

ENVIRONMENTAL CHECKLIST

Purpose of Checklist: The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

A. BACKGROUND

1. Name of proposed project, if applicable:

Alcoa Vancouver Sediment Remediation Project

2. Name of applicant:

Alcoa Inc.

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

Applicant: Mark Stiffler
Alcoa Inc.
201 Isabella Street
Pittsburg, PA 15212
Phone: 412-553-1658

Authorized Agent: Rebecca Desrosiers
Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, WA 98101
Phone: 206-287-9130

4. Date checklist prepared:

August 27, 2008

5. Agency requesting checklist:

Washington State Department of Ecology (Ecology)

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

The project is scheduled to begin October 1, 2008, and be completed by May 31, 2009. Some construction phasing will occur to avoid work below ordinary high water (OHW) during environmental windows established for protection of fish and their habitat.

7. Do you have any plans for future additions, expansion, 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.

Anchor Environmental, L.L.C. February 2008. *Biological Assessment: Alcoa Vancouver Sediment Remediation.*

Anchor Environmental, L.L.C. September 2008. *Remedial Investigation/Feasibility Study, Alcoa/Evergreen Vancouver Site.*

Anchor Environmental, L.L.C. September 2008. *Draft Cleanup Action Plan: Alcoa, Inc. and Evergreen Aluminum, L.L.C.*

Archaeological Investigations Northwest. May 2008. *Records Review and Background Research for the Alcoa Vancouver Proposed Sediment Remediation Project*

Washington State Department of Ecology. 2008. Enforcement Order 5660 in the matter of remedial action by Alcoa Inc.

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.

No.

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

The Proposed Action will be conducted at Ecology's direction under a Model Toxics Control Act (MTCA) Consent Decree. In accordance with Ecology Policy 130B (Permit Exemptions for Remedial Actions under MTCA, February 17, 1995) and MTCA (Revised Code of Washington [RCW] 70.105.D.090), work conducted pursuant to a MTCA order or decree is exempt from the procedural requirements of state and local permits, including chapters 70.94 (Air), 70.95 (Solid Waste), 70.105 (Hazardous Waste), 75.20 (Hydraulic Permit), 90.48 (Water Quality), and 90.58 (Shoreline Management) RCW. However, all substantive permit requirements of the following state and local agencies will be addressed:

- Washington Department of Fish and Wildlife's (WDFW's) Hydraulic Project Approval (HPA), RCW 77.55.021
- City of Vancouver's Shoreline Master Program, Critical Areas Ordinance, Land Use Code, and Archaeological review
- Clark County's Shoreline Master Program, Land Use Code, and Archaeological Predetermination
- Compliance with Sections 401 and 402 of the Clean Water Act, as administered by Ecology

Federal approvals necessary for the project are:

- Section 404 of the Clean Water Act, 33 U.S.C. § 1344 (which may be incorporated into a Nationwide Permit 38, Cleanup of Hazardous and Toxic Waste)
- Compliance with Section 7 of the Endangered Species Act (ESA)
- Compliance with Section 106 of the National Historic Preservation Act

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.)

This project is a component of environmental cleanup of 208 acres of industrial property on the Columbia River, northwest of Vancouver, Washington. (Figure 1) The site was formerly used as an aluminum smelting and fabrication facility, operated by Alcoa for approximately 45 years until the company closed the operation in 1987. At that point, individual land parcels associated with the aluminum manufacturing facility began to be remediated, closed, and sold by Alcoa.

This project would address cleanup of sediment and soil on the Alcoa property at locations shown on Figure 2 and described below.

Sediment Remediation and Cleanup

Dredging of approximately 56,000 cubic yards (cy) of contaminated sediment from the Columbia River would occur along a 2,300-foot section of the shoreline, followed by placement of approximately 60,000 cy of enhanced natural recovery (ENR) sand to restore the dredged areas to pre-construction elevations (see Figures 3, 4, and 5). The project also includes placing approximately 37,000 cy of erosion protection

material with a 13,000 cy filter layer to protect the shoreline from erosion. An approximately 14,000 cy gravel transition layer will be placed between the ENR sand and the erosion protection material.

Prior to dredging, industrial waste located on the riverbank will be removed and disposed of at an appropriate off-site landfill facility. The remaining riverbank will be regraded as necessary with erosion protection measures in place. Existing vegetation would be preserved to the greatest extent possible; however, armoring would be required to protect against wave action at exposed areas.

Dredging and backfill activities would occur during the acceptable in-water environmental work window (November 1 through February 28). Dredging will be completed mechanically using a clamshell bucket operating from a barge. A barge mounted, crane operated mechanical dredge will be employed to remove contaminated material to the required thickness. Depending upon the substrate, an open or closed bucket would be used to dislodge and excavate the material. A closed bucket will be used wherever possible in areas without debris and an open clamshell bucket will be used in areas containing debris. When operating the clamshell, the bucket (in the open position) will be lowered to the sediment surface; when it reaches the bottom, the jaws will close and a bucketful of sediments will be taken. The bucket will then be raised to the surface, positioned above a scow barge, and the sediments will be released. The scow barge's placement and location will be controlled using a tugboat.

Transport and disposal of dredged material would be based on the level of sediment contamination and associated cleanup requirements:

- Dredged material subject to Toxic Substances Control Act (TSCA) Subtitle C disposal requirements would be dewatered prior to being loaded into lined trucks. This material would be transported to a permitted off-site disposal facility. The approximate volume of TSCA Subtitle C material to be disposed is 1,000 cy. The effluent from dewatering TSCA Subtitle C sediment will be treated and discharged back into the Columbia River, or transported to an off-site, regulated facility for disposal.
- Dredged sediment designated for off-site disposal as TSCA Subtitle D will be transferred by barge directly to a transfer facility upstream of the site on the Columbia River. Any decanted water from the barges would be treated and discharged back into the Columbia River. The approximate volume of TSCA Subtitle D material (including material from the Clam Removal Area) to be disposed is 7,000 cy.
- Dredged material meeting upland site cleanup level requirements (i.e., sediment less than 10 milligrams per kilogram [mg/kg] polychlorinated biphenyls [PCBs], but greater than 1 mg/kg PCBs) would be disposed of within the footprint of the former North and North 2 landfills. Any decanted water from the barges would be treated and discharged back into the Columbia River. The approximate volume of industrial level material to be placed on site is 37,000 cy.
- Finally, sediment retained for beneficial use (i.e., sediment less than 1 mg/kg PCBs) would be dredged last, transferred on site, and stockpiled. The stockpile would be located away from the shoreline to prevent transport of the material back to the affected area and allowed to passively dewater prior to final placement as on-site fill. Any decanted water from the barges that is collected during dredging would be treated and discharged back into the Columbia River. The approximate volume of beneficial use material to be stockpiled on site is 11,000 cy.

Upon confirmation that the minimum required dredge elevations are achieved, backfill would be placed to restore all dredged areas to natural grades. In areas where dredging was not performed, a minimum 6-inch layer will be placed. In areas where dredging has occurred, 6 to 36 inches of ENR sand will be placed to restore the dredged areas to natural grade. A barge-mounted, crane-operated clamshell bucket would be used to place backfill material. For placement of sand, the clamshell would take a bite of fill material from a material barge and slowly release the material from the bucket as the operator methodically moves the bucket in a sweeping motion from side to side. This method ensures an even spread of material that will evenly fall through the water column and land in the proper location. In some locations, a gravel transition layer will be added to the ENR sand to enhance the stability of the shoreline.

Additional cleanup work associated with the sediment remediation is planned along the shoreline, as described here:

- **Pile Removal.** Prior to beginning dredging or material placement, approximately 27 abandoned creosote-treated piles located adjacent to the shoreline will be removed. These piles were once part of a dock structure at the site. The piles no longer serve any purpose and are slowly deteriorating. The piles will be removed, to the maximum extent possible, using vibratory extraction. If the Contractor is unable to completely remove a broken pile stub and it extends above the required dredge elevation, the Contractor will cut off the remaining stub 1 foot below the required dredge elevation using a pneumatic underwater chainsaw. The Contractor will then offload and dispose of the piles at an appropriate off-site disposal facility. Approximately 20 additional abandoned piles are located outside of the designated pile removal area may also require removal using the methods described above.
- **Clam Removal.** Contaminated clams were identified in a small area on the far eastern edge of the property between the pier and the shoreline embedded about 1 foot into the sediment. As part of this cleanup effort, the clams and surrounding sediment will be dredged and disposed of in an appropriate upland disposal facility. To accomplish this, the Contractor will use a clamshell bucket or other means depending on site conditions (e.g., those means necessary to protect the integrity of the adjacent pier and dock facilities) and the accessibility of the clams. An estimated 1,600 cy of sediment will be removed and an equal volume of clean sand will be placed in this area after it has been dredged, to restore existing grades.

Water quality would be monitored during dredging, dewatering, clam removal, and sand placement to ensure that water quality impacts are minimized. Water quality monitoring for PCB and dissolved oxygen would occur throughout construction, in accordance with the Water Quality Monitoring Plan currently under development for the project. This plan would include specific measures to correct/adjust construction methods as necessary in order to ensure that water quality standards are met.

Soil Remediation

Soil within the portion of the site designated as the Soluble Oil Area was remediated to 15 mg/kg PCBs in accordance with federal guidelines. To comply with Ecology cleanup criteria, additional characterization is required to determine if concentrations of PCBs in soil are greater than 10 mg/kg. A Sampling and Analysis Plan will be prepared and implemented to re-characterize the soil in this area. In the event soil concentrations are greater than 10 mg/kg PCBs, a work plan will be developed to remediate the area in compliance with MTCA requirements. Remediation would consist of the excavation and off-site disposal of PCB-impacted soil.

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

The project site is located approximately 3 miles northwest of downtown Vancouver, Washington, in Clark County (Figure 1). The property is on the north bank of the Columbia River across from Hayden Island; the site address is 5509 NW Lower River Road, Vancouver, Washington. Section/Township/Range and Latitude/Longitude are shown on Figure 1.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

The upland shoreline is generally flat, with steep nearshore slopes on the river bottom.

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

40 percent

- c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

Medium to coarse sand with up to 15 percent fine particles and refractory brick debris.

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

No.

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

Dredging of approximately 56,000 cy of contaminated sediment from the Columbia River would occur along a 2,300-foot section of the shoreline, followed by placement of approximately 60,000 cy of ENR sand to restore the dredged areas to pre-construction elevations. The project also includes placing approximately 37,000 cy of erosion protection material with a 13,000 cy filter layer to protect the shoreline from erosion. An approximately 14,000 cy gravel transition layer will be placed between the ENR sand and the erosion protection material.

Sediment retained for use as industrial fill (i.e., sediment less than 10 mg/kg PCBs) would be transferred on site to the location of the former North and North 2 landfills.

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

Bank and shoreline soils will be disturbed during construction; however, best management practices (BMPs) will be implemented to minimize erosion. Part of the project involves bank stabilization and the long-term net effect will be stabilizing.

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

This project will not introduce any new impervious surface.

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

BMPs such as geotextile-lined ecology blocks or hay bales will prevent sediment-laden runoff from entering the Columbia River during shoreline work. Upland work will be located away from the shoreline and landward of the river dike.

2. Air

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

Normal equipment emissions will result from the proposal. No unusual air pollutant loads will be introduced.

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

No.

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

No unusual impacts to air are anticipated; therefore, no control measures are proposed.

3. Water

a. Surface:

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

Yes, the project is located on the shoreline of the Columbia River.

- 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.**

Yes, as described in A.11, and shown on Figures 3 and 4.

- 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.**

Approximately 56,000 cy of contaminated material will be removed and replaced with approximately the same volume of clean sand. The sand will be obtained from one of the nearby sand and gravel operations that dredge and sell clean sand from the federally maintained navigation channel.

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

No.

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

The in-water portion of the project site lies within the banks of the Columbia River. The above-water portion lies within the designated Floodway Fringe area for Clark County (Clark County Digital Atlas 2008).

- 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.

b. Ground:

- 1) **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

Yes, sediments that are disposed of on site (i.e., sediments with PCB concentrations less than 10 mg/kg) will be allowed to passively dewater resulting in the infiltration of water into groundwater. In addition, any barge water generated during the dredging of these sediments will be collected and pumped/disposed of on-site. Approximately 200,000 gallons may be placed over a 3-acre area during dredging operations.

- 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.**

This proposal does not involve discharge of waste materials into 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.**

During construction of the upland/dry work, stormwater runoff from the disturbed bank area will flow into the Columbia River. Because of this, BMPs will be followed as described in (d) below.

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

No.

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

For shoreline/upland construction:

- Geotextile-lined ecology blocks or hay bales will be placed at the bottom of the embankment to filter sediment material out of stormwater runoff until the bank area has stabilized after construction.

The following BMPs and conservation measures will be implemented, to the maximum extent practicable, to avoid and/or minimize environmental impacts during dredging:

- Work will be done during the U.S. Army Corps of Engineers (USACE)-approved fish protection work window of November 1 through February 28. In order to reduce the potential impacts on listed species, as much work as possible will be done in the dry. The work at the site approximately from elevations +4 feet and higher can occur in the dry and be constructed outside of the permitted in water work window. Though river levels are generally low during September and October when the work in the dry is expected to occur, BMPs will be used to prevent material from entering the water.
- Turbidity and other water quality parameters will be monitored to verify construction activities are in compliance with Washington State Surface Water Quality Standards (173-201A WAC), or other conditions as specified in the Water Quality Monitoring Plan.
- Appropriate BMPs will be employed to minimize sediment loss and turbidity generation during dredging. BMPs may include, but are not limited to:
 - Eliminating multiple bites while the bucket is on the bottom
 - No stockpiling of dredged material on the riverbed
 - No riverbed leveling
 - Other conditions as specified in the Water Quality Monitoring Plan that will be developed in conjunction with Ecology as part of the Water Quality Certification Equivalency
- Dredge water resulting from removal of sediments will be fully contained; the removed sediments will be placed on a barge with watertight sideboards such that no free water or interstitial water collected on the barge will be allowed to return to the surface water prior to treatment.
- Depending on the results of the water quality monitoring program, additional BMPs may be implemented to further control turbidity. Additional BMPs may include, but are not limited to:
 - Slowing the velocity (i.e., cycle time) of the ascending loaded clamshell bucket through the water column
 - Pausing the dredge bucket near the bottom while descending and near the water line while ascending
- The barge will be managed such that the dredged sediment load does not exceed the capacity of the barge. The load will be placed in the barge to maintain an even keel and avoid listing.
- Dredge vessel personnel will be trained in hazardous material handling and spill response, and will be equipped with appropriate response tools, including absorbent oil booms. If a spill occurs, spill cleanup and containment efforts will begin immediately and will take precedence over normal work.
- The dredging Contractor will inspect fuel hoses, oil or fuel transfer valves, and fittings on a regular basis for drips or leaks in order to prevent spills into the surface water.
- The Contractor will prepare a Spill, Prevention, Control, and Countermeasure (SPCC) Plan to be used for the duration of the Project.

During pile pulling operations, vibratory extraction methods will be in place to minimize turbidity. A containment boom will be placed around the pile being removed and completely encompass the operation to contain any surface debris or sheens. If a pile is broken or breaks above the required dredge elevation during vibratory extraction, the Contractor will use a chain or underwater chainsaw to fully remove the piling. Any broken pile stubs that are cut off underwater will be brought to the surface and disposed of properly.

4. **Plants**

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

 X **deciduous tree: alder, maple, aspen, other** (cottonwood)
 evergreen tree: fir, cedar, pine, other

- X **shrubs** (non-native butterfly bush)
- grass**
- pasture**
- crop or grain**
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- water plants: water lily, eelgrass, milfoil, other**
- X **other types of vegetation (tansy)**

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

Minor removal of weedy vegetation, shrubs, and saplings may take place on the embankment. Vegetation near the shoreline is limited by refractory brick debris.

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

None.

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

None.

5. Animals

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

- birds: hawk, heron, eagle, songbirds, other:**
- mammals: deer, bear, elk, beaver, other:**
- fish: bass, salmon, trout, herring, shellfish, other:**

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

Chinook salmon (*Oncorhynchus tshawytscha*)

- Lower Columbia River ESU
- Upper Columbia River spring ESU
- Snake River fall ESU
- Snake River spring/summer ESU

Coho salmon (*O. kisutch*)

Chum salmon (*O. keta*)

Sockeye salmon (*O. nerka*)

Steelhead (*O. mykiss*)

- Snake River Basin DPS
- Upper Columbia River DPS
- Middle Columbia River DPS
- Lower Columbia River DPS

Bull trout (*Salvelinus confluentus*)

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

The Columbia River is a migration route between salmon-bearing streams and the Pacific Ocean.

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

During pile pulling operations, the following BMPs will be established:

- To help minimize turbidity, the Contractor will engage the vibrator to the minimum extent required to initiate vertical pile movement, and will disengage the vibrator once the pile has been mobilized and is moving upward.
- To reduce the potential for releasing creosote to the water column, piling will not be broken off intentionally by twisting, bending, or other deformation.

The following BMPs and conservation measures will be implemented, to the maximum extent practicable, to avoid and/or minimize environmental impacts during dredging:

- Work will be done during the USACE-approved fish protection work window of November 1 through February 28. In order to reduce the potential impacts on listed species, as much work as possible will be done in the dry. The work at the site approximately from elevations +4 feet and higher can occur in the dry and be constructed outside of the permitted in water work window. Though river levels are generally low during September and October when the work in the dry is expected to occur, BMPs will be used to prevent material from entering the water.
- Turbidity and dissolved oxygen will be monitored to verify construction activities are in compliance with the Water Quality Monitoring Plan that is currently being developed.
- Dredged material aboard the barge will be observed daily for the presence of juvenile salmonids to ensure that they are not being impinged by the clamshell. (Juvenile salmonids are of particular interest for ESA purposes.) If impingement is occurring, crane operation can be adjusted (slowed) to increase opportunity for these fish to avoid the bucket.

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.

None.

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

No.

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:

None.

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.

During construction, PCB-contaminated sediments may briefly be resuspended in the water column. As with any heavy construction activity, there is the possibility of a fuel spill.

1) Describe special emergency services that might be required.

None.

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

The project will improve environmental health of the site over existing conditions. Active water quality monitoring will take place during in-water construction activities to ensure water quality standards are met. In addition, the following activities will address the potential for accidental fuel spills:

- Dredge vessel personnel will be trained in hazardous material handling and spill response, and will be equipped with appropriate response tools, including absorbent oil booms. If a spill occurs, spill cleanup and containment efforts will begin immediately and will take precedence over normal work.
- The dredging Contractor will inspect fuel hoses, oil or fuel transfer valves, and fittings on a regular basis for drips or leaks in order to prevent spills into the surface water.
- The Contractor will prepare a SPCC Plan to be used for the duration of the Project.

b. Noise

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

None.

- 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.**

Construction noise will be generated during both the upland and in-water phases. Because the site is located next to a busy public port, most of the noise will not exceed normal daytime ambient levels. Underwater noise from vibratory pile pulling may reach the disturbance threshold for fish. Pile extraction will be of short duration, with 5 to 10 minutes of vibration per pile. With approximately 27 total piles, total vibration duration will be 2 to 4 1/2 hours over a 1- to 3-day period.

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

The vibratory extractor will be turned off as soon as each pile starts rising from the sediment without resistance.

8. Land and shoreline use

- a. **What is the current use of the site and adjacent properties?**

The project area is a former industrial site. The Port of Vancouver's public port berth facilities are immediately adjacent to the east (upstream). Other industrial facilities with shipping berths lie to the west (downstream).

- b. **Has the site been used for agriculture? If so, describe.**

No.

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

Four silos and a conveyor system between the dock and silos are scheduled for demolition in late summer 2008. The only other structure in the project area is the dock, which will remain on site.

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

No.

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

Heavy Industrial

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

Urban High Density

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

Urban High Density

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

The site is on the shoreline of the Columbia River and as such, is a Fish and Wildlife Habitat Area under the Critical Areas Ordinance for the City of Vancouver.

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

No one will reside or work in the completed project.

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

No one will be displaced by the completed project.

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

No displacement impacts are anticipated; therefore, no control measures are proposed.

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

N/A

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:**

No housing impacts are anticipated; therefore, no control measures are proposed.

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?**

No structures are proposed.

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

Views in the vicinity will not be altered or obstructed. Dredging on the Columbia River is a commonplace activity and will not disrupt shoreline viewing. The shoreline might be more aesthetically pleasing with the brick debris removed.

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

No aesthetic impacts are anticipated; therefore, no control measures are proposed.

11. Light and glare

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

None.

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

N/A

- 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:**

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

12. Recreation

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

The Columbia River is used for waterborne recreation such as boating, wind surfing, and fishing.

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

The project will not displace any existing recreational uses. Dredging on the Columbia River is a commonplace activity and will not disrupt existing 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:

No impacts on recreation are anticipated; therefore, no control measures are proposed.

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

While the Lower Columbia River region around Vancouver is known for numerous prehistoric and historic-period archaeological sites, previous surveys and subsurface testing work within and adjacent to the former Alcoa Vancouver facility have documented extensive areas of modern fill. Several archaeological surveys and subsurface testing projects have found no evidence of intact archaeological deposits within or adjacent to the former Alcoa Vancouver facility.

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

No impacts are anticipated; therefore, no measures are proposed.

14. Transportation

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

Lower River Road serves the site.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest C-TRAN bus stop is more than 1 mile from the site.

c. How many parking spaces would the completed project have? How many would the project eliminate?

The project will not have any associated parking spaces, nor will any be eliminated.

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

No new roads or road improvements will be required for this project.

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

The project occurs in the immediate vicinity of water and rail transportation. Water transportation (the Columbia River) will be used to transport the dredging equipment to the site, and to transport sediments for disposal off-site.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Approximately 100 truck trips will be generated over a 1-month period to transport some sediment to an offsite disposal facility.

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

Transportation impacts are expected to be minimal. No control measures are proposed.

15. Public services

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

No.

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

No public service impacts are anticipated; therefore, no control measures are proposed.

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.

No utilities are proposed for the project.

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: _____

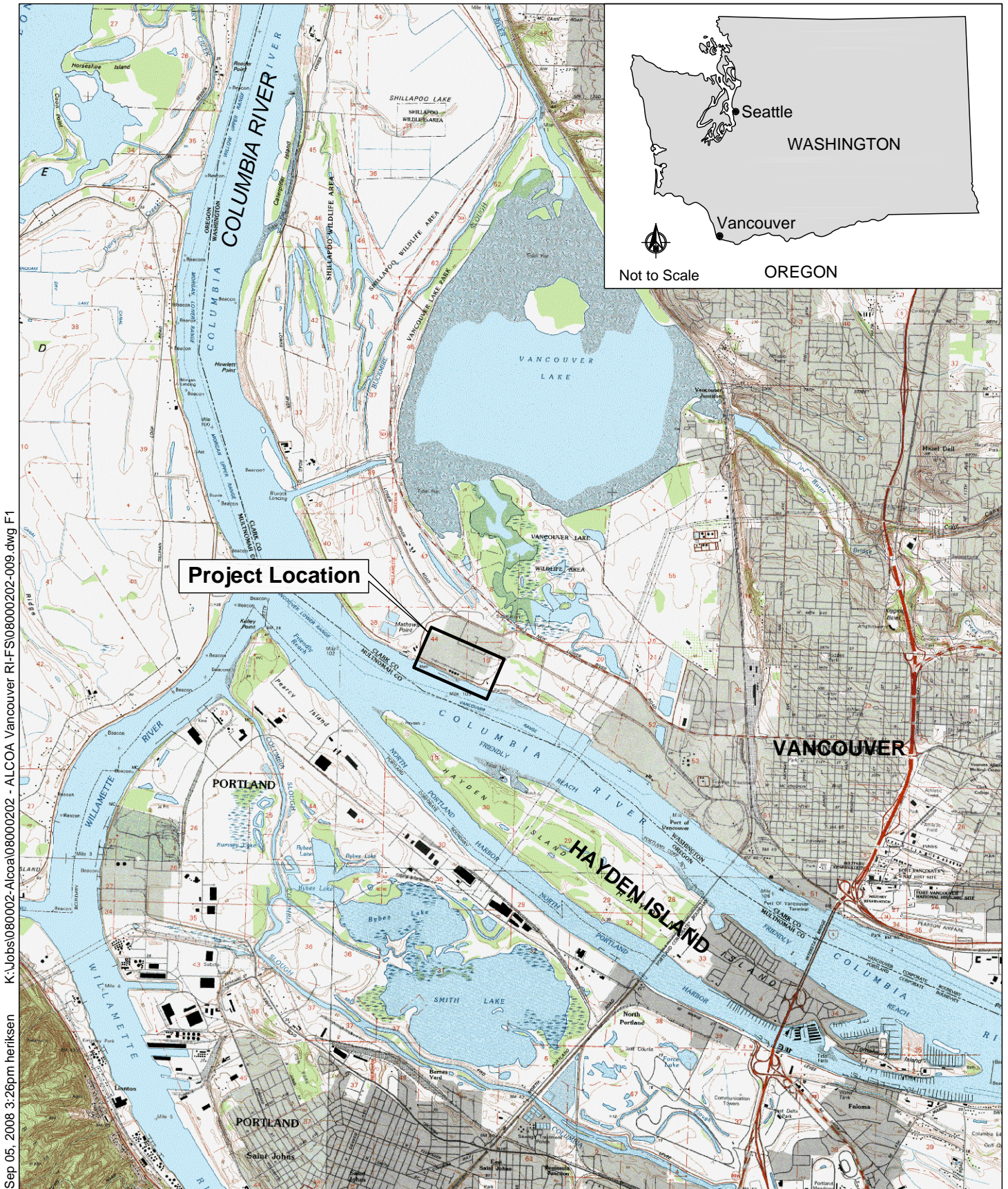
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Date Submitted: _____

Reviewed by: _____

Title: _____ Division _____

Date: _____



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Note: Base map prepared from Terrain Navigator Pro USGS 7.5 minute quadrangle maps of Linnton, Sauvie Island, and Vancouver, Washington, and Portland, Oregon.

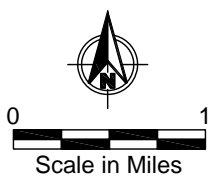



Figure 1
 Vicinity Map
 ALCOA Vancouver Sediment Remediation Project
 Vancouver, Washington



- 1 Sediment Remediation and Cleanup
- 2 Clam Removal Area
- 3 Pile Removal Area
- 4 Former North & North 2 Landfills
- 5 Soluble Oil Area
-  Project Area

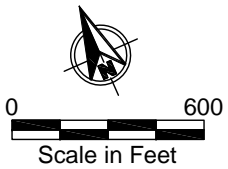
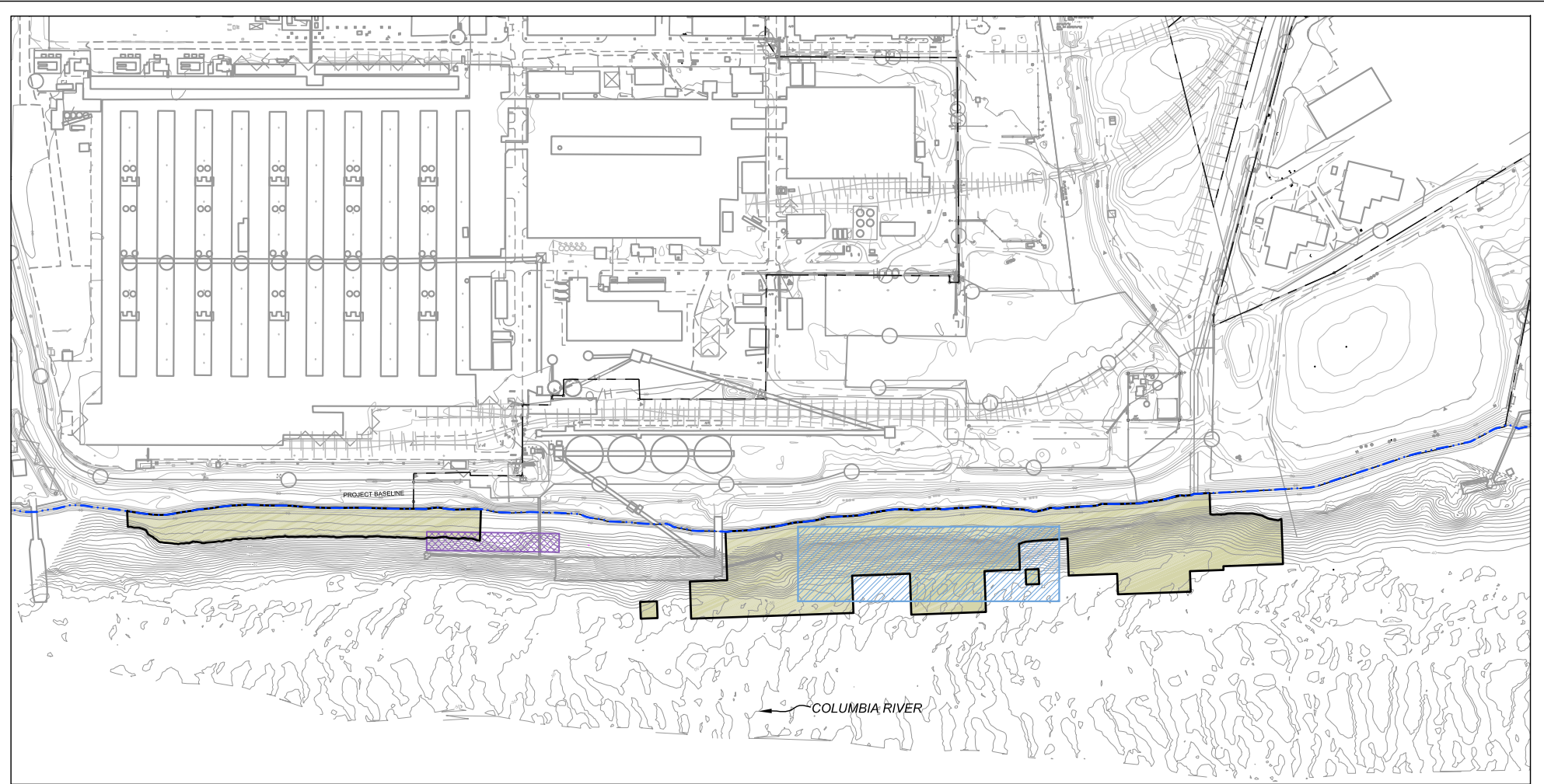







Figure 2
Project Area
ALCOA Vancouver Sediment Remediation Project
Vancouver, Washington



Notes:

1. Topographic survey provided by Orion GPS dated November 2007. Bathymetric survey provided by Etrac dated December 2007.
2. Horizontal datum is Washington State Plane - South zone (NAD 83) U.S. survey feet.
3. Vertical datum is NGVD29.

- | | | | |
|---|-------------------|---|-------------------------------------|
|  | Dredge Area |  | Property Boundary |
|  | Pile Removal Area |  | Ordinary High Water (OHW 16.8 Feet) |
|  | Clam Removal Area | | |

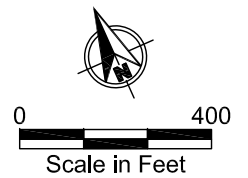
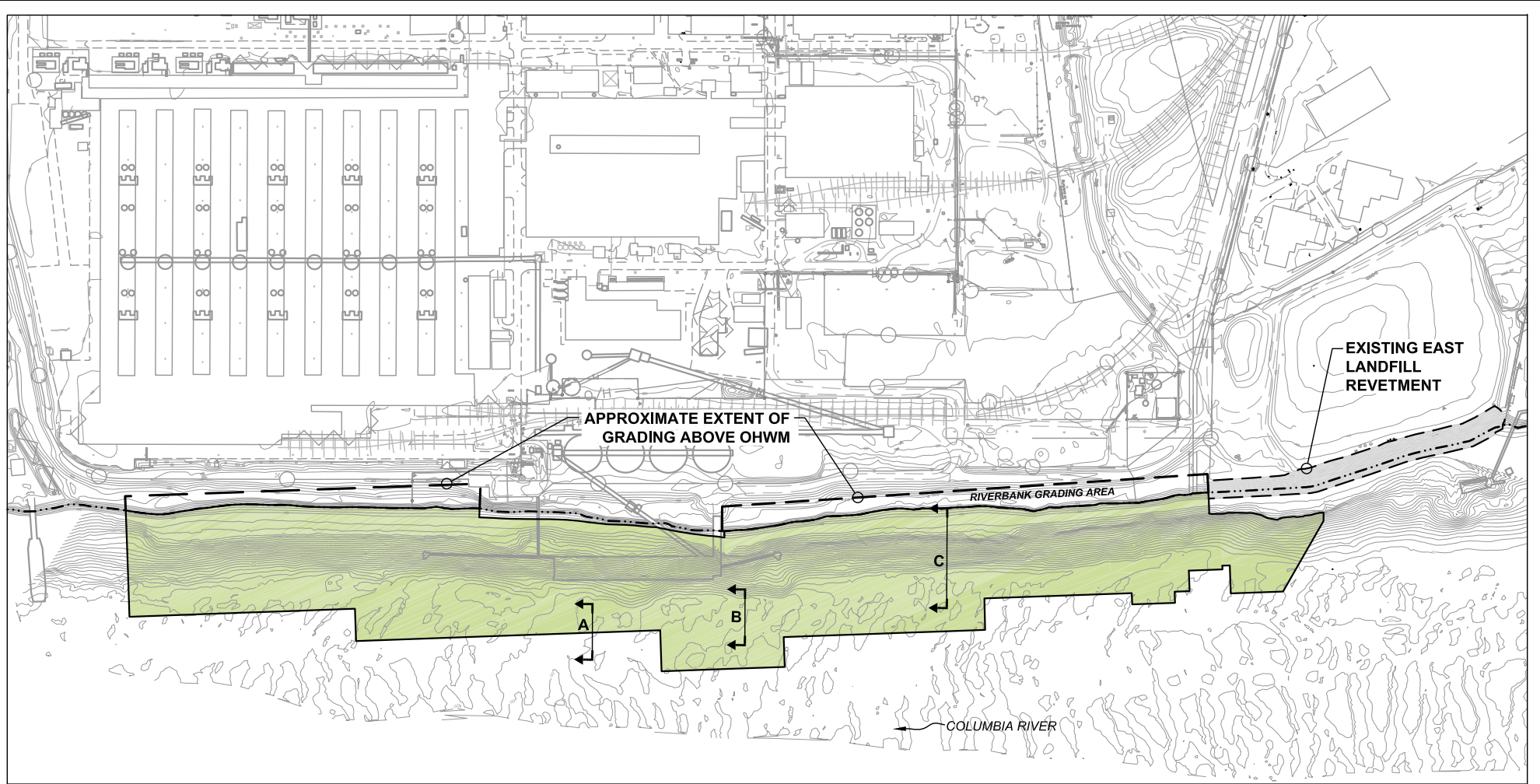




Figure 3
Dredge Area
Alcoa Vancouver Sediment Remediation Project
Vancouver, Washington



Notes:

1. Topographic survey provided by Orion GPS dated November 2007. Bathymetric survey provided by Etrac dated December 2007.
2. Horizontal datum is Washington State Plane - South zone (NAD 83) U.S. survey feet.
3. Vertical datum is NGVD29.

 Material Placement Area

 Cross Section Location
(See Figure 5)

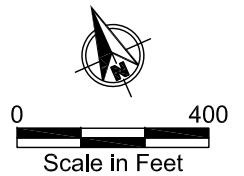
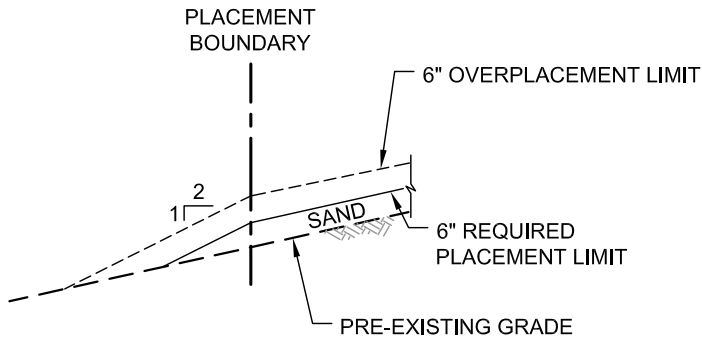
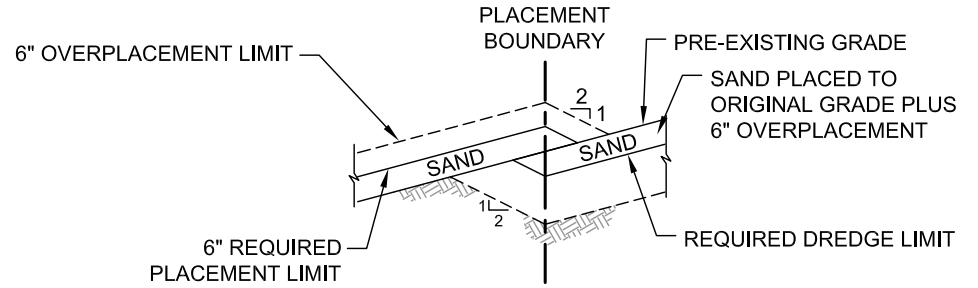


Figure 4
Material Placement Plan
Alcoa Vancouver Sediment Remediation Project
Vancouver, Washington

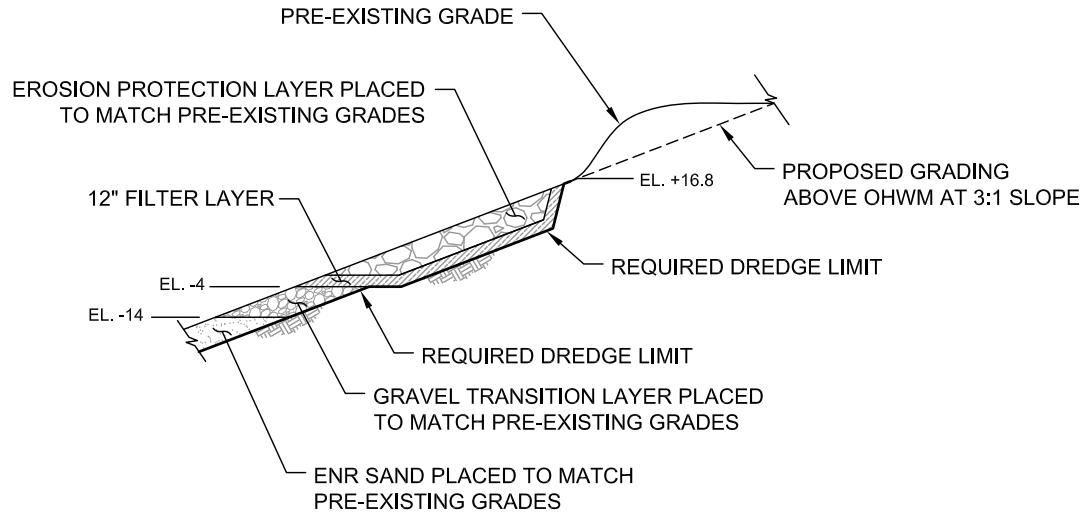
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A TYPICAL EDGE SECTION
NOT TO SCALE



B TYPICAL EDGE SECTION
NOT TO SCALE



C TYPICAL EROSION PROTECTION SECTION
NOT TO SCALE

Figure 5
Material Placement Sections
Alcoa Vancouver Sediment Remediation Project
Vancouver, Washington