

June 5, 2008

Ms. Piper Peterson Lee
USEPA Region 10
1200 Sixth Avenue
Suite 900, ECL-111
Seattle, WA 98101-3140

Subject: Request for Authorization to Perform Bank Line Repair and Maintenance Activities at Terminal 117, River Mile 4.1 Duwamish Waterway, Seattle, Washington

Dear Ms. Peterson Lee:

This letter is our response to your comments transmitted to me via telephone on Tuesday and Thursday, June 3 and June 5, with regard to our letter to you dated May 29, 2008 requesting authorization to perform bank line repair and maintenance activities at Terminal 117.

The first paragraph of our May 29 letter should have read (correction in bold italics):

As we have discussed, approximately 25 linear feet of existing bank line at the center shoreline margin of the Terminal 117 Early Action Area (EAA), in the Lower Duwamish Waterway Superfund Site, has failed and requires repair and maintenance. In order to stabilize the bank line, with the objective of reducing additional bank line failure in adjacent areas, ***two*** bank line repair and maintenance activities are proposed:

- (1) Removal of clean, imported crushed rock ballast from the top-of-bank area in the vicinity of the bank line failure
- (2) Repair and stabilization of approximately 25 linear feet of failed bank line area

In addition to the above modification, you requested a clarification of the gravel removal activity, Item (1) listed above. Therefore, we are submitting (attached) two modified drawings describing in the greater detail the gravel removal activity.

Finally, we have added a BMP to the Temporary Bank Repair General Notes to specify that no in-water work shall occur. We have attached a copy of the modified sheet.

We appreciate your quick review and comments. If you have any questions or concerns, please feel free to contact me.

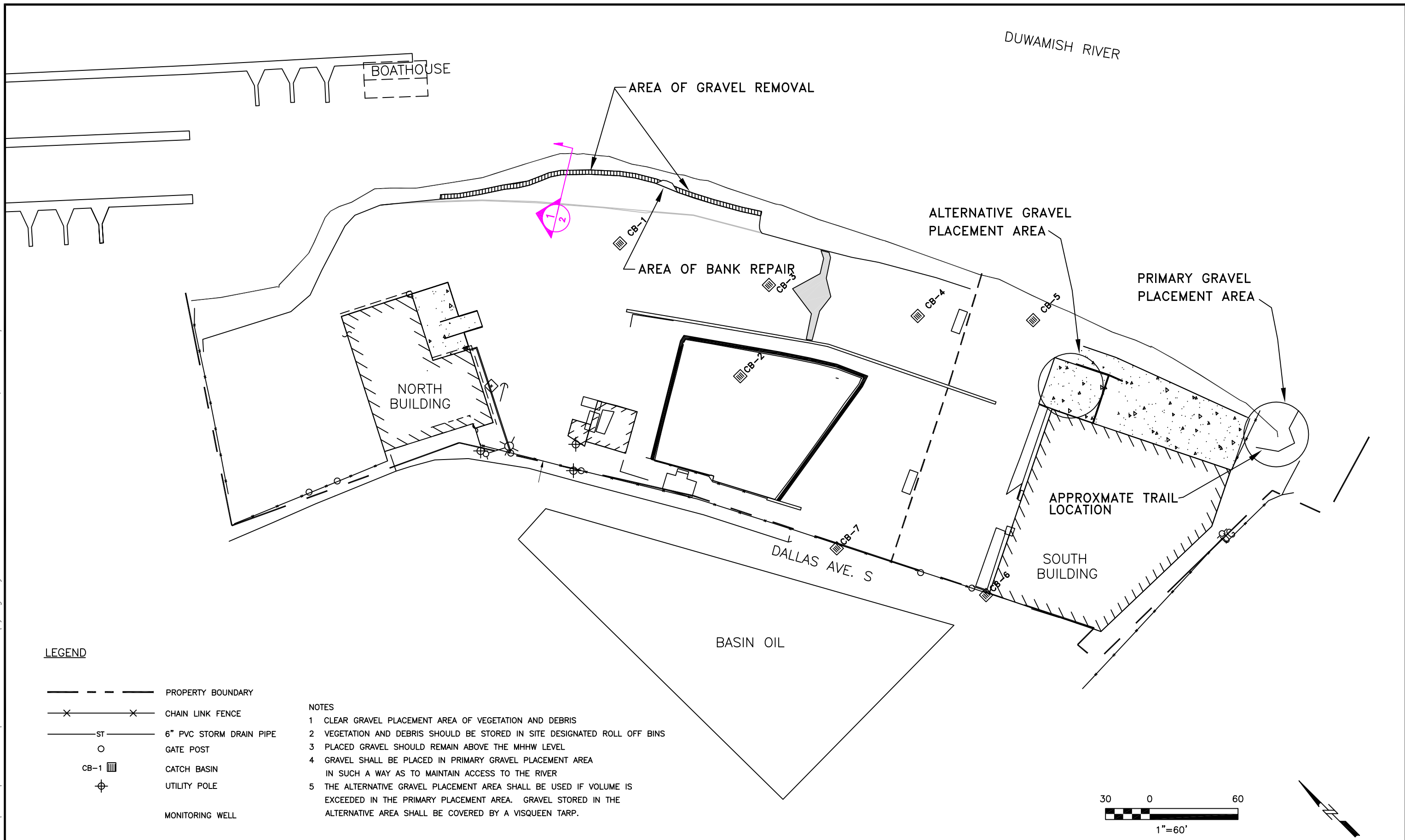
Sincerely,

Roy Kuroiwa
Project Coordinator

Distribution List:

Piper Peterson Lee, EPA (2 hard copies)
Kym Takasaki, USACE (1 hard copy)
George Blomberg, Port of Seattle
Grant Hainsworth, ENSR
Jena Gilman, ENSR
Winston Chen, ENSR

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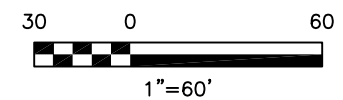


LEGEND

- — — — — PROPERTY BOUNDARY
- X — X — CHAIN LINK FENCE
- ST — 6" PVC STORM DRAIN PIPE
- GATE POST
- CB-1 ■ CATCH BASIN
- ⊕ UTILITY POLE
- ⊕ MONITORING WELL

NOTES

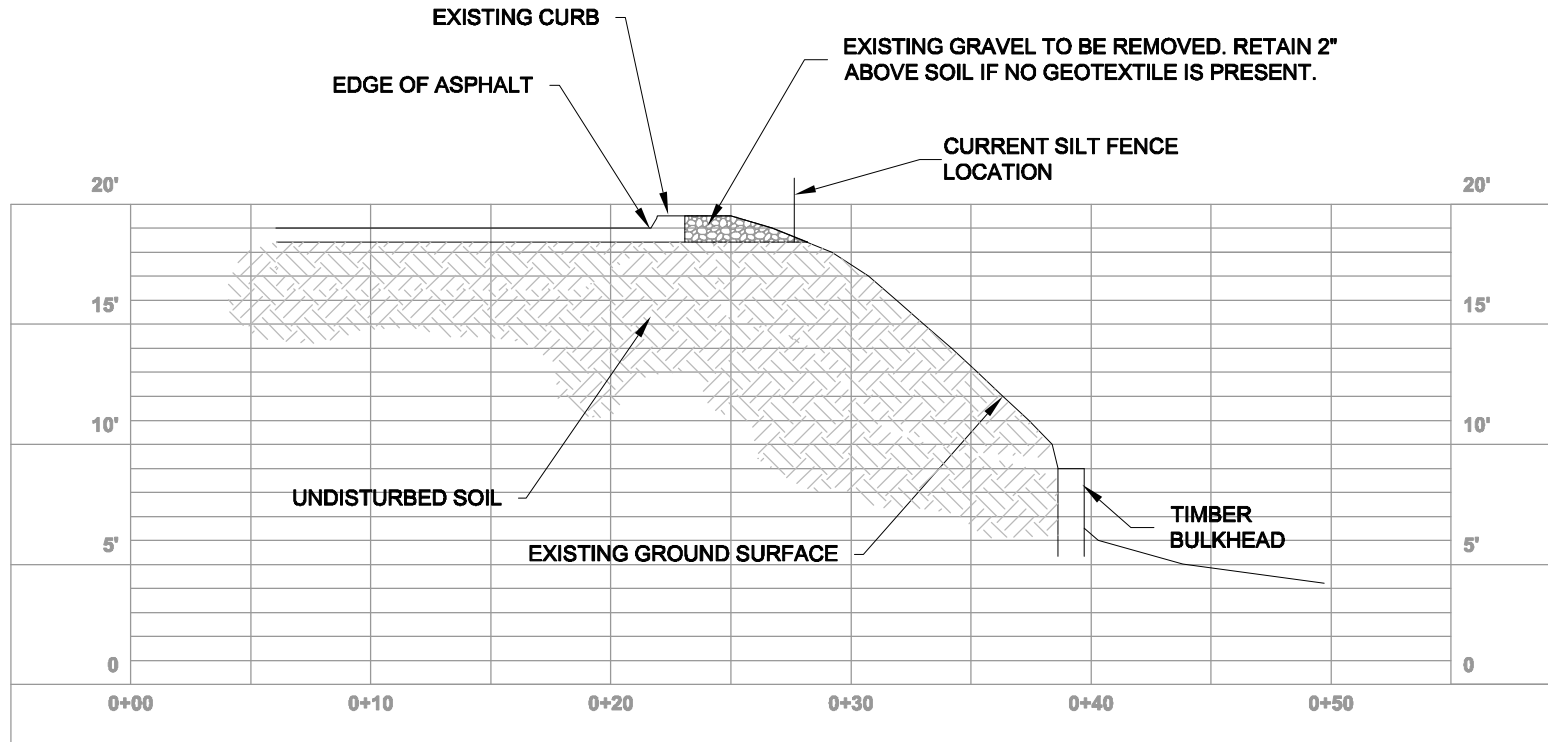
- 1 CLEAR GRAVEL PLACEMENT AREA OF VEGETATION AND DEBRIS
- 2 VEGETATION AND DEBRIS SHOULD BE STORED IN SITE DESIGNATED ROLL OFF BINS
- 3 PLACED GRAVEL SHOULD REMAIN ABOVE THE MHHW LEVEL
- 4 GRAVEL SHALL BE PLACED IN PRIMARY GRAVEL PLACEMENT AREA IN SUCH A WAY AS TO MAINTAIN ACCESS TO THE RIVER
- 5 THE ALTERNATIVE GRAVEL PLACEMENT AREA SHALL BE USED IF VOLUME IS EXCEEDED IN THE PRIMARY PLACEMENT AREA. GRAVEL STORED IN THE ALTERNATIVE AREA SHALL BE COVERED BY A VISQUEEN TARP.



ENSR | AECOM



| | | |
|---------------------------------|--------------------|------------------------------|
| PORT OF SEATTLE TERMINAL 117 | | GRAVEL REMOVAL AND PLACEMENT |
| DATE: 5/01/08 | DRWN: E.M./DJA/SEA | FIGURE 1 |

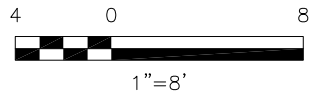


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1
TYPICAL SECTION
SCALE: AS SHOWN

NOTES:

- 1. VERTICAL DATUM: MLLW

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PORT OF SEATTLE
TERMINAL 117

GRAVEL REMOVAL
TYPICAL CROSS SECTION

DATE: 5/1/08

DRWN: E.M./SEA

FIGURE 2

Health and Safety

- A. Contractor shall adhere to the Port of Seattle's Safety and Health Manual (May 2006) found at <https://www.ebidexchange.com/Default.aspx?cid=974a2ff2-5bf3-451a-8cbb-04aed58cab10>.
- B. All personnel assigned to work on this site must have successfully completed 40 hours of Training for Hazardous Waste Site Work, in accordance with Occupational Safety Health Act (OSHA) 29 CFE 1910.120(e)(3), and be current with their 8-hour Refresher Training, in accordance with OSHA 29 CFR 1910.120(e)(8).

Site Preparation

Contractor shall provide all necessary labor, materials, and equipment for clearing vegetation, rocks, and debris.

- A. Prior to site clearing and construction activities, the contractor shall mark the limits of disturbance with an orange construction fence.
- B. Site preparation shall be limited to areas land-ward (up-slope) of +8 feet MLLW in area denoted as approximate limits of work. If work during site preparation causes existing material to tumble down-slope, below +8 feet MLLW, the material will be immediately removed and replaced above +8 MLLW or in an otherwise approved lined closed roll off bins and maintained onsite until EPA approves a disposal location.
- C. Contractor shall cut and remove vegetation branches, limbs, and debris to within 2 inches of the ground surface and without soil disturbance.
- D. Removed vegetation and other debris in contact with impacted material shall be placed in lined closed roll off bins and maintained onsite until EPA approves a disposal location.
- E. Contractor shall perform site clearing in a manner that does not disturb existing soil and ground surface.
- F. Existing large smooth rock and/or debris may be removed at the discretion of the site engineer to prepare area for riprap. Approximately 20 stones up to 18 inches in size will be removed in this manner. This material shall be placed above +8 MLLW or in an otherwise approved lined closed roll off bins and maintained onsite until EPA approves a disposal location.

Geotextile

- A. Geotextile Fabric: Non-biodegradable, woven; C70/06 manufactured by ConTech, or equivalent.
- B. Lap edges at least 18 inches, with upstream edge overlying downstream edge.
- C. Place geotextile evenly and carefully over existing prepared ground surface to minimize wrinkles; do not tear fabric. Place geotextile panels in one consistent operation to preclude disturbance or displacement of soil below geotextile.
- D. The geotextile fabric for the entire area work area will be securely anchored to ground prior to placement of gravel-cobble or riprap material and immediately following site clearing activities to minimize soil disturbance.

Fill Material

Gravel-cobble backfill for slope stabilization shall consist of crushed, processed, or naturally occurring angular material. It shall be free from various types of wood waste or other extraneous or objectionable materials. Riprap material shall be placed and not dumped. All Riprap Rockery material in the outer layer shall be aligned with the long axis of each stone perpendicular to the outer slope so that individual stones are firmly locked in place.

All fill material shall be placed in such a way that the existing soil and ground surface is not disturbed.

All fill material shall have such characteristics of size and shape that it shall meet the following specifications for grading and quality:

| Gravel-Cobble Mix | Riprap |
|-------------------|------------------|
| Dmin = 1-1/2 inch | Dmin = 10 inches |
| D15 ≥ 1-3/4 inch | D50 ≥ 14 inches |
| D30 ≥ 2 inch | Dmax = 18 inches |
| D50 ≥ 2.5 inch | |
| D85 ≥ 3.75 inch | |
| Dmax = 5 inch | |

All fill material shall come from commercial pits or quarries.

The Contractor shall provide the services of an ASTM or AASHTO accredited testing laboratory approved by the Engineer to sample the rock from quarry source, ensuring that rock samples are representative of the rock anticipated for use on the Project, and to perform the following laboratory tests:

| | | |
|-----------------------|--------------|------------------------------------|
| Specific Gravity | ASTM C-127 | Minimum 2.65 |
| Soundness | AASHTO T 104 | Not greater than 5% loss |
| Accelerated Expansion | CRD-C-148 | Not greater than 15% breakdown |
| Absorption | ASTM C-127 | Not greater than 2% |
| L.A. Abrasion | ASTM C-131 | Maximum 20% loss @ 500 revolutions |

- A. No water column work shall take place. All work below the MHHW shall be accomplished during periods of low water or low tide levels
- B. All new aggregate fill shall be placed gently on the geotextile.
- C. No bank line protection material shall be allowed down-slope of +8 feet MLLW. Any existing or placed bank material exposed or released to the aquatic area below +8 feet MLL shall be removed immediately.
- D. All work shall be accomplished using shore-based equipment. No equipment shall be active in shoreline areas below existing top-of-bank. If work during fill placement causes any material to tumble down-slope, below +8 feet MLLW, the material shall be immediately removed from the aquatic area.
- E. The silt fence shall be replaced after repair activities in an area upslope of aggregate.

Best Management Practices

The contractor shall follow the Best Management Practices (BMPs) developed for the project to prevent toxic materials, petrochemicals, debris, and other deleterious material, generated during bankline repair and maintenance from entering aquatic area in the Duwamish Waterway.

- A. All operating equipment at the site will be subject to best management practices (BMPs) and Spill Prevention, Containment and Countermeasures (SPCC) plans provided by the Port of Seattle and implemented to avoid and minimize potential releases of fuel and petroleum products used by construction equipment to the marine environment. It is anticipated that maintenance and repair of the existing bankline will be accomplished using land-based equipment.
- B. A pollution prevention plan, detailing actions necessary for fueling equipment at the site and plans for fuel and hazardous materials storage shall be prepared by the contractor and applied to all equipment in use at the site.
- C. All construction debris shall be collected and prevented from entering aquatic area at the site. All accumulated materials shall be collected and stored at an approved upland location. If heavy (sinking) debris enters the water during the proposed work, the location of the debris shall be documented. When construction is complete the material shall be retrieved and stored in an approved upland location.
- D. Oil absorbent materials shall be employed if floating oil sheen is observed on the surface of the water. Used absorbent material shall be collected, securely stored on-site, and then properly disposed of at an approved upland facility.
- E. Any drains or catch basins adjacent to the work area shall be protected during the proposed work to prevent any deleterious material from entering the water. Any materials prevented from entering drains or catch basins shall be collected and securely stored on-site before drain and catch basin protection is removed. Such materials shall be properly stored at an approved upland facility.
- F. Prior to commencing construction, an emergency containment plan and associated procedures shall be developed for all toxic materials to be kept on-site. All necessary equipment and materials for emergency hazardous material spill containment and clean-up, including oil-absorbent materials, shall be stocked at the project site. A sufficient number of construction personnel shall be trained in the proper implementation of this plan.
- G. Equipment shall be decontaminated by moving the equipment to the designated decon area and brushing off the heavy contamination with a brush and then steam cleaned. Decon water shall be collected and stored in an approved upland location.
- H. No work shall occur in areas inundated by waters of the Duwamish Waterway. All equipment and personnel shall be removed and shall not be allowed to return to the area of inundation until the water level drops below the elevation at which work shall occur.



EXPIRES 12-2-

FOR BIDDING ONLY - NOT FOR CONSTRUCTION

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PORT OF SEATTLE
TERMINAL 117

PROJ. NUMBER: 05482-029

DATE: 5/12/08

**T-117 TEMPORARY BANK REPAIR
GENERAL NOTES**

SHEET NUMBER:

4

REVISION