

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action by:

The Port of Bellingham and the City of
Bellingham

FIRST AMENDMENT
TO AGREED ORDER

No. DE 3441

TO: The Port of Bellingham
P.O. Box 1677
Bellingham, Washington 98227

City of Bellingham
210 Lottie Street
Bellingham, Washington 98225

A. INTRODUCTION

Agreed Order No. DE 3441 (2006 Order), entered into by the State of Washington, Department of Ecology (Ecology), the Port of Bellingham (Port), and the City of Bellingham (City) in 2006, requires the Port and City to conduct a remedial investigation and feasibility study (RI/FS) for the Central Waterfront Site (Site) in Bellingham, Washington. This First Amendment to the 2006 Order (First Amendment) requires the Port and the City to perform an interim action to excavate and remove non-aqueous phase liquid (NAPL) petroleum and petroleum contaminated soil/sediments from the Chevron Subarea beach in order to prevent petroleum sheen on Whatcom Waterway. This amendment also contemplates the potential for additional interim actions at this Site, and sets out a process for approval of any interim actions proposed by the Port and the City.

B. JURISDICTION

This First Amendment to Agreed Order No. DE 3441 is issued by Ecology pursuant to the authority of RCW 70.105D.050(1).

C. AMENDMENT

This amendment does not attempt to recite all of the provisions of the 2006 Order. Provisions of the 2006 Order not specifically addressed in this amendment shall remain in full force and effect. This amendment results in substantial changes to the work being performed and has been the subject of public notice and comment under WAC 173-340-600.

The 2006 Order is hereby amended to incorporate the following provisions, which are integral and enforceable parts of the 2006 Order:

1. Section F (Ecology Determinations) of the 2006 Order is hereby amended to add the following determination in addition to the determinations already set forth:

8. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. NAPL petroleum product and petroleum contaminated soil/sediment serve as a source of contaminants that continue to migrate to Whatcom Waterway and pose an ongoing threat to human health or the environment. Such circumstances warrant interim action consistent with WAC 173-340-430.

2. Section G (Work to Be Performed) of the 2006 Order is hereby amended to add the following requirements in addition to those requirements already set forth:

3. The Port and the City shall conduct the interim action as more fully described in Exhibit D to this Order (Scope of Work and Description of Interim Action).

4. Within thirty (30) days of the effective date of this amendment, the Port and the City shall prepare an interim action work plan for Ecology's review and approval. Within fifteen (15) days of the receipt of Ecology's comments, the Port and the City shall incorporate Ecology's comments and submit a revised interim action work plan for review. The revised interim action work plan will be considered final after Ecology's approval. Within ninety (90) days following completion of the interim action construction, the Port and the City shall submit to Ecology a final interim action completion report. The interim action consists of excavating and removing non-aqueous phase liquid (NAPL) petroleum and petroleum contaminated soil/sediments from the Chevron Subarea beach in order to prevent petroleum sheen on Whatcom Waterway. A more detailed description of the interim action is presented in Exhibit D.

5. Upon approval by Ecology, the interim action work plan becomes an integral and enforceable part of the 2006 Order, and the Port and City are required to perform the interim action according to the work plan and schedule contained therein.

6. The Port and the City may propose that interim actions in addition to that described in paragraph 4 above be taken. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. Should Ecology determine a particular interim action proposed by the Port and the City may be warranted, the Port and the City will prepare and submit a work plan that includes a proposed scope of work and schedule (Work Plan). Interim action work plans are subject to public review and comment. Upon approval by Ecology following public review, the Work Plan becomes an integral and enforceable part of the 2006 Order, and the Port and the City are required to perform the interim action according to the work plan and schedule contained therein.

3. Section H.4 (Designated Project Coordinators) is hereby amended to change the project coordinators as follows:

The project coordinator for Ecology is:

Name: Brian S. Sato, P.E.
Address: Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452
Phone: (425) 649-7265

The project coordinator for the Port is:

Name: Brian Gouran
Address: Port of Bellingham
1801 Roeder Avenue
P.O. Box 1677
Bellingham, WA 98227-1677
Phone: (360) 715-2329

The project coordinator for the City is

Name: Amy Kraham
Address: City of Bellingham
210 Lottie Street
Bellingham, WA 98227-1677
Phone: (360) 778-8270

4. Section H.16 (Compliance with Other Applicable Laws) is hereby replaced in its entirety as follows:

16. Compliance with Applicable Laws

a. All actions carried out by the Port and the City pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. The permits or specific federal, state or local requirements applicable to any interim action that Ecology may approve in the future will be identified in the work plan for that interim action, which will be subject to public comment. Ecology's approval of any such work plan following public comment reflects Ecology's determination as to the permits or specific federal, state or local requirements that apply.

b. Pursuant to RCW 70.105D.090(1), the Port and the City are exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the Port and the City shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section to the RI/FS work required by this Order. As to any interim action that Ecology may approve in the future, any exempt permits or approvals and the applicable substantive requirements of those permits or approvals will be identified in the work plan for that interim action, which will be subject to public comment. Ecology's approval of any such work plan following public comment reflects Ecology's determination on the substantive requirements that apply.

c. The Port and the City have a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required

for the RI/FS and remedial action under this Order. In the event either Ecology or the Port and the City determine that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology, or the Port and the City, shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the Port and the City shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the Port and the City and on how they must meet those requirements. Ecology shall inform the Port and the City in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The Port and the City shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

d. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the State to administer any federal law, the exemption shall not apply and the Port and the City shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

e. At this time, no federal, state or local requirements have been identified as being applicable to the actions related to the RI/FS required by this Order.

f. The implementation of the interim action described in Exhibit D will require federal, state or local permits and substantive requirements, which are identified in Exhibits E (Applicable Permits and Requirements) and F (Permit Exemptions and Substantive Requirements).

5. Exhibits "D," "E" and "F" attached hereto are hereby incorporated into the 2006 Order and the Table of Contents is amended to include the following:

- Exhibit D: Scope of Work and Description of Interim Action
- Exhibit E: Applicable Permits and Requirements
- Exhibit F: Permit Exemptions and Substantive Requirements

D. SIGNATURE AUTHORITY

The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this amendment and to execute and legally bind such party to the same.

E. EFFECTIVE DATE

This First Amendment shall be effective upon execution by the Port, the City, and Ecology.


Effective date of this First Amendment: 9/25/12

PORT OF BELLINGHAM

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY



ROB FIX
Interim Executive Director
Port of Bellingham
(360) 676-2500

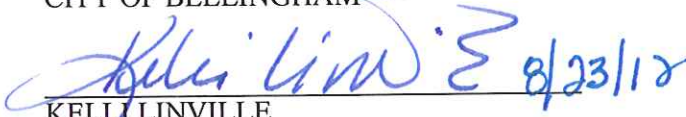


ROBERT W. WARREN, P. Hg., MBA
Regional Manager
Northwest Regional Office
Toxics Cleanup Program
(425) 649-7054

Dated: 8/21/12

Dated:  9/25/12

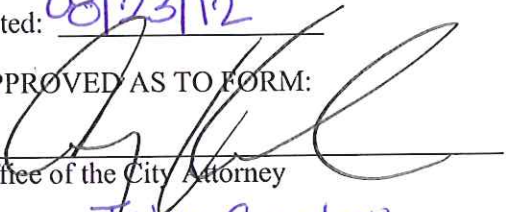
CITY OF BELLINGHAM



KELLI LINVILLE
Mayor, City of Bellingham
(360) 676-6979

Dated: 08/23/12

APPROVED AS TO FORM:



Office of the City Attorney

ATTEST: 

John Gaeter



Finance Director

Date: 8/27/12

EXHIBIT D
SCOPE OF WORK AND DESCRIPTION OF INTERIM ACTION

SCOPE OF WORK

Task 1: Prepare Interim Action Work Plan

An interim action to address petroleum hydrocarbon sheens observed on the southern shoreline of the Chevron Subarea is required under the Agreed Order (as amended). The Port of Bellingham (Port) will prepare and submit to Ecology for review an interim action work plan with detail commensurate with the work to be performed. The work plan shall include, as appropriate:

- A description of the interim action including its purpose and general requirements (the interim action shall be designed in a manner that will not preclude reasonable alternatives for any cleanup action that may be required).
- A summary of existing site conditions.
- Information regarding design and construction requirements, including a proposed schedule and personnel roles and responsibilities.
- A compliance monitoring plan (CMP).
- A health and safety plan (HSP)
- A sampling and analysis plan (SAP), if applicable.

Task 2: Conduct Interim Action

The Port shall conduct an interim action to address petroleum hydrocarbon sheens observed on the southern shoreline of the Chevron Subarea of the Central Waterfront Site. The interim action will be conducted in accordance with WAC 173-340-430 and the Ecology-approved final interim action work plan.

Task 3: Prepare Interim Action Report

Upon successful completion of the interim action, the Port shall prepare and submit an interim action report to Ecology. The interim action report will present the results of the interim action and document the constructed condition of the completed interim action. The report will document any variations from the interim action work plan and present the results of any compliance monitoring of other environmental testing conducted as part of the interim action.

DESCRIPTION OF INTERIM ACTION

BACKGROUND

As required in the Agreed Order (as amended) between the Washington State Department of Ecology (Ecology), the Port of Bellingham (Port), and the City of Bellingham (City), the Port shall conduct an interim action to address petroleum hydrocarbon sheens observed on the southern shoreline of the

Chevron Subarea of the Central Waterfront Site, as shown in Figure 1. Petroleum hydrocarbon impacts have been identified in nearshore sediments, as well as in upland soil and groundwater. This interim action is needed to prevent the spread of contamination to the waters of Bellingham Bay by removing the impacted sediments in the area where sheens have been observed, temporarily isolating clean backfill from potential recontamination by upland impacts pending completion of the RI/FS, and backfilling with cap material to prevent further erosion of the shoreline.

SITE CONDITIONS

The interim action area is in the southwest corner of the Chevron subarea which is part of the larger Central Waterfront Site. The interim action area was originally defined by a beveled tieback timber bulkhead. The bulkhead consisted of vertical cantilever timber piles spaced about 15 feet on-center and held in place with steel rods tied back to an unknown buried "deadman" anchor. The top of the piles and bulkhead were at approximate elevation +15 feet (MLLW). Ground surface behind the bulkhead appears to have been at approximate elevation +14 feet (MLLW).

The bulkhead is now in a severe state of deterioration. While portions of the bulkhead are still standing vertical and full height, the top 6 feet of the bulkhead wall comprising the central 70 feet have been lost through deterioration. The cantilever timber piles in this section are gone. In addition, the shortened timber bulkhead planks have rotated toward the waterway about 60-degrees. As a consequence of the central deterioration and rotation, much of the soil originally behind the bulkhead has been washed away and a sloping gravelly-sand beach is now present.

Oily sheens have been observed on groundwater seeps coming from the adjacent beach. Test borings indicate that the petroleum impacts are associated with the top of the groundwater table fluctuation zone (smear zone) intersecting the beach. It appears that the seep moves up and down the beach between elevations +1 and +7 feet (MLLW) due to the groundwater plume surface's response to tidal variation.

INTERIM ACTION

The planned interim action is to excavate the contaminated beach sediment layer and stabilize the shoreline to prevent further erosion.

Contaminated beach sediments will be excavated as a radial trench between the standing sections of parallel and perpendicular bulkhead and between elevations +2 to +14 feet (MLLW) (see Figure 2 for a plan view of the interim action excavation area relative to existing bulkheads, piles and other structural features). Excavation may be limited in the area immediately adjacent to the existing dock so as not to disturb the exposed tie backs currently supporting the bulkhead. Based on test borings, the excavation is expected to extend to a depth of +2 feet MLLW, but no deeper than elevation 0 feet MLLW (Figure 3 shows a typical cross-section of the excavation). Ten feet of the floor and the landward slope of the radial trench excavation will be covered with an impermeable plastic sheet, as shown in Figure 4. The sheeting will be covered with 2 – 2.5 feet of sand cap material, 1 – 1.5 feet of filter/gravel material, and 2 – 2.5 feet of armor rock. The position of the existing +10 MLLW elevation contour will be maintained

after excavation and backfill. Additional design details will be presented in the interim action work plan and design documents.

The excavation and backfill will proceed in small sections perpendicular to the water during low tides within the construction window which may require nighttime work. The excavation and backfill are expected to take between four and six working days to complete.



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- NOTES:**
1. Horizontal Datum: WA State Plane North Zone, NAD83, Feet.
 2. Aerial image acquired from City of Bellingham, 2008.
 3. Property lines provided by Port of Bellingham.
 4. Subareas provided by ENSR|AECOM.

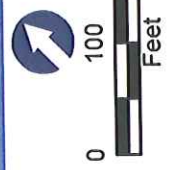
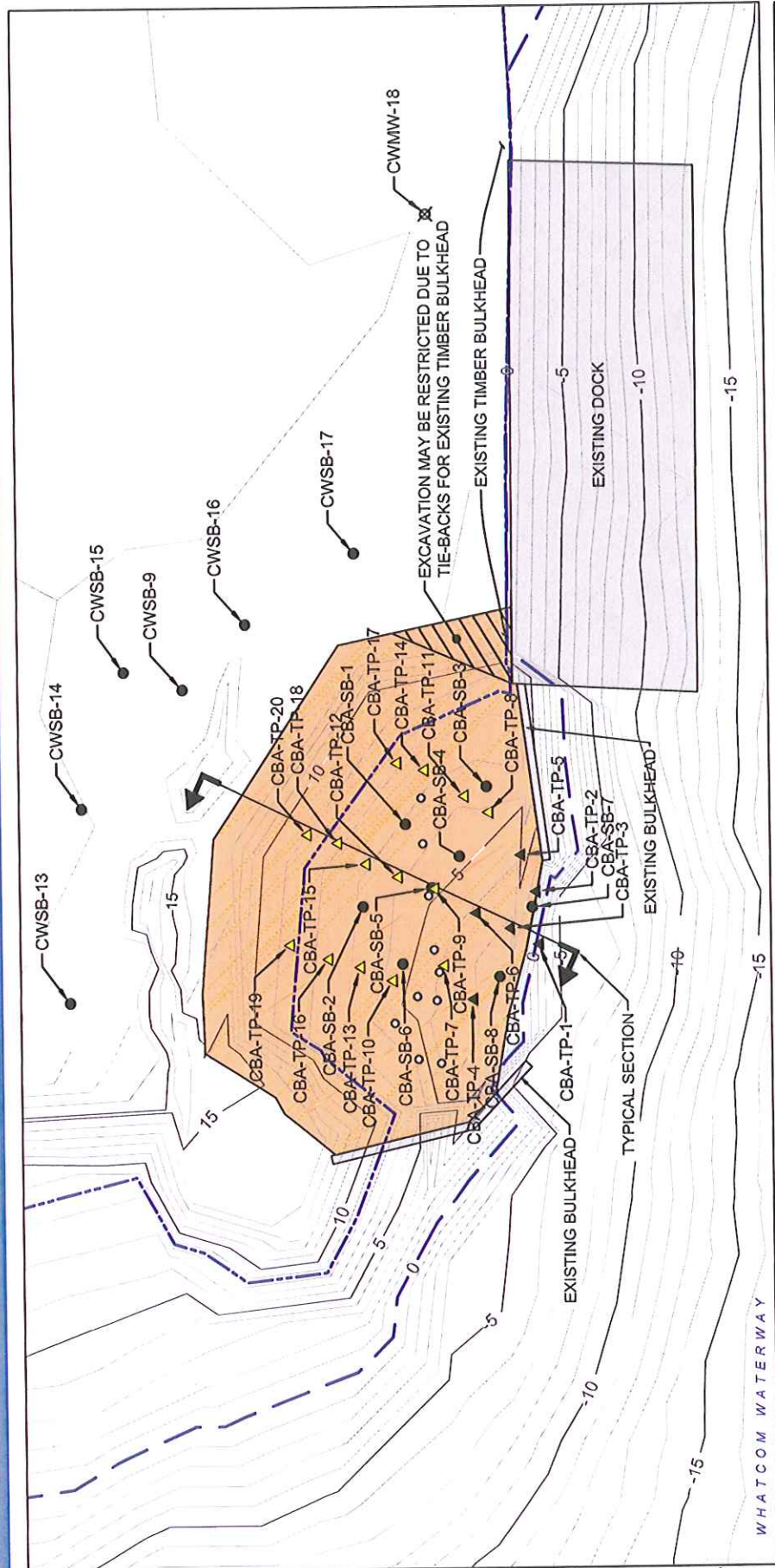


Figure 1
 Site Plan
 Chevron Subarea Interim Action
 Central Waterfront Site
 Port of Bellingham

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LEGEND:

- Mean Lower Low Water (MLLW)
- Mean Higher High Water (MHHW)
- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)
- Area of Excavation
- Existing Structure
- Piling
- Beach Test Pit Location
- Beach Test Pit Location with Visible Product
- Soil Boring Location
- Monitoring Well Location

Scale in Feet
0 10

Figure 2
 Plan View - Extent of Excavation
 Chevron Subarea Interim Action
 Central Waterfront Site
 Port of Bellingham

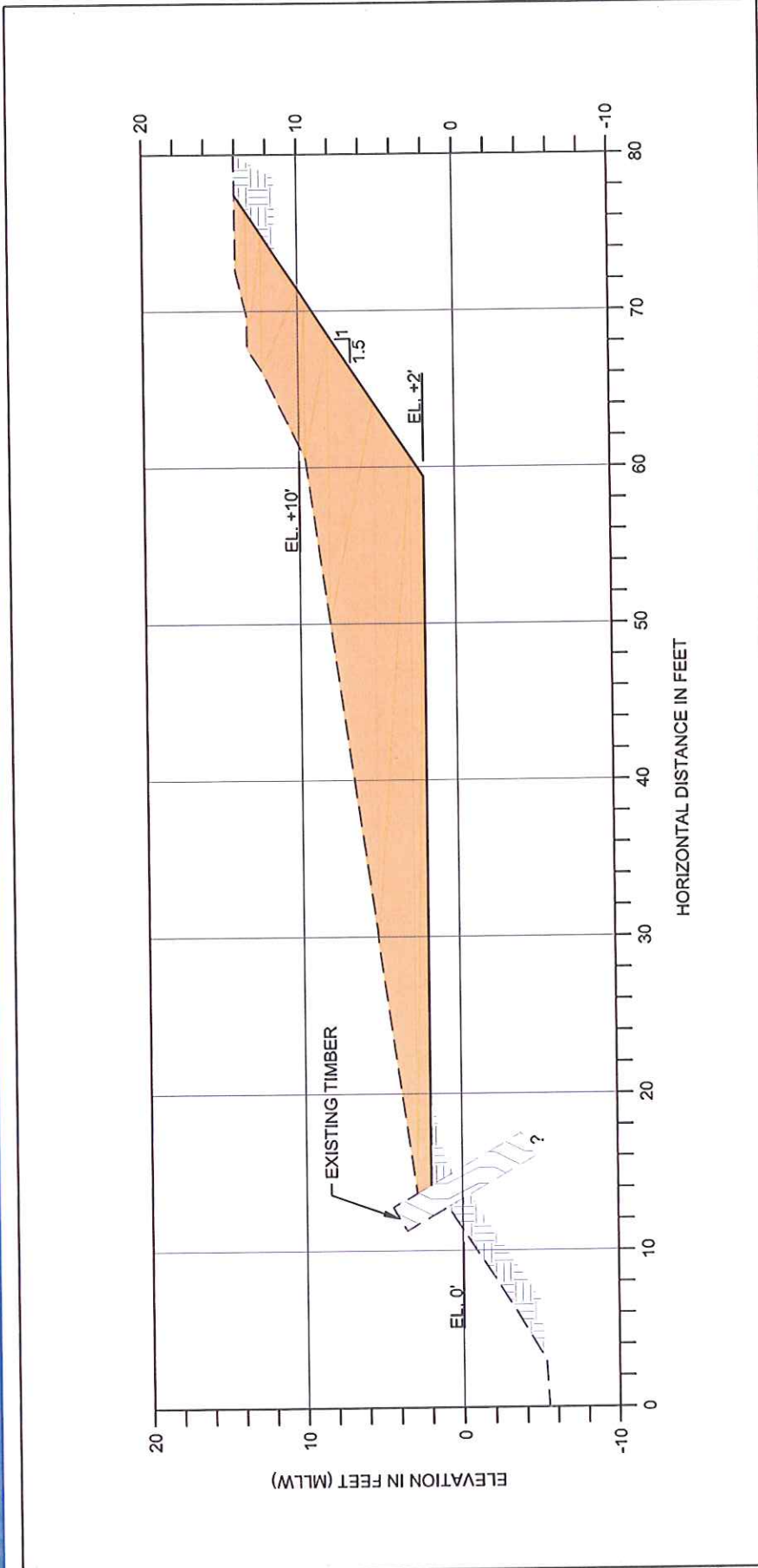
HORIZONTAL DATUM: Washington State Plane North, NAD83, Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet, 1983-2001 Tidal Epoch.

NOTES:

- Drawing prepared from surveys provided by Wilson Surveying and Engineering.
- Existing docks and pilings digitized from aerial photo.



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- LEGEND:**
- Existing Ground
 - Excavation Bottom
 - Area of Excavation

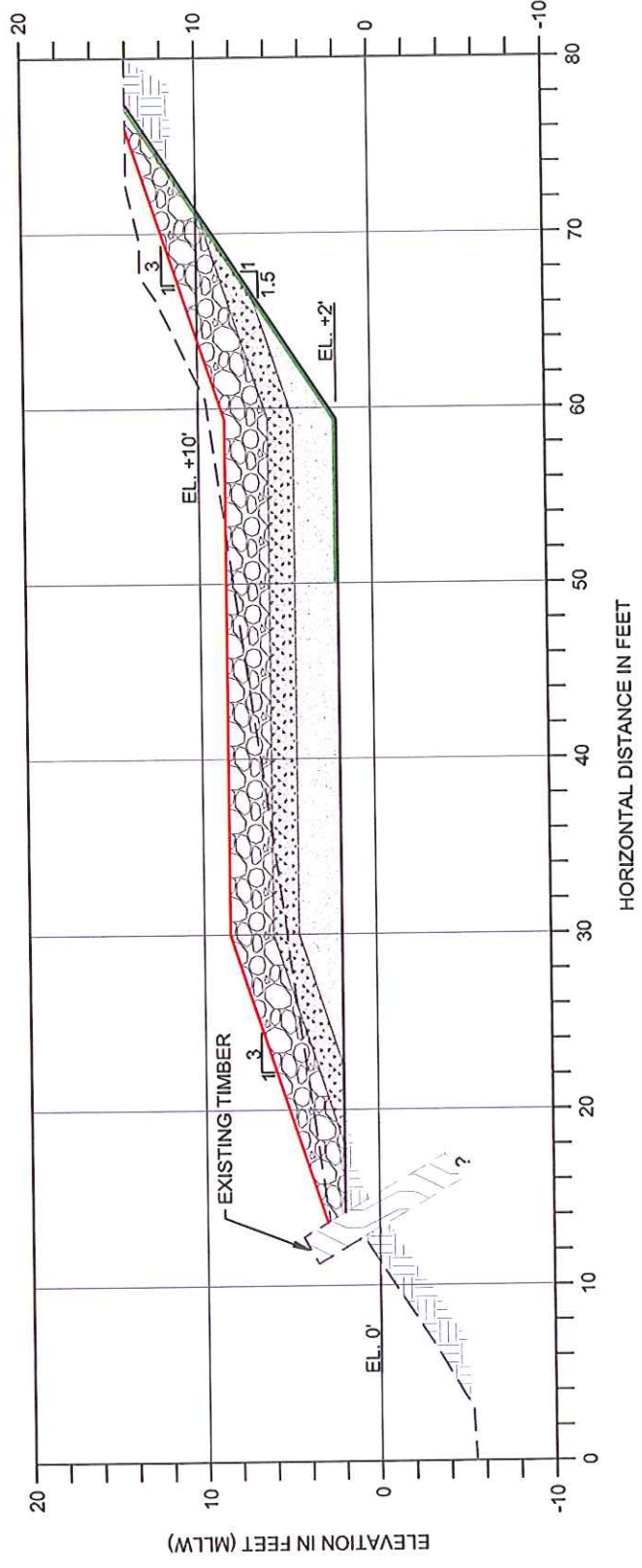
Figure 3
Typical Section - Likely Extent of Excavation
Chevron Subarea Interim Action
Central Waterfront Site
Port of Bellingham

VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet, 1983-2001 Tidal Epoch.

NOTES:
1. Drawing prepared from surveys provided by Wilson Surveying and Engineering.



K:\Projects\10007-Port of Bellingham\Whatcom Waterway Cleanup Inner Whar\1007-RP-010A.dwg FIG 4-LIKELY FILL Jun 21, 2012 10:46am epj\kin



- LEGEND:**
- Existing Ground
 - Proposed Ground
 - Excavation Bottom
 - Impermeable Liner
 - [Pattern] Armor (2.0 - 2.5 ft Thickness)
 - [Pattern] Filter/Gravel (1.0 - 1.5 ft Thickness)
 - [Pattern] Sand Cap (2.0 - 2.5 ft Thickness)



Figure 4
 Typical Section - Likely Extent of Fill
 Chevron Subarea Interim Action
 Central Waterfront Site
 Port of Bellingham

VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet, 1983-2001 Tidal Epoch.

NOTES:

- Drawing prepared from surveys provided by Wilson Surveying and Engineering.



EXHIBIT E
APPLICABLE PERMITS AND REQUIREMENTS

The interim action to be performed at the Site requires the following permit and environmental review process:

United States Army Corps of Engineers Nationwide Permit 38

Section 404 of the Clean Water Act, 33 U.S.C. § 1344 requires a permit prior to discharging dredged or fill material into the waters of the United States, including special aquatic sites such as wetlands. The Port will obtain and comply with the conditions of a Nationwide Permit 38, which covers the Cleanup of Hazardous and Toxic Waste that are performed, ordered or sponsored by government agency with established legal or regulatory authority.

State Environmental Policy Act Integrated Compliance (RCW 43.21C.036 and WAC 197-11-250 through 259)

Compliance with SEPA, Chapter 43.21C RCW, will be achieved by conducting SEPA review in accordance with applicable regulatory requirements, including WAC 197-11-268, and Ecology guidance as presented in Ecology Policy 130A (Ecology 2004). SEPA review will be conducted concurrent with public review of the interim action. The Port will act as the SEPA lead agency and will coordinate SEPA review. It is planned that public review for the Agreed Order amendment will be conducted by Ecology concurrently with public review for the SEPA documentation. The Port will coordinate closely with Ecology to ensure that the two public review processes are consistent and concurrent.

EXHIBIT F

PERMIT EXEMPTIONS AND SUBSTANTIVE REQUIREMENTS

Washington Department of Fish & Wildlife Hydraulic Project Approval

Chapter 220-110 WAC (Hydraulic Code Rules) and Chapter 77.55 RCW (Construction Projects in State Waters) regulate work that uses, diverts, obstructs, or changes the natural flow or bed of any of the salt or fresh waters of state and includes bed reconfiguration, all construction or other work waterward, under and over the ordinary high water line, including dry channels, and may include projects landward of the ordinary high water line (e.g., activities outside the ordinary high water line that will directly impact fish life and habitat, falling trees into streams or lakes, bridge maintenance, dike construction, etc.). The Washington Department of Fish and Wildlife (WDFW) oversees the implementation of these laws and issues a Hydraulic Project Approval (HPA) with appropriate conditions to protect these resources. Through the Nationwide Permit 38 process the Port will complete a Joint Aquatic Resources Permit Application (JARPA) that will also be provided to WDFW. Through the JARPA process, the Port will identify and comply with HPA substantive requirements including coordinating closely with WDFW to ensure that the requirements of the HPA process are met.

City of Bellingham Shoreline Substantial Development Permit (Bellingham Municipal Code Title 22)

Pursuant to the City of Bellingham Shoreline Master Program (Bellingham Municipal Code [BMC] Title 22), the interim action must meet the requirements of a City Shoreline Substantial Development Permit (SMP) for projects that involve more than 50 cubic yards of grading within the shoreline zone. The interim action will occur within the regulated shoreline area designated by BMC Title 22 as Urban Maritime. The substantive requirements include meeting the general conditions for SMPS, requirements and conditions of the Urban Maritime shoreline designation, and applicable use activity policies, procedures, and regulations.

City of Bellingham Fill and Grade Permit (BMC Title 16.70.070)

Pursuant to the City of Bellingham Grading Ordinance (BMC 16.70), a Major Grading permit is required from the City for grading projects that involve more than 500 cubic yards of grading. The City grading ordinance identifies a number of standards and requirements for obtaining a grading permit. The City standards and requirements will be integrated into the construction plans and specification for the interim action to ensure that the interim action complies with the substantive requirements of the City grading ordinance. Those substantive requirements include: staking and flagging property corners and lines when near adjacent property, location and protection of potential underground hazards, proper vehicle access point to prevent transport of soil off-site, erosion control, work hours and methods compatible with weather conditions and surrounding property uses, prevention of damage or nuisance, maintaining a safe and stable work site, compliance with noise ordinances and zoning provisions, development of a traffic plan when utilizing City streets and written permission for grading from legal property owner.

City of Bellingham Construction Stormwater Permit (BMC Title 15.42)

Pursuant to the City of Bellingham Stormwater Management ordinance (BMC 15.42), the interim action must meet the requirements of a City Stormwater Permit. The substantive requirements include preparation of a stormwater site plan, preparation of a construction stormwater pollution prevention

plan, source control of pollution, preservation of natural drainage systems and outfalls, on-site stormwater management, run off treatment, flow control, and system operations and maintenance.

City of Bellingham Critical Area Ordinance (BMC Title 16.55.420)

Critical area substantive requirements are applied to land development activities in the City of Bellingham. The interim action will occur on land designated as "erosion" and "landslide" hazard areas by BMC 16.55.420 Critical Areas. The substantive requirements include an assessment or characterization of the hazard areas, a hazard analysis and a geotechnical engineering report by a licensed professional.