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September 7, 2023
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Mr. Jason Cook
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Toxic Cleanup Program
P.O. Box 47600
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Reference: Port of Everett Interim Action

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
Ecology Facility Site ID 2728

Mr. Cook,

At the request of ExxonMobil Environmental and Property Solutions, on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (ADC), Stantec Consulting Services Inc. (Stantec) conducts environmental activities at the ExxonMobil ADC Site (Site), which includes portions of the Port of Everett (Port) property located at 2730 Federal Avenue, Everett, Washington. Stantec prepared the enclosed *Port of Everett Interim Action* report, dated September 7, 2023. The purpose of the interim action report is to provide a summary of fieldwork conducted while implementing the remedial excavation at the Port property.

Please contact Mr. Bobby Thompson, Stantec Project Manager for this Site, at (206) 510-5855, or Mr. Jeff Johnson, ExxonMobil Project Manager for this Site, at (815) 860-7290 with questions.

Regards,

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Attachment: Stantec's *Port of Everett Interim Action*, dated September 7, 2023

- c. w/enclosure
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Port of Everett Interim Action

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
Ecology Facility Site ID 2728

September 7, 2023

Prepared for:

ExxonMobil Environmental and Property
Solutions Company and American Distributing
Company

Prepared by:

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File: 203722941.R17



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EXECUTIVE SUMMARY

This *Port of Everett Interim Action* report, dated September 7, 2023 is for the ExxonMobil ADC Site (Site) located in Everett, Snohomish County, Washington. This report was prepared by Stantec Consulting Services Inc. (Stantec) at the request of ExxonMobil Environmental and Property Solutions, on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (ADC) and summarizes the interim remedial action performed on the Port of Everett (Port) property (Port Interim Action) located at 2730 Federal Avenue, Everett, Snohomish County, Washington. The implemented interim action was proposed in Cardno's (now Stantec) *ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan* (IAWP), dated June 14, 2022¹, and detailed in Cardno's *ExxonMobil ADC Site – Port of Everett Property Engineering Design Report* (EDR), dated July 18, 2022².

The excavation activities proposed in the IAWP and detailed in the EDR have been implemented. The excavation extended to the predetermined depths and extents, a permanent barrier wall was installed along the western side of Federal Avenue, and all backfilling and restoration work is complete. All waste related to the Port Interim Action has been removed from the Site. The Port Interim Action fulfilled the scope of work described in the IAWP and June 2022 amendment to Agreed Order DE 6184 (2010 Order)³.

Historical releases of hydrocarbons to soil and groundwater at the Site were related to the former operation of bulk storage, transfer, and distribution of petroleum and petroleum-related products. Light non-aqueous phase liquid (LNAPL) has been observed in soil and groundwater beneath the Site. The ExxonMobil ADC Site is defined as the ExxonMobil and ADC properties and the surrounding rights-of-way and properties that were affected by the migration of hydrocarbons in soil and groundwater.

In March 2010, the Washington State Department of Ecology (Ecology) entered into the 2010 Order with ExxonMobil and ADC requiring a Focused Feasibility Study and development of a draft Cleanup Action Plan to identify the nature and extent of hydrocarbons in soil and groundwater and select a preferred final interim action to remediate the Site in accordance with the Model Toxics Control Act. A final draft of the *Site Characterization/Focused Feasibility Study Report*⁴ (SC/FFS) was submitted to Ecology by WSP USA Environment & Infrastructure Inc. (WSP) on May 12, 2023, along with Stantec's *Site Characterization/Focused Feasibility Study Report Addendum*, dated May 25, 2023⁵. A final draft of Stantec's *ExxonMobil ADC Draft Cleanup Action Plan* was submitted on May 31, 2023⁶.

In June 2022, an amendment to the 2010 Order was executed by Ecology, ExxonMobil, and ADC to implement the Port Interim Action. The amendment specified that upon approval, the IAWP would

¹ Cardno. June 14, 2022. *ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan*, ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, Washington.

² Cardno. July 18, 2022. *ExxonMobil ADC Site – Port of Everett Property Engineering Design Report*, ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, Washington.

³ Washington State Department of Ecology (Ecology). March 16, 2010. *Agreed Order for Focused Feasibility Study and Draft Cleanup Action Plan – ExxonMobil ADC Site, No. DE-6184*.

⁴ WSP USA Environment & Infrastructure Inc. (WSP). May 12, 2023. *Site Characterization/Focused Feasibility Study Report*, ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington.

⁵ Stantec Consulting Services Inc. (Stantec). May 25, 2023. *Site Characterization/Focused Feasibility Study Report Addendum*, ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, Washington, Ecology Facility Site ID 2728.

⁶ Stantec Consulting Services Inc. (Stantec). May 31, 2023. *ExxonMobil ADC Draft Corrective Action Plan*, ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, Washington, Ecology Facility Site ID 2728.



become a part of the 2010 Order. The scope of the Port Interim Action includes excavation of LNAPL and soil exceeding the Site-specific residual saturation remediation levels, transportation and disposal of excavated soil, excavation backfill, and site restoration including reinstallation of the asphalt cap. Additionally, a permanent barrier was installed along the western side of Federal Avenue to limit LNAPL migration.

The scope of work described in this report was performed as an interim action under the amended 2010 Order to expedite remediation work on the Port property in order to limit interference with ongoing infrastructure projects. Excavation of LNAPL and soil exceeding the Site-specific residual saturation remediation levels will be excavated on the ExxonMobil and ADC owned parcels under a new Consent Decree and separate mobilization.

Extensive soil borings were completed in 2020 and 2021 at accessible areas of the Port property (Excavation Delineation Work) to predefine the extents of the remedial excavation so that performance monitoring (i.e., soil sampling) during excavation was not necessary.

Equipment and materials were mobilized beginning in August 2022. In preparation for the remedial excavation, various utilities were rerouted or capped, the United States Coast Guard Maritime Security (MARSEC) fencing and the Everett Ship Repair (ESR) gate were moved, and the ESR portable office was relocated. Phased shoring installation, excavation, backfill, geotextile fabric installation, and compaction occurred between September 2022 and February 2023. Final site restoration activities completed in March 2023 included paving, utility reconnections, and MARSEC fencing and ESR portable office and gate reinstallation. Upon the completion of each phase of the excavation, temporary shoring was removed and shoring along the western side of Federal Avenue was advanced to just below ground surface to serve as a permanent barrier wall. The barrier wall consists of interlocking corrugated steel sheet piles installed to depths up to approximately 45 feet below ground surface.

A 750-gallon UST was discovered within the excavation footprint, likely used for heating oil associated with a historical warehouse. The UST was decommissioned and the UST and associated wastewater were transported off-Site for disposal.

The extents of the excavation measured approximately 300 linear feet north to south along Federal Avenue and approximately 80 feet east to west from Federal Avenue toward Port Gardner Bay. The overall surface area of the excavation measured approximately 20,000 square feet.

- A total of 11,838.82 tons of hydrocarbon-containing soil was removed during the remedial excavation.
- Twenty-two 55-gallon drums of absorbent materials containing LNAPL were removed during the remedial excavation.
- 76,200 gallons of groundwater were treated and discharged to the City of Everett's sanitary sewer system.
- Approximately 8,000 pounds of spent carbon was reactivated at the Pacific Coast Biosphere Carbon facility.
- All construction, asphalt, and miscellaneous debris and waste was handled as non-hazardous construction waste and disposed of at Cadman's Delta Remediation landfill in Everett, Washington.



Archaeological monitoring, conducted in accordance with the Monitoring and Inadvertent Discovery Plan⁷ (MIDP), did not identify any precontact or historic-era archaeological sites. The soil encountered during the remedial excavation was backfill material used to extend the shoreline over multiple iterations in 1914, 1947, and 1967 as defined in WSP's SC/FFS. Consequently, it was not anticipated that precontact or historical-era archaeological sites would be encountered on the early industrial era constructed land. Encountered soils were primarily fill with historical industrial materials. Large logs and associated chains were encountered and are consistent with historical industrial use in the vicinity of the Site.

The Port Interim Action fulfilled the scope of work described in the IAWP and June 2022 amendment to the 2010 Order.

⁷ Cardno. April 6, 2022. *Cultural Resources Monitoring and Inadvertent Discovery Plan*, ExxonMobil/ADC Property Remedial Excavation, Everett, Washington.



Acronyms and Abbreviations

1996 Order	Agreed Order DE 95TC-N402
1998 Order	Agreed Order DE 98TCP-N223
2010 Order	Agreed Order DE 6184
AASHTO	American Association of State Highway and Transportation Officials
AC	Asphalt concrete
ADC	American Distributing Company
ASPI	A.S.P.I. Land Surveying, Planning & Engineering
bgs	Below ground surface
BMPs	Best management practices
BNSF	BNSF Railway Company
CAP	Cleanup Action Plan
Cascade Surveying	Cascade Surveying & Engineering Inc.
COC	Contaminant of concern
CFR	Code of Federal Regulations
cPAH	Carcinogenic polycyclic aromatic hydrocarbon
CSO	Combined sewer overflow
Discharge Authorization	City of Everett Discharge Authorization No. MD-46-2022
DOT	Department of Transportation
Ecology	Washington State Department of Ecology
EDR	Engineering Design Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESR	Everett Ship Repair
Excavation Delineation Work	2020 and 2021 delineation soil borings to predefine the extents of the remedial excavations on the ExxonMobil ADC Property and Port property
ExxonMobil	ExxonMobil Oil Corporation
FFS	Focused Feasibility Study
gpm	Gallons per minute
HASP	Health and safety plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HEM	n-Hexane Extractable Material
HMA	Hot mix asphalt
IAWP	Cardno's <i>Interim Action Work Plan</i> (IAWP), dated June 14, 2022
ICC	International Code Council
ICS	Innovative Construction Solutions
LEL	Lower explosive limit
LNAPL	Light non-aqueous phase liquid
MARSEC	United States Coast Guard Maritime Security
Mar Vac	Marine Vacuum Service Inc.
MIDP	Monitoring and Inadvertent Discovery Plan



PORT OF EVERETT INTERIM ACTION

ExxonMobil ADC

September 7, 2023

Miller	Mr. Aven P. Miller (former ADC property owner)
Mobil	Mobil Oil Corporation
MTCA	Model Toxics Control Act
OSHA	Occupational Safety and Health Administration
Plans	Construction drawings for the Port Interim Action
Port	Port of Everett
Port Interim Action	Interim action conducted on Port of Everett property to the west of the ExxonMobil Property in accordance with the June 2022 amendment to the 2010 Agreed Order
Property	ExxonMobil and ADC-owned parcels located at 2717 and 2731 Federal Avenue, in Everett, Washington
PUD	Public Utility District
Rivers Edge	Rivers Edge Environmental Services, Inc.
SC/FFS	Site characterization/focused feasibility study
SEPA	Washington State Environmental Policy Act
SGT	Silica Gel Treated
Site	ExxonMobil and ADC Property and the surrounding parcels where hydrocarbons have migrated
Standard Specifications	WSDOT's <i>Specifications for Road, Bridge, and Municipal Construction 2022</i> , dated January 2022
Stantec	Stantec Consulting Services Inc.
SWPPP	Stormwater Pollution Prevention Plan
TEE	Terrestrial Ecological Evaluation
TESC	Temporary Erosion and Sediment Control
TPHd	Total petroleum hydrocarbons as diesel
TPHg	Total petroleum hydrocarbons as gasoline
TPHmo	Total petroleum hydrocarbons as motor oil
TWIC	Transportation Worker Identification Credentials
USMCE	U.S. Marine Chemists & Engineering
UST	Underground storage tank
WAC	Washington Administrative Code
WISAARD	Washington Department of Archaeology and Historic Preservation
WSDOT	Washington State Department of Transportation



1.0 INTRODUCTION

At the request of ExxonMobil Environmental and Property Solutions, on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (ADC), Stantec Consulting Services Inc. (Stantec) prepared this *Port of Everett Interim Action* report, dated September 7, 2023 for the ExxonMobil ADC Site (Site) located at 2717/2731 Federal Avenue Everett, Snohomish County, Washington. This report summarizes the remedial action performed on the Port of Everett (Port) property (Port Interim Action) located at 2730 Federal Avenue, Everett, Snohomish County, Washington. The location of the Site is shown on Plates 1 and 2.

Historical releases of hydrocarbons to soil and groundwater at the Site (Plate 3) were related to the former operation of bulk storage, transfer, and distribution of petroleum and petroleum related products. Light non-aqueous phase liquid (LNAPL) has been observed in soil and groundwater beneath the Site (including on neighboring properties). The ExxonMobil ADC Site is defined as the ExxonMobil and ADC owned properties (Property) and the surrounding rights-of-way and properties that were affected by the migration of hydrocarbons in soil and groundwater.

The implemented interim action was proposed in Cardno's (now Stantec) *ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan* (IAWP), dated June 14, 2022 (Cardno, 2022d), and detailed in Cardno's *ExxonMobil ADC Site – Port of Everett Property Engineering Design Report* (EDR), dated July 18, 2022 (Cardno 2022e). The EDR was prepared to provide relevant information in order to implement the work described in the IAWP at the Site, satisfy the requirements of Washington Administrative Code (WAC) 173-340-400(4)(a) (WAC, 2007), and the amendment to the 2010 Agreed Order No. DE 6184 (2010 Order; Ecology, 2010).

1.1 PREVIOUS STUDIES

This section briefly discusses previous investigations at the Site. Since 1985, various consultants have conducted environmental investigations to characterize the nature and extent of contaminants of concern (COCs) in soil and groundwater at the Site. Previous investigations are summarized in Appendix A. Interim actions conducted to date are summarized in Appendix B. Boring logs from the Port excavation delineation investigation (Excavation Delineation Work) are included in Appendix C of the EDR (Cardno, 2022e).

1.2 REGULATORY FRAMEWORK

This section summarizes the regulatory background of the Site, including the three Agreed Orders and definition of the Site.

The cleanup of the Site is regulated under WAC Chapter 173-340 – Model Toxics Control Act (MTCA) Cleanup Regulations (WAC, 2007). Environmental site investigation and interim actions have been conducted at the Site beginning in 1985 (WSP, 2023). There have been three Agreed Orders issued under the MTCA to date that direct cleanup actions at the Site (Ecology, 2010).

In April 1996, the Washington State Department of Ecology (Ecology) entered into the 1996 Order (DE 95TC-N402) with Mobil Oil Corporation (Mobil), ADC, and Miller (Mr. Aven P. Miller – former ADC



property owner) requiring cleanup, elimination, and/or containment of petroleum releases at and near the City of Everett's combined sewer overflow (CSO) discharge line into Port Gardner Bay. In accordance with the 1996 Order, the interim actions were completed, and Ecology agreed that the interim containment measures, CSO repair, and cleanup were satisfactorily completed and the exposure pathway to Port Gardner Bay had been removed.

Periodic groundwater monitoring and sampling began in 1988 at the Site (WSP, 2023). In October 1998, Ecology entered into the 1998 Order (DE 98TCP-N223), with Mobil, ADC, and Miller, requiring the preparation of a Remedial Investigation/Focused Feasibility Study Report (FFS), Interim Action Work Plan, and the subsequent completion of the work described in the Interim Action Work Plan. Per the developed FFS, an interceptor trench and cap were installed in 1999. Additionally, quarterly groundwater monitoring and monthly measurement and removal of LNAPL from affected wells began in 2002. In 2007, the groundwater monitoring frequency for the Site was reduced from quarterly to semiannually.

In March 2010, Ecology entered into the 2010 Order (DE 6184), with ExxonMobil and ADC requiring an FFS and development of a draft Cleanup Action Plan (CAP) to identify the nature and extent of hydrocarbons in soil and groundwater and select a preferred final interim action to remediate the Site in accordance with the MTCA. A final draft of the *Site Characterization/Focused Feasibility Study Report* (SC/FFS) was submitted to Ecology by WSP USA Environment & Infrastructure Inc. (WSP) on May 12, 2023 (WSP, 2023), along with Stantec's *Site Characterization/Focused Feasibility Study Report Addendum*, dated May 25, 2023 (Stantec, 2023a). A final draft of Stantec's *ExxonMobil ADC Draft Cleanup Action Plan* was submitted on May 31, 2023 (Stantec, 2023c).

In June 2022, an amendment to the 2010 Order was executed by Ecology, ExxonMobil, and ADC to implement the Port Interim Action (Ecology, 2022). The amendment specified that upon approval, the IAWP would become a part of the 2010 Order. The scope of the Port Interim Action includes excavation of LNAPL and soil exceeding the Site-specific residual saturation remediation levels, transportation and disposal of excavated soil, excavation backfill, and site restoration including reinstallation of the asphalt cap. Additionally, a permanent barrier would be installed along the western side of Federal Avenue to limit LNAPL migration.

As noted in the 2010 order, the MTCA Site is defined as a release of gasoline-, diesel-, and motor oil-range total petroleum hydrocarbons (TPHg, TPHd, TPHmo), benzene, total xylenes, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and lead in soil and groundwater (Ecology, 2010). Additionally, ethylbenzene has been detected exceeding the MTCA Method A Cleanup Level in soil (Ecology, 2010). The Site includes the ExxonMobil ADC Property and extends into former Everett Avenue, Federal Avenue, and the Port properties just west of Federal Avenue. It also includes portions of the City of Everett rights-of-way east and south and the land underneath the Terminal Avenue Overpass to the east and southeast of the Property, and the BNSF Railway Company (BNSF) parcel east of the Property.

In accordance with WAC 173-340-430, an interim action, such as the one outlined in this report, is a remedial action that may be technically necessary in various circumstances, including to reduce the presence of a hazardous substance in the environment (WAC, 2007). The Port property was impacted with hazardous substances exceeding the Ecology-approved Site-specific residual saturation remediation levels, the condition of which could have become substantially more costly or complex to remedy if action was delayed. Based on these circumstances, an interim action was warranted under WAC 173-340-430.



Implementation of the interim action also supports the ongoing design of a final cleanup action for the Site, described in Stantec's draft CAP (Stantec, 2023c). Long-term requirements for the Site, including monitoring and institutional controls, are described in the draft CAP.

2.0 APPLICABLE, RELEVANT, AND APPROPRIATE REQUIREMENTS

Chapter 173-340-710 of the WAC states that cleanup actions must comply with various Federal and State level regulatory requirements (WAC, 2007). The following regulatory requirements are applicable to this interim action:

- MTCA Requirements (Section 1.2).
- State Environmental Policy Act (Section 2.4).
- Public Works Permits (Section 3.2).
- Washington State and Federal Worker Safety (Section 3.3).
- Air Quality (Sections 3.3.3 and 3.4.2).
- National Recommended Water Quality Criteria (Sections 3.1.2, 3.7.4, and 5.5).
- Native American Graves Protection and Repatriation Act (Sections 2.1, 2.2, and 2.3).
- Archaeological Resources Protection Act (Sections 2.1, 2.2, and 2.3).
- Washington Dangerous Waste Regulations (Section 5.0).
- Washington Solid Waste Handling Standards (Section 5.0).
- Federal Waste Transportation Standards (Section 5.0).

2.1 CULTURAL RESOURCE BACKGROUND REVIEW

A literature search of previously recorded cultural resources for the Site and surrounding area was conducted and is summarized in Cardno's *Cultural Resources Assessment Report*, dated November 19, 2021 (Cardno, 2021b). This included a thorough review of existing cultural resource data (i.e., archaeological, ethnohistoric, and historic) and previously completed cultural resources surveys. Information from the following sources were reviewed:

- Washington Department of Archaeology and Historic Preservation (WISAARD).
 - Washington Information System for Architectural and Archaeological Records Data.
 - Previous regional cultural resource investigations.
 - Previously recorded cultural resources.
- Historical registers (National Register of Historic Places).
- Local libraries and historical societies (if accessible).
 - Secondary sources, newspapers, historical documents, maps, photographs, and interviews.
- Tax assessor data.
- Site-specific data (including project plans provided by ExxonMobil).

The background data was compared to the proposed interim action to determine any potential disturbance to previously recorded archaeological resources, and to assess the archaeological significance of the project area.



2.2 MONITORING AND INADVERTENT DISCOVERY PLAN

Cardno prepared the *Cultural Resources Monitoring and Inadvertent Discovery Plan* (MIDP), dated April 6, 2022, for the Site (Cardno, 2022c). The MIDP (Appendix C) contains a project description, pertinent cultural resources laws and regulations, protocols for a preconstruction meeting and archaeological monitoring by a professional archaeologist, maps depicting the monitoring locations, email updates to the applicable agencies and tribes, and relevant contact information.

2.3 ARCHAEOLOGICAL MONITORING

Archaeological monitoring was performed to identify and minimize impacts to archaeological sites in the project vicinity (Appendix D). The monitoring did not identify any precontact or historic-era archaeological sites. The shoreline was extended over multiple iterations in 1914, 1947, and 1967 as defined in WSP's SC/FFS (WSP, 2023). Consequently, it was not anticipated that precontact or historical-era archaeological sites would be encountered on the early industrial era constructed land. Encountered soils were primarily fill with historical industrial materials. Large logs and associated chains were encountered and are consistent with historical industrial use in the vicinity of the Site.

2.4 WASHINGTON STATE ENVIRONMENTAL POLICY ACT REVIEW

In accordance with Washington State Environmental Policy Act (SEPA), a SEPA checklist was prepared for the Site and included in the EDR (Cardno, 2022a). A revised SEPA checklist (Stantec, 2023b) was prepared and submitted with the draft CAP (Stantec, 2023c) and is included as Appendix E. The SEPA checklist identifies measures to avoid, counter, or minimize likely impacts to the environment. If Ecology determines that there is no significant environmental impact associated with the selected cleanup action, Ecology will issue a Determination of Non-Significance or a mitigated Determination of Non-Significance with conditions.

2.5 TERRESTRIAL ECOLOGICAL EVALUATION

No wetlands, streams, shorelines, floodplains, or wildlife habitat are present on the Site (US FWS, 2021; WSP, 2023). As summarized in the final draft SC/FFS (WSP, 2023), soil concentrations are considered protective of terrestrial receptors via a simplified Terrestrial Ecological Evaluation (TEE). The Site met the requirements for an exclusion from performing a TEE (Appendix F) as outlined in WAC 173-340-7492 (WAC, 2007).

2.6 PERFORMANCE MONITORING

Performance monitoring was conducted to document in advance that completion of the selected action would attain the interim action objectives: removal of LNAPL in soil and removal of soil which exceeds the Site-specific residual saturation remediation levels.

Soil borings were completed in October 2020 and January and February 2021 on accessible areas of the Port property (Excavation Delineation Work). The purpose of the borings was to predefine the extents of the LNAPL excavation area to eliminate the need for performance monitoring at the time of excavation. Cardno advanced 51 soil borings within the accessible areas of the Port property. Approximately 240 individual soil samples were collected and analyzed against the Site-specific residual saturation



remediation levels and observed for the presence of LNAPL. The Excavation Delineation Work is summarized in Cardno's *Port of Everett – Excavation Delineation Report*, dated April 21, 2021 (Cardno, 2021a), and the IAWP (Cardno, 2022d). Analytical results for soil samples collected on the Port property during the Excavation Delineation Work are summarized in Plates 4 through 11 and Table 1.

The extents of the excavation measured approximately 300 linear feet north to south along Federal Avenue and approximately 80 feet east to west from Federal Avenue toward Port Gardner Bay (Plate 12). The extents of the excavation completed in 2023 were defined by soil analytical results established by the Excavation Delineation Work shown on Plates 4 through 11 and the cross section (Plate 13). The overall surface area of the excavation measured approximately 20,000 square feet.

3.0 INTERIM ACTION ENGINEERING DESIGN AND PROCEDURES

This section summarizes the engineering design and procedures that were used to complete the interim action outlined in the IAWP (Cardno, 2022d). The engineering design and procedures were derived from the proposal package submitted by Cardno's selected prime contractor (Innovative Construction Solutions [ICS] of Costa Mesa, California), Cardno's IAWP, and from correspondence between Cardno, ICS, and various public agencies during the planning phase of the project.

The work outlined in the EDR (Cardno, 2022e) was separated into four phases (Phases 1 through 4), with fencing, excavation boundaries, work areas, staging and laydown areas, and other aspects of the work moving with each phase. These phases were developed at the request of and in collaboration with the Port to minimize impacts to the Port and its lessees. The implemented phases varied from the proposed phases due to Site conditions and access during the implementation of the excavation.

3.1 PRE-PROJECT PLANNING AND DOCUMENT PREPARATION

3.1.1 Utility Protection Plan

Available utility maps were reviewed, and Advanced Underground Utility Locating LLC of Bellevue, Washington (a private utility locating service) was deployed to evaluate the presence and locations of underground utilities. ICS verified the depths and alignments of any marked utilities that could interfere with the excavation and/or shoring using soft digging methods and a vacuum truck (potholing). All potholes were backfilled or covered with traffic-rated steel plates. Additionally, Cascade Surveying & Engineering Inc. (Cascade Surveying) of Arlington, Washington (a licensed surveyor) marked out all known utility alignments.

3.1.2 Stormwater Pollution Prevention Plan and Temporary Erosion and Sediment Control Plan

Stantec prepared a Stormwater Pollution Prevention Plan (SWPPP) and Temporary Erosion and Sediment Control (TESC) Plan, enclosed as Appendix G. The best management practices (BMPs) outlined in the SWPPP and TESC were implemented. The SWPPP and TESC specified BMPs to:



- Reduce, eliminate, or prevent stormwater contamination and water pollution during the remedial excavation.
- Prevent violations of surface water quality, groundwater quality, or sediment management standards.
- Control peak volumetric flow rates and velocities of stormwater discharges.

3.1.3 Phased Fencing and Site Layout

To maintain access to the Port and Everett Ship Repair (ESR; a lessee of the Port) properties, temporary fencing was erected to minimize impact to the operating businesses (Appendix H).

3.2 PERMITS

3.2.1 City of Everett Permitting Under the MTCA

Since the remedial action is being driven by a MTCA cleanup action – and asphalt removal, shoring installation, excavation of contaminated soil, backfill, compaction, and resurfacing fall within the MTCA scope – traditional construction permits for these activities with the City of Everett were not required.

Upon submittal of the SWPPP to the City of Everett, a Letter of Substantive Requirements was issued in lieu of traditional construction permits on July 14, 2022. While a Letter of Substantive Requirements replaces the need for a formal permitting process, the City of Everett reviewed the construction drawings (hereinafter referred to as the Plans) and issued a conditional approval letter (Appendix I).

While the previously mentioned tasks were exempt from traditional permitting, both capping off utilities and utility reconnection required permits from the City of Everett and were obtained by ICS. The final inspection and permit close out confirmation are included as Appendix J.

3.2.2 City of Everett Discharge Permit

On March 2, 2022, Cardno obtained Discharge Authorization No. MD-46-2022 (Discharge Authorization) from the City of Everett for discharge of groundwater from excavation dewatering activities. An extension to the Discharge Authorization was issued on November 14, 2022 (Appendix K). Discharge rate limits, restrictions, and sampling requirements prior to discharge are summarized on the Discharge Authorization. Predischage sampling is summarized in Section 3.7.4.

3.3 HEALTH AND SAFETY

3.3.1 General Safety Requirements

All workers possessed Occupational Safety and Health Administration (OSHA) 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training as well as the required 8-hour annual refresher training, and equipment training certifications for the equipment the workers operated. Additionally, select workers obtained Transportation Worker Identification Credentials (TWIC) cards and received escort training for the Port of Everett.

Use of specialized equipment (i.e., fall protection) included verification of training including proper use, maintenance, understanding any limitations, and inspection requirements for the equipment.



3.3.2 Health and Safety Plan

Health and Safety Plans (HASPs) were prepared by Cardno and ICS for this interim action in accordance with OSHA 29 Code of Federal Regulations (CFR) 1910.120 – Hazardous waste operations and emergency response (OSHA, 2022), OSHA 29 CFR Part 126 – Safety and Health Regulations for Construction (OSHA, 2022), and WAC 296-843 – Hazardous Waste Operations (WAC, 2007). Cardno's HASP is included as Appendix L of the EDR. The ICS HASP is included as Appendix M of the EDR.

3.3.3 Protection Monitoring

Protection monitoring is to protect human health and the environment during the interim action. Air monitoring was conducted in accordance with Federal and State requirements and the HASPs.

3.4 SITE PREPARATION AND MOBILIZATION

Various activities, outlined in Sections 3.1 through 3.6, were completed prior to remedial excavation activities on the Port property.

3.4.1 Fencing Removal and Temporary Fencing Installation

Prior to initiating the remedial excavation and its associated tasks, perimeter fencing and gates were installed to secure the work zones. To facilitate a phased excavation approach, sections of the United States Coast Guard Maritime Security (MARSEC) fencing were demolished and temporary MARSEC fencing was installed on the Port of Everett and ESR border. The phased fencing, trucking routes, and work zone layout figures are shown on the Plans (Appendix L). Upon removal of select sections of MARSEC fencing, a private security company was retained to provide security guards during non-business hours.

3.4.2 Temporary Erosion and Sediment Controls

The SWPPP and TESC plans are included in Appendix G. All BMPs outlined in the SWPPP were implemented where applicable for the corresponding stage of work. As described in Section 3.2.1, the SWPPP and TESC plan were submitted to the City of Everett for review to obtain a Letter of Substantive Requirements (Appendix I).

Cardno, ICS, and RAM Geoservices, Inc., a Washington State Certified Erosion and Sediment Control Lead, performed regular inspections and maintenance to observe that BMPs were in working condition. More thorough inspections occurred following storm events. A summary of applicable construction stormwater BMPs are in the SWPPP. Copies of weekly SWPPP inspections are included in Appendix M.

In addition to the BMPs listed in the SWPPP, dust control was performed during all phases of the excavation, soil loading, and soil transportation activities with a water truck. Haul routes were kept clean and wetted down to reduce construction-related dust. All trucks were dry decontaminated in loading areas to mitigate track out and dust along haul routes. Street sweeping on soil load out days and reduced drop heights of material when loading out soil was conducted to minimize dust.



3.4.3 Excavation Saw Cutting and Asphalt Concrete Removal

The perimeter of the asphalt concrete (AC) surface was cut for the excavation phases prior to commencing each phase of the excavation. Wet saw cutting methods were utilized to minimize dust. The waste slurry was handled as non-hazardous construction waste (Section 5.7).

Upon completion of saw cutting activities, the existing AC was demolished and removed from the excavation surface. All broken AC was loaded into dump trucks and hauled to Cadman's Delta Remediation landfill for disposal as construction debris (Section 5.7).

3.4.4 Dewatering System Design and Setup

The dewatering and water treatment system (Photograph 1) was designed to extract and treat up to 150 gallons per minute (gpm). The dewatering and treatment system included:

- One 18,000-gallon capacity weir tank. This tank acted as a sediment settling tank and captured any LNAPL present.
- Two 21,000-gallon capacity frac tanks. One of these frac tanks was installed prior to the treatment system and one was installed post treatment to allow batching of the discharge to the City of Everett sanitary sewer.
- One bag filter.
- Four 2,000-pound capacity granular activated carbon vessels to treat water prior to holding and discharge.
- Pumps, hoses, fittings, flow meters, sample ports, and various other implements needed to pump, treat, and discharge water at a rate up to 150 gpm.
- A diesel generator to provide power to the dewatering system.
- Discharge lines from the dewatering system to the sanitary sewer discharge point.
- Containment berms for the three tanks and filtration equipment.

Photograph 1 Dewatering System Setup



3.4.5 ESR Portable Office Relocation

During the remedial excavation, after completion of the utility disconnections, the ESR portable office was temporarily moved to the Norton Terminal on the Port of Everett to accommodate excavation activities on the Port property. A trailer frame, axels, wheels, and tires supported the existing office building. After the ground tethers, staircases, and Americans with Disabilities Act accessible ramp were separated from the building, the building was moved as one complete unit to the Norton Terminal. The building was then retethered to the ground and secured for temporary storage while remedial excavation activities were completed.

A temporary office building was supplied for ESR's use while displaced during the excavation activities. Short-term fiber optic internet service was supplied to the temporary office. Sewer and water connections were established for the temporary office by tying into existing utilities located at the restroom building to the south of the existing main ESR warehouse. Power to the temporary office was supplied by a diesel generator, with electrical connections completed by a licensed electrician.

3.5 PHASED UTILITY REROUTING AND PROTECTION

Various underground and aboveground utilities were located within the extents of the excavation and were disconnected, rerouted, protected, and/or reconnected by ICS or the corresponding utility owner (i.e., Wave Broadband and Snohomish County Public Utility District [PUD]).

As shown on the Plans (Appendix L), these utilities included:

- A southeast to northwest trending 15-inch diameter storm drain, its associated catch basin, and two additional 15-inch diameter storm lines were removed for excavation activities. A bypass was installed to maintain operation during excavation and was reinstalled upon completion of excavation activities (Appendix L, Drawing P-2). The replacement catch basins were pre-cast with a minimum load capacity of 15 kips. The 15-inch storm drain line transected Phases 1 through 4 of the excavation. This utility was disconnected, rerouted, and reinstalled by ICS.
- A 6-inch diameter sewer line entered Phase 4 of the excavation from the west, was removed for excavation activities with a bypass installed to maintain operation and reinstalled upon completion of the excavation activities (Appendix L, Drawing P-2). This utility was disconnected, rerouted, and reinstalled by ICS.
- A 6-inch diameter sewer line located within Phase 4 of the excavation serving the ESR portable office was removed for excavation and reinstalled upon completion of excavation activities (Appendix L, Drawing P-2). This utility was disconnected, rerouted, and reinstalled by ICS.
- An out-of-service sewer line located within Phases 3 and 4 of the excavation, was removed for excavation and not reinstalled upon completion of excavation activities (Appendix L, Drawing P-2). This utility was disconnected by ICS.
- Two ¾-inch diameter water lines entered Phase 4 of the excavation from the east that served the ESR warehouse and the portable office building, were removed for excavation activities with a bypass installed to maintain operation and reinstalled upon completion of the excavation activities (Appendix L, Drawing P-2). These utilities were disconnected, rerouted, and reinstalled by ICS.
- An overhead fiber optic line supplied internet to the portable ESR office, running from a pole located just north of the ESR property boundary. The fiber optic line was rerouted the excavation by



Astound/Wave Broadband of Bothell, Washington, a Cardno subcontractor, prior to moving the temporary ESR building, (Appendix L, Drawing P-2).

- An overhead power line and its associated pole, previously supplying power to the portable ESR building, were removed by Snohomish County PUD prior to the relocation of the ESR building (Appendix L, Drawing P-2).
- Two light poles and the associated overhead lines, previously supplying light to the ESR property, were to be abandoned by Snohomish County PUD. Following disconnection, abandoned wooden poles were removed during the remedial excavation (Appendix L, Drawing P-2).

Utility restoration activities performed by ICS following completion of the remedial excavation are shown in Photograph 2.

Photograph 2 Utility Restoration Post-Excavation



3.6 PHASED SHORING AND PERMANENT SHORING WALL

Due to the phased approach, the excavation design specified a shoring wall around each of the excavation phases (Appendix L, Drawings P-3 through P-6). Shoring installed along the eastern edge of the excavation adjacent to Federal Avenue was left in place at the conclusion of the Port Interim Action to serve as a permanent barrier wall, while other (temporary) shoring was removed upon placement of backfill at the completion of each excavation phase. Vibratory hammer methodology was used to install the sheet piles using an 85-ton crane with a 100-foot boom, driving the piles downward by vibration.

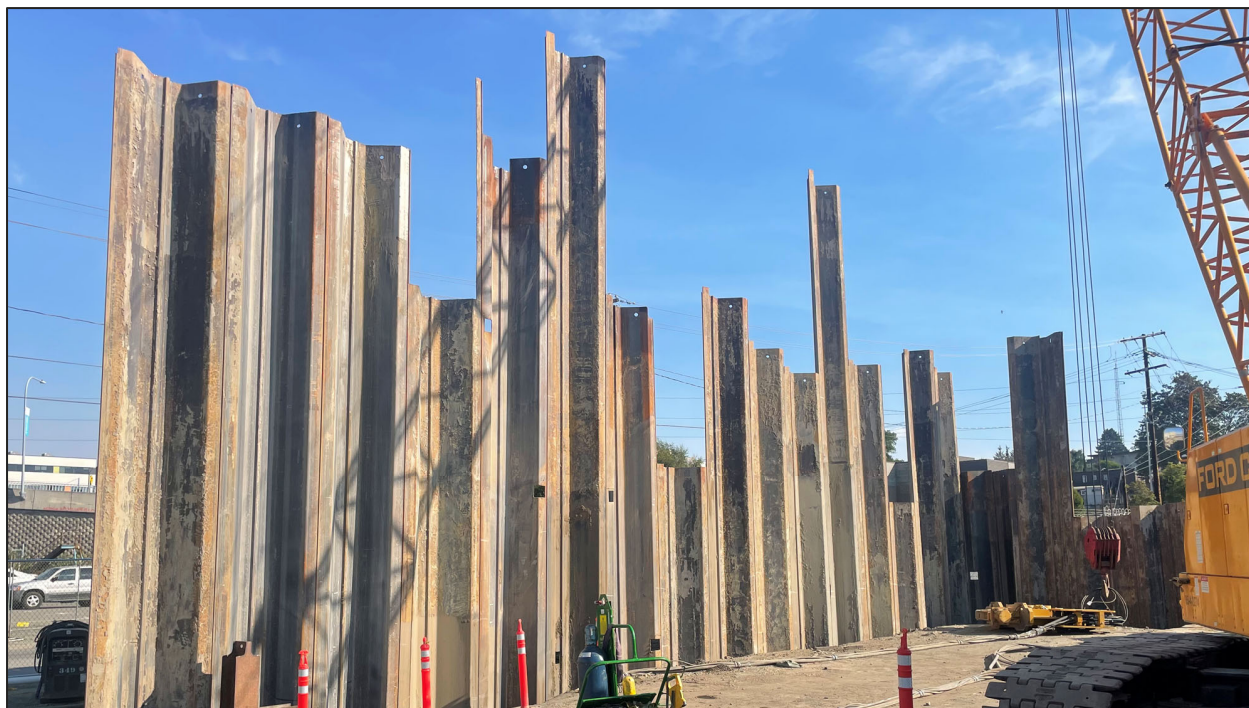


The shoring design (Appendix L, Drawings M-1 through M-4) included the following:

- Permanent (Barrier Wall) Shoring: ZZ14-700 and AZ28 hot rolled corrugated steel, interlocking (joined during installation) sheet piles of approximate thickness 0.4 to 0.5 inch, installed to depths ranging from 17.5 to 42.5 feet below ground surface (bgs), approximately 10 to 25 feet below the bottom of excavation.
- Temporary Shoring: ZZ14-700, AZ28, and AZ34 hot rolled corrugated steel, interlocking (joined during installation) sheet piles of approximate thickness 0.4 to 0.5 inch, installed to depths ranging from 17.5 to 45 feet bgs, approximately 10 to 25 feet below bottom of excavation.

The southern and eastern portion of the Phase 1 and 2 shoring wall are shown in Photograph 3.

Photograph 3 Shoring Wall Installation



3.6.1 Permanent Barrier Wall Installation

At the request of the Port, shoring along Federal Avenue was left in place to serve as a permanent barrier wall to limit future potential hydrocarbon migration onto the Port property (Photograph 4). The barrier wall will restrict groundwater flow and thus limit potential recontamination of the Port property from residual hydrocarbons located beneath Federal Avenue, and limit potential recontamination from the upgradient ExxonMobil ADC Property until the planned future excavation occurs, as described in the draft CAP (Stantec, 2023c).

Photograph 4 Permanent Barrier Wall Prior to Hammering Below Grade



Given the relatively flat local hydraulic gradient of 0.02 (Cardno, 2022b), and that the permanent barrier wall does not intersect a lower confining layer, the restricted groundwater flow through the barrier is not expected to cause significant mounding. Based on the historical groundwater sampling data for monitoring wells across the Site, dissolved hydrocarbons are relatively immobile (Cardno, 2022b), and any changes in groundwater flow patterns caused by the barrier wall are not expected to create potential COC transport issues.

3.7 PHASED REMEDIAL EXCAVATION

The remedial excavation occurred in four phases (Phase 1 through 4), with some overlap between phases, to minimize impacts to Port and ESR access and operations to the extent practicable. Field activities are summarized in the Weekly Progress Reports (Appendix N). Work commenced with equipment mobilization (Photograph 5) and asphalt removal on August 20, 2022, and continued through March 15, 2023, when the final equipment removal and site restoration was completed.

Photograph 5 Equipment Mobilization Prior to Excavation



3.7.1 Remedial Excavation

Following shoring installation and utility preservation, excavation commenced using mechanical excavation methods (excavator) and the field protocol included in Appendix O. Soil was directly loaded or temporarily stockpiled if drying or transport truck coordination was required.

The remedial excavation proceeded to predetermined depths and horizontal extents. Results from the Excavation Delineation Work on the Port property were first presented in Cardno's *Port of Everett – Excavation Delineation Report*, dated April 21, 2021 (Cardno, 2021a). Finalized excavation extents were presented in Cardno's *ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan*, dated June 14, 2022 (Cardno, 2022d). The extents of the excavation measured approximately 300 linear feet north to south along Federal Avenue and approximately 80 feet east to west from Federal Avenue toward Port Gardner Bay (Plate 12), extending to depths ranging from 7.5 to 20 feet bgs. The overall surface area of the excavation measured approximately 20,000 square feet. The excavation extents are defined on Plates 12 and 13.

Excavation to these predetermined extents removed soil inferred to be greater than the Site-specific residual saturation remediation levels (Plates 4 through 11). Horizontal excavation extents are bound by geolocated soil borings and were agreed upon by Ecology, Port of Everett, ExxonMobil, and ADC, and have undergone public comment (Ecology, 2022). Excavation depths encompassed soil greater than Site-specific residual saturation remediation levels, and were agreed upon by Ecology, Port of Everett, ExxonMobil, and ADC, and have undergone public comment (Ecology, 2022). Remedial excavation progress during Phase 2 is shown in Photograph 6.

Photograph 6 Remedial Excavation – Phase 2



Photograph 7 UST Discovery During Phase 2 Excavation



On October 5, 2022, during excavation of Phases 1 and 2, a previously unknown underground storage tank (UST) was uncovered along the eastern extent of the excavation at approximately 3 feet bgs (Photograph 7). The UST was estimated at approximately 750-gallons in capacity and was likely used for heating oil. Details regarding UST decommissioning and disposal are summarized in Sections 4.0 and 5.1.

Between October 5, 2022, and February 20, 2023, approximately 7,500 cubic yards (11,838.82 tons) of contaminated soil was excavated and removed during the Port Interim Action. Remedial excavation progress during Phase 3 is shown in Photograph 8.

The extents of the excavation measured approximately 300 linear feet north to south along Federal Avenue and approximately 80 feet east to west from Federal Avenue toward Port Gardner Bay (Plate 12).

Photograph 8 Remedial Excavation – Phase 3

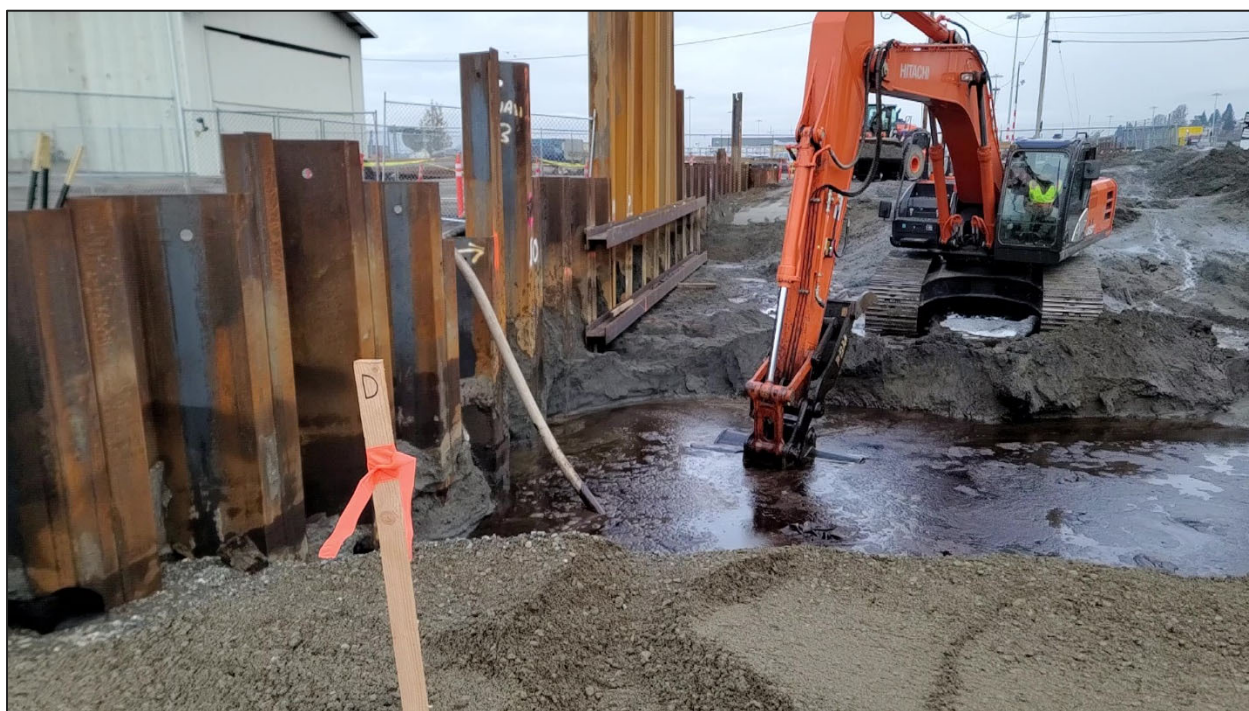


3.7.2 Excavation Depth Confirmation

The remedial excavation removed the lateral and vertical extents of soil as shown on Plate 12. Upon completion of Excavation Delineation Work, ICS contracted A.S.P.I. Land Surveying, Planning & Engineering (ASPI) of Everett, Washington (a licensed surveyor) to perform a topographic survey of the Site including the location and elevation of each of soil borings from the Excavation Delineation Work used to define the limits of the Port excavation. ASPI utilized a benchmark located between offset monuments at the intersection Grand Avenue and Everett Avenue and the intersection of Grand Avenue and 26th Street in Everett, Washington.

Prior to breaking ground, ICS subcontracted Cascade Surveying to use the topographic survey prepared by ASPI to lay out a predefined 20-foot by 20-foot grid overlaying the excavation footprint. ICS then utilized a laser level and survey rod to verify that depth was achieved for each location within the respective grid to document that targeted excavation depths were reached prior to backfilling (Photograph 9). The date and the ICS or Cardno representative responsible for verifying the depth confirmation at each grid location is summarized in Appendix P.

Photograph 9 Laser Level on Excavator Arm to Verify Excavation Depth



3.7.3 Temporary Soil Stockpiling and Drying

Most of the soil encountered during the remedial excavation was dry and consequently direct-loaded into trucks to transport for disposal. Wetter soil required temporary draining or stockpiling for drying prior to loading and transport. A combination of excavation dewatering, soil drying, and mixing of shallow/dry soil with deeper/wetter soils were utilized to prepare soil for transport to the disposal facility. A loader and/or excavator bucket was used to mix the soil. All soil was excavated in vertical horizons so that shallower dryer soil could be more easily mixed with the deeper wetter soil. Phase 4 of the excavation contained the



highest ratio of wet to dry soil. When necessary, soil was temporarily stockpiled for drying. Each drying area was constructed with 20-millimeter, high density polyethylene liner and surrounded by straw wattles weighed down with sandbags, creating a perimeter berm. The berm prevented free liquids from leaving the lined area.

3.7.4 As-Needed Dewatering

Prior to discharges to the City of Everett sanitary sewer, and in accordance with the Discharge Authorization, a representative batch sample was collected by pumping groundwater located within the excavation to the above ground weir tanks. Cardno then collected grab samples of the treated water and submitted the samples to Eurofins Calscience, a state-certified laboratory located in Tustin, California, in accordance with the field protocol (Appendix O). Samples were analyzed for:

- Total arsenic, cadmium, chromium, copper, lead, nickel, silver, and zinc in accordance with Environmental Protection Agency (EPA) Method 6020.
- Total mercury in accordance with EPA Method 7470A.
- n-Hexane Extractable Material (HEM) total oil and grease and Silica Gel Treated (SGT)-HEM polar/non-polar oil and grease in accordance with EPA Method 1664A.
- Total cyanide in accordance with Standard Method 4500 CN E.

All analytical results were submitted to the City of Everett Operations Maintenance Manager for approval prior to discharge. A copy of the discharge permit extension and predischARGE water sample analytical results are included in Appendix K.

Minimal dewatering was required during excavation. Total recovered groundwater measured 76,200 gallons and was processed by the water treatment system for discharge to a City of Everett sanitary sewer. Groundwater removed during dewatering activities was passed through a bag filter to remove fine-grained sediments, and four 2,000-pound granular activated carbon vessels to remove dissolved-phase COCs. Prior to backfill and restoration, any LNAPL present within the excavation was separated from groundwater using absorbent materials and stored in Department of Transportation (DOT)-approved 55-gallon drums pending transport for final disposal (Photograph 10). A total of 76,200 gallons of groundwater was discharged between December 9, 2022, and February 8, 2023.

Photograph 10 LNAPL Removal using Absorbent Materials



3.8 PHASED BACKFILL AND RESTORATION

Upon completion of each phase of the remedial excavation, backfill was placed according to specifications of the Port and the Washington State DOT (WSDOT) *Standard Specifications for Road, Bridge, and Municipal Construction 2022* (WSDOT, 2022), hereinafter referred to as the Standard Specifications. ICS submitted a supplier's certificate documenting compliance of each type of backfill material for approval by Cardno prior to importing material to the Site.

3.8.1 Backfill Below the Water Table

Backfill material met the gradation specification of Section 9-03.12(4) of the Standard Specifications or AASHTO (American Association of State Highway and Transportation Officials) No. 57. Backfill was placed in conformance with the lines, grades, and dimensions shown on the Plans (Photograph 11; Appendix L). The backfill was deposited, spread evenly, and placed in loose lifts that did not exceed 12 inches in thickness. At the water table surface, the backfill was compacted by mechanical tamping and additional backfill deposited until tamping no longer pushed backfill below the water table.

Photograph 11 Backfill Below the Water Table



3.8.2 Geotextile Installation

Upon reaching final depth within each excavation phase, the Plans (Appendix L, Drawing C-3) specified installation of geotextile filter fabric along the sides of the excavation sections to total depth and atop the backfill placed beneath the groundwater table (Photograph 12). The purpose of the geotextile is to limit movement of fines into the voids of the backfill material below the water table.

The geotextile fabric consisted of a woven material composed of a strong, rot-proof polymeric yarn or fiber orientated into a stable network that retains its relative structure during handling, placement, and long-term service. The fabric has complete resistance to deterioration from ambient temperatures, acid and alkaline conditions, and is indestructible to micro-organisms and insects. During installation, the geotextile fabric was overlapped by at least 2 feet. Dewatering was performed to better facilitate the fabric installation.

Photograph 12 Geotextile Filter Fabric Installation



3.8.3 Backfill Above the Water Table (Subbase)

The subbase backfill met gradation specification of Section 9-03.18 of the Standard Specifications for Foundation Material Class C (Photograph 13). The backfill was placed in conformance with the lines, grades, and dimensions shown on the Plans (i.e., from the water table surface to 24 inches bgs) (Appendix L, Drawing C-3), and in accordance with the applicable provisions of the Standard Specifications.

Photograph 13 Backfill Above the Water Table (Subbase)



The subbase backfill was placed in uniform lifts not exceeding 12 inches in uncompacted thickness. Each lift of subbase backfill was compacted to a minimum density of 92 percent of the maximum dry density as determined by WSDOT Standard Operating Procedure 615.

Prior to placement of any subbase backfill, ICS submitted the laboratory test results for the maximum dry density of a proctor sample according to WSDOT T606 for approval. During placement of the subbase backfill, density testing was performed at a minimum of one test per 200 square feet of placed material, with a minimum of four tests per lift (Photograph 14). Copies of the compaction testing reports are included in Appendix P.

Photograph 14 Compaction Testing Between Backfill Lifts



3.8.4 Aggregate Base

The aggregate base conformed to the requirements of Section 9-03.10 of the Standard Specifications. The backfill was placed in conformance with the lines, grades, and dimensions shown on the Plans (i.e., from minus 24 to minus 6 inches below surface grade), and in accordance with the applicable provisions of the Standard Specifications, except as specified below.

The aggregate base was placed in uniform lifts not exceeding 9 inches in uncompacted thickness. Each lift of aggregate base was compacted to a minimum density of 95 percent of the maximum dry density as determined by WSDOT Standard Operating Procedure 615.

Prior to placement of any aggregate base for the project, ICS submitted the laboratory test results for the maximum dry density of a proctor sample according to WSDOT T606 for approval. During placement of the aggregate base, density testing was performed at a minimum of one test per 200 square feet of placed material, with a minimum of four tests per lift per excavation location. Copies of the compaction testing reports are included in Appendix Q.

3.9 PHASED RESTORATION OF ASPHALT CONCRETE PAVING

The hot mix asphalt concrete paving (HMA) was placed and compacted over the aggregate base as shown on the Plans (i.e., from minus 6 inches to surface grade). The HMA aggregate, binder, and other materials met the requirements of Sections 5-04, 9-02, and 9-03 of the Standard Specifications for ¾-inch Class HMA.

Paving for the Phase 1 excavation area (Photograph 15) was completed prior to starting Phase 2. Paving for Phase 2 was completed under a separate mobilization to facilitate ESR access. Paving for Phases 3 and 4 were completed in one mobilization at the end of excavation and backfill activities.

The AC was placed in lifts not exceeding 4 inches and not less than 2 inches thick (compacted thickness). Each lift of AC pavement was tested for density for a minimum average of 92 percent of the theoretical maximum density. Testing was performed at a minimum of two locations within each lift. The density tests were performed by means of a nuclear device in accordance with Sections 5-04.3(10) and 5-04.3(10)A of the Standard Specifications.

The finished AC surface conformed to the smoothness tolerance stipulated in Section 5-04.3(13) of the Standard Specifications; there were no surface depressions greater than ¼ inch when tested with a 12-foot straightedge laid transverse to, or in the direction of paving, and no portion of the pavement retained ponded water. In addition, flood testing was performed to demonstrate positive drainage. The same grade and drainage patterns found at the ESR property prior to remedial excavation were maintained. A paving plan, including the location of the existing catch basin, is shown in Appendix L, Drawing P-6.

Other aspects of the AC placement were in accordance with Section 5.04.3 of the Standard Specifications. Copies of the compaction testing reports are included in Appendix Q.



Photograph 15 Asphalt Concrete Paving



3.10 PORT PROPERTY RESTORATION

Following asphalt surface restoration, the existing ESR office, temporarily stored on the Norton Terminal, was moved back to its original location. The internet connection to the existing ESR office was restored and temporary service terminated. Snohomish County PUD restored power to the existing ESR office including installation of a new power pole immediately to the east of the ESR office. The ground tethers, staircases, and Americans with Disabilities Act accessible ramp were reinstalled. Water and sewer connections to the existing ESR office were reestablished, and the temporary office was removed from the ESR property.

The fencing at the Site was reinstalled to pre-excavation status. A permanent MARSEC-rated fence was installed along the southern, eastern, and northern sections of the Port property (Photograph 16), conforming to Section 2.3.8 of the United States DOT and United States Coast Guard's *Recommended Security Guidelines for Facilities*, dated August 6, 2004 (USCG, 2004). Additionally, the automatic gates servicing ESR were reinstated to pre-excavation status.

Photograph 16 MARSEC Fencing Reinstallation along Eastern Portion Port of Everett



4.0 UST DISCOVERY AND DECOMMISSIONING

On October 3, 2022, during the excavation of Phase 1 and 2, an unknown 750-gallon steel UST was discovered. Excavation work in the area immediately stopped. Cardno uploaded the finding to Ecology's Environmental Report Tracking System (ERTS) on October 5, 2022. Additionally, on October 6, 2022, Cardno filed the 30-day UST removal notice with Ecology with a request for expedited removal on October 12, 2022 (Appendix R).

On October 12, 2022, Cardno observed Rivers Edge Environmental Services, Inc. (Rivers Edge) of Covington, Washington; U.S. Marine Chemists & Engineering (USMCE) of Mukilteo, Washington; Marine Vacuum Service Inc. (Mar Vac) of Seattle, Washington; and ICS decommission and remove the 750-gallon steel UST discovered on October 5, 2022 (Photograph 17). The contents of the UST were unknown but it was likely used for the storage of heating oil. The UST was encountered along the eastern extent of the excavation, near the footprint of a historical warehouse located on the Port property.

An International code Council (ICC)-certified Washington State Site Assessor from Cardno monitored assessment activities associated with the UST. Additionally, an ICC-certified UST Decommissioner from Rivers Edge monitored all decommissioning activities at the Site. A permit for UST decommissioning was obtained from the City of Everett Fire Department.



A certified marine chemist with USMCE and a Cardno representative tested the atmosphere of the UST for percent oxygen, percent lower explosive limit (LEL), carbon monoxide, hydrogen sulfide, and total hydrocarbons, all of which were determined to be absent of hazardous vapors. The marine chemist determined that no explosive atmosphere was present inside or around the UST and that decommissioning activities could begin. Following gas testing, Mar Vac used a vacuum truck to pump and triple rinse the UST.

The UST was encountered within the much larger excavation footprint thus all surrounding soil was excavated and disposed of as part of the Port Interim Action. Consequently, collection of unique soil samples associated with the UST discovery was not necessary.

Following the marine chemist's evaluation and removal of any remaining liquids, verbal approval was obtained from the City of Everett Fire Department and the UST was determined safe for excavation and removal. Using an excavator, ICS excavated the 750-gallon UST and loaded it into a trailer for transport by Rivers Edge for disposal (Photograph 17).

The UST decommissioning documentation including ERTS notice, 30-day note, permit, ICC certifications, triple rinse certificate, and waste disposal are included in Appendix R.

Photograph 17 UST Removal



5.0 WASTE MANAGEMENT

Waste streams generated during remedial excavation and associated activities are summarized in the following subsections. All applicable Federal and State regulations required for the transportation and disposal of potentially contaminated material were met. For waste related to the Port Interim Action, ADC was identified as the generator, with the exception of LNAPL absorbent, which identified ExxonMobil as the generator.

5.1 SOIL

Between October 5, 2022, and February 20, 2023, a total of 11,838.82 tons of hydrocarbon containing soil was generated from remedial excavation activities. Excavated soil was transported to the Heidelberg Materials Thermal Remediation Facility in Everett, Washington (Appendix S).

5.2 WOOD DEBRIS

A total of 32.95 tons of timber (wood debris) was removed from the remedial excavation (Photograph 18).

Photograph 18 Wood Debris Removed from Excavation



The wood debris was cut down into sections and transported to the Snohomish County Airport Road Recycling and Transfer Station for final disposal at the Republic Services Roosevelt Regional MSW Landfill, in Roosevelt, Washington on November 22, 2022 (Photograph 19; Appendix S).

Photograph 19 Excavated Logs Being Loaded for Off-Site Disposal



5.3 LIGHT NON-AQUEOUS PHASE LIQUID

The LNAPL generated during dewatering of the excavation was collected using absorbent material and disposed of by Advanced Chemical Transport, Inc. Twenty-two DOT-approved 55-gallon drums of absorbent materials containing approximately 7,600 pounds of LNAPL including adsorbent booms and containers were transported to the US Ecology facility in Grandview, Idaho, for final disposal (Appendix S).

5.4 DEWATERING

Groundwater generated during dewatering activities was stored and treated on the Port property using the dewatering system summarized in Section 3.4.4. Groundwater was treated and then discharged to the City of Everett's sanitary sewer system in accordance with the Discharge Authorization. A total of 76,200 gallons of water was treated and discharged.

5.5 SPENT CARBON

Spent granular activated carbon from the wastewater treatment system (Section 3.4.4) was managed by Pacific Coast Carbon. A total of eight DOT bulk bags (approximately 8,000 pounds dry weight) were reactivated at the Pacific Coast Biosphere Carbon facility in accordance with 40 CFR Parts 61 and 265.

5.6 CONSTRUCTION, ASPHALT, AND MISCELLANEOUS DEBRIS AND WASTE

All construction, asphalt, and miscellaneous debris and waste generated during remedial activities was handled as non-hazardous construction waste and disposed of at Cadman's Delta Remediation landfill in Everett, Washington.

5.7 UST DECOMMISSIONING

On October 12, 2022, the 400 gallons of wastewater generated during UST pumping and rinsing were transported by Mar Vac to their facility located in Seattle, Washington, for final disposal. The 750-gallon steel UST was transported by Rivers Edge to Metro Metals Northwest Inc. located in Tacoma, Washington, for final disposal. Waste documentation for UST decommissioning and disposal is included in Appendix R.

6.0 CONCLUSIONS

The excavation activities proposed in the IAWP (Cardno, 2022d) and detailed in the EDR (Cardno 2022e), have been completely implemented and included the following:

- Fencing removal and temporary fencing installation.
- Utility services disconnection, rerouting, and protection.
- Saw cutting, breakout, and removal of asphalt cap.
- Sheet pile shoring and barrier wall installation.
- Complete source removal via excavation for the lateral and vertical depths defined on Plate 12.
- Waste disposal.
- Excavation backfill and compaction.
- Surface restoration.
- Site restoration.

7.0 RECOMMENDATIONS

Stantec recommends continued groundwater monitoring and implementation of the proposed cleanup action, detailed in the draft CAP, following the public comment period and approval of the CAP which includes a remedial excavation on the ExxonMobil and ADC owned parcels and long-term monitoring of groundwater conditions via conditional point of compliance monitoring wells.



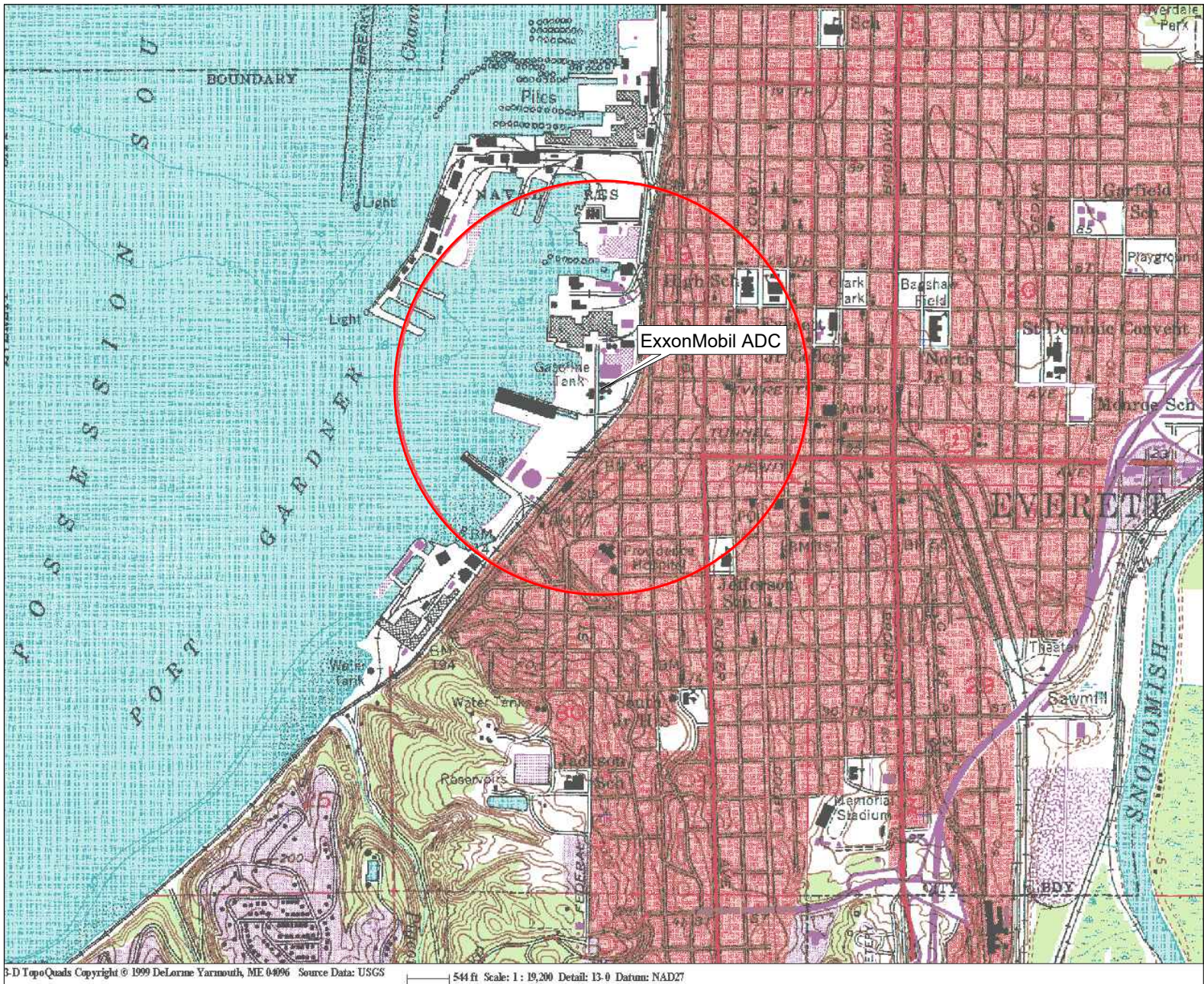
8.0 REFERENCES

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FN 2380003370001

EXPLANATION



1/2-mile radius circle



APPROXIMATE SCALE



SITE LOCATION MAP

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

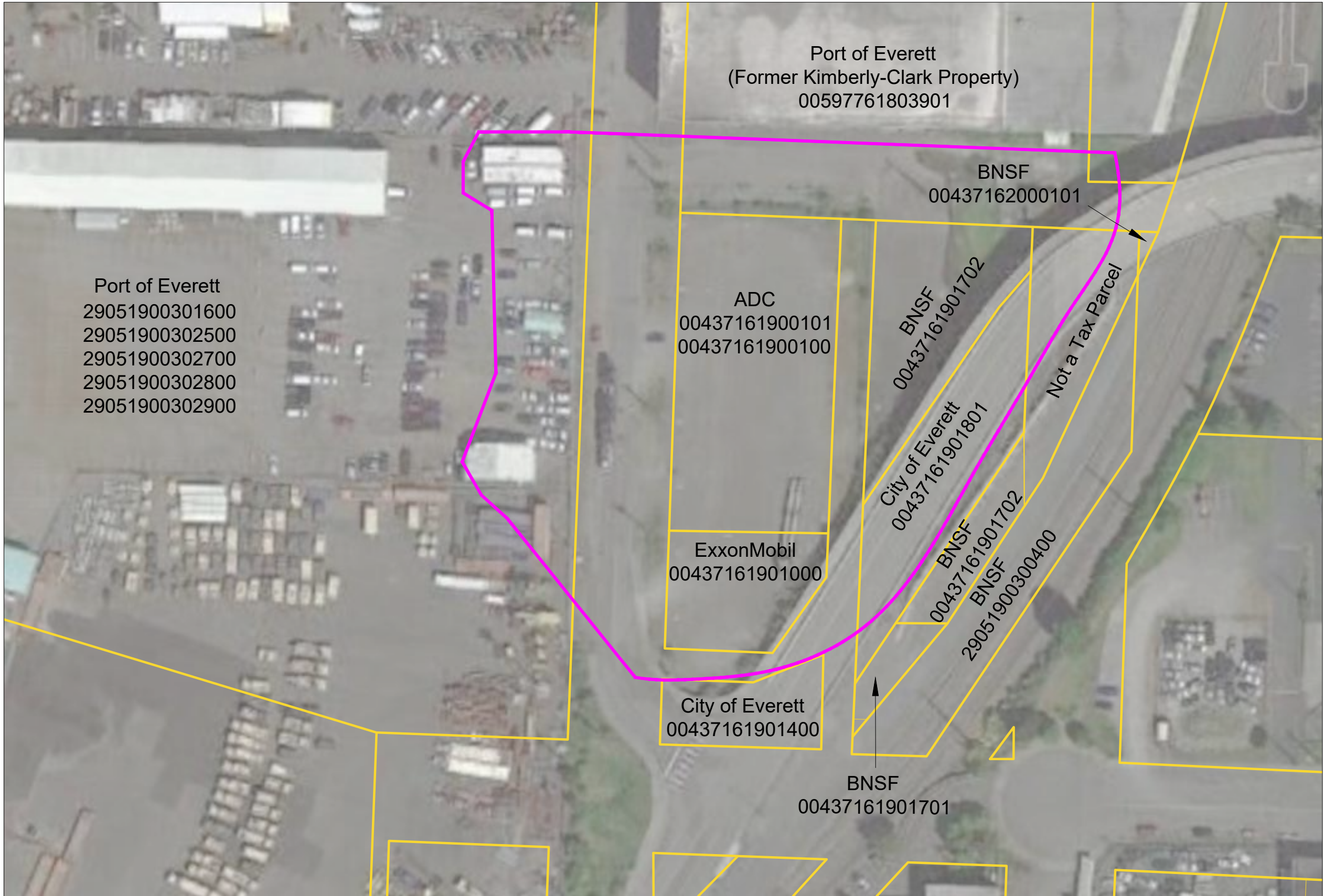
PROJECT NO.

238000337

PLATE



1

LEC: 01/24/23



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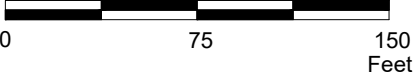
EXPLANATION

-  Ecology Site Boundary
-  Tax Parcel Boundary

SOURCE: Modified from
maps provided by the
Snohomish County Assessor

FN 0314470002

APPROXIMATE SCALE



SITE BOUNDARY MAP

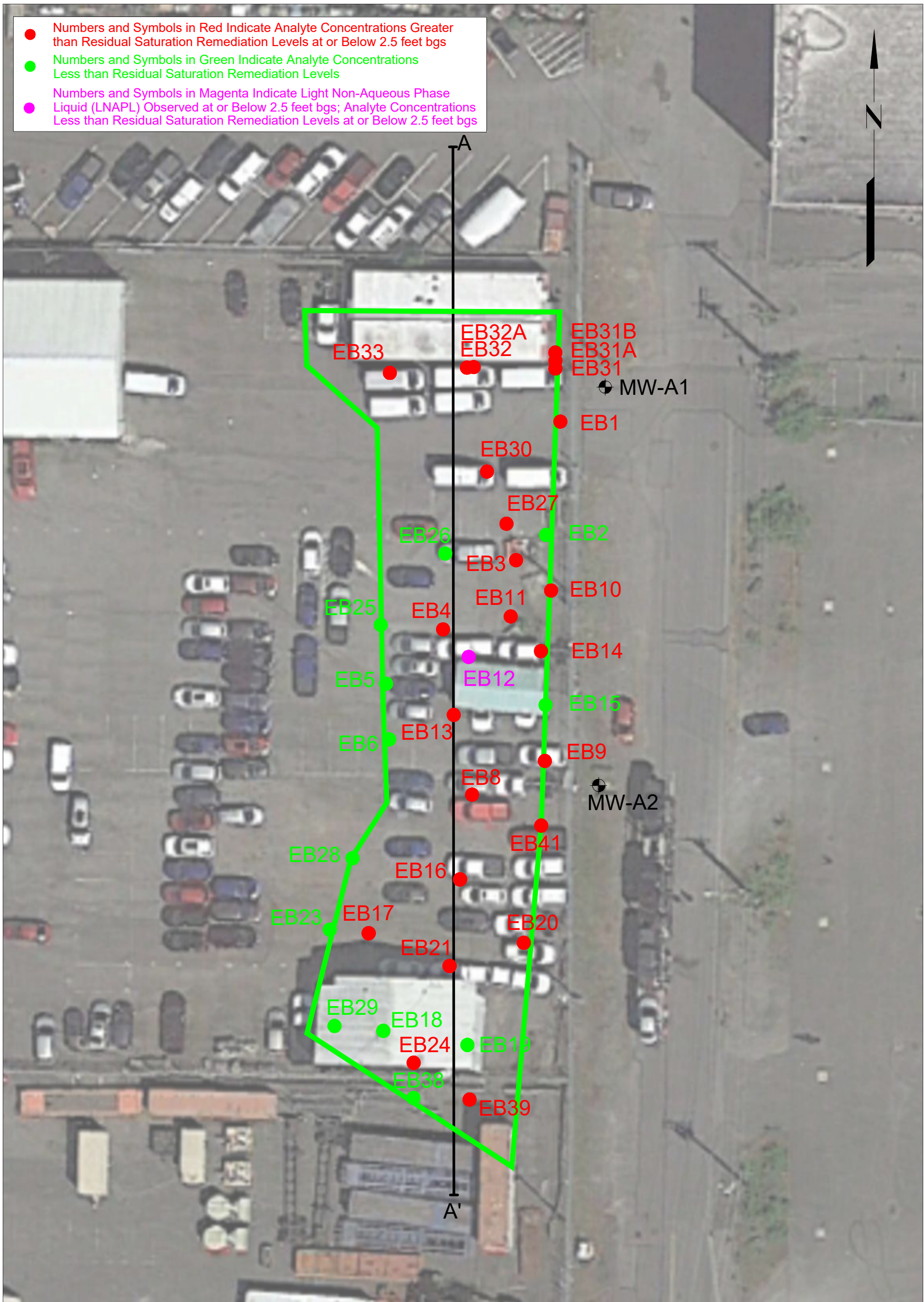
EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
3

CPA: 01/24/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 2.5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 2.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 2.5 feet bgs



FN 2380003370002

SOURCE: Modified from images provided by Google Earth

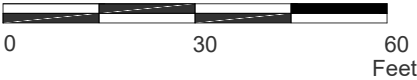
EXPLANATION

- MW-A2
- Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

- A A' Cross Section Traverse
- BGS Below Ground Surface

Defined Excavation Extents

APPROXIMATE SCALE



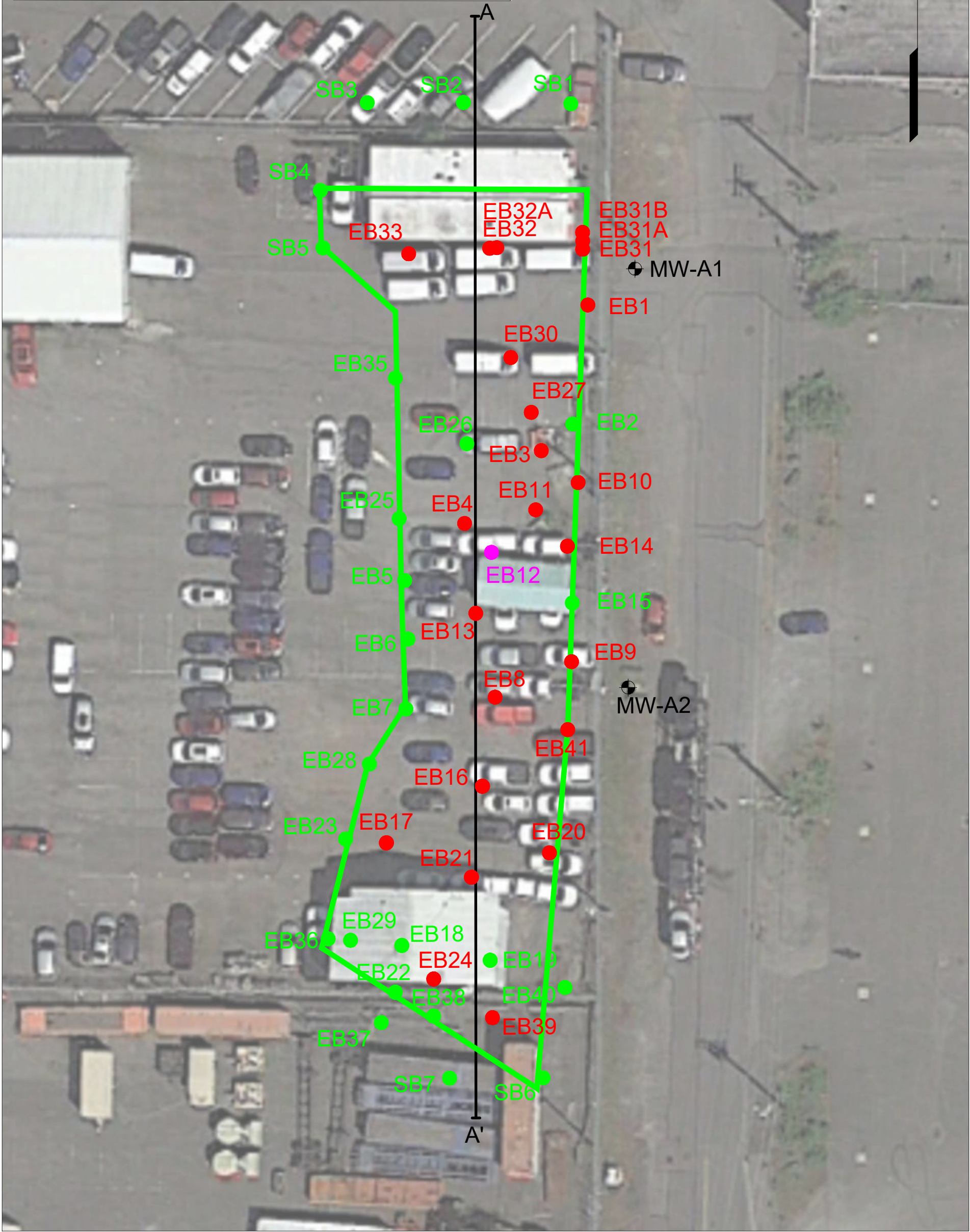
PORT OF EVERETT EXCAVATION DELINEATION MAP - 2.5 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
4
LEC: 02/27/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 5 feet bgs



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SOURCE: Modified from images provided by Google Earth

EXPLANATION

- MW-A2
- ⊕

Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

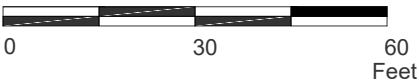
- A A'
- |—

Cross Section Traverse
- BGS
- Below Ground Surface

—

Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP - 5 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
5
LEC: 02/27/23

-
- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 7.5 feet bgs

Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels

Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 7.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 7.5 feet bgs
-
- FN 2380003370002
- SOURCE: Modified from images provided by Google Earth
- EXPLANATION
- MW-A2

Groundwater Monitoring Well

EB41

Excavation Delineation Boring
- A

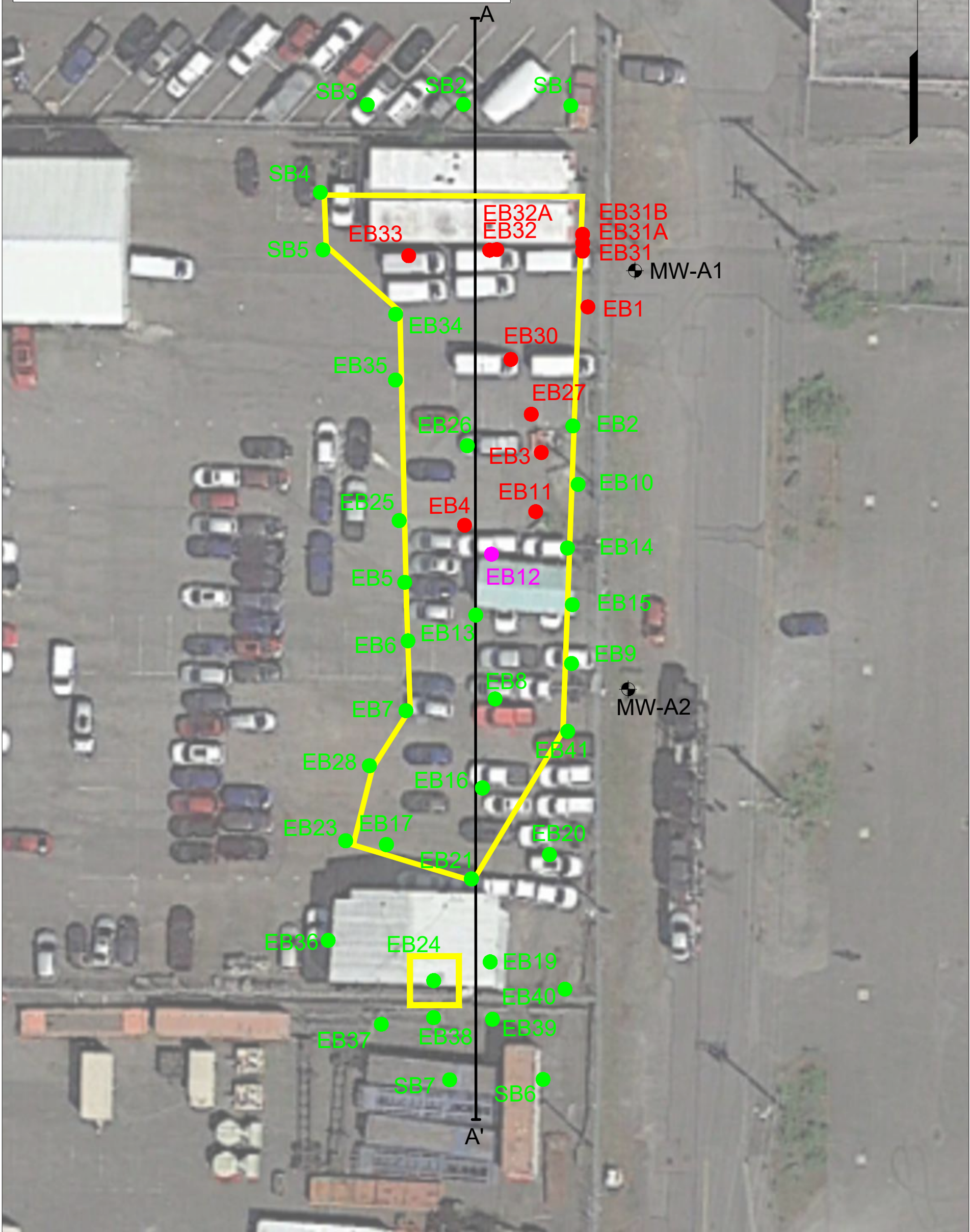
A'

Cross Section Traverse

BGS

Below Ground Surface
- Defined Excavation Extents
- APPROXIMATE SCALE
-
-
- PORT OF EVERETT EXCAVATION DELINEATION MAP - 7.5 FEET BGS
- EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington
- PROJECT NO.
238000337
- PLATE
6
LEC: 02/27/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 10 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 10 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 10 feet bgs



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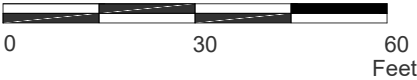
EXPLANATION

- MW-A2
- Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

- A A' Cross Section Traverse
- BGS Below Ground Surface

Defined Excavation Extents

APPROXIMATE SCALE



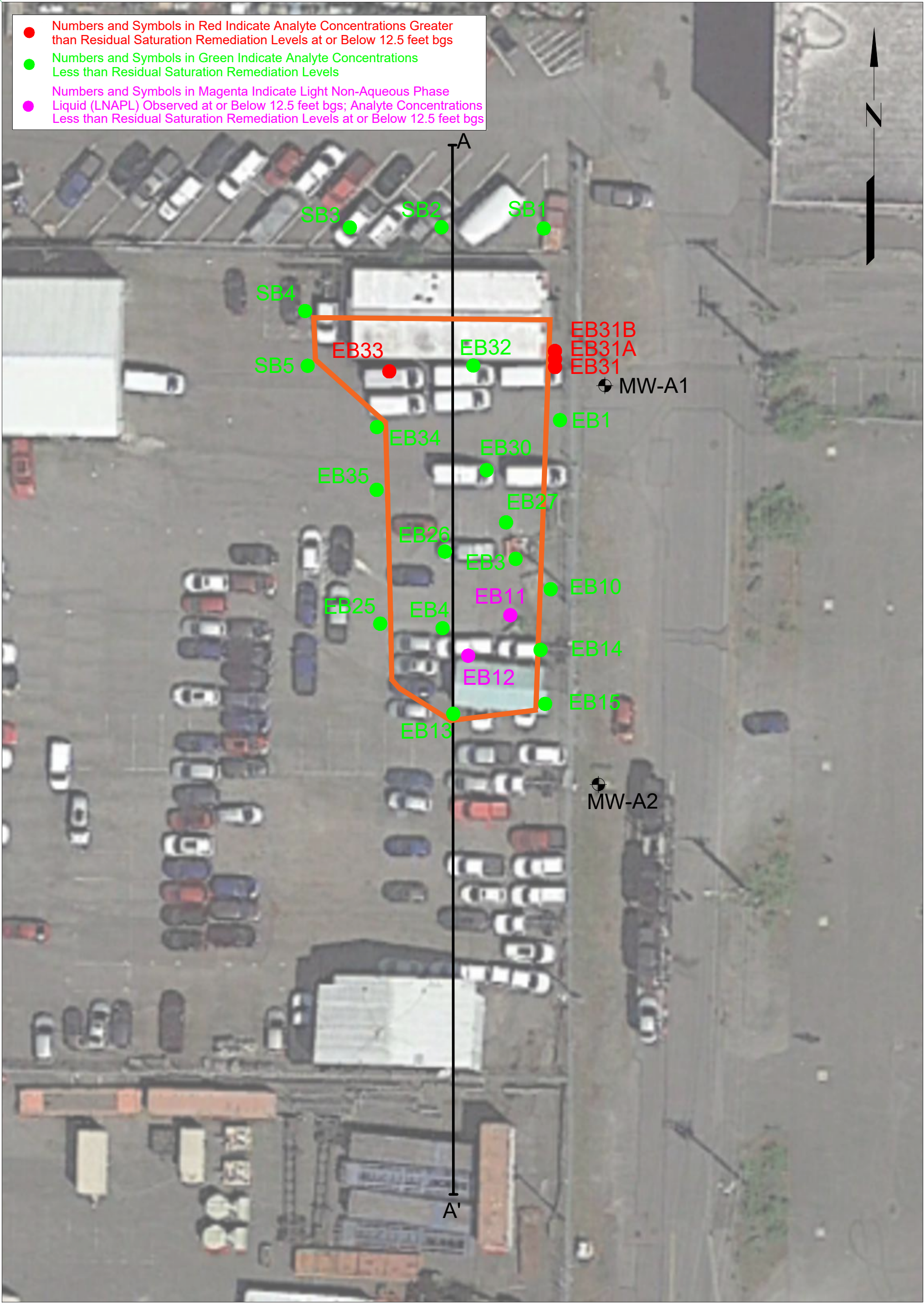
PORT OF EVERETT EXCAVATION DELINEATION MAP - 10 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
7
LEC: 02/27/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 12.5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 12.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 12.5 feet bgs



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SOURCE: Modified from images provided by Google Earth

EXPLANATION

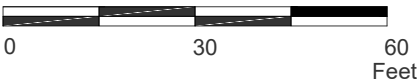
- MW-A2
- ⊕

Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

- A A'
- |—

Cross Section Traverse
- BGS
- Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP - 12.5 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.

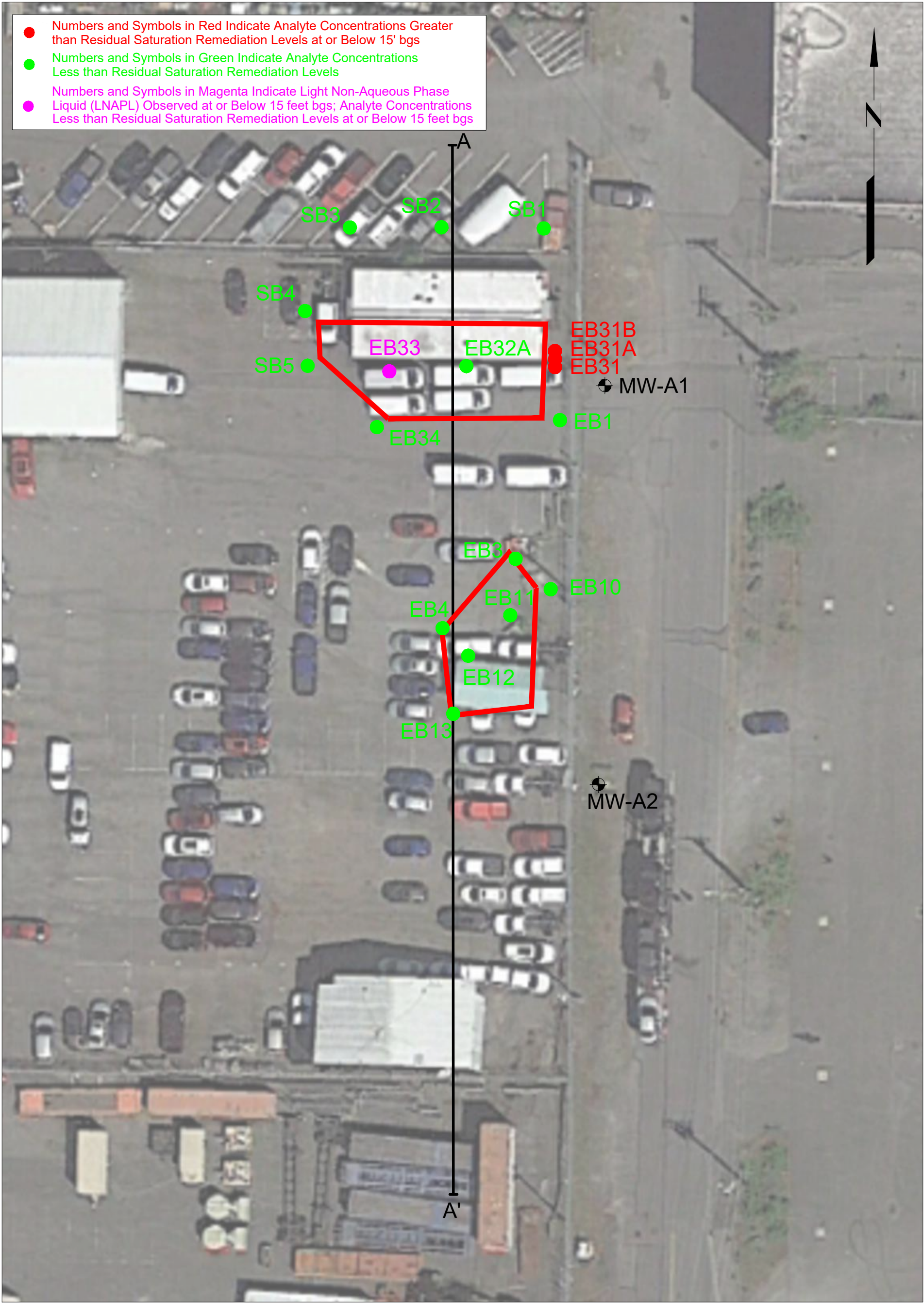
238000337

PLATE

8

LEC: 02/27/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 15' bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 15 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 15 feet bgs



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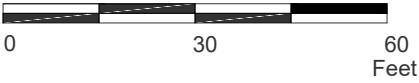
SOURCE: Modified from images provided by Google Earth

EXPLANATION

- MW-A2
● Groundwater Monitoring Well
- EB41
● Excavation Delineation Boring

- A A
— Cross Section Traverse
- BGS
Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP - 15 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
9
LEC: 02/27/23

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 17.5' bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 17.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 17.5 feet bgs



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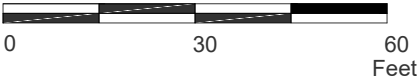
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EXPLANATION

- MW-A2
● Groundwater Monitoring Well
- EB41
● Excavation Delineation Boring

- A A'
— Cross Section Traverse
- BGS
Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP - 17.5 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
10
LEC: 02/27/23

● Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels



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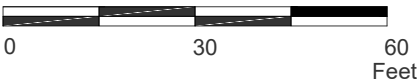
SOURCE: Modified from images provided by Google Earth

EXPLANATION

- MW-A2
● Groundwater Monitoring Well
- EB41
● Excavation Delineation Boring

- A A'
— Cross Section Traverse
- BGS Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE

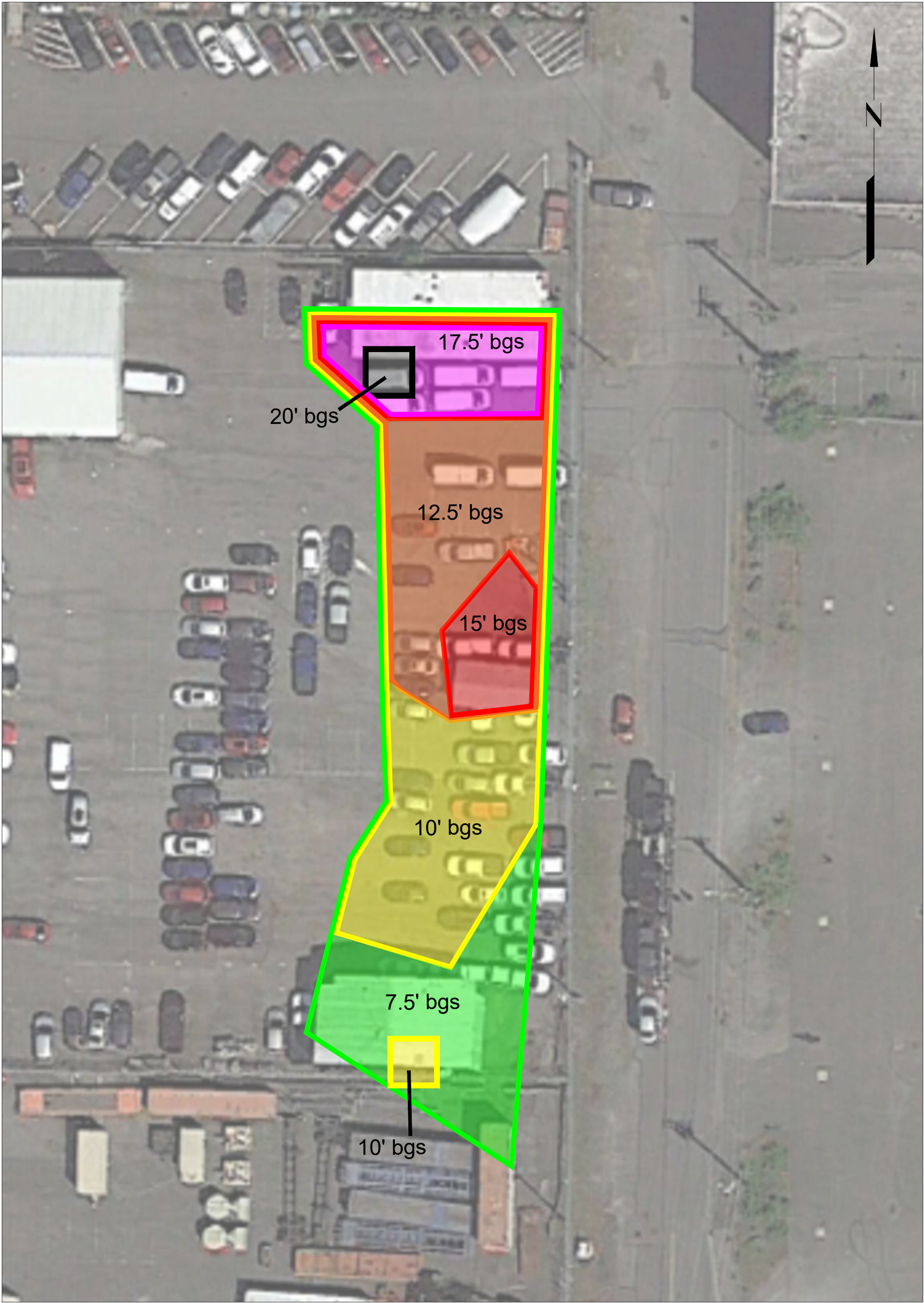


PORT OF EVERETT EXCAVATION DELINEATION MAP - 20 FEET BGS

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
11
LEC: 02/27/23



FN 2380003370002

SOURCE: Modified from images provided by Google Earth

7.5' bgs Defined Excavation Extents

10' bgs Defined Excavation Extents

12.5' bgs Defined Excavation Extents

15' bgs Defined Excavation Extents

17.5' bgs Defined Excavation Extents

20' bgs Defined Excavation Extents

APPROXIMATE SCALE

03060

Feet

BGS

Below Ground Surface

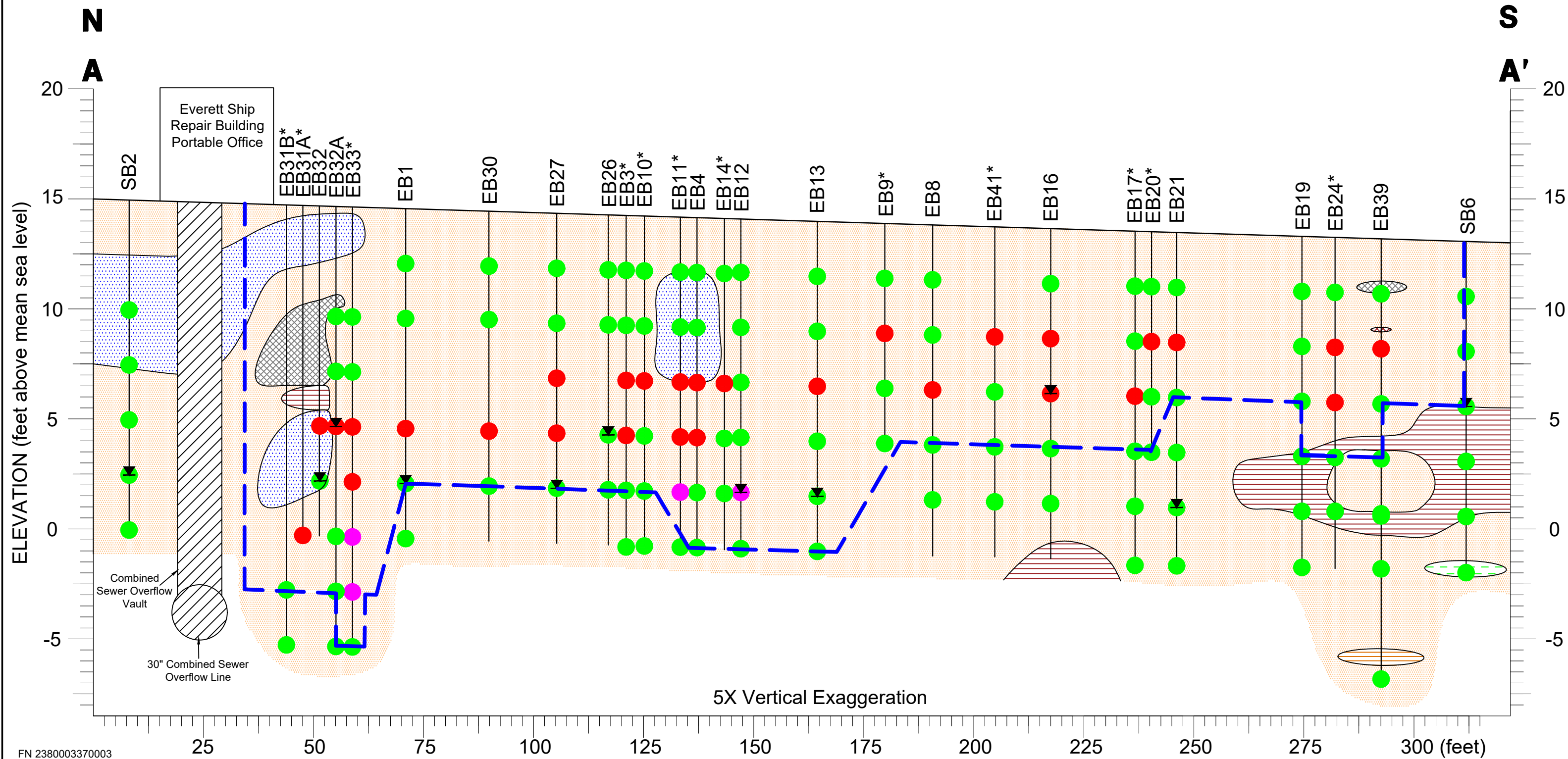
PORT OF EVERETT EXCAVATION EXTENTS BY DEPTH

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
238000337

PLATE
12
LEC: 02/28/23

* = Borings EB1, EB3, EB9, EB10, EB11, EB14, EB17, EB20, EB24, EB31A, EB31B, EB33, and EB41 are projected onto the cross section for hydrocarbon concentration distribution purposes; projected borings were not used to construct lithology illustration



FN 2380003370003



PORT OF EVERETT CROSS SECTION N-S

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

EXPLANATION

- Water Level Encountered During Drilling
- Hydrocarbon Concentrations In Soil Less Than Site-Specific Residual Saturation Remediation Levels
- Hydrocarbon Concentrations In Soil Greater Than Site-Specific Residual Saturation Remediation Levels
- LNAPL Observed During Drilling
- Proposed Excavation Extents

- Coarse-grained Gravelly Sediments (GW, GC)
- Coarse-grained Sandy Sediments (SW, SP, SM, SC)
- Fine-grained Sediments (CL, CH, ML)
- Organic Sediments (OH, PT, Wood Debris)
- Concrete Debris

PROJECT

238000337

PLATE

13

LEC: 02/27/23

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
Page 1 of 7

Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021:							
S-2.5-EB1	EB1	10/13/20	2.5	--	<10	<50	<250
S-5-EB1	EB1	10/13/20	5	--	<10	<50	<250
S-10-EB1	EB1	10/13/20	10	--	<100	16,000E	<250
S-12.5-EB1	EB1	10/13/20	12.5	--	<50	3,500	<250
S-15-EB1	EB1	10/13/20	15	--	<10	<50	<250
S-2.5-EB2	EB2	10/13/20	2.5	--	<10	<50	<250
S-5-EB2	EB2	10/13/20	5	--	<10	<50	<250
S-10-EB2	EB2	10/13/20	10	--	<10	<50	<250
S-2.5-EB3	EB3	10/12/20	2.5	--	<10	<50	<250
S-5-EB3	EB3	10/12/20	5	--	<10	<50	<250
S-7.5-EB3	EB3	10/12/20	7.5	--	<100	43,000	<250
S-10-EB3	EB3	10/12/20	10	--	<50	15,000	<250
S-12.5-EB3	EB3	10/12/20	12.5	--	<50	188	<250
S-15-EB3	EB3	10/12/20	15	--	<10	<50	<250
S-2.5-EB4	EB4	10/12/20	2.5	--	<10	<50	<250
S-5-EB4	EB4	10/12/20	5	--	18	4,700	<250
S-7.5-EB4	EB4	10/12/20	7.5	--	<100	36,000	<250
S-10-EB4	EB4	10/12/20	10	--	<100	5,500E	<250
S-12.5-EB4	EB4	10/12/20	12.5	--	<50	4,400	<250
S-15-EB4	EB4	10/12/20	15	--	<10	<50	<250
S-2.5-EB5	EB5	10/12/20	2.5	--	<10	<50	<250
S-5-EB5	EB5	10/12/20	5	--	<10	<50	<250
S-7.5-EB5	EB5	10/12/20	7.5	--	<10	<50	<250
S-10-EB5	EB5	10/12/20	10	--	<10	51	<250
S-2.5-EB6	EB6	10/12/20	2.5	--	<10	<50	<250
S-5-EB6	EB6	10/12/20	5	--	<10	<50	<250
S-7.5-EB6	EB6	10/12/20	7.5	--	<10	<50	<250
S-10-EB6	EB6	10/12/20	10	--	<10	<50	<250
S-5-EB7	EB7	10/12/20	5	--	<10	<50	<250
S-7.5-EB7	EB7	10/12/20	7.5	--	<10	74	<250
S-10-EB7	EB7	10/12/20	10	--	<10	<50	<250
S-2.5-EB8	EB8	10/14/20	2.5	--	<10	<50	<250
S-5-EB8	EB8	10/14/20	5	--	<10	2,600	4,300
S-7.5-EB8	EB8	10/14/20	7.5	--	<10	7,400	13,000
S-10-EB8	EB8	10/14/20	10	--	<20	1,800	1,300
S-12.5-EB8	EB8	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB9	EB9	10/14/20	2.5	--	<10	<50	<250
S-5-EB9	EB9	10/14/20	5	--	<50	2,700	11,000E
S-7.5-EB9	EB9	10/14/20	7.5	--	<10	<50	<250
S-10-EB9	EB9	10/14/20	10	--	<10	<50	<250
S-2.5-EB10	EB10	10/14/20	2.5	--	<10	<50	<250
S-5-EB10	EB10	10/14/20	5	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT
ExxonMobil ADC
2717/2731 Federal Avenue
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-7.5-EB10	EB10	10/14/20	7.5	--	<10	12,000	<250
S-10-EB10	EB10	10/14/20	10	--	<10	4,300	<250
S-12.5-EB10	EB10	10/14/20	12.5	--	<10	<50	<250
S-15-EB10	EB10	10/14/20	15	--	<10	<50	<250
S-2.5-EB11	EB11	10/12/20	2.5	--	<10	<50	550
S-5-EB11	EB11	10/12/20	5	--	<100	2,400	<250
S-7.5-EB11	EB11	10/12/20	7.5	Yes	<100	44,000	2,700
S-10-EB11	EB11	10/12/20	10	Yes	<100	11,000	1,300
S-12.5-EB11	EB11	10/12/20	12.5	Yes	<10	370	<250
S-15-EB11	EB11	10/12/20	15	--	<10	<50	<250
S-2.5-EB12	EB12	10/12/20	2.5	--	<10	<50	<250
S-5-EB12	EB12	10/12/20	5	--	<10	160	<250
S-7.5-EB12	EB12	10/12/20	7.5	--	<10	3,600	<250
S-10-EB12	EB12	10/12/20	10	--	<100	3,000	<250
S-12.5-EB12	EB12	10/12/20	12.5	Yes	<100	2,000	<250
S-15-EB12	EB12	10/12/20	15	--	<10	460	<250
S-2.5-EB13	EB13	10/14/20	2.5	--	<10	<50	<250
S-5-EB13	EB13	10/14/20	5	--	<50	1,400	1,800
S-7.5-EB13	EB13	10/14/20	7.5	--	190	11,000	1,800
S-10-EB13	EB13	10/14/20	10	--	<10	320	<250
S-12.5-EB13	EB13	10/14/20	12.5	--	<10	<50	<250
S-15-EB13	EB13	10/14/20	15	--	<10	<50	<250
S-2.5-EB14	EB14	10/14/20	2.5	--	<10	<50	<250
S-7.5-EB14	EB14	10/14/20	7.5	--	<10	5,000	6,900
S-10-EB14	EB14	10/14/20	10	--	<10	4,100	1,500
S-12.5-EB14	EB14	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB15	EB15	10/14/20	2.5	--	<10	<50	<250
S-5-EB15	EB15	10/14/20	5	--	<10	1,100	2,000
S-7.5-EB15	EB15	10/14/20	7.5	--	19	2,200	260
S-10-EB15	EB15	10/14/20	10	--	<10	<50	<250
S-12.5-EB15	EB15	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB16	EB16	10/13/20	2.5	--	<10	<50	<250
S-5-EB16	EB16	10/13/20	5	--	<100	4,800	1,100
S-7.5-EB16	EB16	10/13/20	7.5	--	<100	9,700	3,900
S-10-EB16	EB16	10/13/20	10	--	<10	170	<250
S-12.5-EB16	EB16	10/13/20	12.5	--	<10	<50	<250
S-2.5-EB17	EB17	10/13/20	2.5	--	<10	<50	<250
S-5-EB17	EB17	10/13/20	5	--	<10	<50	<250
S-7.5-EB17	EB17	10/13/20	7.5	--	11	33,000	<250
S-10-EB17	EB17	10/13/20	10	--	<50	2,600	<250
S-12.5-EB17	EB17	10/13/20	12.5	--	<10	<50	<250
S-15-EB17	EB17	10/13/20	15	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-5-EB18	EB18	10/13/20	5	--	<10	450	210J
S-2.5-EB19	EB19	10/13/20	2.5	--	<10	<50	<250
S-5-EB19	EB19	10/13/20	5	--	<50	1,900	360
S-7.5-EB19	EB19	10/13/20	7.5	--	<50	4,500	760
S-10-EB19	EB19	10/13/20	10	--	<10	<50	<250
S-12.5-EB19	EB19	10/13/20	12.5	--	<10	<50	<250
S-15-EB19	EB19	10/13/20	15	--	<10	<50	<250
S-2.5-EB20	EB20	10/13/20	2.5	--	<10	170	<250
S-5-EB20	EB20	10/13/20	5	--	<10	8,400	2,200
S-7.5-EB20	EB20	10/13/20	7.5	--	<10	180	<250
S-10-EB20	EB20	10/13/20	10	--	<10	<50	<250
S-2.5-EB21	EB21	10/13/20	2.5	--	<10	<50	<250
S-5-EB21	EB21	10/13/20	5	--	<10	8,100	12,000
S-7.5-EB21	EB21	10/13/20	7.5	--	<50	3,700	640
S-10-EB21	EB21	10/13/20	10	--	<10	<50	<250
S-12.5-EB21	EB21	10/13/20	12.5	--	<10	<50	<250
S-15-EB21	EB21	10/13/20	15	--	<10	<50	<250
S-5-EB22	EB22	10/13/20	5	--	<10	<50	<250
S-2.5-EB23	EB23	10/13/20	2.5	--	<10	<50	<250
S-5-EB23	EB23	10/13/20	5	--	<10	<50	<250
S-7.5-EB23	EB23	10/13/20	7.5	--	<10	<50	<250
S-10-EB23	EB23	10/13/20	10	--	<10	4,100	<250
S-12.5-EB23	EB23	10/13/20	12.5	--	<10	62	<250
S-2.5-EB24	EB24	10/13/20	2.5	--	<10	<50	<250
S-5-EB24	EB24	10/13/20	5	--	<50	<50	6,300
S-7.5-EB24	EB24	10/13/20	7.5	--	<10	8,100	1,200
S-10-EB24	EB24	10/13/20	10	--	<10	2,300	<250
S-12.5-EB24	EB24	10/13/20	12.5	--	<10	<50	<250
S-2.5-EB25	EB25	10/13/20	2.5	--	<10	<50	<250
S-5-EB25	EB25	10/13/20	5	--	<10	<50	<250
S-7.5-EB25	EB25	10/13/20	7.5	--	<10	<50	<250
S-10-EB25	EB25	10/13/20	10	--	<10	2,400	860
S-12.5-EB25	EB25	10/13/20	12.5	--	<10	<50	<250
S-15-EB25	EB25	10/13/20	15	--	--	<50	<250
S-2.5-EB26	EB26	10/14/20	2.5	--	<10	<50	<250
S-5-EB26	EB26	10/14/20	5	--	<10	76	<250
S-10-EB26	EB26	10/14/20	10	--	<20	1,600	<250
S-12.5-EB26	EB26	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB27	EB27	10/14/20	2.5	--	<10	<50	<250
S-5-EB27	EB27	10/14/20	5	--	<10	<50	<250
S-7.5-EB27	EB27	10/14/20	7.5	--	<100	10,000	11,000
S-10-EB27	EB27	10/14/20	10	--	<100	9,100E	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-12.5-EB27	EB27	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB28	EB28	10/14/20	2.5	--	<10	<50	<250
S-5-EB28	EB28	10/14/20	5	--	<10	<50	<250
S-7.5-EB28	EB28	10/14/20	7.5	--	<10	<50	<250
S-10-EB28	EB28	10/14/20	10	--	<50	<50	<250
S-2.5-EB29	EB29	10/14/20	2.5	--	<10	<50	<250
S-5-EB29	EB29	10/14/20	5	--	<10	<50	<250
S-2.5-EB30	EB30	10/14/20	2.5	--	<10	<50	<250
S-5-EB30	EB30	10/14/20	5	--	<10	<50	560
S-10-EB30	EB30	10/14/20	10	--	<100	39,000	<250
S-12.5-EB30	EB30	10/14/20	12.5	--	<10	<50	<250
S-5-EB31	EB31	01/25/21	5	--	<10	<50	<250
S-7.5-EB31	EB31	01/25/21	7.5	--	<10	<50	<250
S-9.5-EB31	EB31	01/25/21	9.5	--	<100	3,400	<250
S-15-EB31A	EB31A	01/27/21	15	--	<100	7,000E	<250
S-17.5-EB31B	EB31B	01/27/21	17.5	--	<10	<50	<250
S-20-EB31B	EB31B	01/27/21	20	--	<10	<50	<250
S-10-EB32	EB32	01/25/21	10	--	<10	6,200	<250
S-10-EB32 ^b	EB32	01/25/21	10	--	--	4,700	<250
S-12.5-EB32	EB32	01/25/21	12.5	--	<10	410	<250
S-12.5-EB32 ^b	EB32	01/25/21	12.5	--	--	340	<250
S-5-EB32A	EB32A	01/27/21	5	--	<10	56	<250
S-7.5-EB32A	EB32A	01/27/21	7.5	--	<25	2,040	290
S-10-EB32A	EB32A	01/27/21	10	--	<10	6,100	<250
S-15-EB32A	EB32A	01/27/21	15	--	<10	<50	<250
S-17.5-EB32A	EB32A	01/27/21	17.5	--	<10	<50	<250
S-20-EB32A	EB32A	01/27/21	20	--	<10	<50	<250
S-5-EB33	EB33	01/25/21	5	--	<10	<50	<250
S-7.5-EB33	EB33	01/25/21	7.5	--	<10	<50	<250
S-10-EB33	EB33	01/25/21	10	Yes	<40	28,000	1,580
S-12.5-EB33	EB33	01/25/21	12.5	Yes	<10	21,000E	<250
S-15-EB33	EB33	01/25/21	15	Yes	<1,000	150	<250
S-17.5-EB33	EB33	01/25/21	17.5	Yes	<10	63	<250
S-20-EB33	EB33	01/25/21	20	--	<10	<50	310
S-7.5-EB34	EB34	01/25/21	7.5	--	<10	<50	<250
S-10-EB34	EB34	01/25/21	10	--	<10	2,100	<250
S-12.5-EB34	EB34	01/25/21	12.5	--	<50	1,600	760
S-15-EB34	EB34	01/25/21	15	--	<10	<50	<250
S-17.5-EB34	EB34	01/25/21	17.5	--	<10	<50	<250
S-20-EB34	EB34	01/25/21	20	--	<10	<50	<250
S-5-EB35	EB35	01/25/21	5	--	<10	<50	<250
S-7.5-EB35	EB35	01/25/21	7.5	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-10-EB35	EB35	01/25/21	10	--	<10	<50	<250
S-12.5-EB35	EB35	01/25/21	12.5	--	<15	520	430
S-15-EB35	EB35	01/25/21	15	--	<10	<50	<250
S-5-EB36	EB36	01/26/21	5	--	<10	<50	<250
S-7.5-EB36	EB36	01/26/21	7.5	--	<10	<50	<250
S-10-EB36	EB36	01/26/21	10	--	<10	<50	<250
S-12.5-EB36	EB36	01/26/21	12.5	--	<10	<50	<250
S-5-EB37	EB37	01/27/21	5	--	<10	<50	<250
S-7.5-EB37	EB37	01/27/21	7.5	--	<10	<50	<250
S-10-EB37	EB37	01/27/21	10	--	<10	<50	<250
S-12.5-EB37	EB37	01/27/21	12.5	--	<10	<50	<250
S-2.5-EB38	EB38	01/27/21	2.5	--	<10	<50	490
S-5-EB38	EB38	01/27/21	5	--	<10	<50	<250
S-7.5-EB38	EB38	01/27/21	7.5	--	<10	<50	<250
S-10-EB38	EB38	01/27/21	10	--	<10	<50	<250
S-12.5-EB38	EB38	01/27/21	12.5	--	<10	<50	<250
S-15-EB38	EB38	01/27/21	15	--	<10	<50	<250
S-2.5-EB39	EB39	01/27/21	2.5	--	<10	2,200	<250
S-2.5-EB39	EB39	01/27/21	2.5	--	<10	2,200	<250
S-5-EB39	EB39	01/27/21	5	--	<10	5,600	<250
S-5-EB39 ^b	EB39	01/27/21	5	--	--	4,500	<250
S-7.5-EB39	EB39	01/27/21	7.5	--	<50	2,200	<250
S-10-EB39	EB39	01/27/21	10	--	<10	<50	<250
S-12.5-EB39	EB39	01/27/21	12.5	--	<10	<50	<250
S-15-EB39	EB39	01/27/21	15	--	<10	<50	<250
S-20-EB39	EB39	01/27/21	20	--	<10	<50	<250
S-5-EB40	EB40	01/26/21	5	--	<10	490a	<250
S-7.5-EB40	EB40	01/26/21	7.5	--	<10	<50	<250
S-10-EB40	EB40	01/26/21	10	--	<10	<50	<250
S-12.5-EB40	EB40	01/26/21	12.5	--	<10	<50	<250
S-5-EB41	EB41	01/27/21	5	--	<15	9,300	6,700
S-7.5-EB41	EB41	01/27/21	7.5	--	<10	630	310
S-10-EB41	EB41	01/27/21	10	--	<10	<50	<250
S-12.5-EB41	EB41	01/27/21	12.5	--	<10	<50	<250
S-5-SB1	SB1	01/26/21	5	--	<10	<50	<250
S-7.5-SB1	SB1	01/26/21	7.5	--	<10	110	660
S-10-SB1	SB1	01/26/21	10	--	<10	<50	<250
S-12.5-SB1	SB1	01/26/21	12.5	--	<10	<50	<250
S-15-SB1	SB1	01/26/21	15	--	<10	<50	<250
S-5-SB2	SB2	01/26/21	5	--	<10	<50	790
S-7.5-SB2	SB2	01/26/21	7.5	--	<10	<50	<250
S-10-SB2	SB2	01/26/21	10	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-12.5-SB2	SB2	01/26/21	12.5	--	<10	<50	<250
S-15-SB2	SB2	01/26/21	15	--	<10	<50	<250
S-5-SB3	SB3	01/26/21	5	--	<10	440	2,200
S-7.5-SB3	SB3	01/26/21	7.5	--	<10	<50	<250
S-10-SB3	SB3	01/26/21	10	--	<10	130	680
S-12.5-SB3	SB3	01/26/21	12.5	--	<10	<50	<250
S-15-SB3	SB3	01/26/21	15	--	<10	<50	<250
S-20-SB3	SB3	01/26/21	20	--	<10	<50	<250
S-5-SB4	SB4	01/25/21	5	--	<10	<50	<250
S-7.5-SB4	SB4	01/25/21	7.5	--	<10	<50	<250
S-10-SB4	SB4	01/25/21	10	--	<10	3,900	<250
S-12.5-SB4	SB4	01/25/21	12.5	--	<50	1,700	<250
S-15-SB4	SB4	01/25/21	15	--	<10	56	<250
S-17.5-SB4	SB4	01/25/21	17.5	--	<10	<50	<250
S-20-SB4	SB4	01/25/21	20	--	<20	610	<250
S-5-SB5	SB5	01/26/21	5	--	<10	<50	1,630
S-7.5-SB5	SB5	01/26/21	7.5	--	<10	<50	<250
S-10-SB5	SB5	01/26/21	10	--	<10	<50	760
S-12.5-SB5	SB5	01/26/21	12.5	--	<10	<50	<250
S-15-SB5	SB5	01/26/21	15	--	<10	82	580
S-17.5-SB5	SB5	01/26/21	17.5	--	<10	<50	<250
S-20-SB5	SB5	01/26/21	20	--	<10	<50	<250
S-2.5-SB6	SB6	02/05/21	2.5	--	<10	2,800	<250
S-5-SB6	SB6	02/05/21	5	--	<10	57	<250
S-7.5-SB6	SB6	02/05/21	7.5	--	<10	<50	<250
S-10-SB6	SB6	02/05/21	10	--	<10	<50	<250
S-12.5-SB6	SB6	02/05/21	12.5	--	<10	<50	<250
S-15-SB6	SB6	02/05/21	15	--	<10	<50	<250
S-5-SB7	SB7	02/05/21	5	--	<10	<50	<250
S-7.5-SB7	SB7	02/05/21	7.5	--	<10	<50	<250
S-10-SB7	SB7	02/05/21	10	--	<10	<50	<250
S-12.5-SB7	SB7	02/05/21	12.5	--	<10	<50	<250
S-15-SB7	SB7	02/05/21	15	--	<10	<50	<250

Site-Specific Residual Saturation Remediation Levels	2,470	4,800	5,810
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TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS - PORT OF EVERETT

ExxonMobil ADC
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Sample Name	Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
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EXPLANATION:

feet bgs = Feet below ground surface

mg/kg = Milligrams per kilogram

LNAPL = Light Non-aqueous Phase Liquid

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd, TPHmo = Total Petroleum Hydrocarbons as Diesel and as Oil, respectively, in accordance with Ecology Method NWTPH-Dx

All TPHd and TPHmo samples analyzed with silica gel cleanup

N/A = Not applicable

< = Less than the stated laboratory reporting limit

-- = Not Observed; Not Analyzed

Shaded values equal or exceed Site-Specific Residual Saturation Remediation Level

a = Indicates light diesel range

b = Sample reanalyzed by laboratory

E = Reported result exceeds the calibration range and is an estimate

J = Indicates analyte was positively identified. Reported result is an estimate.

APPENDIX A

Wood's Chronology of Historical On-Site Environmental Investigations (WSP, 2023)



TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
May-85	RZA	ExxonMobil Parcel	RZA 1985	Borings, monitoring well installation	2-inch-diameter monitoring wells B-1 through B-5 (MW-1 through MW-5 in several reports) installed.	B-1, B-2, B-4, and B-5: Petroleum odor noticed in borings; evidence found of contamination below groundwater table.
Mar-88	RZA	ExxonMobil Parcel	AMEC E&E 2010a	Borings, monitoring well installation	2-inch-diameter monitoring wells MW-6 through MW-18 installed.	Soil and groundwater samples collected. LPH (1.29 feet) measured in MW-14.
Jan-90	ESE	ADC Parcel	AMEC E&E 2010a	Borings	Hand augers AD-01 through AD-19 to depths ranging from 1 to 4.5 feet.	Soil samples collected.
Feb-90	ESE	ADC Parcel	AMEC E&E 2010a	Borings, monitoring well installation	HSA borings W-1 through W-7. 2-inch-diameter monitoring wells W-1 through W-6 installed.	W-7 was backfilled.
Jun-90	ESE	ADC Parcel	AMEC E&E 2010a	Hand-auger borings	Hand-auger borings W-8 through W-17 to depths of 6–10 feet.	No soil data found for W-8 through W-17. Gauging data indicate that free product was observed in 10 of the 17 monitoring wells located at and around the ADC Parcel.
Oct-90	RZA	ExxonMobil Parcel	AMEC E&E 2010a	Shallow grid soil sampling, bio-feasibility study	Hand augers B-1 through B-25. Two soil samples were studied to conduct a slurry flask bio-feasibility study.	0-3 feet bgs. Rapid biodegradation of TPH-G fraction was observed. Biodegradation of TPH (undifferentiated) was not achieved.
Nov-90	Unknown	ExxonMobil Parcel	AMEC E&E 2010a	Monitoring well decommissioning	B-3 (MW-3), B-4 (MW-4), and MW-7 destroyed.	No documentation of well decommissioning.
March–June 1991	RZA	Parcels surrounding ExxonMobil Parcel	AMEC E&E 2010a	Borings, monitoring well installation	Six percussion soil borings to depths ranging from 5 to 5.5 feet bgs, 2-inch diameter monitoring wells MW-19 through MW-24, and 4-inch diameter monitoring wells MW-27 through MW-30 installed. Soil boring B-21-91 advanced to depth of 29 feet bgs.	MW-25 and MW-26 were inaccessible or dry and later renamed as B-25 and B-26. No well decommissioning records were found.
Jun-91	RZA and ESE	The Property	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. New 2-inch diameter monitoring wells MW-25 and MW-26 installed. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-18, AD-19, W-1 through W-6, and W-8 through W-15.	B-1, MW-8, AD-19, W-1, W-6, W-9, W-11, W-12, W-13, and W-15 contained LPH and were not sampled.
Nov-91	RZA AGRA	ExxonMobil Parcel	AMEC E&E 2010a	Borings, recovery well	8-inch diameter recovery well RW-2 installed. Deep soil borings B-1A, B-8A, and B-15A advanced.	Soil borings advanced in vicinity of existing wells B-1, B-8, and B-15. No analytical data found for this event.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Dec-91	RZA AGRA	ExxonMobil Parcel	AGRA 1996g	Quarterly groundwater monitoring, aquifer and tidal study	Quarterly groundwater monitoring. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-30, and AD-19. Aquifer study involved 24-hour pumping from MW-10 at a rate of 1 to 2 gpm and measuring response in MW-18, RW-1, and RW-2 for 48 hours.	B-1, MW-8, MW-11, MW-26, MW-27, MW-29, and AD-19 contained LPH and were not sampled. Hydraulic conductivity at the Site was estimated as 4 to 9.5 feet/day. Minimum tidal influence was observed.
1992	RZA AGRA	NA	NA	Discussions with Ecology	Ecology discussed enforcement with Mobil and RZA AGRA. Ecology decided to allow Site to go independent.	
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AMEC E&E 2010a	Off-Property borings, monitoring well installation, GPR survey	2-inch diameter monitoring wells MW-31 through MW-33 and MW-35 through MW-37 were installed; B-34 advanced and backfilled. GPR survey was conducted to assess whether underground product lines had been removed.	Survey did not identify any subsurface linear features.
Dec-93	RZA AGRA	ExxonMobil Parcel and off-Property to the west	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells B-1, B-2, MW-6, MW-8 through MW-13, MW-15 through MW-18, MW-27 through MW-33, MW-35 through MW-37.	B-1, MW-27, and MW-29 contained LPH and were not sampled.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AMEC E&E 2010a	Test pits, recovery trench	Excavated five test pits, TP-1 through TP-5, to depths ranging from 3 to 3.5 feet bgs. Recovery trench installed along the western border of ExxonMobil Parcel.	Monitoring well MW-21 was reportedly decommissioned during the recovery trench installation activities. However, a 2002 decommissioning record was found that stated that MW-21 was decommissioned in 2002.
1995			NA	Agreed Order DE-95TC-N402		Required evaluation of LPH.
Jul-95	RZA AGRA	ADC Parcel	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells: W-3, W-5, W-9, W-10, W-12 through W-15.	W-9, W-12, and W-13 contained LPH and were not sampled.
Oct-95	U.S. Coast Guard Puget Sound Marine Safety Office & City of Everett	North of the Property	AMEC E&E 2010a	Investigation of petroleum product discharge into Everett Harbor	Camera surveys of the sewer lines made.	Outfall located approximately 175 yards northwest of the ADC Parcel; LPH seepage observed in section of CSO line.
Nov-95	RZA AGRA	Site	AGRA 1996g	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-1, RW-2, B-1, B-2, MW-6, MW-8 to MW-13, MW-15 to MW-18, MW-27 to MW-37, and NRW-1.	B-1, MW-18, MW-29, and MW-30 contained LPH and were not sampled.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Dec-95	RZA AGRA	Site	AGRA 1996g	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-2, B-2, MW-8, MW-9, MW-18, MW-15 through MW-18, MW-27, and MW-28.	RW-2, MW-9, MW-18, and MW-28 contained LPH and were not sampled.
Mar-96	AGRA	North of the Property	AMEC E&E 2010a	Borings	Direct-push soil borings GP-1 through GP-13. Borings associated with the CSO line repair.	The collected soil sample results indicated that soil surrounding the damaged portion of the CSO had petroleum hydrocarbon impacts. LPH accumulation was noticed in temporary screens installed in soil borings. No groundwater samples were collected from temporary screens.
Apr-96	City of Everett		AMEC E&E 2010a	Meeting	Meeting held to discuss options for repairing the section of CSO line.	Decisions made regarding replacement of the settled portion of the line and slip lining of the remaining portion of the line.
May-96	AGRA	ADC Parcel	AGRA 1996d	Borings	Bobcat borings BB-1 through BB-14.	Soil samples collected.
Jun-96	AGRA	ADC Parcel	AGRA 1996d	Borings, monitoring wells, and test pits	4-inch diameter recovery well VRW-1 and 2-inch diameter monitoring well MW-38 installed. Seven test pits TP-1-96 through TP-7-96 excavated.	Wells were installed on the northeast corner of the property. Test pits were located throughout the ADC Parcel.
Aug-96	AGRA	Site	AMEC E&E 2010a	Monitoring wells	Gauged wells at the property.	LPH found in B-1, VRW-1, MW-27, MW-29, MW-30, MW-38, W-1, W-9, W-15.
Feb-97	PTI	Site	PTI 1997	LPH recovery technical memorandum	Technical memorandum to summarize environmental investigations, LPH recovery activities, and geology.	PTI concluded that long-term, passive (LPH only) recovery may be the most effective method of LPH recovery. PTI also concluded that active LPH and groundwater recovery that had been performed up to that time had been effective for short durations, but recovery structures did not continue to recover LPH for extended periods of time when active recovery was employed.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
November 1997 through January 1998	Pacific Environmental Group, Inc.	Kimberly-Clark property	Pacific Environmental Group, Inc. 1998	Borings, monitoring wells	Direct-push borings Probe-1 through Probe-15 were advanced, and 2-inch diameter HSA monitoring wells KC-1 and KC-2 were installed inside the KC warehouse.	Groundwater samples were collected from temporary screens installed in each boring. LPH not identified in soil borings or monitoring wells. TPH-D and TPH-O were detected above MTCA Method A cleanup levels in borings advanced in the vicinity of repaired CSO line. Samples not collected in vicinity of former ASTs.
1998			NA	Agreed Order DE98TC-P-N223		Required remedial investigation/focused feasibility study.
Jul-98	Exponent	Site	Exponent 1998a	Remedial Investigation and Focused Feasibility Study	Exponent summarized the history of the Property and evaluated feasible remedial options for the Site.	Exponent recommended the installation of LPH recovery trenches and installation of a low-permeability cap over the property.
Jul-98	Exponent	Site	Exponent 1998b	Final Interim Action Work Plan and Engineering Design Report	Exponent presented design for interim measures at the Property.	Exponent provided specifications for demolition of existing Site structures and installation of LPH recovery trenches, water treatment system, and low-permeability cap over the Property.
Oct-99	Kleinfelder	The Property	Exponent 2000	Monitoring wells installation	Monitoring wells W-10R, W-15R, and MW-40R.	Wells installed to replace wells W-10, W-15, and MW-40.
Dec-99	Dames and Moore/URS	South and southeast of the Property	URS 2000a	Geotechnical drilling and piezometer installation	DM-6, DM-7, and DM-8 were sampled for environmental samples.	Work associated with CSTO Project.
Sep-00	URS	South, east, and southeast of the Property	URS 2000b	Borings	Phase II investigation for the CSTO Project. Push-probe borings UG-1 through UG-12.	Groundwater samples collected from temporary screens installed in UG-2 and UG-8. Estimated 7,600 cubic yards of petroleum-contaminated soil present along the overcrossing alignment.
Jul-01	URS	Johnston Petroleum parcel	URS 2001a and b	Borings	Phase II investigation for Johnson Petroleum parcel. Push-probe borings JP-1 through JP-7.	Soil samples collected. Groundwater samples collected from JP-1, JP-4, and JP-7. No significant contamination found.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Feb-02	ERI	Site and vicinity	ERI 2002a	Monitoring well decommissioning and re-installment	Abandonment of monitoring wells (MW-22, MW-23, MW-24, MW-35, and MW-37) and piezometer DM-6 due to proximity to the CSTO Project. Re-installed well W-2 screened from 3 to 23 feet bgs.	No soil samples taken during W-2 installation. The reported abandonment of MW-21 in 2002 contradicts the reported decommissioning of MW-21 due to installation of the recovery trench to the west of the Property in December 1995.
2002	Reid Middleton	CSTO	Reid Middleton 2002	Memorandum to Ecology	Southeast corner of the asphalt cap over the ExxonMobil Parcel removed. Steel piles for concrete foundation were installed.	No information regarding contaminant soil excavation and removal was found.
2002-2007	Kleinfelder, ERI, AMEC	Site	Various	Groundwater monitoring	Monthly LPH gauging and quarterly groundwater monitoring.	LPH greater than 0.02 foot thick is bailed manually and oleophilic socks are replaced.
Jul-02	ERI	West of the ExxonMobil Parcel	ERI 2002b	Well decommissioning	Monitoring wells MW-20, MW-21, and one unidentified well were decommissioned.	The record contradicts the records that indicate that MW-21 was decommissioned during the December 1993 recovery trench installation.
Feb-07	AMEC/Bravo Environmental	Site	AMEC E&E 2007	Video survey of storm drain system	AMEC contracted Bravo to conduct a video survey of the storm drain system installed as part of 1999 interim measure to verify that groundwater from the Property is not infiltrating into the stormwater system through possible cracks and fissures in the piping and catch basins.	No significant cracks or fissures within the stormwater system were observed.
2007–present	AMEC	Site	AMEC E&E 2010a	Groundwater monitoring	AMEC requested to change to semiannual groundwater monitoring in 2007.	Request was accepted by Ecology.
2008	AMEC	West of the Property	AMEC E&E 2008b	Monitoring wells	Off-property monitoring wells MW-A1 and MW-A2 installed on the west side of Federal Avenue.	Monitoring wells MW-A1 and MW-A2 are incorporated into existing groundwater monitoring network.
Feb-08	AMEC	Site	AMEC E&E, 2008a	Tidal study	Measured tidal response in W-3, W-6, MW-11, MW-28, & MW-40R.	Minimal response in each well, except MW-11.
Jun-08	AMEC	Site	2010 updated survey included as Appendix C	Well head elevations survey	True North Land Surveying of Seattle, Washington, surveyed recovery and monitoring wells located on-Site.	Recovery wells LPH-1 to LPH-9 and monitoring wells W-1, W-2, W-3, W-6, W-10R, MW-10, MW-11, W-15R, W-17, RW-2, MW-19, MW-27, MW-28, MW-29, MW-30, MW-40R, MW-A1, and MW-A2.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
2010	AMEC	Site	AMEC E&E 2010a	Focused Feasibility Study Work Plan	Summarized Site history, previous environmental investigations and interim remedial activities, known environmental conditions, preliminary conceptual site model, and remaining data gaps.	FFS Work Plan included a sampling and analysis plan to guide data gaps investigation and identified applicable remedial technologies to be evaluated in the FFS.
2010	AMEC	Site	AMEC E&E 2010a	Agreed Order DE 6184		Required FFS and Draft CAP.
2010	AMEC	Site	AMEC E&E 2011f	Sampling for City of Everett Force Main	Borings CE-1 to CE-8 advanced on Federal Avenue, former Everett Avenue, and the BNSF property to characterize soils in the alignment of City's planned force main.	Analytical results were provided to City of Everett and used to characterize soil excavated for the force main project for disposal purposes.
2011	AMEC	Site	AMEC E&E 2011b	Data gaps investigation	Seven deep borings (AB-1 to AB-5, AP-6, MW-7ab), six shallow borings (AP-1 through AP-5, AP-7), five new off-Property monitoring wells (MW-A3 through MW-A7), aquifer testing, and tidal influence study.	A plume of groundwater with petroleum hydrocarbon impacts was identified west & northwest of the Property. Groundwater downgradient and upgradient from the Property was not affected by COCs. Geochemical parameters were consistent with an anaerobic environment in which active petroleum biodegradation appears to be occurring. No continuous silt layer was identified beneath the Property. Monitoring wells MW-A3 through MW-A7 incorporated into existing groundwater monitoring network.
2011	AMEC	Site	AMEC E&E 2011a	Tidal influence investigation	A stilling well with transducer was installed on the Everett Pier to automatically record tidal elevations. Pressure transducer/ data loggers were installed in monitoring wells W-3, W-6, MW-11, MW-19, MW-28, MW-40R, and MW-A1 through MW-A7 to record groundwater levels every 6 minutes for 6 days.	Monitoring wells W-3, MW-11, MW-A1, MW-A2, MW-A3, MW-A5, and MW-A6 are tidally influenced, with tidal fluctuations ranging from 0.1 foot to 1.1 feet. MW-19, MW-28, MW-40R, MW-A4, and W-6 exhibited minimal tidal influence, and MW-A7 was unaffected by tidal elevation. A potentiometric surface map showed groundwater flow toward the west.
2011	AMEC	Former Everett Avenue	AMEC E&E 2011g and h	Observations of seeps along former Everett Avenue	AMEC recorded photographs in the field to document observations of petroleum product seeps through the pavement on former Everett Avenue.	

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
2012	AMEC	Federal Avenue and former Everett Avenue	AMEC 2012b	Observations during City of Everett force main replacement	AMEC observed excavation and drilling activities during installation of the City's force main and recorded notable subsurface features when relevant, including the presence of LPH if encountered.	AMEC documented the presence of LPH in borings and/or trenches along much of the alignment on former Everett Avenue, and at selected locations along Federal Avenue.
2013–2014	AMEC	Site	AMEC 2014a	Data gaps investigation	A total of 33 soil borings were drilled on the Property and nearby properties, and soil samples were analyzed to delineate areas of affected soil at the Site. One of the borings was completed as a new monitoring well (MW-A8).	Higher COC concentrations were found primarily on the Property and in the western portion of the former ADC garage. Contamination from the Site extends to the former ADC garage and former Everett Avenue. Contamination on KC property north of former Everett Avenue likely originates from sources on the KC property. Monitoring well MW-A8 incorporated into groundwater monitoring network.
2020-2021	Cardno	Port of Everett	Appendix F	Excavation delineation	A total of 51 soil borings were drilled on the Port of Everett property, and soil samples were analyzed to delineate areas exceeding remediation levels for future excavation. Two geotechnical borings were also advanced. Analytical results will be used so that collection of sidewall and base soil samples during future excavation work is not necessary.	COC concentrations exceeding remediation levels are present as deep as 16 feet bgs.

Abbreviations

ADC = American Distributing Company
AMEC = AMEC Environment & Infrastructure, Inc.
AMEC E&E = AMEC Earth & Environmental, Inc.
AST = aboveground storage tank
bgs = below ground surface
CAP = Cleanup Action Plan
COC = constituent of concern
CSO = combined sewer outflow
CSTO = California Street Overcrossing
Ecology = Washington State Department of Ecology
ERI = Environmental Resolutions, Inc.
ESE = Environmental Science and Engineering, Inc.
FFS = Focused Feasibility Study
gpm = gallons per minute

GPR = ground penetrating radar
HSA = hollow-stem auger
KC = Kimberly-Clark
Kleinfelder = Kleinfelder, Inc.
LPH = liquid petroleum hydrocarbons
MTCA = Model Toxics Control Act
PTI = PTI Environmental Services
RZA = Rittenhouse-Zeman & Associates, Inc.
RZA AGRA = RZA AGRA Earth & Environmental, Inc.
TPH = total petroleum hydrocarbons
TPH-D = total petroleum hydrocarbons-diesel range organics
TPH-G = total petroleum hydrocarbons-gasoline range organics
TPH-O = total petroleum hydrocarbons-residual range organics

APPENDIX B

Wood's Chronology of Historical Interim Remedial Measures (WSP, 2023)



TABLE 4-1: CHRONOLOGY OF HISTORICAL INTERIM REMEDIAL MEASURES
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
April–May 1988	RZA	ExxonMobil Parcel	PTI 1997	Recovery trench installation, SVE and groundwater treatment system test (oil-water separator and air stripper), infiltration gallery, pumping subsurface fluids	Installation of recovery trench near MW-14, SVE system and groundwater treatment system to evaluate feasibility of extracting LPH. Infiltration gallery installed in the vicinity of MW-14. Subsurface fluids were pumped with a vacuum truck from the sumps.	Decommissioned in 1998 during construction of low-permeability cap at the Property. The gallery was T-shaped and 45 feet long with two 55-gallon drums installed at both ends as sumps. 1,400 gallons of liquid removed, 50 gallons was LPH. As a result, LPH thickness in MW-14 decreased to 0.40 foot by August 1988.
Mar-89	RZA	ExxonMobil Parcel	RZA 1989	Automated groundwater extraction and treatment system	An automated groundwater extraction and treatment system was installed in the location of the infiltration gallery. The system included fluid extraction sump stationed in RW-1 (formerly MW-14), oil-water separator, air stripper, and re-infiltration gallery.	The groundwater extraction and treatment system was shut down in March 1990 due to flooding of the re-infiltration gallery, and has not been restarted.
Nov-91	RZA AGRA	ExxonMobil Parcel	PTI 1997	Borings, recovery well	8-inch diameter recovery well RW-2 installed.	No analytical data found for this event.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AGRA 1993	Test pits, recovery trench	Recovery trench installation along the western border of ExxonMobil Parcel.	
Jun-96	AGRA	North of the Property	AGRA 1996b and c	CSO line repairs	Excavation of settled portion of pipe replaced. Slip-lining of remaining CSO line. CSO line excavation dewatering.	1,450,800 gallons of groundwater and 23,050 gallons of LPH were removed during CSO line excavation and dewatering.
Jun-96	AGRA	LPH Vacuum Recovery Pilot Test	AGRA 1996a, d,e, and f	LPH vacuum recovery pilot test	14-day test included SVE and groundwater/LPH pumping system.	125 gal of LPH and 28,228 gallons of groundwater removed from VRW-1 during test.
Nov-98	Kleinfelder	ADC Parcel	Exponent 2000	Survey, geotechnical evaluation	Initial survey. Asbestos survey prior to demolition.	Demolition activities included four buildings on the ADC parcel. Asbestos abatement activities were conducted in November 1998, and demolition was completed in January 1999.
Dec-98	Kleinfelder	Water management and treatment system	Exponent 2000	Installation of treatment system	A water management and treatment system consisting of an oil–water separator, a settling tank, and a carbon polishing unit was constructed at the Property.	System treated approximately 2.5 million gallons of water between December 1998 and September 1999. Approximately 19,900 gallons of oily water and 450 gallons of sludge were collected between December 1998 and September 1999.
Dec-98	Kleinfelder	The Property	Exponent 2000	Interim remedial action	Removed TPH-impacted soil, graded the property, removed purge water.	162 tons of contaminated shallow soil and vegetation removed from within the ADC firewall area during demolition and transported to TPS Technologies facility for disposal. 3.5 tons of class 3 PCS taken to CRS Associated. Marine Services, Inc. removed 110 gallons of purge water.
1999	Kleinfelder	The Property	Exponent 2000	Interim remedial action	Monitoring well abandonment. Interceptor trench construction along the western and northern property boundaries. Low-permeability cap construction over the property. Recovery wells LPH-1 through LPH-9 installed in interceptor trench. Stormwater collection system that connects to the City of Everett sewer system was installed.	Monitoring wells MW-6, MW-8, MW-9, MW-12, MW-13, MW-15, MW-16, MW-17, MW-38, WP-1, B-1, B-2, W-4, W-8, W-11, W-12, W-14, AD-11, AD-12, AD-13, AD-15, AD-19, W-10, W-15, and MW-40 abandoned. Completed Site grading, installation of two layers of geotextile fabric, asphalt-treated base material, and paving fabric and asphalt cap.
2002–present	Kleinfelder, ERI, AMEC E&E	Site	Various	Petroleum recovery	Monthly removal of LPH.	LPH greater than 0.02 foot thick is bailed manually, and oleophilic socks are replaced.
Jul-08	Floyd Snider	North-northeast of the Property	AMEC E&E 2010a	Excavation and disposal of PCS and dewatering the excavation	Soil associated with Puget Sound Outfall 5 Overflow Structure project was excavated and disposed of. In addition, dewatering occurred during excavation.	Soil was field screened. Soil exhibiting obvious signs of contamination was disposed of as Class II soil without sampling. Soil that appeared to be "clean" was sampled and then disposed as Class II soil. Water from the excavation was sampled for the City sewer discharge requirements.
2010	AMEC E&E	Federal Avenue and Port of Everett property	AMEC E&E 2011e	Removal of abandoned pipes and affected soil	AMEC decommissioned pipelines west of the Property to prepare for upgrades to the storm sewer line planned by the City of Everett.	A total of 76.55 tons of construction debris, 243 tons of soil, 487 linear feet of piping, 65,669 gallons of non-regulated liquid, four 55-gallon product/ water drums, and four 55-gallon solid waste drums were removed and disposed of off Site. Samples from base of excavation showed contaminated soil left in place.
2011–2012	AMEC	BNSF and KC properties	AMEC 2012a	Interim removal action	Excavation and off-Site disposal of surface asphalt, affected soil, and recovered LPH and treatment of the recovered groundwater from the secondary source areas on the BNSF and KC properties. Monitoring wells MW-27 through MW-30 abandoned.	Approximately 3,785 tons of material was excavated and disposed of at a permitted landfill, approximately 2,530 gallons of LPH was removed, and 1,489,246 gallons of petroleum-affected groundwater was removed and treated. Affected material was evident and left in place at all side wall areas of the completed excavation on the BNSF property and on the north and east sidewalls on the KC property.

Abbreviations

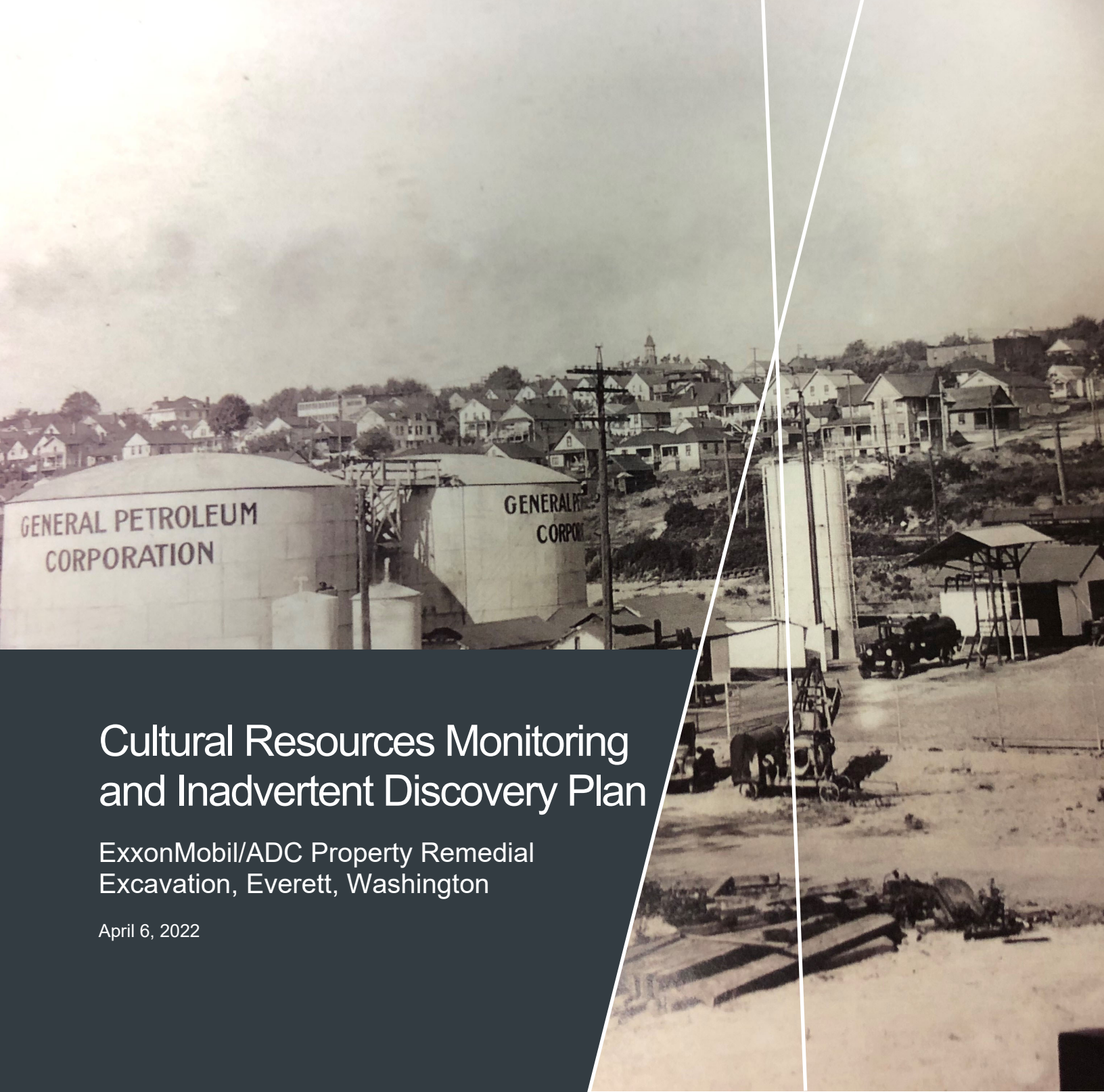
ADC = American Distributing Company
AMEC = AMEC Environment & Infrastructure, Inc.
AMEC E&E = AMEC Earth & Environmental, Inc.
BNSF = BNSF Railway Company
CSO = combined sewer outflow
ERI = Environmental Resolutions, Inc.
KC = Kimberly-Clark
Kleinfelder = Kleinfelder, Inc.

LPH = liquid petroleum hydrocarbons
PCS = petroleum-contaminated soil
PTI = PTI Environmental Services
RZA = Rittenhouse-Zeman & Associates, Inc.
RZA AGRA = RZA AGRA Earth & Environmental, Inc.
SVE = soil vapor extraction
TPH = total petroleum hydrocarbons

APPENDIX C

Cardno's Cultural Resources Monitoring and Inadvertent Discovery Plan, dated April 6, 2022





Cultural Resources Monitoring and Inadvertent Discovery Plan

ExxonMobil/ADC Property Remedial
Excavation, Everett, Washington

April 6, 2022

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ExxonMobil/ADC Property Remedial
Excavation, Everett, Washington
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Date April 6, 2022

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Introduction

The proposed cleanup project by the ExxonMobil/ American Distributing Company (ADC) in Everett, Washington, is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Proposed cleanup activities include installation of shoring walls, and excavation of impacted soils. Following excavation of contaminated soils, the project area will be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved.

Cardno, Inc. (Cardno) previously prepared a cultural resources assessment in support of the project (Scott et al. 2021). The assessment consisted of a literature review and records search within 1.0 mile (1.6 kilometer [km]) of the project area that included cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs). This monitoring and inadvertent discovery plan (MIDP) was developed to use during cleanup operations.

Project Location and Description

The project is in Section 19 of Township 29 North, Range 5 East, Willamette Meridian (Figure 1). The ExxonMobil/ADC property consists of 3.48 acres. The acres are comprised of several tax parcels and portions of the City of Everett's (City) Right-of-Way (ROW). Parcel information is provided below (Table 1; Figure 2). Currently, the project area consists of a paved parking lot with no extant structures or buildings.

Regulatory Setting

The Washington State Environmental Policy Act (SEPA; RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to identify and document cultural and historical places and objects if national, state, or local significance that may be affected by project activities. The regulation requires proposed methods to reduce or control impacts to identified cultural resources during project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. Revised Code of Washington (RCW) 27.44 and RCW 27.53.060 require that a person obtain a permit from the Washington Department of Archaeology and Historic Preservation (DAHP) before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090. The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the National Register of Historic Places (NRHP).

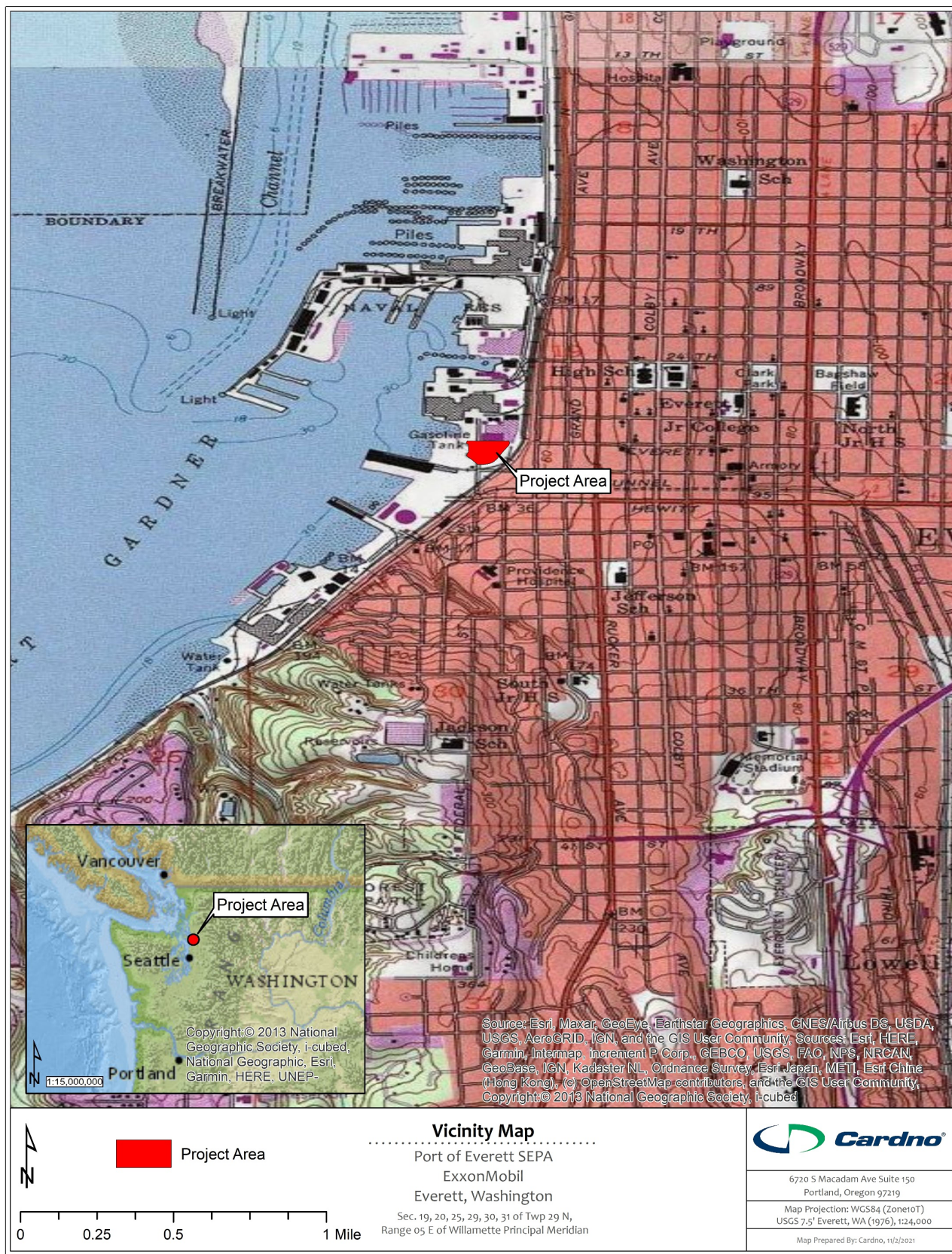


Figure 1. Project area and vicinity.

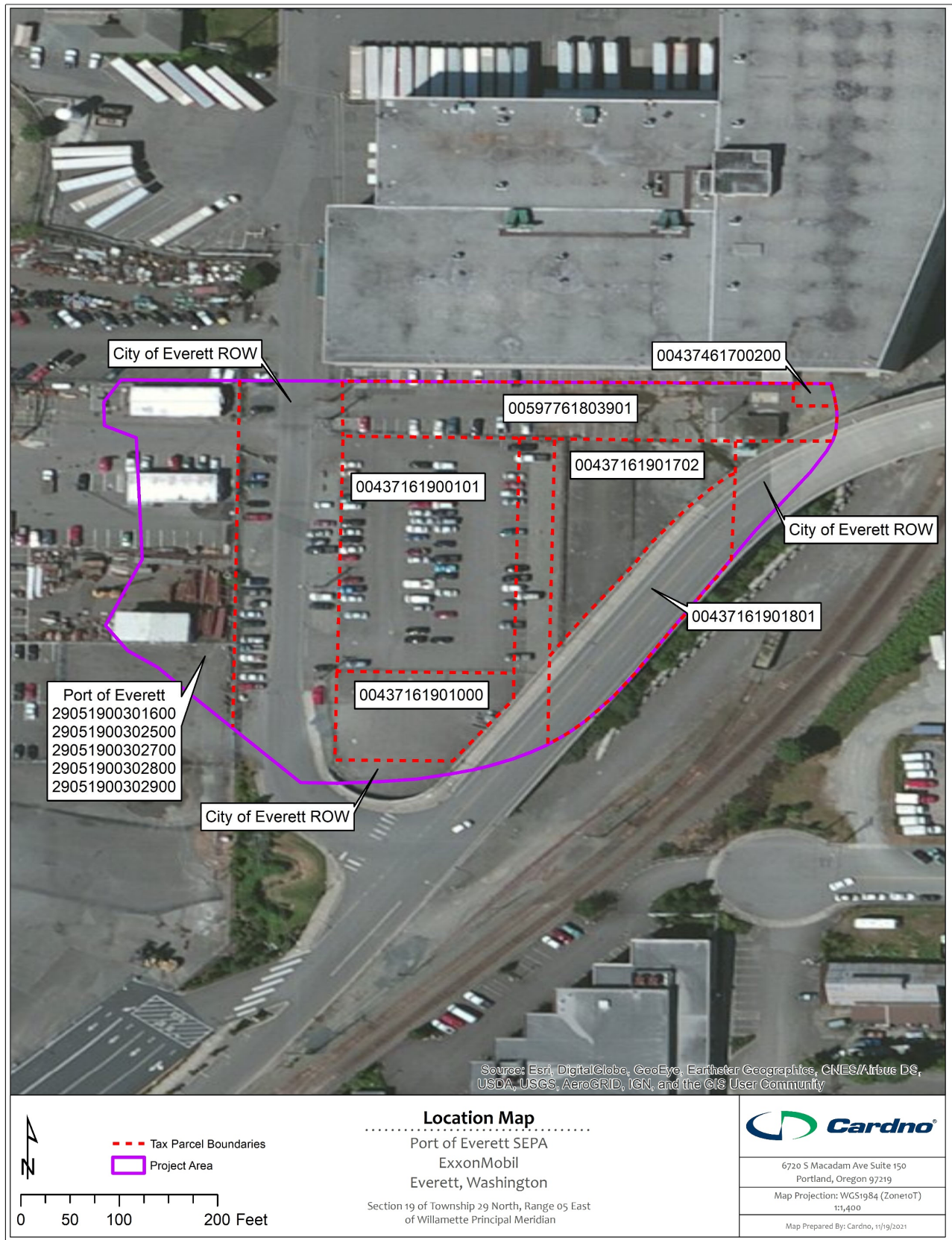


Figure 2. The project area denoting impacted Snohomish County tax parcels and City ROW.

Table 1. Snohomish County Tax Parcel Information.

Owners	Parcel Number(s)
Burlington Northern Railroad	00437161901702
City of Everett	00437161901801
Miller Trust (Cecilia Beverly Miller, beneficiary)	00437161900101
Mobil Oil Corporation	00437161901000
Port of Everett	00437461700200, 00597761803901, 29051900301600, 29051900302500, 29051900302700, 29051900302800, 29051900302900

If a person(s) violates this statute and knowingly disturbs or alters an archaeological site, the DAHP is allowed to issue civil penalties of up to \$5,000, in addition to site restoration costs and investigative costs per RCW 27.53.095. Restorative and monetary remedies do not prevent concerned Indian tribes from undertaking civil action in state or federal court or law enforcement agencies from undertaking criminal investigation or prosecution. If human remains and/or burials are disturbed, RCW 27.44.050 allows an affected Indian Tribe to undertake civil action. Additionally, the excavation of human remains without a permit is a felony. RCW 68.60 requires “expeditious” notification of local law enforcement and the coroner if skeletal human remains are discovered. Failure to notify is considered a misdemeanor.

Snohomish County Code (SCC) 30.67.340 requires developers and property owners to immediately stop work and notify the county, DAHP, and affected Indian tribes if archaeological resources are uncovered during excavation. It further stipulates that county permits issued in areas documented as containing archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes. SCC 20.32D.070-100 outlines the process for obtaining and working under a certificate of appropriateness, and zoning. SCC 20.32D.200 requires recordation of archaeological sites. Additionally, completion of an archaeological report or relocation of a project is required for any construction, earth movement, clearing, or other site disturbance of a known archaeological site or any development application proposed on non-tribally owned, fee-simple properties designated Reservation Commercial on the Snohomish County Future Land Use Map. SCC 20.32D.220 outlines the process to follow if human remains or archaeological resources are found during construction, earth movement, clearing, or other site disturbance.

Everett Municipal Code (EMC) 19.28 outlines the process for identifying, listing, and protecting resources on the Everett Register of Historic Places and within historic overlay zones. Properties within historic overlay zones are governed by EMC 19.28.020 through 19.28.120. Criteria for placement on the Everett Register of Historic Places are described in EMC 19.28.130. Proposed changes to properties on the Everett Register are reviewed by the Everett historical commission per 19.28.140.

Potential for Discovery of Cultural Resources

Archival research indicates a high level of human activity took place adjacent to the project area during precontact and historic times (Scott et al. 2021). Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Historical land modification, including the introduction of artificial fill and development, reduces the likelihood of encountering in situ precontact artifacts. Ethnographic-

period archaeological deposits within and adjacent to the project area may include disturbed or redeposited midden deposits, burials, evidence of a village, or debris associated with short-term occupations and resource-processing locations. Historic-period deposits may include debris from agricultural and historic homestead structures and other early-twentieth-century structure (i.e., “squatters shacks”), or from manufacturing or commercial development.

Cardno archaeologists conducted a background search and literature review of existing cultural resource records; local, state, and national register nomination forms; previous cultural resources investigations; and any known or potential TCPs in and within 1.0 mile (1.6 km) of the project area. According to the DAHP’s predictive model available on the WISAARD online database, there is a very high risk of encountering buried precontact archaeological deposits in the project area. Previous archaeological construction monitoring conducted between 2013 and 2020 suggest a high potential for buried intact cultural deposits.

In 2013, SWCA Environmental Consultants (SWCA) conducted an extensive study and background review for the Kimberly-Clark Worldwide Site Upland Area SEPA process (Rinck et al. 2013). This project area is immediately adjacent to the current project area. Previously, this area was utilized as for industrial purposes which has contaminated the area. During the background review, SWCA identified the project area as containing a high potential for precontact and historical cultural materials within the natural Port Gardner shoreline. In response to the potential for buried archaeological materials, SWCA developed a site-specific Monitoring and Discovery Plan (MDP) (Rinck 2013). SWCA performed archaeological monitoring for cleanup excavations at the Kimberly-Clark Worldwide Site Upland Area (Undem et al. 2014). Within one cleanup area, excavations intersected natural sediments underlying historic-period fill. Within Location 11, archaeologists observed miscellaneous historic debris and architectural remnants located between 2 and 6 feet below ground surface. One precontact artifact was documented during monitoring—45SN00629, an edge-altered basalt cobble (Undem 2014). Archaeological monitoring continued at the Kimberly-Clark Worldwide Site Upland Area in 2020 (Johnson 2020). Archaeologists observed architectural and structural debris within the historic fill layer, likely associated with historical mill operations. No precontact materials or intact sediment layers were observed.

No documented historic properties listed in the NRHP, Washington Heritage Register (WHR), and/or Everett Register of Historic Places (ERHP) are within or adjacent to the project area. There are three historic properties within 0.5 mile (0.8 km) of the project area have been recommended and determined eligible for listing in the NRHP and/or WHR including the Kimberly-Clark Everett Mill Main Office (Property ID 667716), the Daulph Delicatessen (Property ID 18268), and the Everett Main Post Office (Property ID 270916). All other listed and eligible properties are separated from the project area by the BNSF Railway Company train tracks.

Monitoring Measures

Cardno recommends that this MIDP be implemented to minimize potential impacts to any currently unknown intact archaeological resources. Monitoring should not be necessary in glacial deposits and sediments, nor in existing areas where disturbance has already occurred. The following outlines procedures to follow and the responsibilities of Cardno, ExxonMobil/ADC, and the contractor during construction.

Preconstruction Meeting

Prior to construction activities, an archaeologist familiar with the project will meet with the construction supervisors and project personnel. The objective is to review the area to be monitored, and to go over the procedures for coordination and notification of discoveries. Communication is critical to the success of the

MIDP and ensures that a monitor is present when needed. The roles and responsibilities of the monitor and other project personnel need to be outlined prior to construction. These include:

1. Review of all communication protocols. A list of contacts is at the end of this MIDP. When additions or changes in contacts are made, a revised contact list will be prepared at that time.
2. The responsibilities of each party will be reviewed, and each party identified including the contractor, ExxonMobil/ADC, Cardno, agencies, and Tribes.
3. Scheduling procedures for archaeological monitors will be outlined. The individual who will be responsible for making the initial request, and the period of advance notice to be given, will be agreed upon by ExxonMobil/ADC, Cardno, and the contractor.
4. On-site safety procedures will be reviewed.

Monitoring During Construction

An archaeologist will perform on-site monitoring of initial ground-disturbing activities to a depth of approximately 7 ft (2.13 m) below ground surface (bgs) because historic debris and architectural remnants were located between 2 and 6 ft bgs in an adjacent property in 2014 (Undem et al. 2014).

- Ground disturbance occurs when the surface is traversed or cut and may consist of excavation, trenching, potholing, grading, blading, grubbing, leveling, vehicular traffic that treads into the surface (as during wet weather), and hand-digging with a shovel. This list is not considered exhaustive, and essentially anytime possible native soil may be displaced it will be considered to be ground disturbance.
- If formed tools, concentrations, or features are observed during monitoring, construction work will be briefly halted so that the artifacts can be documented, photographed, and mapped in-place, if possible, using a Global Positioning System (GPS) unit. It is anticipated that the archaeological monitor will not collect artifacts or samples unless it is determined that they represent evidence of significant archaeological deposits or a feature, or the artifact is a formed tool.
- If burial features, artifacts, or human bone are encountered within the work area, Cardno has the authority to stop work and notify the construction manager, Exxon Mobile/ADC, and DAHP. The procedures to be followed in the event of an inadvertent discovery that may need additional excavation or protection are outlined in a section below.

Report of Monitoring Activities

A technical memo report of the archaeological monitoring will be prepared following the completion of the project. The report will include information about the monitoring activities and documentation of artifacts or new archaeological resources, if found during construction, and will include maps and photographs. In addition, inadvertent discoveries will be described in the report, if encountered. If artifacts are collected, a catalog will be provided, and a summary prepared as part of the report. Within 90 days of the conclusion of fieldwork, the report will be submitted to Exxon Mobile/ADC, DAHP, and the Tribes.

Summary of Monitoring Measures

ExxonMobil/ADC will ensure that the outlined procedures are followed during construction:

1. An on-site meeting prior to construction will take place between Cardno, the construction inspectors and supervisors, and the developer's representatives, to review specific archaeological resource monitoring procedures and responsibilities. All site safety will be reviewed at this time.

2. On-site archaeological monitoring of initial ground-disturbing activities to a depth of approximately 7 ft (2.13 m) bgs will occur across the project area.
3. Construction activities will be halted if the activity encounters, or may impact, artifact concentrations, features, human remains (or potential human remains), funerary items, or sacred objects. Construction work would not resume until the consulting parties agree on a course of action based on the inadvertent discovery protocol as described in the following section.
4. Cardno will prepare a report summarizing the activities that were monitored, and noting inadvertent discoveries and steps taken in response to a discovery, as outlined in this MIDP. The report will be submitted to Exxon Mobile/ADC, DAHP, and the Tribes.

Inadvertent Discovery Protocol

The following outlines procedures to follow, in accordance with state laws, if certain archaeological materials and human remains are discovered in the project area, during construction. In the event of an inadvertent discovery such as intact archaeological features or human remains, the following steps will be taken.

Archaeological Resources Prompting Inadvertent Discovery Protocol

Archaeological resources, such as pre-contact (Native American) or historic-period artifacts or features, could be inadvertently discovered during construction. Work must stop when the following types of artifacts and/or features are encountered (the list is not exhaustive):

- Flaked stone tools (e.g., arrowheads, knives, scrapers) and debitage.
- Groundstone tools (e.g., mortars, pestles).
- Layers (strata) of discolored earth resulting from fire hearths or other features. May be black, red, or mottled brown and may contain discolored cracked rocks, charcoal, or dark soil.
- An area of charcoal or very dark stained soil with artifacts.
- An accumulation of shell, burned rocks, or other food-related materials.
- Animal bones, including small pieces of bone.
- Personal items, funerary materials, and mortuary objects.
- Structural remains (e.g., wooden beams, post holes).

When in doubt, assume the material is a cultural resource. Even what looks to be old garbage could be an archaeological resource.

On-site Responsibilities

If an inadvertent discovery is encountered during construction the following steps must be followed:

1. **STOP WORK:** If any Exxon Mobil/ADC employee, contractor, or subcontractor believes that he or she has uncovered an archaeological resource or evidence of a burial at any point in the project, all work adjacent to the discovery must stop. The discovery location should not be left unsecured at any time.
2. **NOTIFY CARDNO:** Notify the on-site archaeological monitor and the primary Cardno contact and follow the provisions in the MIDP to verify the discovery (contact list below).

3. NOTIFY EXXONMOBILE/ADC: Notify the Exxon Mobile/ADC project manager immediately (contact list below).
4. CARDNO WILL NOTIFY DAHP AND THE TRIBES, ON BEHALF OF EXXONMOBILE/ADC.

Responsibilities of Exxon Mobile/ADC:

1. PROTECT: Exxon Mobile/ADC is responsible for taking appropriate steps to protect the discovery site.
 - a. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource, typically within 30 meters (100 feet). Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery vicinity. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological materials as set forth in this document.
 - b. Exxon Mobile/ADC may allow construction away from archaeological resources, in other areas, prior to contacting the concerned parties.
 - c. Until assessed by Cardno, treat all bone and bone fragments as possible human remains. If human remains, bone, or bone fragments are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call 911 or speak with the media.
2. CONTACT: If Cardno has not been contacted, Exxon Mobile/ADC will be responsible for doing so (contact list below).

Responsibilities of Archaeologist:

1. MONITOR: An archaeological monitor is required to be on-site ground-disturbing activities to a depth of approximately 7 ft (2.13 m) bgs.
2. IDENTIFY: The archaeologist will examine the inadvertent discovery to determine if it is archaeological or to verify remains are human.
 - a. If the find is determined not archaeological, work may proceed with no further delay.
 - b. If the find is determined to be archaeological, the archaeologist will continue with notification (see archaeological procedure below).
 - c. If the find may be human remains or funerary objects, the archaeologist will ensure that a qualified individual examines the find.
 - d. If it is determined that the remains are human, the procedure described in the following section will be followed.
3. NOTIFY: Notify DAHP (contact list below).
 - a. If the discovery may relate to Native American interests, Cardno will also contact the Tribal representatives (contact list below).

Archaeological Procedures:

Pre-contact or historic-period archaeological material discovered inadvertently during project construction will be recorded, and Cardno will complete the documentation and assessment. Discovered features and formed tools will be photographed; stratigraphic profiles and soil/sediment descriptions of the newly discovered subsurface features will be prepared. Discovery locations will be documented on scaled site plans and site location maps.

Archaeological features and artifacts inadvertently discovered in buried sediments may require further excavation. After coordination on the appropriate procedures with DAHP and Tribes, a unit(s) or small trench(s) may be excavated to determine if an intact occupation surface is present. The controlled excavation of units may assist in gathering information on the nature, extent, and integrity of the subsurface deposits. Archaeological excavation units would be dug by hand in a controlled fashion to expose the feature, collect samples from undisturbed contexts, or assist in interpreting complex stratigraphy. Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of archaeological material, and depth to sterile soil, or bedrock will be recorded for each excavation unit on a standard form. Unit-level forms will be used, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all subsurface artifacts and discovered features. All of the sediments from archaeological excavation units, for the purposes of additional investigations of newly discovered archaeological deposits or features, will be screened through 6.4-mm (¼-in) mesh.

All pre-contact formed tools collected from the subsurface excavation units will be analyzed, cataloged, and temporarily curated. Archaeological materials (with the exception of human remains, funerary items, and sacred objects) and copies of records will be curated at the Burke Museum in Seattle, Washington.

If assessment activity exposes human remains (e.g., burials, isolated teeth, or bones), the process described in the previous sections will be followed. The discovery will then be under the authority of DAHP.

Special Procedures for the Discovery of Human Remains

Any human remains or funerary objects will be treated with dignity and respect at all times. If an inadvertent discovery of human remains or funerary objects occurs during construction the following steps must be followed:

1. Notify the Snohomish County Medical Examiner's Office and Snohomish County Sheriff's Office (contact list below).
 - a. The Medical Examiner has the responsibility to determine if the remains are "forensic" and under the medical examiner's jurisdiction or are "non-forensic."
 - b. If the remains are determined to be "non-forensic," the Medical Examiner will notify DAHP. DAHP's physical anthropologist will examine the remains and notify affected Native American Indian Tribes of the results of the examination. The final disposition of the remains will be determined after consulting with the appropriate Tribal representatives, and others.
2. Participate in Consultation: Per RCW 27.44.055, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains. Exxon Mobile/ADC personnel will participate in consultation.
3. Project construction outside the discovery location may continue while documentation and assessment of the feature proceeds. After Cardno verifies the boundaries of the discovery location, Cardno will determine the appropriate level of documentation and treatment of the resource, in consultation with Exxon Mobile/ADC, DAHP, and the affected Tribes. Construction may continue at the discovery location only after the process outlined in this MIDP is followed and the DAHP determines that compliance with state and county laws is complete.

Summary of Inadvertent Discovery Protocol

If an inadvertent discovery is encountered during construction the following steps must be followed:

1. All construction activities that may affect possible human remains, a feature, or potentially significant archaeological deposits should be halted, and the remains, archaeological materials, and surrounding soil should not be disturbed. The site will be kept secure from further impacts

and trespass. Construction personnel will notify the archaeological monitor if the monitor is not present at the time of the discovery.

2. If the inadvertent discovery includes human remains, bones, or materials possibly representing human remains or a burial, all work in that area must stop and Cardno will contact the Snohomish County Medical Examiner's Office and Snohomish County Sheriff's Office (do not call 911). Treat the finds with dignity and shield them from view of personnel. Additional information on procedures for handling discoveries of possible human remains is detailed above.
3. If the medical examiner determines that the remains are "non-forensic," the medical examiner will officially contact DAHP. The DAHP physical anthropologist will confirm whether the remains are Native American or Non-Native American under the law, and will conduct consultation with the Tribes, Exxon Mobile/ADC, and others deemed appropriate. Disposition of the remains will be made by DAHP, in consultation with Tribes and others, as appropriate.
4. Cardno will contact DAHP, as well as Exxon Mobil/ADC, if they have not yet been contacted, if there is a discovery that is not related to human remains. The nature of the discovery will be determined and consulting parties (i.e., the Tribes) will be contacted. Security measures will be taken to prevent illicit activities such as looting or vandalism.
5. If evidence of an important deposit or feature is encountered during construction, and no human remains are encountered, a plan to address the impacts will be determined among the consulting parties.

Contact Information

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DAHP Tribal Areas of Interest

Muckleshoot Indian Tribe

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Swinomish Indian Tribal Community

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Tulalip Tribes

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DAHP Human Remains Consultation – Inadvertent Discovery Tribal Contacts

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Confederated Tribes and Bands of the Yakama Nation

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

APPENDIX D

WSP's Archaeological Monitoring of the ExxonMobil/ADC Property Remedial Excavation, dated May 1, 2023





ARCHAEOLOGICAL MONITORING OF THE EXXONMOBIL/ADC PROPERTY REMEDIAL EXCAVATION

EVERETT, SNOHOMISH COUNTY, WASHINGTON
STANTEC, INC.

WSP PROJECT #2255100012

Prepared for:

STANTEC, INC.

801 2nd Ave, Suite 1150. Seattle, Washington

MAY 1, 2023



ARCHAEOLOGICAL MONITORING OF THE EXXONMOBIL/ADC PROPERTY REMEDIAL EXCAVATION

EVERETT, SNOHOMISH COUNTY, WASHINGTON
STANTEC, INC.

Prepared for:

STANTEC, Inc.
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Prepared by:

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WSP PROJECT #2255100012

May 1, 2023

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EXECUTIVE SUMMARY

Please be aware that, effective September 21, 2022, Wood Environment & Infrastructure Solutions, Inc., was acquired by WSP. Due to the acquisition, we have changed our name to WSP USA Environment & Infrastructure Inc. No other aspects of our legal entity or capabilities have changed.

This report describes methods and results of archaeological monitoring of excavations for the ExxonMobil/ADC Property Remedial Excavation at Port Gardner, Everett, Snohomish County, Everett, Washington. Monitoring sought to identify and minimize impacts to archaeological sites in the project vicinity, if present, as outlined in the project's cultural resources monitoring and discovery plan prepared by Cardno Inc. (Hart et. al 2022). Archaeological monitoring conducted by WSP USA Environment & Infrastructure Inc. did not result in the identification of any precontact or historic-era archaeological sites.

No further monitoring for cultural resources is recommended for this project.

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1 PROJECT SUMMARY

In June 2022, WSP was contacted by Bobby Thompson of Cardno Inc. (now Stantec) to conduct archaeological monitoring of a soil stabilization project at the Port of Everett, Washington. Cardno Inc. was contracted to conduct a soil stabilization project at a property owned by ExxonMobil in Everett, Washington. Cardno archaeologists had previously conducted a Cultural Resources Assessment for the project (Scott, et al 2022 as well as a Monitoring and Inadvertent Discover Plan (Hart et. al. 2022).

The project is located within the Port of Everett Bay Norton Terminal, Port Gardner south of the site of the former site of the Kimberly-Clark Mill, adjacent to Everett Ship Repair in the west-central area of the city of Everett, Snohomish County, Washington at T29 N., R5 E., Willamette Meridian at 2717 and 2731 Federal Avenue, Everett, Washington 98201 Avenue (Figures 1 and 2).

1.1 PROJECT DESCRIPTION

This cleanup project by the ExxonMobil/American Distributing Company (ADC) in Everett, Washington, is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Cleanup activities included installation of shoring walls and excavation of impacted soils. Following excavation of contaminated soils, the project area was to be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved. Expected soil disturbance is an area approximately 80m (feet) by 25m (feet) with excavations reaching depths between 2.5m (7.5 feet) and 5m (15 feet) (Figures 3 and 4).

Cardno, Inc., now Stanec Inc. (Stantec) previously prepared a cultural resources assessment in support of the project (Scott et al. 2021). The assessment consisted of a literature review and records search within 1.0 mile of the project area that included cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs). Stantec also prepared a monitoring and inadvertent discovery plan (MIDP) for use during cleanup operations (Hart et. al. 2022).

1.2 REGULATORY CONTEXT

The Washington State Environmental Policy Act (SEPA; RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to identify and document cultural and historical places and objects if national, state, or local significance that may be affected by project activities. The regulation requires proposed methods to reduce or control impacts to identified cultural resources during project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. Revised Code of Washington (RCW) 27.44 and RCW 27.53.060 require that a person obtains a permit from the Washington Department of Archaeology and Historic Preservation (DAHP) before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090. The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the

National Register of Historic Places (NRHP).

1.3 PREVIOUS ARCHAEOLOGICAL WORK

A detailed account of past environmental and cultural conditions in the general vicinity of Port Gardner was presented in a comprehensive cultural resources assessment (Rinck et al. 2013). As summarized, native people resided on the shore of the area for thousands of years, utilizing the Everett shoreline for shellfish collection, hunting, gathering, fishing, and habitation. According to the Tulalip Tribes, native long houses were located along the Everett waterfront. Early Euroamerican visitors to the area mention Native American villages at the mouth of the Snohomish River in their accounts. The shorelines were developed quickly after the Euroamericans converted their interests in the region from exploration to settlement and industry including docks and wharves expanding at a great pace between 1900 and 1936. The last mill structure in the vicinity of the project area (the Kimberly Clark Mill) closed permanently in 2012. The larger project vicinity has been contaminated by previous industrial operations with petroleum, heavy metals, and volatile organic compounds. A monitoring project within the vicinity of this project in 2014 (Undem 2014) resulted in the discovery of an isolate (45-SN-629). Other recent monitoring projects just north of the project area (Johnston 2020, Anderson 2022) and one directly adjacent (Anderson 2023) resulted in no archaeological material being observed.

1.4 PROJECT LOCATION HISTORY

The ExxonMobil/American Distributing Company (ADC) site had previously been a petroleum bulk storage and distribution facility south and adjacent to the now demolished Kimberly-Clark Worldwide mill. The predecessor companies of ExxonMobil Oil Corporation owned the entire location from 1927 to 1974. Mobil Oil operated the southern portion of the site until 1987, subsequently selling the northern portion to A.P. Miller for use by ADC. ADC utilized their portion of the location for bulk petroleum operations until 1990.

Between 1998 and 2000, all structures at the location were demolished and removed. Following an investigation in 1998, an “interceptor trench” was built to recover petroleum and the location was paved. The location was used as a parking lot until the beginning of this project (WSDOE 2023).

1.5 JUSTIFICATIONS FOR MONITORING

The Washington State Department of Archaeology and Historic Preservation (DAHP) statewide predictive model within the Washington Information System for Architectural and Archeological Records Data (WISSAARD) system uses environmental data associated with archaeological site locations to identify areas at which unknown sites may be found. The model is used “to determine the probability that, under a particular set of environmental conditions, another location would be expected to contain an archaeological site” (Kauhi and Markert 2009). Environmental categories included in the model are elevation, slope, aspect, distance to water, geology, soils, and landforms. The model ranks the project as “Survey Highly Advised: Very High Risk.”

A cultural resources assessment that included background information on the setting of the project area, expectations for buried cultural resources based on previous investigations in the vicinity, and a GIS-based probability map showing areas with low, medium, and high potential to harbor significant archaeological materials was prepared as required by the Interim Action Plan (Penner-Ash and Chappell 2022). This monitoring and discovery plan was developed for use during opportunistic cleanup according to recommendations made in that assessment. Hart et al. (2022) estimated that fill in the southern vicinity of the project would be between 6 and 8 feet thick and that it overlies possible intact beach and backshore sand sediments. The upper fill was expected to be disturbed, late historic with modern utilities with evidence of repeated incidences of historic, industrial construction and destruction. The lower fill was expected to be less disturbed and possibly stratified, reflecting the early historic record. The project was considered to have retained a moderate to high probability of encountering pre-contact period cultural resources of intact naturally deposited beach sediments if project excavations reached those depths (Hart et al. 2022).

A single archaeological isolate (45-SN-629) consisting of an edge-altered basalt cobble was discovered near the southern portion of the project as a result of monitoring in 2014. The artifact was found within fill at approximately 6.5 feet below surface (Undem 2014). Because of the presence of an isolated artifact and the ethnographically recorded Native use of the beach areas, there has been a concern that intact archaeological material may be present within the native beach sand that underly the fill related to historic activity.

1.6 SAFETY PROTOCOLS

All excavation activities for this project were carried out within what in the *EMES Excavation Minimum Safety Expectations Document* (Cardno 2016) defined as the “Red Zone.” Only personnel directly involved with the excavation were allowed in that zone. All machine operators and spotters within that zone were required to remain in their vehicles while excavations were being carried out. All others could only view the excavation activities from behind the Red Zone fence, typically 30 to 40 meters (100-120 feet) away. As a result, the monitoring archaeologist was not able to make direct observations of the excavations in progress. Only when all machines were shut down were archaeological and environmental monitors allowed to approach and view the excavation area. The archaeologist was also allowed to call a halt to operations at his discretion to make these observations at any time. This occurred throughout the course of each workday at irregular intervals depending on the progress of the excavation.

2 ARCHAEOLOGICAL MONITORING

Archaeological monitoring took place between August 22, 2022, through January 26, 2023. Following the protocols of the MIDP prepared by Cardno Archaeologist Erik D. Anderson monitored all ground disturbance down to a depth of approximately 7 ft (2.13 m). Excavations were carried out by personnel of ICS construction with all environmental monitoring and safety protocols carried out by personnel of Cardno, Inc. Excavations were mainly carried out by a John Deere 135G mid-size excavator and a Hitachi Zaxis 350LC excavator supplemented by Bobcat E35Z mini excavators as well as a Linkbelt 490X4 and a Linkbelt 145X.

Excavations were carried out in four phases (Fig-2). Each phase began with exploratory trenching around the perimeter prior to the installation of metal shoring in preparation of general soil removal.

Phase 1 took place between August 22, 2022, and October 10, 2022. This included shoring for both Phase 1 and Phase 2 as well as all soil removal for Phase 1. Work began with exploratory trenching around the perimeter of both Phases 1 and 2 prior to the installation of heavy, steel shoring. Soils observed were the typical undifferentiated sand/silt with little to no stratification (Photos 1 and 2). All soils exhibited various levels of petroleum odor, some with visible petroleum staining. Some areas near the surface were disturbed by modern utilities. Areas of redeposited beach sand were observed along the west edge of Phase 2 shoring. The sand was determined to be redeposited as it contained small amounts of fragmentary red brick. Plastic sheeting was later observed under the sand deposits as well. Several very large logs were observed in the northwest corner of the Phase-1 shoring trench. Further excavation showed them to have associated chain and log-dogs, indicating they were from log booms (Photo 4). Other deposits of milled wood were observed near the center of Phase-1 shoring (Photo 3 and 5). Other material included red and fire brick, both intact and fragmentary, metal pipe, metal cable, chains, milled wood of various sizes including railroad ties. General soil removal began on October 4, 2022. Soils and material observed were very similar to those that were observed during trenching. More large logs from possible log booms (Photo 4) were removed and even larger deposits of milled wood were seen throughout the excavations. No temporally diagnostic material was observed.

Phase 2 soil removal took place between October 11, 2022, and October 13, 2022. Soils observed were the typical undifferentiated sand/silt with only minimal stratification. What stratification was observed was a thin layer of debris at approximately 2-3 feet (0.7-1 meter) below surface that consisted mostly of milled wood. Other material observed included red and fire brick, both intact and fragmentary. Flooded areas were permeated with petroleum accompanied with a strong odor (Photo 6). No temporally diagnostic material was observed.

Phase 3 took place between October 29, 2022, and January 9, 2023. This included both shoring and soil removal. Trenching began on October 29, 2022. Soils observed were more stratified close to the surface showing multiple incidences of fill beneath the modern asphalt. The rest was the typical undifferentiated sand/silt with various historic debris with the addition of large amounts of broken concrete (Photo 7). General soil removal mostly contained the same undifferentiated sand/silt with the typical historic debris. Milled wood became more concentrated between 1-2 meters (3-6 meters) below surface. Flooded areas were permeated with petroleum accompanied with a strong odor (Photo 8). No temporally diagnostic material was observed.

Phase 4 took place between January 10, 2023, and January 26, 2023. This included both shoring and soil removal. Soils removed were the same undifferentiated sand/silt observed throughout this project (Photo 9). In addition to the typical material were large fragments of wood and concrete concentrating at the very north end of the excavated area (Photo 10). Flooded areas were permeated with petroleum accompanied with a strong odor. No temporally diagnostic material was observed.

2.1 SOILS OBSERVED

Soil observed were generally an undifferentiated sand/silt mix containing various undiagnostic historic era materials. Material included milled wood, red and fire brick as well as unidentified metal fragments. Soils were accompanied by a moderate to strong petroleum odor. All observed milled wood appeared to be creosote preserved. Some areas showed minimal stratification from recent surface fill, mostly likely in compensation for surface subsidence. Some large pockets of imported sand were also observed, determined as such due to brick fragment inclusions. Soils observed were typical for the vicinity of Port Gardner as encountered in other, similar projects (Anderson 2022, 2023; Undem 2014; Johnson 2020).

3 CONCLUSIONS AND RECOMMENDATIONS

Archaeological monitoring conducted by WSP from August 22, 2022, through January 26, 2023, did not result in the identification of any as-yet unrecorded cultural resources. As expected, soils encountered consisted mainly of an undifferentiated sand/silt fill matrix containing historic industrial material, none of which was diagnostic. Larger logs with connected chains may be left over from historic-era log booms but are devoid of any diagnostic attributes. Lumber storage and log booms are clearly visible on the 2003 Aerial (Figure 5). Encountered buried large logs and log booms could easily be from that time frame and not from an earlier historic context. Intermittent beach sand deposits, although being like native beach observed by the archeologist during monitoring for other projects, were clearly redeposited material overlying historic deposits.

It is WSP's opinion that any excavations within proximity to this project at similar depths, will also encounter similarly disturbed soils from historic industrial activity, possibly mixed with redeposited beach sands. The probability of discovering intact, archaeological material either historic or prehistoric, down to 2.5 meters (7 feet) below surface in this general vicinity is very low. No further cultural work is recommended.

Multiple projects in this general vicinity have shown that the predictive model within the WISSAARD system may not be accurate for the more industrially disturbed areas of Port Gardner.

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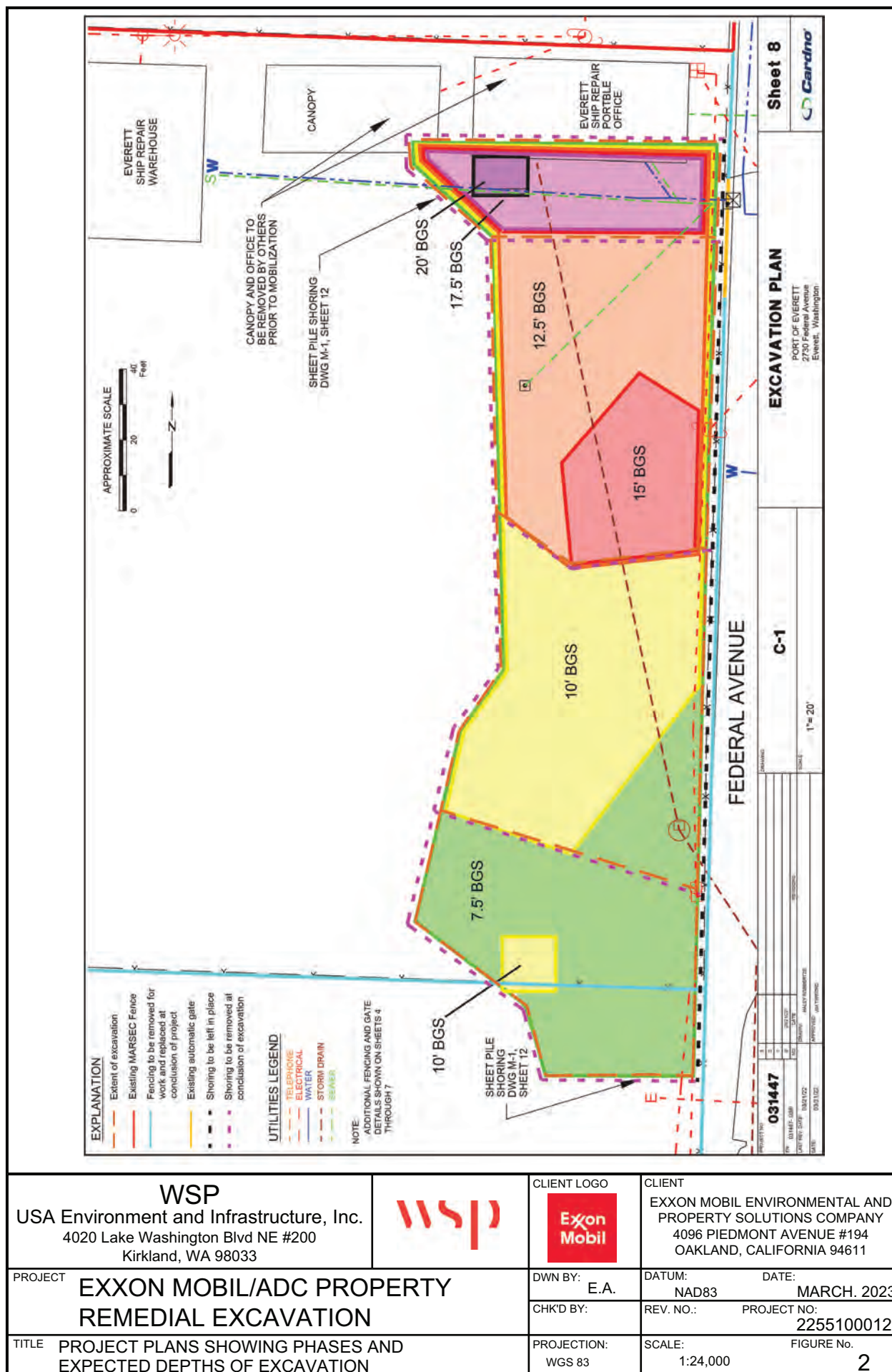
Washington State Department of Ecology (WSDOE)

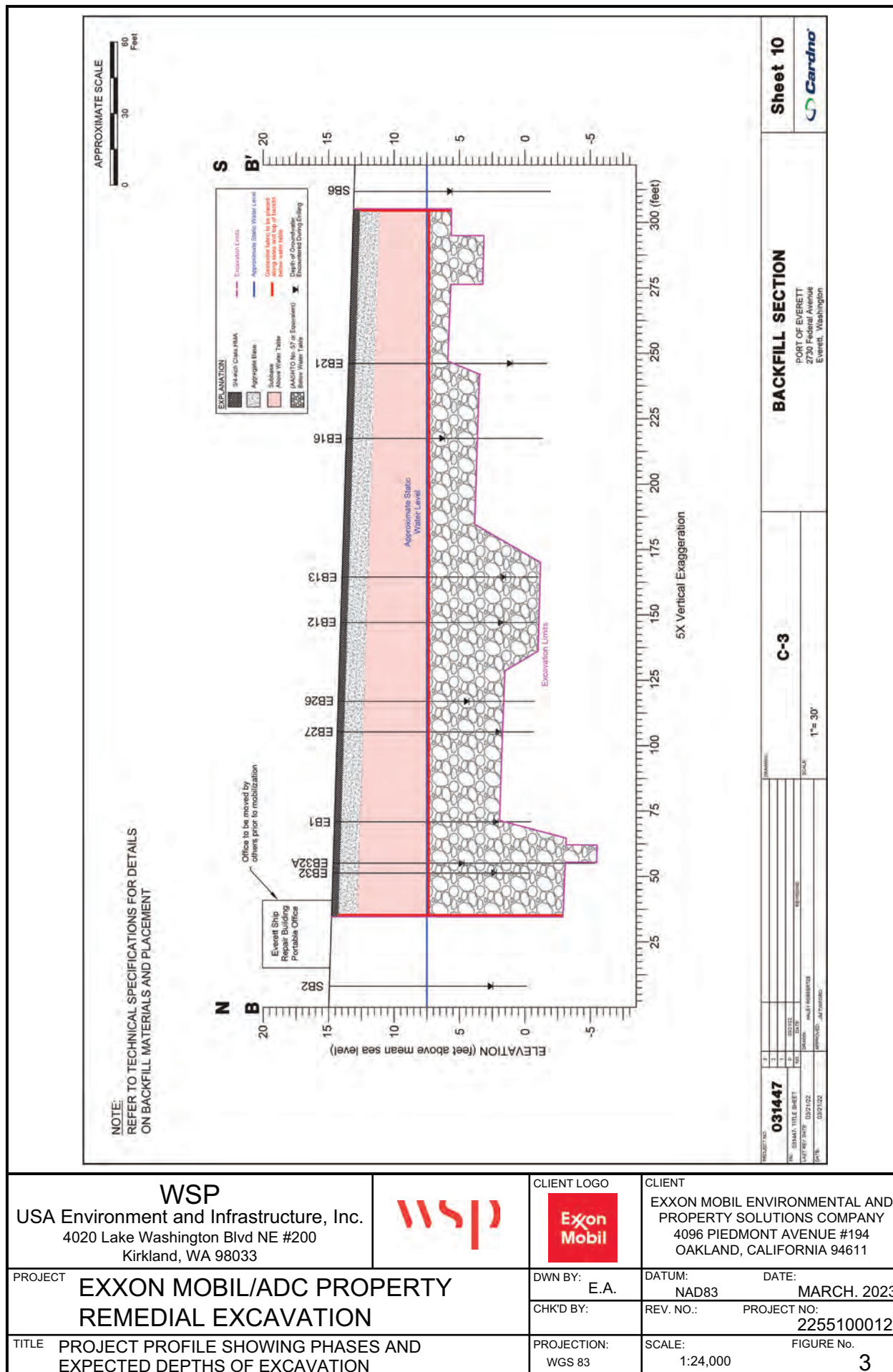
2032 Electronic resource: <https://apps.ecology.wa.gov/cleanupsearch/site/5182>. Accessed March 28, 2023.

FIGURES



<div>WSP</div> <div>USA Environment and Infrastructure, Inc.</div> <div>4020 Lake Washington Blvd NE #200</div> <div>Kirkland, WA 98033</div>		<div></div>	<div>CLIENT LOGO</div> <div><div>Exxon</div><div>Mobil</div></div>	<div>CLIENT</div> <div>EXXON MOBIL ENVIRONMENTAL AND</div> <div>PROPERTY SOLUTIONS COMPANY</div> <div>4096 PIEDMONT AVENUE #194</div> <div>OAKLAND, CALIFORNIA 94611</div>	
PROJECT	EXXON MOBIL/ADC PROPERTY REMEDIAL EXCAVATION	DWN BY:	E.A.	DATUM:	DATE:
		CHK'D BY:		NAD83	APRIL 2023
TITLE	PROJECT LOCATION			REV. NO.:	PROJECT NO:
		PROJECTION:	WGS 83	SCALE:	FIGURE No.
				1:24,000	1



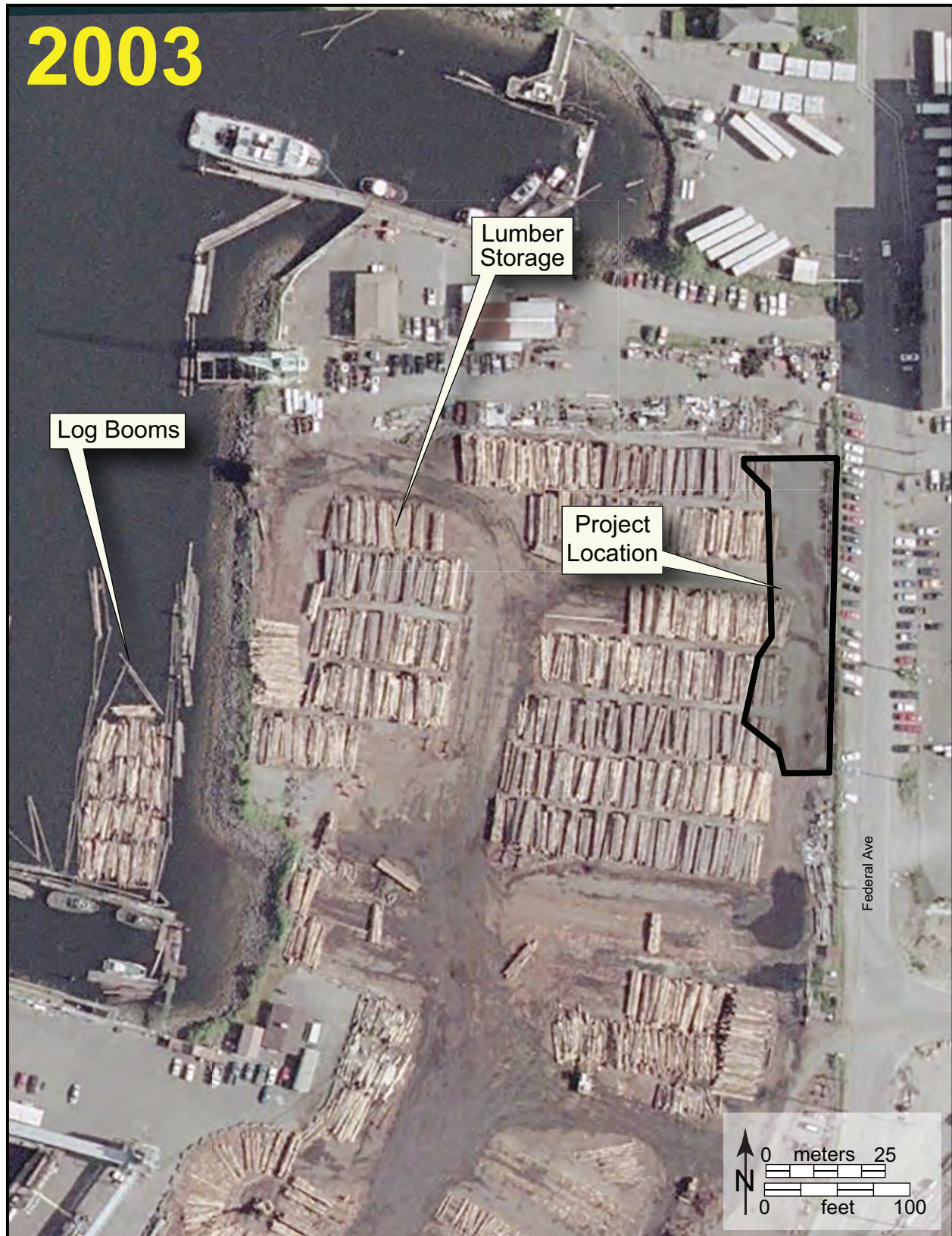


<p>WSP</p> <p>USA Environment and Infrastructure, Inc.</p> <p>4020 Lake Washington Blvd NE #200</p> <p>Kirkland, WA 98033</p>		<p>CLIENT LOGO</p> <p>Exxon Mobil</p>	<p>CLIENT</p> <p>EXXON MOBIL ENVIRONMENTAL AND PROPERTY SOLUTIONS COMPANY</p> <p>4096 PIEDMONT AVENUE #194</p> <p>OAKLAND, CALIFORNIA 94611</p>
<p>PROJECT</p> <p>EXXON MOBIL/ADC PROPERTY REMEDIAL EXCAVATION</p>		<p>DWN BY: E.A.</p> <p>CHK'D BY:</p>	<p>DATUM: NAD83</p> <p>DATE: MARCH. 2023</p> <p>REV. NO.: PROJECT NO: 2255100012</p>
<p>TITLE</p> <p>PROJECT PROFILE SHOWING PHASES AND EXPECTED DEPTHS OF EXCAVATION</p>		<p>PROJECTION: WGS 83</p>	<p>SCALE: 1:24,000</p> <p>FIGURE No. 3</p>



WSP USA Environment and Infrastructure, Inc. 4020 Lake Washington Blvd NE #200 Kirkland, WA 98033			CLIENT LOGO 	CLIENT EXXON MOBIL ENVIRONMENTAL AND PROPERTY SOLUTIONS COMPANY 4096 PIEDMONT AVENUE #194 OAKLAND, CALIFORNIA 94611
PROJECT EXXON MOBIL/ADC PROPERTY REMEDIAL EXCAVATION		DWN BY: E.A. CHK'D BY:	DATUM: NAD83 REV. NO.:	DATE: APRIL 2023 PROJECT NO: 2255100012
TITLE CURRENT CONDITIONS		PROJECTION: WGS 83	SCALE: 1:600	FIGURE No. 4

2003



WSP USA Environment and Infrastructure, Inc. 4020 Lake Washington Blvd NE #200 Kirkland, WA 98033			CLIENT LOGO 	CLIENT EXXON MOBIL ENVIRONMENTAL AND PROPERTY SOLUTIONS COMPANY 4096 PIEDMONT AVENUE #194 OAKLAND, CALIFORNIA 94611
PROJECT EXXON MOBIL/ADC PROPERTY REMEDIAL EXCAVATION		DWN BY: E.A. CHK'D BY:	DATUM: NAD83 REV. NO.:	DATE: MARCH, 2023 PROJECT NO: 2255100012
TITLE 2003 AERIAL SHOWING LUMBER STORAGE AND LOG BOOMS		PROJECTION: WGS 83	SCALE: 1:1,200	FIGURE No. 5

ATTACHMENT 1

PROJECT PHOTO
PAGES



Photo 1. Typical exploratory trenching for Phase-1 and 2 along the east side of Phase-1. Federal Ave in background, view to the southeast.



Photo 2. Typical undifferentiated stratigraphy for Phase-1 and 2 along the east side of Phase-1.



Photo 3. Typical large wood debris removed during exploratory trenching for Phase-1 and 2. Port of Everett facilities background, view to the south.



Photo 4. Example of a suspected log boom remnant excavated from the northwest corner of Phase-1 excavations.



Photo 5. Phase-1 soil removal showing in-situ wood debris, view to the northeast. Note petroleum contamination of the flooded area.



Photo 6. Phase-2 soil removal showing thin debris layer, view to the northeast. Note petroleum contamination of the flooded area.



Photo 7. Phase-2 Trenching along the west side showing upper fill incidences and broken concrete.



Photo 8. Phase-3 soils removal showing typical soils and milled wood concentration, view to the north.



Photo 9. Typical soils encountered during Phase4 soil removal, view to the west.



Photo 10. Large wood and concrete debris encountered at the north end of Phase-4 soil removal, view to the west.

ATTACHMENT 2

DAILY MONITORING LOGS

DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012



DATE: August 22, 2022. 9:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Clear Skies. Warm and Sunny, Temperatures 80s-90s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 9:00 AM at the site location and met with Carl Wimlich, the assistant project manager and health and safety manager from Cardno. Safety protocols were discussed with the archaeologist. Work was proceeding to shift the steel shoring for the planned excavation for the day.

A progress and safety meeting was held at 1:00 PM to discuss the work for the rest of the day. A test trench approximately 5 feet deep was to be dug in the west southwestern portion of the project area. Safety and delineation activities than occurred.

Excavation began approximately 1:30 PM at the northeast section of the trench and proceeded south. Trench be excavated is a U-shaped trench. Excavation was carried out with a John Deere 135G. Direct observation was made difficult due to lack of proximity observation for safety concerns.

Approximately 1-foot of concrete had already been removed prior to excavation. First observed soils was an undifferentiated mix of silt sand and medium to small gravels with numerous small, angled cobbles, indicating stabilization fill. A large piece of coiled cable was observed at approximately 2 feet below surface in the center of the trench. Also observed were several red brick fragments and some milled wood fragments. This was accompanied by a moderate petroleum odor.

Soil observed from approximately 3 feet down to the bottom of the trench was a dark brown, possibly petroleum stained, loose sand/salt with few inclusions. Possibly re-deposited beach sentiments were observed from 4-5 feet below surface.

Approximately 4 feet below surface, the soil changed to very coarse gray sand, similar to other beach sounds observed within the general area.

The first 6-foot segment was completed and approximately 2:00 PM and the next segment began.

Water table was encountered at 5 feet below the surface. High tide was expected to be at 4:30 PM.

A buried concrete slab was observed approximately one to 2 feet below surface at the southeastern portion of the trench. It is quite possible that that is a remnant floor underneath the current concrete floor. You could easily extend through most of the project area.

All excavation ceased at 3:00 PM, and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: August 23, 2022. 7:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Clear Skies. Warm and Sunny, Temperatures 80s-90s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

Archaeologist arrived at 7:00 AM and met with personnel from Cardno and ICS construction. Preparations and safety brief commenced immediately. Excavator operation preparation begin at 7:30 AM. Excavation begin at 8:00 AM with a continuation of the trench from the previous day.

Fragments of an 18-inch ceramic waterline were removed it in approximately 8:30 AM. Soil initially encountered was identical as the previous day: one or 2 feet of fill on top of one foot of concrete overlying dark brown sand/silt, with possible petroleum contamination overlying a very coarse bluish gray sand. Material observed including included small amounts of brick fragments, concrete fragments, Small to large, milled wood fragments, small metal pipe fragments, large hunks of milled wood, possibly old railroad ties.

Worked stopped at 10:00 AM in order to move a series of shoring into the work area. Work started again at 12:00 PM.

Soils observed were identical as before but was accompanied with a slightly stronger petroleum odor.

More significantly large pieces of milled wood were excavated close to the north end of the west trench. Each one was approximately 8 to 10 inches thick with varying lengths and widths. Each one was permeated with creosote.

As excavations occurred, a second excavator, a Case SV 280 was backfilling the trench.

A pocket of possible redeposited glacial was observed at approximately 4 feet below the surface near the north end of the west exploratory trench.

At approximately 1:00 PM, work commenced on the very south end of the project with the same exploratory trenching. Soils near the surface were dominated by very thick, very angular stabilization fill.

The vast majority of the of the south trench stratigraphy was disturbed by previous utilities including multiple plastic corrugated pipes. A corrugated pipe was also discovered approximately 4 feet below service running perpendicular to the trench. This was accompanied by a mild petroleum odor. Trench was expanded out to a pit approximately 10' x 10', excavating around the corrugated plastic pipe in order to expose the corrugated metal pipe beneath. All soils encountered in the pit were pipe-related fill consisting of various silts with heavy angular gravels.

All excavation ceased at 3:00 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: August 24, 2022. 7:00 AM to 2:30 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Clear Skies. Warm and Sunny, Temperatures 80s-90s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 6:45 and began testing out his GPS equipment. Safety brief by personnel of Cardno and ICS began at 7:00 AM. At 7:30 AM, the archaeologist used the GPS equipment to delineate and record the Phase-1 project area. Soon after, the ICS crew began moving large portions of shoring to the excavation site. The crew then conducted repairs on a plastic corrugated water pipe damaged the previous day. That was completed at approximately 10:00 AM and backfilling then occurred.

Excavation resumed at the very south end of the project at approximately 10:30 AM. Soils encountered immediately where the same undifferentiated fill encountered previously. This was accompanied by a prominent petroleum odor.

Top fill was approximately 2 feet thick. Beneath that was the same very dark brown sand/silt containing a few fragments of very small to very large-milled wood fragments.

In close proximity to the repaired waterline, a large ceramic fragment was discovered and approximately 3 feet below surface. Very large, very thick stoneware with a copper insert in the hallmark HA. Artifact was initially identified as a fragment of a large ceramic urinal.

As excavation continued into the late morning the lower strata of fill still contained numerous fragments of milled wood with a small number of red brick fragments.

When the trench turned back to the northwest, what appeared to be just beneath the concrete may be re-deposited beach sands on top of the standard dark brown fill. Within the fill was more milled wood fragments and small diameter metal pipe fragments.

All excavation ceased at 2:30 PM and the archaeologist departed. No diagnostic archaeological material was observed. A date range for the ceramic fragment has not yet been established. All excavated spoils were placed back into the trench.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: August 25, 2022. 9:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Clear Skies. Warm and Sunny, Temperatures 80s-90s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 7:00 AM. Safety reviews were conducted by Cardno and ICS personnel. Checking of all the excavation equipment commenced. Excavation proceeded at approximately 7:45 AM. The archaeologist observed from the fence line approximately 40 meters from the excavation area.

Initially, observed excavated soils were identical to the previous days, consisting of a very thick angular stabilization fill 2 feet thick, overlying an earlier fill of very dark brown sand/silt containing a moderate amount of wood fragments. Large pieces of a log were discovered at approximately 3.5 to 4 feet below surface in the trench just before the intersection where it turns again towards the north. There were no signs of any milling on the log.

The archaeologist requested a brief work stoppage at 9:30 AM to make a closer inspection of the wood being excavated. It appears to be a substantial deposit of cut but not milled wood. Logs originally were approximately 10 to 15 feet long with a 10 to 12-inch diameter. The log dump range between 2 to 6 feet below surface.

Work temporarily ceased at 12:30 PM due to mechanical issues with the excavator. Excavation resumed at 2:00 PM. Soils contained exceedingly large cut log deposit within the same dark brown fill containing a few wood and brick fragments.

All excavation Tuesday at 3:00 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: August 26, 2022. 9:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Clear Skies. Warm and Sunny, Temperatures 80s-90s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

At approximately 11:00 AM, the work crew contacted the archaeologist by email and shared photographs of a small group of shells that the archaeologist determined to be a natural deposit. The archaeologist then informed the crew that it was OK to proceed with the excavations.

The archaeologist arrived at 12:00 PM to perform a spot check on the final few meters of the trench excavation.

The remainder of the trench was excavated and backfilled. The crew then worked on the south end of the trench in order to remove the remaining wood debris from areas to be shored.

The archaeologist departed approximately 12:30 PM. Remaining work for the day will be in previously disturbed areas. No archaeological material was observed.

The next steps in this project are expected to be very shallow trenching within 1-foot of surface. The archaeologist determined that his presence was not needed, as that would be in fill related to the existing concrete pad. After that, the crew will be placing shoring around the main excavation area. Again, the archaeologist determined that his presence will not be needed as subsurface disturbance will not be visible.

DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012



DATE: September 17, 2022. 1:00 PM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Cloudy, strong winds, Temperatures 60s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

Saturday, September 17, 2022

The archaeologist arrived at 1:00 PM to do a quick inspection of a trench excavated on the east side of the project. Upon arrival, the excavation crew was finishing the removal of asphalt and fence post concrete.

Excavation beneath the asphalt began at 2:00 PM. Soils observed where the typical sand/silt mix of undifferentiated fill initially with no inclusions. There are also some pockets of redeposited, brown, coarse sand. Some fragments were observed at approximately 3 to 4 feet below surface, accompanied by a strong petroleum odor.

Large fragments of wood were excavated, possibly from buried logs. Large fragments of uncut, burned logs were discovered at approximately 2 to 3 feet below surface in the east mostly in the east wall of the trench.

As excavation continued deeper in that spot, the amount of wood debris became more prevalent, along with several large angular cobbles. Add approximately 4 feet below surface in that same area, large, build blocks of wood were observed. They appeared to be creosote stained and were accompanied by a strong and petroleum odor

Excavation ceased at 3:00 PM archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: September 22, 2022. 3:00 PM to 5:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Trenching Prior to Shoring

GENERAL FIELD CONDITIONS: Cloudy, strong winds, Temperatures 60s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist received a call from ICS and Cardno to come to site at approximately 3:00 PM to observe subsurface excavation of a trench near the center of the project. The trench was approximately 3 feet across with a maximum depth of disturbance at approximately 5 feet below surface. Soils observed included an undifferentiated fill that included some small pockets of gravel with some small fragments of broken red brick, along with redeposited very coarse gray beach sand.

As the trench proceeded north, sand deposits appeared possibly to be natural, and included some small pockets of naturally deposited, thin amounts of shell.

Excavation ceased at 5:00 PM, and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 4, 2022. 11:30 AM to 5:30 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 11:30 and met with various individuals from Cardno and ISC construction. Upon arrival the archaeologist was informed that the survey team was still engaged in their work, and it might be sometime before excavation commenced.

Excavation began at approximately 3:00 PM with soil removal at the southeast corner of the project area. Observation was difficult due to the distance from the excavation. For safety reasons, the archaeologist was behind a fence approximately 50 to 60 meters away from the machinery.

Excavation briefly stopped at 3:30 PM so the archaeologist could make inspections of the soils. Excavated soils were once again a generalized sand/silt with a few angular cobbles. Soil also contained a large amount of milled wood fragments, a few brick fragments, and the remains of a corrugated pipe. Again, stratigraphy appears to be disturbed with material from the mill.

Exposed stratigraphy in the southeast corner of the excavation area included the same generalized sand/silt. At the bottom of the 5-foot excavation was what appeared to be a bluish gray clay. Possibly redeposited glacial. These same sentiments were observed 200 to 300 m north of this excavation by the archaeologist in a different project.

Excavation was again briefly ceased stopped at 4:30 PM so that the archaeologist could make observations. Same notations as above.

Excavation ceased at approximately 5:30 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 5, 2022. 8:00 AM to 5:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM and met with the employees of both ICS and Cardno. Workers were loading trucks of soil to be removed.

Excavation commenced at approximately 8:45 AM and continued in the southeast corner of the project. As before, direct observation was not possible due to the safety protocols of this project. The archaeologists observed from behind a fence with limited visibility approximately 50-60 feet from the excavation.

Excavation was briefly halted at 9:20 AM for a brief inspection. Soil consisted of the typical sand/silt undifferentiated fill. In the southeast corner of the excavation, there was a large, heavy deposit of milled wood fragments of varying sizes at approximately 5 to 6 feet below surface. There was also a large amount of an unknown fibrous substance throughout the excavated material, later determined to be buried sod. Soil was accompanied by a moderate petroleum odor.

Excavation ceased at 11:30 AM with a discovery of a large metal tank, possibly fuel oil. The tank was approximately 3 feet in diameter and 8 feet long. Nothing about the tank was temporally diagnostic.

Further observations in the afternoon revealed large cut logs in the vicinity of similar material observed during the trenching process. One very large cut log was recovered at the very south end of the project. The log was approximately 35 to 40 feet long, straight cut on one end with a notch cut at the other.

Excavation ceased at 5:00 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 6, 2022. 3:00 PM to 5:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM and met with personnel of both ICS and Cardno . Work continued with soil removal from the south end of the project area. Initial activity mostly consisted of spoil piles being removed by dump truck.

Observed early in this process were again several very large cut logs removed from the south portion of the project. The logs were at least 35 to 40 feet long, cut at one end with a possible notch and large hole at the other.

Another very large cut log was removed at approximately 9:00 AM. Approximately 40 to 45 feet long. Attached to it are several lengths of hooks and chains attached to another small log. The log appears to be a section of pier. Possibly archaeological, further research needed. It is clear that the piers are not in situ, as they are laid down horizontal and not vertical, indicating in disposal after demolition.

Work was briefly halted at 10:45 AM when one of the workers spotted intact shell in gray coarse sand. The archaeologist examined the single shell and determined that it was natural and not part of an archaeological midden.

Soils observed again was the same undifferentiated fill consisting of a sand/silt matrix. Stratigraphy included a moderate amount of milled wood fragments with some red brick fragments, accompanied by a moderate petroleum odor.

Excavation was briefly halted at 1:30 PM so that the archaeologist could make observations. Soils were typical, again being a sand/silt undifferentiated fill containing moderate amounts of milled wood debris with a few red bricks and brick fragments. Accompanied by a strong petroleum odor.

A total of four very large log piers were excavating in the south end of the project area. Ranging from between 40 to 50 feet in length.

All excavation ceased at 5:00 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 10, 2022. 8:00 AM to 5:15 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 1 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM and met with personnel of both ICS construction and Cardno. Minimal excavation was taking place at the center of phase 1 operations. Most activity was involved with the removal of existing spoils.

Soil's initially observed were the same undifferentiated fill of sand/silt. Containing moderate amounts of milled wood fragments with a slight petroleum odor.

Excavation was halted briefly at 9:00 AM to make observations. No difference in stratigraphy was observed. A few more pockets of milled wood debris were observed along with some red brick fragments. Tide was coming in. Soils accompanied by a moderate petroleum odor. Contamination observed in the water as it flowed in.

Petroleum odor came became stronger later in the day as the excavation moved north. Odor was strong even from the point of observation, between 40 and 50 feet away.

Excavation was briefly halted at 11:00 AM to make observations. More wood debris was observed in the sidewall of the north end of the excavation area. This included very large logs and large to medium fragments of milled wood. Petroleum odor was getting stronger. Also observed at approximately 5 to 6 feet below surface was a line of planks extending northwards, possibly a walkway of some sort. Soils observed were the same undifferentiated sand/silt containing medium amounts of wood debris.

Work briefly halted at 11:45 AM as a layer of shell was observed at approximately 4 feet below surface on the very west side of the north wall as the excavation proceeded to the north. Shell deposit was fairly thin accompanying a large amount of rounded pebbles and appeared to be natural. Deposit is above lower layers that contain wood and wood fragments.

Work was stopped briefly again at 2:00 PM to make a brief inspection. Soils encountered were identical. Debris in the soil still included medium to large amounts of milled wood in various

sizes. Some examples of red brick, part of a metal engine manifold. And large parts of cut logs.

Petroleum-stained soil was observed near the bottom of the excavation at approximately 5 to 6 feet below surface accompanied by a moderate petroleum odor.

At approximately 3:30 PM, the archaeologist was afforded a better observational position, directly across from the excavation behind the shoring. The crew proceeded to excavate material right up to the previously discovered fuel tank in order to facilitate its removal. Soils observed again were the same undifferentiated fill consisting of a sand/silt with debris such as milled wood, brick, metal corrugated piping, small piping, and medium-sized fragments of concrete.

All excavations ceased at 5:15 PM, and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 11, 2022. 9:00 PM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 2 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 9:00 AM and met with various personnel of ICS and Cardno. Initial activity consisted of removal of spoils from the end of the previous day. Excavation began at approximately 9:30 AM. Excavation concentrated on the very center of the current project area, soils being removed down to 10 feet below surface. Soils observed are the typical undifferentiated sand/silt with a very diffuse amount of small milled wood debris with little or no accompanying petroleum odor.

At approximately 12:15 PM, the archaeologist made a second observation of the excavation from the southwest corner of the project. Observations were identical as before.

Excavation ceased at 3:00 PM and the archaeologist departed. No archaeological material was observed.

DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012



DATE: October 12, 2022. 8:00 AM to 5:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 2 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM and met with personnel of both ICS and Cardno. Work was concentrating on the removal of asphalt removed the previous day. Minimal excavation of the soil began at approximately 9:00 AM. All excavation ceased soon afterwards as a crew arrived to begin the removal of the fuel tank discovered previously.

After the crew went to test the contents of the tank, proper excavation resumed at approximately 10:00 AM. Soils observed at the very northwest corner of Phase 2 seem to be either redeposited or native sand with minimal lamination observed. Beach sands started at approximately 3 feet below surface and extend to the bottom of the excavation at 8 feet below surface.

Mill related debris was overlying the native sands included possible rebar, Millwood fragments, red brick fragments, and large hunk of chain, possibly related to a log floats.

Within that vicinity, in the north east corner of Phase 2, another very large cut log was removed at about 4 to 5 feet below surface. Again, indicating remnants of log booms. This was accompanied by a strong petroleum odor.

The archaeologist made another direct observation from the west side of the project area at approximately 12:00 PM. Work consisted of the final removal of the soil left in order to gain access to the now removed fuel tank. Soils again were the same undifferentiated sand/silt containing large amounts of milled wood debris with a few red bricks. This was accompanied by a moderate petroleum odor.

At approximately 1:00 PM, large concrete fragments or discovered at approximately 5 feet below surface at the very east side of Phase 2.

Excavation ceased at 5:00 PM at the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 13, 2022. 8:00 AM to 12:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 2 Soil Removal

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM. Excavation began with the removal of material at the very north end of Phase 2, and the removal of spoils excavated late the previous day. All spoils were removed by dump truck to a third location.

Direct observation was made at approximately 8:30 AM. Soils were the typical sand/silt undifferentiated fill containing large amounts of milled wood fragments with a few red brick fragments.

A large cut log was removed in the northeast corner of phase 2, approximately 4-5 feet below surface and approximately 25 to 30 feet long.

The archaeologists made another direct observation at approximately 11:30 AM just as the excavation was beginning to wrap up. Closer examination of the northeast portion of the Phase 2 showed it to be highly disturbed with the typical mill-related fill consisting of a undifferentiated sand/silt containing large amounts of wood fragments, a few red brick fragments and a few fire brick fragments as well. Soil was accompanied by a moderate petroleum odor. Most of the pit is inundated by this point with a noticeable oil sheen on the surface. Excavation ceased at 12:00 PM for this phase and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: October 29, 2022. 8:00 AM to 10:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 trenching

GENERAL FIELD CONDITIONS: Cloudy, Temperatures 40s-50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

Excavation began at 8:00 AM. The intention was to excavate a series of exploratory trenches prior to the installation of shoring. Trenches were possibly 3 feet across and 5 feet deep at maximum depth of excavation.

Soils observed were approximately 2 feet of recent fill consisting of medium rounded to angular gravels. Beneath that appeared to be the typical medium gray coarse beach sands. Either native or redeposited. Sands were not laminated.

Work was briefly halted at 9:00 AM so the archaeologist could make a direct observation. Soils observed in the trench were the typical very coarse gray sand containing no evidence of stratification or lamination. What from a distance appeared to be fragments of shell turned out to be tiny fragments of weathered granite. A very small amount of intact shell was observed.

Excavation was complete at 10:00 AM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: November 3, 2022. 1:00 PM to 4:30 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Trenching

GENERAL FIELD CONDITIONS: Overcast, Heavy Rain, Temperatures 40s-50s °F

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist received a call from Cardno informing him that they would be excavating some exploratory trenches prior to shoring that afternoon. The archaeologist arrived on site at 1:00 PM and excavation commenced. Excavation consisted of a single trench approximately 3 feet across 30 feet long and with a maximum depth of 5 feet below surface. Soil consisted of an undifferentiated mix of sand, silt and various gravels containing a large amount of wood debris, red bricks, metal pipe fragments, metal conduit, an undiagnostic metal bucket, and other unidentifiable metal fragments.

Excavation was interrupted at approximately 2:30 PM due to the delivery of shoring equipment.

Heavy rain increased throughout the later afternoon. At 4:30 PM, excavation was halted to prevent petroleum contaminated runoff from leaking out into the bay. The archaeologist departed and no archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: November 12, 2022. 1:00 PM to 4:30 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 trenching

GENERAL FIELD CONDITIONS: Sunny and bright with dusk at 3:30 PM. Temperatures in the 40s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 7:45 AM and met with personnel from Cardno and ICS. Work planned for the day was more exploratory trenching for Phase 3 near the northeast corner of the project. Excavation began at 8:00 AM.

Work was briefly halted before backfilling at 8:30 AM. The archaeologist made the first observations. Soils observed were the typical undifferentiated sand/silt which included small amounts of various debris including red brick, fire brick, various sizes of milled wood and large segments of cable. Soil was accompanied by a slight petroleum odor.

Excavation ceased at approximately 9:30 AM for the removal of a nearby structure. Excavations resumed approximately one hour later with the final excavation of the north end test trench. Soil observed was the typical undifferentiated sand/silt, containing large amounts of milled wood debris, large cut log debris, red brick fragments, and some cable fragments. Petroleum odor became more pronounced.

Observations made at approximately 2:00 PM included fragments of concrete at 4 feet below surface.

Approximately 5 feet below surface, at the very northwest corner of Phase 3 was plastic sheeting beneath redeposited beach sand.

Excavations ceased at approximately 4:00 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: November 15, 2022. 3:00 PM to 6:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 trenching

GENERAL FIELD CONDITIONS: Sunny and bright with dusk at 3:30 PM, Temperatures in the 40s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist received a call at approximately 1:00 PM that afternoon, informing him that excavation of the test trenches would commence again later this afternoon. The archaeologist arrive at approximately 3:00 PM and excavation commenced at approximately 4:15 PM.

Work was further excavation of the exploratory trench at the north end of the Phase 3 area. The trench was approximately 25 to 30 feet long, approximately 3 feet wide with a maximum depth of 8 to 10 feet below surface. Visibility was hampered by lower light conditions.

Stratigraphy was a dark brown coarse sand about 3 feet thick. Beneath that was a very dark undifferentiated sand/silt containing large amounts of concrete, brick and wood debris. This was accompanied by a slight petroleum odor.

A very large piece of concrete was at the very bottom the trench approximately 8 feet below surface. The concrete appeared to be a discarded, unreinforced piling approximately 2 feet in diameter. Just above that was a wood piling at approximately 6 feet below surface.

Excavations proceeded into previously disturbed soils at 6:00 PM and the archaeologist departed. No archaeological material was discovered.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: December 1, 2022. 8:00 AM to 3:30 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 excavation

GENERAL FIELD CONDITIONS: Overcast with light snow, Temperatures in the 30s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologists arrived at 8:00 AM and met with personnel of both Cardno and ICS Construction. Goals for the next several days was the excavation of Phase 3 of this project. The first task will be to excavate Phase 3 down to 6 feet below surface. That is precisely when the archaeologist is required to be on site as per the instructions of the Monitoring and Inadvertent Discovery plan prepared by Cardno.

Work was briefly interrupted by the archaeologist at 9:15 AM for the first observation of excavated soils. Soils observed were the typical undifferentiated sand/silt fill that included small amounts of wood and metal debris, accompanied by a moderate petroleum odor. Excavations at that point were approximately 5 feet below surface.

Work was again briefly halted at approximately 11:00 AM so that the archaeologist could make a brief inspection. Soils observed were again the same typical sand/silt with very few wood and metal debris with a moderate petroleum odor. The western side of the excavation was more dominated by a very coarse, gray sand. Excavations at the end of Phase 2 as well as the exploratory trenching of Phase 3 determined that the sand is imported and not native.

At 2:30 PM, the archaeologist made one final observation of the excavation. Soils observed were identical as before.

All excavations ceased at 3:30 PM and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: December 2, 2022. 10:00 PM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Soil Removal

GENERAL FIELD CONDITIONS: Overcast with light snow, Temperatures in the 30s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 10:00 AM as scheduled. Weather was overcast and in the low 30s with still a small amount of snow on the ground from overnight. Surveyors on site were still working upon arrival.

At approximately 3:00 PM, the archaeologist was informed that no excavation would be taking place that day.

The archaeologist departed and no archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: December 7, 2022. 11:00 AM to 2:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Soil Removal

GENERAL FIELD CONDITIONS: Cold and overcast, Temperatures in the low 40s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 11:00 AM to conduct an extended spot check. Work was continuing excavating Phase 3, excavating down to 10 to 15 feet below surface.

All observations were being made at the very south end of Phase 3 excavations. This gave the archaeologist full and clear and continuous view of the excavations in progress.

Soils observed were the typical undifferentiated sand/silt containing large amounts of wood debris, including a very large portion of cut log approximately 8 to 10 feet in length and 3 to 4 feet in diameter. At the west-center west area of Phase 3 was what appeared to be portions of a buried wooden structure with pilings and side slats. Also observed was a small group of possibly articulated red brick in proximity to the possible structure.

Several large concrete footings were also observed at approximately 3 feet below surface, away from, and not related to the pilings structure, previously observed.

The archaeologist made the final observation at approximately 2:00 PM. Some crushed red brick staining was observed near the shoring on the east side of the excavation area. Soils observed were as before. The archaeologist departed at approximately 2:00 PM, and no archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: December 8, 2022. 10:00 AM to 1:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Soil Removal

GENERAL FIELD CONDITIONS: Cold and overcast, Temperatures in the low 40s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 10:00 AM to perform a short spot check.

All observations were being made at the very south end of Phase 3 excavations. This gave the archaeologist full and clear and continuous view of the excavations in progress.

Soils observed were again generally the typical undifferentiated sand/silt. Some areas appear to be mostly the previously observed very coarse, gray, sand. This layer of beach sand has already been determined to be redeposited, as there is historic material underneath in several places. The sand fill was most prevalent in the northeast corner of the Phase 3 excavations. Wood debris seems to be more prevalent at approximately 5 to 6 feet below surface in various places. The open pit is severely inundated, there is also apparent soil contamination with a moderate petroleum odor.

As the excavation progressed, soils in the northeast corner were more and more apparently consisting of the very coarse, gray beach sand. There were no inclusions in this layer.

The archaeologist end of the spot check at 1:00 PM and departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: December 9, 2022. 8:30 AM to 10:45 AM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Soil Removal

GENERAL FIELD CONDITIONS: Cold and overcast. Temperatures in the low 40s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:30 AM to perform a spot check. Excavation work was continuing in the northwest corner of Phase 3.

All observations were being made at the very south end of Phase 3 excavations. This gave the archaeologist full and clear and continuous view of the excavations in progress.

Soils observed were mostly the same undifferentiated sand/silt containing medium amounts of milled wood debris, accompanied by a mild petroleum odor.

The archaeologist made one more direct observation at approximately 10:30 AM. Soils observed were as before. Work continued to finish excavating the last portions of the northwest corner of Phase 3. The archaeologist departed at approximately 10:45 AM. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 9, 2023. 8:30 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 3 Soil Removal

GENERAL FIELD CONDITIONS: Cold and overcast with some light rain. Temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:30 AM. And met with representatives of Cardno and ICS construction. Expected work this week is the excavation of Phase 4 with the excavation of test trenching around the perimeter prior to the installation of steel shoring. Excavation began immediately with the removal of soil at the very north end of Phase 4 to expose existing utilities.

Soils initially observed included the typical undifferentiated sand/silt, containing a few angled to rounded gravels and cobbles. Soil became darker and more contaminated with depth. Soil was accompanied by a moderate petroleum odor.

At approximately 5 feet below surface, small amounts of debris were observed which included red brick, fire brick, and fragments of milled wood.

Excavation ceased at 3:00 PM, and the archaeologist departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 10, 2023. 8:30 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 4 Soil Removal

GENERAL FIELD CONDITIONS: Partly cloudy with temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:30 AM to meet with personnel from both ICS construction at Cardno. Excavation with a mini excavator was already underway, probing previously disturbed areas at the perimeter of Phase 1.

Expected work today is a vacuum exploration near the edge of Phase 4.

At approximately 10:00 AM, the archaeologist was informed that no work would be done that day, as the vacuum excavator was malfunctioning and would not arrive.

The archaeologist then departed, and no archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 12, 2023. 9:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 4 Trenching

GENERAL FIELD CONDITIONS: Partly cloudy, occasional heavy rain with temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 9:00 AM in order to observe exploratory excavations prior to the installation of shoring. The archaeologist met with representatives of both ICS, construction and Cardno .

Work began at 9:30 AM with the exploratory excavation around a sewer cap using a mini excavator. Observed soils were previously disturbed by the installation of that utility.

Within the undifferentiated, and previously disturbed fill material, was discovered a clear glass, machine made, 4-ounce medicine bottle with a cork lip, possibly dating between 1905 and 1930. More than likely a manufactured by Owens-Corning. The bottle was not found in anything stratified or any other identifiable context. No other historic debris was observed within the vicinity. It is noted, but not archaeologically recorded.

Work exposing the previous utilities, extended well into the afternoon. The archaeologist made a brief observation of the exposed soils which mainly consisted of an imported very coarse sand.

In the very late afternoon, the large excavator began scraping the surface of the area of phase 4. Soils observed again, were, an imported, very coarse, brown to gray sand.

Due to heavy rains and sloughing trench walls, the archaeologist was informed at 3:00 PM that no more excavation would occur that day. The archaeologists then departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 13, 2023. 9:00 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 4 Trenching

GENERAL FIELD CONDITIONS: Partly cloudy, occasional heavy rain with temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:00 AM and met with representatives of ICS Construction and Cardno. Planned work for the day was exploratory trenching at the north center portion of Phase 4. Excavation began at 8:30 AM with a mini excavator. Observed soils, where the typical undifferentiated sand/silt along with small amounts of wood and brick debris. And soils were also apparently disturbed by existing utilities.

As excavation progressed, at approximately 3 to 4 feet below surface, the excavator encountered large amounts of large concrete fragments.

Just before 10:00 AM, the large excavator was brought in to expand the exploratory trenching and for the removal of the large amounts of concrete debris at approximately 4 feet below surface. Also observed were several very large cut pilings.

Exploratory trenching continued along the north end of Phase 4 progressing to the west.

At 3:00 PM that no more excavation would occur that day. The archaeologists then departed. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 23, 2023. 8:30 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 4 Trenching

GENERAL FIELD CONDITIONS: Partly cloudy, occasional heavy rain with temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:30 AM and met with personnel of ICS and Cardno. Expected work for the day was excavation to reinforce slumping shoring along the north side of Phase 4. Expected depth of excavation was between 4 and 5 feet below surface.

Minor excavations to the very northeast corner were carried out early in the day. Soils observed was the typical undifferentiated sand/silt fill containing small amounts of milled wood debris as well as several unidentifiable metal fragments.

Driving shoring took the rest of the day. No other excavations took place. The archaeologist departed at 3:00 PM. No archaeological material was observed.

**DAILY ARCHAEOLOGICAL MONITORING LOG
EXXON/CARDNO SOIL STABILIZATION MONITORING
W.S.P. PROJECT NO. 2255100012**



DATE: January 26, 2023. 8:30 AM to 3:00 PM.

MONITOR: Erik D. Anderson

PROJECT COMPONENT MONITORED: Phase 4 Soil Removal

GENERAL FIELD CONDITIONS: Partly cloudy, occasional heavy rain with temperatures in the low 50s °F.

ARCHAEOLOGY OBSERVED: None

NARRATIVE:

The archaeologist arrived at 8:30 AM and met with personnel of Cardno and ICS construction. Excavation had begun on the center portion of Phase 4, which is at the very north end of the project. Excavation was carried out by two excavators. A Linkbelt 490X4 and a Linkbelt 145X.

Direct observation of the excavation was made difficult as it was obstructed by previously installed, tall metal shoring. Direct observation of the excavated soils was also difficult as it was immediately placed in the dump trucks and removed.

Soils immediately observed, was the typical sand/silt undifferentiated fill containing large, to moderate amounts of milled wood, red brick, fire brick, concrete fragments, unidentifiable metal fragments, metal pipe, and conduit fragments accompanied by a moderate petroleum order.

The archaeologists entered the excavation area at approximately 8:45 AM for direct observation. Soils were as expected. There were also fragments of PVC pipe, indicating additional utility related disturbance.

Segments of large pilings were observed being excavated near the northeast corner of Phase 4.

Excavation reached the required depth for all monitoring at approximately 10:30 AM, and all required archaeological monitoring was complete. The archaeologist departed, and no archaeological material was observed.

APPENDIX E

Stantec's Revised SEPA Checklist, dated May 30, 2023





**Revised Proposed Remedial
Excavation – SEPA Checklist**

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

May 30, 2023

Prepared for:

ExxonMobil Environmental and
Property Solutions Company and
American Distributing Company

Prepared by:

Stantec Consulting Services Inc
720 Third Avenue, Suite 1500
Seattle, Washington 98104
USA
www.stantec.com

Project: 238000337

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ABBREVIATIONS

ADC	American Distributing Company
bgs	below ground surface
BMPs	Best Management Practices
BNSF	BNSF Railway Company
CAP	Cleanup Action Plan
CFR	Code of Federal Regulations
COCs	contaminants of concerns
CSO	combined sewer outflow
CSTO	California Street Overcrossing
Ecology Site	Ecology recognized ExxonMobil ADC Site
Ecology	Washington State Department of Ecology
ESA	Endangered Species Act
Everett	City of Everett
ExxonMobil	ExxonMobil Environmental and Property Solutions
GPR	ground penetrating radar
Kimberly-Clark	Kimberly-Clark Corporation
LNAPL	light non-aqueous phase liquid
MIDP	Monitoring and Inadvertent Discovery Plan
MTCA	Model Toxics Control Act
N/A	Not applicable
Port Property	Port of Everett
Project	ExxonMobil ADC Cleanup Action Plan
RCW	Revised Code of Washington
SOI	Secretary of the Interior
Stantec	Stantec Consulting Services Inc.
SWMMWW	Stormwater Management Manual for Western Washington
UDWP	Urban Deepwater Port
WAC	Washington Administrative Code



A Background

A. Background

1. Name of proposed project, if applicable:

ExxonMobil ADC Cleanup Action Plan (Project)

2. Name of applicant:

ExxonMobil Environmental and Property Solutions (ExxonMobil), American Distributing Company (ADC)

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

Jeff Johnson
ExxonMobil Environmental and Property Solutions Company
25915 South Frontage Road
Channahon, Illinois 60410
(815) 860-7290

Steve Miller
American Distributing Company
13618 45th Avenue Northeast
Marysville, Washington 98271
(360) 658-375

4. Date checklist prepared:

May 30, 2023

5. Agency requesting checklist:

Washington State Department of Ecology (Ecology)

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

Phase 1 excavation west of Federal Avenue: August 2022 to March 2023 (completed as part of Interim Action Plan).

Phase 2 excavation east of Federal Avenue: September 2023 to September 2024.

Soil and Groundwater monitoring: ongoing, until cleanup levels are achieved.

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

No.



A Background

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

Since 1985, various consultants have conducted environmental investigations to characterize the nature and extent of contaminants of concerns (COCs) in soil and groundwater at the Ecology recognized ExxonMobil ADC Site (Ecology Site). The Ecology Site is defined as the ExxonMobil and ADC-owned properties (ExxonMobil ADC Property), located at 2717 and 2731 Federal Avenue, Everett, Washington (Figure 1), and the surrounding rights-of-way and properties, including the Port of Everett (Port Property), located at 2730 Federal Avenue, Everett, Washington. The investigations and reports related to the remedial excavation activities proposed in the draft Cleanup Action Plan (CAP) (submitted to Ecology in July 2023) are provided in Appendix A.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

The remedial excavation and associated cleanup activities are exempt from the procedural requirements of local, state, and federal permits and approvals because they will be performed under a Washington State Model Toxics Control Act (MTCA) Agreed Order.

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

The remedial excavation and associated cleanup activities actions will be conducted under the Agreed Order. Pursuant to Washington Administrative Code (WAC) 173-340-710(9), the Project will comply with the substantive requirements of the following state laws, however it is exempt from their procedural requirements:

- Washington State Clean Air Act (70.94 Revised Code of Washington [RCW])
- Solid Waste Management Act (70.95 RCW)
- Hazardous Waste Management Act (70.105 RCW)
- Construction Projects in State Waters (75.20 RCW)
- Shoreline Management Act (90.58 RCW)
- City of Everett (Everett) laws regarding excavation, shoring, dewatering, and erosion control

The procedural exemption is not applicable if Ecology determines the exemption would result in loss of approval from a federal agency for the agency to administer federal laws.

11. Give a 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 Ecology Site boundary is 3.37 acres, encompassing private property to the east of Federal Avenue, and Port Property to the west of Federal Avenue (Figure 2). The Ecology Site consists of a paved parking lot; portions of Federal Avenue, the Terminal Avenue Overpass, and the former Everett Avenue; and portions of Everett Ship Repair and Dunlap Towing. Historical releases of petroleum products have been documented at the Ecology Site



A Background

due to former operation of bulk petroleum storage, transfer, and distribution facilities on the Ecology Site and operations of other companies on nearby parcels. The proposed Project is to cleanup soil and groundwater at the Ecology Site that is impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation.

Proposed cleanup activities include excavation of impacted soils in two areas; on the west side of Federal Avenue on Port Property (completed March 2023), and on the east side of Federal Avenue on ADC, ExxonMobil, and BNSF Railway Company (BNSF) property (the Project Areas, see Figure 3 and Figure 4). Groundwater monitoring of the Ecology Site will also occur. Due to the shallow water table in the Project Area, water management during the excavation, including limited dewatering, may be necessary. Soil will be removed using dredging methodology with a bucket, which will facilitate excavation below the water table and minimize the need for dewatering. Any wastewater generated during dewatering will be treated and discharged to a City of Everett-approved discharge point. Impacted soil will be transported offsite by truck to a permitted landfill facility for final disposal. The soils beneath Federal Avenue will not be excavated, and the street will remain open during cleanup activities.

A low permeability barrier wall will be constructed along the excavation sidewall on the western side of Federal Avenue. The barrier wall will limit LNAPL migration following the remedial excavation on the Port Property. After excavation has been completed, a shoring will be removed, and the area will be backfilled, regraded to preexisting contours, repaved, and restored to existing uses. A groundwater monitoring program will be conducted to monitor natural degradation of groundwater COCs by natural processes in the areas below Federal Avenue, and otherwise inaccessible to excavation.

- 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 Ecology Site is located at 2717/2731 Federal Avenue in Everett, Washington (Township 29 North, Range 5 East, Section 19). The Ecology Site location boundaries are shown in Figures 1 and 2.

The Ecology Site is defined as the ExxonMobil and ADC properties, and the surrounding rights-of-way and properties that were affected by the migration of hydrocarbons in soil and groundwater.



B. Environmental Elements

1. EARTH

a. General description of the Site:

The Ecology Site is graded, generally flat, and paved; with the exception of smaller graveled areas, and some ruderal vegetation growing along a fence-line.

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

The area is flat. Prior to development it sloped gently to the west toward Port Gardner Bay.

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.

According to historical aerial photography most of the proposed remedial excavation area was infilled during shoreline expansion efforts between 1914 and 1947. Based on previous subsurface investigations conducted at the Ecology Site and surrounding vicinity, the near-surface soils consist of a heterogeneous mixture of fill materials. The fill materials consist of very loose to medium dense, brown, brownish gray, and gray silty sand and sand with areas of wood and concrete debris extending to depths of approximately 5 to 10 feet below ground surface (bgs). Gray silty sand and silt and dark-brown to black peat mixed with wood debris are encountered beneath the shallow fill and extend up to 20 to 27 feet bgs (Wood, 2019; Cardno, 2020a; 2020b).

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

The area immediately east of the Ecology Site, across Terminal Ave, is classified as a landslide hazard, and the Terminal Ave Overpass on the southeast corner of the Ecology Site is classified as an erosion hazard. See Section 8(h) for additional detail.

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

The total remedial excavation footprint of both areas is 1.40 acres. On the west side of Federal Avenue, 0.46 acre was already excavated, and the proposed footprint of the area that is left to be excavated on the east side of Federal Avenue is 0.94 acre. The Project Area is entirely within the Ecology Site boundary and will exclude the Federal Avenue right-of-way (Figures 3 and 4). Approximately 25,000 cubic yards (41,250 tons) of impacted soil will be excavated from the Project Area in total. Excavation of the west side had 7,500 cubic yards (12,375 tons) of soil removed, and it is proposed that 17,500 cubic yards (28,875 tons) will be excavated from the east side. Impacted soils will be disposed of offsite at a permitted location. Once excavation is complete, the excavated areas will be backfilled with clean granular fill material suitable for compaction and repaved. Areas



B Environmental Elements

within Port Property will be backfilled and restored according to specifications in an agreement with the Port of Everett.

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

Erosion may occur within the footprint of the excavation and soil stockpiles could erode.

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

100 percent

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

Best Management Practices (BMPs) will be implemented to reduce erosion associated with the remediation activities. BMPs that will be implemented include silt fencing, erosion control straw wattles, sediment traps, sloping, shoring, covering stockpiles, maintaining construction entrances with coarse gravel, and preventing vehicles from driving across non-maintained surfaces. These BMPs will be implemented throughout the duration of the remedial activities, and work will be conducted in compliance with City of Everett erosion control requirements.

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.**

Onsite emissions would be associated with operation of personnel vehicles and diesel-fueled construction equipment during shoring installation/removal, soil removal, backfill, paving, and ongoing monitoring efforts. Equipment will include excavators, cranes, dump trucks with trailers, a shoring pile drill rig, paving equipment, and various mechanical tools. Offsite emissions would be associated with transportation of impacted soils by truck and rail to an approved disposal facility and import of clean backfill material.

- b. Are there any offsite 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:**

None.



B Environmental Elements

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.*

The shoreline of Port Gardner Bay is approximately 300 feet northwest of the Ecology Site.

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.*

No.

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 Ecology Site that would be affected. Indicate the source of fill material.*

None.

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 Ecology Site plan.*

No.

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 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 groundwater? Give general description, purpose, and approximate quantities if known.*

Impacted soils to be excavated are located below the water table. During previous Ecology Site investigations, groundwater was observed at depths in the 5-foot bgs range to the south, and 15-foot bgs range to the north (Cardno 2020a, 2020b). During remedial excavation some dewatering may be required; the approximate dewatering requirements are unknown. Wastewater disposal is addressed in Section 3(c). No groundwater will be withdrawn for drinking water purposes.



B Environmental Elements

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.*

None.

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.*

Surface water drainage is controlled largely by surface topography and engineered drainage structures. Stormwater generally flows to the west and northwest, following the surface slope, toward catch basins located on the Ecology Site and on Federal Avenue directly west of the Ecology Site. Storm sewers serving the vicinity discharge to Port Gardner Bay via the storm sewer discharge located near the northwest corner of the Port Property leased by Dunlap Towing. Some surface water may flow north toward the former Kimberly-Clark Corporation (Kimberly-Clark) property, which is now owned by the Port of Everett, and south from the Ecology Site to the City of Everett parcel (Wood, 2019).

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

Impacted soils will be placed directly into dump trucks and hauled offsite. Temporary stockpiling of soil may be necessary prior to removal offsite. Stockpiles would be placed on plastic sheeting, stabilized, and covered to avoid any potential impacts to groundwater or surface water.

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

No. The Project Area will be regraded and repaved to existing conditions.

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

Erosion and sediment control BMPs consistent with Ecology's current Stormwater Management Manual for Western Washington (SWMMWW) will be used during the excavation to prevent impacts to stormwater. A temporary erosion and sediment control plan will be prepared to prevent sediment, debris, and sediment-laden water from leaving the Project Area, entering adjacent surface streets, storm drains, and the Puget Sound. Proposed temporary erosion and sediment control elements will include the following:

- Use of silt/filter fabric fences, straw bales, straw wattles, storm drain inlet protection, catch basin silt barriers and/or similar BMPs.
- Diversion BMPs to prevent offsite stormwater from entering the excavation area.



B Environmental Elements

- Implementation of BMPs at the construction entrance/exit and internal haul routes to minimize the tracking of soil onto the adjacent surface streets.
- Street sweeping and/or street cleaning, as necessary, to remove soil tracked onto the adjacent surface streets.
- Implementation of stockpile BMPs.

Any wastewater generated during dewatering activities will be properly managed under a City of Everett-approved permit, and in compliance with the City's Industrial Pretreatment Ordinance #3070-08, as amended. Wastewater will be discharged at an approved flow rate to the permit-specified discharge point. Routine samples will be collected of the wastewater to confirm that it is compliant with the applicable discharge levels for contaminants. All wastewater discharge data from the Project (e.g., sample data, discharge events, and total volume discharged) will be recorded.

A low permeability barrier wall will be constructed in a north to south trending direction against the excavation wall along the western side of Federal Avenue. The barrier wall will be designed limit migration onto Port Property following the remedial excavation.

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, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation



B Environmental Elements

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

None. The small area with perennial grasses and noxious weeds will not be excavated or otherwise disturbed.

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

None. The entire Ecology Site is graded and developed. No functional native plant habitat occurs on the Ecology Site.

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

None.

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

- Class B: butterfly bush (*Buddleja davidii*)
- Class C: Himalayan blackberry (*Rubus bifrons*)

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.

The Port Property is located near the marine shoreline in the Snohomish River basin, in an area zoned for heavy industrial use. No wetlands, streams, shorelines, floodplains, or functional wildlife habitat occur on the Ecology Site. Nearby environmentally sensitive areas include Port Gardner Bay and the Snohomish River. The shoreline nearest the Ecology Site is deepwater that has been heavily modified by dredging, filling, and shoreline development; there is limited subtidal and intertidal habitat (Wood, 2019). Common wildlife species known to occur in urban/heavily industrial areas may be present onsite.

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

No threatened and endangered animal species would occur at the Ecology Site. Species listed under the Endangered Species Act (ESA) and Washington State Priority Species that may be present in Port Gardner Bay are detailed in Wood's *Site characterization/focused feasibility study report*, dated August 23, 2019, for the Ecology Site (Wood, 2019).

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

No.

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

Not applicable (N/A).

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

None.



B Environmental Elements

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.**

N/A.

- 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:**

N/A

7. ENVIRONMENTAL HEALTH

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

1. *Describe any known or possible contamination at the Site from present or past uses.*

The Ecology Site historically operated as a bulk petroleum storage, transfer, and distribution facility. Additional potential sources of contaminants of concern includes releases from the former rail loading racks located east of the ExxonMobil ADC Property, underneath the current Terminal Avenue Overpass (Stantec, 2023) investigations have been conducted to characterize the Ecology Site soil and groundwater contamination. The COCs known to occur at the Ecology Site include:

- TPHg (total petroleum hydrocarbons as gasoline)
- TPHd (total petroleum hydrocarbons as diesel)
- TPHmo (total petroleum hydrocarbons as motor oil)
- Benzene
- Ethylbenzene
- Total Xylenes
- Total cPAHs (carcinogenic polycyclic aromatic hydrocarbons)
- 1-Methylnaphthalene (Wood, 2019)

2. *Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the Project Area and in the vicinity.*

No underground hazardous liquid and gas transmission pipelines are located on or below the Ecology Site.



B Environmental Elements

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.*

Vehicles and equipment used and stored onsite could have minor leaks (e.g., fuel, oil, hydraulic fluids, etc.).

4. *Describe special emergency services that might be required.*

None.

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

The purpose of the proposed Project is to cleanup and monitor environmental health hazards. Spill kits/absorbent cleanup materials will be available onsite and if used, disposed of properly.

b. Noise

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

The Project is located within and adjacent to the Port of Everett, a heavy industrial use area. Noise from Port of Everett operations including heavy machinery use and noise associated with truck, ship, and rail traffic are present.

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.*

Noise generated by vehicles and equipment during remedial excavation are compatible with the surrounding baseline noise levels that exist. Noise will be short-term: only lasting the duration of the shoring install and excavation. Larger equipment and vehicles will only operate in daylight hours, generally between 7 AM and 5 PM.

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

N/A.

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 Ecology Site includes an asphalt-paved parking lot and portions of former Everett Avenue, Federal Avenue, and Port properties just west of Federal Avenue. It also includes portions of the City of Everett rights-of-way east and south of the ExxonMobil ADC Property, a BNSF parcel, a BNSF railway corridor right-of-way east of the ExxonMobil ADC Property, and the land under the Terminal Avenue Overpass. The Ecology Site is adjoined by the following properties:



B Environmental Elements

- The former Kimberly-Clark property, now owned by the Port of Everett, is located immediately north at 2600 Federal Avenue. The Kimberly-Clark property was used for several decades for wood and paper products manufacturing. It housed former bulk petroleum storage tanks and currently includes a warehouse near the southern end adjacent to the ExxonMobil ADC Property. Most of the former paper manufacturing facility was demolished in 2012 (Wood, 2019).
- A City of Everett right-of-way is located immediately east of the Ecology Site. The City of Everett right-of-way is currently paved with asphalt and is otherwise unoccupied.
- Another City of Everett right-of-way is located immediately south of the Ecology Site. This right-of-way was formerly part of the ExxonMobil parcel but was transferred to the City of Everett as part of the Terminal Avenue Overpass project (Wood, 2019). This right-of-way is currently paved with asphalt and is otherwise unoccupied.
- Federal Avenue is located immediately east of the Port Property. Federal Avenue is a public street and a City of Everett utility corridor.

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

No.

1. *Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:*

No.

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

A wheeled-trailer used by Everett Ship Repair as an administrative office is currently located on the northwest corner of the Ecology Site. It was temporarily relocated during remedial excavation activities.

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

No.

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

The Ecology Site is zoned M-2 Heavy Manufacturing land use by the City of Everett.

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

The City's comprehensive plan shows the Ecology Site as E.5.1 Heavy Industrial land use.



B Environmental Elements

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

The northwest corner of the Ecology Site is located within or immediately adjacent to an area designated as Urban Deepwater Port (UDWP) in the City of Everett's Shoreline Master Program (City of Everett, 2019).

h. Has any part of the Site been classified as a critical area by the City or County? If so, specify.

The portion of the Ecology Site with the Terminal Ave Overpass is classified as a Critical Area Erosion Hazard with Very High/Severe Slopes of greater than 40% in Qva and Qal geologic units (City of Everett, 2006a).

The area immediately east of the Ecology Site across Terminal Ave is classified as a Critical Area Landslide Hazard, with Medium Slopes <15% for Qtb, Qw, and Qls geologic units and uncontrolled fill Slopes of 25% to 40% in "other" geologic units (City of Everett, 2006b).

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

Upon completion of the Port Property portion of the Project, the wheeled trailer used by Everett Ship Repair as an administrative office was returned to the Ecology Site for use.

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

None.

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

N/A.

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

The Project is compatible with existing and future land uses and plans. The Ecology Site will likely continue as heavy industrial or commercial use for the foreseeable future. The City of Everett M-2 zoning allows for a mix of commercial and industrial uses at the Ecology Site, and specifically prohibits residential use and daycare facilities. Use of the Ecology Site for parks is allowed. The Ecology Site owners anticipate that institutional controls will be established, limiting use of the Ecology Site to industrial/commercial purposes. If future redevelopment requires installation of utilities or new structures, this may require implementation of passive or active vapor intrusion protection measures (Wood, 2019).

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

N/A.



B Environmental Elements

9. HOUSING

- a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**
None.
- b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**
None.
- c. **Proposed measures to reduce or control housing impacts, if any:**
None.

10. AESTHETICS

- a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**
No structures are proposed as part of the Project.
- b. **What views in the immediate vicinity would be altered or obstructed?**
None.
- c. **Proposed measures to reduce or control aesthetic impacts, if any:**
N/A

11. LIGHT AND GLARE

- a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**
Work outside of daylight hours will require overhead lighting. Light and glare from vehicles and equipment during the excavation and groundwater monitoring activities are consistent with existing sources of light and glare in the area.
- b. **Could light or glare from the finished project be a safety hazard or interfere with views?**
No.
- c. **What existing offsite sources of light or glare may affect your proposal?**
None.
- d. **Proposed measures to reduce or control light and glare impacts, if any:**
None.



12. RECREATION

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

The parking area along Terminal Avenue for the Pigeon Creek Beach Trailhead is located approximately 300 feet south of the Ecology Site.

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

No.

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

N/A.

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? If so, specifically describe.**

No permanent buildings, structures, or sites are within or immediately adjacent to the Project Area (defined as the boundaries of the Ecology Site). One archaeological resource (inventory ID: 45SN00629) was previously recorded approximately 0.07 mile north of the Project Area. The archaeological resource is a precontact isolated find identified within historic dredge material encountered beneath an asphalt-paved parking lot (Undem, 2014; Undem et al., 2014). Historically, the properties were the location of a mill situated at 2600 Federal Avenue (Boswell and Sharley, 2012). The single lithic artifact was recorded as an edge-altered basalt cobble with 13 multidirectional flake scars on one end.

The Kimberly-Clark Everett Mill Main Office located 0.09 mile north of the Project Area, was originally constructed in 1929 and consisted of a two-story Neoclassical rectangular structure with red brick cladding and low-pitched hipped roof. The building is recommended as eligible for listing in the National Register of Historic Places under Criterion A and listing in the Washington Heritage Register based on its historical association with the industrial development of the City of Everett (Sharley, 2012).

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the Site? Please list any professional studies conducted at the Site to identify such resources.**

The current Project Area contains no historic or precontact landmarks, features, or other evidence. Ethnographic place names within Everett list several near the mouth of the Snohomish River and for water resources near Everett; however, none of these



B Environmental Elements

ethnographic place names are located within or immediately adjacent to the Project Area (Watermann, 1922; Watermann et al., 2001):

- *ʔusʔusič* (Watermann orthography: *Os3a/s1tc*) translates to “chasing a fish here and there” near an estuary between Steamboat and Union Sloughs.
- *bəluʔəb* (Watermann orthography: *PE'ls1b*) translates to “boiling” for an area at the mouth of the main Snohomish River channel.
- *čik'wucid* (Watermann orthography: *Ctcqo'tsid*) translates to “that which chokes up the mouth of something” for a small island located on the north side of the Snohomish River mouth.
- *sexwčulalq̣w* (Watermann orthography: *SExwtculalkw*) is noted for a sharp point of land running toward the Ctcqo'tsid island.
- *hibu'əb* (Watermann orthography: *Hibu'ɪ3ub*) translates to “place where water boils out of the ground” for a former village site south of the Snohomish River mouth.
- Watermann orthography: *SEqwsu'3ub* is noted for a small promontory with a slough that runs parallel to the shore.
- *sluluw#* (Watermann orthography: *SLu'luw1L*) translates to “little perforation for a canoe” for a narrow channel passing behind an island.
- *λ'uxwaʔ* (Watermann orthography: *tL'o'hwaL*) translates to “a cold spring” for a spot on the riverbank opposite Everett.

Historically, most of the Project Area consisted of tidelands and the waters of Port Gardner Bay (Sanborn, 1902). The Ecology Site resides within the land claim of Dennis Brigham, who began the homestead process at this location in 1861 (General Land Office, 1869; Oakley, 2005). “Squatters Shacks” populated the Ecology Site area east of the railroad. Between 1914 and 1950, extensive fill material expanded the usable ground surface west (Sanborn, 1914; 1950).

- 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 Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.**

The Archaeological Assessment which describes the methods used to assess the potential impacts to cultural and historic resources on or near the Project Area is appended to this checklist (Appendix B).

- 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.**

A Monitoring and Inadvertent Discovery Plan (MIDP) will be utilized to minimize potential impacts to any currently unknown intact archaeological resources and that all Project-related ground-disturbing activities in native sediment be monitored. Monitoring is not recommended in glacial deposits and sediments, nor in existing areas where disturbance has already occurred. Monitoring will be conducted by a professional archaeologist who meets the Secretary of the Interior's (SOI's) professional qualifications standards (36



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Code of Federal Regulations [CFR] Part 61) for archaeology or by a qualified archaeologist supervised by a professional archaeologist who meets the SOI standards.

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 onsite plans, if any.**

The Ecology Site is accessible from Federal Avenue, via Terminal Avenue. Federal Avenue is a public 2-way paved street that crosses the Ecology Site and provides access to private and Port Property.

- 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?**

No. The nearest transit stop is located approximately 0.1 mile east of the Ecology Site at West Marine View Drive and California Street.

- c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

No.

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

The BNSF railroad right-of-way is located approximately 80 feet east of the Ecology Site, and the Hewitt Terminal and the Norton Terminal, with deepwater vessel access, is located approximately 300 feet west and 130 feet east of the Ecology Site, respectively.

- e. 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?**

Excavation of both areas requires removal of approximately 42,900 tons of soil, and a single truck/trailer combo can haul approximately 15 tons per load. Excavation of the west side required the removal of 7,500 cubic yards (12,375 tons) of soil with approximately 830 truck trips, whereas excavation of the west side will require removal of 18,500 cubic yards (30,525 tons) of soil with approximately 2,050 truck trips.

Assuming the current schedule, an average of 75 vehicular trips per day would be generated by the Project, with a peak of 200 vehicle trips per day during the excavation and backfill activities during the Project. Peak volumes would occur during daytime hours, and 75 percent would be from commercial/nonpassenger vehicles hauling soil to and from the Ecology Site. This data is based on knowledge of similar projects, and approximate calculation of truck capacity. Loaded trucks will be covered to prevent dust and soils from escaping during transit.



B Environmental Elements

- f. 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.**

No.

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

No excavation within the Federal Avenue right-of-way will occur, and no significant impacts to transportation are anticipated. Federal Avenue currently serves Dunlap Towing, Everett Ship Repair, and the Port of Everett Norton Terminal. Prior to closure of the Kimberly-Clark mill just north of the Ecology Site, Federal Avenue experienced an average of 220 daily truck trips and 500 employee trips per day (Kimberly-Clark, 2012). The Project is being undertaken in collaboration with the Port, and access will be maintained for all Port tenants serviced by Federal Avenue. City of Everett traffic control requirements will be followed.

15. PUBLIC SERVICES

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

No.

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

N/A.

16. UTILITIES

- a. Circle utilities currently available at the Site:**

Stormwater drainage lines are present beneath the Ecology Site. Underground stormwater, sanitary sewer, water, and telephone lines run beneath Federal Avenue and the adjoining former Kimberly-Clark property. The City of Everett's new 24-inch underground force main also runs beneath Federal Avenue and the former Kimberly-Clark property. An overhead power line runs along Federal Avenue and the former Kimberly-Clark property (Wood, 2019).

- 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.**

N/A.



ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

C Signature

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: _____

Name of signee: Adele Pozzuto

Position and Agency/Organization: Senior Environmental Scientist, Stantec

Date Submitted: May 30, 2023



D References

D. References

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D References

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Figures

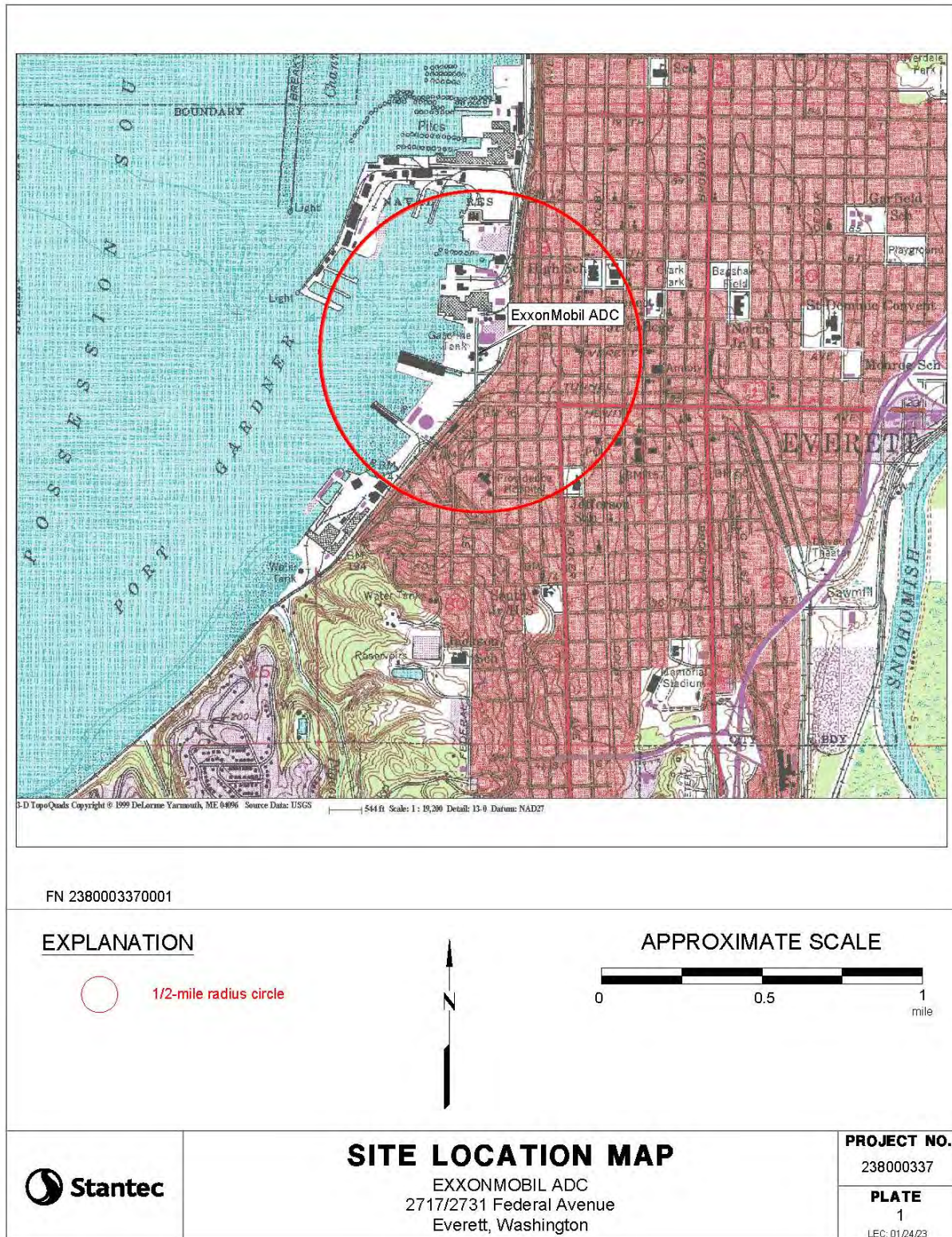


Figure 1 Site Location



Figures



Figure 2 Site Boundary



Figures

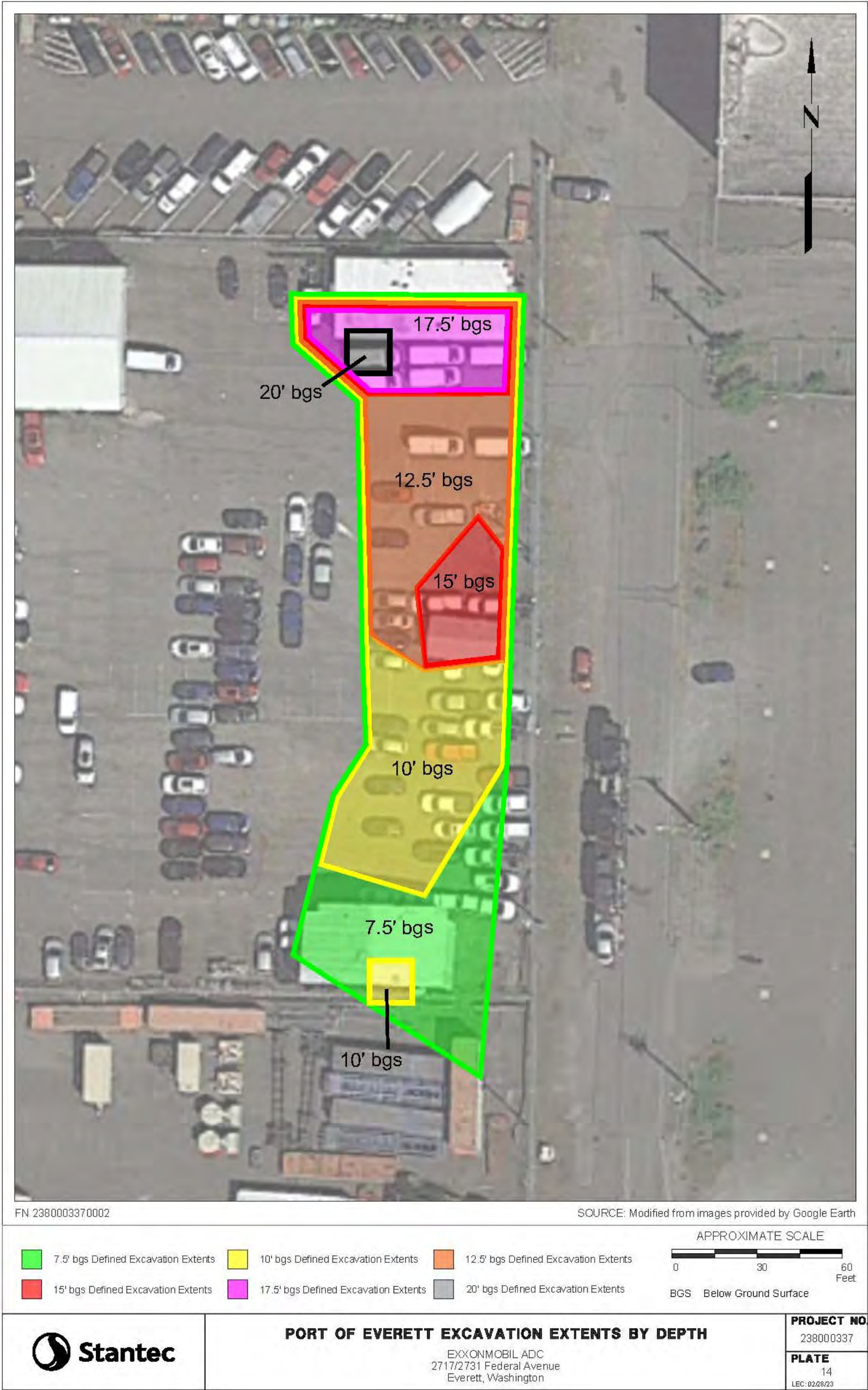


Figure 3 Proposed Excavation Extent on West Side of Federal Avenue



Figures

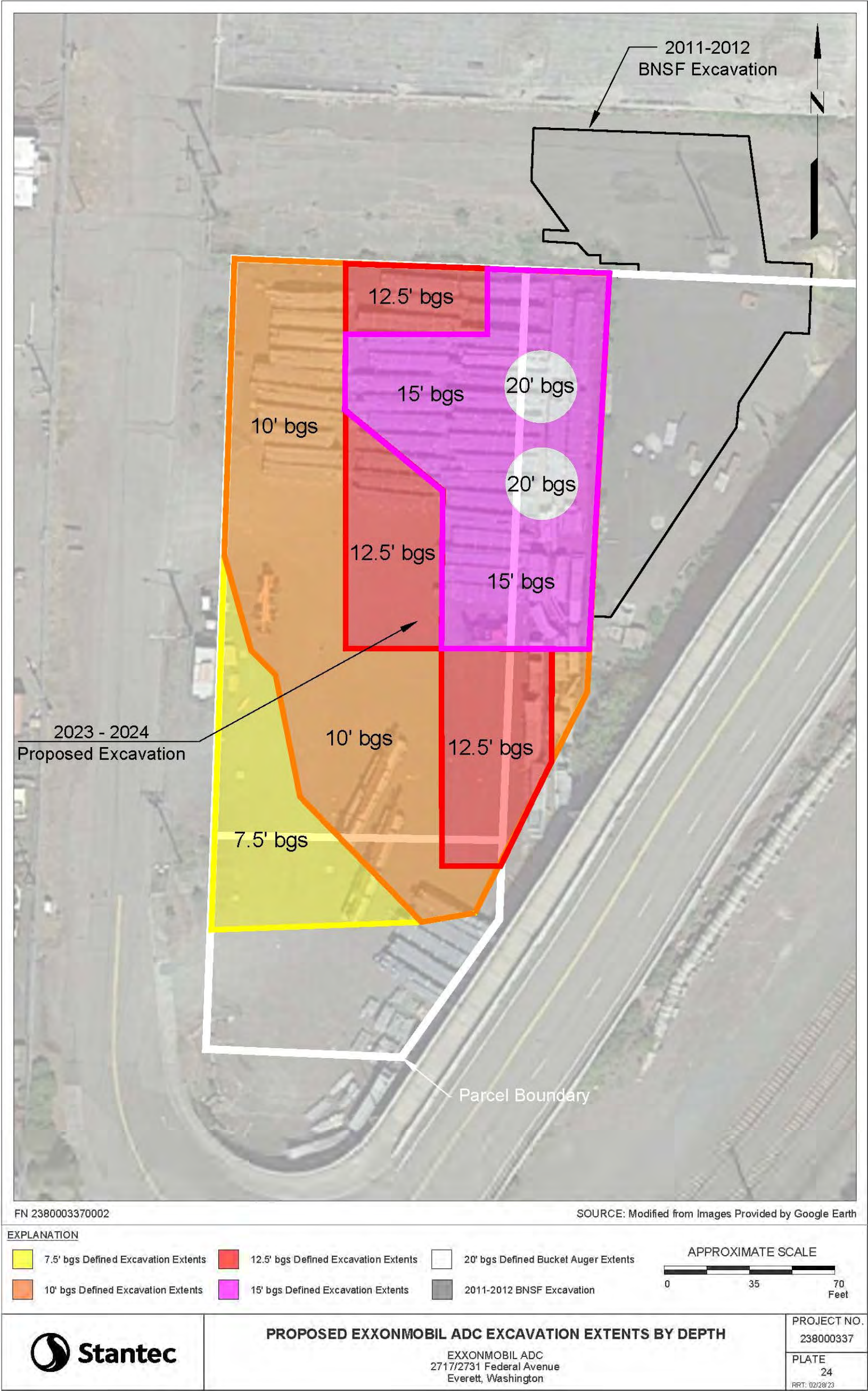


Figure 4 Proposed Excavation Extent on East Side of Federal Avenue



ExxonMobil ADC
2717/2731 Federal Avenue
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Appendix A

APPENDIX A

List of Environmental Investigations and Reports



Appendix A

List of Environmental Investigations and Reports

Date	Consultant	Location	Report/Activities	Summary
Jul-23 (estimated)	Stantec	Ecology Site	Agreed Order	A new Agreed Order will be negotiated with Ecology prior to remedial activities.
Jul-23 (estimated)	Stantec	Ecology Site	Draft Cleanup Action Plan (CAP)	The draft CAP describes the cleanup standards for the Ecology Site, the cleanup methods selected to achieve the cleanup standards, and the rationale for these decisions. Stantec submitted the draft CAP to Ecology in July 2023. The CAP will be finalized after public comment.
Jun-22 – Mar 23	Cardno and Stantec	Ecology Site	Port of Everett Excavation	Completed Port of Everett excavation located west of the ExxonMobil ADC property in accordance with the interim action work plan.
Jul-22	Cardno	Port of Everett	Engineering Design Report for Port of Everett Excavation	The Engineering Design Report documented technical specifications, plan sets, and engineering design drawings used to manage and implement the selected environmental remedy described in the Port of Everett interim action work Plan.
Jun-22	Cardno	Port of Everett	Interim Action Work Plan	Interim action plan submitted to Ecology to excavate the Site west of Federal Avenue (Port of Everett) pursuant to WAC 173-340-430.
Apr-22	Cardno	Ecology Site	Monitoring and Inadvertent Discovery Plan (MIDP)	Developed MIDP to minimize potential impacts to any currently unknown intact archaeological resources and ensure that all project-related ground-disturbing activities in native sediment be monitored.
Jan-22 – Jun-22	Strider	Federal Avenue	Federal Avenue Trenching	Soil samples collected during utility trenching and test pits conducted by the Port of Everett to characterize soil that will remain in place beneath the City of Everett right-of-way beneath and adjacent to Federal Avenue.
Dec-21	Cardno	Port of Everett	Conditional point of compliance well installation and well decommissioning	Conditional point of compliance well MW-A9 was installed and surveyed. Monitoring well MW-33 was decommissioned due to its location within the proposed Port of Everett excavation footprint.



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Date	Consultant	Location	Report/Activities	Summary
Nov-21	Cardno	Ecology Site	Archaeological Assessment	The Archaeological Assessment was prepared to determine the probability for encountering archaeological resources during remedial excavation.
Aug-21 and Oct-21	Cardno	ExxonMobil ADC Property	Excavation delineation	A total of 74 soil borings were drilled on the ExxonMobil ADC Property and soil samples were analyzed to delineate areas exceeding remediation levels for future excavation. Two geotechnical borings were also advanced. Analytical results were used so that collection of sidewall and base soil samples during future excavation work is not necessary.
Oct-2020, Jan-2021, and Feb-2021	Cardno	Port of Everett	Excavation delineation	A total of 51 soil borings were drilled on the Port of Everett property and soil samples were analyzed to delineate areas exceeding remediation levels for future excavation. Two geotechnical borings were also advanced. Analytical results were used so that collection of sidewall and base soil samples during future excavation work is not necessary.
2019	Wood	Ecology Site	Site Characterization/ Focused Feasibility Study (SC/FFS)	SC/FFS identifies the recommended cleanup alternative for the Site. The study will be finalized after public comment.
2013 – 2014	AMEC	Ecology Site	Data gaps investigation	A total of 33 soil borings were drilled on the Property and nearby properties, and soil samples were analyzed to delineate areas of affected soil at the Ecology Site. One of the borings was completed as a monitoring well (MW-A8).
2012	AMEC	Federal Avenue and former Everett Avenue	Observations during City of Everett force main replacement	Observed excavation and drilling activities during installation of the City of Everett's force main and recorded notable subsurface features when relevant, including the presence of LNAPL if encountered.
2011	AMEC	Former Everett Avenue	Observations of seeps along former Everett Avenue	Photographs to document observations of petroleum product seeps through the pavement on former Everett Avenue.



Appendix A

Date	Consultant	Location	Report/Activities	Summary
2011	AMEC	Ecology Site	Tidal influence investigation	A stilling well with transducer was installed on the Everett Pier to automatically record tidal elevations. Pressure transducers/data loggers were installed in monitoring wells W-3, W-6, MW-11, MW-19, MW-28, MW-40R, and MW-A1 through MW-A7 to record groundwater levels every 6 minutes for 6 days.
2011	AMEC	Ecology Site	Data gaps investigation	Seven deep borings (AB-1 to AB-5, AP-6, MW-7ab), six shallow borings (AP-1 through AP-5, AP-7), five new monitoring wells (MW-A3 through MW-A7) located off of the ExxonMobil ADC Property, aquifer testing, and tidal influence study.
2010	AMEC	Ecology Site	Sampling for City of Everett Force Main	Borings CE-1 to CE-8 advanced on Federal Avenue, former Everett Avenue, and the BNSF property to characterize soils in the alignment of City of Everett's planned force main.
2010	Ecology	Ecology Site	Agreed Order DE 6184	Agreed Order requiring a FFS and development of a draft CAP to identify the nature and extent of hydrocarbons in soil and groundwater and select a preferred final interim action to remediate the Ecology Site
2010	AMEC	Ecology Site	Focused Feasibility Study Work Plan	Summarized the Ecology Site history, previous environmental investigations, and interim remedial activities, known environmental conditions, preliminary conceptual site model, and remaining data gaps.
Jun-08	AMEC	Ecology Site	Wellhead elevation survey	Surveyed recovery and monitoring wells located on the Ecology Site.
Feb-08	AMEC	Ecology Site	Tidal study	Measured tidal response in W-3, W-6, MW-11, MW-28, & MW-40R.
2008	AMEC	West of the ExxonMobil ADC Property	Monitoring well installation	Off-property monitoring wells MW-A1 and MW-A2 installed on the west side of Federal Avenue.
2007 – present	AMEC, Wood, Cardno, and Stantec	Ecology Site	Groundwater monitoring	AMEC requested to change to semiannual groundwater monitoring in 2007.



Appendix A

Date	Consultant	Location	Report/Activities	Summary
Feb-07	AMEC	Ecology Site	Video survey of storm drain system	Conducted a video survey of the storm drain system installed as part of 1999 interim measure to verify that groundwater from the ExxonMobil ADC Property was not infiltrating into the stormwater system through possible cracks and fissures in the piping and catch basins.
Jul-02	ERI	West of the ExxonMobil Parcel	Well decommissioning	Monitoring wells MW-20, MW-21, and one unidentified well were decommissioned.
2002 – 2007	Kleinfelder, ERI, and AMEC	Ecology Site	Groundwater monitoring	Monthly LNAPL gauging and quarterly groundwater monitoring.
2002	Reid Middleton	CSTO	Memorandum to Ecology	Southeast corner of the asphalt cap over the ExxonMobil Parcel removed. Steel piles for concrete foundation were installed.
Feb-02	ERI	Ecology Site and vicinity	Monitoring well decommissioning and reinstallation	Decommissioning of monitoring wells (MW-22, MW-23, MW-24, MW-35, and MW-37) and piezometer DM-6 due to proximity to the CSTO Project. Reinstalled well W-2 screened from 3 to 23 feet bgs.
Jul-01	URS	Johnston Petroleum parcel	Borings	Phase II investigation for Johnson Petroleum parcel. Push-probe borings JP-1 through JP-7.
Sep-00	URS	South, east, and southeast of the ExxonMobil ADC Property	Borings	Phase II investigation for the CSTO Project. Push-probe borings UG-1 through UG-12.
Dec-99	Dames and Moore and URS	South and southeast of the ExxonMobil ADC Property	Geotechnical drilling and piezometer installation	DM-6, DM-7, and DM-8 were sampled for environmental samples.
Oct-99	Kleinfelder	ExxonMobil ADC Property	Monitoring wells installation	Monitoring wells W-10R, W-15R, and MW-40R installed.
Jul-98	Exponent	Ecology Site	Final Interim Action Work Plan and Engineering Design Report	Exponent presented design for interim measures at the ExxonMobil ADC Property.



Appendix A

Date	Consultant	Location	Report/Activities	Summary
Jul-98	Exponent	Ecology Site	Remedial Investigation and Focused Feasibility Study	Exponent summarized the history of the ExxonMobil ADC Property and evaluated feasible remedial options for the Ecology Site.
Oct-98	Ecology	Ecology Site	Agreed Order DE98TC-P-N223	Agreed Order requiring the preparation of a Remedial Investigation/Focused Feasibility Study Report, Interim Action Work Plan, and the subsequent completion of the work described in the Interim Action Work Plan.
Nov-97 – Jan-98	Pacific Environmental Group, Inc.	Former Kimberly-Clark property	Borings, monitoring wells	Direct-push borings Probe-1 through Probe-15 were advanced, and 2-inch diameter monitoring wells KC-1 and KC-2 were installed inside the KC warehouse.
Feb-97	PTI	Ecology Site	LNAPL recovery technical memorandum	Technical memorandum to summarize environmental investigations, LNAPL recovery activities, and geology.
Aug-96	AGRA	Ecology Site	Monitoring wells	Gauged wells at the property.
Jun-96	AGRA	ADC Parcel	Borings, monitoring wells, and test pits	4-inch diameter recovery well VRW-1 and 2-inch diameter monitoring well MW-38 installed. Seven test pits TP-1-96 through TP-7-96 excavated.
May-96	AGRA	ADC Parcel	Borings	Bobcat borings BB-1 through BB-14.
Apr-96	City of Everett	North of the ExxonMobil ADC Property	Meeting	Meeting held to discuss options for repairing the section of CSO line.
Mar-96	AGRA	North of the ExxonMobil ADC Property	Borings	Direct-push soil borings GP-1 through GP-13. Borings associated with the CSO line repair.
Dec-95	RZA AGRA	Ecology Site	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-2, B-2, MW-8, MW-9, MW-18, MW-15 through MW-18, MW-27, and MW-28.
Nov-95	RZA AGRA	Ecology Site	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-1, RW-2, B-1, B-2, MW-6, MW-8 to MW-13, MW-15 to MW-18, MW-27 to MW-37, and NRW-1.
Oct-95	U.S. Coast Guard Puget Sound Marine Safety Office and City of Everett	North of the ExxonMobil ADC Property	Investigation of petroleum product discharge into Everett Harbor	Camera surveys of the sewer lines.



Appendix A

Date	Consultant	Location	Report/Activities	Summary
Jul-95	RZA AGRA	ADC Parcel	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells: W-3, W-5, W-9, W-10, W-12 through W-15.
Apr-96	Ecology	Ecology Site	Agreed Order DE-95TC-N402	Agreed Order requiring cleanup, elimination, and/or containment of petroleum releases at and near the City of Everett's CSO.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	Test pits, recovery trench	Excavated five test pits, TP-1 through TP-5, to depths ranging from 3 to 3.5 feet bgs. Recovery trench installed along the western border of ExxonMobil Parcel.
Dec-93	RZA AGRA	ExxonMobil Parcel and off-Property to the west	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells B-1, B-2, MW-6, MW-8 through MW-13, MW-15 through MW-18, MW-27 through MW-33, MW-35 through MW-37.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	Off-Property borings, monitoring well installation, GPR survey	2-inch diameter monitoring wells MW-31 through MW-33 and MW-35 through MW-37 were installed; B-34 advanced and backfilled. GPR survey was conducted to assess whether underground product lines had been removed.
1992	RZA AGRA	Ecology Site	Discussions with Ecology	Ecology discussed enforcement with Mobil and RZA AGRA. Ecology decided to allow Site to go independent.
Dec-91	RZA AGRA	ExxonMobil Parcel	Quarterly groundwater monitoring, aquifer, and tidal study	Quarterly groundwater monitoring. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-30, and AD-19. Aquifer study involved 24-hour pumping from MW-10 at a rate of 1 to 2 gpm and measuring response in MW-18, RW-1, and RW-2 for 48 hours.
Nov-91	RZA AGRA	ExxonMobil Parcel	Borings, recovery well	8-inch diameter recovery well RW-2 installed. Deep soil borings B-1A, B-8A, and B-15A advanced.
Jun-91	RZA and ESE	ExxonMobil ADC Property	Quarterly groundwater monitoring	Groundwater monitoring event. 2-inch diameter monitoring wells MW-25 and MW-26 installed. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-18, AD-19, W-1 through W-6, and W-8 through W-15.



ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

Appendix A

Date	Consultant	Location	Report/Activities	Summary
Mar – Jun-91	RZA	Parcels surrounding ExxonMobil Parcel	Borings, monitoring well installation	Six percussion soil borings to depths ranging from 5 to 5.5 feet bgs. 2-inch diameter monitoring wells MW-19 through MW-24, and 4-inch diameter monitoring wells MW-27 through MW-30 installed. Soil boring B-21-91 advanced to depth of 29 feet bgs.
Nov-90	Unknown	ExxonMobil Parcel	Monitoring well decommissioning	B-3 (MW-3), B-4 (MW-4), and MW-7 decommissioned.
Oct-90	RZA	ExxonMobil Parcel	Shallow grid soil sampling, bio-feasibility study	Hand augers B-1 through B-25. Two soil samples were studied to conduct a slurry flask bio-feasibility study.
Jun-90	ESE	ADC Parcel	Hand-auger borings	Hand-auger borings W-8 through W-17 to depths of 6–10 feet.
Feb-90	ESE	ADC Parcel	Borings, monitoring well installation	Borings W-1 through W-7. 2-inch diameter monitoring wells W-1 through W-6 installed.
Jan-90	ESE	ADC Parcel	Borings	Hand augers AD-01 through AD-19 to depths ranging from 1 to 4.5 feet bgs.
Mar-88	RZA	ExxonMobil Parcel	Borings, monitoring well installation	2-inch diameter monitoring wells MW-6 through MW-18 installed.
May-85	RZA	ExxonMobil Parcel	Borings, monitoring well installation	2-inch diameter monitoring wells B-1 through B-5 (MW-1 through MW-5 in several reports) installed.

Source: Wood, 2019

Abbreviations:

ADC = American Distributing Company
AGRA = AGRA Earth & Environmental, Inc.
AMEC = AMEC Environment & Infrastructure, Inc.
bgs = below ground surface
BNSF = BNSF Railway Company
CAP = Cleanup Action Plan
CSO = combined sewer outflow
CSTO = California Street Overcrossing
Ecology = Washington State Department of Ecology
Ecology Site = Ecology recognized ExxonMobil ADC Site
ERI = Environmental Resolutions, Inc.
ESE = Environmental Science and Engineering, Inc.

FFS = Focused Feasibility Study
gpm = gallons per minute
GPR = ground penetrating radar
KC = Kimberly-Clark Corporation
Kleinfelder = Kleinfelder, Inc.
LNAPL = light non-aqueous phase liquid
MIDP = Monitoring and Inadvertent Discovery Plan
Mobil = ExxonMobil Oil Corporation
PTI = PTI Environmental Services
RZA = Rittenhouse-Zeman & Associates, Inc.
RZA AGRA = RZA AGRA Earth & Environmental, Inc.
SC/FFS = Site Characterization/ Focused Feasibility Study



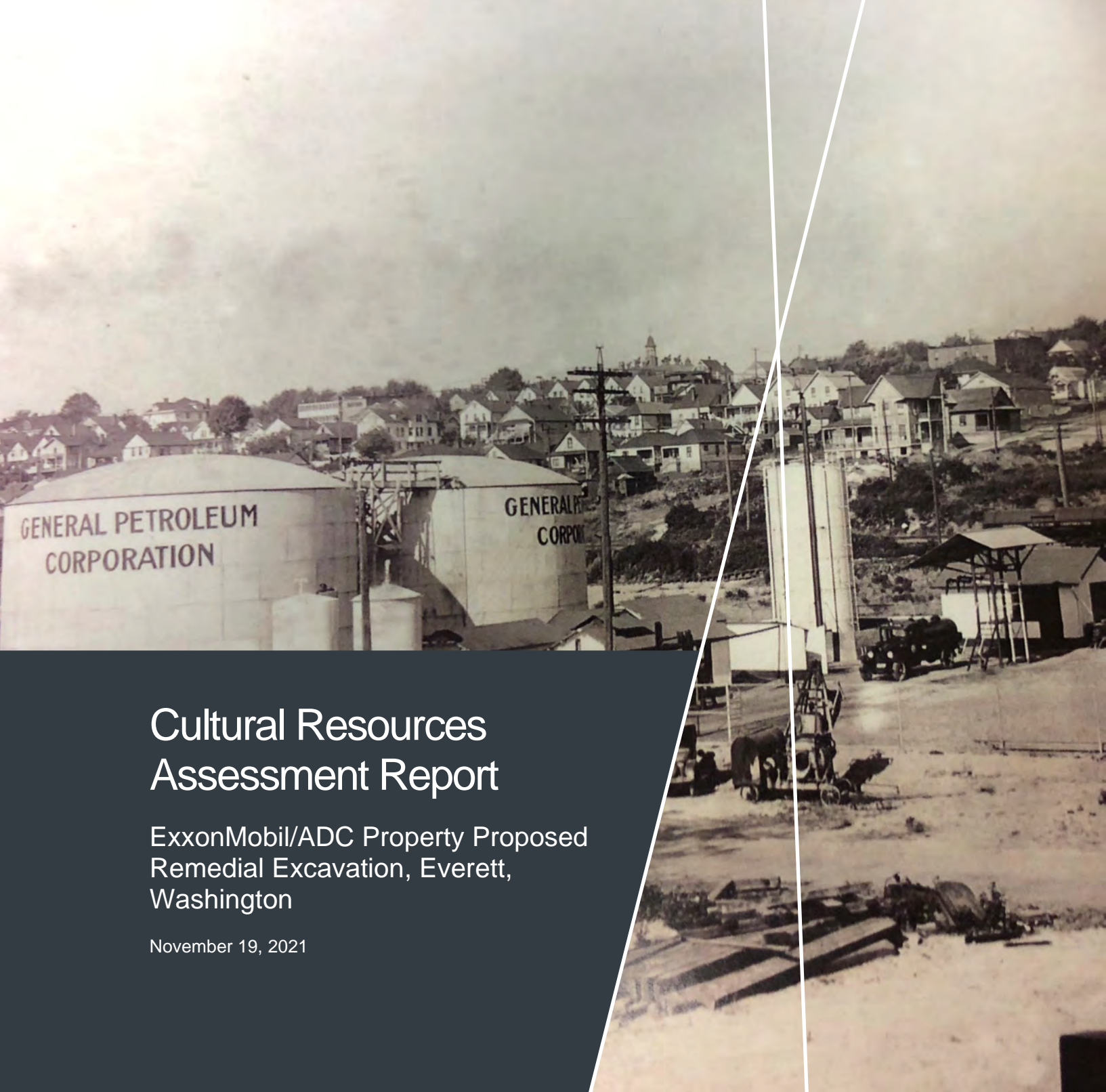
ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
ExxonMobil Environmental and Property Solutions Company and American Distributing Company

Appendix B

APPENDIX B

Archaeological Assessment





Cultural Resources Assessment Report

ExxonMobil/ADC Property Proposed
Remedial Excavation, Everett,
Washington

November 19, 2021

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Project Name Cultural Resources Assessment
Report
ExxonMobil/ADC Property
Proposed Remedial Excavation,
Everett, Washington
Job Reference 0314476040
Version Number 1.0
Date November 19, 2021

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Executive Summary

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington. The project proposed to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The project area is currently developed with a paved parking lot.

Results of the cultural resources assessment for the project area indicate a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources.

1.0 Introduction

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington (Figure 1). This project is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Proposed cleanup activities include installation of shoring walls, and excavation of impacted soils. Following excavation of contaminated soils, the project area will be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved.

The project area consists of 3.48 acres that are comprised of several tax parcels and portions of the City of Everett's (City) Right-of-Way (ROW). Parcel information is provided below (Table 1; Figure 2). Currently, the project area consists of a paved parking lot with no extant structures or buildings (Figure 3).

The cultural resources assessment consisted of a literature review of existing cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs) located within 1.0 mile (1.6 kilometer [km]) of the project area. This research included a records search at the Department of Archaeology and Historic Preservation's (DAHP's) Washington Information System for Architectural and Archaeological Records Data (WISAARD) database. Additional resources that were consulted include historic-era aerial photographs, U.S. Geological Survey (USGS) maps, General Land Office (GLO) maps, Snohomish County atlases, and Sanborn Fire Insurance Maps.

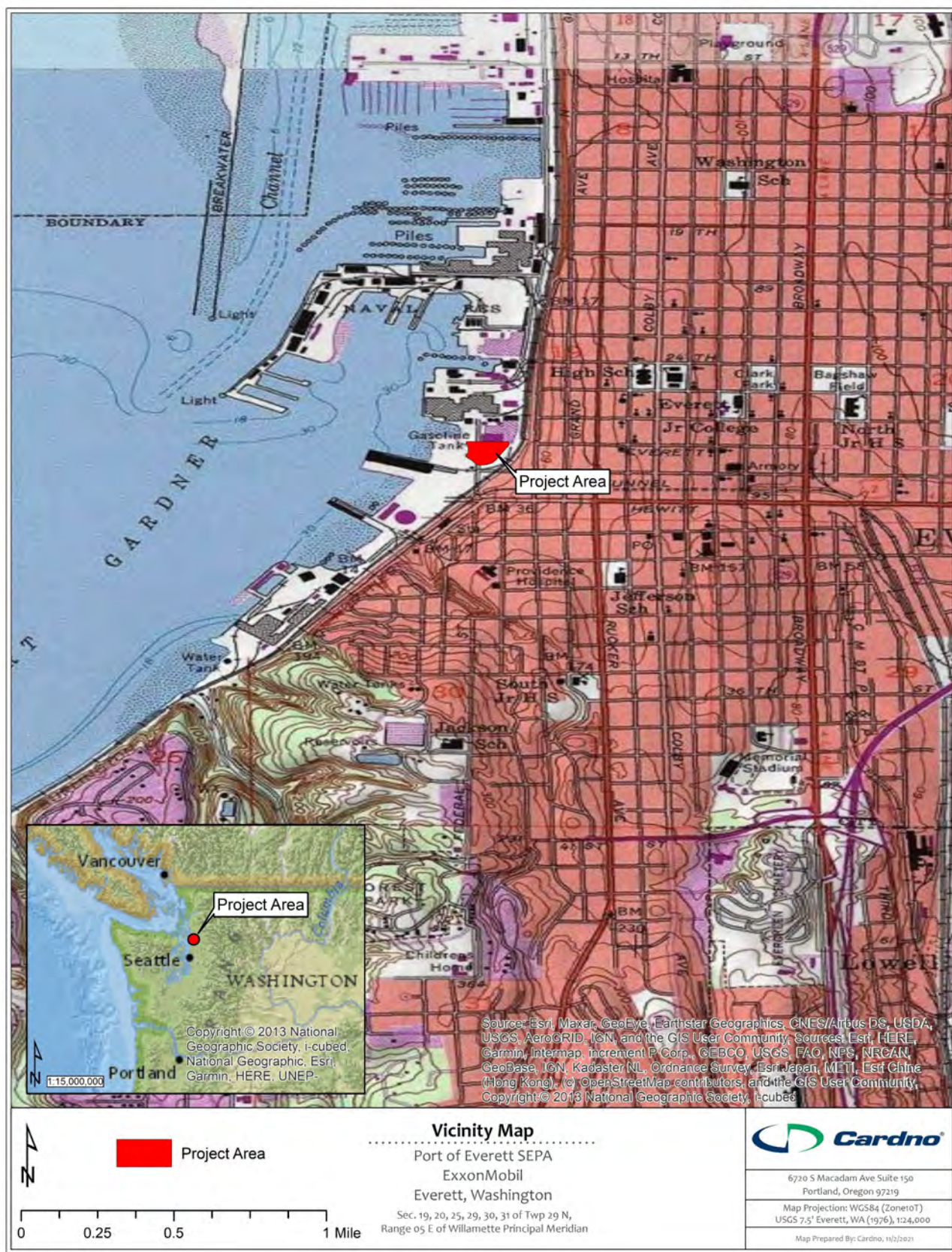


Figure 1. Project area and vicinity.

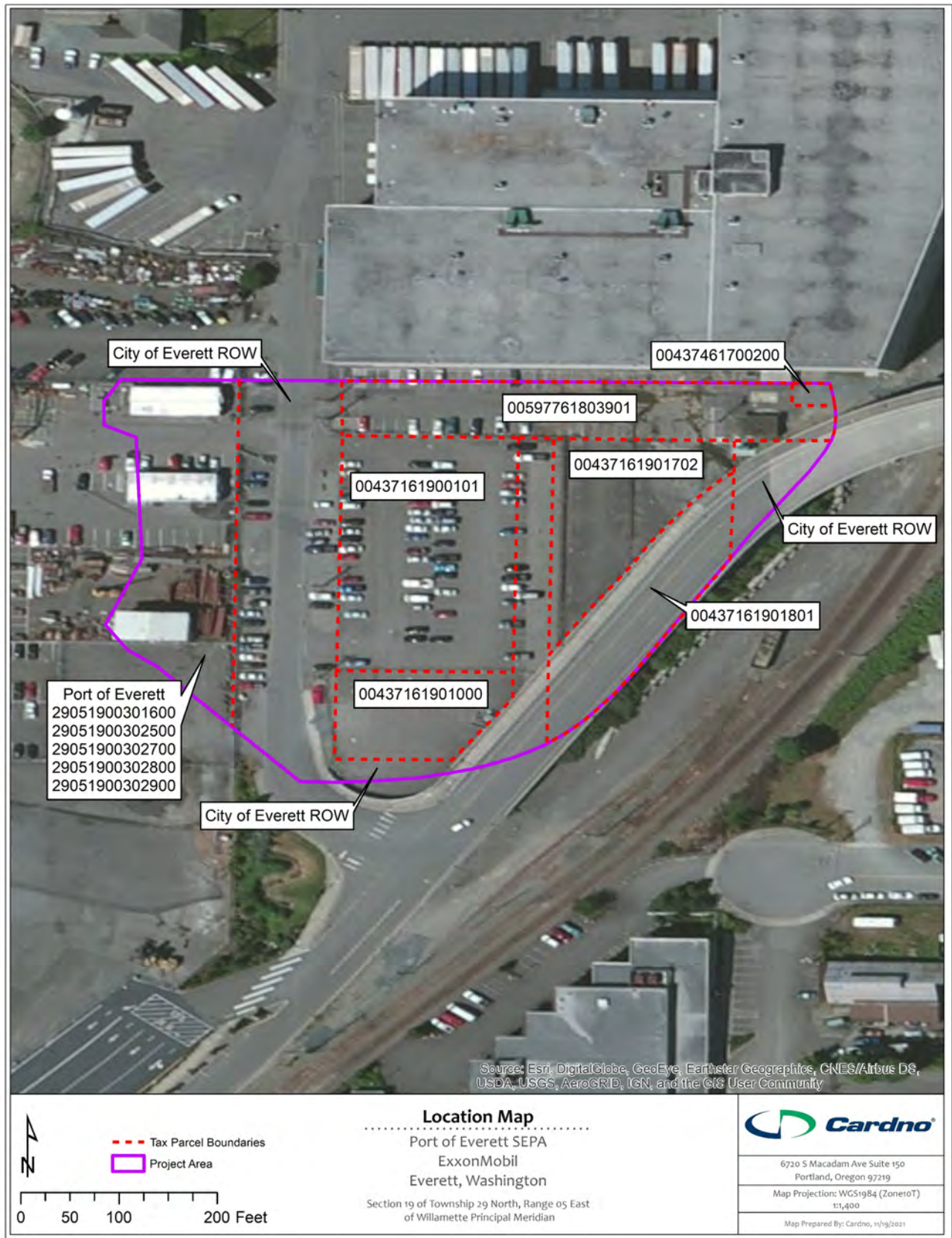


Figure 2. The project area denoting impacted Snohomish County tax parcels and City ROW.

Table 1. Snohomish County Tax Parcel Information.

Owners	Parcel Number(s)
Burlington Northern Railroad	00437161901702
City of Everett	00437161901801
Miller Trust (Cecilia Beverly Miller, beneficiary)	00437161900101
Mobil Oil Corporation	00437161901000
Port of Everett	00437461700200, 00597761803901, 29051900301600, 29051900302500, 29051900302700, 29051900302800, 29051900302900



Figure 3. Overview of project area, facing northeast.

2.0 Regulations

Cardno's cultural resources assessment was completed in compliance with Everett Municipal Code (EMC), Snohomish County Code (SCC), the State Environmental Policy Act (SEPA), and Revised Code of Washington (RCW). These regulations are discussed below. Additionally, information regarding other local, state, and federal regulations applicable to cultural resources is also provided.

2.1 Everett Municipal Code

EMC 19.28 outlines the process for identifying, listing, and protecting resources on the Everett Register of Historic Places and within historic overlay zones. Properties within historic overlay zones are governed by EMC 19.28.020 through 19.28.120. Criteria for placement on the Everett Register of Historic Places are described in EMC 19.28.130. Proposed changes to properties on the Everett Register are reviewed by the Everett historical commission per 19.28.140.

2.2 Snohomish County Code

SCC 30.67.340 requires developers and property owners to immediately stop work and notify the county, DAHP, and affected Indian tribes if archaeological resources are uncovered during excavation. It further stipulates that county permits issued in areas documented as containing archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

SCC 20.32D outlines the identification, evaluation, and protection of archaeological and historic resources within Snohomish County that are listed on the Washington State Archaeological Site Inventory. Additionally, it directs the preservation and rehabilitation of eligible historic properties for future generations. SCC 30.32D.020 established the Snohomish County Register of Historic Places, which includes historic buildings, sites, structures, objects, and districts within the county. SCC 30.32D.030-060 directs property designation to and removal from the Snohomish County Register of Historic Places, as well as alterations of properties on the register.

SCC 20.32D.070-100 outlines the process for obtaining and working under a certificate of appropriateness, and zoning. SCC 20.32D.200 requires recordation of archaeological sites. Additionally, completion of an archaeological report or relocation of a project is required for any construction, earth movement, clearing, or other site disturbance of a known archaeological site or any development application proposed on non-tribally owned, fee-simple properties designated Reservation Commercial on the Snohomish County Future Land Use Map. SCC 20.32D.220 outlines the process to follow if human remains or archaeological resources are found during construction, earth movement, clearing, or other site disturbance.

Lastly, SCC 30.32D.300 allows for an appeal process for any building permit issued with conditions imposed pursuant to this chapter. An appeal may occur as a Type 1 decision pursuant to SCC 30.71.

2.3 State Environmental Policy Act

The SEPA (RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to document cultural and historical significance that may be affected by project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Per WAC 197-11-960, the SEPA checklist submitted to the local planning authority with an application for development review includes the following questions, which must be satisfactorily addressed to demonstrate that a project will not have a significant adverse impact on cultural and historic resources:

- 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? If so, specifically describe.*
- b. *Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.*

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 archaeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.*

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.*

2.4 Revised Code of Washington 27.44 and 27.53

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

If a person(s) violates this statute and knowingly disturbs or alters an archaeological site, the DAHP is allowed to issue civil penalties of up to \$5,000, in addition to site restoration costs and investigative costs per RCW 27.53.095. Restorative and monetary remedies do not prevent concerned Indian tribes from undertaking civil action in state or federal court or law enforcement agencies from undertaking criminal investigation or prosecution. If human remains and/or burials are disturbed, RCW 27.44.050 allows an affected Indian tribe to undertake civil action. Additionally, the excavation of human remains without a permit is a felony.

2.5 Revised Code of Washington 68.60

RCW 68.60 requires “expeditious” notification of local law enforcement and the coroner if skeletal human remains are discovered. Failure to notify is considered a misdemeanor.

2.6 Washington Administrative Code 25-48-060

The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the National Register of Historic Places (NRHP).

2.7 Governor’s Executive Order 21-02

In 2021, Washington Governor Jay Inslee signed executive order 21-02, which supersedes the previous GEO 05-05. GEO 21-02 requires the preservation and protection of Washington’s cultural resources, which are defined as archaeological and historical sites, Native American sacred places and landscapes, and sites, buildings and places that hold special cultural historical, and spiritual significance. The GEO requires state agencies to review their capital construction projects and land acquisitions made for the purpose of a capital construction project that are not undergoing review under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) with the Washington State Department of Archaeology and Historic Preservation (DAHP) and affected Indian tribes to determine potential impacts to cultural resources. GEO 21-02 outlines the steps of review and consultation that should be undertaken as early in the project planning process as possible. In the event a culturally significant site will be impacted by a capital project, the state agency must work with the DAHP and affected Indian tribes on appropriate archaeological survey and mitigation strategies consistent with state and federal laws. Additionally, the state agency must take reasonable action to avoid, minimize, or mitigate adverse effects to the resource.

2.8 Washington Heritage Register

The Washington Heritage Register (WHR) is an official listing of historically significant sites and properties found throughout the state and includes districts, sites, buildings, structures, and objects that have been identified and documented as being significant in local or state history, architecture, archaeology, engineering, or culture. The WHR is governed by several state laws, including Senate Bill 363, RCW 27.34.200, and WAC 25-12.

Any subdivision of state government or recipient of state funds must comply with the SEPA and Executive Order 21-02. These programs require that significant properties, specifically those listed in or eligible for the WHR, be considered when state undertakings (e.g., permits, grants, construction) affect historic and cultural values. If significant resources are identified, the DAHP considers the effects of a proposed project on such resources and makes a professional recommendation for appropriate treatments or actions. The DAHP does not regulate the treatment of properties that are found to be significant, and the local governing authority may choose to uphold the DAHP's recommendation and may require mitigation of adverse effects to significant properties.

2.9 National Register of Historic Places

The NRHP (16 U.S. Code 470a), created under the National Historic Preservation Act of 1966, as amended (16 U.S. Code 470 et seq.), is the federal list of historical, archaeological, and cultural resources worthy of preservation. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture and that possess integrity of location, design, setting, material, workmanship, feeling, and association. The NRHP is maintained by the National Park Service (NPS) on behalf of the Secretary of the Interior (SOI). The DAHP administers the statewide NRHP program under the direction of the State Historic Preservation Officer, located in Olympia, Washington. The NPS has developed NRHP Criteria for Evaluation (36 Code of Federal Regulations [CFR] § 60.4) to guide the evaluation of cultural resources that may be either listed in or eligible for the NRHP. The NRHP Criteria of Evaluation are:

Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: Are associated with the lives of persons significant in our past; or

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

NPS Bulletin No.15, "How to Apply the National Register Criteria for Evaluation," provides guidance on evaluating resources for listing in the NRHP. Archaeological sites are primarily assessed under Criterion D. While cultural resources may be present within the project area, if they do not meet the requirements for listing in the NRHP, they are not considered historic properties. Cultural resources less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance, as described in Criteria Consideration G (36 CFR Part 60) and NPS Bulletin No. 22, "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years."

3.0 Environmental Setting

The project area lies within the greater Puget Lowland physiographic province, which is a low-lying area between the Cascade Range to the east and the Olympic Mountains to the west. Puget Sound was

shaped by widespread continental glaciation that extended south from British Columbia to the northern Puget Lowland and along the western flanks of the Cascade Mountains (Miss 2008). This area is also known as the Puget Sound Trough physiographic province, which extends to the Cowlitz and Chehalis Rivers (Franklin and Dyrness 1988). The Vashon Stade of the Fraser Glaciation was the last glacial maximum in the region and is dated between 18,000 and 14,000 years before present (BP) (Easterbrook 2003). Rapid deglaciation, which saw the occurrence of meltwater channels and temporary ice marginal lakes, occurred after this glaciation. The land experienced isostatic rebound between 13,000 and 7000 years BP as global sea levels rose and deltas formed at the head of the Duwamish Valley, shaping the Puget Sound shoreline (Dragovich et al. 1994; Miss 2008). By 5000 years BP, the Puget Sound sea level was within 6.6 to 9.8 feet (2 to 3 meters [m]) of its current level (Kelsey et al. 2004; Sherrod et al. 2000).

The project area lies within the *Tsuga heterophylla* (western hemlock) vegetation zone in the Puget Lowland, which provides a highly productive ecological system with a complex mosaic of microenvironments (Franklin and Dyrness 1988). This vegetation zone is characterized by forests of western hemlock, western red cedar, and Douglas-fir. Shrub cover consists of sword fern, salal, Oregon grape, ocean spray, huckleberry, and red elderberry. The diversity of floral and faunal species in the area has decreased due to human settlement, which has led to a significant loss of faunal habitat. Additionally, historical and modern contaminants within Port Gardner Bay have significantly impacted mudflats, estuaries, tidal marshes, and shrub wetlands. The National Oceanic and Atmospheric Administration's Damage Assessment, Remediation, and Restoration Program (2021) notes that:

Releases of hazardous substances into Port Gardner Bay have resulted from industrial and municipal processes since the early 1900s, including factories, spills during cargo transfer and refueling, storm water runoff through contaminated soils at upland facilities, discharge of contaminated groundwater, and lumber operations, such as sawmills, and pulp and paper mills.

Prior to historical and modern impacts, the *Tsuga heterophylla* vegetation zone could support large terrestrial animals like elk, deer, black bear, and coyote and smaller mammals like rabbit, squirrel, racoon, beaver, and river otter. Currently, the project area is located within modified industrial landscape with paved ground surface. Recent subsurface investigations note that the near-surface soils consist of a heterogeneous mixture of fill materials. The fill materials consist of very loose to medium dense, brown, brownish gray, and gray silty sand and sand with areas of wood and brick debris extending to depths of approximately 5 to 10 feet below ground surface (bgs). Gray silty sand and silt and dark-brown to black peat mixed with wood debris are encountered beneath the shallow fill and extend up to 20 to 27 feet bgs (Wood 2019, Cardno 2020a, 2020b).

3.1 Archaeology

The earliest known occupations in western Washington, termed Paleo-Indian, are evidenced by the appearance of large, fluted projectile points dating to approximately 12,800 years BP (Ames and Maschner 1999; Carlson 1990). Paleo-Indians were primarily hunter-gatherers with low populations and high levels of mobility. Some researchers have argued that these early people were maritime oriented (Carlson 2003; Dixon 1993; Fedje and Christensen 1999; Fladmark 1979). In western Washington, sites from this period are rare. Much of the late Pleistocene terrain was uninhabitable due to glaciers, and the lands that were occupied by Paleo-Indians were predominately coastal reaches. During the glaciation period, ocean levels fell almost 400 feet globally (Kirk and Daugherty 2007), but with the onset of the warming Holocene, ocean levels rose and submerged many of these coastal sites. However, some sites are not submerged and instead are located above the present shoreline due to eustatic, tectonic, and isostatic effects that vary throughout the region (Fedje and Christensen 1999).

The Archaic period dates from approximately 12,500 to 6,400 years BP (Ames and Maschner 1999; Carlson 1990). Archaic-period sites, similar to Paleo-Indian sites, are poorly represented. Changes in sea level and vegetation have obscured many Archaic-period sites along the coast (Ames and Maschner

1999). However, as the glaciers receded, people were able to occupy larger expanses in the interior of the Puget Sound. Archaic-period peoples likely maintained small populations and high levels of mobility, and focused on a combination of maritime, littoral, and terrestrial economies. Archaic-period occupations are largely characterized by stone tool assemblages that are typically composed of large, stemmed lanceolate projectile points and bifaces. In addition, the Pacific Northwest Archaic period saw an introduction of microblades, which are sometimes present in stone tool assemblages (Ames and Maschner 1999).

Pacific-period sites date from approximately 6,400 to 250 years BP. The period ends at the introduction of smallpox to the region (Ames and Maschner 1999). The Early Pacific period (6,400 to 3,800 years BP) was marked by the increased use of marine resources, the appearance of human burials in middens and cemeteries, a diversification in subsistence activities, the disappearance of microblade technology, and the increased use of bone, antler, and ground stone tools. Major developments also included the appearance of ground stone celts (adze blades) and a proliferation in chipped-stone tool forms and styles, and decorative/ornamental pieces that likely represent contact and trade with groups in neighboring cultural areas (Kirk and Daugherty 2007). The Middle Pacific period (3,800 to 1,800/1,500 years BP) displays major developments including the appearance of long-term settlements (plank houses), intensification of salmon capture (appearance of wooden fish weirs and girdled/drilled net sinkers), and a diversification in tool form and style. Late Pacific period (1,800/1,500 to 250 years BP) developments are represented by the appearance of heavy-duty woodworking tools, an overall decline in the use of chipped-stone tools, and an increase in funerary ritual/burial activities. Sea levels became stable by the start of the Middle Pacific period, and sites representing the Middle and Late Pacific periods are located across the Northwest Coast region (Ames and Maschner 1999).

3.2 Ethnography

The project area lies within the traditional territory of the Snohomish. Since time immemorial, the Snohomish people lived in various locations along the Snohomish River from present-day Monroe to the mouth of the river near Everett, on Camano Island, and on Whidbey Island (Ruby and Brown 1992:212; Tweddell 1974). The region was utilized for resource gathering, hunting, and villages/seasonal habitations. However, there are no known ethnographic sites within the immediate project area (Waterman et al. 2001).

The Snohomish spoke the southern dialects of Lushootseed—a Salish language (Suttles and Lane 1990:486). The Snohomish people followed a seasonal settlement pattern. Winter villages, composed of one or more cedar plank houses where families gathered in the late fall, were typically located along waterways, such as at the mouth of the Snohomish River, river confluences, or protected shorelines (Haeberlin and Gunther 1930; Lane and Lane 1977). During the winter months, they relied on stored foods supplemented by local hunting and fishing (Suttles and Lane 1990).

Coast Salish peoples developed a complex social and religious system in part due to the abundance of food and raw materials (e.g., wood, plants, stone) (Haeberlin and Gunther 1930). Potlatches and spirit quests were important activities in the pursuit of spiritual power, in addition to asserting control over resources and neighboring groups (Elmendorf 1971). Social stratification existed among Coast Salish groups, where villages consisted of elite, commoner, and slave classes (Ames 2001; Grier 2003; Tollefson 1987).

Winter housing consisted of large, multifamily longhouses constructed of cedar planks. Sleeping platforms lined the walls, and storage shelves for winter supplies were typically located on the walls above these sleeping platforms. Fires were located near the sides, and the central area was used as a passageway. Shed-roof houses were a common design among the Coast Salish in the Puget Sound region (Suttles 1991). This house type easily allowed for the addition of rooms when populations increased, such as during winter months, and for the reduction in house size when occupants left for summer food collection

rounds (Suttles 1991). Often, the different placements of sleeping platforms and individual fires portrayed status, where those with the highest status lived in the back of the house and commoners and slaves lived closer to the entryways (Suttles 1991).

During the spring, summer, and fall, people would journey from central villages to temporary camps. Camps were located along streams during salmon runs while smaller groups would hunt, fish, and gather plant resources. Gathering was most intensive during spring and summer. Plants such as cattail (*Typhaceae* spp.), cranberry (*Oxycoccus* spp.), wapato (*Sagittaria latifolia*), and salmonberry (*Rubus spectabilis*) shoots were collected from wetlands, such as those found along Lake Stickney (located directly west of the project area), and prairies were visited for gathering camas (*Liliaceae* spp.) bulbs (Haeberlin and Gunther 1930; Turner 1976).

A typical summer house was constructed for short-term occupation, and they were typically tipi or square-shaped. Mats were placed horizontally over a frame of poles to create the tipi, while square houses were a lean-to type form, with mats placed over a wooden structure with a gabled or single pitch roof. Short-term occupation mountain camps were made using a similar square form, but covered with boughs of various tree species. Another style of summer house consisted of four corner poles with horizontal poles placed on top to create a gable. Cedar twigs held the framework together, while mats covered the roof and three sides (Haeberlin and Gunther 1930).

The Tulalip Reservation was authorized under the Treaty of Point Elliot in 1855, and enlarged in 1873, as the home for several indigenous groups including the Snohomish, Stillaguamish, Snoqualmie, Skykomish, and other allied bands living in the region (Ruby and Brown 1992; Tulalip Tribes 2014). Some among these groups moved to the reservation, while others remained living on their traditional lands. The combined tribes became known as the Tulalip Tribes.

Cardno is not aware of any known ethnographic place names within the project area or immediately adjacent. However, there are several ethnographic place names recorded in the general vicinity of the project area and near the mouth of the Snohomish River (Waterman 1922; Waterman et al. 2001:336-342). Non-English names are Lushootseed when available.

16 *ʔusʔusič* (Watermann orthography: *Osʔa/s1tc*) translates to “chasing a fish here and there” near an estuary between Steamboat and Union Sloughs.

16a *bəluʔəb* (Watermann orthography: *PEʔls1b*) translates to “boiling,” for an area at the mouth of the main Snohomish River channel.

17 *čikʷucid* (Watermann orthography: *Ctcqoʔtsid*) translates to “that which chokes up the mouth of something,” for a small island located on the north side of the Snohomish River mouth.

18 *sexʷčulalqʷ* (Watermann orthography: *SExwtculalkw*) is noted for a sharp point of land running toward the Ctcqoʔtsid island.

19 *hibuləb* (Watermann orthography: *Hibuʔub*) translates to “place where water boils out of the ground,” for a former village site south of the Snohomish River mouth.

20 Watermann orthography: *SEqʷsuʔub* is noted for a small promontory with a slough that runs parallel to the shore.

21 *sluluwʔ* (Watermann orthography: *SLuʔluw1L*) translates to “little perforation for a canoe,” for a narrow channel passing behind an island.

22 *ʔuxʷat* (Watermann orthography: *tLʔoʔhwaL*) translates to “a cold spring” for a spot on the river bank opposite Everett.

3.3 Historical Context

Cardno referenced GLO land patents and cadastral maps for Township 29 North, Range 5 East as well as Snohomish County atlases and USGS topographic survey maps to determine changes in built environment features (e.g., piers, docks, railroads, buildings, and/or roads) in or near the project area (Table 2). According to the results of a land patent search through the Bureau of Land Management (BLM), in 1876 Dennis Brigham was granted a total of 160.15 acres for Lot/Tract 2, Lot/Tract 3, and Lot/Tract 4 within Section 19 of Township 29 North, Range 5 East. Brigham, a carpenter from Massachusetts, arrived in the Everett area in 1861 to begin the homesteading process. Considered the first permanent settler in the area, Brigham constructed a cabin on his acres near Port Gardner Bay and lived a solitary life (Oakley 2005). During the early 1860s, a lone telegraph operator "...and Brigham were the only settlers between Mukilteo and the mouth of the Snohomish River for many years" (Whitfield 1908: 285). Later, John Auson King claimed Lot/Tract 1, immediately north of Brigham within Section 19 (BLM 1874). These lands grants were authorized under the Land Act of 1820 and the Homestead Act of 1862. These acts reduced the price of federal lands and gave citizens up to 160 acres each of public land for improvement.

Table 2. Results of Cartographic Analysis.

Year	Author/Company	Description of project area
1869	BLM	The project area is located within Section 19, which is partially submerged in Port Gardner Bay. A trail extends along the east bank and connects to a telegraph office and through property homesteaded by "Brigam."
1902	Sanborn Map Co.	Federal Ave extends north through the railroad and ends at the west extent of Everett Ave. Lot/Tract 618 and 619 are labeled, but show no company or ownership. Block 619 contains 30 structures consisting of dwellings with associated outbuildings. Block 618 depicts 11 more structures labelled "Squatters Shacks." Area noted as "marsh."
1910	Anderson Map Co.	Several rail spurs extend west to docks and piers owned by G.N. Ry. Co., N.P. Ry. Co., and Everett Imp. Co. project area is situated west of Everett Ave terminus with railroad and tideland additions (labeled 618 and 619).
1914	Sanborn Map Co.	"Squatters shacks" have been removed from Blocks 618 and 619. Shoreline cuts northeast from intersection of Federal Ave and Everett Ave. Two structures are depicted in the southwest area of Block 618 near the waterline. Area noted as "marsh."
1927	Chas. F. Metsker	Project area is depicted west of main roadways within railroad and dock area of Port Gardner Bay. Sections 20 and 19 are not labeled.
1934	Kroll Map Co.	Project area is noted within an undetailed area heavily utilized by railroad and docks.
1936	Chas. F. Metsker	G.N. Rwy. Depicted east of project area with spurs to "City Dock" and other businesses. North of project area is Clark Nickerson Lbr. Co., and docks to west noted as 13, 14, and 21.
1943	Kroll Map Co.	Same as Kroll (1934).
1950	Sanborn Map Co.	Significant development of Blocks 618 and 619. General Petroleum Corporation, Gilmore Oil Co., and the Associated Oil Company have all constructed warehouses and fuel oil tanks. Within Port Gardner Bay there is a pier (Standard Oil Co.) and an outfitting basin.
1960	Thos. C. Metsker	Federal Street depicted within its current alignment. The project area is noted within property owned by Standard Oil. The block (619 and 618) contains storage tanks.
1960	Kroll Map Co.	Same as previous.

Year	Author/Company	Description of project area
1975	Chas. F. Metsker	Scott Paper Co. is north of the project area. Standard Oil property with storage tanks is located within the project area.
198x	Chas. F. Metsker	Same as previous.
1992	Metsker Maps	Same as previous.

The 1869 survey plat image for Township 26 North, Range 5 East, depicts a telegraph line aligned north-south along the east side of Port Gardner Bay. A “Telegraph Office” is noted south of Section 19. This telegraph line “followed along the beach from Seattle to Whatcom” (Whitfield 1908: 285). In the southeast quarter of Section 19, a small cabin is noted along with the misspelled label of “Brigam” (BLM 1869). In 1890, the Brigham homestead property was purchased by Wyatt and Bethel Rucker with plans to create a townsite called “Port Gardner” (Oakley 2005). During the next year, the Ruckers became associated with Henry Hewitt Jr., Charles L. Colby, and other optimistic landowners and incorporated the Everett Land Company. By 1891, the main thoroughfare called Hewitt Ave was cut east to west and 100 feet wide.

Development of the townsite, now called Everett after Charles Colby’s son, continued with stump removals, street grading, and the sale of Everett Land Company lots (Oakley 2005; Port of Everett 2021). The Everett Land Company won ownership of the waterfront in 1892. In April of 1893, Everett was incorporated and boasted more than 5,600 citizens supported by streetlights, streetcars, sawmills, railroads, and residential and commercial expansion. However, the Panic of 1893 led to a withdrawal of investments and money in the Everett Land Company. The holdings of the Everett Land Company were transferred to the Everett Improvement Company in 1899 (Oakley 2005).

Evidence of development revitalization is visible in a 1902 map in the numerous land lots divided and numbered to the East Waterway shoreline of Port Gardner Bay (Figure 4; Sanborn Map Co. 1902). Federal Ave extended north through the Great Northern Coast Line and terminated at the westerly extent of Everett Ave. At this time, no company or business name was noted on the Sanborn Fire Insurance Map within the project area. Within properties directly north of the project area, large structures are depicted for the Everett Flour Mill Co. and the Clark Nickerson Lumber Co.

The color-coded key indicates that within Block 619 within the project area, structures consisted of “frame building” (Sanborn Map Co. 1902). The detailed map page for Block 619 contains 30 frame structures, all dwellings and associated outbuildings, situated around a marshland at the center of the block (Figure 5). Within each dwelling, the maps include a notation of “S.P.,” which is specially called out on the key map introduction: “NOTE Practically all dwellings with a “S.P.” (Stove pipe) are cheap, unpainted shacks” (Sanborn Map Co. 1902: Key Map). Eleven additional “S.P.” buildings consisting of dwellings, outbuildings, bath house, and boat house, are depicted within Block 618 to the north of the project area, and noted as “Squatters Shacks” (Sanborn Map Co. 1902).

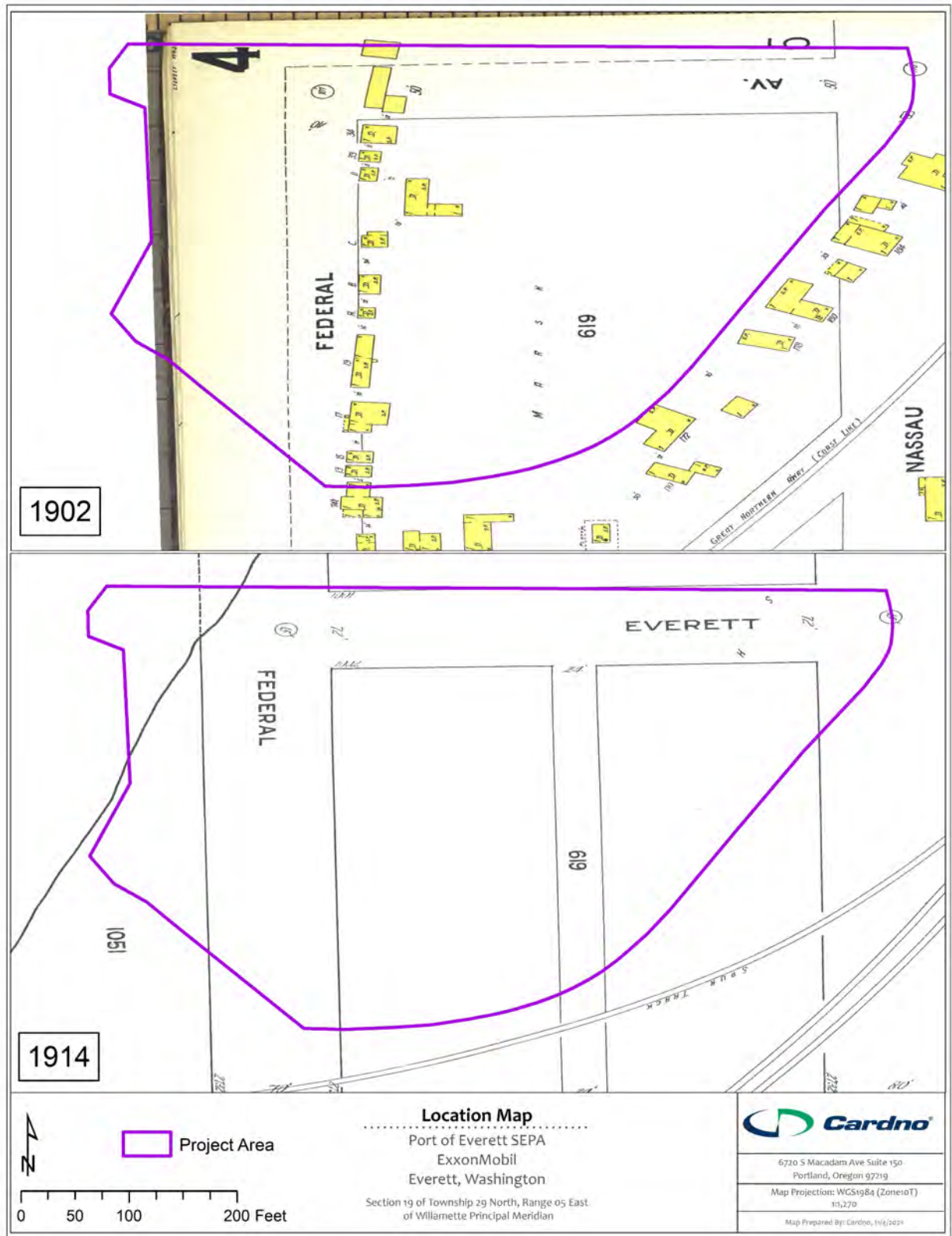


Figure 4. Details from 1902 and 1914 Sanborn Fire Insurance Maps (Sanborn Map Co. 1902, 1914).

Historical maps illustrate a changed landscape. In 1910, railway spurs extended west from the mainline to docks and piers owned by “G.N.Ry.Co.,” “N.P.Ry.Co.,” and “Everett Imp. Co.”:

“G.N.Ry.Co.” – Great Northern Railway

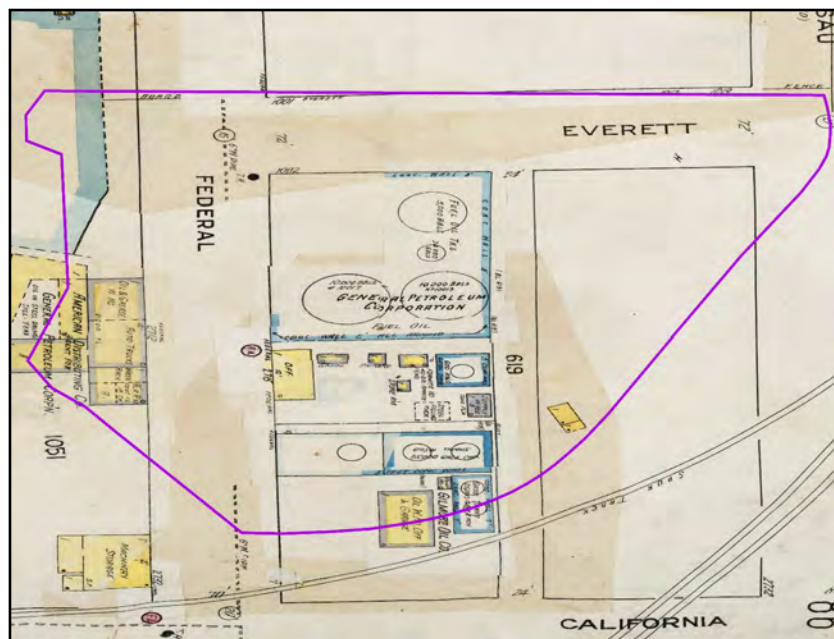
“N.P.RY.Co.” – Northern Pacific Railway

“Everett Imp. Co.” – Everett Improvement Company

By 1914 the “squatters shacks” north of the project area had been removed, and increasing development of piers and docks is evident (see Figure 4; Anderson Map Co. 1910; Sanborn Map Co. 1914). The position of the site between the railroad and waterfront was highly conducive to industrial uses. Between 1914 and 1950, the east shoreline of Port Gardner Bay was significantly filled and artificially extended into the East Waterway. Additionally, docks and piers expanded the industrial and commercial landscape west of the historical extent of Federal Ave (Sanborn Map Co. 1950).

By 1925, the northern part of the project area contained at least two large “General Petroleum Corporation” tanks, three smaller unlabeled tanks, and three gable-roof outbuildings just south of Everett Avenue. The project area spans Federal Avenue, across which was one large “General Petroleum Corporation” warehouse complex near the shoreline. Predecessors of ExxonMobil, owned the project area site beginning in 1927 (Washington Department of Ecology 2021).

The warehouse complex contained automobile truck storage, an oil and grease warehouse, a wash rack room, a boiler room, and an oil in steel drum staging yard adjacent to a wooden bulkhead (Figure 5; Sanborn Map Co. 1939 [Revised through June 1955]). By 1947 development within the project area had been expanded significantly to the south (Figure 6). Additional infrastructure constructed included several cylindrical petroleum tanks each containing 25,000 gallons of gasoline, eight outbuildings including a wooden office building, pump room, and warehouses, and a steel filling rack (Figures 5, 7, and 8; Sanborn Map Co. 1939 [Revised through June 1955]). The shoreline has not been modified with fill since approximately 1950 (Figure 9). An Everett USGS map from 1953 shows the area developed with gasoline tanks and a pier directly adjacent to the company warehouse complex (Figure 10). It does not appear the eastern portion of the project area was ever significantly developed.



**Figure 5. Project area displayed on 1939 Sanborn Fire Insurance Map.
(Sanborn Map Co. 1939 [Revised through June 1955])**



Figure 6. Project Area depicted on aerial imagery from 1947 (Image courtesy of ExxonMobil 2021).



Figure 7. Photograph of project area viewed facing north, taken from south end of site (Washington Department of Ecology 2021).



Figure 8. Undated photograph showing gasoline infrastructure after General Petroleum Corporation was rebranded to Mobilgas. The office building on the site is at the right. (Washington Department of Ecology 2014:65)

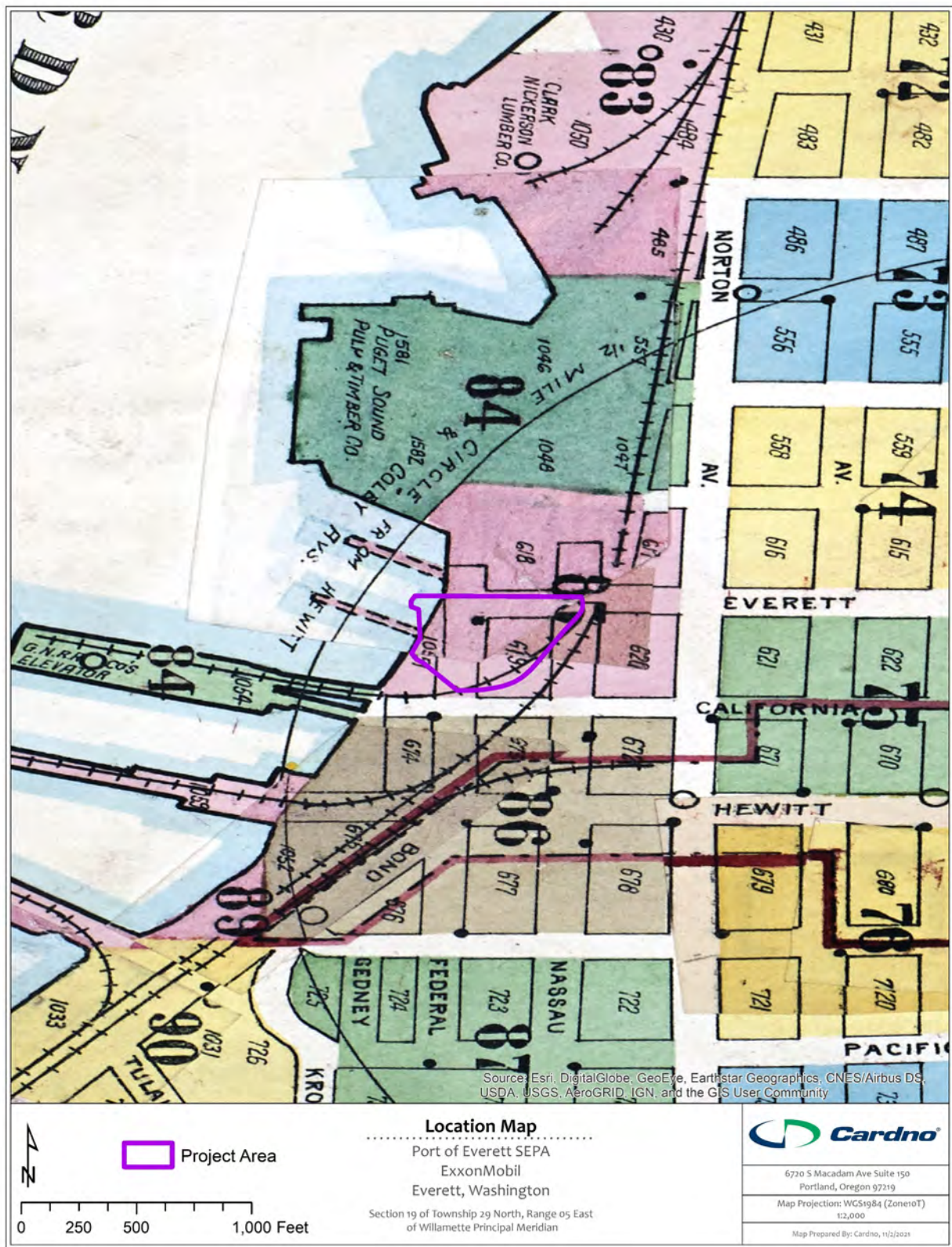


Figure 9. Project Area depicted on 1950 Sanborn Insurance Map (Sanborn Map Co. 1950).

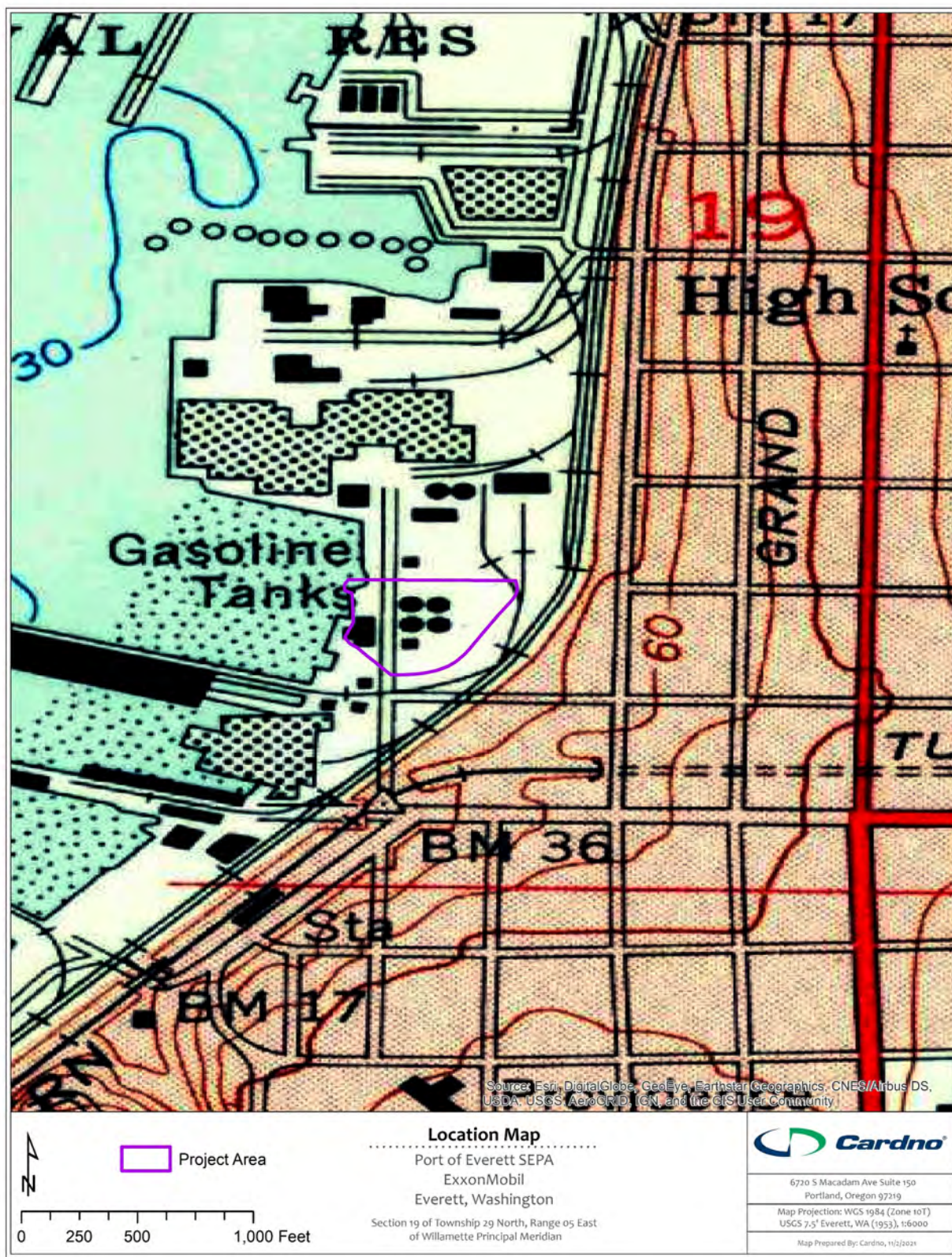


Figure 10. Project area depicted on the 1953 Everett USGS 7.5-minute quadrangle (USGS 1953).

In 1974, Mobil Oil sold the northern part of the project area to A.P. Miller for use by the American Distributing Company (ADC) who continued petroleum operations until 1990 (Washington Department of Ecology 2021). By 1977 the warehouse complex across Federal Avenue and the office building had been demolished (Figure 11). Mobil Oil ceased petroleum operations on the project area in 1987. All remaining infrastructure at the site was demolished between 1998 and 2002, and the project area was used as a parking lot (Washington Department of Ecology 2021). In late 2003 Terminal Avenue was developed adjacent to the site. The project area experienced continued development and change over several years precluding the identification of a particular year or period of importance of the petroleum infrastructure which was once extant.



Figure 11. A 1977 aerial photograph of the project area (Washington Department of Ecology 2021).

3.1 Literature Review

Cardno archaeologists conducted a background search and literature review of existing cultural resource records; local, state, and national register nomination forms; previous cultural resources investigations; and any known or potential TCPs in and within 1.0 mile (1.6 km) of the project area. According to the DAHP's predictive model available on the WISAARD online database, there is a very high risk of encountering buried precontact archaeological deposits in the project area.

3.1.1 Previous Investigations

The background search identified 15 cultural resources investigations that have been previously conducted within 1.0 mile (1.6 km) of the current project between 1975 and 2020 (Table 3). Seven investigations were surveys, two involved construction monitoring, two were historic structures surveys, three provided larger prehistoric and historic context for the area, and one was a monitoring and discovery plan. Recently, four cultural resources investigations fall within or immediately adjacent to the project area, as plotted by WISAARD (see Table 3): Johnson 2000; Rinck et al. 2013; Undem et al. 2014; Johnson 2020.

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (*n* = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
1975	Dunell and Fuller	An Archaeological Survey of Everett Harbor and the Lower Snohomish Estuary-Delta	1332098	Survey Report	project area within Study Area
1987	Blukis Onat	Resource Protection Planning Process Identification of Prehistoric Archaeological Resources in the Northern Puget Sound Study-Unit	1349367	Overview	Overview of Area
1988	Evans-Hamilton, Inc.	The Location, Identification and Evaluation of Potential Submerged Cultural Resources in Three Puget Sound Dredged Material Disposal Sites	1340504	Survey Report	0.84 mile west
1991	Miss and Campbell	Prehistoric Cultural Resources of Snohomish County, Washington	1334282	Overview	Overview of Area
1998	Demuth	Technical Report: Historic, Cultural, and Archaeological Resources Assessment for Everett-to-Seattle Commuter Rail Project Environmental Impact Statement	1340269	Overview	Overview of Area
2000	Johnson	Letter to Molly Adolfson Regarding Proposed California Street Overpass, Everett	1344193	Survey Report	Within project area
2006	Juell	Archaeological Site Assessment of Sound Transit's Sounder: Everett to Seattle Commuter Rail System, King and Snohomish Counties	1348189	Survey Report	0.38 mile south
2008	Hartmann	Cultural Resources Assessment for the Swift Bus Rapid Transit Project	1351380	Survey Report	0.54 mile southeast
2011	Lenz et al.	Cultural Resources Assessment for the Broadway Bridge Replacement Project, Everett	1682948	Survey Report	0.68 mile west
2013	Pinyerd	Downtown Everett #SE03XC527 1602 Hewitt Ave., Everett	1683379	Historic Structures Survey Report	0.37 mile southeast
2013	Rinck	Cultural Resources Monitoring and Discovery Plan for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Monitoring and Discovery Plan	0.11 mile north
2013	Rinck et al.	Archaeological Resources Assessment for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Survey Report	0.06 mile north

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (*n* = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
2014	Udem et al.	Letter to Steve Geriat RE: Results of Cultural Resources Monitoring at the Kimberly-Clark Worldwide Site Upland Area, Everett	1685767	Monitoring Report	0.11 mile north
2014	Sackett	Architectural Survey and Evaluation: Naval Station Everett	1685545	Historic Structures Survey Report	0.47 mile west
2020	Johnson	FINAL Results of Archaeological Monitoring for the Kimberly-Clark Everett Interim Action	1694736	Monitoring Report	0.07 mile north

In 2000, Paragon Research Associates conducted a survey for roadway connector alternatives between Everett Ave that would impact “Maggie’s Park” (Johnson 2000). Maggie’s Park, located approximately 400 feet east of the project area, is located within the Brigham land claim and possibly near the location of the original cabin. However, no archaeological materials have been identified to confirm this claim. Johnson conducted a pedestrian survey and identified no cultural materials.

In 2013, SWCA Environmental Consultants (SWCA) conducted an extensive study and background review for the Kimberly-Clark Worldwide Site Upland Area SEPA process (Rinck et al. 2013). This project area is located within 56 acres of upland lands and 12 acres of tidelands within the north parcel immediately adjacent to the current project area. Previously, this area was utilized as for industrial purposes which has contaminated the area. The first mill within this project area was the Robinson ad Company Mill, which began operations in the early 1890s. By 1901, this area contained an extensive sawmill and planning facility for the Clark-Nickerson Lumber Company. During the background review, SWCA identified the project area as containing a high potential for precontact and historical cultural materials within the natural Port Gardner shoreline. In response to the potential for buried archaeological materials, SWCA developed a site-specific Monitoring and Discovery Plan (MDP) (Rinck 2013).

SWCA performed archaeological monitoring for cleanup excavations at the Kimberly-Clark Worldwide Site Upland Area (Udem et al. 2014). Within one area, excavations intersected natural sediments underlying historic-period fill. Within Location 11, archaeologists observed miscellaneous historic debris and architectural remnants located between 2 and 6 feet below ground surface. One precontact artifact was documented during monitoring—45SN00629, an edge-altered basalt cobble (Udem 2014).

Archaeological monitoring continued at the Kimberly-Clark Worldwide Site Upland Area in 2020 (Johnson 2020). Archaeologists observed architectural and structural debris within the historic fill layer, likely associated with historical mill operations. No precontact materials or intact sediment layers were observed.

3.1.2 Archaeological Resources

One archaeological resource is recorded within a 1.0-mile (1.6-km) radius of the project area. The archaeological resource (45SN00629) is a precontact isolated find identified within historic dredge material underneath a parking lot (Udem 2014; Udem et al. 2014). Historically, the property was the location of a mill situated at 2600 Federal Avenue (Boswell and Sharley 2012). The single lithic artifact was recorded as an edge-altered basalt cobble with 13 multidirectional flake scars on one end. The artifact was donated to the Hibulb Cultural Center (Johnson 2020).

3.1.3 Built Environment

No historic properties listed in the NRHP, WHR, and/or ERHP are located within or immediately adjacent to the project area. Twelve properties listed in the NRHP are located within 1.0 mile (1.6 km) of the project area (Table 4). Additionally, two historic districts are located within 0.5 mile (0.8 km) of the project area: Hewitt Ave Historic District (45DT00231) and Rucker Hill Historic District (45DT00155). Four properties are listed in the WHR. Twenty-seven properties are listed on the ERHP, and all three Everett historic overlay districts begin within one mile of the site. Several properties are listed on more than one register. The dates of significance for the historic properties range from 1892 to 1967. There are no properties listed on the Snohomish County Register of Historic Places within one mile of the project area.

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Roland & Nina Hartley House/Hartley Mansion (45SN00337)	2320 Rucker Ave	1910	Listing No. 86000958; Resource ID 676163 WHR, NRHP	Lambert	1986	0.37 mile northeast
Everett High School (45SN00351)	2400 Colby Ave	1910	Listing No. 97000493; Resource ID 676177 WHR, NRHP	Ravetz	1996	0.35 mile northeast
Everett Public Library (45SN00341)	2702 Hoyt Ave	1934	Resource ID 676167 WHR	Dilgard	1989a	0.27 mile east
Knights of Columbus Community Center and War Memorial Building (45SN00132)	1611 Everett Ave	1921	Listing No. 79002554; Resource ID 676151 WHR, NRHP	Potter	1975c	0.40 mile east
Pioneer Block – Everett (45SN00127)	2814-2816 Rucker	1892	Resource ID 676145 WHR	Lambert	1979	0.23 mile southeast
Marion Building, Hotel Marion, Tontine Saloon (45SN00128)	1401 Hewitt Ave	1895	Resource ID 676146 WHR	Dilgard	1979	0.27 mile southeast
Everett Theatre (45SN00115)	2911 Colby Ave	1901; 1924	Resource ID 676133 WHR	Potter	1975a	0.41 mile southeast
Monte Cristo Hotel (45SN00117)	1507 Wall Street	1925	Listing No. 76001907; Resource ID 676135 WHR, NRHP	Potter	1975b	0.39 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
U.S. Post Office and Customs House (45SN00135)	3006 Colby Ave	1917	Listing No. 76001909; Resource ID 676154 WHR, NRHP	Potter	1975d	0.43 mile southeast
Everett City Hall (45SN00344)	3002 Wetmore Ave	1929	Listing No. 90000674; Resource ID 676170 WHR, NRHP	Dilgard	1989b	0.48 mile southeast
Snohomish County Courthouse (45SN00116)	3000 Rockefeller Ave	1910; 1967	Listing No. 75001870; Resource ID 676134 WHR, NRHP	Potter	1975e	0.56 mile southeast
Everett Carnegie Library/Cassidy Funeral Home (45SN00133)	3001 Oakes Ave	1904; 1905	Listing No. 75001868; Resource ID 676152 WHR, NRHP	Potter	1975f	0.62 mile southeast
Commerce Building (45SN00345)	1801 Hewitt Ave	1910	Listing No. 92001290; Resource ID 676171 ERHP, WHR, NRHP	Sullivan	1992	0.52 mile east
Everett Fire Station No. 2 (45SN00342)	2801 Oakes Ave	1925	Listing No. 90000673; Resource ID 676168 WHR, NRHP	Dilgard	1989c	0.57 mile east
Rucker House (45SN00134)	412 Laurel Dr	1901	Listing No. 75001869; Resource ID 676153 WHR, NRHP	Potter	1975g	0.62 mile southwest
Hewitt Avenue Historic District (45DT00231)	1620 - 1915 Hewitt Avenue and portions of Wetmore, Rockefeller, Oakes, and Lombard Avenues	1894–1959	Listing No. 10001020; Resource ID 674762 WHR, NRHP	Fürész	2010	0.44 mile east
Rucker Hill Historic District (45DT00155)	Laurel, Snohomish, Niles, Warren, Bell, Tulalip, 33rd and 34th	1905–1930	Listing No. 89000399; Resource ID 674698 WHR, NRHP	Ravetz	1988	0.45 mile southwest

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Rucker-Grand Historic Overlay Zone	Rucker and Grand Avenues between 10th and 24th Streets		N/A ERHP			0.37 mile northeast
Norton-Grand Historic Overlay District	Norton and Grand Avenues between Pacific Avenue and 3612 Norton Avenue		N/A ERHP			0.34 mile south
Riverside Historic Overlay District	N/A	Established 2008	N/A ERHP			0.88 mile east
Fratt Mansion (45SN00680)	1725 Grand Ave	1904	Listing No. 100000991 Resource ID 678273 ERHP, WHR, NRHP	Cope & Gillette	2017	0.91 mile northeast
Sittig House	1927 Rucker Ave	1893	N/A ERHP	O'Donnell	2018	0.75 mile northeast
Cleaver Clough House	2031 Grand Ave	1907	N/A ERHP			0.64 mile northeast
Hilzinger House	2108 Rucker Ave	1907	N/A ERHP			0.63 mile northeast
Wright House	2112 Rucker Ave	1905	N/A ERHP			0.61 mile northeast
Blackman House	2208 Rucker Ave	1910	N/A ERHP			0.54 mile northeast
Austin House	2201 Rucker Ave	1897-1900	N/A ERHP			0.57 mile northeast
Agnew House	2301 Rucker Ave	1899	N/A ERHP			0.49 mile northeast
Krieger Laundry	2808 Hoyt Ave	1915	N/A ERHP			0.3 mile southeast
Walsh Platt/Fisher Motors Building	2902 Rucker Ave	1930	N/A ERHP			0.27 mile southeast
Everett Downtown Storage	3001 Rucker Ave	1919	N/A ERHP			0.36 mile southeast
Howard House	3410 Snohomish Ave	1912	N/A ERHP			0.69 mile southwest
Jackson House	3602 Oakes Ave	1906	N/A ERHP			0.97 mile southeast
Culmback Building	3013 Colby Ave	1924	N/A ERHP			0.48 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Port Gardner Building	2802 Wetmore Ave	1929	N/A ERHP			0.43 mile east
Bank of Everett (Cope Gillette Theatre)	2703 Wetmore Ave	1963	N/A ERHP			0.44 mile east
Challacombe & Fickel Building	2727 Oakes Ave	1923	N/A ERHP			0.59 mile east
Evergreen Building	1909 Hewitt Ave	1902	N/A ERHP			0.62 mile southeast
Watson's Bakery	1812 Hewitt Ave	1910	N/A ERHP			0.57 mile southeast
Morrow Building	2823 Rockefeller Ave	1925	N/A ERHP			0.54 mile southeast
Van Valey House	2130 Colby Ave	1914	N/A ERHP			0.64 mile northeast
Sahlinger-Muck	2319 Colby Ave	1908	N/A ERHP			0.56 mile northeast
Clark Park	2400 Lombard Ave	1894	N/A ERHP			0.66 mile northeast
Ray Fosheim House	2017 26 th St	1892	N/A ERHP			0.7 mile northeast
Lettelier House	2510 Baker Ave	1908	N/A ERHP			0.98 mile northeast

Three historic properties located within 0.5 mile (0.8 km) of the project area have been recommended and determined eligible for listing in the NRHP and/or WHR (Table 5). The Kimberly-Clark Everett Mill Main Office (Property ID 667716) is within 0.09 miles of the project area. The building was originally constructed in 1929 and consisted of a two-story Neoclassical rectangular structure with red brick cladding and low-pitched hipped roof. The building has a projecting Classical portico and round, white-painted Tuscan columns. In the 1940s and 1950s, the building underwent several alterations including the addition of two dormers on the roof, an addition to the south elevation of the building, the addition of a poured concrete deck and steps, and window replacements. The building is recommended as eligible for listing in the NRHP under Criterion A and listing in the WHR based on its historical association with the industrial development of Everett (Sharley 2012). All other listed and eligible properties are separated from the project area by the BNSF Railway train tracks. Most listed properties within one mile of the project area are clustered in areas to the east and to the north-northeast.

Table 5. Properties Recommended Eligible Located within 0.5 Mile of project area (n = 3)

Property Name	Address	Date Built	Property ID/ Resource ID	Author	Year	Location Relative to project area
Kimberly-Clark Everett Mill Main Office	2600 Federal Ave	1929	Property ID 667716; Resource ID 614724	Sharley	2012	0.09 mile north
Daulph Delicatessen	1416 Hewitt Ave	1927	Property ID 18268; Resource ID 12597	Dilgard and Riddle	1989	0.33 mile east
Everett Main Post Office	3102 Hoyt Ave	1964	Property ID 270916	Richards	2014	0.44 mile southeast

3.1.4 Cemeteries and Burials

According to information provided on the DAHP's WISAARD, there are no historic or precontact burials located within 1.0 mile (1.6 km) of the project area. One historic columbarium is located approximately 0.47-mile northeast of the project area (DAHP 2009). The Trinity Episcopal Church Columbarium (45SN00555) is situated at 2301 Hoyt Ave. The church was dedicated in 1921 with a new parish hall constructed in 1961 (Trinity Episcopal Church 2019). No further information is provided regarding the columbarium.

3.2 Cultural Resources Summary

Archival research indicates a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Historical land modification, including the introduction of artificial fill and development, reduces the likelihood of encountering in situ precontact artifacts. Ethnographic-period archaeological deposits within and adjacent to the project area may include disturbed or redeposited midden deposits, burials, evidence of a village, or debris associated with short-term occupations and resource-processing locations. Historic-period deposits may include debris from agricultural and historic homestead structures and other early-twentieth-century structure (i.e., "squatters shacks"), or from manufacturing or commercial development.

4.0 Recommendations

Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources. Monitoring should not be necessary in glacial deposits and sediments, nor in existing areas where disturbance has already occurred.

Cardno recommends that the MIDP outline the necessary steps to be taken by contractors in the event of an inadvertent discovery during construction. These steps would serve to minimize damage to any inadvertently discovered archaeological resources during ground-disturbing activities, which may include small, deeply buried, and/or widely dispersed historic or precontact cultural materials (e.g., railroad grade, rails, ties, stakes, and footings; glass bottles; sanitary cans; chipped-stone tools; ground stone; beads; shell; faunal remains; human remains; funerary objects; and objects of cultural patrimony).

Steps included in the MIDP would outline the applicable local laws and regulations, stop-work and notification protocols, discovery protection measures, procedures for assessment by archaeologists, and steps for consultation with the DAHP and any affected Indian tribes. In the state of Washington, archaeological sites are protected from knowing disturbance on both public and private lands. As described in Section 2, RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field. Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

APPENDIX F

Terrestrial Ecological Evaluation Form





Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: ExxonMobil ADC

Facility/Site Address: 2717/2731 Federal Avenue, Everett, Washington 98201

Facility/Site No: 2728

VCP Project No.: N/A

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Bobby Thompson

Title: Project Manager

Organization: Stantec

Mailing address: 720 Third Avenue, Suite 1500

City: Seattle

State: WA

Zip code: 98104

Phone: (208) 761-1557

Fax: N/A

E-mail: robert.thompson@stantec.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- ☒ Yes *If you answered "YES," then answer **Question 2**.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- ☐ All soil contamination is, or will be,* at least 15 feet below the surface.
- ☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- ☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- ☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- ☒ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- ☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 2** below.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 3** below.*
- ☐ No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- ☐ Yes *If you answered "YES," then answer **Question 4** below.*
- ☐ No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- ☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- ☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- ☐ Area of soil contamination at the Site is not more than 350 square feet.
- ☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- ☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- ☐ Yes *If you answered “YES,” then answer **Question 2** below.*
- ☐ No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

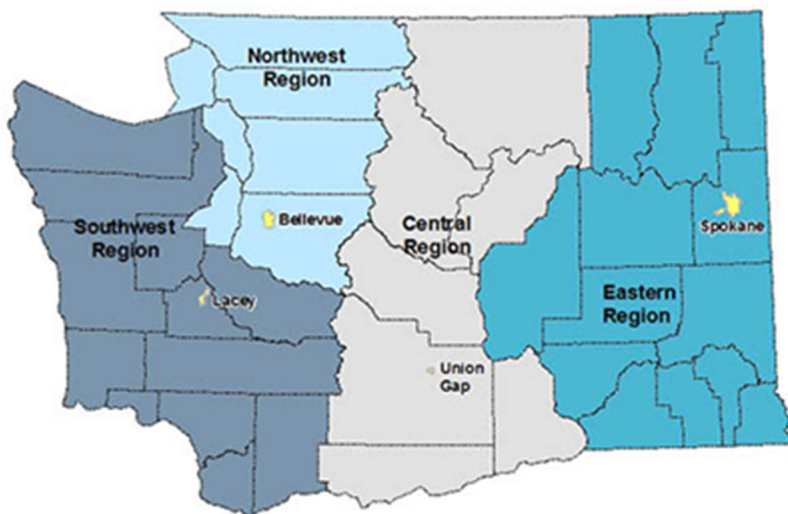
- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- ☐ Yes If so, please identify the Ecology staff who approved those steps:
- ☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

APPENDIX G

Stormwater Pollution Prevention Plan and Temporary Erosion and Sedimentation Control Plan



Construction Stormwater General Permit (CSWGP)

Stormwater Pollution Prevention Plan (SWPPP)

Project Name:
Port of Everett Property Interim Action Remedial Excavation

Prepared for:
**Department of Ecology
Northwest Region**

Permittee / Owner	Developer	Operator / Contractor
ExxonMobil and American Distributing Company (ADC)	Cardno	Innovative Construction Solutions (ICS)

Project Site: **2730 Federal Avenue Everett, Washington**

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
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SWPPP Prepared By

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SWPPP Preparation Date

05/ 24 / 2022

Project Construction Dates

Activity / Phase	Start Date	End Date
Remedial Excavation	June 2022	Fall 2022

Some Ecology instructional text remains in this highlighted format.

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List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO₂	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
pH	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
su	Standard Units
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

Project Information (1.0)

Project/Site Name: Port of Everett Property Interim Action Remedial Excavation

Street/Location: 2730 Federal Avenue

City: Everett State: WA Zip code: 98201

Subdivision: Not Applicable

Receiving waterbody: Port Gardner Bay / Possession Sound

Existing Conditions (1.1)

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage: 3.37 acres (Site including staging areas)

Disturbed acreage: 0.45 acres (estimated extent of excavation)

Existing structures: A wheeled-trailer and canopy used by Everett Ship Repair as an administrative office is currently located on the northwest corner of the Ecology Site. It will be temporarily relocated during remedial excavation activities. The Everett Ship Repair warehouse is also on site and access to it will be maintained throughout construction.

Landscape topography: The project site gently slopes from north/ northwest. to the southeast.

Drainage patterns: Overland flows cross existing asphalt-paved site generally from northwest to southeast towards a catch basin near the southeastern corner of the property. The drainage pipe system (storm system shown in Appendix A plans) drains to the north and outfalls to Port Gardner Bay. There are multiple nearby storm system catch basins that require protection throughout construction

Existing Vegetation: The site is nearly completely impervious with the exception of some shrubs and grasses, including Himalayan blackberry and butterfly bush on edge of site.

Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes): None

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody:

Port Gardner Bay

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

Table 1: Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration (mg/kg)
TPHg	Soil	2.5 to 20 feet	<10 to <100
TPHd	Soil	2.5 to 20 feet	<50 to 43,000
TPHmo	Soil	2.5 to 20 feet	<250 to 13,000
Benzene	Groundwater	2.5 to 20 feet	<1.0 to 2.6 mg/L
Ethylbenzene	Soil	2.5 to 20 feet	<1.0 to <4.0 mg/L
Total Xylenes	Soil	2.5 to 20 feet	<1.0 to <40 mg/L
Total cPAHs	Soil	2.5 to 20 feet	Not known
1-Methylnaphthalene	Soil	2.5 to 20 feet	Not known

Proposed Construction Activities (1.2)

Description of site development:

The Port of Everett Property Interim Action Remedial Excavation project is located within a Department of Ecology Clean Up Site (Ecology Site). The Ecology Site boundary is 3.37 acres, encompassing private property to the east of Federal Avenue, and Port of Everett (Port Property) to the west of Federal Avenue. The entire Ecology Site consists of a paved parking lot; portions of Federal Avenue, the Terminal Avenue Overpass, and the former Everett Avenue; and portions of Everett Ship Repair and Dunlap Towing. Historical releases of petroleum products have been documented at the Ecology Site due to former operation of bulk petroleum storage, transfer, and distribution facilities on the Ecology Site and operations of other companies on nearby parcels.

This project, the Port of Everett Interim Action Remedial Excavation, is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation on the Port Property on the west side of Federal Avenue. After construction activities, the project area will be backfilled, re-graded to preexisting contours, repaved, and restored to existing uses.

Description of construction activities (example: site preparation, demolition, excavation):

Proposed cleanup activities include excavation of impacted soils on the west side of Federal Avenue on Port Property, and groundwater monitoring of the Ecology Site. The scope of construction activities in order of sequence includes:

- Fencing removal and temporary fencing installation

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- Utility services disconnection, rerouting and protection
- Sawcutting, breakout and removal of asphalt
- Sheet pile shoring and low permeability barrier wall installation
- Remedial excavation
- Surface restoration
- Site restoration

Due to the shallow water table in the project area, water management during the excavation, including limited dewatering, may be necessary. Any wastewater generated during dewatering will be discharged to a City of Everett-approved discharge point. Impacted soil will be transported offsite by truck to a temporary staging area, then loaded onto trucks for transport to its final disposal location at a permitted landfill facility.

The soils beneath Federal Avenue will not be excavated, and the street will remain open during cleanup activities.

After excavation has been completed, a low permeability barrier wall will be constructed along the excavation sidewall on the western side of Federal Avenue. The barrier wall will limit LNAPL migration following the remedial excavation on the Port Property. Then shoring will be removed, and the area will be backfilled, re-graded to preexisting contours, repaved, and restored to existing uses.

Groundwater sampling occurs biannually at the site to monitor natural degradation of groundwater contaminants of concern (COCs) by natural processes in the areas below Federal Avenue, and otherwise inaccessible to excavation.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

Surface water drainage in the project area generally flows from north to south, and slightly west to east in the area of land disturbing activities. Flows reach catch basins with the right-of-way of Federal Avenue.

Description of final stabilization (example: extent of revegetation, paving, landscaping):
All disturbed areas will be paved to pre-existing surface conditions.

Contaminated Site Information:

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):

On-site pretreatment of contaminated groundwater will be provided by Contractor. Contractor should anticipate encountering groundwater contaminated within the COCs including but not limited to motor oil, diesel, gasoline, benzene, toluene, ethylbenzene, xylenes, polynuclear aromatic hydrocarbons, 1-methylnaphthalene and LNAPL.

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The groundwater collection and treatment system is designed to extract and treat up 150 gallons per minute (GPM) from the excavation pits. The water extraction and treatment system will include the following components:

- One 18,000-gallon capacity weir tank. The tank will act as a settling tank and capture any liquid phase hydrocarbons (LPH).
- Two 21,000-gallon capacity frac tanks. One of the tanks will be installed prior to the treatment and the second tank will be installed post treatment to allow batching of the discharge.
- One bag filter skid capable of treating over 150 gallons per minute (GPM).
- Four 2,000-pound capacity granular activated carbon (GAC) vessels to treat water prior to discharge.
- Miscellaneous pumps, hoses, fittings, flow meter, sample port, etc. to pump and treat water from the pit at a rate of 150 GPM.
- diesel generator to power the pumps.
- Discharge line from the treatment system to the sanitary sewer discharge point.
- Containment berms for the three tanks and filtration equipment ()

An initial batch of groundwater must be stored and sampled to produce analytical results showing the treated groundwater meets the City of Everett permissible limits in the following table.

Table 2: Permissible Pretreatment Limits for City of Everett Sanitary Sewer

Analyte	Limit (mg/L)
Arsenic	0.5
Cadmium	0.24
Chromium	5.0
Copper	3.0
Lead	1.9
Mercury	0.1
Nickel	2.83
Silver	0.49
Zinc	4.0
Copernicium	0.65
Nonpolar FOG	200
Hydrocarbons	200

In addition to the analyte limits above, the treated groundwater should have closed cup flashpoint of greater than 140 degrees Fahrenheit, no visible floating product, and nothing that creates fire or explosion hazards in the downstream sewer. The sampling of the groundwater and payment of laboratory charges shall be the responsibility of Cardno. Contractor shall assume a minimum 72 hours from time of sampling to receipt of laboratory results. The water

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generated during this decontamination shall also be stored, treated and discharged to the City of Everett sewer system in compliance with Discharge Permit that can be found in Appendix C

In addition to dewatering of removed material, the contractor will be required to decontaminate removed steel from the temporary shoring wall, prior to loading offsite.

Construction Stormwater Best Management Practices (BMPs) (2.0)

BMPs identified to control pollutants in stormwater discharges. Depending on the site, multiple BMPs for each element may be necessary. For each element identified:

- Clearly describe the control measure(s).
- Describe the implementation sequence.
- Describe the inspection and maintenance procedures for that specific BMP.
- Identify the responsible party for maintaining BMPs (if your SWPPP is shared by multiple operators, indicate the operator responsible for each BMP).

Categorize each BMP under one of the following elements as listed below:

SUMMARY OF CONSTRUCTION STORMWATER BMPS BY SWPPP ELEMENT

1. Preserve Vegetation / Mark Clearing Limits
 - a. No on-site vegetation to be preserved. Some invasive species in project vicinity
 - b. Limits of construction activity must be delineated with fencing
2. Establish Construction Access
 - a. C105 Stabilized Construction Access
3. Control Flow Rates
 - a. Not applicable
4. Install Sediment Controls
 - a. Not applicable, no sediment sources flowing into site
5. Stabilize Soils
 - a. C123 Plastic Covering
6. Protect Slopes
 - a. Not applicable, no slopes on site
7. Protect Drain Inlets
 - a. C220: Inlet Protection
8. Stabilize Channels and Outfalls
 - a. Not applicable, no outfalls at site and all discharge routed to sanitary system
9. Control Pollutants
 - a. C153: Material Delivery, Storage and Containment
 - b. S426 BMPs for Spills of Oil and Hazardous Substances
10. Control Dewatering
 - a. BMP C251: Construction Stormwater Filtration (Granular Activated Carbon Treatment) – Note that this BMP is being used only for groundwater sources, not overland flow at project.
11. Maintain BMPs
12. Manage the Project
13. Protect Low Impact Development
 - a. No existing low impact development on site, nearby proposed facilities possible

The 12 Elements (2.1)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e. hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

Element 1: Preserve Vegetation / Mark Clearing Limits (2.1.1)

List and describe BMPs:

C101: No on-site vegetation to be preserved.

Site fencing:

Metal fences shall be designed and installed according to the manufacturer's specifications.

Metal fences shall be at least 3 feet high and must be highly visible.

Maritime Security (MARSEC) Fencing: MARSEC-rated fencing used on site shown in Appendix A and must be a minimum of 8 feet high with an additional 1-foot top guard (ex: razor or barbed wire).

Other site fencing shown Appendix A drawings included 6-foot tall security fencing

Fences shall not be wired or stapled to trees.

Installation Schedules: Before other construction activities begin

Inspection and Maintenance plan:

If the fence has been damaged or visibility reduced, it shall be repaired or replaced immediately and visibility restored.

Responsible Staff: CESCL

Element 2: Establish Construction Access (2.1.2)

List and describe BMPs: C105 Stabilized Construction Access

If the site existing impervious cover is removed at any point where construction vehicles and trucks are accessing site, quarry spalls shall be placed to a thickness of 12" to stabilize equipment access.

Any sediment that is tracked onto pavement shall be removed by shoveling or street sweeping. The sediment collected by sweeping shall be removed or stabilized on site. The pavement shall NOT be cleaned by washing down the street, except when high-efficiency sweeping is ineffective and there is threat to public safety. If it is necessary to wash the streets, the construction of a small sump to contain the wash water shall be considered. The sediment would then be washed into the sump where it can be controlled.

Perform street sweeping by hand or with a high efficiency sweeper.

Installation Schedules: June 2022

Inspection and Maintenance plan: Any quarry spalls that are loosened from the pad, which end up on the roadway shall be removed immediately.

Street sweeping shall be performed after daily construction activities are completed at a minimum.

Responsible Staff: CESCL

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Element 3: Control Flow Rates (2.1.3)

Will you construct stormwater retention and/or detention facilities?

Yes **No**

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?

Yes **No**

List and describe BMPs: Not applicable

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

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Element 4: Install Sediment Controls (2.1.4)

List and describe BMPs: Not applicable, no sediment sources flowing into site

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

Element 5: Stabilize Soils (2.1.5)

Table 3: West of the Cascade Mountains Crest Soil Exposure Duration Limits

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: June 1, 2022 End date: September 30, 2022

Will you construct during the wet season?

Yes **No**

List and describe BMPs:

C123 Plastic Covering

Plastic covering may be installed over stockpiles. Excavation of contaminated soil may only be stockpiled on site for drying and must be placed in trucks for haul off as soon as feasible.

S429 BMPs for Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products

Contact between outside bulk materials and stormwater can cause leachate, and erosion of the stored materials. Contaminants may include TSS, BOD, organics, and dissolved salts (sodium, calcium, and magnesium chloride, etc.).

Pollutant Control Approach: Provide impervious containment with berms, dikes, etc. and/or cover to prevent run-on and discharge of leachate pollutant(s) and TSS. Applicable Operational BMPs:

- Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain, or to a receiving water.
- Maintain drainage areas in and around storage of solid materials with a minimum slope of 1.5 percent to prevent pooling and minimize leachate formation. Areas should be sloped to drain stormwater to the perimeter for collection or to internal drainage "alleyways" where no stock-piled material exists.
- Sweep paved storage areas regularly for collection and disposal of loose solid materials.
- If and when feasible, collect and recycle water-soluble materials (leachates).
- Stock cleanup materials, such as brooms, dustpans, and vacuum sweepers near the storage area

For stockpiles less than 5 cubic yards, place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material as shown in Figure IV5.7: Material Covered with Plastic Sheeting.

The source control BMP options listed below are applicable to:

Stockpiles greater than 5 cubic yards of erodible or water soluble materials such as:

- Soil
- Road deicing salts
- Compost
- Unwashed sand and gravel
- Sawdust

Outside storage areas for solid materials such as:

- Logs
- Bark
- Lumber
- Metal products

Choose one or more of the following Source Control BMPs: Store in a building or paved and bermed covered area as shown in Figure IV-5.6: Covered Storage Area for Bulk Solids.

- Place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent). Cover the material as shown in Figure IV-5.7: Material Covered with Plastic Sheeting. Pave the area and install a drainage system.
- Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.

For large uncovered stockpiles, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material offsite or to a storm drain. Ensure that no direct discharge of contaminated stormwater to catch basins exists without conveying runoff through an appropriate treatment BMP.

- Plastic slope cover must be installed as follows:
 1. Run plastic up and down the slope, not across the slope.
 2. Plastic may be installed perpendicular to a slope if the slope length is less than 10 feet.
 3. Provide a minimum of 8-inch overlap at the seams.
 4. On long or wide slopes, or slopes subject to wind, tape all seams.
 5. Place plastic into a small (12inch wide by 6inch deep) slot trench at the top of the slope and backfill with soil to keep water from flowing underneath.

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6. Place sand filled burlap or geotextile bags every 3 to 6 feet along seams and tie them together with twine to hold them in place.
 7. Inspect plastic for rips, tears, and open seams regularly and repair immediately. This prevents high velocity runoff from contacting bare soil, which causes extreme erosion.
 8. Sandbags may be lowered into place tied to ropes. However, all sandbags must be staked in place.
- Plastic sheeting shall have a minimum thickness of 0.06 millimeters.

If erosion at the toe of a slope is likely, a gravel berm, riprap, or other suitable protection shall be installed at the toe of the slope in order to reduce the velocity of runoff.

Installation Schedules: As needed throughout construction

Inspection and Maintenance plan:

Responsible Staff: CESCL

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Element 6: Protect Slopes (2.1.6)

Will steep slopes be present at the site during construction?

Yes **No**

List and describe BMPs: Not applicable

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

Element 7: Protect Drain Inlets (2.1.7)

List and describe BMPs:

C220: Inlet Protection

Insert catch basin filters just below the grating of all catch basins within 500 feet of the site. This includes any catch basin south of the site on Federal Avenue.

Installation Schedules: Install inlet protection prior to any disturbance activities. June 1, 2022.

Inspection and Maintenance plan: Inlets will be inspected weekly at a minimum and daily during storm events.

Responsible Staff: CESCL

Element 8: Stabilize Channels and Outlets (2.1.8)

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs: Not applicable.

Installation Schedules: Not applicable.

Inspection and Maintenance plan: Not applicable.

Responsible Staff: Not applicable.

Element 9: Control Pollutants (2.1.9)

The following pollutants are anticipated to be present on-site:

Table 4: Anticipated On-site Pollutants

Pollutant (and source, if applicable)
Fuel (construction equipment)
Petroleum (soil and groundwater being remediated)

List and describe BMPs: C153: Material Delivery, Storage and Containment

Fuel used on site for construction equipment must be stored with secondary containment. A fuel spill clean-up kit must be on site at all times

The on-site soil contaminants will be hauled offsite for permanent disposal.

Installation Schedules: Begins when equipment is mobilized, June 2022.

Inspection and Maintenance plan: Secondary containment for fueling activities must be monitored at all times.

Responsible Staff: CESCL

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?

Yes **No**

List and describe BMPs: S426 BMPs for Spills of Oil and Hazardous Substances

Installation Schedules: Begins when equipment is mobilized, June 2022.

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

Will wheel wash or tire bath system BMPs be used during construction?

Yes **No**

List and describe BMPs: Not applicable

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

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Will pH-modifying sources be present on-site?

Yes **No** If yes, check the source(s).

Table 5: pH-Modifying Sources

<input checked="" type="checkbox"/>	None
	Bulk cement
	Cement kiln dust
	Fly ash
	Other cementitious materials
	New concrete washing or curing waters
	Waste streams generated from concrete grinding and sawing
	Exposed aggregate processes
	Dewatering concrete vaults
	Concrete pumping and mixer washout waters
	Recycled concrete
	Other (i.e. calcium lignosulfate) [please describe]

Describe BMPs you will use to prevent pH-modifying sources from contaminating stormwater.

List and describe BMPs: Not applicable, only asphalt on site, no concrete

Installation Schedules: Not applicable

Inspection and Maintenance plan: Not applicable

Responsible Staff: Not applicable

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Element 10: Control Dewatering (2.1.10)

List and describe BMPs:

The site has shallow groundwater that is known to be contaminated. Dewatering will be minimized as feasible on site within the excavation area. On site treatment technology to meet requirements for discharge to City of Everett's sanitary system will be provided, otherwise materials will be hauled off-site by trucks for permitted disposal.

See Contaminated Site Information for description of groundwater and contaminated stormwater treatment system.

Table 6:Dewatering BMPs

	Infiltration
<input checked="" type="checkbox"/>	Transport off-site in a vehicle (vacuum truck for legal disposal)
	Ecology-approved on-site chemical treatment or other suitable treatment technologies
<input checked="" type="checkbox"/>	Sanitary or combined sewer discharge with local sewer district approval (last resort)
	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

Installation Schedules: TBD / See Appendix A, ICS Site Layout with Dewatering

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

Element 11: Maintain BMPs (2.1.11)

This section is a list of permit requirements and does not have to be filled out.

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW* or *Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

Element 12: Manage the Project (2.1.12)

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
 - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
 - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the [Site Map](#). Sampling station(s) are located in accordance with applicable requirements of the CSWGP. The site has no stormwater discharge points or sampling locations and none are shown in Appendix A.
- Maintain an updated SWPPP.
 - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Check all the management BMPs that apply at your site:

Table 7: Management

	Design the project to fit the existing topography, soils, and drainage patterns
	Emphasize erosion control rather than sediment control
	Minimize the extent and duration of the area exposed
	Keep runoff velocities low
	Retain sediment on-site
<input checked="" type="checkbox"/>	Thoroughly monitor site and maintain all ESC measures
<input checked="" type="checkbox"/>	Schedule major earthwork during the dry season
	Other (please describe)

Stormwater Pollution Prevention Plan
Washington State Department of Ecology, Construction Stormwater General Permit
Interim Action Remedial Excavation at Port of Everett

Optional: Fill out Table 6 by listing the BMP associated with specific construction activities. Identify the phase of the project (if applicable). To increase awareness of seasonal requirements, indicate if the activity falls within the wet or dry season.

Table 8: BMP Implementation Schedule

[illegible]

Element 13: Protect Low Impact Development (LID) BMPs (2.1.13)

No existing low impact development on project site, coordination with City of Everett on-going for nearby low impact development best management practices.

Pollution Prevention Team (3.0)

Table 9: Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	TBD	TBD
Resident Engineer	Jim Twiford	916-799-4839
Emergency Ecology Contact	Jason Cook	360-407-7170
Emergency Permittee/ Owner Contact	Bobby Thompson	206-510-5855
Non-Emergency Owner Contact	Cameron Penner-Ash	503 869 1196
Monitoring Personnel	TBD	TBD
Ecology Regional Office	Shoreline Receptionist	206-594-0000

Monitoring and Sampling Requirements (4.0)

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book.

Throughout construction of this project stormwater flows that would normally pass through the site in a 15-inch diameter storm pipe will be conveyed through a series of pumps and pipes to bypass the construction site and will be discharged into an existing stormwater vault in the northern region of the site.

As described in Contaminated Site Information section, any ground-water or rainwater that comes into contact with open excavation will be directed to treatment process including granular activated carbon and discharged to the sanitary sewer system as authorized by the City of Everett. Due to the lack of sheet flow on the site and sediments entering site, stormwater sampling for turbidity and pH will not be required and these sections have been omitted.

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections

A blank site inspection form is filed under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

Complete the following paragraph for sites that discharge to impaired waterbodies for fine sediment, turbidity, phosphorus, or pH:

The receiving waterbody, Port Gardner Bay, is impaired for: sediment contamination. However, as stated above all dewatering discharges from the site will be discharged to sanitary sewer. The effluent limit of 8.5 su for pH and/or 25 NTU for turbidity is not applicable. Discharges to sanitary sewer are subject to limits shown in Table 2: Permissible Pretreatment Limits for City of Everett Sanitary Sewer.

Site Inspection (4.1)

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

Stormwater Pollution Prevention Plan
Washington State Department of Ecology, Construction Stormwater General Permit
Interim Action Remedial Excavation at Port of Everett

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP. The site has no stormwater discharge points so none are shown in Appendix A.

Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies (5.0)

The Port of Everett Remedial Excavation project lies within the drainage basin of Port Gardner / Possession Sound. This receiving waterbody is a 303(d) listed waterbody. Port Gardner / Possession Sound do not have a total maximum daily load (TMDL) plan established between the City of Everett and Ecology. This project will not discharge project site stormwater into Port Gardner Bay.

303(d) Listed Waterbodies (5.1)

The 303(d) status is listed on the Water Quality Atlas: <https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d>

Circle the applicable answer, if necessary:

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

Yes No

List the impairment(s):

The receiving waterbody, Port Gardner Bay, is impaired for: sediment contamination.

If yes, discharges must comply with applicable effluent limitations in S8.C and S8.D of the CSWGP.

Describe the method(s) for 303(d) compliance:

As stated above, all dewatering discharges from the site will be discharged to sanitary sewer. The effluent limit of 8.5 su for pH and/or 25 NTU for turbidity is not applicable because no discharges to Port Gardner Bay will occur. Site groundwater and rainfall in excavation will be discharged to sanitary sewer and are subject to limits shown in Table 2: Permissible Pretreatment Limits for City of Everett Sanitary Sewer.

List and describe BMPs:

The contaminated groundwater and stormwater will be treated with a granular activated carbon system described in the Contaminated Site Information section that will be discharged to the sanitary sewer system. No construction stormwater will discharge to Port Gardner Bay.

TMDL Waterbodies (5.2)

Waste Load Allocation for CSWGP discharges:

No waste load allocations determined for Port Gardner Bay, and water coming from project site will be pretreating discharged to sanitary sewer.

List and describe BMPs:

The contaminated groundwater and stormwater will be treated with a granular activated carbon system described in the Contaminated Site Information section that will be discharged to the sanitary sewer system. No construction stormwater will discharge to Port Gardner Bay.

Reporting and Record Keeping (6.0)

Record Keeping (6.1)

Site Log Book (6.1.1)

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

Records Retention (6.1.2)

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

Updating the SWPPP (6.1.3)

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

Reporting (6.2)

Discharge Monitoring Reports (6.2.1)

Due to contaminated site, the stormwater system and outfall will not receive discharges from this project site. Discharges from the project site will be limited to dewatering activities that include pretreatment using granular activated carbon and discharge to sanitary sewer. See section on Contaminated Site Information.

Groundwater sampling will occur biannually. No Discharge Monitoring Reports (DMRs) are not necessary because site stormwater will not be discharged to a receiving waterbody at any time and land disturbance (excavation) totals less than 1 acre according to staging plans in Appendix A.

If it determined DMRs are still a requirement, DMRs will be reported online through Ecology's WQWebDMR System.

To sign up for WQWebDMR go to:

<https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>

Notification of Noncompliance (6.2.2)

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately, and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Specific information to be included in the noncompliance report is found in Special Condition S5.F.3 of the CSWGP.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- Northwest Region at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County

Include the following information:

1. Your name and / Phone number

Stormwater Pollution Prevention Plan
Washington State Department of Ecology, Construction Stormwater General Permit
Interim Action Remedial Excavation at Port of Everett

2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO₂ sparging is planned for adjustment of high pH water.

Appendices

Appendix A: Site Map and Drawings/Plans

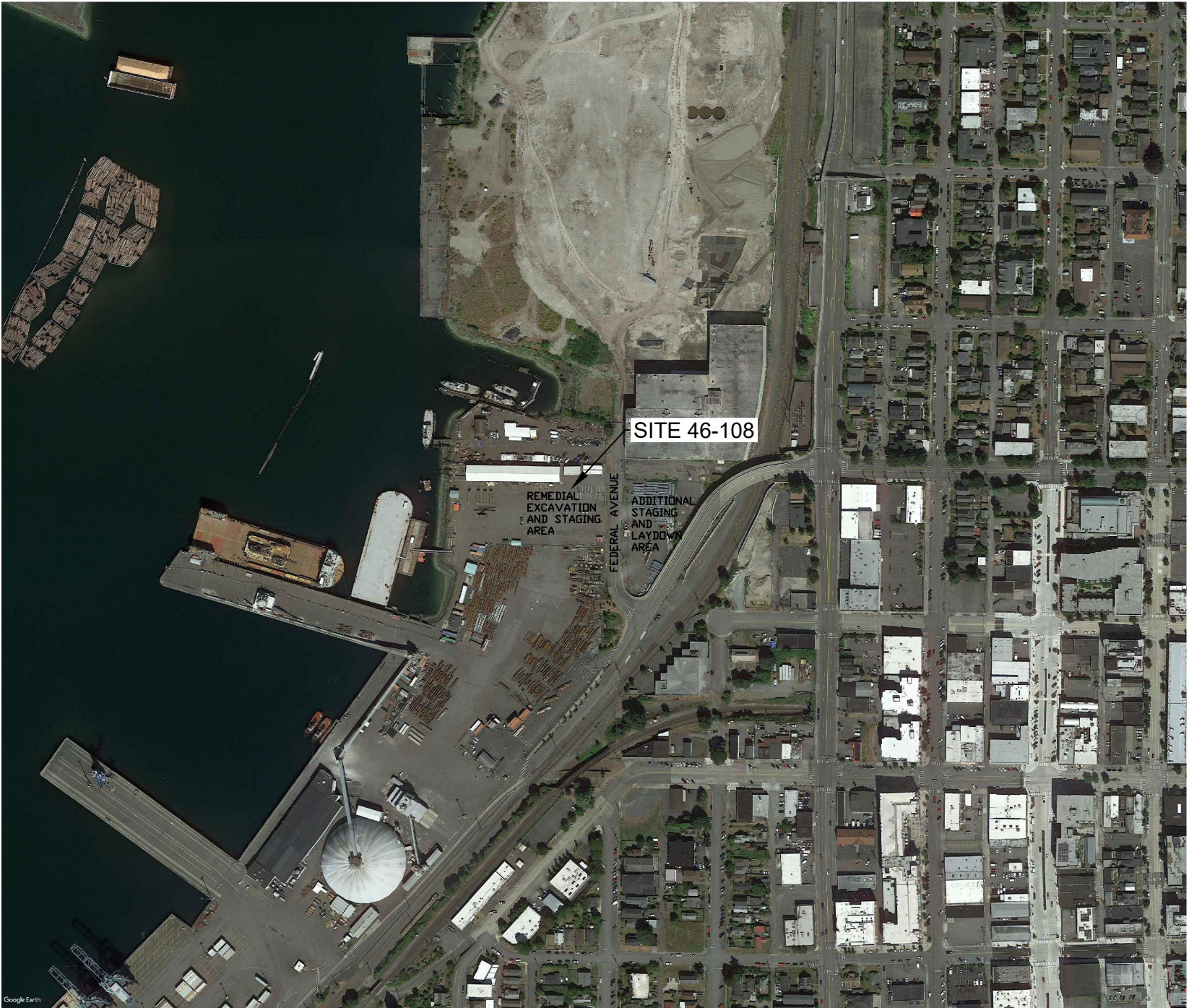
Port of Everett Remedial Excavation Site Plan

Request for Proposal (RFP) Plans 04/25/2022 Sheets 1 -3, 8-11

ICS Site Layout with Dewatering Sheets 4-7

Also, See Plate 12 of DRAFT: ExxonMobil ADC Site – Port of Everett Property Interim Action Plan provided in Contaminated Site Information Appendix G.

PORT OF EVERETT REMEDIAL EXCAVATION
EVERETT, WASHINGTON



DRAWING LIST:

- Sheet C1: SITE PLAN
- Sheet C2: TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN

PROJECT SITE ADDRESS:

3720 FEDERAL AVENUE, EVERETT WASHINGTON

PARCEL TAX ID:

- 29051900301600
- 29051900302500
- 29051900302700
- 29051900302800
- 29051900302900

SCOPE OF WORK:

Excavate and remove approximately 7,600 cubic yards of material to a depth of 20 feet, with the water table at a depth ranging from approximately 6 to 10 feet. Work will include shoring along Federal Avenue. Backfill and restore surface following excavation.

PROJECT NO.		3			DRAWING:	SITE PLAN	REMEDIAL EXCAVATION SITE PLAN	SHEET C1
031447		2						
		1						
FN: 031447- TITLE SHEET		0	03/21/22					
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	SCALE:	1"= 60'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
DATE: 03/21/22		DRAWN: HALEY ROBBERTZE						
		APPROVED: JIM TWIFORD						

LEGEND

- — — — —

EXTENT OF EXCAVATION
- — — — —

EXISTING WATER
- — — — —

EXISTING STORM DRAIN
- — — — —

EXISTING SANITARY SEWER
- x - - - - -

TEMPORARY CONSTRUCTION FENCING PHASE 1
(SEE SHEETS P3-P6 FOR ENTIRE CONSTRUCTION FENCING PLAN)

TOTAL SITE AREA (INCLUDING STAGING): 3.37 ACRES
AREA OF DISTURBANCE: 0.45 ACRES

ELEMENT #1: PRESERVE VEGETATION/MARKING CLEARING LIMITS
NO VEGETATION TO PROTECT, SEE STAGING PLANS 1 THROUGH 4 FOR CONSTRUCTION FENCING
(SEE SHEETS P3 THROUGH P6)

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS:
BMP C105: STABILIZED CONSTRUCTION ENTRANCE/EXIT

ELEMENT #3: CONTROL FLOW RATES:
NOT APPLICABLE TO PROJECT

ELEMENT #4: INSTALL SEDIMENT CONTROLS:
NOT APPLICABLE TO PROJECT

ELEMENT #5: STABILIZE SOILS:
BMP C123: PLASTIC COVERING

ELEMENT #6: PROTECT SOILS:
NOT APPLICABLE TO PROJECT

ELEMENT #7: PROTECT DRAIN INLETS
BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS
NOT APPLICABLE TO PROJECT

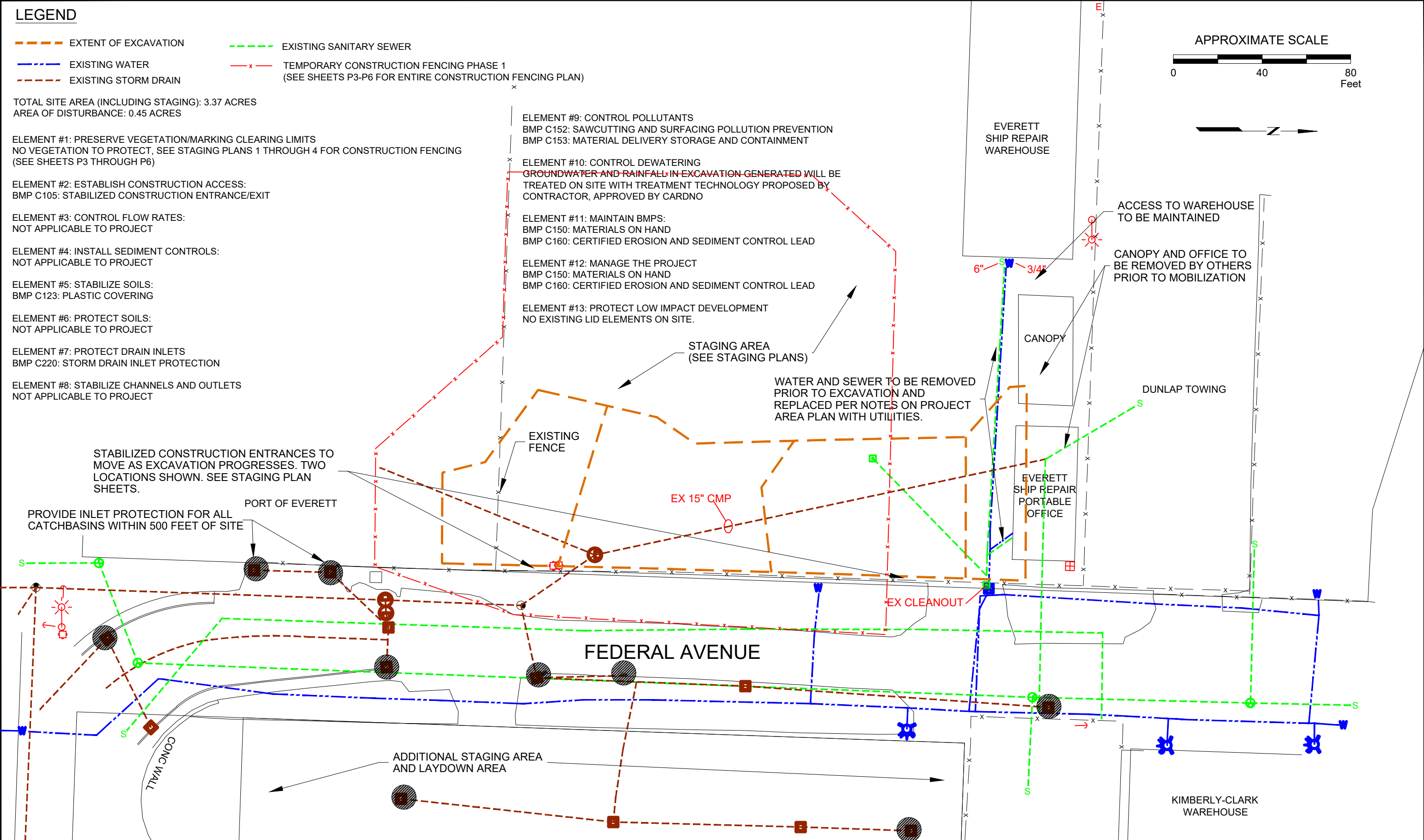
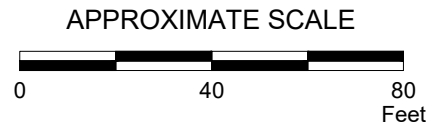
ELEMENT #9: CONTROL POLLUTANTS
BMP C152: SAWCUTTING AND SURFACING POLLUTION PREVENTION
BMP C153: MATERIAL DELIVERY STORAGE AND CONTAINMENT

ELEMENT #10: CONTROL DEWATERING
GROUNDWATER AND RAINFALL IN EXCAVATION GENERATED WILL BE TREATED ON SITE WITH TREATMENT TECHNOLOGY PROPOSED BY CONTRACTOR, APPROVED BY CARDNO

ELEMENT #11: MAINTAIN BMPs:
BMP C150: MATERIALS ON HAND
BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

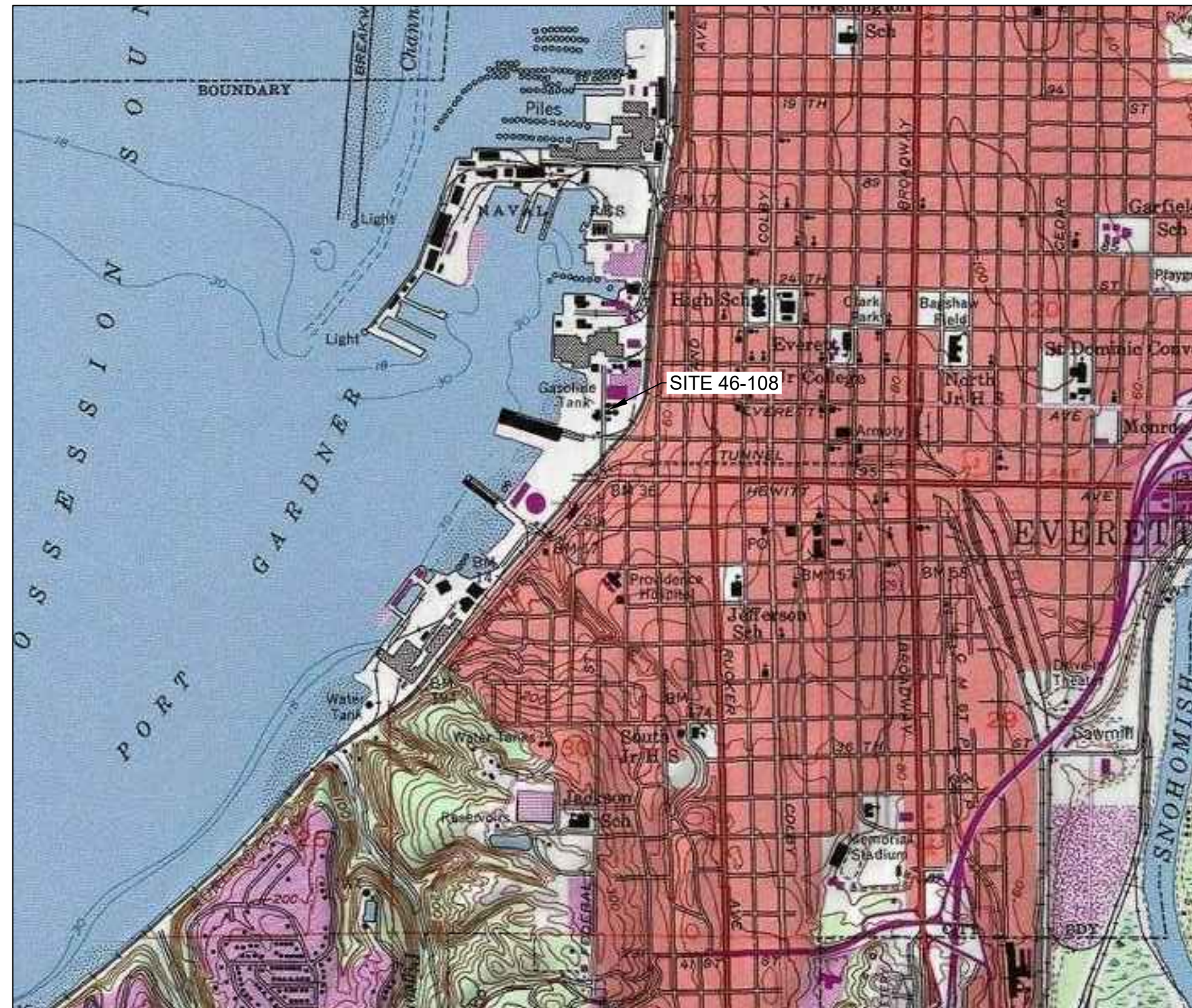
ELEMENT #12: MANAGE THE PROJECT
BMP C150: MATERIALS ON HAND
BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

ELEMENT #13: PROTECT LOW IMPACT DEVELOPMENT
NO EXISTING LID ELEMENTS ON SITE.



PROJECT NO.		3			DRAWING:	C-2	TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN	Sheet C2
031447		2						
		1						
FN: 031447- GSP		0						
LAST REV. DATE:		NO.	DATE	REVISIONS	SCALE:	1"= 40'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
			DRAWN: LESLIE HURLEY					
DATE: 05/03/22			APPROVED: BRIAN WOLF					

PORT OF EVERETT REMEDIAL EXCAVATION EVERETT, WASHINGTON

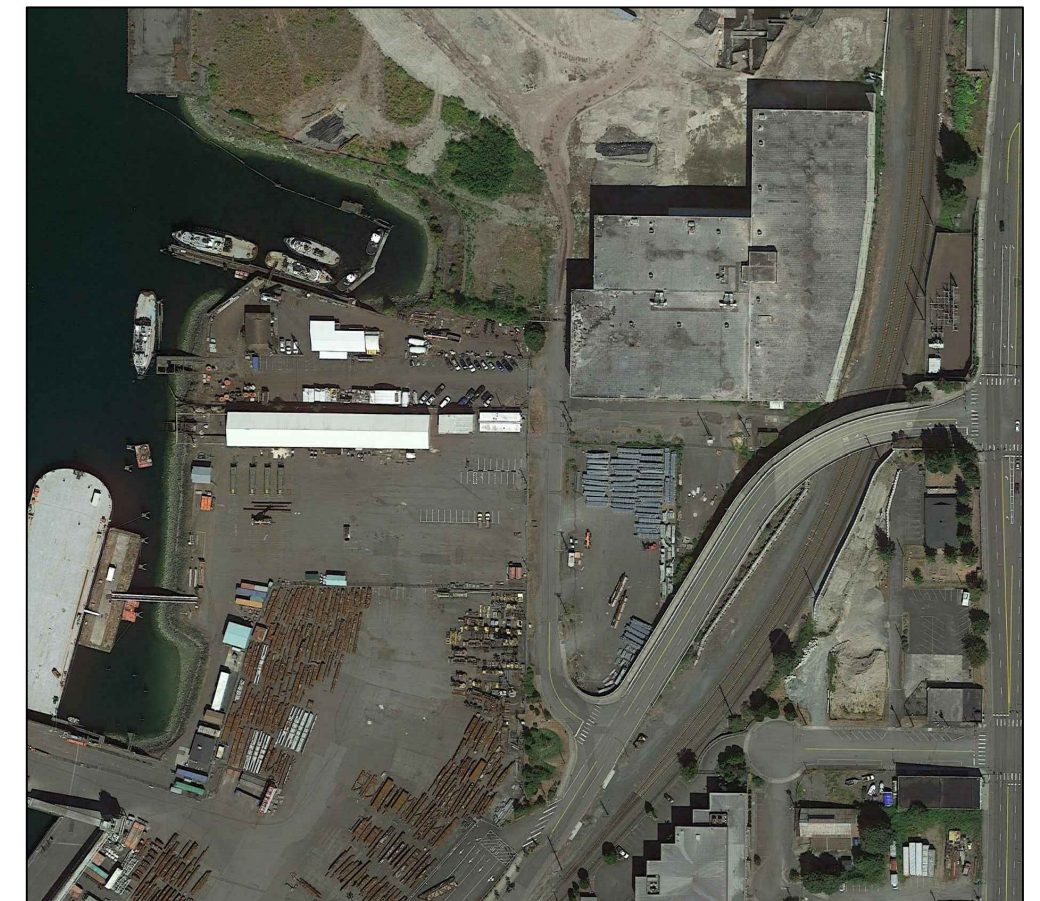


DRAWING LIST:

Sheet 1: TITLE SHEET
Sheet 2: P-1 PROJECT AREA PLAN
Sheet 3: P-2 PROJECT AREA PLAN WITH UTILITIES
Sheet 4: P-3 STAGING PLAN, PHASE 1
Sheet 5: P-4 STAGING PLAN, PHASE 2
Sheet 6: P-5 STAGING PLAN, PHASE 3
Sheet 7: P-6 STAGING PLAN, PHASE 4
Sheet 8: C-1 EXCAVATION PLAN
Sheet 9: C-2 EXCAVATION SECTION
Sheet 10: C-3 BACKFILL SECTION
Sheet 11: C-4 PAVING PLAN
Sheet 12: M-1 SHORING DESIGN

SCOPE OF WORK.

Excavate and remove approximately 7,600 cubic yards of material to a depth of 20 feet, with the water table at a depth ranging from approximately 6 to 10 feet. Work will include shoring along Federal Avenue. Backfill and restore surface following excavation.



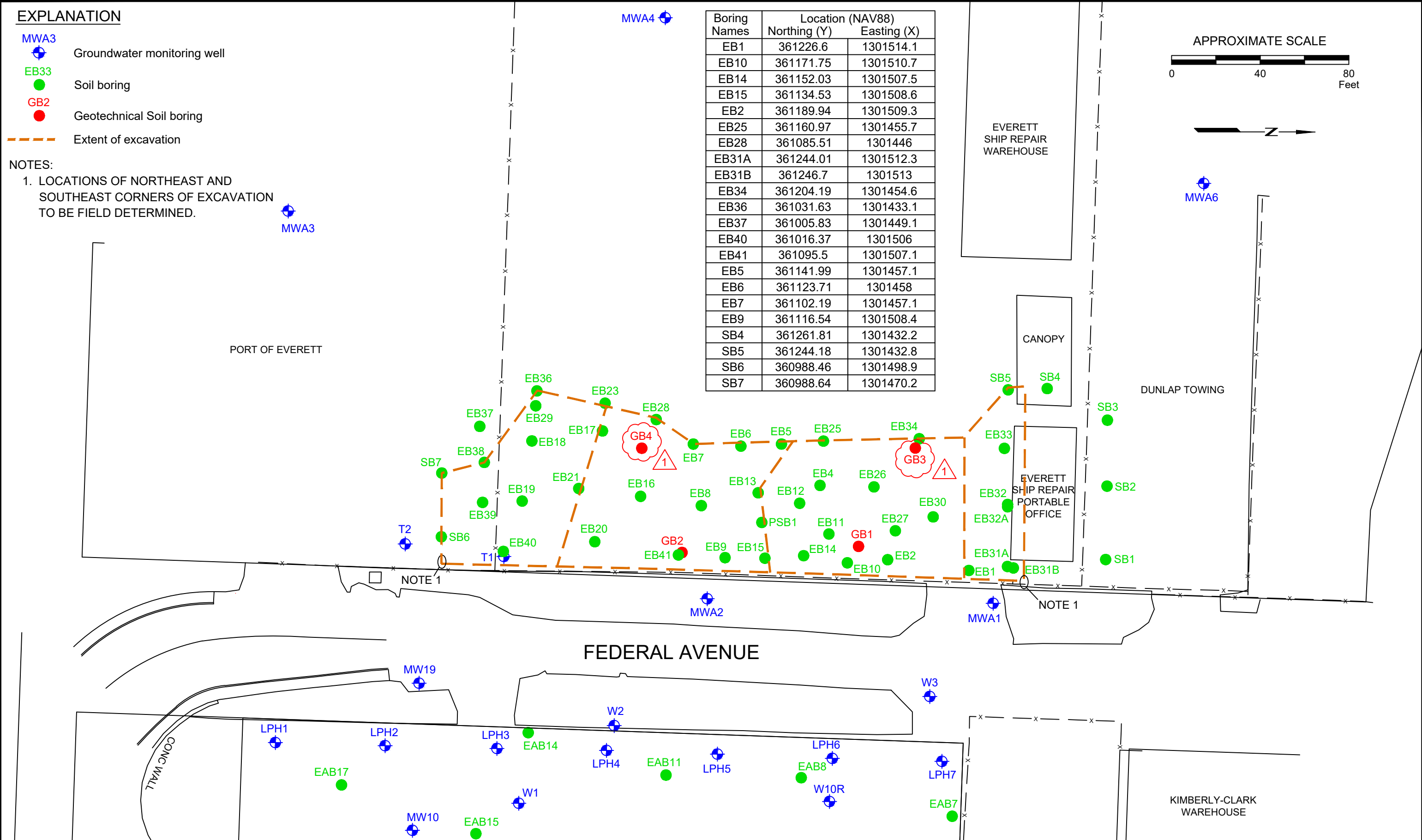
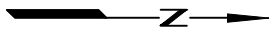
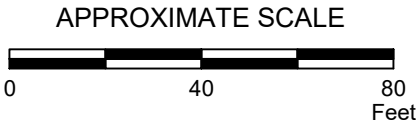
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031447		2							
		1							
		0	03/21/22						
		NO.	DATE	REVISIONS					
LAST REV. DATE: 03/21/22		DRAWN: HALEY ROBBERTZE		SCALE: 1"= 60'					
DATE: 03/21/22		APPROVED: JIM TWIFORD							

EXPLANATION

- MWA3 Groundwater monitoring well
- EB33 Soil boring
- GB2 Geotechnical Soil boring
- Extent of excavation

NOTES:
1. LOCATIONS OF NORTHEAST AND SOUTHEAST CORNERS OF EXCAVATION TO BE FIELD DETERMINED.

Boring Names	Location (NAV88)	
	Northing (Y)	Easting (X)
EB1	361226.6	1301514.1
EB10	361171.75	1301510.7
EB14	361152.03	1301507.5
EB15	361134.53	1301508.6
EB2	361189.94	1301509.3
EB25	361160.97	1301455.7
EB28	361085.51	1301446
EB31A	361244.01	1301512.3
EB31B	361246.7	1301513
EB34	361204.19	1301454.6
EB36	361031.63	1301433.1
EB37	361005.83	1301449.1
EB40	361016.37	1301506
EB41	361095.5	1301507.1
EB5	361141.99	1301457.1
EB6	361123.71	1301458
EB7	361102.19	1301457.1
EB9	361116.54	1301508.4
SB4	361261.81	1301432.2
SB5	361244.18	1301432.8
SB6	360988.46	1301498.9
SB7	360988.64	1301470.2



PROJECT NO.
031447

FN: 031447- GSP

LAST REV. DATE: 04/25/22

DATE: 03/21/22

3		
2		
1	04/25/22	ADDED GEOTECHNICAL BORINGS GB3 AND GB4
0	03/21/22	
NO.	DATE	REVISIONS

DRAWN: HALEY ROBERTZE
APPROVED: JIM TWIFORD

DRAWING:
P-1

SCALE:
1"= 40'

PROJECT AREA PLAN

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

Sheet 2

EXPLANATION

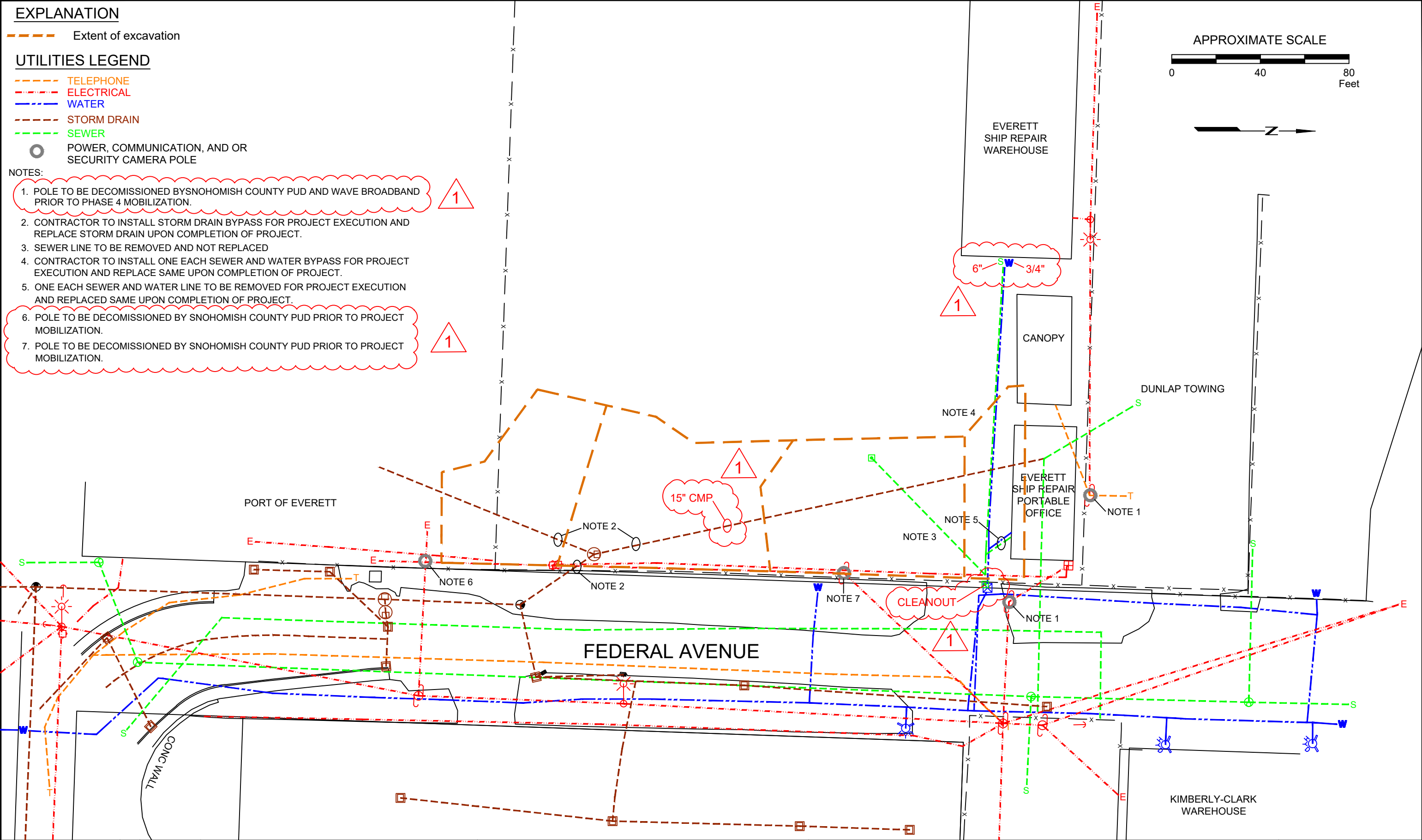
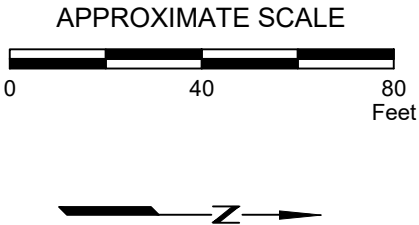
Extent of excavation

UTILITIES LEGEND

- TELEPHONE
- ELECTRICAL
- WATER
- STORM DRAIN
- SEWER
- POWER, COMMUNICATION, AND OR SECURITY CAMERA POLE

NOTES:

- POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD AND WAVE BROADBAND PRIOR TO PHASE 4 MOBILIZATION.
- CONTRACTOR TO INSTALL STORM DRAIN BYPASS FOR PROJECT EXECUTION AND REPLACE STORM DRAIN UPON COMPLETION OF PROJECT.
- SEWER LINE TO BE REMOVED AND NOT REPLACED
- CONTRACTOR TO INSTALL ONE EACH SEWER AND WATER BYPASS FOR PROJECT EXECUTION AND REPLACE SAME UPON COMPLETION OF PROJECT.
- ONE EACH SEWER AND WATER LINE TO BE REMOVED FOR PROJECT EXECUTION AND REPLACED SAME UPON COMPLETION OF PROJECT.
- POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD PRIOR TO PROJECT MOBILIZATION.
- POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD PRIOR TO PROJECT MOBILIZATION.



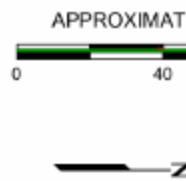
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	2		
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FN: 031447- GSP	0	03/21/22	
LAST REV. DATE: 04/25/22	NO.	DATE	REVISIONS
DATE: 03/21/22	DRAWN:	HALEY ROBBERTZE	
	APPROVED:	JIM TWIFORD	

DRAWING:	P-2
SCALE:	1"= 40'

PROJECT AREA PLAN WITH UTILITIES
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 3

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate



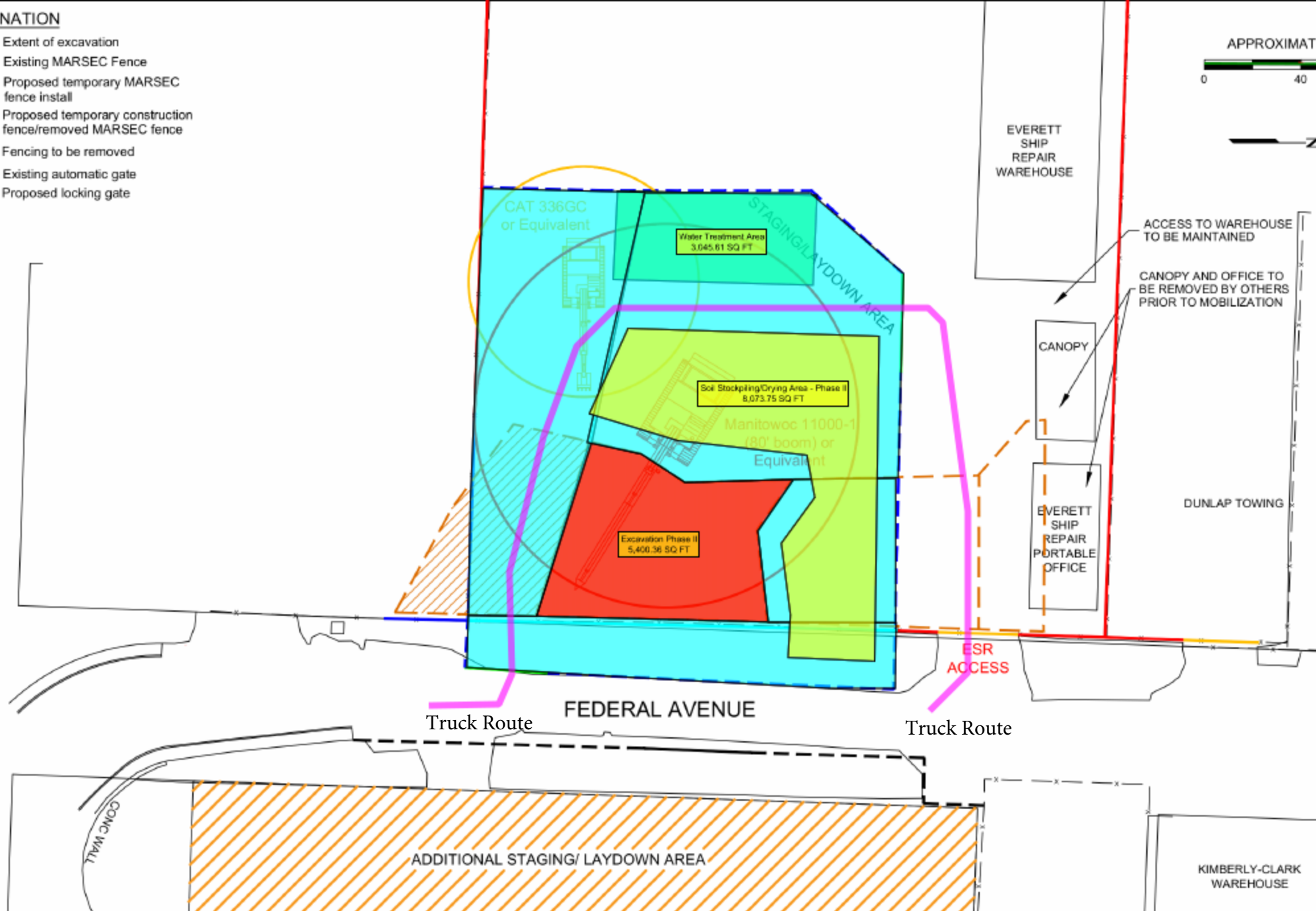
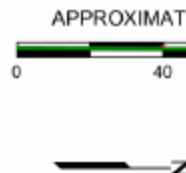
DRAWING: **P-3**

SCALE: 1"= 40'

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate



PROJECT NO.		3			DRAWING	P-3	STAGING PLAN - PHASE 2
031447		2					
		1					
		0	03/21/22				
PM: 03/14/22 - GSP		NO.	DATE	REVISIONS	SCALE: 1"= 40'		PORT OF EVERETT 2730 Federal Avenue Everett, Washington
LAST REV. DATE: 03/21/22		DRAWN: HALEY ROBERTZ					
DATE: 03/21/22		APPROVED: JIM THORP					

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

EVERETT
SHIP
REPAIR
WAREHOUSE

Water Treatment Area	3,075.59 SQ FT
----------------------	----------------

Soil Stockpiling/Drying Area - Phase II
15,000 11 SQ FT

Manitowoc 11000-1
(80' boom) or
Equivalent

Excavation - Phase
5,409.52 SQ FT

DUNLAP TOWING

ESR
ACCESS

Truck Route

FEDERAL AVENUE

Truck Route

KIMBERLY-CLARK
WAREHOUSE

ADDITIONAL STAGING/ LAYDOWN AREA

[illegible]

CRAWFORD

P-3

SCALE: $1" = 40'$

STAGING PLAN - PHASE 3

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

EVERETT
SHIP
REPAIR
TEMPORARY
OFFICE

EVERETT
SHIP
REPAIR
WAREHOUSE

APPROXIMATE

0 40

0 40

Water Treatment Area
3,042.52 SQ FT

STAGING/LAYDOWN AREA

CAT 338GC
or Equivalent

Manitowoc 11000-1
(80' boom) or
Equivalent

Soil Stockpiling/Drying Area - Phase IV
21,003.98 SQ FT

Excavation - Phase IV
2,117.49 SQ FT

ESR
ACCESS

Truck Route

FEDERAL AVENUE

Truck Route

DUNLAP TOWING

CONC
WALL

ADDITIONAL STAGING/ LAYDOWN AREA

KIMBERLY-CLARK
WAREHOUSE

PROJECT NO.
031447

P-3

STAGING PLAN - PHASE 4

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

1" = 40'

PROJECT NO.	031447	DATE	03/21/22
LAST REV. DATE	03/21/22	DATE	03/21/22
DATE	03/21/22	DATE	03/21/22
DRAWN BY	HALEY ROBERTZ	APPROVED BY	JIM TAYLOR
REVISIONS			

DRAWING	P-3
SCALE	1" = 40'

EXPLANATION

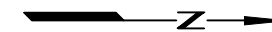
- Extent of excavation
- Existing MARSEC Fence
- Fencing to be removed for work and replaced at conclusion of project
- Existing automatic gate
- Shoring to be left in place
- Shoring to be removed at conclusion of excavation

UTILITIES LEGEND

- TELEPHONE
- ELECTRICAL
- WATER
- STORM DRAIN
- SEWER

NOTE:
ADDITIONAL FENCING AND GATE
DETAILS SHOWN ON SHEETS 4
THROUGH 7

APPROXIMATE SCALE



EVERETT
SHIP REPAIR
WAREHOUSE

CANOPY AND OFFICE TO
BE REMOVED BY OTHERS
PRIOR TO MOBILIZATION

SHEET PILE SHORING
DWG M-1, SHEET 12

CANOPY

20' BGS

17.5' BGS

12.5' BGS

EVERETT
SHIP REPAIR
PORTBLE
OFFICE

15' BGS

10' BGS

7.5' BGS

10' BGS

SHEET PILE
SHORING
DWG M-1,
SHEET 12

FEDERAL AVENUE

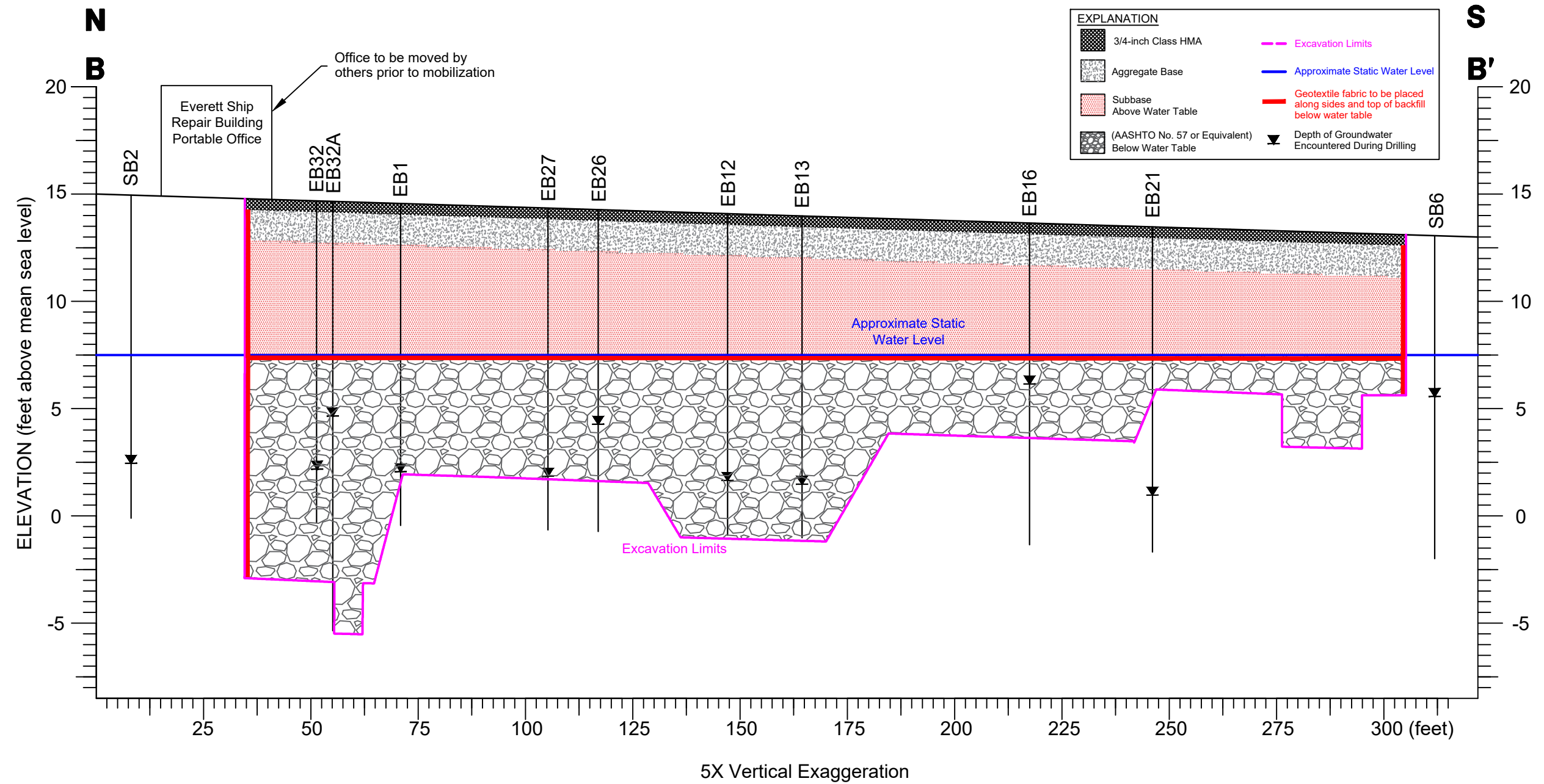
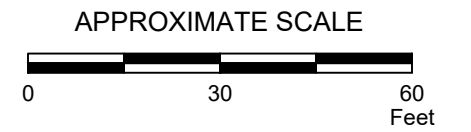
PROJECT NO.	031447	3			
		2			
		1			
FN: 031447- GSP		0	03/21/22		
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	
DATE: 03/21/22		DRAWN:	HALEY ROBBERTZE		
		APPROVED:	JIM TWIFORD		


DRAWING:	C-1
SCALE:	1"= 20'

EXCAVATION PLAN
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 8

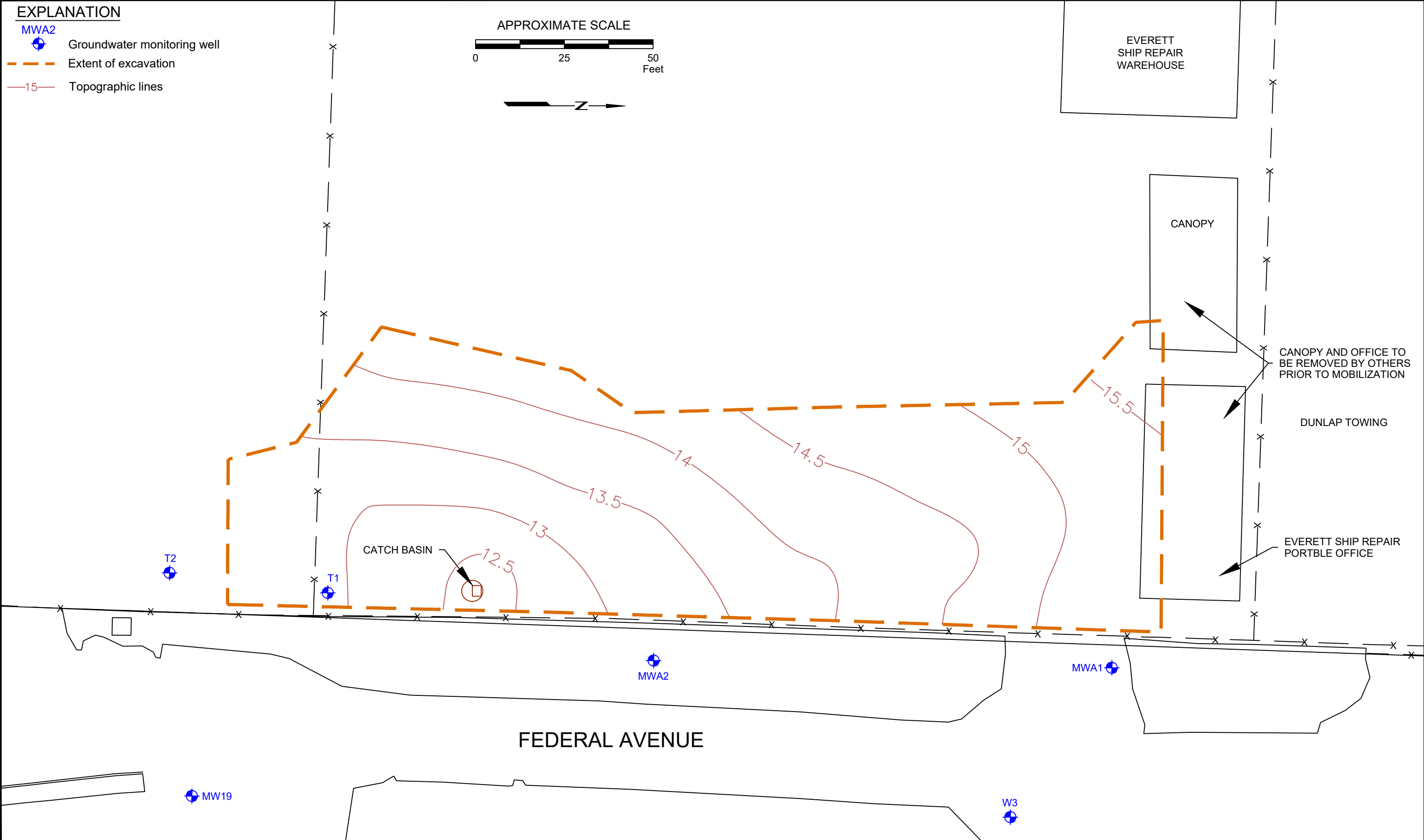
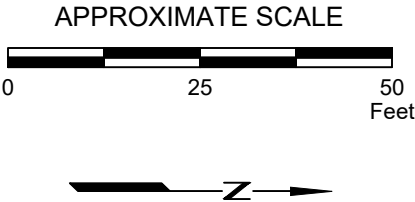
NOTE:
REFER TO TECHNICAL SPECIFICATIONS FOR DETAILS
ON BACKFILL MATERIALS AND PLACEMENT



PROJECT NO.		3			DRAWING:	C-3	BACKFILL SECTION	Sheet 10
031447		2						
		1						
FN: 031447- TITLE SHEET		0	03/21/22					
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	SCALE:	1"= 30'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
DATE: 03/21/22		DRAWN: HALEY ROBBERTZE						
		APPROVED: JIM TWIFORD						

EXPLANATION

- MWA2 Groundwater monitoring well
- Extent of excavation
- 15 Topographic lines



PROJECT NO. 031447		3			DRAWING: C-4	PAVING PLAN PORT OF EVERETT 2730 Federal Avenue Everett, Washington	Sheet 11	
FN: 031447-C-4 PAVING PLAN		2						
		1						
		0	03/21/22					
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	SCALE: 1"= 25'			
DATE: 03/21/22		DRAWN: HALEY ROBBERTZE						
		APPROVED: JIM TWIFORD						

Appendix B: Department of Ecology 2019 SWMMWW BMP Descriptions

Insert BMPs specification sheets here.

Download BMPs from the Ecology Construction Stormwater website at:

<https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals>

Maintenance Standards

If the fence has been damaged or visibility reduced, it shall be repaired or replaced immediately and visibility restored.

BMP C105: Stabilized Construction Access

Purpose

Stabilized construction accesses are established to reduce the amount of sediment transported onto paved roads outside the project site by vehicles or equipment. This is done by constructing a stabilized pad of quarry spalls at entrances and exits for project sites.

Conditions of Use

Construction accesses shall be stabilized wherever traffic will be entering or leaving a construction site if paved roads or other paved areas are within 1,000 feet of the site.

For residential subdivision construction sites, provide a stabilized construction access for each residence, rather than only at the main subdivision entrance. Stabilized surfaces shall be of sufficient length/width to provide vehicle access/parking, based on lot size and configuration.

On large commercial, highway, and road projects, the designer should include enough extra materials in the contract to allow for additional stabilized accesses not shown in the initial Construction SWPPP. It is difficult to determine exactly where access to these projects will take place; additional materials will enable the contractor to install them where needed.

Design and Installation Specifications

See [Figure II-3.1: Stabilized Construction Access](#) for details. Note: the 100' minimum length of the access shall be reduced to the maximum practicable size when the size or configuration of the site does not allow the full length (100').

Construct stabilized construction accesses with a 12-inch thick pad of 4-inch to 8-inch quarry spalls, a 4-inch course of asphalt treated base (ATB), or use existing pavement. Do not use crushed concrete, cement, or calcium chloride for construction access stabilization because these products raise pH levels in stormwater and concrete discharge to waters of the State is prohibited.

A separation geotextile shall be placed under the spalls to prevent fine sediment from pumping up into the rock pad. The geotextile shall meet the standards listed in [Table II-3.2: Stabilized Construction Access Geotextile Standards](#).

**Table II-3.2: Stabilized Construction Access
Geotextile Standards**

Geotextile Property	Required Value
Grab Tensile Strength (ASTM D4751)	200 psi min.

**Table II-3.2: Stabilized Construction Access
Geotextile Standards (continued)**

Geotextile Property	Required Value
Grab Tensile Elongation (ASTM D4632)	30% max.
Mullen Burst Strength (ASTM D3786-80a)	400 psi min.
AOS (ASTM D4751)	20-45 (U.S. standard sieve size)

- Consider early installation of the first lift of asphalt in areas that will be paved; this can be used as a stabilized access. Also consider the installation of excess concrete as a stabilized access. During large concrete pours, excess concrete is often available for this purpose.
- Fencing (see [BMP C 103: High-Visibility Fence](#)) shall be installed as necessary to restrict traffic to the construction access.
- Whenever possible, the access shall be constructed on a firm, compacted subgrade. This can substantially increase the effectiveness of the pad and reduce the need for maintenance.
- Construction accesses should avoid crossing existing sidewalks and back of walk drains if at all possible. If a construction access must cross a sidewalk or back of walk drain, the full length of the sidewalk and back of walk drain must be covered and protected from sediment leaving the site.

Alternative Material Specification

WSDOT has raised safety concerns about the Quarry Spall rock specified above. WSDOT observes that the 4-inch to 8-inch rock sizes can become trapped between Dually truck tires, and then released off-site at highway speeds. WSDOT has chosen to use a modified specification for the rock while continuously verifying that the Stabilized Construction Access remains effective. To remain effective, the BMP must prevent sediment from migrating off site. To date, there has been no performance testing to verify operation of this new specification. Jurisdictions may use the alternative specification, but must perform increased off-site inspection if they use, or allow others to use, it.

Stabilized Construction Accesses may use material that meets the requirements of WSDOT's *Standard Specifications for Road, Bridge, and Municipal Construction* Section 9-03.9(1) ([WSDOT, 2016](#)) for ballast except for the following special requirements.

The grading and quality requirements are listed in [Table II-3.3: Stabilized Construction Access Alternative Material Requirements](#).

**Table II-3.3: Stabilized
Construction Access
Alternative Material
Requirements**

Sieve Size	Percent Passing
2½"	99-100

**Table II-3.3: Stabilized
Construction Access
Alternative Material
Requirements
(continued)**

Sieve Size	Percent Passing
2"	65-100
¾"	40-80
No. 4	5 max.
No. 100	0-2
% Fracture	75 min.

- All percentages are by weight.
- The sand equivalent value and dust ratio requirements do not apply.
- The fracture requirement shall be at least one fractured face and will apply the combined aggregate retained on the No. 4 sieve in accordance with FOP for AASHTO T 335.

Maintenance Standards

Quarry spalls shall be added if the pad is no longer in accordance with the specifications.

- If the access is not preventing sediment from being tracked onto pavement, then alternative measures to keep the streets free of sediment shall be used. This may include replacement/cleaning of the existing quarry spalls, street sweeping, an increase in the dimensions of the access, or the installation of [BMP C106: Wheel Wash](#).
- Any sediment that is tracked onto pavement shall be removed by shoveling or street sweeping. The sediment collected by sweeping shall be removed or stabilized on site. The pavement shall not be cleaned by washing down the street, except when high efficiency sweeping is ineffective and there is a threat to public safety. If it is necessary to wash the streets, the construction of a small sump to contain the wash water shall be considered. The sediment would then be washed into the sump where it can be controlled.
- Perform street sweeping by hand or with a high efficiency sweeper. Do not use a non-high efficiency mechanical sweeper because this creates dust and throws soils into storm systems or conveyance ditches.
- Any quarry spalls that are loosened from the pad, which end up on the roadway shall be removed immediately.
- If vehicles are entering or exiting the site at points other than the construction access(es), [BMP C103: High-Visibility Fence](#) shall be installed to control traffic.

- Upon project completion and site stabilization, all construction accesses intended as permanent access for maintenance shall be permanently stabilized.

Figure II-3.1: Stabilized Construction Access

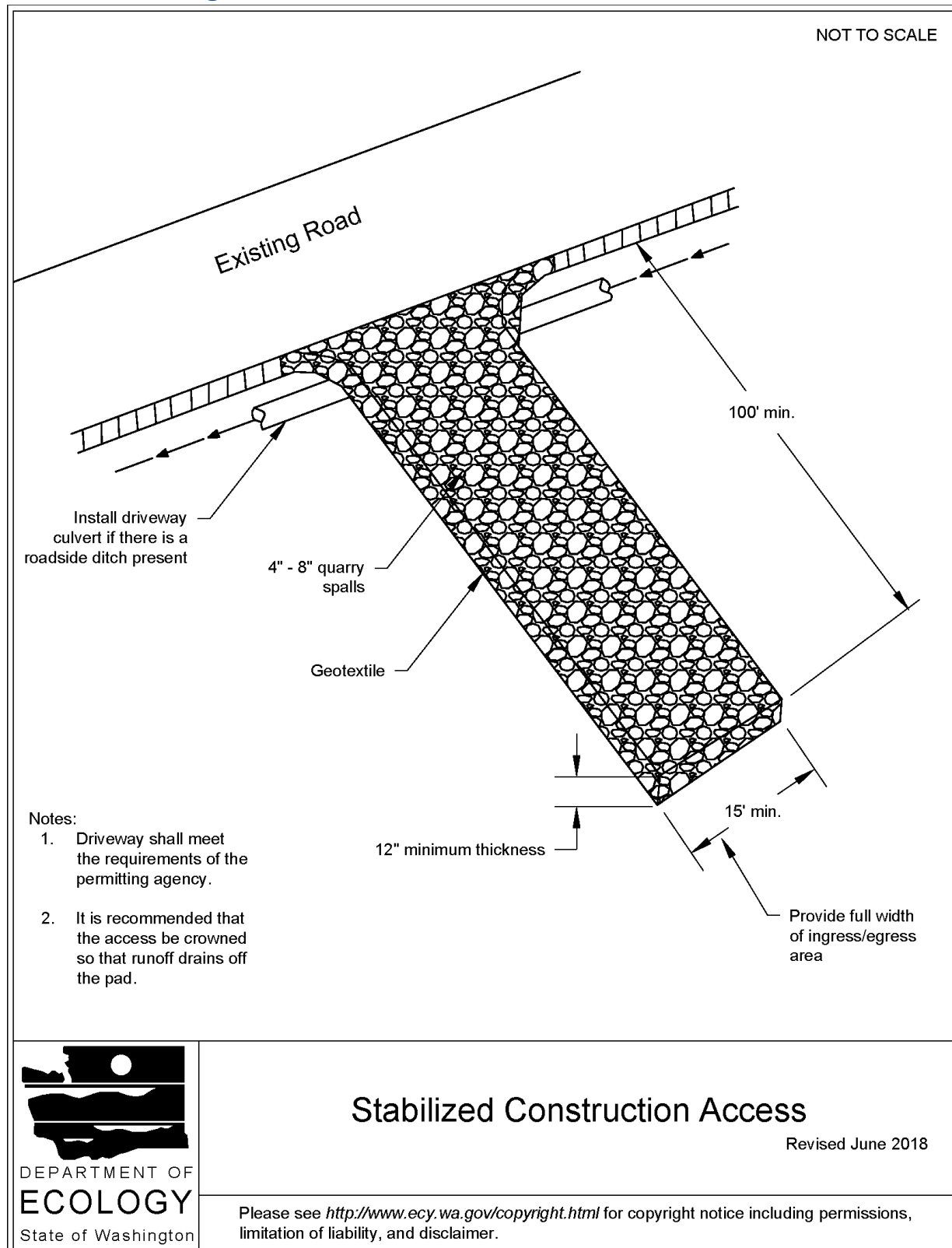
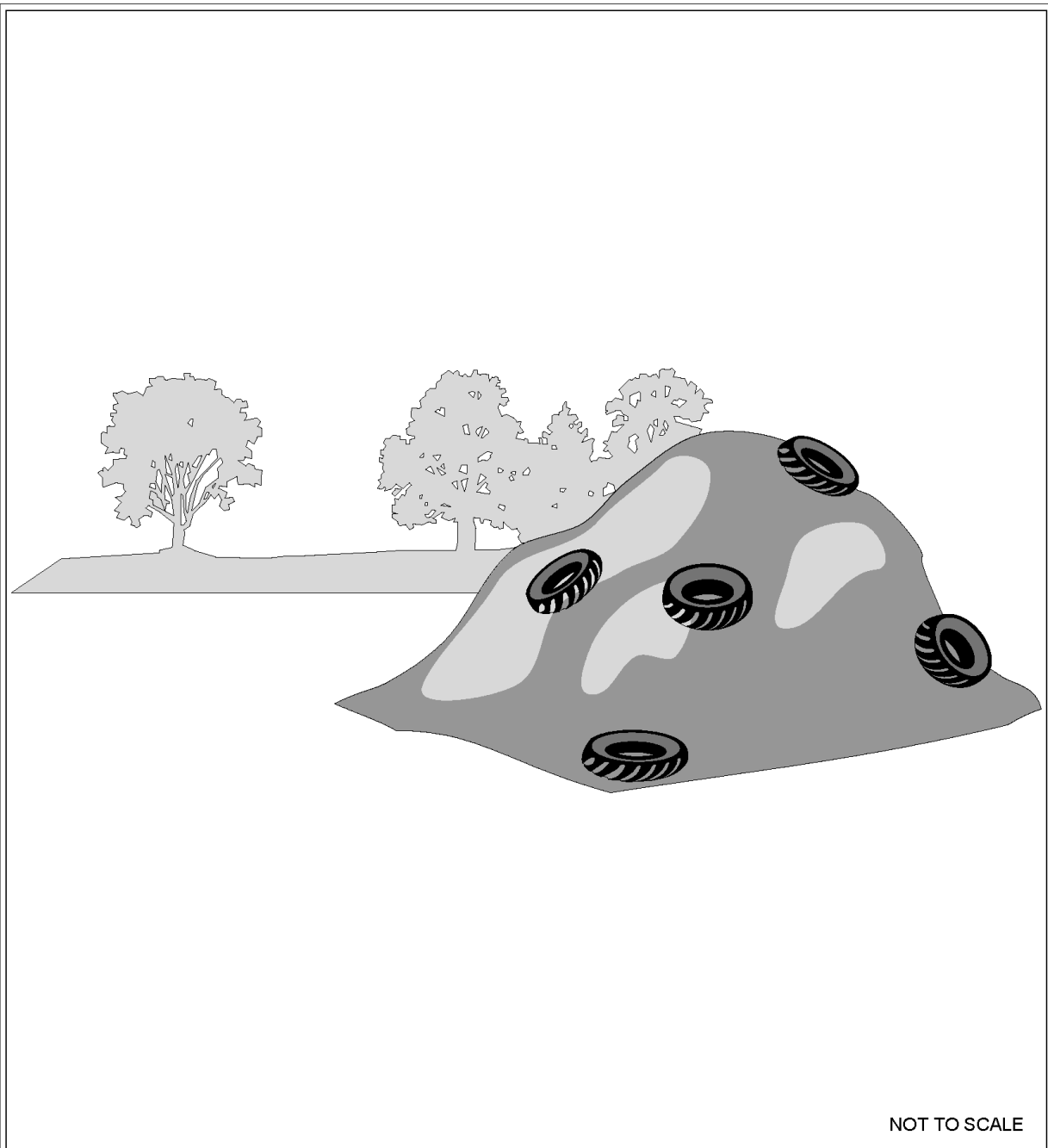


Figure IV-5.7: Material Covered with Plastic Sheet



Material Covered with Plastic Sheet

Revised June 2016

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Figure II-3.4: Slope Installation

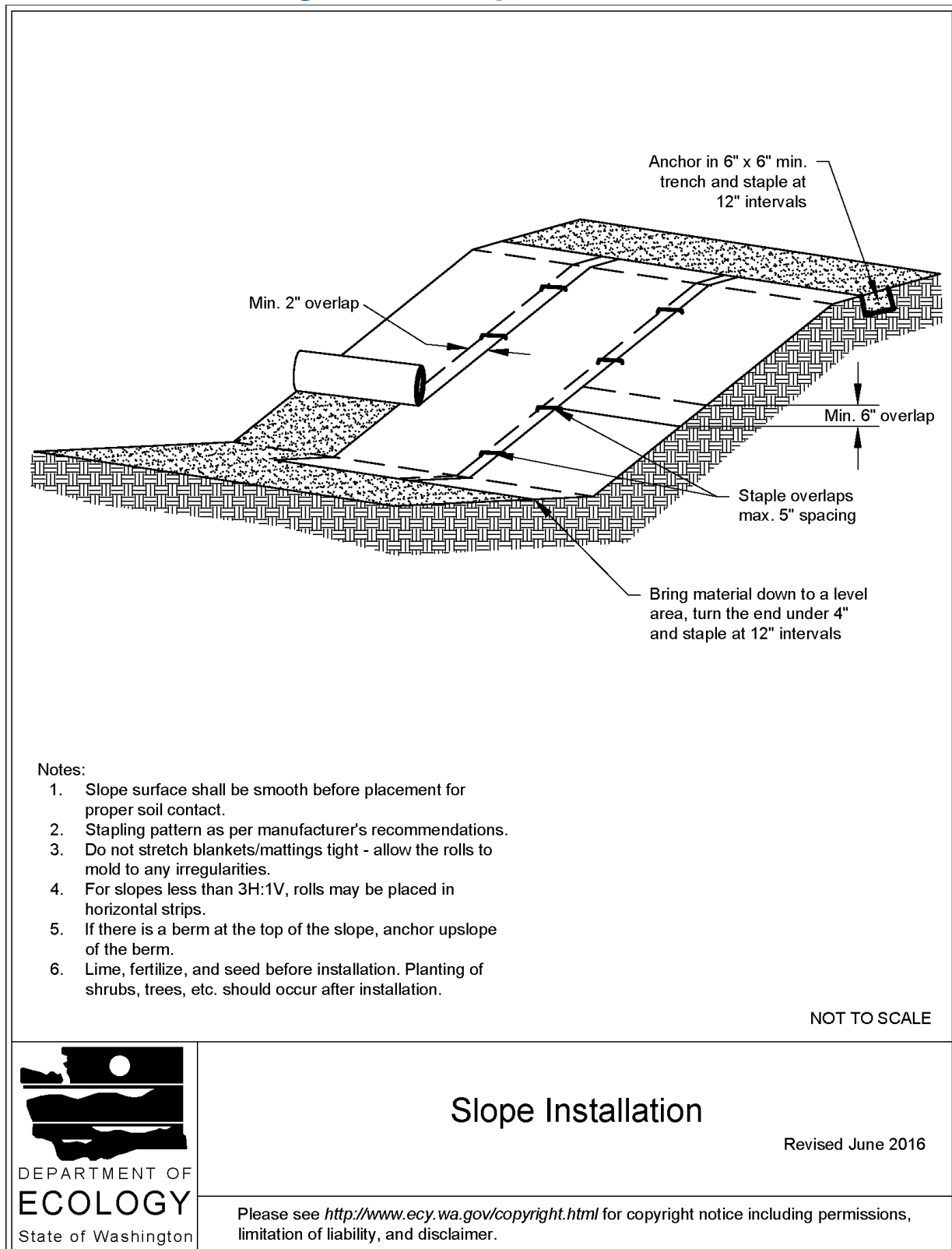
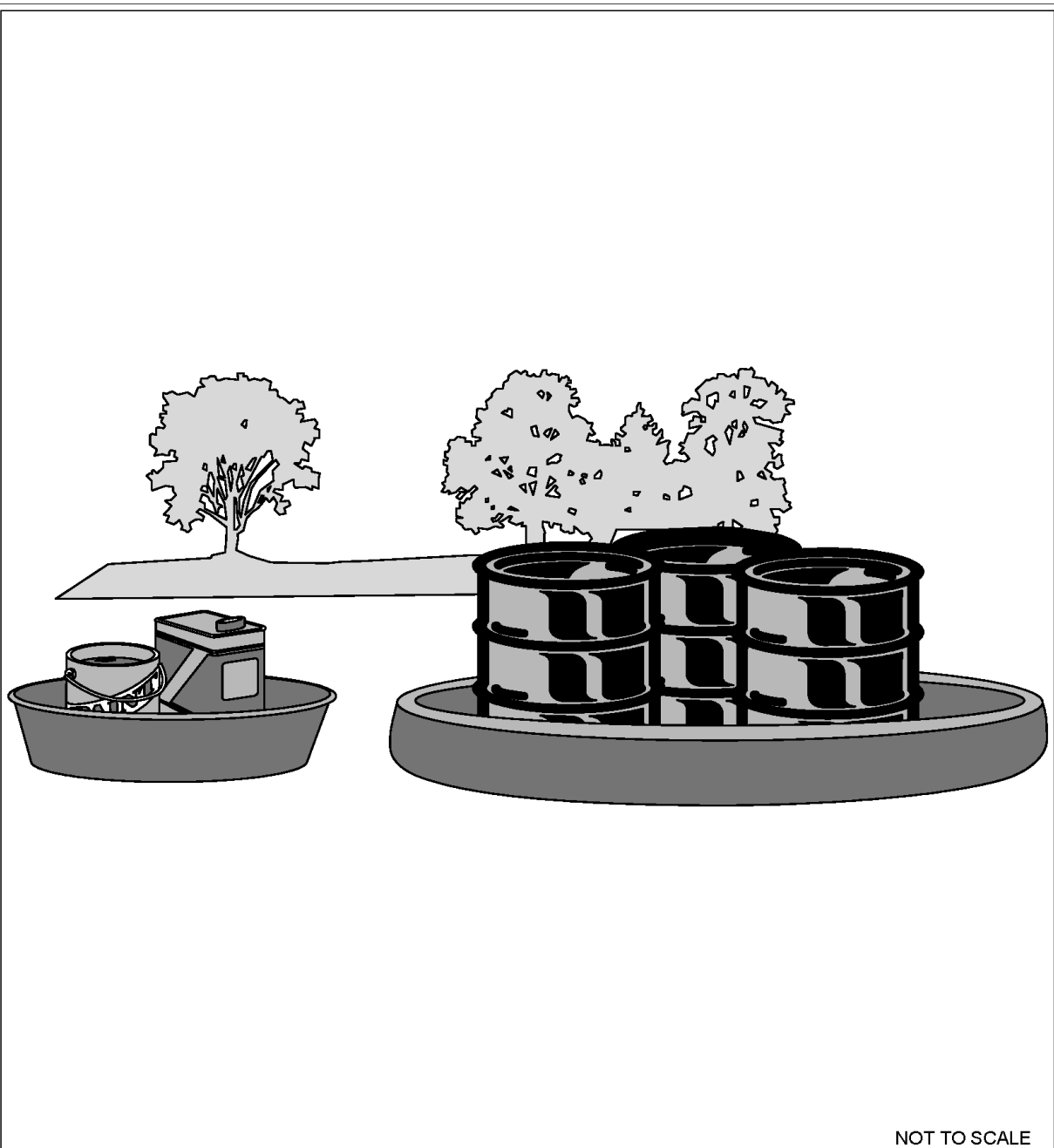


Figure IV-5.1: Secondary Containment System



Secondary Containment System

Revised June 2016

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Appendix C: Correspondence

Ecology

See Appendix G document correspondence for Contaminated Site Information

EPA

None applicable

Local Government (City of Everett)

Discharge Authorization No. MD-46-2022

March 2, 2022

Cameron Penner-Ash
Cardno now Stantec
309 South Cloverdale Street A13
Seattle WA 98104

Subject: Discharge Authorization No. MD-46-2022
7000 & 7100 Hardeson Rd, Everett WA 98201
Expires: December 31, 2022

Dear Mr. Penner-Ash:

Cardno now Santec is hereby authorized to discharge site related water from the construction site. Discharge will be allowed for the permit duration. The discharge will be allowed upon the City's receipt of the signed acceptance of this letter and with the proper notification to the City that the work will proceed. No other water sources are allowed to be discharged under this authorization, other than what is listed above.

This authorization is based on the information you provided; we understand that this work is an ongoing. Discharge will be allowed based on compliance with the conditions of this authorization.

The point of discharge will be within the city's sewer collection system as directed by your City representative.

You will be billed for the amount discharged to the city sewers based on the total flow. Your sewer bill will be invoiced monthly and will be calculated on our current sewer rate (currently \$9.25 per 100 cubic feet) plus the industrial surcharge of \$0.19 per thousand gallons of flow.

You must meter and track the amount discharged to the city sewers. You must also know the approximate flow rate at all times, as we will need to know especially during wet weather

This Discharge Authorization is issued with the following conditions:

- 1) You must comply with the general use and discharge requirements of the Industrial Pretreatment Ordinance #3070-08 as amended (attached), as well as any applicable Federal and State regulations.
- 2) The City solely reserves the right to modify, suspend, or terminate this authorization at any time once issued.
- 3) Your City representative and point of contact for discharge is Brian Doolan at 425-257-8828 (cell at 425-501-5124) or bdoolan@everettwa.gov. You need to notify Brian prior to discharge and when your project is completed. You must also report monthly flows to Brian.

Public Works



3200 Cedar Street
Everett, WA 98201



425.257.8800
425.257.8882 fax



everettpw@everettwa.gov
everettwa.gov/pw

- 4) Discharge can only occur during non-rain impacted flow periods. Your point of contact will receive notification to immediately stop discharging within 30 minutes.
- 5) The point of discharge shall be as directed by the City's project representative and limited to a flow of 150 gallons per minute or less. Higher rates must be first approved by Brian Doolan and be for limited durations.
- 6) Discharge will only be for water related to construction at the specific location identified in the DA application. Other sources must be pre-approved.
- 7) All flow shall be routed through a system to remove any free floatables and settleable solids or be free of floatable and settleable solids. Cardno now Santec will monitor and prevent that there are no floatable and settleable solids in discharge and shall use an onsite storage tank for pre-settlement needs related to high sediment or turbidity prior to discharge to the City's sewers. The City will inspect the tank and volume prior to discharge; with the ability and permission to inspect during the work as needed. Contact Brian for inspection of the tank at least a working day prior to your discharge request.
- 8) At any time, the City can direct the point of discharge to an alternative location that best suits the City.
- 9) Discharge operations shall comply with the City's Noise Ordinance.
- 10) Cardno now Santec is solely responsible for spills of any kind related to the discharge operations, including reporting to Department of Ecology, clean-up, and any repairs or restoration, and costs for City to oversee and respond. The City must be notified immediately of any spill.
- 11) City of Everett personnel may take samples of the effluent for analysis and may inspect your site to verify compliance at any time.
- 12) Maximum rate of flow shall not cause capacity problems in the receiving sewer or at any point downstream of the discharge; the City may modify the flow rate at any time.
- 13) The discharge is subject to these limits:

As	0.5	mg/L
Cd	0.24	mg/L
Cr	5.0	mg/L
Cu	3.0	mg/L
Pb	1.9	mg/L
Hg	0.1	mg/L
Ni	2.83	mg/L
Ag	0.49	mg/L
Zn	4.0	mg/L
CN-	0.65	mg/L
Nonpolar FOG	200	mg/L

Should lab samples indicate higher than allowed discharge limits, then a treatment plan to bring the discharge below the allowable limits will be required.

All discharge data from the site shall be reported. The total amount of flow to the sanitary sewer shall be reported at the completion of the discharge along with the data required. Please send reports to the following:



Brian Doolan
M & O Supervisor
City of Everett
3200 Cedar Street
Everett, WA 98201

- 14) The City reserves the right to bill Cardno now Santec fees for city work beyond our normal site monitoring for sewer related regulatory compliance or for overseeing this discharge authorization.
- 15) Cardno now Santec must install a meter to monitor the flow rate of discharge and report the monthly volumes to Brian Doolan. Brian must inspect and approve the meter installation prior to discharge. The meter shall not be removed or replaced without notifying the City first. Cardno now Santec will not exceed 150 gallons per minute and must keep a log for the discharge volumes noted. The log and amount of flow must be submitted to Brian at the end of the project.

Please contact me at 425 257-8828 (bdoolan@everettwa.gov) if you have any questions.

Sincerely,

Brian Doolan, PE
Maintenance & Operations Supervisor

Accepted By:

Date: _____

Attachment: General Permit Provisions
 Pretreatment Ordinance

cc: Gene Bennett, City of Everett
 Jeff Marrs City of Everett
 Chron File
 IPT File



Appendix D: Site Inspection Form

Construction Stormwater Site Inspection Form

Project Name _____ Permit # _____ Inspection Date _____ Time _____

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: _____

Approximate rainfall amount since the last inspection (in inches): _____

Approximate rainfall amount in the last 24 hours (in inches): _____

Current Weather Clear ☐ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☐ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

- | | | | | |
|--|-----|-------|----|-------|
| 1. Were all areas of construction and discharge points inspected? | Yes | _____ | No | _____ |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | _____ | No | _____ |
| 3. Was a water quality sample taken during inspection? (<i>refer to permit conditions S4 & S5</i>) | Yes | _____ | No | _____ |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | _____ | No | _____ |
| 5. If yes to #4 was it reported to Ecology? | Yes | _____ | No | _____ |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | _____ | No | _____ |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				
pH	Paper, kit, meter				

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)						
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?						
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.						
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?						
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?						
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).						
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.						
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.						
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?						
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?						
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?						
	Is off-site storm water managed separately from stormwater generated on the site?						
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?						
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?						
7 Drain Inlets	Storm drain inlets made operable during construction are protected.						
	Are existing storm drains within the influence of the project protected?						
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?						
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?						
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?						
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?						
	Has secondary containment been provided capable of containing 110% of the volume?						
	Were contaminated surfaces cleaned immediately after a spill incident?						
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.						
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.						
	Dewatering has been done to an approved source and in compliance with the SWPPP.						
	Were there any clean non turbid dewatering discharges?						
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?						
12 Manage the Project	Has the project been phased to the maximum degree practicable?						
	Has regular inspection, monitoring and maintenance been performed as required by the permit?						
	Has the SWPPP been updated, implemented and records maintained?						
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?						
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?						
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.						
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?						
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.						

E. Check all areas that have been inspected. ✓

All in place BMPs ☐ All disturbed soils ☐ All concrete wash out area ☐ All material storage areas ☐
 All discharge locations ☐ All equipment storage areas ☐ All construction entrances/exits ☐

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) _____ (Signature) _____ Date: _____

Title/Qualification of Inspector: _____

Appendix E: Construction Stormwater General Permit (CSWGP)

Issuance Date: November 18, 2020
Effective Date: January 1, 2021
Expiration Date: December 31, 2025

CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge
General Permit for Stormwater Discharges Associated with Construction Activity

State of Washington
Department of Ecology
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly
obtained coverage under this general permit are authorized to discharge in accordance
with the special and general conditions that follow.



Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1 Summary of Required Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
S5.F and S8	Noncompliance Notification – Telephone Notification	As necessary	Within 24 hours
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
S9.D	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice, CO ₂ or food grade vinegar to adjust pH)
G2	Notice of Change in Authorization	As necessary	
G6	Permit Application for Substantive Changes to the Discharge	As necessary	
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
S2.A	Notice of Permit Transfer	As necessary	
G19	Notice of Planned Changes	As necessary	
G21	Reporting Anticipated Non-compliance	As necessary	

NOTE: *Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2 Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit (CSWGP)	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S5, S9
Site Map	See Conditions S5, S9

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3 and 4.

B. Operators Required to Seek Coverage Under this General Permit

1. Operators of the following construction activities are required to seek coverage under this CSWGP:
 - a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage related to construction-support activity as authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.
 - i. This category includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and
 - b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):
 - i. Determines to be a significant contributor of pollutants to waters of the State of Washington.
 - ii. Reasonably expects to cause a violation of any water quality standard.
2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b, above):
 - a. Construction activities that discharge all stormwater and non-stormwater to groundwater, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.
 - b. Construction activities covered under an Erosivity Waiver (Special Condition S1.F).
 - c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges

1. ***Stormwater Associated with Construction Activity.*** Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that “surface waters of the

State” may exist on a construction site as well as off site; for example, a creek running through a site.)

2. ***Stormwater Associated with Construction Support Activity.*** This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:
 - a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and
 - b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and
 - c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.
3. ***Non-Stormwater Discharges.*** The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:
 - a. Discharges from fire-fighting activities.
 - b. Fire hydrant system flushing.
 - c. Potable water, including uncontaminated water line flushing.
 - d. Hydrostatic test water.
 - e. Uncontaminated air conditioning or compressor condensate.
 - f. Uncontaminated groundwater or spring water.
 - g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).
 - h. Uncontaminated discharges from foundation or footing drains.
 - i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.
 - j. Routine external building wash down that does not use detergents.
 - k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3. At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges

The following discharges to waters of the State, including groundwater, are prohibited:

1. Concrete wastewater
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (See Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.
4. Stormwater from facilities located on **Indian Country** as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

Indian Country includes:

- a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
- b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
- c. All off-reservation federal trust lands held for Native American Tribes.

Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.
6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

F. Erosivity Waiver

Construction site operators may qualify for an Erosivity Waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than five (5) acres and the site is not a portion of a common plan of development or sale that will disturb five (5) acres or greater.
2. Calculation of Erosivity “R” Factor and Regional Timeframe:
 - a. The project’s calculated rainfall erosivity factor (“R” Factor) must be less than five (5) during the period of construction activity, (See the CSWGP homepage <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html> for a link to the EPA’s calculator and step by step instructions on computing the “R” Factor in the *EPA Erosivity Waiver Fact Sheet*). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:
 - b. The entire period of construction activity must fall within the following timeframes:
 - i. For sites west of the Cascades Crest: June 15 – September 15.
 - ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.
 - iii. For sites east of the Cascades Crest, within the Central Basin: no timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html>.
3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:
 - a. Comply with applicable local stormwater requirements; and
 - b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.
4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b or for any size construction activity that could

reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.
6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:
 - a. Recalculate the rainfall erosivity “R” factor using the original start date and a new projected ending date and, if the “R” factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S1.F.2.b, complete and submit an amended waiver certification form before the original waiver expires; *or*
 - b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

S2. APPLICATION REQUIREMENTS

A. Permit Application Forms

1. *Notice of Intent Form*

- a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.
- b. Operators must apply using the electronic application form (NOI) available on Ecology’s website (<http://ecy.wa.gov/programs/wq/stormwater/construction/index.html>). Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

- c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it prior to the date of the first public notice (See Special Condition S2.B, below, for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, coverage under the general permit will automatically commence on the 31st day following receipt by Ecology of a *completed* NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2). See S8.B for Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters.
- d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 (“demonstrably equivalent” BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, the applicant must provide notice of the

selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

- e. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:
 - i. List or table of all known contaminants with laboratory test results showing concentration and depth,
 - ii. Map with sample locations,
 - iii. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,
 - iv. Dewatering plan and/or dewatering contingency plan.

2. *Transfer of Coverage Form*

The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided:

- i. The Permittee submits a complete Transfer of Coverage Form to Ecology, signed by the current and new discharger and containing a specific date for transfer of permit responsibility, coverage and liability (including any Administrative Orders associated with the permit); and
- ii. Ecology does not notify the current discharger and new discharger of intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also indicate the remaining permitted acreage after the transfer. Transfers do not require public notice.

3. *Modification of Coverage Form*

Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an Update/Modification of Permit Coverage form in accordance with General Conditions G6 and G19. Examples of such changes include, but are not limited to:

- i. Changes to the Permittee's mailing address,
- ii. Changes to the on-site contact person information, and
- iii. Changes to the area/acreage affected by construction activity.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must be run after the NOI has been submitted and must contain:

1. A statement that *“The applicant is seeking coverage under the Washington State Department of Ecology’s Construction Stormwater NPDES and State Waste Discharge General Permit.”*
2. The name, address, and location of the construction site.
3. The name and address of the applicant.
4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the total number of acres to be disturbed over the lifetime of the project.
5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system and the receiving water(s) the system discharges to.
6. The statement: *Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology’s action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater.*

S3. COMPLIANCE WITH STANDARDS

- A. Discharges must not** cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), groundwater quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the Federal water quality criteria applicable to Washington. (40 CFR Part 131.45) Discharges that are not in compliance with these standards are prohibited.
- B. Prior to the discharge** of stormwater and non-stormwater to waters of the State, the Permittee must apply All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- C. Ecology presumes** that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

1. Comply with all permit conditions, including; planning, sampling, monitoring, reporting, and recordkeeping conditions.
 2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater management manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the *Phase I Municipal Stormwater Permit* are approved by Ecology.)
- D. Where construction sites** also discharge to groundwater, the groundwater discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to groundwater through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

S4. MONITORING REQUIREMENTS, BENCHMARKS, AND REPORTING TRIGGERS

A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

B. Site Inspections

Construction sites one (1) acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a Certified Erosion and Sediment Control Lead (CESCL). Sites less than one (1) acre may have a person without CESCL certification conduct inspections. (See Special Conditions S4.B.3 and B.4, below, for detailed requirements of the Permittee's CESCL.)

Site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control.

1. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
 - a. Site conditions and construction activities that could impact the quality of stormwater; and
 - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL (sites one (1) acre or more) must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. (See BMP C160 in the manual, referred to in Special Condition S9.C.1 and 2.)
2. The CESCL or inspector must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. BMP effectiveness must be evaluated to

determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified, by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
 - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs, within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Documenting BMP implementation and maintenance in the site log book.
3. The CESCL or inspector must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one (1) day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one (1) inspection is required that week.) Inspection frequency may be reduced to once every calendar month for inactive sites that are temporarily stabilized.
4. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
 - a. Inspection date and time.
 - b. Weather information.
 - c. The general conditions during inspection.
 - d. The approximate amount of precipitation since the last inspection.
 - e. The approximate amount of precipitation within the last 24 hours.
 - f. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
 - g. A description of:
 - i. BMPs inspected (including location).
 - ii. BMPs that need maintenance and why.
 - iii. BMPs that failed to operate as designed or intended, and
 - iv. Where additional or different BMPs are needed, and why.
 - h. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

- i. Any water quality monitoring performed during inspection.
- j. General comments and notes, including a brief description of any BMP repairs, maintenance, or installations made following the inspection.
- k. An implementation schedule for the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
- l. A summary report of the inspection.
- m. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement:
I certify that this report is true, accurate, and complete to the best of my knowledge and belief.

Table 3 Summary of Primary Monitoring Requirements

Size of Soil Disturbance ¹	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling ²	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method ³		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required ⁴	Required	Yes

¹ Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

² If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of concrete or recycled concrete placed or poured over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

³ Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.4.a or b.

⁴ Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.4.a.

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods

- a. If construction activity involves the disturbance of five (5) acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.4.a, below.
- b. If construction activity involves one (1) acre or more but fewer than five (5) acres of soil disturbance, the Permittee must conduct either transparency sampling *or* turbidity sampling per Special Condition S4.C.4.a or b, below.

2. Sampling Frequency

- a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.
- g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

3. Sampling Locations

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) in the SWPPP and on the site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.
- e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).
- b. The Permittee performs transparency analysis on site with a 1¾ inch diameter, 60 centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

Table 4 Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs
Transparency	Cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information and follow S5.F – Noncompliance Notification for reporting requirements applicable to discharges which exceed the numeric effluent limit for turbidity.

- a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is 32 to 7 cm, the Permittee must:

- i. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs, and no later than 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Document BMP implementation and maintenance in the site log book.

- b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive

management process described below. For discharges which are subject to a numeric effluent limit for turbidity, see S5.F – Noncompliance Notification.

- i. Within 24 hours, telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) number (or through Ecology's Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available), in accordance with Special Condition S5.A.
 - **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
 - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
 - **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
 - **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers and a link to the ERTS reporting page are also listed at the following website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>.

- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- iii. Sample discharges daily until:
 - a) Turbidity is 25 NTUs (or lower); or
 - b) Transparency is 33 cm (or greater); or
 - c) The Permittee has demonstrated compliance with the water quality standard for turbidity:
 - 1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, or
 - 2) No more than 10% over background turbidity, if background is 50 NTUs or greater; or

*Note: background turbidity in the receiving water must be measured immediately upstream (upgradient) or outside of the area of influence of the discharge.
 - d) The discharge stops or is eliminated.
- iv. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within seven (7) days of the date the discharge exceeded the benchmark.

- v. Document BMP implementation and maintenance in the site log book.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with permit benchmarks.

D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, *and* involves significant concrete work (significant concrete work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.
2. During the applicable pH monitoring period defined below, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
 - a. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first placed or poured and exposed to precipitation, and continue weekly throughout and after the concrete placement, pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
 - b. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).
 - c. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
4. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
 - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters of the state; *or*
 - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO₂) sparging, dry ice or food grade vinegar. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO₂ sparging, dry ice or food grade vinegar.

S5. REPORTING AND RECORDKEEPING REQUIREMENTS

A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm), high turbidity reporting level, the Permittee must notify Ecology within 24 hours of analysis either by calling the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone or by submitting an electronic ERTS report (through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP website for links to ERTS and the WQWebPortal. (<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>) Also, see phone numbers in Special Condition S4.C.5.b.i.

B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G12 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees must submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from the first full month following the effective date of permit coverage up until Ecology has approved termination of the coverage). For more information, contact Ecology staff using information provided at the following website: www.ecy.wa.gov/programs/wq/permits/paris/contacts.html.

C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation) and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of five (5) years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during

the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee samples or monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the sampling results for this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills or fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed numeric effluent limitations (see S8 – Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24 hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i, or go to <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue> to find contact information for the regional offices.)
2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation (See S5.F.3, below, for details on submitting results in a report).
3. Submit a detailed written report to Ecology within five (5) days of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:
 - a. General Permit
 - b. Permit Coverage Letter
 - c. Stormwater Pollution Prevention Plan (SWPPP)
 - d. Site Log Book
 - e. Erosivity Waiver (if applicable)
2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:
 - a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.
 - b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:
 - i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; *or*
 - ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; *or*

Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

- A. Special Condition S3, Compliance with Standards.
- B. WAC 173-216-110.
- C. Other applicable regulations.

S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-Listed Water Bodies

1. Permittees who discharge to segments of water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.
2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2021, or the date when the operator's complete permit application is received by Ecology, whichever is later.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters

Construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; *or*
2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; *or*
3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:
 - a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; *or*
 - b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

Operators of construction sites are eligible for coverage under this permit only after Ecology makes an affirmative determination that the *discharge will not cause or contribute to the existing impairment or exceed the TMDL*.

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.
2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:
 - a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
 - b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.
3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5 Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit ¹
<ul style="list-style-type: none"> Turbidity Fine Sediment Phosphorus 	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; <i>OR</i> In compliance with the surface water quality standard for turbidity (S8.C.2.a)

¹ Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6 pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5 su

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:
 - a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; *or*
 - b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.
3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or another Pollution Control Plan

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to <http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html> for more information on TMDLs.
 - a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
 - i. The Permittee must sample discharges weekly, unless otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
 - ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.
 - iii. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.
 - b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

A. The Permittee's SWPPP must meet the following objectives:

1. To identify best management practices (BMPs) which prevent erosion and sedimentation, and to reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, groundwater quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
 - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
 - b. Potential erosion problem areas.
 - c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.
 - d. Construction phasing/sequence and general BMP implementation schedule.
 - e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
 - f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.
2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:
 - a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.
 - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. *Stormwater Management Manual for Western Washington* (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; *or*

2. *Stormwater Management Manual for Eastern Washington* (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; *or*
3. Revisions to the manuals listed in Special Condition S9.C.1 & 2, or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; *or*
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable stormwater management manuals, including:
 - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
 - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
 - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
 - b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
 - a. Limit construction vehicle access and exit to one route, if possible.
 - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
 - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
 - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
 - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d.
 - f. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

3. Control Flow Rates

- a. Protect properties and waterways downstream of construction sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
- b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater infiltration or detention BMPs as one of the first steps in grading. Assure that detention BMPs function properly before constructing site improvements (for example, impervious surfaces).
- c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from sedimentation during the construction phase.

4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion

control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.

- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion.

West of the Cascade Mountains Crest

During the dry season (May 1 - September 30): 7 days

During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin*

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

The Central Basin*, East of the Cascade Mountains Crest

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

***Note: The Central Basin** is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
- f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
- g. The Permittee must minimize the amount of soil exposed during construction activity.
- h. The Permittee must minimize the disturbance of steep slopes.
- i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
- b. The Permittee must divert off-site stormwater (run-on) or groundwater away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
- c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

- i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
- d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
- e. Place check dams at regular intervals within constructed channels that are cut down a slope.
- 7. Protect Drain Inlets
 - a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
 - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- 8. Stabilize Channels and Outlets
 - a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
 - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
 - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
- b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. Minimize storage of hazardous materials on-site. Safety Data Sheets (SDS) should be supplied for all materials stored. Chemicals should be kept in their original labeled containers. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume of the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
- c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
- d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
- e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
- f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A – Definitions.)
- g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.
- h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums onto the ground, or into storm drains, open ditches, streets, or streams. Washout of small concrete handling equipment may be disposed of in a formed area awaiting concrete where it will not contaminate surface or groundwater. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is

prohibited. At no time shall concrete be washed off into the footprint of an area where an infiltration BMP will be installed.

- i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO₂, dry ice or food grade vinegar, to adjust pH.
- j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

10. Control Dewatering

- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, in conjunction with BMPs to reduce sedimentation before discharge to a sediment trap or sediment pond.
- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point groundwater, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other dewatering treatment or disposal options may include:
 - i. Infiltration
 - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
 - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (See S9.D.9.i, regarding chemical treatment written approval).
 - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
 - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4, and S9.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of on-site LID Stormwater Management is to reduce the disruption of the natural site hydrology through infiltration. LID BMPs are permanent facilities.

- a. Permittees must protect all LID BMPs (including, but not limited to, Bioretention and Rain Garden facilities) from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden bioretention/ rain garden soils, and replacing the removed soils with soils meeting the design specification.
- b. Permittees must maintain the infiltration capabilities of LID BMPs by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.
- c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements or base materials.
- d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.
- e. Permittees must keep all heavy equipment off existing soils under LID BMPs that have been excavated to final grade to retain the infiltration rate of the soils.

E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions.

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.

3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
11. Location or proposed location of LID facilities.

S10. NOTICE OF TERMINATION

Partial terminations of permit coverage are not authorized.

A. The site is eligible for termination of coverage when it has met any of the following conditions:

1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; *or*
2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per Special Condition S2.A), and the Permittee no longer has operational control of the construction activity; *or*
3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.

B. When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the 31st calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

- A. All permit applications must bear a certification of correctness to be signed:
 - 1. In the case of corporations, by a responsible corporate officer.
 - 2. In the case of a partnership, by a general partner of a partnership.
 - 3. In the case of sole proprietorship, by the proprietor.
 - 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to Ecology.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A.** To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.
- B.** To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C.** To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D.** To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A.** When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- B.** When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.
- C.** When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, or
- D.** When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

- A.** Violation of any term or condition of this permit.
- B.** Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
- C.** A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- D.** Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- E.** A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.
- F.** Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

- G.** Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

G9. REMOVED SUBSTANCE

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G17. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

- A.** The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B.** A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: a 20% or greater increase in acreage disturbed by construction activity.
- C.** A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.
- D.** A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of

operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

G23. APPEALS

- A.** The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B.** The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C.** The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

- 1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.
- 2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- a. A description of the bypass and its cause
 - b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - d. The minimum and maximum duration of bypass under each alternative.
 - e. A recommendation as to the preferred alternative for conducting the bypass.
 - f. The projected date of bypass initiation.
 - g. A statement of compliance with SEPA.
 - h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.
 - i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during

preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following before issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

APPENDIX A – DEFINITIONS

AKART is an acronym for “**All Known, Available, and Reasonable** methods of prevention, control, and Treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2021, or before the date the operator’s complete permit application is received by Ecology, whichever is later. TMDLs completed after a complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

Applicant means an *operator* seeking coverage under this permit.

Benchmark means a pollutant concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control stormwater associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local jurisdiction that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (See BMP C160 in the SWMM).

Chemical Treatment means the addition of chemicals to stormwater and/or authorized non-stormwater prior to filtration and discharge to surface waters.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots).

Concrete Wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When stormwater comes in contact with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to waters of the State, including groundwater.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land (including off-site disturbance acreage related to construction-support activity). Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

Construction Support Activity means off-site acreage that will be disturbed as a direct result of the construction project and will discharge stormwater. For example, off-site equipment staging yards, material storage areas, borrow areas, and parking areas.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "hazardous substance" and WAC 173-340-200.

Contaminated soil means soil which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Contaminated groundwater means groundwater which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.
2. The pollutant removal performance expected from the BMPs selected.

3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping groundwater or stormwater away from an active construction site.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to groundwater than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Federal Operator is an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization (same as **fully stabilized** or **full stabilization**) means the completion of all soil disturbing activities at the site and the establishment of permanent vegetative cover, or equivalent permanent stabilization measures (such as pavement, riprap, gabions, or geotextiles) which will prevent erosion. See the applicable Stormwater Management Manual for more information on vegetative cover expectations and equivalent permanent stabilization measures.

Groundwater means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous sub-stance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See **Well**.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH Monitoring Period means the time period in which the pH of stormwater runoff from a site must be tested a minimum of once every seven days to determine if stormwater pH is between 6.5 and 8.5.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See the Fact Sheet for further explanation)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any non-stormwater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If stormwater commingles with process wastewater, the commingled water is considered process wastewater.

Receiving Water means the waterbody at the point of discharge. If the discharge is to a storm sewer system, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for groundwater drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving water.

Representative means a stormwater or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Responsible Corporate Officer for the purpose of signatory authority means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive Area means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or groundwater quality or sediment management standards.

Significant Concrete Work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Drain means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

Storm Sewer System means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW), as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or Manual means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent “final stabilization.”

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.

Transfer of Coverage (TOC) means a request for transfer of coverage under this general permit as specified by Special Condition S2.A of this permit.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a “turbidity tube.”

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant. See definition of “contaminant” and WAC 173-340-200.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste Load Allocation (WLA) means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water-Only Based Shaft Drilling is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt

waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See **Injection Well**.)

Wheel Wash Wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When stormwater comes in contact with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CPD	Common Plan of Development
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
FR	Federal Register
LID	Low Impact Development
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model

Appendix F: 303(d) List Waterbodies / TMDL Waterbodies Information

303(d) Listing for Port Gardner Bay

Listing ID: 504391

Waterbody Name: PORT GARDNER AND INNER EVERETT HARBOR

Medium: Sediment

Parameter: Sediment Bioassay

WQI Project: None

Designated Use: None

Collection Date: 10/6/2008

Year	Category
2014	5
2012	5
2008	2 Rank 4
2004	3
1998	Y
1996	N

Assessment Unit

Assessment Unit ID: 47122J2I1_SW

County: Snohomish

WRIA: 7 - Snohomish

Basis Statement

Data from the Department of Ecology's Environmental Information Management (EIM) system samples
H=PortGardner_08*A1-10*A1-10-S*10/6/2008
M=NONE
L=NONE
indicate a total of 2 points for 1 samples collected on or before October 6, 2008 exceeds the Sediment Management Standards CSL bioassay criterion. This grid is in an area being investigated for sediment contamination, therefore it is assessed as Category 5. Statute: MTCA. This grid is in an area commonly known as Everett East Waterway. Site to be further investigated.

Remarks

2010: Comment #1009 - old bioassay data; new bioassay data available. Data submitted Apr2010.

Data Sources

No Source Records

Map Link

 [Map Link \(https://apps.ecology.wa.gov/waterqualityatlas/wqa/map?lstid=504391\)](https://apps.ecology.wa.gov/waterqualityatlas/wqa/map?lstid=504391)

Appendix G: Contaminated Site Information

G1 -Administrative Order

Amendment to Agreed Order No. DE 6184

Exhibit A of Amendment to Agreed Order No. DE 6184 (DRAFT: ExxonMobil ADC Site –
Port of Everett Property Interim Action Plan

G2 - Sanitary Discharge Permit

Discharge Authorization No. MD-46-2022 from City of Everett

G3 - Soil Management Plan

Not included as of 5/1/2022

G4 - Soil and Groundwater Reports

See Appendix D USCS & Excavation Delineation Boring Logs of the DRAFT: ExxonMobil ADC Site
– Port of Everett Property Interim Action Work Plan

G5 -Maps and Figures Depicting Contamination

See Plate 3 Site Boundary Map of the DRAFT: ExxonMobil ADC Site – Port of Everett Property
Interim Action Work Plan for entire Ecology MTCA Site Boundary

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action by:

ExxonMobil Oil Corporation and
American Distributing Company

AMENDMENT TO AGREED ORDER for

Interim Action at
ExxonMobil/American Distributing Site

No. DE 6184

TO: ExxonMobil Oil Corporation
c/o Maria Quezada
U.S. West-Americas Americas South Business Manager
W3.2A E&PS Environmental Solutions
Springwood, TX 77389

and

American Distributing Company
13618 45th Avenue NE
Marysville, WA 98271

EXHIBITS

Exhibit A: Interim Action Work Plan and Schedule

I. INTRODUCTION

Agreed Order No. DE 6184 (2010 Order) entered into by the State of Washington, Department of Ecology (Ecology), ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (American Distributing) (collectively the Parties) on March 16, 2010, requires ExxonMobil and American Distributing to conduct a supplemental Remedial Investigation and Feasibility Study, referred to as a Focused Feasibility Study, and develop a draft Cleanup Action Plan (DCAP) for the ExxonMobil/American Distributing Site (Site) in Everett, Washington.

ExxonMobil and American Distributing prepared a Site Characterization/Focused Feasibility Study (SC/FFS) dated June 11, 2021, for review and comment by the Department of Ecology (Ecology). ExxonMobil and American Distributing initially submitted a DCAP for Ecology review and comment on October 26, 2021. At the request of ExxonMobil and

American Distributing, Ecology has deferred approval of the DCAP to allow performance of the Interim Action required by this Amendment and a re-evaluation of the safety, engineering, and design for the proposed cleanup of the ExxonMobil/American Distributing properties.

Pursuant to Section VIII.L of the 2010 Order, the Parties hereby stipulate to an Amendment to the 2010 Order. By this Amendment, ExxonMobil and American Distributing will perform an interim remedial action at a facility where there has been a release or threatened release of hazardous substances.

This Amendment does not attempt to recite all of the provisions of the 2010 Order. Provisions of the 2010 Order not specifically changed in this Amendment remain in full force and effect.

VI. ECOLOGY DETERMINATIONS

F. 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, RI/FS study or design of a cleanup action. The Port of Everett's (Port) property that is part of the ExxonMobil ADC Site (Site) is impacted with releases of hazardous substances above residual soil saturation levels which pose a risk to human health and the environment. Based on these circumstances, Ecology has determined that an interim action is permissible under WAC 173-340-430. ExxonMobil and American Distributing have proposed to perform an interim action as described in an Interim Action Work Plan and per the Schedule (Exhibit A). If Ecology approves the Interim Action Work Plan, the Parties are in agreement concerning the interim action and the Parties will follow the process in Section VII.E. If the Parties are not in agreement, Ecology reserves its authority to require additional interim action(s) under a separate order or other enforcement action under RCW 70A.305, or to undertake the interim action(s) itself.

VII. WORK TO BE PERFORMED

E. ExxonMobil and American Distributing have submitted to Ecology an Interim Action Work Plan, including a scope of work and schedule (Exhibit A). ExxonMobil and American Distributing shall not conduct the interim action until Ecology approves the Interim Action Work Plan. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of this Order, and ExxonMobil and American Distributing are required to conduct the interim action in accordance with the approved Interim Action Work Plan.

Scope of Interim Action. In general, the interim action work will involve excavation of soil on the Port's property at the Site containing Light Non-Aqueous Phase Liquid (LNAPL) or residual LNAPL saturation determined in advance as shown on Figure ___ in the Interim Action Work Plan. The excavated soil will be transported and disposed at a licensed disposal facility authorized to accept such waste. Clean soil will be used to backfill the excavation area and an asphalt cap will be placed on top of the backfilled soil. A permanent barrier wall will be installed along Federal Avenue to limit LNAPL migration following the remedial excavation on the Port's property.

Effective date of this Amendment: _____

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

Nicholas Acklam
Acting Section Manager
Toxics Cleanup Program
Land & Aquatic Lands Cleanup Section
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April 7, 2022
Cardno 03144702.R05

Mr. Jason Cook
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SUBJECT DRAFT : ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan
ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

Mr. Cook:

At the request of ExxonMobil Environmental and Property Solutions, on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distribution Company (ADC), Cardno, now Stantec, conducts environmental activities at the ExxonMobil ADC Site (Ecology Site), which includes portions of the Port of Everett. Cardno prepared the enclosed *DRAFT : ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan*, dated April 7, 2022. The purpose of this work plan is to describe the proposed interim remedial excavation to be conducted on the Port of Everett Property, west of Federal Avenue in Everett, Washington.

Site Identification

Agreed Order DE 6184
Facility Site ID No. 2728
Cleanup Site ID No. 5182

Ecology Site Location

2717 and 2731 Federal Avenue
Everett, Washington 98201
Port Gardner / Possession Sound

Ecology Contacts

Washington State Department of Ecology
Toxic Cleanup Program – Headquarters
P.O. Box 47600
Olympia, Washington 98504-7600

Mr. Jason Cook
Site Manager
Phone: 360 407 6834
Email: jason.cook@ecy.wa.gov

April 7, 2022
Cardno 03144702.R05 ExxonMobil ADC, Everett, Washington



Please contact Mr. Bobby Thompson, Cardno Project Manager for this Ecology Site at 206 510 5855, or Mr. Ken Drake, ExxonMobil Project Manager for this Ecology Site at 908 451 0956 with questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cameron Penner-Ash'.

Cameron Penner-Ash
Project Manager
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Direct Line +1 503 869 1196
Email: cameron.penner-ash@cardno.com

A handwritten signature in blue ink, appearing to read 'Bobby Thompson'.

Bobby Thompson
Senior Project Manager
Cardno
Direct Line +1 206 510 5855
Email: robert.thompson@cardno.com

ENCLOSURE

Cardno's *DRAFT : ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan*, dated April 7, 2022

cc: w/ enclosure
Mr. Erik Gerking, Port of Everett (*Email*)
Mr. Steve Miller, American Distribution Company (*Email*)
Mr. Ken Drake, ExxonMobil Environmental and Property Solutions Company (*Project folder*)

DRAFT : ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

Cardno 03144702.R05



Prepared for
ExxonMobil Environmental and Property
Solutions

April 7, 2022

DRAFT : ExxonMobil ADC Site – Port of Everett Property Interim Action Work Plan

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington

Cardno 03144702.R05

April 7, 2022



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Appendix C	Field Protocol
Appendix D	USCS & Excavation Delineation Boring Logs
Appendix E	Draft Cultural Resources Assessment Report
Appendix F	Draft Cultural Resources Monitoring and Inadvertent Discovery Plan
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Appendix H	Terrestrial Ecological Evaluation Form

Acronyms and Abbreviations

1996 Order	Agreed Order DE 95TC-N402
1998 Order	Agreed Order DE 98TCP-N223
2010 Order	Agreed Order DE 6184
ADC	American Distributing Company
ARAR	Applicable, Relevant, and Appropriate Requirements
AST	Aboveground storage tank
ASTM	ASTM International
bgs	Below ground surface
BNSF	BNSF Railway Company
CAP	Cleanup Action Plan
COCs	Contaminants of concern
cPAH	Carcinogenic polycyclic aromatic hydrocarbon
CSO	Combined sewer overflow
Ecology	Washington State Department of Ecology
Ecology Site	ExxonMobil and ADC Property and the surrounding parcels where hydrocarbons have migrated
EDR	Engineering Design Report
ESR	Everett Ship Repair
ExxonMobil	ExxonMobil Oil Corporation
ExxonMobil ADC Property	ExxonMobil and ADC-owned parcels located at 2717 and 2731 Federal Avenue, in Everett, Washington
GPS	Global Positioning System
Kimberly-Clark	Kimberly-Clark Corporation
LNAPL	Non-aqueous phase liquid
mg/kg	Milligram per kilogram
MIDP	Monitoring and Inadvertent Discovery Plan
Miller	Mr. Aven P. Miller (former ADC property owner)
Mobil	Mobil Oil Corporation
MTCA	Model Toxics Control Act
PLP	Potentially liable person
Port	Port of Everett
Port Property	The Port of Everett-owned parcels located at 2730 Federal Avenue, in Everett, Washington
RZA	Rittenhouse-Zeman & Associates, Inc.
SC/FFS	Site characterization/focused feasibility study
SCOPI	Snohomish County Online Property Information
SEPA	Washington State Environmental Policy Act
TEE	Terrestrial Ecological Evaluation
TPH	Total petroleum hydrocarbons
TPHd	Total petroleum hydrocarbons as diesel
TPHg	Total petroleum hydrocarbons as gasoline
TPHmo	Total petroleum hydrocarbons as motor oil
µg/L	Microgram per liter
UST	Underground storage tank
WAC	Washington Administrative Code
WISAARD	Washington Department of Archaeology and Historic Preservation
Wood	Wood Environment & Infrastructure Solutions, Inc.

1 Introduction

At the request of ExxonMobil Environmental and Property Solutions, on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distribution Company (ADC), Cardno has prepared this *DRAFT : Port of Everett Property Interim Action Work Plan* for the Washington State Department of Ecology (Ecology) recognized ExxonMobil ADC Site (Ecology Site) located in Everett, Snohomish County, Washington (Plate 1). The proposed remedial excavation outlined in this work plan will be conducted on the Port of Everett (Port Property) located at 2730 Federal Avenue, Everett, Washington (Plate 2).

The proposed scope of work includes:

- > Pre-field activities.
- > Fencing removal and temporary fencing installation.
- > Utility services disconnection, rerouting, and protection.
- > Sawcutting, breakout, and removal of asphalt cap.
- > Sheet pile shoring and barrier wall installation.
- > Pre-determined remedial excavation.
- > Excavation backfill and compaction.
- > Surface restoration.
- > Site restoration.

Historical releases of hydrocarbons to soil and groundwater at the Ecology Site were related to the former operation of bulk storage, transfer, and distribution of petroleum and petroleum related products. Light non-aqueous phase liquid (LNAPL) has been observed in soil and groundwater beneath the Ecology Site (including on neighboring properties). The Ecology Site is defined as the ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (ADC)-owned properties (ExxonMobil ADC Property), located at 2717 and 2731 Federal Avenue, Everett, Washington, and the surrounding right-of-ways and properties, including the Port Property, which were impacted by the migration of historical releases of hydrocarbons in soil and groundwater. This interim action is designed to address those impacts on the Port Property.

Agreed Order No. DE 6184 (2010 Order) was entered into between Ecology, ExxonMobil, and ADC in March 2010 (Ecology, 2010). Ecology has identified ExxonMobil and ADC as potentially liable persons (PLPs). The PLPs have completed investigation activities under two previous agreed orders – DE 95TC-N402 (1996 Order) and DE 98TCP-N223 (1998 Order).

1.1 Previous Studies

This section briefly discusses previous investigations at the Ecology Site. Since 1985, various consultants have conducted environmental investigations to characterize the nature and extent of contaminants of concerns in soil and groundwater at the Ecology Site. Previous investigations are summarized in Appendix A. Interim actions conducted to date are summarized in Appendix B. Boring logs from the Port excavation delineation investigation are included in Appendix C.

1.2 Regulatory Framework

This section summarizes the regulatory background of the Ecology Site, including the three Agreed Orders and definition of the MTCA Site.

The cleanup of the Ecology Site is regulated under Washington Administrative Code (WAC) Chapter 173-340 – MTCA Cleanup Regulations (WAC, 2007). Environmental site investigation and interim actions have been conducted at the Ecology Site beginning in 1985 (Wood, 2019). There have been three agreed orders issued under the MTCA to date that direct cleanup actions (Ecology, 2010).

In April 1996, Ecology entered in the 1996 Order (DE 95TC-N402) with Mobil Oil Corporation (Mobil), ADC, and Miller (Mr. Aven P. Miller – former ADC property owner) requiring cleanup, elimination, and/or containment of petroleum releases at and near the City of Everett's combined sewer overflow (CSO) discharge line into Port Gardner Bay. In accordance with the 1996 Order, the interim actions were completed, and Ecology agreed that the interim containment measures, CSO repair, and cleanup were satisfactorily completed and the exposure pathway to Port Gardner Bay had been removed.

Periodic groundwater monitoring and sampling began in 1988 at the Ecology Site. In October 1998, Ecology entered in the 1998 Order (DE 98TCP-N223), with Mobil, ADC, and Miller, requiring the preparation of a Remedial Investigation/Focused Feasibility Study Report (FFS), Interim Action Work Plan, and the subsequent completion of the work described in the Interim Action Work Plan. Per the developed FFS, an interceptor trench and cap were installed in 1999. Additionally, quarterly groundwater monitoring and monthly measurement and removal of LNAPL from affected wells began in 2002. In 2007, the groundwater monitoring frequency for the Ecology Site was reduced from quarterly to semiannually.

In March 2010, Ecology entered into the 2010 Order (DE 6184), with ExxonMobil and ADC requiring a FFS and development of a draft CAP to identify the nature and extent of hydrocarbons in soil and groundwater and select a preferred final interim action to remediate the Ecology Site in accordance with MTCA.

As noted in the 2010 Order, the MTCA Site (synonymous to Ecology Site in this report) is defined as a release of gasoline-, diesel-, and motor oil-range total petroleum hydrocarbons (TPHg, TPHd, TPHmo), benzene, total xylenes, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and lead in soil and groundwater (Ecology, 2010). Additionally, ethylbenzene has been detected exceeding the MTCA Method A Cleanup Level in soil (Ecology, 2010). The Ecology Site includes the ExxonMobil ADC Property and extends into former Everett Avenue, Federal Avenue, and the Port properties just west of Federal Avenue. It also includes portions of the City of Everett right-of-way east and south of the ExxonMobil ADC Property, the BNSF Railway Company (BNSF) parcel east of the ExxonMobil ADC Property, and the land underneath the Terminal Avenue Overpass to the east.

In accordance with WAC 173-340-430, an interim action, such as the one outlined in this report, is a remedial action that may be technically necessary in various circumstances, including to reduce the presence of a hazardous substance in the environment. The Port's property is impacted with hazardous substances above Ecology-approved residual soil saturation levels, the condition of which may become substantially more costly or complex to remedy if action is delayed. Based on these circumstances, an interim action is warranted under WAC 173-340-430.

Implementation of the interim action will also support the ongoing design of a final cleanup action for the Site to be included in the Draft Cleanup Action Plan (CAP) to be submitted at a later date. Long-term requirements for the entire Site, including monitoring and institutional controls, will be described in the Draft CAP.

2 Site Description

2.1 ExxonMobil ADC and Port of Everett Properties Current Land Use

The ExxonMobil ADC Property is currently an asphalt-paved parking lot with no structures present. The Port Property is currently asphalt-paved parking and laydown yards with various industrial structures and offices present. The Port currently leases the property for ship repair, storage, and a marine tug terminal. The Ecology Site is comprised of the ExxonMobil ADC Property, City of Everett right-of-ways (former Everett Avenue to the north, Federal Avenue to the west, and land underneath the Terminal Avenue Overpass), the

Port Property to the west (including the active port and the property leased and currently occupied by Everett Ship Repair [ESR]), the BNSF parcel, and the BNSF railway corridor easement to the east of the ExxonMobil ADC Property.

2.2 Site Property Use

The shoreline of Port Gardner Bay is approximately 300 feet northwest of the ExxonMobil ADC Property. The lateral extent of the Ecology Site extends to onto neighboring properties to the north, south, east, and west. The following sections summarize the properties that define the Ecology Site.

2.2.1 ExxonMobil ADC Property

Historical ExxonMobil and ADC operations were located at 2717/2731 Federal Avenue, Everett, Snohomish County, Washington, adjacent to Port Gardner Bay. The ExxonMobil ADC Property consists of three tax parcels: 00437161900101, 00437161900100, and 00437161901000. The northern parcels are owned by ADC, and the southern parcel is owned by ExxonMobil. The ExxonMobil ADC Property occupies 0.86 acre of land (SCOPI, 2021). The northern ADC parcels at 2717 Federal Avenue occupy approximately two-thirds of the ExxonMobil ADC Property (0.65 acre). The southern parcel at 2731 Federal Avenue occupies approximately one-third of the ExxonMobil ADC Property (0.21 acre).

To the west of the ExxonMobil ADC Property is Federal Avenue and Port Property beyond. To the east is the Terminal Avenue Overpass and the BSNF parcel. To the north is former Everett Avenue, which is currently owned by the Port. Kimberly-Clark Corporation (Kimberly-Clark) formerly operated to the north of the ExxonMobil ADC Property. The former Kimberly-Clark warehouse is located on the Port parcel to the north. The ExxonMobil ADC Property and surrounding parcels are shown on Plate 3.

The ExxonMobil ADC Property historically operated as a bulk petroleum storage, transfer, and distribution facility. Additional potential sources of contaminants of concern include releases from the former rail loading racks located east of the ExxonMobil ADC Property, underneath the current Terminal Avenue Overpass (Wood, 2019). In the early 1900s, the historical shoreline was approximately located along present day Federal Avenue. As development continued, the shoreline was extended westward until it reached its current extent in 1976 (Wood, 2019).

2.2.2 The Port of Everett

The properties beyond Federal Avenue to the west are owned by the Port and abut the Port Gardner Bay shoreline (SCOPI, 2021). Various portions of the Port properties are leased to other businesses, including Dunlap Towing and ESR (Wood, 2019).

2.2.3 BNSF Rail Line and Parcels

An active BNSF rail line and adjacent BNSF parcels are located on the eastern and southeastern section of the Ecology Site (Google, 2020; SCOPI, 2021). The BNSF railway corridor crosses underneath the Terminal Avenue Overpass. The adjacent BNSF parcels are paved with asphalt.

2.2.4 Federal Avenue

The City of Everett right-of-way Federal Avenue is located in the western section of the Ecology Site (Google, 2020). Federal Avenue is a north to south trending road that is currently paved with asphalt.

2.2.5 Terminal Avenue Overpass

The City of Everett right-of-way Terminal Avenue Overpass is located in the eastern and southern section of the Ecology Site (Google, 2020). Terminal Avenue is a northeast to southwest trending road that is currently paved with asphalt. The overpass crosses the BNSF railway corridor and then intersects at grade with Federal Avenue southwest of the Ecology Site. A portion of the right-of-way was previously part of the ExxonMobil parcel but was transferred to the City of Everett as part of the Terminal Avenue Overpass project (Wood, 2019).

2.3 Adjacent Property

The former Kimberly-Clark property is located at 2600 Federal Avenue, north of the ADC parcel, and includes a portion of former Everett Avenue (Ecology, 2021). The property was initially developed in the late 1800s to early 1900s and was used for pulp and paper manufacturing, bulk petroleum storage, and sawmilling. Manufacturing was discontinued in 2012, and the former buildings were demolished with the exception of the distribution warehouse building, located on the southern portion of the property. In 2019, Kimberly-Clark sold a majority of the property to the Port.

2.4 Site History

The following is a summary of historical Ecology Site development and use. Additional details regarding historical use and operations of the ExxonMobil ADC Property and the surrounding areas are available in Wood's SC/FFS (Wood, 2019).

Indigenous people historically inhabited the shoreline along Port Gardner Bay. Development of the original shoreline (near present day Federal Avenue) began in the late 1800s and continued until 1976, when the current shoreline was established. The ExxonMobil ADC Property and surrounding properties were used for storage and transfer of petroleum and petroleum products as early as 1920. From the 1920s until 1990, various portions of the ExxonMobil ADC Property were used for bulk storage, transfer, and distribution operations; marine offloading; truck loading; and rail loading and/or unloading of petroleum products that included fuel oils, stove oil, Bunker C fuel oil, diesel, and gasoline.

Peak operations at the ExxonMobil ADC Property occurred from the 1920s through early 1980s. Historical ExxonMobil ADC Property features included various configurations of aboveground storage tanks (ASTs), warehouse buildings, pump houses, diked fuel storage areas, a boiler room, loading racks, and overhang canopies.

In May 1985, Rittenhouse-Zeman & Associates, Inc. (RZA), conducted an environmental investigation that indicated a release of hydrocarbons to the surface and subsurface had occurred. ExxonMobil terminated bulk fuel operations on the ExxonMobil parcel in 1987 and demolished the ASTs and other structures. By 1993, the ExxonMobil parcel had been covered with asphalt with no above-grade structures present. The ADC operations terminated in 1990. In 1998, all structures on the ADC parcels were demolished. In 1999, the ExxonMobil ADC Property was capped with asphalt to meet the requirements of the 1998 Order. Since then, the Ecology Site has been used intermittently as a parking lot by neighboring businesses and has remained unimproved with no above-grade structures (Plate 2).

3 Contaminants of Concern

This section summarizes the contaminants of concern in soil. Soil data have been collected at the Ecology Site since 1988. Soil analytical data from the Port Property excavation delineation drilling activities are summarized on Table 1.

Soil data was first collected at the Ecology Site in 1988 during an environmental investigation conducted by RZA. Numerous investigations have been conducted at the Ecology Site and are summarized in Appendix A. Cardno conducted excavation delineation drilling on the Port Property to characterize current soil conditions and prepare for the proposed interim action (Cardno, 2021). Results of pre-excavation soil delineation activities at the Port Property are summarized on Table 1 and Plates 4 through 13. The excavation delineation drilling activities were conducted in accordance with Cardno's standard field protocol (Appendix D). Descriptions of the materials encountered and sampled intervals are provided in the boring logs (Appendix C).

COCs in soil are summarized in Figure 1.

Figure 1 Contaminants of Concern in Soil

Contaminants of Concern
TPHg
TPHd
TPHmo
Benzene
Ethylbenzene
Total Xylenes
Total cPAHs
1-Methylnaphthalene

4 Soil Residual Saturation Remediation Levels

In the draft August 2019 SC/FFS (Wood, 2019), Wood established residual saturation remediation levels using Ecology Site-specific data. Wood defined residual saturation as “fluid distributed within a porous medium and held in place by capillary action” and noted that LNAPL under these conditions is not connected between pores and does not flow. As discussed in the SC/FFS, “the distinction between residual LNAPL and potentially mobile LNAPL is based on research into how much LNAPL is expected to be retained by saturated soils of various textures for different LNAPL viscosities.”

Historically, attempts at LNAPL collection via interceptor trenches, absorbent socks installed in groundwater wells, and other methods have failed to produce a significant reduction in LNAPL volume in the soil beneath the Ecology Site, as indicated by total petroleum hydrocarbons (TPH) concentrations in soil samples at magnitudes high enough to indicate the presence of LNAPL. These observations support Wood’s assertion that the LNAPL present at the Ecology Site is not mobile. LNAPL has only been observed to be mobile during the artificially increased hydraulic gradients induced during dewatering in support of historical excavation activities (Wood, 2019).

Using Ecology Site-specific data, including soil types and viscosity of LNAPL observed at the Ecology Site, Wood used guidance from Brost and DeVaul’s *Non-Aqueous Phase Liquid (NAPL) Mobility Limits in Soil* (Brost and DeVaul, 2000) to establish residual saturation remediation levels in ranges for TPHg, TPHd, and TPHmo:

- > TPHg: 2,470 to 3,410 milligrams per kilogram (mg/kg)
- > TPHd: 4,800 to 8,840 mg/kg
- > TPHmo: 5,810 to 11,000 mg/kg

In Ecology’s May 6, 2019, response to the draft 2019 SC/FFS, Ecology recommended the use of the more stringent limits of the proposed residual saturation remediation level ranges (Ecology, 2019), shown in Figure 2.

Figure 2 Remediation Levels for Soil

Contaminant of Concern	Ecology Site-Specific Residual Saturation Remediation Level in Soil (mg/kg)
TPHg	2,470
TPHd	4,800
TPHmo	5,810

The Ecology Site-specific residual saturation remediation levels will be used to ensure that excavation has been completed to the maximum extent practicable in accessible areas on the Port Property.

5 Applicable, Relevant, and Appropriate Requirements (ARARs)

Chapter 173-340-710 of the WAC states that cleanup actions must comply with various federal and state level regulatory requirements. Some requirements will be refined during the design process and will be summarized in the Engineering Design Report (EDR). The following regulatory requirements are applicable to this interim action:

- > State Environmental Policy Act (Section 5.3).
- > Public Works Permits (EDR).
- > Washington State and Federal Worker Safety (EDR; health and safety plan).
- > Monitoring Well Construction, Maintenance, and Decommissioning (EDR).
- > Air Quality (EDR).
- > National Recommended Water Quality Criteria (EDR).
- > Native American Graves Protection and Repatriation Act (Sections 5.1 and 5.2).
- > Archaeological Resources Protection Act (Sections 5.1 and 5.2).
- > Washington Dangerous Waste Regulations (EDR).
- > Washington Solid Waste Handling Standards (EDR).
- > Federal Waste Transportation Standards (EDR).
- > Stormwater Management Manual for Western Washington (Section 6.1.3)

5.1 Cultural Resource Background Review

A literature search of previously recorded cultural resources for the Ecology Site and surrounding area was conducted. The Cultural Resources Report includes a thorough review of existing cultural resource data (i.e., archaeological, ethnohistoric, and historic) and previously completed cultural resources surveys and is included as Appendix E. This review was conducted prior to the implementation of the proposed interim action. Information from the following sources was reviewed:

- > Washington Department of Archaeology and Historic Preservation (WISAARD)
 - Washington Information System for Architectural and Archaeological Records Data
 - Previous regional cultural resource investigations
 - Previously recorded cultural resources
- > Historic registers (National Register of Historic Places)
- > Local libraries and historical societies (if accessible)
 - Secondary sources, newspapers, historic documents, maps, photographs, interviews
- > Tax assessor data
- > Ecology Site-specific data (including project plans provided by ExxonMobil)

The background data was compared to the proposed project plans to determine any potential disturbance to previously recorded archaeological resources, and to assess the archaeological significance of the project area. A project number within the WISAARD database will be initiated, as appropriate.

5.2 Monitoring and Inadvertent Discovery Plan

A Monitoring and Inadvertent Discovery Plan (MIDP) has been prepared for the Ecology Site. The MIDP (Appendix F) contains a project description, pertinent cultural resources laws and regulations, protocols for a preconstruction meeting and archaeological monitoring by a professional archaeologist, maps depicting the monitoring locations, email updates to the applicable agencies and tribes, and relevant contact information.

5.3 Washington State Environmental Policy Act (SEPA) Review

In accordance with Washington State Environmental Policy Act (SEPA), a SEPA checklist was prepared for the Port Property Remedial Excavation (Ecology, 2016). The SEPA checklist, included as Appendix G, identifies measures to avoid, counter, or minimize likely impacts to the environment. If Ecology determines that there is no significant environmental impact associated with the selected interim action, Ecology will issue a Determination of Non-Significance or a mitigated Determination of Non-Significance with conditions.

5.4 Terrestrial Ecological Evaluation

No wetlands, streams, shorelines, floodplains, or wildlife habitat are present on the Ecology Site (FWS, 2021; Wood, 2019). As summarized in the SC/FFS, soil concentrations are considered protective of terrestrial receptors via a simplified terrestrial ecological evaluation. The Ecology Site meets the requirements for an exclusion from performing a TEE (Appendix H) as outlined in WAC 173-340-7492 (WAC, 2007).

5.5 Performance Monitoring

Performance monitoring will be conducted to confirm that the selected action has attained the interim action objectives: removal of LNAPL in soil by excavation and removal of soil which exceeds the Ecology Site-specific residual saturation remediation levels.

To pre-determine the extents of the proposed remedial excavation, delineation drilling has been conducted at accessible areas within the Port Property.

Borings were completed in 2020 and 2021 on the Port Property. The purpose of the borings was to predefine the extents of the LNAPL excavation area such that performance monitoring in the form of soil sampling at the time of excavation is not necessary. Analytical results for soil samples collected on the Port Property during this investigation are summarized in Plates 4 through 11 and Table 1.

The excavation extents were established to remove accessible soils containing LNAPL and where analytical results exceeded the Ecology Site-specific residual saturation remediation levels. Performance monitoring will include confirmation of achieving vertical and lateral extent of the planned excavation limits. This confirmation will use a combination of surveying or global positioning system (GPS)-enabled excavation equipment. The specifications and criteria will be documented in the EDR.

6 The Port of Everett Property Remedial Excavation

The proposed remedial excavation will be performed in accordance with this *Interim Action Work Plan*, Cardno's standard field protocols (Appendix D), and under the supervision of a licensed geologist and engineer. Cardno will release an official Request for Proposal (RFP) for this work and contract a primary contractor (Contractor) to perform the work outlined in this work plan.

6.1 Site Access, Security, and Site Preparation

6.1.1 Permitting and Engineering Design Report

All required permits will be acquired from the applicable local and/or state regulatory agencies including, but not limited to building, grading, utility, shoring, and erosion control permits. Additionally, Cardno and its Contractor will develop an EDR, which will outline and finalize the process and designs of this work.

6.1.2 Site Mobilization

Cardno will oversee the Contractor's mobilization of personnel, equipment, tools, and materials to the project area. During mobilization, the Contractor will establish all office, buildings, and other facilities necessary for work in the project area.

6.1.3 Remainder of Site Preparation

During mobilization, dust, noise, sediment, erosion, stormwater, and other environmental or risk controls will be established, as required. During this phase, heavy equipment exclusion zones will be established in accordance with ExxonMobil's health and safety policies. Various other miscellaneous tasks will also be conducted to establish a safe, sanitary, and clean workplace.

6.1.4 Underground Utility Locating

Prior to excavation, the Contractor will notify Underground Service Alert at least 48 hours prior to the onset of field activities requiring subsurface disturbance in the project area. In addition, Cardno will notify the property owner (Port) and the lessees (ESR and Dunlap Towing) at least 14 days prior to the on-set of field work. A private utility locating service will be contracted to locate underground utilities by geophysical methods including electro-magnetic, magnetic, ground penetrating radar, and any other technologies available for identifying underground utilities and structures. All confirmed utilities and identified anomalies shall be delineated to identify subsurface structures throughout the duration of the work.

6.1.5 Permanent Fencing Removal and Temporary Fencing Installation

To accommodate the excavation extents and create a safe work area, the Contractor will remove permanent fencing and automatic gates on the southern, eastern, and northern extents of the project area. The Contractor will erect a fence that meets the United States Coast Guard Maritime Security (MARSEC) requirements. Temporary MARSEC-rated fencing will separate the work area and ESR operations from the MARSEC Level 1 rated Port. The project area will be designated as non-MARSEC and will be appropriately fenced and gated in accordance with ESR, Dunlap, and the Port's requirements.

6.2 Utility Services Disconnection, Re-Routing, and Protection

Various utilities run underground throughout the excavation extents as well as overhead above the excavation area. To safely conduct the remedial excavation and maintain service to the neighboring businesses (ESR and Dunlap Towing), Cardno will oversee the Contractor disconnect, reroute, and protect the utilities, as needed.

One water line and one sanitary sewer line run through the northern portion of the remedial excavation. These lines service the ESR portable office building, warehouse, and associated outbuildings. In coordination with ESR, the water and sewer lines will be disconnected, rerouted, and protected during the remedial excavation.

A 15-inch storm line runs diagonally (southeast to northwest) through the excavation extents, meeting up with a 30-inch combined sewer overflow (CSO) line underneath the current location of the ESR portable office building. Cardno and its Contractor will coordinate with the City of Everett to disconnect and potentially reroute portions of the 15-inch storm system. Additionally, Cardno is aware of the City of Everett's plans to install a modular wetland within the neighboring storm lines and will attempt to coordinate work to minimize overlap.

Three aboveground power poles will require relocation or disconnection during remedial excavation activities. Based on information provided by the Port, one of the power poles belongs to the City of Everett while the remaining two belong to Snohomish Public Utility District (PUD). Relocation and restoration of service will be coordinated with the Port, Snohomish PUD, ESR, and Dunlap Towing to minimize impacts to businesses.

A single pole with security cameras is located at the southeastern corner of the excavation. In addition, the pole's underground electric and data lines runs along the eastern excavation boundary. The Contractor will remove and temporarily store the security infrastructure during the remedial excavation. To maintain the existing level of security provided by the security pole and associated infrastructure, a night security guard will be employed to restrict access to the ESR and Dunlap Towing properties.

Upon completion of the remedial excavation, all utilities will be reconnected and returned to their pre-excavation state.

6.3 Sawcutting, Breakout, and Removal of Asphalt Cap

Upon successful rerouting of utilities within the excavation boundaries, Cardno will observe the Contractor cut and remove all asphalt necessary to complete the excavation. No asphalt will be cut within two feet of a marked utility unless the utility has been protected or exposed, as outlined in Section 6.2. All asphalt debris will be transported and disposed of at a recycling facility approved by Cardno.

6.4 Sheet Pile Shoring Installation

To reach required excavation depths a sheet pile shoring wall will be required. Shoring will be installed in accordance with the design created by a licensed subcontractor engineer. A Cardno subcontracted engineer will review all engineering designs and approve them prior to installation. The final design of the sheet pile shoring wall will be included in the EDR.

6.5 Permanent Barrier Wall Installation

At the request of the Port, a permanent barrier wall along Federal Avenue will be installed on the eastern excavation extent to limit future hydrocarbon migration onto the Port Property. At minimum, the permanent barrier wall will be at least the depth of excavation directly west of the barrier wall (Plate 12). The final design of the barrier wall will be included in the EDR.

6.6 Recontamination of Port of Everett Property Mitigation

Hydrocarbons in soil and groundwater exceeding the Ecology Site-specific residual saturation remediation levels will remain beneath Federal Avenue and beneath the ExxonMobil and ADC-owned parcels to the east. A remedial excavation of the ExxonMobil and ADC Property is scheduled for the summer 2023. The barrier wall described in Section 6.5 will be designed to prevent recontamination of the Port Property from residual hydrocarbons located beneath Federal Avenue. Additionally, the barrier wall will prevent recontamination from the upgradient ExxonMobil and ADC Property prior to the upgradient excavation. Excavation for the Port Property will occur prior to the ExxonMobil and ADC Property excavations to ensure Port development and infrastructure projects can commence in fall 2022. The proposed schedule to complete the future Site Cleanup Action Plan and ExxonMobil ADC Property excavations is described in Section 8.

In addition to the barrier wall, a review of historical soil and groundwater data indicates that the hydrocarbon plume is stable. Downgradient groundwater monitoring wells MW-A3, MW-A4, MW-A5, MW-A6, and MW-A8 located on Port Property have contained hydrocarbons concentrations less than the MTCA Method A Cleanup Levels for the past four semiannual groundwater sampling events. (Table 2).

6.7 Remedial Excavation

The remedial excavation will be conducted to predetermined depths. Results from delineation drilling activities on the Port Property were first presented in Cardno's *Port of Everett – Excavation Delineation*

Report, dated April 21, 2021 (Cardno, 2021). Proposed excavation depths for the Port Property excavation are defined in Plates 12 and 13 of this work plan. Excavation to these pre-determined depths will remove all soil determined to be above the Ecology Site-specific residual saturation remediation levels (Figure 2). Due to the shallow water table encountered during drilling activities (between 3 and 5 feet bgs), dewatering during excavation is impracticable. Instead, the Contractor will utilize a combination of dredging and traditional mechanical excavation through any water that accumulates in the excavation.

Due to moisture level requirements at soil disposal facilities, the moisture level of excavated soil will be reduced either through gravity drainage or amendment. A water treatment and storage system will be designed to adequately remove all contaminants of concern to concentrations less than the City of Everett requirements. Representative samples of the treated wastewater will be collected prior to discharge. Upon successful treatment and authorization from the City of Everett, wastewater will be pumped into the City of Everett's sanitary sewer system for treatment at a City of Everett treatment facility.

Upon completion of adequate moisture level reduction, excavated soil will be loaded into trucks and transported to the designated waste facility.

6.7.1 Remedial Excavation in Vicinity of 30-inch Combined Sewer Overflow

Following the delineation drilling work documented in Cardno's *Port of Everett – Excavation Delineation Report*, dated April 21, 2021 (Cardno, 2021) a City of Everett 30-inch combined sewer overflow line was discovered at 20 feet bgs beneath the ESR office building. This area was not historically documented in Wood's draft August 2019 SC/FFS and thus never contemplated as an "inaccessible area" as defined in the draft SC/FFS. Excavation in the vicinity of the 30-inch sewer line is not practical or justified for the following reasons:

- > The draft SC/FFS did not show the location of the CSO and was not included as an "inaccessible area" as documented and occupied by other utility corridors in the area.
- > Per the City of Everett, excavation of historically impacted material would have occurred at the time the CSO was installed in 1996; thus, additional excavation would not accomplish further remediation of the Port of Everett property. Excavation around the 30-inch CSO line would remove imported fill placed at the time of the installation when the 30-inch CSO line was installed.
- > Per the City of Everett, cutting/capping/rerouting the line would be difficult and would also pose a danger to construction workers.
- > The northern shoring wall will be setback approximately 15 feet south of the CSO. This setback distance will be further refined based on collaboration with Cardno's subcontracted excavation contractor and the City of Everett. A final setback distance will be presented in the EDR and associated designs.

To ensure that soil in the vicinity of the 30-inch CSO line is protective of human health and the environment, soil samples will be collected prior to or at the time of the installation of the northern shoring wall. If soil concentrations are greater than the MTCA Method A Cleanup Levels, an Environmental Covenant will be placed on the affected parcels. Placement of environmental covenants will be described in the future Site Cleanup Action Plan. Additional details pertaining to backfill material compositions, and lift thickness requirements will be provided in the EDR.

6.8 Excavation Restoration

6.8.1 Geotechnical Filter Fabric Installation

Upon completion of excavation activities, and prior to the placement of backfill, a geotechnical filter fabric will be installed. The geotechnical filter fabric will consist of a woven material composed of a strong, rot-proof polymeric yarn or fiber oriented into a network that retains its structure during handling, placement, and long-term service. Geotechnical filter fabric will be used to ensure that backfill material does not migrate and cause future geotechnical instability. The fabric material shall have complete resistance to deterioration from

ambient temperatures, acid, and alkaline conditions, and shall be indestructible to microorganisms and insects.

The geotechnical filter fabric will be placed along the sidewalls and floor of the excavation, as well as between layers of different backfill materials (see Section 6.8.2). The geotechnical filter fabric seams shall be joined by either overlapping or sewing using a double seam-sewn joint. If overlapped, the fabric will overlap by at least 2 feet.

6.8.2 Backfill and Compaction

Once the geotechnical filter fabric has been installed along the sidewalls and floor, the excavation will be backfilled. Per specifications outlined by the Port engineer, backfill material installed below the water table will be an open-grade, self-compacting aggregate blend. Backfill installed above the groundwater table will be compacted to a 92% of maximum dry density until approximately 24 inches bgs. Compacted backfill material will be installed to within approximately 6 inches bgs. Additional details pertaining to backfill material compositions, and lift thickness requirements will be provided in the EDR.

6.9 Surface Restoration

Surface restoration will be accomplished by installing clean crushed rock, pre-approved by the Cardno engineer and placed in approximately 3-inch loose lifts, from approximately 24 to 6-inches bgs. Each lift will be compacted using various compaction tools such as jumping-jacks, plate compactors, and excavator compaction plates to a maximum dry density of 95%. To maximize adherence to the existing asphalt, the asphalt will be re-cut around the perimeter of the excavation.

Upon completion of the crushed rock base installation, asphalt paving activities will begin. A 6-inch surface coverage of hot asphalt paving mix will be placed over the crushed rock base and compacted. Asphalt mix will be placed in lifts between 2 and 4 inches thick (compacted thickness), except leveling course, which may be thinner. To ensure adequate compaction, each lift of asphalt mix will be tested for density for a minimum average of 92 percent of the theoretical maximum density.

6.10 Site Restoration

Following asphalt surface restoration, fencing at the Ecology Site will be restored to pre-excavation status. A permanent MARSEC-rated fence will be installed along the southern, eastern, and northern sections of the Port Property, conforming to Section 2.3.8 of the United States Department of Transportation and United States Coast Guard's *Recommended Security Guidelines for Facilities*, dated January 13, 2003 (USCG, 2003). Additionally, the automatic gates servicing ESR will be reinstated to pre-excavation status.

7 Overview of Remedial Design and Reporting

After the Interim Action Work Plan has been finalized, the PLP's will proceed with the remedial design for the Port Property remedial excavation. This section summarizes the steps included in the remedial design and implementation of the activities outlined in Section 6 of this report.

The PLPs will prepare an EDR for Ecology's review and approval. The EDR will be prepared in collaboration with the Contractor awarded the work. The EDR will include final shoring design plans, water management specifications, excavation methodologies, and method statements on the means and measures to execute technical components of the work. Roles and responsibilities for the subcontractors of the excavation work will be defined in the EDR. Additional means and methods for utility disconnection and restoration, haul routes, waste disposal facilities, Ecology Site-specific best management practices, site layout plans, detailed construction schedules, means to meet permit requirements, proposed impermeable barrier wall specifications, backfill specifications/method statement, and site restoration plan and method statement will

also be included in the EDR. Mobilization and demobilization plans for the Contractor, as well as a Ecology Site-specific HASP, will be included in the EDR.

Project permits will be obtained as necessary. Substantive requirements of laws for which the MTCA creates a permit exemption will also be determined.

Upon completion of the interim action, a report summarizing field activities (including shoring, excavation, backfill, and restoration) and waste documentation will be submitted to ExxonMobil, ADC, Ecology, and property owners affected by the interim action. The report will be signed by a State of Washington licensed geologist or engineer.

8 Schedule for Implementation

The interim action will be initiated after the *Interim Action Work Plan* has been finalized. A tentative implementation schedule with more detail, including an estimated completion time, will be included in the EDR. The projected timeframe for the proposed interim action is May through August 2022 for optimal coordination between this interim action and the Port's 3rd Interim Action at the Kimberly-Clark site, and so it occurs during drier months. The timeframes for planned activities are estimated and could be subject to change. A projected schedule is summarized in Figure 3.

Figure 3 Interim Action Implementation Schedule

Date	Planned Activities
February 2022 – May 2022	Subcontractor bid solicitation, permitting, remedial excavation planning, and EDR production.
July – September 2022	Relocate ESR office to the ExxonMobil-owned parcel and mobilize a temporary office to the west of the planned Port excavation for ESR use during field work.
June 2022	Excavation contractor mobilization to the Port Property and initiate remedial excavation.
June – September 2022	Perform Port Property remedial excavation.
September 30, 2022	Port Property restoration complete, relocate ESR structure back to its original location, and demobilize from the Port Property.

The work described in this *Port of Everett Property Interim Action Work Plan* will be performed in summer 2022 to ensure Port redevelopment and infrastructure projects can commence in fall 2022. The schedule to complete the Ecology Site FFS, Ecology Site Cleanup Action Plan, and perform the ExxonMobil and ADC parcel remedial excavation is summarized in Figure 4.

Figure 4 Site Cleanup Projected Implementation Schedule

Date	Planned Activities
May – July 2022	Prepare Revised Draft Focused Feasibility Study
July – December 2022	Prepare Revised Draft Cleanup Action Plan
January – March 2023	Public Comment Period for Draft Final Focused Feasibility Study and Draft Final Cleanup Action Plan
May – October 2023	Perform ExxonMobil and ADC Property remedial excavation
October – December 2023	Prepare environmental covenants and remedial action closeout reporting

9 Contact Information

- > The responsible party contact is Mr. Ken Drake, ExxonMobil Environmental and Property Solutions Company, 22777 Springwoods Village Parkway, W3.2A.581, Spring, Texas 77389.
- > The consultant contact is Mr. Bobby Thompson, Cardno, 309 South Cloverdale Street, Unit A13, Seattle, Washington 98108.
- > The agency contact is Mr. Jason Cook, Washington State Department of Ecology, Toxic Cleanup Program, P.O. Box 47600, Olympia, Washington 98504-7600.

10 Limitations

For documents cited that were not generated by Cardno, the data taken from those documents is used “as is” and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This report and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in Washington at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the Ecology Site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

11 References

Brost, E.J., and DeVaul, G.E. (Brost and DeVaul). June 2000. *Non-Aqueous Phase Liquid (NAPL) Mobility Limits in Soil*. American Petroleum Institute, Soil & Groundwater Research Bulletin, No. 9.

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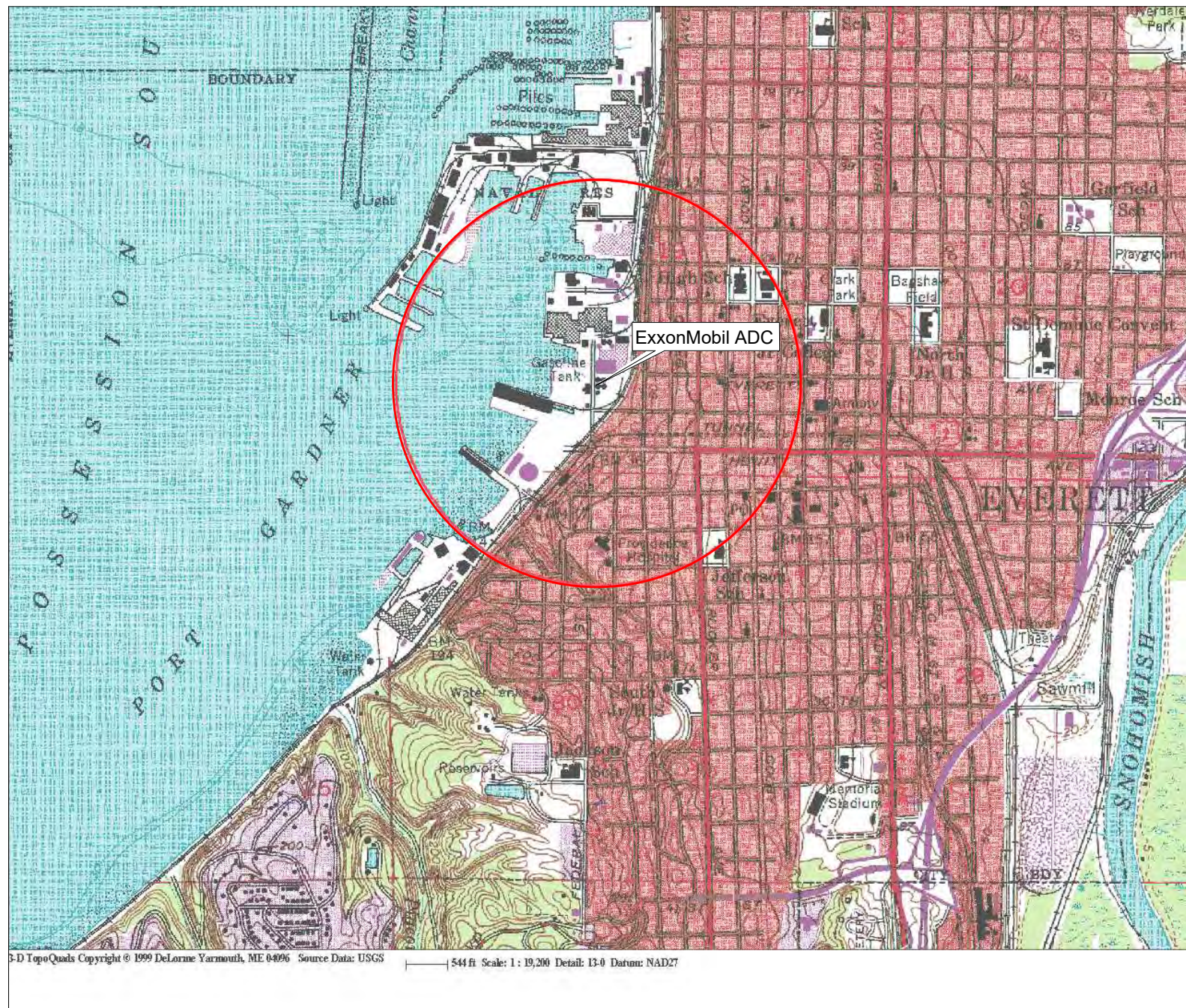
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Washington State Department of Ecology (Ecology). 2021. Cleanup Site Search.
<https://apps.ecology.wa.gov/gsp/SiteSearchPage.aspx>. Accessed August 4, 2021.

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FN 0314470001

EXPLANATION



1/2-mile radius circle



APPROXIMATE SCALE



SITE LOCATION MAP

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

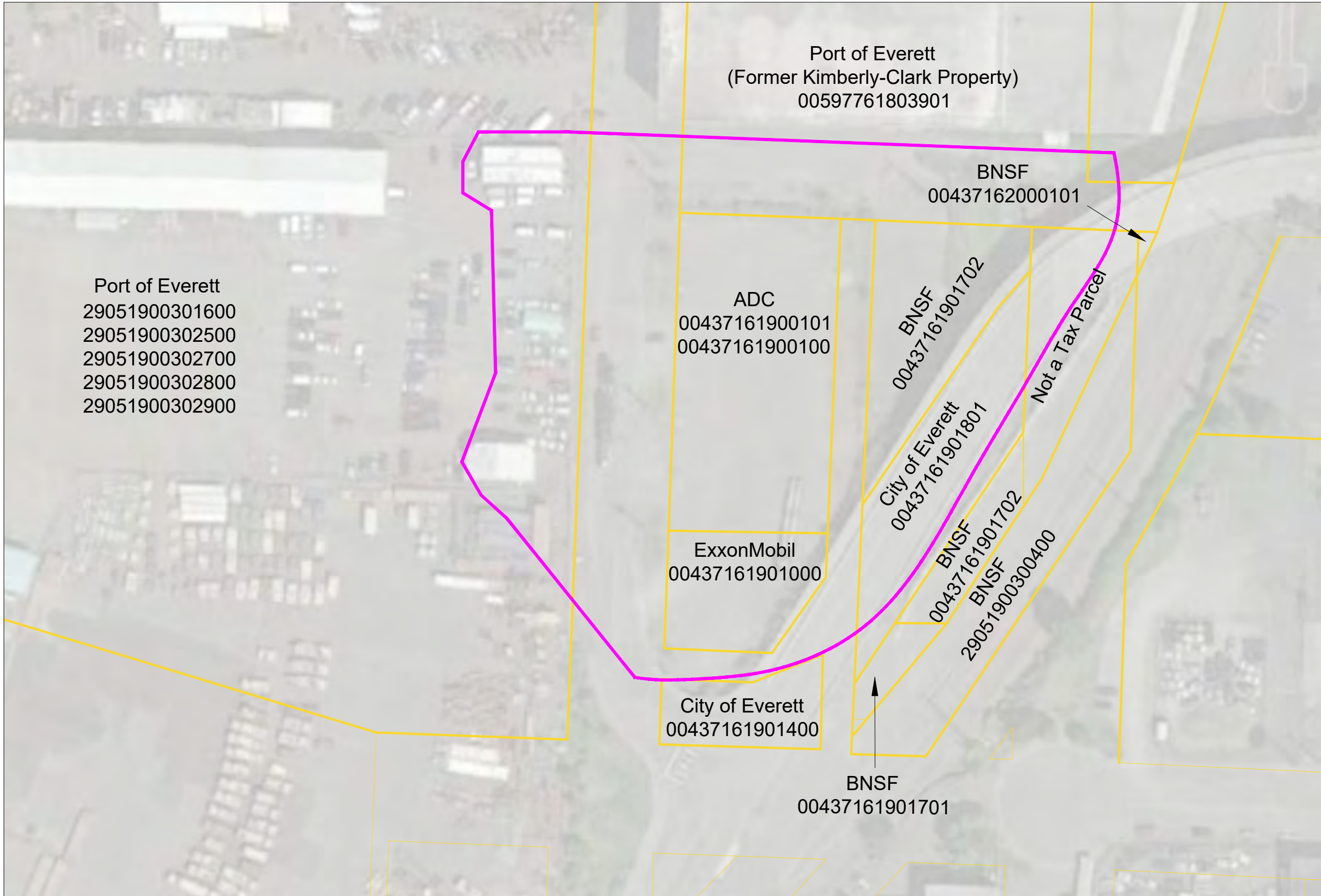
PROJECT NO.

031447

PLATE

1

LEC: 12/16/21



EXPLANATION

- MTCA Site Boundary
- Tax Parcel Boundary

SOURCE: Modified from
maps provided by the
Snohomish County Assessor

FN 0314470002

APPROXIMATE SCALE



SITE BOUNDARY MAP

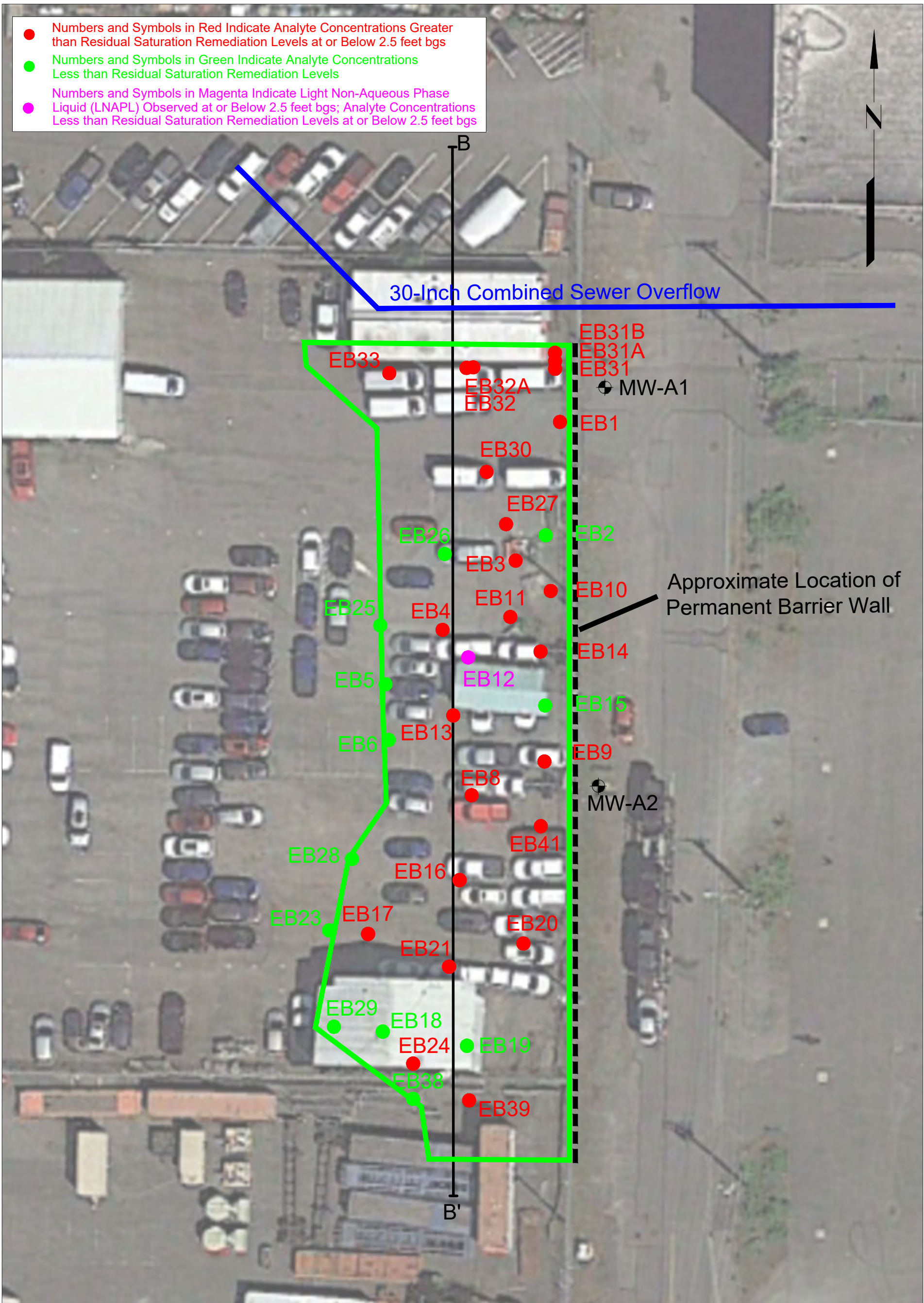
EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
3

LEC: 12/16/21

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 2.5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 2.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 2.5 feet bgs



FN 0314470002

SOURCE: Modified from images provided by Google Earth

EXPLANATION

- MW-A2
Groundwater Monitoring Well
- EB41
Excavation Delineation Boring

- B B' Cross Section Traverse
- BGS Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



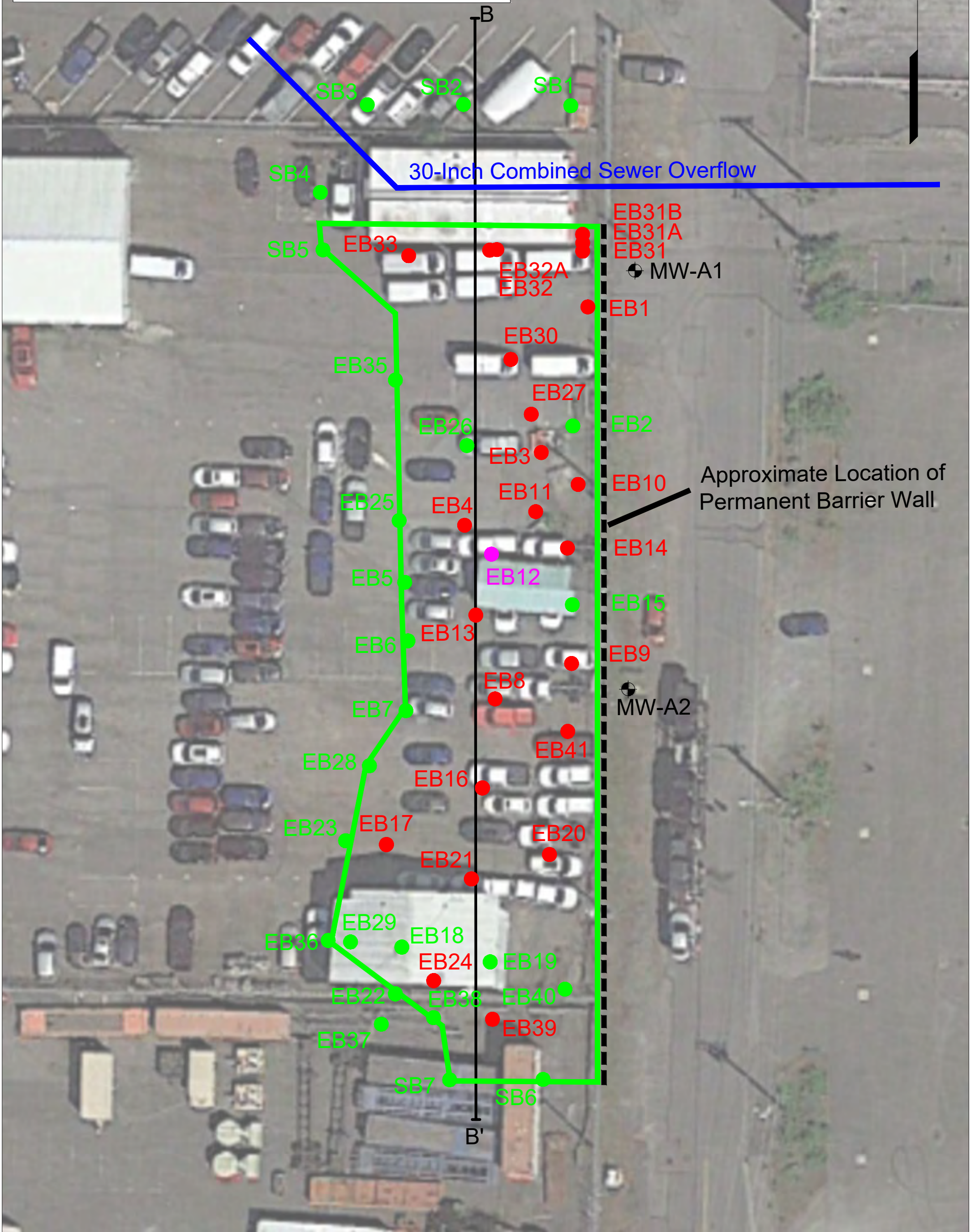
PORT OF EVERETT EXCAVATION DELINEATION MAP-
2.5 FEET BGS EXCAVATION FLOOR SAMPLES

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
4
CPA: 03/28/22

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 5 feet bgs



FN 0314470002

SOURCE: Modified from images provided by Google Earth

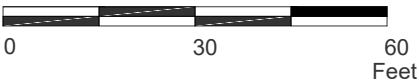
EXPLANATION

- MW-A2
Groundwater Monitoring Well
- EB41
Excavation Delineation Boring

- B B' Cross Section Traverse
- BGS Below Ground Surface

Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP-
5 FEET BGS EXCAVATION FLOOR SAMPLES

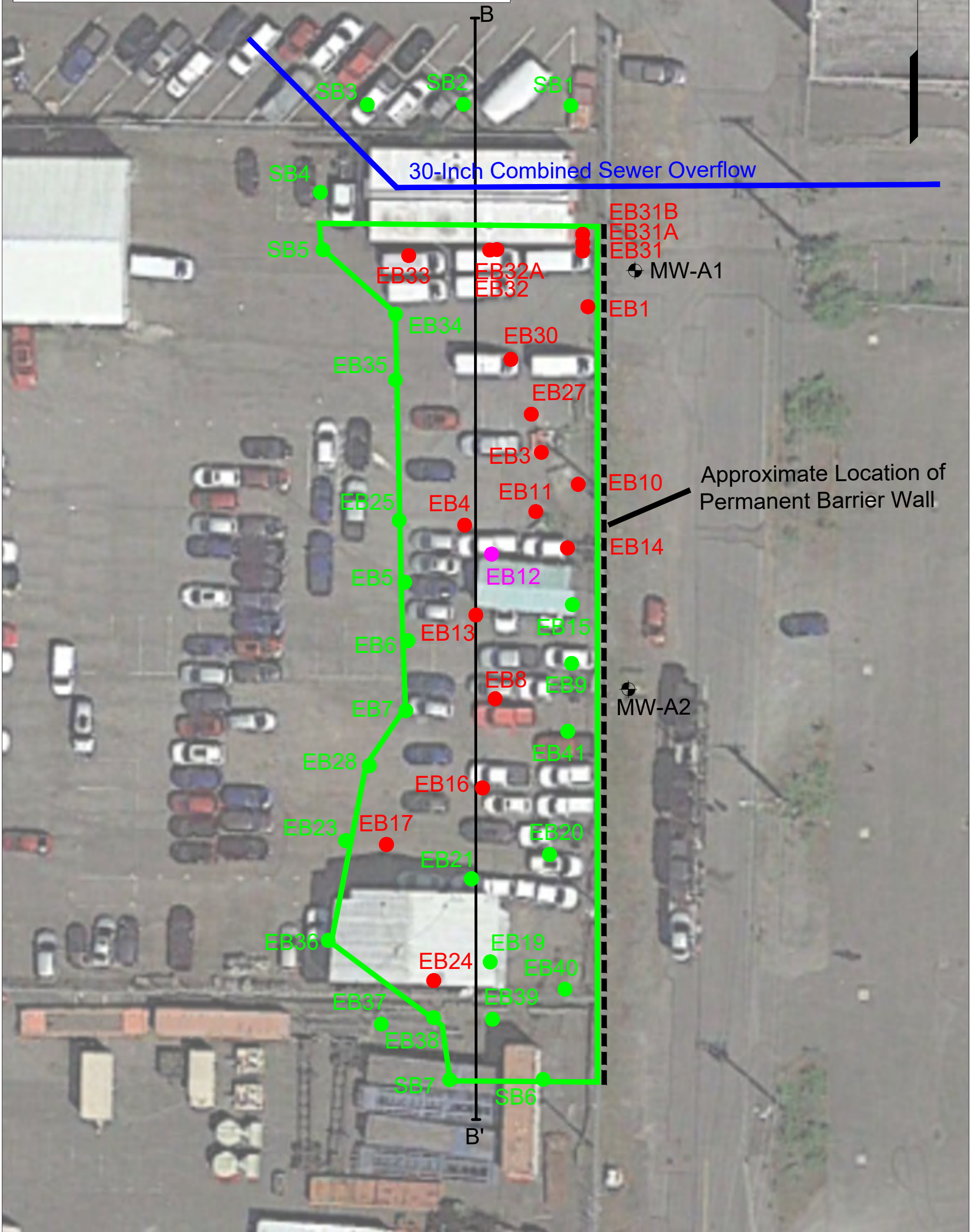
EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
5

CPA: 03/28/22

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 7.5 feet bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 7.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 7.5 feet bgs



FN 0314470002

SOURCE: Modified from images provided by Google Earth

EXPLANATION

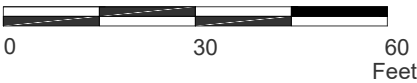
- MW-A2
- ⊕

Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

- B B'
- |—

Cross Section Traverse
- BGS
- Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP-
7.5 FEET BGS EXCAVATION FLOOR SAMPLES

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
6
CPA: 03/28/22

-
- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 10 feet bgs

Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels

Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 10 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 10 feet bgs
- SB3 SB2 SB1

SB4

30-Inch Combined Sewer Overflow

EB33 EB32A EB32 EB31B EB31A EB31

MW-A1

EB1

EB34

EB35

EB30

EB27

EB26

EB3

EB11

EB4

EB2

EB10

EB14

EB15

EB5

EB12

EB6

EB13

EB9

EB7

EB8

MW-A2

EB41

EB28

EB16

EB20

EB23

EB17

EB21

EB36

EB24

EB19

EB40

EB39

EB37

EB38

SB7

SB6

B

B'

Approximate Location of Permanent Barrier Wall
- FN 0314470002
- SOURCE: Modified from images provided by Google Earth
- EXPLANATION
- MW-A2

Groundwater Monitoring Well

EB41

Excavation Delineation Boring
- B

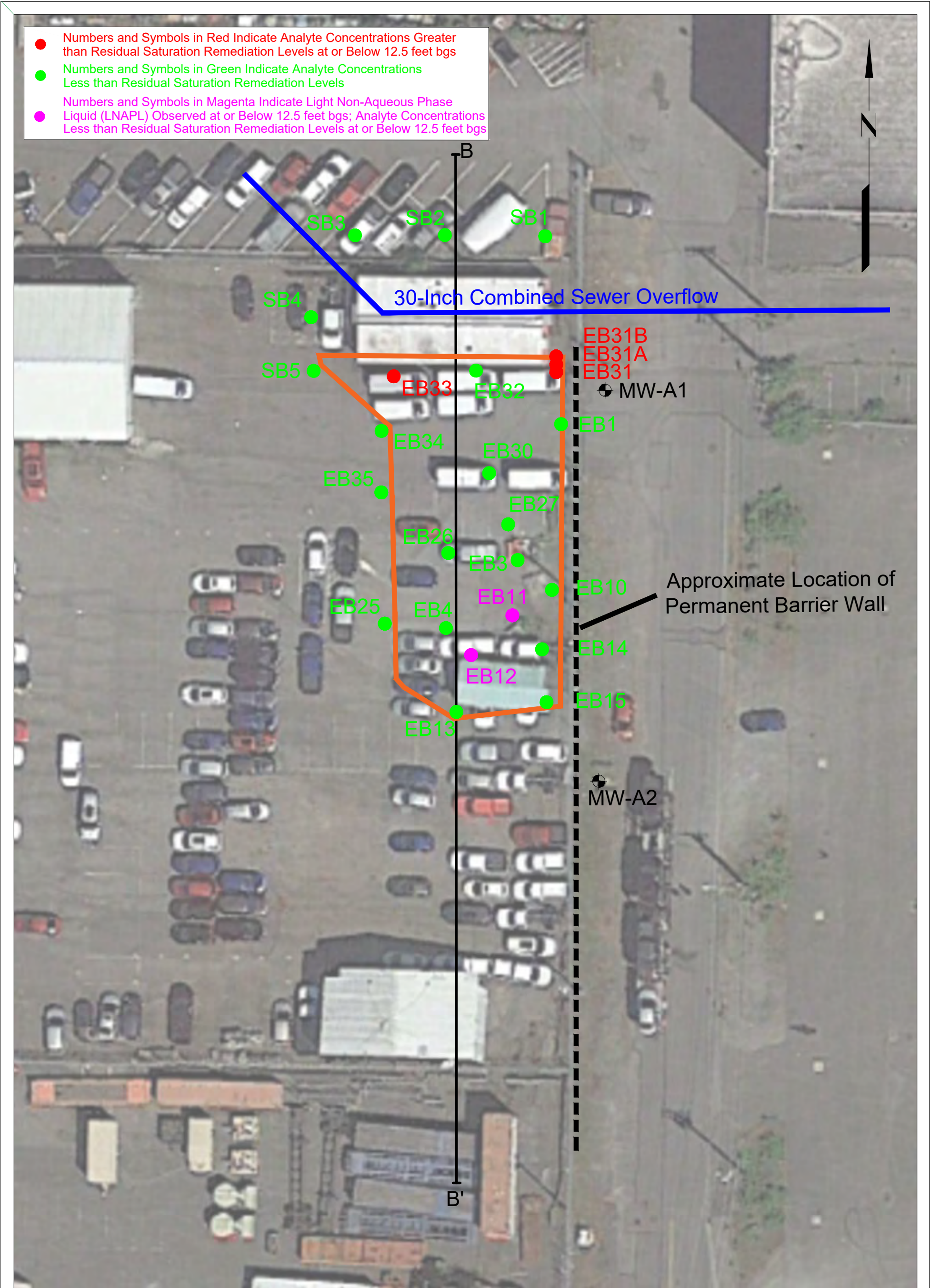
B'

Cross Section Traverse

BGS

Below Ground Surface

Defined Excavation Extents
- APPROXIMATE SCALE
-
-
- PORT OF EVERETT EXCAVATION DELINEATION MAP-
10 FEET BGS EXCAVATION FLOOR SAMPLES
- EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington
- PROJECT NO.
031447
- PLATE
7
CPA: 03/28/22



-
- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 15' bgs

Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels

Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 15 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 15 feet bgs
- An aerial photograph of an industrial site with a parking lot full of cars. A blue line represents a '30-Inch Combined Sewer Overflow' running horizontally across the upper middle. A vertical line labeled 'B' at the top and 'B'' at the bottom indicates a cross-section traverse. Several sample points are marked: SB1, SB2, SB3, SB4, SB5 in green; EB1, EB3, EB4, EB10, EB11, EB12, EB13, EB32A, EB34 in green; EB31, EB31A, EB31B in red; and EB33 in magenta. Two monitoring wells, MW-A1 and MW-A2, are marked with black circles and crosshairs. A dashed black line on the right is labeled 'Approximate Location of Permanent Barrier Wall'. A red line outlines a specific area of concern.
- FN 0314470002
- SOURCE: Modified from images provided by Google Earth
- EXPLANATION
- MW-A2

Groundwater Monitoring Well

EB41

Excavation Delineation Boring
- B

B'

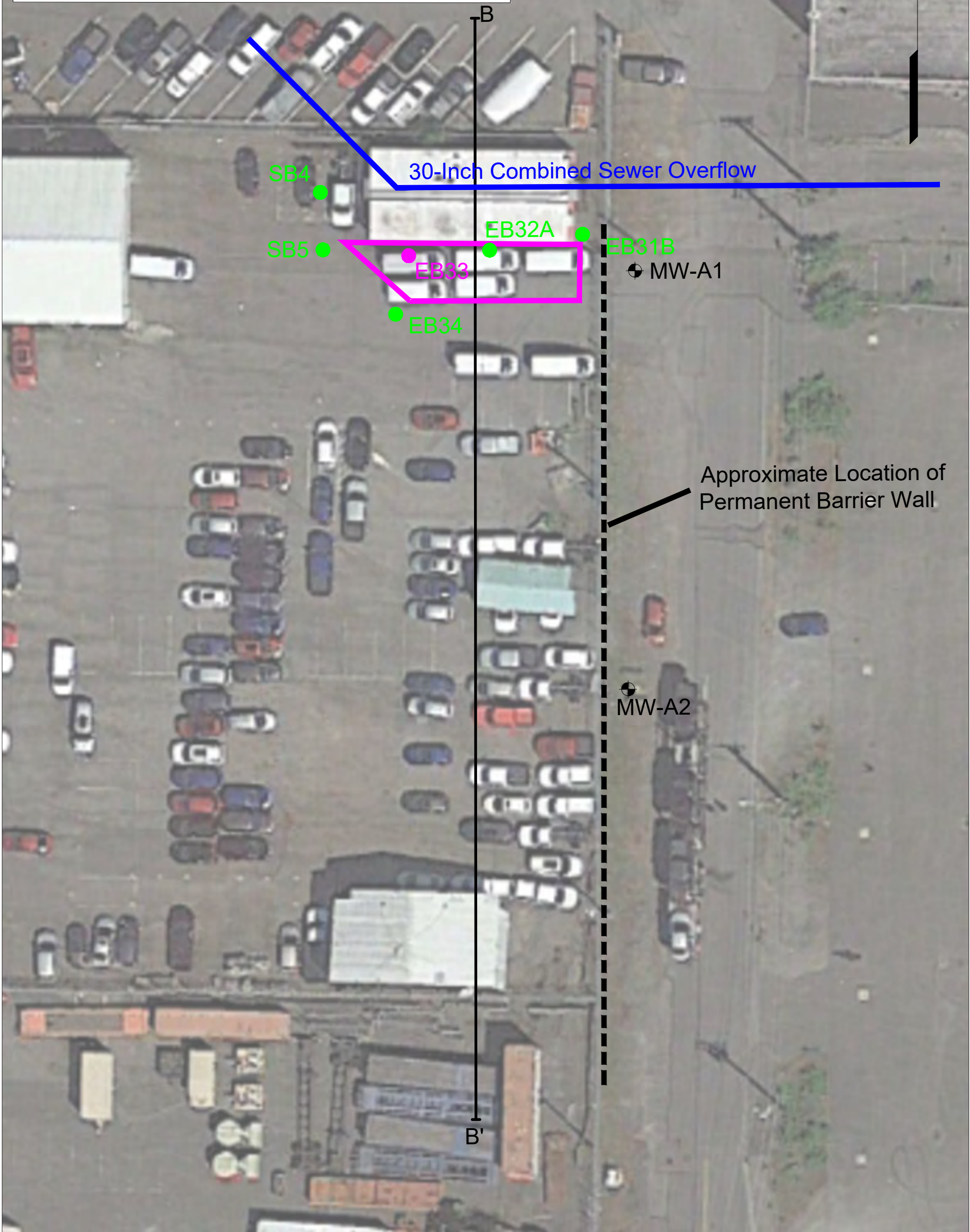
Cross Section Traverse

BGS

Below Ground Surface

Defined Excavation Extents
- APPROXIMATE SCALE
-
-
- PORT OF EVERETT EXCAVATION DELINEATION MAP-
15 FEET BGS EXCAVATION FLOOR SAMPLES
- EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington
- PROJECT NO.
031447
- PLATE
9
- CPA: 03/28/22

- Numbers and Symbols in Red Indicate Analyte Concentrations Greater than Residual Saturation Remediation Levels at or Below 17.5' bgs
- Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels
- Numbers and Symbols in Magenta Indicate Light Non-Aqueous Phase Liquid (LNAPL) Observed at or Below 17.5 feet bgs; Analyte Concentrations Less than Residual Saturation Remediation Levels at or Below 17.5 feet bgs



FN 0314470002

SOURCE: Modified from images provided by Google Earth

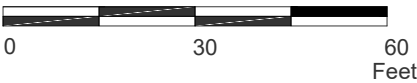
EXPLANATION

- MW-A2
- Groundwater Monitoring Well
- EB41
- Excavation Delineation Boring

- B

B'
- Cross Section Traverse
- BGS
- Below Ground Surface
-
- Defined Excavation Extents

APPROXIMATE SCALE



PORT OF EVERETT EXCAVATION DELINEATION MAP-
17.5 FEET BGS EXCAVATION FLOOR SAMPLES
EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447
PLATE
10
CPA: 03/28/22

● Numbers and Symbols in Green Indicate Analyte Concentrations Less than Residual Saturation Remediation Levels



FN 0314470002

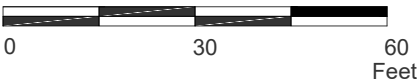
SOURCE: Modified from images provided by Google Earth

EXPLANATION

- MW-A2
● Groundwater Monitoring Well
- EB41
● Excavation Delineation Boring

- B B' Cross Section Traverse
- BGS Below Ground Surface
- Defined Excavation Extents

APPROXIMATE SCALE



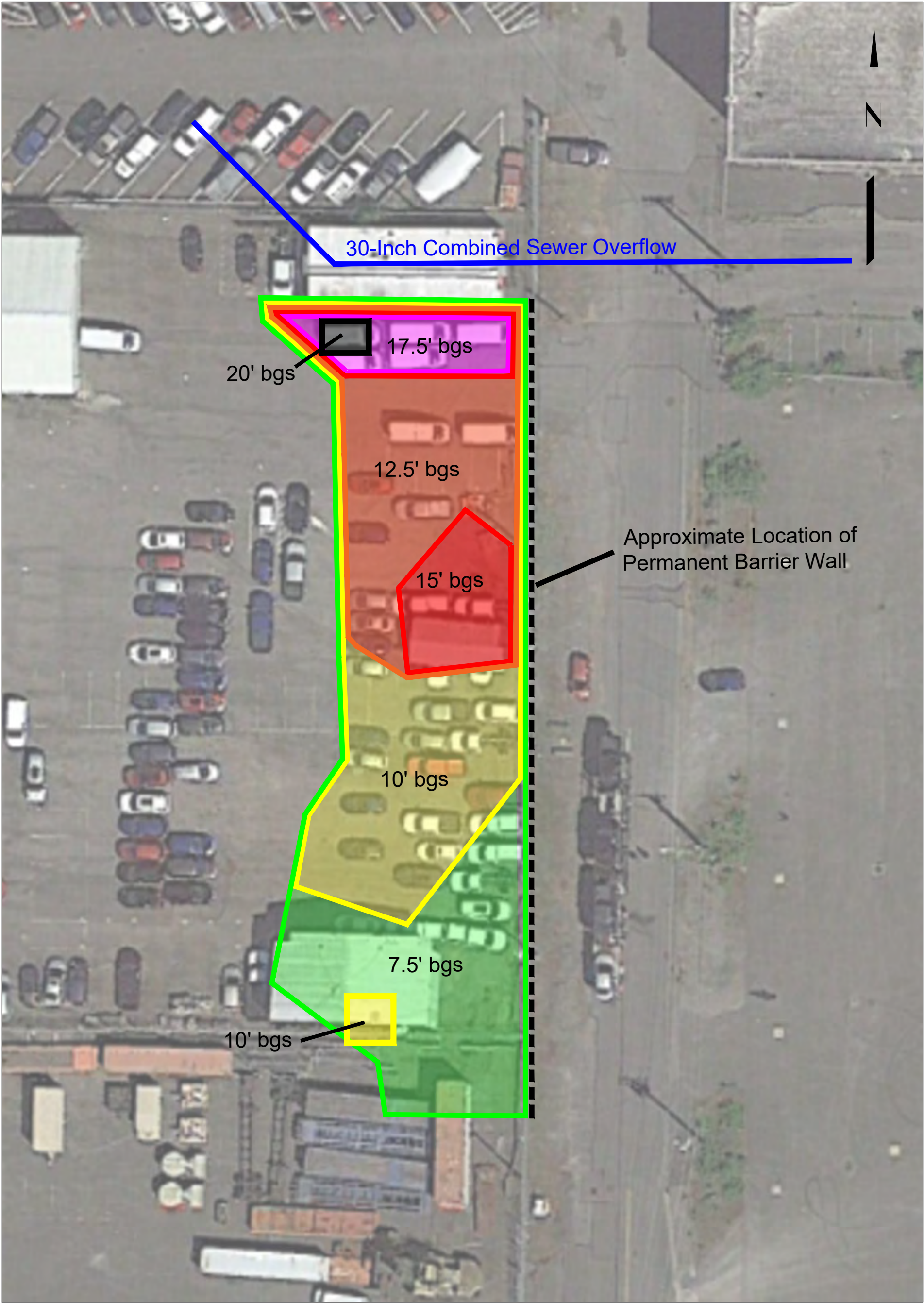
PORT OF EVERETT EXCAVATION DELINEATION MAP-
20 FEET BGS EXCAVATION FLOOR SAMPLES

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
11

CPA: 03/28/22



FN 0314470002

7.5' bgs Defined Excavation Extents

10' bgs Defined Excavation Extents

12.5' bgs Defined Excavation Extents

15' bgs Defined Excavation Extents

17.5' bgs Defined Excavation Extents

20' bgs Defined Excavation Extents

0

20

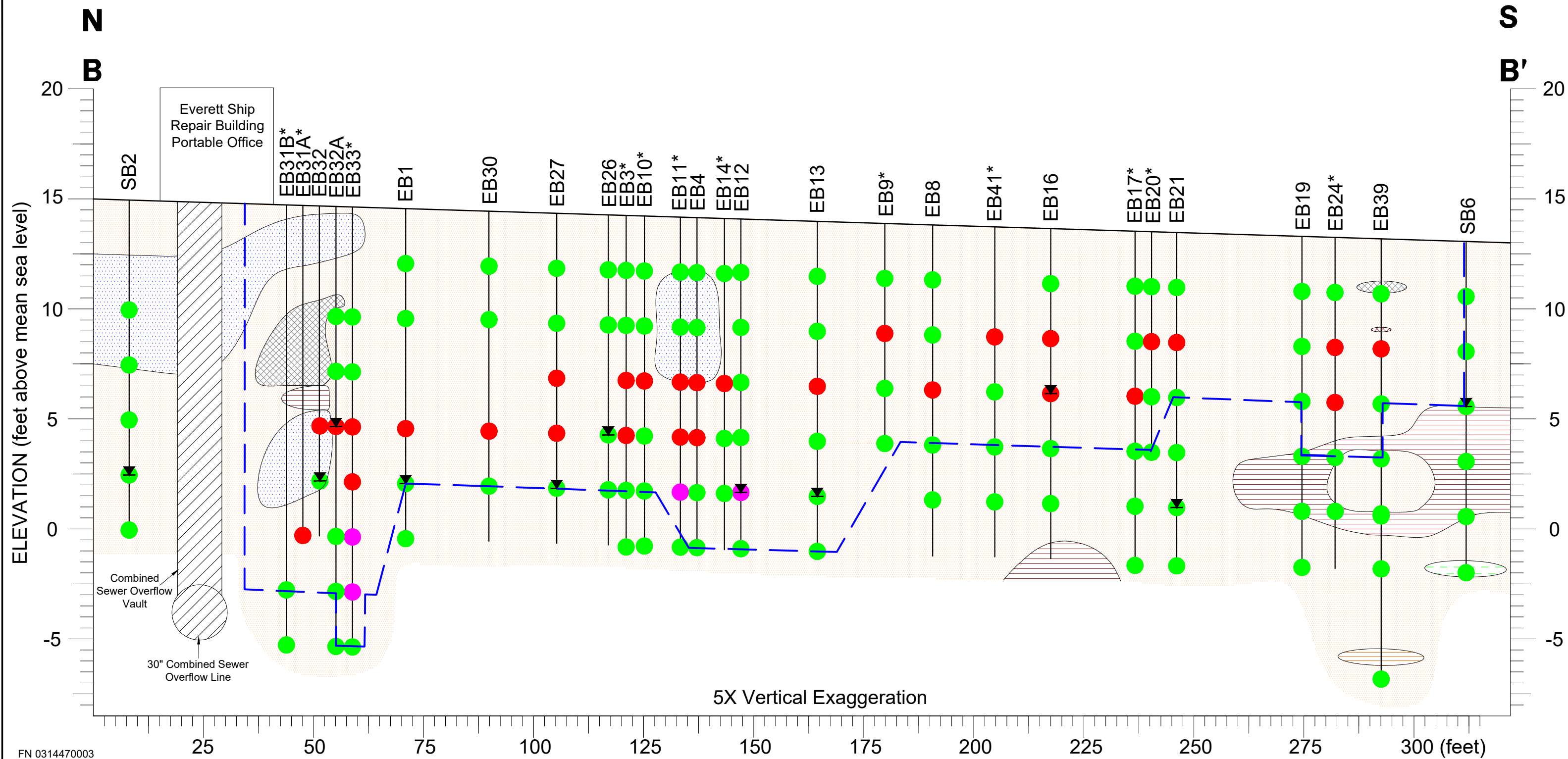
40

Feet

BGS

Below Ground Surface

* = Borings EB1, EB3, EB9, EB10, EB11, EB14, EB17, EB20, EB24, EB31A, EB31B, EB33, and EB41 are projected onto the cross section for hydrocarbon concentration distribution purposes; projected borings were not used to construct lithology illustration



FN 0314470003



PORT OF EVERETT CROSS SECTION N-S

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

EXPLANATION

- Water Level Encountered During Drilling
- Hydrocarbon Concentrations In Soil Less Than Site-Specific Residual Saturation Remediation Levels
- Hydrocarbon Concentrations In Soil Greater Than Site-Specific Residual Saturation Remediation Levels
- LNAPL Observed During Drilling
- Proposed Excavation Extents

- Coarse-grained Gravelly Sediments (GW, GC)
- Coarse-grained Sandy Sediments (SW, SP, SM, SC)
- Fine-grained Sediments (CL, CH, ML)
- Organic Sediments (OH, PT, Wood Debris)
- Concrete Debris

PROJECT

031447

PLATE

13

CPA: 03/28/22

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
Page 1 of 7

Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021:							
S-2.5-EB1	EB1	10/13/20	2.5	--	<10	<50	<250
S-5-EB1	EB1	10/13/20	5	--	<10	<50	<250
S-10-EB1	EB1	10/13/20	10	--	<100	16,000E	<250
S-12.5-EB1	EB1	10/13/20	12.5	--	<50	3,500	<250
S-15-EB1	EB1	10/13/20	15	--	<10	<50	<250
S-2.5-EB2	EB2	10/13/20	2.5	--	<10	<50	<250
S-5-EB2	EB2	10/13/20	5	--	<10	<50	<250
S-10-EB2	EB2	10/13/20	10	--	<10	<50	<250
S-2.5-EB3	EB3	10/12/20	2.5	--	<10	<50	<250
S-5-EB3	EB3	10/12/20	5	--	<10	<50	<250
S-7.5-EB3	EB3	10/12/20	7.5	--	<100	43,000	<250
S-10-EB3	EB3	10/12/20	10	--	<50	15,000	<250
S-12.5-EB3	EB3	10/12/20	12.5	--	<50	188	<250
S-15-EB3	EB3	10/12/20	15	--	<10	<50	<250
S-2.5-EB4	EB4	10/12/20	2.5	--	<10	<50	<250
S-5-EB4	EB4	10/12/20	5	--	18	4,700	<250
S-7.5-EB4	EB4	10/12/20	7.5	--	<100	36,000	<250
S-10-EB4	EB4	10/12/20	10	--	<100	5,500E	<250
S-12.5-EB4	EB4	10/12/20	12.5	--	<50	4,400	<250
S-15-EB4	EB4	10/12/20	15	--	<10	<50	<250
S-2.5-EB5	EB5	10/12/20	2.5	--	<10	<50	<250
S-5-EB5	EB5	10/12/20	5	--	<10	<50	<250
S-7.5-EB5	EB5	10/12/20	7.5	--	<10	<50	<250
S-10-EB5	EB5	10/12/20	10	--	<10	51	<250
S-2.5-EB6	EB6	10/12/20	2.5	--	<10	<50	<250
S-5-EB6	EB6	10/12/20	5	--	<10	<50	<250
S-7.5-EB6	EB6	10/12/20	7.5	--	<10	<50	<250
S-10-EB6	EB6	10/12/20	10	--	<10	<50	<250
S-5-EB7	EB7	10/12/20	5	--	<10	<50	<250
S-7.5-EB7	EB7	10/12/20	7.5	--	<10	74	<250
S-10-EB7	EB7	10/12/20	10	--	<10	<50	<250
S-2.5-EB8	EB8	10/14/20	2.5	--	<10	<50	<250
S-5-EB8	EB8	10/14/20	5	--	<10	2,600	4,300
S-7.5-EB8	EB8	10/14/20	7.5	--	<10	7,400	13,000
S-10-EB8	EB8	10/14/20	10	--	<20	1,800	1,300
S-12.5-EB8	EB8	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB9	EB9	10/14/20	2.5	--	<10	<50	<250
S-5-EB9	EB9	10/14/20	5	--	<50	2,700	11,000E
S-7.5-EB9	EB9	10/14/20	7.5	--	<10	<50	<250
S-10-EB9	EB9	10/14/20	10	--	<10	<50	<250
S-2.5-EB10	EB10	10/14/20	2.5	--	<10	<50	<250
S-5-EB10	EB10	10/14/20	5	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
Page 2 of 7

Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-7.5-EB10	EB10	10/14/20	7.5	--	<10	12,000	<250
S-10-EB10	EB10	10/14/20	10	--	<10	4,300	<250
S-12.5-EB10	EB10	10/14/20	12.5	--	<10	<50	<250
S-15-EB10	EB10	10/14/20	15	--	<10	<50	<250
S-2.5-EB11	EB11	10/12/20	2.5	--	<10	<50	550
S-5-EB11	EB11	10/12/20	5	--	<100	2,400	<250
S-7.5-EB11	EB11	10/12/20	7.5	Yes	<100	44,000	2,700
S-10-EB11	EB11	10/12/20	10	Yes	<100	11,000	1,300
S-12.5-EB11	EB11	10/12/20	12.5	Yes	<10	370	<250
S-15-EB11	EB11	10/12/20	15	--	<10	<50	<250
S-2.5-EB12	EB12	10/12/20	2.5	--	<10	<50	<250
S-5-EB12	EB12	10/12/20	5	--	<10	160	<250
S-7.5-EB12	EB12	10/12/20	7.5	--	<10	3,600	<250
S-10-EB12	EB12	10/12/20	10	--	<100	3,000	<250
S-12.5-EB12	EB12	10/12/20	12.5	Yes	<100	2,000	<250
S-15-EB12	EB12	10/12/20	15	--	<10	460	<250
S-2.5-EB13	EB13	10/14/20	2.5	--	<10	<50	<250
S-5-EB13	EB13	10/14/20	5	--	<50	1,400	1,800
S-7.5-EB13	EB13	10/14/20	7.5	--	190	11,000	1,800
S-10-EB13	EB13	10/14/20	10	--	<10	320	<250
S-12.5-EB13	EB13	10/14/20	12.5	--	<10	<50	<250
S-15-EB13	EB13	10/14/20	15	--	<10	<50	<250
S-2.5-EB14	EB14	10/14/20	2.5	--	<10	<50	<250
S-7.5-EB14	EB14	10/14/20	7.5	--	<10	5,000	6,900
S-10-EB14	EB14	10/14/20	10	--	<10	4,100	1,500
S-12.5-EB14	EB14	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB15	EB15	10/14/20	2.5	--	<10	<50	<250
S-5-EB15	EB15	10/14/20	5	--	<10	1,100	2,000
S-7.5-EB15	EB15	10/14/20	7.5	--	19	2,200	260
S-10-EB15	EB15	10/14/20	10	--	<10	<50	<250
S-12.5-EB15	EB15	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB16	EB16	10/13/20	2.5	--	<10	<50	<250
S-5-EB16	EB16	10/13/20	5	--	<100	4,800	1,100
S-7.5-EB16	EB16	10/13/20	7.5	--	<100	9,700	3,900
S-10-EB16	EB16	10/13/20	10	--	<10	170	<250
S-12.5-EB16	EB16	10/13/20	12.5	--	<10	<50	<250
S-2.5-EB17	EB17	10/13/20	2.5	--	<10	<50	<250
S-5-EB17	EB17	10/13/20	5	--	<10	<50	<250
S-7.5-EB17	EB17	10/13/20	7.5	--	11	33,000	<250
S-10-EB17	EB17	10/13/20	10	--	<50	2,600	<250
S-12.5-EB17	EB17	10/13/20	12.5	--	<10	<50	<250
S-15-EB17	EB17	10/13/20	15	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
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Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-5-EB18	EB18	10/13/20	5	--	<10	450	210J
S-2.5-EB19	EB19	10/13/20	2.5	--	<10	<50	<250
S-5-EB19	EB19	10/13/20	5	--	<50	1,900	360
S-7.5-EB19	EB19	10/13/20	7.5	--	<50	4,500	760
S-10-EB19	EB19	10/13/20	10	--	<10	<50	<250
S-12.5-EB19	EB19	10/13/20	12.5	--	<10	<50	<250
S-15-EB19	EB19	10/13/20	15	--	<10	<50	<250
S-2.5-EB20	EB20	10/13/20	2.5	--	<10	170	<250
S-5-EB20	EB20	10/13/20	5	--	<10	8,400	2,200
S-7.5-EB20	EB20	10/13/20	7.5	--	<10	180	<250
S-10-EB20	EB20	10/13/20	10	--	<10	<50	<250
S-2.5-EB21	EB21	10/13/20	2.5	--	<10	<50	<250
S-5-EB21	EB21	10/13/20	5	--	<10	8,100	12,000
S-7.5-EB21	EB21	10/13/20	7.5	--	<50	3,700	640
S-10-EB21	EB21	10/13/20	10	--	<10	<50	<250
S-12.5-EB21	EB21	10/13/20	12.5	--	<10	<50	<250
S-15-EB21	EB21	10/13/20	15	--	<10	<50	<250
S-5-EB22	EB22	10/13/20	5	--	<10	<50	<250
S-2.5-EB23	EB23	10/13/20	2.5	--	<10	<50	<250
S-5-EB23	EB23	10/13/20	5	--	<10	<50	<250
S-7.5-EB23	EB23	10/13/20	7.5	--	<10	<50	<250
S-10-EB23	EB23	10/13/20	10	--	<10	4,100	<250
S-12.5-EB23	EB23	10/13/20	12.5	--	<10	62	<250
S-2.5-EB24	EB24	10/13/20	2.5	--	<10	<50	<250
S-5-EB24	EB24	10/13/20	5	--	<50	<50	6,300
S-7.5-EB24	EB24	10/13/20	7.5	--	<10	8,100	1,200
S-10-EB24	EB24	10/13/20	10	--	<10	2,300	<250
S-12.5-EB24	EB24	10/13/20	12.5	--	<10	<50	<250
S-2.5-EB25	EB25	10/13/20	2.5	--	<10	<50	<250
S-5-EB25	EB25	10/13/20	5	--	<10	<50	<250
S-7.5-EB25	EB25	10/13/20	7.5	--	<10	<50	<250
S-10-EB25	EB25	10/13/20	10	--	<10	2,400	860
S-12.5-EB25	EB25	10/13/20	12.5	--	<10	<50	<250
S-15-EB25	EB25	10/13/20	15	--	--	<50	<250
S-2.5-EB26	EB26	10/14/20	2.5	--	<10	<50	<250
S-5-EB26	EB26	10/14/20	5	--	<10	76	<250
S-10-EB26	EB26	10/14/20	10	--	<20	1,600	<250
S-12.5-EB26	EB26	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB27	EB27	10/14/20	2.5	--	<10	<50	<250
S-5-EB27	EB27	10/14/20	5	--	<10	<50	<250
S-7.5-EB27	EB27	10/14/20	7.5	--	<100	10,000	11,000
S-10-EB27	EB27	10/14/20	10	--	<100	9,100E	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
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Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-12.5-EB27	EB27	10/14/20	12.5	--	<10	<50	<250
S-2.5-EB28	EB28	10/14/20	2.5	--	<10	<50	<250
S-5-EB28	EB28	10/14/20	5	--	<10	<50	<250
S-7.5-EB28	EB28	10/14/20	7.5	--	<10	<50	<250
S-10-EB28	EB28	10/14/20	10	--	<50	<50	<250
S-2.5-EB29	EB29	10/14/20	2.5	--	<10	<50	<250
S-5-EB29	EB29	10/14/20	5	--	<10	<50	<250
S-2.5-EB30	EB30	10/14/20	2.5	--	<10	<50	<250
S-5-EB30	EB30	10/14/20	5	--	<10	<50	560
S-10-EB30	EB30	10/14/20	10	--	<100	39,000	<250
S-12.5-EB30	EB30	10/14/20	12.5	--	<10	<50	<250
S-5-EB31	EB31	01/25/21	5	--	<10	<50	<250
S-7.5-EB31	EB31	01/25/21	7.5	--	<10	<50	<250
S-9.5-EB31	EB31	01/25/21	9.5	--	<100	3,400	<250
S-15-EB31A	EB31A	01/27/21	15	--	<100	7,000E	<250
S-17.5-EB31B	EB31B	01/27/21	17.5	--	<10	<50	<250
S-20-EB31B	EB31B	01/27/21	20	--	<10	<50	<250
S-10-EB32	EB32	01/25/21	10	--	<10	6,200	<250
S-10-EB32 ^b	EB32	01/25/21	10	--	--	4,700	<250
S-12.5-EB32	EB32	01/25/21	12.5	--	<10	410	<250
S-12.5-EB32 ^b	EB32	01/25/21	12.5	--	--	340	<250
S-5-EB32A	EB32A	01/27/21	5	--	<10	56	<250
S-7.5-EB32A	EB32A	01/27/21	7.5	--	<25	2,040	290
S-10-EB32A	EB32A	01/27/21	10	--	<10	6,100	<250
S-15-EB32A	EB32A	01/27/21	15	--	<10	<50	<250
S-17.5-EB32A	EB32A	01/27/21	17.5	--	<10	<50	<250
S-20-EB32A	EB32A	01/27/21	20	--	<10	<50	<250
S-5-EB33	EB33	01/25/21	5	--	<10	<50	<250
S-7.5-EB33	EB33	01/25/21	7.5	--	<10	<50	<250
S-10-EB33	EB33	01/25/21	10	Yes	<40	28,000	1,580
S-12.5-EB33	EB33	01/25/21	12.5	Yes	<10	21,000E	<250
S-15-EB33	EB33	01/25/21	15	Yes	<1,000	150	<250
S-17.5-EB33	EB33	01/25/21	17.5	Yes	<10	63	<250
S-20-EB33	EB33	01/25/21	20	--	<10	<50	310
S-7.5-EB34	EB34	01/25/21	7.5	--	<10	<50	<250
S-10-EB34	EB34	01/25/21	10	--	<10	2,100	<250
S-12.5-EB34	EB34	01/25/21	12.5	--	<50	1,600	760
S-15-EB34	EB34	01/25/21	15	--	<10	<50	<250
S-17.5-EB34	EB34	01/25/21	17.5	--	<10	<50	<250
S-20-EB34	EB34	01/25/21	20	--	<10	<50	<250
S-5-EB35	EB35	01/25/21	5	--	<10	<50	<250
S-7.5-EB35	EB35	01/25/21	7.5	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT
ExxonMobil ADC
2717/2731 Federal Avenue
Everett, Washington
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Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-10-EB35	EB35	01/25/21	10	--	<10	<50	<250
S-12.5-EB35	EB35	01/25/21	12.5	--	<15	520	430
S-15-EB35	EB35	01/25/21	15	--	<10	<50	<250
S-5-EB36	EB36	01/26/21	5	--	<10	<50	<250
S-7.5-EB36	EB36	01/26/21	7.5	--	<10	<50	<250
S-10-EB36	EB36	01/26/21	10	--	<10	<50	<250
S-12.5-EB36	EB36	01/26/21	12.5	--	<10	<50	<250
S-5-EB37	EB37	01/27/21	5	--	<10	<50	<250
S-7.5-EB37	EB37	01/27/21	7.5	--	<10	<50	<250
S-10-EB37	EB37	01/27/21	10	--	<10	<50	<250
S-12.5-EB37	EB37	01/27/21	12.5	--	<10	<50	<250
S-2.5-EB38	EB38	01/27/21	2.5	--	<10	<50	490
S-5-EB38	EB38	01/27/21	5	--	<10	<50	<250
S-7.5-EB38	EB38	01/27/21	7.5	--	<10	<50	<250
S-10-EB38	EB38	01/27/21	10	--	<10	<50	<250
S-15-EB38	EB38	01/27/21	15	--	<10	<50	<250
S-2.5-EB39	EB39	01/27/21	2.5	--	<10	2,200	<250
S-12.5-EB38	EB38	01/27/21	12.5	--	<10	<50	<250
S-2.5-EB39 ^b	EB39	01/27/21	2.5	--	<10	--	--
S-5-EB39	EB39	01/27/21	5	--	<10	5,600	<250
S-5-EB39 ^b	EB39	01/27/21	5	--	--	4,500	<250
S-7.5-EB39	EB39	01/27/21	7.5	--	<50	2,200	<250
S-10-EB39	EB39	01/27/21	10	--	<10	<50	<250
S-12.5-EB39	EB39	01/27/21	12.5	--	<10	<50	<250
S-15-EB39	EB39	01/27/21	15	--	<10	<50	<250
S-20-EB39	EB39	01/27/21	20	--	<10	<50	<250
S-5-EB40	EB40	01/26/21	5	--	<10	490a	<250
S-7.5-EB40	EB40	01/26/21	7.5	--	<10	<50	<250
S-10-EB40	EB40	01/26/21	10	--	<10	<50	<250
S-12.5-EB40	EB40	01/26/21	12.5	--	<10	<50	<250
S-5-EB41	EB41	01/27/21	5	--	<15	9,300	6,700
S-7.5-EB41	EB41	01/27/21	7.5	--	<10	630	310
S-10-EB41	EB41	01/27/21	10	--	<10	<50	<250
S-12.5-EB41	EB41	01/27/21	12.5	--	<10	<50	<250
S-5-SB1	SB1	01/26/21	5	--	<10	<50	<250
S-7.5-SB1	SB1	01/26/21	7.5	--	<10	110	660
S-10-SB1	SB1	01/26/21	10	--	<10	<50	<250
S-12.5-SB1	SB1	01/26/21	12.5	--	<10	<50	<250
S-15-SB1	SB1	01/26/21	15	--	<10	<50	<250
S-5-SB2	SB2	01/26/21	5	--	<10	<50	790
S-7.5-SB2	SB2	01/26/21	7.5	--	<10	<50	<250
S-10-SB2	SB2	01/26/21	10	--	<10	<50	<250
Site-Specific Residual Saturation Remediation Levels					2,470	4,800	5,810

TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

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Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
Cardno - Port of Everett - Excavation Delineation Report - April 21, 2021 (continued):							
S-12.5-SB2	SB2	01/26/21	12.5	--	<10	<50	<250
S-15-SB2	SB2	01/26/21	15	--	<10	<50	<250
S-5-SB3	SB3	01/26/21	5	--	<10	440	2,200
S-7.5-SB3	SB3	01/26/21	7.5	--	<10	<50	<250
S-10-SB3	SB3	01/26/21	10	--	<10	130	680
S-12.5-SB3	SB3	01/26/21	12.5	--	<10	<50	<250
S-15-SB3	SB3	01/26/21	15	--	<10	<50	<250
S-20-SB3	SB3	01/26/21	20	--	<10	<50	<250
S-5-SB4	SB4	01/25/21	5	--	<10	<50	<250
S-7.5-SB4	SB4	01/25/21	7.5	--	<10	<50	<250
S-10-SB4	SB4	01/25/21	10	--	<10	3,900	<250
S-12.5-SB4	SB4	01/25/21	12.5	--	<50	1,700	<250
S-15-SB4	SB4	01/25/21	15	--	<10	56	<250
S-17.5-SB4	SB4	01/25/21	17.5	--	<10	<50	<250
S-20-SB4	SB4	01/25/21	20	--	<20	610	<250
S-5-SB5	SB5	01/26/21	5	--	<10	<50	1,630
S-7.5-SB5	SB5	01/26/21	7.5	--	<10	<50	<250
S-10-SB5	SB5	01/26/21	10	--	<10	<50	760
S-12.5-SB5	SB5	01/26/21	12.5	--	<10	<50	<250
S-15-SB5	SB5	01/26/21	15	--	<10	82	580
S-17.5-SB5	SB5	01/26/21	17.5	--	<10	<50	<250
S-20-SB5	SB5	01/26/21	20	--	<10	<50	<250
S-2.5-SB6	SB6	02/05/21	2.5	--	<10	2,800	<250
S-5-SB6	SB6	02/05/21	5	--	<10	57	<250
S-20-SB5	SB5	01/26/21	20	--	<10	<50	<250
S-2.5-SB6	SB6	02/05/21	2.5	--	<10	2,800	<250
S-5-SB6	SB6	02/05/21	5	--	<10	57	<250
S-7.5-SB6	SB6	02/05/21	7.5	--	<10	<50	<250
S-10-SB6	SB6	02/05/21	10	--	<10	<50	<250
S-12.5-SB6	SB6	02/05/21	12.5	--	<10	<50	<250
S-15-SB6	SB6	02/05/21	15	--	<10	<50	<250
S-5-SB7	SB7	02/05/21	5	--	<10	<50	<250
S-7.5-SB7	SB7	02/05/21	7.5	--	<10	<50	<250
S-10-SB7	SB7	02/05/21	10	--	<10	<50	<250
S-12.5-SB7	SB7	02/05/21	12.5	--	<10	<50	<250
S-15-SB7	SB7	02/05/21	15	--	<10	<50	<250

Site-Specific Residual Saturation Remediation Levels	2,470	4,800	5,810
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TABLE 1
EXCAVATION DELINEATION SOIL ANALYTICAL RESULTS — PORT OF EVERETT

ExxonMobil ADC
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Sample Name	Well ID / Location	Date	Sample Depth (feet bgs)	LNAPL Observed	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)
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EXPLANATION:

feet bgs = Feet below ground surface

mg/kg = Milligrams per kilogram

LNAPL = Light Non-aqueous Phase Liquid

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd, TPHmo = Total Petroleum Hydrocarbons as Diesel and as Oil, respectively, in accordance with Ecology Method NWTPH-Dx

All TPHd and TPHmo samples analyzed with silica gel cleanup

N/A = Not applicable

< = Less than the stated laboratory reporting limit

-- = Not Observed; Not Analyzed

Shaded values equal or exceed Site-Specific Residual Saturation Remediation Level

a = Indicates light diesel range

b = Sample reanalyzed by laboratory

E = Reported result exceeds the calibration range and is an estimate

J = Indicates analyte was positively identified. Reported result is an estimate.

TABLE 2
SEMIANNUAL GROUNDWATER ANALYTICAL RESULTS - 2019 THROUGH SECOND HALF 2021

ExxonMobil ADC
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (ft bgs)	LNAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-A1	02/27/19	14.07	5.42	0.00	8.65	260J	1,300J	<94	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A1	08/15/19	14.07	6.39	0.00	7.68	<100	380	<91	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A1	02/27/20	14.07	5.68	0.00	8.39	240	1,400J	<94	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A1	08/27/20	14.07	6.46	0.00	7.61	200J	1,600J	240J	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A1	02/12/21	14.07	5.44	0.00	8.63	110	2,600	140	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A1	02/12/21 ^b	14.07	5.54	0.00	8.53	130	1,900	120	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A1	08/25/21	14.07	6.14	0.00	7.93	120	1,600	350	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A2	02/27/19	12.56	4.59	0.00	7.97	190J	250J	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A2	02/27/19 ^b	12.56	4.59	0.00	7.97	190J	250J	<100	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A2	08/15/19	12.56	5.61	0.00	6.95	110J	130	<94	<2.0	<2.0	<2.0	<6.0	<2.0
MW-A2	08/15/19 ^b	12.56	5.61	0.00	6.95	<100	160	<94	<2.0	<2.0	<2.0	<6.0	<2.0
MW-A2	02/27/20	12.56	4.83	0.00	7.73	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A2	02/27/20 ^b	12.56	4.83	0.00	7.73	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A2	08/26/20	12.56	5.42	0.00	7.14	<100	200J	<98	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A2	02/11/21	12.56	4.59	0.00	7.97	<100	<98	<98	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A2	08/24/21	12.56	5.14	0.00	7.42	<100	<91	<91	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A3	02/27/19	13.79	6.82	0.00	6.97	<100	<94	<94	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A3	08/15/19	13.79	8.30	0.00	5.49	<100	<100	<100	<2.0	<2.0	<2.0	<6.0	<2.0
MW-A3	02/26/20	13.79	7.16	0.00	6.63	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A3	08/26/20	13.79	7.83	0.00	5.96	<100	<97	<97	<1.0	<2.0	<2.0	<6.0	<2.0
MW-A3	02/10/21	13.79	6.70	0.00	7.09	<100	<61	<61	<2.0	<4.0	<4.0	<8.0	<4.0
MW-A3	08/23/21	13.79	7.51	0.00	6.28	<100UJ	<93	<93	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A4	02/27/19	16.33	10.20	0.00	6.13	<100	<94	<94	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A4	08/15/19	16.33	10.56	0.00	5.77	<100	<98	<98	<4.0	<4.0	<4.0	<12	<4.0
MW-A4	02/26/20	16.33	10.70	0.00	5.63	<100	<98	<98	<4.0	<4.0	<4.0	<12	<4.0
MW-A4	08/25/20	16.33	10.53	0.00	5.80	<100	<94UJ	<94UJ	<1.0	<2.0	<2.0	<6.0	<2.0
MW-A4	02/10/21	16.33	10.16	0.00	6.17	<100	<92	<92	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A4	08/23/21	16.33	10.45	0.00	5.88	<100	<96	<96	<2.0	<4.0	<4.0	<8.0	<4.0
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	20

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TABLE 2
SEMIANNUAL GROUNDWATER ANALYTICAL RESULTS - 2019 THROUGH SECOND HALF 2021

ExxonMobil ADC
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (ft bgs)	LNAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-A5	02/27/19	17.74	11.55	0.00	6.19	<100	370J	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A5	08/15/19	17.74	12.03	0.00	5.71	<100	190	<100	<4.0	<4.0	<4.0	<12	<4.0
MW-A5	02/26/20	17.74	12.00	0.00	5.74	<100	98J	<98	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A5	08/25/20	17.74	11.94	0.00	5.80	<100	190J	<100JJ	<1.0	<2.0	<2.0	<6.0	<2.0
MW-A5	02/11/21	17.74	11.38	0.00	6.36	<100	160	<98	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A5	08/24/21	17.74	11.55	0.00	6.19	<100	320	<92	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A6	02/27/19	16.94	10.43	0.00	6.51	<100	150J	<94	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A6	08/15/19	16.94	10.82	0.00	6.12	<100	<93	<93	<4.0	<4.0	<4.0	<12	<4.0
MW-A6	02/26/20	16.94	10.80	0.00	6.14	<100	<91	<91	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A6	08/26/20	16.94	10.86	0.00	6.08	<100	100J	<94	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A6	02/11/21	16.94	10.35	0.00	6.59	<100	<99	<99	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A6	08/24/21	16.94	10.61	0.00	6.33	<100	130	<93	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A7	02/27/19	14.20	0.00	0.00	14.20	<100	<100	<100	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A7	08/15/19	14.20	0.00	0.00	14.20	<100	<93	<93	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A7	02/27/20	14.20	0.00	0.00	14.20	<100	<93	<93	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A7	08/26/20	14.20	0.00	0.00	14.20	<100	<96	<96	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A7	08/26/20 ^b	14.20	0.00	0.00	14.20	<100	<97	<97	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A7	02/11/21	14.20	0.00	0.00	14.20	<100	<100	<100	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A7	08/24/21	14.20	0.00	0.00	14.20	<100	<94	150	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A8	02/27/19	16.81	10.82	0.00	5.99	<100	<91	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-A8	08/15/19	16.81	11.08	0.00	5.73	<100	<91	<91	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A8	02/26/20	16.81	11.95	0.00	4.86	<100	<93	<93	<1.0	<1.0	<1.0	<3.0	<1.0
MW-A8	08/25/20	16.81	11.91	0.00	4.90	<100	<99JJ	<99JJ	<0.50	<1.0	<1.0	<3.0	<1.0
MW-A8	02/11/21	16.81	11.09	0.00	5.72	<100	<100	<100	<0.50	<1.0	<1.0	<2.0	<1.0
MW-A8	08/24/21	16.81	10.93	0.00	5.88	<100	<92	<92	<0.50	<1.0	<1.0	<2.0	<1.0
MW-11	02/27/19	16.50	NM	--	--	<100	<91	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-11	08/15/19	16.50	NM	--	--	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	20

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TABLE 2
SEMIANNUAL GROUNDWATER ANALYTICAL RESULTS - 2019 THROUGH SECOND HALF 2021

ExxonMobil ADC
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Well ID	Sampling Date	Wellhead Elev (feet)	DTW (ft bgs)	LNAPL (feet)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-11	02/27/20	16.50	1.42	0.00	15.08	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MW-11	08/26/20	16.50	1.93	0.00	14.57	<100	<99	<99	<0.50	<1.0	<1.0	<3.0	<1.0
MW-11	02/10/21	16.50	1.39	0.00	15.11	<100	<100	<100	<0.50	<1.0	<1.0	<2.0	<1.0
MW-11	08/23/21	16.50	1.88	0.00	14.62	<100	<92	<92	<0.50	<1.0	<1.0	<2.0	<1.0
MW-19	02/27/19	12.75	NM	--	--	390J	140J	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-19	08/17/19	12.75	NM	--	--	110J	150	<94	<2.0	<2.0	<2.0	<6.0	<2.0
MW-19	02/27/20	12.75	3.20	0.00	9.55	230	160J	<100	<1.0	<1.0	<1.0	<3.0	<1.0
MW-19	08/26/20	12.75	2.98	0.00	9.77	130J	140J	<98	<0.50	<1.0	<1.0	<3.0	<1.0
MW-19	02/11/21	12.75	2.75	0.00	10.00	220	220	<91	<0.50	<1.0	<1.0	<2.0	<1.0
MW-19	08/24/21	12.75	2.98	0.00	9.77	<100	<96	<96	<0.50	<1.0	<1.0	<2.0	<1.0
MW-40R	02/27/19	15.53	3.14	0.00	12.39	570J	520J	<91	<1.0	<1.0	<1.0	<1.0	<1.0
MW-40R	08/15/19	15.53	4.71	0.00	10.82	510J	270	<96	<8.0	<8.0	<8.0	<24	<8.0
MW-40R	02/27/20	15.53	3.30	0.00	12.23	420	250J	<100	1.3	<1.0	<1.0	<3.0	<1.0
MW-40R	08/27/20	15.53	4.37	0.00	11.16	230J	<100UJ	<100UJ	2.6	<4.0	<4.0	<12.0	<4.0
MW-40R	02/12/21	15.53	3.22	0.00	12.31	330	400	<100	0.99	<1.0	<1.0	<2.0	<1.0
MW-40R	08/25/21	15.53	4.38	0.00	11.15	200J	480	99	<10	<20	<20	<40	<20
MW-40R	08/25/21 ^b	15.53	4.38	0.00	11.15	350J	480	<93	<10	<20	<20	<40	<20
MTCA Method A Cleanup Levels						800/1,000 ^a	500	500	5	1,000	700	1,000	20

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TABLE 2
SEMIANNUAL GROUNDWATER ANALYTICAL RESULTS - 2019 THROUGH SECOND HALF 2021

ExxonMobil ADC
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EXPLANATION:

µg/L = Micrograms per Liter

ft bgs = Feet below ground surface

DTW = Depth to water in feet below top of casing

LNAPL = Light Non-aqueous Phase Liquid thickness in feet

GW Elev = Groundwater elevation relative to top of casing elevation

NM = Not Measured; NE = Not Established; N/A = Not Applicable; -- = Not analyzed or Sampled

Data collected prior to 02/26/20 was taken from prior consultants' reports

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and Motor Oil, respectively, analyzed in accordance with Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds analyzed in accordance with EPA Method 8260B

MTBE = Methyl tert-butyl ether analyzed in accordance with EPA Method 8260B

< = Less than stated laboratory reporting limit

Shaded values equal or exceed Model Toxics Control Act (MTCA) Method A Cleanup Levels

FOOTNOTES:

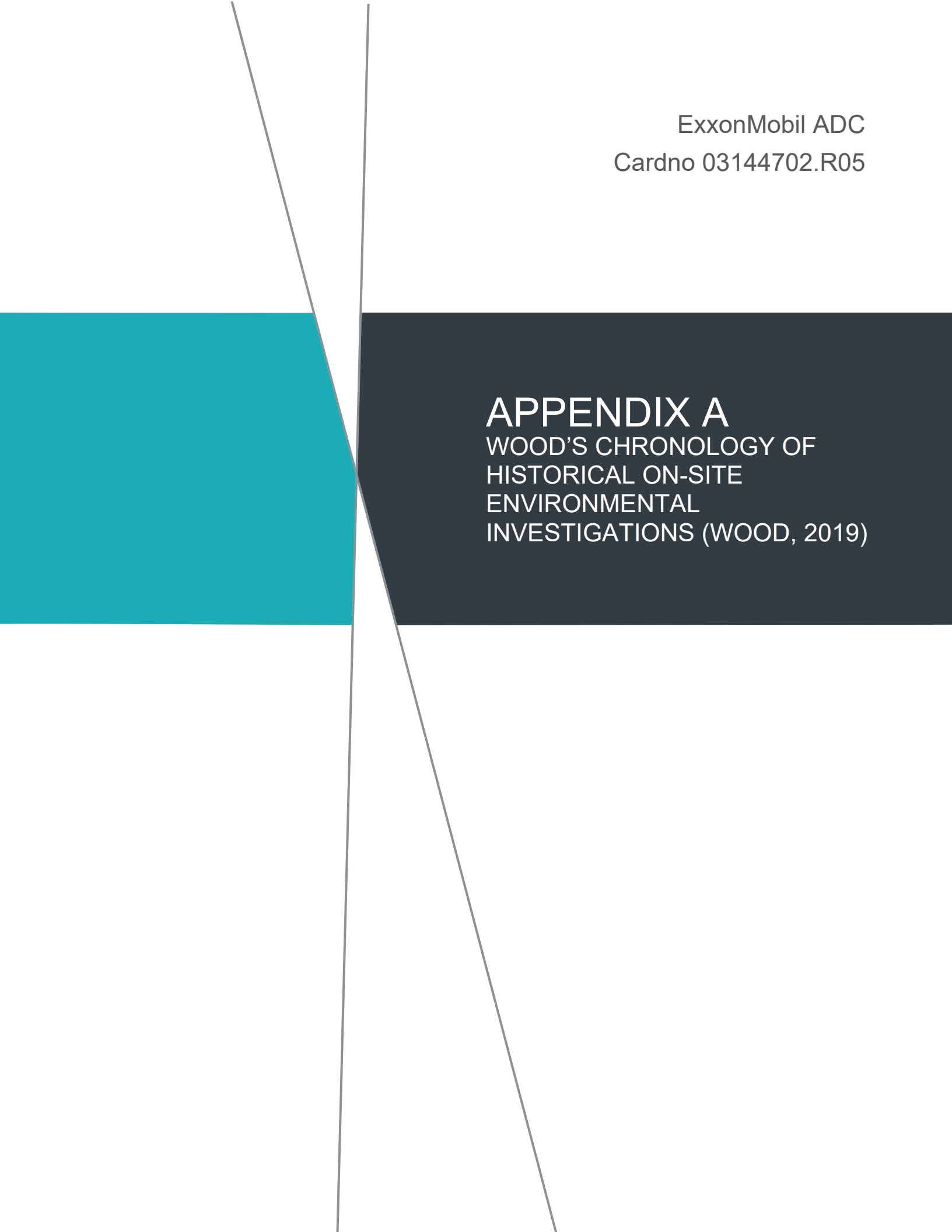
a = TPHg cleanup level for groundwater is 800 µg/L if benzene is present, or 1,000 µg/L if benzene is not present

b = Duplicate field sample collected and submitted blindly to the laboratory

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of analyte in the sample.

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ExxonMobil ADC
Cardno 03144702.R05



APPENDIX A

WOOD'S CHRONOLOGY OF
HISTORICAL ON-SITE
ENVIRONMENTAL
INVESTIGATIONS (WOOD, 2019)

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
May-85	RZA	ExxonMobil Parcel	RZA 1985	Borings, monitoring well installation	2-inch-diameter monitoring wells B-1 through B-5 (MW-1 through MW-5 in several reports) installed.	B-1, B-2, B-4, and B-5: Petroleum odor noticed in borings; evidence found of contamination below groundwater table.
Mar-88	RZA	ExxonMobil Parcel	AMEC E&E 2010a	Borings, monitoring well installation	2-inch-diameter monitoring wells MW-6 through MW-18 installed.	Soil and groundwater samples collected. LPH (1.29 feet) measured in MW-14.
Jan-90	ESE	ADC Parcel	AMEC E&E 2010a	Borings	Hand augers AD-01 through AD-19 to depths ranging from 1 to 4.5 feet.	Soil samples collected.
Feb-90	ESE	ADC Parcel	AMEC E&E 2010a	Borings, monitoring well installation	HSA borings W-1 through W-7. 2-inch-diameter monitoring wells W-1 through W-6 installed.	W-7 was backfilled.
Jun-90	ESE	ADC Parcel	AMEC E&E 2010a	Hand-auger borings	Hand-auger borings W-8 through W-17 to depths of 6–10 feet.	No soil data found for W-8 through W-17. Gauging data indicate that free product was observed in 10 of the 17 monitoring wells located at and around the ADC Parcel.
Oct-90	RZA	ExxonMobil Parcel	AMEC E&E 2010a	Shallow grid soil sampling, bio-feasibility study	Hand augers B-1 through B-25. Two soil samples were studied to conduct a slurry flask bio-feasibility study.	0-3 feet bgs. Rapid biodegradation of TPH-G fraction was observed. Biodegradation of TPH (undifferentiated) was not achieved.
Nov-90	Unknown	ExxonMobil Parcel	AMEC E&E 2010a	Monitoring well decommissioning	B-3 (MW-3), B-4 (MW-4), and MW-7 destroyed.	No documentation of well decommissioning.
March–June 1991	RZA	Parcels surrounding ExxonMobil Parcel	AMEC E&E 2010a	Borings, monitoring well installation	Six percussion soil borings to depths ranging from 5 to 5.5 feet bgs, 2-inch diameter monitoring wells MW-19 through MW-24, and 4-inch diameter monitoring wells MW-27 through MW-30 installed. Soil boring B-21-91 advanced to depth of 29 feet bgs.	MW-25 and MW-26 were inaccessible or dry and later renamed as B-25 and B-26. No well decommissioning records were found.
Jun-91	RZA and ESE	The Property	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. New 2-inch diameter monitoring wells MW-25 and MW-26 installed. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-18, AD-19, W-1 through W-6, and W-8 through W-15.	B-1, MW-8, AD-19, W-1, W-6, W-9, W-11, W-12, W-13, and W-15 contained LPH and were not sampled.
Nov-91	RZA AGRA	ExxonMobil Parcel	AMEC E&E 2010a	Borings, recovery well	8-inch diameter recovery well RW-2 installed. Deep soil borings B-1A, B-8A, and B-15A advanced.	Soil borings advanced in vicinity of existing wells B-1, B-8, and B-15. No analytical data found for this event.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Dec-91	RZA AGRA	ExxonMobil Parcel	AGRA 1996g	Quarterly groundwater monitoring, aquifer and tidal study	Quarterly groundwater monitoring. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-30, and AD-19. Aquifer study involved 24-hour pumping from MW-10 at a rate of 1 to 2 gpm and measuring response in MW-18, RW-1, and RW-2 for 48 hours.	B-1, MW-8, MW-11, MW-26, MW-27, MW-29, and AD-19 contained LPH and were not sampled. Hydraulic conductivity at the Site was estimated as 4 to 9.5 feet/day. Minimum tidal influence was observed.
1992	RZA AGRA	NA	NA	Discussions with Ecology	Ecology discussed enforcement with Mobil and RZA AGRA. Ecology decided to allow Site to go independent.	
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AMEC E&E 2010a	Off-Property borings, monitoring well installation, GPR survey	2-inch diameter monitoring wells MW-31 through MW-33 and MW-35 through MW-37 were installed; B-34 advanced and backfilled. GPR survey was conducted to assess whether underground product lines had been removed.	Survey did not identify any subsurface linear features.
Dec-93	RZA AGRA	ExxonMobil Parcel and off-Property to the west	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells B-1, B-2, MW-6, MW-8 through MW-13, MW-15 through MW-18, MW-27 through MW-33, MW-35 through MW-37.	B-1, MW-27, and MW-29 contained LPH and were not sampled.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AMEC E&E 2010a	Test pits, recovery trench	Excavated five test pits, TP-1 through TP-5, to depths ranging from 3 to 3.5 feet bgs. Recovery trench installed along the western border of ExxonMobil Parcel.	Monitoring well MW-21 was reportedly decommissioned during the recovery trench installation activities. However, a 2002 decommissioning record was found that stated that MW-21 was decommissioned in 2002.
1995			NA	Agreed Order DE-95TC-N402		Required evaluation of LPH.
Jul-95	RZA AGRA	ADC Parcel	AGRA 1996g	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells: W-3, W-5, W-9, W-10, W-12 through W-15.	W-9, W-12, and W-13 contained LPH and were not sampled.
Oct-95	U.S. Coast Guard Puget Sound Marine Safety Office & City of Everett	North of the Property	AMEC E&E 2010a	Investigation of petroleum product discharge into Everett Harbor	Camera surveys of the sewer lines made.	Outfall located approximately 175 yards northwest of the ADC Parcel; LPH seepage observed in section of CSO line.
Nov-95	RZA AGRA	Site	AGRA 1996g	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-1, RW-2, B-1, B-2, MW-6, MW-8 to MW-13, MW-15 to MW-18, MW-27 to MW-37, and NRW-1.	B-1, MW-18, MW-29, and MW-30 contained LPH and were not sampled.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Dec-95	RZA AGRA	Site	AGRA 1996g	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-2, B-2, MW-8, MW-9, MW-18, MW-15 through MW-18, MW-27, and MW-28.	RW-2, MW-9, MW-18, and MW-28 contained LPH and were not sampled.
Mar-96	AGRA	North of the Property	AMEC E&E 2010a	Borings	Direct-push soil borings GP-1 through GP-13. Borings associated with the CSO line repair.	The collected soil sample results indicated that soil surrounding the damaged portion of the CSO had petroleum hydrocarbon impacts. LPH accumulation was noticed in temporary screens installed in soil borings. No groundwater samples were collected from temporary screens.
Apr-96	City of Everett		AMEC E&E 2010a	Meeting	Meeting held to discuss options for repairing the section of CSO line.	Decisions made regarding replacement of the settled portion of the line and slip lining of the remaining portion of the line.
May-96	AGRA	ADC Parcel	AGRA 1996d	Borings	Bobcat borings BB-1 through BB-14.	Soil samples collected.
Jun-96	AGRA	ADC Parcel	AGRA 1996d	Borings, monitoring wells, and test pits	4-inch diameter recovery well VRW-1 and 2-inch diameter monitoring well MW-38 installed. Seven test pits TP-1-96 through TP-7-96 excavated.	Wells were installed on the northeast corner of the property. Test pits were located throughout the ADC Parcel.
Aug-96	AGRA	Site	AMEC E&E 2010a	Monitoring wells	Gauged wells at the property.	LPH found in B-1, VRW-1, MW-27, MW-29, MW-30, MW-38, W-1, W-9, W-15.
Feb-97	PTI	Site	PTI 1997	LPH recovery technical memorandum	Technical memorandum to summarize environmental investigations, LPH recovery activities, and geology.	PTI concluded that long-term, passive (LPH only) recovery may be the most effective method of LPH recovery. PTI also concluded that active LPH and groundwater recovery that had been performed up to that time had been effective for short durations, but recovery structures did not continue to recover LPH for extended periods of time when active recovery was employed.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
November 1997 through January 1998	Pacific Environmental Group, Inc.	Kimberly-Clark property	Pacific Environmental Group, Inc. 1998	Borings, monitoring wells	Direct-push borings Probe-1 through Probe-15 were advanced, and 2-inch diameter HSA monitoring wells KC-1 and KC-2 were installed inside the KC warehouse.	Groundwater samples were collected from temporary screens installed in each boring. LPH not identified in soil borings or monitoring wells. TPH-D and TPH-O were detected above MTCA Method A cleanup levels in borings advanced in the vicinity of repaired CSO line. Samples not collected in vicinity of former ASTs.
1998			NA	Agreed Order DE98TC-P-N223		Required remedial investigation/focused feasibility study.
Jul-98	Exponent	Site	Exponent 1998a	Remedial Investigation and Focused Feasibility Study	Exponent summarized the history of the Property and evaluated feasible remedial options for the Site.	Exponent recommended the installation of LPH recovery trenches and installation of a low-permeability cap over the property.
Jul-98	Exponent	Site	Exponent 1998b	Final Interim Action Work Plan and Engineering Design Report	Exponent presented design for interim measures at the Property.	Exponent provided specifications for demolition of existing Site structures and installation of LPH recovery trenches, water treatment system, and low-permeability cap over the Property.
Oct-99	Kleinfelder	The Property	Exponent 2000	Monitoring wells installation	Monitoring wells W-10R, W-15R, and MW-40R.	Wells installed to replace wells W-10, W-15, and MW-40.
Dec-99	Dames and Moore/URS	South and southeast of the Property	URS 2000a	Geotechnical drilling and piezometer installation	DM-6, DM-7, and DM-8 were sampled for environmental samples.	Work associated with CSTO Project.
Sep-00	URS	South, east, and southeast of the Property	URS 2000b	Borings	Phase II investigation for the CSTO Project. Push-probe borings UG-1 through UG-12.	Groundwater samples collected from temporary screens installed in UG-2 and UG-8. Estimated 7,600 cubic yards of petroleum-contaminated soil present along the overcrossing alignment.
Jul-01	URS	Johnston Petroleum parcel	URS 2001a and b	Borings	Phase II investigation for Johnson Petroleum parcel. Push-probe borings JP-1 through JP-7.	Soil samples collected. Groundwater samples collected from JP-1, JP-4, and JP-7. No significant contamination found.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
Feb-02	ERI	Site and vicinity	ERI 2002a	Monitoring well decommissioning and re-installment	Abandonment of monitoring wells (MW-22, MW-23, MW-24, MW-35, and MW-37) and piezometer DM-6 due to proximity to the CSTO Project. Re-installed well W-2 screened from 3 to 23 feet bgs.	No soil samples taken during W-2 installation. The reported abandonment of MW-21 in 2002 contradicts the reported decommissioning of MW-21 due to installation of the recovery trench to the west of the Property in December 1995.
2002	Reid Middleton	CSTO	Reid Middleton 2002	Memorandum to Ecology	Southeast corner of the asphalt cap over the ExxonMobil Parcel removed. Steel piles for concrete foundation were installed.	No information regarding contaminant soil excavation and removal was found.
2002-2007	Kleinfelder, ERI, AMEC	Site	Various	Groundwater monitoring	Monthly LPH gauging and quarterly groundwater monitoring.	LPH greater than 0.02 foot thick is bailed manually and oleophilic socks are replaced.
Jul-02	ERI	West of the ExxonMobil Parcel	ERI 2002b	Well decommissioning	Monitoring wells MW-20, MW-21, and one unidentified well were decommissioned.	The record contradicts the records that indicate that MW-21 was decommissioned during the December 1993 recovery trench installation.
Feb-07	AMEC/Bravo Environmental	Site	AMEC E&E 2007	Video survey of storm drain system	AMEC contracted Bravo to conduct a video survey of the storm drain system installed as part of 1999 interim measure to verify that groundwater from the Property is not infiltrating into the stormwater system through possible cracks and fissures in the piping and catch basins.	No significant cracks or fissures within the stormwater system were observed.
2007–present	AMEC	Site	AMEC E&E 2010a	Groundwater monitoring	AMEC requested to change to semiannual groundwater monitoring in 2007.	Request was accepted by Ecology.
2008	AMEC	West of the Property	AMEC E&E 2008b	Monitoring wells	Off-property monitoring wells MW-A1 and MW-A2 installed on the west side of Federal Avenue.	Monitoring wells MW-A1 and MW-A2 are incorporated into existing groundwater monitoring network.
Feb-08	AMEC	Site	AMEC E&E, 2008a	Tidal study	Measured tidal response in W-3, W-6, MW-11, MW-28, & MW-40R.	Minimal response in each well, except MW-11.
Jun-08	AMEC	Site	2010 updated survey included as Appendix C	Well head elevations survey	True North Land Surveying of Seattle, Washington, surveyed recovery and monitoring wells located on-Site.	Recovery wells LPH-1 to LPH-9 and monitoring wells W-1, W-2, W-3, W-6, W-10R, MW-10, MW-11, W-15R, W-17, RW-2, MW-19, MW-27, MW-28, MW-29, MW-30, MW-40R, MW-A1, and MW-A2.

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
2010	AMEC	Site	AMEC E&E 2010a	Focused Feasibility Study Work Plan	Summarized Site history, previous environmental investigations and interim remedial activities, known environmental conditions, preliminary conceptual site model, and remaining data gaps.	FFS Work Plan included a sampling and analysis plan to guide data gaps investigation and identified applicable remedial technologies to be evaluated n the FFS.
2010	AMEC	Site	AMEC E&E 2010a	Agreed Order DE 6184		Required FFS and Draft CAP.
2010	AMEC	Site	AMEC E&E 2011f	Sampling for City of Everett Force Main	Borings CE-1 to CE-8 advanced on Federal Avenue, former Everett Avenue, and the BNSF property to characterize soils in the alignment of City's planned force main.	Analytical results were provided to City of Everett and used to characterize soil excavated for the force main project for disposal purposes.
2011	AMEC	Site	AMEC E&E 2011b	Data gaps investigation	Seven deep borings (AB-1 to AB-5, AP-6, MW-7ab), six shallow borings (AP-1 through AP-5, AP-7), five new off-Property monitoring wells (MW-A3 through MW-A7), aquifer testing, and tidal influence study.	A plume of groundwater with petroleum hydrocarbon impacts was identified west & northwest of the Property. Groundwater downgradient and upgradient from the Property was not affected by COCs. Geochemical parameters were consistent with an anaerobic environment in which active petroleum biodegradation appears to be occurring. No continuous silt layer was identified beneath the Property. Monitoring wells MW-A3 through MW-A7 incorporated into existing groundwater monitoring network.
2011	AMEC	Site	AMEC E&E 2011a	Tidal influence investigation	A stilling well with transducer was installed on the Everett Pier to automatically record tidal elevations. Pressure transducer/ data loggers were installed in monitoring wells W-3, W-6, MW-11, MW-19, MW-28, MW-40R, and MW-A1 through MW-A7 to record groundwater levels every 6 minutes for 6 days.	Monitoring wells W-3, MW-11, MW-A1, MW-A2, MW-A3, MW-A5, and MW-A6 are tidally influenced, with tidal fluctuations ranging from 0.1 foot to 1.1 feet. MW-19, MW-28, MW-40R, MW-A4, and W-6 exhibited minimal tidal influence, and MW-A7 was unaffected by tidal elevation. A potentiometric surface map showed groundwater flow toward the west.
2011	AMEC	Former Everett Avenue	AMEC E&E 2011g and h	Observations of seeps along former Everett Avenue	AMEC recorded photographs in the field to document observations of petroleum product seeps through the pavement on former Everett Avenue.	

TABLE 3-1: CHRONOLOGY OF HISTORICAL ON-SITE ENVIRONMENTAL INVESTIGATIONS
ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

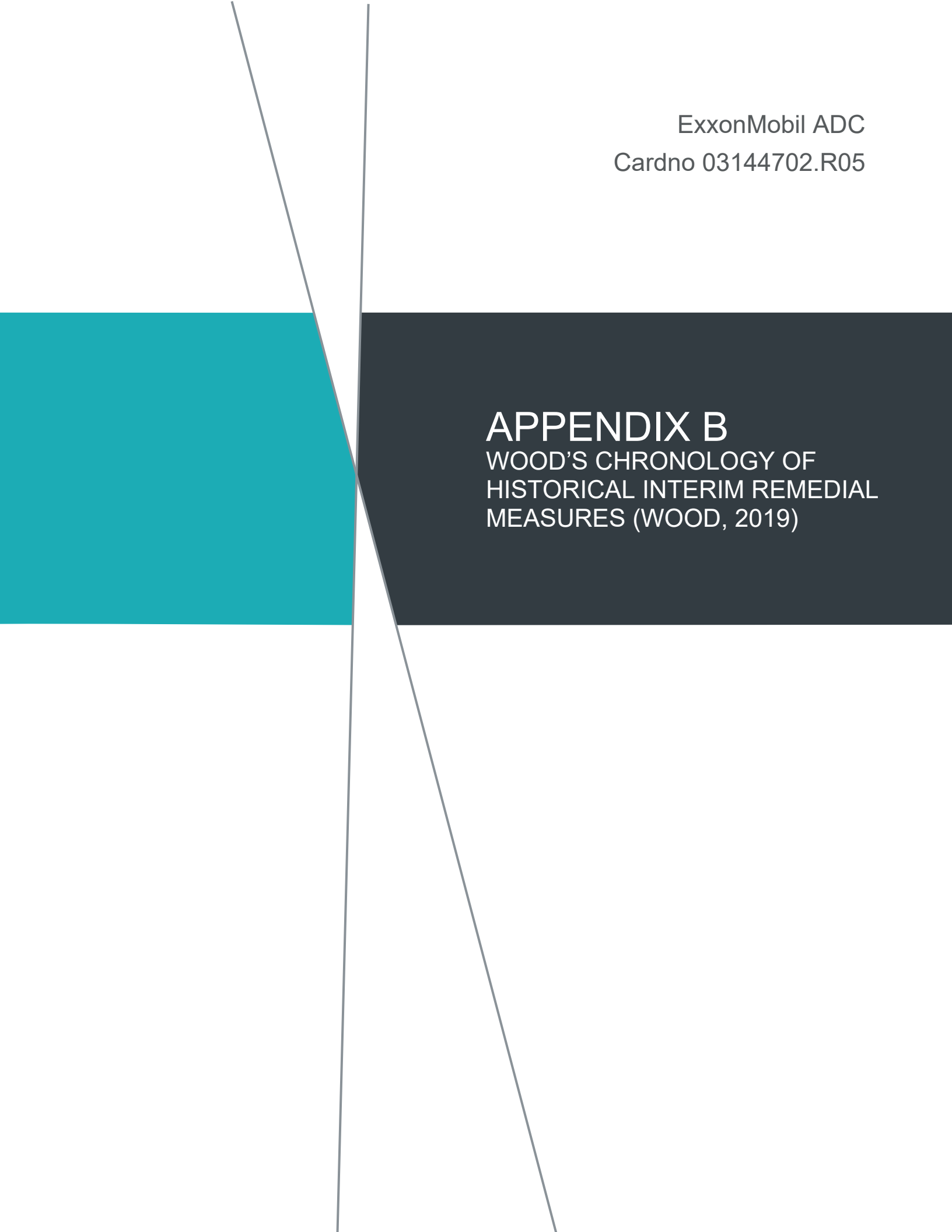
Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
2012	AMEC	Federal Avenue and former Everett Avenue	AMEC 2012b	Observations during City of Everett force main replacement	AMEC observed excavation and drilling activities during installation of the City’s force main and recorded notable subsurface features when relevant, including the presence of LPH if encountered.	AMEC documented the presence of LPH in borings and/or trenches along much of the alignment on former Everett Avenue, and at selected locations along Federal Avenue.
2013–2014	AMEC	Site	AMEC 2014a	Data gaps investigation	A total of 33 soil borings were drilled on the Property and nearby properties, and soil samples were analyzed to delineate areas of affected soil at the Site. One of the borings was completed as a new monitoring well (MW-A8).	Higher COC concentrations were found primarily on the Property and in the western portion of the former ADC garage. Contamination from the Site extends to the former ADC garage and former Everett Avenue. Contamination on KC property north of former Everett Avenue likely originates from sources on the KC property. Monitoring well MW-A8 incorporated into groundwater monitoring network.

Abbreviations

ADC = American Distributing Company
AMEC = AMEC Environment & Infrastructure, Inc.
AMEC E&E = AMEC Earth & Environmental, Inc.
AST = aboveground storage tank
bgs = below ground surface
CAP = Cleanup Action Plan
COC = constituent of concern
CSO = combined sewer outflow
CSTO = California Street Overcrossing
Ecology = Washington State Department of Ecology
ERI = Environmental Resolutions, Inc.
ESE = Environmental Science and Engineering, Inc.
FFS = Focused Feasibility Study
gpm = gallons per minute

GPR = ground penetrating radar
HSA = hollow-stem auger
KC = Kimberly-Clark
Kleinfelder = Kleinfelder, Inc.
LPH = liquid petroleum hydrocarbons
MTCA = Model Toxics Control Act
PTI = PTI Environmental Services
RZA = Rittenhouse-Zeman & Associates, Inc.
RZA AGRA = RZA AGRA Earth & Environmental, Inc.
TPH = total petroleum hydrocarbons
TPH-D = total petroleum hydrocarbons-diesel range organics
TPH-G = total petroleum hydrocarbons-gasoline range organics
TPH-O = total petroleum hydrocarbons-residual range organics

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APPENDIX B

WOOD'S CHRONOLOGY OF
HISTORICAL INTERIM REMEDIAL
MEASURES (WOOD, 2019)

TABLE 4-1: CHRONOLOGY OF HISTORICAL INTERIM REMEDIAL MEASURES

ExxonMobil/ADC Property, Ecology Site ID 2728, Everett, Washington

Date	Consultant	Location	Reference	Activities	Tasks Performed	Notes
April–May 1988	RZA	ExxonMobil Parcel	PTI 1997	Recovery trench installation, SVE and groundwater treatment system test (oil-water separator and air stripper), infiltration gallery, pumping subsurface fluids	Installation of recovery trench near MW-14, SVE system and groundwater treatment system to evaluate feasibility of extracting LPH. Infiltration gallery installed in the vicinity of MW-14. Subsurface fluids were pumped with a vacuum truck from the sumps.	Decommissioned in 1998 during construction of low-permeability cap at the Property. The gallery was T-shaped and 45 feet long with two 55-gallon drums installed at both ends as sumps. 1,400 gallons of liquid removed, 50 gallons was LPH. As a result, LPH thickness in MW-14 decreased to 0.40 foot by August 1988.
Mar-89	RZA	ExxonMobil Parcel	RZA 1989	Automated groundwater extraction and treatment system	An automated groundwater extraction and treatment system was installed in the location of the infiltration gallery. The system included fluid extraction sump stationed in RW-1 (formerly MW-14), oil-water separator, air stripper, and re-infiltration gallery.	The groundwater extraction and treatment system was shut down in March 1990 due to flooding of the re-infiltration gallery, and has not been restarted.
Nov-91	RZA AGRA	ExxonMobil Parcel	PTI 1997	Borings, recovery well	8-inch diameter recovery well RW-2 installed.	No analytical data found for this event.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	AGRA 1993	Test pits, recovery trench	Recovery trench installation along the western border of ExxonMobil Parcel.	
Jun-96	AGRA	North of the Property	AGRA 1996b and c	CSO line repairs	Excavation of settled portion of pipe replaced. Slip-lining of remaining CSO line. CSO line excavation dewatering.	1,450,800 gallons of groundwater and 23,050 gallons of LPH were removed during CSO line excavation and dewatering.
Jun-96	AGRA	LPH Vacuum Recovery Pilot Test	AGRA 1996a, d,e, and f	LPH vacuum recovery pilot test	14-day test included SVE and groundwater/LPH pumping system.	125 gal of LPH and 28,228 gallons of groundwater removed from VRW-1 during test.
Nov-98	Kleinfelder	ADC Parcel	Exponent 2000	Survey, geotechnical evaluation	Initial survey. Asbestos survey prior to demolition.	Demolition activities included four buildings on the ADC parcel. Asbestos abatement activities were conducted in November 1998, and demolition was completed in January 1999.
Dec-98	Kleinfelder	Water management and treatment system	Exponent 2000	Installation of treatment system	A water management and treatment system consisting of an oil–water separator, a settling tank, and a carbon polishing unit was constructed at the Property.	System treated approximately 2.5 million gallons of water between December 1998 and September 1999. Approximately 19,900 gallons of oily water and 450 gallons of sludge were collected between December 1998 and September 1999.
Dec-98	Kleinfelder	The Property	Exponent 2000	Interim remedial action	Removed TPH-impacted soil, graded the property, removed purge water.	162 tons of contaminated shallow soil and vegetation removed from within the ADC firewall area during demolition and transported to TPS Technologies facility for disposal. 3.5 tons of class 3 PCS taken to CRS Associated. Marine Services, Inc. removed 110 gallons of purge water.
1999	Kleinfelder	The Property	Exponent 2000	Interim remedial action	Monitoring well abandonment. Interceptor trench construction along the western and northern property boundaries. Low-permeability cap construction over the property. Recovery wells LPH-1 through LPH-9 installed in interceptor trench. Stormwater collection system that connects to the City of Everett sewer system was installed.	Monitoring wells MW-6, MW-8, MW-9, MW-12, MW-13, MW-15, MW-16, MW-17, MW-38, WP-1, B-1, B-2, W-4, W-8, W-11, W-12, W-14, AD-11, AD-12, AD-13, AD-15, AD-19, W-10, W-15, and MW-40 abandoned. Completed Site grading, installation of two layers of geotextile fabric, asphalt-treated base material, and paving fabric and asphalt cap.
2002–present	Kleinfelder, ERI, AMEC E&E	Site	Various	Petroleum recovery	Monthly removal of LPH.	LPH greater than 0.02 foot thick is bailed manually, and oleophilic socks are replaced.
Jul-08	Floyd Snider	North-northeast of the Property	AMEC E&E 2010a	Excavation and disposal of PCS and dewatering the excavation	Soil associated with Puget Sound Outfall 5 Overflow Structure project was excavated and disposed of. In addition, dewatering occurred during excavation.	Soil was field screened. Soil exhibiting obvious signs of contamination was disposed of as Class II soil without sampling. Soil that appeared to be "clean" was sampled and then disposed as Class II soil. Water from the excavation was sampled for the City sewer discharge requirements.
2010	AMEC E&E	Federal Avenue and Port of Everett property	AMEC E&E 2011e	Removal of abandoned pipes and affected soil	AMEC decommissioned pipelines west of the Property to prepare for upgrades to the storm sewer line planned by the City of Everett.	A total of 76.55 tons of construction debris, 243 tons of soil, 487 linear feet of piping, 65,669 gallons of non-regulated liquid, four 55-gallon product/ water drums, and four 55-gallon solid waste drums were removed and disposed of off Site. Samples from base of excavation showed contaminated soil left in place.
2011–2012	AMEC	BNSF and KC properties	AMEC 2012a	Interim removal action	Excavation and off-Site disposal of surface asphalt, affected soil, and recovered LPH and treatment of the recovered groundwater from the secondary source areas on the BNSF and KC properties. Monitoring wells MW-27 through MW-30 abandoned.	Approximately 3,785 tons of material was excavated and disposed of at a permitted landfill, approximately 2,530 gallons of LPH was removed, and 1,489,246 gallons of petroleum-affected groundwater was removed and treated. Affected material was evident and left in place at all side wall areas of the completed excavation on the BNSF property and on the north and east sidewalls on the KC property.

Abbreviations

ADC = American Distributing Company
AMEC = AMEC Environment & Infrastructure, Inc.
AMEC E&E = AMEC Earth & Environmental, Inc.
BNSF = BNSF Railway Company
CSO = combined sewer outflow
ERI = Environmental Resolutions, Inc.
KC = Kimberly-Clark
Kleinfelder = Kleinfelder, Inc.

LPH = liquid petroleum hydrocarbons
PCS = petroleum-contaminated soil
PTI = PTI Environmental Services
RZA = Rittenhouse-Zeman & Associates, Inc.
RZA AGRA = RZA AGRA Earth & Environmental, Inc.
SVE = soil vapor extraction
TPH = total petroleum hydrocarbons

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APPENDIX C

FIELD PROTOCOL

Soil Boring and Well Installation Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Drilling and Soil Sampling Procedures

Cardno contracts a licensed driller to advance the boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140 pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil samples are preserved in the metal or plastic sleeve used with the CMSSS or core sampler, in glass jars or other manner required by the local regulatory agency (e.g., Environmental Protection Agency Method 5035). Sleeves are removed from the sample barrel, and the lowermost sample sleeve is immediately sealed with Teflon™ tape, capped and labeled. Samples are placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory. The samples are transferred under chain-of-custody (COC) protocol.

Field Screening Procedures

Cardno places the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is placed away from direct sunlight for approximately 20 minutes, after which the tip of a photo-ionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The PID measurement is recorded on the boring log. At a minimum, the PID or other device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Cardno trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Air Monitoring Procedures

Cardno performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated photo-ionization detector or lower explosive level meter.

Groundwater Sampling

A groundwater sample, if desired, is collected from the boring by using Hydropunch™ sampling technology or installing a well in the borehole. In the case of using Hydropunch™ technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. A new or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe and either the boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips or backfill is continued to just below grade with neat cement grout. The borehole is completed to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Well Development and Sampling

If a permanent groundwater monitoring well is installed, the grout is allowed to cure a minimum of 48 hours before development. Cardno personnel or a contracted driller use a submersible pump or surge block to develop the newly installed well. Prior to development, the pump is decontaminated by allowing it to run and re-circulate while immersed in a non-phosphate solution followed by successive immersions in potable water and de-ionized water baths. The well is developed until sufficient well casing volumes are removed so that turbidity is within allowable limits and pH, conductivity and temperature levels stabilize in the purge water. The volume of groundwater extracted is recorded on a log.

Following development, groundwater within the well is allowed to recharge until at least 80% of the drawdown is recovered. A new or decontaminated bailer is slowly lowered past the air/water interface in the well, and a water sample is collected and checked for the presence of non-aqueous phase liquid, sheen, or emulsions. The water sample is then emptied into laboratory-supplied containers as discussed above.

Surveying

If required, wells are surveyed by a licensed land surveyor relative to an established benchmark of known elevation above mean sea level to an accuracy of +/- 0.01 foot. The casing is notched or marked on one side to identify a consistent surveying and measuring point.

Decontamination Procedures

Cardno or the contracted driller decontaminates soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids and purge water from well development and sampling activities, if conducted, are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

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APPENDIX D

USCS & EXCAVATION
DELINEATION BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM KEY

MAJOR DIVISIONS		LTR	DESCRIPTION	MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines	FINE GRAINED SOILS	SILTS AND CLAYS LL<50	ML	Inorganic silts and very fine-grained sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines				
		GM	Silty gravels, gravel-sand-clay mixtures			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		GC	Clayey gravels, gravel-sand-clay mixtures				
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines		SILTS AND CLAYS LL>50	MH	Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts
		SP	Poorly-graded sands or gravelly sands, little or no fines				
		SM	Silty sands, sand-silt mixtures			OH	Organic clays of medium to high plasticity
		SC	Clayey sands, sand-clay mixtures				

BLOW COUNTS REPRESENT THE NUMBER OF BLOWS OF A 140- OR 300-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH EACH 6 INCHES OF PENETRATION.

FN:QuiklogUSCS.dwg

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.



**UNIFIED SOIL CLASSIFICATION SYSTEM
AND LOG OF BORINGS SYMBOL KEY**

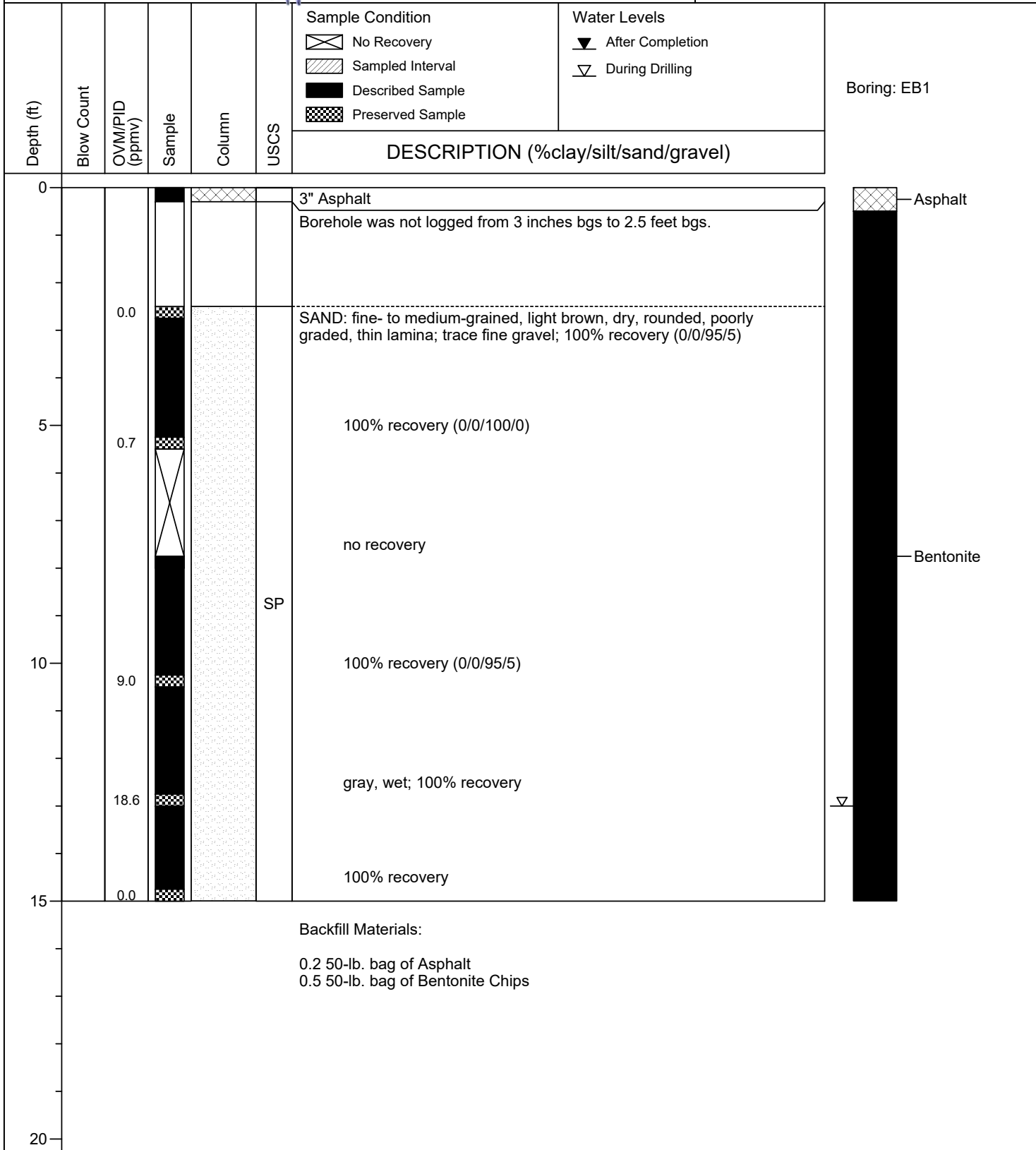


BORING LOG EB1

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 13' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*





BORING LOG EB4

(Page 1 of 1)

Date Drilled: : 10/12/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 10' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB4
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt Borehole was not logged from 3 inches bgs to 2.5 feet bgs.		Asphalt
5					GP	GRAVEL with Sand: fine to coarse gravel, subrounded; medium- to coarse-grained sand, brown, damp; trace silt; 75% recovery (0/5/45/50)		
10					SP	SAND with Gravel: medium- to coarse-grained, dark brown, damp, poorly graded; fine to coarse gravel, subrounded, poorly graded; trace silt and silty clasts; 50% recovery (0/5/75/20) black to dark gray, wet; gravel subangular; no silty clasts; 50% recovery (0/5/85/10) 100% recovery 100% recovery	<input checked="" type="checkbox"/>	Bentonite
15								
20								

Backfill Materials:
0.2 50-lb. bag of Asphalt
0.5 50-lb. bag of Bentonite Chips

Note: PID unavailable for use during fieldwork on 10/12/20.



BORING LOG EB5

(Page 1 of 1)

Date Drilled: : 10/12/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 10' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB5
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		
Borehole was not logged from 3 inches bgs to 2.5 feet bgs.								
5					GP	GRAVEL with Sand: fine to coarse gravel, subrounded to subangular; fine- to coarse-grained sand, light gray, dry, well graded; trace silt; 80% recovery (0/5/40/55) well graded sand, occasional silty clasts; 80% recovery (0/5/30/65)		
10					SP	SAND with Gravel: medium- to coarse-grained, gray, dry, poorly graded; fine to coarse gravel, subangular to subrounded, well graded; trace silt; 80% recovery (0/5/70/25) 100% recovery		
15								
20								

Backfill Materials:
0.2 50-lb. bag of Asphalt
0.5 50-lb. bag of Bentonite Chips

Note: PID unavailable for use during fieldwork on 10/12/20.

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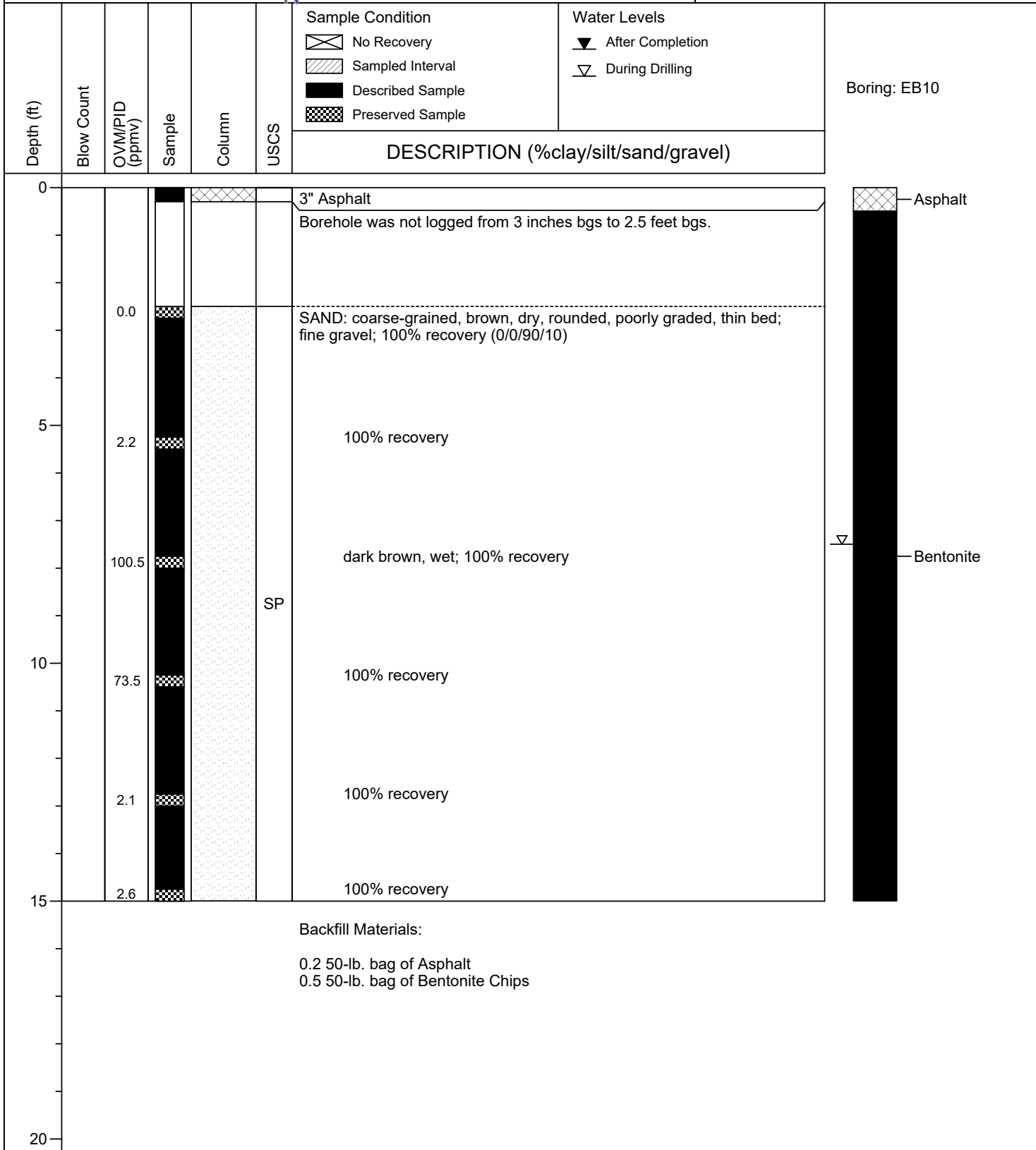


BORING LOG EB10

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 7.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell





BORING LOG EB11

(Page 1 of 1)

Date Drilled: : 10/12/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 7.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB11
						<div><div>No Recovery</div><div>Sampled Interval</div><div>Described Sample</div><div>Preserved Sample</div></div>	<div><div>After Completion</div><div>During Drilling</div></div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		<div><div></div></div> Asphalt
						Borehole was not logged from 3 inches bgs to 2.5 feet bgs.		
					SW	SAND with Gravel: fine- to coarse-grained, dark brown, damp, well graded; fine to coarse gravel, subangular to angular, well graded; 60% recovery (0/10/50/40)		
					ML	SILT: moist, reduced organic material; 100% recovery (0/100/0/0)		
5						SAND: medium- to coarse-grained, light brown, damp, poorly graded; trace silt; 60% recovery (0/5/95/0)		
						gray, wet, NAPL observed; 100% recovery	<div><div></div></div>	Bentonite
10					SP	NAPL observed; 100% recovery		
						NAPL observed; 100% recovery		
15						no NAPL; 100% recovery		
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								
Note: PID unavailable for use during fieldwork on 10/12/20.								
20								

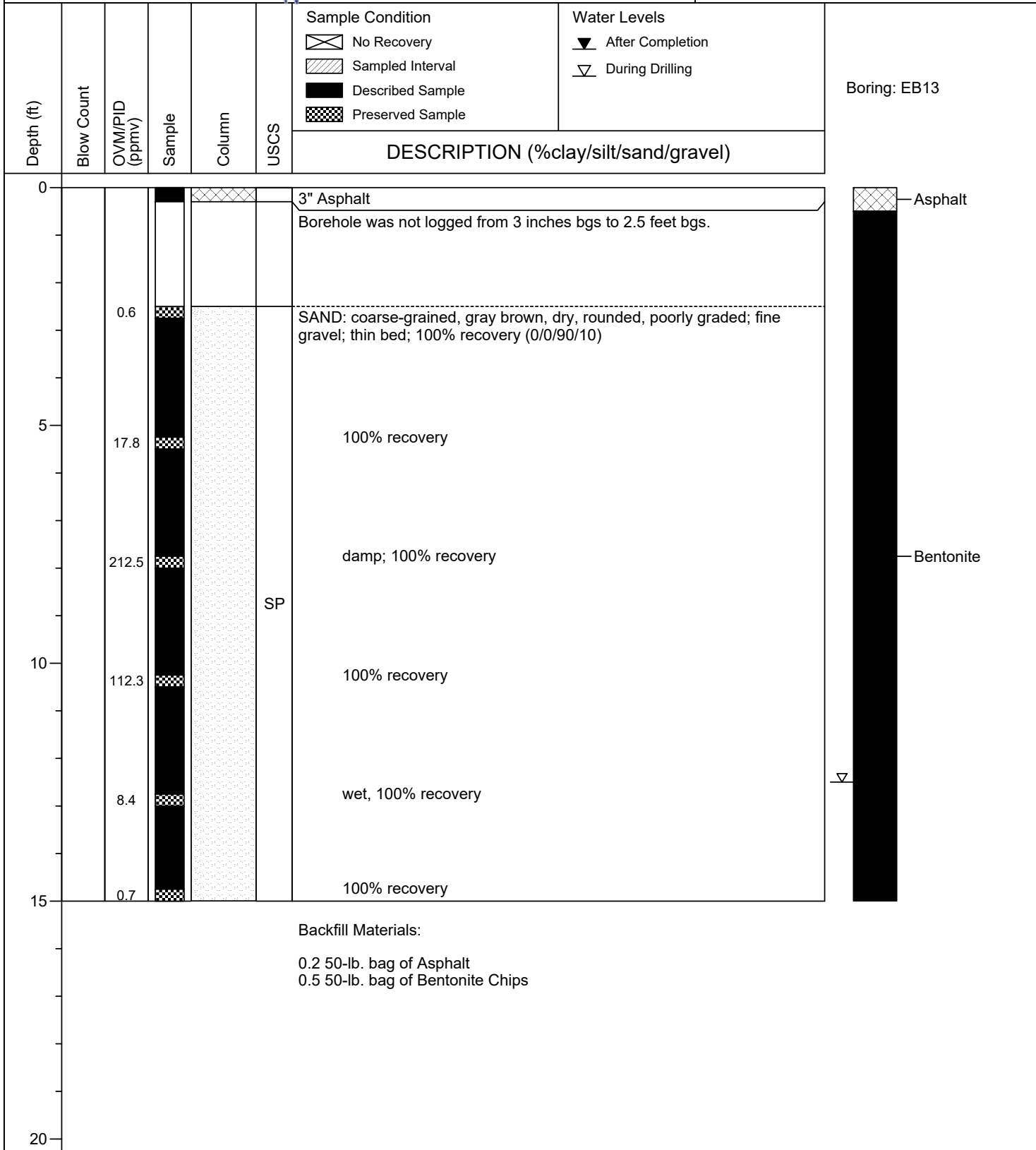


BORING LOG EB13

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



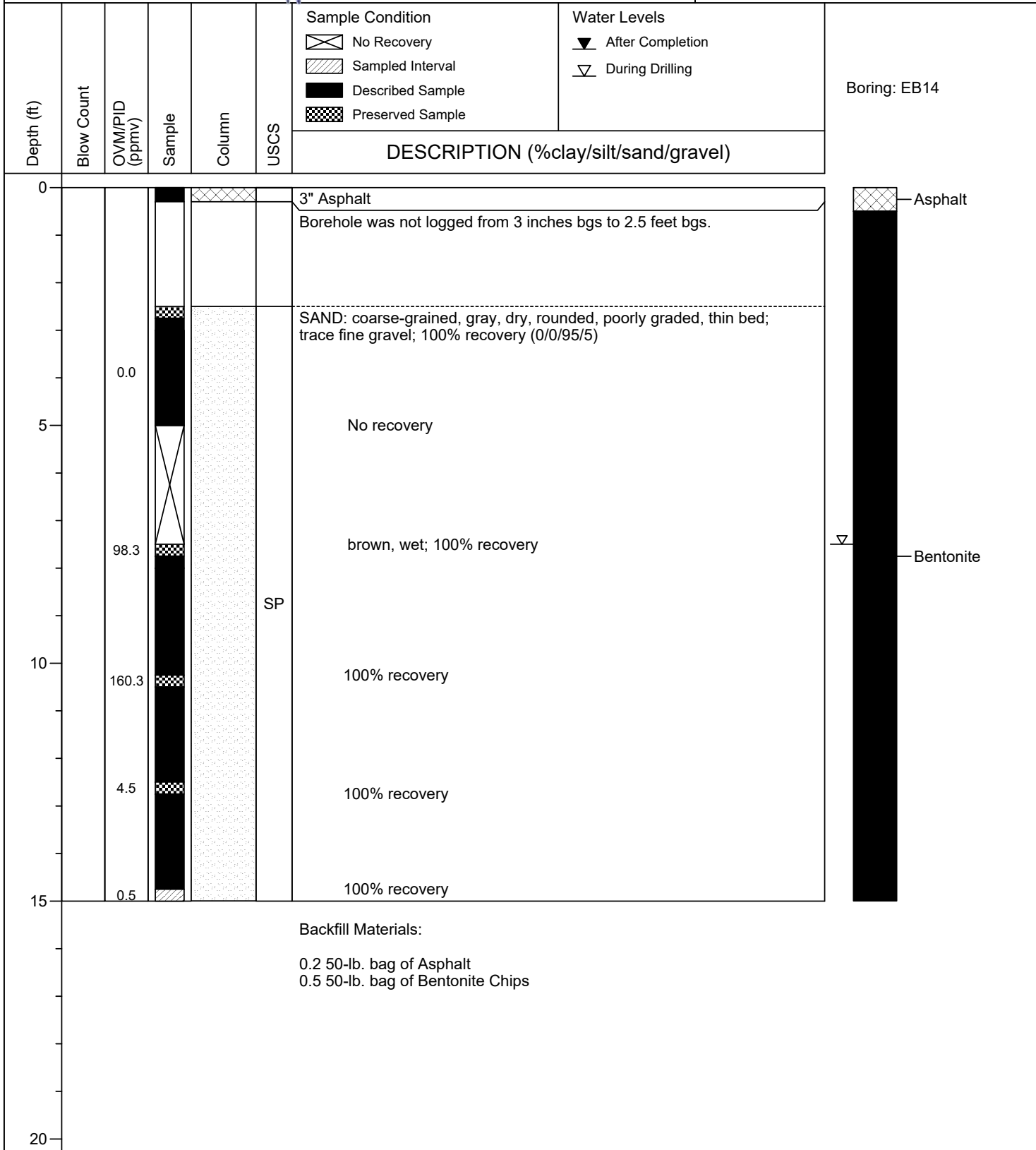


BORING LOG EB14

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



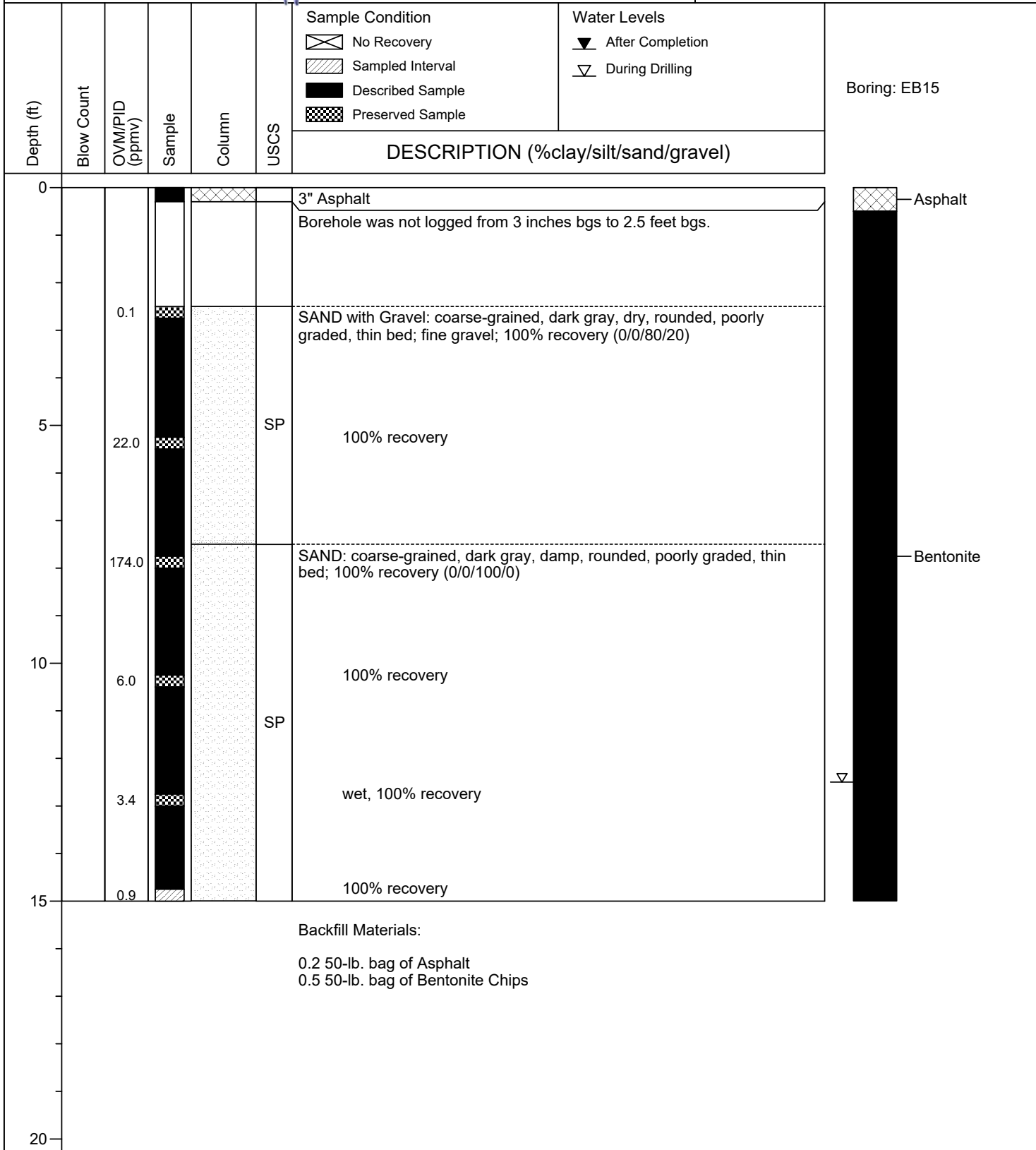


BORING LOG EB15

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



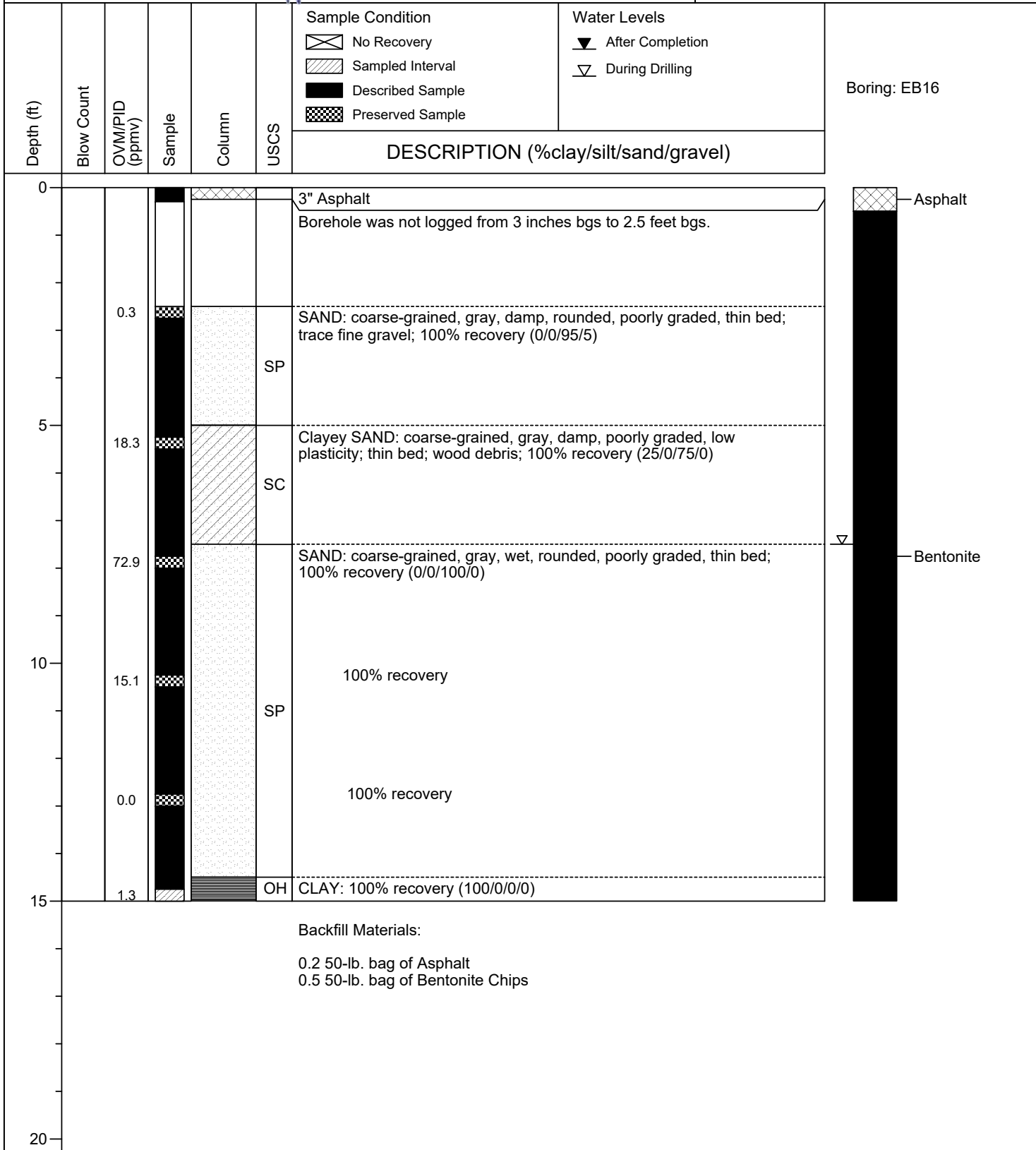


BORING LOG EB16

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 7.5' bgs

Project No.: : 031447
Site: : ExxonMobil/ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



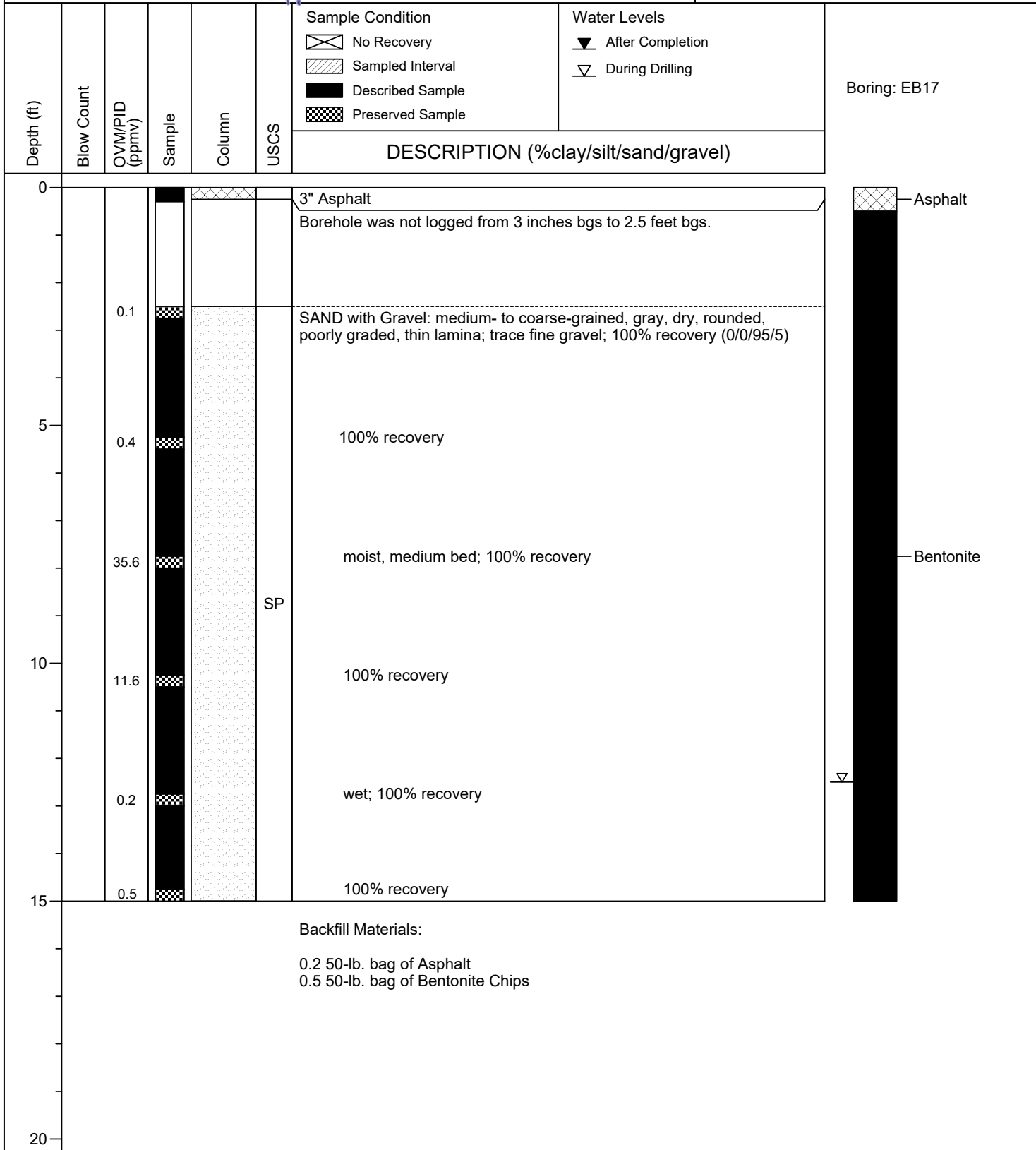


BORING LOG EB17

(Page 1 of 1)

Date Drilled: : 10/13/2020
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*



(Page 1 of 1)

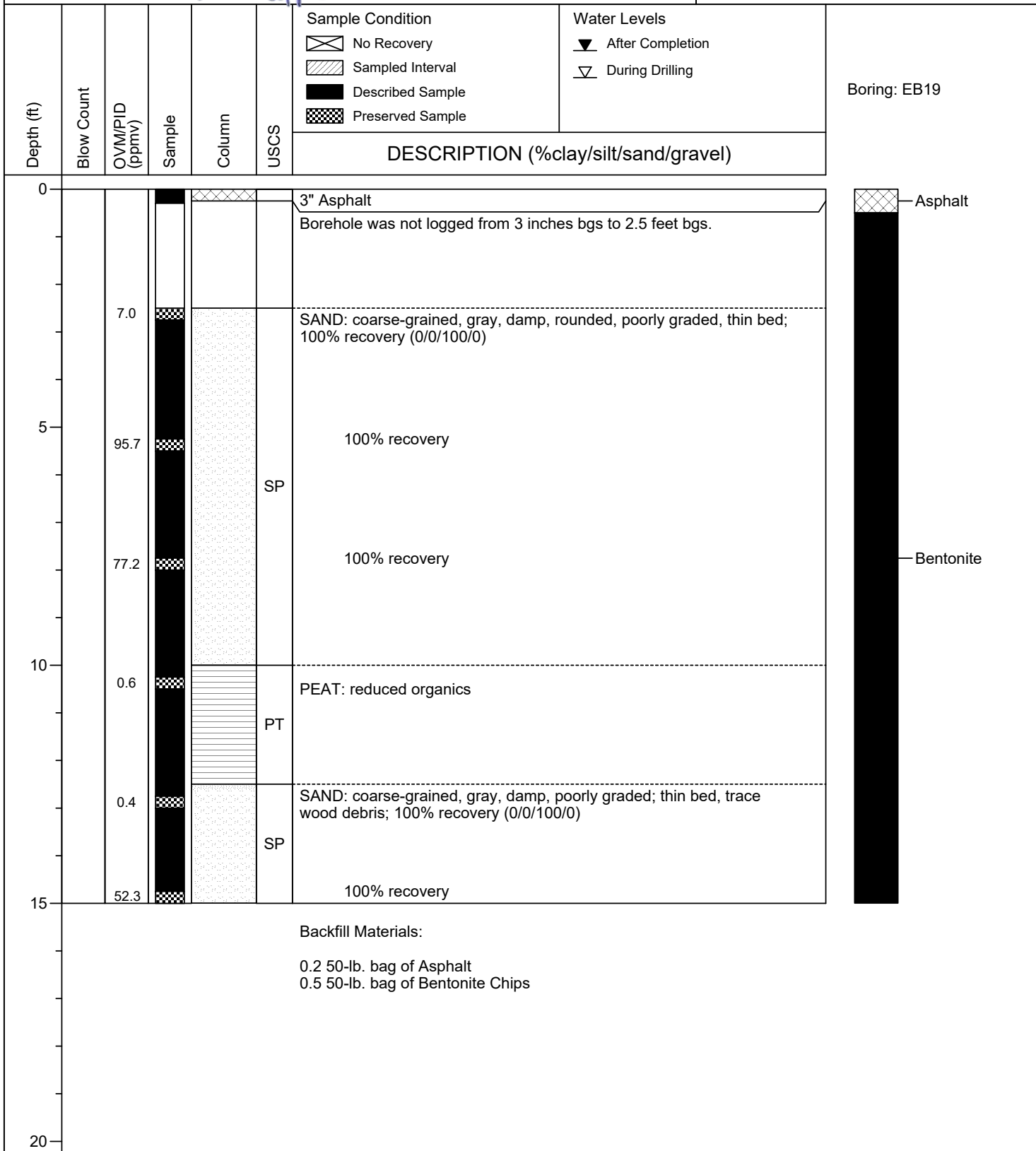


BORING LOG EB19

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



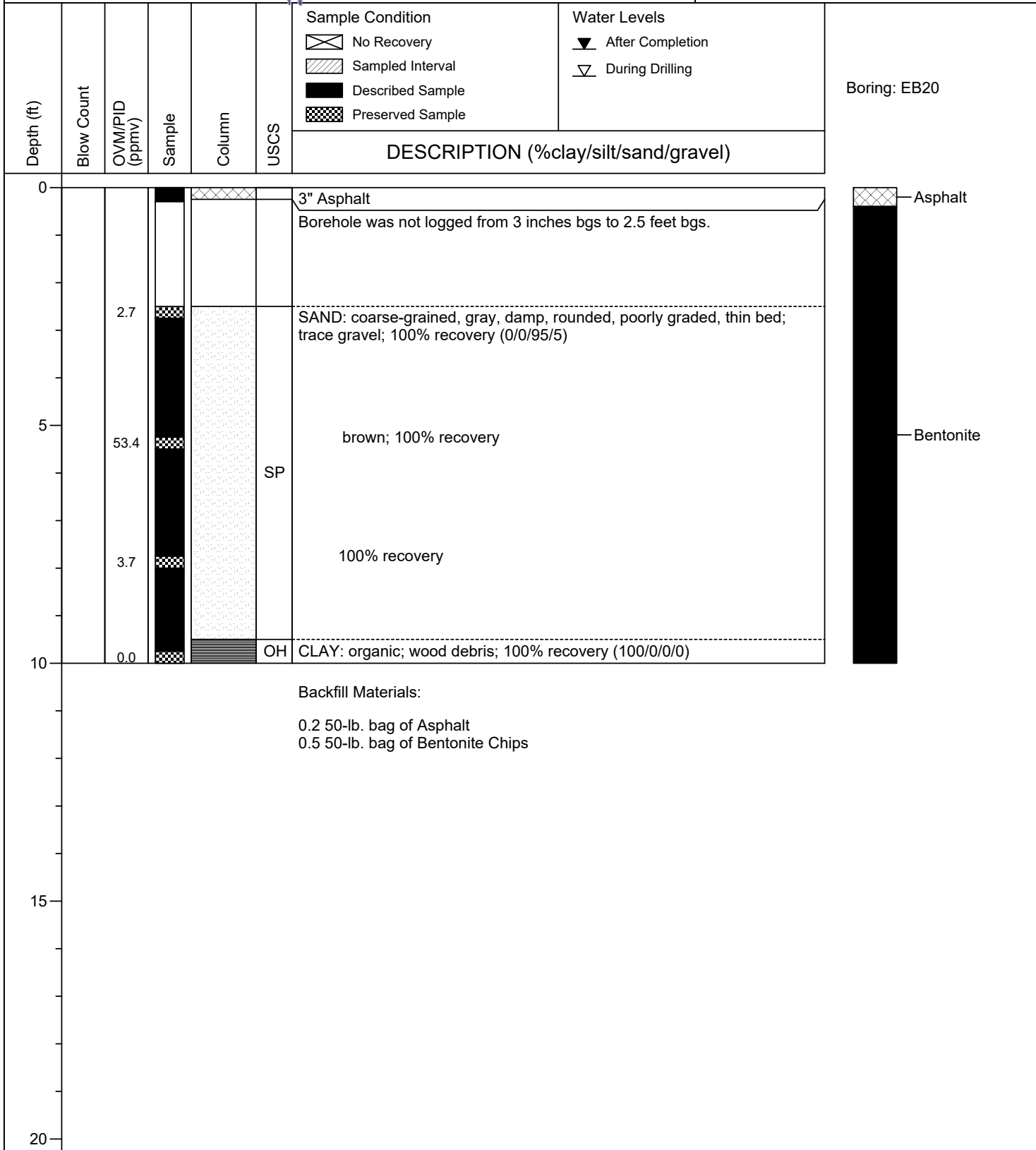


BORING LOG EB20

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 10' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB21
						<div> <div>No Recovery</div> <div>Sampled Interval</div> <div>Described Sample</div> <div>Preserved Sample</div> </div>	<div> <div>After Completion</div> <div>During Drilling</div> </div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		
						Borehole was not logged from 3 inches bgs to 2.5 feet bgs.		
0.3						SAND: coarse-grained, gray, dry, rounded, moderately graded, thin bed; fine gravel; 100% recovery (0/0/95/5)		
54.5						light brown; no gravel; trace wood debris; 100% recovery		
46.5						damp; 100% recovery		
0.9					SP	100% recovery		
0.1						wet; 100% recovery		
0.0						100% recovery		
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								





BORING LOG EB22

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 5' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB22
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		
						Borehole was not logged from 3 inches bgs to 2.5 feet bgs.		
		0.0				SAND: coarse-grained, brown, damp, rounded, poorly graded, lamina; 100% recovery (0/0/100/0)		
					SP			
5		1.0				Refusal at 5' bgs; 100% recovery		
Backfill Materials: 0.2 50-lb. bag of Asphalt 0.5 50-lb. bag of Bentonite Chips								
10								
15								
20								

 Asphalt
 Bentonite

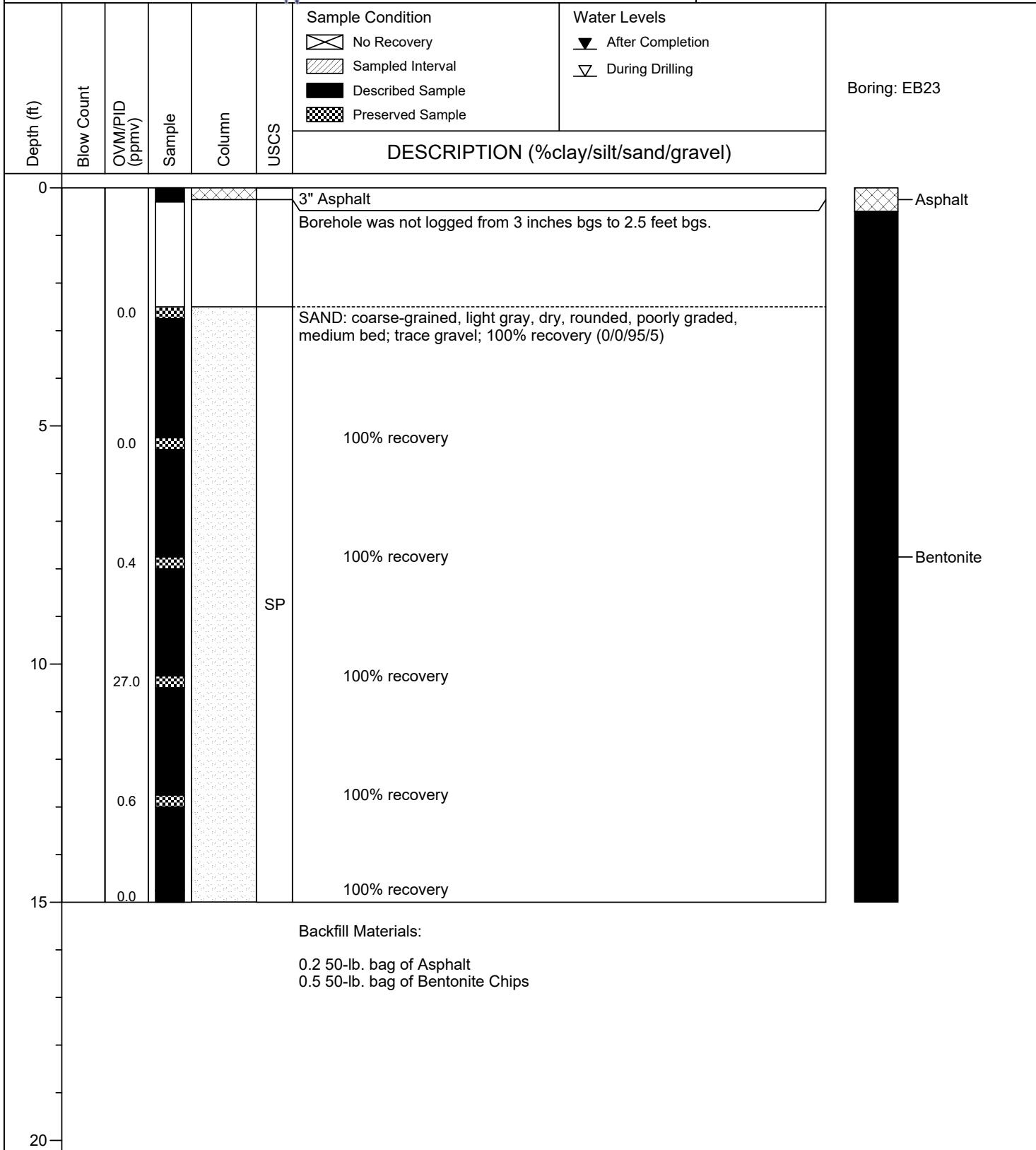


BORING LOG EB23

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



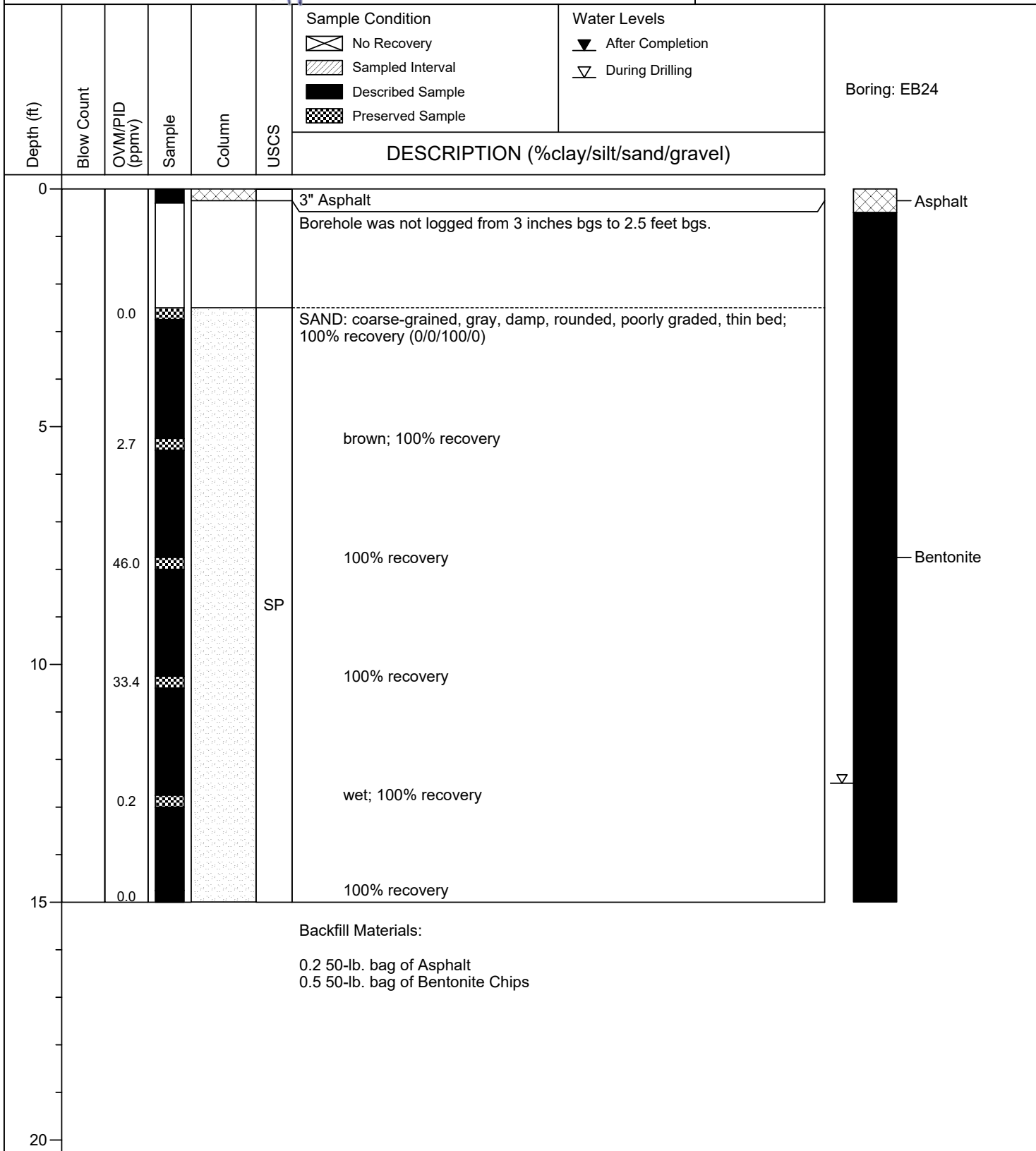


BORING LOG EB24

(Page 1 of 1)

Date Drilled: : 10/13/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



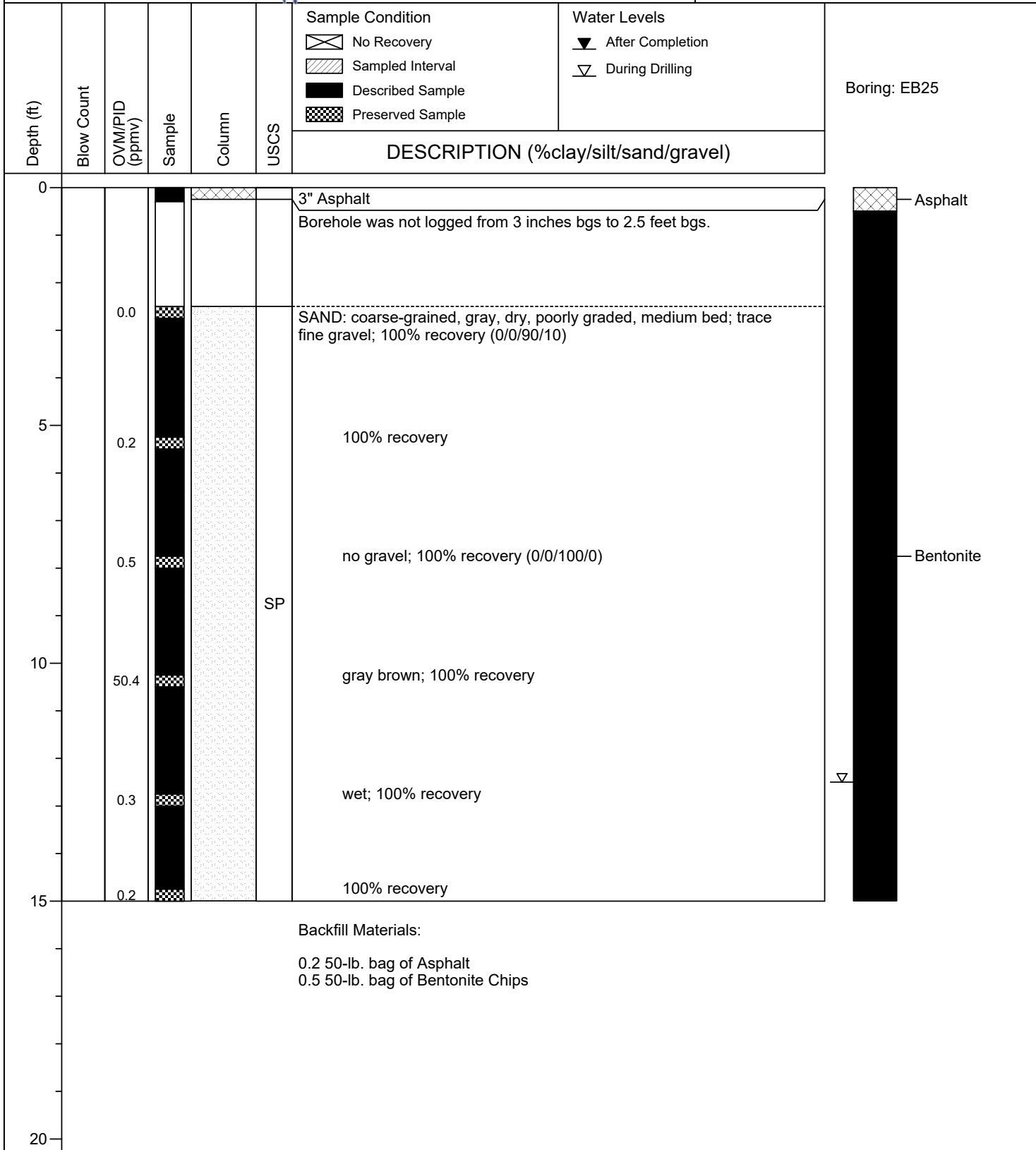


BORING LOG EB25

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



(Page 1 of 1)

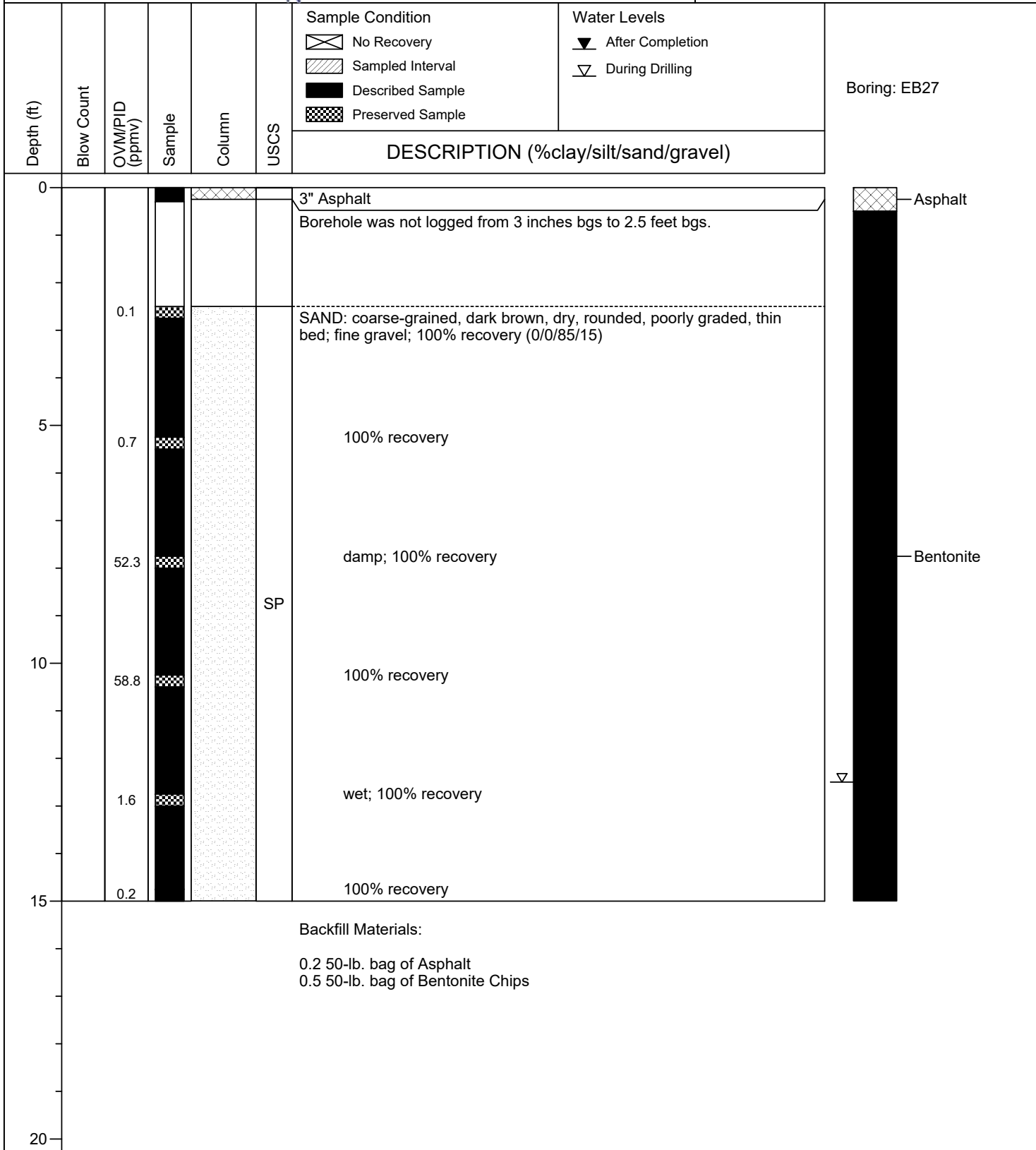


BORING LOG EB27

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



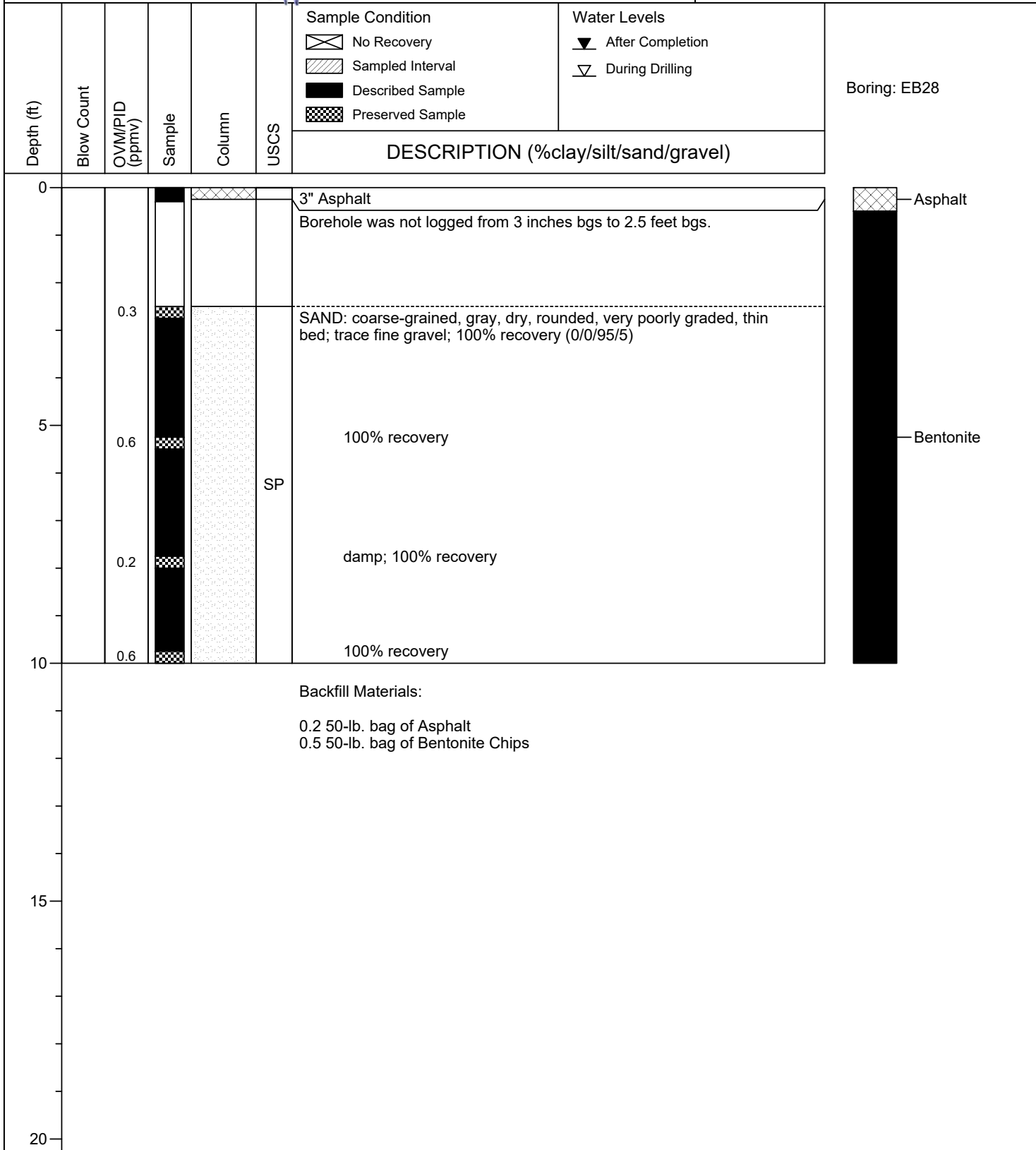


BORING LOG EB28

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell



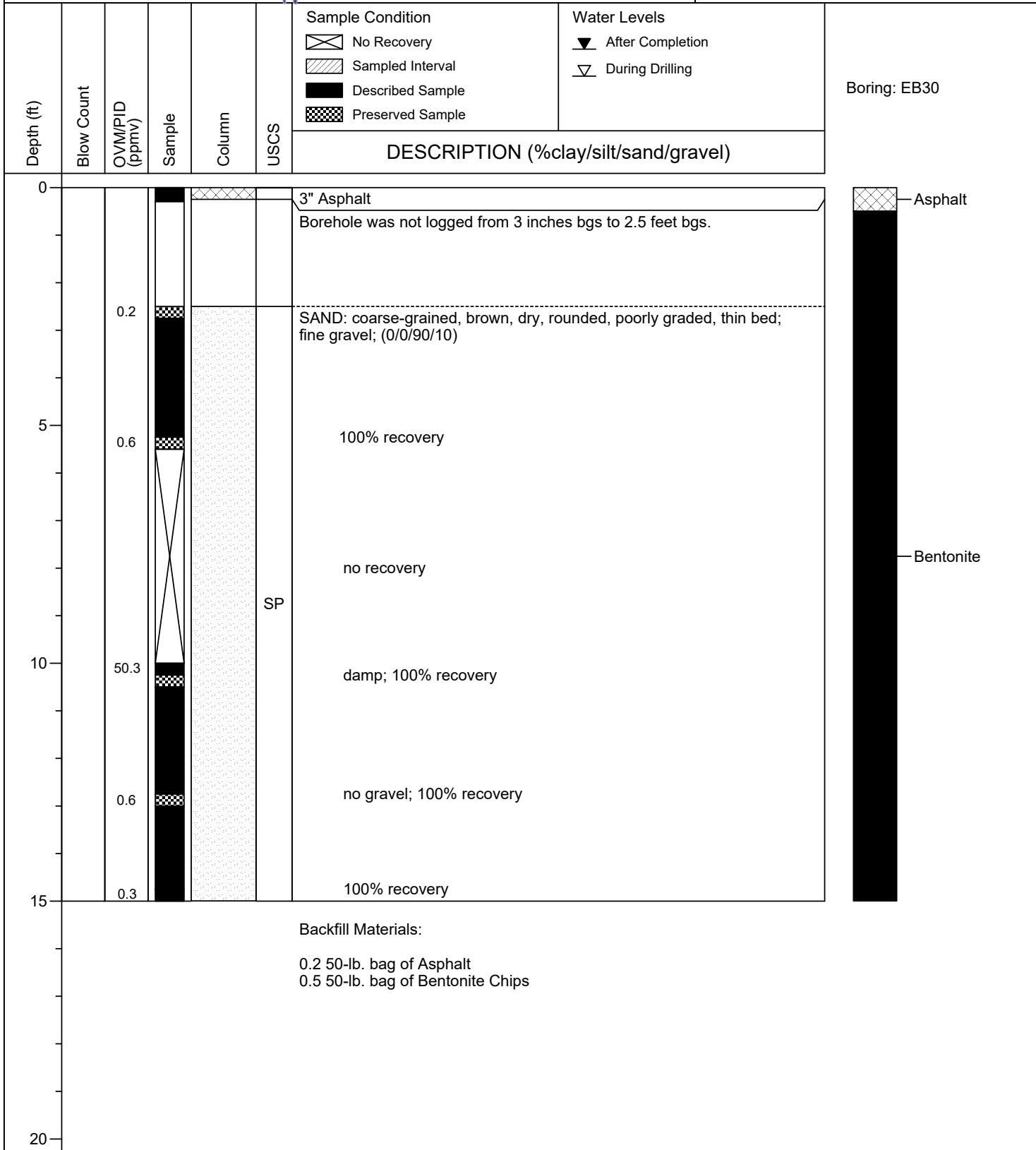


BORING LOG EB30

(Page 1 of 1)

Date Drilled: : 10/14/20
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell





BORING LOG EB31

(Page 1 of 1)

Date Drilled: : 01/25/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 9.5' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB31
						<div>✕ No Recovery</div> <div>▨ Sampled Interval</div> <div>■ Described Sample</div> <div>▩ Preserved Sample</div>	<div>▼ After Completion</div> <div>▽ During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div>▩ Asphalt</div>
						Debris backfill		
		0.0				SAND with Gravel: fine- to coarse-grained, gray brown, moist, well graded; fine to coarse gravel, angular to subangular; 50% recovery (0/5/55/40)		
					SW	50% recovery		
5		0.1				Wood debris; 100% recovery		<div>■ Bentonite</div>
		0.0				SAND with Gravel: medium- to coarse-grained, brown, moist, poorly graded; fine to coarse gravel, subrounded; 75% recovery (0/10/70/20)		
					SP			
		18.1			SP	SAND: coarse-grained, gray, damp, poorly graded; 100% recovery (0/5/95/0)		
10						refusal at 9.5' bgs; 60% recovery		
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								
15								
20								

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BORING LOG EB31B

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 20' bgs
First GW Depth: : 17.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB31B
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		Asphalt
Borehole was not logged from 6 inches bgs to 17.5 feet bgs.								
5								
10								Bentonite
15								
17.5		0.4			SP	SAND: medium- to coarse-grained, gray to dark gray, wet, poorly graded; fine gravel, subangular; 100% recovery (0/5/90/5)	<input checked="" type="checkbox"/>	
20		0.6			CL	CLAY: gray brown, moist, high plasticity; trace fine sand; 100% recovery (95/0/5/0)	<input type="checkbox"/>	
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								

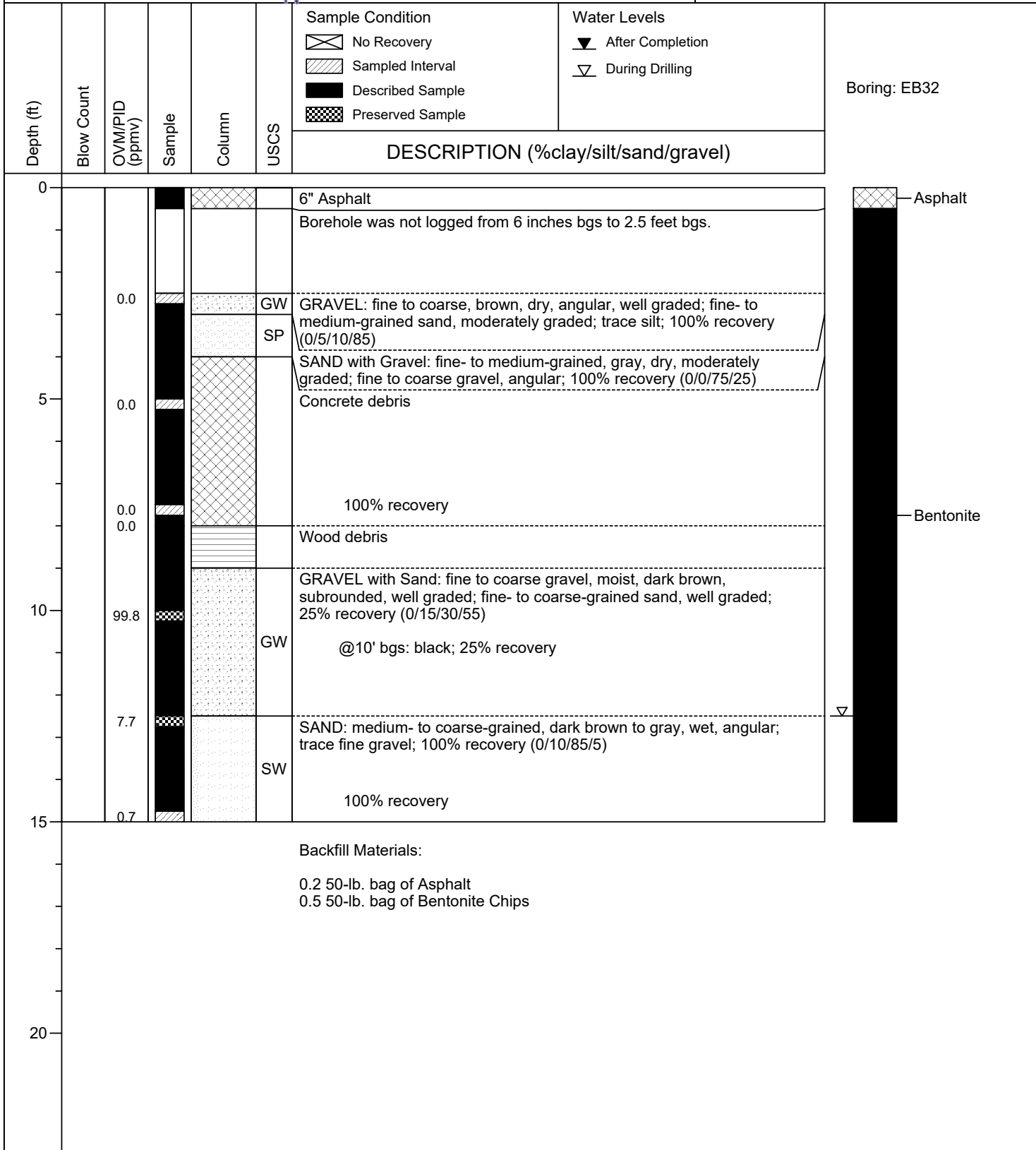


BORING LOG EB32

(Page 1 of 1)

Date Drilled: : 01/25/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*



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BORING LOG EB35

(Page 1 of 1)

Date Drilled: : 01/25/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB35
						<div>No Recovery</div> <div>Sampled Interval</div> <div>Described Sample</div> <div>Preserved Sample</div>	<div>After Completion</div> <div>During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div>Asphalt</div>
						Debris backfill		
		0.0						
5		0.0			SW	SAND with Gravel: fine- to coarse grained, light brown, dry, well graded; fine to coarse gravel, subrounded, moderately graded; 100% recovery (0/5/60/35)		
						100% recovery		
		0.0						
10		0.3			SM	Silty SAND: fine- to medium-grained, black, moist, moderately graded; fine to coarse gravel, subrounded; 100% recovery (0/20/70/10)		<div>Bentonite</div>
						100% recovery		
		1.5						
						fine-grained, dark brown, poorly graded; wood debris; 100% recovery (0/20/80/0)		
15		0.9			SP	SAND: medium- to coarse-grained, gray, damp, poorly to moderately graded; trace fine gravel; 100% recovery (0/5/90/5)		
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								
20								



BORING LOG EB36

(Page 1 of 1)

Date Drilled: : 01/26/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 8.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB36
						<div><div></div>No Recovery</div> <div><div></div>Sampled Interval</div> <div><div></div>Described Sample</div> <div><div></div>Preserved Sample</div>	<div><div></div>After Completion</div> <div><div></div>During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div><div></div>Ashpalt</div>
						SAND: fine- to medium-grained, gray, dry, poorly graded; (0/5/95/0)		
		0.0			SP	100% recovery		
5		0.4				100% recovery		
		0.3				100% recvoery		
						Wood debris, wet	<div><div></div></div>	<div>Bentonite</div>
10		1.0			SW	Silty SAND: fine- to coarse-grained, gray to dark gray, wet, well graded; trace fine gravel, subrounded; 100% recovery (0/15/80/5)		
		0.3			SP	SAND: medium- to coarse-grained, gray, wet, poorly graded; trace fine gravel, angular; 100% recovery (0/5/90/5)		
					SP	Wood debris, 3" layer		
15						SAND: medium- to coarse-grained, gray, wet, poorly graded; trace fine gravel, angular; 100% recovery (0/5/90/5)		
						Backfill Materials:		
						0.2 50-lb. bag of Asphalt		
						0.5 50-lb. bag of Bentonite Chips		
20								

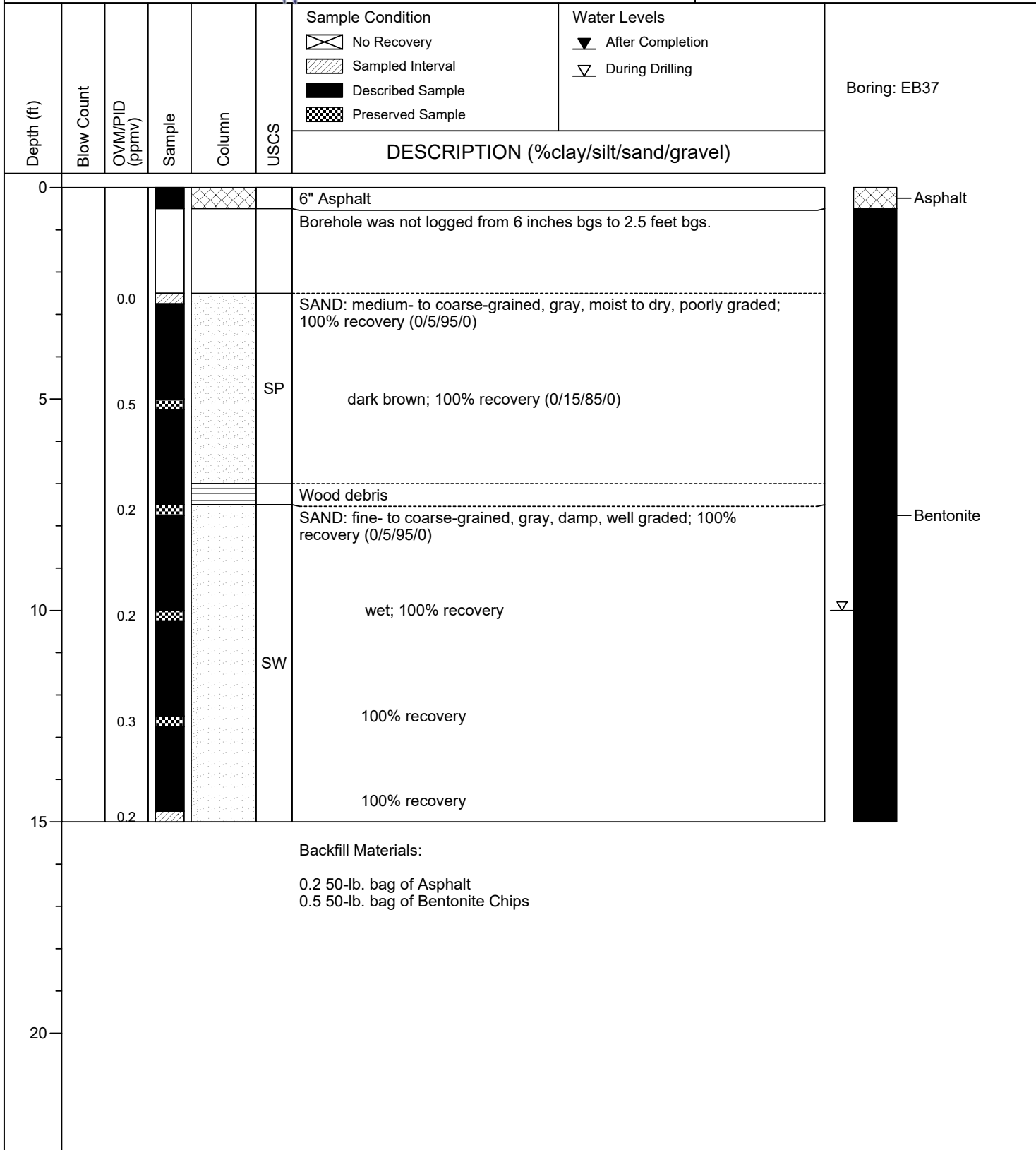


BORING LOG EB37

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 10' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*





BORING LOG EB38

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB38
						<div>✖ No Recovery</div> <div>▨ Sampled Interval</div> <div>■ Described Sample</div> <div>▩ Preserved Sample</div>	<div>▼ After Completion</div> <div>▽ During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div>▩ Asphalt</div>
						Borehole was not logged from 6 inches bgs to 2.5 feet bgs.		
		2.7				SAND: medium- to coarse-grained, gray, dry to damp, poorly graded; 100% recovery (0/5/95/0)		
						100% recovery		
		1.0						
						dark gray; 100% recovery		
		0.5			SP			<div>■ Bentonite</div>
						black and dark gray; organics and plant material present; 100% recovery (0/10/90/0)		
10		0.3				gray to dark gray; no organics and plant material; 100% recovery		
		0.2				Wood debris, 2" layer		
					SP	SAND: medium- to coarse-grained, gray to dark gray, dry to damp, poorly graded; 100% recovery (0/10/90/0)		
15		6.9				Backfill Materials:		
						0.2 50-lb. bag of Asphalt		
						0.5 50-lb. bag of Bentonite Chips		
20								



BORING LOG EB39

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 20' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB39
						<div>✕</div> No Recovery	<div>▼</div> After Completion	
						<div>▨</div> Sampled Interval	<div>▽</div> During Drilling	
						<div>■</div> Described Sample		
						<div>▩</div> Preserved Sample		
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div>▨</div> Asphalt
						Borehole was not logged from 6 inches bgs to 2.5 feet bgs.		
		4.2	<div>▩</div>	<div>▨</div>		Concrete debris		
					SP	SAND: medium- to coarse-grained, brown, dry to damp, poorly graded; 100% recovery (0/5/95/0)		
						Wood debris, 2" layer		
5		12.7	<div>▩</div>			SAND: medium- to coarse-grained, gray, dry to damp, poorly graded; 100% recovery (0/10/90/0)		
					SP			
		8.4	<div>▩</div>			dark gray, organic material present; 100% recovery		
						Wood debris with brown clay, medium plasticity; 100% recovery		
10		3.7	<div>▩</div>			SAND: medium- to coarse-grained, dark gray, dry to damp, poorly graded; 100% recovery (0/10/90/0)		<div>■</div> Bentonite
					SP			
		4.2	<div>▩</div>			Wood debris with dark brown clay, medium plasticity; 100% recovery		
						SAND: medium- to coarse-grained, gray, dry to damp, poorly graded; 100% recovery (0/10/90/0)		
15		10.1	<div>▩</div>			dark gray; 100% recovery		
					SP			
		0.7	<div>▨</div>			100% recovery		
						Wood debris with brown clay, medium plasticity; intermittent coarse-grained sand; 100% recovery		
20		17.5	<div>▩</div>		SP	SAND: medium- to coarse-grained, dark gray, dry to damp, poorly graded; 100% recovery (0/10/90/0)		
Backfill Materials:								
0.2 50-lb. bag of Asphalt								
0.5 50-lb. bag of Bentonite Chips								

(Page 1 of 1)



BORING LOG EB41

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : N/A

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: EB41
						<div><div></div>No Recovery</div> <div><div></div>Sampled Interval</div> <div><div></div>Described Sample</div> <div><div></div>Preserved Sample</div>	<div><div></div>After Completion</div> <div><div></div>During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		
					SW	SAND with Gravel: fine- to coarse-grained, brown, well graded; fine to coarse gravel, angular, well graded (0/5/55/40)		
0.4								
					SW	SAND: fine- to coarse-grained, gray, moist, poorly graded; 100% recovery (0/5/95/0)		
5						gray to dark gray; 100% recovery		
36.0								
						wood chips; 100% recovery (0/10/90/0)		
27.5								
						Wood debris in dark brown clay		
10					SP	SAND: fine- to coarse-grained, gray to dark gray, moist, poorly graded; 100% recovery (0/5/95/0)		
5.8								
						100% recovery		
5.6								
						wood debris; 100% recovery (0/15/85/0)		
1.9								
15								
						Backfill Materials:		
						0.2 50-lb. bag of Asphalt		
						0.5 50-lb. bag of Bentonite Chips		
20								

Asphalt

Bentonite

(Page 1 of 1)

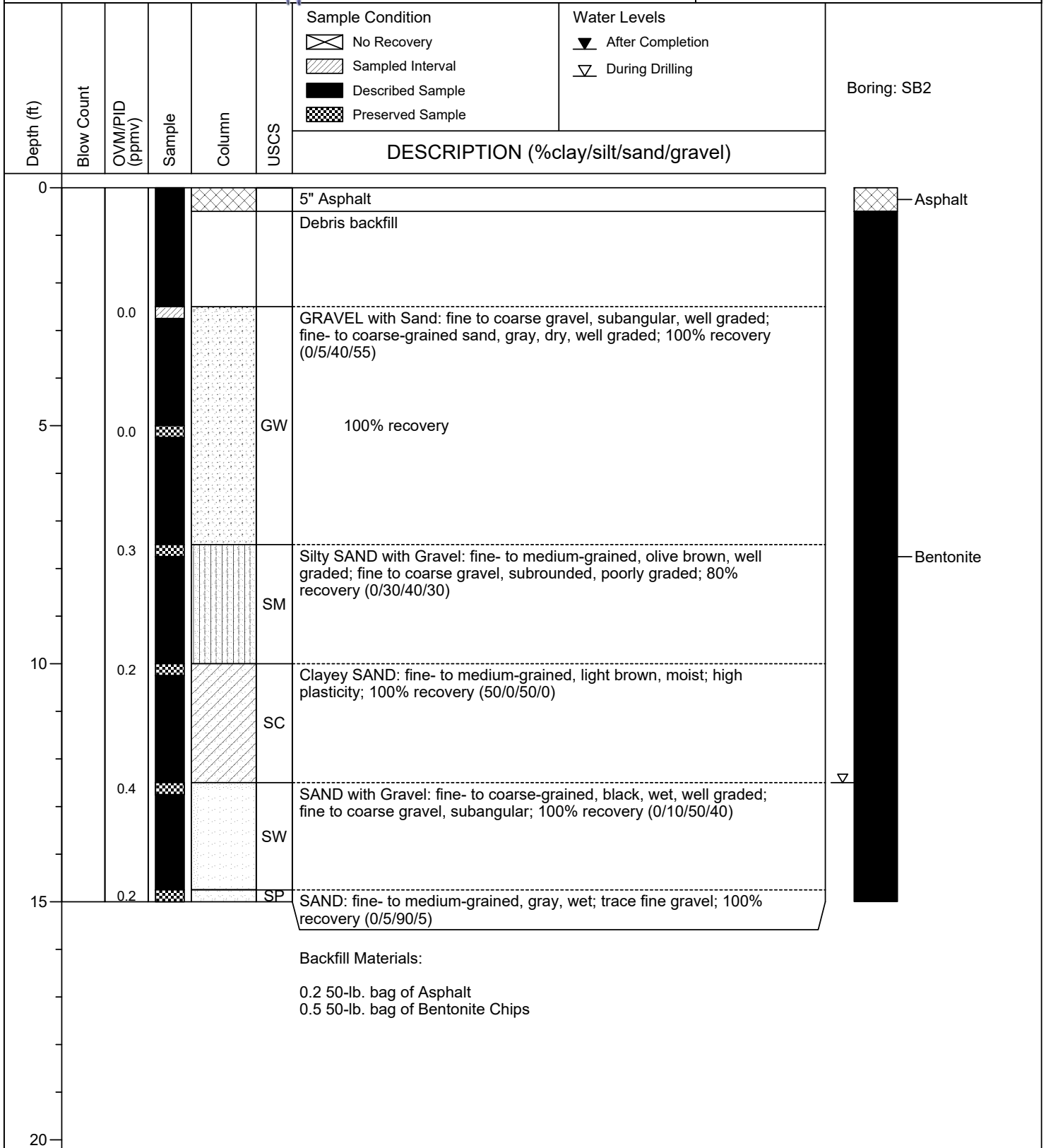


BORING LOG SB2

(Page 1 of 1)

Date Drilled: : 01/26/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*





BORING LOG SB3

(Page 1 of 1)

Date Drilled: : 01/26/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 20' bgs
First GW Depth: : 10' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: SB3
						<div>⊠ No Recovery</div> <div>▨ Sampled Interval</div> <div>■ Described Sample</div> <div>▤ Preserved Sample</div>	<div>▼ After Completion</div> <div>▽ During Drilling</div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						4" Asphalt		<div>⊠ Asphalt</div>
						Debris backfill		
0.2						SAND with Gravel: fine- to coarse-grained, light brown, dry, well graded; fine to coarse gravel, subrounded to subangular, moderately graded; 100% recovery (0/5/65/30)		
5					SW	black, moist; organics and wood present; 100% recovery (0/5/65/30)		
0.4								
0.3					SM	Silty SAND: fine- to medium-grained, dark brown, moist, moderate to poorly graded; 100% recovery (0/20/80/0)		
						Wood debris		
10					CL	Clay lense, 2" thick		<div>▽ Bentonite</div>
						Silty SAND: fine-grained, olive brown, wet, poorly graded; 100% recovery (0/50/50/0)		
0.2					SM	100% recovery		
15						Wood debris, 2" layer		
0.4						Silty SAND: fine-grained, olive brown, wet, poorly graded; 100% recovery (0/50/50/0)		
0.1					SM	100% recovery		
20						100% recovery		
						Backfill Materials:		
						0.2 50-lb. bag of Asphalt		
						0.5 50-lb. bag of Bentonite Chips		










BORING LOG SB4

(Page 1 of 1)

Date Drilled: : 01/25/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 20' bgs
First GW Depth: : 10' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: SB4
						<div><div>No Recovery</div><div>Sampled Interval</div><div>Described Sample</div><div>Preserved Sample</div></div>	<div><div>After Completion</div><div>During Drilling</div></div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						6" Asphalt		<div><div></div></div> Asphalt
						Debris backfill		
		0.0			SW	SAND: fine- to coarse-grained, brown, dry; fine to coarse gravel, subangular; 80% recovery (0/5/85/10) wood debris		
		0.2				SAND: coarse-grained, gray, dry, poorly graded; trace fine gravel; 100% recovery (0/5/90/5)		
		0.4			SP			
10		28.9			SP	SAND with Gravel: fine- to medium-grained, brown, wet, poorly graded; fine to coarse gravel, poorly graded, subrounded; trace silt; 30% recovery (0/5/50/45)	<div><div></div></div>	Bentonite
		24.5				SAND: medium-grained, black, wet, poorly graded; 100% recovery (0/5/90/5)		
15		14.6			SP	medium- to coarse-grained, trace medium gravel, subrounded; 100% recovery		
		12.2			SM	Silty SAND: medium- to coarse-grained, black, wet, moderate to poorly graded; trace fine gravel; 100% recovery (0/20/75/5)		
20		9.6			SP	SAND with Gravel: medium- to coarse-grained, gray, wet, moderately graded; fine to coarse gravel, poorly graded, subangular; 100% recovery (0/5/65/30) Backfill Materials: 0.2 50-lb. bag of Asphalt 0.5 50-lb. bag of Bentonite Chips		

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: SB5
						 No Recovery  Sampled Interval  Described Sample  Preserved Sample	 After Completion  During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						2" Asphalt Debris backfill		 Asphalt
0.4						SAND with Gravel: fine- to coarse-grained, light brown, dry, well graded; fine gravel, subangular, moderately graded; 100% recovery (0/5/60/35)		
0.7						100% recovery		
0.4						100% recovery wet		
0.2					SW	dark brown; 100% recovery (0/10/60/30)		
0.2						100% recovery (0/15/55/30)		
0.1						Silty SAND with Gravel: fine- to coarse-grained, black, wet, well graded; fine gravel, subangular, moderately graded; 100% recovery (0/20/55/25)		
0.5					SM	Silty SAND: fine-grained, black, damp, poorly graded; trace organic matter; 100% recovery (0/30/70/0)		
0.0					SP	SAND: medium- to coarse-grained, brown, damp, poorly graded; trace fine gravel; 100% recovery (0/5/90/5)		
Backfill Materials: 0.2 50-lb. bag of Asphalt 0.5 50-lb. bag of Bentonite Chips								



BORING LOG SB6

(Page 1 of 1)

Date Drilled: : 02/05/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 7.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: SB6
						<div><div>No Recovery</div><div>Sampled Interval</div><div>Described Sample</div><div>Preserved Sample</div></div>	<div><div>After Completion</div><div>During Drilling</div></div>	
DESCRIPTION (%clay/silt/sand/gravel)								
0						5" Asphalt		<div><div></div></div> Asphalt
						Borehole was not logged from 6 inches bgs to 2.5 feet bgs.		
3.5					SW	SAND with Gravel: fine- to coarse-grained, black to dark brown, moist, moderately graded; fine to coarse gravel, rounded to subangular, well graded; 100% recovery (0/5/60/35)		
5					SM	Silty SAND: very fine- to medium-grained, gray, moist; 100% recovery (0/30/70/0)		
						fine- to coarse-grained, bimodal primarily coarse-grained, brown, wet, low plasticity; trace fine gravel; 100% recovery (0/20/75/5)	<div><div></div></div>	Bentonite
						Wood debris with brown clay, dry to moist, roots		
10								
					SP	SAND: medium- to coarse-grained, gray, wet, poorly graded; 100% recovery (0/5/95/0)		
15					CL	CLAY with Sand: dark brown, moist, high plasticity; fine-grained sand, poorly graded; 100% recovery (85/0/15/0)		
						Backfill Materials:		
						0.2 50-lb. bag of Asphalt		
						0.5 50-lb. bag of Bentonite Chips		
20								












BORING LOG SB7

(Page 1 of 1)

Date Drilled: : 02/05/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Push Probe
Sampling Method: : Dual Tube
Borehole Diameter: : 3"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 15' bgs
First GW Depth: : 12.5' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Paul Prevou
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : Keri Chappell

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: SB7
						 No Recovery  Sampled Interval  Described Sample  Preserved Sample	 After Completion  During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						5" Asphalt		 Asphalt  Bentonite
						Borehole not logged from 5 inches bgs to 2.5 feet bgs.		
0.1					SW	SAND with Gravel: fine- to coarse-grained, black to dark brown, moist, moderately graded; fine to coarse gravel, subrounded to subangular, well to moderately graded; 100% recovery (0/5/60/35)		
5					SP	SAND: fine- to medium-grained, brown, moist, poorly graded; trace fine gravel; 100% recovery (0/5/90/5)		
0.1					SW	SAND: fine- to coarse-grained, dark gray, moist, moderately graded; 100% recovery (0/5/95/0)		
0.0						Wood debris in brown clay, roots, high plasticity 100% recovery		
3.4					SC	Clayey SAND: fine- to medium-grained, dark brown, wet, poorly to moderately graded, medium plasticity; decayed plant material present; 100% recovery (40/0/60/0)		
0.2					SP	SAND: medium- to coarse-grained, dark gray, wet, poorly to moderately graded; 100% recovery (0/10/90/0)		
15						Backfill Materials: 0.2 50-lb. bag of Asphalt 0.5 50-lb. bag of Bentonite Chips		
20								

(Page 1 of 1)



BORING LOG GB2

(Page 1 of 1)

Date Drilled: : 01/27/21
Drilling Co.: : Holocene Drilling, Inc.
Drilling Method: : Hollow-Stem Auger
Sampling Method: : Split Spoon
Borehole Diameter: : 8"
Casing Diameter: : N/A
Latitude : N/A
Longitude : N/A
Total Depth: : 31.5' bgs
First GW Depth: : 10' bgs

Project No.: : 031447
Site: : ExxonMobil ADC, 2717/2731 Federal Avenue, Everett, WA
Logged By: : Brett McLees
Reviewed By: : Keri Chappell, L.G. 2719
Signature: : *Keri Chappell*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	Boring: GB2
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> After Completion <input type="checkbox"/> During Drilling	
DESCRIPTION (%clay/silt/sand/gravel)								
0						3" Asphalt		
Borehole was cleared to 5' bgs on 01/26/21 using air knife and hand tools. Borehole was not logged from 3 inches bgs to 5 feet bgs.								
5	2 5					SAND: fine- to coarse-grained, gray, damp, rounded; 100% recovery (0/0/100/0)		
10	3 4 5					wet; 100% recovery		
15	1 2 3					brown; trace silt; trace wood; 100% recovery (0/5/95/0)		
20	4 5				SW	gray; 100% recovery		
25	6 9 11					100% recovery		
30	3 4 6					100% recovery		
35						Geotechnical Information: Truck-mounted rig No. 113, Diedrich D-120, 140-pound Auto Hammer Certification complete on November 19, 2020.		
						Borehole collapsed during backfill activities due to high water table. Bottom of bentonite calculated via Cetco 3/8" Crumble standard volume.		
						Backfill Materials:		
						2 50-lb. bags of Cement		
						1 50-lb. bag of Bentonite Chips		
40								

Concrete

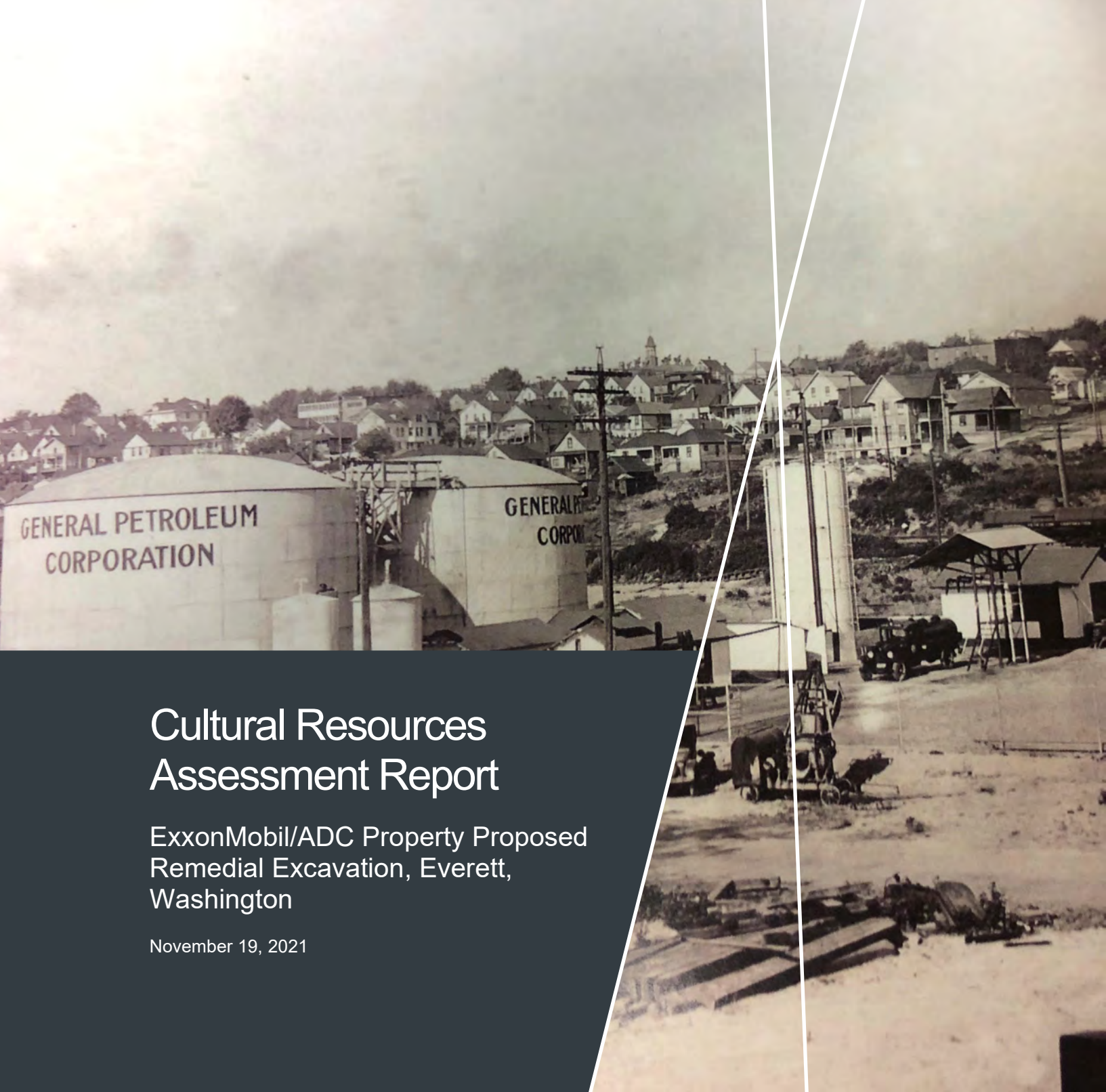
Bentonite (Estimate)

Collapsed Material (Estimate)

ExxonMobil ADC
Cardno 03144702.R05

APPENDIX E

DRAFT CULTURAL RESOURCES
ASSESSMENT REPORT



Cultural Resources Assessment Report

ExxonMobil/ADC Property Proposed
Remedial Excavation, Everett,
Washington

November 19, 2021

Contact Information

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801 2nd Avenue
Suite 1150
Seattle, WA 98108
Telephone: 206-269-0104
www.cardno.com

Prepared By: Emily Scott, BA,
Alana Vidmar, MSc, and
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and

American Distributing Co.
13618 45th Avenue NE
Marysville, WA 98271
(360) 658-375

Project Name Cultural Resources Assessment
Report
ExxonMobil/ADC Property
Proposed Remedial Excavation,
Everett, Washington
Job Reference 0314476040
Version Number 1.0
Date November 19, 2021

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Executive Summary

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington. The project proposed to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The project area is currently developed with a paved parking lot.

Results of the cultural resources assessment for the project area indicate a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources.

1.0 Introduction

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington (Figure 1). This project is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Proposed cleanup activities include installation of shoring walls, and excavation of impacted soils. Following excavation of contaminated soils, the project area will be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved.

The project area consists of 3.48 acres that are comprised of several tax parcels and portions of the City of Everett's (City) Right-of-Way (ROW). Parcel information is provided below (Table 1; Figure 2). Currently, the project area consists of a paved parking lot with no extant structures or buildings (Figure 3).

The cultural resources assessment consisted of a literature review of existing cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs) located within 1.0 mile (1.6 kilometer [km]) of the project area. This research included a records search at the Department of Archaeology and Historic Preservation's (DAHP's) Washington Information System for Architectural and Archaeological Records Data (WISAARD) database. Additional resources that were consulted include historic-era aerial photographs, U.S. Geological Survey (USGS) maps, General Land Office (GLO) maps, Snohomish County atlases, and Sanborn Fire Insurance Maps.

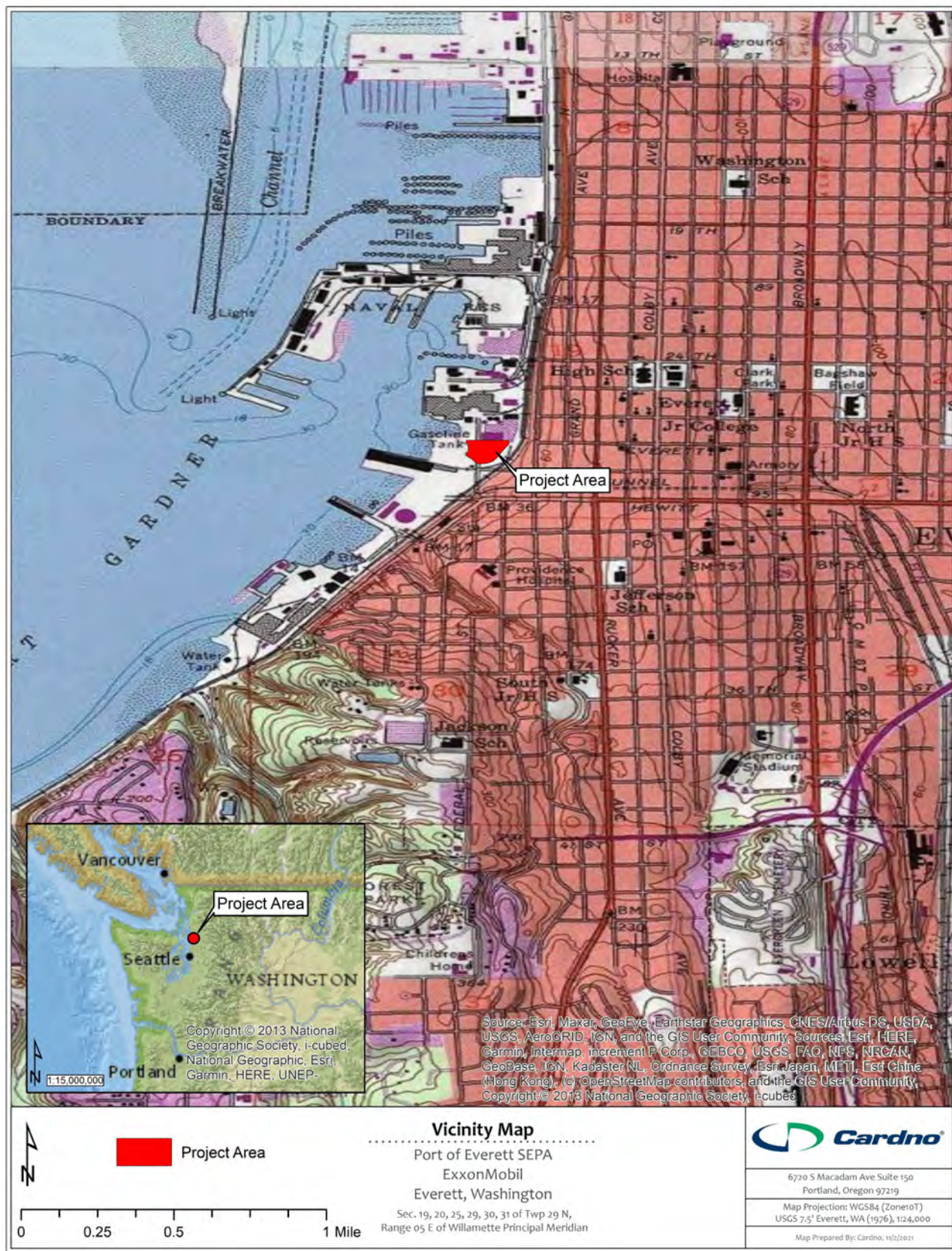


Figure 1. Project area and vicinity.

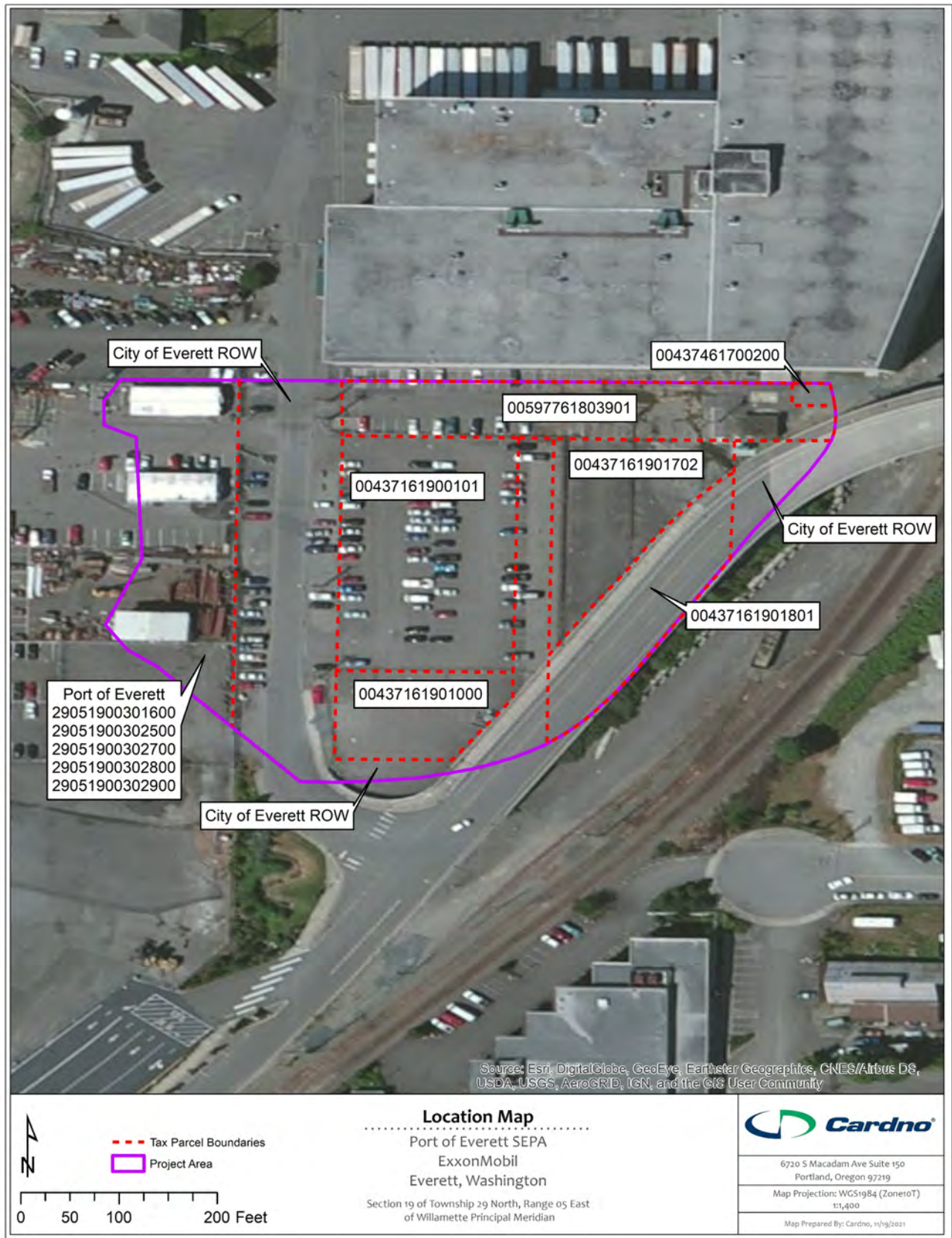


Figure 2. The project area denoting impacted Snohomish County tax parcels and City ROW.

Table 1. Snohomish County Tax Parcel Information.

Owners	Parcel Number(s)
Burlington Northern Railroad	00437161901702
City of Everett	00437161901801
Miller Trust (Cecilia Beverly Miller, beneficiary)	00437161900101
Mobil Oil Corporation	00437161901000
Port of Everett	00437461700200, 00597761803901, 29051900301600, 29051900302500, 29051900302700, 29051900302800, 29051900302900



Figure 3. Overview of project area, facing northeast.

2.0 Regulations

Cardno's cultural resources assessment was completed in compliance with Everett Municipal Code (EMC), Snohomish County Code (SCC), the State Environmental Policy Act (SEPA), and Revised Code of Washington (RCW). These regulations are discussed below. Additionally, information regarding other local, state, and federal regulations applicable to cultural resources is also provided.

2.1 Everett Municipal Code

EMC 19.28 outlines the process for identifying, listing, and protecting resources on the Everett Register of Historic Places and within historic overlay zones. Properties within historic overlay zones are governed by EMC 19.28.020 through 19.28.120. Criteria for placement on the Everett Register of Historic Places are described in EMC 19.28.130. Proposed changes to properties on the Everett Register are reviewed by the Everett historical commission per 19.28.140.

2.2 Snohomish County Code

SCC 30.67.340 requires developers and property owners to immediately stop work and notify the county, DAHP, and affected Indian tribes if archaeological resources are uncovered during excavation. It further stipulates that county permits issued in areas documented as containing archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

SCC 20.32D outlines the identification, evaluation, and protection of archaeological and historic resources within Snohomish County that are listed on the Washington State Archaeological Site Inventory. Additionally, it directs the preservation and rehabilitation of eligible historic properties for future generations. SCC 30.32D.020 established the Snohomish County Register of Historic Places, which includes historic buildings, sites, structures, objects, and districts within the county. SCC 30.32D.030-060 directs property designation to and removal from the Snohomish County Register of Historic Places, as well as alterations of properties on the register.

SCC 20.32D.070-100 outlines the process for obtaining and working under a certificate of appropriateness, and zoning. SCC 20.32D.200 requires recordation of archaeological sites. Additionally, completion of an archaeological report or relocation of a project is required for any construction, earth movement, clearing, or other site disturbance of a known archaeological site or any development application proposed on non-tribally owned, fee-simple properties designated Reservation Commercial on the Snohomish County Future Land Use Map. SCC 20.32D.220 outlines the process to follow if human remains or archaeological resources are found during construction, earth movement, clearing, or other site disturbance.

Lastly, SCC 30.32D.300 allows for an appeal process for any building permit issued with conditions imposed pursuant to this chapter. An appeal may occur as a Type 1 decision pursuant to SCC 30.71.

2.3 State Environmental Policy Act

The SEPA (RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to document cultural and historical significance that may be affected by project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Per WAC 197-11-960, the SEPA checklist submitted to the local planning authority with an application for development review includes the following questions, which must be satisfactorily addressed to demonstrate that a project will not have a significant adverse impact on cultural and historic resources:

- 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? If so, specifically describe.*
- b. *Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.*

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 archaeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.*

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.*

2.4 Revised Code of Washington 27.44 and 27.53

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

If a person(s) violates this statute and knowingly disturbs or alters an archaeological site, the DAHP is allowed to issue civil penalties of up to \$5,000, in addition to site restoration costs and investigative costs per RCW 27.53.095. Restorative and monetary remedies do not prevent concerned Indian tribes from undertaking civil action in state or federal court or law enforcement agencies from undertaking criminal investigation or prosecution. If human remains and/or burials are disturbed, RCW 27.44.050 allows an affected Indian tribe to undertake civil action. Additionally, the excavation of human remains without a permit is a felony.

2.5 Revised Code of Washington 68.60

RCW 68.60 requires “expeditious” notification of local law enforcement and the coroner if skeletal human remains are discovered. Failure to notify is considered a misdemeanor.

2.6 Washington Administrative Code 25-48-060

The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the National Register of Historic Places (NRHP).

2.7 Governor’s Executive Order 21-02

In 2021, Washington Governor Jay Inslee signed executive order 21-02, which supersedes the previous GEO 05-05. GEO 21-02 requires the preservation and protection of Washington’s cultural resources, which are defined as archaeological and historical sites, Native American sacred places and landscapes, and sites, buildings and places that hold special cultural historical, and spiritual significance. The GEO requires state agencies to review their capital construction projects and land acquisitions made for the purpose of a capital construction project that are not undergoing review under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) with the Washington State Department of Archaeology and Historic Preservation (DAHP) and affected Indian tribes to determine potential impacts to cultural resources. GEO 21-02 outlines the steps of review and consultation that should be undertaken as early in the project planning process as possible. In the event a culturally significant site will be impacted by a capital project, the state agency must work with the DAHP and affected Indian tribes on appropriate archaeological survey and mitigation strategies consistent with state and federal laws. Additionally, the state agency must take reasonable action to avoid, minimize, or mitigate adverse effects to the resource.

2.8 Washington Heritage Register

The Washington Heritage Register (WHR) is an official listing of historically significant sites and properties found throughout the state and includes districts, sites, buildings, structures, and objects that have been identified and documented as being significant in local or state history, architecture, archaeology, engineering, or culture. The WHR is governed by several state laws, including Senate Bill 363, RCW 27.34.200, and WAC 25-12.

Any subdivision of state government or recipient of state funds must comply with the SEPA and Executive Order 21-02. These programs require that significant properties, specifically those listed in or eligible for the WHR, be considered when state undertakings (e.g., permits, grants, construction) affect historic and cultural values. If significant resources are identified, the DAHP considers the effects of a proposed project on such resources and makes a professional recommendation for appropriate treatments or actions. The DAHP does not regulate the treatment of properties that are found to be significant, and the local governing authority may choose to uphold the DAHP's recommendation and may require mitigation of adverse effects to significant properties.

2.9 National Register of Historic Places

The NRHP (16 U.S. Code 470a), created under the National Historic Preservation Act of 1966, as amended (16 U.S. Code 470 et seq.), is the federal list of historical, archaeological, and cultural resources worthy of preservation. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture and that possess integrity of location, design, setting, material, workmanship, feeling, and association. The NRHP is maintained by the National Park Service (NPS) on behalf of the Secretary of the Interior (SOI). The DAHP administers the statewide NRHP program under the direction of the State Historic Preservation Officer, located in Olympia, Washington. The NPS has developed NRHP Criteria for Evaluation (36 Code of Federal Regulations [CFR] § 60.4) to guide the evaluation of cultural resources that may be either listed in or eligible for the NRHP. The NRHP Criteria of Evaluation are:

Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: Are associated with the lives of persons significant in our past; or

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

NPS Bulletin No.15, "How to Apply the National Register Criteria for Evaluation," provides guidance on evaluating resources for listing in the NRHP. Archaeological sites are primarily assessed under Criterion D. While cultural resources may be present within the project area, if they do not meet the requirements for listing in the NRHP, they are not considered historic properties. Cultural resources less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance, as described in Criteria Consideration G (36 CFR Part 60) and NPS Bulletin No. 22, "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years."

3.0 Environmental Setting

The project area lies within the greater Puget Lowland physiographic province, which is a low-lying area between the Cascade Range to the east and the Olympic Mountains to the west. Puget Sound was

shaped by widespread continental glaciation that extended south from British Columbia to the northern Puget Lowland and along the western flanks of the Cascade Mountains (Miss 2008). This area is also known as the Puget Sound Trough physiographic province, which extends to the Cowlitz and Chehalis Rivers (Franklin and Dyrness 1988). The Vashon Stade of the Fraser Glaciation was the last glacial maximum in the region and is dated between 18,000 and 14,000 years before present (BP) (Easterbrook 2003). Rapid deglaciation, which saw the occurrence of meltwater channels and temporary ice marginal lakes, occurred after this glaciation. The land experienced isostatic rebound between 13,000 and 7000 years BP as global sea levels rose and deltas formed at the head of the Duwamish Valley, shaping the Puget Sound shoreline (Dragovich et al. 1994; Miss 2008). By 5000 years BP, the Puget Sound sea level was within 6.6 to 9.8 feet (2 to 3 meters [m]) of its current level (Kelsey et al. 2004; Sherrod et al. 2000).

The project area lies within the *Tsuga heterophylla* (western hemlock) vegetation zone in the Puget Lowland, which provides a highly productive ecological system with a complex mosaic of microenvironments (Franklin and Dyrness 1988). This vegetation zone is characterized by forests of western hemlock, western red cedar, and Douglas-fir. Shrub cover consists of sword fern, salal, Oregon grape, ocean spray, huckleberry, and red elderberry. The diversity of floral and faunal species in the area has decreased due to human settlement, which has led to a significant loss of faunal habitat. Additionally, historical and modern contaminants within Port Gardner Bay have significantly impacted mudflats, estuaries, tidal marshes, and shrub wetlands. The National Oceanic and Atmospheric Administration's Damage Assessment, Remediation, and Restoration Program (2021) notes that:

Releases of hazardous substances into Port Gardner Bay have resulted from industrial and municipal processes since the early 1900s, including factories, spills during cargo transfer and refueling, storm water runoff through contaminated soils at upland facilities, discharge of contaminated groundwater, and lumber operations, such as sawmills, and pulp and paper mills.

Prior to historical and modern impacts, the *Tsuga heterophylla* vegetation zone could support large terrestrial animals like elk, deer, black bear, and coyote and smaller mammals like rabbit, squirrel, racoon, beaver, and river otter. Currently, the project area is located within modified industrial landscape with paved ground surface. Recent subsurface investigations note that the near-surface soils consist of a heterogeneous mixture of fill materials. The fill materials consist of very loose to medium dense, brown, brownish gray, and gray silty sand and sand with areas of wood and brick debris extending to depths of approximately 5 to 10 feet below ground surface (bgs). Gray silty sand and silt and dark-brown to black peat mixed with wood debris are encountered beneath the shallow fill and extend up to 20 to 27 feet bgs (Wood 2019, Cardno 2020a, 2020b).

3.1 Archaeology

The earliest known occupations in western Washington, termed Paleo-Indian, are evidenced by the appearance of large, fluted projectile points dating to approximately 12,800 years BP (Ames and Maschner 1999; Carlson 1990). Paleo-Indians were primarily hunter-gatherers with low populations and high levels of mobility. Some researchers have argued that these early people were maritime oriented (Carlson 2003; Dixon 1993; Fedje and Christensen 1999; Fladmark 1979). In western Washington, sites from this period are rare. Much of the late Pleistocene terrain was uninhabitable due to glaciers, and the lands that were occupied by Paleo-Indians were predominately coastal reaches. During the glaciation period, ocean levels fell almost 400 feet globally (Kirk and Daugherty 2007), but with the onset of the warming Holocene, ocean levels rose and submerged many of these coastal sites. However, some sites are not submerged and instead are located above the present shoreline due to eustatic, tectonic, and isostatic effects that vary throughout the region (Fedje and Christensen 1999).

The Archaic period dates from approximately 12,500 to 6,400 years BP (Ames and Maschner 1999; Carlson 1990). Archaic-period sites, similar to Paleo-Indian sites, are poorly represented. Changes in sea level and vegetation have obscured many Archaic-period sites along the coast (Ames and Maschner

1999). However, as the glaciers receded, people were able to occupy larger expanses in the interior of the Puget Sound. Archaic-period peoples likely maintained small populations and high levels of mobility, and focused on a combination of maritime, littoral, and terrestrial economies. Archaic-period occupations are largely characterized by stone tool assemblages that are typically composed of large, stemmed lanceolate projectile points and bifaces. In addition, the Pacific Northwest Archaic period saw an introduction of microblades, which are sometimes present in stone tool assemblages (Ames and Maschner 1999).

Pacific-period sites date from approximately 6,400 to 250 years BP. The period ends at the introduction of smallpox to the region (Ames and Maschner 1999). The Early Pacific period (6,400 to 3,800 years BP) was marked by the increased use of marine resources, the appearance of human burials in middens and cemeteries, a diversification in subsistence activities, the disappearance of microblade technology, and the increased use of bone, antler, and ground stone tools. Major developments also included the appearance of ground stone celts (adze blades) and a proliferation in chipped-stone tool forms and styles, and decorative/ornamental pieces that likely represent contact and trade with groups in neighboring cultural areas (Kirk and Daugherty 2007). The Middle Pacific period (3,800 to 1,800/1,500 years BP) displays major developments including the appearance of long-term settlements (plank houses), intensification of salmon capture (appearance of wooden fish weirs and girdled/drilled net sinkers), and a diversification in tool form and style. Late Pacific period (1,800/1,500 to 250 years BP) developments are represented by the appearance of heavy-duty woodworking tools, an overall decline in the use of chipped-stone tools, and an increase in funerary ritual/burial activities. Sea levels became stable by the start of the Middle Pacific period, and sites representing the Middle and Late Pacific periods are located across the Northwest Coast region (Ames and Maschner 1999).

3.2 Ethnography

The project area lies within the traditional territory of the Snohomish. Since time immemorial, the Snohomish people lived in various locations along the Snohomish River from present-day Monroe to the mouth of the river near Everett, on Camano Island, and on Whidbey Island (Ruby and Brown 1992:212; Tweddell 1974). The region was utilized for resource gathering, hunting, and villages/seasonal habitations. However, there are no known ethnographic sites within the immediate project area (Waterman et al. 2001).

The Snohomish spoke the southern dialects of Lushootseed—a Salish language (Suttles and Lane 1990:486). The Snohomish people followed a seasonal settlement pattern. Winter villages, composed of one or more cedar plank houses where families gathered in the late fall, were typically located along waterways, such as at the mouth of the Snohomish River, river confluences, or protected shorelines (Haeberlin and Gunther 1930; Lane and Lane 1977). During the winter months, they relied on stored foods supplemented by local hunting and fishing (Suttles and Lane 1990).

Coast Salish peoples developed a complex social and religious system in part due to the abundance of food and raw materials (e.g., wood, plants, stone) (Haeberlin and Gunther 1930). Potlatches and spirit quests were important activities in the pursuit of spiritual power, in addition to asserting control over resources and neighboring groups (Elmendorf 1971). Social stratification existed among Coast Salish groups, where villages consisted of elite, commoner, and slave classes (Ames 2001; Grier 2003; Tollefson 1987).

Winter housing consisted of large, multifamily longhouses constructed of cedar planks. Sleeping platforms lined the walls, and storage shelves for winter supplies were typically located on the walls above these sleeping platforms. Fires were located near the sides, and the central area was used as a passageway. Shed-roof houses were a common design among the Coast Salish in the Puget Sound region (Suttles 1991). This house type easily allowed for the addition of rooms when populations increased, such as during winter months, and for the reduction in house size when occupants left for summer food collection

rounds (Suttles 1991). Often, the different placements of sleeping platforms and individual fires portrayed status, where those with the highest status lived in the back of the house and commoners and slaves lived closer to the entryways (Suttles 1991).

During the spring, summer, and fall, people would journey from central villages to temporary camps. Camps were located along streams during salmon runs while smaller groups would hunt, fish, and gather plant resources. Gathering was most intensive during spring and summer. Plants such as cattail (*Typhaceae* spp.), cranberry (*Oxycoccus* spp.), wapato (*Sagittaria latifolia*), and salmonberry (*Rubus spectabilis*) shoots were collected from wetlands, such as those found along Lake Stickney (located directly west of the project area), and prairies were visited for gathering camas (*Liliaceae* spp.) bulbs (Haeberlin and Gunther 1930; Turner 1976).

A typical summer house was constructed for short-term occupation, and they were typically tipi or square-shaped. Mats were placed horizontally over a frame of poles to create the tipi, while square houses were a lean-to type form, with mats placed over a wooden structure with a gabled or single pitch roof. Short-term occupation mountain camps were made using a similar square form, but covered with boughs of various tree species. Another style of summer house consisted of four corner poles with horizontal poles placed on top to create a gable. Cedar twigs held the framework together, while mats covered the roof and three sides (Haeberlin and Gunther 1930).

The Tulalip Reservation was authorized under the Treaty of Point Elliot in 1855, and enlarged in 1873, as the home for several indigenous groups including the Snohomish, Stillaguamish, Snoqualmie, Skykomish, and other allied bands living in the region (Ruby and Brown 1992; Tulalip Tribes 2014). Some among these groups moved to the reservation, while others remained living on their traditional lands. The combined tribes became known as the Tulalip Tribes.

Cardno is not aware of any known ethnographic place names within the project area or immediately adjacent. However, there are several ethnographic place names recorded in the general vicinity of the project area and near the mouth of the Snohomish River (Waterman 1922; Waterman et al. 2001:336-342). Non-English names are Lushootseed when available.

16 *ʔusʔusič* (Watermann orthography: *Osʔa/s1tc*) translates to “chasing a fish here and there” near an estuary between Steamboat and Union Sloughs.

16a *bəluʔəb* (Watermann orthography: *PEʔls1b*) translates to “boiling,” for an area at the mouth of the main Snohomish River channel.

17 *čikʷucid* (Watermann orthography: *Ctcqoʔtsid*) translates to “that which chokes up the mouth of something,” for a small island located on the north side of the Snohomish River mouth.

18 *sexʷčulalqʷ* (Watermann orthography: *SExwtculalkw*) is noted for a sharp point of land running toward the Ctcqoʔtsid island.

19 *hibuləb* (Watermann orthography: *Hibuʔub*) translates to “place where water boils out of the ground,” for a former village site south of the Snohomish River mouth.

20 Watermann orthography: *SEqʷsuʔub* is noted for a small promontory with a slough that runs parallel to the shore.

21 *sluluw#* (Watermann orthography: *SLuʔluw1L*) translates to “little perforation for a canoe,” for a narrow channel passing behind an island.

22 *ʔuxʷat* (Watermann orthography: *tLʔoʔhwaL*) translates to “a cold spring” for a spot on the river bank opposite Everett.

3.3 Historical Context

Cardno referenced GLO land patents and cadastral maps for Township 29 North, Range 5 East as well as Snohomish County atlases and USGS topographic survey maps to determine changes in built environment features (e.g., piers, docks, railroads, buildings, and/or roads) in or near the project area (Table 2). According to the results of a land patent search through the Bureau of Land Management (BLM), in 1876 Dennis Brigham was granted a total of 160.15 acres for Lot/Tract 2, Lot/Tract 3, and Lot/Tract 4 within Section 19 of Township 29 North, Range 5 East. Brigham, a carpenter from Massachusetts, arrived in the Everett area in 1861 to begin the homesteading process. Considered the first permanent settler in the area, Brigham constructed a cabin on his acres near Port Gardner Bay and lived a solitary life (Oakley 2005). During the early 1860s, a lone telegraph operator "...and Brigham were the only settlers between Mukilteo and the mouth of the Snohomish River for many years" (Whitfield 1908: 285). Later, John Auson King claimed Lot/Tract 1, immediately north of Brigham within Section 19 (BLM 1874). These lands grants were authorized under the Land Act of 1820 and the Homestead Act of 1862. These acts reduced the price of federal lands and gave citizens up to 160 acres each of public land for improvement.

Table 2. Results of Cartographic Analysis.

Year	Author/Company	Description of project area
1869	BLM	The project area is located within Section 19, which is partially submerged in Port Gardner Bay. A trail extends along the east bank and connects to a telegraph office and through property homesteaded by "Brigam."
1902	Sanborn Map Co.	Federal Ave extends north through the railroad and ends at the west extent of Everett Ave. Lot/Tract 618 and 619 are labeled, but show no company or ownership. Block 619 contains 30 structures consisting of dwellings with associated outbuildings. Block 618 depicts 11 more structures labelled "Squatters Shacks." Area noted as "marsh."
1910	Anderson Map Co.	Several rail spurs extend west to docks and piers owned by G.N. Ry. Co., N.P. Ry. Co., and Everett Imp. Co. project area is situated west of Everett Ave terminus with railroad and tideland additions (labeled 618 and 619).
1914	Sanborn Map Co.	"Squatters shacks" have been removed from Blocks 618 and 619. Shoreline cuts northeast from intersection of Federal Ave and Everett Ave. Two structures are depicted in the southwest area of Block 618 near the waterline. Area noted as "marsh."
1927	Chas. F. Metsker	Project area is depicted west of main roadways within railroad and dock area of Port Gardner Bay. Sections 20 and 19 are not labeled.
1934	Kroll Map Co.	Project area is noted within an undetailed area heavily utilized by railroad and docks.
1936	Chas. F. Metsker	G.N. Rwy. Depicted east of project area with spurs to "City Dock" and other businesses. North of project area is Clark Nickerson Lbr. Co., and docks to west noted as 13, 14, and 21.
1943	Kroll Map Co.	Same as Kroll (1934).
1950	Sanborn Map Co.	Significant development of Blocks 618 and 619. General Petroleum Corporation, Gilmore Oil Co., and the Associated Oil Company have all constructed warehouses and fuel oil tanks. Within Port Gardner Bay there is a pier (Standard Oil Co.) and an outfitting basin.
1960	Thos. C. Metsker	Federal Street depicted within its current alignment. The project area is noted within property owned by Standard Oil. The block (619 and 618) contains storage tanks.
1960	Kroll Map Co.	Same as previous.

Year	Author/Company	Description of project area
1975	Chas. F. Metsker	Scott Paper Co. is north of the project area. Standard Oil property with storage tanks is located within the project area.
198x	Chas. F. Metsker	Same as previous.
1992	Metsker Maps	Same as previous.

The 1869 survey plat image for Township 26 North, Range 5 East, depicts a telegraph line aligned north-south along the east side of Port Gardner Bay. A “Telegraph Office” is noted south of Section 19. This telegraph line “followed along the beach from Seattle to Whatcom” (Whitfield 1908: 285). In the southeast quarter of Section 19, a small cabin is noted along with the misspelled label of “Brigam” (BLM 1869). In 1890, the Brigham homestead property was purchased by Wyatt and Bethel Rucker with plans to create a townsite called “Port Gardner” (Oakley 2005). During the next year, the Ruckers became associated with Henry Hewitt Jr., Charles L. Colby, and other optimistic landowners and incorporated the Everett Land Company. By 1891, the main thoroughfare called Hewitt Ave was cut east to west and 100 feet wide.

Development of the townsite, now called Everett after Charles Colby’s son, continued with stump removals, street grading, and the sale of Everett Land Company lots (Oakley 2005; Port of Everett 2021). The Everett Land Company won ownership of the waterfront in 1892. In April of 1893, Everett was incorporated and boasted more than 5,600 citizens supported by streetlights, streetcars, sawmills, railroads, and residential and commercial expansion. However, the Panic of 1893 led to a withdrawal of investments and money in the Everett Land Company. The holdings of the Everett Land Company were transferred to the Everett Improvement Company in 1899 (Oakley 2005).

Evidence of development revitalization is visible in a 1902 map in the numerous land lots divided and numbered to the East Waterway shoreline of Port Gardner Bay (Figure 4; Sanborn Map Co. 1902). Federal Ave extended north through the Great Northern Coast Line and terminated at the westerly extent of Everett Ave. At this time, no company or business name was noted on the Sanborn Fire Insurance Map within the project area. Within properties directly north of the project area, large structures are depicted for the Everett Flour Mill Co. and the Clark Nickerson Lumber Co.

The color-coded key indicates that within Block 619 within the project area, structures consisted of “frame building” (Sanborn Map Co. 1902). The detailed map page for Block 619 contains 30 frame structures, all dwellings and associated outbuildings, situated around a marshland at the center of the block (Figure 5). Within each dwelling, the maps include a notation of “S.P.,” which is specially called out on the key map introduction: “NOTE Practically all dwellings with a “S.P.” (Stove pipe) are cheap, unpainted shacks” (Sanborn Map Co. 1902: Key Map). Eleven additional “S.P.” buildings consisting of dwellings, outbuildings, bath house, and boat house, are depicted within Block 618 to the north of the project area, and noted as “Squatters Shacks” (Sanborn Map Co. 1902).

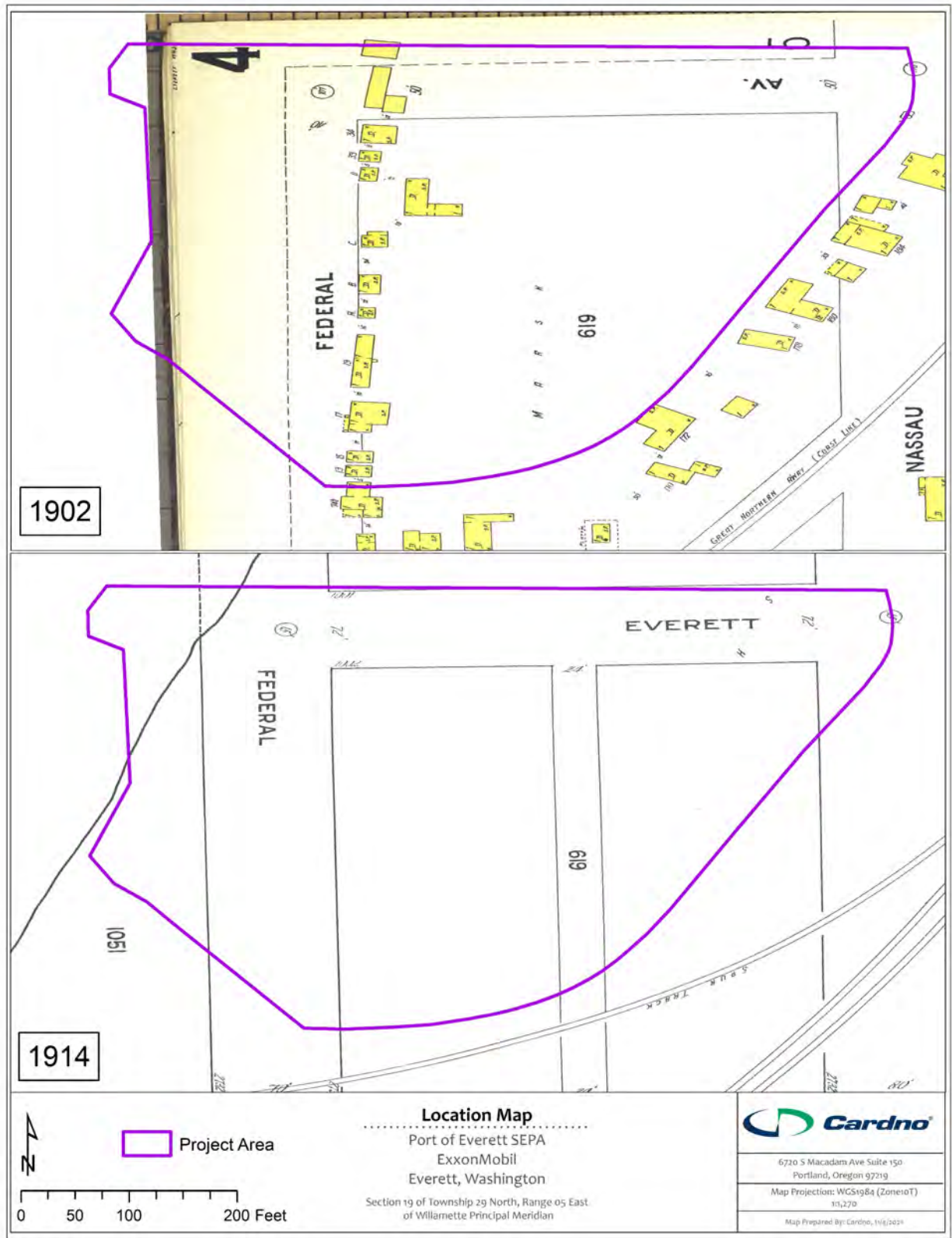


Figure 4. Details from 1902 and 1914 Sanborn Fire Insurance Maps (Sanborn Map Co. 1902, 1914).

Historical maps illustrate a changed landscape. In 1910, railway spurs extended west from the mainline to docks and piers owned by “G.N.Ry.Co.,” “N.P.Ry.Co.,” and “Everett Imp. Co.”:

“G.N.Ry.Co.” – Great Northern Railway

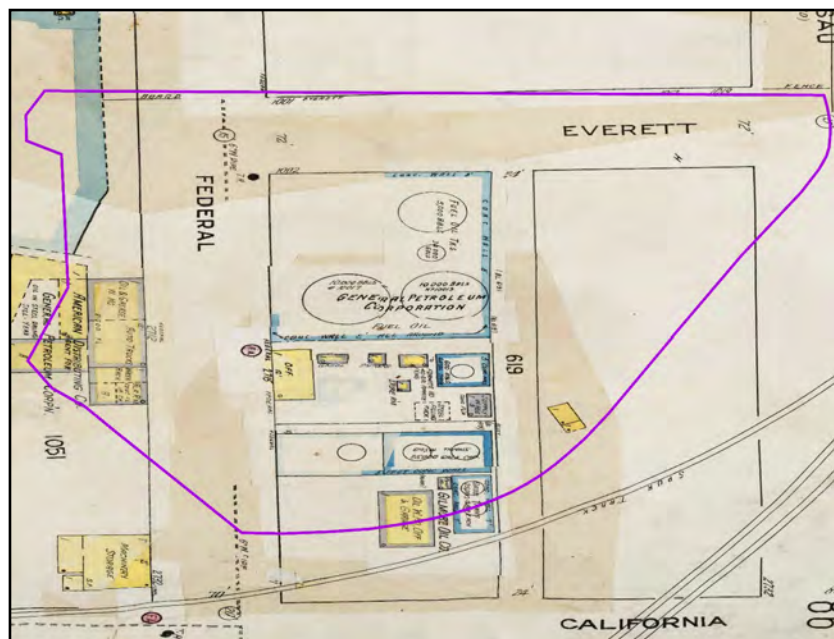
“N.P.RY.Co.” – Northern Pacific Railway

“Everett Imp. Co.” – Everett Improvement Company

By 1914 the “squatters shacks” north of the project area had been removed, and increasing development of piers and docks is evident (see Figure 4; Anderson Map Co. 1910; Sanborn Map Co. 1914). The position of the site between the railroad and waterfront was highly conducive to industrial uses. Between 1914 and 1950, the east shoreline of Port Gardner Bay was significantly filled and artificially extended into the East Waterway. Additionally, docks and piers expanded the industrial and commercial landscape west of the historical extent of Federal Ave (Sanborn Map Co. 1950).

By 1925, the northern part of the project area contained at least two large “General Petroleum Corporation” tanks, three smaller unlabeled tanks, and three gable-roof outbuildings just south of Everett Avenue. The project area spans Federal Avenue, across which was one large “General Petroleum Corporation” warehouse complex near the shoreline. Predecessors of ExxonMobil, owned the project area site beginning in 1927 (Washington Department of Ecology 2021).

The warehouse complex contained automobile truck storage, an oil and grease warehouse, a wash rack room, a boiler room, and an oil in steel drum staging yard adjacent to a wooden bulkhead (Figure 5; Sanborn Map Co. 1939 [Revised through June 1955]). By 1947 development within the project area had been expanded significantly to the south (Figure 6). Additional infrastructure constructed included several cylindrical petroleum tanks each containing 25,000 gallons of gasoline, eight outbuildings including a wooden office building, pump room, and warehouses, and a steel filling rack (Figures 5, 7, and 8; Sanborn Map Co. 1939 [Revised through June 1955]). The shoreline has not been modified with fill since approximately 1950 (Figure 9). An Everett USGS map from 1953 shows the area developed with gasoline tanks and a pier directly adjacent to the company warehouse complex (Figure 10). It does not appear the eastern portion of the project area was ever significantly developed.



**Figure 5. Project area displayed on 1939 Sanborn Fire Insurance Map.
(Sanborn Map Co. 1939 [Revised through June 1955])**



Figure 6. Project Area depicted on aerial imagery from 1947 (Image courtesy of ExxonMobil 2021).



Figure 7. Photograph of project area viewed facing north, taken from south end of site (Washington Department of Ecology 2021).



Figure 8. Undated photograph showing gasoline infrastructure after General Petroleum Corporation was rebranded to Mobilgas. The office building on the site is at the right. (Washington Department of Ecology 2014:65)

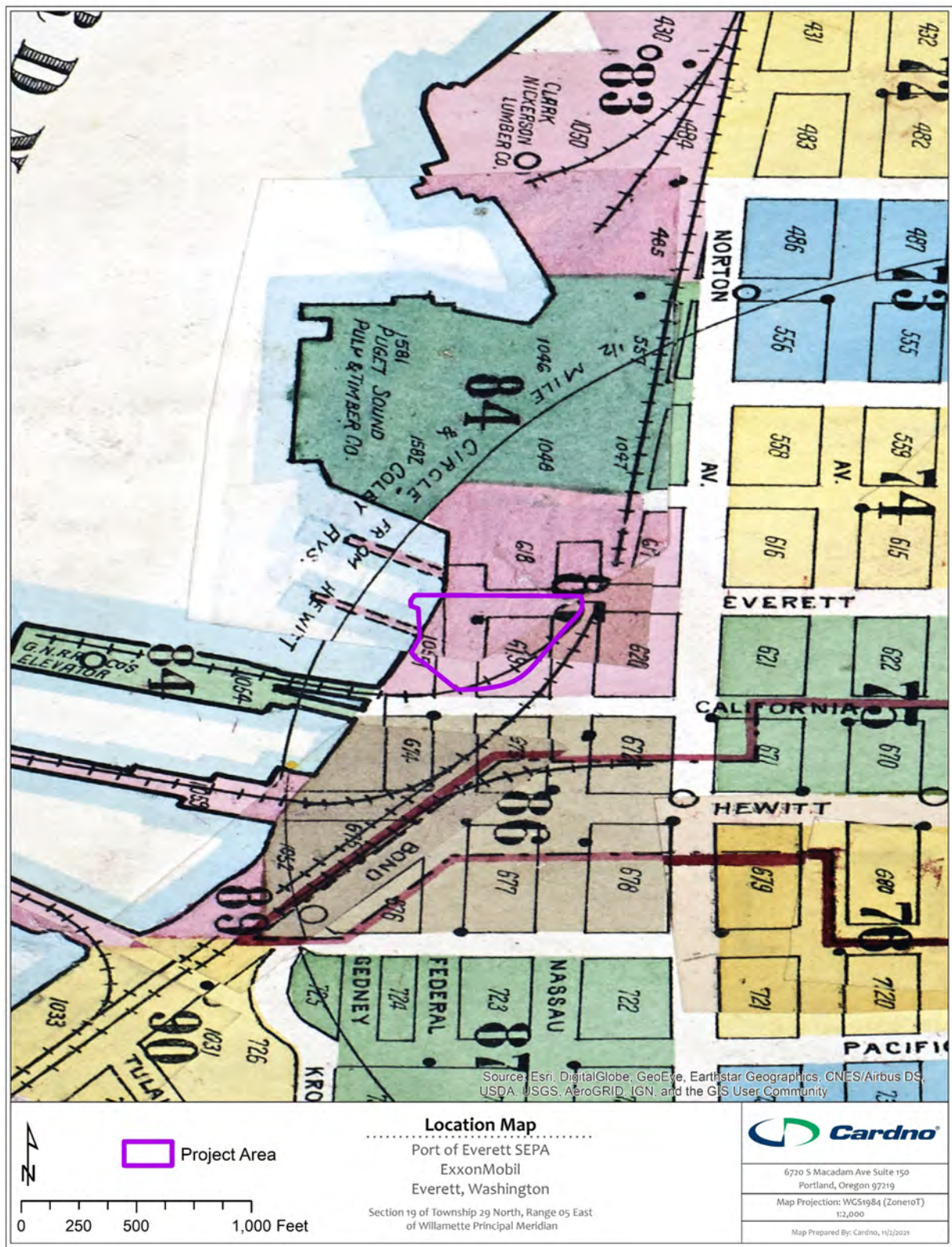


Figure 9. Project Area depicted on 1950 Sanborn Insurance Map (Sanborn Map Co. 1950).

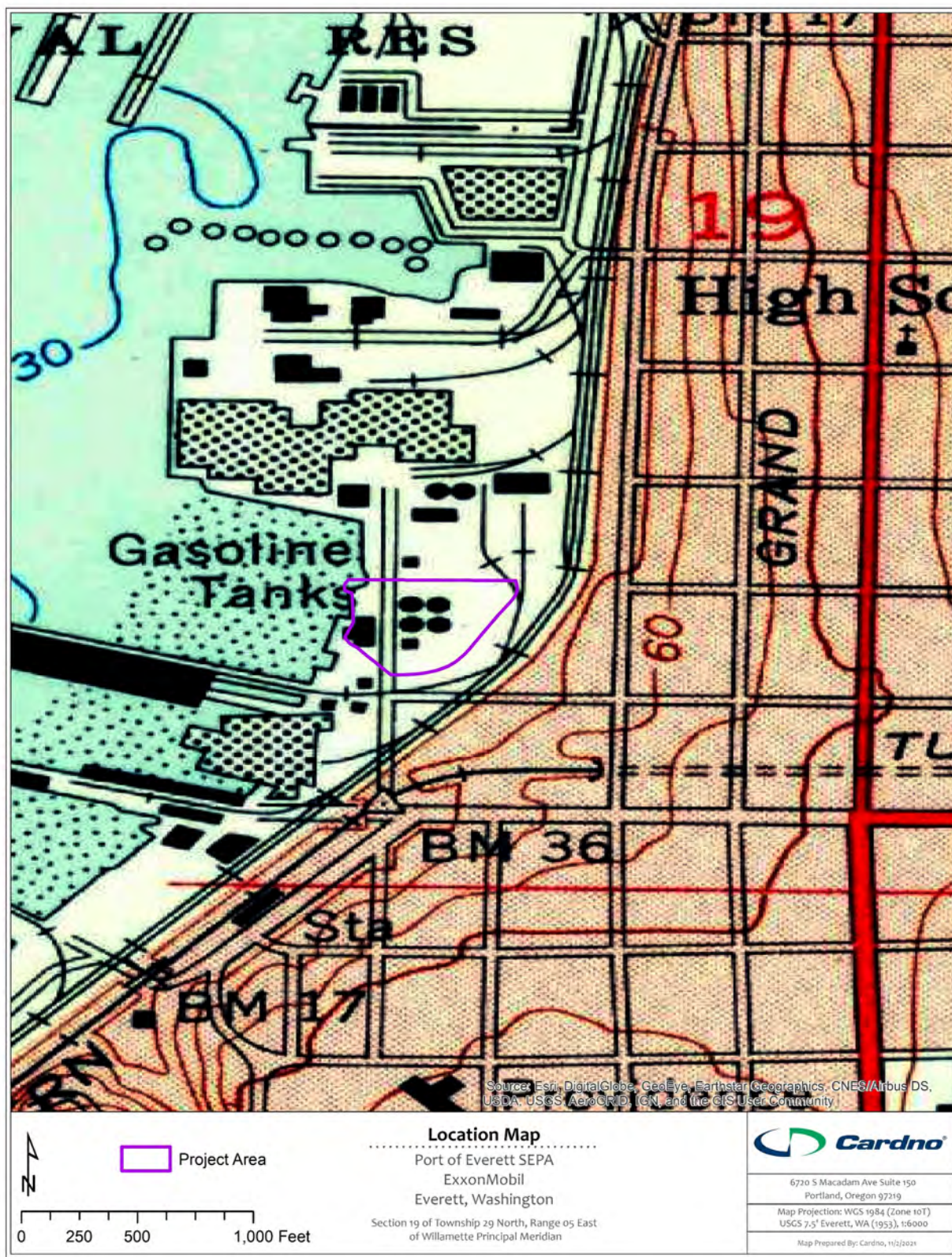


Figure 10. Project area depicted on the 1953 Everett USGS 7.5-minute quadrangle (USGS 1953).

In 1974, Mobil Oil sold the northern part of the project area to A.P. Miller for use by the American Distributing Company (ADC) who continued petroleum operations until 1990 (Washington Department of Ecology 2021). By 1977 the warehouse complex across Federal Avenue and the office building had been demolished (Figure 11). Mobil Oil ceased petroleum operations on the project area in 1987. All remaining infrastructure at the site was demolished between 1998 and 2002, and the project area was used as a parking lot (Washington Department of Ecology 2021). In late 2003 Terminal Avenue was developed adjacent to the site. The project area experienced continued development and change over several years precluding the identification of a particular year or period of importance of the petroleum infrastructure which was once extant.



Figure 11. A 1977 aerial photograph of the project area (Washington Department of Ecology 2021).

3.1 Literature Review

Cardno archaeologists conducted a background search and literature review of existing cultural resource records; local, state, and national register nomination forms; previous cultural resources investigations; and any known or potential TCPs in and within 1.0 mile (1.6 km) of the project area. According to the DAHP's predictive model available on the WISAARD online database, there is a very high risk of encountering buried precontact archaeological deposits in the project area.

3.1.1 Previous Investigations

The background search identified 15 cultural resources investigations that have been previously conducted within 1.0 mile (1.6 km) of the current project between 1975 and 2020 (Table 3). Seven investigations were surveys, two involved construction monitoring, two were historic structures surveys, three provided larger prehistoric and historic context for the area, and one was a monitoring and discovery plan. Recently, four cultural resources investigations fall within or immediately adjacent to the project area, as plotted by WISAARD (see Table 3): Johnson 2000; Rinck et al. 2013; Undem et al. 2014; Johnson 2020.

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (n = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
1975	Dunell and Fuller	An Archaeological Survey of Everett Harbor and the Lower Snohomish Estuary-Delta	1332098	Survey Report	project area within Study Area
1987	Blukis Onat	Resource Protection Planning Process Identification of Prehistoric Archaeological Resources in the Northern Puget Sound Study-Unit	1349367	Overview	Overview of Area
1988	Evans-Hamilton, Inc.	The Location, Identification and Evaluation of Potential Submerged Cultural Resources in Three Puget Sound Dredged Material Disposal Sites	1340504	Survey Report	0.84 mile west
1991	Miss and Campbell	Prehistoric Cultural Resources of Snohomish County, Washington	1334282	Overview	Overview of Area
1998	Demuth	Technical Report: Historic, Cultural, and Archaeological Resources Assessment for Everett-to-Seattle Commuter Rail Project Environmental Impact Statement	1340269	Overview	Overview of Area
2000	Johnson	Letter to Molly Adolfson Regarding Proposed California Street Overpass, Everett	1344193	Survey Report	Within project area
2006	Juell	Archaeological Site Assessment of Sound Transit's Sounder: Everett to Seattle Commuter Rail System, King and Snohomish Counties	1348189	Survey Report	0.38 mile south
2008	Hartmann	Cultural Resources Assessment for the Swift Bus Rapid Transit Project	1351380	Survey Report	0.54 mile southeast
2011	Lenz et al.	Cultural Resources Assessment for the Broadway Bridge Replacement Project, Everett	1682948	Survey Report	0.68 mile west
2013	Pinyerd	Downtown Everett #SE03XC527 1602 Hewitt Ave., Everett	1683379	Historic Structures Survey Report	0.37 mile southeast
2013	Rinck	Cultural Resources Monitoring and Discovery Plan for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Monitoring and Discovery Plan	0.11 mile north
2013	Rinck et al.	Archaeological Resources Assessment for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Survey Report	0.06 mile north

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (*n* = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
2014	Udem et al.	Letter to Steve Geriat RE: Results of Cultural Resources Monitoring at the Kimberly-Clark Worldwide Site Upland Area, Everett	1685767	Monitoring Report	0.11 mile north
2014	Sackett	Architectural Survey and Evaluation: Naval Station Everett	1685545	Historic Structures Survey Report	0.47 mile west
2020	Johnson	FINAL Results of Archaeological Monitoring for the Kimberly-Clark Everett Interim Action	1694736	Monitoring Report	0.07 mile north

In 2000, Paragon Research Associates conducted a survey for roadway connector alternatives between Everett Ave that would impact “Maggie’s Park” (Johnson 2000). Maggie’s Park, located approximately 400 feet east of the project area, is located within the Brigham land claim and possibly near the location of the original cabin. However, no archaeological materials have been identified to confirm this claim. Johnson conducted a pedestrian survey and identified no cultural materials.

In 2013, SWCA Environmental Consultants (SWCA) conducted an extensive study and background review for the Kimberly-Clark Worldwide Site Upland Area SEPA process (Rinck et al. 2013). This project area is located within 56 acres of upland lands and 12 acres of tidelands within the north parcel immediately adjacent to the current project area. Previously, this area was utilized as for industrial purposes which has contaminated the area. The first mill within this project area was the Robinson ad Company Mill, which began operations in the early 1890s. By 1901, this area contained an extensive sawmill and planning facility for the Clark-Nickerson Lumber Company. During the background review, SWCA identified the project area as containing a high potential for precontact and historical cultural materials within the natural Port Gardner shoreline. In response to the potential for buried archaeological materials, SWCA developed a site-specific Monitoring and Discovery Plan (MDP) (Rinck 2013).

SWCA performed archaeological monitoring for cleanup excavations at the Kimberly-Clark Worldwide Site Upland Area (Udem et al. 2014). Within one area, excavations intersected natural sediments underlying historic-period fill. Within Location 11, archaeologists observed miscellaneous historic debris and architectural remnants located between 2 and 6 feet below ground surface. One precontact artifact was documented during monitoring—45SN00629, an edge-altered basalt cobble (Udem 2014).

Archaeological monitoring continued at the Kimberly-Clark Worldwide Site Upland Area in 2020 (Johnson 2020). Archaeologists observed architectural and structural debris within the historic fill layer, likely associated with historical mill operations. No precontact materials or intact sediment layers were observed.

3.1.2 Archaeological Resources

One archaeological resource is recorded within a 1.0-mile (1.6-km) radius of the project area. The archaeological resource (45SN00629) is a precontact isolated find identified within historic dredge material underneath a parking lot (Udem 2014; Udem et al. 2014). Historically, the property was the location of a mill situated at 2600 Federal Avenue (Boswell and Sharley 2012). The single lithic artifact was recorded as an edge-altered basalt cobble with 13 multidirectional flake scars on one end. The artifact was donated to the Hibulb Cultural Center (Johnson 2020).

3.1.3 Built Environment

No historic properties listed in the NRHP, WHR, and/or ERHP are located within or immediately adjacent to the project area. Twelve properties listed in the NRHP are located within 1.0 mile (1.6 km) of the project area (Table 4). Additionally, two historic districts are located within 0.5 mile (0.8 km) of the project area: Hewitt Ave Historic District (45DT00231) and Rucker Hill Historic District (45DT00155). Four properties are listed in the WHR. Twenty-seven properties are listed on the ERHP, and all three Everett historic overlay districts begin within one mile of the site. Several properties are listed on more than one register. The dates of significance for the historic properties range from 1892 to 1967. There are no properties listed on the Snohomish County Register of Historic Places within one mile of the project area.

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Roland & Nina Hartley House/Hartley Mansion (45SN00337)	2320 Rucker Ave	1910	Listing No. 86000958; Resource ID 676163 WHR, NRHP	Lambert	1986	0.37 mile northeast
Everett High School (45SN00351)	2400 Colby Ave	1910	Listing No. 97000493; Resource ID 676177 WHR, NRHP	Ravetz	1996	0.35 mile northeast
Everett Public Library (45SN00341)	2702 Hoyt Ave	1934	Resource ID 676167 WHR	Dilgard	1989a	0.27 mile east
Knights of Columbus Community Center and War Memorial Building (45SN00132)	1611 Everett Ave	1921	Listing No. 79002554; Resource ID 676151 WHR, NRHP	Potter	1975c	0.40 mile east
Pioneer Block – Everett (45SN00127)	2814-2816 Rucker	1892	Resource ID 676145 WHR	Lambert	1979	0.23 mile southeast
Marion Building, Hotel Marion, Tontine Saloon (45SN00128)	1401 Hewitt Ave	1895	Resource ID 676146 WHR	Dilgard	1979	0.27 mile southeast
Everett Theatre (45SN00115)	2911 Colby Ave	1901; 1924	Resource ID 676133 WHR	Potter	1975a	0.41 mile southeast
Monte Cristo Hotel (45SN00117)	1507 Wall Street	1925	Listing No. 76001907; Resource ID 676135 WHR, NRHP	Potter	1975b	0.39 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
U.S. Post Office and Customs House (45SN00135)	3006 Colby Ave	1917	Listing No. 76001909; Resource ID 676154 WHR, NRHP	Potter	1975d	0.43 mile southeast
Everett City Hall (45SN00344)	3002 Wetmore Ave	1929	Listing No. 90000674; Resource ID 676170 WHR, NRHP	Dilgard	1989b	0.48 mile southeast
Snohomish County Courthouse (45SN00116)	3000 Rockefeller Ave	1910; 1967	Listing No. 75001870; Resource ID 676134 WHR, NRHP	Potter	1975e	0.56 mile southeast
Everett Carnegie Library/Cassidy Funeral Home (45SN00133)	3001 Oakes Ave	1904; 1905	Listing No. 75001868; Resource ID 676152 WHR, NRHP	Potter	1975f	0.62 mile southeast
Commerce Building (45SN00345)	1801 Hewitt Ave	1910	Listing No. 92001290; Resource ID 676171 ERHP, WHR, NRHP	Sullivan	1992	0.52 mile east
Everett Fire Station No. 2 (45SN00342)	2801 Oakes Ave	1925	Listing No. 90000673; Resource ID 676168 WHR, NRHP	Dilgard	1989c	0.57 mile east
Rucker House (45SN00134)	412 Laurel Dr	1901	Listing No. 75001869; Resource ID 676153 WHR, NRHP	Potter	1975g	0.62 mile southwest
Hewitt Avenue Historic District (45DT00231)	1620 - 1915 Hewitt Avenue and portions of Wetmore, Rockefeller, Oakes, and Lombard Avenues	1894–1959	Listing No. 10001020; Resource ID 674762 WHR, NRHP	Fürész	2010	0.44 mile east
Rucker Hill Historic District (45DT00155)	Laurel, Snohomish, Niles, Warren, Bell, Tulalip, 33rd and 34th	1905–1930	Listing No. 89000399; Resource ID 674698 WHR, NRHP	Ravetz	1988	0.45 mile southwest

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Rucker-Grand Historic Overlay Zone	Rucker and Grand Avenues between 10th and 24th Streets		N/A ERHP			0.37 mile northeast
Norton-Grand Historic Overlay District	Norton and Grand Avenues between Pacific Avenue and 3612 Norton Avenue		N/A ERHP			0.34 mile south
Riverside Historic Overlay District	N/A	Established 2008	N/A ERHP			0.88 mile east
Fratt Mansion (45SN00680)	1725 Grand Ave	1904	Listing No. 100000991 Resource ID 678273 ERHP, WHR, NRHP	Cope & Gillette	2017	0.91 mile northeast
Sittig House	1927 Rucker Ave	1893	N/A ERHP	O'Donnell	2018	0.75 mile northeast
Cleaver Clough House	2031 Grand Ave	1907	N/A ERHP			0.64 mile northeast
Hilzinger House	2108 Rucker Ave	1907	N/A ERHP			0.63 mile northeast
Wright House	2112 Rucker Ave	1905	N/A ERHP			0.61 mile northeast
Blackman House	2208 Rucker Ave	1910	N/A ERHP			0.54 mile northeast
Austin House	2201 Rucker Ave	1897-1900	N/A ERHP			0.57 mile northeast
Agnew House	2301 Rucker Ave	1899	N/A ERHP			0.49 mile northeast
Krieger Laundry	2808 Hoyt Ave	1915	N/A ERHP			0.3 mile southeast
Walsh Platt/Fisher Motors Building	2902 Rucker Ave	1930	N/A ERHP			0.27 mile southeast
Everett Downtown Storage	3001 Rucker Ave	1919	N/A ERHP			0.36 mile southeast
Howard House	3410 Snohomish Ave	1912	N/A ERHP			0.69 mile southwest
Jackson House	3602 Oakes Ave	1906	N/A ERHP			0.97 mile southeast
Culmback Building	3013 Colby Ave	1924	N/A ERHP			0.48 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Port Gardner Building	2802 Wetmore Ave	1929	N/A ERHP			0.43 mile east
Bank of Everett (Cope Gillette Theatre)	2703 Wetmore Ave	1963	N/A ERHP			0.44 mile east
Challacombe & Fickel Building	2727 Oakes Ave	1923	N/A ERHP			0.59 mile east
Evergreen Building	1909 Hewitt Ave	1902	N/A ERHP			0.62 mile southeast
Watson's Bakery	1812 Hewitt Ave	1910	N/A ERHP			0.57 mile southeast
Morrow Building	2823 Rockefeller Ave	1925	N/A ERHP			0.54 mile southeast
Van Valey House	2130 Colby Ave	1914	N/A ERHP			0.64 mile northeast
Sahlinger-Muck	2319 Colby Ave	1908	N/A ERHP			0.56 mile northeast
Clark Park	2400 Lombard Ave	1894	N/A ERHP			0.66 mile northeast
Ray Fosheim House	2017 26 th St	1892	N/A ERHP			0.7 mile northeast
Lettelier House	2510 Baker Ave	1908	N/A ERHP			0.98 mile northeast

Three historic properties located within 0.5 mile (0.8 km) of the project area have been recommended and determined eligible for listing in the NRHP and/or WHR (Table 5). The Kimberly-Clark Everett Mill Main Office (Property ID 667716) is within 0.09 miles of the project area. The building was originally constructed in 1929 and consisted of a two-story Neoclassical rectangular structure with red brick cladding and low-pitched hipped roof. The building has a projecting Classical portico and round, white-painted Tuscan columns. In the 1940s and 1950s, the building underwent several alterations including the addition of two dormers on the roof, an addition to the south elevation of the building, the addition of a poured concrete deck and steps, and window replacements. The building is recommended as eligible for listing in the NRHP under Criterion A and listing in the WHR based on its historical association with the industrial development of Everett (Sharley 2012). All other listed and eligible properties are separated from the project area by the BNSF Railway train tracks. Most listed properties within one mile of the project area are clustered in areas to the east and to the north-northeast.

Table 5. Properties Recommended Eligible Located within 0.5 Mile of project area ($n = 3$)

Property Name	Address	Date Built	Property ID/ Resource ID	Author	Year	Location Relative to project area
Kimberly-Clark Everett Mill Main Office	2600 Federal Ave	1929	Property ID 667716; Resource ID 614724	Sharley	2012	0.09 mile north
Daulph Delicatessen	1416 Hewitt Ave	1927	Property ID 18268; Resource ID 12597	Dilgard and Riddle	1989	0.33 mile east
Everett Main Post Office	3102 Hoyt Ave	1964	Property ID 270916	Richards	2014	0.44 mile southeast

3.1.4 Cemeteries and Burials

According to information provided on the DAHP's WISAARD, there are no historic or precontact burials located within 1.0 mile (1.6 km) of the project area. One historic columbarium is located approximately 0.47-mile northeast of the project area (DAHP 2009). The Trinity Episcopal Church Columbarium (45SN00555) is situated at 2301 Hoyt Ave. The church was dedicated in 1921 with a new parish hall constructed in 1961 (Trinity Episcopal Church 2019). No further information is provided regarding the columbarium.

3.2 Cultural Resources Summary

Archival research indicates a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Historical land modification, including the introduction of artificial fill and development, reduces the likelihood of encountering in situ precontact artifacts. Ethnographic-period archaeological deposits within and adjacent to the project area may include disturbed or redeposited midden deposits, burials, evidence of a village, or debris associated with short-term occupations and resource-processing locations. Historic-period deposits may include debris from agricultural and historic homestead structures and other early-twentieth-century structure (i.e., "squatters shacks"), or from manufacturing or commercial development.

4.0 Recommendations

Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources. Monitoring should not be necessary in glacial deposits and sediments, nor in existing areas where disturbance has already occurred.

Cardno recommends that the MIDP outline the necessary steps to be taken by contractors in the event of an inadvertent discovery during construction. These steps would serve to minimize damage to any inadvertently discovered archaeological resources during ground-disturbing activities, which may include small, deeply buried, and/or widely dispersed historic or precontact cultural materials (e.g., railroad grade, rails, ties, stakes, and footings; glass bottles; sanitary cans; chipped-stone tools; ground stone; beads; shell; faunal remains; human remains; funerary objects; and objects of cultural patrimony).

Steps included in the MIDP would outline the applicable local laws and regulations, stop-work and notification protocols, discovery protection measures, procedures for assessment by archaeologists, and steps for consultation with the DAHP and any affected Indian tribes. In the state of Washington, archaeological sites are protected from knowing disturbance on both public and private lands. As described in Section 2, RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

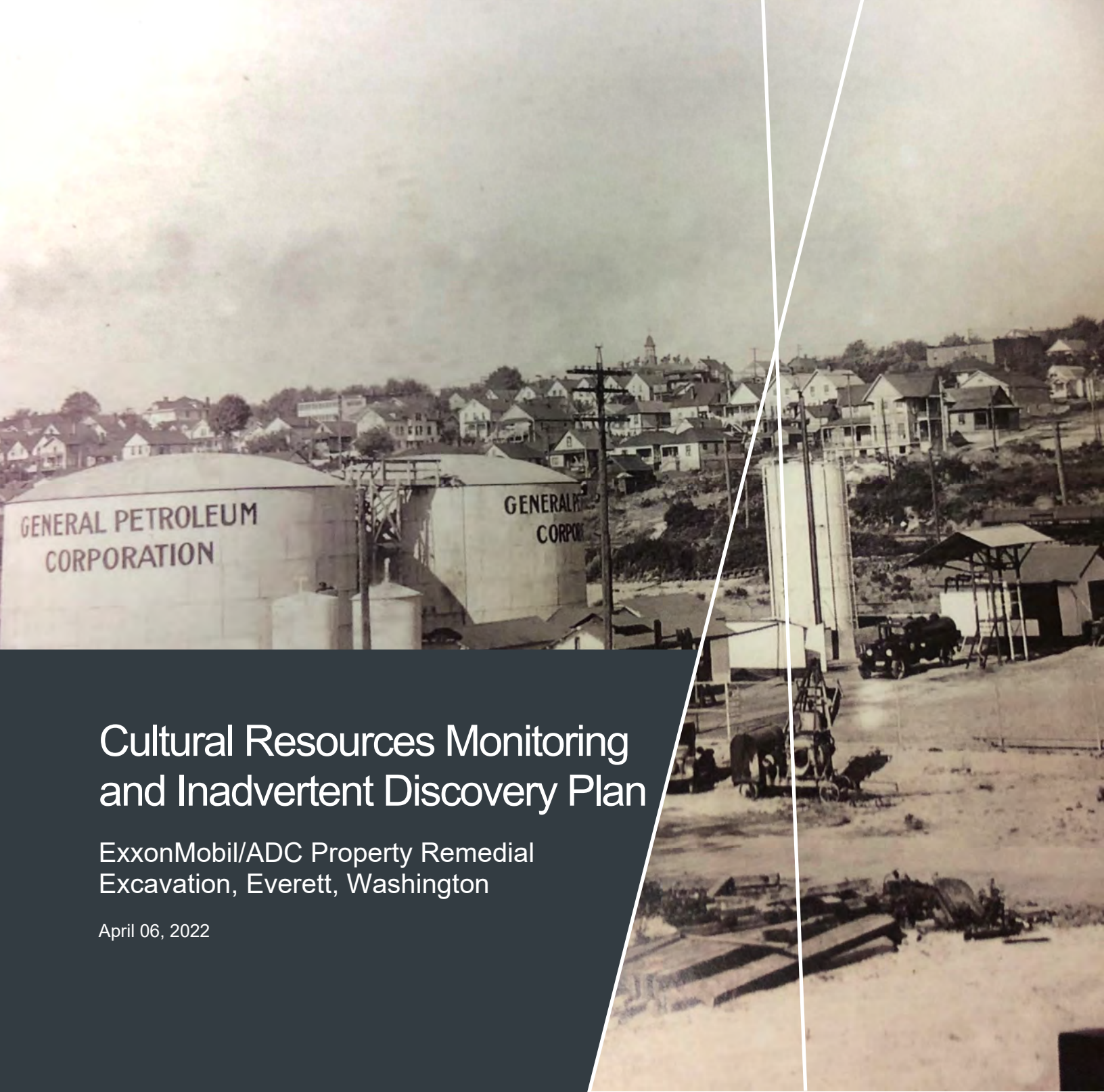
Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

ExxonMobil ADC
Cardno 03144702.R05



APPENDIX F

DRAFT CULTURAL RESOURCES
MONITORING AND INADVERTENT
DISCOVERY PLAN



Cultural Resources Monitoring and Inadvertent Discovery Plan

ExxonMobil/ADC Property Remedial
Excavation, Everett, Washington

April 06, 2022

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Project Name Cultural Resources Monitoring and
Inadvertent Discovery Plan
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Cover image: PSI Cleanup Sites - Port Gardner, Sound Living Conference presentation, October 25, 2014. Page 20.
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Introduction

The proposed cleanup project by the ExxonMobil/ American Distributing Company (ADC) in Everett, Washington, is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Proposed cleanup activities include installation of shoring walls, and excavation of impacted soils. Following excavation of contaminated soils, the project area will be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved.

Cardno, Inc. (Cardno) previously prepared a cultural resources assessment in support of the project (Scott et al. 2021). The assessment consisted of a literature review and records search within 1.0 mile (1.6 kilometer [km]) of the project area that included cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs). This monitoring and inadvertent discovery plan (MIDP) was developed to use during cleanup operations.

Project Location and Description

The project is in Section 19 of Township 29 North, Range 5 East, Willamette Meridian (Figure 1). The ExxonMobil/ADC property consists of 3.48 acres. The acres are comprised of several tax parcels and portions of the City of Everett's (City) Right-of-Way (ROW). Parcel information is provided below (Table 1; Figure 2). Currently, the project area consists of a paved parking lot with no extant structures or buildings.

Regulatory Setting

The Washington State Environmental Policy Act (SEPA; RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to identify and document cultural and historical places and objects if national, state, or local significance that may be affected by project activities. The regulation requires proposed methods to reduce or control impacts to identified cultural resources during project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. Revised Code of Washington (RCW) 27.44 and RCW 27.53.060 require that a person obtain a permit from the Washington Department of Archaeology and Historic Preservation (DAHP) before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090. The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the National Register of Historic Places (NRHP).

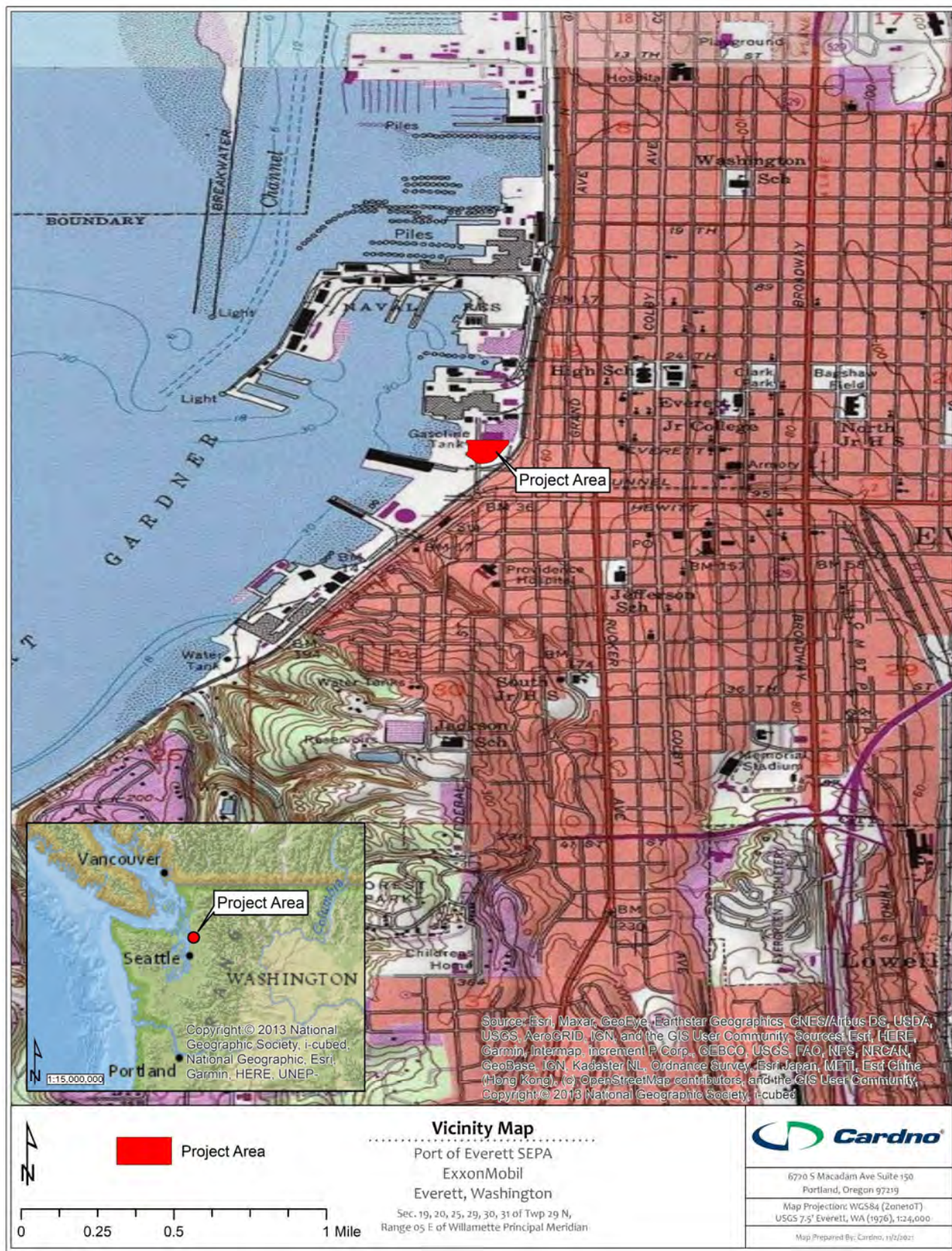


Figure 1. Project area and vicinity.

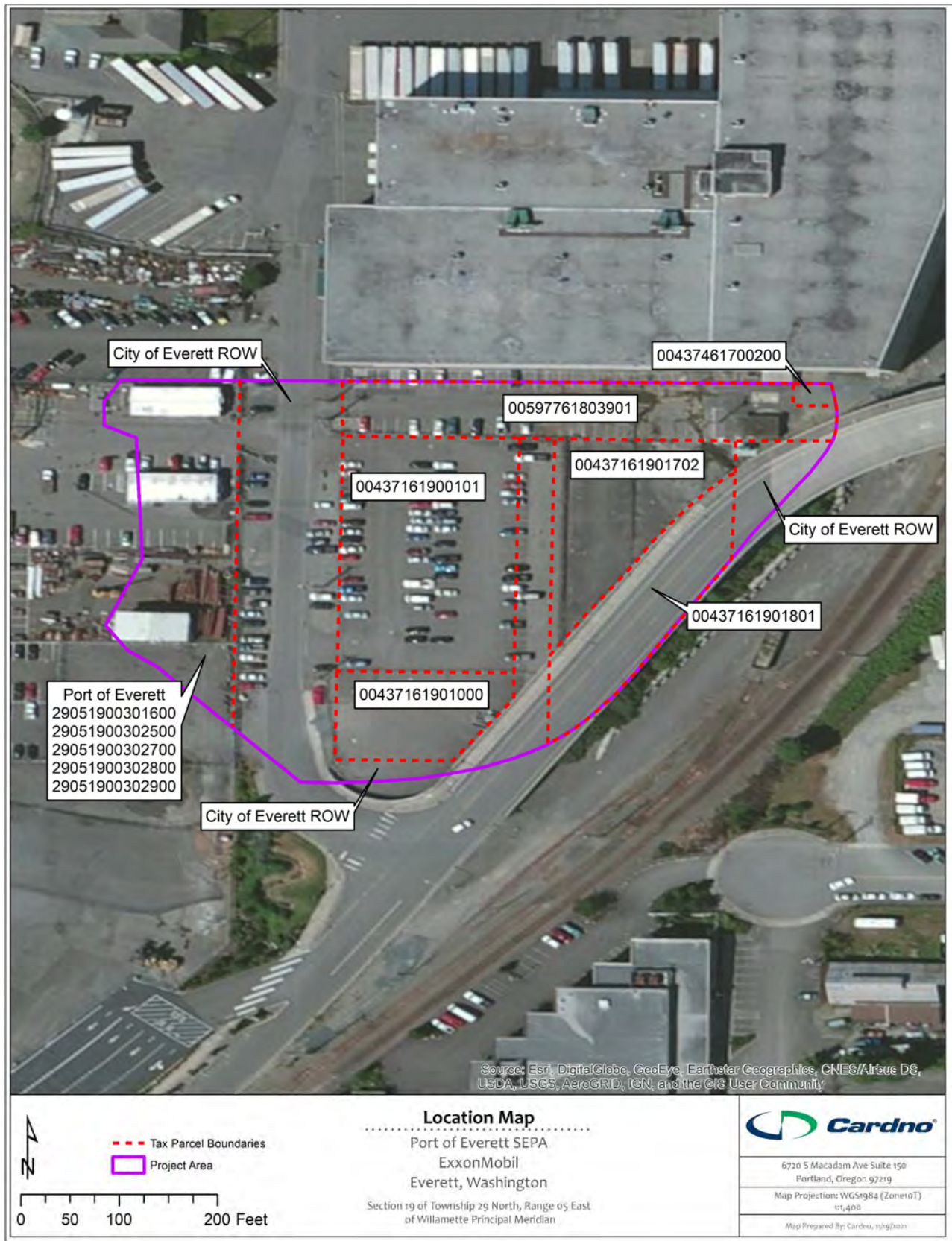


Figure 2. The project area denoting impacted Snohomish County tax parcels and City ROW.

Table 1. Snohomish County Tax Parcel Information.

Owners	Parcel Number(s)
Burlington Northern Railroad	00437161901702
City of Everett	00437161901801
Miller Trust (Cecilia Beverly Miller, beneficiary)	00437161900101
Mobil Oil Corporation	00437161901000
Port of Everett	00437461700200, 00597761803901, 29051900301600, 29051900302500, 29051900302700, 29051900302800, 29051900302900

If a person(s) violates this statute and knowingly disturbs or alters an archaeological site, the DAHP is allowed to issue civil penalties of up to \$5,000, in addition to site restoration costs and investigative costs per RCW 27.53.095. Restorative and monetary remedies do not prevent concerned Indian tribes from undertaking civil action in state or federal court or law enforcement agencies from undertaking criminal investigation or prosecution. If human remains and/or burials are disturbed, RCW 27.44.050 allows an affected Indian Tribe to undertake civil action. Additionally, the excavation of human remains without a permit is a felony. RCW 68.60 requires “expeditious” notification of local law enforcement and the coroner if skeletal human remains are discovered. Failure to notify is considered a misdemeanor.

Snohomish County Code (SCC) 30.67.340 requires developers and property owners to immediately stop work and notify the county, DAHP, and affected Indian tribes if archaeological resources are uncovered during excavation. It further stipulates that county permits issued in areas documented as containing archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes. SCC 20.32D.070-100 outlines the process for obtaining and working under a certificate of appropriateness, and zoning. SCC 20.32D.200 requires recordation of archaeological sites. Additionally, completion of an archaeological report or relocation of a project is required for any construction, earth movement, clearing, or other site disturbance of a known archaeological site or any development application proposed on non-tribally owned, fee-simple properties designated Reservation Commercial on the Snohomish County Future Land Use Map. SCC 20.32D.220 outlines the process to follow if human remains or archaeological resources are found during construction, earth movement, clearing, or other site disturbance.

Everett Municipal Code (EMC) 19.28 outlines the process for identifying, listing, and protecting resources on the Everett Register of Historic Places and within historic overlay zones. Properties within historic overlay zones are governed by EMC 19.28.020 through 19.28.120. Criteria for placement on the Everett Register of Historic Places are described in EMC 19.28.130. Proposed changes to properties on the Everett Register are reviewed by the Everett historical commission per 19.28.140.

Potential for Discovery of Cultural Resources

Archival research indicates a high level of human activity took place adjacent to the project area during precontact and historic times (Scott et al. 2021). Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Historical land modification, including the introduction of artificial fill and development, reduces the likelihood of encountering in situ precontact artifacts. Ethnographic-

period archaeological deposits within and adjacent to the project area may include disturbed or redeposited midden deposits, burials, evidence of a village, or debris associated with short-term occupations and resource-processing locations. Historic-period deposits may include debris from agricultural and historic homestead structures and other early-twentieth-century structure (i.e., “squatters shacks”), or from manufacturing or commercial development.

Cardno archaeologists conducted a background search and literature review of existing cultural resource records; local, state, and national register nomination forms; previous cultural resources investigations; and any known or potential TCPs in and within 1.0 mile (1.6 km) of the project area. According to the DAHP’s predictive model available on the WISAARD online database, there is a very high risk of encountering buried precontact archaeological deposits in the project area. Previous archaeological construction monitoring conducted between 2013 and 2020 suggest a high potential for buried intact cultural deposits.

In 2013, SWCA Environmental Consultants (SWCA) conducted an extensive study and background review for the Kimberly-Clark Worldwide Site Upland Area SEPA process (Rinck et al. 2013). This project area is immediately adjacent to the current project area. Previously, this area was utilized as for industrial purposes which has contaminated the area. During the background review, SWCA identified the project area as containing a high potential for precontact and historical cultural materials within the natural Port Gardner shoreline. In response to the potential for buried archaeological materials, SWCA developed a site-specific Monitoring and Discovery Plan (MDP) (Rinck 2013). SWCA performed archaeological monitoring for cleanup excavations at the Kimberly-Clark Worldwide Site Upland Area (Undem et al. 2014). Within one cleanup area, excavations intersected natural sediments underlying historic-period fill. Within Location 11, archaeologists observed miscellaneous historic debris and architectural remnants located between 2 and 6 feet below ground surface. One precontact artifact was documented during monitoring—45SN00629, an edge-altered basalt cobble (Undem 2014). Archaeological monitoring continued at the Kimberly-Clark Worldwide Site Upland Area in 2020 (Johnson 2020). Archaeologists observed architectural and structural debris within the historic fill layer, likely associated with historical mill operations. No precontact materials or intact sediment layers were observed.

No documented historic properties listed in the NRHP, Washington Heritage Register (WHR), and/or Everett Register of Historic Places (ERHP) are within or adjacent to the project area. There are three historic properties within 0.5 mile (0.8 km) of the project area have been recommended and determined eligible for listing in the NRHP and/or WHR including the Kimberly-Clark Everett Mill Main Office (Property ID 667716), the Daulph Delicatessen (Property ID 18268), and the Everett Main Post Office (Property ID 270916). All other listed and eligible properties are separated from the project area by the BNSF Railway Company train tracks.

Monitoring Measures

Cardno recommends that this MIDP be implemented to minimize potential impacts to any currently unknown intact archaeological resources. Monitoring should not be necessary in glacial deposits and sediments, nor in existing areas where disturbance has already occurred. The following outlines procedures to follow and the responsibilities of Cardno, ExxonMobil/ADC, and the contractor during construction.

Preconstruction Meeting

Prior to construction activities, an archaeologist familiar with the project will meet with the construction supervisors and project personnel. The objective is to review the area to be monitored, and to go over the procedures for coordination and notification of discoveries. Communication is critical to the success of the

MIDP and ensures that a monitor is present when needed. The roles and responsibilities of the monitor and other project personnel need to be outlined prior to construction. These include:

1. Review of all communication protocols. A list of contacts is at the end of this MIDP. When additions or changes in contacts are made, a revised contact list will be prepared at that time.
2. The responsibilities of each party will be reviewed, and each party identified including the contractor, ExxonMobil/ADC, Cardno, agencies, and Tribes.
3. Scheduling procedures for archaeological monitors will be outlined. The individual who will be responsible for making the initial request, and the period of advance notice to be given, will be agreed upon by ExxonMobil/ADC, Cardno, and the contractor.
4. On-site safety procedures will be reviewed.

Monitoring During Construction

An archaeologist will perform on-site monitoring of initial ground-disturbing activities to a depth of approximately 7 ft (2.13 m) below ground surface (bgs) because historic debris and architectural remnants were located between 2 and 6 ft bgs in an adjacent property in 2014 (Undem et al. 2014).

- Ground disturbance occurs when the surface is traversed or cut and may consist of excavation, trenching, potholing, grading, blading, grubbing, leveling, vehicular traffic that treads into the surface (as during wet weather), and hand-digging with a shovel. This list is not considered exhaustive, and essentially anytime possible native soil may be displaced it will be considered to be ground disturbance.
- If formed tools, concentrations, or features are observed during monitoring, construction work will be briefly halted so that the artifacts can be documented, photographed, and mapped in-place, if possible, using a Global Positioning System (GPS) unit. It is anticipated that the archaeological monitor will not collect artifacts or samples unless it is determined that they represent evidence of significant archaeological deposits or a feature, or the artifact is a formed tool.
- If burial features, artifacts, or human bone are encountered within the work area, Cardno has the authority to stop work and notify the construction manager, Exxon Mobile/ADC, and DAHP. The procedures to be followed in the event of an inadvertent discovery that may need additional excavation or protection are outlined in a section below.

Report of Monitoring Activities

A technical memo report of the archaeological monitoring will be prepared following the completion of the project. The report will include information about the monitoring activities and documentation of artifacts or new archaeological resources, if found during construction, and will include maps and photographs. In addition, inadvertent discoveries will be described in the report, if encountered. If artifacts are collected, a catalog will be provided, and a summary prepared as part of the report. Within 90 days of the conclusion of fieldwork, the report will be submitted to Exxon Mobile/ADC, DAHP, and the Tribes.

Summary of Monitoring Measures

ExxonMobil/ADC will ensure that the outlined procedures are followed during construction:

1. An on-site meeting prior to construction will take place between Cardno, the construction inspectors and supervisors, and the developer's representatives, to review specific archaeological resource monitoring procedures and responsibilities. All site safety will be reviewed at this time.

2. On-site archaeological monitoring of initial ground-disturbing activities to a depth of approximately 7 ft (2.13 m) bgs will occur across the project area.
3. Construction activities will be halted if the activity encounters, or may impact, artifact concentrations, features, human remains (or potential human remains), funerary items, or sacred objects. Construction work would not resume until the consulting parties agree on a course of action based on the inadvertent discovery protocol as described in the following section.
4. Cardno will prepare a report summarizing the activities that were monitored, and noting inadvertent discoveries and steps taken in response to a discovery, as outlined in this MIDP. The report will be submitted to Exxon Mobile/ADC, DAHP, and the Tribes.

Inadvertent Discovery Protocol

The following outlines procedures to follow, in accordance with state laws, if certain archaeological materials and human remains are discovered in the project area, during construction. In the event of an inadvertent discovery such as intact archaeological features or human remains, the following steps will be taken.

Archaeological Resources Prompting Inadvertent Discovery Protocol

Archaeological resources, such as pre-contact (Native American) or historic-period artifacts or features, could be inadvertently discovered during construction. Work must stop when the following types of artifacts and/or features are encountered (the list is not exhaustive):

- Flaked stone tools (e.g., arrowheads, knives, scrapers) and debitage.
- Groundstone tools (e.g., mortars, pestles).
- Layers (strata) of discolored earth resulting from fire hearths or other features. May be black, red, or mottled brown and may contain discolored cracked rocks, charcoal, or dark soil.
- An area of charcoal or very dark stained soil with artifacts.
- An accumulation of shell, burned rocks, or other food-related materials.
- Animal bones, including small pieces of bone.
- Personal items, funerary materials, and mortuary objects.
- Structural remains (e.g., wooden beams, post holes).

When in doubt, assume the material is a cultural resource. Even what looks to be old garbage could be an archaeological resource.

On-site Responsibilities

If an inadvertent discovery is encountered during construction the following steps must be followed:

1. **STOP WORK:** If any Exxon Mobil/ADC employee, contractor, or subcontractor believes that he or she has uncovered an archaeological resource or evidence of a burial at any point in the project, all work adjacent to the discovery must stop. The discovery location should not be left unsecured at any time.
2. **NOTIFY CARDNO:** Notify the on-site archaeological monitor and the primary Cardno contact and follow the provisions in the MIDP to verify the discovery (contact list below).

3. NOTIFY EXXONMOBILE/ADC: Notify the Exxon Mobile/ADC project manager immediately (contact list below).
4. CARDNO WILL NOTIFY DAHP AND THE TRIBES, ON BEHALF OF EXXONMOBILE/ADC.

Responsibilities of Exxon Mobile/ADC:

1. PROTECT: Exxon Mobile/ADC is responsible for taking appropriate steps to protect the discovery site.
 - a. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource, typically within 30 meters (100 feet). Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery vicinity. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological materials as set forth in this document.
 - b. Exxon Mobile/ADC may allow construction away from archaeological resources, in other areas, prior to contacting the concerned parties.
 - c. Until assessed by Cardno, treat all bone and bone fragments as possible human remains. If human remains, bone, or bone fragments are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call 911 or speak with the media.
2. CONTACT: If Cardno has not been contacted, Exxon Mobile/ADC will be responsible for doing so (contact list below).

Responsibilities of Archaeologist:

1. MONITOR: An archaeological monitor is required to be on-site ground-disturbing activities to a depth of approximately 7 ft (2.13 m) bgs.
2. IDENTIFY: The archaeologist will examine the inadvertent discovery to determine if it is archaeological or to verify remains are human.
 - a. If the find is determined not archaeological, work may proceed with no further delay.
 - b. If the find is determined to be archaeological, the archaeologist will continue with notification (see archaeological procedure below).
 - c. If the find may be human remains or funerary objects, the archaeologist will ensure that a qualified individual examines the find.
 - d. If it is determined that the remains are human, the procedure described in the following section will be followed.
3. NOTIFY: Notify DAHP (contact list below).
 - a. If the discovery may relate to Native American interests, Cardno will also contact the Tribal representatives (contact list below).

Archaeological Procedures:

Pre-contact or historic-period archaeological material discovered inadvertently during project construction will be recorded, and Cardno will complete the documentation and assessment. Discovered features and formed tools will be photographed; stratigraphic profiles and soil/sediment descriptions of the newly discovered subsurface features will be prepared. Discovery locations will be documented on scaled site plans and site location maps.

Archaeological features and artifacts inadvertently discovered in buried sediments may require further excavation. After coordination on the appropriate procedures with DAHP and Tribes, a unit(s) or small trench(s) may be excavated to determine if an intact occupation surface is present. The controlled excavation of units may assist in gathering information on the nature, extent, and integrity of the subsurface deposits. Archaeological excavation units would be dug by hand in a controlled fashion to expose the feature, collect samples from undisturbed contexts, or assist in interpreting complex stratigraphy. Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of archaeological material, and depth to sterile soil, or bedrock will be recorded for each excavation unit on a standard form. Unit-level forms will be used, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all subsurface artifacts and discovered features. All of the sediments from archaeological excavation units, for the purposes of additional investigations of newly discovered archaeological deposits or features, will be screened through 6.4-mm (¼-in) mesh.

All pre-contact formed tools collected from the subsurface excavation units will be analyzed, cataloged, and temporarily curated. Archaeological materials (with the exception of human remains, funerary items, and sacred objects) and copies of records will be curated at the Burke Museum in Seattle, Washington.

If assessment activity exposes human remains (e.g., burials, isolated teeth, or bones), the process described in the previous sections will be followed. The discovery will then be under the authority of DAHP.

Special Procedures for the Discovery of Human Remains

Any human remains or funerary objects will be treated with dignity and respect at all times. If an inadvertent discovery of human remains or funerary objects occurs during construction the following steps must be followed:

1. Notify the Snohomish County Medical Examiner's Office and Snohomish County Sheriff's Office (contact list below).
 - a. The Medical Examiner has the responsibility to determine if the remains are "forensic" and under the medical examiner's jurisdiction or are "non-forensic."
 - b. If the remains are determined to be "non-forensic," the Medical Examiner will notify DAHP. DAHP's physical anthropologist will examine the remains and notify affected Native American Indian Tribes of the results of the examination. The final disposition of the remains will be determined after consulting with the appropriate Tribal representatives, and others.
2. Participate in Consultation: Per RCW 27.44.055, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains. Exxon Mobile/ADC personnel will participate in consultation.
3. Project construction outside the discovery location may continue while documentation and assessment of the feature proceeds. After Cardno verifies the boundaries of the discovery location, Cardno will determine the appropriate level of documentation and treatment of the resource, in consultation with Exxon Mobile/ADC, DAHP, and the affected Tribes. Construction may continue at the discovery location only after the process outlined in this MIDP is followed and the DAHP determines that compliance with state and county laws is complete.

Summary of Inadvertent Discovery Protocol

If an inadvertent discovery is encountered during construction the following steps must be followed:

1. All construction activities that may affect possible human remains, a feature, or potentially significant archaeological deposits should be halted, and the remains, archaeological materials, and surrounding soil should not be disturbed. The site will be kept secure from further impacts

and trespass. Construction personnel will notify the archaeological monitor if the monitor is not present at the time of the discovery.

2. If the inadvertent discovery includes human remains, bones, or materials possibly representing human remains or a burial, all work in that area must stop and Cardno will contact the Snohomish County Medical Examiner's Office and Snohomish County Sheriff's Office (do not call 911). Treat the finds with dignity and shield them from view of personnel. Additional information on procedures for handling discoveries of possible human remains is detailed above.
3. If the medical examiner determines that the remains are "non-forensic," the medical examiner will officially contact DAHP. The DAHP physical anthropologist will confirm whether the remains are Native American or Non-Native American under the law, and will conduct consultation with the Tribes, Exxon Mobile/ADC, and others deemed appropriate. Disposition of the remains will be made by DAHP, in consultation with Tribes and others, as appropriate.
4. Cardno will contact DAHP, as well as Exxon Mobil/ADC, if they have not yet been contacted, if there is a discovery that is not related to human remains. The nature of the discovery will be determined and consulting parties (i.e., the Tribes) will be contacted. Security measures will be taken to prevent illicit activities such as looting or vandalism.
5. If evidence of an important deposit or feature is encountered during construction, and no human remains are encountered, a plan to address the impacts will be determined among the consulting parties.

Contact Information

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Email:

American Distributing Co. (ADC)

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Dr. Guy Tasa, State Physical Anthropologist
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Snohomish County

Medical Examiner
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Everett, WA 98204
Phone: (425)438-6200

Adam Fortney, Sheriff
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Everett, WA 98201
Phone: (425)388-3393

DAHP Tribal Areas of Interest

Muckleshoot Indian Tribe

Jaison Elkins, Tribal Chair
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Sauk-Suiattle Indian Tribe

Nino Maltos, Tribal Chair
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Snoqualmie Indian Tribe

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Stillaguamish Tribe of Indians

Eric White, Tribal Chair
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Email: ewhite@stillaguamish.com

Swinomish Indian Tribal Community

Steve Edwards, Tribal Chair
11404 Moorage Way
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Tulalip Tribes

Teri Gobin, Tribal Chair
6406 Marine Drive
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DAHP Human Remains Consultation – Inadvertent Discovery Tribal Contacts

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Sauk-Suiattle Indian Tribe

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Upper Skagit Indian Tribe

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Confederated Tribes and Bands of the Yakama Nation

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Toppenish, WA 98948
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Email: Delano_saluskin@yakima.com

References Cited

Johnson, Jack

- 2020 *FINAL Results of Archaeological Monitoring for the Kimberly-Clark Everett Interim Action*. Prepared by Perteet, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

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- 2013 *Cultural Resources Monitoring and Discovery Plan for the Kimberly-Clark Worldwide Site Upland Area, Everett, Snohomish County, Washington*. Prepared by SWCA Environmental Consultants/Northwest Archaeological Associates, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

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- 2013 *Archaeological Resources Assessment for the Kimberly-Clark Worldwide Site Upland Area, Everett, Snohomish County, Washington*. Prepared by SWCA Environmental Consultants/Northwest Archaeological Associates, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Scott, Emily, Alana Vidmar, and Shawn Fackler

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- 2014 *State of Washington Archaeological Isolate Inventory Form: 45SN00629*. Prepared by SWCA Environmental Consultants/Northwest Archaeological Associates, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

ExxonMobil ADC
Cardno 03144702.R05

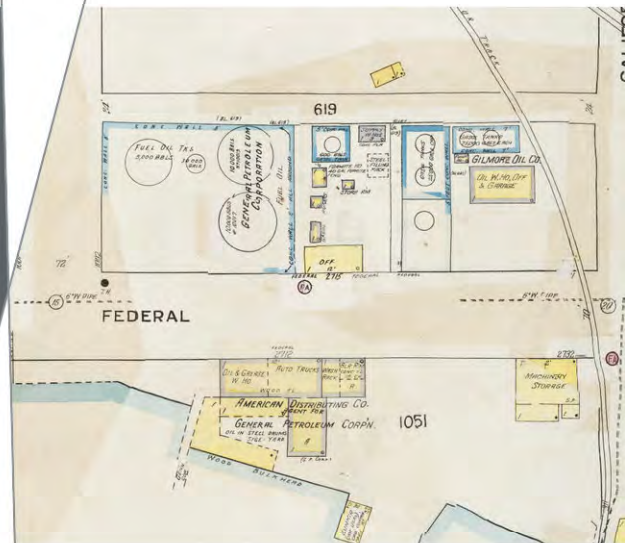
APPENDIX G

DRAFT SEPA CHECKLIST

SEPA Checklist

Port of Everett Proposed Remedial Excavation, Everett, Washington

February 23, 2022



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Figure 1. Site Location

Figure 2. Site Boundary

Figure 3. Proposed Excavation Extent

Appendices

Appendix A – List of Investigations and Reports

Appendix B – Archaeological Assessment

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A. Background

1. Name of proposed project, if applicable:

Port of Everett Interim Action Remedial Excavation

2. Name of applicant:

ExxonMobil Environmental and Property Solutions (ExxonMobil), American Distributing Co. (ADC)

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

Ken Drake
ExxonMobil Environmental and Property Solutions Company
22777 Springwoods Village Parkway, W3.2A.581
Spring, TX 77389
(908) 451 0956

Steve Miller
American Distributing Co.
13618 45th Avenue NE
Marysville, WA 98271
(360) 658-375

4. Date checklist prepared:

February 23, 2022

5. Agency requesting checklist:

Washington State Department of Ecology (Ecology)

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

Excavation: May 1, 2022 to December 31, 2022

Groundwater monitoring: Ongoing, until cleanup levels are achieved.

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.

Since 1985, various consultants have conducted environmental investigations to characterize the nature and extent of contaminants of concerns (COCs) in soil and groundwater at the Ecology recognized ExxonMobil ADC Site (Ecology Site). The Ecology Site is defined as the ExxonMobil and ADC owned properties (ExxonMobil ADC Property), located at 2717 and 2731 Federal Avenue, Everett, Washington, and the surrounding right-of-ways and properties, including the Port Property, located at 2730 Federal Avenue, Everett, Washington. The investigations and reports related to the remedial excavation activities proposed in the draft Cleanup Action Plan (submitted to Ecology in October 2021) are provided in Appendix A.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

The remedial excavation and associated cleanup activities are exempt from the procedural requirements of local, state, and federal permits and approvals because they will be performed under a Washington State Model Toxics Control Act (MTCA) Agreed Order.

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

The remedial excavation and associated cleanup activities actions will be conducted under the Agreed Order. Pursuant to WAC 173-340-710(9), the project will comply with the substantive requirements of the following state laws, however it is exempt from their procedural requirements:

- > Washington State Clean Air Act (70.94 RCW)
- > Solid Waste Management Act (70.95 RCW)
- > Hazardous Waste Management Act (70.105 RCW)
- > Construction Projects in State Waters (75.20 RCW)
- > Shoreline Management Act (90.58 RCW)
- > City of Everett laws regarding excavation, shoring, dewatering, and erosion control

The procedural exemption is not applicable if Ecology determines the exemption would result in loss of approval from a federal agency for the agency to administer federal laws.

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 Ecology Site boundary is 3.37 acres, encompassing private property to the east of Federal Avenue, and Port of Everett (Port Property) property to the west of Federal Avenue (Figure 2). The Ecology Site consists of a paved parking lot; portions of Federal Avenue, the Terminal Avenue Overpass, and the former Everett Avenue; and portions of Everett Ship Repair and Dunlap Towing. Historical releases of petroleum products have been documented at the Ecology Site due to former operation of bulk petroleum storage, transfer, and distribution facilities on the Ecology Site and operations of other companies on nearby parcels. The proposed Project is to cleanup soil and groundwater at the Ecology Site that is impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation.

Proposed cleanup activities include excavation of impacted soils on the west side of Federal Avenue on Port Property (the Project Area, see Figure 3), and groundwater monitoring of the Ecology Site. Due to the shallow water table in the Project Area, water management during the excavation, including limited dewatering, may be necessary. Soil will be removed using dredging methodology with a clamshell bucket, which will facilitate excavation below the water table and minimize the need for dewatering. Any wastewater generated during dewatering will be discharged to a City of Everett-approved discharge point. Impacted soil will be transported offsite by truck to a temporary staging area, then loaded onto rail cars for transport to its final disposal location at a permitted landfill facility. The soils beneath Federal Avenue will not be excavated, and the street will remain open during cleanup activities.

After excavation has been completed, a low permeability barrier wall will be constructed along the excavation sidewall on the western side of Federal Avenue. The barrier wall will limit LNAPL migration following the remedial excavation on the Port Property. Then shoring will be removed, and the area will be backfilled, re-graded to preexisting contours, repaved, and restored to existing uses. A groundwater monitoring program will be conducted to monitor natural degradation of groundwater contaminants of concern (COCs) by natural processes in the areas below Federal Avenue, and otherwise inaccessible to excavation.

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 Ecology Site is located at 2717/2731 Federal Avenue Everett, Washington (Township 29 North, Range 5 East, Section 19). The Ecology Site location boundaries are shown in Figures 1 and 2.

The Ecology Site is defined as the ExxonMobil and ADC properties, and the surrounding rights-of-way and properties that were affected by the migration of hydrocarbons in soil and groundwater.

B. Environmental Elements

1. Earth

a. General description of the Site:

The Ecology Site is graded, generally flat, and paved; with the exception of smaller graveled areas, and some ruderal vegetation growing along a fence-line.

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

The area is flat. Prior to development it sloped gently to the west toward Port Gardner Bay.

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.

According to historical aerial photography most of the proposed remedial excavation area was infilled during shoreline expansion efforts between 1914 and 1947. Based on previous subsurface investigations conducted at the Ecology Site and surrounding vicinity, the near-surface soils consist of a heterogeneous mixture of fill materials. The fill materials consist of very loose to medium dense, brown, brownish gray, and gray silty sand and sand with areas of wood and brick debris extending to depths of approximately 5 to 10 feet below ground surface (bgs). Gray silty sand and silt and dark-brown to black peat mixed with wood debris are encountered beneath the shallow fill and extend up to 20 to 27 feet bgs (Wood 2019, Cardno 2020a, 2020b).

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

The area immediately east of the Ecology Site, across Terminal Ave, is classified as a landslide hazard, and the Terminal Ave Overpass on the southeast corner of the Ecology Site is classified as an erosion hazard. See Section 8(h) for additional detail.

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

The proposed remedial excavation footprint is 0.45 acres. The Project Area is entirely within the Ecology Site boundary, and will exclude the Federal Avenue right-of-way (Figure 3). Approximately 10,000 cubic yards (16,500 tons) of impacted soil will be excavated from the Project Area and disposed of offsite at a permitted location. Once excavation is complete, the excavated areas will be backfilled with clean granular fill material suitable for compaction and repaved. Areas within Port Property will be backfilled and restored according to specifications in an agreement with the Port.

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

Erosion may occur within the footprint of the excavation and soil stockpiles could erode.

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

100 percent

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

Best Management Practices (BMPs) will be implemented to reduce erosion associated with the remediation activities. BMPs that will be implemented include silt fencing, erosion control straw wattles, sediment traps, sloping, shoring, covering stockpiles, maintaining construction entrances with coarse gravel, and preventing vehicles from driving across non-maintained surfaces. These BMPs will be implemented throughout the duration of the remedial activities, and work will be conducted in compliance with City of Everett erosion control requirements.

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.

Onsite emissions would be associated with operation of personnel vehicles, and diesel-fueled construction equipment during shoring installation/removal, soil removal, backfill, paving, and ongoing monitoring efforts. Equipment will include excavators, dump trucks with trailers, a shoring pile drill rig, paving equipment, and various mechanical tools. Offsite emissions would be associated with transportation of impacted soils by truck and rail to an approved disposal facility.

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:

None

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.*

The shoreline of Port Gardner Bay is approximately 300 feet northwest of the Ecology Site.

- 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.*

No

- 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 Ecology Site that would be affected. Indicate the source of fill material.*

None

- 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 Ecology Site plan.*

No

- 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 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 groundwater? Give general description, purpose, and approximate quantities if known.*

Impacted soils to be excavated are located below the water-table. During previous Ecology Site investigations, groundwater was observed at depths in the 5-foot bgs range to the south, and 15-foot bgs range to the north (Cardno 2020a, 2020b). During remedial excavation some dewatering may be

required; the approximate dewatering requirements are unknown. Wastewater disposal is addressed in Section 3(d) below. No groundwater will be withdrawn for drinking water purposes.

- 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.*

None

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.*

Surface water drainage is controlled largely by surface topography and engineered drainage structures. Stormwater generally flows to the west and northwest, following the surface slope, toward catch basins located on the Ecology Site and on Federal Avenue directly west of the Ecology Site. Storm sewers serving the vicinity discharge to Port Gardner Bay via the storm sewer discharge located near the northwest corner of the Port property leased by Dunlap Towing. Some surface water may flow north toward the KC property and south from the Ecology Site to the City of Everett parcel (Wood 2019).

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

Impacted soils will be placed directly into dump trucks and hauled offsite. Temporary stockpiling of soil may be necessary prior to removal offsite. Stockpiles would be placed on plastic sheeting, stabilized, and covered to avoid any potential impacts to groundwater or surface water.

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

No. The Project Area will be regraded and repaved to existing conditions.

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

Erosion and sediment control BMPs consistent with Ecology's current Stormwater Management Manual for Western Washington (SWMMWW) will be used during the excavation to prevent impacts to stormwater. A temporary erosion and sediment control plan will be prepared to prevent sediment, debris and sediment-laden water from leaving the work area, entering adjacent surface streets, storm drains, and the Puget Sound. Proposed temporary erosion and sediment control elements will include the following:

- Use of silt/filter fabric fences, straw bales, straw wattles, storm drain inlet protection, catch basin silt barriers and/or similar BMPs.
- Diversion BMPs to prevent offsite stormwater from entering the excavation area.
- Implementation of BMPs at the construction entrance/exit and internal haul routes to minimize the tracking of soil onto the adjacent surface streets
- Street sweeping and/or street cleaning, as necessary, to remove soil tracked onto the adjacent surface streets
- Implementation of stockpile BMPs

Any wastewater generated during dewatering activities will be properly managed under a City of Everett-approved permit, and in compliance with the City's Industrial Pretreatment Ordinance #3070-08, as amended. Wastewater will be discharged at an approved flow rate to the permit-specified discharge point. Routine samples will be collected of the wastewater to confirm that it is compliant with the applicable discharge levels for contaminants. All wastewater discharge data from the project (e.g., sample data, discharge events, and total volume discharged) will be recorded.

A low permeability barrier wall will be constructed in a north to south trending direction against the excavation wall along the western side of Federal Avenue. The barrier wall will be designed limit migration onto Port Property following the remedial excavation.

4. Plants

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

- ☐deciduous tree: alder, maple, aspen, other
- ☐evergreen tree: fir, cedar, pine, other
- ☒X shrubs
- ☒X grass
- ☐pasture
- ☐crop or grain
- ☐Orchards, vineyards or other permanent crops.
- ☐wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐water plants: water lily, eelgrass, milfoil, other
- ☐other types of vegetation

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

None. The small area with perennial grasses and noxious weeds will not be excavated or otherwise disturbed.

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

None. The entire Ecology Site is graded and developed. No functional native plant habitat occurs on the Ecology Site.

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

None

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

- > Class B: butterfly bush (*Buddleja davidii*)
- > Class C: Himalayan blackberry (*Rubus bifrons*)

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.

The Port Property is located near the marine shoreline in the Snohomish River basin, in an area zoned for heavy industrial use. No wetlands, streams, shorelines, floodplains, or functional wildlife habitat occur on the Ecology Site. Nearby environmentally sensitive areas include Port Gardner Bay and the Snohomish River. The shoreline nearest the Ecology Site is deepwater that has been heavily modified by dredging, filling, and shoreline development; there is limited subtidal and intertidal habitat (Wood 2019). Common wildlife species known to occur in urban/heavily industrial areas may be present onsite.

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

No threatened and endangered animal species would occur at the Ecology Site. Species listed under the Endangered Species Act (ESA) and Washington State Priority Species that may be present in Port Gardner Bay are detailed in the Ecology Site characterization/focused feasibility study report (Wood 2019).

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

No

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

N/A

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

None

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.

N/A

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:

N/A

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

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

The Ecology Site historically operated as a bulk petroleum storage, transfer, and distribution facility. Additional potential sources of contaminants of concern includes releases from the former rail loading racks located east of the ExxonMobil ADC Property, underneath the current Terminal Avenue Overpass (Cardno 2021). Multiple investigations have been conducted to characterize Ecology Site soil and groundwater contamination. The COCs known to occur at the Ecology Site include:

- > TPHg
- > TPHd
- > TPHmo
- > Benzene
- > Ethylbenzene
- > Total Xylenes
- > Total cPAHs
- > 1-Methylnaphthalene (Wood 2019).

- 2) *Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.*

No underground hazardous liquid and gas transmission pipelines are located on or below the Ecology Site.

- 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.*

Vehicles and equipment used and stored onsite could have minor leaks (e.g., fuel, oil, hydraulic fluids, etc.).

- 4) *Describe special emergency services that might be required.*

None

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

The purpose of the proposed Project is to cleanup and monitor environmental health hazards. Spill kits/absorbent clean-up materials will be available on-site and if used, disposed of properly.

b. Noise

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

The Project is located within and adjacent to the Port, a heavy industrial use area. Noise from Port operations including heavy machinery use, and noise associated with truck, ship, and rail traffic are present.

- 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.*

Noise generated by vehicles and equipment during remedial excavation are compatible with the surrounding baseline noise levels that exist. Noise will be short-term: only lasting the duration of the shoring install and excavation. Larger equipment and vehicles will only operate in daylight hours, generally between 7 AM and 5 PM.

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

N/A

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 Ecology Site includes an asphalt-paved parking and portions of former Everett Avenue, Federal Avenue, and Port Properties just west of Federal Avenue. It also includes portions of the City of Everett right-of-way east and south of the Property, the BNSF Railway Company (BNSF) parcel, the BNSF railway corridor right-of-way east of the Property, and the land under the Terminal Avenue Overpass. The Ecology Site is adjoined by the following properties:

- > The KC property is located immediately north at 2600 Federal Avenue. The KC property was used for several decades for wood and paper products manufacturing. It housed former bulk petroleum storage tanks and currently includes a warehouse near the southern end adjacent to the ExxonMobil/ADC Property. Most of the former paper manufacturing facility was demolished in 2012.
- > A City of Everett right-of-way is located immediately east of the Ecology Site. The City of Everett right-of-way is currently paved with asphalt and is otherwise unoccupied.

- > Another City of Everett right-of-way is located immediately south of the Ecology Site. This right-of-way was formerly part of the ExxonMobil Parcel but was transferred to the City of Everett as part of the Terminal Avenue Overpass project. This right-of-way is currently paved with asphalt and is otherwise unoccupied.
- > Federal Avenue is located immediately east of the Port Property. Federal Avenue is a public street and City of Everett utility corridor.

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

No

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

c. Describe any structures on the Site.

A wheeled-trailer used by Everett Ship Repair as an administrative office is currently located on the northwest corner of the Ecology Site. It will be temporarily relocated during remedial excavation activities.

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

No

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

The Ecology Site is zoned M-2 Heavy Manufacturing land use by the City of Everett.

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

The City's comprehensive plan shows The Ecology Site as E.5.1 Heavy Industrial land use.

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

The northwest corner of the Ecology Site is located within or immediately adjacent to an area designated as Urban Deepwater Port (UDWP) in the City of Everett's Shoreline Master Program (City of Everett, 2019).

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

The portion of the Ecology Site with the Terminal Ave Overpass is classified as a Critical Area Erosion Hazard with Very High/Severe Slopes of greater than 40% in Qva and Qal geologic units (City of Everett 2006a).

The area immediately east of the Ecology Site across Terminal Ave is classified as a Critical Area Landslide Hazard, with Medium Slopes < 15% for Qtb, Qw, Qls geologic units and uncontrolled fill Slopes of 25% - 40% in "other" geologic units (City of Everett 2006b).

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

Once the Project is complete, the wheeled-trailer used by Everett Ship Repair as an administrative office will be returned to the Ecology Site for use.

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

None

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

N/A

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

The Project is compatible with existing and future land uses and plans. The Ecology Site will likely continue as heavy industrial/or commercial for the foreseeable future. The City of Everett M-2 zoning allows for a mix of commercial and industrial uses at the Ecology Site, and specifically prohibits residential use, and daycare facilities. Use of the Ecology Site for parks is allowed. The Ecology Site owners anticipate that institutional controls will be established, limiting use of the Ecology Site to industrial/commercial purposes. If future redevelopment requires installation of utilities or new structures, this may require implementation of passive or active vapor intrusion protection measures (Wood 2019).

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, 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:

None

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 as part of the Project.

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

None

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

N/A

11. Light and Glare

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

The remedial excavation work will occur during daylight hours and no additional lighting sources are required. Light and glare from vehicles and equipment during the excavation and groundwater monitoring activities are consistent with existing sources of light and glare in the area.

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

No

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:

N/A

12. Recreation

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

The parking area along Terminal Avenue for the Pigeon Creek Beach Trailhead is located approximately 300 feet south of the Ecology Site.

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

No

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

N/A

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? If so, specifically describe.

No permanent buildings, structures, or sites are within or immediately adjacent to the Project Area (defined as the boundaries of the Ecology Site). One archaeological resource (45SN629) was previously recorded approximately 0.07 mile north of the Project Area. The archaeological resource is a precontact isolated find identified within historic dredge material encountered beneath an asphalt-paved parking lot (Undem 2014; Undem et al. 2014). Historically, the properties were the location of a mill situated at 2600 Federal Avenue (Boswell and Sharley 2012). The single lithic artifact was recorded as an edge-altered basalt cobble with 13 multidirectional flake scars on one end.

The Kimberly-Clark Everett Mill Main Office (Property ID 667716), located 0.09 mile north of the project area, was originally constructed in 1929 and consisted of a two-story Neoclassical rectangular structure with red brick cladding and low-pitched hipped roof. The building is recommended as eligible for listing in the National Register of Historic Places under Criterion A and listing in the Washington Heritage Register based on its historical association with the industrial development of Everett (Sharley 2012).

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the Site? Please list any professional studies conducted at the Site to identify such resources.

The current project area contains no historic or precontact landmarks, features, or other evidence. Ethnographic place names within Everett list several near the mouth of the Snohomish River and for water resources near Everett; however, none of these ethnographic place names are located within or immediately adjacent to the project area (Watermann 1922; Watermann et al. 2001):

- *ʔusʔusič* (Watermann orthography: *Os3a/s1tc*) translates to “chasing a fish here and there” near an estuary between Steamboat and Union Sloughs.
- *bəluʔəb* (Watermann orthography: *PE'ls1b*) translates to “boiling,” for an area at the mouth of the main Snohomish River channel.
- *čik'wucid* (Watermann orthography: *Ctcqo'tsid*) translates to “that which chokes up the mouth of something,” for a small island located on the north side of the Snohomish River mouth.
- *sexwčulalqw* (Watermann orthography: *SExwtculalkw*) is noted for a sharp point of land running toward the Ctcqo'tsid island.
- *hibu'əb* (Watermann orthography: *Hibu'l3ub*) translates to “place where water boils out of the ground,” for a former village site south of the Snohomish River mouth.

- Watermann orthography: *SEqwsu'3ub* is noted for a small promontory with a slough that runs parallel to the shore.
- *sluluw#* (Watermann orthography: *SLu'luw1L*) translates to "little perforation for a canoe," for a narrow channel passing behind an island.
- *λ'uxwa#* (Watermann orthography: *tL'o'hwaL*) translates to "a cold spring" for a spot on the riverbank opposite Everett.

Historically, most of the project area consisted of tidelands and the waters of Port Gardner Bay (Sanborn 1902). The Ecology Site resides within the land claim of Dennis Brigham, who began the homestead process at this location in 1861 (General Land Office 1869; Oakley 2005). "Squatters Shacks" populated the Ecology Site area east of the railroad. Between 1914 and 1950, extensive fill material expanded the usable ground surface west (Sanborn 1914, 1950).

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The Archaeological Assessment which describes the methods used to assess the potential impacts to cultural and historic resources on or near the project area is appended to this checklist (Appendix B).

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.

A Monitoring and Inadvertent Discovery Plan (MIDP) will be utilized to minimize potential impacts to any currently unknown intact archaeological resources and that all project-related ground-disturbing activities in native sediment be monitored. Monitoring is not recommended in glacial deposits and sediments, nor in existing areas where disturbance has already occurred. Monitoring will be conducted by a professional archaeologist who meets the Secretary of the Interior's (SOI's) professional qualifications standards (36 Code of Federal Regulations [CFR] Part 61) for archaeology or by a qualified archaeologist supervised by a professional archaeologist who meets the SOI standards.

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 Ecology Site is accessible from Federal Avenue, via Terminal Avenue. Federal Avenue is a public 2-way paved street that crosses the Ecology Site, and provides access to private and Port properties.

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?

No. The nearest transit stop is located approximately 0.5 miles east of the Ecology Site at Hewitt Ave and Hoyt Ave.

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

During the excavation the parking lot portion of the Ecology Site will be closed to the public. Once the excavation is complete the parking area will be restored to existing conditions; no parking spaces will be eliminated.

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

No

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

The BNSF railroad right-of-way is located approximately 200 feet east of the Ecology Site, and the Hewitt Terminal with deep-water vessel access is located approximately 300 feet west of the Ecology Site.

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?

Excavation requires removal of 16,500 tons of soil, and a single truck/trailer combo can haul approximately 25 tons per load. Assuming the current schedule, approximately 40 vehicle trips per day would be generated by the Project. Peak volumes would occur during daytime hours, and 75 percent would be from commercial/non-passenger vehicles hauling impacted soil from the Ecology Site. This data is based on knowledge of similar projects, and approximate calculation of truck capacity. Loaded trucks will be covered to prevent dust and soils from escaping during transit.

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.

No

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

No excavation within the Federal Avenue right-of-way will occur, and no significant impacts to transportation are anticipated. Federal Avenue currently serves Dunlap Towing and Everett Ship Repair. Prior to closure of the Kimberly-Clark mill just north of the Ecology Site, Federal Avenue experienced an average of 220 daily truck trips and 500 employee daily trips per day (Kimberly-Clark 2012). The Project is being undertaken in collaboration with the Port, and access will be maintained for all Port tenants serviced by Federal Avenue. City of Everett traffic control requirements will be followed.

15. Public Services

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

No

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

N/A

16. Utilities

a. Circle utilities currently available at the Site:

Stormwater drainage lines are present beneath the Ecology Site. Underground stormwater, sanitary sewer, water, and telephone lines run beneath Federal Avenue and the adjoining KC property. The City of Everett's new 24-inch underground force main also runs beneath Federal Avenue and the KC property. An overhead power line runs along Federal Avenue and the KC property (Wood 2019).

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.

N/A

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: _____

Name of signee _____

Position and Agency/Organization _____

Date Submitted: _____

D. References

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- Cardno. 2021. *Cleanup Action Plan*. ExxonMobil ADC, 2717/2713 Federal Avenue, Everett, Washington.
- _____. 2020a. *Subsequent Excavation Delineation Drilling Work*. ExxonMobil ADC, 2717/2713 Federal Avenue, Everett, Washington.
- _____. 2020b. *Excavation Delineation Work Plan – Port of Everett Property*. ExxonMobil ADC, 2717/2713 Federal Avenue, Everett, Washington.
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- Undem, Cyrena. 2014. *State of Washington Archaeological Isolate Inventory Form: 45SN00629*. Prepared by SWCA Environmental Consultants/Northwest Archaeological Associates, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
- Undem, Cyrena, Michael Shong, and Brandy Rinck. 2014. *Results of Cultural Resources Monitoring at the Kimberly-Clark Worldwide Site Upland Area, Everett, Washington*. Letter to Aspect, Aspect Consulting LLC, Seattle. Prepared by SWCA Environmental Consultants, Seattle. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

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- Waterman, T.T., V. Hilbert, J. Miller, and Z. Zahir. 2001 *Puget Sound Geography*. Original Manuscript from T.T. Waterman. Lushootseed Press, Federal Way, Washington.
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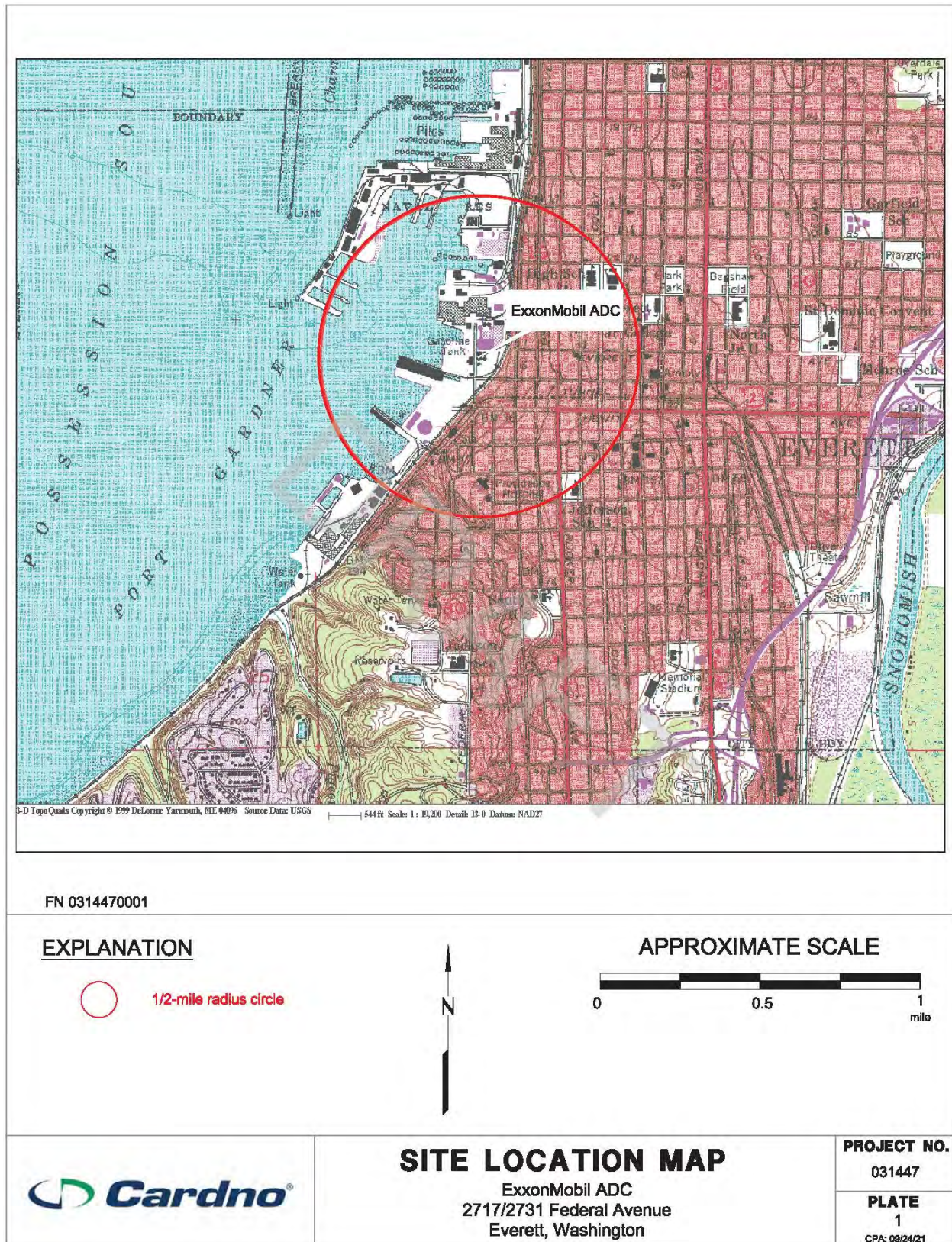


Figure 1. Site Location

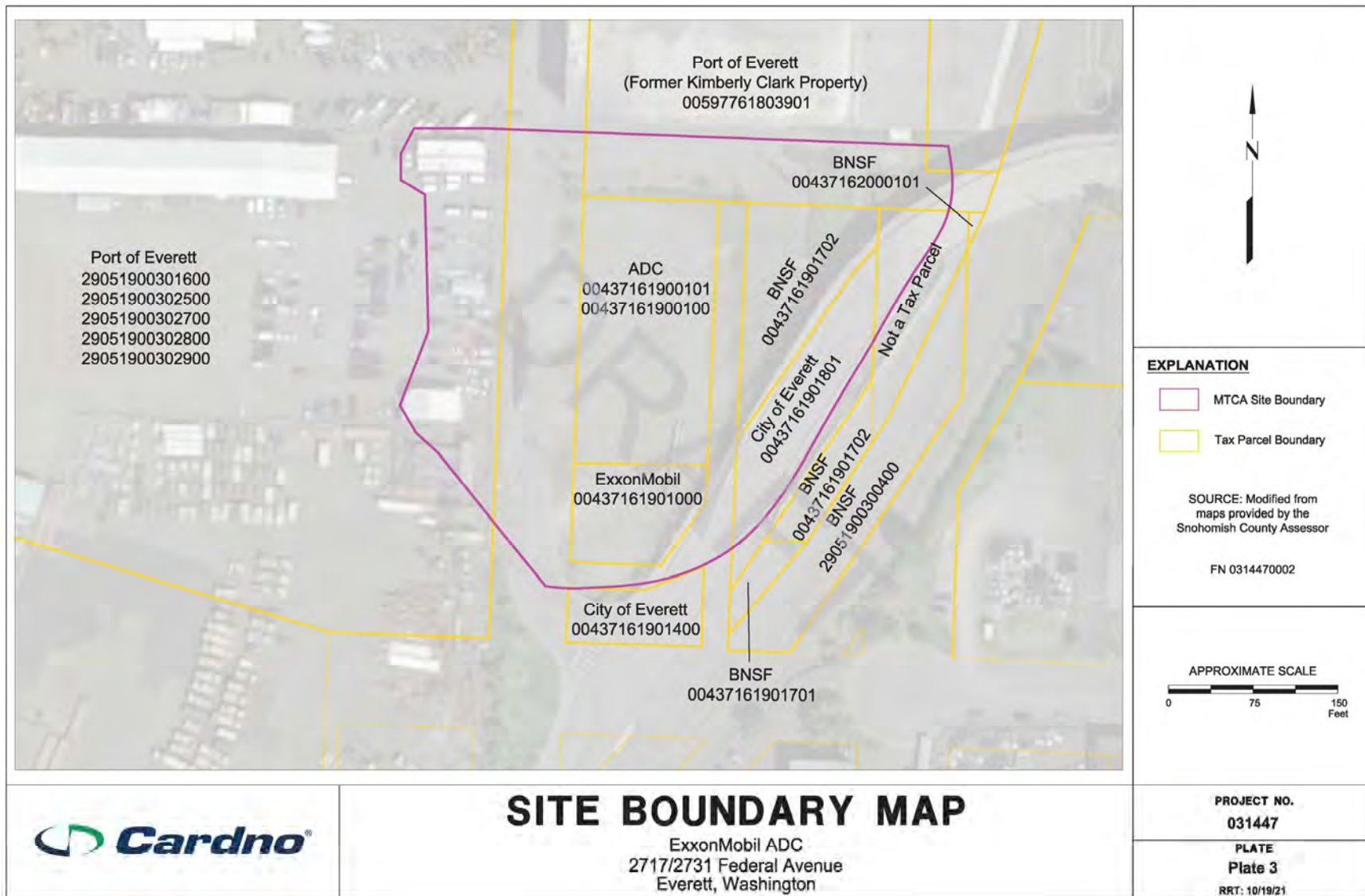


Figure 2. Site Boundary

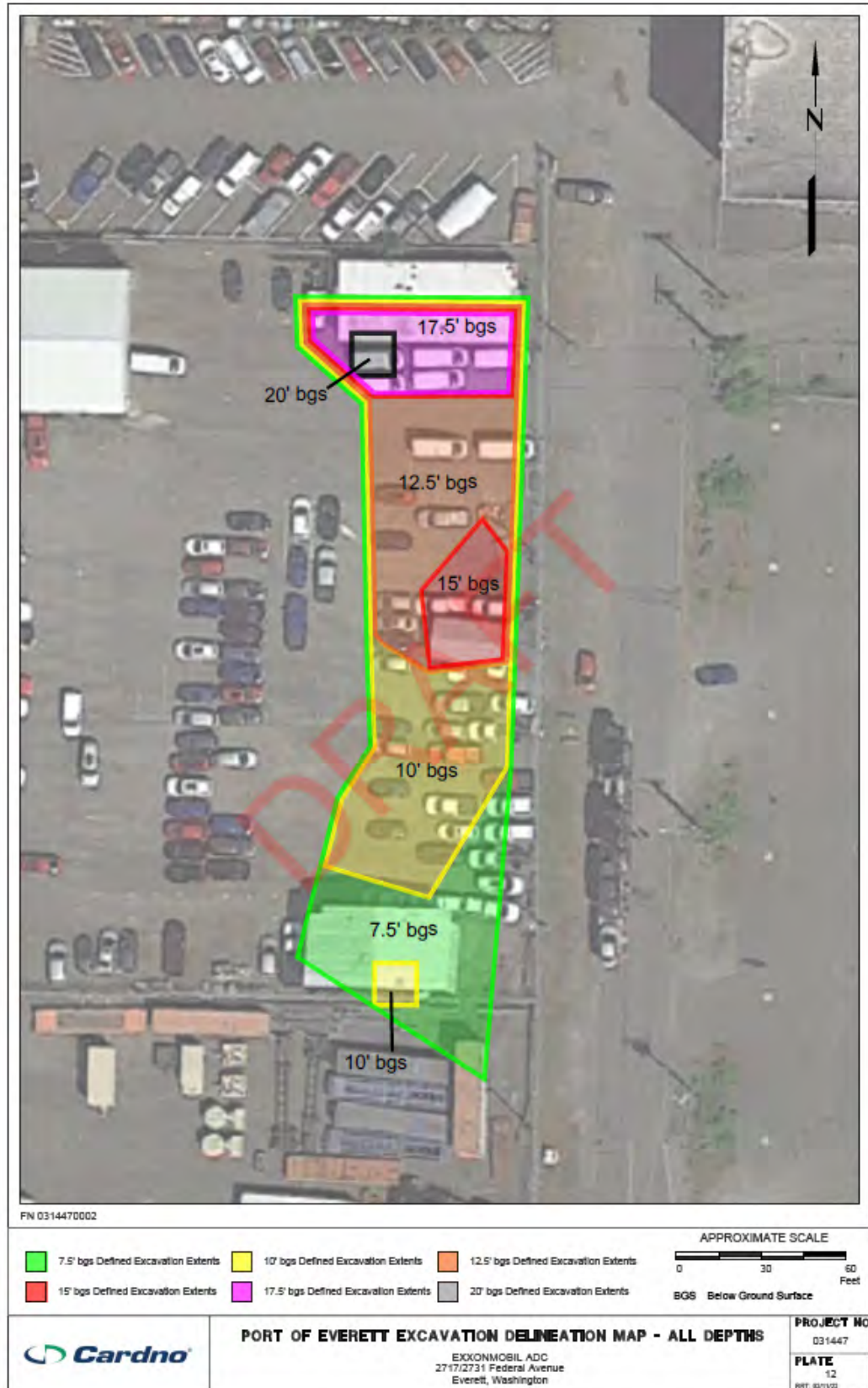


Figure 3. Proposed Excavation Extent

Appendix A List of Environmental Investigations and Reports

List of Environmental Investigations and Reports

Date	Consultant	Location	Report/Activities	Summary
2022 (Estimated)	Cardno	Site	Agreed Order	A new Agreed Order will be negotiated with Ecology prior to remedial activities.
Ongoing	Cardno	Site	Groundwater monitoring reports	Semi-annual groundwater monitoring and sampling reports will be submitted to Ecology.
May-22 (Estimated)	Cardno	Site	Monitoring and Inadvertent Discovery Plan (MIDP)	Plan to minimize potential impacts to any currently unknown intact archaeological resources and ensure that all project-related ground-disturbing activities in native sediment be monitored.
Feb-22 (Estimated)	Cardno	Site	Engineering Design Report	The Engineering Design Report will document technical specifications, plan sets, and engineering design drawings used to manage and implement the selected environmental remedy described in the CAP.
Nov-21	Cardno	Site	Archaeological Assessment	The Archaeological Assessment was prepared to determine the probability for encountering archaeological resources during remedial excavation.
Oct-21	Cardno	Site	Work Plan	The Conditional Point of Compliance Groundwater Well Installation Work Plan submitted to the Port of Everett in October 2021.
Oct-21	Cardno	Site	Draft Cleanup Action Plan (CAP)	The draft CAP describes the cleanup standards for the subject site, the cleanup methods selected to achieve the cleanup standards, and the rationale for these decisions. Cardno submitted the draft CAP to Ecology in October 2021. The plan will be finalized after public comment.
2020-2021	Cardno	Port of Everett	Excavation delineation	A total of 51 soil borings were drilled on the Port of Everett property, and soil samples were analyzed to delineate areas exceeding remediation levels for future excavation. Two geotechnical borings were also advanced. Analytical results will be used so that collection of sidewall and base soil samples during future excavation work is not necessary. Cardno submitted the Excavation Delineation Report to Ecology in April 2021.
2019	Wood	Site	Site Characterization/ Focused Feasibility Study (SC/FFS)	SC/FFS identifies the recommended cleanup alternative for the Site. The study will be finalized after public comment.
2013–2014	AMEC	Site	Data gaps investigation	A total of 33 soil borings were drilled on the Property and nearby properties, and soil samples were analyzed to delineate areas of affected soil at the Site. One of the borings was completed as a new monitoring well (MW-A8).

Date	Consultant	Location	Report/Activities	Summary
2012	AMEC	Federal Avenue and former Everett Avenue	Observations during City of Everett force main replacement	AMEC observed excavation and drilling activities during installation of the City's force main and recorded notable subsurface features when relevant, including the presence of LPH if encountered.
2011	AMEC	Former Everett Avenue	Observations of seeps along former Everett Avenue	AMEC recorded photographs in the field to document observations of petroleum product seeps through the pavement on former Everett Avenue.
2011	AMEC	Site	Tidal influence investigation	A stilling well with transducer was installed on the Everett Pier to automatically record tidal elevations. Pressure transducer/ data loggers were installed in monitoring wells W-3, W-6, MW-11, MW-19, MW-28, MW-40R, and MW-A1 through MW-A7 to record groundwater levels every 6 minutes for 6 days.
2011	AMEC	Site	Data gaps investigation	Seven deep borings (AB-1 to AB-5, AP-6, MW-7ab), six shallow borings (AP-1 through AP-5, AP-7), five new off-Property monitoring wells (MW-A3 through MW-A7), aquifer testing, and tidal influence study.
2010	AMEC	Site	Sampling for City of Everett Force Main	Borings CE-1 to CE-8 advanced on Federal Avenue, former Everett Avenue, and the BNSF property to characterize soils in the alignment of City's planned force main.
2010	AMEC	Site	Agreed Order DE 6184	
2010	AMEC	Site	Focused Feasibility Study Work Plan	Summarized Site history, previous environmental investigations and interim remedial activities, known environmental conditions, preliminary conceptual site model, and remaining data gaps.
Jun-08	AMEC	Site	Well head elevations survey	True North Land Surveying of Seattle, Washington, surveyed recovery and monitoring wells located on-Site.
Feb-08	AMEC	Site	Tidal study	Measured tidal response in W-3, W-6, MW-11, MW-28, & MW-40R.
2008	AMEC	West of the Property	Monitoring wells	Off-property monitoring wells MW-A1 and MW-A2 installed on the west side of Federal Avenue.
2007–present	AMEC	Site	Groundwater monitoring	AMEC requested to change to semiannual groundwater monitoring in 2007.
Feb-07	AMEC/Bravo Environmental	Site	Video survey of storm drain system	AMEC contracted Bravo to conduct a video survey of the storm drain system installed as part of 1999 interim measure to verify that groundwater from the Property is not infiltrating into the stormwater system through possible cracks and fissures in the piping and catch basins.
Jul-02	ERI	West of the ExxonMobil Parcel	Well decommissioning	Monitoring wells MW-20, MW-21, and one unidentified well were decommissioned.
2002-2007	Kleinfelder, ERI, AMEC	Site	Groundwater monitoring	Monthly LPH gauging and quarterly groundwater monitoring.

Date	Consultant	Location	Report/Activities	Summary
2002	Reid Middleton	CSTO	Memorandum to Ecology	Southeast corner of the asphalt cap over the ExxonMobil Parcel removed. Steel piles for concrete foundation were installed.
Feb-02	ERI	Site and vicinity	Monitoring well decommissioning and re-installment	Abandonment of monitoring wells (MW-22, MW-23, MW-24, MW-35, and MW-37) and piezometer DM-6 due to proximity to the CSTO Project. Re-installed well W-2 screened from 3 to 23 feet bgs.
Jul-01	URS	Johnston Petroleum parcel	Borings	Phase II investigation for Johnson Petroleum parcel. Push-probe borings JP-1 through JP-7.
Sep-00	URS	South, east, and southeast of the Property	Borings	Phase II investigation for the CSTO Project. Push-probe borings UG-1 through UG-12.
Dec-99	Dames and Moore/URS	South and southeast of the Property	Geotechnical drilling and piezometer installation	DM-6, DM-7, and DM-8 were sampled for environmental samples.
Oct-99	Kleinfelder	The Property	Monitoring wells installation	Monitoring wells W-10R, W-15R, and MW-40R.
Jul-98	Exponent	Site	Final Interim Action Work Plan and Engineering Design Report	Exponent presented design for interim measures at the Property.
Jul-98	Exponent	Site	Remedial Investigation and Focused Feasibility Study	Exponent summarized the history of the Property and evaluated feasible remedial options for the Site.
1998			Agreed Order DE98TC-P-N223	
November 1997 through January 1998	Pacific Environmental Group, Inc.	Kimberly-Clark property	Borings, monitoring wells	Direct-push borings Probe-1 through Probe-15 were advanced, and 2-inch diameter HSA monitoring wells KC-1 and KC-2 were installed inside the KC warehouse.
Feb-97	PTI	Site	LPH recovery technical memorandum	Technical memorandum to summarize environmental investigations, LPH recovery activities, and geology.
Aug-96	AGRA	Site	Monitoring wells	Gauged wells at the property.
Jun-96	AGRA	ADC Parcel	Borings, monitoring wells, and test pits	4-inch diameter recovery well VRW-1 and 2-inch diameter monitoring well MW-38 installed. Seven test pits TP-1-96 through TP-7-96 excavated.
May-96	AGRA	ADC Parcel	Borings	Bobcat borings BB-1 through BB-14.
Apr-96	City of Everett		Meeting	Meeting held to discuss options for repairing the section of CSO line.

Date	Consultant	Location	Report/Activities	Summary
Mar-96	AGRA	North of the Property	Borings	Direct-push soil borings GP-1 through GP-13. Borings associated with the CSO line repair.
Dec-95	RZA AGRA	Site	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-2, B-2, MW-8, MW-9, MW-18, MW-15 through MW-18, MW-27, and MW-28.
Nov-95	RZA AGRA	Site	Groundwater monitoring	Groundwater monitoring event. Gauged wells: RW-1, RW-2, B-1, B-2, MW-6, MW-8 to MW-13, MW-15 to MW-18, MW-27 to MW-37, and NRW-1.
Oct-95	U.S. Coast Guard Puget Sound Marine Safety Office & City of Everett	North of the Property	Investigation of petroleum product discharge into Everett Harbor	Camera surveys of the sewer lines made.
Jul-95	RZA AGRA	ADC Parcel	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells: W-3, W-5, W-9, W-10, W-12 through W-15.
1995			Agreed Order DE-95TC-N402	
Dec-93	RZA AGRA	West of ExxonMobil Parcel	Test pits, recovery trench	Excavated five test pits, TP-1 through TP-5, to depths ranging from 3 to 3.5 feet bgs. Recovery trench installed along the western border of ExxonMobil Parcel.
Dec-93	RZA AGRA	ExxonMobil Parcel and off-Property to the west	Quarterly groundwater monitoring	Groundwater monitoring event. Gauged wells B-1, B-2, MW-6, MW-8 through MW-13, MW-15 through MW-18, MW-27 through MW-33, MW-35 through MW-37.
Dec-93	RZA AGRA	West of ExxonMobil Parcel	Off-Property borings, monitoring well installation, GPR survey	2-inch diameter monitoring wells MW-31 through MW-33 and MW-35 through MW-37 were installed; B-34 advanced and backfilled. GPR survey was conducted to assess whether underground product lines had been removed.
1992	RZA AGRA	NA	Discussions with Ecology	Ecology discussed enforcement with Mobil and RZA AGRA. Ecology decided to allow Site to go independent.
Dec-91	RZA AGRA	ExxonMobil Parcel	Quarterly groundwater monitoring, aquifer and tidal study	Quarterly groundwater monitoring. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-30, and AD-19. Aquifer study involved 24-hour pumping from MW-10 at a rate of 1 to 2 gpm and measuring response in MW-18, RW-1, and RW-2 for 48 hours.
Nov-91	RZA AGRA	ExxonMobil Parcel	Borings, recovery well	8-inch diameter recovery well RW-2 installed. Deep soil borings B-1A, B-8A, and B-15A advanced.

Date	Consultant	Location	Report/Activities	Summary
Jun-91	RZA and ESE	The Property	Quarterly groundwater monitoring	Groundwater monitoring event. New 2-inch diameter monitoring wells MW-25 and MW-26 installed. Gauged wells: RW-1, B-1, B-2, B-5, MW-6, MW-8 through MW-13, MW-15 through MW-18, AD-19, W-1 through W-6, and W-8 through W-15.
March–June 1991	RZA	Parcels surrounding ExxonMobil Parcel	Borings, monitoring well installation	Six percussion soil borings to depths ranging from 5 to 5.5 feet bgs, 2-inch diameter monitoring wells MW-19 through MW-24, and 4-inch diameter monitoring wells MW-27 through MW-30 installed. Soil boring B-21-91 advanced to depth of 29 feet bgs.
Nov-90	Unknown	ExxonMobil Parcel	Monitoring well decommissioning	B-3 (MW-3), B-4 (MW-4), and MW-7 destroyed.
Oct-90	RZA	ExxonMobil Parcel	Shallow grid soil sampling, bio-feasibility study	Hand augers B-1 through B-25. Two soil samples were studied to conduct a slurry flask bio-feasibility study.
Jun-90	ESE	ADC Parcel	Hand-auger borings	Hand-auger borings W-8 through W-17 to depths of 6–10 feet.
Feb-90	ESE	ADC Parcel	Borings, monitoring well installation	HSA borings W-1 through W-7. 2-inch-diameter monitoring wells W-1 through W-6 installed.
Jan-90	ESE	ADC Parcel	Borings	Hand augers AD-01 through AD-19 to depths ranging from 1 to 4.5 feet.
Mar-88	RZA	ExxonMobil Parcel	Borings, monitoring well installation	2-inch-diameter monitoring wells MW-6 through MW-18 installed.
May-85	RZA	ExxonMobil Parcel	Borings, monitoring well installation	2-inch-diameter monitoring wells B-1 through B-5 (MW-1 through MW-5 in several reports) installed.

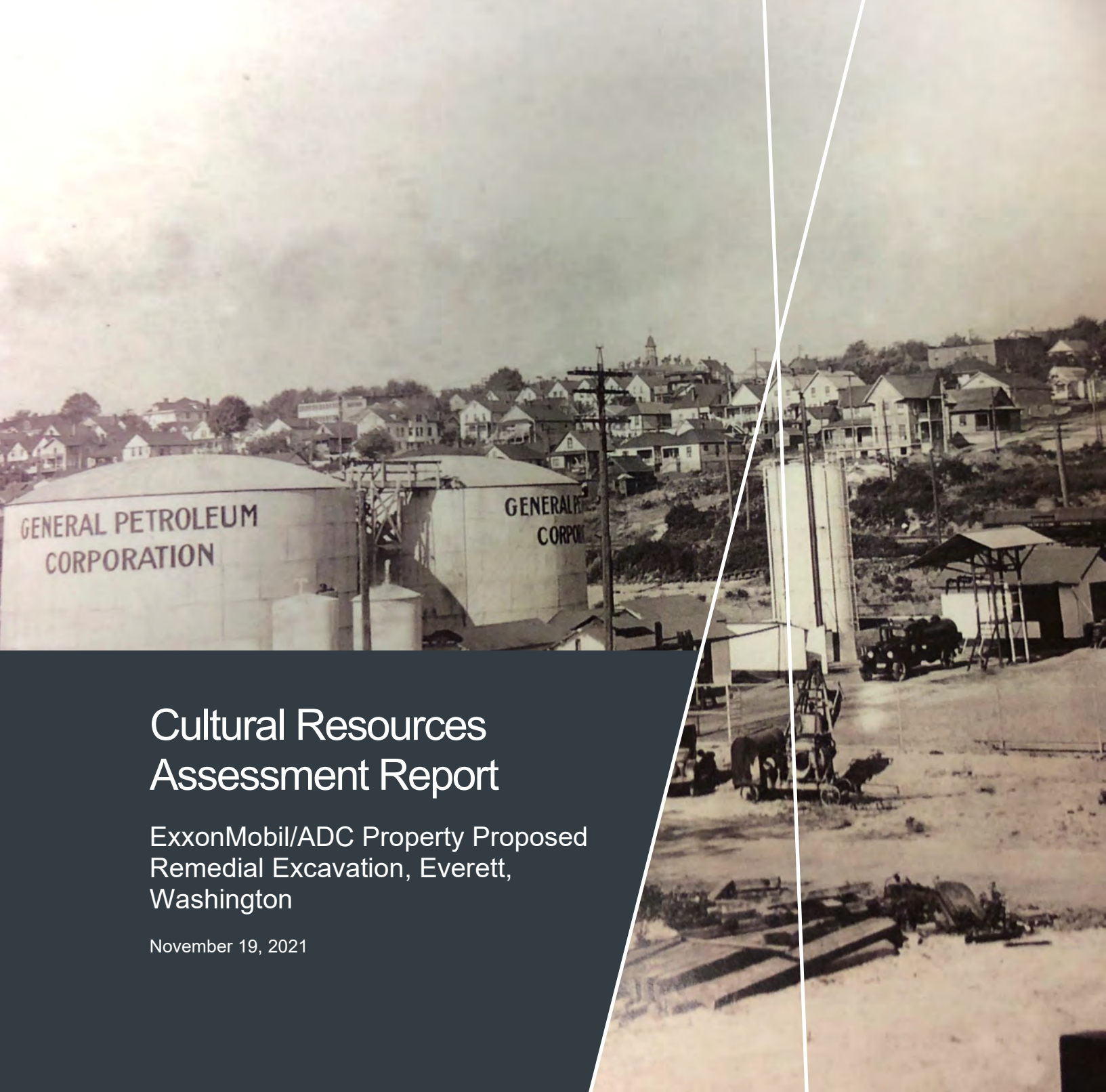
Source: Wood 2019

Abbreviations:

ADC = American Distributing Company
 AMEC = AMEC Environment & Infrastructure, Inc.
 AMEC E&E = AMEC Earth & Environmental, Inc.
 AST = aboveground storage tank
 bgs = below ground surface
 CAP = Cleanup Action Plan
 COC = constituent of concern
 CSO = combined sewer outflow
 CSTO = California Street Overcrossing
 Ecology = Washington State Department of Ecology
 ERI = Environmental Resolutions, Inc.
 ESE = Environmental Science and Engineering, Inc.
 FFS = Focused Feasibility Study

gpm = gallons per minute
 GPR = ground penetrating radar
 HSA = hollow-stem auger
 KC = Kimberly-Clark
 Kleinfelder = Kleinfelder, Inc.
 LPH = liquid petroleum hydrocarbons
 MTCA = Model Toxics Control Act
 PTI = PTI Environmental Services
 RZA = Rittenhouse-Zeman & Associates, Inc.
 RZA AGRA = RZA AGRA Earth & Environmental, Inc.
 TPH = total petroleum hydrocarbons
 TPH-D = total petroleum hydrocarbons-diesel range organics
 TPH-G = total petroleum hydrocarbons-gasoline range organics
 TPH-O = total petroleum hydrocarbons-residual range organics

Appendix B Archaeological Assessment



Cultural Resources Assessment Report

ExxonMobil/ADC Property Proposed
Remedial Excavation, Everett,
Washington

November 19, 2021

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Project Name Cultural Resources Assessment
Report
ExxonMobil/ADC Property
Proposed Remedial Excavation,
Everett, Washington
Job Reference 0314476040
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Date November 19, 2021

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Executive Summary

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington. The project proposed to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The project area is currently developed with a paved parking lot.

Results of the cultural resources assessment for the project area indicate a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources.

1.0 Introduction

Cardno, Inc. (Cardno) conducted a cultural resources assessment for the proposed ExxonMobil/American Distributing Company (ADC) project in Everett, Washington (Figure 1). This project is listed by the Washington State Department of Ecology (Ecology) as Cleanup Site 5182. Historical releases of petroleum products have been documented within the project area due to former operations of bulk petroleum storage, transfer, and distribution facilities and operations of other similar companies on nearby parcels. The purpose of the project is to cleanup soil and groundwater impacted by light non-aqueous phase liquid (LNAPL) and/or residual LNAPL saturation. Proposed cleanup activities include installation of shoring walls, and excavation of impacted soils. Following excavation of contaminated soils, the project area will be backfilled, re-graded to preexisting contours, removal of shoring walls, and repaved.

The project area consists of 3.48 acres that are comprised of several tax parcels and portions of the City of Everett's (City) Right-of-Way (ROW). Parcel information is provided below (Table 1; Figure 2). Currently, the project area consists of a paved parking lot with no extant structures or buildings (Figure 3).

The cultural resources assessment consisted of a literature review of existing cultural resource records for previously recorded historic, ethnohistoric, and precontact archaeological and built environment resources; a review of any local, state, and national register nomination forms; a review of previously conducted cultural resources investigations; and a review of any known or potential Traditional Cultural Properties (TCPs) located within 1.0 mile (1.6 kilometer [km]) of the project area. This research included a records search at the Department of Archaeology and Historic Preservation's (DAHP's) Washington Information System for Architectural and Archaeological Records Data (WISAARD) database. Additional resources that were consulted include historic-era aerial photographs, U.S. Geological Survey (USGS) maps, General Land Office (GLO) maps, Snohomish County atlases, and Sanborn Fire Insurance Maps.

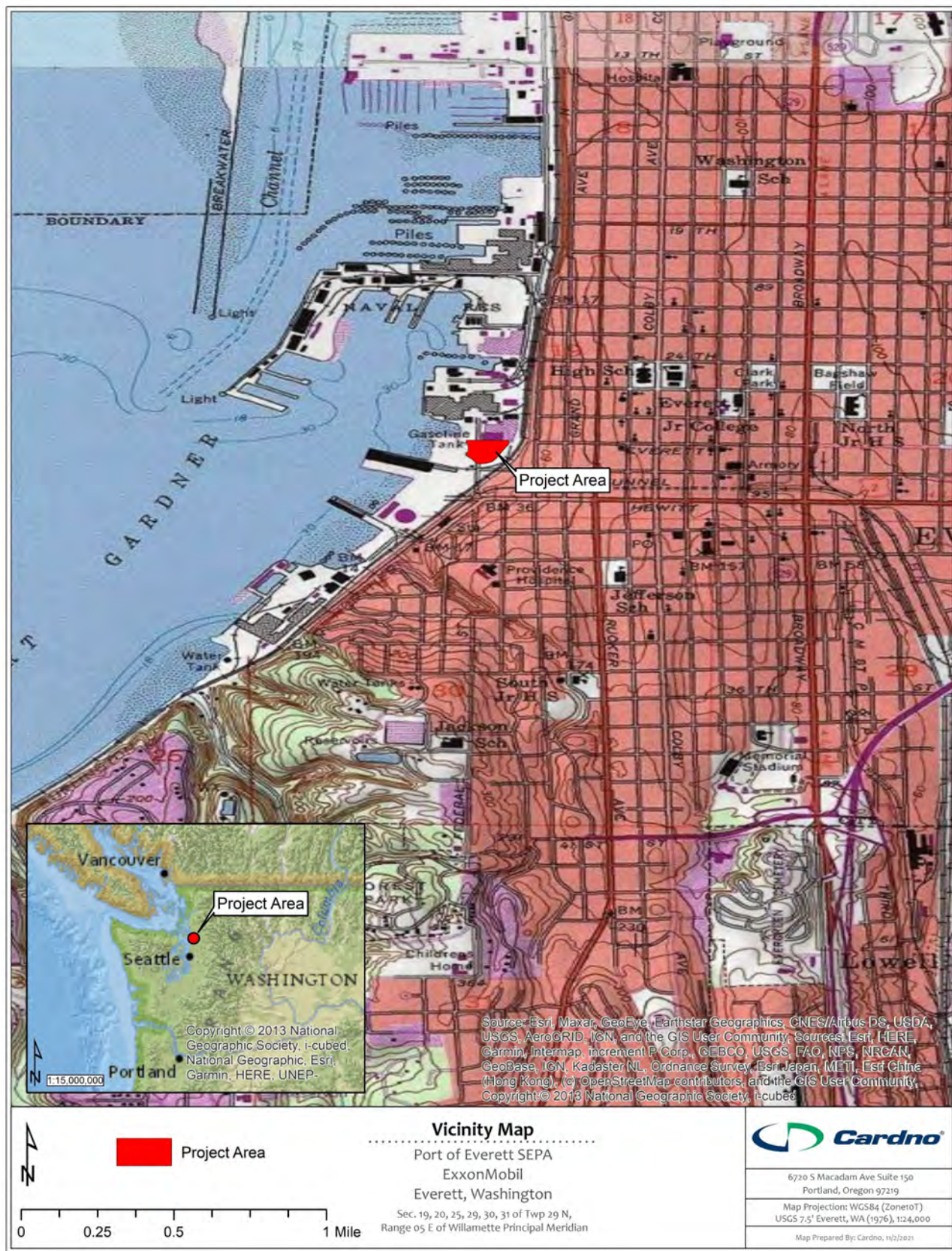


Figure 1. Project area and vicinity.

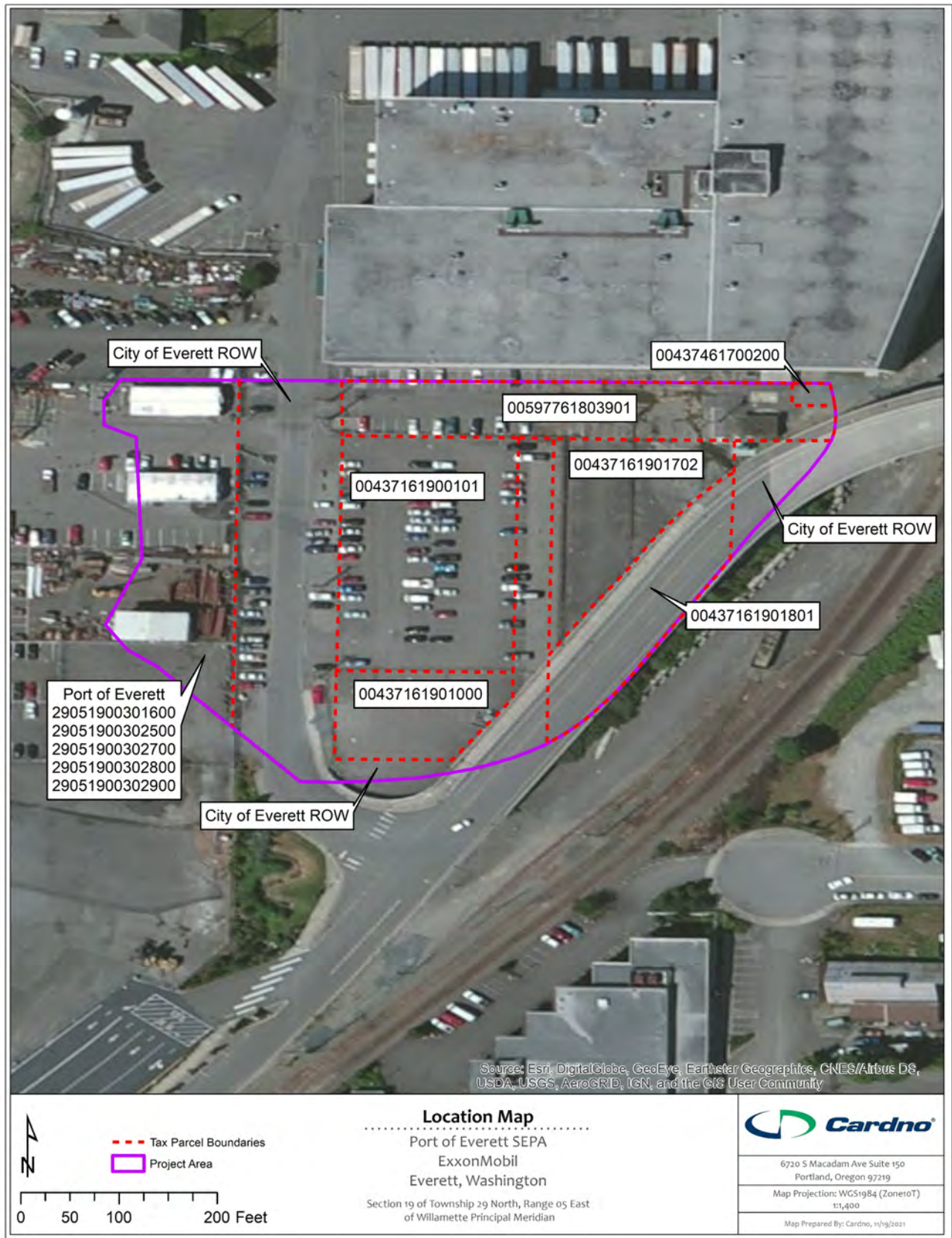


Figure 2. The project area denoting impacted Snohomish County tax parcels and City ROW.

Table 1. Snohomish County Tax Parcel Information.

Owners	Parcel Number(s)
Burlington Northern Railroad	00437161901702
City of Everett	00437161901801
Miller Trust (Cecilia Beverly Miller, beneficiary)	00437161900101
Mobil Oil Corporation	00437161901000
Port of Everett	00437461700200, 00597761803901, 29051900301600, 29051900302500, 29051900302700, 29051900302800, 29051900302900



Figure 3. Overview of project area, facing northeast.

2.0 Regulations

Cardno's cultural resources assessment was completed in compliance with Everett Municipal Code (EMC), Snohomish County Code (SCC), the State Environmental Policy Act (SEPA), and Revised Code of Washington (RCW). These regulations are discussed below. Additionally, information regarding other local, state, and federal regulations applicable to cultural resources is also provided.

2.1 Everett Municipal Code

EMC 19.28 outlines the process for identifying, listing, and protecting resources on the Everett Register of Historic Places and within historic overlay zones. Properties within historic overlay zones are governed by EMC 19.28.020 through 19.28.120. Criteria for placement on the Everett Register of Historic Places are described in EMC 19.28.130. Proposed changes to properties on the Everett Register are reviewed by the Everett historical commission per 19.28.140.

2.2 Snohomish County Code

SCC 30.67.340 requires developers and property owners to immediately stop work and notify the county, DAHP, and affected Indian tribes if archaeological resources are uncovered during excavation. It further stipulates that county permits issued in areas documented as containing archaeological resources require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

SCC 20.32D outlines the identification, evaluation, and protection of archaeological and historic resources within Snohomish County that are listed on the Washington State Archaeological Site Inventory. Additionally, it directs the preservation and rehabilitation of eligible historic properties for future generations. SCC 30.32D.020 established the Snohomish County Register of Historic Places, which includes historic buildings, sites, structures, objects, and districts within the county. SCC 30.32D.030-060 directs property designation to and removal from the Snohomish County Register of Historic Places, as well as alterations of properties on the register.

SCC 20.32D.070-100 outlines the process for obtaining and working under a certificate of appropriateness, and zoning. SCC 20.32D.200 requires recordation of archaeological sites. Additionally, completion of an archaeological report or relocation of a project is required for any construction, earth movement, clearing, or other site disturbance of a known archaeological site or any development application proposed on non-tribally owned, fee-simple properties designated Reservation Commercial on the Snohomish County Future Land Use Map. SCC 20.32D.220 outlines the process to follow if human remains or archaeological resources are found during construction, earth movement, clearing, or other site disturbance.

Lastly, SCC 30.32D.300 allows for an appeal process for any building permit issued with conditions imposed pursuant to this chapter. An appeal may occur as a Type 1 decision pursuant to SCC 30.71.

2.3 State Environmental Policy Act

The SEPA (RCW 43.21C) and its implementing rules contained in Washington Administrative Code (WAC) 197-11 require applicants to document cultural and historical significance that may be affected by project activities. The SEPA review process provides notice to all affected tribal, state, and private entities.

Per WAC 197-11-960, the SEPA checklist submitted to the local planning authority with an application for development review includes the following questions, which must be satisfactorily addressed to demonstrate that a project will not have a significant adverse impact on cultural and historic resources:

- 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? If so, specifically describe.*
- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.*

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 archaeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.*

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.*

2.4 Revised Code of Washington 27.44 and 27.53

Precontact and historic archaeological sites are protected by several Washington state regulations on both public and private lands. RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

If a person(s) violates this statute and knowingly disturbs or alters an archaeological site, the DAHP is allowed to issue civil penalties of up to \$5,000, in addition to site restoration costs and investigative costs per RCW 27.53.095. Restorative and monetary remedies do not prevent concerned Indian tribes from undertaking civil action in state or federal court or law enforcement agencies from undertaking criminal investigation or prosecution. If human remains and/or burials are disturbed, RCW 27.44.050 allows an affected Indian tribe to undertake civil action. Additionally, the excavation of human remains without a permit is a felony.

2.5 Revised Code of Washington 68.60

RCW 68.60 requires “expeditious” notification of local law enforcement and the coroner if skeletal human remains are discovered. Failure to notify is considered a misdemeanor.

2.6 Washington Administrative Code 25-48-060

The complete requirements for filing an archaeological excavation permit can be found in WAC 25-48-060. In the state of Washington, permits are required for alterations (e.g., excavation, removal, and collection of archaeological materials) at all precontact archaeological sites and at historic archaeological sites that are eligible for or listed in the National Register of Historic Places (NRHP).

2.7 Governor’s Executive Order 21-02

In 2021, Washington Governor Jay Inslee signed executive order 21-02, which supersedes the previous GEO 05-05. GEO 21-02 requires the preservation and protection of Washington’s cultural resources, which are defined as archaeological and historical sites, Native American sacred places and landscapes, and sites, buildings and places that hold special cultural historical, and spiritual significance. The GEO requires state agencies to review their capital construction projects and land acquisitions made for the purpose of a capital construction project that are not undergoing review under Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) with the Washington State Department of Archaeology and Historic Preservation (DAHP) and affected Indian tribes to determine potential impacts to cultural resources. GEO 21-02 outlines the steps of review and consultation that should be undertaken as early in the project planning process as possible. In the event a culturally significant site will be impacted by a capital project, the state agency must work with the DAHP and affected Indian tribes on appropriate archaeological survey and mitigation strategies consistent with state and federal laws. Additionally, the state agency must take reasonable action to avoid, minimize, or mitigate adverse effects to the resource.

2.8 Washington Heritage Register

The Washington Heritage Register (WHR) is an official listing of historically significant sites and properties found throughout the state and includes districts, sites, buildings, structures, and objects that have been identified and documented as being significant in local or state history, architecture, archaeology, engineering, or culture. The WHR is governed by several state laws, including Senate Bill 363, RCW 27.34.200, and WAC 25-12.

Any subdivision of state government or recipient of state funds must comply with the SEPA and Executive Order 21-02. These programs require that significant properties, specifically those listed in or eligible for the WHR, be considered when state undertakings (e.g., permits, grants, construction) affect historic and cultural values. If significant resources are identified, the DAHP considers the effects of a proposed project on such resources and makes a professional recommendation for appropriate treatments or actions. The DAHP does not regulate the treatment of properties that are found to be significant, and the local governing authority may choose to uphold the DAHP's recommendation and may require mitigation of adverse effects to significant properties.

2.9 National Register of Historic Places

The NRHP (16 U.S. Code 470a), created under the National Historic Preservation Act of 1966, as amended (16 U.S. Code 470 et seq.), is the federal list of historical, archaeological, and cultural resources worthy of preservation. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture and that possess integrity of location, design, setting, material, workmanship, feeling, and association. The NRHP is maintained by the National Park Service (NPS) on behalf of the Secretary of the Interior (SOI). The DAHP administers the statewide NRHP program under the direction of the State Historic Preservation Officer, located in Olympia, Washington. The NPS has developed NRHP Criteria for Evaluation (36 Code of Federal Regulations [CFR] § 60.4) to guide the evaluation of cultural resources that may be either listed in or eligible for the NRHP. The NRHP Criteria of Evaluation are:

Criterion A: Are associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: Are associated with the lives of persons significant in our past; or

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

NPS Bulletin No.15, "How to Apply the National Register Criteria for Evaluation," provides guidance on evaluating resources for listing in the NRHP. Archaeological sites are primarily assessed under Criterion D. While cultural resources may be present within the project area, if they do not meet the requirements for listing in the NRHP, they are not considered historic properties. Cultural resources less than 50 years old do not meet the NRHP criteria unless they are of exceptional importance, as described in Criteria Consideration G (36 CFR Part 60) and NPS Bulletin No. 22, "How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years."

3.0 Environmental Setting

The project area lies within the greater Puget Lowland physiographic province, which is a low-lying area between the Cascade Range to the east and the Olympic Mountains to the west. Puget Sound was

shaped by widespread continental glaciation that extended south from British Columbia to the northern Puget Lowland and along the western flanks of the Cascade Mountains (Miss 2008). This area is also known as the Puget Sound Trough physiographic province, which extends to the Cowlitz and Chehalis Rivers (Franklin and Dyrness 1988). The Vashon Stade of the Fraser Glaciation was the last glacial maximum in the region and is dated between 18,000 and 14,000 years before present (BP) (Easterbrook 2003). Rapid deglaciation, which saw the occurrence of meltwater channels and temporary ice marginal lakes, occurred after this glaciation. The land experienced isostatic rebound between 13,000 and 7000 years BP as global sea levels rose and deltas formed at the head of the Duwamish Valley, shaping the Puget Sound shoreline (Dragovich et al. 1994; Miss 2008). By 5000 years BP, the Puget Sound sea level was within 6.6 to 9.8 feet (2 to 3 meters [m]) of its current level (Kelsey et al. 2004; Sherrod et al. 2000).

The project area lies within the *Tsuga heterophylla* (western hemlock) vegetation zone in the Puget Lowland, which provides a highly productive ecological system with a complex mosaic of microenvironments (Franklin and Dyrness 1988). This vegetation zone is characterized by forests of western hemlock, western red cedar, and Douglas-fir. Shrub cover consists of sword fern, salal, Oregon grape, ocean spray, huckleberry, and red elderberry. The diversity of floral and faunal species in the area has decreased due to human settlement, which has led to a significant loss of faunal habitat. Additionally, historical and modern contaminants within Port Gardner Bay have significantly impacted mudflats, estuaries, tidal marshes, and shrub wetlands. The National Oceanic and Atmospheric Administration's Damage Assessment, Remediation, and Restoration Program (2021) notes that:

Releases of hazardous substances into Port Gardner Bay have resulted from industrial and municipal processes since the early 1900s, including factories, spills during cargo transfer and refueling, storm water runoff through contaminated soils at upland facilities, discharge of contaminated groundwater, and lumber operations, such as sawmills, and pulp and paper mills.

Prior to historical and modern impacts, the *Tsuga heterophylla* vegetation zone could support large terrestrial animals like elk, deer, black bear, and coyote and smaller mammals like rabbit, squirrel, racoon, beaver, and river otter. Currently, the project area is located within modified industrial landscape with paved ground surface. Recent subsurface investigations note that the near-surface soils consist of a heterogeneous mixture of fill materials. The fill materials consist of very loose to medium dense, brown, brownish gray, and gray silty sand and sand with areas of wood and brick debris extending to depths of approximately 5 to 10 feet below ground surface (bgs). Gray silty sand and silt and dark-brown to black peat mixed with wood debris are encountered beneath the shallow fill and extend up to 20 to 27 feet bgs (Wood 2019, Cardno 2020a, 2020b).

3.1 Archaeology

The earliest known occupations in western Washington, termed Paleo-Indian, are evidenced by the appearance of large, fluted projectile points dating to approximately 12,800 years BP (Ames and Maschner 1999; Carlson 1990). Paleo-Indians were primarily hunter-gatherers with low populations and high levels of mobility. Some researchers have argued that these early people were maritime oriented (Carlson 2003; Dixon 1993; Fedje and Christensen 1999; Fladmark 1979). In western Washington, sites from this period are rare. Much of the late Pleistocene terrain was uninhabitable due to glaciers, and the lands that were occupied by Paleo-Indians were predominately coastal reaches. During the glaciation period, ocean levels fell almost 400 feet globally (Kirk and Daugherty 2007), but with the onset of the warming Holocene, ocean levels rose and submerged many of these coastal sites. However, some sites are not submerged and instead are located above the present shoreline due to eustatic, tectonic, and isostatic effects that vary throughout the region (Fedje and Christensen 1999).

The Archaic period dates from approximately 12,500 to 6,400 years BP (Ames and Maschner 1999; Carlson 1990). Archaic-period sites, similar to Paleo-Indian sites, are poorly represented. Changes in sea level and vegetation have obscured many Archaic-period sites along the coast (Ames and Maschner

1999). However, as the glaciers receded, people were able to occupy larger expanses in the interior of the Puget Sound. Archaic-period peoples likely maintained small populations and high levels of mobility, and focused on a combination of maritime, littoral, and terrestrial economies. Archaic-period occupations are largely characterized by stone tool assemblages that are typically composed of large, stemmed lanceolate projectile points and bifaces. In addition, the Pacific Northwest Archaic period saw an introduction of microblades, which are sometimes present in stone tool assemblages (Ames and Maschner 1999).

Pacific-period sites date from approximately 6,400 to 250 years BP. The period ends at the introduction of smallpox to the region (Ames and Maschner 1999). The Early Pacific period (6,400 to 3,800 years BP) was marked by the increased use of marine resources, the appearance of human burials in middens and cemeteries, a diversification in subsistence activities, the disappearance of microblade technology, and the increased use of bone, antler, and ground stone tools. Major developments also included the appearance of ground stone celts (adze blades) and a proliferation in chipped-stone tool forms and styles, and decorative/ornamental pieces that likely represent contact and trade with groups in neighboring cultural areas (Kirk and Daugherty 2007). The Middle Pacific period (3,800 to 1,800/1,500 years BP) displays major developments including the appearance of long-term settlements (plank houses), intensification of salmon capture (appearance of wooden fish weirs and girdled/drilled net sinkers), and a diversification in tool form and style. Late Pacific period (1,800/1,500 to 250 years BP) developments are represented by the appearance of heavy-duty woodworking tools, an overall decline in the use of chipped-stone tools, and an increase in funerary ritual/burial activities. Sea levels became stable by the start of the Middle Pacific period, and sites representing the Middle and Late Pacific periods are located across the Northwest Coast region (Ames and Maschner 1999).

3.2 Ethnography

The project area lies within the traditional territory of the Snohomish. Since time immemorial, the Snohomish people lived in various locations along the Snohomish River from present-day Monroe to the mouth of the river near Everett, on Camano Island, and on Whidbey Island (Ruby and Brown 1992:212; Tweddell 1974). The region was utilized for resource gathering, hunting, and villages/seasonal habitations. However, there are no known ethnographic sites within the immediate project area (Waterman et al. 2001).

The Snohomish spoke the southern dialects of Lushootseed—a Salish language (Suttles and Lane 1990:486). The Snohomish people followed a seasonal settlement pattern. Winter villages, composed of one or more cedar plank houses where families gathered in the late fall, were typically located along waterways, such as at the mouth of the Snohomish River, river confluences, or protected shorelines (Haeberlin and Gunther 1930; Lane and Lane 1977). During the winter months, they relied on stored foods supplemented by local hunting and fishing (Suttles and Lane 1990).

Coast Salish peoples developed a complex social and religious system in part due to the abundance of food and raw materials (e.g., wood, plants, stone) (Haeberlin and Gunther 1930). Potlatches and spirit quests were important activities in the pursuit of spiritual power, in addition to asserting control over resources and neighboring groups (Elmendorf 1971). Social stratification existed among Coast Salish groups, where villages consisted of elite, commoner, and slave classes (Ames 2001; Grier 2003; Tollefson 1987).

Winter housing consisted of large, multifamily longhouses constructed of cedar planks. Sleeping platforms lined the walls, and storage shelves for winter supplies were typically located on the walls above these sleeping platforms. Fires were located near the sides, and the central area was used as a passageway. Shed-roof houses were a common design among the Coast Salish in the Puget Sound region (Suttles 1991). This house type easily allowed for the addition of rooms when populations increased, such as during winter months, and for the reduction in house size when occupants left for summer food collection

rounds (Suttles 1991). Often, the different placements of sleeping platforms and individual fires portrayed status, where those with the highest status lived in the back of the house and commoners and slaves lived closer to the entryways (Suttles 1991).

During the spring, summer, and fall, people would journey from central villages to temporary camps. Camps were located along streams during salmon runs while smaller groups would hunt, fish, and gather plant resources. Gathering was most intensive during spring and summer. Plants such as cattail (*Typhaceae* spp.), cranberry (*Oxycoccus* spp.), wapato (*Sagittaria latifolia*), and salmonberry (*Rubus spectabilis*) shoots were collected from wetlands, such as those found along Lake Stickney (located directly west of the project area), and prairies were visited for gathering camas (*Liliaceae* spp.) bulbs (Haeberlin and Gunther 1930; Turner 1976).

A typical summer house was constructed for short-term occupation, and they were typically tipi or square-shaped. Mats were placed horizontally over a frame of poles to create the tipi, while square houses were a lean-to type form, with mats placed over a wooden structure with a gabled or single pitch roof. Short-term occupation mountain camps were made using a similar square form, but covered with boughs of various tree species. Another style of summer house consisted of four corner poles with horizontal poles placed on top to create a gable. Cedar twigs held the framework together, while mats covered the roof and three sides (Haeberlin and Gunther 1930).

The Tulalip Reservation was authorized under the Treaty of Point Elliot in 1855, and enlarged in 1873, as the home for several indigenous groups including the Snohomish, Stillaguamish, Snoqualmie, Skykomish, and other allied bands living in the region (Ruby and Brown 1992; Tulalip Tribes 2014). Some among these groups moved to the reservation, while others remained living on their traditional lands. The combined tribes became known as the Tulalip Tribes.

Cardno is not aware of any known ethnographic place names within the project area or immediately adjacent. However, there are several ethnographic place names recorded in the general vicinity of the project area and near the mouth of the Snohomish River (Waterman 1922; Waterman et al. 2001:336-342). Non-English names are Lushootseed when available.

16 *ʔusʔusič* (Watermann orthography: *Osʔa/s1tc*) translates to “chasing a fish here and there” near an estuary between Steamboat and Union Sloughs.

16a *bəluʔəb* (Watermann orthography: *PEʔls1b*) translates to “boiling,” for an area at the mouth of the main Snohomish River channel.

17 *čikʷucid* (Watermann orthography: *Ctcqoʔtsid*) translates to “that which chokes up the mouth of something,” for a small island located on the north side of the Snohomish River mouth.

18 *sexʷčulalqʷ* (Watermann orthography: *SExwtculalkw*) is noted for a sharp point of land running toward the Ctcqoʔtsid island.

19 *hibuləb* (Watermann orthography: *Hibuʔub*) translates to “place where water boils out of the ground,” for a former village site south of the Snohomish River mouth.

20 Watermann orthography: *SEqʷsuʔub* is noted for a small promontory with a slough that runs parallel to the shore.

21 *sluluw#* (Watermann orthography: *SLuʔluw1L*) translates to “little perforation for a canoe,” for a narrow channel passing behind an island.

22 *ʔuxʷat* (Watermann orthography: *tLʔoʔhwaL*) translates to “a cold spring” for a spot on the river bank opposite Everett.

3.3 Historical Context

Cardno referenced GLO land patents and cadastral maps for Township 29 North, Range 5 East as well as Snohomish County atlases and USGS topographic survey maps to determine changes in built environment features (e.g., piers, docks, railroads, buildings, and/or roads) in or near the project area (Table 2). According to the results of a land patent search through the Bureau of Land Management (BLM), in 1876 Dennis Brigham was granted a total of 160.15 acres for Lot/Tract 2, Lot/Tract 3, and Lot/Tract 4 within Section 19 of Township 29 North, Range 5 East. Brigham, a carpenter from Massachusetts, arrived in the Everett area in 1861 to begin the homesteading process. Considered the first permanent settler in the area, Brigham constructed a cabin on his acres near Port Gardner Bay and lived a solitary life (Oakley 2005). During the early 1860s, a lone telegraph operator "...and Brigham were the only settlers between Mukilteo and the mouth of the Snohomish River for many years" (Whitfield 1908: 285). Later, John Auson King claimed Lot/Tract 1, immediately north of Brigham within Section 19 (BLM 1874). These lands grants were authorized under the Land Act of 1820 and the Homestead Act of 1862. These acts reduced the price of federal lands and gave citizens up to 160 acres each of public land for improvement.

Table 2. Results of Cartographic Analysis.

Year	Author/Company	Description of project area
1869	BLM	The project area is located within Section 19, which is partially submerged in Port Gardner Bay. A trail extends along the east bank and connects to a telegraph office and through property homesteaded by "Brigam."
1902	Sanborn Map Co.	Federal Ave extends north through the railroad and ends at the west extent of Everett Ave. Lot/Tract 618 and 619 are labeled, but show no company or ownership. Block 619 contains 30 structures consisting of dwellings with associated outbuildings. Block 618 depicts 11 more structures labelled "Squatters Shacks." Area noted as "marsh."
1910	Anderson Map Co.	Several rail spurs extend west to docks and piers owned by G.N. Ry. Co., N.P. Ry. Co., and Everett Imp. Co. project area is situated west of Everett Ave terminus with railroad and tideland additions (labeled 618 and 619).
1914	Sanborn Map Co.	"Squatters shacks" have been removed from Blocks 618 and 619. Shoreline cuts northeast from intersection of Federal Ave and Everett Ave. Two structures are depicted in the southwest area of Block 618 near the waterline. Area noted as "marsh."
1927	Chas. F. Metsker	Project area is depicted west of main roadways within railroad and dock area of Port Gardner Bay. Sections 20 and 19 are not labeled.
1934	Kroll Map Co.	Project area is noted within an undetailed area heavily utilized by railroad and docks.
1936	Chas. F. Metsker	G.N. Rwy. Depicted east of project area with spurs to "City Dock" and other businesses. North of project area is Clark Nickerson Lbr. Co., and docks to west noted as 13, 14, and 21.
1943	Kroll Map Co.	Same as Kroll (1934).
1950	Sanborn Map Co.	Significant development of Blocks 618 and 619. General Petroleum Corporation, Gilmore Oil Co., and the Associated Oil Company have all constructed warehouses and fuel oil tanks. Within Port Gardner Bay there is a pier (Standard Oil Co.) and an outfitting basin.
1960	Thos. C. Metsker	Federal Street depicted within its current alignment. The project area is noted within property owned by Standard Oil. The block (619 and 618) contains storage tanks.
1960	Kroll Map Co.	Same as previous.

Year	Author/Company	Description of project area
1975	Chas. F. Metsker	Scott Paper Co. is north of the project area. Standard Oil property with storage tanks is located within the project area.
198x	Chas. F. Metsker	Same as previous.
1992	Metsker Maps	Same as previous.

The 1869 survey plat image for Township 26 North, Range 5 East, depicts a telegraph line aligned north-south along the east side of Port Gardner Bay. A “Telegraph Office” is noted south of Section 19. This telegraph line “followed along the beach from Seattle to Whatcom” (Whitfield 1908: 285). In the southeast quarter of Section 19, a small cabin is noted along with the misspelled label of “Brigam” (BLM 1869). In 1890, the Brigham homestead property was purchased by Wyatt and Bethel Rucker with plans to create a townsite called “Port Gardner” (Oakley 2005). During the next year, the Ruckers became associated with Henry Hewitt Jr., Charles L. Colby, and other optimistic landowners and incorporated the Everett Land Company. By 1891, the main thoroughfare called Hewitt Ave was cut east to west and 100 feet wide.

Development of the townsite, now called Everett after Charles Colby’s son, continued with stump removals, street grading, and the sale of Everett Land Company lots (Oakley 2005; Port of Everett 2021). The Everett Land Company won ownership of the waterfront in 1892. In April of 1893, Everett was incorporated and boasted more than 5,600 citizens supported by streetlights, streetcars, sawmills, railroads, and residential and commercial expansion. However, the Panic of 1893 led to a withdrawal of investments and money in the Everett Land Company. The holdings of the Everett Land Company were transferred to the Everett Improvement Company in 1899 (Oakley 2005).

Evidence of development revitalization is visible in a 1902 map in the numerous land lots divided and numbered to the East Waterway shoreline of Port Gardner Bay (Figure 4; Sanborn Map Co. 1902). Federal Ave extended north through the Great Northern Coast Line and terminated at the westerly extent of Everett Ave. At this time, no company or business name was noted on the Sanborn Fire Insurance Map within the project area. Within properties directly north of the project area, large structures are depicted for the Everett Flour Mill Co. and the Clark Nickerson Lumber Co.

The color-coded key indicates that within Block 619 within the project area, structures consisted of “frame building” (Sanborn Map Co. 1902). The detailed map page for Block 619 contains 30 frame structures, all dwellings and associated outbuildings, situated around a marshland at the center of the block (Figure 5). Within each dwelling, the maps include a notation of “S.P.,” which is specially called out on the key map introduction: “NOTE Practically all dwellings with a “S.P.” (Stove pipe) are cheap, unpainted shacks” (Sanborn Map Co. 1902: Key Map). Eleven additional “S.P.” buildings consisting of dwellings, outbuildings, bath house, and boat house, are depicted within Block 618 to the north of the project area, and noted as “Squatters Shacks” (Sanborn Map Co. 1902).

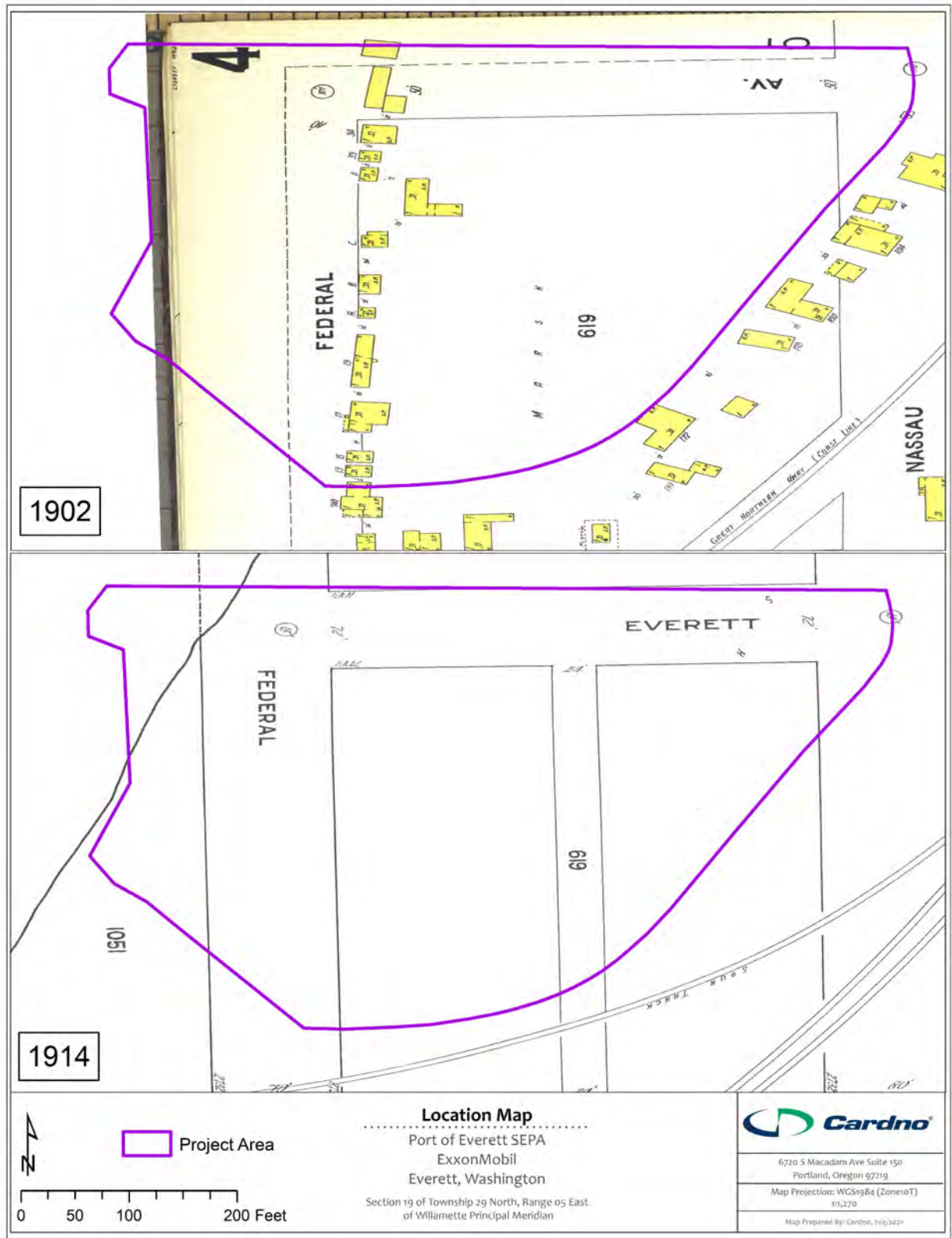


Figure 4. Details from 1902 and 1914 Sanborn Fire Insurance Maps (Sanborn Map Co. 1902, 1914).

Historical maps illustrate a changed landscape. In 1910, railway spurs extended west from the mainline to docks and piers owned by “G.N.Ry.Co.,” “N.P.Ry.Co.,” and “Everett Imp. Co.”:

“G.N.Ry.Co.” – Great Northern Railway

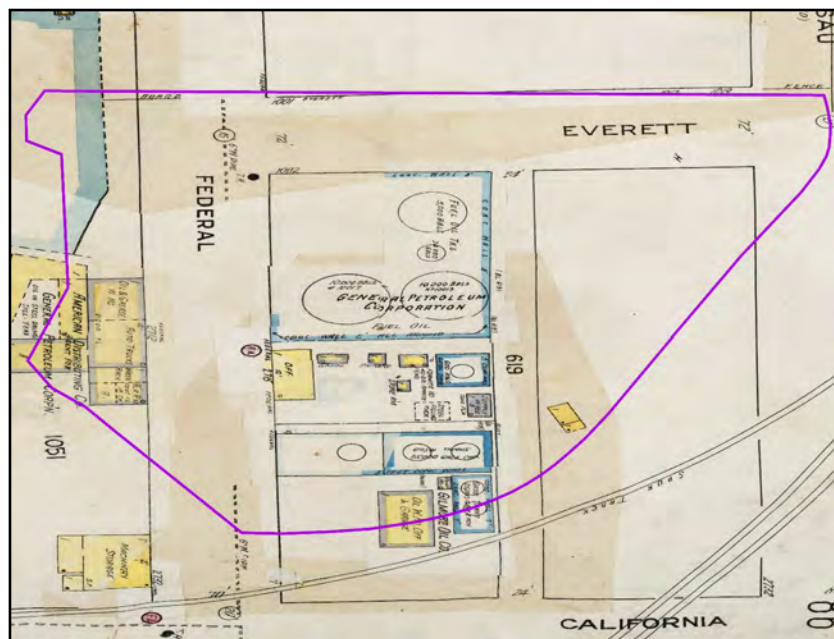
“N.P.RY.Co.” – Northern Pacific Railway

“Everett Imp. Co.” – Everett Improvement Company

By 1914 the “squatters shacks” north of the project area had been removed, and increasing development of piers and docks is evident (see Figure 4; Anderson Map Co. 1910; Sanborn Map Co. 1914). The position of the site between the railroad and waterfront was highly conducive to industrial uses. Between 1914 and 1950, the east shoreline of Port Gardner Bay was significantly filled and artificially extended into the East Waterway. Additionally, docks and piers expanded the industrial and commercial landscape west of the historical extent of Federal Ave (Sanborn Map Co. 1950).

By 1925, the northern part of the project area contained at least two large “General Petroleum Corporation” tanks, three smaller unlabeled tanks, and three gable-roof outbuildings just south of Everett Avenue. The project area spans Federal Avenue, across which was one large “General Petroleum Corporation” warehouse complex near the shoreline. Predecessors of ExxonMobil, owned the project area site beginning in 1927 (Washington Department of Ecology 2021).

The warehouse complex contained automobile truck storage, an oil and grease warehouse, a wash rack room, a boiler room, and an oil in steel drum staging yard adjacent to a wooden bulkhead (Figure 5; Sanborn Map Co. 1939 [Revised through June 1955]). By 1947 development within the project area had been expanded significantly to the south (Figure 6). Additional infrastructure constructed included several cylindrical petroleum tanks each containing 25,000 gallons of gasoline, eight outbuildings including a wooden office building, pump room, and warehouses, and a steel filling rack (Figures 5, 7, and 8; Sanborn Map Co. 1939 [Revised through June 1955]). The shoreline has not been modified with fill since approximately 1950 (Figure 9). An Everett USGS map from 1953 shows the area developed with gasoline tanks and a pier directly adjacent to the company warehouse complex (Figure 10). It does not appear the eastern portion of the project area was ever significantly developed.



**Figure 5. Project area displayed on 1939 Sanborn Fire Insurance Map.
(Sanborn Map Co. 1939 [Revised through June 1955])**



Figure 6. Project Area depicted on aerial imagery from 1947 (Image courtesy of ExxonMobil 2021).



Figure 7. Photograph of project area viewed facing north, taken from south end of site (Washington Department of Ecology 2021).



Figure 8. Undated photograph showing gasoline infrastructure after General Petroleum Corporation was rebranded to Mobilgas. The office building on the site is at the right. (Washington Department of Ecology 2014:65)

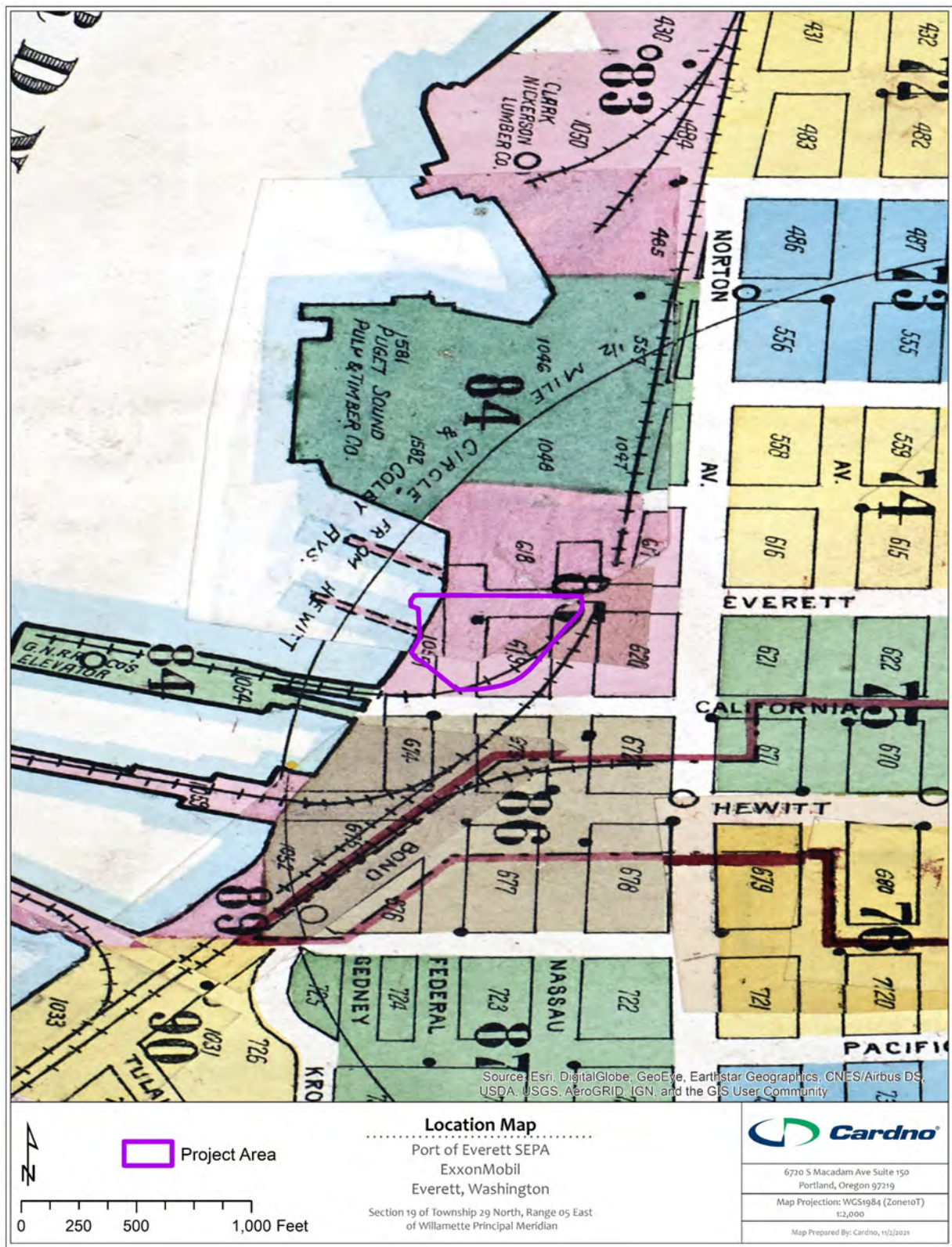


Figure 9. Project Area depicted on 1950 Sanborn Insurance Map (Sanborn Map Co. 1950).

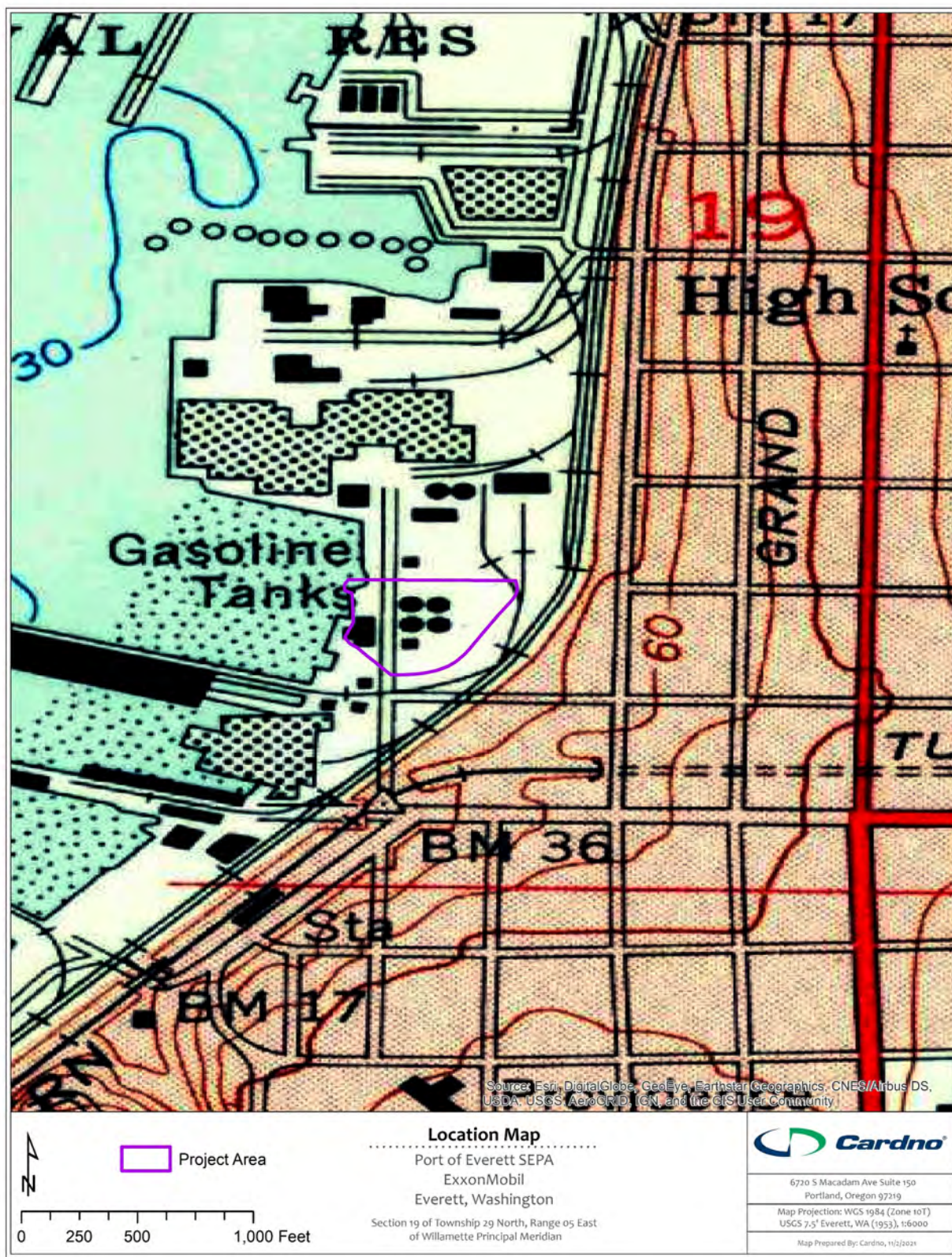


Figure 10. Project area depicted on the 1953 Everett USGS 7.5-minute quadrangle (USGS 1953).

In 1974, Mobil Oil sold the northern part of the project area to A.P. Miller for use by the American Distributing Company (ADC) who continued petroleum operations until 1990 (Washington Department of Ecology 2021). By 1977 the warehouse complex across Federal Avenue and the office building had been demolished (Figure 11). Mobil Oil ceased petroleum operations on the project area in 1987. All remaining infrastructure at the site was demolished between 1998 and 2002, and the project area was used as a parking lot (Washington Department of Ecology 2021). In late 2003 Terminal Avenue was developed adjacent to the site. The project area experienced continued development and change over several years precluding the identification of a particular year or period of importance of the petroleum infrastructure which was once extant.



Figure 11. A 1977 aerial photograph of the project area (Washington Department of Ecology 2021).

3.1 Literature Review

Cardno archaeologists conducted a background search and literature review of existing cultural resource records; local, state, and national register nomination forms; previous cultural resources investigations; and any known or potential TCPs in and within 1.0 mile (1.6 km) of the project area. According to the DAHP's predictive model available on the WISAARD online database, there is a very high risk of encountering buried precontact archaeological deposits in the project area.

3.1.1 Previous Investigations

The background search identified 15 cultural resources investigations that have been previously conducted within 1.0 mile (1.6 km) of the current project between 1975 and 2020 (Table 3). Seven investigations were surveys, two involved construction monitoring, two were historic structures surveys, three provided larger prehistoric and historic context for the area, and one was a monitoring and discovery plan. Recently, four cultural resources investigations fall within or immediately adjacent to the project area, as plotted by WISAARD (see Table 3): Johnson 2000; Rinck et al. 2013; Undem et al. 2014; Johnson 2020.

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (n = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
1975	Dunell and Fuller	An Archaeological Survey of Everett Harbor and the Lower Snohomish Estuary-Delta	1332098	Survey Report	project area within Study Area
1987	Blukis Onat	Resource Protection Planning Process Identification of Prehistoric Archaeological Resources in the Northern Puget Sound Study-Unit	1349367	Overview	Overview of Area
1988	Evans-Hamilton, Inc.	The Location, Identification and Evaluation of Potential Submerged Cultural Resources in Three Puget Sound Dredged Material Disposal Sites	1340504	Survey Report	0.84 mile west
1991	Miss and Campbell	Prehistoric Cultural Resources of Snohomish County, Washington	1334282	Overview	Overview of Area
1998	Demuth	Technical Report: Historic, Cultural, and Archaeological Resources Assessment for Everett-to-Seattle Commuter Rail Project Environmental Impact Statement	1340269	Overview	Overview of Area
2000	Johnson	Letter to Molly Adolfson Regarding Proposed California Street Overpass, Everett	1344193	Survey Report	Within project area
2006	Juell	Archaeological Site Assessment of Sound Transit's Sounder: Everett to Seattle Commuter Rail System, King and Snohomish Counties	1348189	Survey Report	0.38 mile south
2008	Hartmann	Cultural Resources Assessment for the Swift Bus Rapid Transit Project	1351380	Survey Report	0.54 mile southeast
2011	Lenz et al.	Cultural Resources Assessment for the Broadway Bridge Replacement Project, Everett	1682948	Survey Report	0.68 mile west
2013	Pinyerd	Downtown Everett #SE03XC527 1602 Hewitt Ave., Everett	1683379	Historic Structures Survey Report	0.37 mile southeast
2013	Rinck	Cultural Resources Monitoring and Discovery Plan for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Monitoring and Discovery Plan	0.11 mile north
2013	Rinck et al.	Archaeological Resources Assessment for the Kimberly-Clark Worldwide Site Upland Area, Everett	NA	Survey Report	0.06 mile north

Table 3. Cultural Resources Investigations within 1.0 Mile of the project area (*n* = 15).

Year	Author	Report Title	NADB Number	Report Type	Location Relative to project area
2014	Udem et al.	Letter to Steve Geriat RE: Results of Cultural Resources Monitoring at the Kimberly-Clark Worldwide Site Upland Area, Everett	1685767	Monitoring Report	0.11 mile north
2014	Sackett	Architectural Survey and Evaluation: Naval Station Everett	1685545	Historic Structures Survey Report	0.47 mile west
2020	Johnson	FINAL Results of Archaeological Monitoring for the Kimberly-Clark Everett Interim Action	1694736	Monitoring Report	0.07 mile north

In 2000, Paragon Research Associates conducted a survey for roadway connector alternatives between Everett Ave that would impact “Maggie’s Park” (Johnson 2000). Maggie’s Park, located approximately 400 feet east of the project area, is located within the Brigham land claim and possibly near the location of the original cabin. However, no archaeological materials have been identified to confirm this claim. Johnson conducted a pedestrian survey and identified no cultural materials.

In 2013, SWCA Environmental Consultants (SWCA) conducted an extensive study and background review for the Kimberly-Clark Worldwide Site Upland Area SEPA process (Rinck et al. 2013). This project area is located within 56 acres of upland lands and 12 acres of tidelands within the north parcel immediately adjacent to the current project area. Previously, this area was utilized as for industrial purposes which has contaminated the area. The first mill within this project area was the Robinson ad Company Mill, which began operations in the early 1890s. By 1901, this area contained an extensive sawmill and planning facility for the Clark-Nickerson Lumber Company. During the background review, SWCA identified the project area as containing a high potential for precontact and historical cultural materials within the natural Port Gardner shoreline. In response to the potential for buried archaeological materials, SWCA developed a site-specific Monitoring and Discovery Plan (MDP) (Rinck 2013).

SWCA performed archaeological monitoring for cleanup excavations at the Kimberly-Clark Worldwide Site Upland Area (Udem et al. 2014). Within one area, excavations intersected natural sediments underlying historic-period fill. Within Location 11, archaeologists observed miscellaneous historic debris and architectural remnants located between 2 and 6 feet below ground surface. One precontact artifact was documented during monitoring—45SN00629, an edge-altered basalt cobble (Udem 2014).

Archaeological monitoring continued at the Kimberly-Clark Worldwide Site Upland Area in 2020 (Johnson 2020). Archaeologists observed architectural and structural debris within the historic fill layer, likely associated with historical mill operations. No precontact materials or intact sediment layers were observed.

3.1.2 Archaeological Resources

One archaeological resource is recorded within a 1.0-mile (1.6-km) radius of the project area. The archaeological resource (45SN00629) is a precontact isolated find identified within historic dredge material underneath a parking lot (Udem 2014; Udem et al. 2014). Historically, the property was the location of a mill situated at 2600 Federal Avenue (Boswell and Sharley 2012). The single lithic artifact was recorded as an edge-altered basalt cobble with 13 multidirectional flake scars on one end. The artifact was donated to the Hibulb Cultural Center (Johnson 2020).

3.1.3 Built Environment

No historic properties listed in the NRHP, WHR, and/or ERHP are located within or immediately adjacent to the project area. Twelve properties listed in the NRHP are located within 1.0 mile (1.6 km) of the project area (Table 4). Additionally, two historic districts are located within 0.5 mile (0.8 km) of the project area: Hewitt Ave Historic District (45DT00231) and Rucker Hill Historic District (45DT00155). Four properties are listed in the WHR. Twenty-seven properties are listed on the ERHP, and all three Everett historic overlay districts begin within one mile of the site. Several properties are listed on more than one register. The dates of significance for the historic properties range from 1892 to 1967. There are no properties listed on the Snohomish County Register of Historic Places within one mile of the project area.

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Roland & Nina Hartley House/Hartley Mansion (45SN00337)	2320 Rucker Ave	1910	Listing No. 86000958; Resource ID 676163 WHR, NRHP	Lambert	1986	0.37 mile northeast
Everett High School (45SN00351)	2400 Colby Ave	1910	Listing No. 97000493; Resource ID 676177 WHR, NRHP	Ravetz	1996	0.35 mile northeast
Everett Public Library (45SN00341)	2702 Hoyt Ave	1934	Resource ID 676167 WHR	Dilgard	1989a	0.27 mile east
Knights of Columbus Community Center and War Memorial Building (45SN00132)	1611 Everett Ave	1921	Listing No. 79002554; Resource ID 676151 WHR, NRHP	Potter	1975c	0.40 mile east
Pioneer Block – Everett (45SN00127)	2814-2816 Rucker	1892	Resource ID 676145 WHR	Lambert	1979	0.23 mile southeast
Marion Building, Hotel Marion, Tontine Saloon (45SN00128)	1401 Hewitt Ave	1895	Resource ID 676146 WHR	Dilgard	1979	0.27 mile southeast
Everett Theatre (45SN00115)	2911 Colby Ave	1901; 1924	Resource ID 676133 WHR	Potter	1975a	0.41 mile southeast
Monte Cristo Hotel (45SN00117)	1507 Wall Street	1925	Listing No. 76001907; Resource ID 676135 WHR, NRHP	Potter	1975b	0.39 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (n = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
U.S. Post Office and Customs House (45SN00135)	3006 Colby Ave	1917	Listing No. 76001909; Resource ID 676154 WHR, NRHP	Potter	1975d	0.43 mile southeast
Everett City Hall (45SN00344)	3002 Wetmore Ave	1929	Listing No. 90000674; Resource ID 676170 WHR, NRHP	Dilgard	1989b	0.48 mile southeast
Snohomish County Courthouse (45SN00116)	3000 Rockefeller Ave	1910; 1967	Listing No. 75001870; Resource ID 676134 WHR, NRHP	Potter	1975e	0.56 mile southeast
Everett Carnegie Library/Cassidy Funeral Home (45SN00133)	3001 Oakes Ave	1904; 1905	Listing No. 75001868; Resource ID 676152 WHR, NRHP	Potter	1975f	0.62 mile southeast
Commerce Building (45SN00345)	1801 Hewitt Ave	1910	Listing No. 92001290; Resource ID 676171 ERHP, WHR, NRHP	Sullivan	1992	0.52 mile east
Everett Fire Station No. 2 (45SN00342)	2801 Oakes Ave	1925	Listing No. 90000673; Resource ID 676168 WHR, NRHP	Dilgard	1989c	0.57 mile east
Rucker House (45SN00134)	412 Laurel Dr	1901	Listing No. 75001869; Resource ID 676153 WHR, NRHP	Potter	1975g	0.62 mile southwest
Hewitt Avenue Historic District (45DT00231)	1620 - 1915 Hewitt Avenue and portions of Wetmore, Rockefeller, Oakes, and Lombard Avenues	1894–1959	Listing No. 10001020; Resource ID 674762 WHR, NRHP	Fürész	2010	0.44 mile east
Rucker Hill Historic District (45DT00155)	Laurel, Snohomish, Niles, Warren, Bell, Tulalip, 33rd and 34th	1905–1930	Listing No. 89000399; Resource ID 674698 WHR, NRHP	Ravetz	1988	0.45 mile southwest

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Rucker-Grand Historic Overlay Zone	Rucker and Grand Avenues between 10th and 24th Streets		N/A ERHP			0.37 mile northeast
Norton-Grand Historic Overlay District	Norton and Grand Avenues between Pacific Avenue and 3612 Norton Avenue		N/A ERHP			0.34 mile south
Riverside Historic Overlay District	N/A	Established 2008	N/A ERHP			0.88 mile east
Fratt Mansion (45SN00680)	1725 Grand Ave	1904	Listing No. 100000991 Resource ID 678273 ERHP, WHR, NRHP	Cope & Gillette	2017	0.91 mile northeast
Sittig House	1927 Rucker Ave	1893	N/A ERHP	O'Donnell	2018	0.75 mile northeast
Cleaver Clough House	2031 Grand Ave	1907	N/A ERHP			0.64 mile northeast
Hilzinger House	2108 Rucker Ave	1907	N/A ERHP			0.63 mile northeast
Wright House	2112 Rucker Ave	1905	N/A ERHP			0.61 mile northeast
Blackman House	2208 Rucker Ave	1910	N/A ERHP			0.54 mile northeast
Austin House	2201 Rucker Ave	1897-1900	N/A ERHP			0.57 mile northeast
Agnew House	2301 Rucker Ave	1899	N/A ERHP			0.49 mile northeast
Krieger Laundry	2808 Hoyt Ave	1915	N/A ERHP			0.3 mile southeast
Walsh Platt/Fisher Motors Building	2902 Rucker Ave	1930	N/A ERHP			0.27 mile southeast
Everett Downtown Storage	3001 Rucker Ave	1919	N/A ERHP			0.36 mile southeast
Howard House	3410 Snohomish Ave	1912	N/A ERHP			0.69 mile southwest
Jackson House	3602 Oakes Ave	1906	N/A ERHP			0.97 mile southeast
Culmback Building	3013 Colby Ave	1924	N/A ERHP			0.48 mile southeast

Table 4. NRHP/WHR/ERHP-Listed Properties Located within 1.0 Mile of the project area (*n* = 33).

Property Name	Address	Date Built	Property/Inventory No./Resource ID	Author	Year	Location Relative to project area
Port Gardner Building	2802 Wetmore Ave	1929	N/A ERHP			0.43 mile east
Bank of Everett (Cope Gillette Theatre)	2703 Wetmore Ave	1963	N/A ERHP			0.44 mile east
Challacombe & Fickel Building	2727 Oakes Ave	1923	N/A ERHP			0.59 mile east
Evergreen Building	1909 Hewitt Ave	1902	N/A ERHP			0.62 mile southeast
Watson's Bakery	1812 Hewitt Ave	1910	N/A ERHP			0.57 mile southeast
Morrow Building	2823 Rockefeller Ave	1925	N/A ERHP			0.54 mile southeast
Van Valey House	2130 Colby Ave	1914	N/A ERHP			0.64 mile northeast
Sahlinger-Muck	2319 Colby Ave	1908	N/A ERHP			0.56 mile northeast
Clark Park	2400 Lombard Ave	1894	N/A ERHP			0.66 mile northeast
Ray Fosheim House	2017 26 th St	1892	N/A ERHP			0.7 mile northeast
Lettelier House	2510 Baker Ave	1908	N/A ERHP			0.98 mile northeast

Three historic properties located within 0.5 mile (0.8 km) of the project area have been recommended and determined eligible for listing in the NRHP and/or WHR (Table 5). The Kimberly-Clark Everett Mill Main Office (Property ID 667716) is within 0.09 miles of the project area. The building was originally constructed in 1929 and consisted of a two-story Neoclassical rectangular structure with red brick cladding and low-pitched hipped roof. The building has a projecting Classical portico and round, white-painted Tuscan columns. In the 1940s and 1950s, the building underwent several alterations including the addition of two dormers on the roof, an addition to the south elevation of the building, the addition of a poured concrete deck and steps, and window replacements. The building is recommended as eligible for listing in the NRHP under Criterion A and listing in the WHR based on its historical association with the industrial development of Everett (Sharley 2012). All other listed and eligible properties are separated from the project area by the BNSF Railway train tracks. Most listed properties within one mile of the project area are clustered in areas to the east and to the north-northeast.

Table 5. Properties Recommended Eligible Located within 0.5 Mile of project area ($n = 3$)

Property Name	Address	Date Built	Property ID/ Resource ID	Author	Year	Location Relative to project area
Kimberly-Clark Everett Mill Main Office	2600 Federal Ave	1929	Property ID 667716; Resource ID 614724	Sharley	2012	0.09 mile north
Daulph Delicatessen	1416 Hewitt Ave	1927	Property ID 18268; Resource ID 12597	Dilgard and Riddle	1989	0.33 mile east
Everett Main Post Office	3102 Hoyt Ave	1964	Property ID 270916	Richards	2014	0.44 mile southeast

3.1.4 Cemeteries and Burials

According to information provided on the DAHP's WISAARD, there are no historic or precontact burials located within 1.0 mile (1.6 km) of the project area. One historic columbarium is located approximately 0.47-mile northeast of the project area (DAHP 2009). The Trinity Episcopal Church Columbarium (45SN00555) is situated at 2301 Hoyt Ave. The church was dedicated in 1921 with a new parish hall constructed in 1961 (Trinity Episcopal Church 2019). No further information is provided regarding the columbarium.

3.2 Cultural Resources Summary

Archival research indicates a high level of human activity took place adjacent to the project area during precontact and historic times. Given the history of the project area and its immediate vicinity, Cardno concludes that the potential for encountering subsurface archaeological deposits beneath the historic fill layers is moderate to high. Historical land modification, including the introduction of artificial fill and development, reduces the likelihood of encountering in situ precontact artifacts. Ethnographic-period archaeological deposits within and adjacent to the project area may include disturbed or redeposited midden deposits, burials, evidence of a village, or debris associated with short-term occupations and resource-processing locations. Historic-period deposits may include debris from agricultural and historic homestead structures and other early-twentieth-century structure (i.e., "squatters shacks"), or from manufacturing or commercial development.

4.0 Recommendations

Cardno recommends that a monitoring and inadvertent discovery plan (MIDP) be implemented to minimize potential impacts to any currently unknown intact archaeological resources. Monitoring should not be necessary in glacial deposits and sediments, nor in existing areas where disturbance has already occurred.

Cardno recommends that the MIDP outline the necessary steps to be taken by contractors in the event of an inadvertent discovery during construction. These steps would serve to minimize damage to any inadvertently discovered archaeological resources during ground-disturbing activities, which may include small, deeply buried, and/or widely dispersed historic or precontact cultural materials (e.g., railroad grade, rails, ties, stakes, and footings; glass bottles; sanitary cans; chipped-stone tools; ground stone; beads; shell; faunal remains; human remains; funerary objects; and objects of cultural patrimony).

Steps included in the MIDP would outline the applicable local laws and regulations, stop-work and notification protocols, discovery protection measures, procedures for assessment by archaeologists, and steps for consultation with the DAHP and any affected Indian tribes. In the state of Washington, archaeological sites are protected from knowing disturbance on both public and private lands. As described in Section 2, RCW 27.44 and RCW 27.53.060 require that a person obtain a permit from the DAHP before excavating, removing, or altering Native American human remains or archaeological resources in Washington. A failure to obtain a permit is punishable by civil fines and penalties under RCW 27.53.095 and criminal prosecution under RCW 27.53.090.

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
ZERO
HARM
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field. Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

ExxonMobil ADC
Cardno 03144702.R05

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APPENDIX H

TERRESTRIAL ECOLOGICAL
EVALUATION FORM



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: ExxonMobil ADC

Facility/Site Address: 2717 2731 Federal Avenue, Everett, Washington 98201

Facility/Site No: 2728

VCP Project No.: N/A

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Cameron Penner-Ash

Title: Assistant Project Manager

Organization: Cardno

Mailing address: 309 South Cloverdale Street, Unit A13

City: Seattle

State: WA

Zip code: 98108

Phone: 503 869 1196

Fax: N/A

E-mail: cameron.penner-ash@cardno.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- ☒ Yes *If you answered "YES," then answer **Question 2**.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- ☐ All soil contamination is, or will be,* at least 15 feet below the surface.
- ☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- ☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- ☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- ☒ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- ☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 2** below.*
- ☐ No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- ☐ Yes *If you answered "YES," then answer **Question 3** below.*
- ☐ No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- ☐ Yes *If you answered "YES," then answer **Question 4** below.*
- ☐ No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- ☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- ☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- ☐ Area of soil contamination at the Site is not more than 350 square feet.
- ☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- ☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- ☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- ☐ Yes *If you answered “YES,” then answer **Question 2** below.*
- ☐ No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

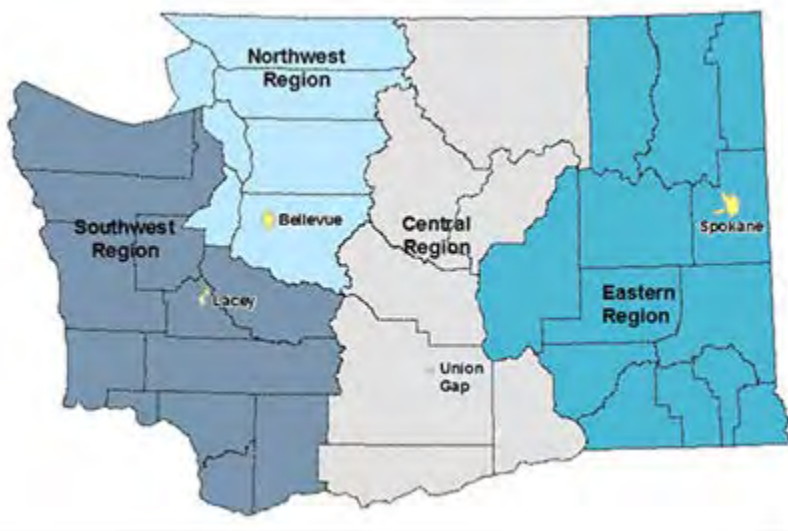
- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- ☐ Yes If so, please identify the Ecology staff who approved those steps:
- ☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160 th Ave. SE Bellevue, WA 98008-5452	Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

Cardno

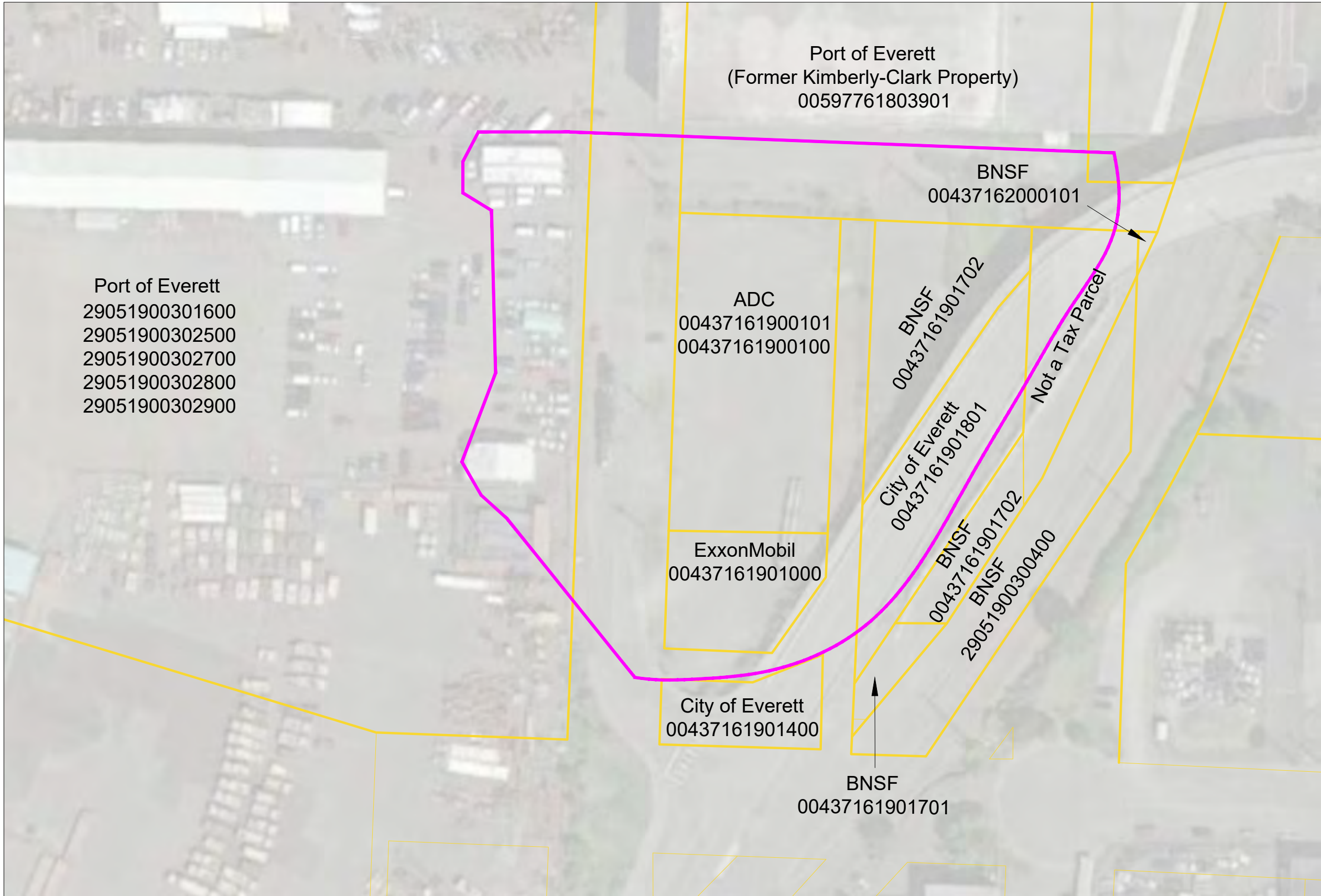
Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm





At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.



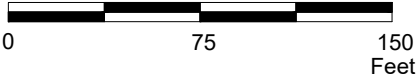
EXPLANATION

-  MTCA Site Boundary
-  Tax Parcel Boundary

SOURCE: Modified from
maps provided by the
Snohomish County Assessor

FN 0314470002

APPROXIMATE SCALE



SITE BOUNDARY MAP

EXXONMOBIL ADC
2717/2731 Federal Avenue
Everett, Washington

PROJECT NO.
031447

PLATE
3

LEC: 12/16/21

Appendix H: Engineering Calculations (Not applicable)

None included as of 05/24/2022

LEGEND

- — — — —

EXTENT OF EXCAVATION
- — — — —

EXISTING WATER
- — — — —

EXISTING STORM DRAIN
- — — — —

EXISTING SANITARY SEWER
- x —

TEMPORARY CONSTRUCTION FENCING PHASE 1
(SEE SHEETS P3-P6 FOR ENTIRE CONSTRUCTION FENCING PLAN)

TOTAL SITE AREA (INCLUDING STAGING): 3.37 ACRES
AREA OF DISTURBANCE: 0.45 ACRES

ELEMENT #1: PRESERVE VEGETATION/MARKING CLEARING LIMITS
NO VEGETATION TO PROTECT, SEE STAGING PLANS 1 THROUGH 4 FOR CONSTRUCTION FENCING
(SEE SHEETS P3 THROUGH P6)

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS:
BMP C105: STABILIZED CONSTRUCTION ENTRANCE/EXIT

ELEMENT #3: CONTROL FLOW RATES:
NOT APPLICABLE TO PROJECT

ELEMENT #4: INSTALL SEDIMENT CONTROLS:
NOT APPLICABLE TO PROJECT

ELEMENT #5: STABILIZE SOILS:
BMP C123: PLASTIC COVERING

ELEMENT #6: PROTECT SOILS:
NOT APPLICABLE TO PROJECT

ELEMENT #7: PROTECT DRAIN INLETS
BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS
NOT APPLICABLE TO PROJECT

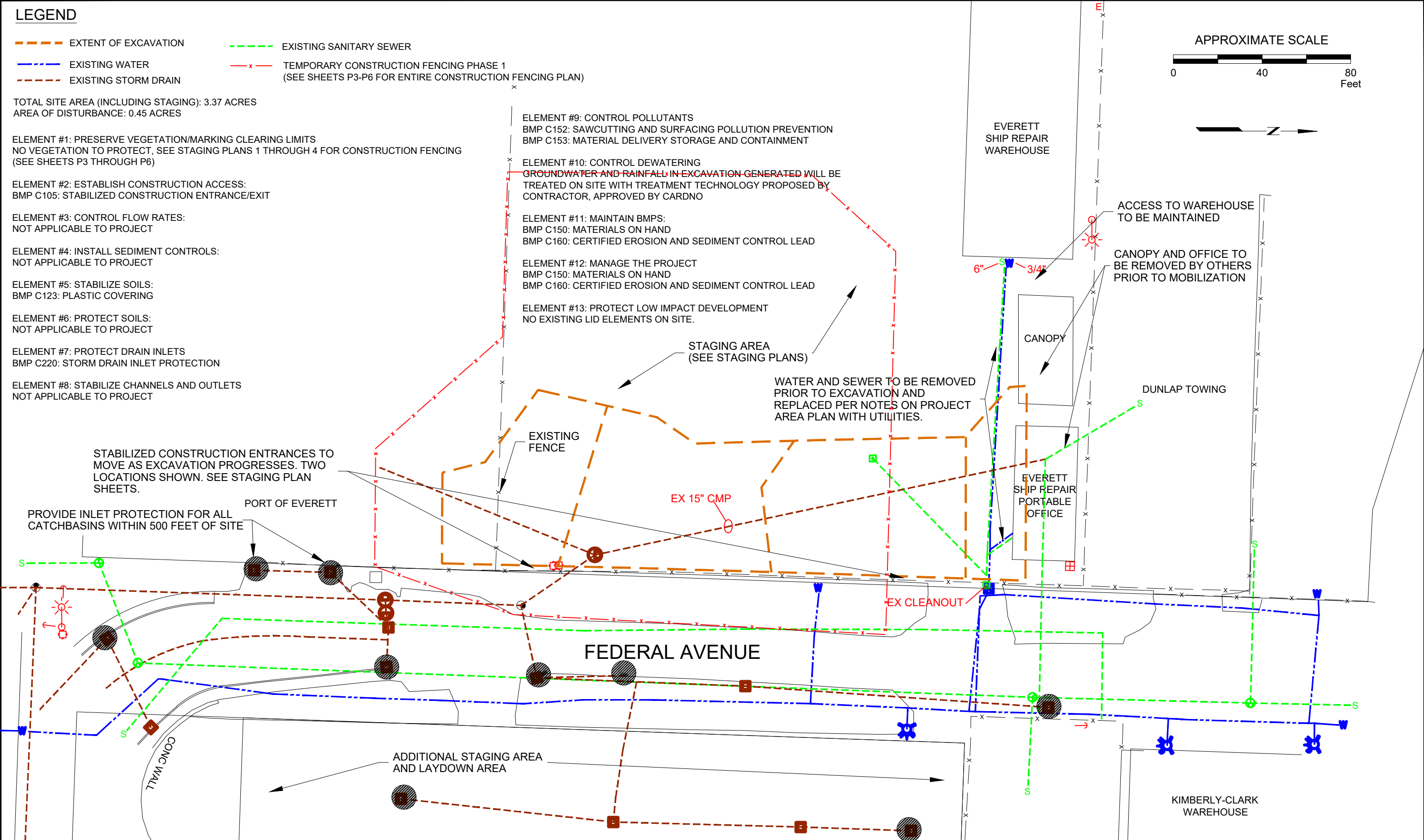
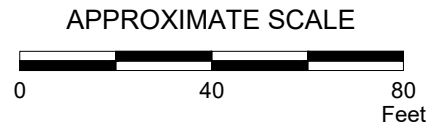
ELEMENT #9: CONTROL POLLUTANTS
BMP C152: SAWCUTTING AND SURFACING POLLUTION PREVENTION
BMP C153: MATERIAL DELIVERY STORAGE AND CONTAINMENT

ELEMENT #10: CONTROL DEWATERING
GROUNDWATER AND RAINFALL IN EXCAVATION GENERATED WILL BE
TREATED ON SITE WITH TREATMENT TECHNOLOGY PROPOSED BY
CONTRACTOR, APPROVED BY CARDNO

ELEMENT #11: MAINTAIN BMPs:
BMP C150: MATERIALS ON HAND
BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

ELEMENT #12: MANAGE THE PROJECT
BMP C150: MATERIALS ON HAND
BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

ELEMENT #13: PROTECT LOW IMPACT DEVELOPMENT
NO EXISTING LID ELEMENTS ON SITE.



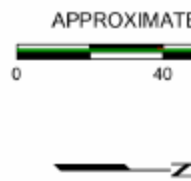
PROJECT NO.		3			DRAWING:	C-2	TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN	Sheet C2
031447		2						
		1						
FN: 031447- GSP		0						
LAST REV. DATE:		NO.	DATE	REVISIONS	SCALE:	1"= 40'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
DATE: 05/03/22								
		DRAWN: LESLIE HURLEY						
		APPROVED: BRIAN WOLF						

APPENDIX H

Site Layouts



- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- - - Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate



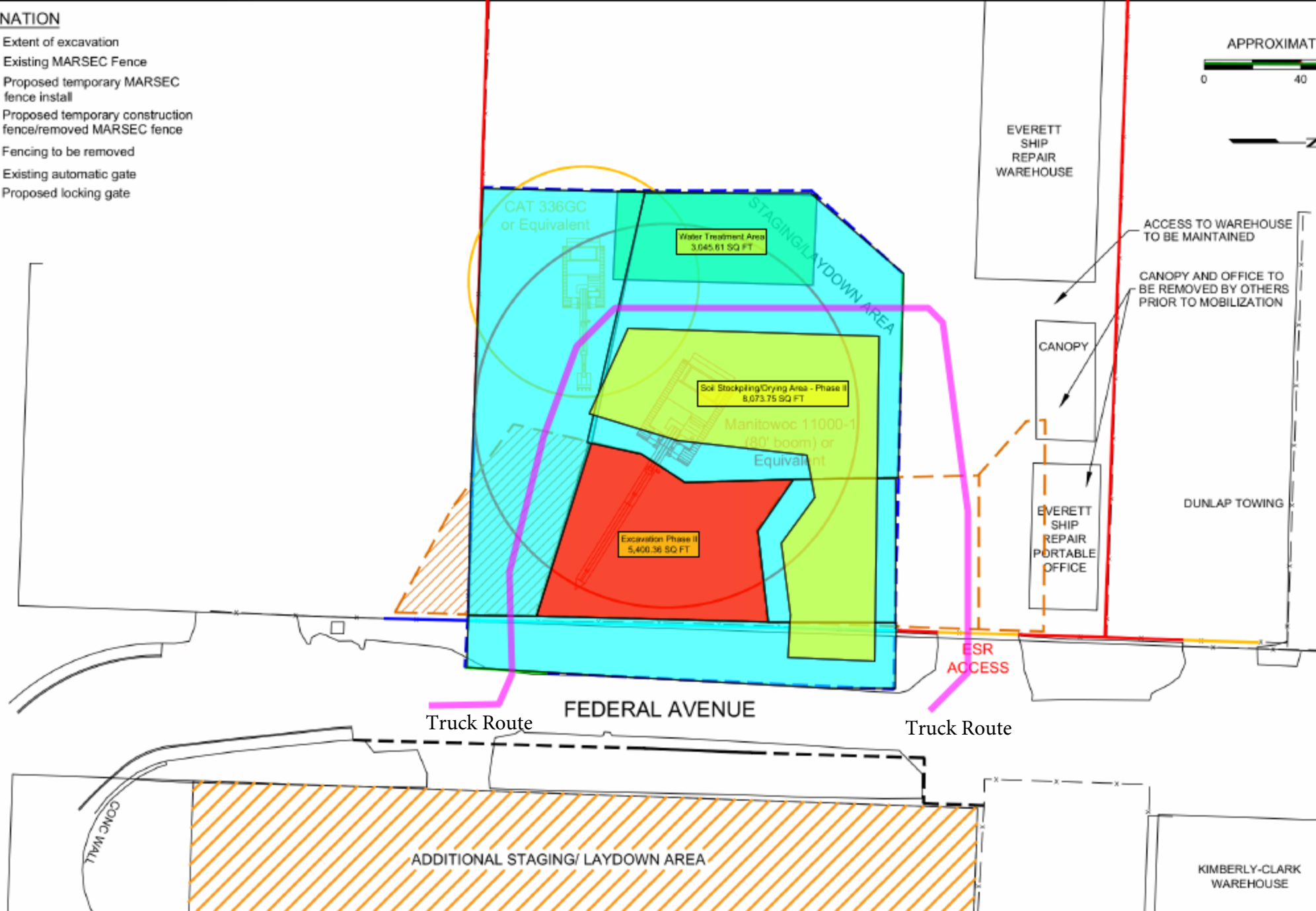
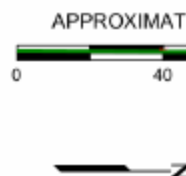
DRAWING: **P-3**

SCALE: 1"= 40'

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate



PROJECT NO.		3			DRAWING:	P-3	STAGING PLAN - PHASE 2
031447		2					
		1					
PM: 031447-GSP		0	03/21/22				
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	SCALE:	1"= 40'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington
DATE: 03/21/22		DRAWN: HALEY ROBERTZ					
		APPROVED: JIM TRIFORD					

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

EVERETT
SHIP
REPAIR
TEMPORARY
OFFICE

EVERETT
SHIP
REPAIR
WAREHOUSE

APPROXIMATE

0 40

0 40

Water Treatment Area
3,675.59 SQ FT

CAT 338GC
or Equivalent

Manitowoc 11000-1
(60' boom) or
Equivalent

Soil Stockpiling/Drying Area - Phase III
15,000.11 SQ FT

Excavation - Phase III
5,409.52 SQ FT

DUNLAP TOWING

ESR
ACCESS

Truck Route

FEDERAL AVENUE

Truck Route

ADDITIONAL STAGING/ LAYDOWN AREA

KIMBERLY-CLARK
WAREHOUSE

CONCRETE WALL

PROJECT NO.	031447	3			
PN	031447- GSP	2			
LAST REV. DATE	03/21/22	1			
DATE	03/21/22	0			
DRAWN	HALEY ROBERTS	NO.	DATE	REVISIONS	
APPROVED	JIM TAYLOR				

DRAWING	P-3
SCALE	1"= 40'

STAGING PLAN - PHASE 3

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

EVERETT
SHIP
REPAIR
TEMPORARY
OFFICE

EVERETT
SHIP
REPAIR
WAREHOUSE

APPROXIMATE
0 40

Water Treatment Area
3,042.52 SQ FT

STAGING/LAYDOWN AREA

CAT 338GC
or Equivalent

Manitowoc 11000-1
(80' boom) or
Equivalent

Soil Stockpiling/Drying Area - Phase IV
21,003.98 SQ FT

Excavation - Phase IV
2,117.49 SQ FT

ESR
ACCESS

Truck Route

FEDERAL AVENUE

Truck Route

DUNLAP TOWING

CONC WALL

ADDITIONAL STAGING/ LAYDOWN AREA

KIMBERLY-CLARK
WAREHOUSE

PROJECT NO.	031447	3	
PM	031447- GSP	2	
LAST REV. DATE	03/21/22	1	
DATE	03/21/22	0	
DRAWN	HALEY ROBERTZ	NO.	DATE
APPROVED	JIM TAYLOR	REVISIONS	

DRAWING	P-3
SCALE	1" = 40'

STAGING PLAN - PHASE 4
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

APPENDIX I

Letter of Substantive Requirements, dated July 14, 2022





July 14, 2022

Cardno
Attn: Bobby Thompson, Senior Project Manager
309 South Cloverdale Street, Unit A13
Seattle, WA 98108

Subject: Interim Action at ExxonMobil/ADC Site

Dear Bobby:

Thank you for providing notice and construction plans of the ExxonMobil and American Distributing Company (ADC)'s plans to conduct a remedial cleanup and restoration action under the MTCA Agreed Order at the ExxonMobil/ADC Site, located at 2730 Federal Ave, under the regulatory oversight of the Washington State Department of Ecology. We recognize that pursuant to Agreed Order No. DE 6184 and RCW 70.105D.090 (1), a portion of this work is exempt from the procedural requirements of local government permits or approvals for the remedial action. The exemption does not apply to National Pollutant Discharge Elimination Permits (NPDES) under RCW 90348. To that end the Washington State Department of Ecology Site Manager is obligated to consult with the Washington State Department of Ecology Water Quality Program to ensure that federal, state, and local requirements are included in the Agreed Order.

We support ExxonMobil & ADC's efforts to remediate the site and soils in a manner consistent with current Best Management Practices and all other applicable regulations.

Conditions of approval:

- All work performed shall comply with the Ecology Amendment to Agreed Order DE6184. Work shall not be conducted until Ecology approves the Interim Action Work Plan.
- All excavated material shall be hauled to an approved, permitted site. Keep City streets clean at all times. No dirt, mud, rocks, debris, or contaminated soils shall be tracked onto roadway. Coordinate haul route and any oversize load permit needs with the City's Traffic Engineering Division at 425-257-8810, option 7.
- A separate Construction Stormwater General Permit may be required from Ecology. It is the owner's responsibility to ensure coverage is obtained and maintained throughout the duration of the project, if required. Temporary erosion and sedimentation control shall be managed on-site throughout the duration of the remedial action, complying with Ecology's requirements.
- Separate utility permits for cutting and capping water and/or sewer services or reconnecting services are required and are outside of this permit exemption. Separate public works permit is required for any permanent utility mains to be installed. Permit applications will require submittal of design plans identifying vertical and horizontal locations, materials, installation procedures, and any site-specific details such as sheet pile wall penetrations.

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- Separate demolition/building permits for removal or relocation of existing buildings are required and are outside of this permit exemption.
- The project shall comply with City of Everett stormwater standards as set forth in Chapter 14.28 of the Everett Municipal Code for all permanent improvements to the site. Documentation shall be provided demonstrating compliance with these standards. Since the project will disturb more than 7,000 square feet of land the documentation shall include a stormwater site plan (stormwater report).
- Stormwater bypass systems shall be capable of conveying at least as much flow as the existing pipe system. Many of the storm events which have caused flooding in the City have happened during the summer season. Inadequate temporary conveyance capacity shall not cause flooding of adjacent right-of-way or private properties.
- Restored utilities shall be constructed in accordance with the requirements of the City of Everett Design and Construction Standards and Specifications (DCSS). Materials and installation requirements shall comply with the section of the DCSS appropriate to the utility being installed.
- Storm drainage pipe constructed below the static water level shall be of a water-tight material (HDPE, ductile iron) acceptable to the City.
- Inspections are required by City Inspectors for all stages of construction scope under required separate permits, particularly for buildings and utility work.
- Any work at or below 13 feet as measured by FEMA FIRM maps, shall require a stamped survey that shows the elevation of those areas below the 13' BFE line and compliance with Habitat assessment and mitigation of the fill as prescribed in Everett Municipal Code 19.37.190 (excerpt below).
 - “H. Compensation for Impacts within the One-Hundred-Year Floodplain.
 1. Compensation must be provided for any effects to floodwater storage and fish habitat function within the one-hundred-year floodplain. Indirect adverse effects of development in the floodplain (effects to stormwater, riparian vegetation, bank stability, channel migration, hyporheic zones, wetlands, etc.) must be mitigated such that equivalent or better salmon habitat protection is provided.”
- Upon completion of the work, as-builts of the underground barrier walls and utility pipes shall be turned in to City of Everett Permit Services for records purposes.

Please contact me at SGood@everettwa.gov with any questions you may have.

Sincerely,



Sabrina Good, P.E.

Permit Services Manager | Everett Permit Services

CC: Steve Ingalsbe, Planning Land Use Manager
 Tony Lee, Building Official
 Ryan Sass, Public Works Director



APPENDIX J

Utility Permits



06/14/2023
11:36 AM**City of Everett Inspection Requests**

Permit No. PW2208-012		Permit Type	PUBLIC WORKS	Site Address	2730 FEDERAL AVE EVERETT
Applied	08/16/2022	Applicant	RYAN TRACEY		
Approved	09/02/2022	Owner	EVERETT PORT OF		
Issued	09/02/2022	Contractor	INNOVATIVE CONST SOLUTIONS		
Parent Permit No.		Description	TEMP STORMWATER BYPASS FOR CLEAN UP ACTIVITIES		
		Notes	ALSO INCLUDE FINAL RESTORATION		
Date of Inspection	Inspection Type	Inspector	Result	Remarks	Notes
06/14/2023	PW 25-SITE FINAL/PERMIT CLOSE OUT	JIM KNAPPERT	APPRVD- PERMIT FINAL		6/14/2023 7:42:07 AM No inspection requested.

APPENDIX K

Discharge Authorization





March 2, 2022

Cameron Penner-Ash
Cardno now Stantec
309 South Cloverdale Street A13
Seattle WA 98104

Subject: Discharge Authorization No. MD-46-2022
7000 & 7100 Hardeson Rd, Everett WA 98201
Expires: December 31, 2022

Dear Mr. Penner-Ash:

Cardno now Santec is hereby authorized to discharge site related water from the construction site. Discharge will be allowed for the permit duration. The discharge will be allowed upon the City's receipt of the signed acceptance of this letter and with the proper notification to the City that the work will proceed. No other water sources are allowed to be discharged under this authorization, other than what is listed above.

This authorization is based on the information you provided; we understand that this work is an ongoing. Discharge will be allowed based on compliance with the conditions of this authorization.

The point of discharge will be within the city's sewer collection system as directed by your City representative.

You will be billed for the amount discharged to the city sewers based on the total flow. Your sewer bill will be invoiced monthly and will be calculated on our current sewer rate (currently \$9.25 per 100 cubic feet) plus the industrial surcharge of \$0.19 per thousand gallons of flow.

You must meter and track the amount discharged to the city sewers. You must also know the approximate flow rate at all times, as we will need to know especially during wet weather

This Discharge Authorization is issued with the following conditions:

- 1) You must comply with the general use and discharge requirements of the Industrial Pretreatment Ordinance #3070-08 as amended (attached), as well as any applicable Federal and State regulations.
- 2) The City solely reserves the right to modify, suspend, or terminate this authorization at any time once issued.
- 3) Your City representative and point of contact for discharge is Brian Doolan at 425-257-8828 (cell at 425-501-5124) or bdoolan@everettwa.gov. You need to notify Brian prior to discharge and when your project is completed. You must also report monthly flows to Brian.

Public Works



3200 Cedar Street
Everett, WA 98201



425.257.8800
425.257.8882 fax



everettpw@everettwa.gov
everettwa.gov/pw

- 4) Discharge can only occur during non-rain impacted flow periods. Your point of contact will receive notification to immediately stop discharging within 30 minutes.
- 5) The point of discharge shall be as directed by the City's project representative and limited to a flow of 150 gallons per minute or less. Higher rates must be first approved by Brian Doolan and be for limited durations.
- 6) Discharge will only be for water related to construction at the specific location identified in the DA application. Other sources must be pre-approved.
- 7) All flow shall be routed through a system to remove any free floatables and settleable solids or be free of floatable and settleable solids. Cardno now Santec will monitor and prevent that there are no floatable and settleable solids in discharge and shall use an onsite storage tank for pre-settlement needs related to high sediment or turbidity prior to discharge to the City's sewers. The City will inspect the tank and volume prior to discharge; with the ability and permission to inspect during the work as needed. Contact Brian for inspection of the tank at least a working day prior to your discharge request.
- 8) At any time, the City can direct the point of discharge to an alternative location that best suits the City.
- 9) Discharge operations shall comply with the City's Noise Ordinance.
- 10) Cardno now Santec is solely responsible for spills of any kind related to the discharge operations, including reporting to Department of Ecology, clean-up, and any repairs or restoration, and costs for City to oversee and respond. The City must be notified immediately of any spill.
- 11) City of Everett personnel may take samples of the effluent for analysis and may inspect your site to verify compliance at any time.
- 12) Maximum rate of flow shall not cause capacity problems in the receiving sewer or at any point downstream of the discharge; the City may modify the flow rate at any time.
- 13) The discharge is subject to these limits:

As	0.5	mg/L
Cd	0.24	mg/L
Cr	5.0	mg/L
Cu	3.0	mg/L
Pb	1.9	mg/L
Hg	0.1	mg/L
Ni	2.83	mg/L
Ag	0.49	mg/L
Zn	4.0	mg/L
CN-	0.65	mg/L
Nonpolar FOG	200	mg/L

Should lab samples indicate higher than allowed discharge limits, then a treatment plan to bring the discharge below the allowable limits will be required.

All discharge data from the site shall be reported. The total amount of flow to the sanitary sewer shall be reported at the completion of the discharge along with the data required. Please send reports to the following:



Brian Doolan
M & O Supervisor
City of Everett
3200 Cedar Street
Everett, WA 98201

- 14) The City reserves the right to bill Cardno now Santec fees for city work beyond our normal site monitoring for sewer related regulatory compliance or for overseeing this discharge authorization.
- 15) Cardno now Santec must install a meter to monitor the flow rate of discharge and report the monthly volumes to Brian Doolan. Brian must inspect and approve the meter installation prior to discharge. The meter shall not be removed or replaced without notifying the City first. Cardno now Santec will not exceed 150 gallons per minute and must keep a log for the discharge volumes noted. The log and amount of flow must be submitted to Brian at the end of the project.

Please contact me at 425 257-8828 (bdoolan@everettwa.gov) if you have any questions.

Sincerely,

Brian Doolan, PE
Maintenance & Operations Supervisor

Accepted By:



Date: 03/02/22

Attachment: General Permit Provisions
 Pretreatment Ordinance

cc: Gene Bennett, City of Everett
 Jeff Marrs City of Everett
 Chron File
 IPT File





November 14, 2022

Bobby Thompson
Cardno now Stantec
309 South Cloverdale Street A13
Seattle WA 98104

Subject: Discharge Authorization No. MD-46-2022 Extension
2730 Federal Avenue, Everett WA 98201
Expires: June 30, 2023

Dear Mr. Thompson:

Cardno now Santec is hereby authorized to discharge site related water from the construction site. Discharge will be allowed for the permit duration. The discharge will be allowed upon the City's receipt of the signed acceptance of this letter and with the proper notification to the City that the work will proceed. No other water sources are allowed to be discharged under this authorization, other than what is listed above.

This authorization is based on the information you provided; we understand that this work is an ongoing. Discharge will be allowed based on compliance with the conditions of this authorization.

The point of discharge will be within the city's sewer collection system as directed by your City representative.

You will be billed for the amount discharged to the city sewers based on the total flow. Your sewer bill will be invoiced monthly and will be calculated on our current sewer rate (currently \$9.25 per 100 cubic feet) plus the industrial surcharge of \$0.19 per thousand gallons of flow.

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3200 Cedar Street
Everett, WA 98201



425.257.8800
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everettpw@everettwa.gov
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- 7) All flow shall be routed through a system to remove any free floatables and settleable solids or be free of floatable and settleable solids. Cardno now Santec will monitor and prevent that there are no floatable and settleable solids in discharge and shall use an onsite storage tank for pre-settlement needs related to high sediment or turbidity prior to discharge to the City's sewers. The City will inspect the tank and volume prior to discharge; with the ability and permission to inspect during the work as needed. Contact Brian for inspection of the tank at least a working day prior to your discharge request.
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- 11) City of Everett personnel may take samples of the effluent for analysis and may inspect your site to verify compliance at any time.
- 12) Maximum rate of flow shall not cause capacity problems in the receiving sewer or at any point downstream of the discharge; the City may modify the flow rate at any time.
- 13) The discharge is subject to these limits:

As	0.5	mg/L
Cd	0.24	mg/L
Cr	5.0	mg/L
Cu	3.0	mg/L
Pb	1.9	mg/L
Hg	0.1	mg/L
Ni	2.83	mg/L
Ag	0.49	mg/L
Zn	4.0	mg/L
CN-	0.65	mg/L
Nonpolar FOG	200	mg/L

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All discharge data from the site shall be reported. The total amount of flow to the sanitary sewer shall be reported at the completion of the discharge along with the data required. Please send reports to the following:



Brian Doolan
M & O Supervisor
City of Everett
3200 Cedar Street
Everett, WA 98201

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Please contact me at 425 257-8828 (bdoolan@everettwa.gov) if you have any questions.

Sincerely,



Brian Doolan, PE
Maintenance & Operations Supervisor

Accepted By:

Robert
Thompson

Digitally signed by Robert
Thompson
Date: 2022.11.14 14:15:57
-07'00'

Date: November 14, 2022

Attachment: General Permit Provisions
 Pretreatment Ordinance

cc: Gene Bennett, City of Everett
 Jeff Marrs City of Everett
 Chron File
 IPT File



ANALYTICAL REPORT

PREPARED FOR

Attn: Bobby Thompson
Cardno, Inc
309 South Cloverdale Street
Unit A13
Seattle, Washington 98108

Generated 12/15/2022 3:39:12 PM

JOB DESCRIPTION

ExxonMobil ADC / 238000337

JOB NUMBER

570-120489-1

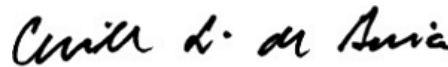
Job Notes

This report is issued solely for the use of the person or company to whom it is addressed. Any use, copying or disclosure other than by the intended recipient is unauthorized. If you have received this report in error, please notify the sender and destroy this report immediately. This report shall not be reproduced except in full, without prior express written approval by the laboratory.

The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



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12/15/2022 3:39:12 PM

Authorized for release by
Cecile de Guia, Project Manager I
Cecile.deGuia@et.eurofinsus.com
(714)895-5494

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Lab Chronicle	11
Certification Summary	12
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Sample Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-120489-1	Effluent	Water	12/12/22 10:50	12/13/22 10:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Definitions/Glossary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Job ID: 570-120489-1

Laboratory: Eurofins Calscience

Narrative

Job Narrative
570-120489-1

Comments

No additional comments.

Receipt

The sample was received on 12/13/2022 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.5° C.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Client Sample ID: Effluent

Lab Sample ID: 570-120489-1

 No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Client Sample ID: Effluent

Lab Sample ID: 570-120489-1

Date Collected: 12/12/22 10:50

Matrix: Water

Date Received: 12/13/22 10:00

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500 CN E)	ND		0.0250	mg/L		12/13/22 14:12	12/14/22 18:49	1

QC Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 440-673393/1-A
Matrix: Water
Analysis Batch: 673398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673393

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.0250	mg/L		12/13/22 14:12	12/14/22 18:48	1

Lab Sample ID: LCS 440-673393/2-A
Matrix: Water
Analysis Batch: 673398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.200	0.1964		mg/L		98	80 - 120

Lab Sample ID: LCSD 440-673393/3-A
Matrix: Water
Analysis Batch: 673398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 673393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.200	0.1936		mg/L		97	80 - 120	1	20

Lab Sample ID: 570-119762-A-3-B MS
Matrix: Water
Analysis Batch: 673398

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 673393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		0.200	0.1924		mg/L		96	75 - 125

Lab Sample ID: 570-119762-A-3-C MSD
Matrix: Water
Analysis Batch: 673398

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 673393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		0.200	0.1964		mg/L		98	75 - 125	2	20

QC Association Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

General Chemistry

Prep Batch: 673393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120489-1	Effluent	Total/NA	Water	Distill/CN	
MB 440-673393/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 440-673393/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
LCSD 440-673393/3-A	Lab Control Sample Dup	Total/NA	Water	Distill/CN	
570-119762-A-3-B MS	Matrix Spike	Total/NA	Water	Distill/CN	
570-119762-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	Distill/CN	

Analysis Batch: 673398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120489-1	Effluent	Total/NA	Water	SM 4500 CN E	673393
MB 440-673393/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	673393
LCS 440-673393/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	673393
LCSD 440-673393/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 CN E	673393
570-119762-A-3-B MS	Matrix Spike	Total/NA	Water	SM 4500 CN E	673393
570-119762-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CN E	673393

Lab Chronicle

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Client Sample ID: Effluent

Lab Sample ID: 570-120489-1

Date Collected: 12/12/22 10:50

Matrix: Water

Date Received: 12/13/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/CN			50 mL	50 mL	673393	12/13/22 14:12		EET TUS 2
Total/NA	Analysis	SM 4500 CN E		1			673398	12/14/22 18:49	GG0B	EET TUS 2
Instrument ID: Genesys30-5										

Laboratory References:

EET TUS 2 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10256	07-31-23
California	State	3082	07-31-23

Method Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120489-1

Method	Method Description	Protocol	Laboratory
SM 4500 CN E	Cyanide, Total	SM	EET TUS 2
Distill/CN	Distillation, Cyanide	None	EET TUS 2


Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

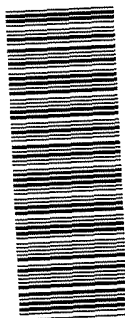
EET TUS 2 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Client Information		Sampler Cecilia M. LANA COLE	Lab PM: de Guia, Cecile	Carrier Tracking No(s): 570-62009-13184 1	
Client Contact: Bobby Thompson		Phone: (644) 794-9027	E-Mail: Cecile.deGuia@et.eurofinsus.com	Page: Page 1 of 1	
Company Cardno		PWSID:	Job #:		
Address: 309 South Cloverdale Street, Unit A13		Due Date Requested:			
City: Seattle		TAT Requested (days): 24 Hour			
State, Zip: WA, 98108		Compliance Project: Δ Yes Δ No			
Phone: (206) 510-5855		PO #: 238000337			
Email: robert.thompson@cardno.com		WO #: 57013427			
Project Name: ExxonMobil ADC / 238000337		SSOW#: _____			
Site: Everett					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)
Effluent / CYANIDE		12/12/22	1050	G	Water
Barcode					
570-120489 Chain of Custody					
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested I II III IV Other (specify)					
Empty Kit Relinquished by					
Relinquished by C. de Guay		Date: 12/12/22	Time: 14:44	Company CARDNO	
Relinquished by		Date/Time:	Received by	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 4-7/4-5 sec			

Loc: 570
120489

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570-120489 Waybill

ORIGIN ID: (817) 965-6081
PAUL PREVOUT
CARDNO. INC
308 SOUTH CLOVERDALE STREET
UNIT #13
SEATTLE WA 98108
UNITED STATES US

SHIP DATE: 06APR22
ACTWT: 10.00 LB MAN
CAD: 0343492/CAFE3512

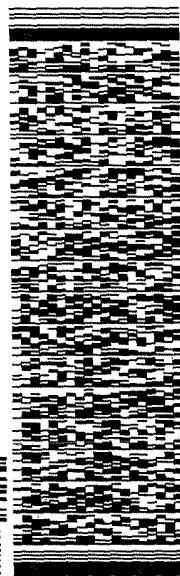
570C1/1E3B/6F4D

TO SHIPPING
EUROFINS CALSCIENCE
2841 DOW AVE STE 100

TUSTIN CA 927807211

(949) 261-1022
REF: S570-49660

RMA: III III III



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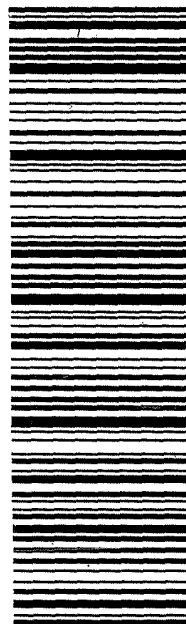
TUE - 13 DEC 10:30A
PRIORITY OVERNIGHT

FedEx
TRK# 5739 4183 1108
0221

92 DTHA

92780
CA-US SNA

1211020121101W



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161
96
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6

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 570-120489-1

Login Number: 120489

List Source: Eurofins Calscience

List Number: 1

Creator: de Guia, Cecile

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Bobby Thompson
Cardno, Inc
309 South Cloverdale Street
Unit A13
Seattle, Washington 98108

Generated 12/13/2022 8:27:43 PM

JOB DESCRIPTION

ExxonMobil ADC / 238000337

JOB NUMBER

570-120181-1

Eurofins Calscience

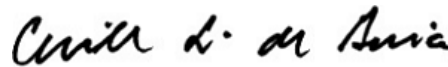
Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

Authorization



Generated
12/13/2022 8:27:43 PM

Authorized for release by
Cecile de Guia, Project Manager I
Cecile.deGuia@et.eurofinsus.com
(714)895-5494

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Sample Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-120181-1	Effluent 1	Water	12/09/22 12:45	12/10/22 10:50

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Definitions/Glossary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Job ID: 570-120181-1

Laboratory: Eurofins Calscience

Narrative

Job Narrative
570-120181-1

Comments

No additional comments.

Receipt

The sample was received on 12/10/2022 10:50 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2° C.

Receipt Exceptions

The following sample was collected in an improper container. Lab did not receive a plastic 250 w/ NaOH for Total Cyanide analysis. Client has been notified and recollected another sample for Cyanide. Sample was received today and was assigned to Job #570-120489.

One of 1L amber with sulfuric acid containers for the following sample(s) was received almost empty. Cap of bottle appeared to be loose. There is sufficient volume in other container to run Oil and Grease analysis: Effluent 1 (570-120181-1).

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Client Sample ID: Effluent 1

Lab Sample ID: 570-120181-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0288		0.00100	mg/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Calscience

Client Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Client Sample ID: Effluent 1

Lab Sample ID: 570-120181-1

Date Collected: 12/09/22 12:45

Matrix: Water

Date Received: 12/10/22 10:50

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0288		0.00100	mg/L		12/12/22 06:19	12/12/22 10:02	1
Cadmium	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 10:02	1
Chromium	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 10:02	1
Copper	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 10:02	1
Lead	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 10:02	1
Nickel	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 10:02	1
Silver	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 10:02	1
Zinc	ND		0.0200	mg/L		12/12/22 06:19	12/12/22 10:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000500	mg/L		12/12/22 11:04	12/12/22 18:25	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease (1664A)	ND		0.983	mg/L		12/13/22 10:21	12/13/22 14:39	1
HEM-SGT: Oil and Grease (1664A)	ND		0.983	mg/L		12/13/22 10:21	12/13/22 14:39	1

QC Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 570-288036/1-A

Matrix: Water

Analysis Batch: 288207

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 288036

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 09:54	1
Cadmium	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 09:54	1
Chromium	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 09:54	1
Copper	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 09:54	1
Lead	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 09:54	1
Nickel	ND		0.00200	mg/L		12/12/22 06:19	12/12/22 09:54	1
Silver	ND		0.00100	mg/L		12/12/22 06:19	12/12/22 09:54	1
Zinc	ND		0.0200	mg/L		12/12/22 06:19	12/12/22 09:54	1

Lab Sample ID: LCS 570-288036/2-A

Matrix: Water

Analysis Batch: 288207

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 288036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0800	0.08048		mg/L		101	80 - 120
Cadmium	0.0800	0.08065		mg/L		101	80 - 120
Chromium	0.0800	0.08386		mg/L		105	80 - 120
Copper	0.0800	0.08399		mg/L		105	80 - 120
Lead	0.0800	0.07960		mg/L		99	80 - 120
Nickel	0.0800	0.08427		mg/L		105	80 - 120
Silver	0.0800	0.08008		mg/L		100	80 - 120
Zinc	0.0800	0.07754		mg/L		97	80 - 120

Lab Sample ID: LCSD 570-288036/3-A

Matrix: Water

Analysis Batch: 288207

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 288036

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.0800	0.08098		mg/L		101	80 - 120	1	20
Cadmium	0.0800	0.08166		mg/L		102	80 - 120	1	20
Chromium	0.0800	0.08474		mg/L		106	80 - 120	1	20
Copper	0.0800	0.08630		mg/L		108	80 - 120	3	20
Lead	0.0800	0.08123		mg/L		102	80 - 120	2	20
Nickel	0.0800	0.08529		mg/L		107	80 - 120	1	20
Silver	0.0800	0.08146		mg/L		102	80 - 120	2	20
Zinc	0.0800	0.07986		mg/L		100	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-288153/1-A

Matrix: Water

Analysis Batch: 288320

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 288153

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000500	mg/L		12/12/22 11:04	12/12/22 18:14	1

Eurofins Calscience

QC Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 570-288153/2-A

Matrix: Water

Analysis Batch: 288320

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 288153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00800	0.009324		mg/L		117	80 - 120

Lab Sample ID: LCSD 570-288153/3-A

Matrix: Water

Analysis Batch: 288320

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 288153

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00800	0.009321		mg/L		117	80 - 120	0	10

Lab Sample ID: 570-119473-F-1-E MS

Matrix: Water

Analysis Batch: 288320

Client Sample ID: Matrix Spike

Prep Type: Dissolved

Prep Batch: 288153

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00800	0.008701		mg/L		109	80 - 120

Lab Sample ID: 570-119473-F-1-F MSD

Matrix: Water

Analysis Batch: 288320

Client Sample ID: Matrix Spike Duplicate

Prep Type: Dissolved

Prep Batch: 288153

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.008704		mg/L		109	80 - 120	0	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-288517/1-A

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 288517

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	mg/L		12/13/22 10:21	12/13/22 14:39	1
HEM-SGT: Oil and Grease	ND		1.00	mg/L		12/13/22 10:21	12/13/22 14:39	1

Lab Sample ID: LCS 570-288517/2-A

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 288517

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM: Oil and Grease	40.0	39.20		mg/L		98	78 - 114
HEM-SGT: Oil and Grease	20.0	19.30		mg/L		96	64 - 132

Lab Sample ID: LCSD 570-288517/3-A

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 288517

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.40		mg/L		94	78 - 114	5	18
HEM-SGT: Oil and Grease	20.0	18.40		mg/L		92	64 - 132	5	34

Eurofins Calscience

QC Sample Results

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: 570-120391-A-6-A MS

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 288517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM: Oil and Grease	3.88		44.9	46.63		mg/L		95	78 - 114
HEM-SGT: Oil and Grease	2.00		22.5	20.79		mg/L		84	64 - 132

Lab Sample ID: 570-120391-A-6-B MSD

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 288517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM: Oil and Grease	3.88		46.0	47.99		mg/L		96	78 - 114	3	18
HEM-SGT: Oil and Grease	2.00		23.0	22.67		mg/L		90	64 - 132	9	34

Lab Sample ID: 570-120391-A-6-C DU

Matrix: Water

Analysis Batch: 288629

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 288517

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
HEM: Oil and Grease	3.88		3.708		mg/L		5	18
HEM-SGT: Oil and Grease	2.00		1.854		mg/L		8	34

QC Association Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Metals

Prep Batch: 288036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total Recoverable	Water	3005A	
MB 570-288036/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 570-288036/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 570-288036/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 288153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total/NA	Water	7470A	
MB 570-288153/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-288153/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-288153/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
570-119473-F-1-E MS	Matrix Spike	Dissolved	Water	7470A	
570-119473-F-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 288207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total Recoverable	Water	6020	288036
MB 570-288036/1-A	Method Blank	Total Recoverable	Water	6020	288036
LCS 570-288036/2-A	Lab Control Sample	Total Recoverable	Water	6020	288036
LCSD 570-288036/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020	288036

Analysis Batch: 288320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total/NA	Water	7470A	288153
MB 570-288153/1-A	Method Blank	Total/NA	Water	7470A	288153
LCS 570-288153/2-A	Lab Control Sample	Total/NA	Water	7470A	288153
LCSD 570-288153/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	288153
570-119473-F-1-E MS	Matrix Spike	Dissolved	Water	7470A	288153
570-119473-F-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	288153

General Chemistry

Prep Batch: 288517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total/NA	Water	1664A	
MB 570-288517/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-288517/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-288517/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-120391-A-6-A MS	Matrix Spike	Total/NA	Water	1664A	
570-120391-A-6-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	
570-120391-A-6-C DU	Duplicate	Total/NA	Water	1664A	

Analysis Batch: 288629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-120181-1	Effluent 1	Total/NA	Water	1664A	288517
MB 570-288517/1-A	Method Blank	Total/NA	Water	1664A	288517
LCS 570-288517/2-A	Lab Control Sample	Total/NA	Water	1664A	288517
LCSD 570-288517/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	288517
570-120391-A-6-A MS	Matrix Spike	Total/NA	Water	1664A	288517
570-120391-A-6-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	288517
570-120391-A-6-C DU	Duplicate	Total/NA	Water	1664A	288517

Eurofins Calscience

Lab Chronicle

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Client Sample ID: Effluent 1

Lab Sample ID: 570-120181-1

Date Collected: 12/09/22 12:45

Matrix: Water

Date Received: 12/10/22 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	288036	12/12/22 06:19	JP8N	EET CAL 4
Total Recoverable	Analysis	6020		1			288207	12/12/22 10:02	Y2WS	EET CAL 4
		Instrument ID: ICPMS09								
Total/NA	Prep	7470A			25 mL	50 mL	288153	12/12/22 11:04	C0YH	EET CAL 4
Total/NA	Analysis	7470A		1			288320	12/12/22 18:25	C0YH	EET CAL 4
		Instrument ID: HG8								
Total/NA	Prep	1664A			1017 mL	1000 mL	288517	12/13/22 10:21	RY4P	EET CAL 4
Total/NA	Analysis	1664A		1			288629	12/13/22 14:39	L6IE	EET CAL 4
		Instrument ID: NO EQUIQ								

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C916-18	10-12-22 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Calscience

Method Summary

Client: Cardno, Inc
Project/Site: ExxonMobil ADC / 238000337

Job ID: 570-120181-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	EET CAL 4
7470A	Mercury (CVAA)	SW846	EET CAL 4
1664A	HEM and SGT-HEM	1664A	EET CAL 4
1664A	HEM and SGT-HEM (Aqueous)	1664A	EET CAL 4
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CAL 4
7470A	Preparation, Mercury	SW846	EET CAL 4

Protocol References:

1664A = EPA-821-98-002

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

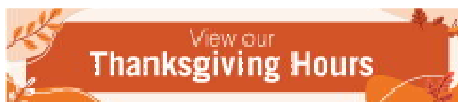
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Cecile L de Guia

From: Cecile L de Guia
Sent: Monday, December 12, 2022 11:14 AM
To: Cole, Laina; Laina Cole; Bobby Thompson
Subject: RE: Eurofins Calscience sample confirmation files from 570-120181-1 ExxonMobil ADC / 238000337

Hi Laina,
Ok, thanks for letting me know.

Best regards,
Cecile de Guia
Project Manager



Eurofins Environment Testing Southwest, LLC
2841 Dow Avenue, Suite 100
Tustin, Ca 92780
USA
Main: 714 895 5494
Direct: 657 210 6423

From: Cole, Laina <laina.cole@stantec.com>
Sent: Monday, December 12, 2022 11:09 AM
To: Cecile L de Guia <Cecile.deGuia@et.eurofinsus.com>; Laina Cole <laina.cole@cardno.com>; Bobby Thompson <robert.thompson@cardno.com>
Subject: Re: Eurofins Calscience sample confirmation files from 570-120181-1 ExxonMobil ADC / 238000337

EXTERNAL EMAIL*

Cecile,

We are shipping the NaOH bottle today.

Thank you,

Laina

From: Cecile de Guia <Cecile.deGuia@et.eurofinsus.com>
Sent: Monday, December 12, 2022 12:20 PM
To: Laina Cole <laina.cole@cardno.com>; Bobby Thompson <robert.thompson@cardno.com>
Subject: Eurofins Calscience sample confirmation files from 570-120181-1 ExxonMobil ADC / 238000337

Hello,

Attached please find the sample confirmation files for job 570-120181-1; ExxonMobil ADC / 238000337

Lab did not receive a plastic 250 w/ NaOH for Total Cyanide analysis. Please cancel the analysis. Received two bottles for Metals.

Thank you.

Cecile de Guia
Project Manager

Eurofins Calscience
Phone: 714-895-5494

E-mail: Cecile.deGuia@et.eurofinsus.com
www.eurofinsus.com/env



Reference: [570-399086]
Attachments: 2

> > Bank information has changed, please refer to remittance information on invoice. < <

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**SATURDAY
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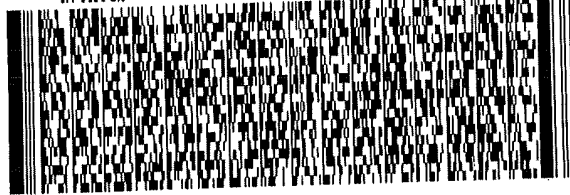
ORIGIN 1000THA (510) 734-3627
CARL MIKELICH
CARDNO C70 BEST WESTERN CASCADIA IN
2800 PACIFIC AVENUE
GUEST ROOM #118
EVERETT, WA 98201
UNITED STATES US

SHIP DATE: 02DEC22
ACTWGT: 10.00 LB MAN
CAD: 0343492/CAFE3618

TO **SHIPPING DEPARTMENT
EUROFINS CALSCIENCE
2841 DOW AVE
SUITE 100
TUSTIN CA 92780**

(714) 806-5494
REF: \$570-62009

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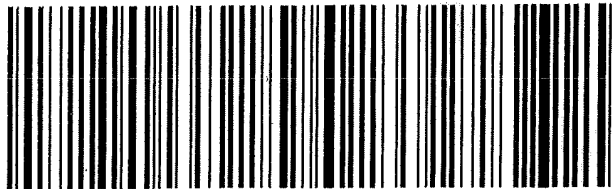
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**SATURDAY 12:00P
PRIORITY OVERNIGHT**

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**92780
CA-US SNA**

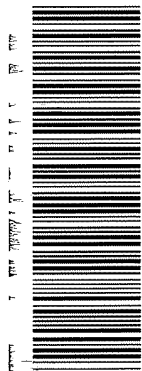


N2637161 12/09 581J3/9A97/FE2D

RT **168**

FZ

**1
12:00
A
6689
12.10**



570-120181 Waybill

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 570-120181-1

Login Number: 120181

List Number: 1

Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Did not receive all required containers.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Cole, Laina

From: Brian Doolan <BDoolan@everettwa.gov>
Sent: Wednesday, June 7, 2023 11:43 AM
To: Alexander Flink
Cc: Jayson Short; Rick Jenkins; James Harrison
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Some people who received this message don't often get email from bdoolan@everettwa.gov. [Learn why this is important](#)

Good morning,

During the work that took place on the Port of Everett's property the City of Everett made site visits to see the conditions, pipes, and dewatering system. The only permit that is associated with this project was the discharge permit. The discharge permit was complied with and has been closed on based on the final meter reading received on May 23rd, 2023. The final invoice was made and sent out resulting in the closing of the permit MD 46. The other pipes were inspected by City maintenance staff on different days and no issues were noted by them on the installation.

At this time there are no open permits associated with this property and no outstanding issues requiring any follow up.

If you have any questions, please reach out and I will be happy to help in any manner I can.

Thank you



Brian Doolan, P.E., MBA
Operations Maintenance Manager | Public Works
425 257-8856 | 3200 Cedar Street, Everett, WA 98201
everettwa.gov | [Facebook](#) | [Twitter](#)

Note: Emails and attachments sent to and from the City of Everett are public records and may be subject to disclosure pursuant to the Public Records Act.

From: Alexander Flink <aflink@icsinc.tv>
Sent: Monday, June 5, 2023 5:29 PM
To: Brian Doolan <BDoolan@everettwa.gov>
Cc: Jayson Short <jshort@icsinc.tv>; Rick Jenkins <rjenkins@icsinc.tv>; James Harrison <jharrison@icsinc.tv>
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Good evening, Brian,

We have received a request for the following from our client for the project at 2730 Federal Avenue on Everett Ship Repair's property:

- Final inspection certification for ESR side sewer connection and water line
- Final inspection certification for 15" stormwater line
- Closeout of 15" stormwater bypass permit

I know that throughout the project you, and/or someone else had been out to the site several times to see our progress but there was no official "inspection certification" completed. Could you please, send me an email or letter stating the city had conducted site visits and/or inspections and concluded that everything was installed properly?

I believe, Jayson Short and/or Ryan Tracey has been working on the Stormwater bypass permit.

Please feel free to call/email if you have any questions.

Thank you,



Alex Flink

Field Services Coordinator/Project Manager

Innovative Construction Solutions

2525 Starwell Drive, Suite 200, Concord, CA 94520

T: 925.574.2600 | F: 925.574.2601 | www.icsinc.tv

D: 925.574.2606 | C: 916.261.4418 | aflink@icsinc.tv

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From: Brian Doolan <BDoolan@everettwa.gov>

Sent: Friday, March 31, 2023 9:25 AM

To: Thompson, Robert <robert.thompson@stantec.com>

Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>; Mario Netto <mnetto@icsinc.tv>;

Twiford, Jim <jim.twiford@stantec.com>; Alexander Flink <aflink@icsinc.tv>; Miklich, Carl <carl.miklich@stantec.com>

Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Good morning,

Wanted to get an update on this project, I know we have talked during the project and from what I have seen looks like it is wrapped up and complete, if so please send me a total volume discharged (minus the additional flows from the City job) and I can get this permit closed out. Thank you



Brian Doolan, P.E.

Operations Maintenance Manager | Public Works

425 257-8856 | 3200 Cedar Street, Everett, WA 98201

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From: Brian Doolan

Sent: Friday, December 16, 2022 8:06 AM

To: Thompson, Robert <robert.thompson@stantec.com>

Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>; Mario Netto <mnetto@icsinc.tv>;

Twiford, Jim <jim.twiford@stantec.com>; Alexander Flink <aflink@icsinc.tv>; Miklich, Carl <carl.miklich@stantec.com>

Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Good morning,

Thanks for the information. I am here until 11 today and then I am here Monday through Thursday next week. Let me know when you would like me to come take a look at the set up.



Brian Doolan, P.E.

Operations Maintenance Manager | Public Works
425 257-8856 | 3200 Cedar Street, Everett, WA 98201
everettwa.gov | [Facebook](https://www.facebook.com/everettwa) | [Twitter](https://twitter.com/everettwa)

Note: Emails and attachments sent to and from the City of Everett are public records and may be subject to disclosure pursuant to the Public Records Act.

From: Thompson, Robert <robert.thompson@stantec.com>
Sent: Thursday, December 15, 2022 4:02 PM
To: Brian Doolan <BDoolan@everettwa.gov>
Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>; Mario Netto <mnetto@icsinc.tv>; Twiford, Jim <jim.twiford@stantec.com>; Alexander Flink <aflink@icsinc.tv>; Miklich, Carl <carl.miklich@stantec.com>
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Hello Brian,

The dewatering system is setup, and the first batch has been generated and sampled as we prepare to discharge to the sanitary sewer per our discharge Authorization MD-46-2022 extension. Please find the results of the sampling attached. All parameters are below discharge criteria.

Note there are two lab reports attached as an error prevented cyanide from being reported on the first lab report.

I understand we now need to schedule an inspection of the dewatering system prior to initiating discharge. Mario Netto of ICS attached on this email will coordinate directly with you to schedule the inspection.

Please let me know if you have any questions or concerns.

Thank you,

Bobby

Bobby Thompson

Direct: 206 510-5855
Mobile: 208 761-1557
robert.thompson@stantec.com

Stantec
720 Third Avenue Suite 1500
Seattle WA 98104-1878



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Please consider the environment before printing this email.

From: Brian Doolan <BDoolan@everettwa.gov>
Sent: Tuesday, November 15, 2022 8:21 AM
To: Bobby Thompson <robert.thompson@cardno.com>
Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Good morning,

Attached is the fully signed extension. Let me know if you have any other questions or if I can help in anyway. Thanks



Brian Doolan, P.E.

Operations Maintenance Manager | Public Works

425 257-8856 | 3200 Cedar Street, Everett, WA 98201

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Note: Emails and attachments sent to and from the City of Everett are public records and may be subject to disclosure pursuant to the Public Records Act.

From: Bobby Thompson <robert.thompson@cardno.com>
Sent: Monday, November 14, 2022 1:18 PM
To: Brian Doolan <BDoolan@everettwa.gov>
Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Hello Brian,

Thank you for the quick response. Please find the signed copy attached.

Note I changed the permittee from Cam Penner-Ash to myself as Cam is no longer with Cardno.

Thank you,

Bobby

Bobby Thompson
SENIOR PROJECT MANAGER



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From: Brian Doolan <BDoolan@everettwa.gov>
Sent: Monday, November 14, 2022 2:13 PM
To: Bobby Thompson <robert.thompson@cardno.com>
Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>
Subject: RE: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

Good afternoon,

The frequency is just once, unless something changes that would make you think the water quality as gotten worse. And yes no problem to extend it, attached is the extension (same permit just changed the date and put it until the end of June 2023. Thanks



Brian Doolan, P.E.

Operations Maintenance Manager | Public Works
425 257-8856 | 3200 Cedar Street, Everett, WA 98201
everettwa.gov | [Facebook](#) | [Twitter](#)

Note: Emails and attachments sent to and from the City of Everett are public records and may be subject to disclosure pursuant to the Public Records Act.

From: Bobby Thompson <robert.thompson@cardno.com>
Sent: Monday, November 14, 2022 11:03 AM
To: Brian Doolan <BDoolan@everettwa.gov>
Cc: Ryan Pozzuto <ryan.pozzuto@cardno.com>; Laina Cole <laina.cole@cardno.com>
Subject: [EXTERNAL] Cardno / Port of Everett - Dewatering Discharge Permit

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Hello Brian,

I hope you are doing well. We are finally to a point where we anticipate dewatering activities to commence in the next ~2 weeks for the subject discharge permit. Prior to discharge, I believe you need to perform an inspection of the setup. I will let you know when the system is setup and ready for inspection. I have two other questions as well:

1. I see the project lists the water quality criteria that must be achieved prior to discharge. Can you please let me know the required sampling frequency?
2. Our project is going to extend into 2023. Can we have the permit expiration date extended through the end of March 2023?

Thank you,

Bobby

Bobby Thompson
SENIOR PROJECT MANAGER

Cell: 206 510 5855
robert.thompson@cardno.com

309 South Cloverdale Street Unit A13
Seattle, WA 98108



ify us immediately.

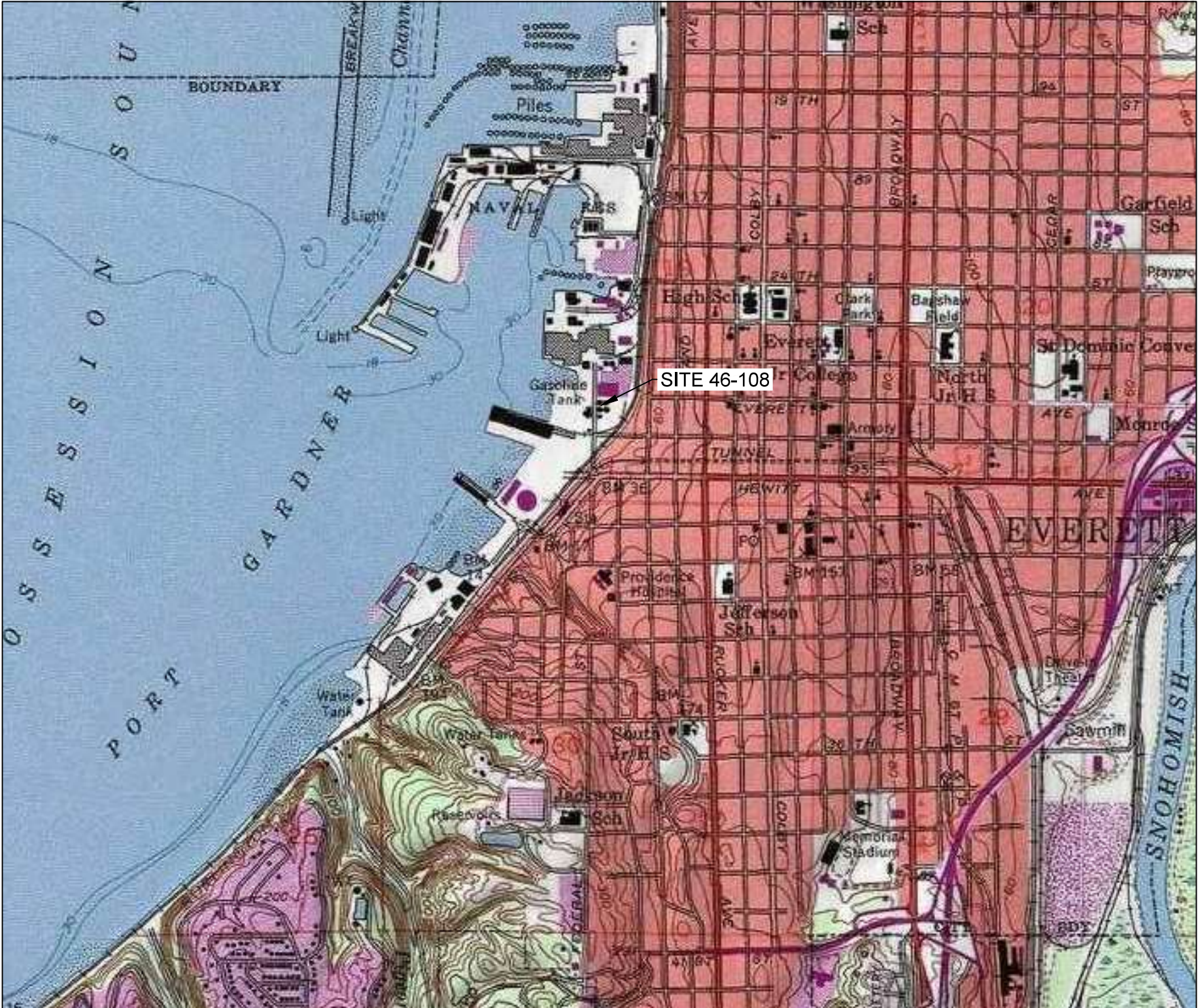
Please consider the environment before printing this email.

APPENDIX L

Plans



PORT OF EVERETT REMEDIAL EXCAVATION
EVERETT, WASHINGTON

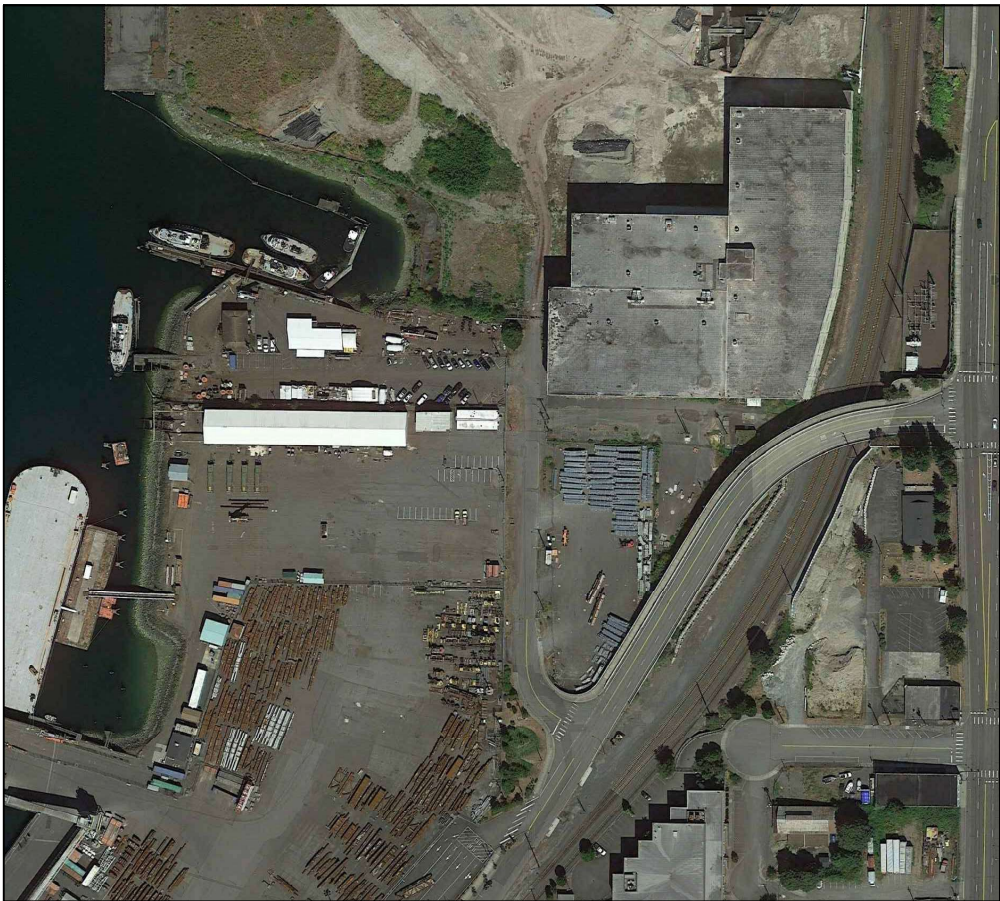


DRAWING LIST:

- Sheet 1: TITLE SHEET
- Sheet 2: P-1 PROJECT AREA PLAN
- Sheet 3: P-2 PROJECT AREA PLAN WITH UTILITIES
- Sheet 4: P-3 STAGING PLAN, PHASE 1
- Sheet 5: P-4 STAGING PLAN, PHASE 2
- Sheet 6: P-5 STAGING PLAN, PHASE 3
- Sheet 7: P-6 STAGING PLAN, PHASE 4
- Sheet 8: C-1 EXCAVATION PLAN
- Sheet 9: C-2 EXCAVATION SECTION
- Sheet 10: C-3 BACKFILL SECTION
- Sheet 11: C-4 PAVING PLAN
- Sheets 12-23: M-1 - M-12 SHORING DESIGN

SCOPE OF WORK:

Excavate and remove approximately 7,600 cubic yards of material to a depth of 20 feet, with the water table at a depth ranging from approximately 6 to 10 feet. Work will include shoring along Federal Avenue. Backfill and restore surface following excavation.



PROJECT NO.	3		
	2		
	1	07/15/22	Inserted final shoring design Sheets 12-23
FN: 031447- TITLE SHEET	0	03/21/22	
LAST REV. DATE: 07/15/22	NO.	DATE	REVISIONS
DATE: 03/21/22	DRAWN:	HALEY ROBERTZE	
	APPROVED:	JIM TWIFORD	

DRAWING:	
	TITLE SHEET
SCALE:	1"= 60'

REMEDIAL EXCAVATION
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

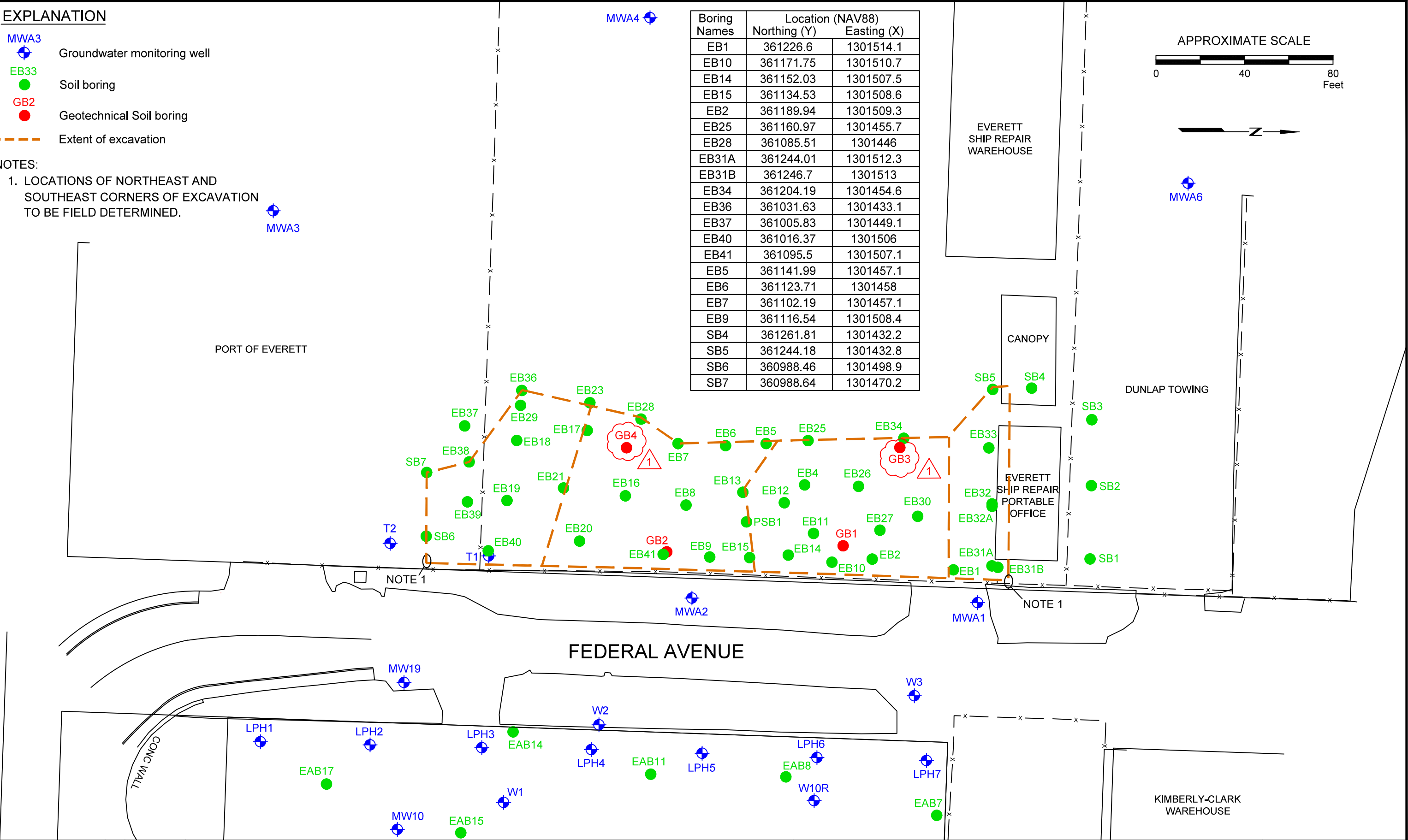
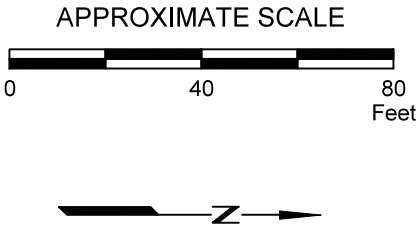
Sheet 1

EXPLANATION

- MWA3 Groundwater monitoring well
- EB33 Soil boring
- GB2 Geotechnical Soil boring
- Extent of excavation

NOTES:
1. LOCATIONS OF NORTHEAST AND SOUTHEAST CORNERS OF EXCAVATION TO BE FIELD DETERMINED.

Boring Names	Location (NAV88)	
	Northing (Y)	Easting (X)
EB1	361226.6	1301514.1
EB10	361171.75	1301510.7
EB14	361152.03	1301507.5
EB15	361134.53	1301508.6
EB2	361189.94	1301509.3
EB25	361160.97	1301455.7
EB28	361085.51	1301446
EB31A	361244.01	1301512.3
EB31B	361246.7	1301513
EB34	361204.19	1301454.6
EB36	361031.63	1301433.1
EB37	361005.83	1301449.1
EB40	361016.37	1301506
EB41	361095.5	1301507.1
EB5	361141.99	1301457.1
EB6	361123.71	1301458
EB7	361102.19	1301457.1
EB9	361116.54	1301508.4
SB4	361261.81	1301432.2
SB5	361244.18	1301432.8
SB6	360988.46	1301498.9
SB7	360988.64	1301470.2



PROJECT NO. 031447 FN: 031447- GSP LAST REV. DATE: 04/25/22 DATE: 03/21/22	3		
	2		
	1	04/25/22	ADDED GEOTECHNICAL BORINGS GB3 AND GB4
	0	03/21/22	
	NO.	DATE	REVISIONS
	DRAWN: HALEY ROBERTZE		
	APPROVED: JIM TWIFORD		

DRAWING: P-1
SCALE: 1"= 40'

PROJECT AREA PLAN PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 2

EXPLANATION

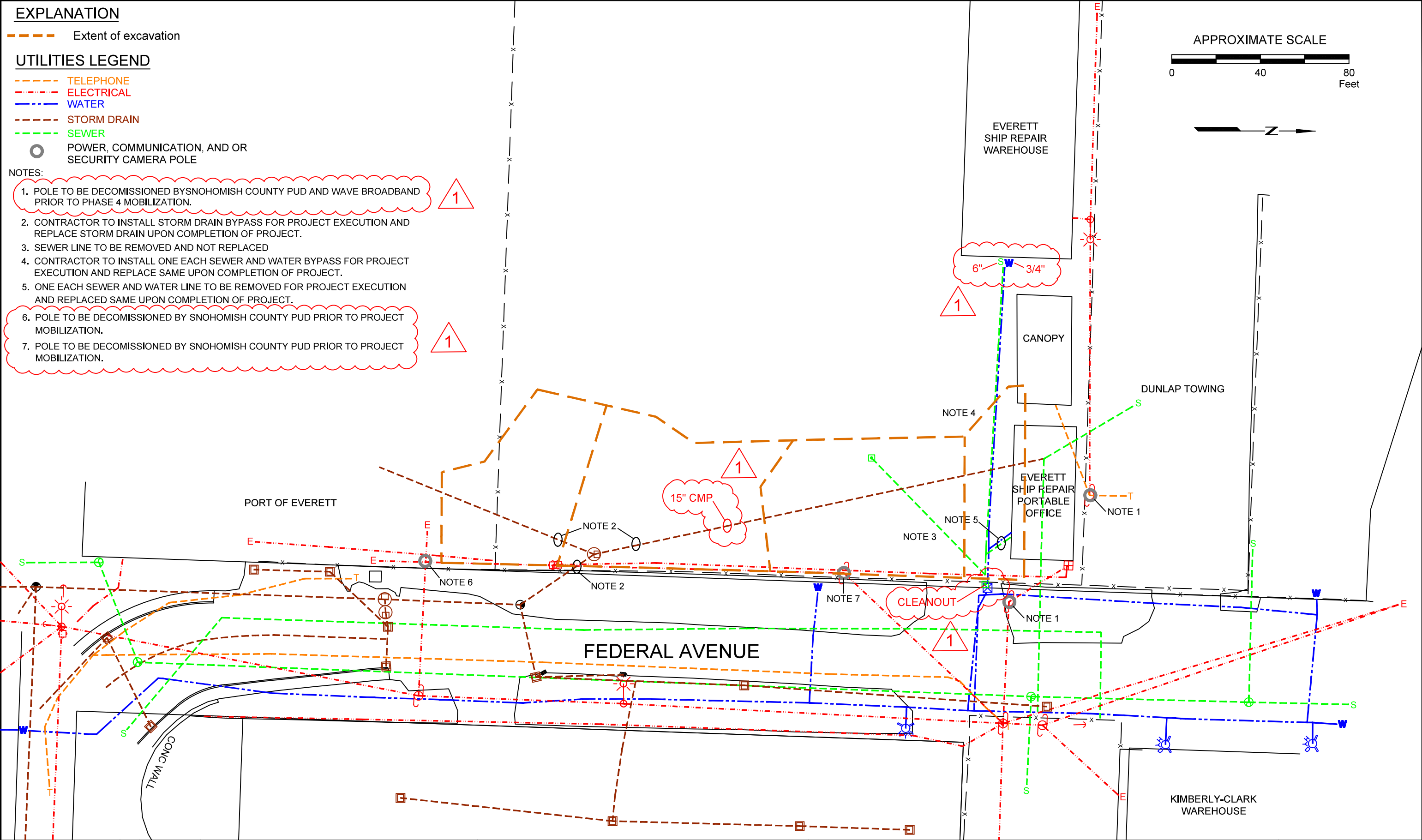
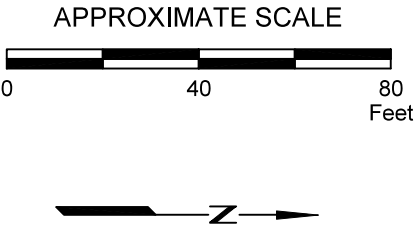
Extent of excavation

UTILITIES LEGEND

- TELEPHONE
- ELECTRICAL
- WATER
- STORM DRAIN
- SEWER
- POWER, COMMUNICATION, AND OR SECURITY CAMERA POLE

NOTES:

- 1. POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD AND WAVE BROADBAND PRIOR TO PHASE 4 MOBILIZATION.
- 2. CONTRACTOR TO INSTALL STORM DRAIN BYPASS FOR PROJECT EXECUTION AND REPLACE STORM DRAIN UPON COMPLETION OF PROJECT.
- 3. SEWER LINE TO BE REMOVED AND NOT REPLACED
- 4. CONTRACTOR TO INSTALL ONE EACH SEWER AND WATER BYPASS FOR PROJECT EXECUTION AND REPLACE SAME UPON COMPLETION OF PROJECT.
- 5. ONE EACH SEWER AND WATER LINE TO BE REMOVED FOR PROJECT EXECUTION AND REPLACED SAME UPON COMPLETION OF PROJECT.
- 6. POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD PRIOR TO PROJECT MOBILIZATION.
- 7. POLE TO BE DECOMISSIONED BY SNOHOMISH COUNTY PUD PRIOR TO PROJECT MOBILIZATION.



PROJECT NO.	3		
	2		
	1	04/25/22	UPDATE NOTES AND UTILITY INFORMATION
FN: 031447- GSP	0	03/21/22	
LAST REV. DATE: 04/25/22	NO.	DATE	REVISIONS
DATE: 03/21/22	DRAWN:	HALEY ROBBERTZE	
	APPROVED:	JIM TWIFORD	

DRAWING:	P-2
SCALE:	1"= 40'

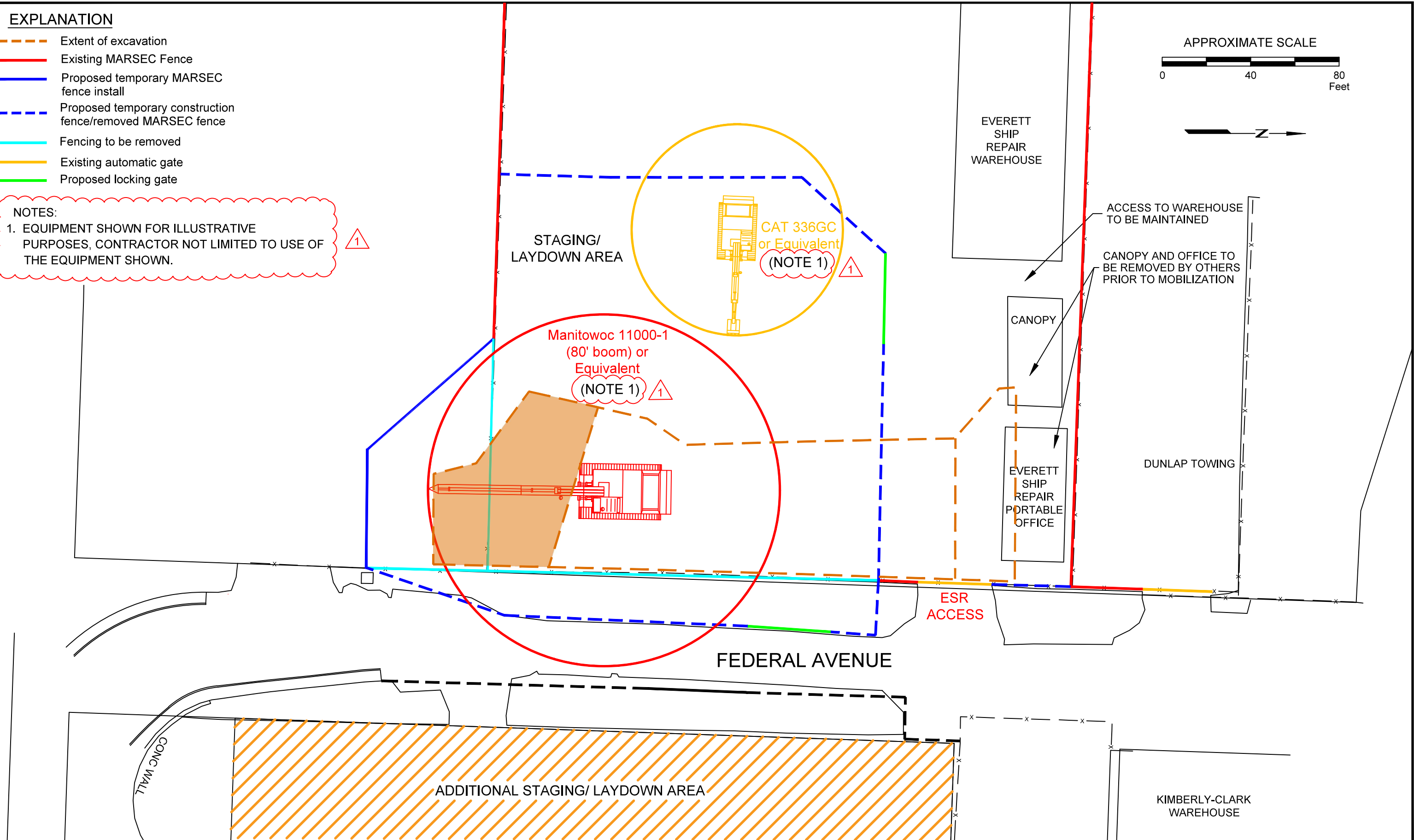
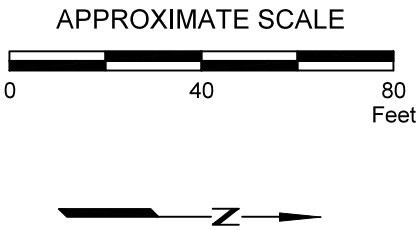
PROJECT AREA PLAN WITH UTILITIES
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 3

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

NOTES:
1. EQUIPMENT SHOWN FOR ILLUSTRATIVE PURPOSES, CONTRACTOR NOT LIMITED TO USE OF THE EQUIPMENT SHOWN.

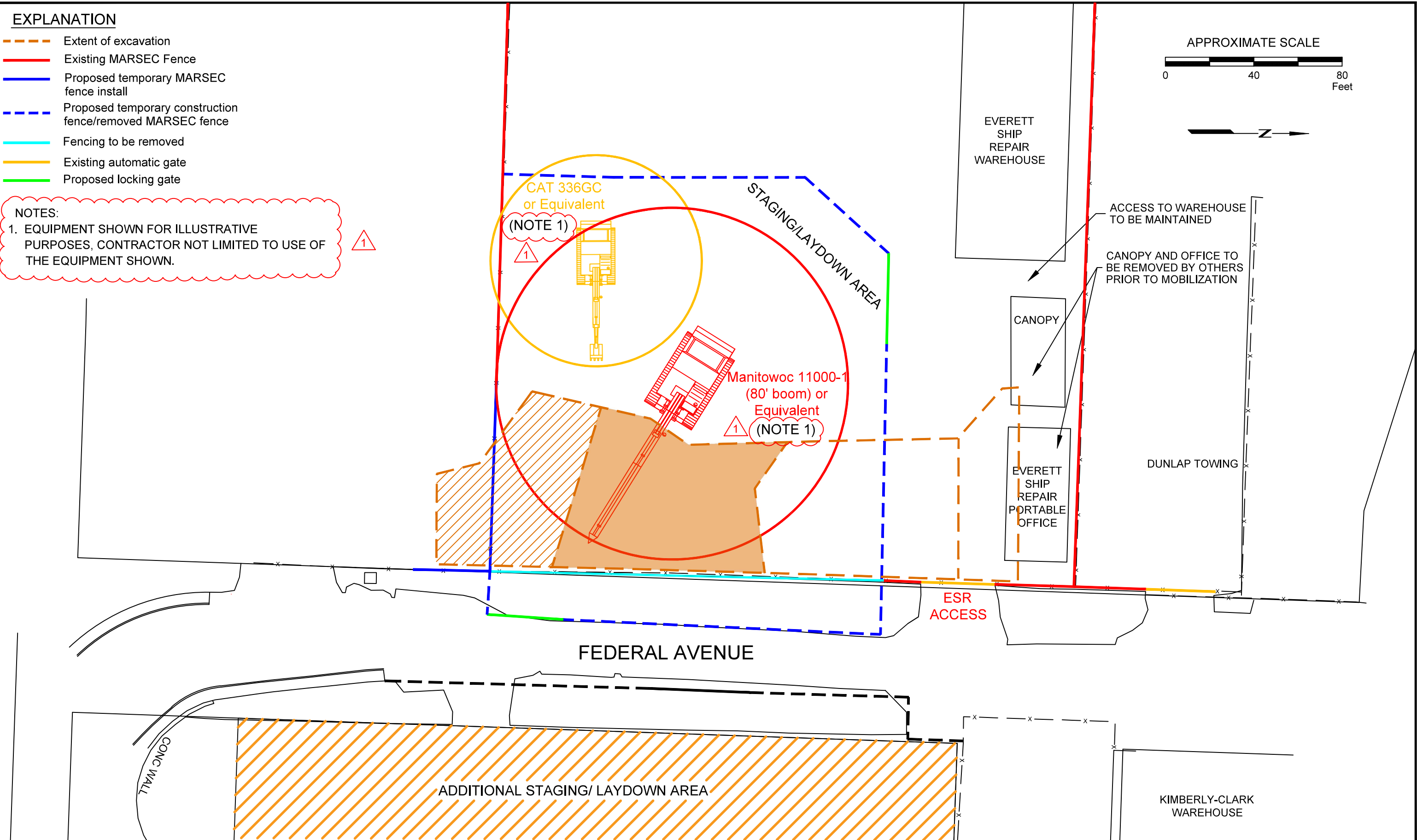
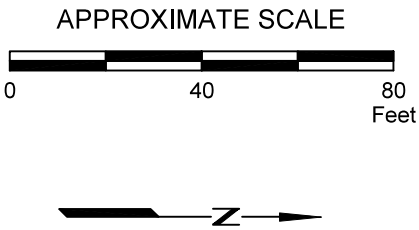


PROJECT NO. 031447		3			DRAWING: P-3	STAGING PLAN - PHASE 1	Sheet 4
		2					
		1	04/25/22	ADDED NOTE 1			
		0	03/21/22				
FN: 031447- GSP		NO.	DATE	REVISIONS	SCALE: 1"= 40'	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
LAST REV. DATE: 04/25/22		DRAWN: HALEY ROBERTZE					
DATE: 03/21/22		APPROVED: JIM TWIFORD					

EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

NOTES:
1. EQUIPMENT SHOWN FOR ILLUSTRATIVE PURPOSES, CONTRACTOR NOT LIMITED TO USE OF THE EQUIPMENT SHOWN.



PROJECT NO. 031447	3		
	2		
	1	04/25/22	ADDED NOTE 1
	0	03/21/22	
FN: 031447- GSP	NO.	DATE	REVISIONS
LAST REV. DATE: 04/25/22	DRAWN:	HALEY ROBBERTZE	
DATE: 03/21/22	APPROVED:	JIM TWIFORD	

DRAWING: P-3
SCALE: 1"= 40'

STAGING PLAN - PHASE 2
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 5

EXPLANATION

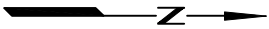
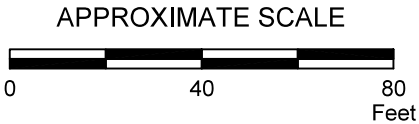
- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

NOTES:
1. EQUIPMENT SHOWN FOR ILLUSTRATIVE PURPOSES, CONTRACTOR NOT LIMITED TO USE OF THE EQUIPMENT SHOWN.



EVERETT SHIP REPAIR TEMPORARY OFFICE

EVERETT SHIP REPAIR WAREHOUSE



STAGING/LAYDOWN AREA

CAT 336GC or Equivalent
(NOTE 1)



Manitowoc 11000-1 (80' boom) or Equivalent
(NOTE 1)



DUNLAP TOWING

ESR ACCESS

FEDERAL AVENUE

CONC WALL

ADDITIONAL STAGING/ LAYDOWN AREA

KIMBERLY-CLARK WAREHOUSE

PROJECT NO. 031447 FN: 031447- GSP LAST REV. DATE: 04/25/22 DATE: 03/21/22	3		
	2		
	1	04/25/22	ADDED NOTE 1
	0	03/21/22	
	NO.	DATE	REVISIONS
DRAWN: HALEY ROBERTZE		APPROVED: JIM TWIFORD	

DRAWING: **P-3**

SCALE: 1"= 40'

STAGING PLAN - PHASE 3

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

Sheet 6

EXPLANATION

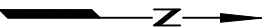
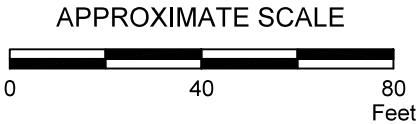
- Extent of excavation
- Existing MARSEC Fence
- Proposed temporary MARSEC fence install
- Proposed temporary construction fence/removed MARSEC fence
- Fencing to be removed
- Existing automatic gate
- Proposed locking gate

NOTES:
1. EQUIPMENT SHOWN FOR ILLUSTRATIVE PURPOSES, CONTRACTOR NOT LIMITED TO USE OF THE EQUIPMENT SHOWN.

1

EVERETT SHIP REPAIR TEMPORARY OFFICE

EVERETT SHIP REPAIR WAREHOUSE



STAGING/LAYDOWN AREA

CAT 336GC or Equivalent
(NOTE 1)

Manitowoc 11000-1
(80' boom) or Equivalent
(NOTE 1)

DUNLAP TOWING

ESR ACCESS

FEDERAL AVENUE

ADDITIONAL STAGING/ LAYDOWN AREA

KIMBERLY-CLARK WAREHOUSE

PROJECT NO.	3		
	2		
	1	04/25/22	ADDED NOTE 1
FN: 031447- GSP	0	03/21/22	
	NO.	DATE	REVISIONS
LAST REV. DATE: 04/25/22	DRAWN: HALEY ROBBERTZE		
DATE: 03/21/22	APPROVED: JIM TWIFORD		

DRAWING:	P-3
SCALE:	1"= 40'

STAGING PLAN - PHASE 4
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 7

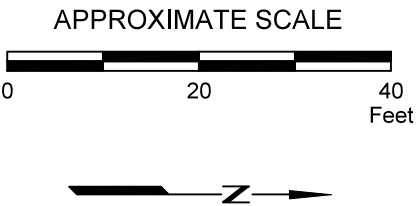
EXPLANATION

- Extent of excavation
- Existing MARSEC Fence
- Fencing to be removed for work and replaced at conclusion of project
- Existing automatic gate
- Shoring to be left in place
- Shoring to be removed at conclusion of excavation

UTILITIES LEGEND

- TELEPHONE
- ELECTRICAL
- WATER
- STORM DRAIN
- SEWER

NOTE:
ADDITIONAL FENCING AND GATE
DETAILS SHOWN ON SHEETS 4
THROUGH 7



EVERETT
SHIP REPAIR
WAREHOUSE

CANOPY AND OFFICE TO
BE REMOVED BY OTHERS
PRIOR TO MOBILIZATION

SHEET PILE SHORING
DWG M-1, SHEET 12

CANOPY

EVERETT
SHIP REPAIR
PORTBLE
OFFICE

20' BGS

17.5' BGS

12.5' BGS

15' BGS

10' BGS

7.5' BGS

10' BGS

SHEET PILE
SHORING
DWG M-1,
SHEET 12

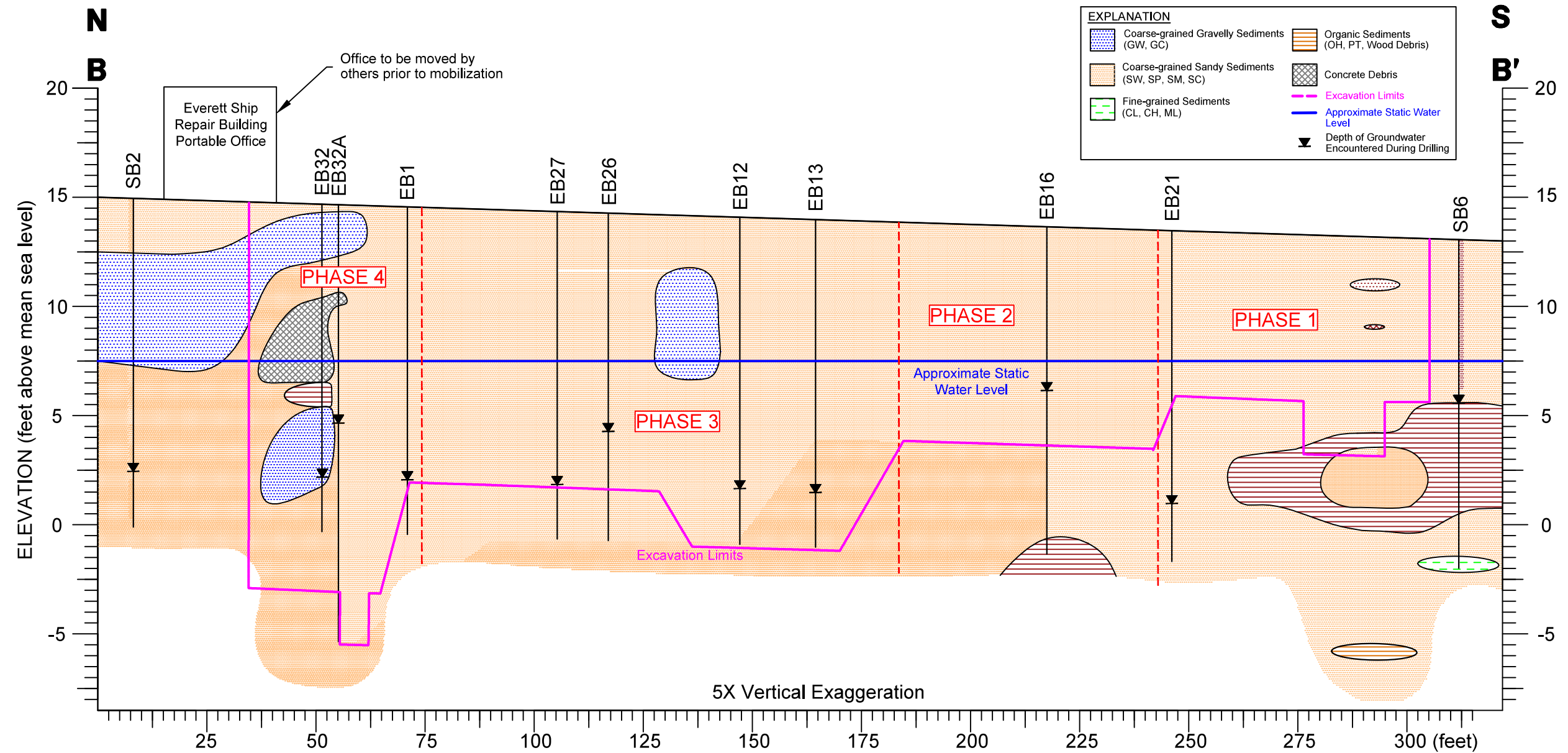
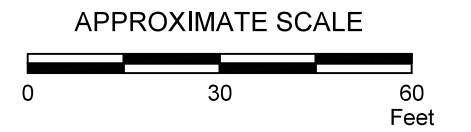
FEDERAL AVENUE

PROJECT NO.	031447	3			
		2			
		1			
FN: 031447- GSP		0	03/21/22		
LAST REV, DATE: 03/21/22		NO.	DATE	REVISIONS	
DATE: 03/21/22		DRAWN: HALEY ROBERTZE			
		APPROVED: JIM TWIFORD			

DRAWING:	C-1
SCALE:	1"= 20'

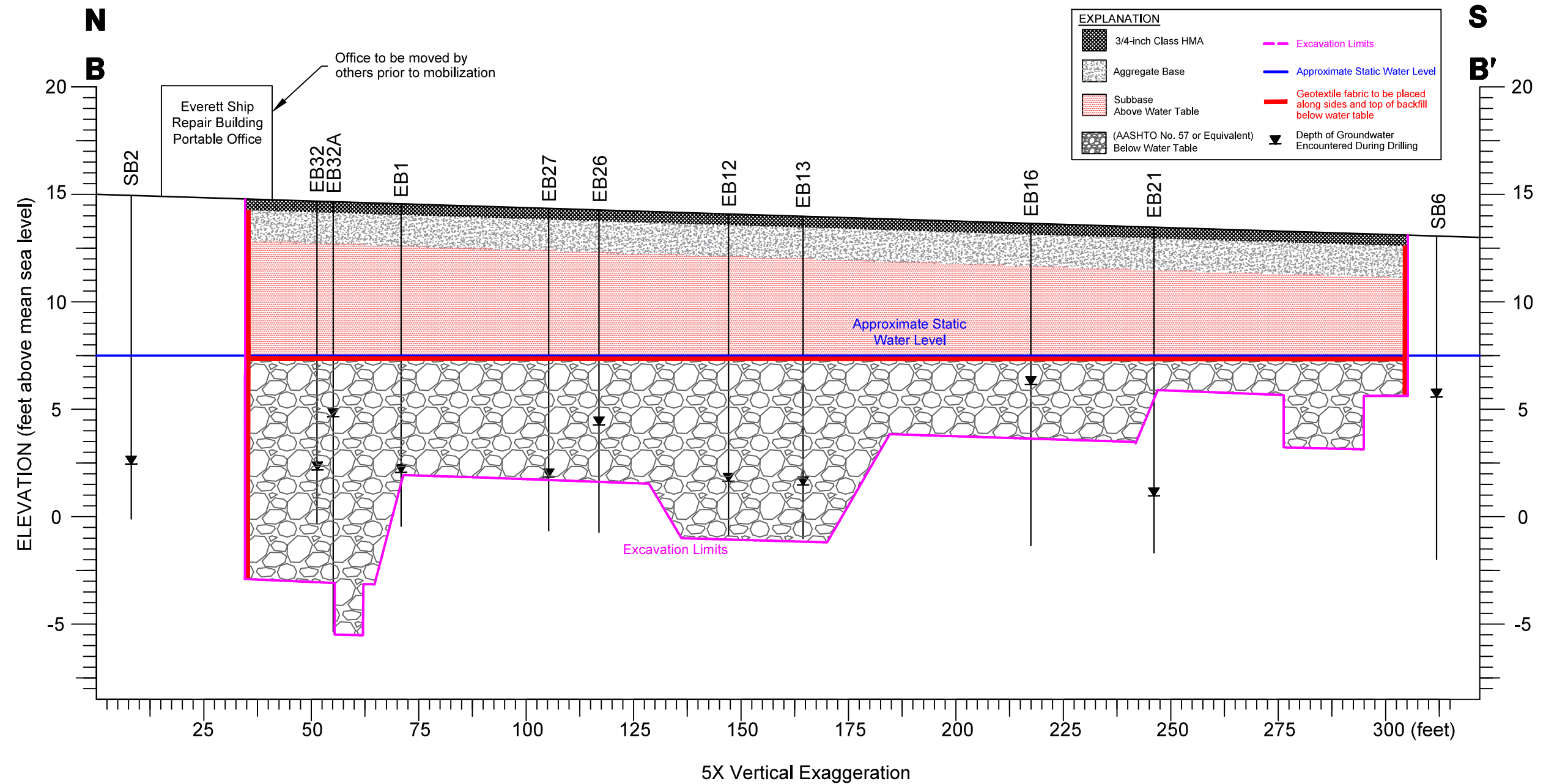
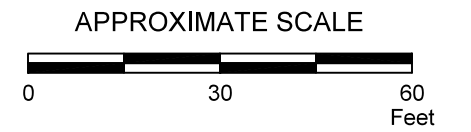
EXCAVATION PLAN
PORT OF EVERETT 2730 Federal Avenue Everett, Washington


Sheet 8



PROJECT NO.		3			DRAWING:	C-2	EXCAVATION SECTION	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	Sheet 9
031447		2							
		1							
FN: 031447- TITLE SHEET		0	03/21/22						
		NO.	DATE	REVISIONS	SCALE:	1"= 30'			
LAST REV. DATE: 03/21/22		DRAWN: HALEY ROBBERTZE							
DATE: 03/21/22		APPROVED: JIM TWIFORD							

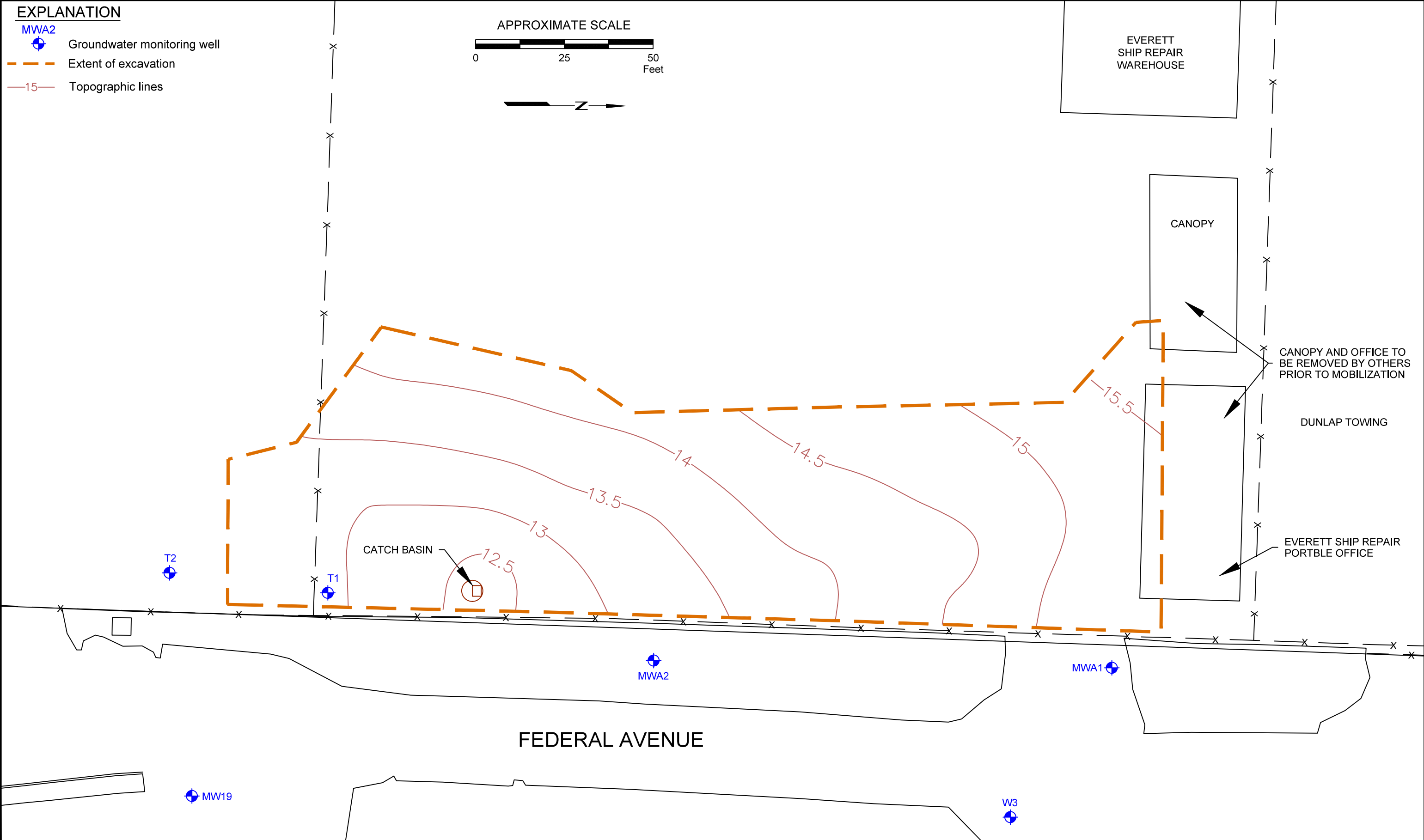
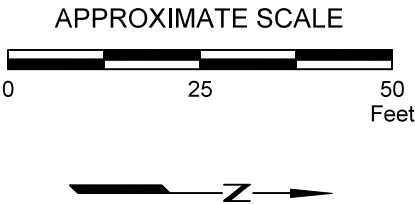
NOTE:
REFER TO TECHNICAL SPECIFICATIONS FOR DETAILS
ON BACKFILL MATERIALS AND PLACEMENT



PROJECT NO.		3			DRAWING:	C-3	BACKFILL SECTION	PORT OF EVERETT 2730 Federal Avenue Everett, Washington	
031447		2							
		1							
		0	03/21/22						
FN:	031447- TITLE SHEET	NO.	DATE	REVISIONS	SCALE:	1" = 30'			
LAST REV. DATE:		DRAWN:							
DATE:		APPROVED:							
03/21/22		HALEY ROBBERTZE							
03/21/22		JIM TWIFORD							

EXPLANATION

- MWA2 Groundwater monitoring well
- Extent of excavation
- 15 Topographic lines



PROJECT NO. 031447		3			DRAWING: C-4	PAVING PLAN PORT OF EVERETT 2730 Federal Avenue Everett, Washington	Sheet 11
		2					
		1					
FN: 031447-C-4 PAVING PLAN		0	03/21/22				
LAST REV. DATE: 03/21/22		NO.	DATE	REVISIONS	SCALE: 1" = 25'		
DATE: 03/21/22		DRAWN: HALEY ROBBERTZE APPROVED: JIM TWIFORD					

SHEET PILE - SHORING NOTES:

STRUCTURAL STEEL:

REFERENCED STANDARDS:
(1) AISC "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN"
(2) AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS & BRIDGES"
(3) AWS D1.1 "STRUCTURAL WELDING CODE - STEEL"

MATERIALS: CONFORM TO:
STRUCTURAL SHEETPILE SHAPES - ASTM GRADE 50 OR 60
STRUCTURAL STEEL WIDE FLANGE SHAPES - ASTM GRADE 50

UTILITIES & INTERFERENCES:

ALL EXISTING UTILITIES AND OTHER OBJECTS WHICH MAY INTERFERE WITH THE INSTALLATION OF THE SHORING SYSTEM ARE TO BE LOCATED PRIOR TO BEGINNING CONSTRUCTION.

POSSIBLE INTERFERENCES BETWEEN THE SHORING AND ANY UTILITY OR OTHER OBJECT(S) IS TO BE PROVIDED TO THE SHORING DESIGNER PRIOR TO THE START OF WORK.

SHORING MONITORING PLAN

A MONITORING PROGRAM IS TO BE IMPLEMENTED TO VERIFY THE PERFORMANCE OF THE SHORING SYSTEM AND POSSIBLE EXCAVATION EFFECTS ON NEIGHBORING PROPERTIES.

THE FIRST STEP IN THIS PROGRAM SHOULD CONSIST OF SURVEYING THE SHORING WALL LINE & ELEVATIONS AND DOCUMENTING THE CONDITION/LOCATION OF THE SHORING AS INSTALLED. THIS DOCUMENTATION SHOULD INCLUDE A PHOTOGRAPHIC RECORD, WITH MONITORING POINTS ESTABLISHED AS FOLLOWS: ELEVATION AND LOCATION POINTS AT TOP OF THE SHEET PILE AT 15' INTERVALS.

MONITORING OF THE SHORING SYSTEM AND SURROUNDING AREAS SHOULD OCCUR TWO TIMES PER WEEK AS THE EXCAVATION PROCEEDS. A REGISTERED LAND SURVEYOR SHOULD BE RETAINED TO PERFORM THESE READINGS.

THE DATA SHOULD INCLUDE SURVEYING THE VERTICAL AND HORIZONTAL ALIGNMENT OF EVERY MONITORING POINT. THE POINT ON THE SHORING SHOULD BE ESTABLISHED WITHIN 24 HOURS OF THE PILE BEING INSTALLED AND PRIOR TO EXCAVATION.

THE PROJECT GEOTECHNICAL ENGINEER SHALL REVIEW THE MONITORING DATA AS IT IS RECORDED. THE GEOTECHNICAL ENGINEER SHALL PROVIDE AN EVALUATION OF WALL PERFORMANCE ALONG WITH SURVEY DATA TO THE OWNER ON AT LEAST A WEEKLY BASIS. IMMEDIATELY AND DIRECTLY, NOTIFY THE OWNER IF ANY UNUSUAL OR SIGNIFICANT INCREASED MOVEMENT OCCURS.

SURVEYING SHOULD CONTINUE UNTIL THE EXCAVATION AND BACKFILLING OPERATIONS ARE COMPLETE UP TO FINAL GRADING.

IMMEDIATELY AND DIRECTLY, NOTIFY THE GEOTECHNICAL AND STRUCTURAL ENGINEER, WALL DESIGNER, THE OWNER, IF GREATER MOVEMENT THAN EXPECTED OCCURS, SEE PLAN SHEET S-1.0 FOR EXPECTED SHEET PILE DEFLECTION. AT DEFLECTION ABOVE THE AMOUNT OF MOVEMENT EXPECTED THE ENGINEERS AND ENGINEERS SHALL DETERMINE THE CAUSE OF ANY ADVERSE DISPLACEMENT AND DEVELOP REMEDIAL MEASURES REQUIRED.

WELDING:

WELDING AND REPAIR WELDING FOR ALL STEEL FABRICATION SHALL COMPLY WITH THE AWS D1.1/D1.1M, LATEST EDITION, STRUCTURAL WELDING CODE. THE REQUIREMENTS DESCRIBED IN THE REMAINDER OF THIS SECTION SHALL PREVAIL WHENEVER THEY DIFFER FROM EITHER OF THE ABOVE WELDING CODES.

THE CONTRACTOR SHALL WELD STRUCTURAL STEEL ONLY TO THE EXTENT SHOWN IN THE PLANS. NO WELDING, INCLUDING TACK AND TEMPORARY WELDS SHALL BE DONE IN THE SHOP OR FIELD UNLESS THE LOCATION OF THE WELDS IS SHOWN ON THE APPROVED SHOP DRAWINGS OR APPROVED BY THE ENGINEER IN WRITING. WELDING PROCEDURES SHALL BE SUBMITTED FOR APPROVAL WITH SHOP DRAWINGS. THE PROCEDURES SHALL SPECIFY THE TYPE OF EQUIPMENT TO BE USED, ELECTRODE SELECTION, PREHEAT REQUIREMENTS, BASE MATERIALS, AND JOINT DETAILS. WHEN THE PROCEDURES ARE NOT PREQUALIFIED BY AWS OR AASHTO, EVIDENCE OF QUALIFICATION TESTS SHALL BE SUBMITTED.

WELDING SHALL NOT BEGIN UNTIL AFTER THE CONTRACTOR HAS RECEIVED THE ENGINEER'S APPROVAL OF SHOP PLANS. THESE PLANS SHALL INCLUDE PROCEDURES FOR WELDING, ASSEMBLY, AND ANY HEAT-STRAIGHTENING OR HEAT-CURVING.

IN SHIELDED METAL-ARC WELDING, THE CONTRACTOR SHALL USE LOW-HYDROGEN ELECTRODES.

IN SUBMERGED-ARC WELDING, FLUX SHALL BE OVEN-DRIED AT 550°F FOR AT LEAST 2-HOURS, THEN STORED IN OVENS HELD AT 250°F OR MORE. IF NOT USED WITHIN 4-HOURS AFTER REMOVAL FROM A DRYING OR STORAGE OVEN, FLUX SHALL BE REDRIED BEFORE USE.

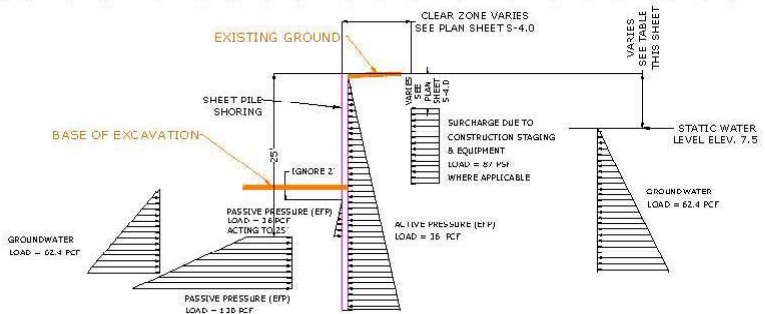
PREHEAT AND INTERPASS TEMPERATURES SHALL CONFORM TO THE APPLICABLE WELDING CODE AS SPECIFIED IN THIS SECTION. REFER TO APPROVED WELDING PROCEDURES WHEN WELDING MAIN TO STEEL MEMBERS. IF GROOVE WELDS (WEB-TO-WEB OR FLANGE-TO-FLANGE) HAVE BEEN REJECTED, THEY MAY BE REPAIRED NO MORE THAN TWICE. IF A THIRD FAILURE OCCURS, THE CONTRACTOR SHALL:

1. TRIM THE MEMBERS, IF THE ENGINEER APPROVES, AT LEAST 1/2 INCH ON EACH SIDE OF THE WELD;
2. REPLACE THE MEMBERS AT NO EXPENSE TO THE CONTRACTING AGENCY.

BY USING EXTENSION BARS AND RUNOFF PLATES, THE CONTRACTOR SHALL TERMINATE GROOVE WELDS IN A WAY THAT ENSURES THE SOUNDNESS OF EACH WELD TO ITS ENDS. THE BARS AND PLATES SHALL BE REMOVED AFTER THE WELD IS FINISHED AND COOLED. THE WELD ENDS SHALL THEN BE GROUND SMOOTH AND FLUSH WITH THE EDGES OF ABUTTING PARTS.

THE CONTRACTOR SHALL NOT:

1. WELD WITH ELECTROGAS OR ELECTROSLAG METHODS,
2. WELD NOR FLAME CUT WHEN THE AMBIENT TEMPERATURE IS BELOW 20°F,
3. USE COPED HOLES IN THE WEB FOR WELDING BUTT SPLICES IN THE FLANGES UNLESS THE PLANS SHOW THEM.



SHORING LOADING DIAGRAM

SHEET PILE INFORMATION

	Sheet pile Section	Existing Ground Surface Elevation (Feet)	Depth of Excavation (Feet)	Bottom of Penetration Elevation (Feet)	Depth to Static Water (Feet)	Required Embedment Depth (Feet)	Required Sheet Length (Feet)	Predicted Top of Sheet Deflection (Inches)	Number of Sheet Needed	Required Section Modulus	Acceptable Alternate Pile Sections
WALL 1 0' to 60'	Z226	12.88	7.5	5.38	5.38	35.6	43	1.67	26	37.4	A226, S212, P232, C241, P27225
	Z226	13.17	7.5	5.67	5.67	35.6	43	1.67	18	37.4	A226, S212, C241, C876, S26
	Z226	13.48	7.5	5.98	5.98	35.6	43	1.67	8	37.4	A226, S212, C241, C876, S26
	Z238	13.44	10	3.44	5.44	35.6	46.6	1.12	8	24.5	Z238, P232, P243, P27232
	Z226	14.00	7.5	6.00	6.00	35.6	43	1.67	8	37.4	A226, S212, C241, C876, S26
WALL 3 0' to 40'	Z226	12.28	7.5	5.78	5.78	35.6	43	1.67	14	37.4	A226, S212, C241, C876, S26
	Z226	13.00	7.5	5.50	5.50	35.6	43	1.67	17	37.4	A226, S212, C241, C876, S26
WALL 4 0' to 30' 38' to 75'	A734	13.76	10	3.76	6.76	27.6	46.6	1.12	17	24.5	Z238, P232, P243, P27232
	Z226	13.76	7.5	6.00	6.00	35.6	43	1.67	24	37.4	A226, S212, C241, C876, S26
WALL 4 60' to 90'	A734	13.13	10	3.13	6.13	31.6	46.6	1.12	19	24.5	Z238, P232, P243, P27232
	Z226	13.13	10	3.13	6.13	31.6	46.6	1.12	19	24.5	Z238, P232, P243, P27232
WALL 6 0' to 40' 40' to 55'	A736	13.76	15	1.76	6.76	37.6	51.6	1.39	18	66.4	P232, P243, P27232
	A736	12.28	12.5	1.78	6.78	37.6	49	1.39	12	66.4	P232, P243, P27232
WALL 7 0' to 20' 20' to 40' 41' to 45'	A234	13.27	10	1.27	6.27	31.6	36.6	1.12	11	24.5	Z238, P232, P243, P27232
	A234	13.32	10	1.32	6.32	31.6	36.6	1.12	9	24.5	Z238, P232, P243, P27232
	A234	13.12	10	1.12	6.12	31.6	36.6	1.12	20	24.5	Z238, P232, P243, P27232
WALL 8 0' to 40' 40' to 55'	A736	13.60	15	1.60	6.60	37.6	51.6	1.39	18	66.4	P232, P243, P27232
	A736	13.76	12.5	1.26	6.26	37.6	49	1.39	21	66.4	P232, P243, P27232
WALL 9 0' to 40'	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	28	34.5	A219, C2128, P232, S227
WALL 10 0' to 70'	A236	14.88	20	5.88	7.88	36.6	49	1.39	34	66.4	P232, P243, P27232
WALL 11 0' to 25'	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	43	34.5	A219, C2128, P232, S227
WALL 12 0' to 60' 60' to 70' 70' to 80'	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	23	34.5	A219, C2128, P232, S227
	Z219	13.60	20	4.60	6.60	25	32.6	3.14	10	34.5	A219, S227, S229, P232, P243
	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	6	34.5	A219, C2128, P232, S227
WALL 13 0' to 10' 10' to 20' 20' to 30'	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	5	34.5	A219, C2128, P232, S227
	Z219	13.60	20	4.60	6.60	25	32.6	3.14	5	34.5	A219, S227, S229, P232, P243
	Z219	13.60	17.5	5.60	7.60	25	32.6	3.14	4	34.5	A219, C2128, P232, S227

PORT OF EVERETT
Remedial Excavation

Permanent & Temporary
Sheet Pile Shoring
Plans

LUCIA ENGINEERING, INC.

12527 Huckleberry Lane
Arlington, Washington 98223

PHONE: (206) 790-8039

E-MAIL: joe@luciaeng.com



07-06-22

Number Date By Description

SHEET
S-1.0

PROJECT NO.	3		
	2		
	1	07/15/22	Inserted final shoring design
FN: 031447- TITLE SHEET	0	03/21/22	
LAST REV. DATE: 07/15/22	NO.	DATE	REVISIONS
DATE: 03/21/22	DRAWN: HALEY ROBERTZE		
	APPROVED: JIM TWIFORD		

DRAWING:

M-1

SCALE:

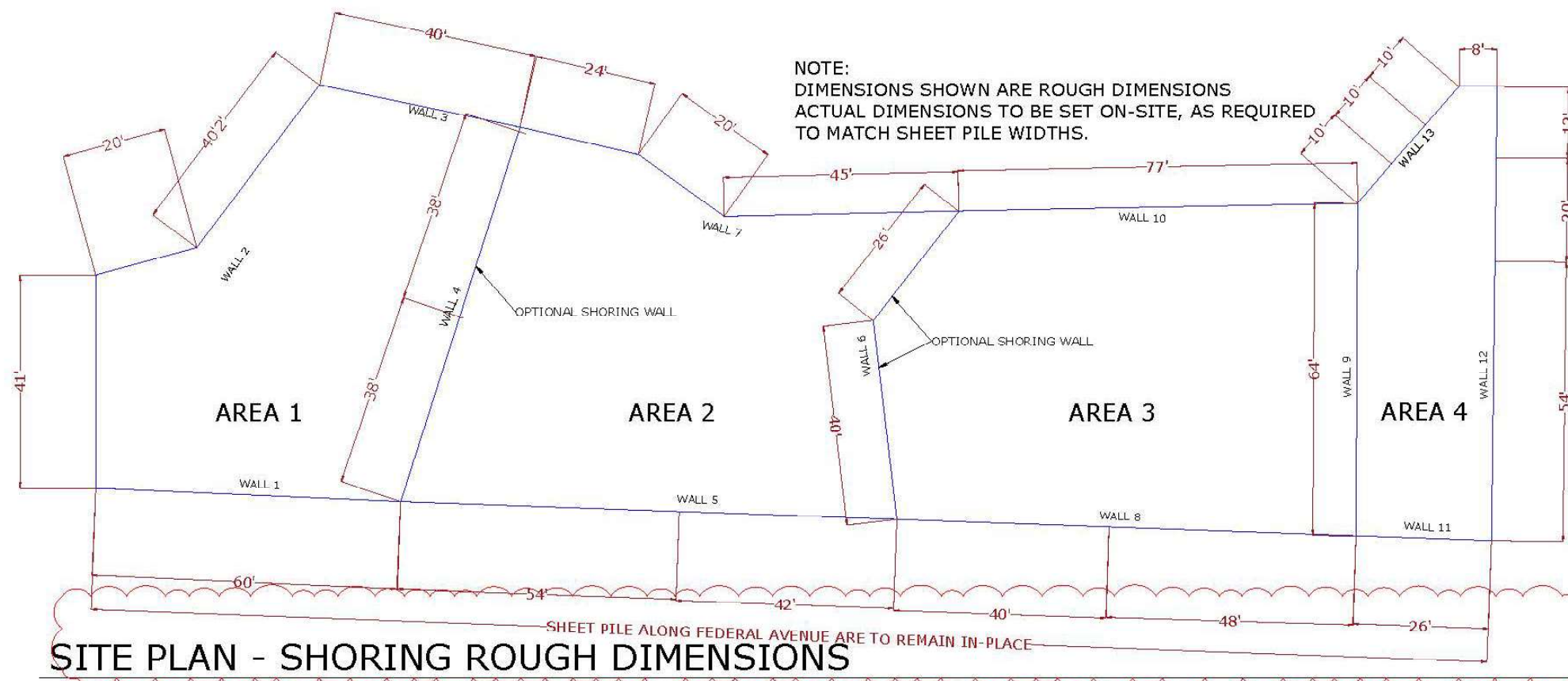
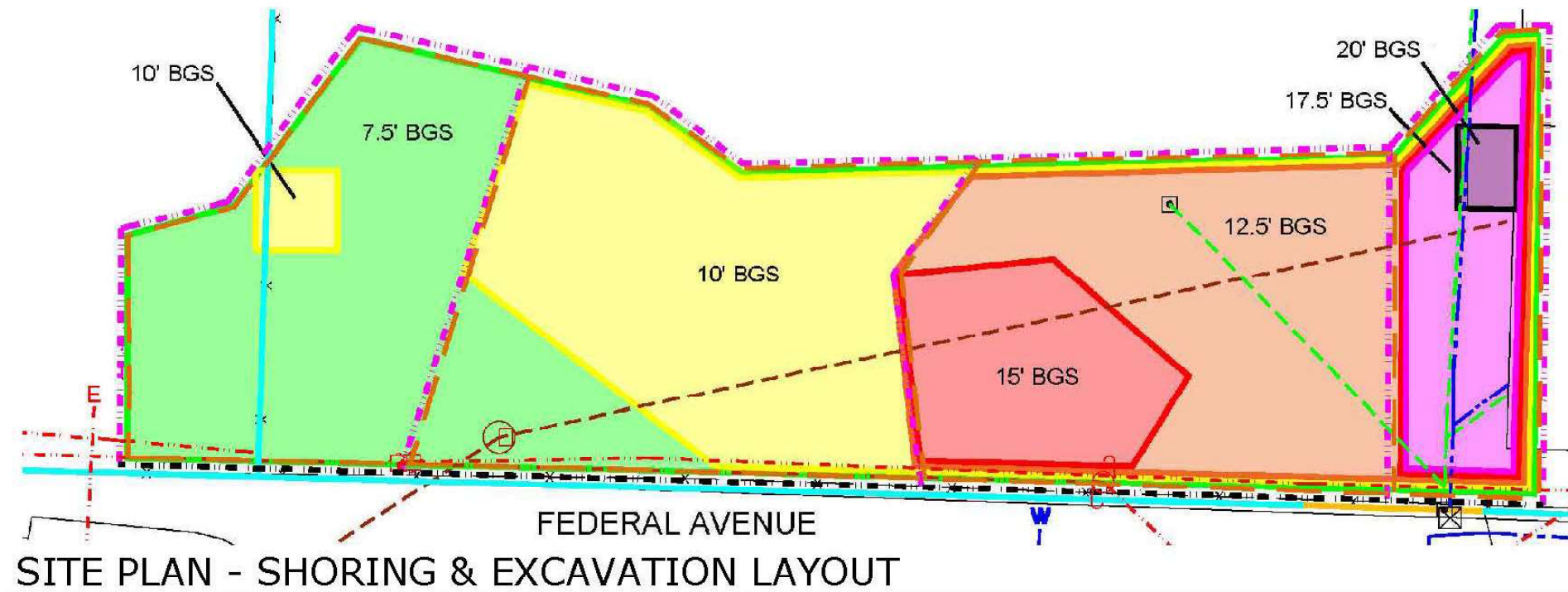
1"= 60'

SHORING DESIGN (1 OF 12)

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

Sheet 12





PORT OF EVERETT
Remedial Excavation

Permanent & Temporary
Sheet Pile Shoring
Plans

LUCIA ENGINEERING, INC.
12527 Huckabee Lane
Arlington, Washington 98223
PHONE: (206) 790-8039
E-MAIL: joe@luciaeng.com

07-06-22

Number	Date	By	Description
1	06-27-22	JML	

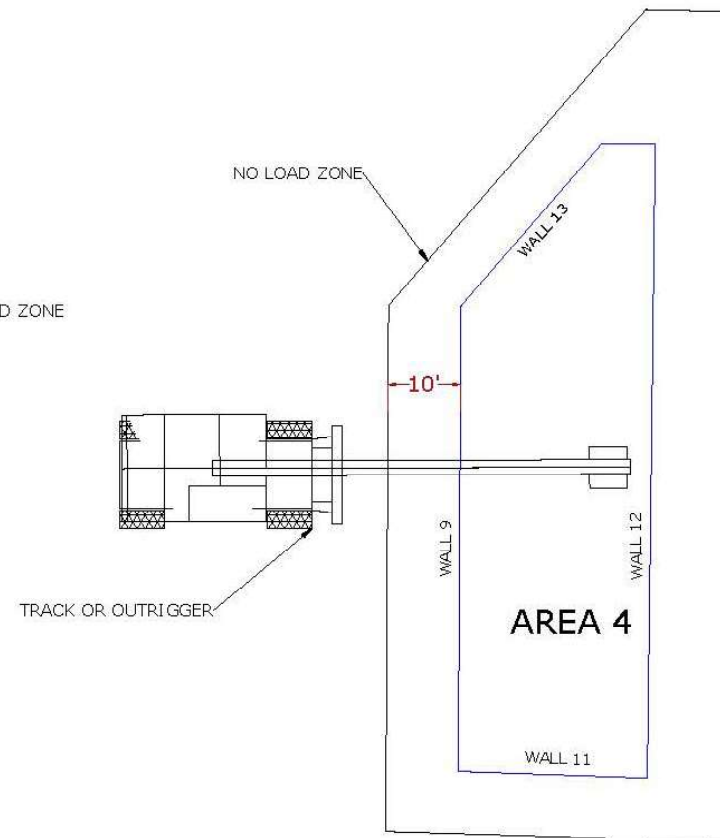
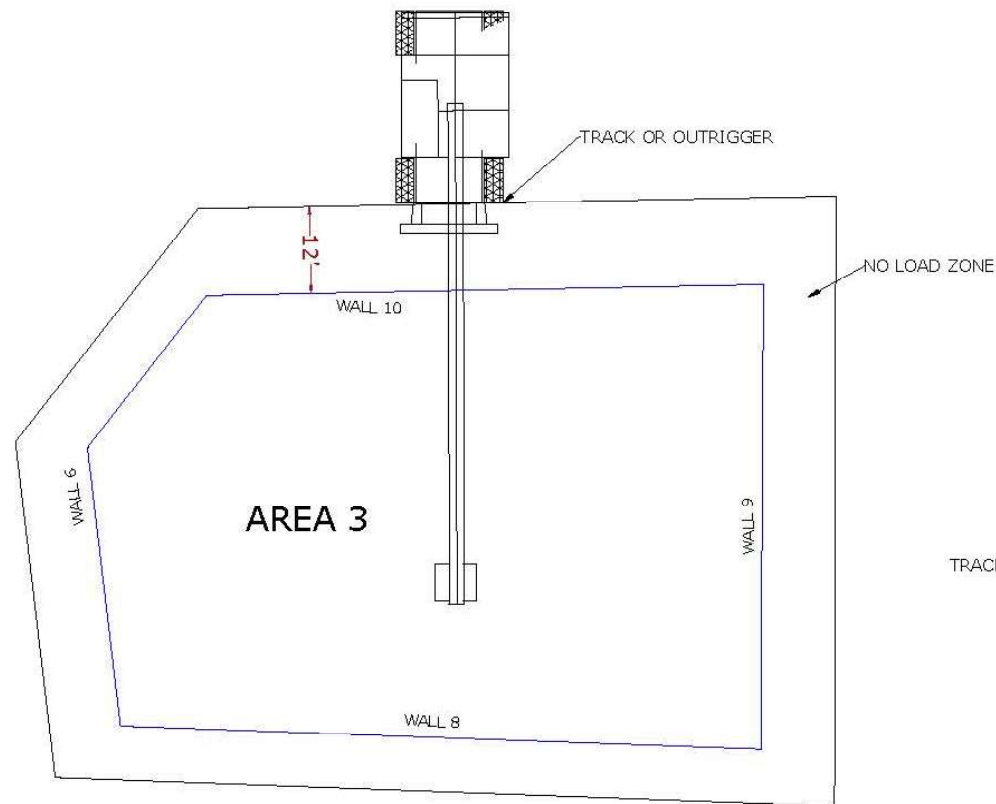
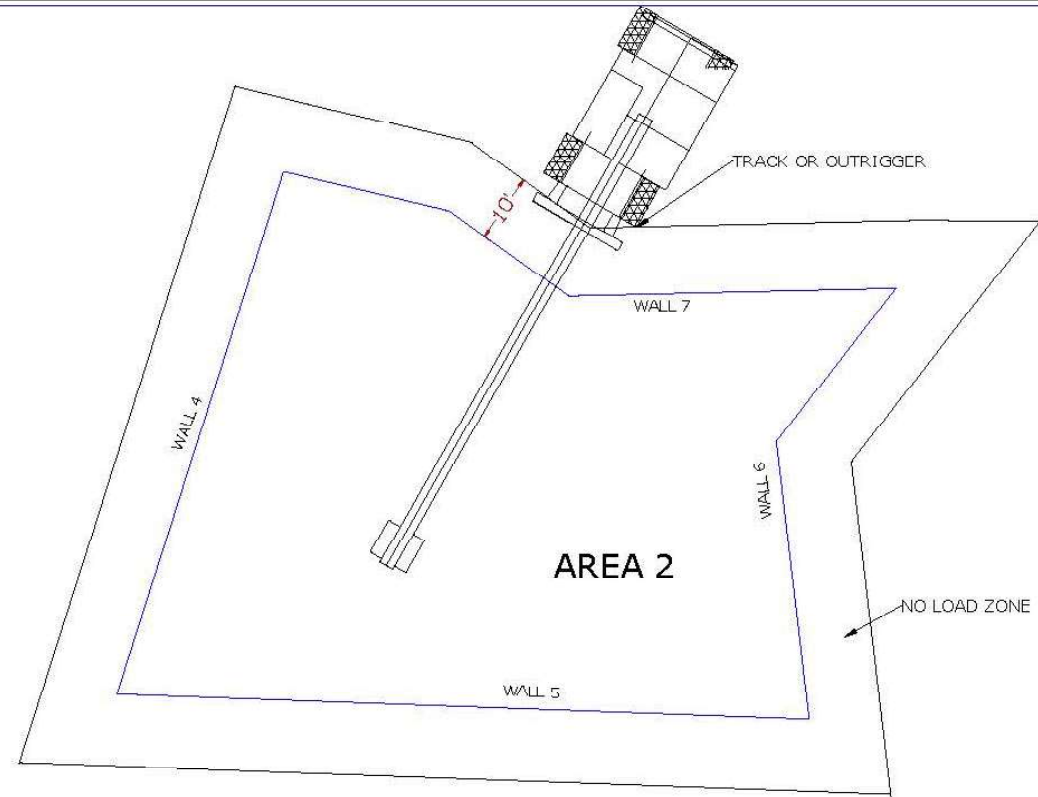
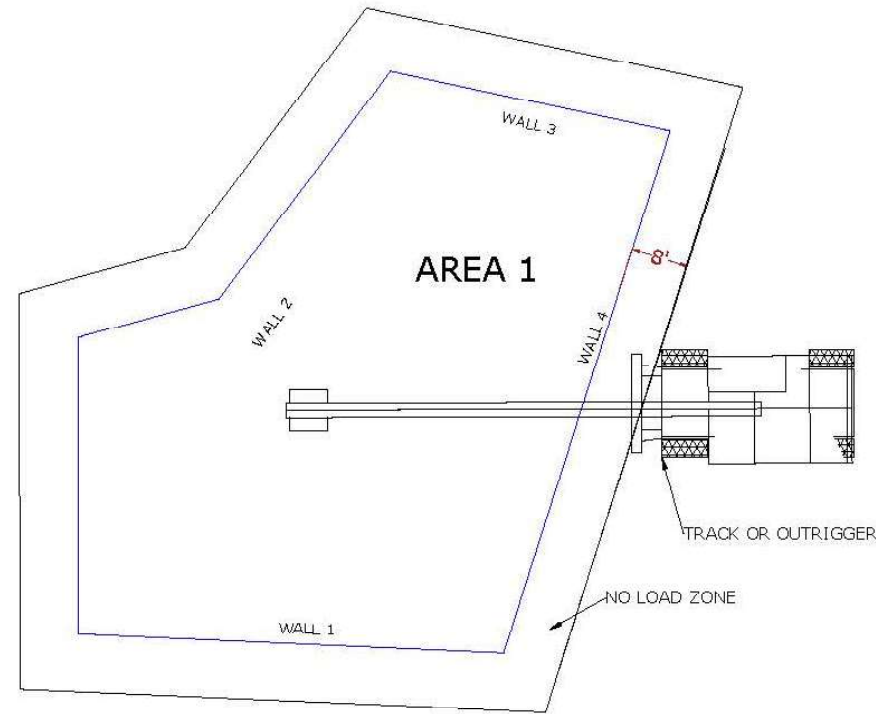
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DATE:	03/21/22	0	03/21/22	
		NO.	DATE	REVISIONS
		DRAWN:	HALEY ROBERTZE	
		APPROVED:	JIM TWIFORD	

DRAWING:	M-2
SCALE:	1"= 60'

SHORING DESIGN (2 OF 12)
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 13
Cardno



PORT OF EVERETT
Remedial Excavation

**Permanent & Temporary
Sheet Pile Shoring
Plans**

LUCIA ENGINEERING, INC.
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Arlington, Washington 98223
PHONE: (206) 790-8039
E-MAIL: joe@luciaeng.com



07-06-22

Number	Date	By	Description
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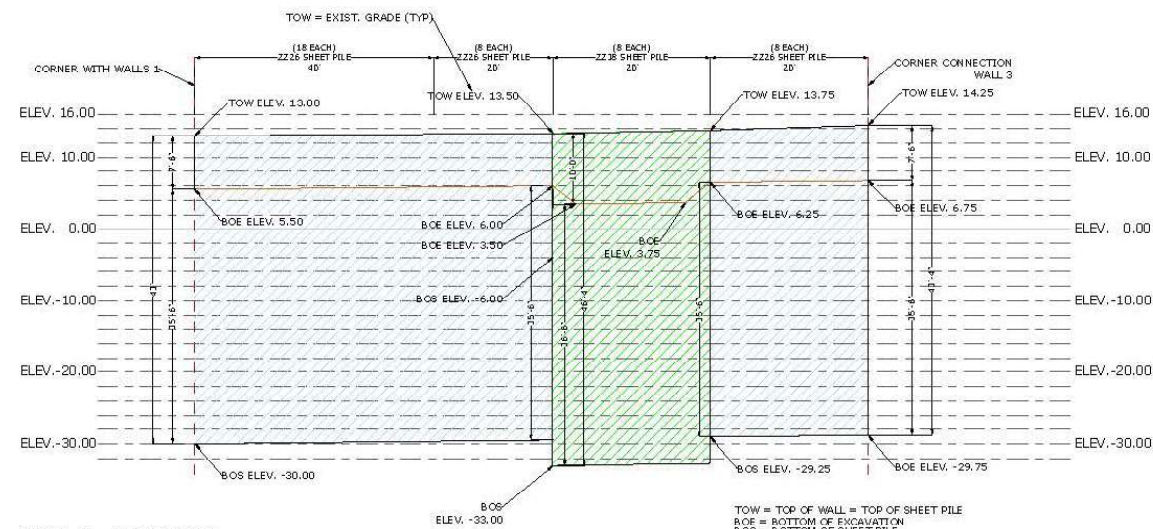
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DATE: 03/21/22		DRAWN:	HALEY ROBERTZE	
		APPROVED:	JIM TWIFORD	

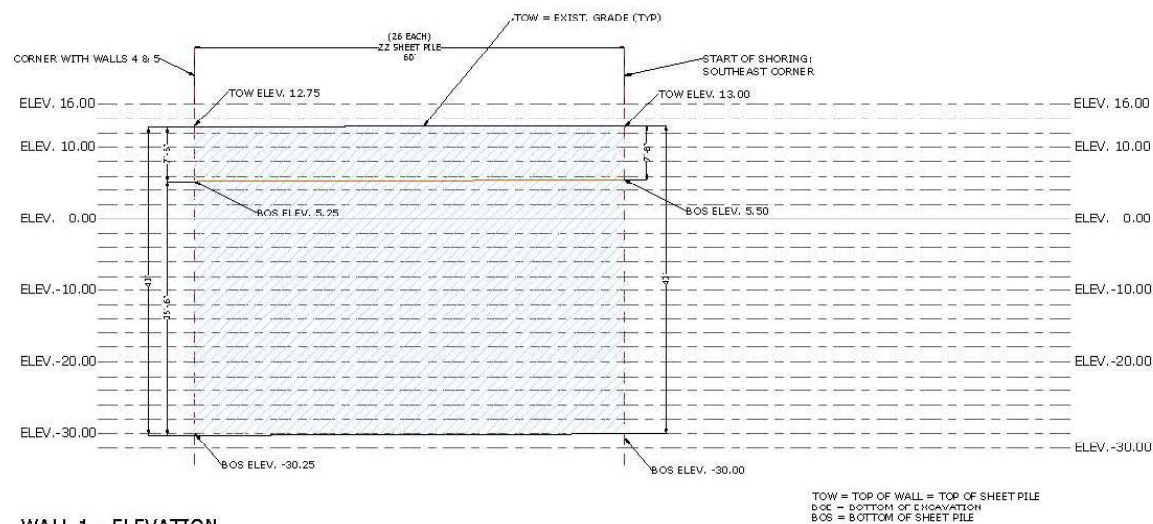
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SHORING DESIGN (4 OF 12)
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

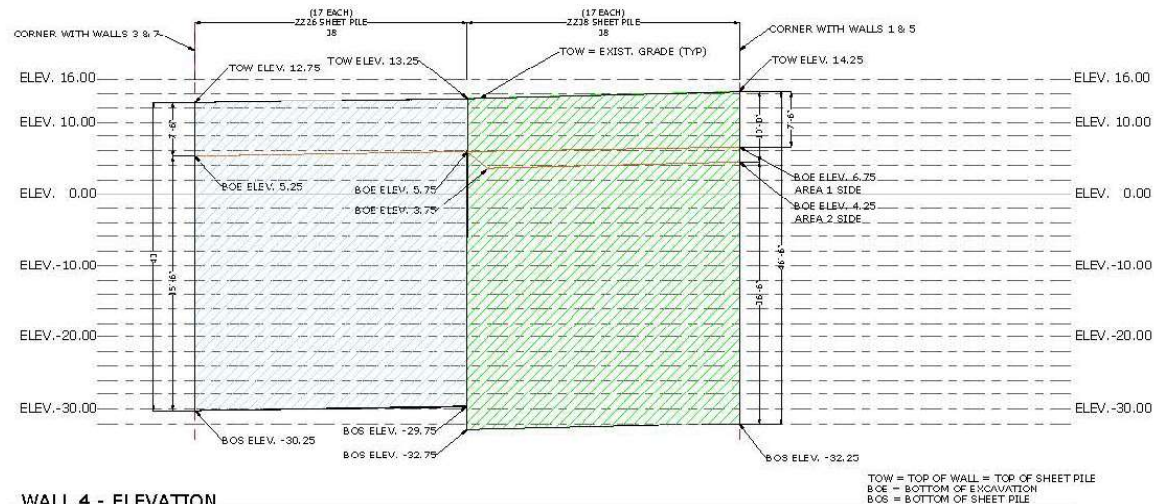
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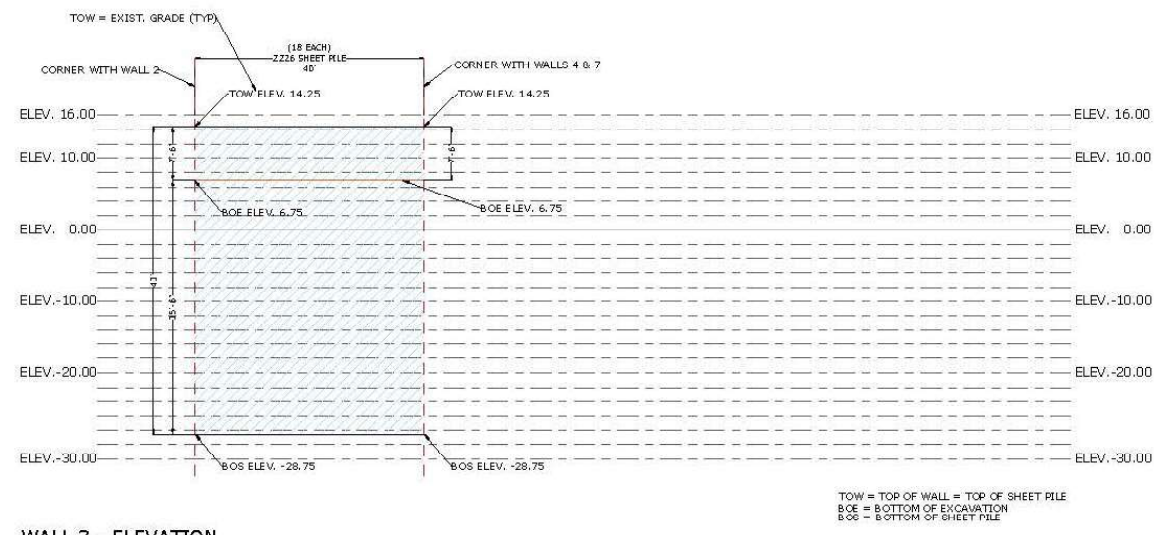
WALL 2 - ELEVATION



WALL 1 - ELEVATION



WALL 4 - ELEVATION



WALL 3 - ELEVATION

PORT OF EVERETT
Remedial Excavation

Permanent & Temporary
Sheet Pile Shoring
Plans

LUCIA ENGINEERING, INC.
12527 Huckleberry Lane
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PHONE: (206) 790-6039
E-MAIL: joe@luciaeng.com



07-06-22

SHEET
S-6.0

PROJECT NO.	031447	3			
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FN: 031447- TITLE SHEET		0	03/21/22		
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DATE: 03/21/22		DRAWN:	HALEY ROBERTZE		
		APPROVED:	JIM TWIFORD		

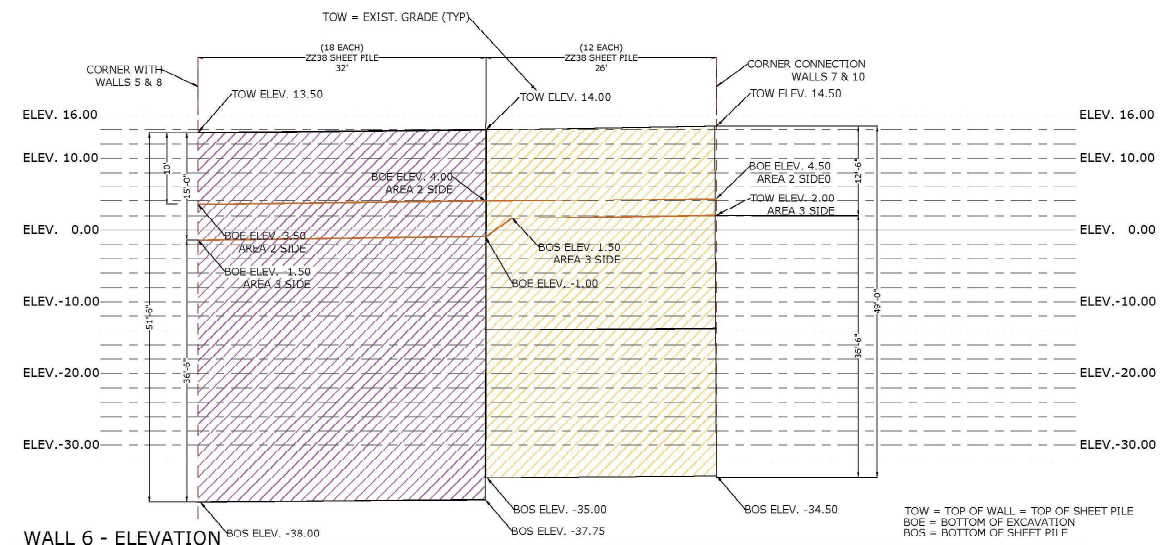
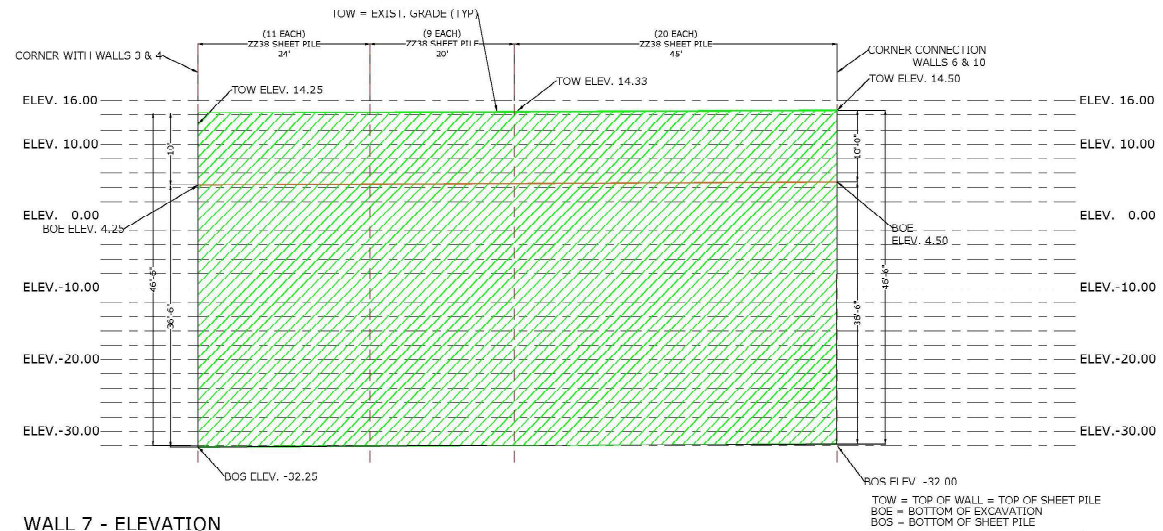
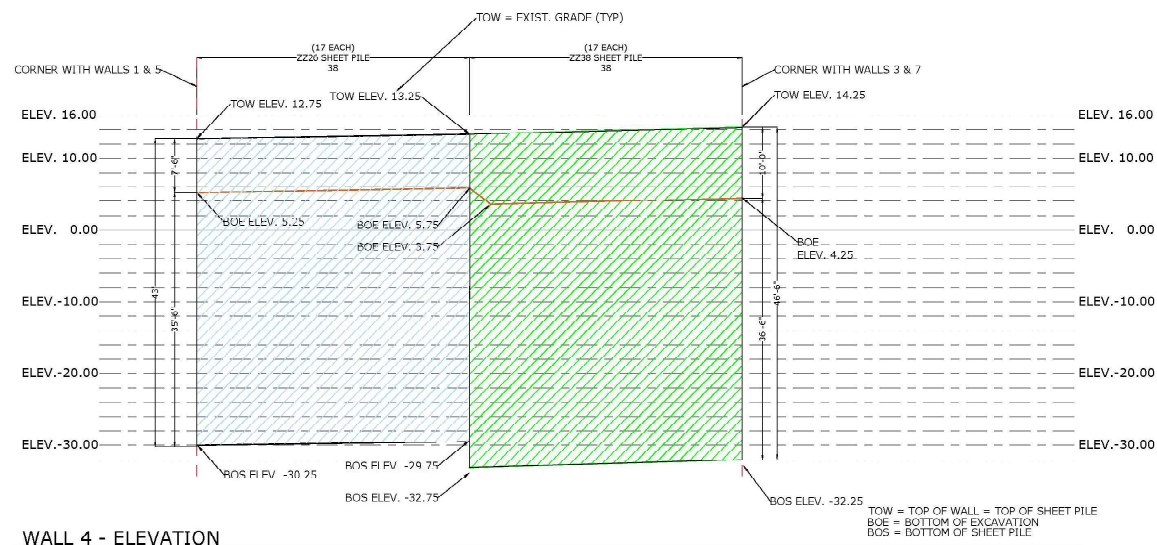
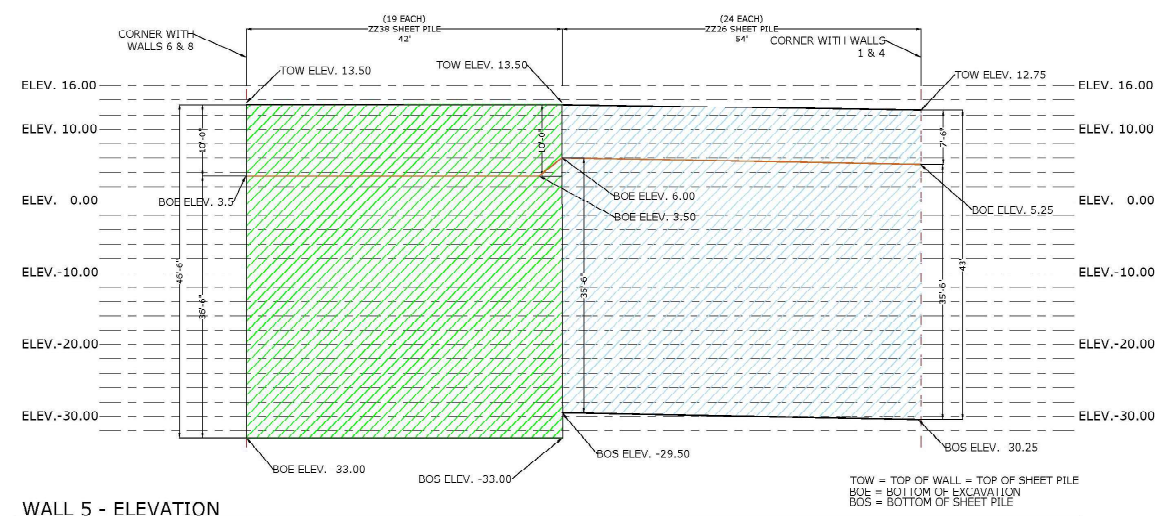
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SHORING DESIGN (6 OF 12)

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

Sheet 17

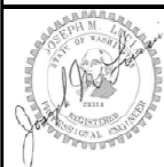




PORT OF EVERETT
Remedial Excavation

Permanent & Temporary
Sheet Pile Shoring
Plans

LUCIA ENGINEERING, INC.
12527 Huckleberry Lane
Arlington, Washington 98225
PHONE: (206) 790-8039
E-MAIL: joe@luciaeng.com



07-06-22

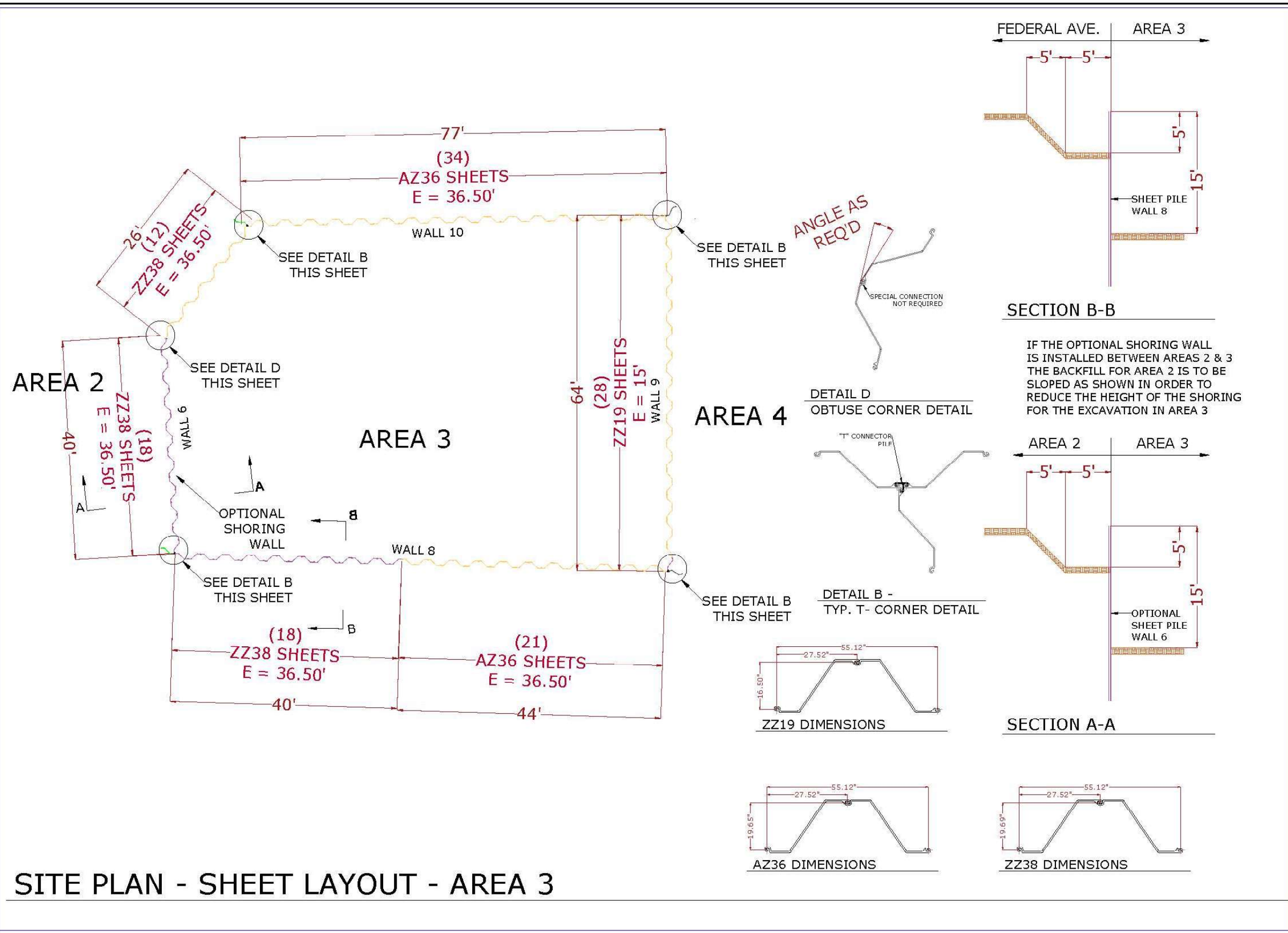
SHEET
S 8.0


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LAST REV. DATE: 07/15/22		NO.	DATE	REVISIONS	
DATE: 03/21/22		DRAWN:	HALEY ROBBERTZE		
		APPROVED:	JIM TWIFORD		

DRAWING:	M-8
SCALE:	1" = 60'

SHORING DESIGN (8 OF 12)
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 19



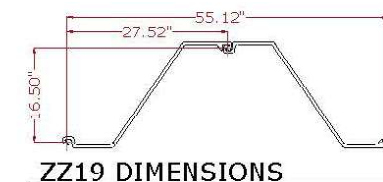
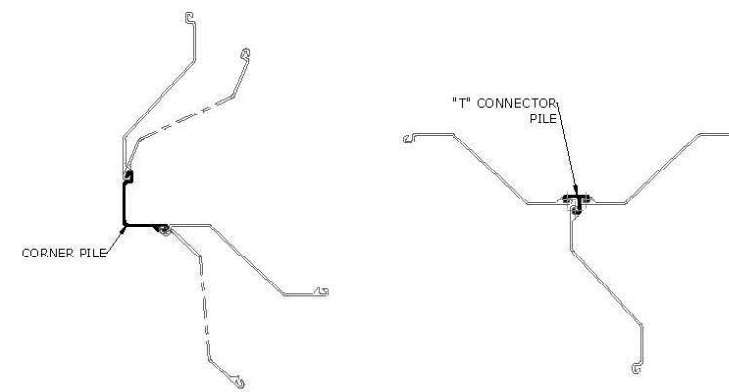
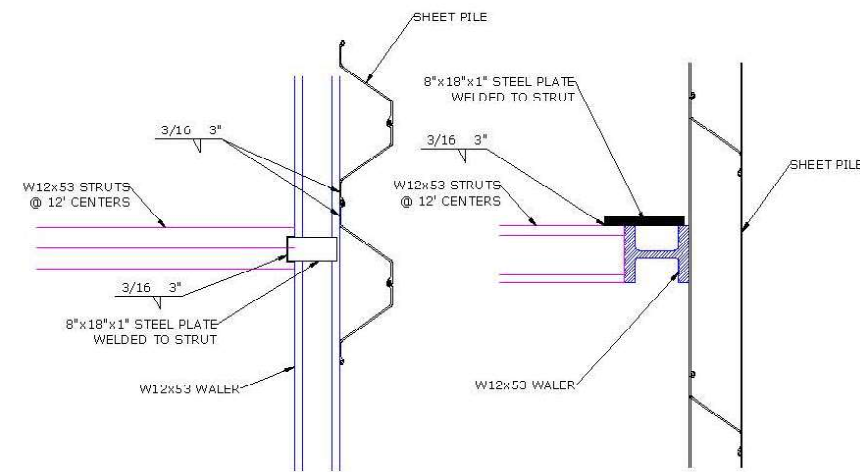
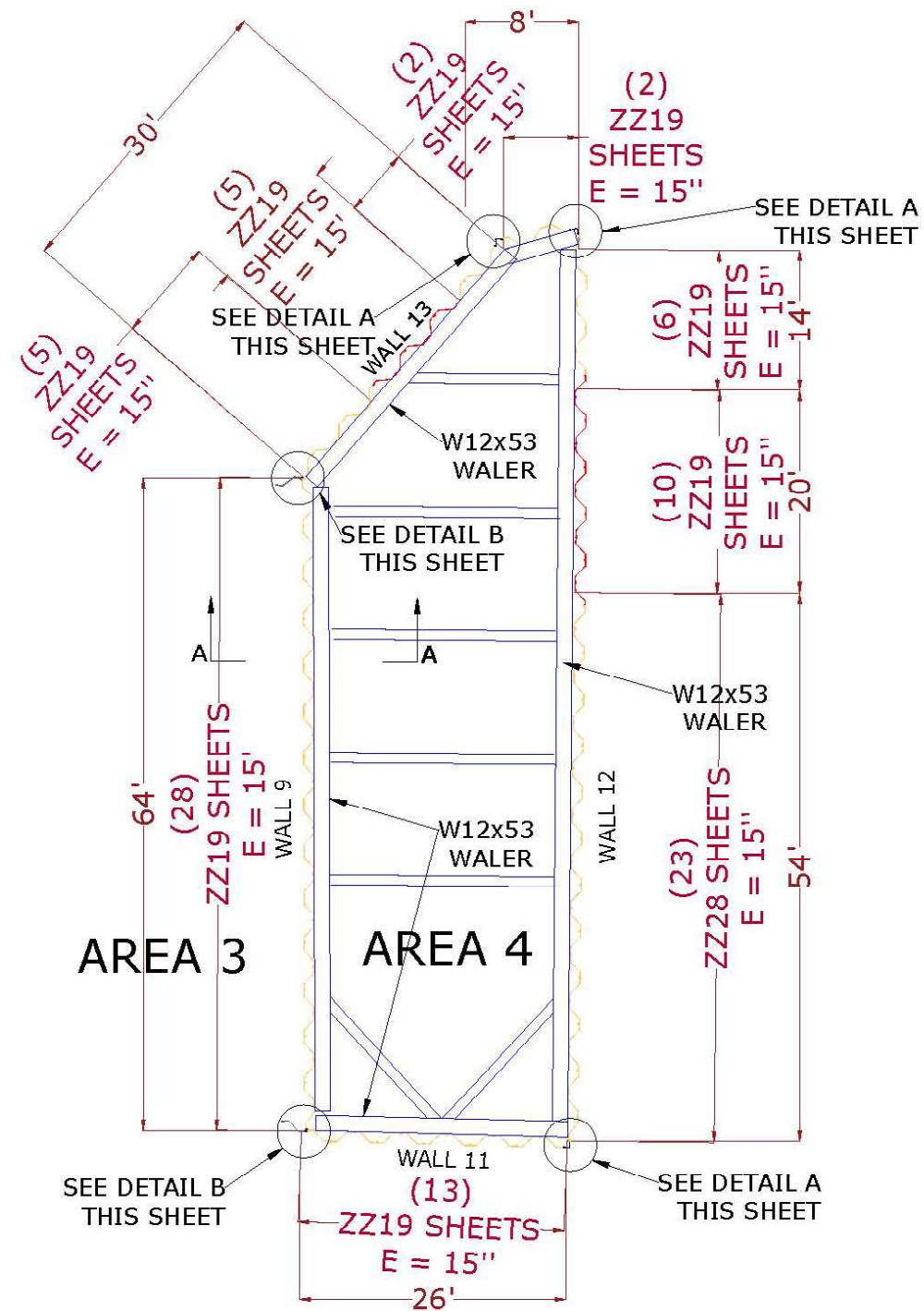
PORT OF EVERETT Remedial Excavation	
Permanent & Temporary Sheet Pile Shoring Plans	
LUCIA ENGINEERING, INC. 12527 Huckleberry Lane Arlington, Washington 98223 PHONE: (206) 790-8039 E-MAIL: joe@luciaeng.com	
 07-06-22	
0	06-11-22 JML
Number	Date By Description
SHEET 3-9.0	

PROJECT NO.	3		
	2		
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FN: 031447- TITLE SHEET	0	03/21/22	
LAST REV. DATE: 07/15/22	NO.	DATE	REVISIONS
DATE: 03/21/22	DRAWN: HALEY ROBERTZE		
	APPROVED: JIM TWIFORD		

DRAWING:	M-9
SCALE:	1"= 60'

SHORING DESIGN (9 OF 12)
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

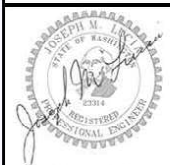
Sheet 20

PORT OF EVERETT
Remedial Excavation

Permanent & Temporary Sheet Pile Shoring Plans

LUCIA ENGINEERING, INC.
12527 Huckleberry Lane
Arlington, Washington 98223
PHONE: (206) 790-8039
E-MAIL: joe@luciaeng.com



07-06-22

Number	Date	By	Description
D	06-11-22 JML		

SHEET
S-11.0

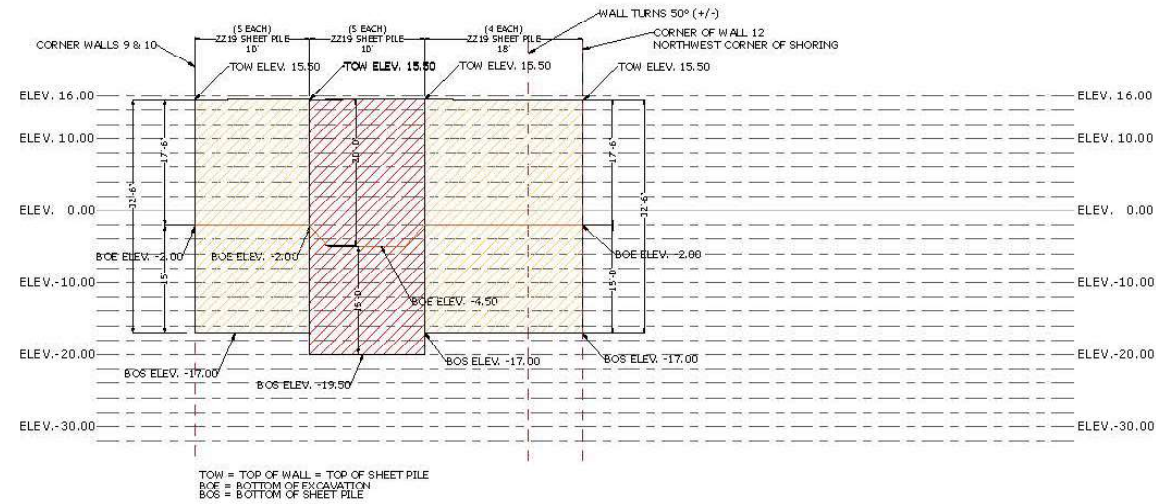
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031447		2		
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FN:	031447- TITLE SHEET	0	03/21/22	
		NO.	DATE	REVISIONS
LAST REV. DATE: 07/15/22		DRAWN: HALEY ROBBERTZE		
DATE: 03/21/22		APPROVED: JIM TWIFORD		

DRAWING:	M-11
SCALE:	1"= 60'

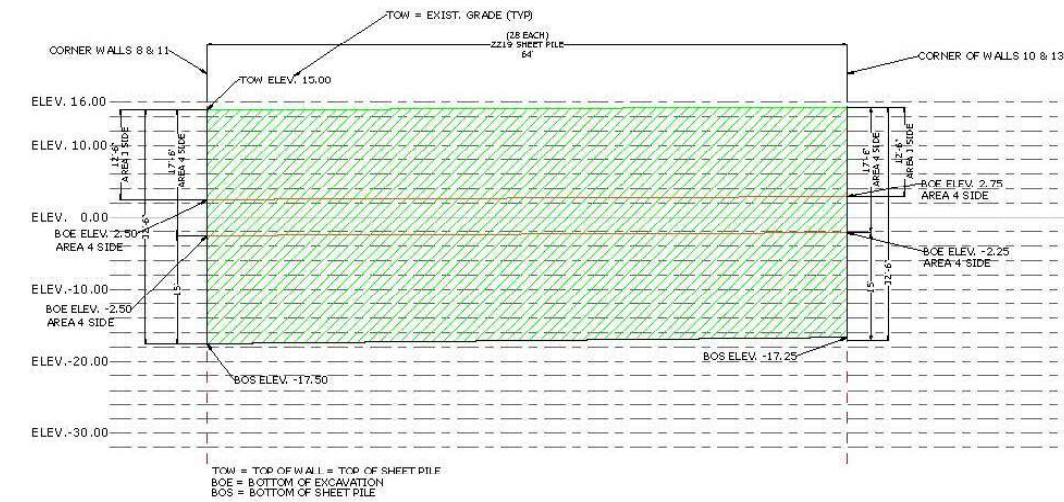
SHORING DESIGN (11 OF 12)

PORT OF EVERETT
2730 Federal Avenue
Everett, Washington

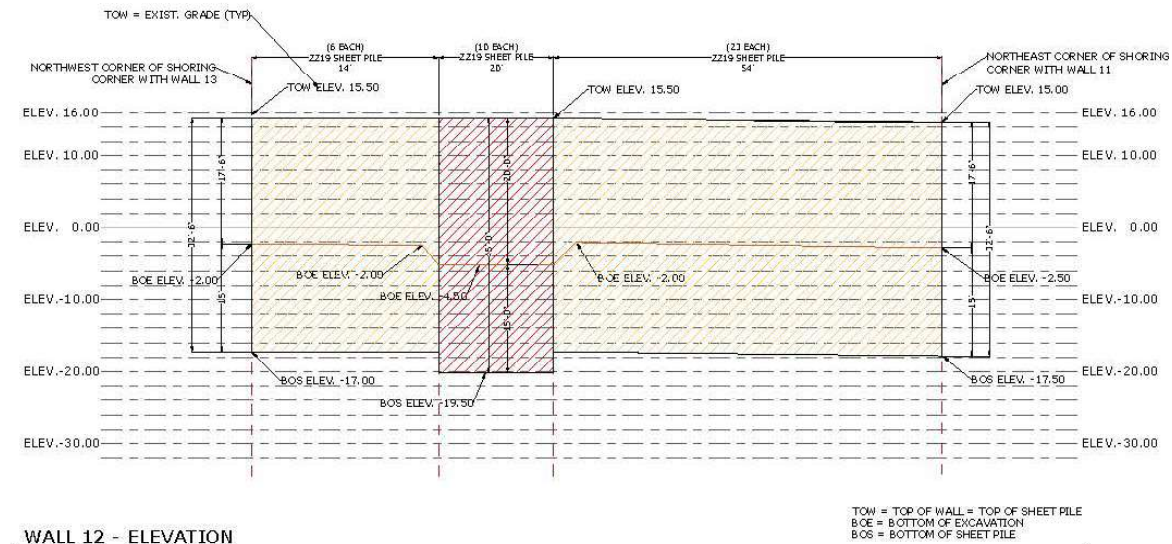
Sheet 22



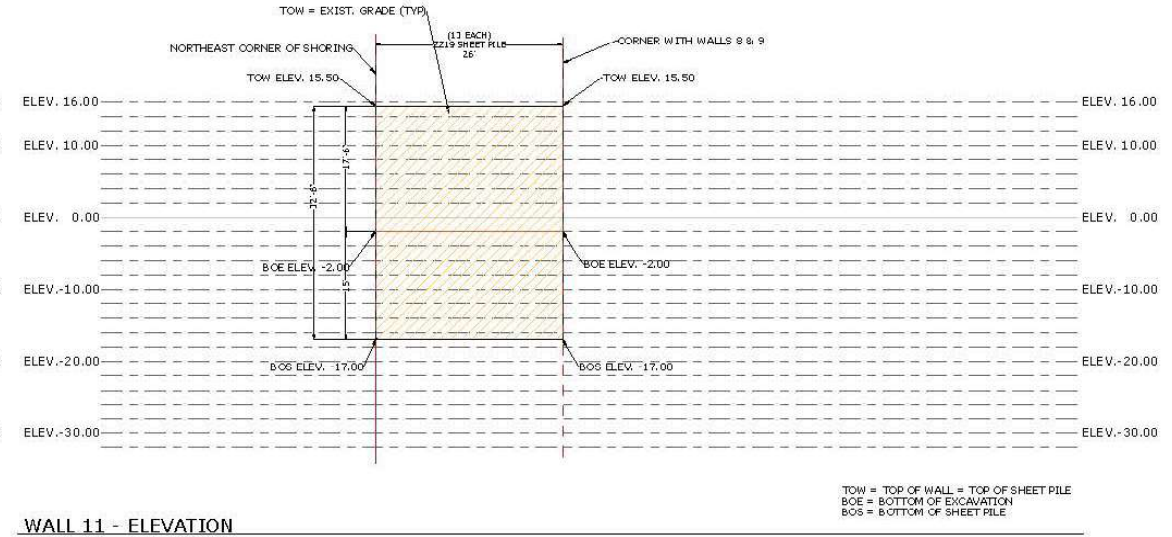
WALL 13 - ELEVATION



WALL 9 - ELEVATION



WALL 12 - ELEVATION

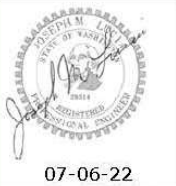


WALL 11 - ELEVATION

PORT OF EVERETT
Remedial Excavation

Permanent & Temporary
Sheet Pile Shoring
Plans

LUCIA ENGINEERING, INC.
12527 Huckleberry Lane
Arlington, Washington 98023
PHONE: (206) 790-8039
E-MAIL: joe@luciaeng.com



07-06-22

SHEET
S-12.0

PROJECT NO.	031447	3			
		2			
		1	07/15/22	Inserted final shoring design	
FN: 031447- TITLE SHEET		0	03/21/22		
LAST REV. DATE: 07/15/22		NO.	DATE	REVISIONS	
DATE: 03/21/22		DRAWN:	HALEY ROBBERTZE		
		APPROVED:	JIM TWIFORD		

DRAWING:	M-12
SCALE:	1"= 60'

SHORING DESIGN (12 OF 12)
PORT OF EVERETT 2730 Federal Avenue Everett, Washington

Sheet 23

APPENDIX M

Stormwater Pollution Prevention Plan Inspections

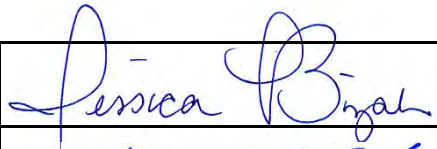



DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 6
ADDRESS 2717/2731 Federal Avenue		DATE 10/03/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:55 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Clear, 53F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 6
R045-00 – ExxonMobil Port of Everett ADC
10/03/22
Page 2 of 7



Photo 1. Catch basin with repaired filter.



Photo 2. One of three new sump/catch basins currently being installed. Will cut down to grade and have high/low floats with filter to collect and filter groundwater/surface flow.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **10/03/22** Time **6:55am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

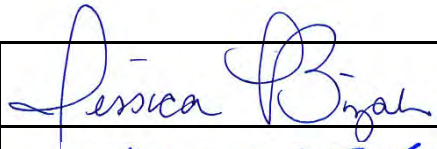

Inspected by: (print) Jessica Bizak (Signature)  Date: 10/03/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 7
ADDRESS 2717/2731 Federal Avenue		DATE 10/10/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:45 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy, 49F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 7
R045-00 – ExxonMobil Port of Everett ADC
10/10/22
Page 2 of 7



Photo 1. Newly installed onsite catch basin.



Photo 2. Secondary containment system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **10/10/22** Time **6:45am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

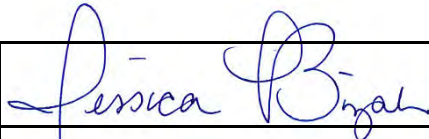

Inspected by: (print) Jessica Bizak (Signature)  Date: 10/10/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 10
ADDRESS 2717/2731 Federal Avenue		DATE 10/31/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:05 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy 54F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>The recommendations made in DFR 9 (10/24/22) for the onsite sump along Federal Avenue (Photo 1, page 2) have been implemented and the piping modified to accommodate the increased outflow.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 10
R045-00 – ExxonMobil Port of Everett ADC
10/31/22
Page 2 of 7



Photo 1. Federal Avenue sump with new 6" pipe



Photo 2. Newly constructed berm leading to onsite catch basin

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **10/31/22** Time **7:05am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 1.517

Approximate rainfall amount in the last 24 hours (in inches): 0.102

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date:

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

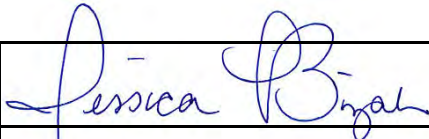

Inspected by: (print) Jessica Bizak (Signature)  Date: 10/31/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 16
ADDRESS 2717/2731 Federal Avenue		DATE 12/12/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy 41F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 16
R045-00 – ExxonMobil Port of Everett ADC
12/12/22
Page 2 of 7



Photo 1. Functioning onsite catch basin



Photo 2. Functioning diversion pump to storm system

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **12/12/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 1.470

Approximate rainfall amount in the last 24 hours (in inches): 0.270

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) - No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"



Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 12/12/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 17
ADDRESS 2717/2731 Federal Avenue		DATE 12/20/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jacob Bizak / 253-722-6495		
SUBCONTRACTOR	WEATHER Snowing 30°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 17
R045-00 – ExxonMobil Port of Everett ADC
12/20/22
Page 2 of 7



Photo 1. Functioning onsite catch basin



Photo 2. Functioning diversion pump to storm system

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **12/20/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jacob Bizak

Approximate rainfall amount since the last inspection (in inches): 0.099

Approximate rainfall amount in the last 24 hours (in inches): 0.069 (3" of snow)

Current Weather Clear ☐ Cloudy ☐ Mist ☐ Snow ☒ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) - No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒


F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

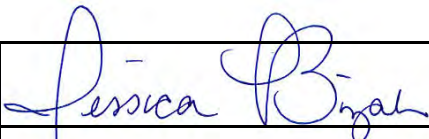

Inspected by: (print) Jacob Bizak (Signature)  Date: 12/20/22
Title/Qualification of Inspector: CESCL – CWTA-90766577

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 18
ADDRESS 2717/2731 Federal Avenue		DATE 01/05/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy 50°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>We recommend that a filter be installed in the new catch basin on the southeast portion of the site.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p style="text-align: center;">-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 18
R045-00 – ExxonMobil Port of Everett ADC
01/05/23
Page 2 of 7



Photo 1. Onsite catch basin in need of filter



Photo 2. Onsite catch basin in need of filter

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **01/05/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 2.456

Approximate rainfall amount in the last 24 hours (in inches): 0.036

Current Weather Clear ☒ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – Needs filter installed	No	Yes, see Section F
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
7	New catch basin on southeast portion of project area	Install filter in new catch basin		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

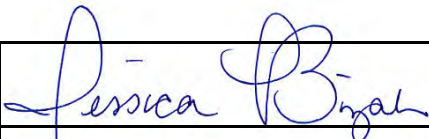

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 01/05/23
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 19
ADDRESS 2717/2731 Federal Avenue		DATE 01/11/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy 46°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>The recommendation made in DFR 18 (01/05/23) for the onsite catch basin in the southeast portion of the site has been implemented and is properly functioning.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 19
R045-00 – ExxonMobil Port of Everett ADC
01/11/23
Page 2 of 7



Photo 1. Onsite catch basin with new filter installed



Photo 2. Functioning and protected onsite catch basin

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **01/11/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.976

Approximate rainfall amount in the last 24 hours (in inches): 0.076

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

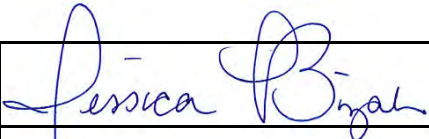

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 01/11/23
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 20
ADDRESS 2717/2731 Federal Avenue		DATE 01/16/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:45 AM	DEPARTURE TIME 7:30 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy 45°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 20
R045-00 – ExxonMobil Port of Everett ADC
01/16/23
Page 2 of 7



Photo 1. New diversion directed to septic system



Photo 2. Functioning and protected onsite catch basin with diversion pump to septic

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **01/16/23** Time **6:50am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.787

Approximate rainfall amount in the last 24 hours (in inches): 0.136

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Offsite improvements

☐

Construction/buildings

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			
	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

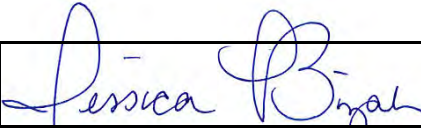

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 01/16/23
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 21
ADDRESS 2717/2731 Federal Avenue		DATE 01/24/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:55 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Clear 39°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>We recommend that a secondary containment system be installed around the pump located on northwest corner of site and repair the existing secondary containment system under the pump that's located on southeast corner of site.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 21
R045-00 – ExxonMobil Port of Everett ADC
01/24/23
Page 2 of 7



Photo 1. Pump located on northwest corner of site that requires installation of a secondary containment system.



Photo 2. Pump located on southeast corner of site that requires maintenance to existing secondary containment system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **01/24/23** Time **6:55am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.688

Approximate rainfall amount in the last 24 hours (in inches): 0.011

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			Yes	No	Yes, see Section F, page 7
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
9	Pump located on northwest corner of site does not have a secondary containment system installed.	Install secondary containment system.		
9	Pump located on southeast corner of site requires maintenance.	Repair current secondary containment system so that all sides are structurally sound and vertical.		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

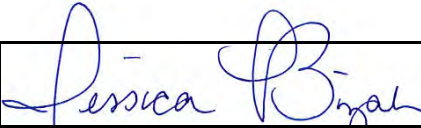

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 01/24/23
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 22
ADDRESS 2717/2731 Federal Avenue		DATE 02/02/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy 32°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>The recommendations made in DFR 21 (01/24/23) for the onsite pumps located on both the northwest corner and southeast corner of the site have been implemented and are now properly functioning.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p style="text-align: center;">-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 22
R045-00 – ExxonMobil Port of Everett ADC
02/02/23
Page 2 of 7



Photo 1. Pump located on northwest corner of site with newly installed secondary containment system.



Photo 2. Pump located on southeast corner of site with repaired secondary containment system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **02/02/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.555

Approximate rainfall amount in the last 24 hours (in inches): 0.000

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

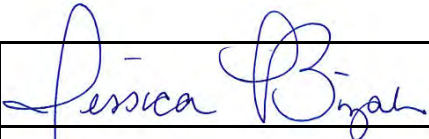

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 02/02/23
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 23
ADDRESS 2717/2731 Federal Avenue		DATE 02/06/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Foggy 43°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 23
R045-00 – ExxonMobil Port of Everett ADC
02/06/23
Page 2 of 7



Photo 1. Diversion line to sewer system.



Photo 2. Protected sewer system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **02/06/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.264

Approximate rainfall amount in the last 24 hours (in inches): 0.085

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☒

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			
	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 02/06/23
Title/Qualification of Inspector: CESCL – CWTA-76058938



DAILY FIELD REPORT



RAM GeoServices, Inc.

PO Box 731065

Puyallup, WA 98373

(425) 233-7211

RamGeoServices.com

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 24
ADDRESS 2717/2731 Federal Avenue		DATE 02/14/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:30 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jacob Bizak / 253-722-6495		
SUBCONTRACTOR	WEATHER Partly Cloudy 34°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 24
R045-00 – ExxonMobil Port of Everett ADC
02/14/23



Photo 1. Diversion line to sewer system.



Photo 2. Protected sewer system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **02/14/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jacob Bizak

Approximate rainfall amount since the last inspection (in inches): 0.354

Approximate rainfall amount in the last 24 hours (in inches): 0.139

Current Weather Clear ☒ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒


F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

Inspected by: (print) Jacob Bizak (Signature)  Date: 02/14/23
Title/Qualification of Inspector: CESCL – CWTA-90766577



DAILY FIELD REPORT



RAM GeoServices, Inc.

PO Box 731065

Puyallup, WA 98373

(425) 233-7211

RamGeoServices.com

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-21	FIELD REPORT NO. 25
ADDRESS 2717/2731 Federal Avenue		DATE 02/21/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:30 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jacob Bizak / 253-722-6495		
SUBCONTRACTOR	WEATHER Light Rain 39°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the RAM project manager.		 RAM Project Manager	

DAILY FIELD REPORT

ExxonMobil Port of Everett ADC

February 21, 2023
R045-00 - DFR 25



Photo 1. Diversion lines have been removed.



Photo 2. Protected sewer system.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **02/21/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jacob Bizak

Approximate rainfall amount since the last inspection (in inches): 0.534

Approximate rainfall amount in the last 24 hours (in inches): 0.329

Current Weather Clear ☐ Cloudy ☒ Mist ☒ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads ☐

Concrete pours

☐

Vertical

☐

Utilities ☐

Offsite improvements

☐

Construction/buildings

☐

Final stabilization ☐

Site temporary stabilized

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒


F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

Inspected by: (print) Jacob Bizak (Signature)  Date: 02/21/23
Title/Qualification of Inspector: CESCL – CWTA-90766577



DAILY FIELD REPORT



RAM GeoServices, Inc.

PO Box 731065

Puyallup, WA 98373

(425) 233-7211

RamGeoServices.com

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-21	FIELD REPORT NO. 26
ADDRESS 2717/2731 Federal Avenue		DATE 02/28/23	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:30 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jacob Bizak / 253-722-6495		
SUBCONTRACTOR	WEATHER Light Rain 37°F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM GeoServices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the RAM project manager.		 RAM Project Manager	

DAILY FIELD REPORT

ExxonMobil Port of Everett ADC

February 28, 2023
R045-00 - DFR 26



Photo 1. Project nearing completion; ready for paving.



Photo 2. Functioning silt sock in storm drain.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **02/28/23** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jacob Bizak

Approximate rainfall amount since the last inspection (in inches): 0.464

Approximate rainfall amount in the last 24 hours (in inches): 0.169

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Snow ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input type="checkbox"/>	Clearing/Demo/Grading	<input checked="" type="checkbox"/>	Infrastructure/storm/roads	<input checked="" type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) – No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			
	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Are all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒


F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed.

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

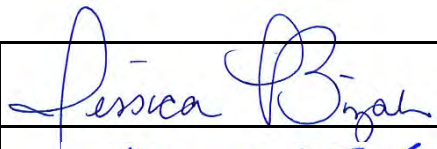

Inspected by: (print) Jacob Bizak (Signature)  Date: 02/28/23
Title/Qualification of Inspector: CESCL – CWTA-90766577

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 1
ADDRESS 2717/2731 Federal Avenue		DATE 08/30/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 9:30 AM	DEPARTURE TIME 10:00 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Clear, sunny		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly. Cardno plans to install construction entrance in the following week utilizing geotextile fabric and quarry spalls.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 1
R045-00 – ExxonMobil Port of Everett ADC
08/30/22
Page 2 of 7



Photo 1. Catch basin w/ silt sock



Photo 2. Asphalt rubble w/ straw wattles

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **08/30/22** Time **9:30am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			Not currently needed, but planned for future activity; install construction entrance with fabric and quarry spalls	No	Yes
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

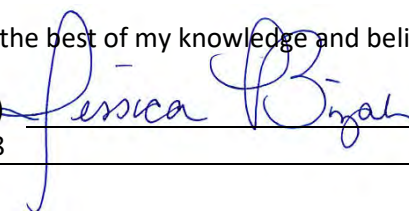
F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
2	Construction entrance	Yes: client plans to install new construction entrance per BMP C105		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

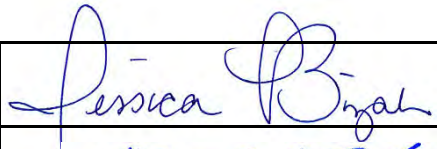

Inspected by: (print) Jessica Bizak (Signature)  Date: 08/30/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 2
ADDRESS 2717/2731 Federal Avenue		DATE 09/07/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:45 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy, 53F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly. Cardno plans to install construction entrance in the following week utilizing geotextile fabric and quarry spalls.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 2
R045-00 – ExxonMobil Port of Everett ADC
09/07/22
Page 2 of 7

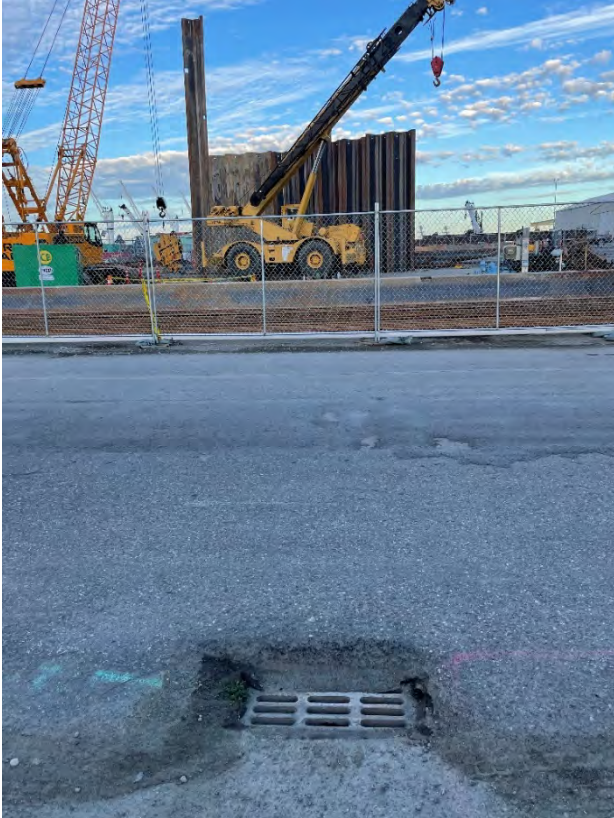


Photo 1. Catch basin w/ silt sock and intact perimeter fencing



Photo 2. Area for construction entrance to be installed

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **09/07/22** Time **6:45am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			Not currently needed, but planned for future activity; install construction entrance with fabric and quarry spalls	No	Yes
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
2	Construction entrance	Yes: client plans to install new construction entrance per BMP C105		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

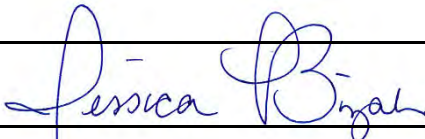

Inspected by: (print) Jessica Bizak (Signature)  Date: 09/07/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 3
ADDRESS 2717/2731 Federal Avenue		DATE 09/12/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:50 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy, 60F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly. Construction entrance has been properly installed since last site visit.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 3
R045-00 – ExxonMobil Port of Everett ADC
09/12/22
Page 2 of 7



Photo 1. Catch basin w/ silt sock and intact perimeter fencing



Photo 2. Newly installed construction entrance

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **09/12/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			Although the standard BMP for secondary containment is not being utilized and because the generator is within the excavation area with known similarly	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.					contaminated soils, the potential for offsite contamination is reduced. We understand that generator will be moved outside of the excavation footprint in about a week and will have the standard BMP employed at that time		
	Were contaminated surfaces cleaned immediately after a spill incident?			X			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			

Construction Stormwater Site Inspection Form

	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

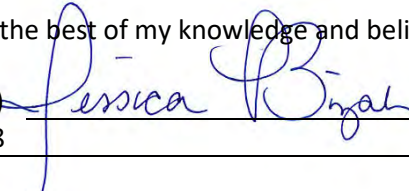
F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

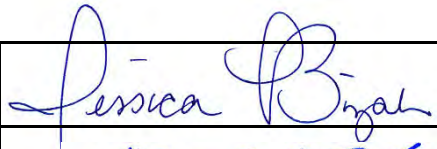

Inspected by: (print) Jessica Bizak (Signature)  Date: 09/12/22
 Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 4
ADDRESS 2717/2731 Federal Avenue		DATE 09/19/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Clear, 51F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 4
R045-00 – ExxonMobil Port of Everett ADC
09/19/22
Page 2 of 7



Photo 1. Pump with secondary containment



Photo 2. Intact and secured security fencing

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **09/19/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

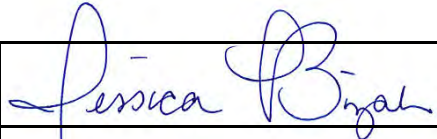

Inspected by: (print) Jessica Bizak (Signature)  Date: 09/19/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 5
ADDRESS 2717/2731 Federal Avenue		DATE 09/26/22	PAGE 1 OF 8
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy, 53F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to TESC Plan (Figure 1, page 3) for location of BMP that needs repair.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 4-8) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 5
R045-00 – ExxonMobil Port of Everett ADC
09/26/22
Page 2 of 8



Photo 1. Catch basin with tear in Witches Hat



Photo 2. Covered organic debris from excavation

DAILY FIELD REPORT



Daily Field Report No. 5
R045-00 – ExxonMobil Port of Everett ADC
09/26/22
Page 2 of 8

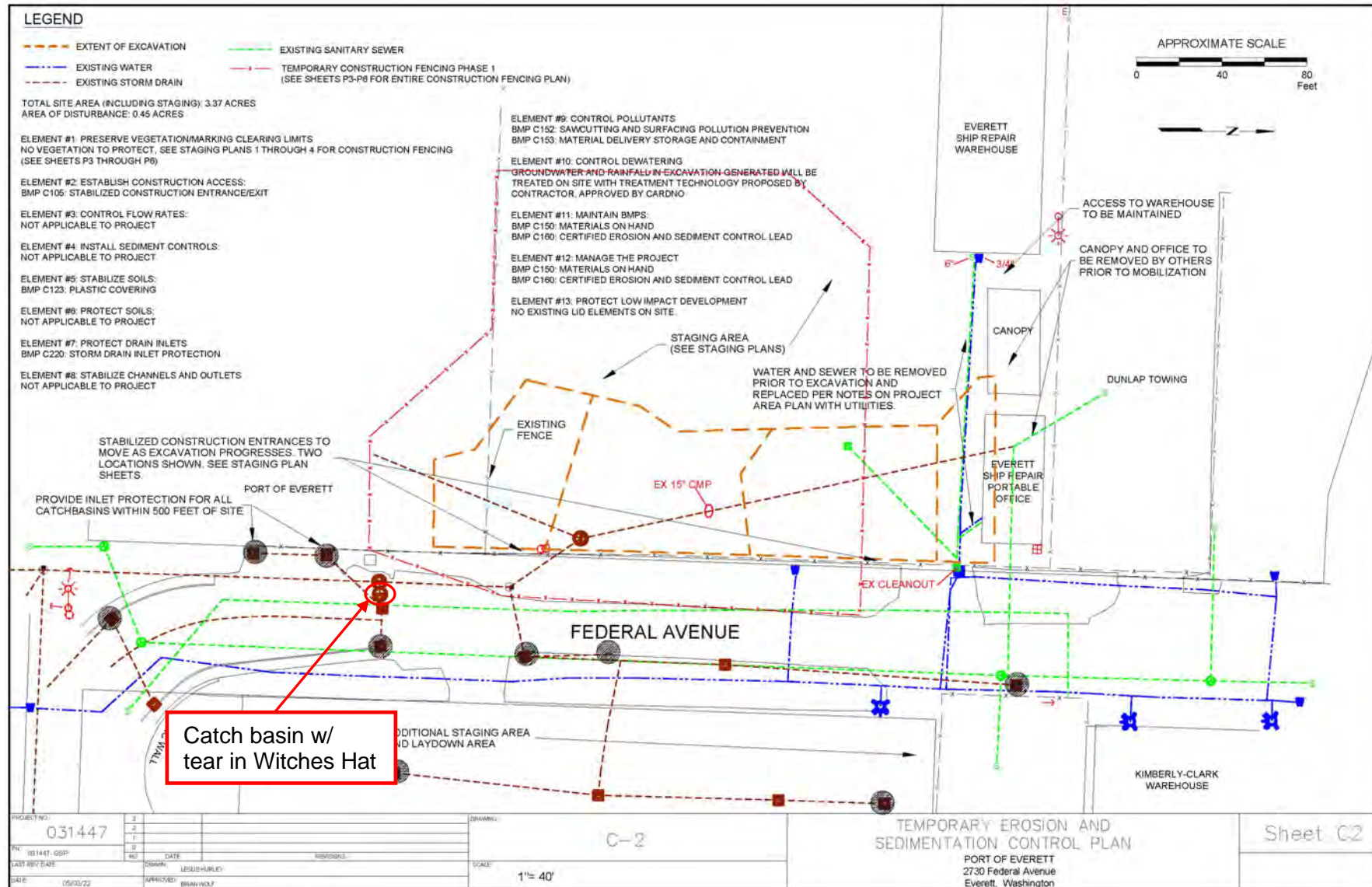


Figure 1. Location of BMP that requires maintenance

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **09/26/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Yes, see Page 8	No	Yes, see Page 8
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

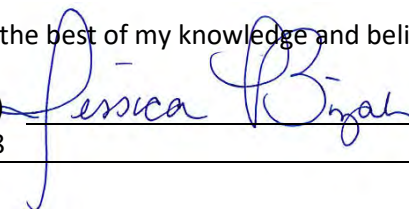
F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
7	Small tear in SE corner of Witches Hat in catch basin located on Federal Ave, on SE corner of project site (see page 3 for exact location)	Replace Witches Hat		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

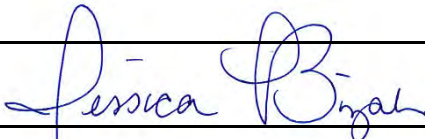

Inspected by: (print) Jessica Bizak (Signature)  Date: 09/26/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 8
ADDRESS 2717/2731 Federal Avenue		DATE 10/19/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:30 AM	DEPARTURE TIME 8:00 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy/foggy 46F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 8
R045-00 – ExxonMobil Port of Everett ADC
10/19/22
Page 2 of 7



Photo 1. Newly installed onsite water/sediment flow path.



Photo 2. Water/sediment flow path to onsite catch basin.

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **10/19/22** Time **7:30am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.0

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☒

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

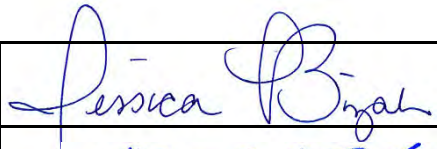

Inspected by: (print) Jessica Bizak (Signature)  Date: 10/19/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 9
ADDRESS 2717/2731 Federal Avenue		DATE 10/24/22	PAGE 1 OF 8
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:05 AM	DEPARTURE TIME 7:40 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy 47F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly, with the exception of the onsite sump located outside of the excavation area on the side of Federal Avenue.</p> <p>The sump shown in Photo 1 (page 2) is reported to occasionally overflow because the inflow has exceeded the outflow capacity. However, the overflow is reported to not have backflowed back into the sump. We recommend the system be evaluated and modified such that outflow capacity (pump and piping) exceed design peak inflow. Although Element #8 has not be addressed in the SWPPP, this was the most appropriate place for the recommendation.</p> <p>This is the first site visit after significant precipitation, and it should be noted that all other BMPs are functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 4-8) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 9
R045-00 – ExxonMobil Port of Everett ADC
10/24/22
Page 2 of 8



Photo 1. Federal Avenue sump



Photo 2. Site sweeper attachment for asphalt cleaning.

DAILY FIELD REPORT



Daily Field Report No. 9
R045-00 – ExxonMobil Port of Everett ADC
10/24/22
Page 3 of 8

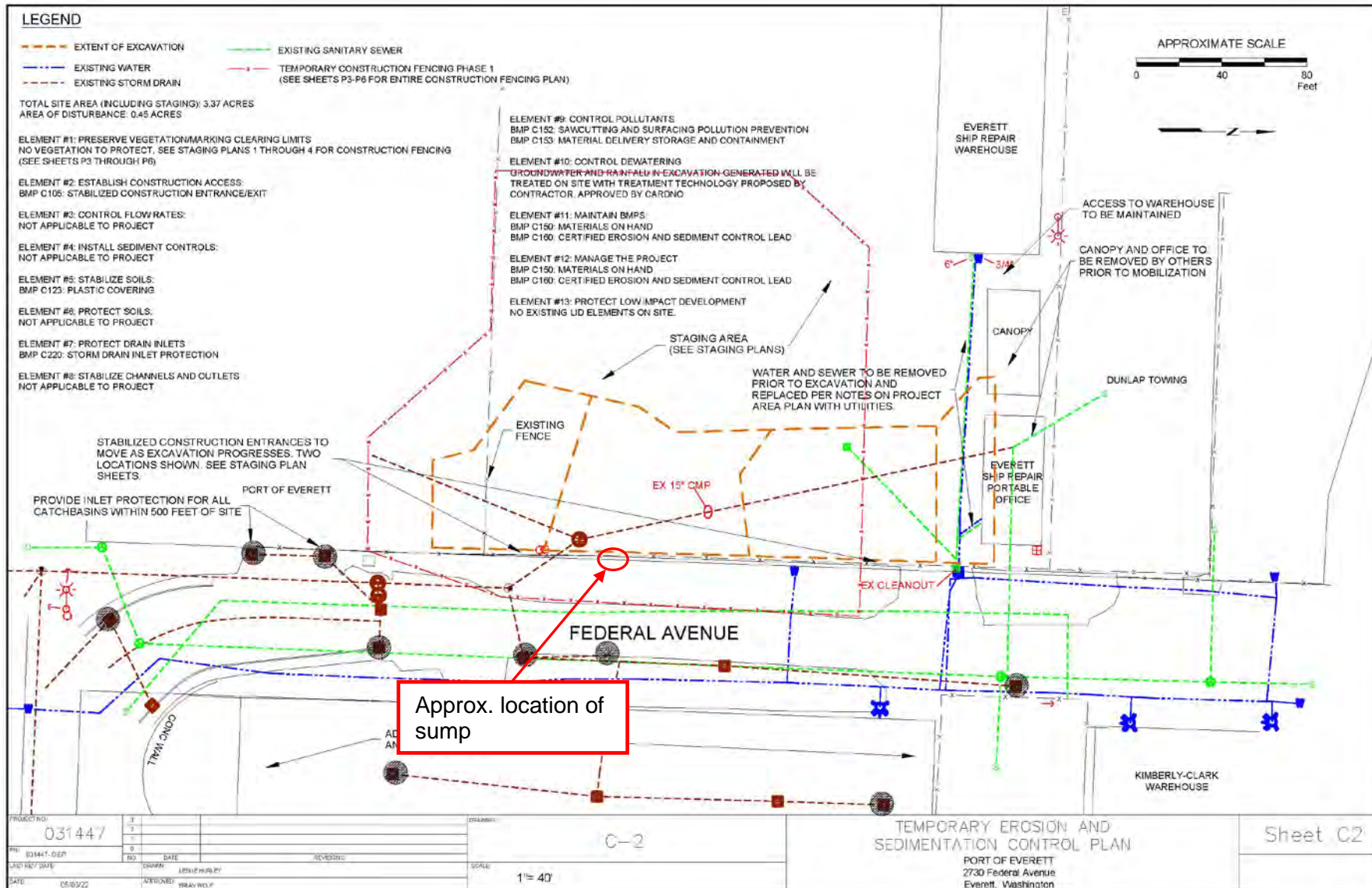


Figure 1. Location of BMP that requires maintenance

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **10/24/22** Time **7:05am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.53

Approximate rainfall amount in the last 24 hours (in inches): 0.13

Current Weather Clear ☐ Cloudy ☒ Mist ☒ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?	x			Yes	?	See Section F
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

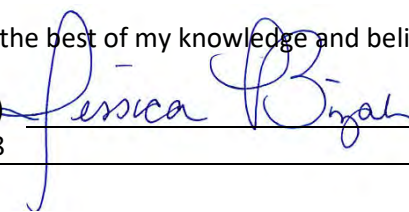
F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
8	Sump / Onsite, outside of excavation area along Federal Avenue	See Daily Field Report (page 1)		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

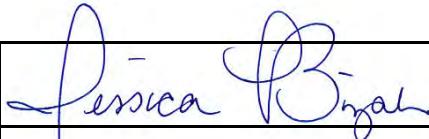

Inspected by: (print) Jessica Bizak (Signature)  Date: 10/24/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 11
ADDRESS 2717/2731 Federal Avenue		DATE 11/07/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:55 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Partly cloudy 37F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 11
R045-00 – ExxonMobil Port of Everett ADC
11/07/22
Page 2 of 7



Photo 1. Federal Avenue functioning sump

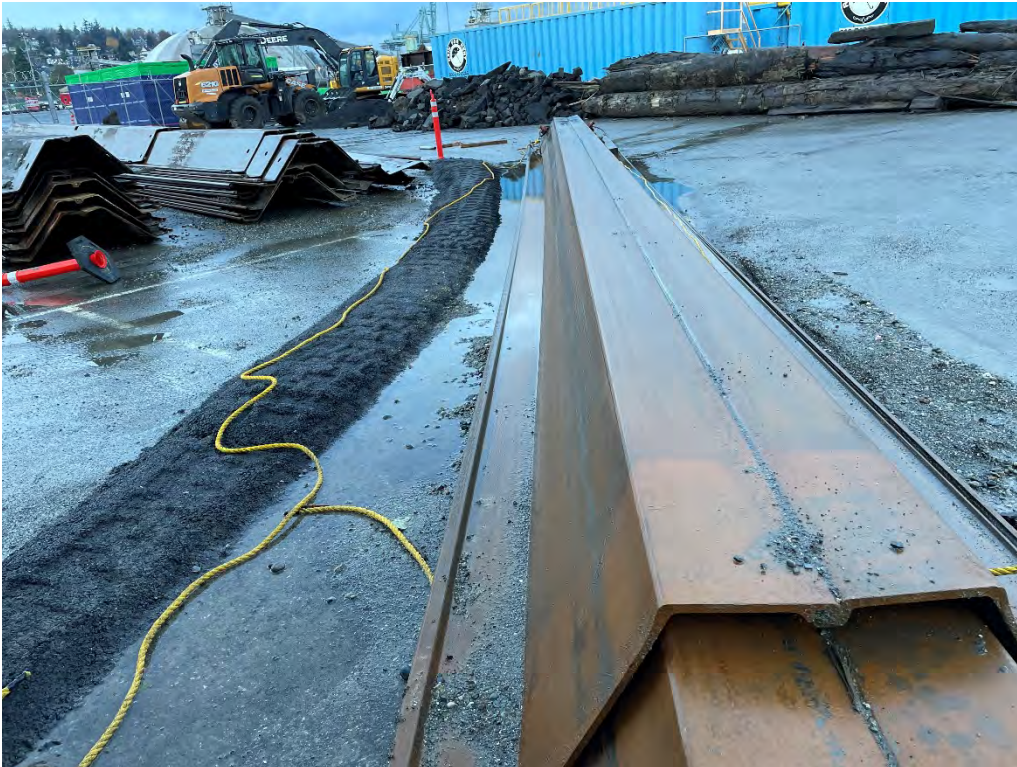


Photo 2. Working berm directed toward onsite catch basin

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **11/07/22** Time **6:55am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 1.853

Approximate rainfall amount in the last 24 hours (in inches): 0.492

Current Weather Clear ☒ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls
Concrete pours
Offsite improvements

☒ Clearing/Demo/Grading
☐ Vertical Construction/buildings
☐ Site temporary stabilized

☐ Infrastructure/storm/roads
☐ Utilities
☐ Final stabilization

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

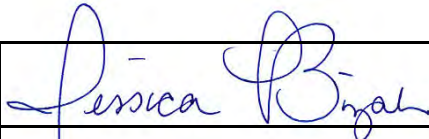

Inspected by: (print) Jessica Bizak (Signature)  Date: 11/07/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 12
ADDRESS 2717/2731 Federal Avenue		DATE 11/14/22	PAGE 1 OF 8
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 6:55 AM	DEPARTURE TIME 7:45 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Clear 32F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) and Figure 1 location map (page 3) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 4-8) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 12
R045-00 – ExxonMobil Port of Everett ADC
11/14/22
Page 2 of 8



Photo 1. Catch basin Witches Hat with fallen corner circled in red



Photo 2. Location of catch basin that needs maintenance

DAILY FIELD REPORT



Daily Field Report No. 12
R045-00 – ExxonMobil Port of Everett ADC
11/14/22
Page 3 of 8

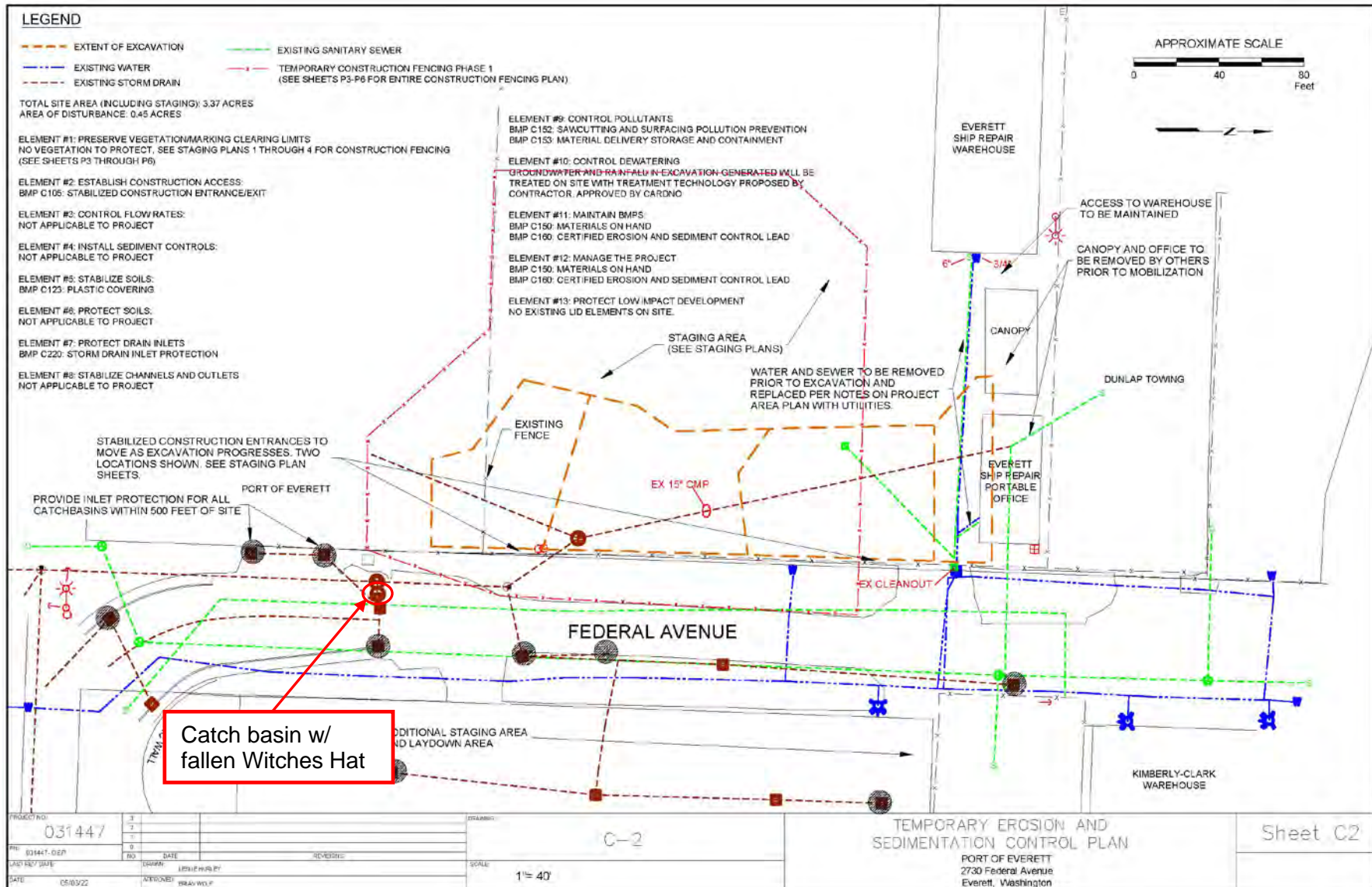


Figure 1. Location of BMP that requires maintenance

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **11/14/22** Time **6:55am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.045

Approximate rainfall amount in the last 24 hours (in inches): 0.0

Current Weather Clear ☒ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input checked="" type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>	Infrastructure/storm/roads	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>	Utilities	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>	Final stabilization	<input type="checkbox"/>

C. Questions:

1. Were all areas of construction and discharge points inspected?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?*	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
5. If yes to #4 was it reported to Ecology?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
6. Is pH sampling required? pH range required is 6.5 to 8.5.	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Yes, see Page 8	No	Yes, see Page 8
	Are existing storm drains within the influence of the project protected?	x			No maintenance req'd	No	None
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			x			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			x			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			x			
	Were there any clean non turbid dewatering discharges?			x			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	x			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	x			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	x			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			x			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			x			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			x			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			x			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			x			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			x			

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
 All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

Construction Stormwater Site Inspection Form

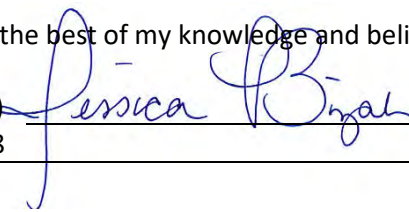
F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
7	SE corner of Witches Hat has fallen in catch basin located on Federal Ave, on SE corner of project site (see page 3 for exact location)	Replace Witches Hat		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

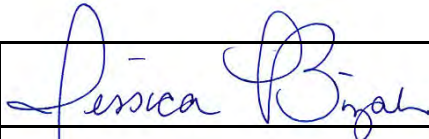

Inspected by: (print) Jessica Bizak (Signature)  Date: 11/14/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 13
ADDRESS 2717/2731 Federal Avenue		DATE 11/21/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:05 AM	DEPARTURE TIME 7:50 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Overcast 40F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 13
R045-00 – ExxonMobil Port of Everett ADC
11/21/22
Page 2 of 7



Photo 1. New permanent catch basin in need of insert



Photo 2. Decommissioned temporary catch basin

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **11/21/22** Time **7:05am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.022

Approximate rainfall amount in the last 24 hours (in inches): 0.021

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date:

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s)		Yes
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
7	Newly established permanent onsite catch basin needs insert installed	Install catch basin insert		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

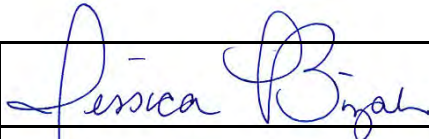

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 11/21/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 14
ADDRESS 2717/2731 Federal Avenue		DATE 11/28/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:00 AM	DEPARTURE TIME 7:50 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Cloudy 36F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 14
R045-00 – ExxonMobil Port of Everett ADC
11/28/22
Page 2 of 7



Photo 1. New fully functioning permanent on site catch basin



Photo 2. Drainage path (constructed w/ asphalt) leading to new permanent catch basin

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **11/28/22** Time **7:00am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 1.483

Approximate rainfall amount in the last 24 hours (in inches): 0.248

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date:

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) - No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials
7	Newly established permanent onsite catch basin needs insert installed	Install catch basin insert		

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

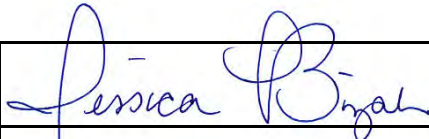

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 11/28/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

DAILY FIELD REPORT



PO Box 44840, Tacoma, WA 98448

(253) 537-9400 office • (253) 537-9401 fax

PROJECT NAME ExxonMobil Port of Everett ADC		PROJECT NO. R045-00	FIELD REPORT NO. 15
ADDRESS 2717/2731 Federal Avenue		DATE 12/05/22	PAGE 1 OF 7
CITY OR COUNTY Everett, WA	PERMIT NO.	ARRIVAL TIME 7:15 AM	DEPARTURE TIME 7:50 AM
CLIENT Cardno	RAM PROJECT MANAGER / PHONE NO. Mark Rohrbach / 425-233-7211		
GENERAL CONTRACTOR	RAM FIELD REPRESENTATIVE / PHONE NO. Jessica Bizak / 253-370-4369		
SUBCONTRACTOR	WEATHER Mostly cloudy 28F		
TYPE OF WORK PERFORMED CESCL Inspection			
EQUIPMENT USED n/a			
COMMENTS			
<p>RAM Geoservices, Inc. (RAM) representative was on site for weekly site inspection as requested to observe installation of erosion and sediment control BMPs during construction of sheet pile shoring. BMPs were found to be appropriately used and functioning correctly.</p> <p>A representative of RAM will continue weekly site visits throughout construction.</p> <p>Refer to photos 1-2 (page 2) for today's inspection.</p> <p>Refer to the attached Construction Stormwater Site Inspection Form (pages 3-7) for more detailed information regarding today's site inspection.</p> <p>-End-</p>			
The contents of this field report were discussed with the contractor's on-site representative.			
<input type="checkbox"/> A preliminary copy of this field report was left on site. All recommendations contained herein are subject to change pending review by the Migizi project manager.		 RAM Project Manager	

DAILY FIELD REPORT



Daily Field Report No. 15
R045-00 – ExxonMobil Port of Everett ADC
12/05/22
Page 2 of 7



Photo 1. Functioning onsite catch basin



Photo 2. Functioning diversion pump to storm system

Construction Stormwater Site Inspection Form

Project Name **ExxonMobil ADC Port of Everett** Permit # **MTCA Agreed Order** Inspection Date **12/05/22** Time **7:15am**

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: Jessica Bizak

Approximate rainfall amount since the last inspection (in inches): 0.398

Approximate rainfall amount in the last 24 hours (in inches): 0.000

Current Weather Clear ☐ Cloudy ☒ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☒ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls

☒

Clearing/Demo/Grading

☐

Infrastructure/storm/roads

☐

Concrete pours

☐

Vertical

☐

Utilities

☐

Construction/buildings

Offsite improvements

☐

Site temporary stabilized

☐

Final stabilization

☐

C. Questions:

- | | | | | |
|---|-----|-------------------------------------|----|-------------------------------------|
| 1. Were all areas of construction and discharge points inspected? | Yes | <input checked="" type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 3. Was a water quality sample taken during inspection? (refer to permit conditions S4 & S5) | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 5. If yes to #4 was it reported to Ecology? | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results:

Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				No rain event / no site discharge
pH	Paper, kit, meter				No rain event / no site discharge

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)			x			
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?	x			No maintenance req'd	No	None
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.	x			No maintenance req'd	No	None
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?			x			
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?			x			
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).			x			
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.			x			
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.			x			
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?	x			No maintenance req'd	No	None

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?	x			No maintenance req'd	No	None
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?	x			No maintenance req'd	No	None
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?			x			
	Is off-site storm water managed separately from stormwater generated on the site?			x			
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?			x			
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?			x			
7 Drain Inlets	Storm drain inlets made operable during construction are protected.	x			Onsite catch basin(s) - No maintenance req'd	No	None
	Are existing storm drains within the influence of the project protected?			x	Note for offsite catch basins: remove from scope, monitoring under new agency		
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?			x			
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?			x			
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?	x			No maintenance req'd	No	None
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?	x			No maintenance req'd	No	None
	Has secondary containment been provided capable of containing 110% of the volume?	x			No maintenance req'd	No	None
	Were contaminated surfaces cleaned immediately after a spill incident?			x			

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?			X			
	Wheel wash wastewater is handled and disposed of properly.			X			
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.			X			
	Dewatering has been done to an approved source and in compliance with the SWPPP.			X			
	Were there any clean non turbid dewatering discharges?			X			
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?	X			No maintenance req'd	No	None
12 Manage the Project	Has the project been phased to the maximum degree practicable?	X			No maintenance req'd	No	None
	Has regular inspection, monitoring and maintenance been performed as required by the permit?	X			No maintenance req'd	No	None
	Has the SWPPP been updated, implemented and records maintained?			X			
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?			X			
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?			X			
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.			X			
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?			X			
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.			X			

Construction Stormwater Site Inspection Form

E. Check all areas that have been inspected. ✓

All in place BMPs ☒ All disturbed soils ☒ All concrete wash out area ☐ All material storage areas ☒
All discharge locations ☒ All equipment storage areas ☒ All construction entrances/exits ☒

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) Jessica Bizak (Signature) Jessica Bizak Date: 12/05/22
Title/Qualification of Inspector: CESCL – CWTA-76058938

APPENDIX N

Weekly Progress Reports



August 25, 2022

Safety Moment

- > Small hydraulic leak detected on excavator. Work was stopped and the rental company mechanic mobilized to repair the excavator to prevent an environmental release or further damage to the excavator.



Minor Hydraulic Oil Leak

Activities Conducted This Week – Friday, August 26, 2022

Saturday August 20th

- > Asphalt removal
- > Install SWPPP BMPs

Monday August 22nd

- > Unload sheet piles
- > Shoring fabrication / torch cutting
- > Excavate phase 1 shoring perimeter with archeological oversight
- > Setup additional temporary MARSEC fencing

Tuesday August 23rd

- > Unload sheet piles
- > Excavate phase 1 shoring perimeter with archeological oversight
- > Quarry spalls delivered for construction entrance

Wednesday August 24th

- > Excavate phase 1 shoring perimeter with archeological oversight
- > Private locate mobilized to evaluate abandoned storm drain line

Thursday August 25th

- > Excavate phase 1 shoring perimeter with archeological oversight
- > Wood/timber debris encountered along shoring perimeter

Friday August 26th

- > Final delivery and unload Phase 1 and 2 sheet piles
- > Excavate phase 1 shoring perimeter with archeological oversight
- > Phase 1 shoring perimeter timber removal efforts

Shoring Perimeter Clearance / Excavation



Sheet Pile Delivery



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Erosion Control BMPs



Planned Activities for Next Week – Week of Saturday, August 27th

Saturday August 27th

- > Continue timber removal efforts in southwest corner of Phase 1 excavation

Monday August 29th

- > Complete perimeter trenching and install construction entrance

Tuesday August 30th

- > Shoring installation / ExxonMobil and ADC site visit
- > SWPPP / BMP inspection

Wednesday August 31st

- > Shoring installation

Thursday September 1st

- > Shoring installation

Friday September 2nd

- > Shoring installation

September 2, 2022

Safety Moment

- > Reviewed the 2016 High Value Learning (HVL) pile driving crane boom failure with Ford Crane. Had a discussion on what went wrong in the HVL including the shortcuts that were taken and dependence on safety mechanisms that lead to the crane failure. Discussed how the findings could prevent a similar incident at our site.



Tailgate Safety Meeting

Activities Conducted This Week – Friday, September 2, 2022

Saturday August 27th

- > Expose wood debris around Phase 1 perimeter
- > Install subsurface storm sewer bypass PVC lines

Monday August 29th

- > Install storm sewer bypass pumps

Tuesday August 30th

- > ExxonMobil, ADC, and Ecology site visit
- > Backfill southwest corner of Phase 1 excavation
- > SWPPP compliance inspection
- > Completed Port of Everett storm sewer bypass connection

Wednesday August 31st

- > Sheet pile fabrication work
- > Moved ESR parking fence 60 feet north
- > Installed western shoring wall guide beam

Thursday September 1st

- > Installation of 5 sheet pile pairs

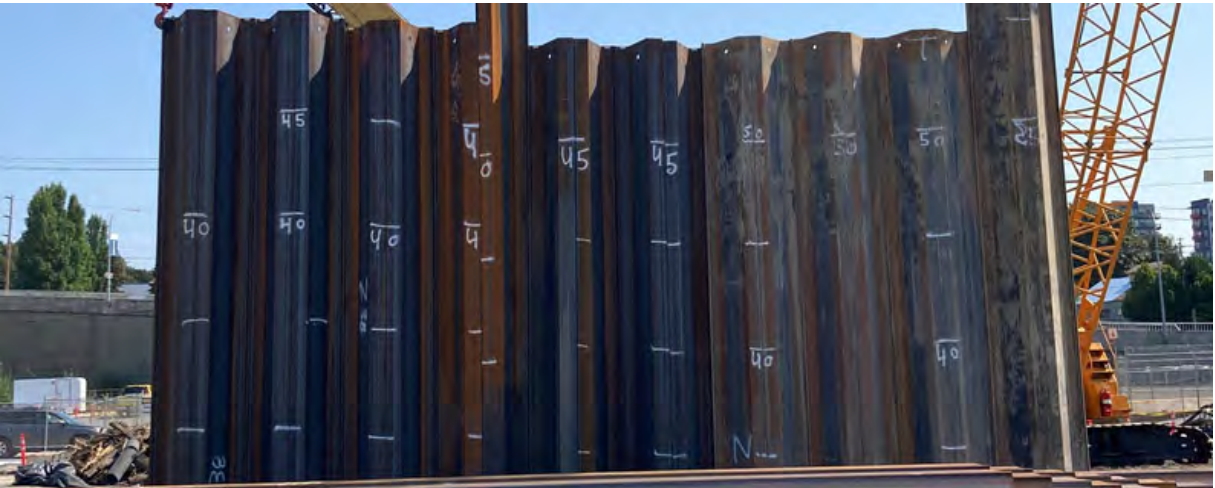
Friday September 2nd

- > Installation of 5 sheet pile pairs
- > Secured site for Labor Day holiday

Phase 1 Shoring Installation



Phase 1 Shoring Wall 09/02/22

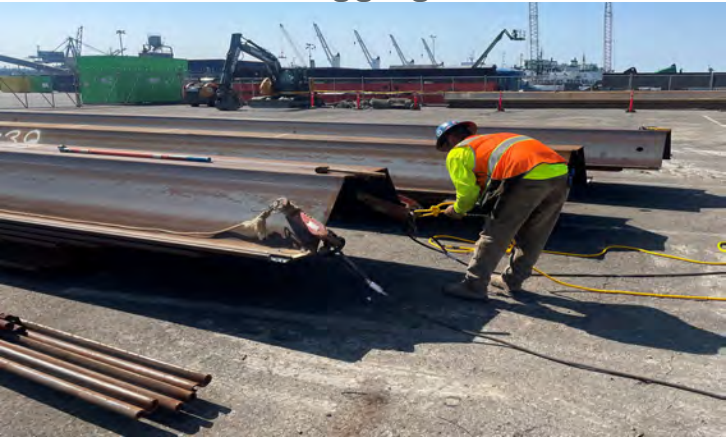


Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	10/37 Pairs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Storm Sewer Bypass Pump



Rigging



Planned Activities for Next Week – Week of Saturday, September 3rd

Saturday September 3rd

- > Labor Day holiday

Monday September 5th

- > Labor Day holiday

Tuesday September 6th

- > ICS travel day

Wednesday September 7th

- > Shoring installation

Thursday September 8th

- > Shoring installation

Friday September 9th

- > Shoring installation

September 9, 2022

Safety Moment

- > Near loss incident – Hot slag from steel cutting work was caught by the wind and started small 2 square foot grass fire. Due to the engaged fire watch personnel, the fire was immediately put out with fire extinguishers staged adjacent to the hot work. A near loss investigation has been initiated.

Extinguishing Small Grass Fire



Activities Conducted This Week – Friday, September 9, 2022

Saturday August 3rd

- > Labor Day holiday

Monday August 5th

- > Labor Day holiday

Tuesday August 6th

- > ICS travel day

Wednesday August 7th

- > Sheet pile fabrication work
- > Install two sets of sheet piles. High winds prevented afternoon pile installation due to safety concerns.
- > Construction entrance installation work
- > SWPPP inspection

Thursday September 8th

- > Installation of two sheet pile pairs
- > Pile groove cleaning and fabrication work

Friday September 9th

- > Inspect sheets for warpage or debris in sheet grooves.
- > Pile groove cleaning and fabrication work
- > Segregate sheets that need to be replaced
- > Stage cleaned/inspected piles for installation to commence on 9/12

Installation of Construction Entrance



Phase 1 Southern Shoring Wall 09/09/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	14/37 Pairs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Storm Bypass Installation Trench Box



Sheet Pile Cleaning/Preparation



Planned Activities for Next Week – Week of Saturday, September 10th

Saturday September 10th

- > Complete construction entrance

Monday September 12th

- > Shoring installation

Tuesday September 13th

- > Shoring installation

Wednesday September 14th

- > Shoring installation

Thursday September 15th

- > Shoring installation

Friday September 16th

- > Shoring installation

September 16, 2022

Safety Moment

- > Equipment Inspections: Considerable short-term wear was identified on the wire cable used to suspend the vibratory hammer during a routine cable/rigging inspection. It was determined that the hook for the crane mobilized to site was more square than typical hooks used with this rigging. The hook/block was exchanged with a round one and the cable replaced.

Cable Inspection



Activities Conducted This Week – Friday, September 16, 2022

Saturday September 10th

- > Place construction entrance geotextile fabric
- > Place aggregate base and complete construction entrance

Monday September 12th

- > SWPPP Inspection
- > Drive western shoring sheets to depth
- > Joe Lucia (shoring engineer) site visit
- > Install 4 sets of sheet piles

Tuesday September 13th

- > Install 7 sets of sheet piles

Wednesday September 14th

- > Advance southern shoring sheets to depth

Thursday September 15th

- > Inspect sheets for warpage and debris in sheet interlocks
- > Pile interlock cleaning and fabrication work
- > Segregate sheets that need to be replaced
- > Removal of small excavator and skid steer

Friday September 16th

- > Install 6 sets of sheet piles
- > Front end loader and large excavator delivery

Phase 1 Excavation Sheet Pile – 09/16/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	35/37 Pairs	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Construction Entrance with Aggregate Base



Planned Activities for Next Week – Week of Saturday, September 17th

Saturday September 17th

- > Phase 2 perimeter trenching
- > Phase 2 sewer bypass connection

Monday September 19th

- > Phase 1 shoring installation

Tuesday September 20th

- > Phase 2 shoring installation

Wednesday September 21st

- > Phase 2 shoring installation

Thursday September 22nd

- > ExxonMobil site visit / Phase 2 shoring installation

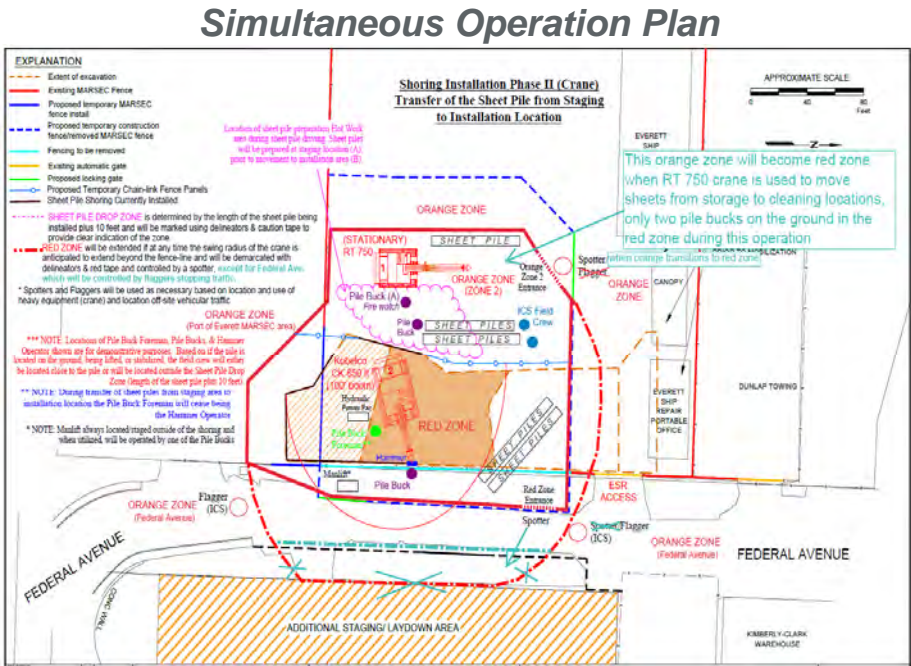
Friday September 23rd

- > Phase 2 shoring installation / Strider paving / asphalt export

September 23, 2022

Safety Moment

- Cardno and ICS collaborated to develop safe work zones for the simultaneous operations of sheet pile cleaning and sheet pile installation. Additional simultaneous operation plans will be developed going forward to increase project efficiency.



Activities Conducted This Week – Friday, September 23, 2022

Saturday September 17th

- Phase 2 perimeter asphalt removal
- Phase 2 Federal Avenue trenching

Monday September 19th

- SWPPP Inspection
- Large excavator delivery
- Metal recycle bin hauled offsite
- Sheet preparation

Tuesday September 20th

- Install 4 sets of sheet piles

Wednesday September 21st

- Install 5 sets of sheet piles

Thursday September 22nd

- ExxonMobil and Ecology site visit
- Hammer Federal Avenue sheets to near depth
- Simultaneous operations for sheet driving and sheet interlock groove cleaning
- Install 3 sets of sheet piles
- Phase 2 perimeter trenching

Friday September 23rd

- Install 6 sets of sheet piles
- Strider/Port Federal Avenue paving

Permanent Barrier Wall Sheet Pile Installation – 09/21/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	0%	0%	17/43 Pairs	0%	0%	0%	0%	0%	0%	0%	0%	0%

Dust Suppression



Sheet Fabrication



Planned Activities for Next Week – Week of Monday, September 26th

Monday September 26th

- Phase 2 shoring Installation

Tuesday September 27th

- Phase 2 shoring Installation

Wednesday September 28th

- Phase 2 shoring Installation

Thursday September 29th

- Phase 2 shoring Installation

Friday September 30th

- Phase 2 shoring Installation

September 30, 2022

Safety Moment

- > Use of magnetic rod to direct sheets during sheet pile consolidation in preparation for excavation. The magnetic rod enables the ICS employee to direct the sheet while reducing the likelihood of a hand/crush hazard.

Use of Magnetic Rod to Direct Sheets



Activities Conducted This Week – Friday, September 30, 2022

Monday September 26th

- > SWPPP inspection
- > Shoring engineer site visit
- > Install 2 sets of sheet piles

Tuesday September 27th

- > Install 9 sets of sheet piles

Wednesday September 28th

- > Install final 3 sets of sheet piles prior to commencing Phase 1 & 2 excavation
- > Demobilize vibratory hammer, power pack, and welder

Thursday September 29th

- > Shoring material consolidation
- > Licensed surveyor shoring survey
- > Shoring engineer site visit
- > Asphalt breakup
- > Export 4 loads of asphalt
- > Install perimeter surface flow catch basins

Friday September 30th

- > Asphalt breakup
- > Export 5 loads of asphalt
- > Install perimeter surface flow catch basins

Asphalt Break Out and Export – 09/30/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	5%	0%	31/31 Pairs	0%	0%	0%	0%	0%	0%	0%	0%	0%

Perimeter Catch Basin



Asphalt Removal Dust Suppression



Planned Activities for Next Week – Week of Saturday, October 1st

Saturday October 1st

- > Install perimeter catch basins

Monday October 3rd

- > Phase 1 excavation

Tuesday October 4th

- > Phase 1 excavation

Wednesday October 5th

- > Phase 1 excavation

Thursday October 6th

- > Phase 1 soil loading and export

Friday October 7th

- > Phase 1 soil loading and export

October 7, 2022

Safety Moment

- > An unknown 500-gallon UST was discovered. Work immediately stopped. The team used a long rod with tubing connected to the 4-gas meter to determine if a hazardous atmosphere was present within the tank. Proper discovery notifications were made, and work resumed when it was determined the tank did not present a hazard.

~500-Gallon UST Discovery



Activities Conducted This Week – Friday, October 7, 2022

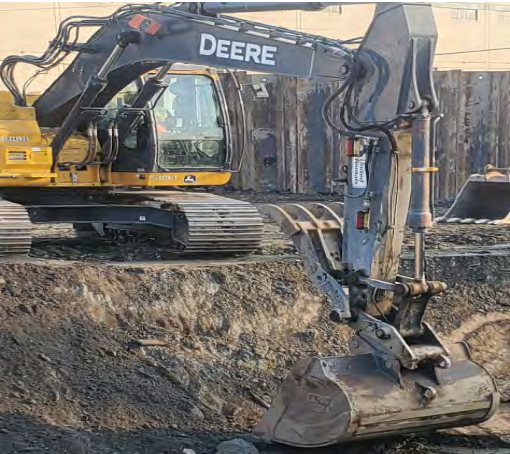
- Saturday October 1st**
- > Storm water diversion sump installation
- Monday October 3rd**
- > SWPPP Inspection
 - > Asphalt breakout and export 5 loads of asphalt
- Tuesday October 4th**
- > Topographic grid survey to confirm excavation depths are achieved
 - > Begin Phase 1 excavation/stockpiling
- Wednesday October 5th**
- > Phase 1 excavation
 - > Unknown ~500-gallon UST identified on southeastern side of Phase 1 excavation
 - > Export 28 loads of impacted soil
- Thursday October 6th**
- > Phase 1 Excavation
 - > 190 tons of import rock delivered to site
 - > ESR temporary office delivery
 - > Export 57 loads of impacted soil
- Friday October 7th**
- > Phase 2 Excavation
 - > 338 tons of import rock delivered to site
 - > Export 10 loads of impacted soil
 - > Export 10 loads of asphalt

Phase 1 Excavation – 10/07/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	95%	0%	31/31 Pairs	10%	0%	0%	0%	0%	0%	0%	0%	0%

Excavation



Soil Export



Planned Activities for Next Week – Week of Monday, October 10th

- Monday October 10th**
- > Phase 1 backfill
- Tuesday October 11th**
- > Phase 1 backfill
- Wednesday October 12th**
- > Phase 2 excavation / export
- Thursday October 13th**
- > Phase 2 excavation / export
- Friday October 14th**
- > Phase 2 excavation / export
- Saturday October 15th**
- > Phase 2 excavation / export

October 14, 2022

Safety Moment

- > Tank removal performed under the permit of the fire marshal including a marine chemist to determine the tank did not present an explosive atmosphere. The tank was pumped, and triple rinsed prior to disposal under hot work permit.

~500-Gallon UST Removal



Activities Conducted This Week – Friday, October 14, 2022

Monday October 10th

- > SWPPP inspection
- > Excavate/export 56 loads of impacted soil
- > Shoring inspection by licensed engineer
- > 298 tons of import rock delivered to site
- > ESR trailer construction

Tuesday October 11th

- > Excavate/export 46 loads of impacted soil
- > ESR trailer construction

Wednesday October 12th

- > Excavate/export 37 loads of impacted soil
- > 500-gallon UST excavation and removal
- > ESR IT department site walk for fiber relocate

Thursday October 13th

- > Excavate/export 46 loads of impacted soil
- > LNAPL skimming and recovery
- > Site preparation for power relocation
- > Excavation performance depth measurements taken

Friday October 14th

- > Delivery of dewatering equipment
- > LNAPL skimming and recovery
- > Begin backfilling Phase 1 and 2
- > 357 tons of import rock delivered to site

Phase 1 and 2 Excavation Limits Reached – 10/13/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	30%	31/31 Pairs	100%	10%	0%	0%	0%	0%	0%	0%	0%

LNAPL Skimming

ESR Temporary Office Installation



Planned Activities for Next Week – Week of Saturday, October 15th

Saturday October 15th

- > Phases 1 and 2 backfill / compaction

Monday October 16th

- > ESR electrical connection / backfill / compaction

Tuesday October 17th

- > Phases 1 and 2 backfill / compaction

Wednesday October 18th

- > Phases 1 and 2 backfill / compaction

Thursday October 19th

- > Phases 1 and 2 backfill / compaction

Friday October 20th

- > ESR fiber move / backfill / compaction

October 21, 2022

Safety Moment

- > ICS broke up a large concrete footing. Plastic sheeting was installed to prevent flying concrete debris.

Concrete Footing Breakup



Activities Conducted This Week – Friday, October 21, 2022

- Saturday October 15th**
- > Place aggregate fill beneath water table
- Monday October 17th**
- > Aggregate backfill beneath water table
 - > 143 tons of import rock delivered to site
 - > Filter fabric installation
 - > Shoring engineer site visit
- Tuesday October 18th**
- > ESR electrical connection complete
 - > Backfill and compaction
 - > Import 426 tons of fill
- Wednesday October 19th**
- > Backfill and compaction
 - > Import 1,046 tons of fill
 - > SWPPP inspection
- Thursday October 20th**
- > Backfill and compaction
 - > Import 938 tons of fill
- Friday October 21st**
- > Import 438 tons of fill, 148 tons AB
 - > Backfill and compaction completed
 - > Compaction testing performed throughout
 - > ESR fiber relocation

Fill compaction completed prior to asphalt base – 10/21/22

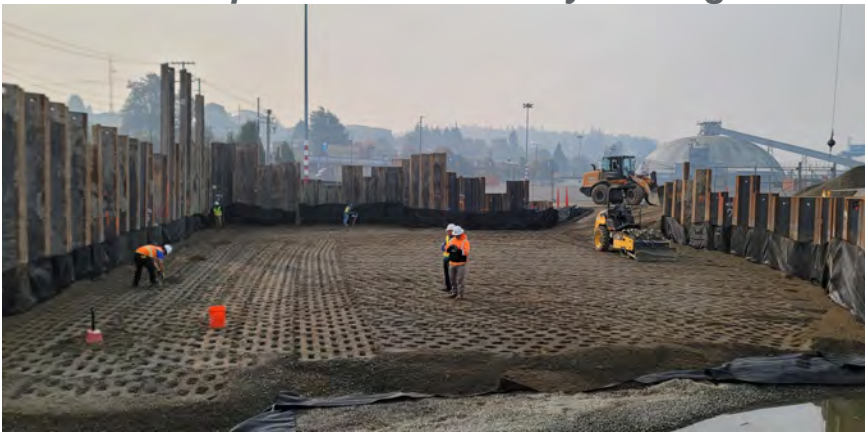


Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	90%	31/31 Pairs	100%	90%	0%	0%	0%	0%	0%	0%	0%

Aggregate Backfill and Liner



Compaction and Density Testing



Planned Activities for Next Week – Week of Saturday, October 22nd

- Saturday October 22nd**
- > ESR IT department hardware/connectivity move
- Monday October 24th**
- > ESR temp office ready, site cleanup, shoring removal prep, complete density testing
- Tuesday October 25th**
- > Phases 1 and 2 shoring removal
- Wednesday October 26th**
- > Phases 1 and 2 shoring removal
- Thursday October 27th**
- > ExxonMobil site visit, shoring removal
- Friday October 28th**
- > Phase 1 and 2 shoring removal

October 28, 2022

Safety Moment

- > SIMOPS for sheet pile removal and Phases 3 and 4 excavation survey – HEEZ plan developed and discussed/executed in the field.

Phases 3 and 4 Topographic Survey



Activities Conducted This Week – Friday, October 28, 2022

Saturday October 22nd

- > ESR/Litzia IT move
- > ICS material staging

Monday October 24th

- > SWPPP inspection
- > Install larger stormwater bypass pump

Tuesday October 25th

- > Shoring removal – 11 sheets removed

Wednesday October 26th

- > Shoring removal – 4.5 sheets removed
- > Shoring engineer site visit
- > Expanded northern work area toward ESR office

Thursday October 27th

- > Shoring removal – 8 sheets removed
- > ExxonMobil management visit
- > Site preparation to hammer Federal Avenue sheets flush to grade

Friday October 28th

- > Shoring removal – 8 sheets removed
- > Begin hammering Federal Avenue Sheets to grade
- > Phases 3 & 4 topographic survey
- > Phases 3 & 4 saw cutting

Shoring Removal – 10/28/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	90%	31/31 Pairs	100%	90%	0%	0%	0%	0%	0%	0%	0%

ExxonMobil Site Visit



Phases 3 and 4 Asphalt Cutting



Planned Activities for Next Week – Week of Saturday, October 29th

Saturday October 29th

- > Phase 1 surface prep for paving

Monday October 31st

- > MARSEC fence removal

Tuesday November 1st

- > Phase 1 paving (weather dependent)

Wednesday November 2nd

- > Phase 3 and 4 perimeter trenching

Thursday November 3rd

- > Phase 3 shoring installation

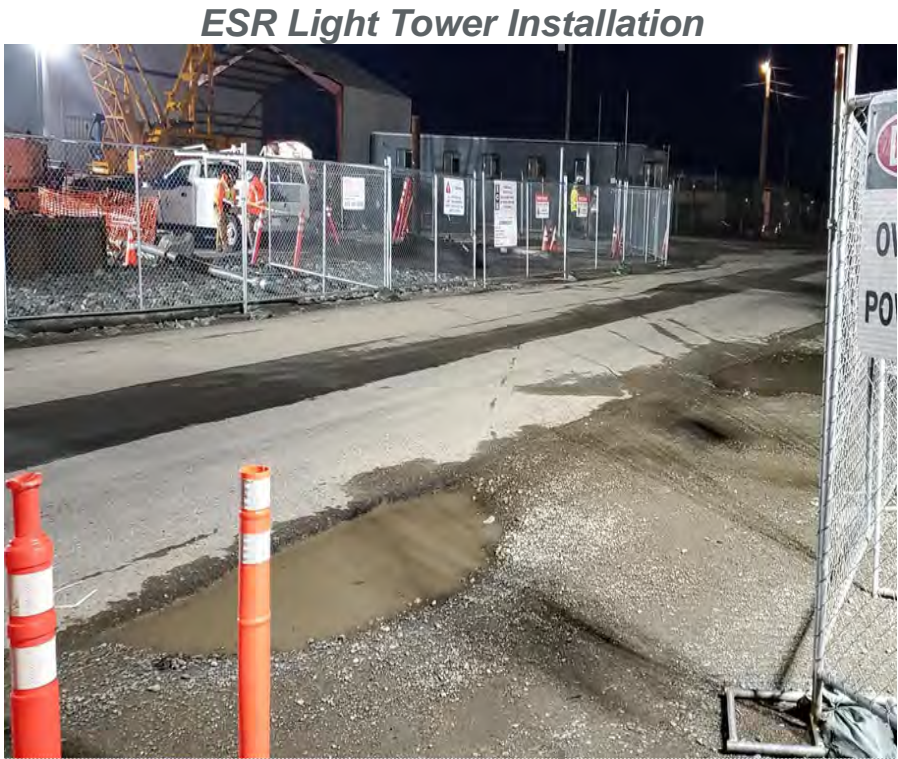
Friday November 4th

- > Phase 3 shoring installation

November 4, 2022

Safety Moment

- > Installed diesel powered light tower to illuminate ESR parking lot and pedestrian crossing for ESR team due to low light conditions morning/evening.



ESR Light Tower Installation

Activities Conducted This Week – Friday, November 4, 2022

Saturday October 29th

- > Phase 1 grading
- > Phase 3 trenching

Monday October 31st

- > SWPPP inspection
- > Phase 1 grading
- > Install new southern catch basin and conveyance pipe

Tuesday November 1st

- > ESR power termination
- > Phase 3 trenching and shoring

Wednesday November 2nd

- > Ziplly fiber termination
- > Phase 3 trenching and shoring
- > Remove northern MARSEC fence

Thursday November 3rd

- > Phase 3 trenching
- > Phase 1 asphalt resurfacing
- > Shoring material delivery

Friday November 4th

- > Phase 3 shoring install
- > Stage timber/asphalt and shoring site prep

Phase 1 Resurfaced and Released to Port of Everett



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	x/51 Pairs	0%	0%	0%	0%	0%	0%

Southern Storm Line Install



Phase 1 Final Grading



Planned Activities for Next Week – Week of Saturday, November 5th

Saturday November 5th

- > ESR office move

Monday November 6th

- > Phase 3 shoring installation

Tuesday November 7th

- > Phase 3 shoring installation

Wednesday November 8th

- > Phase 3 shoring installation

Thursday November 9th

- > Phase 3 shoring installation

Friday November 10th

- > Phase 3 shoring installation

November 11, 2022

Safety Moment

- > Near loss – Large crane tracked over the power pack hydraulic lines. Immediately stopped work. Near loss investigation was initiated.

Phase 3 Shoring Install (New Sheets Right)



Activities Conducted This Week – Friday, November 11, 2022

Saturday November 5th

- > ESR office move preparation
- > Stage asphalt and other materials

Monday November 7th

- > SWPPP inspection
- > Phase 3 shoring delivery and install

Tuesday November 8th

- > Asphalt export
- > Aggregate base import
- > Phase 3 shoring delivery and install

Wednesday November 9th

- > Import fill material
- > Phase 3 shoring delivery and install

Thursday November 10th

- > Pave ESR southern access point
- > Shift temporary fencing to allow expanded northern work zone
- > Phase 3 shoring delivery and install

Friday November 11th

- > Phase 3 shoring install
- > Revise site layout for ESR southern driveway entrance
- > Phase 3 excavation trenching

ESR Southern Access with New Asphalt – 11/11/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	15/51 Pairs	0%	0%	0%	0%	0%	0%

Catch Basin Delivery



Phase 3 Shoring Delivery



Planned Activities for Next Week – Week of Saturday, November 12th

Saturday November 12th

- > ESR office move to new location – Norton Terminal

Monday November 14th

- > Phase 3 shoring install / setup dewatering system

Tuesday November 15th

- > Phase 3 shoring install / setup dewatering system

Wednesday November 16th

- > Phase 3 shoring installation

Thursday November 17th

- > Phase 3 shoring installation

Friday November 18th

- > Phase 3 shoring installation

November 18, 2022

Safety Moment

- > After initially observing Rain for Rent construct the dewatering system, Cardno supervisor directed the team to reduce trip hazards from the piping and reviewed the no tools on the ground policy.

Dewatering System



Activities Conducted This Week – Friday, November 18, 2022

Saturday November 12th

- > ESR office move
- > Exploratory trenching/debris removal

Monday November 14th

- > SWPPP inspection
- > Phase 3 shoring install
- > Stormwater bypass piping install

Tuesday November 15th

- > Phase 3 shoring install
- > Expose and remove concrete debris
- > Move ESR canopy

Wednesday November 16th

- > Phase 3 shoring install
- > Phase 4 topographic survey
- > Stormwater bypass piping install
- > Cut timber into 8-foot sections

Thursday November 17th

- > Phase 3 shoring delivery and install
- > Dewatering system setup
- > Stormwater bypass piping install

Friday November 18th

- > Phase 3 shoring install
- > Dewatering system setup

Site Status – 11/18/22



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	29/51 Pairs	0%	0%	0%	0%	0%	0%

ESR Canopy Move



ESR Office Move



Planned Activities for Next Week – Week of Saturday, November 19th

Saturday November 19th

- > Phase 3 shoring installation

Monday November 21st

- > Phase 3 shoring installation

Tuesday November 22nd

- > Phase 3 shoring installation

Wednesday November 23rd

- > Phase 3 shoring installation

Thursday November 24th

- > Thanksgiving holiday

Friday November 25th

- > Thanksgiving holiday

November 23, 2022

Safety Moment

- > Upon installation of stormwater run-off pad, ICS placed sandbags and protective grate over stormwater bypass conveyance piping to replace the removed stormwater vault lid.

Stormwater Run-off Pad



Activities Conducted This Week – Wednesday, November 23, 2022

Nearing Completion of Phase 3 Shoring Installation



Saturday November 19th

- > Phase 3 shoring installation

Monday November 21st

- > SWPPP inspection
- > Phase 3 shoring installation
- > Stormwater catch basin for conveyance from Phase 1 and 2

Tuesday November 22nd

- > Phase 3 shoring installation
- > Timber load out
- > Asphalt load out

Wednesday November 23rd

- > Phase 3 shoring installation
- > Secure site for Thanksgiving break

Thursday November 24th

- > Thanksgiving break

Friday November 25th

- > Thanksgiving break

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	0%	0%	0%	0%	0%	0%

Asphalt Load Out



Timber Load Out



Planned Activities for Next Week – Week of Monday, November 26th

Saturday November 26th

- > Thanksgiving break

Monday November 28th

- > Phase 3 excavation

Tuesday November 29th

- > Phase 3 excavation

Wednesday November 30th

- > Phase 3 excavation

Thursday December 1st

- > Phase 3 excavation

Friday December 2nd

- > Phase 3 excavation

December 2, 2022

Safety Moment

- > Inclement weather stop work to discuss and mitigate the slip hazard presented by several inches of snow.

Plowed Snow to Reduce Slip Hazard



Activities Conducted This Week – Friday, December 2, 2022

Phase 3 Excavation – 12/02/22



Saturday November 26th

- > Thanksgiving holiday

Monday November 28th

- > SWPPP inspection
- > Shoring material layout/staging
- > Phase 3 asphalt break out

Tuesday November 29th

- > Phase 3 asphalt break out

Wednesday November 30th

- > Phase 3 asphalt breakout and load out – 12 loads

Thursday December 1st

- > Phase 3 soil excavation and load out – 52 loads

Friday December 2nd

- > Install stormwater conveyance bypass trench via vacuum truck
- > Phase 4 topographic survey
- > Phase 3 excavation and stockpiling

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	30%	0%	0%	0%	0%	0%

Stormwater Bypass Trench



Topographic Survey



Planned Activities for Next Week – Week of Saturday, December 3rd

Saturday December 3rd

- > Reconfigure green zone to accommodate ESR parking

Monday December 5th

- > Install tie-back system / Phase 3 excavation and load out

Tuesday December 6th

- > Phase 3 soil excavation and load out

Wednesday November 7th

- > Phase 3 soil excavation and load out

Thursday December 8th

- > Phase 3 soil excavation and load out

Friday December 9th

- > Phase 3 soil excavation and load out

December 9, 2022

Safety Moment

- > Discussed slip/trip/fall and head knockers with rain for rent dewatering team inside treatment room.

Dewatering Treatment Room



Activities Conducted This Week – Friday, December 9, 2022

Phase 3 Excavation – 12/09/22

Saturday December 3rd

- > Expand ESR parking area

Monday December 5th

- > SWPPP inspection
- > Shoring tie-back system installation

Tuesday December 6th

- > Complete tie back shoring system
- > Phase 3 excavation – 40 loads

Wednesday December 7th

- > Phase 3 excavation – 106 loads

Thursday December 8th

- > Phase 3 excavation – 97 loads
- > Collect dewatering system effluent compliance sample

Friday December 9th

- > Phase 3 excavation – 62 loads
- > Secured site for weekend



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	0%	0%	0%	0%	0%

Phase 3 Load Out



Site Cleaning BMPs



Planned Activities for Next Week – Week of Saturday, December 10th

Saturday December 10th

- > ICS travel weekend

Monday December 12th

- > Phase 3 backfill

Tuesday December 13th

- > Phase 3 backfill

Wednesday November 14th

- > Phase 3 backfill

Thursday December 15th

- > Phase 3 backfill

Friday December 16th

- > Phase 3 backfill

December 16, 2022

Safety Moment

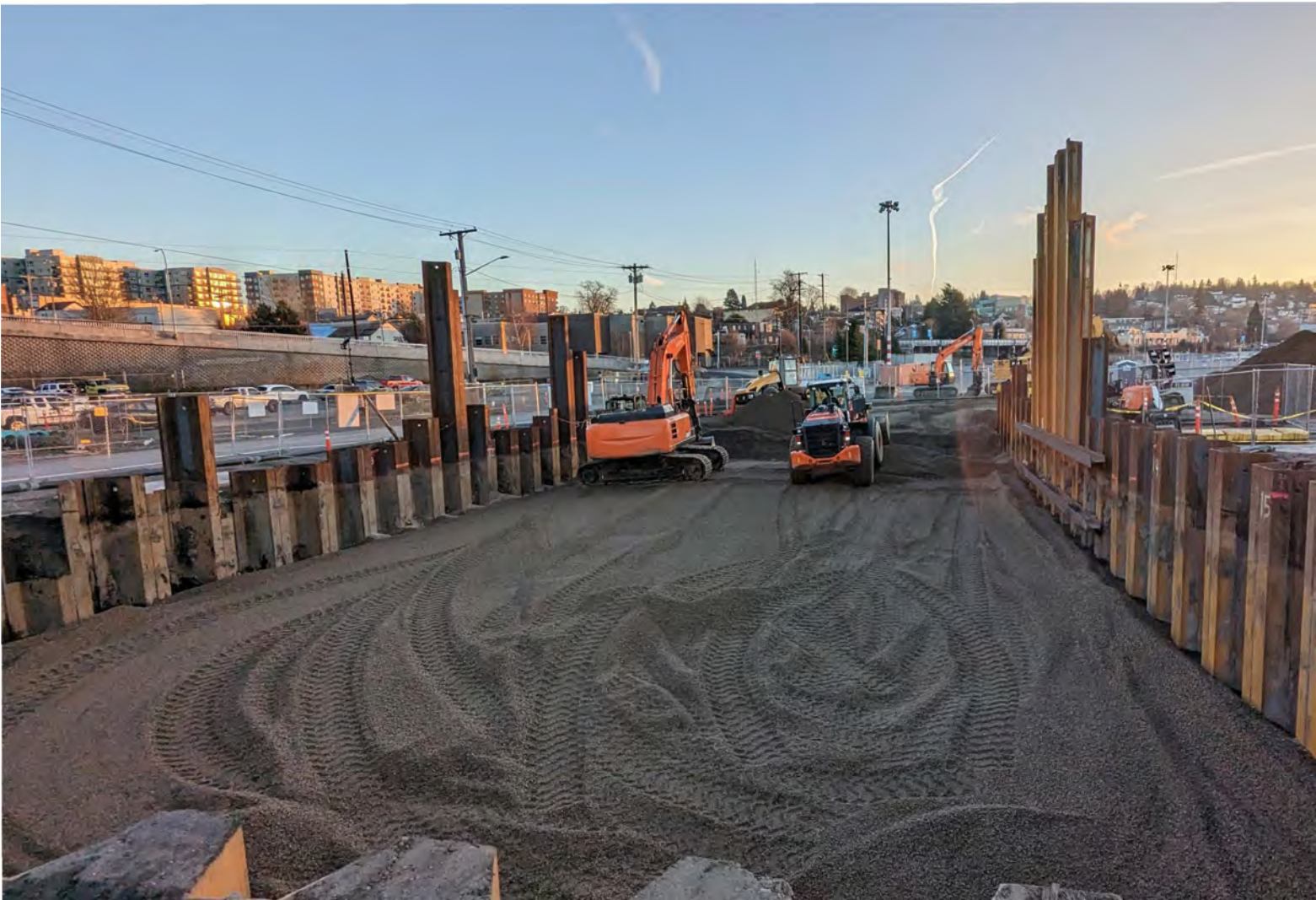
- > Discussed slip/trip/fall and head knockers with Rain for Rent dewatering team inside treatment room.

Equipment Decontamination



Activities Conducted This Week – Friday, December 16, 2022

Phase 3 Excavation – 12/16/22



Saturday December 10th

- > ICS travel day

Monday December 12th

- > SWPPP inspection
- > ESR driveway site configuration
- > Equipment decontamination

Tuesday December 13th

- > ESR driveway site configuration
- > LNAPL recovery
- > Port of Everett site meeting

Wednesday December 14th

- > Phase 3 excavation backfill – 70 loads
- > LNAPL recovery

Thursday December 15th

- > Phase 3 excavation backfill – 85 loads
- > LNAPL recovery

Friday December 16th

- > Phase 3 excavation backfill – 30 loads
- > LNAPL recovery

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	60%	0%	0%	0%	0%

Product Recovery Boom Install



Product Removed



Planned Activities for Next Week – Week of Saturday, December 17th

Saturday December 17th

- > Install geotextile filter fabric

Monday December 19th

- > Above water table backfill/compaction/testing

Tuesday December 20th

- > Above water table backfill/compaction/testing

Wednesday December 21st

- > Above water table backfill/compaction/testing

Thursday December 22nd

- > Above water table backfill/compaction/testing

Friday December 23rd

- > ICS travel day

December 21, 2022

Safety Moment

- > The team used traction devices on their work boots when foot travel across ice/snow was required.

Snow Event



Activities Conducted This Week – Friday December 21, 2022

Phase 3 Excavation Backfill – 12/19/22



Saturday December 17th

- > Install geotextile filter fabric
- > Select borrow backfill – 451 tons

Monday December 19th

- > Import backfill material – 852 tons
- > Select borrow backfill – 200 Tons
- > City of Everett dewatering system inspection

Tuesday December 20th

- > SWPPP inspection
- > Secure site for holiday break

Wednesday December 21st

- > Backfill/compaction weather delay. freezing temperatures preventing accurate compaction testing.

Thursday December 22nd

- > Holiday break

Friday December 23rd

- > Holiday break

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	85%	0%	0%	0%	0%

Product Recovery



Filter Fabric Install



Planned Activities for Next Week – Week of Monday, December 26th



HAPPY
HOLIDAYS

January 6, 2023

Safety Moment

- > Began planning and coordination for utility work including confined space entry and working within a trench box for Phase 4 utility work.

Trench Box for Phase 4 Utility Work Delivered



Activities Conducted This Week – Friday, January 6, 2023

Saturday December 31st

- > New Year’s holiday

Monday January 2nd

- > New Year’s holiday

Tuesday January 3rd

- > Phase 3 backfill and compaction
- > Compaction testing
- > Containerize oily rags/booms
- > Shoring engineer site visit

Wednesday January 4th

- > Import 910 tons of backfill material
- > Phase 3 backfill and compaction
- > Compaction testing

Thursday January 5th

- > Phase 3 backfill and compaction
- > SWPPP inspection
- > Compaction testing

Friday January 6th

- > Phase 3 backfill and compaction
- > Phase 4 asphalt cutting and loadout
- > Phase 4 utility reroute
- > Phase 4 perimeter trenching

Phase 3 Excavation Backfill



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	90%	0%	5%	0%	0%

Phase 4 Asphalt Removal



Compaction Testing



Planned Activities for Next Week – Week of Monday, January 9th

Monday January 9th

- > Phase 3 shoring removal

Tuesday January 10th

- > Phase 3 shoring removal

Wednesday January 11th

- > Phase 3 shoring removal
- > Phase 4 stormwater bypass

Thursday January 12th

- > Phase 3 shoring removal
- > Sanitary sewer disconnect and bypass

Friday January 13th

- > Phase 4 asphalt removal and trenching

January 13, 2023

Safety Moment

- > Used vacuum truck soft digging methods to expose water line that transects Phase 4 extents to prevent damage during excavation.

Exposure of ESR Water Line



Activities Conducted This Week – Friday January 13, 2023

Phase 3 Sheet Removal Complete



- Monday January 9th**
- > Phase 4 asphalt load out
 - > Phase 3 shoring removal
 - > Utility bypass work

- Tuesday January 10th**
- > Phase 3 shoring removal
 - > Utility bypass work

- Wednesday January 11th**
- > SWPPP inspection
 - > Torch cut permanent barrier wall sheets to final grade
 - > Phase 3 shoring removal
 - > Utility bypass work

- Thursday January 12th**
- > Torch cut permanent barrier wall sheets to final grade
 - > Phase 3 shoring removal
 - > Utility bypass work

- Friday January 13th**
- > Phase 3 shoring removal completion

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	90%	0%	5%	0%	0%

Barrier Wall Sheet Piles Cut to Grade



ESR Warehouse Utility Reroute



Planned Activities for Next Week – Week of Monday, January 16th

- Monday January 16th**
- > Phase 4 shoring installation
- Tuesday January 17th**
- > Phase 4 shoring installation
- Wednesday January 18th**
- > Phase 4 shoring installation

- Thursday January 19th**
- > Phase 4 shoring installation
- Friday January 20th**
- > Phase 4 shoring installation

January 20, 2023

Safety Moment

- > Developed multiple red exclusion zones to allow for simultaneous heavy equipment operations for shoring installation and asphalt preparation.

Phase 3 Asphalt Base Preparation



Activities Conducted This Week – Friday, January 20, 2023

Monday January 16th

- > Phase 4 shoring installation
- > SWPPP inspection
- > Phase 3 asphalt base/grading

Tuesday January 17th

- > Phase 4 shoring installation
- > Phase 3 asphalt base/grading
- > Phase 3 storm line work

Wednesday January 18th

- > Phase 4 shoring installation
- > Phase 3 storm line work
- > Topographic survey for Phase 2 and 3 paving
- > Catch basin concrete coring

Thursday January 19th

- > Phase 4 shoring installation
- > Phase 3 storm line work

Friday January 20th

- > Phase 4 shoring installation
- > Phase 3 storm line work
- > Phase 2 and 3 asphalt base prep

Phase 4 Shoring Installation



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	90%	51/51 Pairs	100%	90%	36/37 Pairs	5%	0%	0%

15-Inch Storm Line Installation



Import Asphalt Base



Planned Activities for Next Week – Week of Monday January 23rd

Monday January 23rd

- > Phase 4 shoring installation

Tuesday January 24th

- > Drive Phase 4 sheets to final depth
- > Compaction testing

Wednesday January 25th

- > Phase 4 shoring whaler install
- > Phase 3 paving

Thursday January 26th

- > Phase 4 shoring whaler install

Friday January 27th

- > Phase 4 shoring whaler install

January 27, 2023

Safety Moment

- > Emphasis on confined space, air monitoring, and egress for installation of the waler system within the Phase 4 excavation extends down to 4 feet bgs.

Waler Construction



Activities Conducted This Week – Friday, January 27, 2023

Monday January 23rd

- > Phase 4 shoring installation
- > Import of asphalt base
- > Remove subsurface obstructions blocking shoring installation
- > Shoring engineer site visit
- > Waterjet/clear ADC parcel storm drain

Tuesday January 24th

- > Drive Phase 4 shoring sheets to depth
- > Import and lay asphalt base material
- > Compaction testing

Wednesday January 25th

- > Phase 2 and 3 asphalt resurfacing
- > Demobilize power pack and vibratory hammer
- > Compaction testing

Thursday January 26th

- > Phase 4 excavation to 4 feet bgs for whaler installation

Friday January 27th

- > Waler installation
- > Site reconfiguration and release of Phases 2 & 3 to ESR

Phase 4 Upper Excavation for Waler Bracing System Installation



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	15%	0%	0%

Phase 2 & 3 Asphalt Resurfacing



Threading Final Shoring Sheet



Planned Activities for Next Week – Week of Monday, January 30th

Monday January 30th

- > Waler shoring support system installation

Tuesday January 31st

- > Waler shoring support system installation

Wednesday February 1st

- > Waler shoring support system installation
- > Dewatering well point installation

Thursday February 2nd

- > Phase 4 excavation

Friday February 3rd

- > Phase 4 excavation

Safety Moment

- > Crushed rock was placed within the excavation extents to cover water/ice to provide for a stable surface for the welders to construct waler system.

Waler Construction



Activities Conducted This Week – Friday, February 3, 2023

Monday January 30th

- > Waler system construction
- > Shoring engineer site visit and inspection

Tuesday January 31st

- > Install dewatering well

Wednesday February 1st

- > Phase 4 excavation and export 96 loads

Thursday February 2nd

- > Phase 4 excavation and export 40 loads
- > Dewatering
- > Import 283 tons of aggregate for backfill beneath water table
- > SWPPP inspection
- > ExxonMobil and ADC site visit

Friday February 3rd

- > Phase 4 excavation and export via vacuum truck to clean northeast corner
- > Import 283 tons of aggregate for backfill beneath water table
- > Export Phase 3 shoring sheets

Phase 4 Excavation



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	20%	0%

Phase 4 Aggregate Backfill



Soil Export



Planned Activities for Next Week – Week of Monday, February 6th

Monday February 6th

- > Phase 4 backfill beneath water table

Tuesday February 7th

- > Phase 4 backfill beneath water table

Wednesday February 8th

- > Install geotextile filter fabric

Thursday February 9th

- > Backfill and compaction

Friday February 10th

- > Backfill and compaction

February 10, 2023

Safety Moment

- > Emphasis with lifting and rigging with the start of new shoring tasks including the export of the water system and other scrap metal.

Shoring Material Demobilization



Activities Conducted This Week – Friday, February 10, 2023

Phase 4 Shoring Removal

Monday February 6th

- > Backfill Phase 4 via placement of 130 tons of crushed rock beneath water table
- > Import 180 tons of select fill to stockpile for backfill above water table
- > SWPPP inspection

Tuesday February 7th

- > Import 244 tons of select fill to stockpile for backfill above water table
- > Shoring system water disassembly

Wednesday February 8th

- > Import 65 tons of select fill to stockpile for backfill above water table
- > Shoring system water disassembly
- > Export concrete and wood debris
- > Discharge Baker Tanks

Thursday February 9th

- > Ecology site visit
- > Phase 4 backfill and compaction
- > Export water system and scrap steel
- > Mobilize power pack and vibratory hammer

Friday February 10th

- > Phase 4 shoring removal



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	90%	0%

Phase 4 Backfill



Stockpiled Select Fill Material



Planned Activities for Next Week – Week of Monday, February 13th

Monday February 13th

- > Phase 4 shoring removal

Tuesday February 14th

- > Phase 4 shoring removal

Wednesday February 15th

- > Phase 4 shoring removal

Thursday February 16th

- > Repair utilities

Friday February 17th

- > Repair utilities

February 17, 2023

Safety Moment

- > Detailed discussion regarding installation of utilities within a 1.5 to 1 ratio trench cut.

15-Inch Storm Sewer Installation



Activities Conducted This Week – Friday, February 17, 2023

Monday January 13th

- > Phase 4 shoring removal

Tuesday January 14th

- > SWPPP inspection
- > Shoring system waler disassembly
- > Evaluate demobilization of dewatering system
- > Phase 4 shoring removal

Wednesday February 15th

- > Phase 4 shoring removal complete
- > Torch cut barrier wall sheets to grade along Federal Avenue
- > Offload scrap steel

Thursday February 16th

- > Install 95-feet of 15-inch storm line
- > Torch cut barrier wall sheets to grade along Federal Avenue
- > Offload scrap steel

Friday February 17th

- > Utility connection work
- > Complete 15-inch storm install/connection
- > Dewatering system breakdown and demobilization

Phase 4 Shoring Removal



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	90%	20%

Phase 4 Shoring Removed



Utility Work



Planned Activities for Next Week – Week of Monday, February 20th

Monday February 20th

- > Perimeter asphalt saw cutting

Tuesday February 21st

- > Utility repair

Wednesday February 22nd

- > Utility repair

Thursday February 23rd

- > Backfill with subbase – asphalt preparation

Friday February 24th

- > Backfill with subbase – asphalt preparation

February 24, 2023

Safety Moment

- > Discuss trench safety during installation of ESR sanitary sewer pipe.

ESR Office Sanitary Sewer Line Install



Activities Conducted This Week – Friday, February 24, 2023

Monday January 20th

- > Utility work
- > Import and place asphalt base material

Tuesday January 21st

- > SWPPP inspection
- > Utility work
- > Import and place asphalt base material
- > Perimeter asphalt saw cutting

Wednesday February 22nd

- > Utility work
- > Import and place asphalt base material
- > Professional survey to mark ESR office for relocation
- > Asphalt load out

Thursday February 23rd

- > Utility work
- > Import and place asphalt base material
- > PUD, ESR, Port site walk for power/light pole installation
- > Site walk with ESR security camera company

Friday February 24th

- > Utility work
- > Import and place asphalt base material
- > Compaction testing

Final Grading with ESR Water and Sewer Connections Above Grade



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	90%	50%

Import Asphalt Base



Asphalt Load Out



Planned Activities for Next Week – Week of Monday February 27th

Monday February 27th

- > Security camera and automatic gate electrical conduit install
- > Final grading

Tuesday February 28th

- > Asphalt paving

Wednesday March 1st

- > Asphalt paving

Thursday March 2nd

- > Asphalt paving

Friday March 4th

- > Asphalt paving



Monday February 27th

- > Install electrical conduit for access gates and security cameras
- > Final asphalt base compaction testing

Tuesday February 28th

- > Asphalt resurfacing
- > Asphalt compaction testing

Wednesday March 1st

- > Demobilize rain for rent transfer pumps
- > ICS equipment organization and demobilization

Thursday March 2nd

- > ICS demobilization and site cleaning

Friday March 3rd

- > ICS demobilization and site cleaning

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	100%	70%

Rain for Rent Demobilization



ESR Office Move Prep



Planned Activities for Next Week – Week of Saturday, March 4th

Saturday March 4th

- ESR office move back

Monday March 6th

- > Fencing installation / demobilization

Tuesday March 7th

- > Fencing installation / demobilization

Wednesday March 8th

- > Fencing installation / demobilization

Thursday March 9th

- > Fencing installation / demobilization

Friday March 10th

- > Fencing installation / demobilization

March 10, 2023

Activities Conducted This Week – Friday, March 10, 2023

MARSEC Fencing Installation



Saturday March 4th

- > ESR office move back

Monday March 6th

- > ICS demobilization
- > Rain for Rent demobilization activities
- > MARSEC fence installation

Tuesday March 7th

- > ICS demobilization
- > Rain for Rent demobilization activities
- > MARSEC fence installation

Wednesday March 8th

- > ICS demobilization
- > Final Rain for Rent demobilization
- > MARSEC fence installation

Thursday March 9th

- > MARSEC fence installation
- > Load out remaining sheet piles

Friday March 10th

- > MARSEC fence installation
- > Disassemble crane and Ford demobilization

Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	100%	95%

ESR Office Move Back



Rain for Rent Demobilization



Planned Activities for Next Week – Week of Saturday, March 11th

Saturday March 11th

- > MARSEC fencing installation

Monday March 13th

- > MARSEC fencing installation

Tuesday March 14th

- > MARSEC fencing installation

Wednesday March 15th

- > Complete MARSEC fencing installation
- > All employees/subcontractors depart site

Port of Everett Interim Action Complete

- Saturday March 11th

> MARSEC fencing installation

> Install ESR office skirting
- Monday March 13th

> MARSEC fencing installation
- Tuesday March 14th

> ESR automatic gate installation

> Final site walk with Alex Flink of ICS and Jon Hie of ESR
- Wednesday March 15th

> ExxonMobil ADC property cleaning

> Demobilize Stantec portable office generator

> Final demobilization for Port of Everett Interim Action



Mobilization	PHASE 1			PHASE 2			PHASE 3			PHASE 4			Demobilization
	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	Shoring	Excavation	Backfill & Resurfacing	
100%	37/37 Pairs	100%	100%	31/31 Pairs	100%	100%	51/51 Pairs	100%	100%	37/37 Pairs	100%	100%	100%

APPENDIX O

Field Protocols



Excavation Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Stantec or a licensed subcontractor obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Stantec or the general contractor marks the area to be excavated and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. The excavation location may also be checked for buried utilities by a private geophysical surveyor. Prior to excavation, the area is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist or civil engineer and in accordance with an updated site-specific safety plan prepared for the project, which is available at the site during field activities.

Excavation and Soil Sampling Procedures

The excavation is performed by a licensed general contractor. Air monitoring is conducted as required by the regulatory agency or client, and the readings are recorded on a log. Excavated soil is temporarily stockpiled, covered with an impervious material (e.g., plastic sheeting), secured and labeled, or immediately containerized into bins.

Upon reaching the planned limit of the excavation, soil samples are collected from the bottom and sidewalls of the excavation, as directed by the regulatory agency or as specified in the work plan. Soil samples are collected using the bucket of the excavating equipment (e.g., backhoe or excavator), and then the sample container (sleeve or glass jar) is pushed by hand into the soil near the teeth of the equipment bucket to ensure that soil from the limit of the excavation, not slough, is collected. Alternatively, a metal sleeve may be driven by slide hammer into the soil. Samples from the stockpile(s) are collected in the same manner.

Soil samples are preserved in the metal or plastic sleeve, in glass jars or other manner required by the local regulatory agency (e.g., Environmental Protection Agency Method 5035). Each sleeve is promptly sealed with Teflon™ tape, capped, labeled, and placed in a cooler chilled to 4° Celsius. The samples are transferred under chain-of-custody protocol to a client-approved, state-certified laboratory for analysis.

Field Screening Procedures

Stantec places the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is placed away from direct sunlight for approximately 20 minutes, after which the tip of a photo-ionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The PID measurement is recorded on the boring log. At a minimum, the PID or other device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Stantec trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Field Screening Procedures

Field screening is conducted during the excavation activities, and the excavated material is segregated into stockpiles based on concentrations above and below regulatory action levels. The stockpiled soil with concentrations above regulatory action levels is placed on an imperious surface (e.g., paving or plastic).

A photo-ionization detector (PID) or similar device is used to measure organic vapor concentration and segregate the excavated soil. The tip of the measuring device is placed approximately 3 inches above the excavated soil. At a minimum, the PID or other device is calibrated daily in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log.

Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis.

Stantec trained personnel describe the soil according to the Unified Soil Classification System and record the description, sampling method and sampling depth on the field notes.

Backfilling of Excavation

The excavation is backfilled using excavated stockpile material with concentrations below regulatory action levels and/or clean import fill. Import fill typically is virgin material obtained from a quarry; if the material is obtained from another source, it is selectively sampled to verify it does not contain constituents of concern.

Decontamination Procedures

Stantec decontaminates soil sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. The bucket of the excavating equipment is not typically decontaminated between sampling events.

Waste Treatment and Soil Disposal

The stockpiled soil containing concentrations above regulatory action levels is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal, or remediated on site and placed back into the excavation. Decontamination fluids are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

Low-Flow Sampling Field Protocol

The static water level and non-aqueous phase liquid (NAPL) level, if present, in each groundwater monitoring well that contained water and/or NAPL are measured with an interface probe accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from wellhead elevations.

Before water samples are collected from the groundwater monitoring wells, the wells are purged using a peristaltic or a down-well pump at rates not exceeding 1 liter per minute (L/min) until stabilization of the dissolved oxygen (DO), pH, conductivity, and temperature are obtained. Readings of these parameters are taken and recorded every three minutes while the water is purged, and DTW readings are collected every three minutes to ensure drawdown in the well is less than 0.33 feet. If drawdown occurs too quickly, the rate of withdrawal will be reduced.

Purging will continue until three consecutive readings indicate the following:

- > Temperature has a change of less than ± 1 degree Celsius
- > Conductivity has a change of less than $\pm 3\%$
- > pH has a change of less than ± 0.10
- > DO has a change of less than $\pm 10\%$ in concentrations (or less than ± 0.3 milligram per liter (mg/L) DO, whichever occurs first)

These are indicators of stabilized conditions.

Once groundwater conditions have stabilized, groundwater samples are carefully collected in 40-milliliter (ml) glass vials, which are filled to produce a positive meniscus. Each vial is preserved with hydrochloric acid, sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. Additional samples may be collected in other sampling containers. The samples are promptly transported in iced storage in a thermally insulated ice chest, accompanied by chain-of-custody documentation, to a state-certified laboratory.

APPENDIX P

Depth Confirmation Grid and Measurements



**PORT OF EVERETT REMEDIAL EXCAVATION
VERIFICATION DEPTH MEASUREMENTS**

	A	B	C	D	E	F	Notes
1	M (7.5')	M (7.5')	M (7.5')				A-C by JCT 10/11/22
2	M (7.5')	M (7.5')	M (7.5')	M (7.5')			A-C by JCT 10/11/22 D by JSL 10/14/22
3	B (8')	B (8')	M (8')	Pit / B (10')	M (7.5')		D by ICS on 10/07/22 C,E by JCT 10/11/22 A-C by JSL 10/12/22
4	B (8')	B (8')	M/B (7.5')	M (7.5')	M (7.5')	M (7.5')	C-F by JCT 10/11/22 A-B by JSL 10/12/22
5	B (8')	B (8')	M/B (7.5')	M (7.5')	M (7.5')		C-E by JCT 10/11/22 A-B by JSL 10/12/22
6	B (8')	B (8')	B (10')	M (10')	M (10')		A-C by JSL 10/12/22 D-E by JSL 10/14/22
7	B (7.5')	B (10')	B (10')	B (10')	M (10')		A-B by JSL 10/12/22 C-D by JSL 10/11/22 E by JSL 10/14/22
8	B (10')	B (10')	B (10')	B (10')	B (10')		A-E by JSL 10/12/22
9	B (10')	B (10')	B (10')	B (10')	B (10')		A-E by JSL 10/13/22
10	B (10')	B (10')	B (10')	B (10')	B (10')		A-E by LEC 12/06/22
11	B (15')	B (15')	B (15')	B (12.5')	B (7.5')		A, B, C, E by LEC 12/06/22 D by LEC 12/07/22
12	B (15')	B (15')	B (15')	B (15')	B (15')		A, B by LEC 12/06/22 C-E by LEC 12/07/22
13	B (15')	B (15')	B (15')	B (12.5')	B (12.5')		A-E by CWM 12/07/22
14	B (12.5')	B (12.5')	B (12.5')	B (12.5')	B (12.5')		A, B by CWM 12/08/22 C-E by CWM 12/09/22
15	B (12.5')	B (12.5')	B (12.5')	B (12.5')	B (12.5')		A, B by CWM 12/08/22 C-E by CWM 12/09/22
16	B (12.5')	B (12.5')	B (12.5')	B (12.5')	B (12.5')		A, B by CWM 12/08/22 C-E by CWM 12/09/22
17	B (17.5')	B (17.5')	B (17.5')	B (17.5')	M (17.5')		A, B by CWM 02/02/23 C by CCJ 02/02/23 D by CCJ 02/01/23 E by CCJ 01/31/23
18	B (17.5')	B (17.5')	B (17.5')	B (17.5')	B (20')	M (17.5')	A, B by CWM 02/02/23 C by CCJ 02/02/23 D, E by CCJ 02/01/23 F by CCJ 01/31/23

EXPLANATION:

' = feet below ground surface

M = Manual

B = Boom Indicator

APPENDIX Q

Compaction Testing







Earth Solutions NW LLC

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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 01032023
Date	Tue 1/3/2023	Weather	Partly cloudy, 45°F		
Arrival/Departure Time(s)	1:35 – 2:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor has begun backfilling the remainder of the remedial pond onsite. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

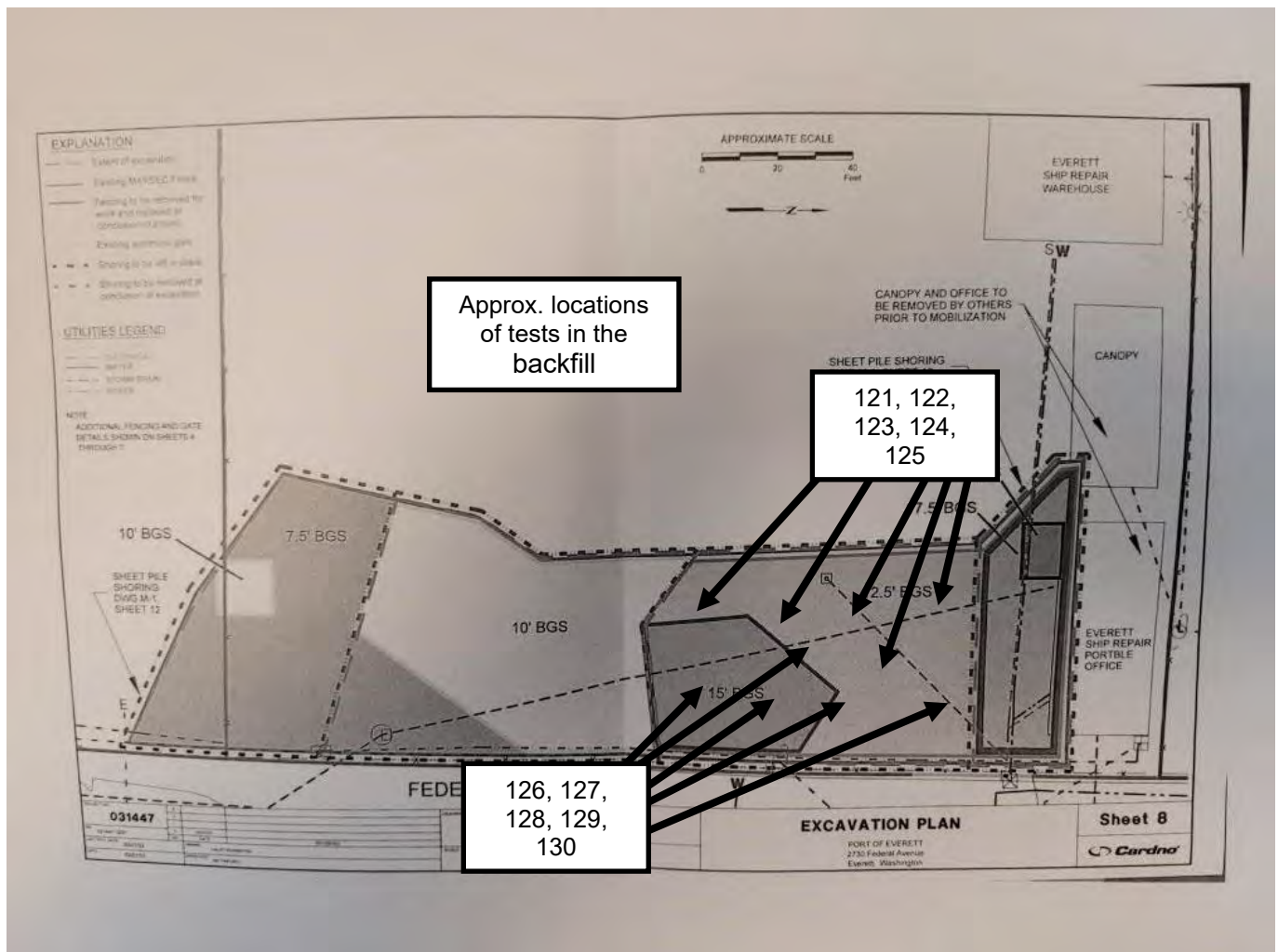
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
121	Remedial pond BF	-5'	1	141.2	6.8	140.5	100
122	Remedial pond BF	-5'	1	141.2	5.8	140.3	99
123	Remedial pond BF	-5'	1	141.2	6.5	139.6	99
124	Remedial pond BF	-5'	1	141.2	5.7	141.1	100
125	Remedial pond BF	-5'	1	141.2	6.6	140.0	99
126	Remedial pond BF	-5'	1	141.2	5.6	139.5	99
127	Remedial pond BF	-5'	1	141.2	5.5	136.6	97
128	Remedial pond BF	-5'	1	141.2	5.9	139.9	99
129	Remedial pond BF	-5'	1	141.2	6.0	139.1	99
130	Remedial pond BF	-5'	1	141.2	6.4	138.6	98







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 01042023
Date	Wed 1/4/2023	Weather	Cloudy, 50°F		
Arrival/Departure Time(s)	12:40 – 1:40	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor continuing to backfill the remainder of the remedial pond onsite. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

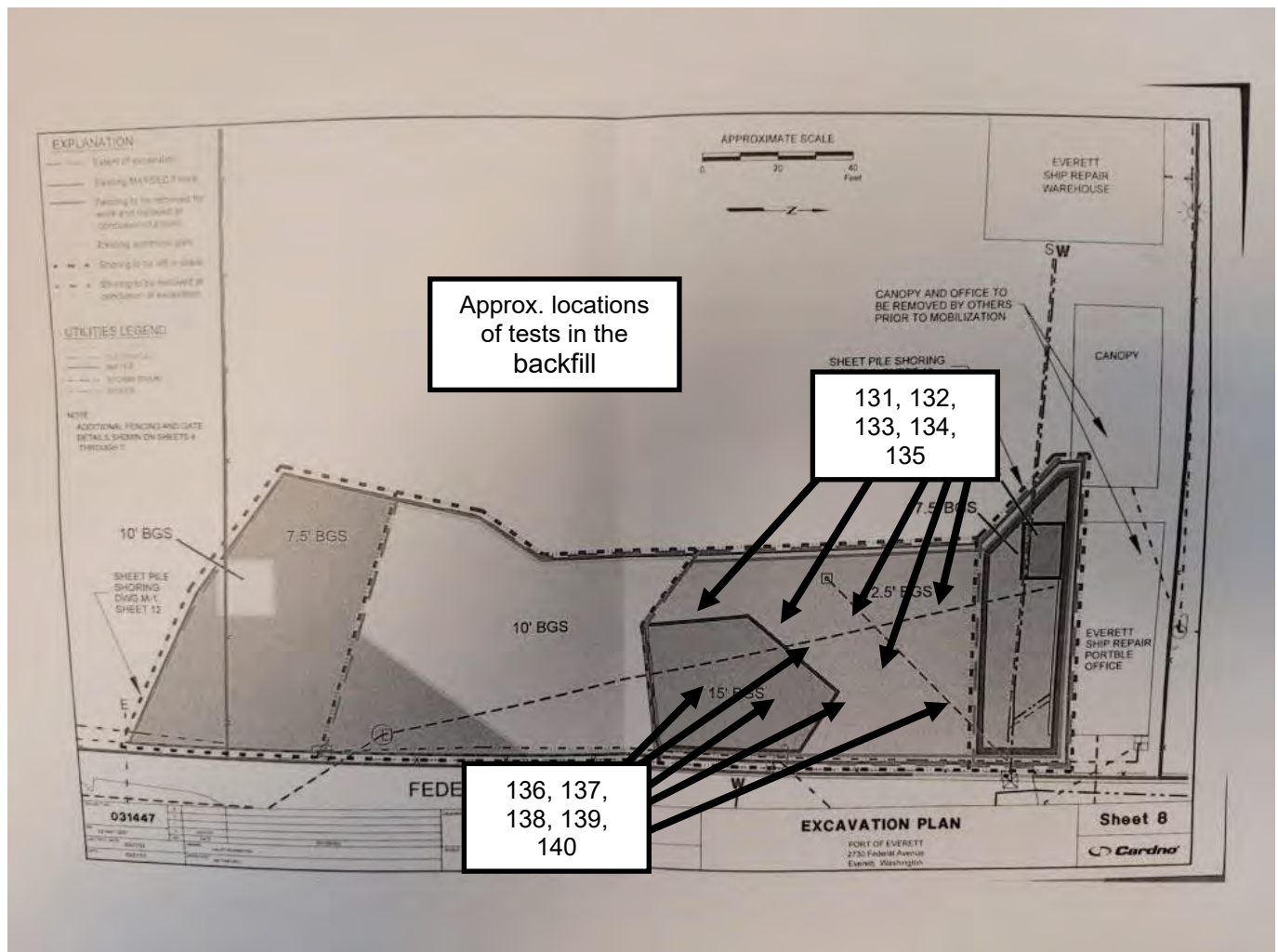
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
131	Remedial pond BF	-3'	1	141.2	5.9	140.8	100
132	Remedial pond BF	-3'	1	141.2	6.2	137.8	98
133	Remedial pond BF	-3'	1	141.2	6.7	136.8	97
134	Remedial pond BF	-3'	1	141.2	7.0	133.7	95
135	Remedial pond BF	-3'	1	141.2	6.7	136.7	97
136	Remedial pond BF	-3'	1	141.2	6.5	138.1	98
137	Remedial pond BF	-3'	1	141.2	6.4	134.9	96
138	Remedial pond BF	-3'	1	141.2	6.7	135.0	96
139	Remedial pond BF	-3'	1	141.2	6.4	140.3	99
140	Remedial pond BF	-3'	1	141.2	6.6	139.4	99







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 01052023
Date	Thu 1/5/2023	Weather	Cloudy/rain, 50°F		
Arrival/Departure Time(s)	9:50 – 10:50	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor continuing to backfill the remainder of the remedial pond onsite. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

ESNW rep. spoke with the contractor while onsite and determined that they will be placing a final lift in the area in the next few days but will not fully prepare the final subgrade until a later point. ESNW rep. will be available to observe and test any further backfill when it has been placed and compacted.

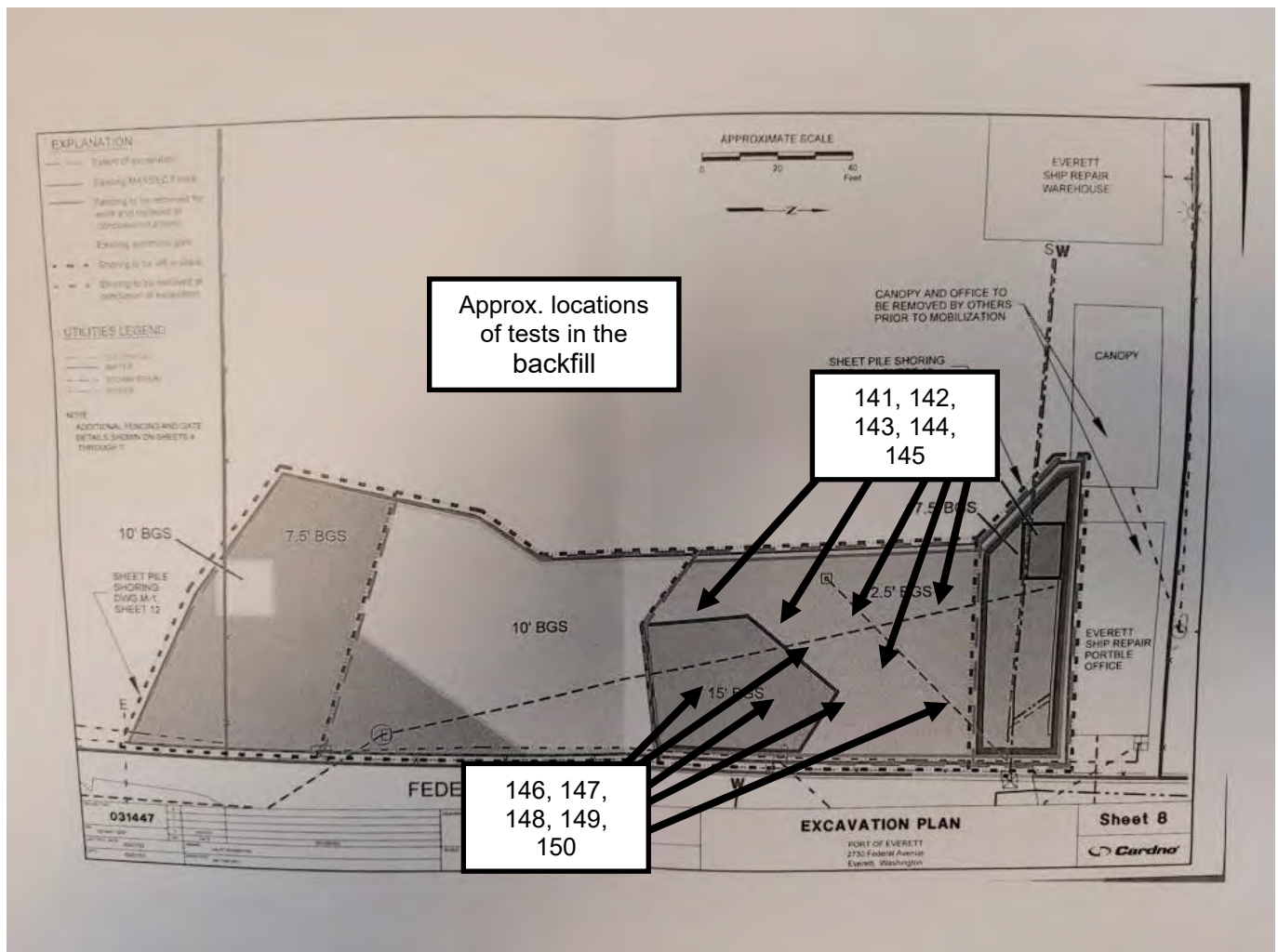
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Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
141	Remedial pond BF	-1'	1	141.2	5.8	136.2	96
142	Remedial pond BF	-1'	1	141.2	5.6	135.8	96
143	Remedial pond BF	-1'	1	141.2	6.3	136.5	97
144	Remedial pond BF	-1'	1	141.2	5.9	135.2	96
145	Remedial pond BF	-1'	1	141.2	6.4	133.5	95
146	Remedial pond BF	-1'	1	141.2	5.8	134.1	95
147	Remedial pond BF	-1'	1	141.2	5.4	134.3	95
148	Remedial pond BF	-1'	1	141.2	6.1	134.1	95
149	Remedial pond BF	-1'	1	141.2	5.6	133.8	95
150	Remedial pond BF	-1'	1	141.2	6.3	134.8	95







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 01242023
Date	Tue 1/24/2023			Weather	Cloudy, 45°F
Arrival/Departure Time(s)	12:50 – 2:20			Travel Time (hr)	1.25
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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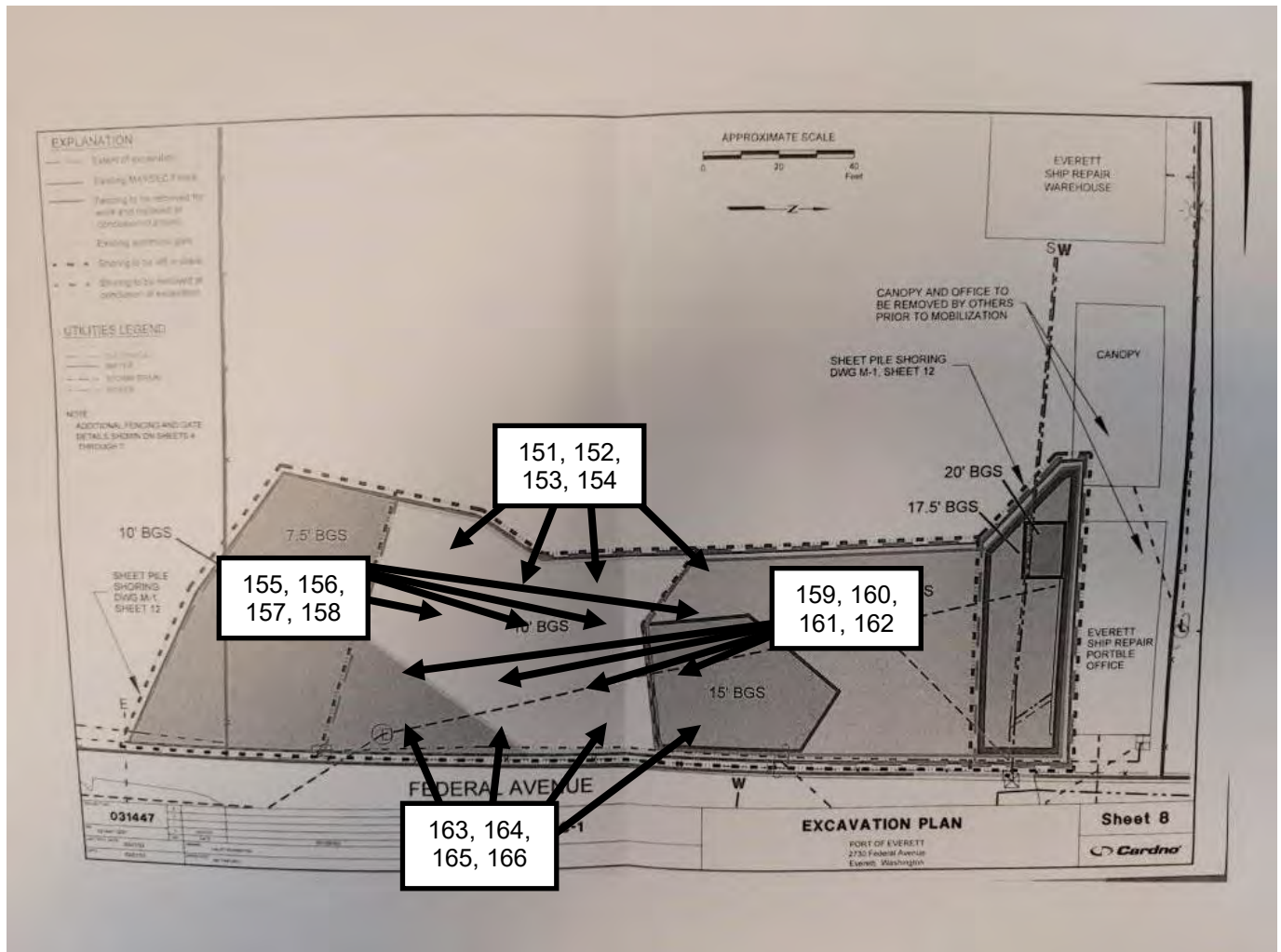
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ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
151	Remedial pond BF	SG	1	141.2	8.6	137.4	97
152	Remedial pond BF	SG	1	141.2	4.5	140.4	99
153	Remedial pond BF	SG	1	141.2	5.9	136.2	96
154	Remedial pond BF	SG	1	141.2	6.1	138.9	98
155	Remedial pond BF	SG	1	141.2	7.1	138.2	98
156	Remedial pond BF	SG	1	141.2	6.9	139.9	99
157	Remedial pond BF	SG	1	141.2	6.2	136.8	97
158	Remedial pond BF	SG	1	141.2	5.9	137.1	97
159	Remedial pond BF	SG	1	141.2	6.4	135.6	96
160	Remedial pond BF	SG	1	141.2	7.2	138.0	98
161	Remedial pond BF	SG	1	141.2	7.6	134.3	95
162	Remedial pond BF	SG	1	141.2	7.8	134.1	95
163	Remedial pond BF	SG	1	141.2	6.9	136.2	96
164	Remedial pond BF	SG	1	141.2	7.6	135.6	96
165	Remedial pond BF	SG	1	141.2	6.2	133.8	95
166	Remedial pond BF	SG	1	141.2	6.3	136.4	97







Earth Solutions NW LLC

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FIELD REPORT

Project No.	8921.00	Page	1 of 3	Report ID	8921.00 E 01252023
Date	Wed 1/25/2023	Weather	Cloudy/rain, 45°F		
Arrival/Departure Time(s)	8:50 – 1:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

As requested by the contractor, ESNW rep. was onsite to observe and test asphalt installation over the remedial pond backfill onsite.

Asphalt testing:

Upon arrival ESNW rep. observed the contractor installing asphalt over the backfill onsite. ESNW rep. observed that the contractor placed the asphalt in 2 lifts of HMA, approx. ~3" and ~2" respectively, in the area onsite. ESNW rep. observed that contractor place the asphalt and then compact the material with a double barrel roller. ESNW rep. took compaction tests on the material while onsite.

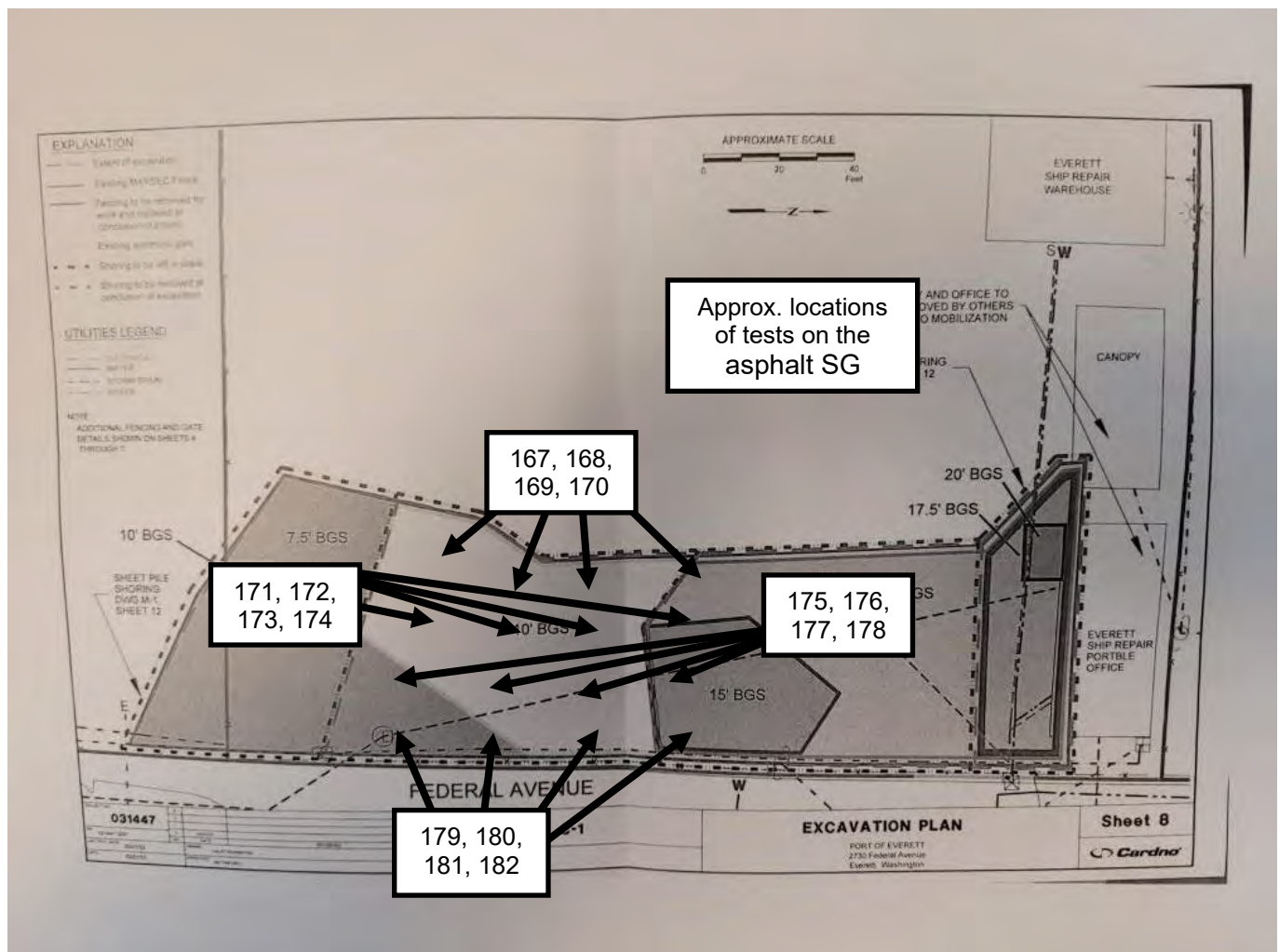
Compaction results:

ESNW rep. took compaction tests at various elevations of the asphalt after it was placed and compacted. Density test results indicate adequate compaction of at least 92% at the tested locations (see below). The locations of these tests are approximately shown on the attached plans.

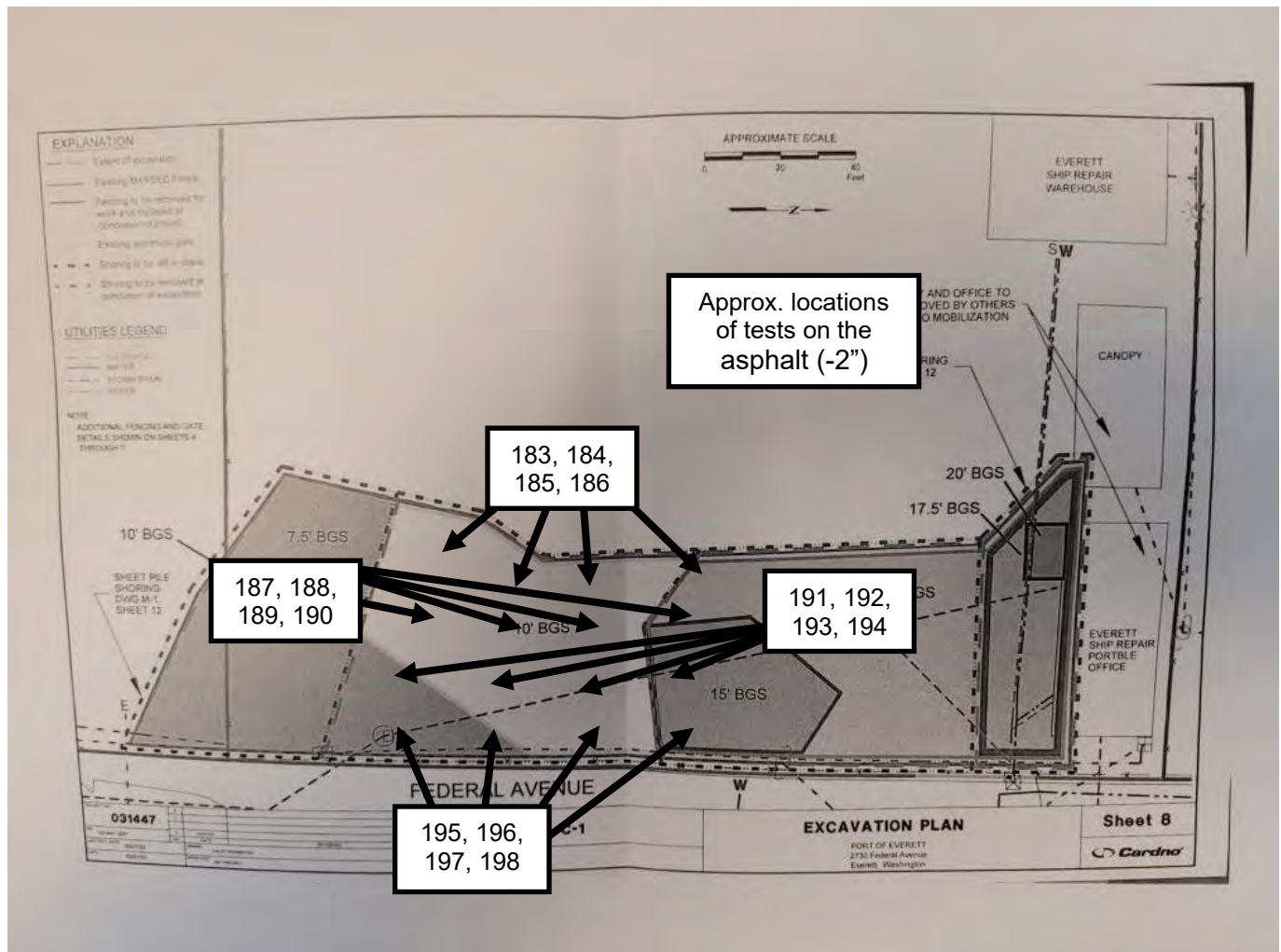
ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Rice Value (pcf)	Test Density (pcf)	% of Rice Value
167	Asphalt over BF	-2"	154.1	149.9	97
168	Asphalt over BF	-2"	154.1	146.6	95
169	Asphalt over BF	-2"	154.1	144.5	94
170	Asphalt over BF	-2"	154.1	147.8	96
171	Asphalt over BF	-2"	154.1	143.2	93
172	Asphalt over BF	-2"	154.1	149.1	97
173	Asphalt over BF	-2"	154.1	147.3	96
174	Asphalt over BF	-2"	154.1	145.5	94
175	Asphalt over BF	-2"	154.1	142.5	92
176	Asphalt over BF	-2"	154.1	145.0	94
177	Asphalt over BF	-2"	154.1	145.7	95
178	Asphalt over BF	-2"	154.1	142.2	92
179	Asphalt over BF	-2"	154.1	144.1	94
180	Asphalt over BF	-2"	154.1	141.9	92
181	Asphalt over BF	-2"	154.1	142.6	93
182	Asphalt over BF	-2"	154.1	146.7	95



Test Number	Test Location	Elevation	Rice Value (pcf)	Test Density (pcf)	% of Rice Value
183	Asphalt over BF	SG	154.1	141.7	92
184	Asphalt over BF	SG	154.1	146.8	95
185	Asphalt over BF	SG	154.1	143.7	93
186	Asphalt over BF	SG	154.1	147.7	96
187	Asphalt over BF	SG	154.1	143.8	93
188	Asphalt over BF	SG	154.1	147.1	95
189	Asphalt over BF	SG	154.1	149.7	97
190	Asphalt over BF	SG	154.1	148.8	97
191	Asphalt over BF	SG	154.1	141.2	92
192	Asphalt over BF	SG	154.1	146.0	95
193	Asphalt over BF	SG	154.1	144.3	94
194	Asphalt over BF	SG	154.1	142.7	93
195	Asphalt over BF	SG	154.1	141.7	92
196	Asphalt over BF	SG	154.1	144.6	94
197	Asphalt over BF	SG	154.1	146.8	95
198	Asphalt over BF	SG	154.1	145.4	94







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 02102023
Date	Fri 2/10/2023	Weather	Partly cloudy, 45°F		
Arrival/Departure Time(s)	8:05 – 9:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor has finished placing backfill the remainder of the remedial pond onsite. ESNW rep. observed the contractor placed imported soil as backfill in the area and used a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

While onsite, ESNW rep. also had the contractor dig test pits in the backfilled area so compaction tests could be obtained for the lower lift. ESNW rep. observed the contractor dig the test pits approx. 2' deep and took compaction tests at the bottom of each pit. ESNW rep. then observed the contractor backfill the pits again and compact the material as it was placed.

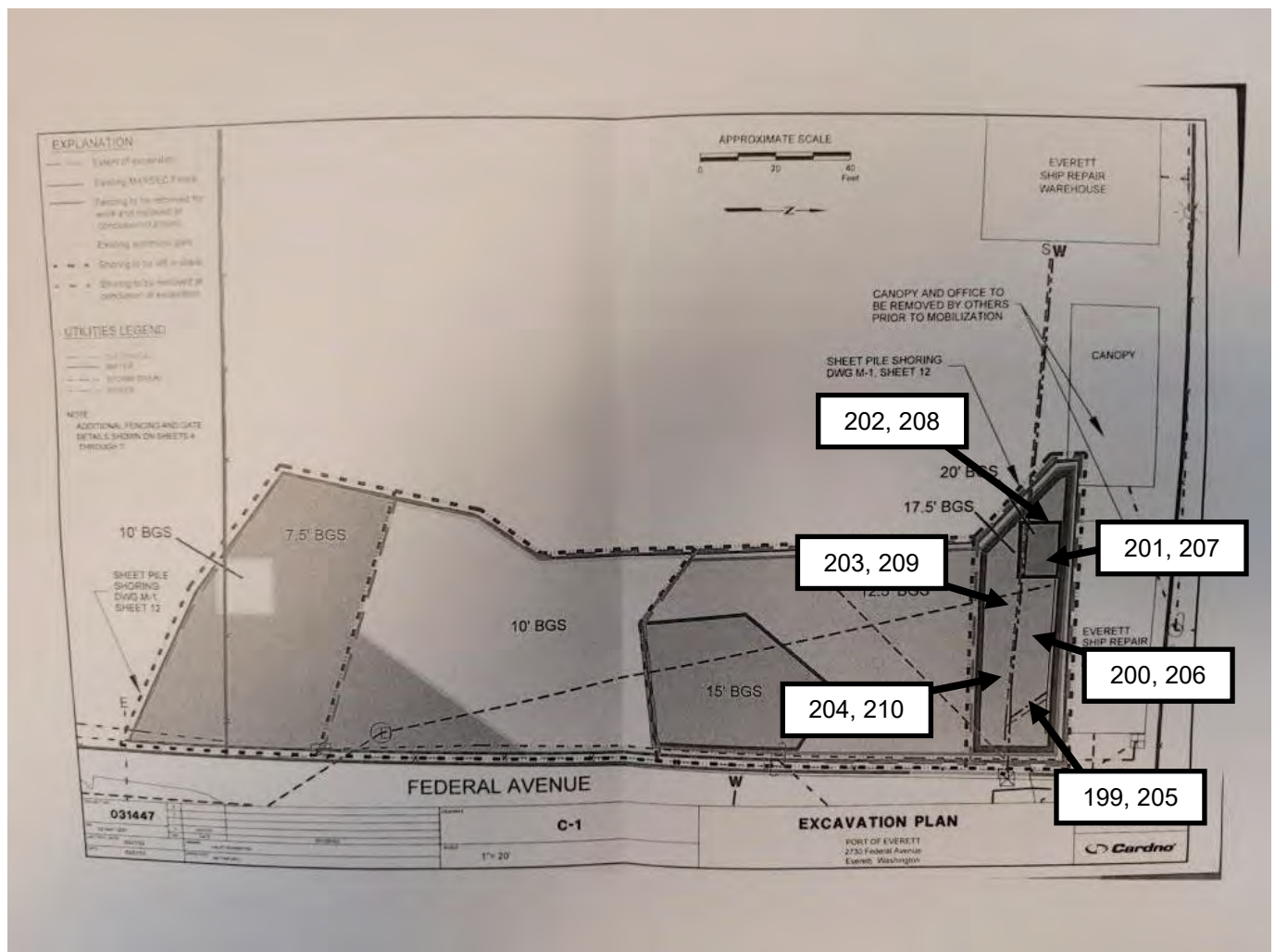
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
199	Remedial pond BF	-2'	1	141.2	8.9	140.6	100
200	Remedial pond BF	-2'	1	141.2	8.7	139.6	99
201	Remedial pond BF	-2'	1	141.2	9.6	141.0	100
202	Remedial pond BF	-2'	1	141.2	9.3	138.5	98
203	Remedial pond BF	-2'	1	141.2	10.2	140.8	100
204	Remedial pond BF	-2'	1	141.2	8.9	140.4	99
205	Remedial pond BF (test pit)	-4'	1	141.2	9.8	140.8	100
206	Remedial pond BF (test pit)	-4'	1	141.2	10.3	139.2	99
207	Remedial pond BF (test pit)	-4'	1	141.2	10.0	141.2	100
208	Remedial pond BF (test pit)	-4'	1	141.2	10.1	141.1	100
209	Remedial pond BF (test pit)	-4'	1	141.2	8.0	138.7	98
210	Remedial pond BF (test pit)	-4'	1	141.2	10.0	137.8	98







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 02242023
Date	Fri 2/24/2023	Weather	Sunny, 35°F		
Arrival/Departure Time(s)	2:35 – 3:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor has finished placing backfill the remainder of the remedial pond onsite. ESNW rep. observed the contractor placed imported soil as backfill in the area and used a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

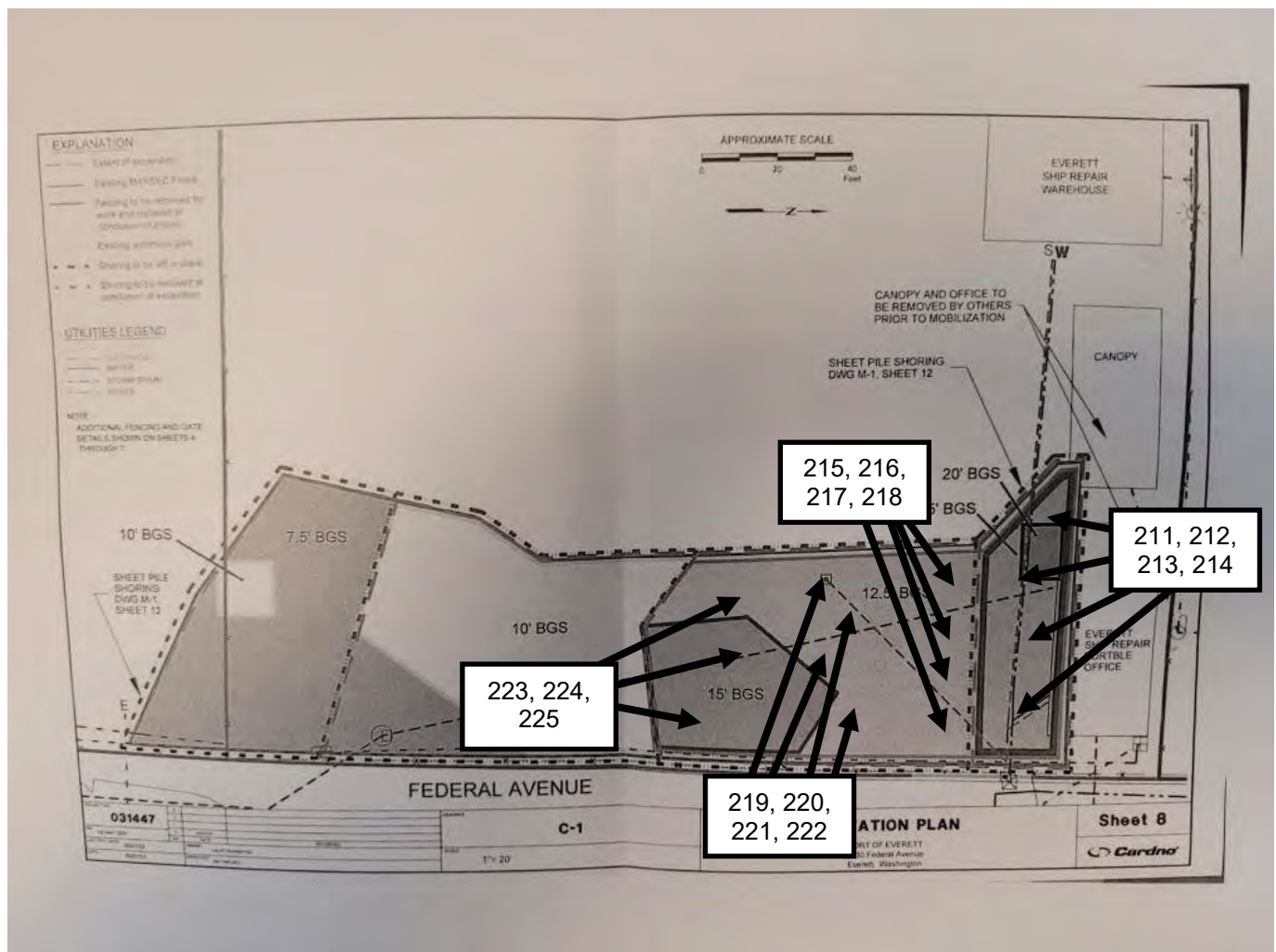
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
211	Remedial pond BF	SG	2	144.0	5.7	136.2	95
212	Remedial pond BF	SG	2	144.0	6.4	136.1	95
213	Remedial pond BF	SG	2	144.0	5.8	136.8	95
214	Remedial pond BF	SG	2	144.0	6.4	139.7	97
215	Remedial pond BF	SG	2	144.0	5.9	138.3	96
216	Remedial pond BF	SG	2	144.0	5.9	136.2	95
217	Remedial pond BF	SG	2	144.0	6.3	136.8	95
218	Remedial pond BF	SG	2	144.0	9.9	143.8	100
219	Remedial pond BF	SG	2	144.0	5.6	139.8	97
220	Remedial pond BF	SG	2	144.0	6.8	138.5	96
221	Remedial pond BF	SG	2	144.0	4.9	137.4	95
222	Remedial pond BF	SG	2	144.0	6.7	138.0	96
223	Remedial pond BF	SG	2	144.0	7.3	140.3	97
224	Remedial pond BF	SG	2	144.0	7.9	138.1	96
225	Remedial pond BF	SG	2	144.0	8.2	139.2	97







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 2023 0228
Date	Tue 2/28/2023	Weather	Cloudy/rain, 40°F		
Arrival/Departure Time(s)	2:50 – 4:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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As requested by the contractor, ESNW rep. was onsite to observe and test asphalt installation over the remedial pond backfill onsite.

Asphalt testing:

Upon arrival ESNW rep. observed the contractor installing asphalt over the backfill onsite. ESNW rep. observed that the contractor placed the asphalt in 2 lifts of HMA, approx. ~3" and ~2" respectively, in the area onsite. ESNW rep. observed that contractor place the asphalt and then compact the material with a double barrel roller. ESNW rep. determined that the contractor continued to compact them entire area with the roller while the asphalt was poured so adequate compaction could be obtained. ESNW rep. took compaction tests on the material while onsite.

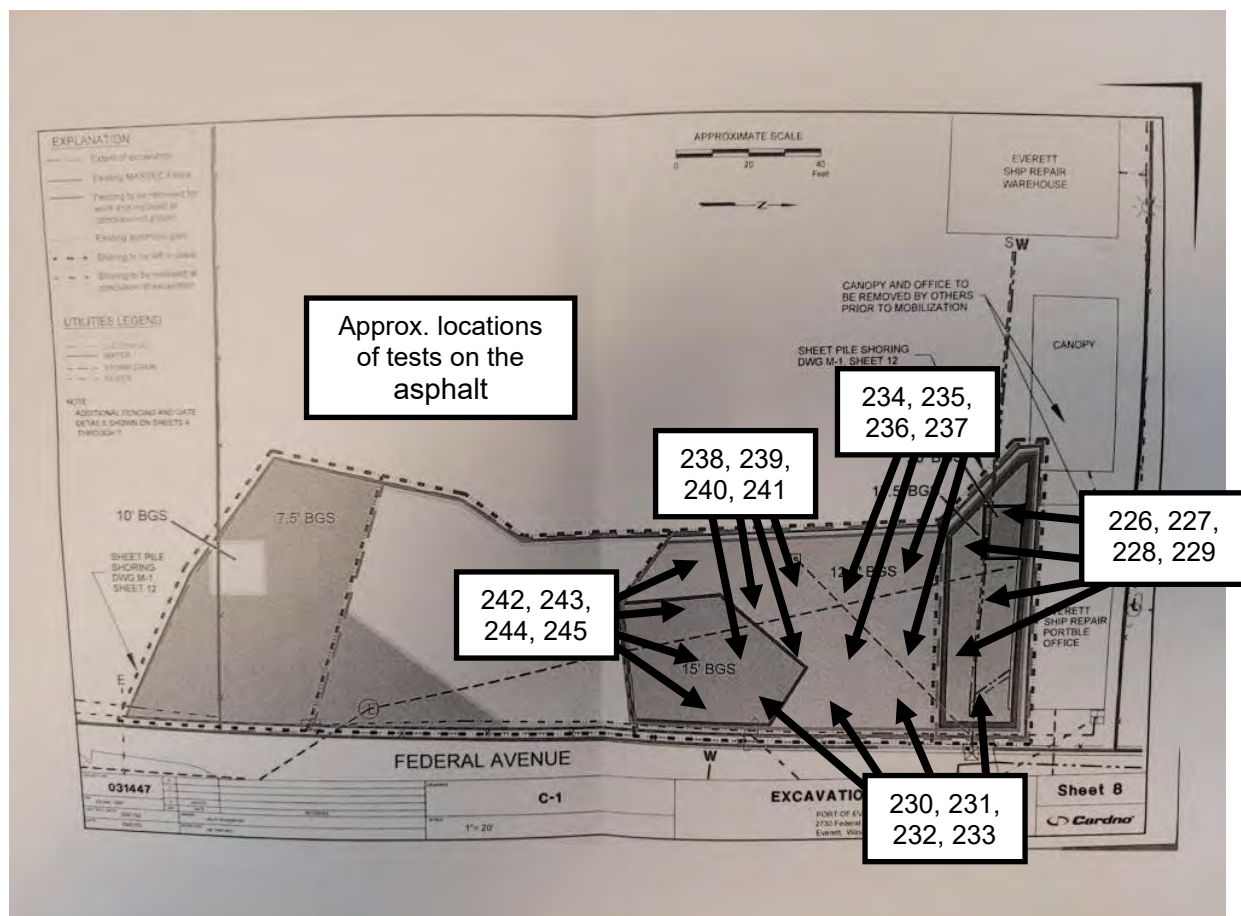
Compaction results:

ESNW rep. took compaction tests at various elevations of the asphalt after it was placed and compacted. Density test results indicate adequate compaction of at least 92% at the tested locations (see below). The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Rice Value (pcf)	Test Density (pcf)	% of Rice Value
226	Asphalt over BF	SG	155.6	146.6	94
227	Asphalt over BF	SG	155.6	147.8	95
228	Asphalt over BF	SG	155.6	143.9	92
229	Asphalt over BF	SG	155.6	142.4	92
230	Asphalt over BF	SG	155.6	143.1	92
231	Asphalt over BF	SG	155.6	145.5	94
232	Asphalt over BF	SG	155.6	143.8	92
233	Asphalt over BF	SG	155.6	142.9	92
234	Asphalt over BF	SG	155.6	145.1	93
235	Asphalt over BF	SG	155.6	146.9	94
236	Asphalt over BF	SG	155.6	148.2	95
237	Asphalt over BF	SG	155.6	142.8	92
238	Asphalt over BF	SG	155.6	142.9	92
239	Asphalt over BF	SG	155.6	143.7	92
240	Asphalt over BF	SG	155.6	145.1	93
241	Asphalt over BF	SG	155.6	148.4	95
242	Asphalt over BF	SG	155.6	145.9	94
243	Asphalt over BF	SG	155.6	144.5	93
244	Asphalt over BF	SG	155.6	150.3	97
245	Asphalt over BF	SG	155.6	149.0	96






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FIELD REPORT

Project No.	8921.00	Page	1 of 3	Report ID	8921.00 E 10192022
Date	Wed 10/19/2022	Weather	Cloudy, 55°F		
Arrival/Departure Time(s)	2:25 – 3:40	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor has begun backfilling the remedial pond onsite. ESNW rep. observed the contractor installed the water line pipes and embedded them in sand. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

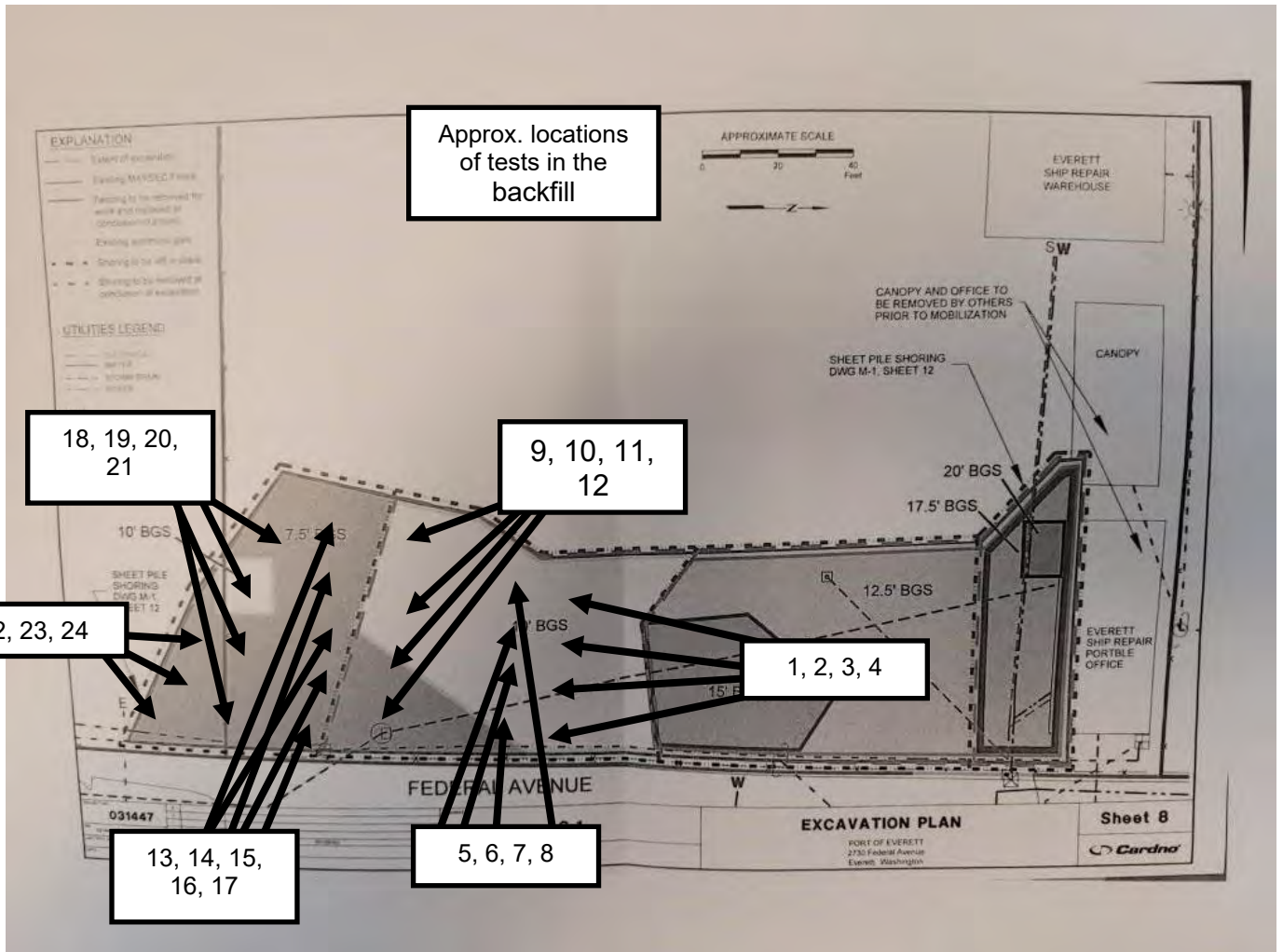
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
1	Remedial pond backfill	-8'	1	141.2	11.5	138.7	98
2	Remedial pond backfill	-8'	1	141.2	13.4	140.6	100
3	Remedial pond backfill	-8'	1	141.2	12.2	140.1	99
4	Remedial pond backfill	-8'	1	141.2	11.4	136.7	97
5	Remedial pond backfill	-8'	1	141.2	10.8	136.2	96
6	Remedial pond backfill	-8'	1	141.2	14.0	139.4	99
7	Remedial pond backfill	-8'	1	141.2	10.3	136.0	96
8	Remedial pond backfill	-8'	1	141.2	11.4	134.1	95
9	Remedial pond backfill	-8'	1	141.2	11.2	133.9	95
10	Remedial pond backfill	-8'	1	141.2	10.8	135.5	96
11	Remedial pond backfill	-8'	1	141.2	14.2	133.5	95
12	Remedial pond backfill	-8'	1	141.2	10.6	138.6	98
13	Remedial pond backfill	-8'	1	141.2	8.9	133.7	95
14	Remedial pond backfill	-8'	1	141.2	10.1	136.8	97
15	Remedial pond backfill	-8'	1	141.2	11.2	141.0	100
16	Remedial pond backfill	-8'	1	141.2	9.8	139.4	99
17	Remedial pond backfill	-8'	1	141.2	10.6	140.2	99
18	Remedial pond backfill	-8'	1	141.2	9.6	140.1	99
19	Remedial pond backfill	-8'	1	141.2	9.1	134.9	96
20	Remedial pond backfill	-8'	1	141.2	9.1	135.1	96
21	Remedial pond backfill	-8'	1	141.2	9.2	140.0	99
22	Remedial pond backfill	-8'	1	141.2	9.9	136.5	97
23	Remedial pond backfill	-8'	1	141.2	12.3	138.3	98
24	Remedial pond backfill	-8'	1	141.2	14.9	139.9	99






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FIELD REPORT

Project No.	8921.00	Page	1 of 3	Report ID	8921.00 E 10202022
Date	Thu 10/20/2022	Weather	Cloudy, 55°F		
Arrival/Departure Time(s)	8:05 – 2:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

Upon arrival, ESNW rep. observed the contractor has begun backfilling the remedial pond onsite. ESNW rep. observed the contractor installed the water line pipes and embedded them in sand. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

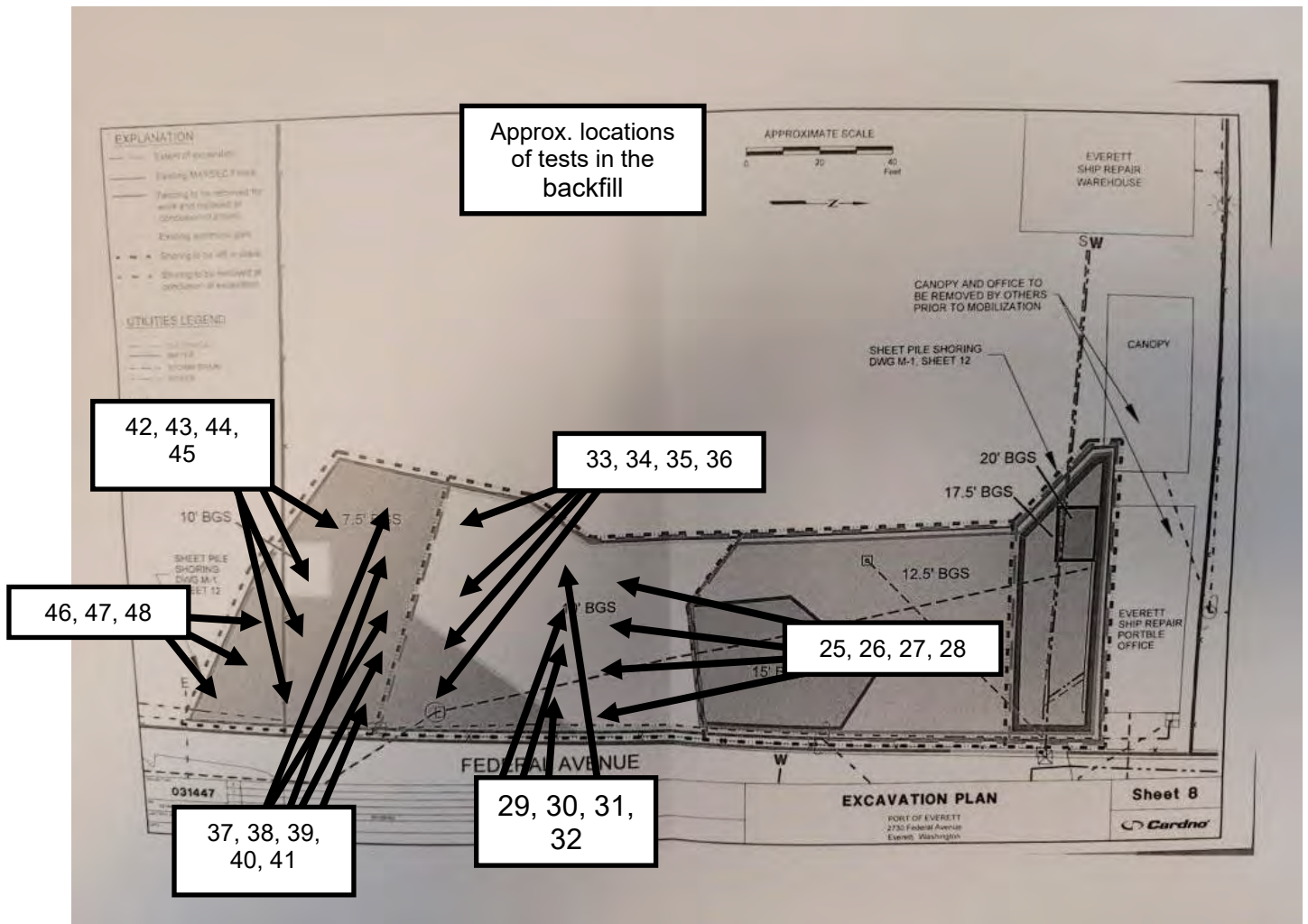
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
25	Remedial pond backfill	-6'	1	141.2	9.8	141.1	100
26	Remedial pond backfill	-6'	1	141.2	13.4	139.1	99
27	Remedial pond backfill	-6'	1	141.2	14.0	140.3	99
28	Remedial pond backfill	-6'	1	141.2	12.3	138.4	98
29	Remedial pond backfill	-6'	1	141.2	10.3	136.0	96
30	Remedial pond backfill	-6'	1	141.2	13.8	140.4	99
31	Remedial pond backfill	-6'	1	141.2	12.7	139.6	99
32	Remedial pond backfill	-6'	1	141.2	14.4	141.1	100
33	Remedial pond backfill	-6'	1	141.2	13.7	135.3	96
34	Remedial pond backfill	-6'	1	141.2	12.1	133.9	95
35	Remedial pond backfill	-6'	1	141.2	13.5	140.5	100
36	Remedial pond backfill	-6'	1	141.2	11.3	138.1	98
37	Remedial pond backfill	-6'	1	141.2	10.7	140.6	100
38	Remedial pond backfill	-6'	1	141.2	14.1	138.6	98
39	Remedial pond backfill	-6'	1	141.2	11.9	133.6	95
40	Remedial pond backfill	-6'	1	141.2	11.6	140.8	100
41	Remedial pond backfill	-6'	1	141.2	10.3	140.3	99
42	Remedial pond backfill	-6'	1	141.2	13.3	139.9	99
43	Remedial pond backfill	-6'	1	141.2	14.1	134.9	96
44	Remedial pond backfill	-6'	1	141.2	12.4	135.7	96
45	Remedial pond backfill	-6'	1	141.2	9.0	138.8	98
46	Remedial pond backfill	-6'	1	141.2	9.0	134.0	95
47	Remedial pond backfill	-6'	1	141.2	10.8	141.3	100
48	Remedial pond backfill	-6'	1	141.2	10.2	137.1	97






Earth Solutions NW LLC

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Redmond, WA 98052
Main (425) 449-4704 | Fax (425) 449-4711
esnw.com

FIELD REPORT

Project No.	8921.00	Page	1 of 3	Report ID	8921.00 E 10202022A
Date	Thu 10/20/2022	Weather	Cloudy, 55°F		
Arrival/Departure Time(s)	8:05 – 2:35	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

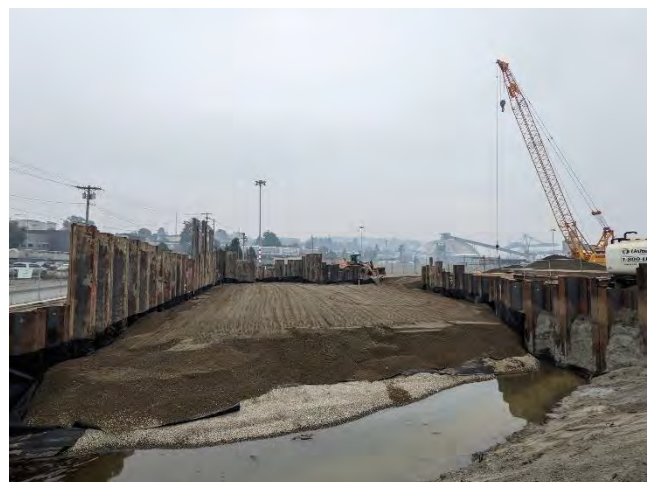
Remedial pond backfill observations:

While onsite, ESNW rep. observed the contractor has begun backfilling the remedial pond onsite. ESNW rep. observed the contractor installed the water line pipes and embedded them in sand. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to thoroughly compact the material. ESNW rep. took compaction tests in the backfill while onsite.

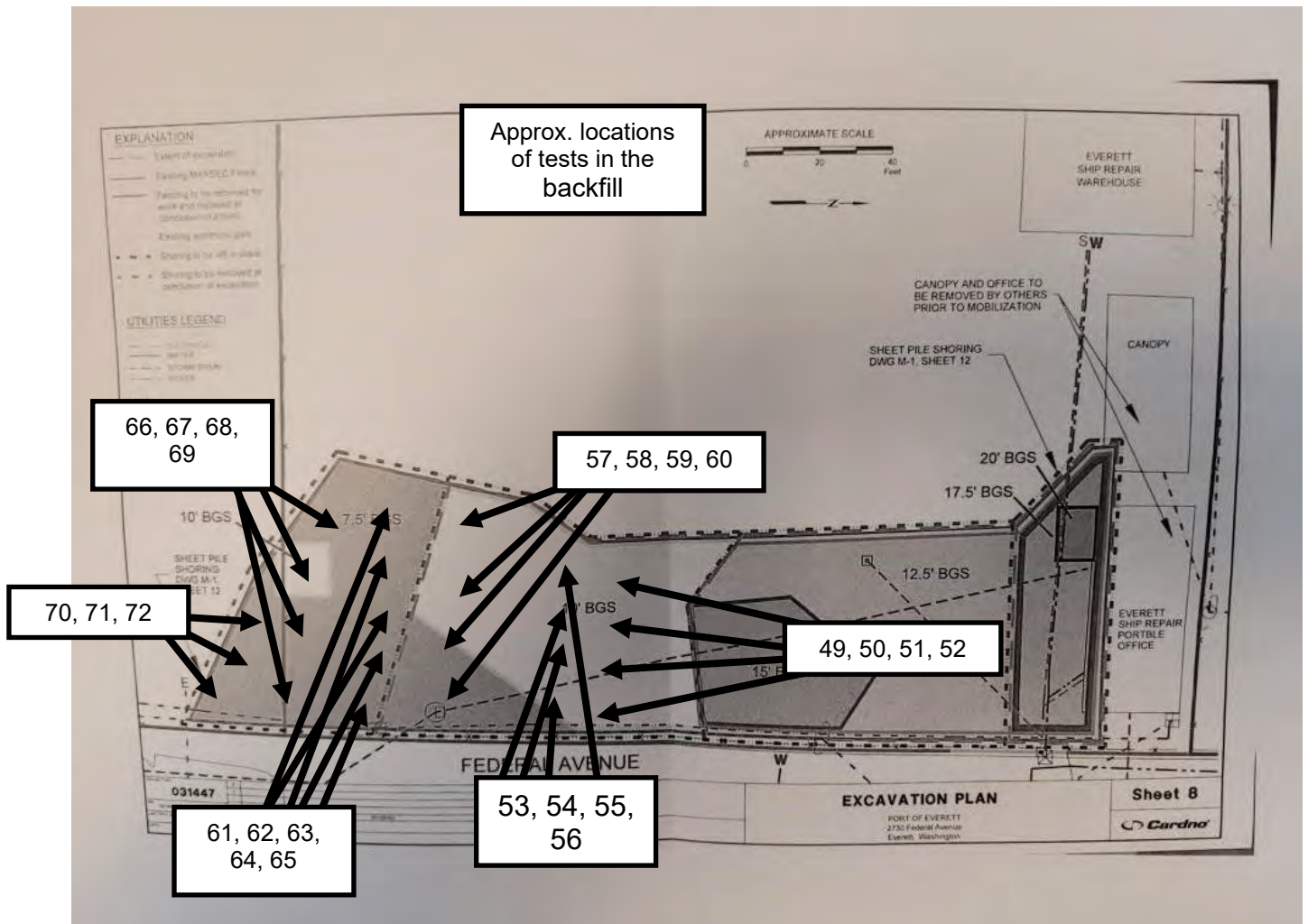
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
49	Remedial pond backfill	-4'	1	141.2	12.1	134.2	95
50	Remedial pond backfill	-4'	1	141.2	10.9	137.1	97
51	Remedial pond backfill	-4'	1	141.2	11.0	139.2	99
52	Remedial pond backfill	-4'	1	141.2	8.9	136.8	97
53	Remedial pond backfill	-4'	1	141.2	10.8	135.2	96
54	Remedial pond backfill	-4'	1	141.2	12.1	137.2	97
55	Remedial pond backfill	-4'	1	141.2	14.0	140.0	99
56	Remedial pond backfill	-4'	1	141.2	13.2	140.4	99
57	Remedial pond backfill	-4'	1	141.2	11.9	137.1	97
58	Remedial pond backfill	-4'	1	141.2	10.5	136.6	97
59	Remedial pond backfill	-4'	1	141.2	13.5	138.8	98
60	Remedial pond backfill	-4'	1	141.2	10.2	139.1	99
61	Remedial pond backfill	-4'	1	141.2	10.1	134.3	95
62	Remedial pond backfill	-4'	1	141.2	13.4	135.9	96
63	Remedial pond backfill	-4'	1	141.2	12.7	138.4	98
64	Remedial pond backfill	-4'	1	141.2	11.9	137.3	97
65	Remedial pond backfill	-4'	1	141.2	9.9	140.7	100
66	Remedial pond backfill	-4'	1	141.2	11.3	136.1	96
67	Remedial pond backfill	-4'	1	141.2	12.2	138.9	98
68	Remedial pond backfill	-4'	1	141.2	11.4	136.3	97
69	Remedial pond backfill	-4'	1	141.2	11.1	135.7	96
70	Remedial pond backfill	-4'	1	141.2	12.1	137.5	97
71	Remedial pond backfill	-4'	1	141.2	11.0	138.2	98
72	Remedial pond backfill	-4'	1	141.2	11.7	136.7	97






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FIELD REPORT

Project No.	8921.00	Page	1 of 3	Report ID	8921.00 E 10212022
Date	Fri 10/21/2022	Weather	Cloudy, 50°F		
Arrival/Departure Time(s)	7:55 – 8:55 & 10:05 – 11:20			Travel Time (hr)	1.25
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
<small>Limitations: The presence of our field representative at the site is to provide our client with a source of professional advice, opinions, and recommendations based upon the field representative's observations and testing of the contractor's work. Our services do not include supervision or direction of the contractor, their employees, or agents. Geotechnical recommendations for obtaining project objectives may be made by our representatives; however, direction of the actual work should come from the owner or contractor, as appropriate. The contractor is responsible for complying with the contract documents at all times, regardless of the presence of our field representative. Jobsite safety, including compliance with all applicable state or federal regulations, is the sole responsibility of the contractor. The observations, recommendations, and conclusions provided in this field report are preliminary until reviewed by the ESNW project manager.</small>					

At the client's request, ESNW rep. was onsite to observe and test backfill in the remedial pond onsite.

Remedial pond backfill observations:

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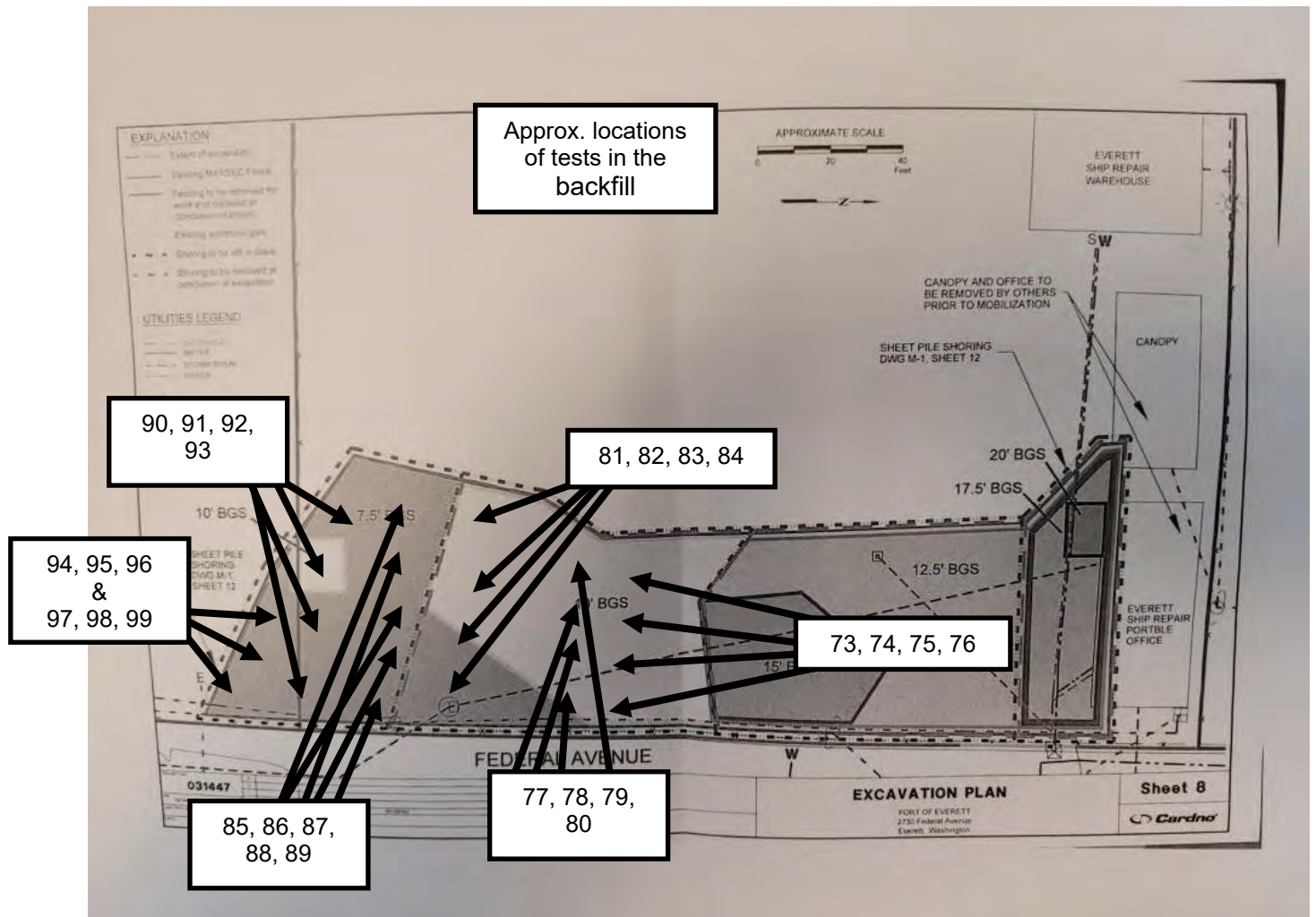
Compaction results:

ESNW rep. took compaction tests in the remedial pond backfill after it was placed and compacted. Density test results indicate adequate compaction of at least 95% at the tested locations. The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
73	Remedial pond backfill	-2'	1	141.2	10.2	139.1	99
74	Remedial pond backfill	-2'	1	141.2	9.5	135.2	96
75	Remedial pond backfill	-2'	1	141.2	9.5	134.2	95
76	Remedial pond backfill	-2'	1	141.2	9.6	136.0	96
77	Remedial pond backfill	-2'	1	141.2	9.2	139.9	99
78	Remedial pond backfill	-2'	1	141.2	9.7	136.5	97
79	Remedial pond backfill	-2'	1	141.2	9.9	139.4	99
80	Remedial pond backfill	-2'	1	141.2	9.6	133.9	95
81	Remedial pond backfill	-2'	1	141.2	9.0	135.2	96
82	Remedial pond backfill	-2'	1	141.2	10.3	136.4	97
83	Remedial pond backfill	-2'	1	141.2	10.2	133.9	95
84	Remedial pond backfill	-2'	1	141.2	9.2	139.1	99
85	Remedial pond backfill	-2'	1	141.2	10.5	134.8	95
86	Remedial pond backfill	-2'	1	141.2	9.1	134.2	95
87	Remedial pond backfill	-2'	1	141.2	9.7	138.1	98
88	Remedial pond backfill	-2'	1	141.2	11.7	134.1	95
89	Remedial pond backfill	-2'	1	141.2	9.7	137.1	97
90	Remedial pond backfill	-2'	1	141.2	10.7	140.3	99
91	Remedial pond backfill	-2'	1	141.2	11.4	136.7	97
92	Remedial pond backfill	-2'	1	141.2	9.1	135.1	96
93	Remedial pond backfill	-2'	1	141.2	10.0	141.1	100
94	Remedial pond backfill	-2'	1	141.2	9.6	137.8	98
95	Remedial pond backfill	-2'	1	141.2	9.8	137.1	97
96	Remedial pond backfill	-2'	1	141.2	10.4	137.9	98
97	Remedial pond backfill	SG	1	141.2	8.4	134.1	95
98	Remedial pond backfill	SG	1	141.2	9.6	136.2	96
99	Remedial pond backfill	SG	1	141.2	11.0	133.9	95







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 11032022
Date	Thu 11/3/2022	Weather	Cloudy, 45°F		
Arrival/Departure Time(s)	11:10 – 11:40 & 2:40 – 4:25	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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While onsite, ESNW rep. observed the contractor has finished backfilling part of the remedial pond onsite. ESNW rep. observed the contractor place imported soil as backfill in the area and use a large vibratory roller to compact the material. ESNW rep. took compaction tests in the backfill while onsite.

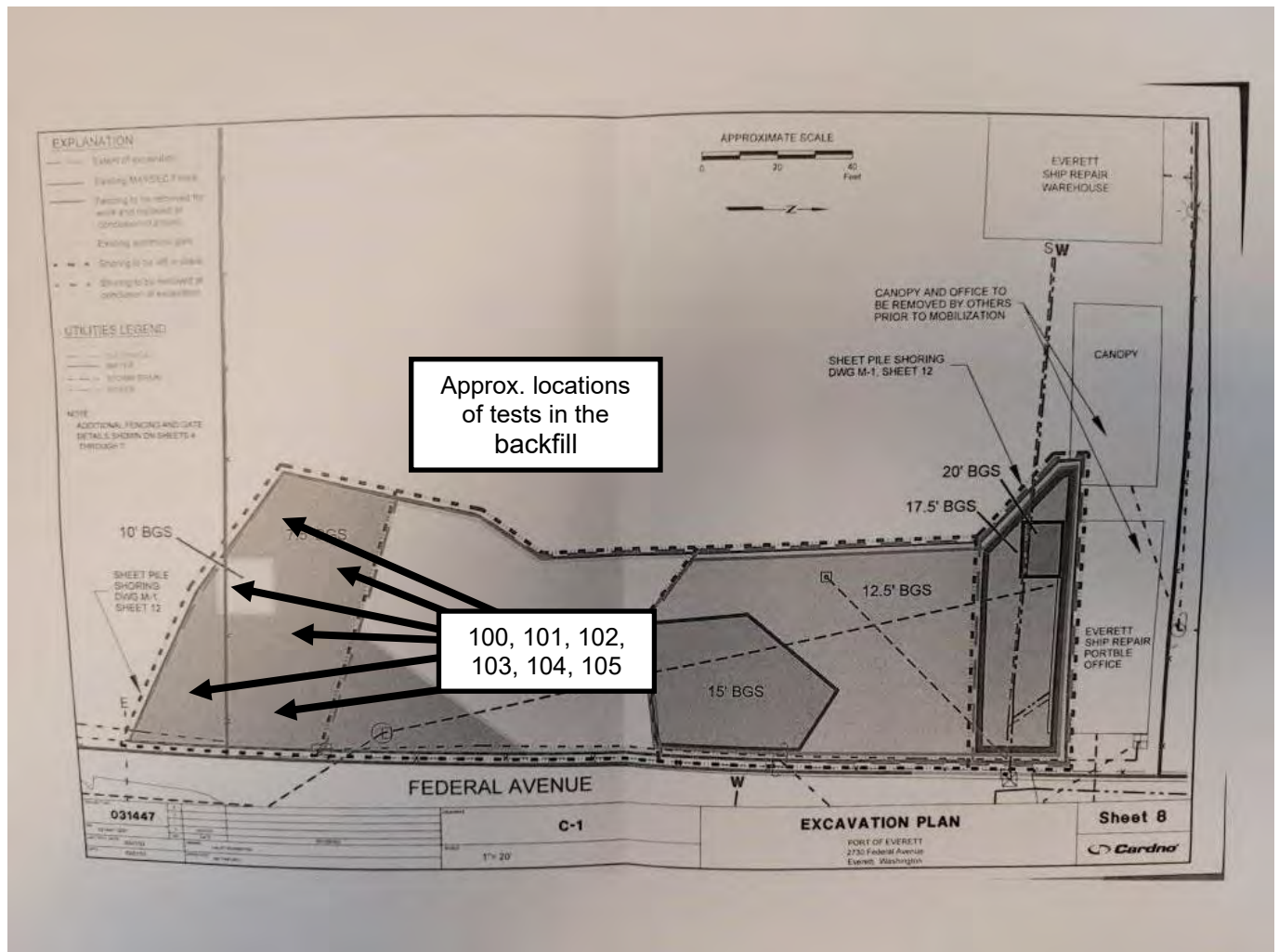
Compaction results:

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ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Reference Proctor	Maximum Dry Density (pcf)	Test Moisture (%)	Test Dry Density (pcf)	% of MDD
100	Remedial pond BF	SG	1	141.2	9.7	135.9	96
101	Remedial pond BF	SG	1	141.2	10.8	136.7	97
102	Remedial pond BF	SG	1	141.2	10.2	138.1	98
103	Remedial pond BF	SG	1	141.2	10.6	138.9	98
104	Remedial pond BF	SG	1	141.2	11.2	136.4	97
105	Remedial pond BF	SG	1	141.2	11.0	139.2	99







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 11032022A
Date	Thu 11/3/2022	Weather	Cloudy, 45°F		
Arrival/Departure Time(s)	11:10 – 11:40 & 2:40 – 4:25	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
General Contractor Info/Contact					
Reviewed By	LAC		KRC		
	Field Supervisor	Initials/Date	Project Manager	Initials/Date	
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As requested by the contractor, ESNW rep. was onsite to observe and test asphalt installation in the remedial pond backfill onsite.

Asphalt testing:

Upon arrival ESNW rep. observed the contractor installing asphalt over the backfill onsite. ESNW rep. observed that the contractor placed the asphalt in 2 lifts of HMA, approx. ~3" and ~2" respectively, in the area onsite. ESNW rep. observed that contractor place the asphalt and then compact the material with a double barrel roller. ESNW rep. took compaction tests on the material while onsite and upon subsequent returns to the site.

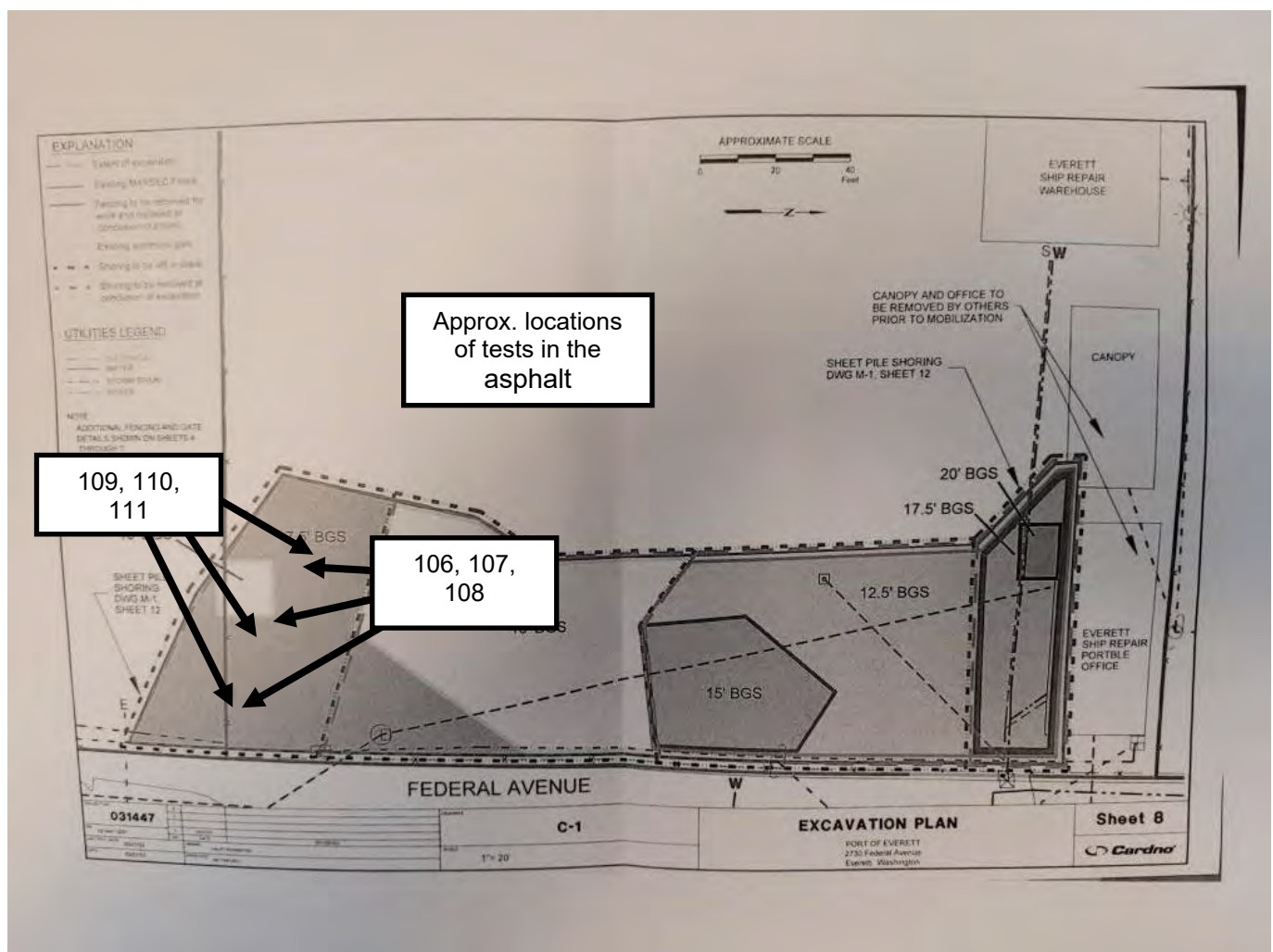
Compaction results:

ESNW rep. took compaction tests at various elevations of the asphalt after it was placed and compacted. Density test results indicate adequate compaction of at least 92% at the tested locations (see below). The locations of these tests are approximately shown on the attached plans.

ESNW rep. will return when requested.



Test Number	Test Location	Elevation	Rice Value (pcf)	Test Density (pcf)	% of Rice Value
106	Asphalt over BF	-3"	156.2	144.1	92
107	Asphalt over BF	-3"	156.2	146.8	94
108	Asphalt over BF	-3"	156.2	145.7	93
109	Asphalt over BF	SG	156.2	145.2	93
110	Asphalt over BF	SG	156.2	146.9	94
111	Asphalt over BF	SG	156.2	144.6	93







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 11102022
Date	Thu 11/10/2022	Weather	Cloudy, 40°F		
Arrival/Departure Time(s)	9:10 – 11:55	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
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Remedial pond backfill observations:

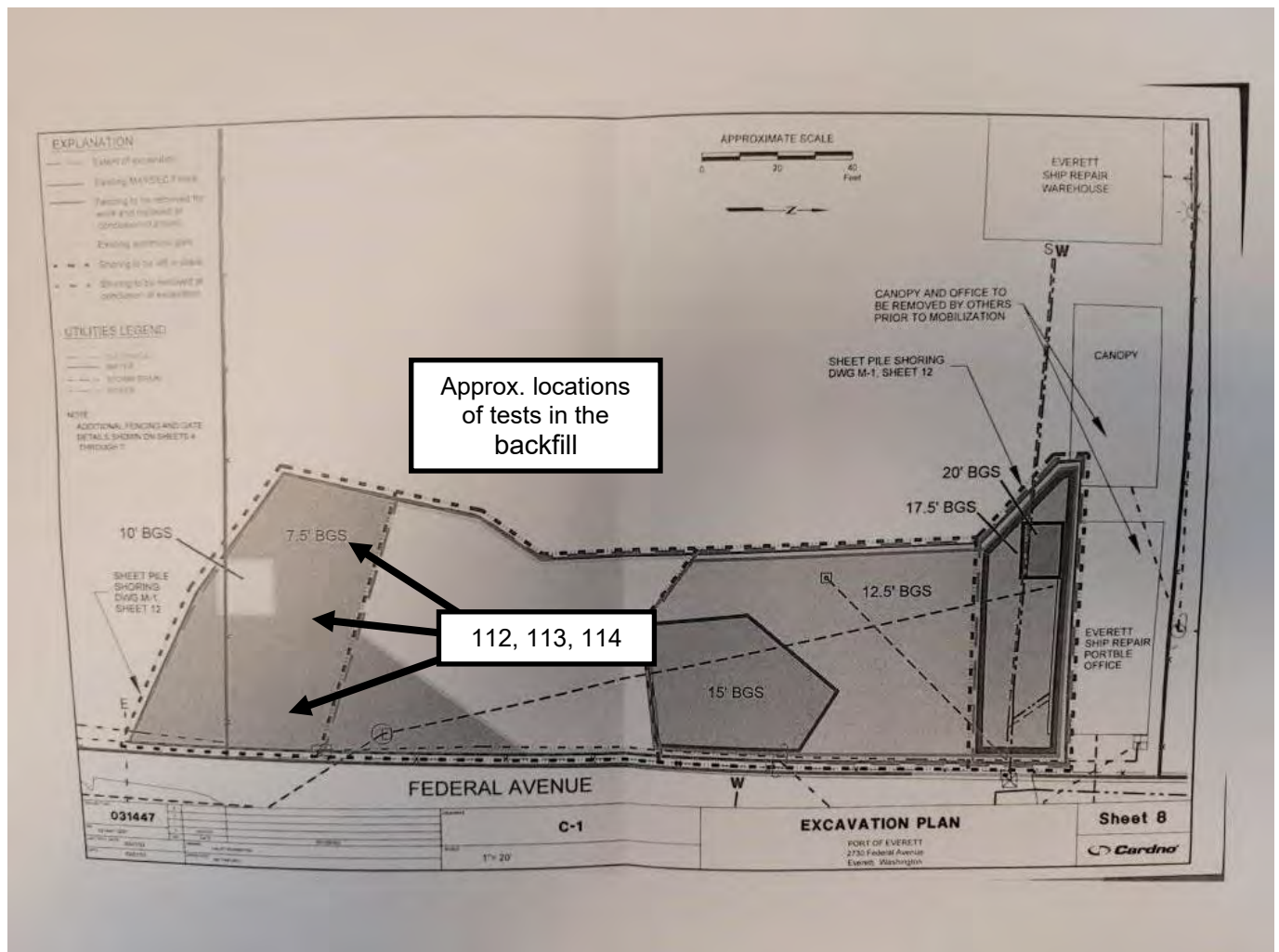
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112	Remedial pond BF	SG	1	141.2	9.2	134.9	96
113	Remedial pond BF	SG	1	141.2	9.8	141.7	100
114	Remedial pond BF	SG	1	141.2	9.6	139.1	99







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FIELD REPORT

Project No.	8921.00	Page	1 of 2	Report ID	8921.00 E 11102022A
Date	Thu 11/10/2022	Weather	Cloudy, 40°F		
Arrival/Departure Time(s)	9:10 – 11:55	Travel Time (hr)	1.25		
Project Name	Port of Everett Remedial Excavation				
Location	2730 Federal Ave, Everett				
ESNW Rep. & Phone	Greg Buzitis, (206) 488-4151				
Client Info/Contact	Innovative Construction Solutions Alex Flink				
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Reviewed By	LAC		KRC		
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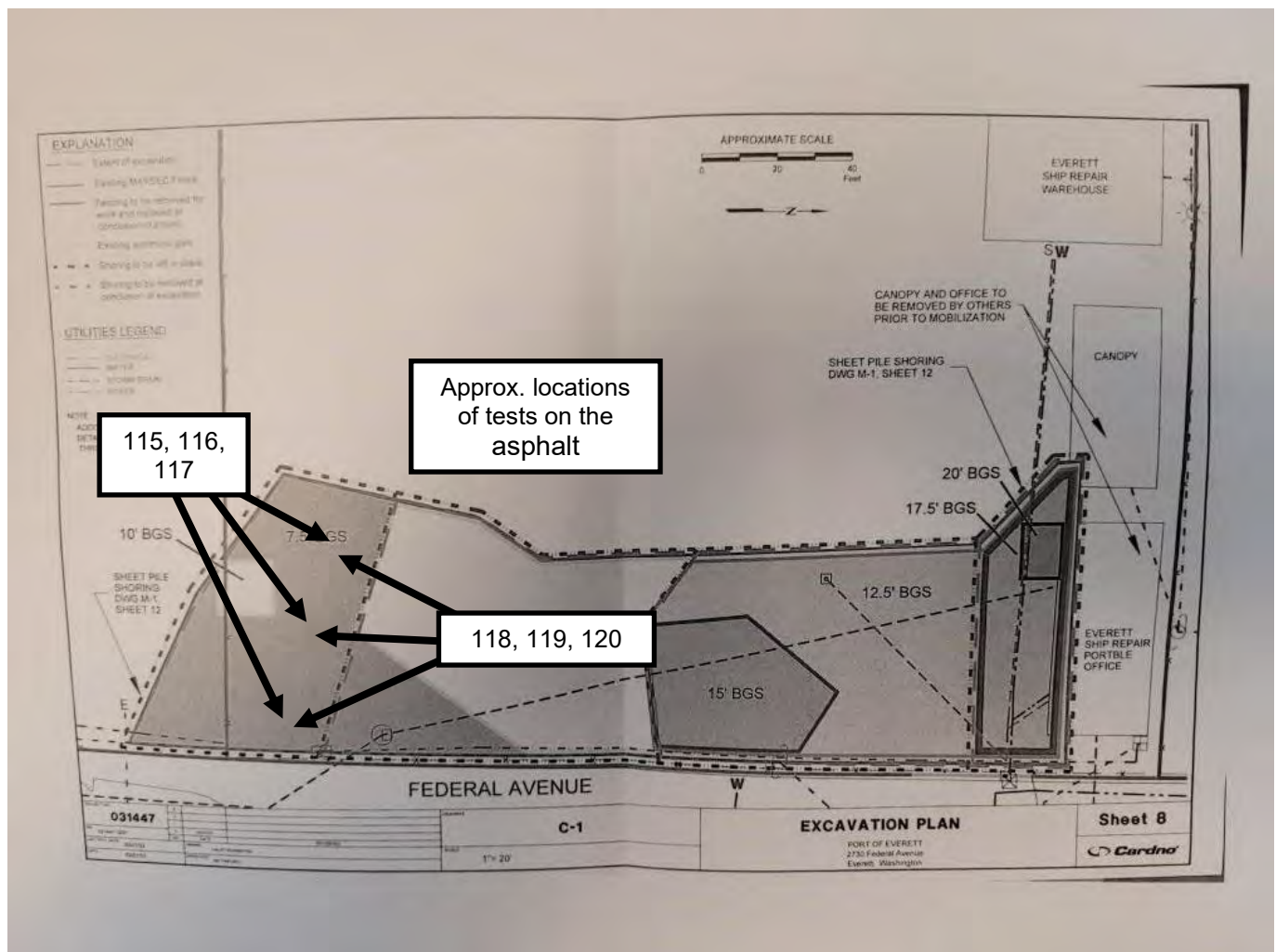
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115	Asphalt over BF	-3"	156.2	145.8	93
116	Asphalt over BF	-3"	156.2	145.0	93
117	Asphalt over BF	-3"	156.2	147.9	95
118	Asphalt over BF	SG	156.2	147.4	94
119	Asphalt over BF	SG	156.2	149.9	96
120	Asphalt over BF	SG	156.2	143.1	92



APPENDIX R

UST Decommissioning Documentation



Thompson, Robert

From: ECY RE NWRO ERTS <nwroerts@ECY.WA.GOV>
Sent: Wednesday, October 5, 2022 1:41 PM
To: Bobby Thompson
Subject: RE: Report of an environmental issue in Snohomish county

Hello Robert,

Thank you for your report. It has been documented in our Environmental Report Tracking System (ERTS) as report #718051. It has been sent to our Toxics Cleanup Program for review.

Kelli Sheldon (she/her)
ERTS & SEPA Coordinator
Department of Ecology | Northwest Region
Report an Environmental Concern: [Online](#) or by Phone at (206) 594-0000



NOTICE: This communication is a public record and may be subject to disclosure pursuant to the Public Records Act (RCW 42.56).

From: ERTS-noreply@ecy.wa.gov <ERTS-noreply@ecy.wa.gov>
Sent: Wednesday, October 5, 2022 12:34 PM
To: ECY RE NWRO ERTS <nwroerts@ECY.WA.GOV>
Subject: Report of an environmental issue in Snohomish county

Environmental issue report — Snohomish County

Date received: 10/5/2022 12:33:31 PM
Confidentiality requested? No
Self reporting? Yes

Who is reporting?

Your first name	Robert
Your last name	Thompson
Confidential?	No
Are you self reporting?	Yes
Reporter type	Consultant
Your organization name (if any)	Cardno

Your email	robert.thompson@cardno.com
Primary phone number	(206) 510-5855
Secondary phone number	
Your country	United States
Your mailing address	309 South Cloverdale Street
Apartment, suite, P.O. box, etc.	Unit A13
Your city	Seattle
Your state	WA
Your ZIP code	98108

Where did it happen?

Location name	Port of Everett
Physical address	2730 Federal Avenue
Apartment or suite, if applicable	
Nearest city	Everett
State	WA
ZIP code	98201
Parcel number, if known	29051900301600
Latitude and longitude, if known	47.981378, 122.217108
Location county *	Snohomish
Ecology region	NWRO
Regional email	nwroerts@ecy.wa.gov
Directions	Located at Port of Everett, Everett Ship Repair Leasehold

What happened? Description of incident

Incident date & time	10/5/2022 12:12:32 PM
Activity	Construction

Medium category	Ground
Medium Type:	Soil
Source category	Tank
Source Type:	Underground storage tank (UST)
Substance category	Oil / Petroleum
Substance Type:	Unknown, oil
Substance quantity	28 Unit of measure: Gallon
Ecology permit number, if known	Facility Site ID: 2728
Additional incident details	During the Port of Everett Interim Action Remedial excavation an unknown UST was discovered during excavation. Excavation in the vicinity of the tank was ceased while further information regarding size, contents, and contaminants are analyzed. Approximately 28 gallons of oily groundwater encountered in the tank.
Attach a photo	

Who might be responsible?

First name	Robert
Last name	Thompson
Organization name	Cardno
Email	robert.thompson@cardno.com
Phone number	(206) 510-5855
Country of the responsible party	United States
Mailing address	309 South Cloverdale Street
Apartment or suite, if applicable	Unit A13
City	Seattle
State	WA
ZIP code	98108

Additional information about
the potentially responsible
party

Form ID#: 8576



30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

UST ID #: _____

County: _____

This form provides Ecology 30-days' advanced notice for projects, as required by Chapter 173-360A WAC. Instructions are on the back page.

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION				II. OWNER/OPERATOR INFORMATION	
Tag or UBI # (if applicable): NA				Owner/Operator Name: Steve Miller	
UST ID # (if applicable): NA				Business Name: American Distributing Company	
Site Name: ExxonMobil ADC Site				Mailing Address: 13618 45th Avenue Northeast	
Site Address: 2717 Federal Avenue				City: Marysville	State: WA Zip: 98271
City: Everett				Phone: (360) 658-3751	
Phone: (206) 510-5855				Email: steve@americandistributing.com	
III. CERTIFIED SERVICE PROVIDER(S)					
Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.					
Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.					
1) <input type="checkbox"/> Installer <input type="checkbox"/> Decommissioner <input checked="" type="checkbox"/> Site Assessor					
Company Name: Cardno			Certification Type: ICC U7 Site Assessor		
Service Provider Name: Ryan Pozzuto			Cert. No.: 8143012	Exp. Date: 07/13/23	
Provider Phone: 206 550 6681			Provider Email: ryan.pozzuto@cardno.com		
2) <input type="checkbox"/> Installer <input checked="" type="checkbox"/> Decommissioner <input type="checkbox"/> Site Assessor					
Company Name: Rivers Edge LLC			Certification Type: ICC UST Decommissioning		
Service Provider Name: Dan Kuhl			Cert. No.: 9291718	Exp. Date: N/A	
Provider Phone: 206 962 0323			Provider Email: dkuhn@rivers.city		
IV. TANK AND/OR PIPING INFORMATION					
TANK ID	TANK CAPACITY	SUBSTANCE STORED	PIPING INSTALLATION OR REPLACEMENT ONLY (Y/N)	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
1	500 Gallons	Heating Oil	N		During the ExxonMobil / ADC Interim Action remedial excavation a 500-gallon UST was discovered. Based on historic site maps, it is believed the tank is a heating oil UST. Approximately 25-gallons of oily-groundwater was encountered in the tank. Free product is not present in the tank.

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

GENERAL INSTRUCTIONS

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology
Underground Storage Tank Section
PO Box 47655
Olympia, WA 98504-7655

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form must confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.

To receive additional deliveries and operate the new tanks/piping, you must submit the [Business License application, UST Addendum](#), and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) **within 30 days** of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If only piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the [Retrofit/Repair Checklist](#) with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was removed from both the piping and the tank to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is not discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination is discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- ❖ Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only.
The fuel must be used for farm purposes and cannot be for resale.
- ❖ Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- ❖ Tanks with a capacity of 110 gallons or less.
- ❖ Emergency overflow tanks, catch basins, or sumps.



Everett Fire Department

2801 Oakes Ave, Everett, WA 98201

FIRE PERMIT - DECOMMISSIONING HEATING OIL TANK

Issued

Permit Number EFD-001130
Effective 10/11/2022
Expires 11/11/2022

Issued To Dan Kuhn
Located On 2730 Federal AVE
Everett, WA 98201
Snohomish
Fee \$88.00

Issued On 10/11/2022

Jeff Alford

Authorized On 10/11/2022

Kurtis A. Brown, Fire Marshal

This permit does not take the place of any license and has been issued in accordance with the requirements of Everett Fire Code. This permit is subject to revocation or suspension by the Fire Code Official and is not transferable.



INTERNATIONAL CODE COUNCIL

DAN KUHN

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

UST Decommissioning

Given this day October 6, 2021

Certificate No. 9291718

A handwritten signature in black ink, appearing to read "Greg Wheeler".

Greg Wheeler, CBO
President, Board of Directors

A handwritten signature in black ink, appearing to read "Dominic Sims".

Dominic Sims, CBO
Chief Executive Officer





INTERNATIONAL CODE COUNCIL

RYAN POZZUTO

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

Washington State Site Assessment

Given this day July 14, 2021

A handwritten signature in black ink, appearing to read "Greg Wheeler".

Greg Wheeler, CBO
President, Board of Directors

Certificate No. 8143012

A handwritten signature in black ink, appearing to read "Dominic Sims".

Dominic Sims, CBO
Chief Executive Officer



Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 750
Last Contents DIESEL
Tank Location: PORT OF EVERETT
WA.

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: PORT OF EVERETT

Contractor: RIVER'S EDGE

M.V.S. Representative: [Signature]

Date: 10/14/22

Notes:

Dan Kuhn-Rivers Edge Environmental Services		Rivers Edge Enviro Services, Inc./ CARDNO/STANTEC--Carl Miklich/Project Supervisor		Oct 11, 2022	
Survey Requested by		Vessel Owner Agent		Date	
UST		Underground Storage Tank (UST)		2730 Federal Ave, Everett, WA	
Vessel		Type of Vessel		Specific Location of Vessel	
Heating Oil/Diesel (3X)		O ₂ , LEL, Visual, CO, H ₂ S, THC _s , VISUAL		13:12	
Last Three 3 Loadings		Tests Performed		Time Survey Completed	

Inspected Spaces: Group 1. —ONE APPROXIMATELY 750 GALLON UNDERGROUND STORAGE TANK (UST)	Safety Designations: NOT SAFE FOR WORKERS NOT SAFE FOR HOT WORK
--	--

(Approximately 1/4 full with water; no standing oil or residues floating on water)

AUTHORIZATION, RESTRICTIONS & REQUIREMENTS:

- 1) MARINE CHEMIST INSPECTION COMPLETED AT 1225 PM ON OCTOBER 11, 2022;
- 2) TANK HAS BEEN INSPECTED & CERTIFIED “GAS-FREED”—NO FLAMMABLE/COMBUSTIBLE RESIDUAL PRODUCTS, LIQUIDS, RESIDUES OR GASES IN THE TANK AT THE TIME OF INSPECTION.
- 3) TANK IS AUTHORIZED TO BE PUMPED, TRIPLE-RISE OR PRESSURE-WASHED TO REMOVE WATER AND BOTTOM SEDIMENTS/SLUDGE/SCALES/SOIL/MUD, ETC..
- 4) TANK IS AUTHORIZED TO BE TRANSPORT OFF SITE TO A DISPOSAL/SCRAPPING/RECYCLING FACILITY;
- 5) TANK IS AUTHORIZED TO BE SCRAPPED/DECOMMISSIONED;
- 6) ENTRY INTO TANK & HOT WORK ON TANK IS NOT AUTHORIZED ON THIS CERTIFICATE.

Test Results	% O ₂	% LEL	CO	H ₂ S	THCs	VISUAL
Inspected spaces group 1	20.9%	0%	0 ppm	0 ppm	<2 ppm	NO OIL ppm

Limits of Detection

0.5% O₂, 1% LEL, 0.1 ppm H₂S, 1 ppm CO, 1 ppb THC_s/VOC_s w/PPB PID

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this Certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person in support of work prior to entry or recommencement of work.

QUALIFICATIONS: Transfer of ballast, cargo, fuel, or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances are considered “not safe” unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this Certificate.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306):

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere is at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, and inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry is not permitted.

ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.

SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces containing or having contained flammable or combustible materials are sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire or they are to be inerted. Ship’s fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces are to be treated in accordance with the Marine Chemist’s requirements.

SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space are to meet the requirements for Safe for Hot Work and Partial Cleaning, as applicable; (b) the space is to be inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space are to meet the requirements for Safe for Hot Work, as applicable, and the nature of the work or type of hot work is to be limited or restricted.

NOT SAFE FOR HOT WORK: In the space or compartment so designated, hot work is not permitted.

CHEMIST’S ENDORSEMENT: This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306, Standard for the Control of Gas Hazards on Vessels, and have found the condition of each to be in accordance with its assigned designation.

The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Philip Dovinh - U.S. Marine Chemists & Engineering
P.O. Box 63, Mukilteo, WA 98275
Office: (206) 200-6912 Fax:
Cell: (206) 200-6912 Email: pdovinh@comcast.net

MARINE CHEMIST CERTIFICATE



Serial 667-05228
Page 2 of 2

Authorized Representative

Company

Signed Marine Chemist

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 20477

Carrier No. _____

Marine Vacuum Service Inc.

Page 1 of 4

(Name of carrier)

(SCAC)

Date _____

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO: Consignee **Marine Vacuum Service Inc.**

Street **1516 South Graham Street**

City **Seattle**

State **WA**

Zip Code **98108**

FROM: Shipper MAN

Street 2730 Federal Ave

City Everett

State WA

Zip Code _____

ChemTel 1-800-255-3924

Contract MIS3627926

24 hr. Emergency Contact Tel. No. _____

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	400 Gallons			
1 TT		Used Oil Non Reg by DOT				
1 TT		Used Coolant Non Reg by DOT				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declares a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations.

Signature _____

REMIT C.O.D. TO: ADDRESS

COD

Amt: \$ _____

C.O.D. FEE: PREPAID ☐ COLLECT ☐ \$ _____

TOTAL CHARGES \$ _____

FREIGHT CHARGES
FREIGHT PREPAID ☐ Check box if charges are to be collect ☐

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER DAN LUN

PER [Signature]

CARRIER MAN VAC

PER [Signature]

DATE 10/12/20

Permanent post-office address of shipper.

Phone: 253 272-9364

Fax: 253 838-1998

Purchase Ticket

Tacoma

2202 E River St.
Tacoma, WA 98421



4713
RIVERS EDGE ENVIRONMENTAL
17115 SE 270 PLACE 3105
covington, WA 98042

October 19, 2022

Ticket# 1232580

Weight 9,340

Total \$0.00

Driver:

Description:

Notes:

Truck#:

Container In:

Other:

Container Out:

Commercial Ticket - Number: 1232580

<u>Commodity</u>	<u>Gross</u>	<u>Tare</u>	<u>Tare2</u>	<u>Deduct</u>	<u>Net UM</u>	<u>Price</u>	<u>Total</u>
Bin	44,020	34,680			9,340 N		.00
	44,020	34,680			9,340		.00

APPENDIX S

Waste Documentation





Release of Liability/Certificate of Disposal

Innovative Construction Solutions & their client: are released from liability for all petroleum contaminated soil originating from:

**Port of Everett Project
2717 to 2731 Federal Ave,
Everett WA.**

And transported to:

**HEIDELBERG MATERIALS
Thermal Remediation Facility
17 East Marine View Drive
Everett WA 98201**

From 10-05-2022 through 02-20-2023

A total of 11838.82 tons of Class 3 petroleum-contaminated soil were transported to the above facility. The material was disposed of in the following manner:

Thermal Desorption/Landfill for Reclamation

Disposal of the contaminated soil was performed in accordance with all applicable federal, state, and local laws / regulations.

Signed:

Date: March 29th , 2023

A handwritten signature in black ink that reads 'Larry W. Baker'.

Larry W. Baker

Manager

Heidelberg Materials Inc.
Soil Remediation Division
17 East Marine View
Drive, Everett WA,
98201
(425)-210-8429

HISTORY TICKET INQUIRY

BEGIN DATE	9/1/2022	LOCATION	98846900
END DATE	3/29/2023	CUSTOMER	10194638
SELL/BUY/TRANS	ALL	ORDER	10121825
SHIP/RECEIVE	ALL		

<u>Ticket</u>	<u>Date</u>	<u>Time</u>	<u>Customer</u>	<u>Order</u>	<u>Product</u>	<u>Vehicle</u>	<u>Qty</u>	<u>Unit</u>
1124520732	10/5/2022	8:40:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.19	Ton
1124520735	10/5/2022	9:07:04 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	13.85	Ton
1124520738	10/5/2022	9:27:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	NCE1	14.50	Ton
1124520740	10/5/2022	9:42:55 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.18	Ton
1124520743	10/5/2022	10:01:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.42	Ton
1124520745	10/5/2022	10:18:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	13.63	Ton
1124520749	10/5/2022	10:26:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	NCE1	14.09	Ton
1124520751	10/5/2022	10:35:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.37	Ton
1124520754	10/5/2022	10:47:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.44	Ton
1124520756	10/5/2022	10:57:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	NCE1	15.00	Ton
1124520758	10/5/2022	11:06:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.92	Ton
1124520761	10/5/2022	11:16:22 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.95	Ton
1124520762	10/5/2022	11:38:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.64	Ton
1124520766	10/5/2022	11:56:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.67	Ton
1124520769	10/5/2022	12:10:23 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	19.87	Ton
1124520771	10/5/2022	12:31:48 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.53	Ton
1124520774	10/5/2022	12:46:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.03	Ton
1124520775	10/5/2022	12:54:43 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	NCE1	15.82	Ton
1124520776	10/5/2022	1:01:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.34	Ton
1124520778	10/5/2022	1:18:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	19.49	Ton
1124520780	10/5/2022	1:32:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.90	Ton
1124520783	10/5/2022	1:50:10 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.29	Ton
1124520785	10/5/2022	2:02:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.08	Ton
1124520787	10/5/2022	2:21:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.84	Ton
1124520789	10/5/2022	2:34:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.51	Ton
1124520790	10/5/2022	2:52:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.37	Ton
1124520791	10/5/2022	3:07:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.75	Ton
1124520792	10/5/2022	3:24:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.86	Ton
1124520793	10/6/2022	8:02:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.75	Ton
1124520795	10/6/2022	8:15:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.18	Ton
1124520796	10/6/2022	8:17:42 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.19	Ton
1124520797	10/6/2022	8:23:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.50	Ton
1124520799	10/6/2022	8:36:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.66	Ton
1124520800	10/6/2022	8:39:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.14	Ton
1124520801	10/6/2022	8:44:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.42	Ton
1124520802	10/6/2022	8:49:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	17.36	Ton
1124520803	10/6/2022	8:53:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.67	Ton
1124520804	10/6/2022	9:09:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	16.50	Ton
1124520805	10/6/2022	9:14:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	18.24	Ton
1124520806	10/6/2022	9:19:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.48	Ton
1124520807	10/6/2022	9:23:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	17.26	Ton

1124520809	10/6/2022	9:32:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.69	Ton
1124520810	10/6/2022	9:39:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	18.10	Ton
1124520811	10/6/2022	9:44:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.03	Ton
1124520812	10/6/2022	9:49:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.60	Ton
1124520813	10/6/2022	9:53:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	17.10	Ton
1124520814	10/6/2022	9:57:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.62	Ton
1124520815	10/6/2022	10:11:42 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	17.01	Ton
1124520816	10/6/2022	10:16:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.14	Ton
1124520817	10/6/2022	10:20:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.21	Ton
1124520818	10/6/2022	10:26:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.77	Ton
1124520819	10/6/2022	10:35:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.64	Ton
1124520820	10/6/2022	10:39:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.76	Ton
1124520821	10/6/2022	10:44:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.53	Ton
1124520822	10/6/2022	10:51:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.95	Ton
1124520823	10/6/2022	10:55:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.79	Ton
1124520824	10/6/2022	11:24:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.58	Ton
1124520825	10/6/2022	11:27:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	17.30	Ton
1124520826	10/6/2022	11:32:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.87	Ton
1124520827	10/6/2022	11:38:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.48	Ton
1124520828	10/6/2022	11:42:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.69	Ton
1124520829	10/6/2022	12:17:00 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.81	Ton
1124520830	10/6/2022	12:21:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.64	Ton
1124520831	10/6/2022	12:25:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.95	Ton
1124520832	10/6/2022	12:33:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.98	Ton
1124520833	10/6/2022	12:36:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.06	Ton
1124520834	10/6/2022	12:44:22 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.13	Ton
1124520835	10/6/2022	12:49:07 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	13.83	Ton
1124520836	10/6/2022	12:55:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.57	Ton
1124520838	10/6/2022	1:04:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	16.47	Ton
1124520839	10/6/2022	1:06:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.16	Ton
1124520841	10/6/2022	1:12:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.33	Ton
1124520842	10/6/2022	1:17:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.59	Ton
1124520843	10/6/2022	1:24:32 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.36	Ton
1124520844	10/6/2022	1:33:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	17.74	Ton
1124520845	10/6/2022	1:37:14 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.81	Ton
1124520846	10/6/2022	1:56:05 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.76	Ton
1124520847	10/6/2022	1:57:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.72	Ton
1124520848	10/6/2022	1:59:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.47	Ton
1124520849	10/6/2022	2:01:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	18.32	Ton
1124520850	10/6/2022	2:06:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	18.64	Ton
1124520851	10/6/2022	2:23:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.63	Ton
1124520852	10/6/2022	2:29:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.51	Ton
1124520853	10/6/2022	2:35:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.56	Ton
1124520854	10/6/2022	2:42:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	18.06	Ton
1124520858	10/7/2022	8:06:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.81	Ton
1124520876	10/7/2022	12:07:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	13.72	Ton
1124520877	10/7/2022	12:25:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.26	Ton
1124520879	10/7/2022	12:30:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	14.16	Ton
1124520881	10/7/2022	12:37:17 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.08	Ton
1124520885	10/7/2022	12:51:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.33	Ton
1124520887	10/7/2022	12:58:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.98	Ton
1124520888	10/7/2022	1:04:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.36	Ton

1124520891	10/7/2022	1:22:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.23	Ton
1124520895	10/7/2022	1:31:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	16.03	Ton
1124520897	10/7/2022	1:35:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.24	Ton
1124520911	10/10/2022	8:03:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.55	Ton
1124520914	10/10/2022	8:08:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.79	Ton
1124520917	10/10/2022	8:17:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	15.63	Ton
1124520920	10/10/2022	8:23:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.99	Ton
1124520924	10/10/2022	8:35:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.90	Ton
1124520925	10/10/2022	8:41:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.00	Ton
1124520928	10/10/2022	8:52:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	16.10	Ton
1124520929	10/10/2022	8:57:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.64	Ton
1124520932	10/10/2022	9:06:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.60	Ton
1124520937	10/10/2022	9:28:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.85	Ton
1124520938	10/10/2022	9:32:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	18.09	Ton
1124520939	10/10/2022	9:36:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.31	Ton
1124520940	10/10/2022	9:43:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.77	Ton
1124520941	10/10/2022	9:57:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.21	Ton
1124520942	10/10/2022	10:01:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	16.54	Ton
1124520943	10/10/2022	10:06:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.51	Ton
1124520945	10/10/2022	10:13:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.52	Ton
1124520949	10/10/2022	10:26:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.77	Ton
1124520950	10/10/2022	10:31:31 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.93	Ton
1124520952	10/10/2022	10:35:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.73	Ton
1124520954	10/10/2022	10:41:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.86	Ton
1124520955	10/10/2022	10:53:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.13	Ton
1124520956	10/10/2022	10:58:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.77	Ton
1124520958	10/10/2022	11:03:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.85	Ton
1124520960	10/10/2022	11:15:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.83	Ton
1124520961	10/10/2022	11:20:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.74	Ton
1124520962	10/10/2022	11:24:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.58	Ton
1124520963	10/10/2022	11:28:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.63	Ton
1124520967	10/10/2022	11:42:36 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.29	Ton
1124520968	10/10/2022	11:46:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.46	Ton
1124520970	10/10/2022	11:51:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.32	Ton
1124520972	10/10/2022	11:56:22 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.28	Ton
1124520974	10/10/2022	12:50:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.29	Ton
1124520975	10/10/2022	12:54:43 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.33	Ton
1124520976	10/10/2022	12:59:18 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.32	Ton
1124520977	10/10/2022	1:06:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	16.85	Ton
1124520981	10/10/2022	1:20:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.18	Ton
1124520982	10/10/2022	1:24:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.64	Ton
1124520983	10/10/2022	1:29:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.45	Ton
1124520985	10/10/2022	1:34:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	15.67	Ton
1124520987	10/10/2022	1:48:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.17	Ton
1124520988	10/10/2022	1:51:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.01	Ton
1124520989	10/10/2022	1:55:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.62	Ton
1124520990	10/10/2022	2:00:13 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.91	Ton
1124520992	10/10/2022	2:18:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.76	Ton
1124520993	10/10/2022	2:22:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.06	Ton
1124520994	10/10/2022	2:26:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.99	Ton
1124520995	10/10/2022	2:31:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	13.83	Ton
1124520996	10/10/2022	2:45:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	17.46	Ton

1124520997	10/10/2022	2:50:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.32	Ton
1124520998	10/10/2022	2:55:26 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.77	Ton
1124520999	10/10/2022	3:00:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	15.64	Ton
1124521000	10/10/2022	3:15:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.57	Ton
1124521001	10/10/2022	3:21:00 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.32	Ton
1124521002	10/10/2022	3:26:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.60	Ton
1124521003	10/10/2022	3:31:50 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.76	Ton
1124521007	10/11/2022	8:16:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.97	Ton
1124521009	10/11/2022	8:22:22 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.54	Ton
1124521012	10/11/2022	8:33:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.82	Ton
1124521014	10/11/2022	8:37:04 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	17.20	Ton
1124521016	10/11/2022	8:47:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	19.08	Ton
1124521018	10/11/2022	8:53:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	18.78	Ton
1124521020	10/11/2022	9:02:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.47	Ton
1124521021	10/11/2022	9:06:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.96	Ton
1124521023	10/11/2022	9:17:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	16.05	Ton
1124521024	10/11/2022	9:27:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.72	Ton
1124521025	10/11/2022	9:33:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	14.81	Ton
1124521027	10/11/2022	9:38:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.98	Ton
1124521030	10/11/2022	9:45:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.07	Ton
1124521032	10/11/2022	9:54:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.24	Ton
1124521033	10/11/2022	9:58:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	14.67	Ton
1124521036	10/11/2022	10:04:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.83	Ton
1124521038	10/11/2022	10:15:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	15.57	Ton
1124521040	10/11/2022	10:21:05 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.00	Ton
1124521042	10/11/2022	10:25:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.29	Ton
1124521043	10/11/2022	10:34:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.69	Ton
1124521044	10/11/2022	10:43:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	14.66	Ton
1124521045	10/11/2022	10:47:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.06	Ton
1124521046	10/11/2022	10:52:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	13.03	Ton
1124521047	10/11/2022	10:58:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	12.89	Ton
1124521050	10/11/2022	11:13:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	10.83	Ton
1124521051	10/11/2022	11:15:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.77	Ton
1124521053	10/11/2022	11:20:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	12.83	Ton
1124521055	10/11/2022	11:29:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.49	Ton
1124521056	10/11/2022	11:38:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	11.55	Ton
1124521058	10/11/2022	11:44:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.44	Ton
1124521060	10/11/2022	11:52:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	13.61	Ton
1124521061	10/11/2022	11:56:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.53	Ton
1124521063	10/11/2022	12:08:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	10.71	Ton
1124521065	10/11/2022	12:16:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.22	Ton
1124521066	10/11/2022	12:29:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	12.82	Ton
1124521069	10/11/2022	12:37:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	12.88	Ton
1124521070	10/11/2022	12:39:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	11.79	Ton
1124521072	10/11/2022	12:43:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.49	Ton
1124521076	10/11/2022	1:19:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.14	Ton
1124521078	10/11/2022	1:26:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.05	Ton
1124521079	10/11/2022	1:30:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	10.96	Ton
1124521080	10/11/2022	1:34:22 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.85	Ton
1124521082	10/11/2022	1:47:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.84	Ton
1124521084	10/11/2022	1:57:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS1	15.93	Ton
1124521085	10/11/2022	2:04:02 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR77	10.67	Ton

1124521088	10/11/2022	2:16:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.17	Ton
1124521100	10/12/2022	8:38:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.89	Ton
1124521104	10/12/2022	9:11:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	12.59	Ton
1124521112	10/12/2022	10:15:55 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87TT	0.00	Ton
1124521113	10/12/2022	10:21:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.39	Ton
1124521115	10/12/2022	10:27:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.75	Ton
1124521120	10/12/2022	11:00:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	12.72	Ton
1124521121	10/12/2022	11:01:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	15.09	Ton
1124521123	10/12/2022	11:06:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.32	Ton
1124521124	10/12/2022	11:10:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.06	Ton
1124521126	10/12/2022	11:24:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	15.00	Ton
1124521127	10/12/2022	11:34:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	13.00	Ton
1124521129	10/12/2022	11:41:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.60	Ton
1124521131	10/12/2022	11:50:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.94	Ton
1124521133	10/12/2022	11:59:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	16.05	Ton
1124521136	10/12/2022	12:10:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	14.33	Ton
1124521137	10/12/2022	12:15:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.00	Ton
1124521139	10/12/2022	12:20:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.63	Ton
1124521144	10/12/2022	1:07:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.65	Ton
1124521145	10/12/2022	1:17:38 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	15.00	Ton
1124521146	10/12/2022	1:24:54 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.25	Ton
1124521147	10/12/2022	1:34:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.70	Ton
1124521151	10/12/2022	1:55:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	15.81	Ton
1124521153	10/12/2022	2:02:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	15.28	Ton
1124521154	10/12/2022	2:09:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.00	Ton
1124521156	10/12/2022	2:15:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.08	Ton
1124521158	10/12/2022	2:26:08 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	14.94	Ton
1124521159	10/12/2022	2:36:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	12.85	Ton
1124521160	10/12/2022	2:41:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.84	Ton
1124521161	10/12/2022	2:47:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.01	Ton
1124521162	10/12/2022	2:53:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	13.84	Ton
1124521164	10/12/2022	3:01:51 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	13.85	Ton
1124521165	10/12/2022	3:13:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.42	Ton
1124521166	10/12/2022	3:22:05 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	11.57	Ton
1124521167	10/12/2022	3:30:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	ERS4	13.41	Ton
1124521169	10/13/2022	7:59:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.12	Ton
1124521171	10/13/2022	8:11:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.23	Ton
1124521172	10/13/2022	8:14:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	14.20	Ton
1124521173	10/13/2022	8:22:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	13.92	Ton
1124521174	10/13/2022	8:25:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.76	Ton
1124521175	10/13/2022	8:36:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.38	Ton
1124521177	10/13/2022	8:44:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.78	Ton
1124521179	10/13/2022	8:50:58 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	15.92	Ton
1124521181	10/13/2022	8:57:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.25	Ton
1124521184	10/13/2022	9:08:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.06	Ton
1124521186	10/13/2022	9:13:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.01	Ton
1124521188	10/13/2022	9:24:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	15.16	Ton
1124521189	10/13/2022	9:30:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.65	Ton
1124521191	10/13/2022	9:37:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.60	Ton
1124521192	10/13/2022	9:43:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.19	Ton
1124521196	10/13/2022	10:00:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	13.95	Ton
1124521197	10/13/2022	10:03:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.85	Ton

1124521200	10/13/2022	10:09:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.65	Ton
1124521201	10/13/2022	10:15:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	14.48	Ton
1124521203	10/13/2022	10:27:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.96	Ton
1124521204	10/13/2022	10:32:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	14.11	Ton
1124521206	10/13/2022	10:38:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.11	Ton
1124521207	10/13/2022	10:44:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.52	Ton
1124521210	10/13/2022	10:54:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.20	Ton
1124521212	10/13/2022	10:59:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	14.58	Ton
1124521214	10/13/2022	11:06:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.25	Ton
1124521215	10/13/2022	11:11:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.41	Ton
1124521218	10/13/2022	11:20:43 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.34	Ton
1124521219	10/13/2022	11:26:04 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	12.81	Ton
1124521221	10/13/2022	11:34:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.71	Ton
1124521223	10/13/2022	11:40:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.38	Ton
1124521225	10/13/2022	11:50:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.83	Ton
1124521226	10/13/2022	11:55:05 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	14.54	Ton
1124521227	10/13/2022	12:03:07 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.01	Ton
1124521234	10/13/2022	12:51:02 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.39	Ton
1124521236	10/13/2022	12:55:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.21	Ton
1124521238	10/13/2022	1:00:07 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	14.07	Ton
1124521239	10/13/2022	1:04:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.76	Ton
1124521242	10/13/2022	1:17:52 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	14.57	Ton
1124521243	10/13/2022	1:22:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.61	Ton
1124521245	10/13/2022	1:34:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	16.43	Ton
1124521246	10/13/2022	1:36:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.44	Ton
1124521248	10/13/2022	1:55:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR87	14.84	Ton
1124521251	10/13/2022	2:03:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.49	Ton
1124521252	10/13/2022	2:08:03 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	14.16	Ton
1124521254	10/13/2022	2:15:48 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.59	Ton
1124521255	10/13/2022	2:27:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RTR83	15.26	Ton
1124521256	10/13/2022	2:33:51 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.00	Ton
1124521257	10/13/2022	2:44:45 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	HIN5	11.99	Ton
1124521258	10/13/2022	2:54:53 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	14.04	Ton
1124522151	12/1/2022	10:11:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	19.01	Ton
1124522152	12/1/2022	10:15:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	19.54	Ton
1124522153	12/1/2022	10:17:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	18.94	Ton
1124522154	12/1/2022	10:39:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.94	Ton
1124522155	12/1/2022	10:45:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.85	Ton
1124522156	12/1/2022	10:47:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.89	Ton
1124522157	12/1/2022	10:52:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.94	Ton
1124522158	12/1/2022	11:06:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.94	Ton
1124522159	12/1/2022	11:10:36 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.47	Ton
1124522160	12/1/2022	11:13:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.74	Ton
1124522161	12/1/2022	11:17:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.53	Ton
1124522162	12/1/2022	11:30:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.50	Ton
1124522163	12/1/2022	11:37:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.33	Ton
1124522164	12/1/2022	11:40:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.30	Ton
1124522165	12/1/2022	11:42:36 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.46	Ton
1124522166	12/1/2022	11:54:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.58	Ton
1124522167	12/1/2022	12:03:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.98	Ton
1124522168	12/1/2022	12:06:54 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.86	Ton
1124522169	12/1/2022	12:10:02 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	18.37	Ton

1124522170	12/1/2022	12:20:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.71	Ton
1124522171	12/1/2022	12:29:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.95	Ton
1124522172	12/1/2022	12:32:26 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.19	Ton
1124522173	12/1/2022	12:35:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.26	Ton
1124522174	12/1/2022	12:45:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.52	Ton
1124522175	12/1/2022	12:56:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.84	Ton
1124522176	12/1/2022	12:58:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.97	Ton
1124522177	12/1/2022	1:02:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.52	Ton
1124522178	12/1/2022	1:10:38 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.66	Ton
1124522179	12/1/2022	1:21:43 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.73	Ton
1124522180	12/1/2022	1:25:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.52	Ton
1124522181	12/1/2022	1:26:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.29	Ton
1124522182	12/1/2022	1:35:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.01	Ton
1124522185	12/1/2022	1:49:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.17	Ton
1124522186	12/1/2022	1:50:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.04	Ton
1124522187	12/1/2022	1:52:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.16	Ton
1124522188	12/1/2022	2:02:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.82	Ton
1124522189	12/1/2022	2:14:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.53	Ton
1124522190	12/1/2022	2:18:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.02	Ton
1124522191	12/1/2022	2:21:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.82	Ton
1124522192	12/1/2022	2:28:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.09	Ton
1124522193	12/1/2022	2:38:59 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.18	Ton
1124522194	12/1/2022	2:43:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.66	Ton
1124522195	12/1/2022	2:46:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.86	Ton
1124522196	12/1/2022	2:54:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.44	Ton
1124522197	12/1/2022	3:07:03 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.19	Ton
1124522198	12/1/2022	3:08:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.76	Ton
1124522199	12/1/2022	3:14:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.80	Ton
1124522200	12/1/2022	3:19:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.09	Ton
1124522201	12/1/2022	3:32:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.58	Ton
1124522202	12/1/2022	3:35:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.19	Ton
1124522203	12/1/2022	3:41:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.46	Ton
1124522204	12/1/2022	3:45:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.25	Ton
1124522232	12/6/2022	8:55:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.78	Ton
1124522233	12/6/2022	8:59:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.23	Ton
1124522234	12/6/2022	9:01:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.07	Ton
1124522235	12/6/2022	9:03:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.23	Ton
1124522236	12/6/2022	9:08:31 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.03	Ton
1124522238	12/6/2022	9:22:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.36	Ton
1124522240	12/6/2022	9:28:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.51	Ton
1124522241	12/6/2022	9:30:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.69	Ton
1124522242	12/6/2022	9:33:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.38	Ton
1124522243	12/6/2022	9:35:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.00	Ton
1124522245	12/6/2022	9:46:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.26	Ton
1124522247	12/6/2022	9:54:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.17	Ton
1124522248	12/6/2022	9:56:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.45	Ton
1124522250	12/6/2022	10:00:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.09	Ton
1124522251	12/6/2022	10:02:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	11.49	Ton
1124522252	12/6/2022	10:14:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.43	Ton
1124522253	12/6/2022	10:20:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.03	Ton
1124522254	12/6/2022	10:24:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	11.77	Ton
1124522255	12/6/2022	10:31:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.35	Ton

1124522257	12/6/2022	10:49:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.45	Ton
1124522258	12/6/2022	10:54:20 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.31	Ton
1124522259	12/6/2022	10:55:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.89	Ton
1124522260	12/6/2022	10:57:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.54	Ton
1124522261	12/6/2022	11:01:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.49	Ton
1124522263	12/6/2022	11:12:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	16.18	Ton
1124522264	12/6/2022	11:19:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.20	Ton
1124522266	12/6/2022	11:23:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.83	Ton
1124522267	12/6/2022	11:24:55 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	17.84	Ton
1124522268	12/6/2022	11:29:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.47	Ton
1124522271	12/6/2022	11:40:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.22	Ton
1124522272	12/6/2022	11:43:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.66	Ton
1124522273	12/6/2022	11:50:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.82	Ton
1124522274	12/6/2022	11:51:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.83	Ton
1124522276	12/6/2022	11:54:58 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.02	Ton
1124522277	12/6/2022	12:02:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	16.09	Ton
1124522279	12/6/2022	12:09:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	17.18	Ton
1124522280	12/6/2022	12:16:08 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	17.91	Ton
1124522282	12/6/2022	12:19:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	17.29	Ton
1124522283	12/6/2022	12:24:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.72	Ton
1124522285	12/6/2022	12:30:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	17.49	Ton
1124522299	12/7/2022	7:54:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.45	Ton
1124522300	12/7/2022	7:57:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.83	Ton
1124522301	12/7/2022	7:59:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.66	Ton
1124522302	12/7/2022	8:02:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.58	Ton
1124522303	12/7/2022	8:06:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.71	Ton
1124522304	12/7/2022	8:09:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.50	Ton
1124522305	12/7/2022	8:18:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.82	Ton
1124522307	12/7/2022	8:24:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.48	Ton
1124522308	12/7/2022	8:25:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.30	Ton
1124522309	12/7/2022	8:27:42 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.14	Ton
1124522310	12/7/2022	8:31:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.38	Ton
1124522311	12/7/2022	8:33:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	16.47	Ton
1124522312	12/7/2022	8:44:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.94	Ton
1124522313	12/7/2022	8:49:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.09	Ton
1124522314	12/7/2022	8:52:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.11	Ton
1124522316	12/7/2022	9:01:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.74	Ton
1124522317	12/7/2022	9:02:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.62	Ton
1124522318	12/7/2022	9:03:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.45	Ton
1124522320	12/7/2022	9:11:22 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.06	Ton
1124522323	12/7/2022	9:18:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.34	Ton
1124522324	12/7/2022	9:19:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.63	Ton
1124522325	12/7/2022	9:24:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.14	Ton
1124522327	12/7/2022	9:36:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.99	Ton
1124522329	12/7/2022	9:42:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	17.30	Ton
1124522330	12/7/2022	9:44:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.93	Ton
1124522331	12/7/2022	9:45:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.51	Ton
1124522333	12/7/2022	9:49:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.25	Ton
1124522334	12/7/2022	9:50:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.07	Ton
1124522336	12/7/2022	10:04:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	18.78	Ton
1124522337	12/7/2022	10:07:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	16.67	Ton
1124522338	12/7/2022	10:11:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	19.27	Ton

1124522339	12/7/2022	10:12:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.53	Ton
1124522340	12/7/2022	10:18:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.96	Ton
1124522341	12/7/2022	10:20:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.61	Ton
1124522343	12/7/2022	10:28:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.49	Ton
1124522344	12/7/2022	10:30:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	16.22	Ton
1124522345	12/7/2022	10:35:58 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.98	Ton
1124522346	12/7/2022	10:40:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.37	Ton
1124522347	12/7/2022	10:42:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.75	Ton
1124522348	12/7/2022	10:44:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.94	Ton
1124522349	12/7/2022	10:52:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.71	Ton
1124522350	12/7/2022	10:54:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.37	Ton
1124522351	12/7/2022	11:00:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.99	Ton
1124522353	12/7/2022	11:06:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.93	Ton
1124522354	12/7/2022	11:08:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.81	Ton
1124522355	12/7/2022	11:12:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.34	Ton
1124522356	12/7/2022	11:19:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.45	Ton
1124522357	12/7/2022	11:20:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.31	Ton
1124522359	12/7/2022	11:27:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.87	Ton
1124522361	12/7/2022	11:31:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.06	Ton
1124522364	12/7/2022	11:38:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.70	Ton
1124522365	12/7/2022	11:40:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.45	Ton
1124522367	12/7/2022	11:58:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.05	Ton
1124522368	12/7/2022	11:59:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.93	Ton
1124522369	12/7/2022	12:02:12 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.95	Ton
1124522370	12/7/2022	12:04:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.96	Ton
1124522371	12/7/2022	12:06:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.20	Ton
1124522372	12/7/2022	12:08:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.50	Ton
1124522375	12/7/2022	12:21:22 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.69	Ton
1124522376	12/7/2022	12:23:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.70	Ton
1124522379	12/7/2022	12:29:05 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.34	Ton
1124522380	12/7/2022	12:30:40 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.41	Ton
1124522381	12/7/2022	12:32:02 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.11	Ton
1124522382	12/7/2022	12:36:18 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.82	Ton
1124522383	12/7/2022	12:46:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.86	Ton
1124522384	12/7/2022	12:49:10 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.29	Ton
1124522386	12/7/2022	12:55:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.89	Ton
1124522387	12/7/2022	12:56:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.54	Ton
1124522389	12/7/2022	1:00:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.38	Ton
1124522390	12/7/2022	1:01:54 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.59	Ton
1124522391	12/7/2022	1:13:10 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	10.95	Ton
1124522392	12/7/2022	1:16:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.69	Ton
1124522393	12/7/2022	1:21:29 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.02	Ton
1124522394	12/7/2022	1:24:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	17.01	Ton
1124522396	12/7/2022	1:27:38 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.69	Ton
1124522398	12/7/2022	1:31:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.51	Ton
1124522399	12/7/2022	1:35:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.11	Ton
1124522400	12/7/2022	1:41:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.11	Ton
1124522401	12/7/2022	1:46:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.06	Ton
1124522402	12/7/2022	1:51:26 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.37	Ton
1124522403	12/7/2022	1:54:21 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.60	Ton
1124522404	12/7/2022	1:56:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.32	Ton
1124522405	12/7/2022	2:01:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.42	Ton

1124522406	12/7/2022	2:05:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.97	Ton
1124522407	12/7/2022	2:11:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.47	Ton
1124522408	12/7/2022	2:17:22 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.44	Ton
1124522409	12/7/2022	2:19:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.66	Ton
1124522410	12/7/2022	2:21:00 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.73	Ton
1124522411	12/7/2022	2:27:51 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.32	Ton
1124522412	12/7/2022	2:31:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.38	Ton
1124522414	12/7/2022	2:44:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.74	Ton
1124522415	12/7/2022	2:45:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.59	Ton
1124522416	12/7/2022	2:48:58 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.55	Ton
1124522417	12/7/2022	2:52:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.73	Ton
1124522418	12/7/2022	2:59:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.83	Ton
1124522419	12/7/2022	3:09:48 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.59	Ton
1124522420	12/7/2022	3:12:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.65	Ton
1124522421	12/7/2022	3:14:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.61	Ton
1124522422	12/7/2022	3:17:10 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.60	Ton
1124522423	12/7/2022	3:22:30 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.79	Ton
1124522424	12/7/2022	3:28:03 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.36	Ton
1124522425	12/7/2022	3:34:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.94	Ton
1124522426	12/7/2022	3:38:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.13	Ton
1124522427	12/7/2022	3:42:37 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.14	Ton
1124522428	12/7/2022	3:44:40 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.84	Ton
1124522429	12/7/2022	3:47:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.13	Ton
1124522430	12/8/2022	8:10:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.36	Ton
1124522431	12/8/2022	8:12:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.05	Ton
1124522432	12/8/2022	8:19:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	10.94	Ton
1124522433	12/8/2022	8:21:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA23	11.52	Ton
1124522434	12/8/2022	8:24:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.03	Ton
1124522435	12/8/2022	8:29:20 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	12.32	Ton
1124522436	12/8/2022	8:30:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	11.06	Ton
1124522438	12/8/2022	8:46:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.81	Ton
1124522439	12/8/2022	8:48:31 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.16	Ton
1124522440	12/8/2022	8:50:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.06	Ton
1124522441	12/8/2022	8:53:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.96	Ton
1124522442	12/8/2022	8:56:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	0.00	Ton
1124522443	12/8/2022	9:01:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.16	Ton
1124522444	12/8/2022	9:03:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.59	Ton
1124522447	12/8/2022	9:12:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.39	Ton
1124522448	12/8/2022	9:16:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.58	Ton
1124522449	12/8/2022	9:21:05 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.29	Ton
1124522450	12/8/2022	9:23:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	11.50	Ton
1124522454	12/8/2022	9:38:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.32	Ton
1124522456	12/8/2022	9:42:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.32	Ton
1124522458	12/8/2022	9:44:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.47	Ton
1124522459	12/8/2022	9:48:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.80	Ton
1124522460	12/8/2022	9:52:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.61	Ton
1124522462	12/8/2022	9:55:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.79	Ton
1124522463	12/8/2022	10:02:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.54	Ton
1124522466	12/8/2022	10:12:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.00	Ton
1124522467	12/8/2022	10:15:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.10	Ton
1124522469	12/8/2022	10:25:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.35	Ton
1124522470	12/8/2022	10:28:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.50	Ton

1124522471	12/8/2022	10:29:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.00	Ton
1124522472	12/8/2022	10:32:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	12.46	Ton
1124522474	12/8/2022	10:38:22 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.87	Ton
1124522475	12/8/2022	10:39:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	11.95	Ton
1124522476	12/8/2022	10:50:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.61	Ton
1124522478	12/8/2022	10:58:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.23	Ton
1124522479	12/8/2022	11:00:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.29	Ton
1124522480	12/8/2022	11:05:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.04	Ton
1124522481	12/8/2022	11:07:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.23	Ton
1124522482	12/8/2022	11:10:35 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.58	Ton
1124522483	12/8/2022	11:18:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.83	Ton
1124522484	12/8/2022	11:24:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.34	Ton
1124522485	12/8/2022	11:25:56 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.63	Ton
1124522486	12/8/2022	11:30:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.90	Ton
1124522487	12/8/2022	11:33:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.36	Ton
1124522489	12/8/2022	11:40:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.20	Ton
1124522490	12/8/2022	11:44:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.57	Ton
1124522491	12/8/2022	11:49:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.84	Ton
1124522492	12/8/2022	11:51:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.47	Ton
1124522493	12/8/2022	11:59:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.96	Ton
1124522495	12/8/2022	12:06:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.06	Ton
1124522497	12/8/2022	12:10:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.42	Ton
1124522498	12/8/2022	12:11:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.98	Ton
1124522500	12/8/2022	12:14:32 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.23	Ton
1124522502	12/8/2022	12:19:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.91	Ton
1124522503	12/8/2022	12:24:17 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.11	Ton
1124522506	12/8/2022	12:34:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.79	Ton
1124522507	12/8/2022	12:35:39 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.35	Ton
1124522509	12/8/2022	12:40:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.89	Ton
1124522510	12/8/2022	12:42:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.03	Ton
1124522511	12/8/2022	12:44:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.13	Ton
1124522513	12/8/2022	12:52:26 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.78	Ton
1124522514	12/8/2022	12:57:53 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.80	Ton
1124522515	12/8/2022	1:02:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.20	Ton
1124522516	12/8/2022	1:08:53 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.63	Ton
1124522519	12/8/2022	1:13:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.11	Ton
1124522521	12/8/2022	1:16:21 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.75	Ton
1124522522	12/8/2022	1:18:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.96	Ton
1124522523	12/8/2022	1:29:13 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.76	Ton
1124522524	12/8/2022	1:34:46 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.83	Ton
1124522525	12/8/2022	1:35:50 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.15	Ton
1124522526	12/8/2022	1:38:48 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.32	Ton
1124522527	12/8/2022	1:41:54 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.63	Ton
1124522528	12/8/2022	1:46:29 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	17.28	Ton
1124522529	12/8/2022	1:54:14 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.52	Ton
1124522531	12/8/2022	2:03:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.29	Ton
1124522532	12/8/2022	2:04:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.07	Ton
1124522533	12/8/2022	2:07:42 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.22	Ton
1124522534	12/8/2022	2:10:52 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.47	Ton
1124522535	12/8/2022	2:14:07 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.82	Ton
1124522536	12/8/2022	2:18:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.67	Ton
1124522537	12/8/2022	2:29:01 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.98	Ton

1124522538	12/8/2022	2:32:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.21	Ton
1124522539	12/8/2022	2:37:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.53	Ton
1124522540	12/8/2022	2:38:40 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.85	Ton
1124522541	12/8/2022	2:41:18 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.52	Ton
1124522542	12/8/2022	2:43:51 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.49	Ton
1124522543	12/8/2022	2:56:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.33	Ton
1124522544	12/8/2022	3:00:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.84	Ton
1124522545	12/8/2022	3:02:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.93	Ton
1124522546	12/8/2022	3:05:13 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.83	Ton
1124522547	12/8/2022	3:08:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.48	Ton
1124522548	12/8/2022	3:10:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.63	Ton
1124522549	12/8/2022	3:26:13 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.16	Ton
1124522550	12/8/2022	3:29:25 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.82	Ton
1124522551	12/8/2022	3:33:02 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.75	Ton
1124522552	12/8/2022	3:34:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.66	Ton
1124522553	12/8/2022	3:36:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.29	Ton
1124522554	12/8/2022	3:39:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.23	Ton
1124522555	12/9/2022	8:09:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.24	Ton
1124522556	12/9/2022	8:13:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.90	Ton
1124522557	12/9/2022	8:16:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.74	Ton
1124522558	12/9/2022	8:20:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.58	Ton
1124522559	12/9/2022	8:23:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.82	Ton
1124522560	12/9/2022	8:26:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.19	Ton
1124522561	12/9/2022	8:35:21 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	0.00	Ton
1124522563	12/9/2022	8:40:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.58	Ton
1124522564	12/9/2022	8:42:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.69	Ton
1124522567	12/9/2022	8:49:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.82	Ton
1124522568	12/9/2022	8:50:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.50	Ton
1124522569	12/9/2022	8:54:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.13	Ton
1124522573	12/9/2022	9:21:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.14	Ton
1124522574	12/9/2022	9:22:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.61	Ton
1124522575	12/9/2022	9:27:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.04	Ton
1124522576	12/9/2022	9:28:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.46	Ton
1124522577	12/9/2022	9:32:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	15.02	Ton
1124522580	12/9/2022	9:40:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	14.07	Ton
1124522581	12/9/2022	9:44:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	13.80	Ton
1124522582	12/9/2022	9:49:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.46	Ton
1124522583	12/9/2022	9:55:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.48	Ton
1124522584	12/9/2022	9:59:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.47	Ton
1124522585	12/9/2022	10:02:20 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.21	Ton
1124522586	12/9/2022	10:18:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.33	Ton
1124522587	12/9/2022	10:21:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.12	Ton
1124522588	12/9/2022	10:24:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.55	Ton
1124522589	12/9/2022	10:26:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.65	Ton
1124522590	12/9/2022	10:29:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.13	Ton
1124522591	12/9/2022	10:36:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.83	Ton
1124522593	12/9/2022	10:49:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.93	Ton
1124522595	12/9/2022	10:56:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.28	Ton
1124522596	12/9/2022	10:59:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.92	Ton
1124522597	12/9/2022	11:02:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	11.81	Ton
1124522599	12/9/2022	11:14:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.97	Ton
1124522600	12/9/2022	11:17:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	13.79	Ton

1124522602	12/9/2022	11:21:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	12.66	Ton
1124522603	12/9/2022	11:23:58 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.96	Ton
1124522605	12/9/2022	11:29:42 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.16	Ton
1124522606	12/9/2022	11:33:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.09	Ton
1124522607	12/9/2022	11:41:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.73	Ton
1124522608	12/9/2022	11:45:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	12.66	Ton
1124522610	12/9/2022	11:49:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	16.69	Ton
1124522611	12/9/2022	11:52:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.58	Ton
1124522612	12/9/2022	11:57:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.06	Ton
1124522613	12/9/2022	11:58:38 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	0.00	Ton
1124522615	12/9/2022	12:02:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.19	Ton
1124522618	12/9/2022	12:10:14 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.05	Ton
1124522620	12/9/2022	12:13:28 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	14.85	Ton
1124522622	12/9/2022	12:19:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	13.78	Ton
1124522623	12/9/2022	12:21:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	10.09	Ton
1124522624	12/9/2022	12:26:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.20	Ton
1124522625	12/9/2022	12:31:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.08	Ton
1124522626	12/9/2022	12:36:34 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.74	Ton
1124522627	12/9/2022	12:44:05 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.86	Ton
1124522628	12/9/2022	12:46:58 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RBT1	15.58	Ton
1124522629	12/9/2022	12:49:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.01	Ton
1124522630	12/9/2022	1:20:59 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.73	Ton
1124522631	12/9/2022	1:25:03 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.67	Ton
1124522632	12/9/2022	1:28:50 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.72	Ton
1124522635	12/9/2022	1:51:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.76	Ton
1124522637	12/9/2022	1:54:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.17	Ton
1124522638	12/9/2022	1:57:53 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV2	16.80	Ton
1124522639	12/9/2022	2:25:50 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.58	Ton
1124522640	12/9/2022	2:27:46 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.50	Ton
1124522968	1/6/2023	1:58:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.18	Ton
1124522969	1/6/2023	2:00:14 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.68	Ton
1124522972	1/6/2023	2:37:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.73	Ton
1124522973	1/6/2023	2:39:51 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	7.52	Ton
1124523114	1/23/2023	2:07:04 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	5.63	Ton
1124523230	1/26/2023	8:06:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.76	Ton
1124523231	1/26/2023	8:10:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.18	Ton
1124523232	1/26/2023	8:13:17 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	14.48	Ton
1124523233	1/26/2023	8:17:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.51	Ton
1124523234	1/26/2023	8:25:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	18.68	Ton
1124523235	1/26/2023	8:41:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.26	Ton
1124523236	1/26/2023	8:42:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.99	Ton
1124523237	1/26/2023	8:44:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	14.70	Ton
1124523238	1/26/2023	8:47:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.65	Ton
1124523239	1/26/2023	8:51:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	16.07	Ton
1124523240	1/26/2023	9:13:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.26	Ton
1124523241	1/26/2023	9:14:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.93	Ton
1124523242	1/26/2023	9:16:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	14.21	Ton
1124523243	1/26/2023	9:18:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	14.84	Ton
1124523244	1/26/2023	9:21:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	17.34	Ton
1124523245	1/26/2023	9:46:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.57	Ton
1124523246	1/26/2023	9:47:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	16.48	Ton
1124523247	1/26/2023	9:49:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	15.61	Ton

1124523248	1/26/2023	9:53:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.55	Ton
1124523249	1/26/2023	9:57:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.75	Ton
1124523250	1/26/2023	10:17:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.78	Ton
1124523251	1/26/2023	10:18:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	15.03	Ton
1124523252	1/26/2023	10:20:07 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	14.49	Ton
1124523253	1/26/2023	10:22:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.42	Ton
1124523254	1/26/2023	10:24:34 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	15.43	Ton
1124523257	1/26/2023	10:47:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.92	Ton
1124523258	1/26/2023	10:49:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.35	Ton
1124523259	1/26/2023	10:50:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	14.80	Ton
1124523260	1/26/2023	10:51:43 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	15.81	Ton
1124523263	1/26/2023	10:58:43 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	13.56	Ton
1124523269	1/26/2023	11:16:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.39	Ton
1124523270	1/26/2023	11:17:58 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	14.87	Ton
1124523271	1/26/2023	11:19:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	13.80	Ton
1124523273	1/26/2023	11:23:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	12.79	Ton
1124523275	1/26/2023	11:26:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	12.23	Ton
1124523280	1/26/2023	11:52:14 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.40	Ton
1124523281	1/26/2023	11:53:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.33	Ton
1124523282	1/26/2023	11:54:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	11.10	Ton
1124523283	1/26/2023	11:56:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	CVT01	10.69	Ton
1124523284	1/26/2023	12:01:14 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR28	11.50	Ton
1124523505	2/1/2023	8:15:25 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.07	Ton
1124523506	2/1/2023	8:17:16 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.57	Ton
1124523507	2/1/2023	8:19:52 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	11.18	Ton
1124523508	2/1/2023	8:22:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	12.53	Ton
1124523509	2/1/2023	8:24:00 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	11.90	Ton
1124523510	2/1/2023	8:27:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	12.36	Ton
1124523511	2/1/2023	8:28:44 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	12.40	Ton
1124523512	2/1/2023	8:30:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	12.64	Ton
1124523513	2/1/2023	8:49:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.05	Ton
1124523514	2/1/2023	8:51:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.44	Ton
1124523515	2/1/2023	8:52:48 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.57	Ton
1124523516	2/1/2023	8:54:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	13.06	Ton
1124523517	2/1/2023	8:57:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	11.17	Ton
1124523518	2/1/2023	9:00:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	10.86	Ton
1124523519	2/1/2023	9:02:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	12.94	Ton
1124523520	2/1/2023	9:05:45 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	13.38	Ton
1124523521	2/1/2023	9:24:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.53	Ton
1124523522	2/1/2023	9:25:33 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.10	Ton
1124523523	2/1/2023	9:27:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.40	Ton
1124523524	2/1/2023	9:28:37 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	12.52	Ton
1124523525	2/1/2023	9:30:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	11.54	Ton
1124523526	2/1/2023	9:32:00 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.64	Ton
1124523527	2/1/2023	9:35:59 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	12.60	Ton
1124523528	2/1/2023	9:38:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	13.83	Ton
1124523529	2/1/2023	10:00:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.34	Ton
1124523530	2/1/2023	10:01:28 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.37	Ton
1124523531	2/1/2023	10:02:43 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.21	Ton
1124523532	2/1/2023	10:03:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	13.47	Ton
1124523533	2/1/2023	10:07:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	12.75	Ton
1124523534	2/1/2023	10:09:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	12.55	Ton

1124523535	2/1/2023	10:12:15 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	13.69	Ton
1124523536	2/1/2023	10:14:09 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	12.80	Ton
1124523537	2/1/2023	10:34:02 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.45	Ton
1124523538	2/1/2023	10:35:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.72	Ton
1124523539	2/1/2023	10:36:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	11.53	Ton
1124523540	2/1/2023	10:39:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	13.52	Ton
1124523541	2/1/2023	10:43:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	12.32	Ton
1124523542	2/1/2023	10:44:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.35	Ton
1124523543	2/1/2023	10:47:26 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	13.20	Ton
1124523544	2/1/2023	10:49:30 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	11.76	Ton
1124523545	2/1/2023	11:06:46 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	12.18	Ton
1124523546	2/1/2023	11:08:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	13.34	Ton
1124523547	2/1/2023	11:09:31 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	13.37	Ton
1124523548	2/1/2023	11:11:05 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	13.42	Ton
1124523549	2/1/2023	11:14:18 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	12.86	Ton
1124523550	2/1/2023	11:16:54 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	12.90	Ton
1124523551	2/1/2023	11:18:43 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	12.37	Ton
1124523552	2/1/2023	11:20:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	11.95	Ton
1124523553	2/1/2023	11:39:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.65	Ton
1124523554	2/1/2023	11:41:10 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.81	Ton
1124523555	2/1/2023	11:42:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.16	Ton
1124523556	2/1/2023	11:43:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	11.50	Ton
1124523557	2/1/2023	11:46:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	12.53	Ton
1124523558	2/1/2023	11:49:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.75	Ton
1124523559	2/1/2023	11:51:11 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	11.27	Ton
1124523560	2/1/2023	11:53:08 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	11.29	Ton
1124523562	2/1/2023	12:14:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.02	Ton
1124523563	2/1/2023	12:15:43 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	11.00	Ton
1124523564	2/1/2023	12:17:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.70	Ton
1124523565	2/1/2023	12:18:13 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	12.30	Ton
1124523566	2/1/2023	12:20:08 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	13.60	Ton
1124523567	2/1/2023	12:21:26 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.14	Ton
1124523568	2/1/2023	12:25:29 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	11.64	Ton
1124523570	2/1/2023	12:28:29 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	10.78	Ton
1124523574	2/1/2023	12:50:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	11.44	Ton
1124523575	2/1/2023	12:51:32 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	12.68	Ton
1124523576	2/1/2023	12:52:59 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	12.33	Ton
1124523578	2/1/2023	12:56:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.65	Ton
1124523580	2/1/2023	12:58:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	11.41	Ton
1124523582	2/1/2023	1:02:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.13	Ton
1124523583	2/1/2023	1:03:58 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	10.98	Ton
1124523585	2/1/2023	1:06:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	10.73	Ton
1124523591	2/1/2023	1:45:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.48	Ton
1124523592	2/1/2023	1:47:19 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	10.37	Ton
1124523593	2/1/2023	1:48:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.32	Ton
1124523594	2/1/2023	1:50:06 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	9.95	Ton
1124523595	2/1/2023	1:53:11 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	9.83	Ton
1124523597	2/1/2023	1:56:36 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	9.62	Ton
1124523598	2/1/2023	1:59:57 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	9.82	Ton
1124523599	2/1/2023	2:02:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	7.95	Ton
1124523603	2/1/2023	2:21:29 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	8.39	Ton
1124523604	2/1/2023	2:22:43 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	9.86	Ton

1124523605	2/1/2023	2:24:41 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.42	Ton
1124523606	2/1/2023	2:26:24 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.06	Ton
1124523608	2/1/2023	2:34:35 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	9.53	Ton
1124523609	2/1/2023	2:36:12 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	9.33	Ton
1124523610	2/1/2023	2:37:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	8.92	Ton
1124523611	2/1/2023	2:40:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	10.24	Ton
1124523612	2/1/2023	3:12:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	9.27	Ton
1124523613	2/1/2023	3:14:16 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	RAM9	9.42	Ton
1124523614	2/1/2023	3:16:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.08	Ton
1124523615	2/1/2023	3:17:32 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.88	Ton
1124523616	2/1/2023	3:22:31 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.80	Ton
1124523617	2/1/2023	3:23:47 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	DIV3	11.50	Ton
1124523618	2/1/2023	3:26:55 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	WOLD8	11.19	Ton
1124523619	2/1/2023	3:29:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GUZ00	12.13	Ton
1124523626	2/2/2023	8:45:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.24	Ton
1124523627	2/2/2023	8:47:00 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.09	Ton
1124523628	2/2/2023	8:48:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.23	Ton
1124523629	2/2/2023	8:50:23 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.33	Ton
1124523630	2/2/2023	8:55:49 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	11.04	Ton
1124523632	2/2/2023	9:24:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	11.21	Ton
1124523633	2/2/2023	9:25:41 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.80	Ton
1124523634	2/2/2023	9:27:04 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.17	Ton
1124523635	2/2/2023	9:28:31 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.82	Ton
1124523636	2/2/2023	9:29:47 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	10.48	Ton
1124523642	2/2/2023	10:07:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	8.93	Ton
1124523643	2/2/2023	10:09:03 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.10	Ton
1124523644	2/2/2023	10:10:57 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.23	Ton
1124523645	2/2/2023	10:14:27 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	11.26	Ton
1124523646	2/2/2023	10:15:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	10.54	Ton
1124523648	2/2/2023	10:51:50 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	8.00	Ton
1124523649	2/2/2023	10:52:55 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	9.73	Ton
1124523650	2/2/2023	10:55:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	9.75	Ton
1124523651	2/2/2023	10:57:13 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	11.31	Ton
1124523652	2/2/2023	11:01:05 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	11.00	Ton
1124523655	2/2/2023	11:32:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.36	Ton
1124523656	2/2/2023	11:33:42 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.87	Ton
1124523657	2/2/2023	11:35:01 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.03	Ton
1124523658	2/2/2023	11:38:06 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	12.54	Ton
1124523659	2/2/2023	11:41:19 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	9.93	Ton
1124523662	2/2/2023	12:14:10 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.82	Ton
1124523663	2/2/2023	12:15:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.32	Ton
1124523664	2/2/2023	12:17:59 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	11.44	Ton
1124523665	2/2/2023	12:20:56 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	10.41	Ton
1124523666	2/2/2023	12:25:58 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	13.12	Ton
1124523667	2/2/2023	1:09:20 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	10.27	Ton
1124523668	2/2/2023	1:10:33 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.78	Ton
1124523670	2/2/2023	1:13:27 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	10.18	Ton
1124523671	2/2/2023	1:16:38 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	9.35	Ton
1124523673	2/2/2023	1:19:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	9.62	Ton
1124523677	2/2/2023	2:07:44 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	6.42	Ton
1124523678	2/2/2023	2:09:03 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	10.76	Ton
1124523679	2/2/2023	2:11:15 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BAR11	9.97	Ton

1124523681	2/2/2023	2:15:09 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	R&B1	11.58	Ton
1124523682	2/2/2023	2:26:12 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	BACK13	13.20	Ton
1124523691	2/3/2023	2:33:48 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 VACTOR WST (BAD2162VAC	5.90	Ton
1124524124	2/20/2023	8:54:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.42	Ton
1124524125	2/20/2023	8:55:51 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.36	Ton
1124524132	2/20/2023	9:29:40 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	14.49	Ton
1124524133	2/20/2023	9:30:53 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.83	Ton
1124524138	2/20/2023	10:05:00 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.40	Ton
1124524139	2/20/2023	10:06:32 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	16.74	Ton
1124524144	2/20/2023	10:45:29 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	16.89	Ton
1124524145	2/20/2023	10:46:39 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	15.32	Ton
1124524152	2/20/2023	11:24:12 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	15.20	Ton
1124524153	2/20/2023	11:25:24 AM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	14.83	Ton
1124524154	2/20/2023	12:05:46 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	COA34	13.46	Ton
1124524155	2/20/2023	12:06:49 PM	INNOVATIVE CONSTRUCTION SOLUTIONS	10121825	CLASS 3 SOILS (TN)	GJR1	18.29	Ton

Tickets: 836

Total: 11,838.82 Tons

03/29/2023 7:14:06 AM

CADMAN - FO

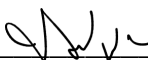


CERTIFICATE OF DESTRUCTION

I, Jeff Sichmeller, of Republic Services
(RSI facility), hereby certify that the entire product described in Section A has
been properly and legally disposed of in Roosevelt Regional MSW Landfill
on November 22, 2022 (attach any appropriate documentation).

I understand that due to potential concerns related to such things as health,
quality, and loss of goodwill, American Distributing Company (Company) does not
want this product to be distributed to consumers, even through so called
“distressed merchandise” channels of trade, and I further certify that these items
were destroyed in such a manner that it cannot be sold, and that the company
has taken every reasonable step to prevent resale of said items.

Name (print): Jeff Sichmeller

Signature: 

Title: BU Finance Mgr Post Collection

Date: 11/30/2022

Section A- Products Destroyed (attached additional sheets if needed):

Waste Profile Number (if applicable): 41782215675

<u>Description of Product</u>	<u>Quantity or Weight</u>
Weathered Creosote Pilings	32.95 Tons

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator ID Number

WAVSOG

2. Page 1 of

3. Emergency Response Phone

888-785-7225

4. Waste Tracking Number

112290/D504828

5. Generator's Name and Mailing Address

ExxonMobil c/o Cardno
309 South Cloverdale Street Unit A13
Seattle, WA 98108

Generator's Site Address (if different than mailing address)

ExxonMobil Oil Corporation
2717 Federal Ave
Everett, WA 98201

Generator's Phone:

206-394-7224

6. Transporter 1 Company Name

U.S. EPA ID Number

Advanced Chemical Transport Inc. DBA ACTenviro

CAR00007054

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

US Ecology Idaho Inc Site B
20400 Lemley Rd
Grandview, ID 83624

U.S. EPA ID Number

IDD07311469

Facility's Phone:

208-834-2275

9. Waste Shipping Name and Description

10. Containers

No.

Type

11. Total
Quantity

12. Unit
Wt./Vol.

1. Non-RCRA/Non-DOT Regulated Material Solid
(ABSORBENT, SAMPLING SUPPLIES)

16

DM

6,400

P

2.

3.

4.

13. Special Handling Instructions and Additional Information

Project Number 412280

Document #: D504828

1) 54056-0 EXU- 16.55 gal DM

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Officer's Printed/Typed Name

Signature

Month Day Year

LAINA COLE ON BEHALF OF EXXONMOBIL

02/03/23

15. International Shipments

☐ Import to U.S.

☐ Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Signature

Month Day Year

Transporter 1 Printed/Typed Name

Scott Loidhaver

02/03/23

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

Month Day Year

17c. Signature of Alternate Facility (or Generator)

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Signature

Month Day Year

Terencia Aranda

12/15/23

CERTIFICATE OF DISPOSAL

March 8, 2023

EXXONMOBILE OIL CORPORATION
2717/2731 FEDERAL AVE
EVERETT, WA 98201

This is to certify that waste as defined on Waste Manifest number 412290/D504828 was received by U.S. Ecology, Inc., on 2/15/2023. The waste(s) were subsequently treated, if required by CFR Part 268 and U.S. Ecology's permits, and disposed of on 02/15/2023 in accordance with permits and laws regulating this facility.

Reference Number: 23021400618-412290/D504828-1-1

Material: 16 55 GALLON DRUM

Process: Direct Landfill

Management Code: H132 Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)

Facility: US ECOLOGY IDAHO, INC.
20400 LEMLEY ROAD
GRAND VIEW, ID 83624
EPA ID: IDD073114654

Waste Stream #: 54056-0

Waste Type: NON-HAZARDOUS

Customer: ADVANCED CHEMICAL TRANSPORT

Printed Name: CORIAN SCHMITZ

Signature:

A handwritten signature in cursive script that reads "Corian Schmitz". The signature is written in dark ink and is positioned above a solid horizontal line.

Title: RECEIVING CLERK

NON-HAZARDOUS
WASTE MANIFEST1. Generator ID Number
WAVSQG2. Page 1 of
13. Emergency Response Phone
888-785-72254. Waste Tracking Number
420640/D511965

5. Generator's Name and Mailing Address

ExxonMobil c/o Cardno
309 South Cloverdale Street, Unit A13
Seattle, WA 98108

Generator's Phone 206-394-7224

Generator's Site Address (if different than mailing address)

ExxonMobil Oil Corporation
2717 Federal Ave
Everett, WA 98201

6. Transporter 1 Company Name

Advanced Chemical Transport Inc./DBA ACTenviro

U.S. EPA ID Number

CAR000070540

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

US Ecology Idaho Inc Site B
20400 Lemley Rd
Grandview, ID 83624

U.S. EPA ID Number

IDD07311465

Facility's Phone 208-834-2275

9. Waste Shipping Name and Description

10. Containers

No.

Type

11. Total
Quantity12. Unit
Wt./Vol.1. Non-RCRA/Non-DOT Regulated Material Solid
(ABSORBENT, SAMPLING SUPPLIES)

6

DM

1200

P

2.

3.

4.

13. Special Handling Instructions and Additional Information

Project Number 420640

Document #: D511965

1) 54056-0 EXU-~~CXSS~~ DM

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Officer's Printed/Typed Name

Signature

K. RUPERT P. LITTON BEHALF OF ExxonMobil Corporation

Month Day Year
3 3 23

15. International Shipments

☐

Import to U.S.

☐

Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Jason Simmons

Month Day Year
3 3 23

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐

Quantity

☐

Type

☐

Residue

☐

Partial Rejection

☐

Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

Month Day Year

17c. Signature of Alternate Facility (or Generator)

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name

Signature

Brian Schmitz

Brian Schmitz

Month Day Year
3 12 23

CERTIFICATE OF DISPOSAL

May 2, 2023

EXXONMOBILE OIL CORPORATION
2717/2731 FEDERAL AVE
EVERETT, WA 98201

This is to certify that waste as defined on Waste Manifest number 420640/D511965 was received by U.S. Ecology, Inc., on 3/22/2023. The waste(s) were subsequently treated, if required by CFR Part 268 and U.S. Ecology's permits, and disposed of on 03/22/2023 in accordance with permits and laws regulating this facility.

Reference Number: 23032201096-420640/D511965-1-1

Material: 6 55 GALLON DRUM

Process: Direct Landfill

Management Code: H132 Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)

Facility: US ECOLOGY IDAHO, INC.
20400 LEMLEY ROAD
GRAND VIEW, ID 83624
EPA ID: IDD073114654

Waste Stream #: 54056-0

Waste Type: NON-HAZARDOUS

Customer: ADVANCED CHEMICAL TRANSPORT

Printed Name: CORIAN SCHMITZ

Signature:

A handwritten signature in cursive script that reads "Corian Schmitz". The signature is written in dark ink and is positioned above a solid horizontal line.

Title: RECEIVING CLERK



Activated Carbon Products & Services

PO Box 1346 – Ridgefield, WA 98642

Phone: (360) 727-3775

Email: Info@PacificCoastCarbon.com

May 5th, 2023

American Distribution Company

Attn: Steve Miller

13618 NW 45th Ave NE

Marysville, WA 98271

360-658-3571

This letter certifies the following spent carbon received at the Pacific Coast- Biosphere Carbon facility was reactivated in accordance with 40 CFR Part 265 and part 61 regulations:

Generators Site Address: **2730 Federal Ave, Everett, WA 98201**

Profile Number: **L-23101**

Shipping Documentation number: **SO-23171 (Bill of lading)**

Date of Receipt: **03/14/23**

Qty Container & Type: **(8) DOT-bulk bags (~8,000 lbs. dry weight)**

Reactivation Date: **05/04/23**

Under civil and criminal penalties of law for false and or fraudulent statements or representations, I verify the information contained above is accurate, true and complete. As to the identified sections(s) of this certificate for which I cannot personally verify accuracy and truth, I certify as the company official and having company authority and responsibility for the persons who, acting under my direct instructions, made the verification that this information is accurate, true and complete.

Sincerely,

Alex Peru

Alex Peru
President