



**202510100078**

10/10/2025 03:26 PM Pages: 1 of 51 Fees: \$353.50  
Skagit County Auditor

After Recording Return  
Original Signed Covenant to:

**Erik G. Snyder**  
HQ Section Manager  
Toxics Cleanup Program  
Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600

## **Environmental Covenant**

**Grantor:** Port of Anacortes

**Grantee:** State of Washington, Department of Ecology (hereafter "Ecology")

**Brief Legal Description:** See Exhibit A

**Tax Parcel Nos.:** P32866, P32867, P32898, P32903, P32904, P32905, P32906, P32907,  
P54924, P55030, P55031, P56539 12/35/02 et al

**Cleanup Site ID (CSID):** 5174

**Site Name:** Anacortes Port of Dakota Creek

## **RECITALS**

a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70A.305 RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.

b. The Property that is the subject of this Covenant is part or all of a site commonly known as **Anacortes Port of Dakota Creek, Facility ID 2670**. The Property is legally described in Exhibit A, and illustrated in Exhibit B, both of which are attached (hereafter “Property”). If there are differences between these two Exhibits, the legal description in Exhibit A shall prevail.

c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on the Property after completion of remedial actions. Specifically, the following principal contaminants remain on the Property:

| Medium                 | Principal Contaminants Present                                 |
|------------------------|----------------------------------------------------------------|
| Soil                   | arsenic, nickel, carcinogenic polycyclic aromatic hydrocarbons |
| Groundwater            | arsenic, nickel, carcinogenic polycyclic aromatic hydrocarbons |
| Surface Water/Sediment | none                                                           |

d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment, and the integrity of remedial actions conducted at the site. Records describing the extent of residual contamination and remedial actions conducted are available through Ecology at <https://apps.ecology.wa.gov/cleanupsearch/site/5174>. These records include the following documents:

- GeoEngineers, 2022. Final Remedial Investigation/Feasibility Study Report Dakota Creek Industries Anacortes, Washington Ecology Agreed Order No. DE-07TCPHQ-5080. October 27.
- Washington Department of Ecology, 2022. Cleanup Action Plan Dakota Creek Industries Anacortes, Washington. July.
- GeoEngineers, 2022. Engineering Design Report Dakota Creek Industries Anacortes, Washington. November 1.
- GeoEngineers, 2023. Construction Completion Report Dakota Creek Industries Site Anacortes, Washington. December 7.
- Geoengineers, 2024. Engineering and Institutional Controls Monitoring and Maintenance Plan. May 2.

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property; however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 *et seq.* The rights of Ecology as an “agency” under UECA, other than its right as a holder, are not an interest in real property.

## COVENANT

Port of Anacortes, as Grantor and fee simple owner of the Property, hereby grants to the Washington State Department of Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the GRANTOR has in the property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

### **Section 1. General Restrictions and Requirements.**

The following general restrictions and requirements shall apply to the Property:

**a. Interference with Remedial Action.** The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection, or monitoring of that remedial action without prior written approval from Ecology.

**b. Protection of Human Health and the Environment.** The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.

**c. Continued Compliance Required.** Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance, and monitoring of remedial actions and continued compliance with this Covenant.

**d. Leases.** Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property.

**e. Preservation of Reference Monuments.** Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within thirty (30) days of discovery of the damage or destruction.

## **Section 2. Specific Prohibitions and Requirements.**

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

**a. Land Use.** The remedial action for the Property is based on a cleanup designed for industrial property. As such, the Property shall be used in perpetuity only for industrial uses, as that term is defined in the rules promulgated under chapter 70A.305 RCW. Prohibited uses on the Property include but are not limited to residential uses, childcare facilities, K-12 public or private schools, parks, grazing of animals, growing of food crops, and non-industrial commercial uses.

**b. Containment of Soil.** The remedial action for the Property is based on containing contaminated soil under a cap consisting of an approximate 4-6" asphalt layer and/or concrete layer in addition to gravel pavement/working surfaces and located as illustrated in Exhibits C and D. The primary purpose of this cap is to contain contamination and mitigate risk of direct human/terrestrial wildlife contact with contaminated soils and minimize leaching of contaminants to the groundwater and surface water. As such, the following restrictions shall apply within the area illustrated in Exhibit C:

**i.** With the exception of activities carried out consistent with Section 2(b)(ii), any activity on the Property that will compromise the integrity of the cap including: drilling; digging; piercing the cap with sampling device, post, stake or similar device; grading; excavation; installation of underground utilities; removal of the cap; or, application of loads in excess of the cap load bearing capacity, is prohibited without prior written approval by Ecology. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to the cap. Unless an alternative plan has been approved



by Ecology in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

ii. Exceptions to the restricted activities are described in the *Engineering and Institutional Controls Monitoring and Maintenance Plan* dated May 2, 2024, attached hereto as Exhibit E. Activities that disturb the capped areas shall be performed subject to any applicable requirements in the *Engineering and Institutional Controls Monitoring and Maintenance Plan*. The Grantor shall not conduct such activities without prior written notice to Ecology as set forth in Section 2(b)(i), above.

iii. The Grantor covenants and agrees that it shall annually, or at another time as approved in writing by Ecology, inspect the cap and report within sixty (60) days of the inspection the condition of the cap and any changes to the cap that would impair its performance.

**c. Stormwater facilities.** To minimize the potential for mobilization of contaminants remaining in the soil and groundwater on the Property, no new stormwater infiltration facilities or ponds shall be constructed on the Property without approval from Ecology. All stormwater catch basins, conveyance systems, and other appurtenances located within this area shall be of water-tight construction.

**d. Groundwater Use.** The groundwater beneath the Property remains contaminated and shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring, or remediation. Drilling of a well for any water supply purpose is strictly prohibited. Groundwater extracted from the Property for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

**e. Monitoring.** Several groundwater monitoring wells are located on the Property to monitor the performance of the remedial action. The Grantor shall maintain clear access to these devices and protect them from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring device. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

### **Section 3. Access.**

- a.** The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor, and maintain the remedial action.
- b.** The Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.
- c.** No right of access or use by a third party to any portion of the Property is conveyed by this instrument.

### **Section 4. Notice Requirements.**

**a. Conveyance of Any Interest.** The Grantor, when conveying any interest in any part of the property, including but not limited to title, easement, leases, and security or other interests, must:

- i.** Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.
- ii.** Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

**NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON [DATE] AND RECORDED WITH THE SKAGIT COUNTY AUDITOR UNDER RECORDING NUMBER [RECORDING NUMBER]. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.**

- iii.** Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days of the date of execution of such document.
- b. Reporting Violations.** Should the Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

**c. Emergencies.** For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within twenty-four (24) hours of the discovery of the event.

**d. Notification procedure.** Any required written notice, approval, reporting or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to personal delivery or first-class mail, such as e-mail or other electronic means, may be used for these communications.

Director of Planning, Properties & Environmental  
Port of Anacortes  
100 Commercial Avenue  
Anacortes, WA 98221  
(360) 293-3134

Environmental Covenants Coordinator  
Washington State Department of Ecology  
Toxics Cleanup Program  
P.O. Box 47600  
Olympia, WA 98504-7600  
(360) 407-6000  
ToxicsCleanupProgramHQ@ecy.wa.gov

## **Section 5. Modification or Termination.**

**a.** Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site:

- i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and
- ii. If Ecology approves of the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

**b.** If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

c. By signing this agreement, per RCW 64.70.100, the original signatories to this agreement, other than Ecology, agree to waive all rights to sign amendments to and termination of this Covenant.

## **Section 6. Enforcement and Construction.**

a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within ten (10) days of execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay, or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.

d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.

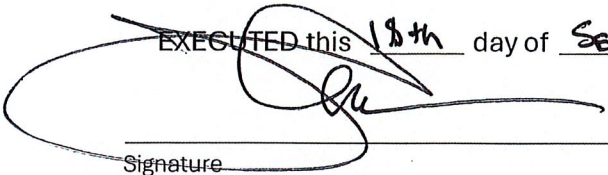
e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.

f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.

g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

The undersigned Grantor warrants he/she holds the title to the Property and has authority to execute this Covenant.

EXECUTED this 18th day of SEPTEMBER, 2025.

  
Signature

by: JOHN DUMAS  
Printed name

Title: EXECUTIVE DIRECTOR

#### REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF Washington

COUNTY OF Skagit

On this 18th day of Sept, 2025, I certify that John Dumas personally appeared before me, acknowledged that ~~he/she~~ signed this instrument, on oath stated that ~~he/she~~ was authorized to execute this instrument, and acknowledged it as the Executive Director of the Port of Anacortes to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.



YS/John com #138568  
Notary Public in and for the State of Washington<sup>4</sup>

Residing at Skagit Co.

My appointment expires 9/20/2028

Ecology hereby accepts the status as GRANTEE and HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

  
\_\_\_\_\_  
Signature

By: Erik G. Snyder

Title: Toxics Cleanup Program,  
Headquarters Section Manager

Dated: 9/30/2025

## Exhibit A

### LEGAL DESCRIPTIONS

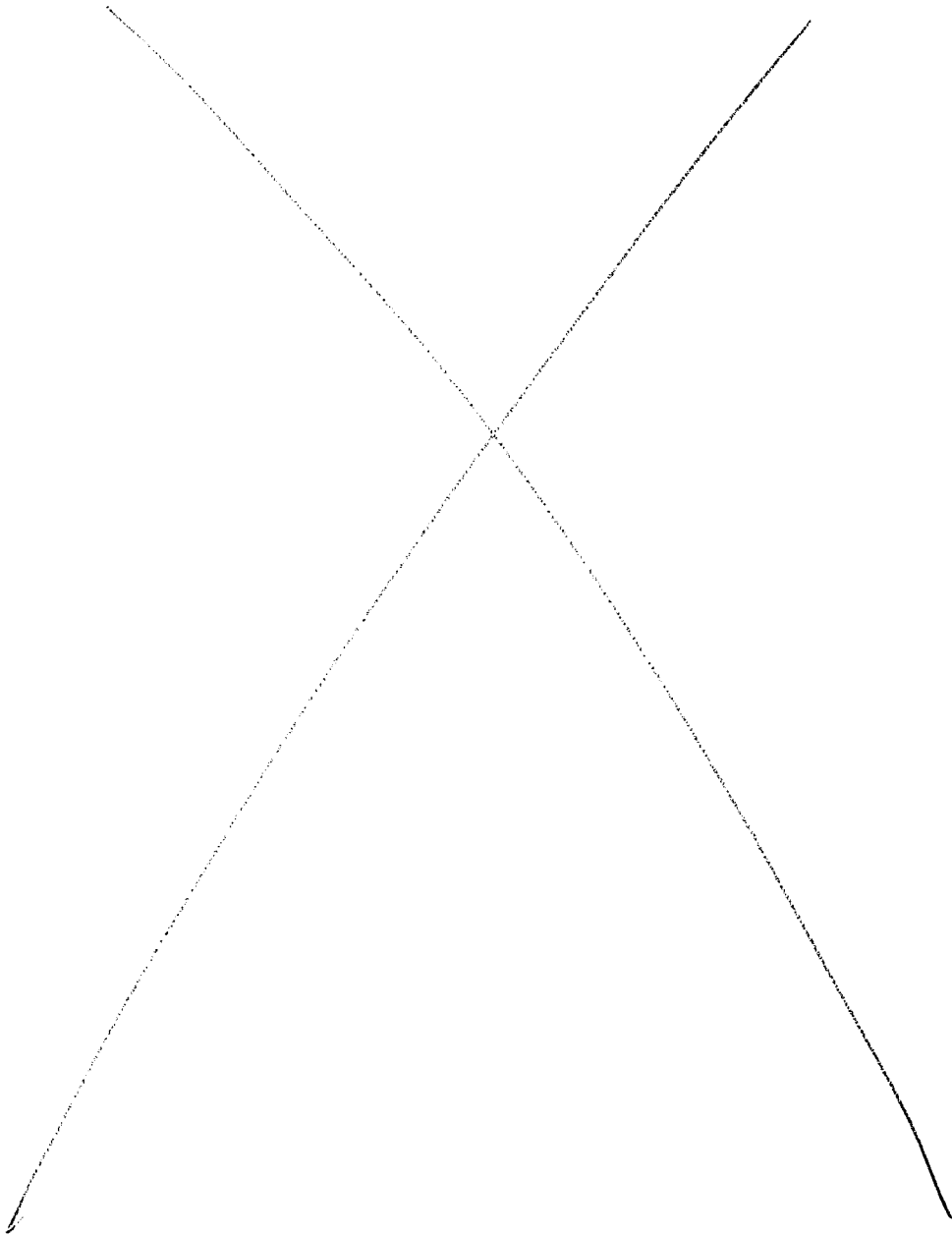
- **Tax Parcel No. P32866:** (1.3000 AC) ANACORTES TIDE LANDS TR 2 & 3 PL 9, SECTION 12, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M., TGW PTN VAC Q AVE ADJ ORD #1728
- **Tax Parcel No. P32867:** (2.1000 AC) TRS 4 & 16 PL 9, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M., INC VAC PTN 2ND & BROADWAY ST ADJ & W 15FT VAC R ST ADJ TGW E1/2 VAC Q AVE ADJ TR 4 ORD #1707 AF#862268 LESS FDT BAAP ON E LI R AVE 40FT N OF N LI 3RD ST TH E 10FT TH N 150FT TH W 10FT TO E LI R AVE TH S 150FT TPOB
- **Tax Parcel No. P32898:** (0.1400 AC) ANACORTES TIDE LANDS TAX 14 BAAP OF TR 3 PL, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M., 9 TH S 89-26 E 196FT TH S 34FT W 100FT N 89-26 W 80FT M/L TO MEAN HI-TD LI TH N 50-30 W 11.5FT TPB BEING PTN TR 3 PL 9
- **Tax Parcel No. P32903:** (0.4100 AC) TAX 24A: ANACORTES TIDE LANDS BAT INT OF N LI 3RD ST WI E LI R AVE TH N ALG E LI R AVE 190FT TH W 65FT TH N TO INNER HARBOR LI TH E ALG SD LI 165FT TH S TO N LI 3RD ST TH W 100FT TPB, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M., LESS PTN TAX 24B & EASE TO CITY LESS RT 0-041-01
- **Tax Parcel No. P32904:** (1.0800 AC) PTN BLK 296 CITY ANA TOGW PTN PLATE 9 TIDE & SHORELANDS, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M., DAF BAAP 25FT W C/L R AVE & 190FT N OF N LI 3RD ST TH N PLT C/L R AVE TO INT W INNER HARBOR LI TH E ALG SD LI TAP 100FT E OF E LI R AVE TH S TAP WH LIES 190FT N OF N LI 3RD ST TH W TPOB
- **Tax Parcel No. P32905:** (0.0300 AC) TAX 24B: ANACORTES TIDE LANDS BEG ON E LI R AVE 40FT N OF N LI 3RD ST TH E 10FT TH N PLT E LI R AVE 150FT TH W 10FT TO E LI R AVE TH S ALG E LI R AVE 150FT TPB, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M.

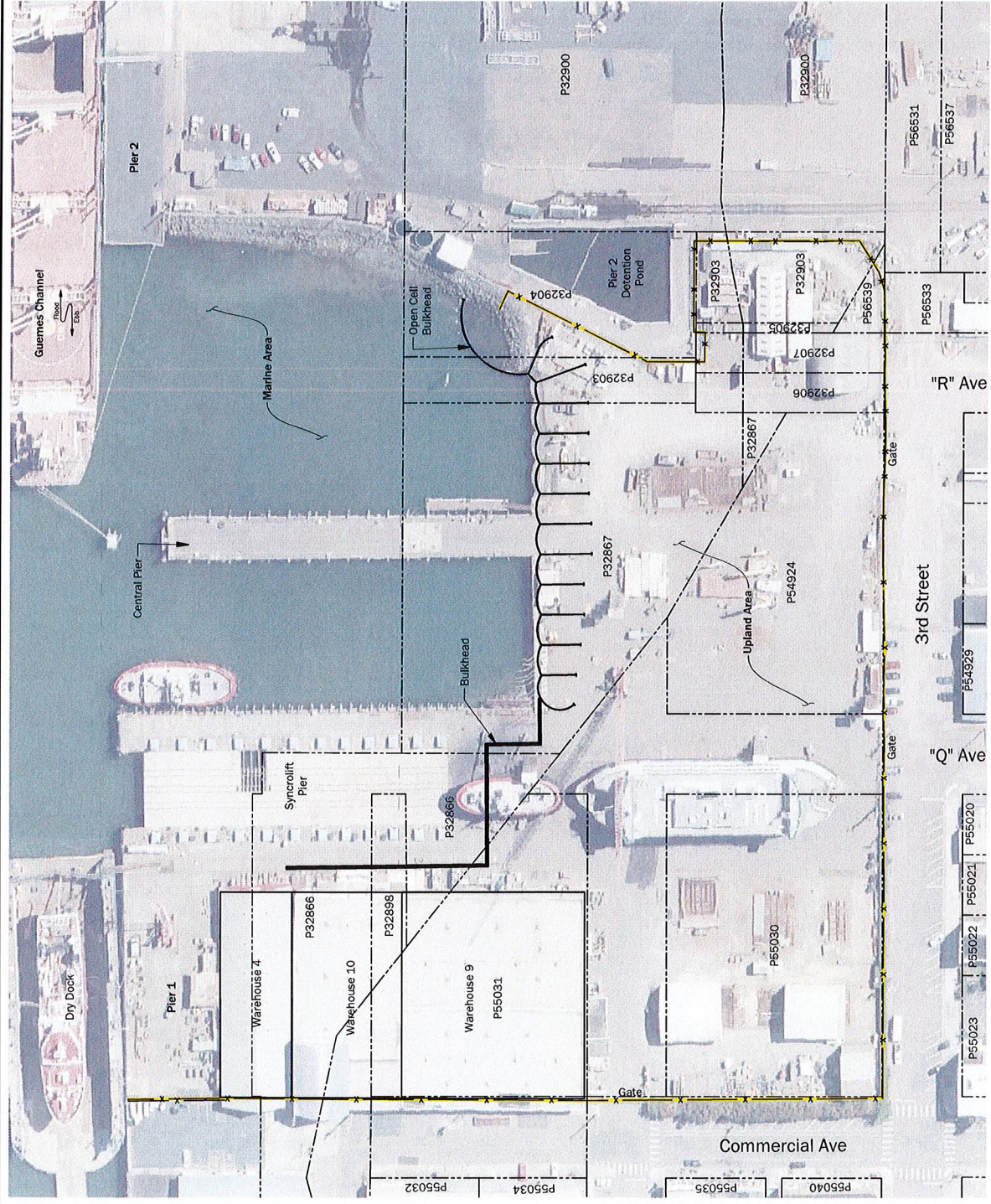
- **Tax Parcel No. P32906:** (0.0300 AC) TAX 25: ANACORTES TIDE LANDS TH PTN W1/2 VAC R AVE LY BTW A LI 40FT N OF & PLT N LI 3RD ST & A LI 190FT N OF & PLT N LI OF 3RD ST, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M.
- **Tax Parcel No. P32907:** (0.1300 AC) TAX 26: ANACORTES TIDE LANDS TH PTN E1/2 VAC R AVE LY BTW A LI 40FT N OF & PLT N LI 3RD ST & A LI 190F TN & PLT N LI 3RD ST, SECTION 18, TOWNSHIP 35 NORTH, RANGE 2 EAST, W.M.
- **Tax Parcel No. P54924:** (1.0786 AC) BLOCK 3, MAP OF THE CITY OF ANACORTES, AS PER PLAT RECORDED IN VOLUME 2 OF PLATS, PAGE 4, RECORDS OF SKAGIT COUNTY, WASHINGTON. TGW VAC ALLEY THRU BLK ORD#1775. TGW PTN R AVE AND 3RD ST PER ORDINANCE NO. 2862 RECORDED UNDER AF#201201170067
- **Tax Parcel No. P55030:** (1.3900 AC) ALL BLOCK 26, MAP OF THE CITY OF ANACORTES, AS PER PLAT RECORDED IN VOLUME 2 OF PLATS, PAGE 4, RECORDS OF SKAGIT COUNTY, WASHINGTON. TGW VAC ALLEY THRU SD BLK ORD #1708 AF#862269
- **Tax Parcel No. P55031:** (1.2100 AC) BLOCK 27 & PTN GN RLY EXT THRU BLOCK 27 TGW VAC ALLEY OF BLOCK 27 EXC ANY PTN LY WTHN TR 3 PL 9 OF ANA TDLNDS, MAP OF THE CITY OF ANACORTES, AS PER PLAT RECORDED IN VOLUME 2 OF PLATS, PAGE 4, RECORDS OF SKAGIT COUNTY, WASHINGTON.
- **Tax Parcel No. P56539:** LOTS 11 TO 13, BLOCK 296, MAP OF THE CITY OF ANACORTES, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 2 OF PLATS, PAGES 4 THROUGH 7, RECORDS OF SKAGIT COUNTY, WASHINGTON.



## Exhibit B

### PROPERTY MAP





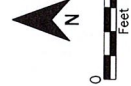
**Legend**

Dakota Creek Industries (DCI) Lease Area  
Skagit County Parcel Boundary and Number

P32904

**Notes:**

1. The locations of all features shown are approximate.
  2. The locations of all features shown are approximate.
- GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
- Data Source: Aerial from Microsoft Bing, Circa 2023.
- Projection: WA State Plane, North Zone, NAD83, US Feet



**Parcel Map**

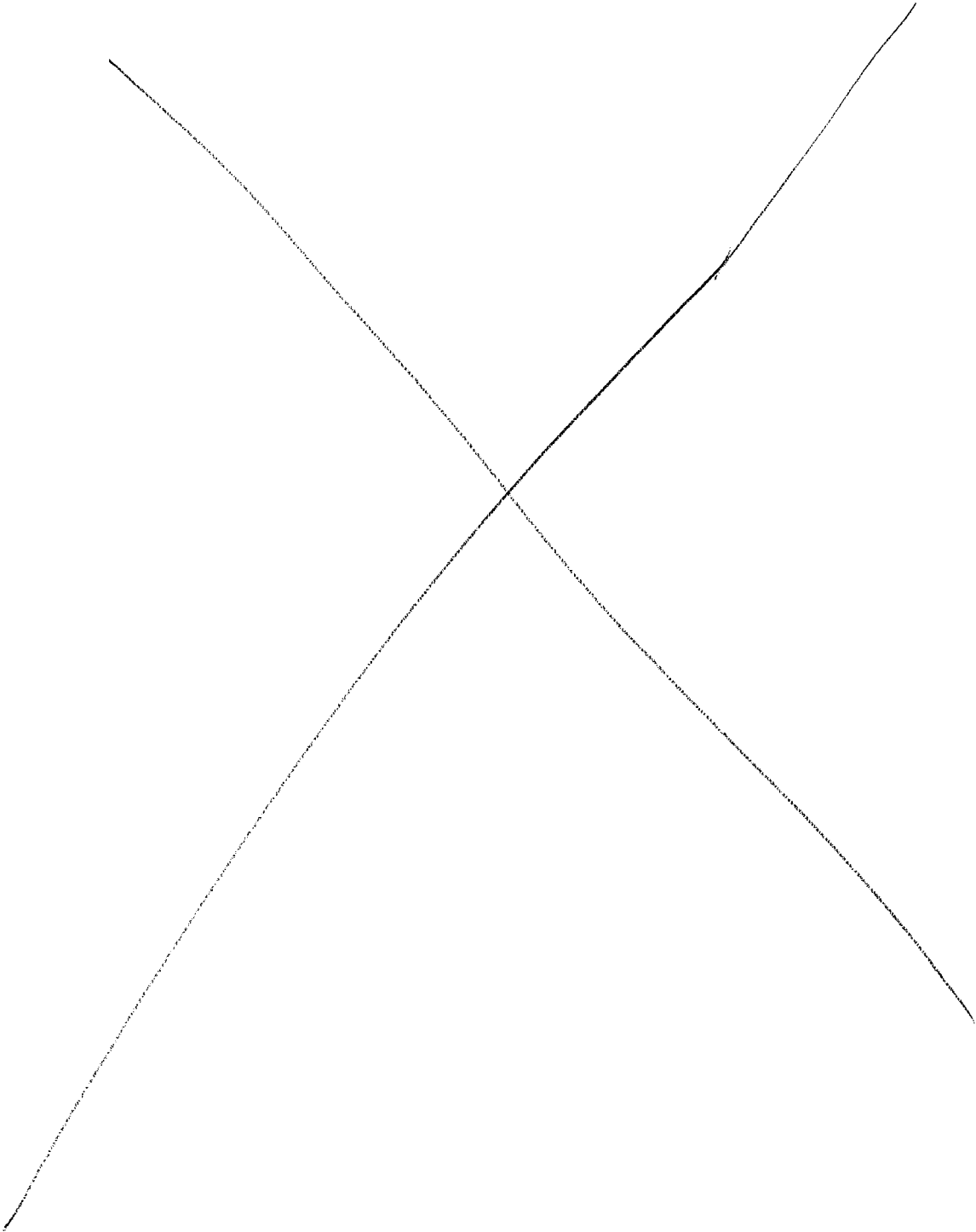
Dakota Creek Industries  
Anacortes, Washington



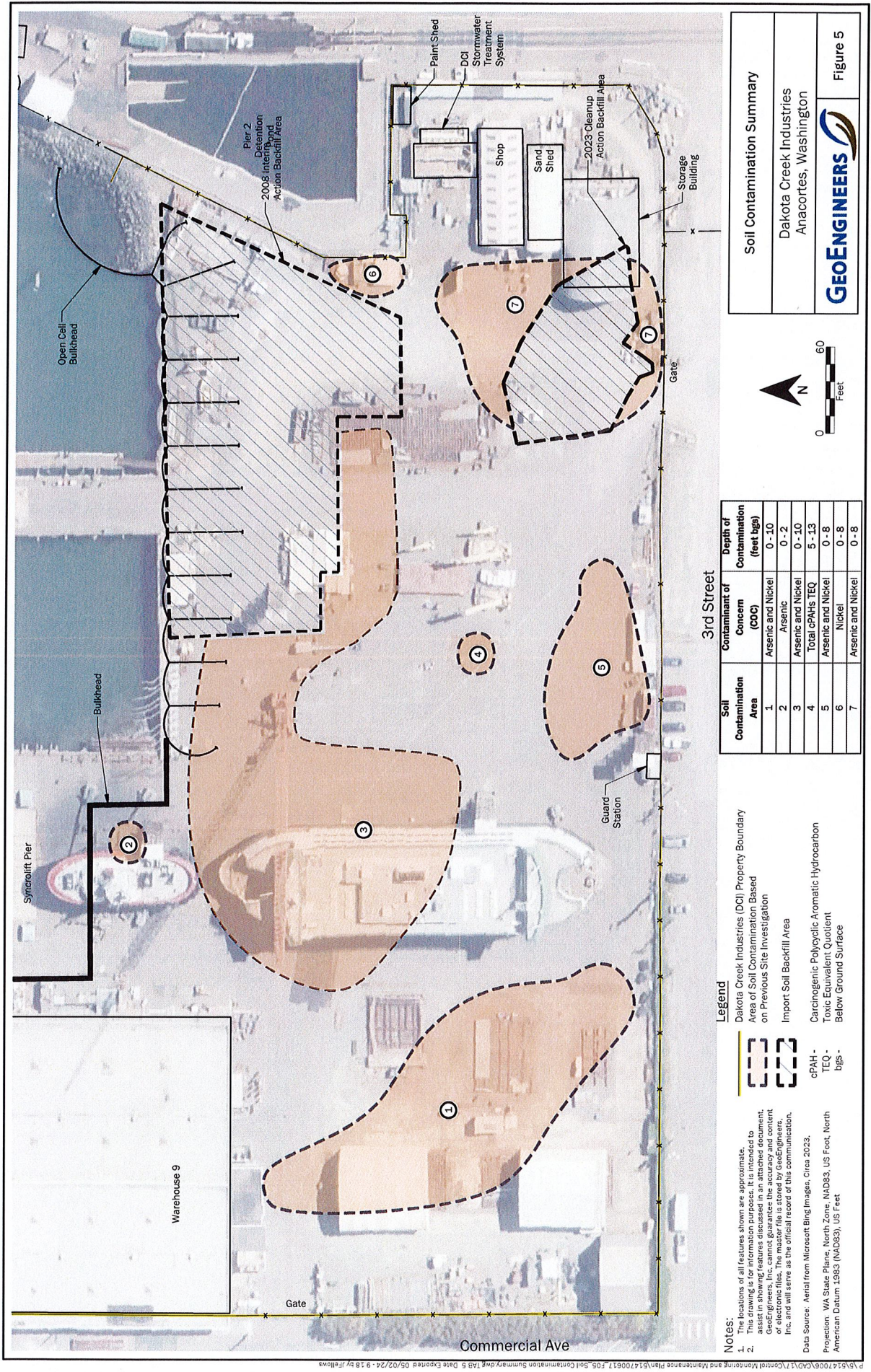
Figure 4

## Exhibit C

### MAP ILLUSTRATING LOCATION OF SOIL CONTAMINATION



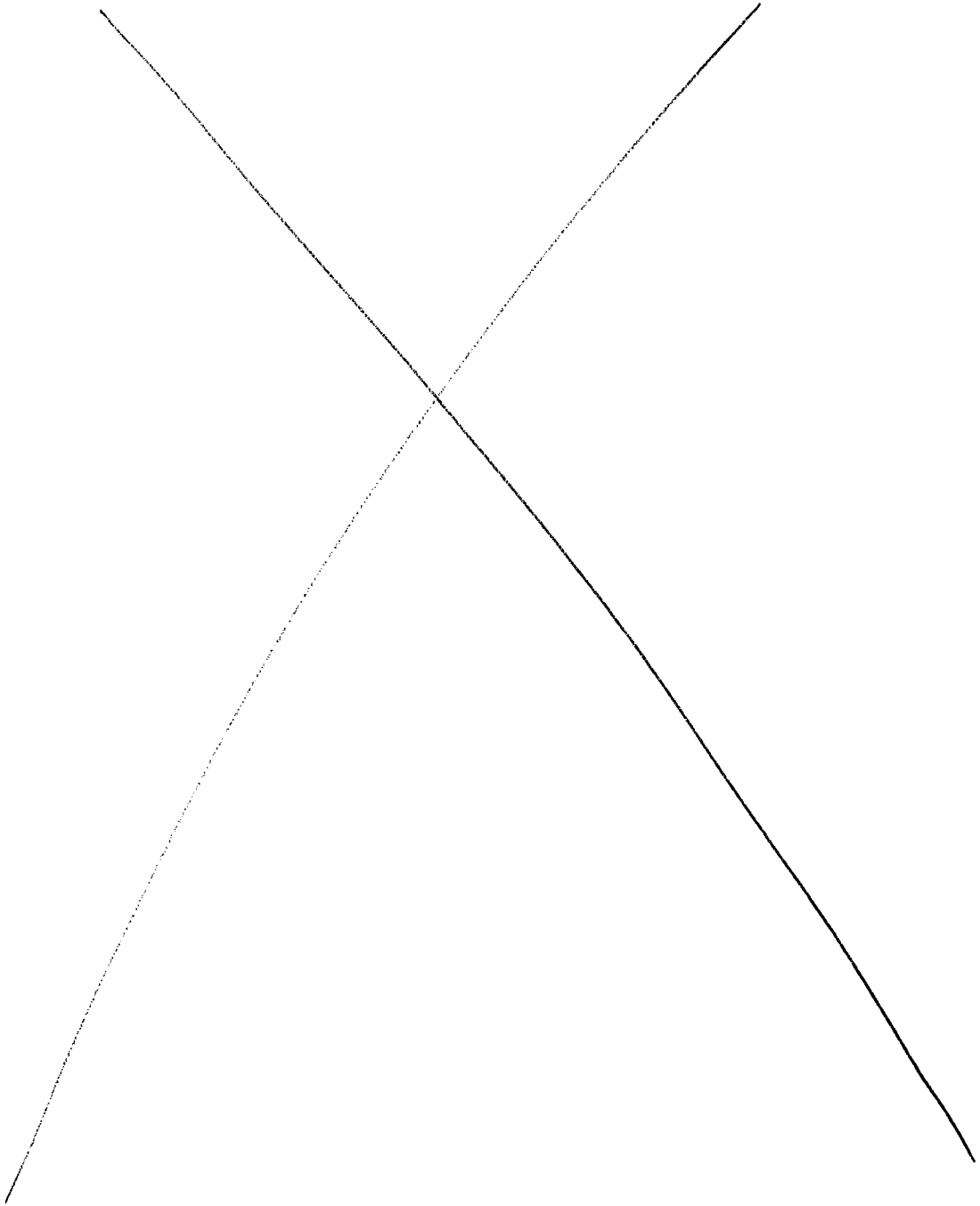


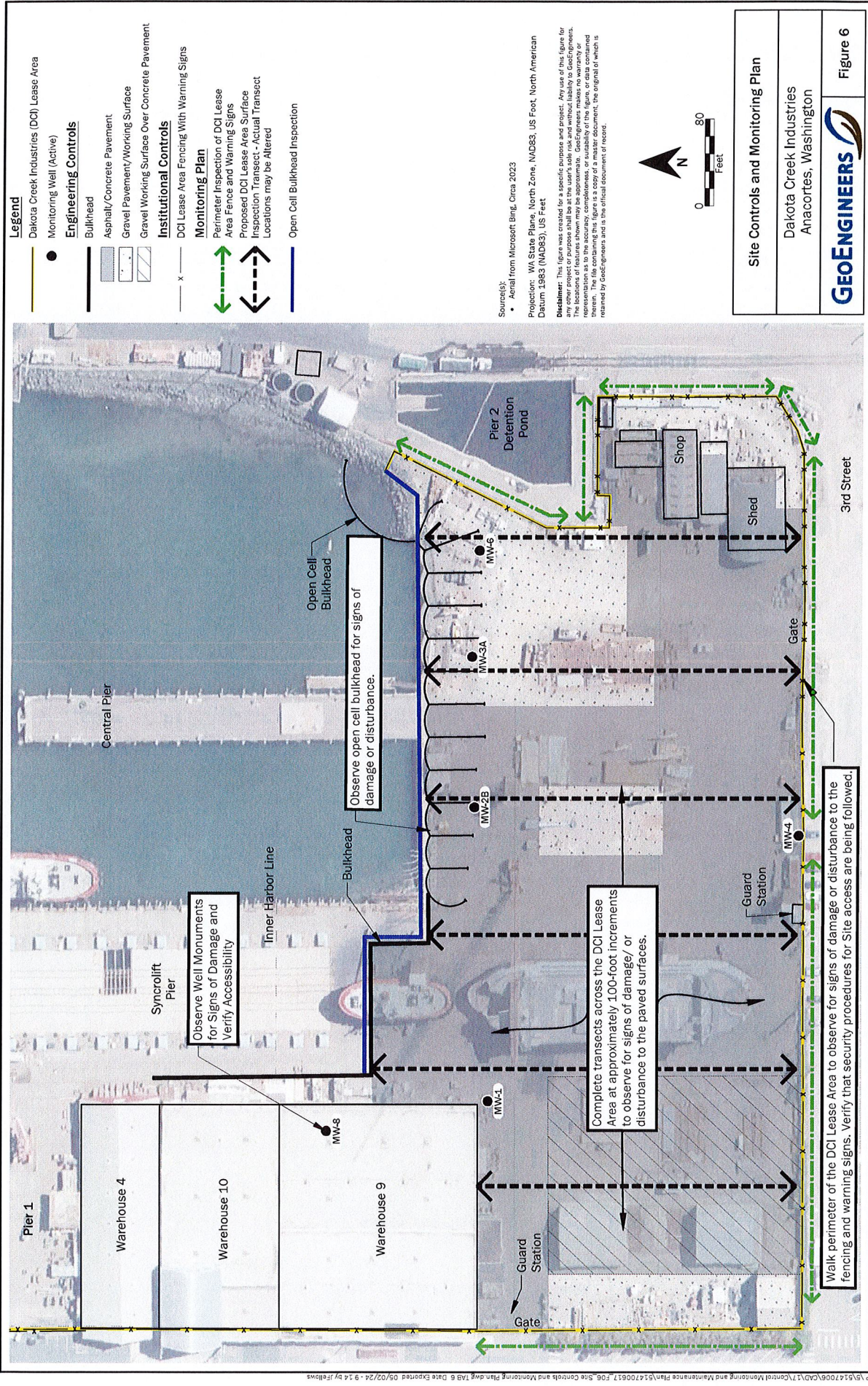




## Exhibit D

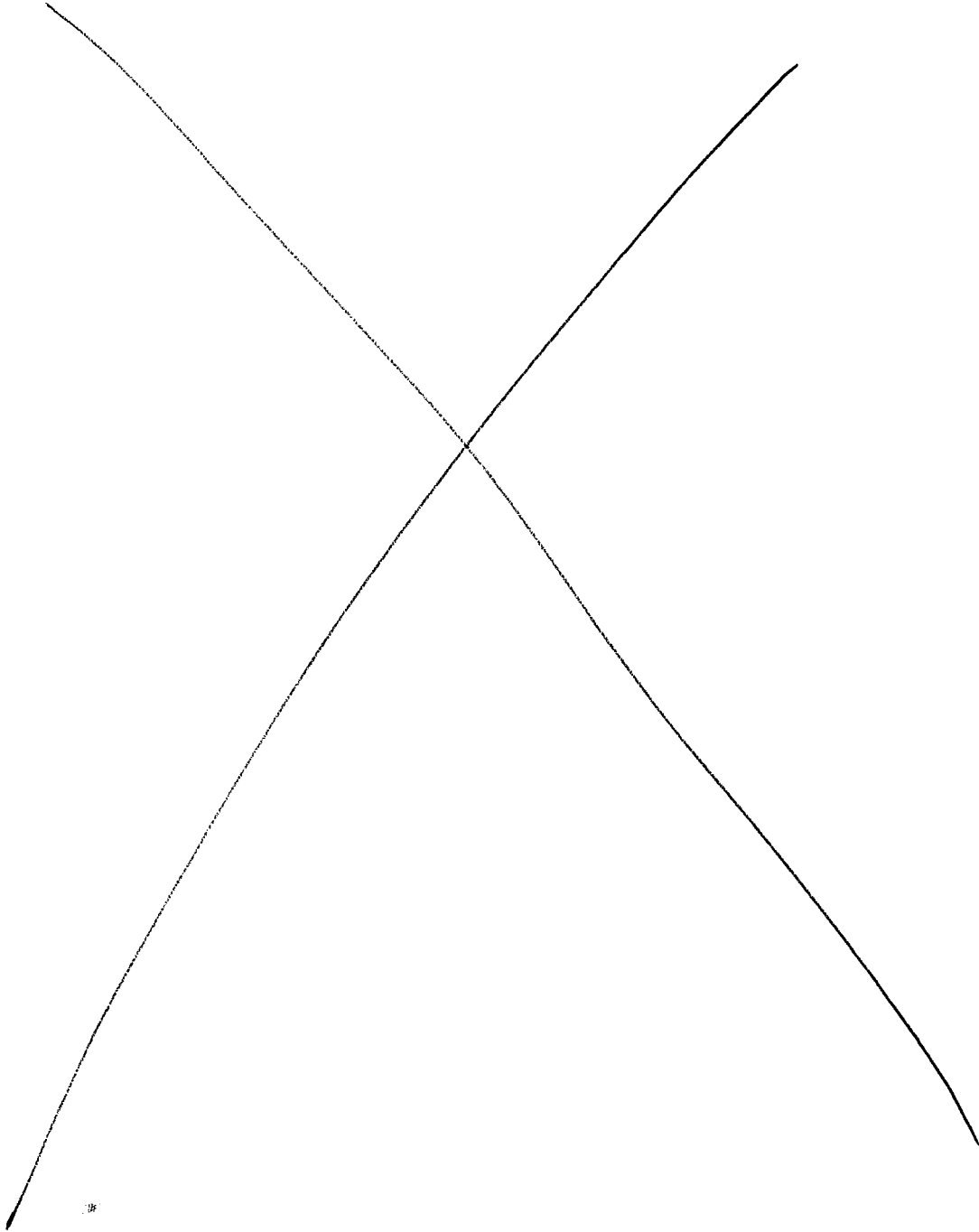
### MAP ILLUSTRATING LOCATION OF RESTRICTIONS





## **Exhibit E**

### **ENGINEERING AND INSTITUTIONAL CONTROLS MONITORING AND MAINTENANCE PLAN**





Engineering and Institutional Controls  
Monitoring and Maintenance Plan

Dakota Creek Industries Site  
Anacortes, Washington

*for*

**Washington State Department of Ecology  
on Behalf of Port of Anacortes**

May 2, 2024

2101 4<sup>th</sup> Avenue, Suite 950  
Seattle, Washington, 98121  
206.728.2674

**GEOENGINEERS** 



# Engineering and Institutional Controls Monitoring and Maintenance Plan

Dakota Creek Industries Site  
Anacortes, Washington

File No. 5147-006-17  
May 2, 2024

Prepared for:

Washington State Department of Ecology  
PO Box 47600  
Olympia, Washington 98504-7600

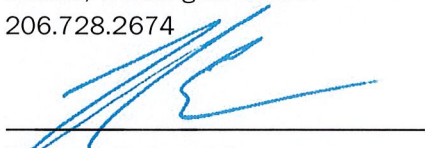
Attention: David Horne

On Behalf of:

Port of Anacortes  
100 Commercial Avenue  
Anacortes, Washington 98221

Prepared by:

GeoEngineers, Inc.  
2101 4<sup>th</sup> Avenue, Suite 950  
Seattle, Washington 98121  
206.728.2674

  
Robert S. Trahan, LG  
Senior Environmental Scientist  
John M. Herzog, LG, PhD  
Senior Principal

RST:JMH:ch

Disclaimer: Any electronic form, facsimile, or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

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## APPENDICES

Appendix A. Engineering and Institutional Controls Monitoring Form

## List of Acronyms and Abbreviations

| <b>Acronym/<br/>Abbreviation</b> | <b>Description</b>                                                     |
|----------------------------------|------------------------------------------------------------------------|
| Agreed Order                     | Agreed Order No. DE-07TCPHQ-5080                                       |
| AST                              | Above ground storage tank                                              |
| bgs                              | below ground surface                                                   |
| BMP                              | Best Management Practice                                               |
| CAO                              | Cleanup Action Objective                                               |
| CAP                              | Cleanup Action Plan                                                    |
| CFR                              | Code of Federal Regulations                                            |
| CMP                              | Compliance Monitoring Plan                                             |
| cPAH                             | Carcinogenic Polycyclic Aromatic Hydrocarbon                           |
| Consent Decree                   | Consent Decree No. 22-2-00800-29                                       |
| DCI                              | Dakota Creek Industries                                                |
| Ecology                          | Washington State Department of Ecology                                 |
| EICMMP                           | Engineering and Institutional Controls Monitoring and Maintenance Plan |
| EPA                              | United States Environmental Protection Agency                          |
| FS                               | Feasibility Study                                                      |
| HAZWOPER                         | Hazardous Waste Operations and Emergency Response                      |
| HPAH                             | High Molecular Weight Polycyclic Aromatic Hydrocarbon                  |
| LPAH                             | Low Molecular Weight Polycyclic Aromatic Hydrocarbon                   |
| mg/kg                            | milligram per kilogram                                                 |
| MLLW                             | Mean Lower Low Water                                                   |
| MS                               | Manufacturing/Shipping                                                 |
| MTCA                             | Modal Toxics Control Act                                               |
| OHW                              | Ordinary High Water                                                    |
| OSHA                             | Occupational Safety and Health Administration                          |
| PAH                              | Polycyclic Aromatic Hydrocarbon                                        |
| PCB                              | Polychlorinated Biphenyl                                               |
| Port                             | Port of Anacortes                                                      |



|       |                                             |
|-------|---------------------------------------------|
| QAPP  | Quality Assurance Project Plan              |
| RCW   | Revised Code of Washington                  |
| RI    | Remedial Investigation                      |
| ROW   | right-of-way                                |
| Site  | Dakota Creek Industries Site                |
| TBT   | Tributyltin                                 |
| TCLP  | Toxicity Characteristic Leaching Procedure  |
| TEQ   | Toxic Equivalent Quotient                   |
| WISHA | Washington Industrial Safety and Health Act |
| WAC   | Washington Administrative Code              |

## 1.0 Introduction

This Engineering and Institutional Controls Monitoring and Maintenance Plan (EICMMP) describes the engineering and institutional controls established for the Dakota Creek Industries Site (Site; Figure 1) and the monitoring and maintenance actions that will be completed to ensure long-term compliance with the Site's overall cleanup action objectives (CAOs). Preparation of the EICMMP for the Site is a requirement of the Washington State Department of Ecology (Ecology) Cleanup Action Plan (CAP; Ecology 2022).

In accordance with the CAP and pursuant to Chapter 173-340 of the Washington Administrative Code (WAC), cleanup action activities were completed at the Site by the Port of Anacortes (Port) to address source area soil that was determined to have the greatest potential to adversely impact groundwater. In other upland portions of the Site, soil contamination is isolated in place by existing protective barriers (asphalt and concrete pavement, gravel working surface, gravel working surface over concrete pavement and sheet pile bulkhead) to prevent contact with Site workers and the leaching of contaminants through the soil column and migration to surface water. The procedures specified in this EICMMP are applicable to future property redevelopment or maintenance activities that involve the disturbance of soil or the disturbance of the protective barriers that could create a potential exposure pathway.

This EICMMP is divided into the following sections:

- Section 1.0 (**Introduction**) provides a brief description of the purpose and organization.
- Section 2.0 (**Background**) provides a description of the Site, regulatory framework and summary of current conditions.
- Section 3.0 (**Site Controls**) provides a description of the engineering and institutional controls established for the Site in accordance with the CAP.
- Section 4.0 (**Monitoring and Maintenance of Site Controls**) describes the monitoring activities that will be completed and maintenance or corrective actions that may be required based on the monitoring activities.
- Section 5.0 (**Materials Management**) describes the management of soil and wastewater generated during future Site work.
- Section 6.0 (**Limitations**) describes the limitations of this document.
- Section 7.0 (**References**) presents the references used in preparing this EICMMP.

## 2.0 Background

The Site has been used for shipping, shipbuilding, ship repairs and other maritime-related industrial purposes since approximately 1879. Historically, various above ground storage tanks (ASTs), a rail spur, and associated buildings including machine shops, welding shops and equipment sheds were located at the Site to support industrial operations. Historical records indicate that a bulk oil storage and distribution facility with at least six ASTs was in operation in the central upland portion of the Site. Between the mid-1940s to the mid-1970s, the Port acquired various portions of the Site and in about 1976, Dakota Creek Industries (DCI) began to lease the Site from the Port (DCI Lease Area) for use as a shipyard and has

continued to operate the facility since that time. Currently, public access to the shipyard facility as well as the Port's Pier 1 and Pier 2 facilities are restricted with fencing, signage and security guards.

Historical operations and features are shown in Figure 2. Current DCI operations and DCI Lease Area features are shown in Figure 3.

## **2.1 SITE DESCRIPTION**

The Site is comprised of multiple property parcels (P32866, P32867, P32898, P32903, P32904, P32905, P32906, P32907, P54924, P55030, P55031, P56539) owned by the Port (Figure 4). At present, the property parcels located within the Site are zoned by the City of Anacortes for industrial use (Manufacturing/Shipping [MS]) and are characterized by marine shipping, warehousing, bulk material storage, transportation, and other industrial uses. Although the specific future use of the Site is dependent on the operations of the Port's lessees, it is likely to continue to be for industrial purposes including shipbuilding, ship repairs and other maritime-related industrial business. Currently, the Port maintains a lease with DCI that extends through 2055. For the purposes of the completed cleanup action, the Site is divided into the Marine and Upland Areas as described below.

### **2.1.1 Marine Area**

The Marine Area of the Site is located offshore of Ordinary High Water (OHW) and is located between the Port's Pier 1 and Pier 2 Marine Terminals (Pier 1 and Pier 2). The Marine Area is maintained to a navigation depth of approximately -35 feet Mean Lower Low Water (MLLW) to allow adequate navigation depths for the shipyard facility. To the west and south, the Marine Area is separated from the adjacent uplands by vertical sheet pile bulkheads. To the east, the Marine Area is bound by Pier 2 which is an earth fill structure and a pile supported wharf along the northern most part of the facility. The slope of the earth fill is armored with large rock (riprap).

As described in Section 2.2, an interim action was completed in 2008 (2008 Interim Action) which resulted in the complete removal of the contaminated sediment. As a result of the completeness of the 2008 Interim Action, the Marine Area is not subject to this EICMMP.

### **2.1.2 Upland Area**

The Upland Area of the Site located is landward of OHW and is relatively flat with a ground surface elevation of approximately 15 feet MLLW. Most of the Upland Area is paved with asphalt or concrete. The limited unpaved portions of the Upland Area are covered with a crushed gravel working surface or crushed gravel working surface over concrete pavement that are used for fabrication layout and heavy equipment operations. There is little or no stormwater run-on to the Site. Precipitation falling onto the DCI lease area is primarily captured by a network of stormwater drains and is treated by DCI prior to permitted discharge to Guemes Channel or the City of Anacortes sanitary sewer. In the limited areas that are unpaved, stormwater infiltrates into the ground.

DCI currently has utility connections for power, water, sewer, and communications which extend into the adjacent right-of-way (ROW), including Commercial Street and 3<sup>rd</sup> Avenue. DCI also maintains a compressed air utility to support facility operations.



As discussed in Section 2.3, Site contaminants remain below the paved and crushed gravel working surfaces in portions of the Upland Area at concentrations greater than the cleanup level established by the CAP. As a result, Upland Area is subject to this EICMMP.

## **2.2 REGULATORY FRAMEWORK**

### **2.2.1 *Agreed Order and Previous Environmental Investigations***

Several environmental investigations have been conducted at the Site, beginning with an initial soil investigation in 1997, and culminating in the Remedial Investigation (RI) and Feasibility Study (FS) in 2022. On December 12, 2007, the Port entered into Agreed Order No. DE-07TCPHQ-5080 (Agreed Order) with Ecology. Between March 2008 and July 2018, the Port completed RI field investigations as required by the 2007 Agreed Order to fill data gaps in the characterization of Site sediment, groundwater and soil conditions and to define the nature and extent of contamination on a Site-wide basis to develop and evaluate cleanup alternatives for addressing Site contamination.

Between July and November 2008, interim action dredging within the Marine Area and soil excavation activities in the Upland Area as shown in Figure 2 were completed in accordance with the Interim Work Plan (GeoEngineers 2008) to facilitate the Port's Project Pier 1 Redevelopment. The 2008 Interim Action resulted in the removal of approximately 26,000 cubic yards (approximately 38,000 tons) of contaminated sediment from the Marine Area and an additional 580 cubic yards (approximate) of contaminated soil from the Upland Area. Both contaminated sediment and soil were transported from the Site for permitted upland landfill disposal. Due to the completeness of the 2008 Interim Action, Ecology determined that sediment was no longer considered a media of concern for the Site.

In March 2021, additional soil sampling and analysis were completed as required by Ecology to verify the completeness of three separate independent cleanup action areas (Figure 2). Independent cleanup actions included the 1991 UST Cleanup Action, 2001 Hydraulic Winch Cleanup Action and 2002 Petroleum and Marine Railway Cleanup Action Areas. Results of the additional soil investigation (presented as Appendix A of the CAP) confirmed the removal of petroleum related contamination from these areas. Based on these results, Ecology determined additional actions to address the previously identified petroleum contamination associated with these areas are not required.

A detailed summary of historical and Agreed Order investigation activities, and interim action cleanup activities completed at the Site is presented in the RI/FS Report (GeoEngineers 2022a).

### **2.2.2 *Consent Decree Cleanup Action***

On October 21, 2022, the Port entered into a Consent Decree (Consent Decree No. 22-2-00800-29) with Ecology to implement the Ecology-selected cleanup action presented in the CAP. Pursuant to the Consent Decree, cleanup actions were completed by the Port between June and August 2023 to remove soil contamination in the southeastern portion of the Site with the potential to impact groundwater (contaminant source area). Because the selected cleanup action included leaving soil contamination in place in other portions of the Site at concentrations exceeding the established cleanup levels, engineering and institutional controls were required to maintain the CAOs. Engineering and institutional controls (Site controls) are further described in Section 3.0.



Contaminated soil removal activities completed in accordance with the CAP pursuant to Consent Decree No. 22-2-00800-29 are presented in the Construction Completion Report (GeoEngineers 2023). The 2023 cleanup action area is shown in Figure 3.

## 2.3 CURRENT SITE CONDITIONS

### 2.3.1 Soil

Site soils are generally comprised of multiple layers of historical fill overlying native marine sediment and glacial deposits. More recently, imported material was placed at the Site as part of the Project Pier 1 Redevelopment activities to expand the shoreline of the Upland Area northward of the historical shoreline. Clean fill material was placed behind the new open cell bulkhead following completion of the interim action dredging in this area. Additionally, clean fill material was placed at the Site to restore the 2023 cleanup action area. Project Pier 1 and 2023 Cleanup Action backfill areas are shown in Figure 5.

Currently, contaminated material in the Upland Area of the Site contains arsenic and nickel, and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) at concentrations greater than the established soil cleanup level. The distribution of Upland Area arsenic and nickel, and cPAH contamination is shown in Figure 5 and is summarized below.

- **Soil Contamination Area 1** – Arsenic and nickel exceed the cleanup level in fill deposits to a depth of approximately 10 feet below ground surface (bgs).
- **Soil Contamination Area 2** – Arsenic exceeds the cleanup level in shallow fill deposits to a depth of approximately 2 feet bgs.
- **Soil Contamination Area 3** – Arsenic and nickel exceed cleanup levels in fill deposits to a depth of approximately 10 feet bgs.
- **Soil Contamination Area 4** – Total cPAHs calculated using the toxic equivalent quotient (TEQ) methodology exceed the soil cleanup level in fill deposits between approximately 5 and 13 feet bgs.
- **Soil Contamination Area 5** – Arsenic and nickel exceed the soil cleanup levels in fill deposits to a depth of approximately 8 feet bgs.
- **Soil Contamination Area 6** – Nickel exceeds the cleanup levels in fill deposits to a depth of approximately 8 feet bgs.
- **Soil Contamination Area 7** – Arsenic and nickel exceed the cleanup levels in fill deposits to a depth of approximately 8 feet bgs.

The range of contaminant concentrations remaining in place within the Upland Area of the Site are summarized in the table below.

| CONTAMINANT OF CONCERN | RANGE OF DETECTION (MG/KG) | SOIL CLEANUP LEVEL <sup>1</sup> (MG/KG) |
|------------------------|----------------------------|-----------------------------------------|
| <b>Metals</b>          |                            |                                         |
| Arsenic                | 1 to 92                    | 20                                      |
| Nickel                 | 5.75 to 200                | 48                                      |

| CONTAMINANT OF CONCERN                                       | RANGE OF DETECTION (MG/KG) | SOIL CLEANUP LEVEL <sup>1</sup> (MG/KG) |
|--------------------------------------------------------------|----------------------------|-----------------------------------------|
| <b>Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs)</b> |                            |                                         |
| Total cPAH TEQ – Vadose Zone                                 | 0.0069 to 1.38             | 2                                       |
| Total cPAH TEQ – Saturated Zone                              | 0.024 to 0.18              | 0.1                                     |

Notes:

<sup>1</sup> Cleanup levels for the Site are established by the CAP.

mg/kg = milligrams per kilogram

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

TEQ = toxic equivalent quotient

### 2.3.2 Groundwater

One shallow water-bearing hydrogeologic unit is identified for the Upland Area of the Site. The shallow water-bearing unit occurs in the fill material at a depth of approximately 4 to 10 feet bgs with an inferred flow direction to the north toward Guemes Channel. The RI groundwater monitoring results initially identified concentrations of arsenic, nickel, and cPAHs exceeding their respective cleanup levels. However, groundwater monitoring results have shown a general decrease in contaminant concentrations over-time which generally correlates with the increase in the amount of Upland Area paving completed between 2015 and 2016.

Currently, compliance monitoring to document groundwater conditions is being completed in accordance with the Compliance Monitoring and Quality Assurance Project Plan (CMP/QAPP; GeoEngineers 2022b) utilizing the monitoring wells MW-2B, MW-3A, MW-6 and MW-8 shown in Figure 6 as confirmed in an email from Ecology (Ecology 2023). Future long-term groundwater monitoring needs and frequency will be determined by Ecology based on review of the initial post-construction monitoring results.

### 2.3.3 Sediment

The RI identified sediment contamination including metals (arsenic, copper, lead, mercury and zinc), tributyltin (TBT), low molecular weight PAHs (LPAHs), high molecular weight PAHs (HPAHs), cPAHs, polychlorinated biphenyls (PCBs), and dioxin and furans at concentrations greater than the sediment cleanup level for the Marine Area. The 2008 interim action described in Section 2.2 addressed the identified contamination through full removal and permitted upland landfill disposal of the contaminated sediment. As a result, Ecology determined that the cleanup action for the Marine Area is complete with no further action required.

## 3.0 Site Controls

In accordance with the CAP, the paved surfaces (asphalt and concrete pavement), gravel working surfaces including gravel working surfaces over concrete pavement and the open cell bulkhead at the Site are established as engineering controls to prevent direct contact with the soil contamination that remains in place. The surface paving and stormwater conveyance and treatment system limits stormwater infiltration that could result in the mobilization and discharge of contaminants to surface water.



Institutional controls established for the Site include warning signs to inform Site workers and visitors regarding restricted activities and fencing at the perimeter of the DCI Lease Area restricting access to the general public. Additionally, an Environmental Covenant (once established) will impose restrictions on future use of the Upland Area of the Site where residual contamination is present consistent with industrial land use of the Site and prohibit the use of groundwater for drinking water in accordance with WAC 173-340-440 and Revised Code of Washington (RCW) 64.70.

To maintain the integrity and function of the established Site controls, activities that result in their alteration or removal are restricted. Restricted activities include but are not limited to drilling, digging or piercing of the paved surfaces, gravel working surfaces or open cell bulkhead without prior authorization by the Port. Additionally, removal of the DCI Lease Area perimeter fencing and warning signs are restricted without prior authorization by the Port.

Exceptions to these restricted activities include the following routine and emergency maintenance situations:

- Maintenance activities to fix broken, worn or damaged asphalt or concrete pavement that do not disturb soil below the underlying base coarse material.
- Maintenance activities to re-grade the gravel working surface including the placement of additional surfacing material (crushed rock) or vegetation removal (i.e., weed control) that does not extend below a depth of approximately 1 foot bgs.
- Maintenance activities to fix broken, damaged or worn portions of the open cell bulkhead including but not limited to replacing zinc anodes, patching holes and addressing areas of corrosion.
- Maintenance activities to fix broken or damaged portions of Warehouse Nos. 4, 9 and 10 or other structures being utilized for storage or to house machining and fabrication facilities.
- Maintenance activities to fix broken or damaged portions of the DCI Lease Area perimeter fencing.
- Maintenance activities to fix or replace missing or damaged warning signs secured to the DCI Lease Area perimeter fencing.
- Emergency maintenance activities that damage or remove one or more Site control or result in the exposure of the underlying soil or groundwater. Under such conditions, corrective actions or repairs as described in Section 4.2 will be taken to ensure that the Site controls are restored to their original function. For these emergency maintenance events, notice will be given to Ecology describing the emergency activity and corrective actions completed to restore the Site controls.

The Port will require their tenant to provide notice of planned activities that will disturb one or more of the Site controls beyond what is generally considered to be a routine maintenance action so that they may review the details of the proposed action to ensure that the elements of this EICMMP are followed. Materials generated by these activities (if any) will be managed using the guidelines presented in Section 5.0.

The Site controls established for the Upland Area of the Site are shown in Figure 6. Monitoring and maintenance of these Site controls are further described below in Section 4.0.

## 4.0 Monitoring and Maintenance of Site Controls

Monitoring of the Site controls will consist of routine inspection and documentation of the observed condition followed by reporting. Maintenance actions will be completed, as necessary, to address conditions that may compromise Site controls integrity. Site controls requiring routine monitoring and maintenance include:

- Asphalt and concrete pavement which prevent stormwater infiltration and contaminant leaching and migration through the soil column as well as provide a physical barrier to prevent direct contact to Site contaminants.
- Gravel working surfaces which provide a physical barrier to prevent direct contact to Site contaminants.
- Gravel working surface over concrete pavement which provide a physical barrier to prevent direct contact to Site contaminants.
- Open cell bulkhead that separates the Marine Area from the Upland Area and provides a physical barrier to prevent direct contact as well as limit the discharge of groundwater to surface water.
- Stormwater collection system including catch basins and treatment area being utilized to transfer collected water from the pavement surfaces.
- Perimeter fencing encompassing the DCI Lease Area and security procedures to restrict public access to the Upland Area of the Site.
- Warning signage which informs Site workers and visitors on land use restrictions.

In addition, monitoring wells being utilized to verify compliance with the cleanup standards should be observed for accessibility and damage so that they can be repaired in advance of future monitoring events as required by Ecology. The monitoring plan for the Site controls established for the Upland Area of the Site is shown in Figure 6. Monitoring and maintenance activities are further discussed below (Sections 4.1 and 4.2).

### 4.1 SITE CONTROL MONITORING AND MAINTENANCE

#### 4.1.1 *Monitoring Schedule*

Routine monitoring will be completed on an annual basis to evaluate the overall integrity and function of the Site controls and identify maintenance action (if needed) to restore the Site control(s). Routine monitoring will be completed at the Site until which time the residual contaminated soil is either remediated, has attenuated or as otherwise directed by Ecology. Additional monitoring may be necessary during non-routine activities such as maintenance work or other activity that could potentially compromise the integrity of a Site control. Ecology will be informed of any non-routine activity with the potential to disturb one or more Site controls, to confirm compliance with overall CAOs and determine whether special provisions are required.

#### 4.1.2 *Monitoring Activities*

##### 4.1.2.1 ROUTINE MONITORING

Routine monitoring activities will consist of a review of this EICMMP, as-built plans and base maps showing the current layout of the Site, and changes in Site conditions prior to completing a visual reconnaissance of the Site. In addition, previous monitoring reports and maintenance records will be reviewed prior to



visiting the Site to evaluate if any previously documented anomaly or maintenance related issue was identified and to confirm that repairs or maintenance work was completed.

Upon visiting the Site, the visual reconnaissance will include walking the perimeter of the DCI Lease Area to verify the condition of the existing fence and warning signs as well as to verify that the security procedures for access of authorized personnel into the DCI Lease Area are maintained. Within the DCI Lease Area, multiple transects will be completed to visually observe the Site surfaces. Transects will be completed at intervals that are not greater than approximately 100 feet apart to identify evidence of one or more of the following:

- Breaching, cracking or deformation of the concrete and asphalt paved areas.
- Rutting, grading, digging or other disturbances within the areas containing the gravel working surfaces.
- Damage or corrosion of the open cell sheet pile bulkhead that separates the Marine Area from the Upland Area.
- Blockage or damage to the stormwater conveyance or stormwater treatment system that would limit the ability to transfer water away from the pavement collection areas and allow for pooling of water on Site.
- Damage or alteration of the DCI Lease Area perimeter fencing.
- Damage, missing or fallen warning signs attached to the DCI Lease Area perimeter fencing.
- Damage to the groundwater monitoring well surface monuments.
- Other potential anomalies or non-routine activities that appear to compromise the integrity of the Site Controls which could result in the exposure or release of Site contaminants.

Conditions that may affect the function or integrity of the Site controls will be documented, and maintenance actions identified to address the observed condition. Documentation and reporting of observed condition of the Site controls are further discussed below (Section 4.1.3). Site controls and monitoring activities are shown in Figure 6.

#### 4.1.2.2 NON-ROUTINE MONITORING

Non-routine monitoring will be completed when activities outside of those listed in Section 3.0 are implemented and will be completed on an as needed basis to document activities that could potentially compromise the integrity of the Site controls. Non-routine monitoring will also include documentation of the restoration activities to ensure that their long-term function is maintained.

#### 4.1.3 Reporting

Each monitoring event (routine or non-routine) will be documented by completing an inspection form that includes a description of the observed Site conditions noting areas of interest on a log or map. Conditions that do not comply with this EICMMP will be identified and photographed. An example inspection form for documenting the review of previous monitoring events, observed condition of the Site controls and photograph log to document the observed conditions that do not comply with this EICMMP during each monitoring event is presented in Appendix A.

Inspection forms and supporting documentation for each monitoring event (routine or non-routine) will be retained by the Port and made available for regulatory review upon request. On an annual basis, an Engineering and Institutional Controls Monitoring Report will be prepared and submitted to Ecology for review. The Engineering and Institutional Controls Monitoring Report will include the following:

- A description of the monitoring activities completed and condition of the Site controls;
- A summary of any identified Site controls disturbance activities; and
- A description of any identified or implemented maintenance or corrective actions to restore the proper function of the Site controls. Maintenance and corrective actions are discussed in Section 4.2.

## 4.2 MAINTENANCE AND CORRECTIVE ACTIVITIES

If a monitoring event identifies existing or potential conditions that may threaten the integrity of the Site controls, maintenance or corrective actions may be required. Maintenance or corrective actions will be evaluated and determined on a case-by-case basis. These actions may involve providing reminders to on-site workers or maintenance crews of the activities that are restricted or completing restoration activities to address an observed condition that may affect one or more Site control.

Maintenance or corrective actions that are anticipated to result in the exposure of contaminated media or permanent modifications to a current Site control will be coordinated with Ecology to confirm compliance with overall CAOs and determine whether special provisions are required. Maintenance or corrective actions may include the following type of activities:

- Placing and compacting new fill or subgrade materials.
- Re-grading activities.
- Modifying drainage patterns or repairing the stormwater drainage system.
- Replacing, patching or sealcoating paved surfaces.

## 5.0 Materials Management

In the event that it becomes necessary to disturb one or more Site control that results in the exposure of soil within the DCI Lease Area, the Port will identify proper soil management procedures prior to initiating the work. These procedures apply to both the areas of contamination identified in Figure 5 and the remaining parts of the DCI Lease Area outside of these areas. Such on-site work should not begin until the Port has reviewed the proposed work and provides authorization to proceed. Proper material handling procedures based on the Port's review of the planned work will be established for soil disturbed in these areas, and as further described below.

### 5.1 SOIL EXCAVATION AND STOCKPILING MANAGEMENT PROCEDURES

As described in Section 2.3, arsenic, nickel and cPAH contamination has been identified in fill soil up to a depth of approximately 13 feet bgs within portions of the DCI Lease Area (see Figure 5). In general, soil and/or demolition debris (asphalt, concrete, etc.) generated from within the materials management area shown in Figure 7 should be segregated, stockpiled and managed as described in Section 5.3.



Best management practices (BMPs) will be used to minimize the potential for cross-contamination of soil during excavation, handling, stockpiling, loading and transporting activities. Segregation and stockpiling of excavated soil should be conducted as close as practicable to the excavation area in which the material was generated. Stockpiles should be placed on and covered by durable plastic sheeting and bermed to control runoff, or in roll-off or other covered and labeled containers. Access to the temporarily stockpiled/secured soil should be restricted by a properly labeled fence or other barrier pending reuse as backfill or offsite disposal. Additionally, BMPs will be used to prevent erosion and the transport of soil to the DCI stormwater collection and treatment system or to the Marine Area.

Personnel working in areas of known or suspected contaminated soil or groundwater should comply with provisions of WAC 173-340-810 (Model Toxics Cleanup Act [MTCA] Cleanup Regulation, Worker Safety and Health). WAC 173-340-810 states that requirements under the Occupational Safety and Health Administration (OSHA) and the Washington Industrial Safety and Health Act (WISHA) are applicable to the type of remedial activities that will be conducted at the Property (excavation and handling of contaminated soil). Personnel working in areas of known or suspected contaminated soil or groundwater should also be in compliance with Hazardous Waste Operations and Emergency Response (HAZWOPER) Training in accordance with WAC 296-62. A health and safety plan should be maintained by the contractor and include precautionary health and safety measures to address potential exposure to contaminants present.

## **5.2 DEWATERING AND WASTEWATER MANAGEMENT**

Contingency measures should be established to address wastewater that accumulates in an excavation or comes into contact with potentially contaminated soil during future development, maintenance, utility work or other soil disturbance activity. Based on existing subsurface information, groundwater may be encountered at depths as shallow as 4 feet bgs.

If dewatering becomes necessary, the wastewater should be collected and characterized as discussed in Section 5.3 to determine what treatment is required (if any) and to meet the off-Site discharge and disposal requirements of the receiving facility. BMPs will be employed to prevent leaks, spills, or releases of the recovered stormwater and/or excavation wastewater.

## **5.3 WASTE STREAM CHARACTERIZATION**

### **5.3.1 Soil Characterization**

Excavated soil that is geotechnically suitable for reuse may be used as backfill from the area in which it was generated to the extent practicable and does not require testing. Excavated soil that is not reused as backfill should be disposed at an approved landfill and characterized to meet the specific disposal criteria of the selected facility. The procedures for stockpile characterization and dangerous waste evaluation are described in the following sections.

#### **5.3.1.1 STOCKPILE CHARACTERIZATION SAMPLING**

Where stockpile characterization sampling is necessary, stockpile sampling should be completed at a frequency consistent with Table 6.9 of Ecology's Guidance for Remediation of Petroleum Contaminated Sites (Ecology 2016), as follows:



| CUBIC YARDS OF SOIL | MINIMUM NUMBER OF SAMPLES                  |
|---------------------|--------------------------------------------|
| 0-100               | 3                                          |
| 101-500             | 5                                          |
| 501-1000            | 7                                          |
| 1001-2000           | 10                                         |
| >2000               | 10 + 1 for each additional 500 cubic yards |

Discrete grab samples should be collected from various zones and depth horizons within the stockpiles as the stockpiles are being constructed to obtain spatially representative samples of the stockpiled material. The stockpile samples should be collected from locations that are generally representative of the soils, and where physical evidence of contamination (sheen, odor, staining, etc.) may be present. If physical evidence of contamination is not observed, the stockpile should be divided into relatively equal sections and each section sampled depending on the volume of material generated.

Stockpile soil samples should be submitted to an Ecology-certified laboratory for chemical analysis of Site contaminants including arsenic, nickel and cPAHs or as otherwise requested by the receiving facility to support waste disposal acceptance. Copies of the analytical data should be submitted to the receiving facility with written approval for material acceptance.

### 5.3.1.2 DANGEROUS WASTE EVALUATION

Dangerous waste regulations require that contaminants be evaluated for the toxicity “characteristic” if they are included on the toxicity characteristic list (WAC 173-303-090[8]). A contaminant has the potential to designate as a dangerous waste if its concentration in soil is greater than 20 times<sup>1</sup> the associated toxicity characteristic threshold listed in WAC 173-303-090(8). In this case, representative samples of the soil would also be tested using the toxicity characteristic leaching procedure (TCLP). The results from the TCLP test should then be compared directly to the toxicity characteristic threshold to determine whether the material is designated as a dangerous waste.

Excavated soil with concentrations that are greater than the MTCA cleanup levels will fall into one of two categories: 1) non-hazardous waste suitable for disposal at a Subtitle D facility; or 2) Washington-defined dangerous/hazardous waste requiring either disposal at a Subtitle C facility, or treatment followed by disposal at a Subtitle D facility. Before the stockpiled soil is transported off-property for disposal, chemical characterization data for this soil should be reviewed to evaluate potential dangerous or non-dangerous waste status, and follow-up TCLP analyses completed if the detected metals concentration exceeds the “trigger value” to confirm waste designation as appropriate. TCLP results equal to or greater than their associated toxicity characteristic threshold designates as a dangerous waste requiring special handling, transport and disposal in accordance with state (WAC 173-303) and federal (40 CFR 261) regulations.

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<sup>1</sup> This is referred to as the “20-times rule” and is described in a September 21, 1992, United States Environmental Protection Agency (EPA) letter titled “Calculation of TCLP Concentrations from Total Concentrations”. This reference is available at: <http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/95e9e57b91ea2e9f8525670f006c0acd10OpenDocument>

### 5.3.2 Wastewater Characterization

Depending on the location and amount of water requiring disposal, logistical or construction schedule considerations, it may be necessary to temporarily store wastewater generated in one or more storage tanks for chemical analytical testing prior to off-Site disposal. Wastewater generated should be sampled for chemical analysis at an Ecology-certified laboratory for Site contaminants including arsenic, nickel and cPAHs or as otherwise requested by the receiving facility.

If the water does not meet discharge/disposal criteria of the receiving facility, the wastewater will be treated and re-sampled to ensure compliance with the receiving facility acceptance criteria. A waste disposal authorization will be obtained prior to off-Site discharge or disposal of the wastewater generated from the Site.

## 6.0 Limitations

This report has been prepared for the exclusive use of the Port of Anacortes and the Washington State Department of Ecology. No other party may rely on the product of our services unless we agree in advance and in writing to such reliance. Any use of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and written authorization by GeoEngineers, Inc., shall be at the user's sole risk. Any unauthorized use of (or reliance on) this report shall release GeoEngineers from any liability resulting from such use (or reliance). Within the limitations of scope, schedule, and budget, GeoEngineers, Inc.'s respective services have been provided in a manner consistent with that level of care and skill exercised by members of the profession currently practicing in the same locality under similar conditions as this project. No warranty or other conditions, expressed or implied, should be understood. GeoEngineers, Inc. assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available.

Any electronic form, facsimile, or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

## 7.0 References

- GeoEngineers Inc. (GeoEngineers) 2008. Final Work Plan, Remedial Investigation/Feasibility Study and Interim Action Work Plan – Dakota Creek Industries. Prepared for the Washington State Department of Ecology on behalf of Port of Anacortes. April 1.
- GeoEngineers Inc. (GeoEngineers) 2022a. Remedial Investigation/Feasibility Study Report, Dakota Creek Industries, Anacortes, Washington, Ecology Agreed Order No. DE-07TCPHQ-5080. Prepared for the Washington State Department of Ecology on Behalf of Port of Anacortes. October 27.
- GeoEngineers Inc. (GeoEngineers) 2022b. Compliance Monitoring and Quality Assurance Project Plan (CMP/QAPP), Dakota Creek Industries, Anacortes, Washington. Prepared for Washington State Department of Ecology on Behalf of Port of Anacortes. November 1.

GeoEngineers Inc. (GeoEngineers) 2023. Construction Completion Report, Dakota Creek Industries, Anacortes, Washington. Prepared for Washington State Department of Ecology on Behalf of Port of Anacortes. December 7.

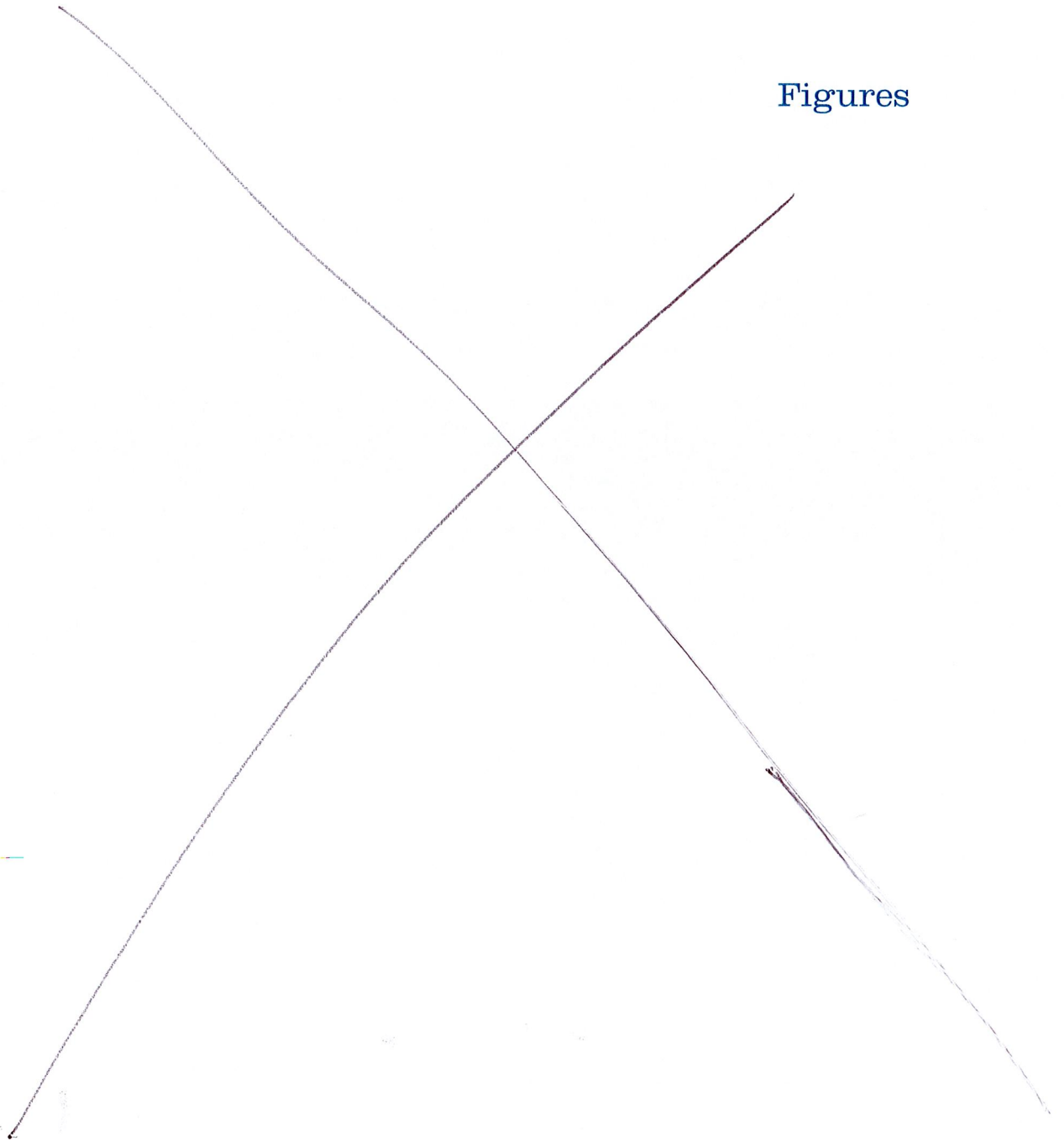
Washington State Department of Ecology (Ecology) 2016. Guidance for Remediation of Petroleum Contaminated Sites. Toxics Cleanup Program. Publication No. 10-09-057. Revised June.

Washington State Department of Ecology (Ecology) 2022. Cleanup Action Plan, Dakota Creek Industries, Anacortes, Washington, Facility Site ID: 2670, Cleanup Site ID: 5147. July.

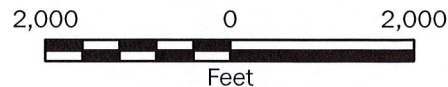
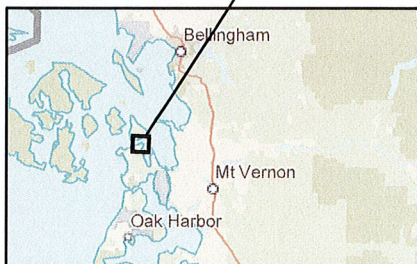
Washington State Department of Ecology (Ecology) 2023. Email Correspondence to GeoEngineers from Ecology confirming the use of shoreline monitoring wells MW-2B, MW-3A, MW-6 and MW-8 for post-construction groundwater compliance monitoring. October 2.



Figures



P:\5147006\GIS\5147006\_Project\aprx\514700616\_F01\_VicinityMap Date Exported: 12/04/23 by maugust



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI

Projection: NAD 1983 UTM Zone 10N

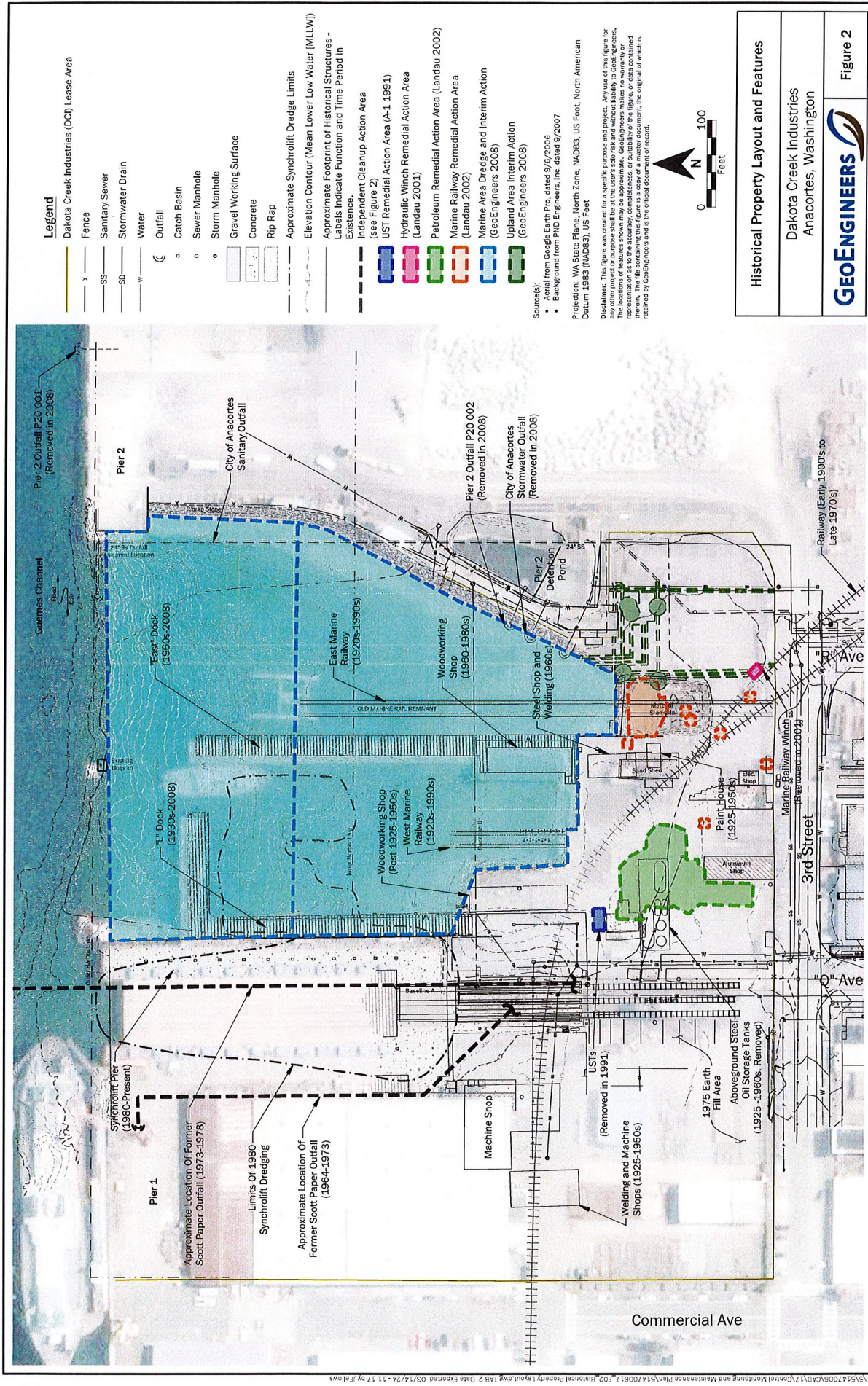
**Vicinity Map**

Port of Anacortes - Dakota Creek Industries  
Anacortes, Washington



**Figure 1**





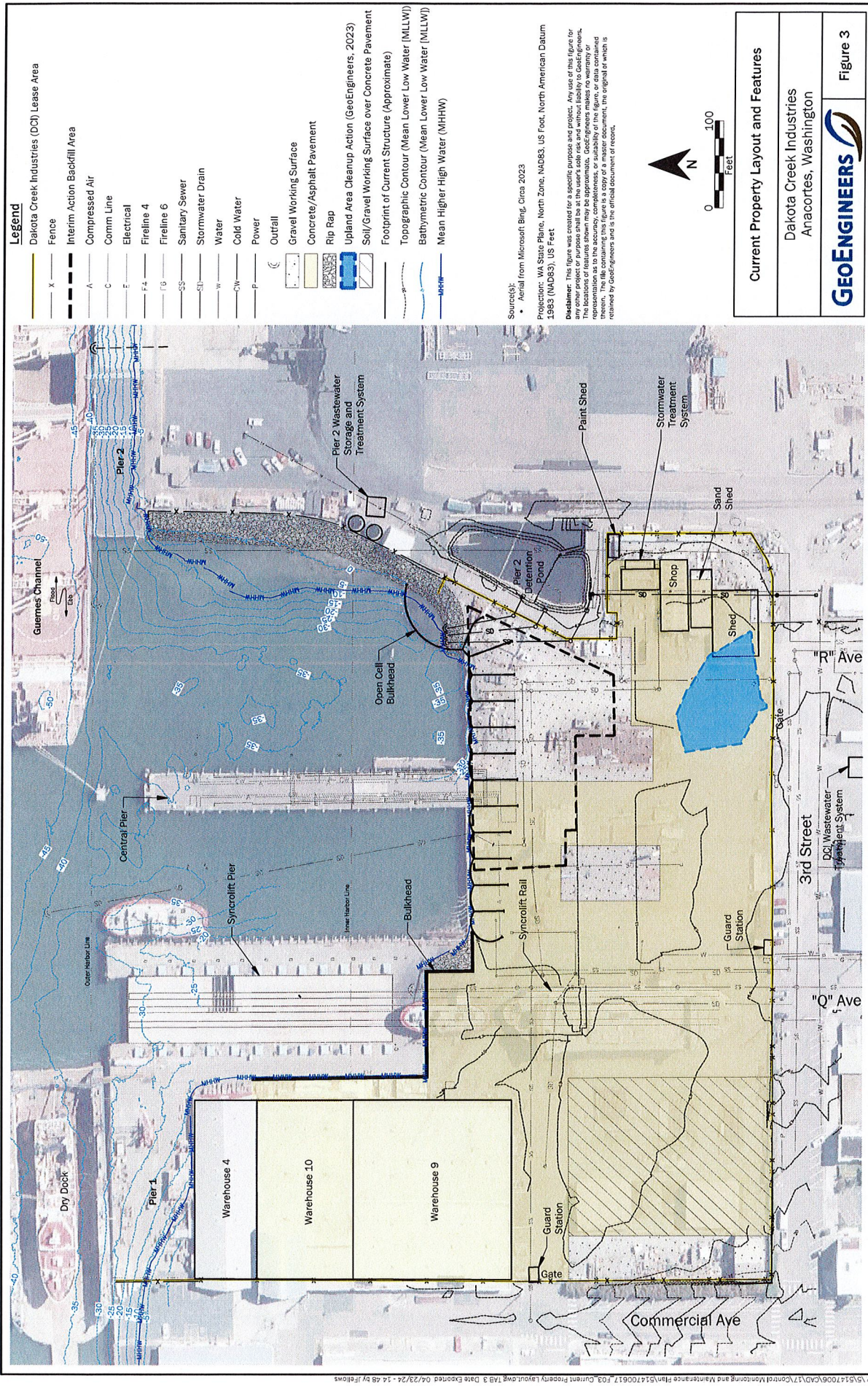
**Historical Property Layout and Features**

Dakota Creek Industries  
Anacortes, Washington

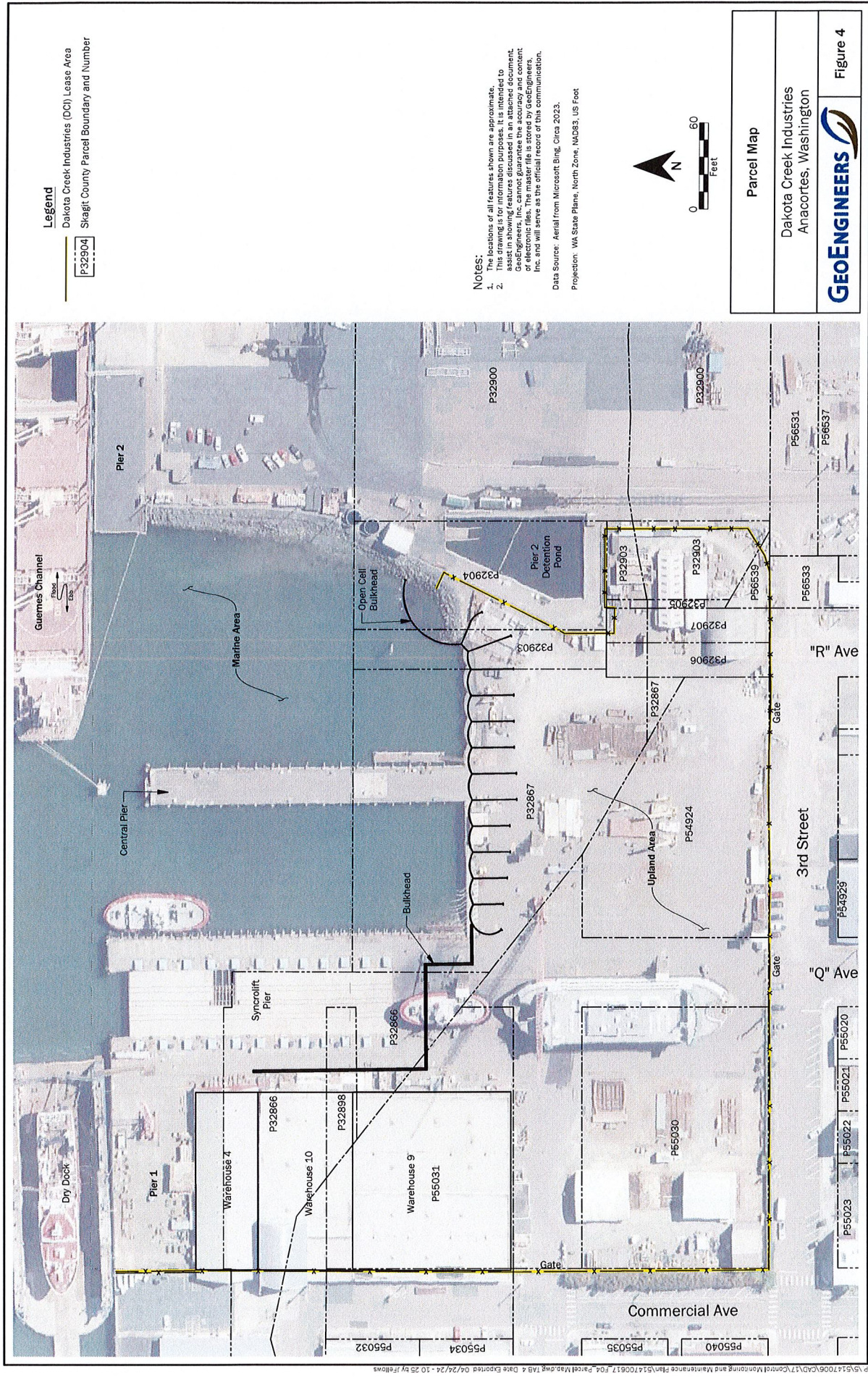
**GEOENGINEERS**

**Figure 2**









**Legend**

Dakota Creek Industries (DCI) Lease Area  
Shagit County Parcel Boundary and Number

P32904

**Notes:**

1. Locations of all features shown are approximate.
2. This drawing is for informational purposes only and is not intended to assist in showing features discussed in an attached document, or electronic files. The maker file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Aerial from Microsoft Bing, circa 2023.

Projection: WA State Plane, North Zone, NAD83, US Feet



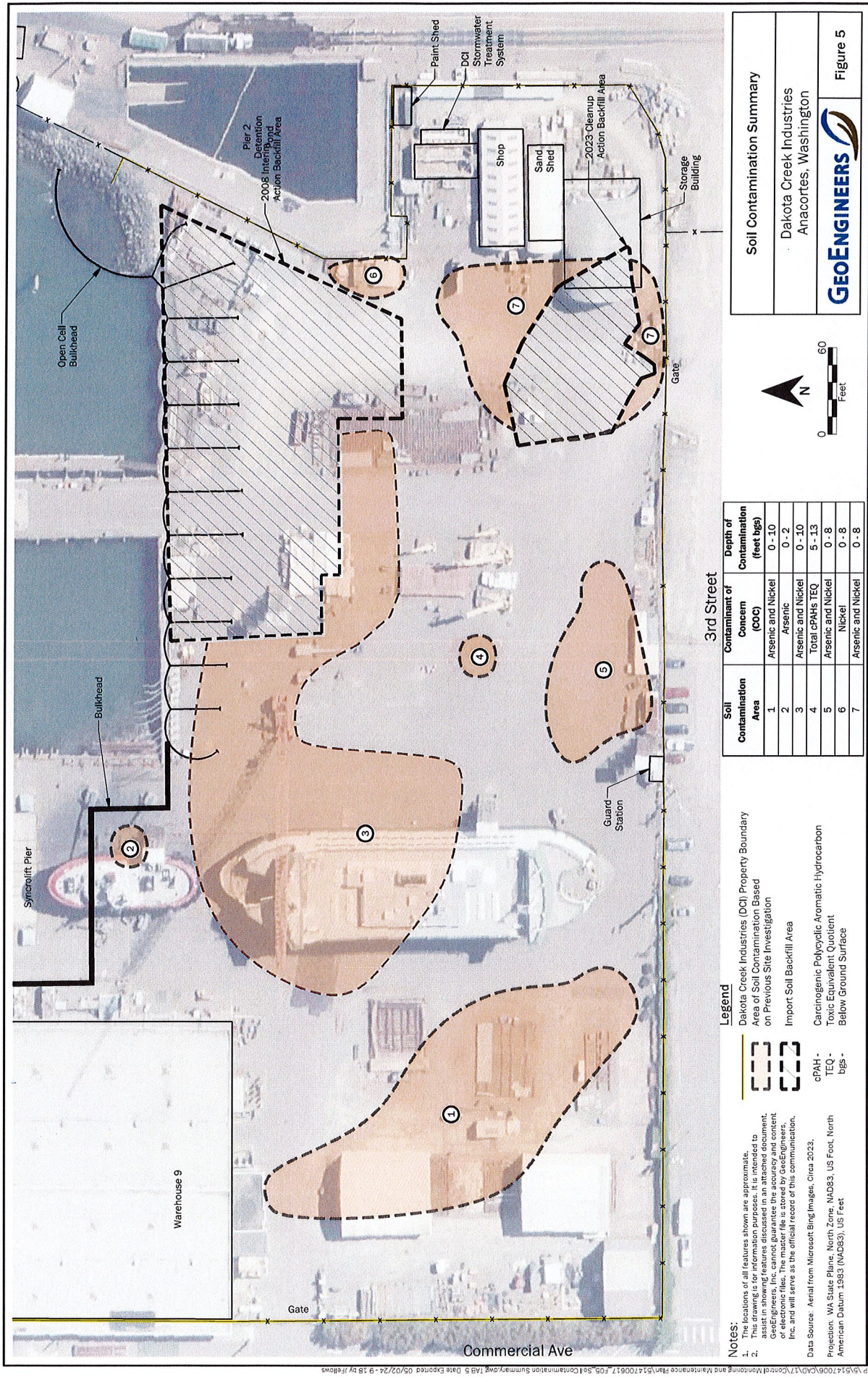
**Parcel Map**

Dakota Creek Industries  
Anacortes, Washington



Figure 4



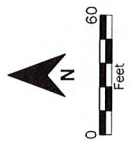


Soil Contamination Summary

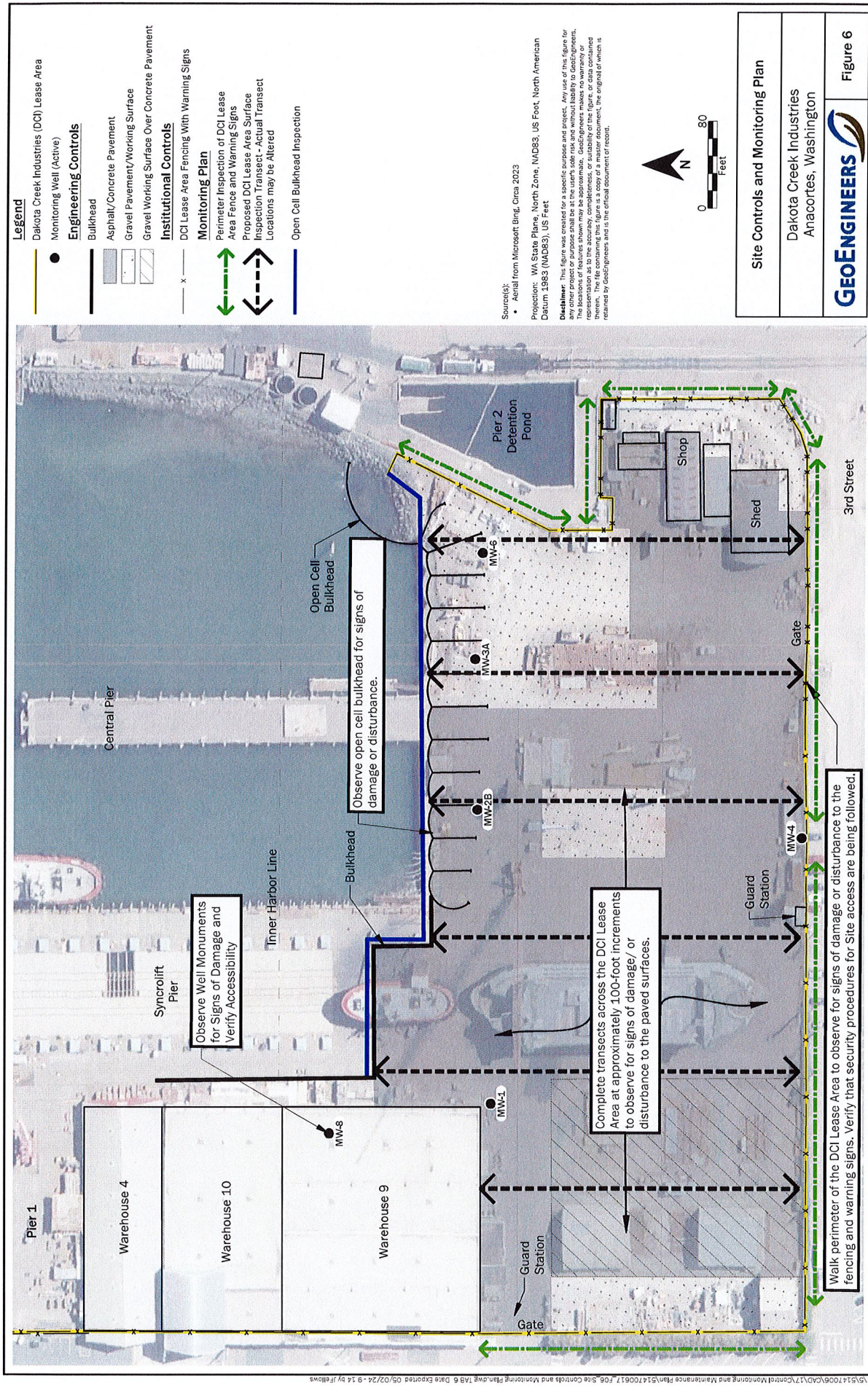
Dakota Creek Industries  
Anacortes, Washington

GEOENGINEERS

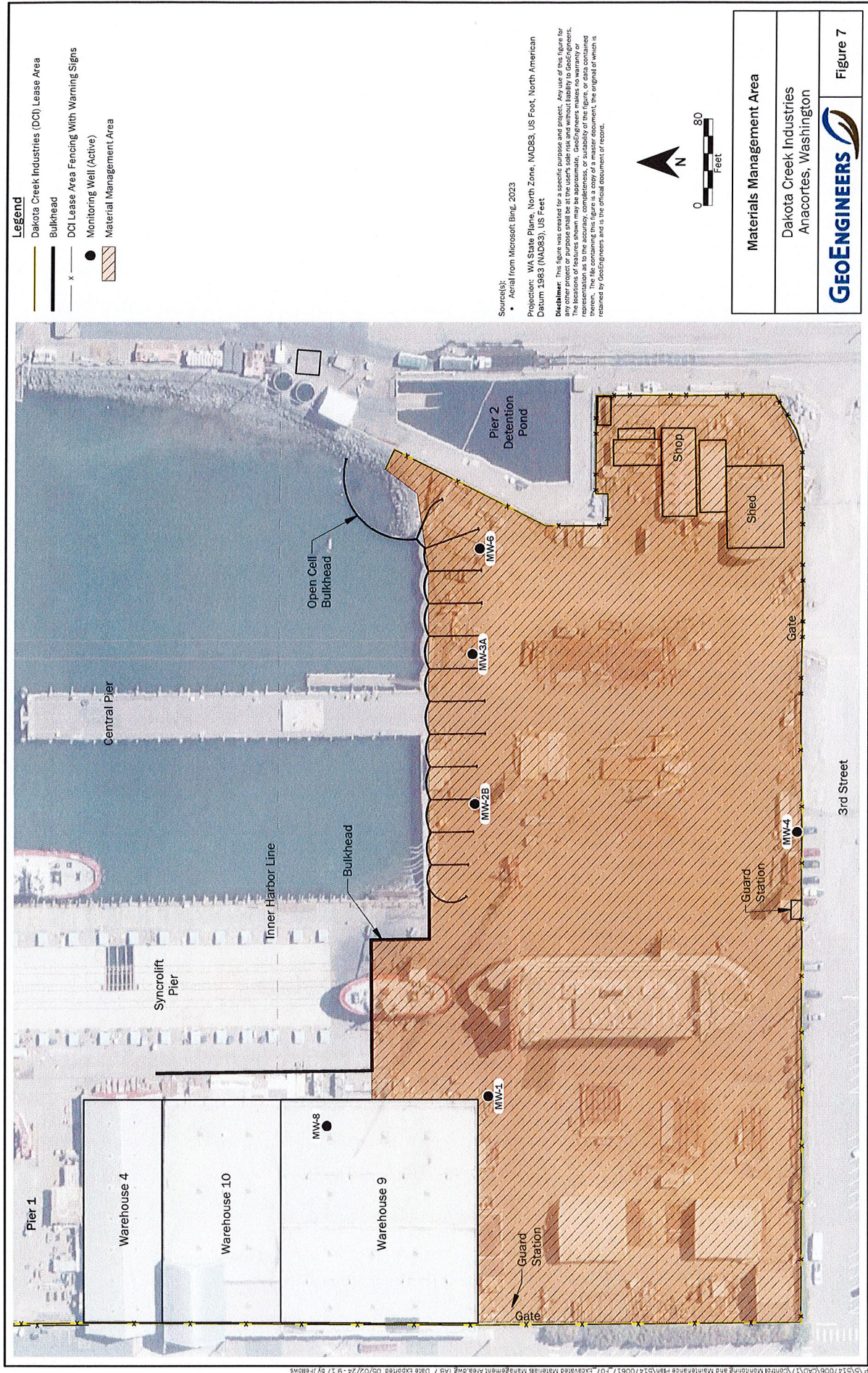
Figure 5





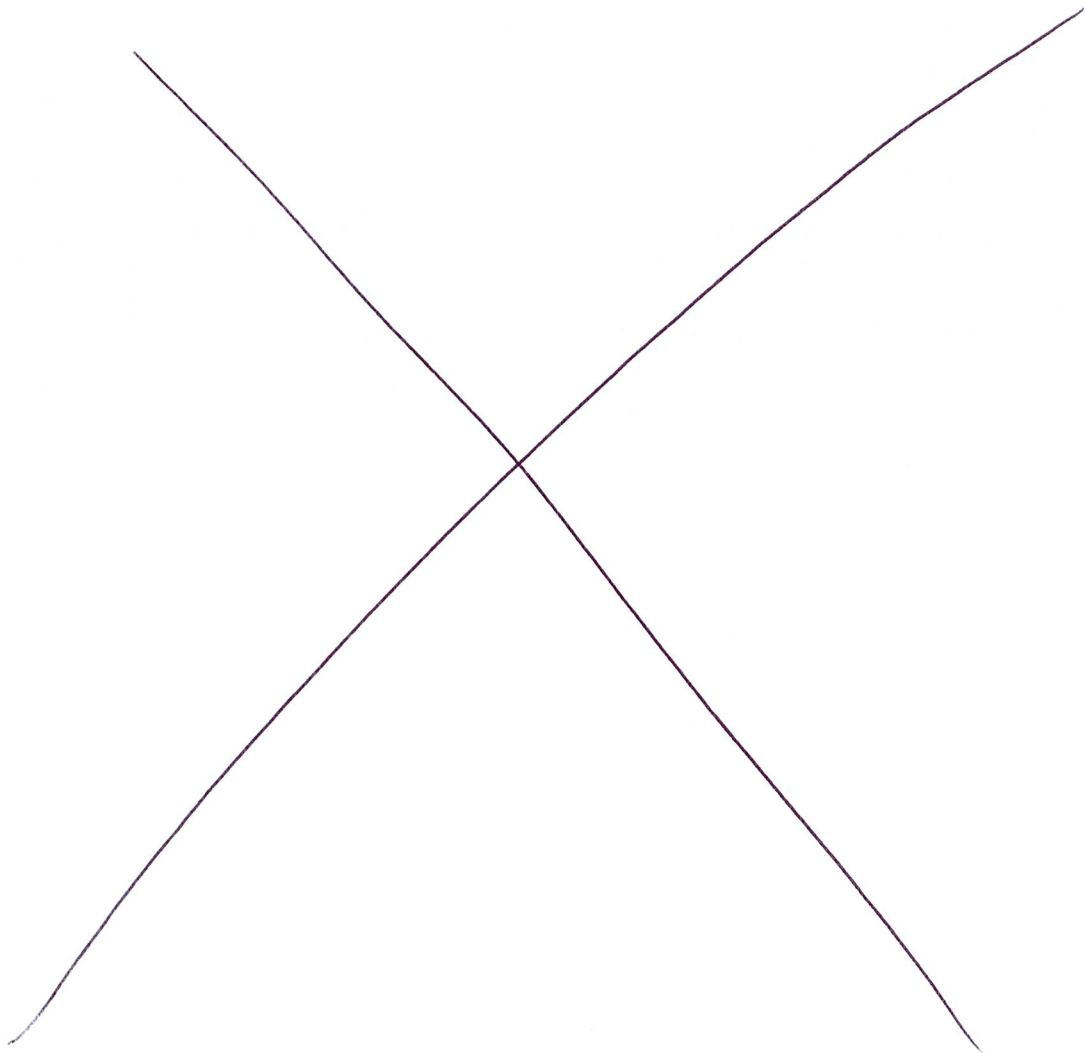








Appendix A  
Engineering and Institutional Controls Monitoring Form



# Engineering and Institutional Controls Monitoring Form

Site Name:

Date:

Monitoring Event Completed By (Name, Title, Organization):

Signature:

## Instructions:

- All checklist items must be completed and detailed comments made to document the results of the site controls evaluation.
- The completed checklist is part of the field record of the evaluation. Additional pages should be used (as necessary) to ensure a complete record is made. Number, date, initial and attach additional pages to this checklist upon completion.
- Any checklist line item marked in a SHADED BOX must be fully explained or an appropriate reference to previous reports provided. The explanation should include the rationale for conclusions and recommendations, if appropriate. Annotated the attached Site Plan as appropriate to provide additional detail.
- An evaluation of the site controls should consist of a complete site walk to fully evaluate the condition of site controls and features specifically described in this checklist.

| Preparation (to be completed prior to site visit)                        | YES        | NO        | EXPLANATION        |
|--------------------------------------------------------------------------|------------|-----------|--------------------|
| 1. Site as-built plans and/or base maps reviewed?                        |            |           |                    |
| 2. Previous monitoring report reviewed?                                  |            |           |                    |
| a. Were anomalies or site changes identified on the previous report?     |            |           |                    |
| b. Was maintenance performed on areas with identified anomalies?         |            |           |                    |
| 3. Site Maintenance and repair records reviewed?                         |            |           |                    |
| a. Has site repair resulted in a change from as-build conditions?        |            |           |                    |
| b. Are revised as-built drawings available that reflect repair changes?  |            |           |                    |
| 4. Changes in adjacent property conditions?                              |            |           |                    |
| a. Any change in adjacent property tenants?                              |            |           |                    |
| b. Any change in property use/features?                                  |            |           |                    |
| c. Any utility and/or maintenance work completed?                        |            |           |                    |
| d. Any erosion of adjacent property surfaces?                            |            |           |                    |
| e. Changes in surrounding vegetation?                                    |            |           |                    |
| 5. Changes in property conditions?                                       |            |           |                    |
| a. Any change in adjacent property ownership?                            |            |           |                    |
| b. Any change in property tenant(s)?                                     |            |           |                    |
| c. Any change in property use/features?                                  |            |           |                    |
| d. Any utility, repair and/or maintenance work completed?                |            |           |                    |
| <b>Evaluation of Site Controls (to be completed during site visit)</b>   | <b>YES</b> | <b>NO</b> | <b>EXPLANATION</b> |
| 1. Integrity of the <b>paved surfaces</b> (asphalt/concrete) threatened? |            |           |                    |
| a. Evidence of disturbance, excavation, grading?                         |            |           |                    |
| b. Evidence of cracking?                                                 |            |           |                    |
| c. Evidence of deformation/subsidence?                                   |            |           |                    |
| d. Evidence of ponded water?                                             |            |           |                    |
| e. Evidence of invasive plant species (weeds)?                           |            |           |                    |



| Evaluation of Site Controls (continued)                                                                    | YES        | NO        | EXPLANATION        |
|------------------------------------------------------------------------------------------------------------|------------|-----------|--------------------|
| 2. Integrity of the <b>gravel working surfaces</b> threatened?                                             |            |           |                    |
| a. Evidence of excavation or grading?                                                                      |            |           |                    |
| b. Evidence of rutting?                                                                                    |            |           |                    |
| c. Evidence of erosion/subsidence?                                                                         |            |           |                    |
| d. Evidence of ponded water?                                                                               |            |           |                    |
| e. Evidence of invasive plant species (weeds)?                                                             |            |           |                    |
| 3. Integrity of <b>sheet pile bulkhead</b> threatened?                                                     |            |           |                    |
| a. Evidence of disturbance or damage?                                                                      |            |           |                    |
| b. Evidence of corrosion?                                                                                  |            |           |                    |
| 4. Integrity of DCI Lease Area <b>perimeter fencing/warning signs</b> ?                                    |            |           |                    |
| a. Evidence of disturbance or damage?                                                                      |            |           |                    |
| b. Evidence of missing or fallen warning signs?                                                            |            |           |                    |
| 5. Integrity of compliance <b>monitoring wells</b> ?                                                       |            |           |                    |
| a. Evidence of disturbance or damage?                                                                      |            |           |                    |
| b. Well covered, buried or inaccessible?                                                                   |            |           |                    |
| 6. Evidence of anomalies or non-routine activities that may compromise the integrity of the Site Controls? |            |           |                    |
| <b>Conclusions and Recommendations</b>                                                                     | <b>YES</b> | <b>NO</b> | <b>EXPLANATION</b> |
| 1. Is there visual evidence of an imminent threat to one or more Site control?                             |            |           |                    |
| 2. Are follow-up site evaluations required?                                                                |            |           |                    |
| 3. Are existing maintenance/corrective actions satisfactory?                                               |            |           |                    |
| 4. Are other maintenance/corrective actions necessary?                                                     |            |           |                    |
| 5. Corrective/Maintenance Action(s) Required:                                                              |            |           |                    |
| 6. Corrective/Maintenance Action(s) Implemented:                                                           |            |           |                    |
| 7. Additional Comments:                                                                                    |            |           |                    |

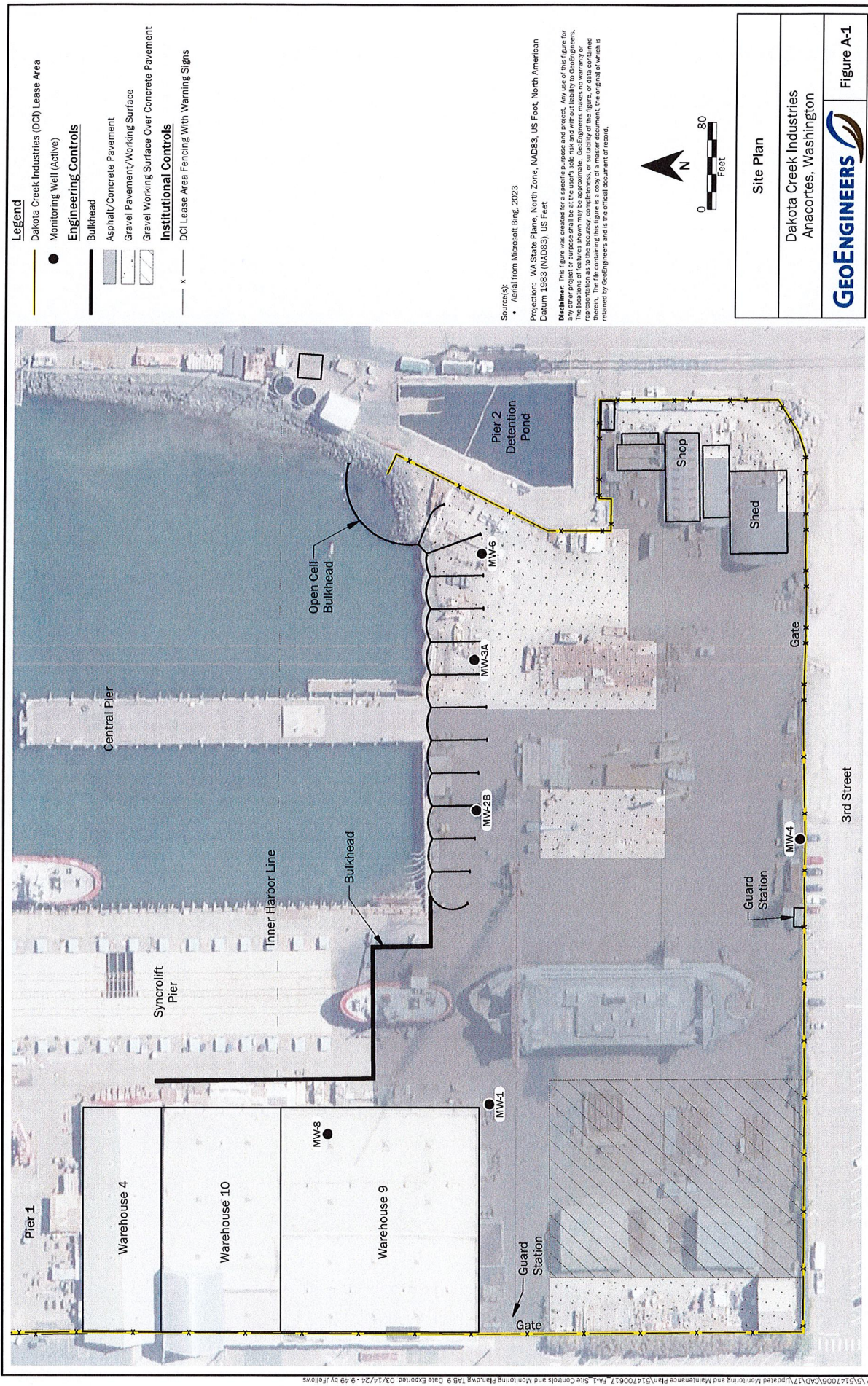
## Photograph Log

### General Instructions

- Photograph areas of interest in which anomalous conditions such as damage or changes to an existing site control are observed.
  - Record photograph number and a description of the observed condition.
  - Annotate the attached Site Plan with the approximate location of the observed anomalous condition that could potentially compromise the integrity of a Site control and corresponding photograph number.
  - Attach photographs documenting the anomalous Site condition.

| Photograph<br>No. | Photograph | Description |
|-------------------|------------|-------------|
|                   |            |             |
|                   |            |             |
|                   |            |             |
|                   |            |             |





|                                                  |
|--------------------------------------------------|
| <b>Site Plan</b>                                 |
| Dakota Creek Industries<br>Anacortes, Washington |
| <b>GEOENGINEERS</b>                              |
| Figure A-1                                       |