



**Periodic Review
Norseland Landfill
Facility Site ID#: 2627
Cleanup Site ID#: 761**

**8651 State Highway 3 Southwest
Bremerton, Washington**

**Northwest Region Office
Toxics Cleanup Program
December 2022**

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1.0 Introduction

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup Site conditions and monitoring data to ensure that human health and the environment are being protected at Norseland Landfill (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under Consent Decree No. 00 2 02071 8, State of Washington, Department of Ecology v. Kitsap County and Port of Bremerton. Residual concentrations of chloride, sulfate, nitrate, cyanide, ammonia, iron, manganese, beryllium, methane, and chloromethane that exceeded MTCA cleanup levels remain on the property. The MTCA cleanup levels for soil and groundwater are established under WAC 173-340-740 and WAC 173-340-720, respectively.

WAC 173-340-420(2) requires that Ecology conduct a periodic review every 5 years under the following conditions:

“The department shall conduct periodic reviews of a site whenever the department conducts a cleanup action; whenever the department approves a cleanup action under an order, agreed order or consent decree; or, as resources permit, whenever the department issues a no further action opinion; and one of the following conditions exists, at the site:

- (a) Where an institutional control and/or financial assurance is required as part of the cleanup action;
- (b) Where the cleanup level is based on a practical quantitation limit as provided for under WAC 173-340-707; and
- (c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.”

When evaluating whether human health and the environment are being protected, the factors Ecology must consider under WAC 173-340-420(4) Review criteria are:

- “(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site;
- (b) New scientific information for individual hazardous substances or mixtures present at the Site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site and resource uses;

- (e) The availability and practicability of more permanent remedies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.”

Ecology shall provide an opportunity for public comment for all periodic reviews.

2.0 Summary of Site Conditions

2.1 Site Description and History

From 1942 through 1948, the US Navy occupied the Property and operated Camp Christies, which included barracks, officer’s quarters, and several out-buildings. All buildings and debris were removed from the Site or demolished before the Property was transferred to Kitsap County. Puget Service Company leased the land and operated a landfill from 1950 through 1961. Most of the time the landfill was operated as a burn dump.

In 1962, the county leased the land to a developer who created Norseland Mobile Estates, a mobile-home park. In 1963, the County transferred the Property to the Port of Bremerton. In 1991, the Department of Ecology received reports of transitory odors from the Site as well as reports of health issues among the residents. The issues at the Site were believed to originate from the former landfill Site operations. In 1997, the County and Port decided to close the Norseland Mobile Estate Site and relocate the residents to a new mobile home park.

The properties adjacent to the Site are as follows:

- Undeveloped land is located to the north and west.
- The Bremerton National Airport is located to the southeast.
- A boat manufacturing facility is located to the east.

The regional geology of the area near the Site consists of glacial deposits, including till and advance outwash sands and gravels, that were deposited during the Vashon Stade of the Frasier Glacial Period. Soils from test pits advanced on Site consist of dense silty sand and gravelly sands typical of glacial till and outwash, to the maximum exploration depth of 60 feet below ground surface (bgs).

Groundwater was observed in two zones during drilling operations: a thin, perched zone located between 15 to 20 feet bgs and a deeper zone located at 40 to 60 feet bgs. Groundwater production within water supply wells in the area ranges from 6 to 20 gallons per minute. Groundwater elevation contours through the Site indicate that groundwater flows to the northwest, consistent with the ground surface topography.

There are two small streams located about 1/2 mile north and south of the Property. Both streams discharge to the Union River located about 2 miles west of the Site. There are wetlands in the area, although none on the Site.

2.2 Site Investigations

Initial Investigation (1991): As a result of odor and health complaints, in October 1991 Ecology performed an Initial Investigation to attempt to determine the source of the odors. No conclusions were reached with regard to the source of odors (whether on-site from the former Puget Service Company Landfill or off-site); however, Ecology determined that a number of 55-gallon drums had been stored at the Site and some of them had reportedly been emptied onto the soil and used as burn barrels. An estimated 800-square-foot (ft²) area of oil-stained soil was identified at the old drum storage area.

Site Hazard Assessment (1992): Based upon information gathered during the Initial Investigation, the Site was added to Ecology's list of Confirmed and Suspected Contaminated Sites as a suspected site. In November 1991, the Site was selected for a Site Hazard Assessment (SHA) and ranking using the Washington Ranking Method (WARM). The SHA was conducted in December 1991 by Ecology.

Ecology conducted air monitoring and collected soil and water samples as part of the SHA for the Site and the off-site Olympic View Sanitary Landfill (OVSL), which is located ½ mile northwest (downgradient) of the Site. The highest readings for organic compounds in air were observed at the eastern boundary of the OVSL, where concentrations of methane measured approximately 70 parts per million (ppm). Ecology collected soil samples of the "blue clay" fill material and from oil-stained soils in the former drum storage area. Water samples were collected from storm sewer drains.

Ecology concluded in the SHA that the primary concern at the Site was the odor problem and its potential health impacts. There was some concern regarding contamination at one exposed location of blue clay and the oily soil area. No definitive source of the odor was identified.

The Site was given a ranking of "2" through the SHA scoring process. The scoring was based on the relative toxicity of the lead detected in the "blue clay;" the proximity of the Site to populated areas and fishery resources; and the lack of runoff control, cover, or vapor recovery for the petroleum-impacted and "blue clay" areas.

Washington State Department of Health Survey (1992): In February and March 1992, the Washington State Department of Health (DOH) conducted a health survey of residents at the Norseland Mobile Estates. The survey consisted of a questionnaire mailed to 108 residents of the mobile home park and was conducted to assess the health status of the residents, as well as to gather information about the odors.

Over half of the residents responded that they had first detected the odor between April and November 1991. The residents most frequently indicated that they detected the odor on a daily basis, and 66% of the respondents indicated that they had experienced one or more health symptoms.

The study concluded that there was no evidence of an acute health threat posed by the Site. The residents may have had an increased reporting of respiratory complaints; however, other

symptoms appeared to be within the normal range. Additional investigation and characterization of the Site was recommended to identify compounds that could be causing the reported odors.

U.S. Navy Records Search (1992): In 1992, the US Navy conducted an historical records search regarding past Navy ownership, operation, and waste disposal activities at the Site, in particular whether the Navy disposed of the so-called "blue clay" at the Site. The report concluded that the Navy was likely not the source of the "blue clay" used as fill at the Site, and there was no evidence to support allegations that the Navy disposed of fill material at the Site.

Site Investigation (1992): Prompted by complaints of odors and environmental concerns, Science Applications International Corporation (SAIC) conducted a study for the Port of Bremerton in April/May 1992 involving an historical records search, soil gas survey, and ambient air sampling. The US Army and Navy, Kitsap County, City of Bremerton, past Norseland Mobile Estates residential owners, and private garbage haulers were identified as potential contributors to the former landfill. However, no written records of disposal activities were found in the study.

The exact source of the Site odors was not identified in the study; however, it was stated that both an off-site (Olympic View Sanitary Landfill) and an on-site subsurface source (potentially the former Puget Service Company landfill) were likely present. Odor episodes were correlated with calm or low wind conditions.

Soil gas testing, and on-site and off-site ambient air sampling, suggested that a variety of organic compounds (including benzene, toluene, ethylbenzene, and xylene (BTEX)) were present in the subsurface at the Norseland Site and in the ambient air at the Norseland and OVSL Sites. Low levels of methane and sulfide compounds were detected at OVSL but not at Norseland. Several compounds detected in ambient air samples at Norseland and OVSL exceeded MTCA air standards.

The report recommended additional investigations to confirm the presence of soil contamination, additional ambient air sampling, and a geophysical survey to delineate the extent of disposal areas at the Norseland Site. This information could then be evaluated in the context of a human-health risk assessment.

Soil Gas Survey (1993): Applied Geotechnology Inc. (AGI) conducted a soil gas survey at the Norseland Mobile Estates during December 1992. PETREX soil gas samplers were placed at five locations associated with past landfill operations. The samplers were placed at specific locations of suspected contamination. AGI did not detect any volatile organic compounds or semi-volatile organic compounds which might indicate soil gas contamination in any of the samplers. The report concluded that the data suggest that soil gas did not substantially contribute to odor events.

Air Sampling Results (1993): AGI personnel conducted ambient air sampling during an "odor event" on April 21, 1993. Samples were collected from three outside locations and one inside location (inside one of the Site mobile homes). Sample analysis was performed for volatile

organics compounds (VOCs), fixed gases, sulfur compounds, and aldehydes. No VOCs, sulfur compounds, or aldehydes were detected in the outdoor samples collected at the Site. Low concentrations of several compounds were detected in an air sample collected from inside a home.

Site Radiation Survey (1993): A radiation survey of the Norseland neighborhood and open field adjacent to the Site was made by DOH radiation personnel. No elevated readings were observed.

Drinking Water Study (1992): The DOH tested the drinking water supplied to the Norseland Mobile Estates by the City of Bremerton and found it to be of good quality and satisfactory for use. The results indicated that there was no evidence of contamination of the water system from leaching of organic or inorganic chemicals through the water distribution system at the Site.

Additional Soil Sampling (1993): Ecology conducted additional sampling of the petroleum-contaminated soils and so-called "blue clay" to determine whether additional action was warranted with regards to these materials. The results of the blue clay sampling, which included the collection of 20 samples for chemical testing and statistical analysis of results, indicated that lead and chromium were below MTCA cleanup levels for these soils and no further action was warranted.

The petroleum-contaminated soils contained Total Petroleum Hydrocarbon (TPH) concentrations of 360 and 600 milligrams per kilogram (mg/kg), above the MTCA soil cleanup level in place at that time (100 mg/kg). The TPH was most likely lube oil or heavy motor oil. The petroleum-contaminated soils at the Site represented a small, isolated surface staining of soils (approximately 800 ft²) identified and sampled by Ecology. These TPH-contaminated soils were specifically excluded from the RI/FS per the Consent Decree. Remediation of these soils was to be done independently by the "potentially liable person," as defined by MTCA.

Odor Monitoring (1995): The study consisted of a compilation of observations made at six locations in the area over the period April 1993 to March 1994. The observations were made utilizing a standardized system for recording odor observations.

Odors occurred throughout the period of the study. The majority of the strong odors occurred during early morning or late evening when air mixing is lowest. Odors decreased during periods of increased wind. The OVSL was identified as the most likely source of the odors. The presence of the odors indicated the need for continued gas control improvements at OVSL and the use of best available technology to minimize odor impacts from the landfill.

Landfill Boundaries Survey (1996): An EM-31 and ground-penetrating radar (GPR) survey were performed at the Site to delineate the boundaries of the former landfill. The electromagnetic survey was successful in identifying the west boundary of the landfill. A GPR survey was completed along the streets and several other locations in order to define the eastern boundary of the landfill debris. The GPR survey indicated that several lots in the west-central portion of the Site were partially or wholly underlain by landfill debris.

Test Pit Observations (1996): Test pit excavations by Golder Associates confirmed the results of the geophysical surveys in delineating the landfill debris.

2.3 Cleanup Actions

During the Remedial Investigation (RI) and Feasibility Study (FS), four alternative remedies were developed: (1) No Action, (2) Institutional Controls and Monitoring, (3) Permeable Soil Cap, and (4) Low Permeability Cap.

After evaluation of the alternatives based on the seven criteria in WAC 173-340-360 that include (1) Protectiveness, (2) Permanence, (3) Cost, (4) Effectiveness over the long term, (5) Management of short-term risk, (6) technical and administrative implementability, and (7) Consideration of public concerns, Alternative 3 was selected as the best remediation option.

The Alternative 3 remedy consisted of a permeable soil cap that is 18 inches thick and is overlain by 6-inch-thick vegetated topsoil layer. The vegetated layer promotes evapotranspiration and decreases the potential for erosion of the cap.

The underlying 18-inch-thick soil layer was graded to even out the topography and serve as a base to the vegetated topsoil. Since the soil layer is relatively uniform, it provides a more homogeneous medium for any landfill gasses to diffuse through the full area (11 acres) covered by the cap. This diffusion is intended to mitigate buildup of gas pockets beneath the soil cap.

Because of the simplicity of the cap, little maintenance is required to maintain this remedy. The cap also provides a barrier to direct contact with landfill debris. In the event that the capped area is ever developed with buildings, landfill gas control measures, such as passive venting, would be required, in addition to any other measures that are necessary to protect the remedy, human health, and the environment.

Requirements for this remedy include cap maintenance, surface water control, groundwater and ambient air compliance monitoring, and restricted land use, as described in the Compliance Monitoring, Operations, and Maintenance Plan dated December 26, 2001. A Restrictive Covenant on the portion of the land parcel that includes the Site was recorded on August 9, 2000.

Groundwater compliance monitoring at the Site was conducted at three monitoring wells on the Site (MW-1 to MW-3) on a semi-annual basis for 5 years. Groundwater was analyzed for conventional parameters, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and priority metals. Ambient air monitoring was also conducted at the Site on a semi-annual basis. Ambient air samples were collected over a time-averaged 24-hour interval and analyzed for “hazardous air constituents” and methane.

Groundwater and ambient air compliance monitoring was conducted from 2001 to 2006. Over this interval, Site contaminants of concern were not detected above their respective cleanup levels. Because there was no exceedance of the ambient air or groundwater monitoring

cleanup levels, the Site was removed from the Washington State Hazardous Sites List in 2011 after a public notice and comment period.

2.4 Cleanup Standards

Cleanup standards consist of a cleanup level and a point of compliance. A cleanup level is the maximum acceptable concentration of a constituent of concern to which human or ecological receptors could be exposed. A point of compliance is the location at which cleanup levels must be met. Cleanup levels were established for the Site based on its location in a zoned industrial park and institutional controls prohibiting residential and recreational use of the Site. Cleanup standards for site media are as follows:

- **Air:** Ambient air sampling conducted during Site characterization indicated air at the Site was similar in composition to the national average suburban ambient air quality. The cleanup level was defined as either calculated MTCA Method B cleanup levels or the national average suburban ambient air quality, as defined in the Agency for Toxic Substances and Disease Registry (ATSDR) 1997 update on air quality. The point of compliance was defined as ambient air in the breathing zone throughout the Site.
- **Groundwater:** The highest beneficial use for groundwater on the Site is drinking water. Cleanup levels for groundwater were defined based on MTCA Method B for non-carcinogens, and EPA primary drinking water maximum contaminant levels (MCLs) for carcinogens, where the risk of cancer is equal to or less than 10^{-5} , or MTCA Method B calculated concentration if the risk of cancer exceeds 10^{-5} . The groundwater point of compliance for the Site was defined as the perimeter of the landfill at the time of closure in 1961, extending vertically from the uppermost level to the maximum depth which could potentially be affected by the Site.
- **Soil:** Soil cleanup levels were calculated using MTCA Method B. The point of compliance was defined as from the ground surface to 2 feet bgs within the perimeter of the former active area of the landfill (the footprint of the permeable cap), and from the surface to 15 feet bgs outside the active area of the former landfill.

2.5 Restrictive Covenant

Based on the Site use and industrial zoning, surface cover, and cleanup levels, it was determined that the Site was eligible for a 'No Further Action' determination if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded on August 8, 2000 on the portion of Kitsap County tax parcel 1123-01-3-001-1000 that includes the Site (depicted in Attachment A of the Restrictive Covenant). It imposed the following limitations:

1. The owner shall not disrupt the integrity of the cap required by the cleanup action plan in any manner that will expose waste materials or create a new exposure pathway to the environment without prior written approval from Ecology. However, maintenance

or minor temporary alterations of the cap may be permitted so long as appropriate health and safety protocols are followed and the cap is repaired in a manner consistent with the Cleanup Action Plan. In addition, excavation or other activities connected with the site development are permitted so long as appropriate health and safety protocols are followed, Ecology is given prior notice of development activities and a cap of equivalent protectiveness is provided following development.

2. Unless authorized by the Cleanup Action Plan or this Restrictive Covenant, any activity on the property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
3. Unless authorized by the Cleanup Action Plan or this Restrictive Covenant, any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action or create a new exposure pathway is prohibited without prior written approval from Ecology.
4. Unless authorized by the Cleanup Action Plan, the Owners will not withdraw groundwater from the Property.
5. Residential use, agricultural use, child daycare, educational institutions, and overnight recreational use on the Property is prohibited without prior approval by Ecology.
6. Subject to Section 5 herein, following remediation, any activity listed for an industrial zone by Kitsap County Zoning Ordinance Section 370, Industrial Zone (IND), dated June 22, 1998 (See Appendix D of the Cleanup Action Plan) is permitted.
7. The owner of the Property must give thirty (30) days' advanced written notice to Ecology of the Owners intent to convey any interest in the Property. No conveyance of title, easement, lease or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
8. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all leases of the restrictions on the use of the Property.
9. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
10. For the duration of the Consent Decree which requires the Remedial Action, the Owner shall allow Ecology, its employee's, agent's, contractor's, and authorized representatives an irrevocable right to enter upon the property with reasonable notice and at any reasonable time for purposes from following Ecology to monitor and enforce compliance with the decree, including, but not limited to: (1) inspecting records, operations logs, and contracts related to work being performed pursuant to the Decree; (2) reviewing the Owners progress in carrying out the terms of the Decree; (3)

conducting such tests or collecting such samples as Ecology may deem necessary; (4) using a camera, sound recording or other documentary type equipment to record work done pursuant to the Decree; (5) verify the data submitted to Ecology by the Owner. Consistent with Ecology's responsibility under state law, Ecology, and any person acting for it, shall use reasonable efforts not to interfere with the operations of Owner or Owner's lessee by any such entry. In the event Ecology agrees that it shall provide reasonable notice to the Owner of any planned activity, as well as schedules and locations of activities at the Property. Ecology further agrees to consider any request to modify its scheduled entry or activities at the Property. Notwithstanding any provision of this Restrictive Covenant, Ecology retains all access authorities and access rights, including enforcement authorities related hereto, under applicable law.

11. The Owners of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.5.

3.0 Periodic Review

3.1 Effectiveness of completed cleanup actions

The Site is currently vacant and not developed with any structures. A photo log is included as Appendix 6.6.

The Restrictive Covenant for the Site was recorded and is discoverable through the Kitsap County Recording Office. Ecology found no evidence a new instrument has been recorded that limits the effectiveness or applicability of the covenant. This covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup action and prohibits any use of the property that is inconsistent with the covenant, unless approved by Ecology in advance. This covenant ensures the long-term integrity of the cleanup action will be protected.

Based upon the Site visit conducted on May 25, 2022, the permeable soil cap at the Site continues to eliminate exposure to contaminated soils by ingestion and contact. The cap appears in satisfactory condition. Some erosion was observed on the slope on the western side of the cap (Appendix 6.6, Photo 3). This part of the cap should be assessed and repaired to ensure further damage to the cap does not occur.

Soils with chloride, sulfate, nitrate, manganese, and beryllium concentrations higher than Site cleanup levels are still present at the Site. However, the remedy prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the contamination remaining is contained and controlled.

3.2 New scientific information for individual hazardous substances or mixtures present at the Site

There is no new relevant scientific information for the hazardous substances remaining at the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

There are no new applicable or relevant state or federal laws for hazardous substances remaining at the Site.

3.4 Current and projected Site and resource use

The Site is currently vacant and not developed with any structures.

The Port of Bremerton proposed the construction of a 58,500 square-foot, slab-on-grade, manufacturing facility on the Site. Ecology's advanced approval of the development was required, per the terms and conditions of the Restrictive Covenant.

The following documents were provided to Ecology for review as part of the Port of Bremerton's development request:

- *Exposure Assessment and Work Plan, Inventech Marine Solutions Site Development/Norseland Cleanup Site* by Krista Webb Consulting dated August 2, 2022
- *Stormwater Report for Inventech Marine Solutions, City of Bremerton Site Plan Review & Site Development Permit Applications* by Map Limited dated April 11, 2022

Ecology provided these documents to the Kitsap Public Health District for review as well. These documents can be found on the Site's webpage:

<https://apps.ecology.wa.gov/cleanupsearch/site/761>

The Engineering Design Report (Golder Associates, 2000) indicates that the remedy for the Site (such as capping and grading) was designed to accommodate a future industrial park at the Site. The engineering design also included stormwater conveyance facilities and utility corridors so that the cap and landfill refuse would not be disturbed during future development activities. Additionally, Section 1 of the Restrictive Covenant indicates: "...excavation or other activities connected with site development are permitted as long as appropriate health and safety protocols are followed, Ecology is given prior notice of development activities, and a cap of equivalent protectiveness is provided following development".

The development is adjacent to, but not on top of, the landfill refuse. The landfill cap will not be affected by the development or during construction activities. A map showing the proposed development area relative to the landfill is included as Appendix 6.4.

No subsurface features are planned as part of the development, except for utility lines. To ensure the proper handling and disposal of any contaminated soils that may be encountered, Krista Webb Consulting (on behalf of the Port of Bremerton) will be on-site during excavation activities. Monitoring for methane gas will be conducted during utility installation as well; however, prior investigations indicate that methane gas is not likely to be a concern. A health and safety plan will be developed for excavation workers.

The stormwater design for the Site shows that there is sufficient capacity of the existing system to handle the increased flow and run off generated by the new impervious surfaces associated with the development. The existing stormwater system was designed to prevent sheet flow over the landfill cap.

Based on Ecology's review and evaluation of the request and work plans, the proposed construction project and changes in Site use are anticipated to still be protective of the remedy, human health, and the environment. Ecology approved the Port of Bremerton's development request via email on December 22, 2022, with the condition that Ecology would need to be notified if there is new information about site conditions or potential exposure pathways, if contamination is identified or disposed of during construction activities, if additional mitigation measures are necessary, or if there are any other significant changes to the work plans.

3.5 Availability and practicability of more permanent remedies

The remedy implemented included containing hazardous substances, and it continues to be protective of human health and the environment. While more permanent remedies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the cleanup action were capable of detection below the selected MTCA cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 Conclusions

The following conclusions have been made as a result of this periodic review:

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action is determined to comply with cleanup standards under WAC 173-340-740(6)(f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Restrictive Covenant for the property is in place and continues to be effective in protecting human health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.
- The permeable soil cap at the Site appears in satisfactory condition; however, some erosion was observed on the slope on the western side of the cap. This part of the cap should be assessed and repaired by the property owner to ensure further damage does not occur.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. No additional cleanup actions are required by the property owner at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the remedy is maintained.

Ecology will schedule the next review for the Site five years from the date of this periodic review. If additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years after those activities are completed.

5.0 References

Ecology. Initial Investigation. 1991.

Ecology. No Further Action Determination. August 15, 2006.

Ecology. Periodic Review and Proposed Removal from the Hazardous Sites List Fact Sheet. June 3, 2011.

Ecology. Periodic Review. May 2017.

Ecology. Site Visit. May 25, 2022.

Golder Associates, Inc. As-Built Report, Norseland Site, Port Orchard, Washington. June 29, 2001.

Golder Associates, Inc. Cleanup Action Plan, Norseland Site, Bremerton, Washington. May 17, 2000.

Golder Associates, Inc. Compliance Monitoring and Operation and Maintenance Plan, Norseland Site, Bremerton, Washington. December 26, 2001.

Golder Associates, Inc. Draft Final Remedial Investigation and Feasibility Study for the Norseland Mobile Estates. December 4, 1996.

Golder Associates, Inc. Engineering Design Report, Norseland Site Development Information to Support Site Development Activity Permit Application. June 23, 2000.

Golder Associates, Inc. Petition for Removal of the Former Norseland Estates Site (Port Orchard, Washington) from the Hazardous Sites List. November 1, 2007.

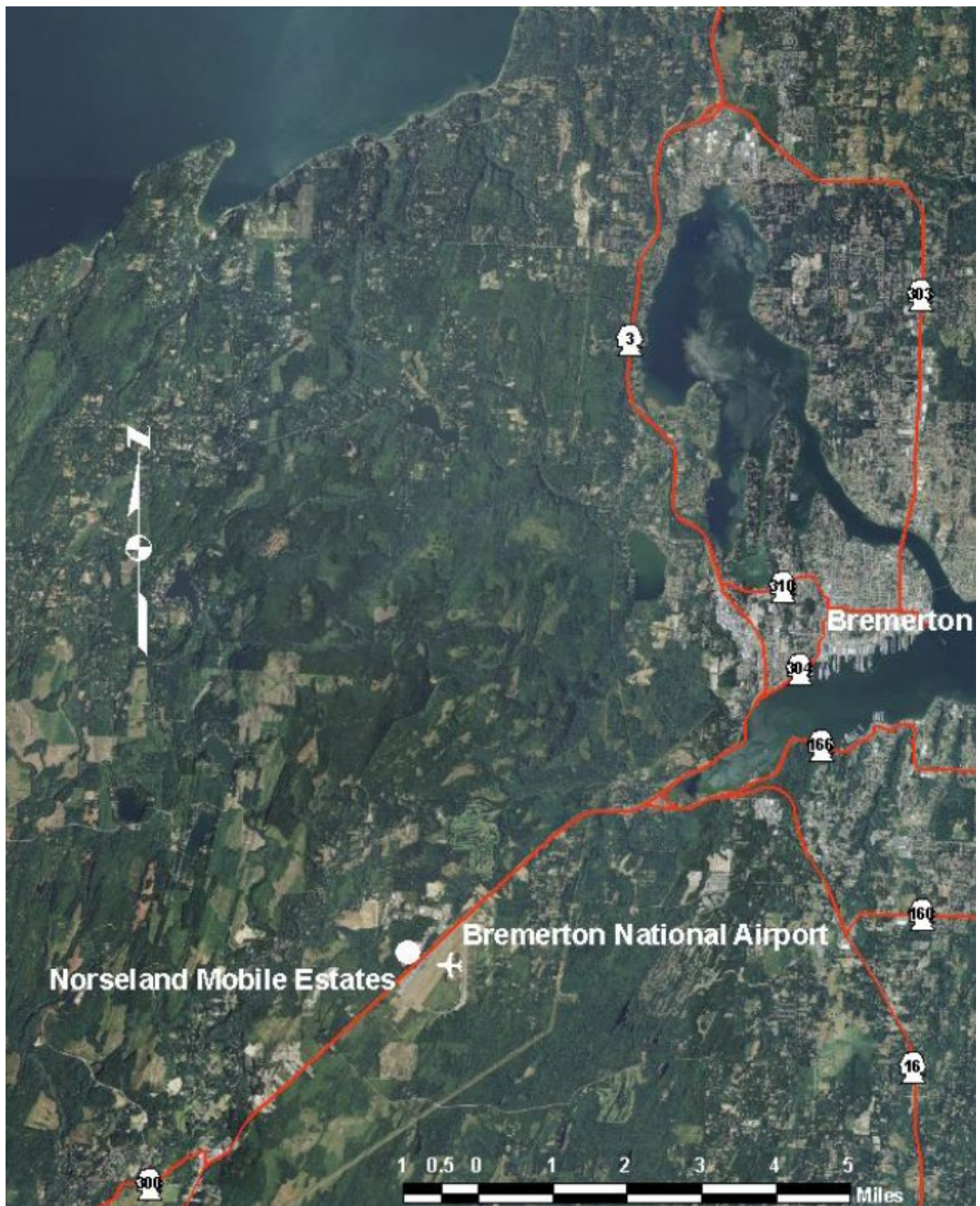
Krista Webb Consulting. Exposure Assessment and Work Plan, Inventech Marine Solutions Site Development/Norseland Cleanup Site. August 2, 2022.

Map Limited. Stormwater Report for Inventech Marine Solutions, City of Bremerton Site Plan Review & Site Development Permit Applications. April 11, 2022.

Port of Bremerton. Restrictive Covenant. August 9, 2000.

6.0 Appendices

6.1 Vicinity Map



6.2 Site Map and Aerial Photograph



6.3 Site Map with Former Monitoring Locations

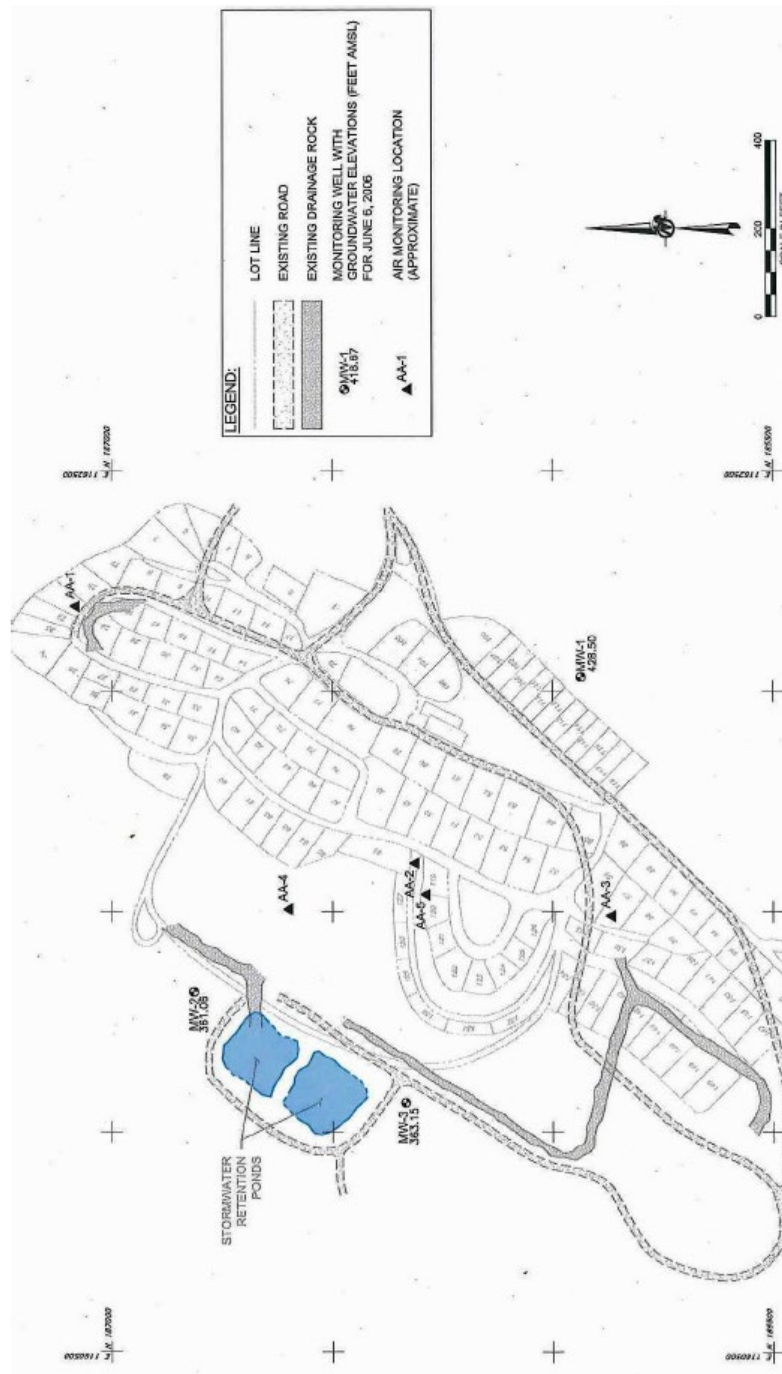
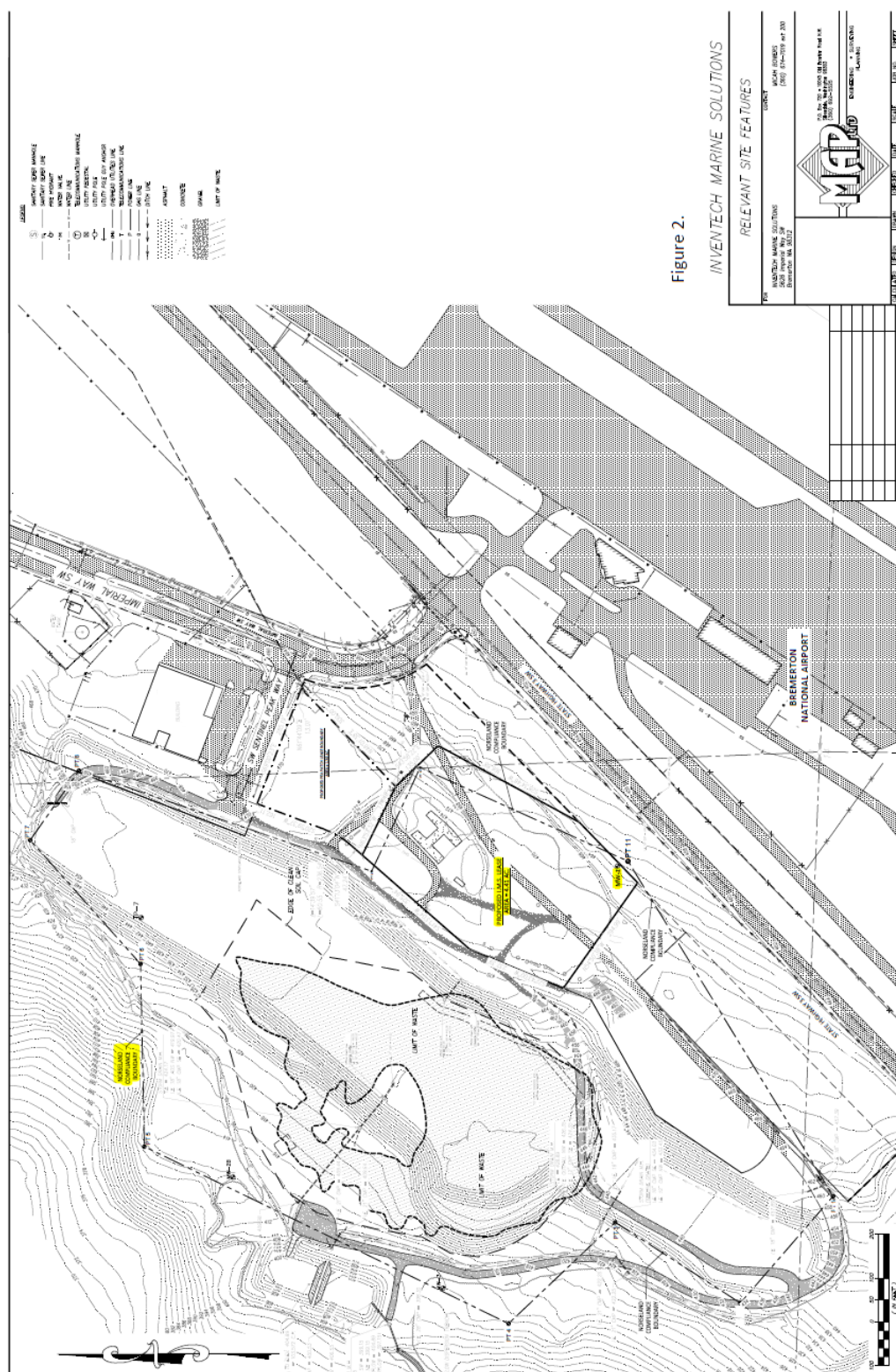


Figure 2.



6.5 Restrictive Covenant

AFTER RECORDING MAIL TO:

William F. Joyce
Ogden Murphy Wallace, P.L.L.C.
1601 Fifth Avenue, Suite 2100
Seattle, WA 98101-1686



DOCUMENT TITLE: Restrictive Covenant
GRANTOR(S): Port of Bremerton
GRANTEE(S): Washington State Department of Ecology
LEGAL DESCRIPTION: Reference Attachment B
(8651 State Hwy 3 SW, Port Orchard WA
a portion of Section 11, Township 23N, Range 1W)
REFERENCE NUMBER: SE 1/4 & NE 1/4 of the SW 1/4 of SEC 11
ASSESSOR'S PROPERTY TAX PARCEL/ACCOUNT NUMBER: A portion of Assessor's #1123-01-3-001-1000

**RESTRICTIVE COVENANT
NORSELAND MOBILE ESTATES**

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by the Port of Bremerton, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following documents: 1) Consent Decree, dated July 6, 2000; and 2) Cleanup Action Plan, dated May 17, 2000. These documents are on file at Ecology's Northwest Regional Office (NWRO).

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of certain hazardous substances which exceed the Model Toxics Control Act Method A Residential Cleanup Level for Soil established under WAC 173-340-740, as described in the RI/FS for Norseland Mobile Estates dated May 1997.

The undersigned, the Port of Bremerton, is the fee owner of real property (hereafter "Property") in the County of Kitsap, State of Washington, that is subject to this Restrictive Covenant. The Property boundaries are depicted in Attachment A. The Property is legally described as set forth in Attachment B. The extent of documented landfill debris at the Property is depicted on Attachment C. The extent of the permeable cap required by the Cleanup Action Plan is depicted on Attachment D.

The Port of Bremerton makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all



persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. The Owner shall not disrupt the integrity of the cap required by the Cleanup Action Plan in any manner that will expose waste materials or create a new exposure pathway to the environment without prior written approval from Ecology. However, maintenance or minor, temporary alterations of the cap may be permitted so long as appropriate health and safety protocols are followed and the cap is repaired in a manner consistent with the Cleanup Action Plan. In addition, excavation or other activities connected with site development are permitted so long as appropriate health and safety protocols are followed, Ecology is given prior notice of development activities, and a cap of equivalent protectiveness is provided following development.

Section 2. Unless authorized by the Cleanup Action Plan or this Restrictive Covenant, any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Unless authorized by the Cleanup Action Plan or this Restrictive Covenant, any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.



Section 4. Unless authorized by the Cleanup Action Plan, the Owner will not withdraw groundwater from the Property.

Section 5. Residential uses, agricultural uses, child daycare, educational institutions, and overnight recreational uses on the Property are prohibited without prior approval by Ecology.

Section 6. Subject to Section 5 herein, following remediation, any activity listed for an industrial zone by Kitsap County Zoning Ordinance Section 370, Industrial Zone (IND), dated June 22, 1998 (See Appendix D of Cleanup Action Plan) is permitted.

Section 7. The Owner of the Property must give thirty (30) days' advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 8. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 9. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.



Section 10. For the duration of the Consent Decree which requires the Remedial Action, the Owner shall allow Ecology, its employees, agents, contractors and authorized representatives an irrevocable right to enter upon the property with reasonable notice and at any reasonable time for purposes for allowing Ecology to monitor and enforce compliance with the Decree, including, but not limited to: (1) inspecting records, operation logs, and contracts related to the work being performed pursuant to the Decree; (2) reviewing the Owner's progress in carrying out the terms of the Decree; (3) conducting such tests or collecting such samples as Ecology may deem necessary; (4) using a camera, sound recording or other documentary type equipment to record work done pursuant to the Decree; and (5) verifying the data submitted to Ecology by the Owner. Consistent with Ecology's responsibility under state law, Ecology, and any persons acting for it, shall use reasonable efforts not to interfere with the operations of Owner or Owner's lessees by any such entry. In the event Ecology enters the Property for reasons other than emergency response, Ecology agrees that it shall provide reasonable notice to Owner of any planned activity, as well as schedules and locations of activities on the Property. Ecology further agrees to consider any requests to modify its scheduled entry or activities at the Property.

Notwithstanding any provision of this Restricted Covenant, Ecology retains all of its access authorities and access rights, including enforcement authorities related thereto, under applicable law.



Section 11. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

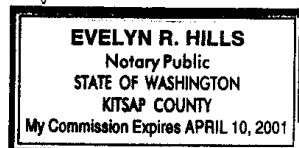
Mary Ann Huntington
PORT OF BREMERTON
Mary Ann Huntington, President

August 8, 2000
DATE SIGNED

STATE OF WASHINGTON
COUNTY OF KITSAP

I certify that I know or have satisfactory evidence that MARY ANN HUNTINGTON is the person who appeared before me, and said person acknowledged that he/she was authorized to execute the instrument and acknowledged it as PRESIDENT of the Port of Bremerton to be the free and voluntary act and deed of such party for the uses and purposes mentioned in this instrument.

DATED: August 8, 2000



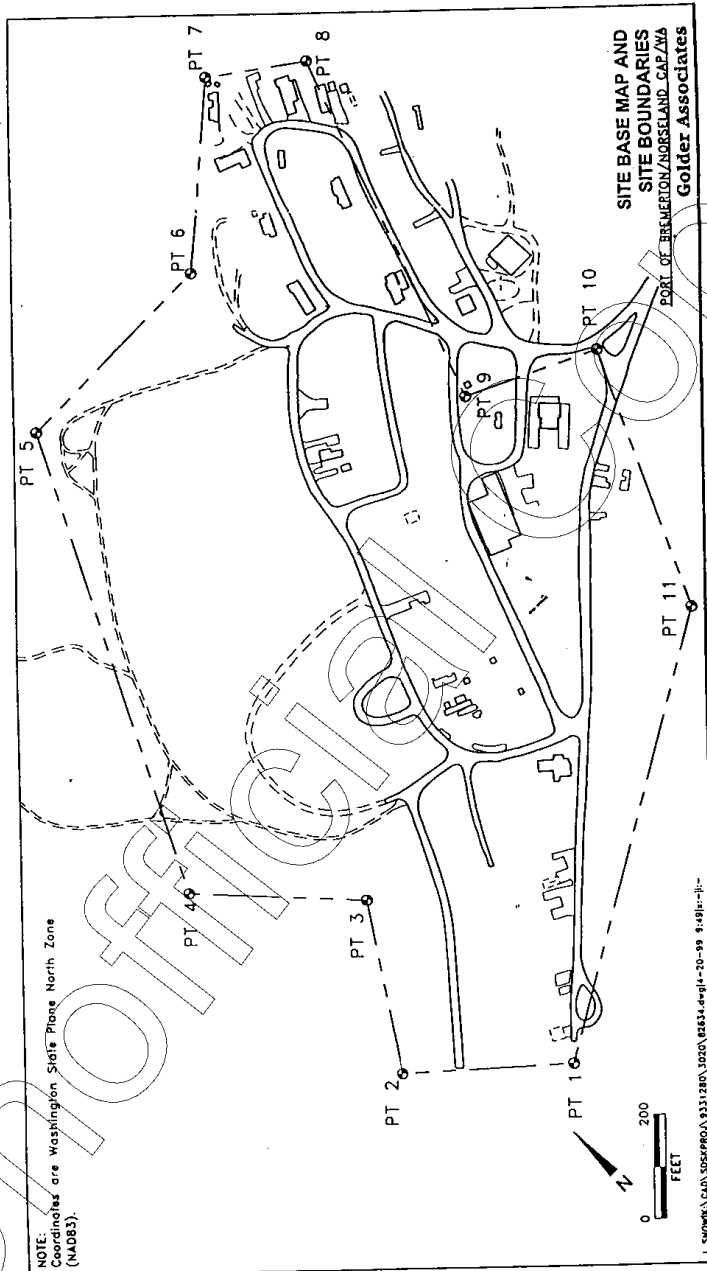
Evelyn R. Hills
NOTARY PUBLIC



EVELYN HILLS
(Print Name)
My appointment expires: 4-10-01

Unofficial Copy

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PORT OF BREMERTON COVEN \$18.00 Kitsap Co, WA



ATTACHMENT A

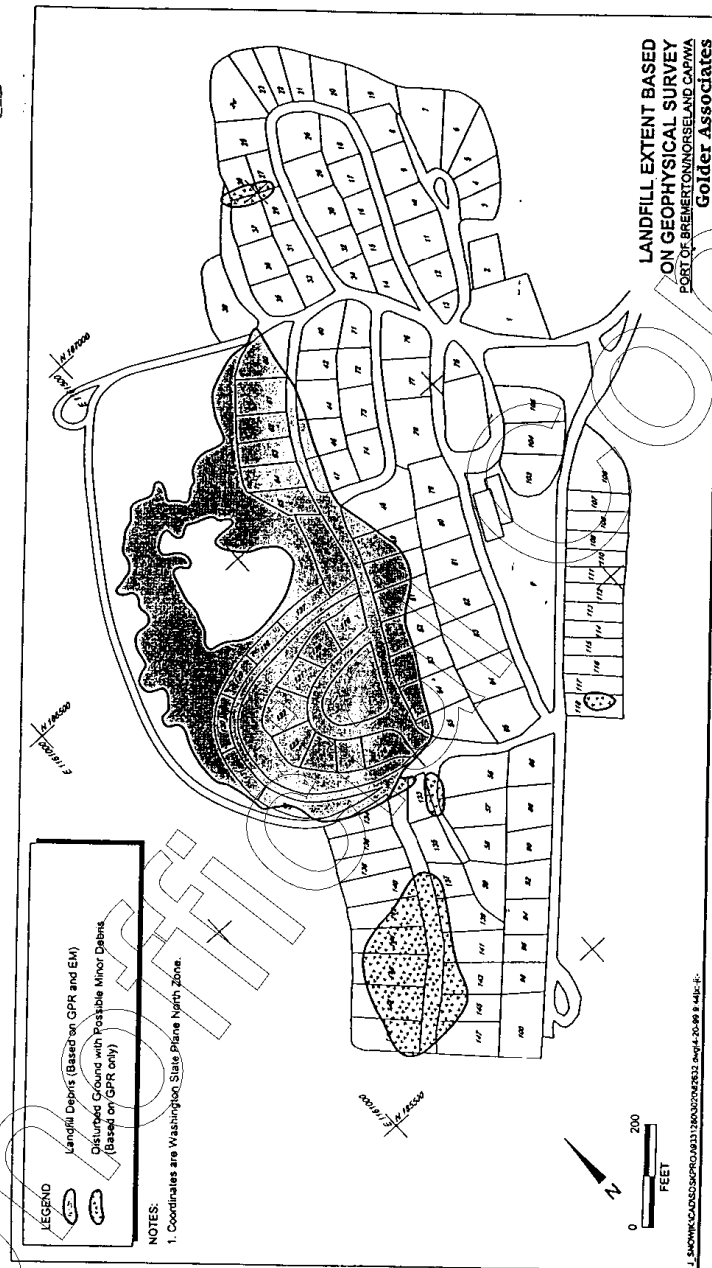
PORT OF BREMER/ NORSLEND LAF/MS
COVEN \$18.00 Kitsap Co, WA

ATTACHMENT B

The Site is described by the following coordinates given in Washington Plane North Zone (NAD 83):

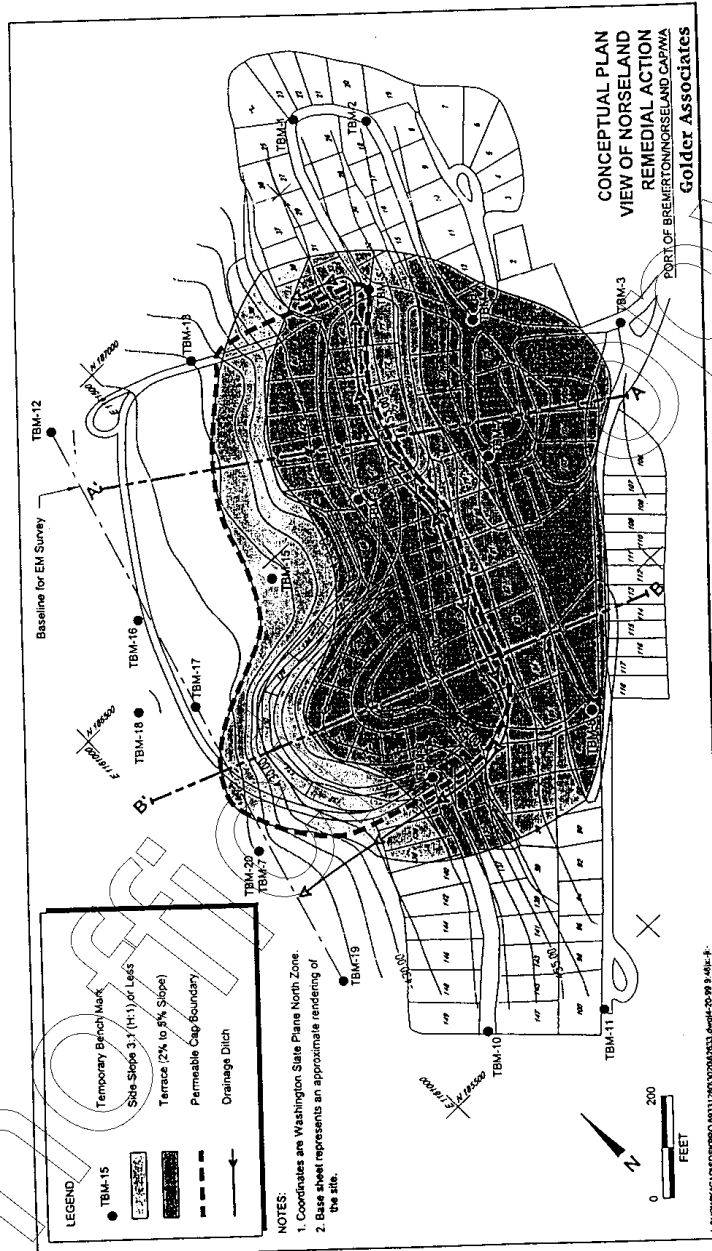
SITE CORNER	EAST (NAD 83)	NORTH (NAD 83)
PT 11	1162042.640	185911.123
PT 10	1162256.773	186386.180
PT 9	1162019.625	186497.181
PT 8	1162250.010	187165.678
PT 7	1162090.916	187277.058
PT 6	1161807.593	187025.055
PT 5	1161389.786	187016.284
PT 4	1160984.916	186184.298
PT 3	1161216.576	185940.440
PT 2	1161031.881	185654.590
PT 1	1161276.435	185442.803





ATTACHMENT C

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ATTACHMENT D

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Kitsap Co, WA
COVEN \$18.00
PORT OF BREMERTON

6.6 Photo log

Photo 1: View of top of landfill cap, view to the southwest from the east edge of the cap.



Photo 2: Stormwater settling ponds, view to the west from the west of the cap.



Photo 3: Erosion on the western slope of the cap, view to the east.

