



WHATCOM COUNTY LAND DISTURBANCE AND CLEARING

APPLICATION INFORMATION

THIS HANDOUT HAS IMPORTANT INFORMATION REGARDING APPLICATION REQUIREMENTS, ADDITIONAL PERMITTING, AND CONTACTS.



FLAGGING

SITE MUST BE FLAGGED! Fees will be imposed for additional site trips & inspections

- All proposed project areas must be located on site with clearly marked stakes and flagging.
- Site location must be visible from road by address, by name or by flagging.
- Call the Land Disturbance Clerk at (360) 676-6907 when site is flagged and ready to be inspected.
- Project review will be delayed if site is not properly staked and/or flagged.

WHATCOM COUNTY NATURAL RESOURCES OFFICE (360) 676-6907 or (360) 380-8100

Please be advised that staff have scheduled appointments and daily site inspections making their availability limited. Call the above telephone numbers for information related to the following:



CONTACT

- Land Disturbance - General inquiries for permit requirements, application in-take, permit review, status and issuance.
- Critical Areas – Wetlands, Streams, and Habitat Conservation Areas - review, inspection, mitigation, and monitoring.
- Critical Areas – Geology - Geological Hazards – review, inspection, mitigation, and monitoring.
- Critical Areas – Forestry/Wildlife - review, inspection, mitigation, and monitoring.
- Watersheds - Lake Whatcom, Lake Samish, Drayton Harbor, and Birch Bay – may require review and inspection.



FILL, GRADE & CLEARING

FILLING, GRADING and CLEARING

- Any fill, grade, or clearing within 200 feet of critical areas requires review and approval from Whatcom County prior to commencing any project work.
- Any fill or grade in excess of 50 cubic yards (approx. 5 dump trucks) requires a Land Disturbance Permit.
- Any material moved off-site in excess of 50 cubic yards will require a separate Land Disturbance permit.
- Filling and grading cannot start before approval from Planning and Development Services.



FOREST PRACTICES

FOREST PRACTICES INFORMATION

- If your project involves the harvest of trees on forestland (forest practices as defined in Washington Administrative Code (WAC) 222-16-050) a Forest Practices Application/Notification is required.
- For questions related to permit requirements, or to obtain a Forest Practices Application, contact the Washington State Department of Natural Resources (DNR) at (360) 856-3500.
- Failure to obtain an approved Forest Practices Application/Notification from DNR prior to conducting forest practices is a violation of state law and may result in enforcement action and a six-year development moratorium on property.



RIGHT OF WAY

WORKING IN COUNTY/STATE ROAD RIGHTS-OF-WAY MAY REQUIRE ADDITIONAL PERMITTING!

- Any work that utilizes a new or existing access off of a public road right-of-way may require a Revocable Encroachment Permit, Trail Permit, and/or a possible drainage study from Whatcom County's Engineering Services Division (360) 676-6730.
- For any work in the State highway right-of-way, contact the Washington State Department of Transportation (WSDOT) at (360) 788-2500.



UTILITIES

BONNEVILLE POWER ADMINISTRATION EASEMENT

- Whatcom County requires a letter of approval from Bonneville Power Administration (BPA) authorizing any filling, excavation, or clearing in their easement. Contact BPA at (360) 568-2943 or (800) 836-6619.



DIGGING

CALL BEFORE YOU DIG – IT'S THE LAW

- For One Call Locates in Washington call 1-800-424-5555. For additional information go to Washington Utilities Coordinating Council at <http://www.wucc.org>.

SEE REVERSE SIDE FOR MORE INFORMATION

WHATCOM COUNTY LAND DISTURBANCE SUBMITTAL INFORMATION

THE INFORMATION BELOW IS REQUIRED FOR SUBMITTAL OF A WHATCOM COUNTY LAND DISTURBANCE APPLICATION.

(Note: submittal of an application does not vest the project to a submittal date or deem the application package complete)

- ☒ Completed Whatcom County Land Disturbance Application. **Required**
- ☒ Cash or check for payment. **Required**
- ☒ Site plan with a north arrow and a scale consistent across the site (see Land Disturbance application for site plan requirements). **Required**
- ☒ Written narrative describing the purpose of the proposed action and future plans. **Required**
- ☐ Whatcom County Health Department approved Septic Design (if applied for as part of Land Disturbance application).
- ☐ Zoning/Land Use consistency approval. **Required**
- ☐ Land Use Agreement (if proposed work is in an easement and/or on land owned by someone else).

(Note: the application will not be accepted if it is incomplete)

DO NOT WRITE IN THIS SECTION

FOR WHATCOM COUNTY USE ONLY

_____ If additional information is required, please list what is needed and return to applicant.

Submittal date _____

Application accepted by _____

Complete application date _____

WHATCOM COUNTY

Planning & Development Services
 5280 Northwest Drive,
 Bellingham, WA 98226-9097
 360-676-6907, TTY 800-833-6384
 360-738-2525 Fax



J.E. "Sam" Ryan
 Director

LDP #

(MT 2011-00015)
 (SEP 2011-00067)
 2011-00054

Answer all questions as completely and accurately as possible.

Sign and date your application.

Provide an adequate site plan (see example).

Application fee will apply upon submittal.

NAME, ADDRESS AND PHONE REQUIRED IN EACH SECTION BELOW

Applicant / Contact Person		Property Owner		Contractor	
Name	Skip Sahlin for Pacific International Terminals, Inc.	Name	Pacific International Terminals, Inc., by Skip Sahlin, VP	Name	Sean Cool for GeoEngineers
Address	1131 SW Klickitat Way Seattle, WA 98134	Address	1131 SW Klickitat Way Seattle, WA 98134	Address	600 Dupont Street Bellingham, WA 98225-4020
Phone	(206) 654-3510	Phone	(206) 654-3510	Phone	(360) 647-1510
Other	skip.sahlin@SSAMarine.com	Other	skip.sahlin@SSAMarine.com	License UBI 600375010	Expires

Parcel Number: Upland Parcels: 039011-7473110; 039011-7067334; 039011-7205467; 039011-7067334; 039011-7065466; 039011-8117050; 039011-9424335; 039011-9198377; 039011-7278062; Parcel 14: 390117278062

Tax parcels contiguous to DNR open water: 039512-4546546; 039011-9092500; 039011-9172456; 039011-9199451; 039011-9214451; 039011-9252449; 039011-9298423; 039011-9327425; 039011-9349425; 039011-9388424; 039011-9438360; 039011-9454299; 039011-9469346

Subdivision: N/A

Job Site Address 4750 Gulf Road, Ferndale, WA

Division _____ Lot _____ Block _____

Project Description

Include all proposed work for this application (Include full project concept – continue on additional page if needed).

SSA Marine is applying for the permits required to perform the terrestrial geotechnical investigation for the proposed Gateway Pacific Terminal (Terminal) site in the Cherry Point Urban Growth Area. The proposed investigation entails advancing approx. 50 boreholes and 20 cone penetration tests (CPT) to evaluate subsurface soil and groundwater conditions at the site that are critical for design of future development. The boreholes and CPT explorations are advanced with track-mounted equipment. To allow equipment to test locations, access paths approximately 17 feet wide are required to accommodate the equipment and provide safe working clearance. To prepare access pathways in forest and shrub areas, a tracked excavator is used to knock over trees and to pick up smaller vegetation and push it to the perimeter of the access path. These access paths are temporary, and no improvements were made to create roadways. In total, approx. 23,132 feet of access paths are needed. (See attached Project Description for a more detailed description.)

Future Development / Building Plans

State what your known development and building plans are for the next 6 years.

If unknown, please state so (continue on additional page if needed).

The Gateway Pacific Terminal will be a multimodal, deep-water Terminal to provide storage and handling for the export and import of up to 54 million metric tons per year dry bulk commodities, including grain products, coal, potash, calcined petroleum coke, and other bulk commodities. Commodities would be transferred to and from the Terminal by rail on the BNSF Railway's Custer Spur and by ship via a wharf. The Terminal would be developed on approx. 350 acres within a total project area of 1,090 acres. The project area is zoned for Heavy Impact Industrial use. Please refer to Whatcom County PDS File Nos. MDP2011-00001/SHR2011-0009 for additional information.

Physical Site Characteristics

Check all characteristics that apply on and within 200 feet of the entire parcel.

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Streams
<input checked="" type="checkbox"/> Fish bearing
<input checked="" type="checkbox"/> Non-fish bearing
<input type="checkbox"/> Unknown
<input checked="" type="checkbox"/> Drainage ditches
<input type="checkbox"/> Frequently flooded areas
<input checked="" type="checkbox"/> Wetlands/seasonally wet/soggy areas | <input type="checkbox"/> Ponds and lakes
<input type="checkbox"/> Topographically low areas
<input checked="" type="checkbox"/> Steep slopes
<input checked="" type="checkbox"/> Greater than 35%
<input type="checkbox"/> Greater than 80%
<input checked="" type="checkbox"/> Leaning trees
<input checked="" type="checkbox"/> Landslide areas | <input checked="" type="checkbox"/> Forested areas
<input checked="" type="checkbox"/> Brush / scrub
<input checked="" type="checkbox"/> Pasture, lawn, landscaping
<input type="checkbox"/> Existing developed areas
<input checked="" type="checkbox"/> Wildlife features (e.g., raptor nests, beaver dams, large snags, etc.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



SITE MUST BE FLAGGED PRIOR TO INSPECTION
 (otherwise additional site inspection fees will be assessed - e.g. \$200)

FILL		The deposit of earth material by artificial means.							
BY FEET	Length (ft)	Width (ft)	Depth (ft)	Volume (ft³)	Divided By 27	= Cubic Yard			
Septic		x	x	=	/ 27 =	CY			
Driveway/Road/Parking	0	x	0	x	0	=	0	/ 27 =	0 CY
Building site		x	x	=	/ 27 =	CY			
Foundation		x	x	=	/ 27 =	CY			
Other		x	x	=	/ 27 =	CY			
MATERIAL SOURCE:					TOTAL VOLUME:				CY

EXCAVATION		The mechanical removal of earth materials. Grading is any excavation, filling, or combination thereof. Earth material is any rock, natural soil, fill, or any combination thereof.							
BY FEET	Length (ft)	Width (ft)		Depth (ft)		Volume (ft³)	Divided By 27	= Cubic Yard	
Septic		x		x		=	/ 27 =		CY
Driveway/Road/Parking		x		x		=	0.0 / 27 =	0.0	CY
Building site		x		x		=	/ 27 =		CY
Foundation		x		x		=	/ 27 =		CY
Other	23,130	x	17	x	0.3	=	117963 / 27 =	4,369	CY
MATERIAL SOURCE: Dirt pushed from excavator/attached to root wads						TOTAL VOLUME:		4,369	CY

CLEARING / CONVERSION	Defined as, "the destruction of vegetation by manual, mechanical, or chemical methods resulting in exposed soils." WCC 20.97.053
Required TOTAL AREA TO BE CLEARED and/or GRUBBED, IN ACRES <u>9.1 acres</u> AREA OF TREE CLEARING, IN ACRES <u>9.1 acres</u> TIMBER USE: Personal Use <u>0</u> % Sell <u>0</u> % Burn <u>0</u> % Give Away <u>0</u> %	
If your project includes any tree cutting, a Forest Practices Application / Notification may be required. For questions related to permit requirements, contact the Washington Department of Natural Resources (DNR) at 360-856-3500.	

SITE PLAN (required)

THE FOLLOWING INFORMATION MUST BE PUT ON THE SITE PLAN
SITE PLAN SCALE REQUIRED: (example) 1 inch = 20 feet
(scale must be consistent across the site plan - see attached example)
North Arrow

Incomplete or inadequate site plan ***can significantly delay processing!***

LOT INFORMATION	SITE CHARACTERISTICS	PROPOSED WORK
<input checked="" type="checkbox"/> Property boundaries and dimensions <input checked="" type="checkbox"/> Buffer and setback lines <input checked="" type="checkbox"/> Existing / proposed access roads and driveways <input checked="" type="checkbox"/> Existing / proposed easements and right-of-ways <input checked="" type="checkbox"/> Existing / proposed buildings	<input checked="" type="checkbox"/> Slopes Streams Wetlands Ponds <input checked="" type="checkbox"/> Forested or treed areas <input checked="" type="checkbox"/> Ditches, culverts and flow directions <input checked="" type="checkbox"/> Wetland areas and flow directions <input checked="" type="checkbox"/> Ordinary high water mark <input checked="" type="checkbox"/> Critical area boundaries	<input checked="" type="checkbox"/> Topography <input checked="" type="checkbox"/> Outline of disturbed areas - excavation and fill <input type="checkbox"/> Fill / Excavation cross sections <div style="text-align: center; border-top: 1px solid black; padding-top: 5px;">EROSION CONTROL MEASURES</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Silt Fences <input type="checkbox"/> Straw bales </div> <div style="width: 45%;"> <input checked="" type="checkbox"/> Mulching / seeding <input type="checkbox"/> Vegetated buffers </div> </div>

VENUE AND JURISDICTION: The parties hereto recognize and agree that the venue of any act ion involving their rights or obligations related to this application shall be in Whatcom County, and the parties' rights and obligations hereunder shall be determined in accordance with the laws of the State of Washington.

FEE GUARANTY: Notwithstanding that this application has been submitted in the name of a company, I personally guarantee payment of the fees accrued according to the terms listed in the Whatcom County Unified Fee Schedule and agree to be bound personally as a principal and not as a surety. I recognize that my personal guarantee is part of the consideration for review of the application.

I understand that this application does not grant authorization to begin work, and that no work will begin until a permit/authorization is issued. The above information and statements are true and accurate to the best of my knowledge.

Applicant Signature  Property Owner Signature Same

Applicant Printed Name Skip Sahlin Property Owner Printed Name Skip Sahlin

Date 16 August 2011 Date _____

Exhibits:

- Exhibit A: Detailed Project Description (attached)
- Exhibit B: Geotechnical Investigation Site Access As-Built Plan & Wetland Impact Areas (attached)
- Exhibit C: SEPA Environmental Checklist (attached)
- Exhibit D: Critical Areas Report and Restoration Plan (to be submitted when complete)
- Exhibit E: Stormwater Pollution Prevention Plan & Erosion Control Plan (to be submitted when complete)

Gateway Pacific Terminal

Geotechnical Investigation Project Description

Project Description

Pacific International Terminals, Inc. is applying for permits required to perform geotechnical investigation for the proposed Gateway Pacific Terminal (Terminal) in the Cherry Point Urban Growth Area, Whatcom County, Washington. The County issued two Notices of Corrective Action: one on August 2 – Land Clearing, and one on August 3, 2011 – Critical Areas.

This SEPA Checklist is submitted to Whatcom County as required to provide information for their assessment of potential environmental impacts from the geotechnical investigation, including vegetation clearing for site access. Information in this Checklist describes geotechnical work already completed along with the remaining portions of the geotechnical investigation yet to be completed

The geotechnical investigation entails advancing approximately 50 boreholes and approximately 20 cone penetration tests (CPT) to evaluate subsurface soil and groundwater conditions. The investigation will provide information regarding subsurface conditions that will be critical for design of future development on the property. Geotechnical boreholes are generally about 8 inches in diameter and extend to depths between 80 and 130 feet. The cone penetration tests push a 1.4-inch diameter rod into the ground to depths up to about 100 feet. Two shallow test pit excavations, to depths of about 15 feet will be used to confirm near-surface soil profiles. The locations of the explorations are shown on Exhibit B: Geotechnical Investigation Site Access As-Built Plan & Wetland Impact Areas.

The boreholes and CPT explorations are advanced with track-mounted equipment, which are approximately 8 feet wide by 25 feet long. To allow equipment to access test locations in forested and shrub vegetated areas, access paths approximately 17 feet wide are required to accommodate the equipment and provide safe working clearance.

To prepare access pathways in forest and shrub areas, a tracked excavator was used to knock over trees and to pick up smaller vegetation and push it to the perimeter of the access path. These access paths are temporary and no improvements were made to create roadways. Following initiation of clearing, data collection was begun and boreholes and CPT work initiated. Access to all borehole locations was completed while approximately half of the intended data was collected when the fieldwork was halted on July 22, 2011.

Plan Development and Implementation

To develop the geotechnical investigation plan, access routes were drawn onto base maps and evaluated to determine the least amount of clearing disturbance and to avoid wetlands, streams, and buffers. Consideration was made to avoid direct vegetation impacts by locating the proposed geotechnical boreholes to the extent feasible outside of wetlands and heavily vegetated areas; however, complete avoidance of wetland areas was not practicable because

much of the proposed terminal development area is wetland, and geotechnical data is needed for subsurface conditions in those locations. When a boring location was located within a wetland, existing roads, pastures, and hay fields were used to the extent possible as access routes to minimize vegetation disturbance throughout the property. Only when no other alternative could be identified were access routes placed through forested or shrub vegetated wetland areas.

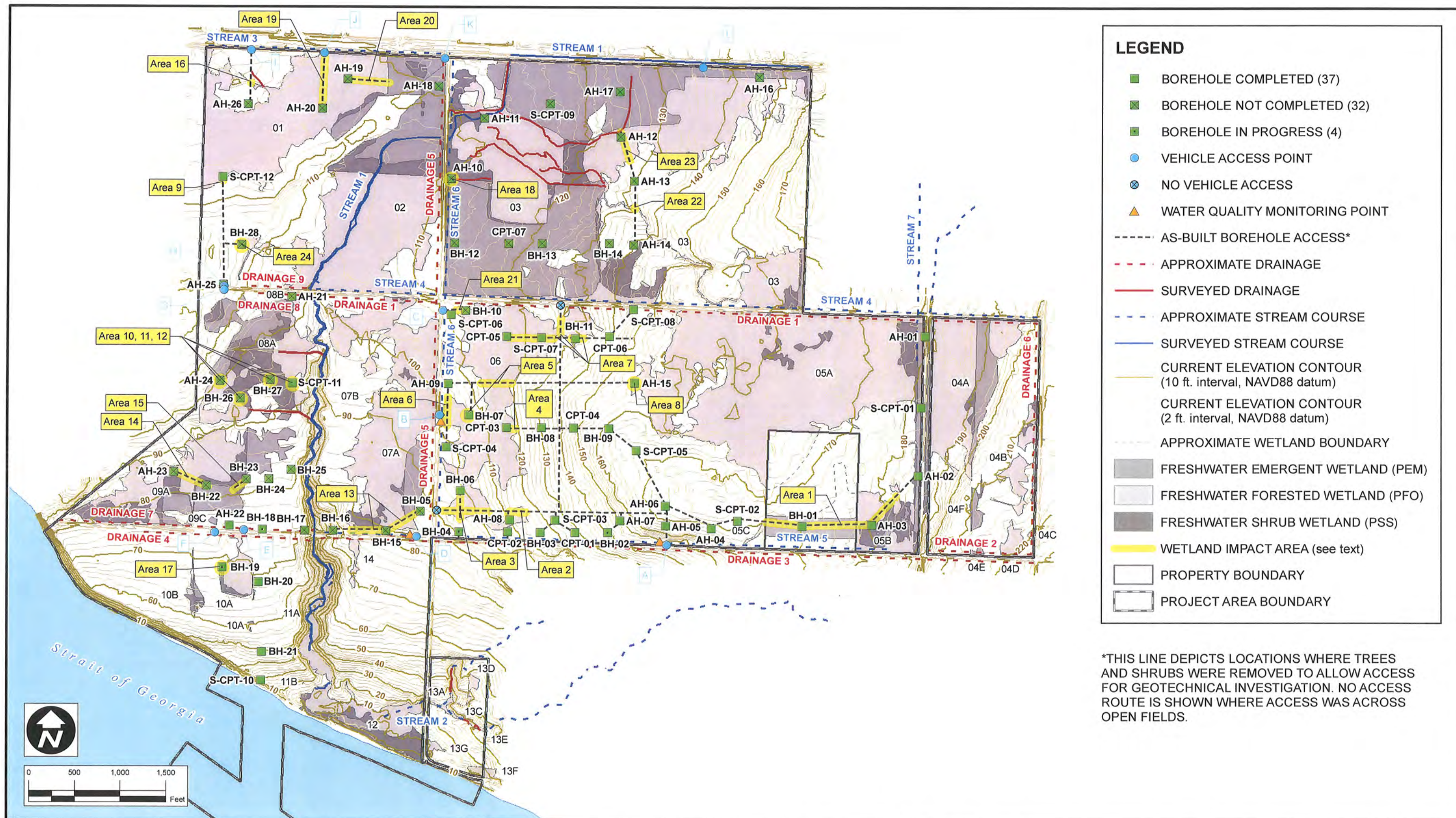
Clearing for access paths to the geotechnical boring locations was initiated on July 5, 2011 and was completed on July 22, 2011. In total, approximately 23,132 lineal feet of access paths were cleared in both uplands and in wetland forest and shrub areas. The average width of clearing was determined to be 17 feet and the total area cleared was approximately 9.1 acres. Of this total cleared area, approximately 2.8 acres of vegetation and soil in forested and shrub wetlands and approximately 0.96 acres of wetland buffers were disturbed. At this time, no additional access paths are anticipated to be necessary to complete the geotechnical investigation.

Borings were made on-site starting on July 7, 2011 through July 22, 2011. As of July 22, 19 (of the 50 planned) boreholes and 19 (of the 20 planned) CPT explorations were completed. Several boreholes were in progress and are not completed. Two test pit explorations were also completed.

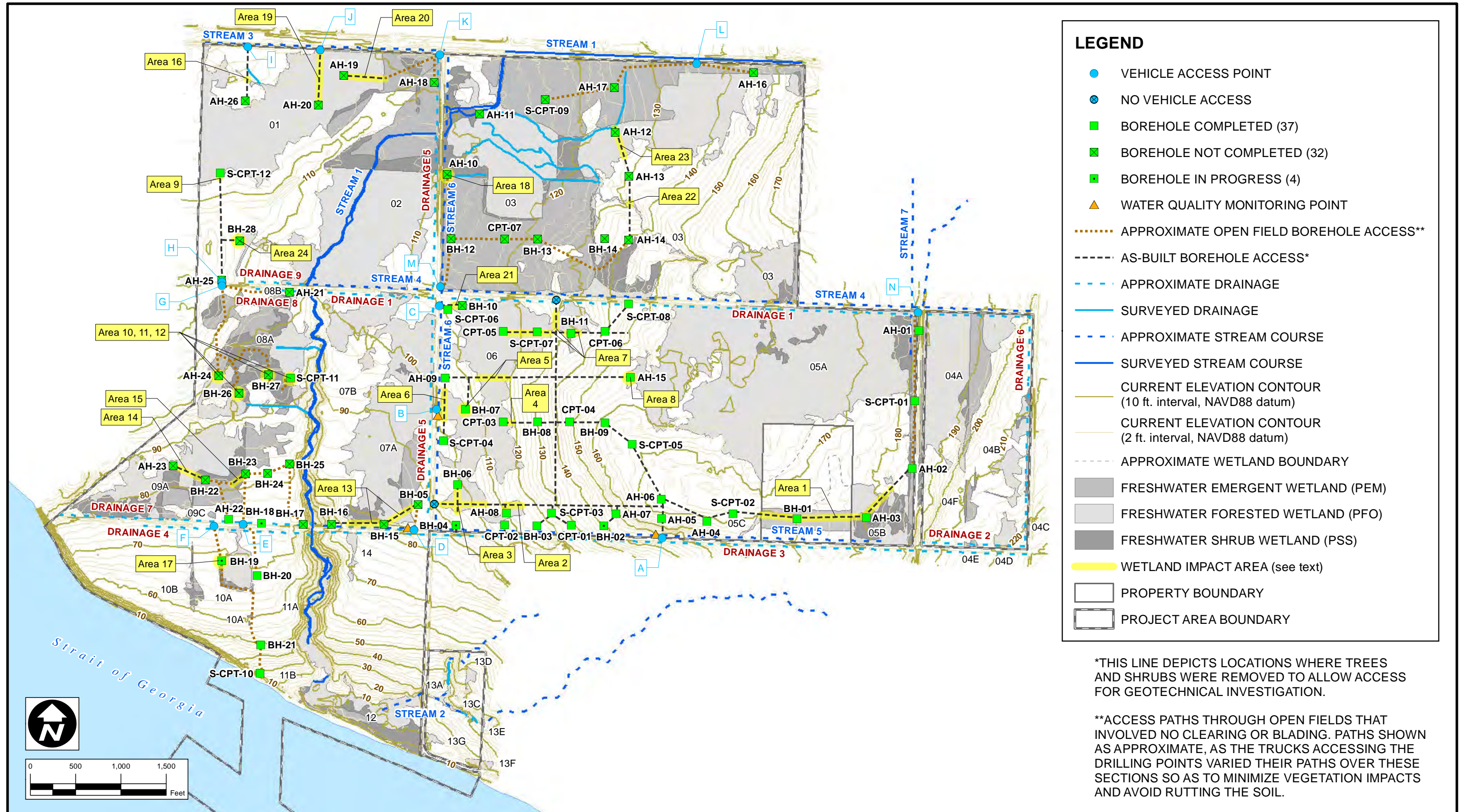
To reduce the risk of erosion or sedimentation from cleared areas, best management practices, including stabilized construction entrances and covering bare soils, are planned to be implemented. Bare soil areas are planned to be covered by hydroseeding. Seed mixes are planned to include fast germinating grasses and forbes suitable for forest or shrub wetlands and a separate seed mix for forested upland areas. Entrance areas are planned to be stabilized with chipped wood and bark.

Future geotechnical testing includes advancing approximately 30 boreholes and 1 CPT as shown in Exhibit B, which would take approximately 6 workweeks.

Following completion of field testing, cleared areas are planned to be restored. In wetland areas, side cast rootwads and some root mats with soil will be moved to the clearings to reduce the size of adjacent piles. Plantings appropriate to forested wetlands or shrub areas will be installed. In upland areas, trees seedlings will be planted to accomplish reforestation at a survival rate of 190 stems per acre for at least one growing season to meet DNR reforestation requirements.



	 Pacific International Terminals. <small>A Carrix Enterprise</small>	CLIENT: PACIFIC INTERNATIONAL TERMINALS, INC.		DWN BY: SD	PROJECT: PROPOSED GATEWAY PACIFIC TERMINAL	DATE: 15 th AUGUST 2011
				CHKD BY: KD		PROJECT NO.: 091515338C-13-0
				DATUM: NAD83	TITLE: EXHIBIT B: GEOTECHNICAL INVESTIGATION SITE ACCESS AS-BUILT PLAN AND WETLAND IMPACT AREAS	REV. NO.:
		AMEC Earth & Environmental 11810 North Creek Parkway N Bothell, WA 98011		PROJECTION: WA SP North, Ft.		FIGURE NO.:
			SCALE: 1 inch = 1,000 feet		FIGURE	



WHATCOM COUNTY

Planning & Development Services

5280 Northwest Rd., Suite B

Bellingham, WA 98226

360-676-6907**CUSTOMER RECEIPT**

Receipt: 5201000000000001381

Payor: PACIFIC INTERNATIONAL TERMIN

Date: August 16, 2011

Description	Amount
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LDP2011-00054

Grading permit app	525.00
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NR office review (B)	2,400.00
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MIT2011-00015

CA mit. plan development (B)	1,260.00
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SEP2011-00067

SEPA checklist review (B)	370.00
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Legal Notice	100.00
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Total:	\$ 4,655.00
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Check # 2539669	Paid	\$ 4,655.00
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PACIFIC INTERNATIONAL TERMINALS IN

Thank you!



**Pacific International
Terminals**

A Carrix Enterprise

1131 SW Klickitat
Way Seattle
Washington 98134
800/422-3505
tel 206/623-0179
fax www.carrix.com

18 August 2011

Attention: Bryan Sehmel, Code Enforcement & Shorelines
Whatcom County Planning and Development Services
5280 Northwest Drive, Suite B
Bellingham, WA 98226-9097

**Subject: Gateway Pacific Terminal – Addendum to the Proposed Temporary Erosion
and Sedimentation Plan**

Dear Bryan:

On Tuesday of this week, you met with Cliff Strong, our planner on the Gateway Pacific Terminal project. In the meeting, you raised several questions regarding our proposed Temporary Erosion and Sedimentation Plan (TESC) plan. Please consider the below responses an addendum to that plan. Addenda are shown in underline/underline.

Again, we would like to have your review and written approval of the following proposed approach to stabilizing soils on the Gateway Pacific Terminal site. Our target now is to install the soil cover on August 24, 2011. As you are aware, disturbed areas to be treated are comprised of approximately 4.3 miles of 17-foot wide cleared access paths encompassing approximately 9.1 acres total in upland and wetland forested areas.

County regulations pertaining to stormwater and erosion control reference the Washington State Stormwater Management Manual for Western Washington (SWMWW) as the resource to follow for Best Management Practices (BMPs). In the discussion below, we have referenced the BMPs by SWMWW number.

STABILIZATION OF SOIL ON ACCESS PATHS

The site is relatively flat ground with a slight slope to the west. An attached figure shows the approximately location of access paths to be stabilized (Figure 1). As per your request, the map now shows access routes where machinery crossed open fields even though no clearing or blading was performed (and, thus, no erosion control is needed).

Two BMPs are proposed: Temporary Seeding and Stabilized Construction Entrance.

Temporary Seeding (BMP C120) is proposed as the BMP to be used for stabilizing soils (in lieu of hog fuel, which would be counterproductive to planned restoration efforts). The BMP would be installed by a hydroseeding machine at an approximate application rate of 1,500 lb/ac wood fiber mulch, 150 lb/ac wet area seed, 200 lb/ac of 25-5-15 fertilizer, and 15 lb/ac tackifier (specifications of the tackifier attached).

A wetland seed mix is proposed for wetland areas and comprised of (by weight):

- 67% Sterile Wheatgrass
- 10% Seaside ~~Creeping~~ Colonial Bentgrass (*Agrostis stolonifera capillaris*)
- 10% Meadow Foxtail (*Alopecurus pratensis*)
- 6% Alsike Marsh Clover (*Trifolium hybridum wormskjoldii*)
- 7% Redtop Bentgrass (*Agrostis stolonifera*)

The upland seed mix is proposed for other areas to be comprised of:

- 60% Blue Wildrye (*Elymus glaucus*)
- 30% Native Red Fescue (*Festuca rubra*)
- 10% Western Fescue (*Festuca occidentalis*)

No water is available onsite and must be trucked to the site from Ferndale. Access paths will be inspected for excessive rutting prior to hydroseeding and remedied by hand raking, if needed. Irrigation of the hydroseed is not proposed. The seed mixtures are intended to germinate once there is enough natural moisture in the air (e.g., dew, fog, or rain); in the interim, the wood fiber mulch and tackifier control any dust.

Stabilized Construction Entrances (BMP C105) would be installed using mixed wood/bark chips at site entrances to prevent tracking of dirt onto County roads. Vehicle accessing the site from County roads will cross a 100-foot-long strip of wood/bark chips of an appropriate width to accommodate the hydroseed truck. Tracking of dirt onto public roads will be minimized. An encroachment permit for any activities on County right-of-way is being applied for.

As for the number of trips per entrance, the hydroseed contractor estimates that there would be 1-2 trips in and out of 11 of the 12 site entrances, and at Entry B, alternating between wetland and upland areas will require 16-20 trips comprised of smaller batches. Additional trips would also be made by the restoration contractor once that plan is approved and implemented. Table 1 shows the estimated total number of vehicle trips per access point from both implementation of the TESC and the restoration plan.

Table 1: Estimated Number of Vehicle Trips per Access Point

<u>Access Point (see map for approx. location)</u>	<u>Preexisting or Constructed*</u>	<u>Est. Number of vehicle trips per Access point</u>
<u>A</u>	<u>Preexisting</u>	<u>15-20</u>
<u>B</u>	<u>Preexisting</u>	<u>15-20</u>
<u>C</u>	<u>Preexisting</u>	<u>15-20</u>
<u>D</u>	<u>Preexisting</u>	<u>20-30</u>
<u>E</u>	<u>Preexisting</u>	<u>50-60</u>
<u>F</u>	<u>Preexisting</u>	<u>10-15</u>
<u>G</u>	<u>Preexisting</u>	<u>20-30</u>
<u>H</u>	<u>Constructed</u>	<u>20-30</u>
<u>I</u>	<u>Constructed</u>	<u>15-20</u>
<u>J</u>	<u>Constructed</u>	<u>15-20</u>
<u>K</u>	<u>Preexisting</u>	<u>15-20</u>
<u>L</u>	<u>Preexisting</u>	<u>20-30</u>
<u>M</u>	<u>Preexisting</u>	<u>10-15</u>
<u>N</u>	<u>Preexisting</u>	<u>10-15</u>

* "Preexisting" means existing prior to initiation of the geotechnical investigation. "Constructed" means constructed as part of the geotechnical investigation, though they now exist. No additional access points would be constructed.

BMP INSTALLATION

Work would be conducted in a sequential phased approach using only the existing access points. No new access points are proposed. Work will be partly in delineated wetland areas that are extremely sensitive to equipment traffic and the following will be required of the contractor:

- No mechanized methods of soil leveling will be used in sensitive areas.
- Stabilization of bare earth will start from the furthest most point of access.
- Areas treated will not be driven over once worked and covered with product.
- Vehicular traffic associated with this action will be restricted to only the access paths and will not extend onto any additional surface areas not already tracked.
- Use of mats to span across sensitive areas for vehicle transport will be required to prevent additional rutting.
- Turning of equipment will be limited to avoid additional rutting. We will have available a Morooka rubber track carrier (www.morooka.com) in case the hydroseed truck needs assistance.
- Wetlands are marked with appropriate surveyor tape.
- A certified erosion control specialist will be on-site during the installation to provide additional direction, as needed.

Once we have your final review and approval, we will provide this information to other agencies for concurrence, as well as our contractor. In addition, we will incorporate this information into our formal submissions that are required for permit application.

Please feel free to contact either Al Jeroue (253-229-6246) or myself if you have questions.

Sincerely,

Pacific International Terminals, Inc.

A handwritten signature in blue ink, appearing to read 'Ari Steinberg', is written over the printed name.

Ari Steinberg, P.E.

Attachments

- Revised Geotechnical Investigation Site Access As-built Plan and Wetland Impact Areas Map
- Tackifier Specifications

CS/KD AJ/L

Bryan Sehmel - GPT TESC Plan

From: "Strong, Cliff" <Cliff.Strong@amec.com>
To: Bryan Sehmel <bsehmel@co.whatcom.wa.us>
Date: 8/19/2011 11:48 AM
Subject: GPT TESC Plan
CC: Tyler Schroeder <Tschroed@co.whatcom.wa.us>, "Dunkin, Kristie A" <Kristie.Dunkin@amec.com>, Al Jeroue <Al.Jeroue@SSAMarine.com>, Ari Steinberg <Ari.Steinberg@SSAMarine.com>

Hey Bryan, I just received a call from Kristie (biologist) and Al (CESCL), who are out in the field right now trying to figure out the logistics of the TESC, SWPPP, and encroachment permit. In talking with the hydroseed contractor, they've come to the conclusion that switching between seed mixes (wetland and upland) will cause more problems than using just one. In particular, the truck would need to be taken off site to switch, wash out, etc., every time they need to change seed mixes, causing more trips. They'd like to minimize trips (to minimize any additional impacts to the soil and plants) by just using the wetland seed mix throughout.

Per the TESC addendum I sent last night, the wetland seed mix is comprised of (by weight):

- 67% Sterile Wheatgrass
- 10% Seaside Creeping Bentgrass (*Agrostis stolonifera*)
- 10% Meadow Foxtail (*Alopecurus pratensis*)
- 6% Alsike Clover (*Trifolium hybridum*)
- 7% Redtop Bentgrass (*Agrostis stolonifera*)

Please consider this in your review of the TESC we've proposed.

Thanks,

Cliff Strong

Senior Land Use/Environmental Planner
and Office Sustainability Coordinator
email: cliff.strong@amec.com

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AMEC Earth & Environmental, Inc.
11810 North Creek Parkway N
Bothell, WA 98011

website: www.amec.com/earthandenvironmental

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AAH
AL

CERTIFICATE OF COMPLIANCE

Eco E-Tack Tacifier is a specially formulated anionic polymer that electrochemically binds soil and mulch particles together. It is used in hydroseeding mulch applications and can be used for dust control in non-traffic areas.

Eco E-Tack hydrates rapidly in water and readily blends with seed, fertilizer, mulch and other ingredients to form a homogeneous slurry mixture. When the slurry is sprayed over the soil surface, and after drying, microscope chain-like fibrils are formed to assist in soil and mulch stabilization. Eco E-Tack contains no germination or growth inhibiting materials, and it is not harmful to fish or other wildlife when used at the recommended application rate.

- Appearance: White to off-white granular powder
- Content Analysis: Sodium Acrylate / Acrylamide Copolymer ≥ 90%.
- Composition: 100% modified linear polyacrylamide
- Ionic Character: Anionic
- Ionic Charge: 23 – 30%
- Insoluble Content: 2% maximum
- Residual Monomer: 0.05% maximum
- pH range: 7 – 9
- Bulk Density: 44 lbs / cu. ft.

Carl Gehlin, V.P.
Representative

June 17, 2011
Date

11111 East Trent, Spokane, WA 99206 Tel (509) 927-4071 800-426-6002 Fax (509) 927-2330

1/62

Fiber Marketing International Inc.

fmi

July 8, 2011

Carol Davis, President
Briar Group, Inc
P.O. Box 1475
Milton, WA 98354

RE: FMI Eco E-Tac™ Soil and Mulch Binder

This letter is to confirm our recommended application rate for Eco E-Tac.

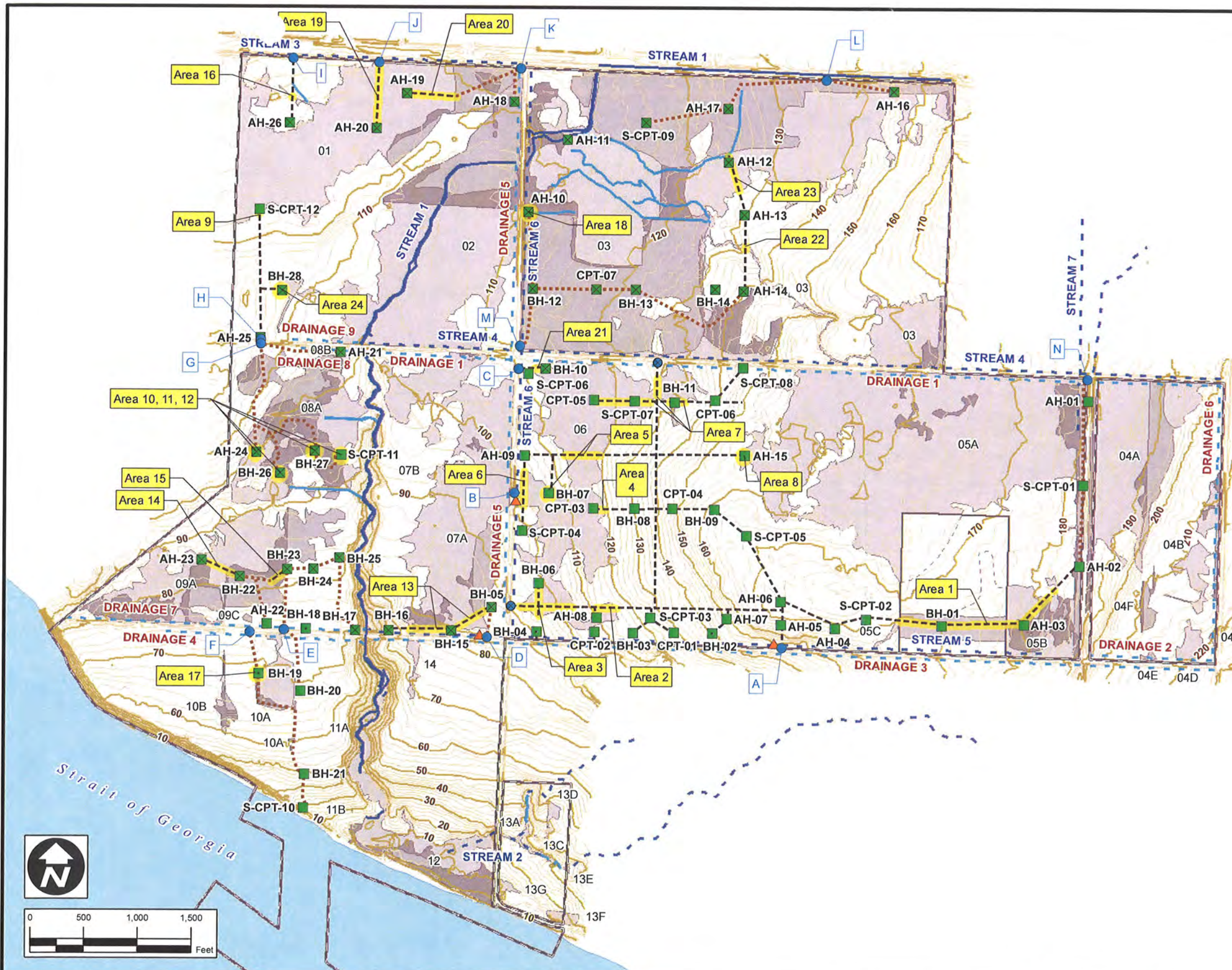
When Eco E-Tac is applied at 15 lbs. per acre it will give the same tacifier results as J-3000 Guar applied at 60 lbs. per acre. We have sold both products for many years and are very familiar with the performance of both when used at the above rates.

Sincerely,



Earl Dahlin
Technical Manager

202



LEGEND

●

VEHICLE ACCESS POINT

●

NO VEHICLE ACCESS

■

BOREHOLE COMPLETED (37)

■

BOREHOLE NOT COMPLETED (32)

■

BOREHOLE IN PROGRESS (4)

▲

WATER QUALITY MONITORING POINT

APPROXIMATE OPEN FIELD BOREHOLE ACCESS**

AS-BUILT BOREHOLE ACCESS*

APPROXIMATE DRAINAGE

SURVEYED DRAINAGE

APPROXIMATE STREAM COURSE

SURVEYED STREAM COURSE

CURRENT ELEVATION CONTOUR (10 ft. interval, NAVD88 datum)

CURRENT ELEVATION CONTOUR (2 ft. interval, NAVD88 datum)

APPROXIMATE WETLAND BOUNDARY

■

FRESHWATER EMERGENT WETLAND (PEM)

■

FRESHWATER FORESTED WETLAND (PFO)

■

FRESHWATER SHRUB WETLAND (PSS)

WETLAND IMPACT AREA (see text)

PROPERTY BOUNDARY

PROJECT AREA BOUNDARY

*THIS LINE DEPICTS LOCATIONS WHERE TREES AND SHRUBS WERE REMOVED TO ALLOW ACCESS FOR GEOTECHNICAL INVESTIGATION.

**ACCESS PATHS THROUGH OPEN FIELDS THAT INVOLVED NO CLEARING OR BLADING. PATHS SHOWN AS APPROXIMATE, AS THE TRUCKS ACCESSING THE DRILLING POINTS VARIED THEIR PATHS OVER THESE SECTIONS SO AS TO MINIMIZE VEGETATION IMPACTS AND AVOID RUTTING THE SOIL.

 Pacific International Terminals <small>A Carrix Enterprise</small>	CLIENT: PACIFIC INTERNATIONAL TERMINALS, INC.		DWN BY: SD	PROJECT: PROPOSED GATEWAY PACIFIC TERMINAL	DATE: 18 th AUGUST 2011
	AMEC Earth & Environmental 11810 North Creek Parkway N Bothell, WA 98011 		CHK'D BY: KD		PROJECT NO.: 091515338C-13-07
			DATUM: NAD83	REV. NO.: 3	
			PROJECTION: WA SP North, Ft.		FIGURE NO.: FIGURE 1
			SCALE: 1 inch = 1,000 feet		
		TITLE: EXHIBIT B: GEOTECHNICAL INVESTIGATION SITE ACCESS AS-BUILT PLAN AND WETLAND IMPACT AREAS			



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August 15, 2011

Tyler R. Schroeder, Planning Supervisor
Bryan Sehmel, Code Enforcement Officer
Whatcom County Planning and Development Services
5280 Northwest Drive, Suite B
Bellingham, WA 98226-9097

**Subject: Gateway Pacific Terminal - Site Access,
Proposed Erosion Control Approach**

Dear Tyler and Bryan:

As discussed by phone, we would like to have your review and written approval of the following proposed approach to stabilizing soils on the Gateway Pacific Terminal site. Our target is to install the soil cover during the week of August 15th. As you are aware, disturbed areas to be treated are comprised of approximately 4.3 miles of up to 17-foot wide cleared access paths encompassing approximately 9.1 acres total in upland and wetland forested areas.

County regulations pertaining to stormwater and erosion control reference the Washington State Stormwater Management Manual for Western Washington (SWMWW) as the resource to follow for Best Management Practices (BMPs). In the discussion below, we have referenced the BMP's by SWMWW number.

STABILIZATION OF SOIL ON ACCESS PATHS

The site is relatively flat ground with a slight slope to the west. An attached figure shows the approximately location of access paths to be stabilized (Figure 1). We do not show access routes where machinery crossed open fields because no clearing was performed and no erosion control is needed in these well-vegetated fields.

Two BMPs are proposed: Temporary Seeding and Stabilized Construction Entrance.

Temporary Seeding (BMP C120) is proposed as the BMP to be used for stabilizing soils. The BMP would be installed by a hydroseeding machine at an approximate



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DOE Mgt =
1,500 w/ 3% tackifier

application rate of 1,000 lb/ac wood fiber mulch, 150 lb/ac wet area seed, 200 lb/ac of 25-5-15 fertilizer, and 15 lb/ac tackifier.

A wetland seed mix is proposed for wetland areas and comprised of (by weight):

- 15% Sterile Wheatgrass
- 20% Seaside Colonial Bentgrass (*Agrostis capillaris*)
- 35% Meadow Foxtail (*Alopecurus pratensis*)
- 10% Marsh Clover (*Trifolium wormskjoldii*)
- 20% Redtop Bentgrass (*Agrostis stolonifera*)

The upland seed mix is proposed for other areas to be comprised of:

- 60% Blue Wildrye (*Elymus glaucus*)
- 30% Native Red Fescue (*Festuca rubra*)
- 10% Western Fescue (*Festuca occidentalis*)

No water is available onsite and must be obtained in the vicinity of Ferndale and trucked to the site. Access paths will be inspected for excessive rutting prior to hydroseeding and remedied by hand raking, if needed.

Stabilized Construction Entrances (BMP C105) would be installed using mixed wood/bark chips at site entrances to prevent tracking of dirt onto County roads. Vehicles accessing the site from County roads will cross a 100-foot-long strip of wood/bark chips of an appropriate width to accommodate the hydroseed truck. Tracking of dirt onto public roads would be minimized.

BMP INSTALLATION

Work would be conducted in a sequential phased approach using only the existing access points. No new access points are proposed. Work will be partly in delineated wetland areas that are extremely sensitive to equipment traffic, and the following will be required of the contractor:

- No mechanized methods of soil leveling will be used in sensitive areas.
- Stabilization of bare earth will start from the furthest most point of access.
- Areas treated will not be driven over once worked and covered with product.



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- Vehicular traffic associated with this action will be restricted to only the access paths and will not extend onto any additional surface areas not already tracked.
- Use of mats to span across sensitive areas for vehicle transport will be required to prevent additional rutting.
- Turning of equipment will be limited to avoid additional rutting.
- Wetlands are marked with appropriate surveyor tape.
- Tracking of soils or other material on to public roadways will be minimized. If tracking occurs, the material must be picked up from the roadways.
- A certified erosion control specialist will be on-site during the installation to provide additional direction, as needed.

Once we have your received your review and any suggestions, we will provide this information to our contractor. Also, we will incorporate this information into our formal permit application submission.

Please feel free to contact either our field representative Al Jeroue (253-229-6246) or myself if you have questions.

Sincerely,

Pacific International Terminals, Inc.

Ari Steinberg, P.E.

Attachments – Gateway Pacific Terminal Geotechnical Investigation and Access As-built

cc: Randel Perry, USACE
Kurt Baumgarten, Ecology
Jane Dewell, ORA

