August 5, 2002



Charlie Ciecko, Director Regional Parks, Greenspaces Metro 600 NE Grand Ave. Portland, Oregon 97232

Re: Metro/Rivergate Property Exchange

Dear Charlie,

Cordially,

Enclosed please find a revised proposal including additional language clarifying the two issues we discussed. I moved the condition for regarding and fencing to a separate category called Conditions After Closing (Within One Year). I also added a sentence regarding the concrete removal area being reseeded with a mixture of grass seed. I clarified that "naturally vegetated condition" means grass.

If these terms are acceptable, please acknowledge your acceptance by signing below and returning a copy of this letter to me. We will then proceed to prepare the documents for the proposed exchange. We look forward to completing this transaction with you in a timely fashion.

Please feel free to call me at 944-7538 or Jim Laubenthal at 944-7526 if you have any questions.

Haral Sinnen
Lorali Sinnen
Contract Administrator
Read, Agreed and Accepted by Metro.
By:
Charlie Ciecko, Director
Date:

OUTLINE OF PROPOSED TERMS FOR AN EXCHANGE OF PROPERTIES BETWEEN METRO AND THE PORT OF PORTLAND

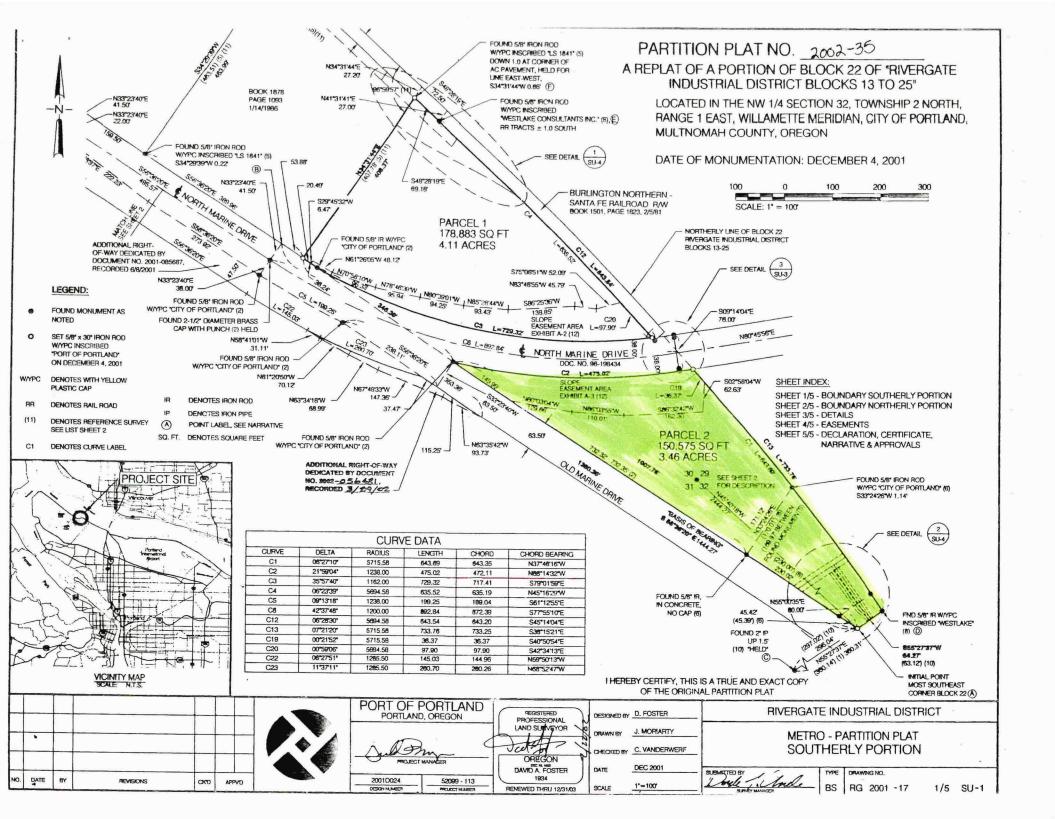
	Metro Property	Port Property					
Property	Approximately 6.04-acres of land	Approximately 3.46-acres of land					
	located on the westerly boundary of the	located on the south side of the					
	Radio Tower property, as shown as	Burlington Northern Railroad, on the					
	Parcel 1 on Exhibit B, (" the Metro	east side of the N. Marine Drive					
	Property").	overpass in Rivergate Industrial					
,		District. This site is shown on Port					
,	Approximately 0.7-acre strip of land	drawing RG 2001-17, labeled					
	located on the northerly boundary of	Exhibit A (the "Rivergate					
	the Radio Tower site, that runs parallel	Property").					
	to the north side of Metro's fence line,						
	as shown as Parcel 2 on Exhibit B, the	Of the 3.46 acres, approximately					
	Metro Property.	0.78-acres is a slope easement					
		located in the westerly boundary as					
	Both Parcels are subject to the City of	shown on Exhibit A. This easement					
	Portland's approval of a lot line	is to the City of Portland and Metro					
	adjustment to create one parcel and a	will be responsible for the landscape					
	boundary survey, both to be conducted	and maintenance of the slope.					
	by the Port.						
Seller	Metro	Port of Portland					
Buyer	Port of Portland	Metro					
Price/	It is the intent of both parties to agree	It is the intent of both parties to agree					
Consideration	to an even exchange. The value for the	to an even exchange.					
	exchange will take into consideration						
	the costs necessary to prepare land for						
	development and limitations to						
	development, including but not limited						
	to survey, lot line adjustments,						
	partitioning, wetlands, easements, and						
	utility connections.						
Access	Metro will grant to the Port a vehicular	Vehicular access is by way of new,					
	and pedestrian access easement to the	widened N. Marine Drive, then over					
	northeast corner of the Metro Property	the old, vacated N. Marine Drive to					
	from the private road that runs along	the site. Pedestrian access to the boat					
	the south end of the Expo parking lot.	launch from the proposed parking lot					
		will require an access easement from					
		the Port across undeveloped Port					
		property, which will include access					
		for trail, conservation activities and					
Use	Development of vegetative buffer and	associated recreational facilities. Multiple recreational uses to include					
USE	enhancements compatible with the						
	adjacent Radio Tower (Vanport	biking, walking, hiking, wildlife					
	Wetlands) site.	viewing, canoeing and kayaking					
	wedanus) site.	(non-gas powered boats only),					
		fishing, and environmental					

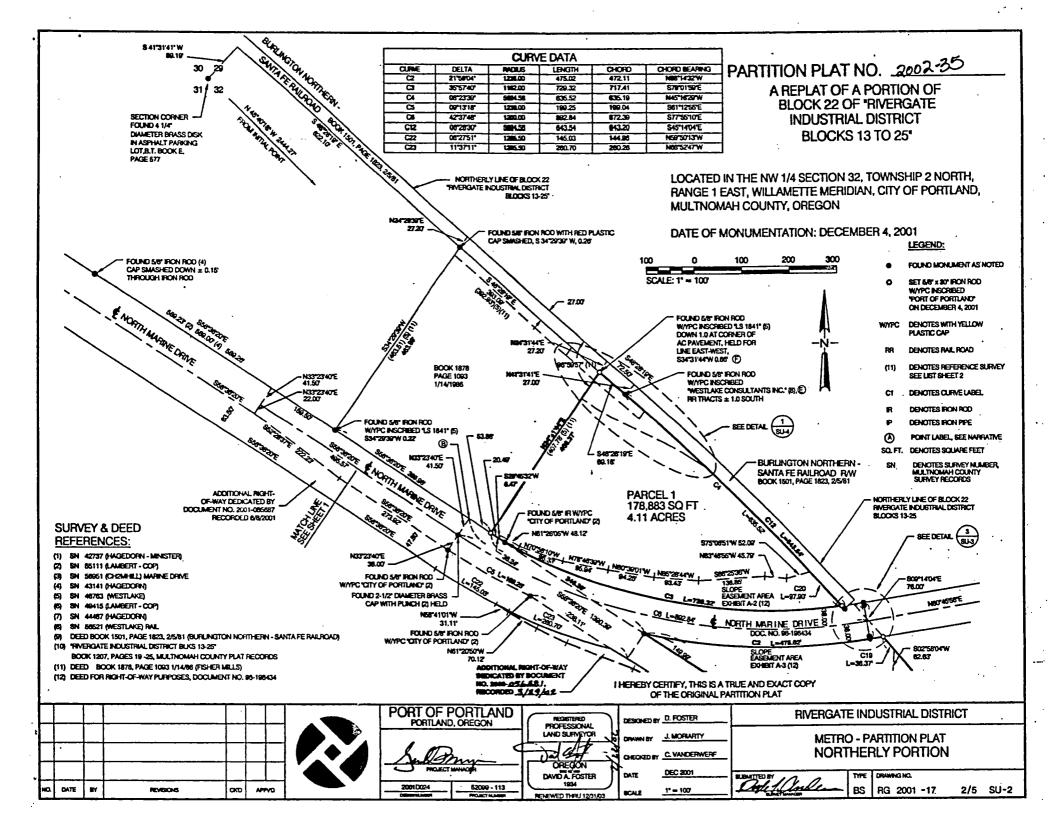
		
		education, with a parking lot for public access, and public boat launch with access to Smith and Bybee Lakes. Said uses to be consistent with the "Smith and Bybee Lakes Wildlife Area Recreation Facility Plan" as adopted by the Metro Council in December, 1999.
Conditions of Closing	The Port will have 60 days after execution of the Exchange Agreement by both parties to complete at its cost any due diligence it wishes to conduct. IGA needs to be extended to provide continuing access for the due diligence work.	Metro will have 60 days after execution of the Exchange Agreement by both parties to complete, at its cost, any due diligence it wishes to conduct. IGA needs to be extended to provide continuing access for the due diligence work.
	The City of Portland's approval for lot line adjustments for both properties, which takes approximately eight-weeks to complete. Based upon an analysis of the findings of the Phase II Assessment dated	Prior to Closing, Metro will submit a preliminary development plan for the Property to the Port for review and approval for issues related to access and utility coordination. Metro will provide copies of all permits and
	October 18, 2001, conducted by Hahn and Associates, Exhibit C, Metro agrees to complete the following prior to Closing:	approvals to Port
→	Demolish, remove, and dispose of two existing concrete covered areas, as indicated on Exhibit D . Property should be free from any debris resulting from such demolition, free from all litter, and in a naturally vegetated (grass) condition at time of transfer. The concrete removal area must be broadcast or hydroseeded with a mixture of a quick germinating cover species and a native species.	
<i>→</i>	Clean out the storm water outfall at the discharge point and remove and replace the soil containing Total Petroleum Hydrocarbon ("TPH"), as described in Section 6, page 7, and Figure 2, of Exhibit C to the satisfaction of the Port. Documentation of clean up including re-sampling after clean-up shall be provided to the Port.	
	Provide to the Port, for Port review,	

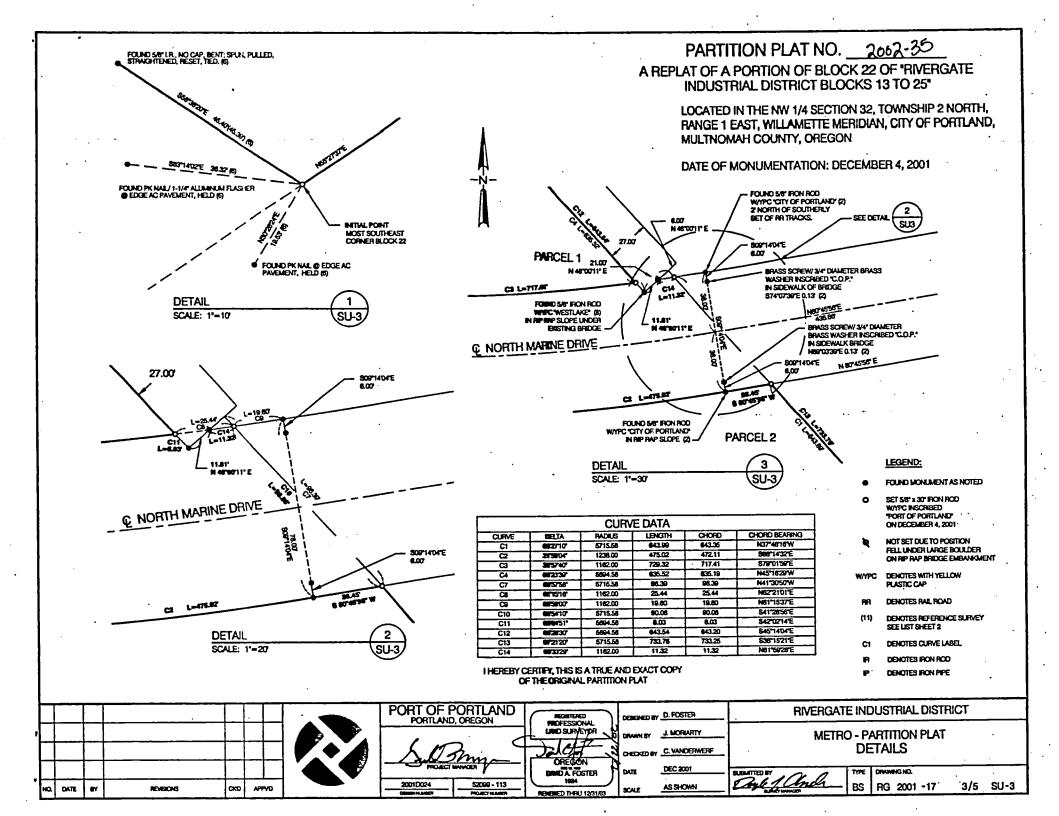
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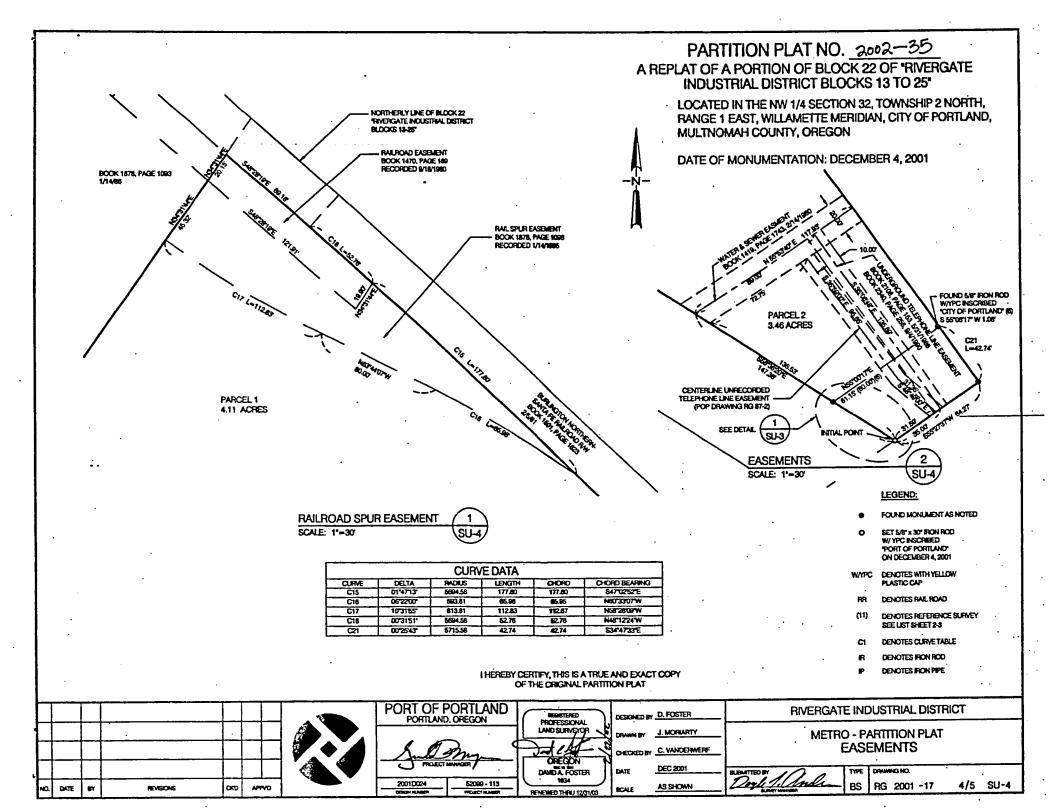
	Metro's storm water management and pollution control plan, including maintenance schedule and storm water sampling program, for Expo Center parking areas that discharge to the Port's Radio Tower Property, in the discharge locations shown on Exhibit D.	
Conditions After Closing (Within One Year)	Re-grade the slope area, reseed, and provide erosion control on slope area of Metro property to the north of the new proposed south access road as required by Exposition Master Plan as approved by the City of Portland. Port will build fence on southern boundary of road to limit access.	·
Sale "As Is"	Sale will be AS-IS with no representations or warranties regarding the condition of the Property	Sale will be AS-IS with no representations or warranties regarding the condition of the Property
Deed	Bargain and Sale Deed with clause providing for reversion if property ceases to be used for its intended purposes	Bargain and Sale Deed with clause providing for reversion if property ceases to be used for its intended purposes
Brokerage	Metro and the Port represent that there are no brokers involved with this proposed exchange and will indemnify each other against any real estate brokerage fees or commissions due, or alleged to be due as a result of commitments that may have been made to other parties by Metro or the Port.	Metro and the Port represent that there are no brokers involved with this proposed exchange and will indemnify each other against any real estate brokerage fees or commissions due, or alleged to be due as a result of commitments that may have been made to other parties by Metro or the Port.
Closing Costs	Seller of each property will pay for a standard owner's insurance policy. The Closing Date shall occur no later than fifteen (15) days following the satisfaction or waiver of all conditions as described above, unless both parties agree to extend, but in no event later than November 30, 2002. The Exchange Agreement shall be closed in the downtown offices of Chicago Title Insurance Company of Oregon. Each party will pay one-half (1/2) of the escrow fee and any recording fees and other.	Seller of each property will pay for a standard owner's insurance policy. The Closing Date shall occur no later than fifteen (15) days following the satisfaction or waiver of all conditions as described above, unless both parties agree to extend, but in no event later than November 30, 2002. The Exchange Agreement shall be closed in the downtown offices of Chicago Title Insurance Company of Oregon. Each party will pay one-half (1/2) of the escrow fee and any recording fees and other.

; 1* The terms outlined above are expressly limited to the purposes of negotiations only and are not intended to be binding or create any interest or right on behalf of Metro or the Port. The terms of a proposed exchange described above are contingent upon the execution of an agreement acceptable to the both parties and approved by the Port of Portland Commission, Metro Council, and Metropolitan Exposition-Recreation Commission. The agreement and deed form will contain additional and more detailed terms.









DECLARATION

KNOW ALL PEOPLE BY THESE PRESENTS THAT THE PORT OF PORTLAND. OWNER OF THE LAND REPRESENTED ON THE MANDED HAP AND MORE PARTICLE ARLY DESCRIBED IN THE ACCOMPANYING BURNEYORS CERTIFICATE, DOES HEREBY DECLARE THE ANNIDED MAP TO BE A CORRECT MAP OF THE PARTITION OF SAID PROPERTY, AND HAS CAUSED THIS PARTITION PLAT TO BE PREPARED AND THE PROPERTY PARTITIONED THE HIM SONGROODS IN INVOICE AS STIMESAS SMITSDE HIM PROVISIONS OF CHAPTER 82 OF DREGION REVISED BATUTES.

PORT OF PORTLAND WILLIAM WYATT, EXECUTIVE DIRECTOR

ACKNOWLEDGEMENT:

STATE OF OREGON COUNTY OF MULTINOMAH

KNOW ALL PEOPLE BY THESE PRESENTS, ON THIS 20 1 DAY OF 2002, BEFORE ME A NOTARY PUBLIC IN AND FOR SAID STATE AND COUNTY, PERSONALLY APPEARED WILLIAM WANT WHO BEING DULY SWORN, DID SAYTHAT HE IS THE IDENTICAL PERSON NAMED IN THE FOREGOING INSTRUMENT, AND THAT HE EXECUTED SAID INSTRUMENT FREELY AND VOLLINTARILY.

Many E.	Shine
NOTARY SIGNATURE	
Mary E.	Shinn
NOTARY PUBLIC - OREGON	l .
COMMISSION NO	315111
4 0.4 0.00 M MOONON! ENGINEER	· - 3 - 20 - 43

PLAT RESTRICTIONS & NOTES

1. THIS PLAT SUBJECT TO THE CONDITIONS IMPOSED BY THE CITY OF PORTLAND IN CASE FILE NO. LUR 01-00426 MP VZ

NARRATIVE:

THE PURPOSE OF THIS SURVEY WAS TO PARTITION A PORTION OF BLOCK 22 TRIVERGATE INDUSTRIAL DISTRICT BLOCKS 13 TO 25" INTO TWO PARCELS AS SHOWN AND AS APPROVED BY THE CITY OF PORTLAND PLANNING DEPARTMENT IN THEIR CASE FILE NUMBER LUR 01-00426 MP VZ. FOR MY BASIS OF BEARING I HELD A LINE FROM THE CALCULATED POSITION (DETERMINED BY USING THE REFERENCES AS SET IN SN 49415) OF THE MOST SOUTHEAST CORNER (LABELED POINT "A") AND A POINT (LABELED POINT '8") PERPENDICULAR TO AND 41.50 FEET NORTHEASTERLY FROM THE FOUND AND HELD BRASS CAP AS SOUTH 56"36"20" EAST PER REFERENCE SURVEY NUMBERS 49,415 AND 56,521. THIS LINE WAS HELD AS MY SOUTHWESTERLY LINE MORTHEASTERLY RIGHT-OF-WAY LINE OF OLD MARINE DRIVE).

THE SOUTHEASTERLY LINE WAS DETERMINED BY HOLDING THE FOUND 2-INCH IRON PIPE ON THE MEANDER LINE (AT POINT LABELED 'CT) ALONG WITH THE REFERENCED POSITION OF THE MOST SOUTHEAST CORNER OF BLOOK 22 (POINT LABELED "A"), AND THE FOUND MONUMENT SET BY WESTLAKE (PONT LABOLED TO AT THE EASTERLY MOST CORNER OF SAID BLOCK 22

THE NORTHEASTERLY LINE, (SOUTHEASTERLY RIGHT-OF-WAY LINE OF THE BUPLINGTON NORTHERN - SANTA FE RAILPOAD) WAS HELD AS MONUMENTED BY THE WESTLAKE SURVEY (SURVEY NO. 56521) (MONUMENTS LABELED 'D' AND 'E').

THE NORTHWESTERLY LINE (SOUTHEASTERLY LINE OF BOOK 1878, PAGE 1083, RECORDED JANUARY 14, 1985) WAS DETERMINED BY HOLDING RECORD DEED ANGLE PEFERENCE NO. 11) WHILE HOLDING THE POSITION OF THE FOUND MONUMENT CABELED AS POINT 'FT AND INTERSECTING SAID LINE WITH THE PREVIOUSLY DESCRIBED SOUTHWESTERLY RAILROAD RIGHT-OF-WAY LINE TO THE NORTH AND THE NORTHEASTERLY RIGHT-OF-WAY LINE OF NORTH MARINE DRIVE AS SHOWN.

NORTH MARINE DRIVE WAS DETERMINED BY HOLDING RECORD DATA FROM THE CITY OF PORTLAND IMONUMENTATION OF NORTH MARINE DRIVE SURVEY ISURVEY NO.

PARTITION PLAT NO. 2002-35

A REPLAT OF A PORTION OF BLOCK 22 OF "RIVERGATE **INDUSTRIAL DISTRICT BLOCKS 13 TO 25"**

LOCATED IN THE NW 1/4 SECTION 32, TOWNSHIP 2 NORTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF PORTLAND, MULTNOMAH COUNTY, OREGON

DATE OF MONUMENTATION: DECEMBER 4. 2001

CITY OF PORTLAND CASE FILE LUR 01-00426 MP VZ APPROVALS:_

CITY OF PORTILAND PLANNING CASE FILE LLIR 01-00426 MP VZ

APPROVED THIS 8 DAY OF Caril 20 6-2

APPRIL DOZ

- DEPUTY COUNTY SURVEYOR MULTINOMAN COUNTY, OREGON

ALL TAXES, FEES, ASSESSMENTS OR OTHER CHARGES AS PROVIDED BY O.R.S. 82:005 HAVE BEEN PAID AS OF A PALL 11 ______, 20 D. 2— DIRECTOR, DIVISION OF ASSESSMENTS & TAXATION MULTINOMAH COUNTY, OREGON

DEPUTY

STATE OF OREGON COUNTY OF MULTHOMAH) 85

I DO HEREBY CERTIFY THAT THE ATTACHED PARTITION PLAT WAS RECEMED FOR RECORD AND RECORDED APRIL 11, 20 62.
AT 11:13.0 CLOCK A.M. AS PARTITION PLAT NO. 2002-35. MULTNOWAH COUNTY RECORDS.

COUNTY RECORDING OFFICE

K. Mooneyhan

THEREBY CERTIFY, THIS IS A TRUE AND EXACT COPY OF THE ORIGINAL PARTITION PLAT

۵	DATE	BY .	REVISIONS	coxo	APPVD	
			•			
7				- 1 1	- 	·



PORT OF PORTLAND PORTLAND, OREGON

POINT, SAID POINT BEING THE TRUE POINT OF BEGINNING.

CONTAINING 220,458 SOLVAPE FEET OR 7,58 ACRES MORE OR LESS.

SURVEYORS CERTIFICATE

L DAVID A. FOSTER, A REGISTERED PROFESSIONAL BURNEYOR IN THE STATE OF OREGON, DO HEREBY

REPRESENTED ON THE ATTACHED PARTITION PLATIMP THE BOUNDARY OF SAID LAND BEING DESCRIBED

AS FOLLOWS, A PORTION OF BLOCK 22 OF TRIVERGATE INDUSTRIAL DISTRICT BLOCKS 13 TO 36" LDCATED

IN THE NORTHWEST ONE-CLIARTER OF SECTION 32, TOWNSHIP 2 NORTH, RANGE 1 EAST, WILLIAMETTE

BEGINNING AT THE INITIAL POINT, A SET 5/8 INCH BY 20 INCH IRON ROD WITH YELLOW PLASTIC DIP INSCRIBED "PORT OF PORTLAND" AT THE MOST SOUTHEASTERLY CORNER OF BLOCK 22 OF TRANSPORTE

MERICIAN, CITY OF PORTLAND, MULTINOMAN COUNTY, STATE OF OREGON, BEING FURTHER DESCRIBED

NOUSTRAL DISTRICT BLOCKS 13 TO 25°, FROM WHICH A 444 INCH BRASS DISK, BEING THE NORTHMEST

CORNER OF SAID SECTION 32, BEARS NORTH 45"4(THE WEST A DISTANCE OF 2,444.27 FEET, SAID MITVAL POINT BEING ON THE NORTHEASTERLY RIGHT-OF-WAY LINE OF OLD MARINE DRIVE; THENCE ALDING SAID

NORTHEASTERLY RIGHT-OF-WAY LINE AND IT'S WESTERLY EXTENSION NORTH 56 "36"20" WEST A DISTANCE

OF 1,390.39 FEET TO A 5/6 INCH IRON ROD WITH YELLOW PLASTIC CAP INSCRIBED PORT OF PORTLAND SET AT THE MOST SOUTHERLY CORNER OF THAT TRACT OF LAND DESCRIBED IN DEED BOOK WAR, PAGE

1023, RECORDED JUNIUARY 14, 1986, MILITHOMAH COUNTY DEED RECORDS; THENCE LEAVING BIND

RIGHT-OF-WAY LINE NORTH SH'31'44' EAST FOLLOWING THE BOUTHEASTERLY LINE OF SAID TRACTA

ALONG SAID PARALLEL LINE ALONG THE ARC OF A SIGN. 58 FOOT RADIUS CURVE TO THE RIGHT.

1404' EAST A DISTANCE OF 643 20 FEET FROM THE LAST DESCRIBED POINT, SAID POINT BEING THE SOUTHERLY CORNER OF THAT TRACT OF LAND COMEYED TO CREGON-WASHINGTON RALFORD & NAVIGATION CO. AND BURLINGTON NORTHERN INC. RECORDED FEBRUARY 5, 1981 IN BOOK 1991, PAGE 1823, MILL THOMAH COUNTY DEED RECORDS, THENCE LEAVING SAID PARALLEL LINE RADIAL TO SAID

DISTANCE OF 408.37 FEET TO A POINT BEING PERPENDICULAR TO AND 27.00 FEET DISTANT FROM THE NORTHEASTERLY LINE OF SAID BLOCK 22, ISAID POINT BEING ON THE BOUTHWESTERLY RIGHT-OF-WAY

LINE OF THE BURLINGTON NORTHERN - SANTA FERMINDADI: THENCE SOUTH 46 "28"19" EAST PARMILEI. TO THE NORTHEASTERLY LINE OF SAID BLOCK 22 A DISTANCE OF 80.18 FEET; THENCE CONTINUES

THROUGH A CENTRAL ANOLE OF 06"2630" A DISTANCE OF 643.64 FEET TO A POINT THAT BEARS SIDUTH 45"

CLIRVE NORTH 48'00'11' EAST A DISTANCE OF 11.81 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF NORTH MARINE DRIVE: THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE ALONG THE AFC OF A 1162.00 FOOT RADIUS NON-TANGENT CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 80 "33720" A DISTANCE OF 11.32 FEET TO A POINT THAT BEARS NORTH 81 50/28" EAST A DISTANCE OF 11.32 FEET FROM THE LAST DESCRIBED POINT, SALD POINT BEING A POINT ON THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF SAID BURLINGTON NORTHERN - SANTA FERALROAD RIGHT-OF-WAY; THENCE ALONG SHED SOUTHWESTERLY RIGHT-OF-WAY LINE ALONG THE ARC OF A 5715.58 FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 07'21'20" A DISTANCE OF 733.76 FEET TO A POINT THAT

BEARS SOUTH 38"1521" EAST A DISTANCE OF 733.25 FEET FROM THE LAST DESCRIBED POINT; THENCE

EXCEPTING THAT PORTION CONVEYED TO THE CITY OF PORTLAND FOR PUBLIC STREET AND

RIGHT-OF-WAY PURPOSES (NORTH MARINE DRIVE) BY EXHIBIT A-1 IN DOCUMENT NO. 98-198494 MULTNOMAH COUNTY DEED RECORDS BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING

AT THE PHEMOUSLY DESCRIBED INITIAL POINT, A SET S/8 INCH BY 30 INCH IRON ROD WITH YELLOW

NORTH 56"36'20" WEST A DISTANCE OF 1007.76 FEET TO A FOUND 5/8 INCH IRON ROD WITH YELLOW

PLASTIC CAP INSCRIBED PORT OF PORTLAND' AT THE MOST SOUTHEASTERLY CORNER OF BLOCK 22 OF

"RIVERGATE INDUSTRIAL DISTRICT BLOCKS 13 TO 25", SAID INITIAL POINT BEING ON THE NORTHEASTERLY

RIGHT-OF-WAY LINE OF OLD MARINE DRIVE, THENCE ALONG SAID NORTHEASTERLY RIGHT-OF-WAY LINE

PLASTIC CAP INSCRIBED 'CITY OF PORTLAND' AT A POINT OF NON-TANGENCY ON THE SOUTHEASTERLY

RIGHT-OF-WAY LINE OF NORTH MARINE DRIVE AS DESCRIBED IN SAID DOCUMENT NO. 98-198404 AND THE

EXTENSION OF SAID MORTHEASTERLY RIGHT-OF-WAY LINE OF OLD MARINE DRIVE MORTH SE WIEST A

DISTANCE OF 346.30 FEET, TO A POINT OF CUSP ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF NORTH

MARINE DRIVE AS DESCRIBED IN SAID DOCUMENT NO. 98-198434; THENCE ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE THE FOLLOWING FOUR (4) COURSES AND DISTANCES: 1) ALONG THE ARCOF A

1152.00 FOOT RADIUS CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 36 "5740", A DISTANCE OF

729.32 FEET TO A POINT THAT BEARS SOUTH 79 DISSY EAST A DISTANCE OF 717.41 FEET FROM THE LAST

DESCRIBED POINT; 2) ALONG THE ARC OF A 5894 SM FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT,

4270214" EAST A DISTANCE OF 8.03 FEET FROM THE LAST DESCRIBED POINT, 3) NORTH 48 "001FEAST A DISTANCE OF 11.61 FEET TO A POINT, 4) ALONG THE ARC OF A 1162.00 FOOT BADIUS NON-TANGESIT

CLEVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 00"3328", A DISTANCE OF 11.32 FEET TO A POINT

NON-TANGENT CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 00°54°10", A DISTANCE OF 80.08

DESCRIBED POINT SAID POINT BEING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID NORTH MAPINE

DRIVE: THENCE ALONG SAID SOUTHERLY RIGHT-DEVIAY LINE THE FOLLOWING TWO (2) COURSES AND

DISTANCES: 1) SOUTH 80"4556" WEST A DISTANCE OF 28.46 FEET; 2) ALONG THE ARC OF A 1238.00 FOOT

A POINT THAT BEARS NORTH 88"1432" WEST A DISTANCE OF 472.11 FEET FROM THE LAST DESCRIBED

RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 21 5004", A DISTANCE OF 475.02 FEET TO

THAT BEARS NORTH 81 SO28' EAST A DISTANCE OF 11.32 FEET FROM THE LAST DESCRIBED POINT;

FEET TO A POINT THAT BEARS SOUTH 41"2856" EAST A DISTANCE OF 90.06 FEET FROM THE LAST

THENCE CROSSING SAID NORTH MARINE DRIVE ALONG THE ARC OF A 5715.59 FOOT RADIUS

THROUGH A CENTRAL ANGLE OF 00"0451", A DISTANCE OF B.03 FEET TO A POINT THAT BEARS SOUTH

TRUE POINT OF BEGINNING OF SAID EXCEPTION PARCEL; THENCE CONTINUING ALONG THE MESTERLY

SOUTH 56'27'37' WEST A DISTANCE OF \$4.27 FEET TO THE INITIAL POINT.

CERTIFY THAT I HAVE CORRECTLY SURVEYED AND WARKED WITH PROPER MONUMENTS THE LAND

52099 - 113

20010024

REGISTERED PROFESSIONAL LAND SURVEROF OREGON

DAVID A. FOSTER 1834

RENEWED THRU 12/31/03

DESIGNED BY D. FOSTER J. MORIARTY

CHECKEDAY C. VANDERWERF **DEC 2001**

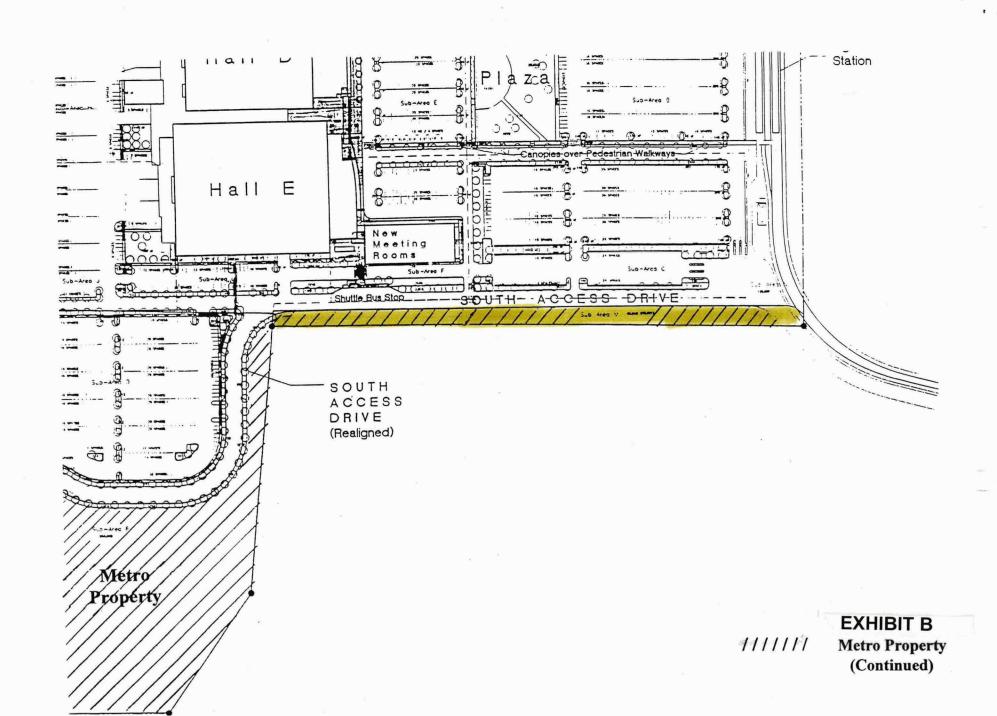
NONE

METRO - PARTITION PLAT DECLARATION, CERTIFICATE, & APPROVALS

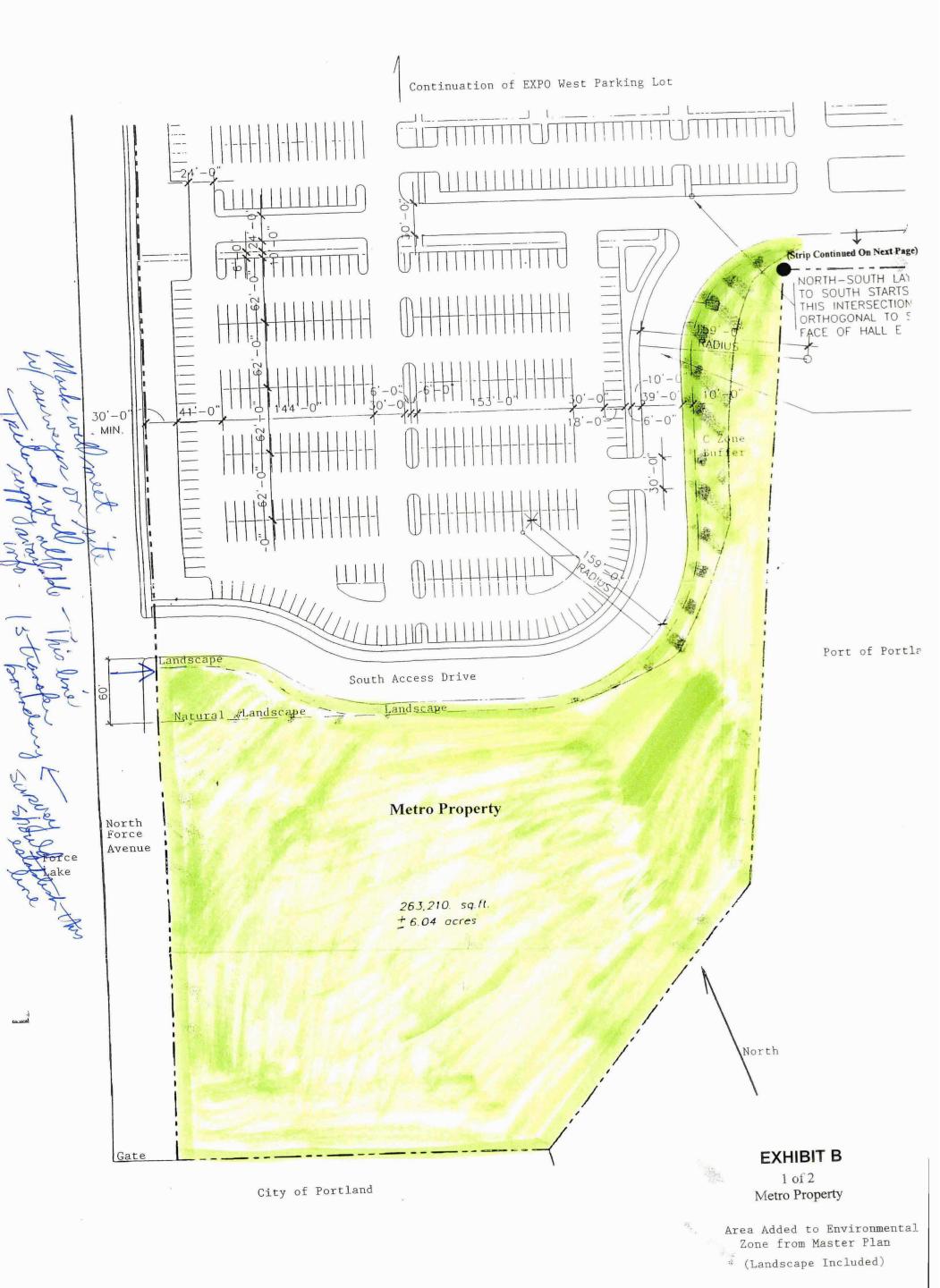
RIVERGATE INDUSTRIAL DISTRICT .

TYPE DRAWING NO. BS RG 2001 -17

5/5 SU-5



Metro Property



A PHASE II ENVIRONMENTAL SITE ASSESSMENT

6.04-Acre Parcel North Force Avenue . Portland, Oregon

October 18, 2001

HAHN AND ASSOCIATES, INC. **Environmental Management**

434 NW 6th Avenue, Suite 203 Portland, Oregon 97209-3600 503/796-0717 • 503/227-2209 FAX

A PHASE II ENVIRONMENTAL SITE ASSESSMENT

6.04-Acre Parcel North Force Avenue Portland, Oregon

October 18, 2001

Prepared for:

The Port of Portland Portland, Oregon

Prepared by:

Hahn and Associates, Inc. Portland, Oregon

11

Port Project /Task No. 52099/111 HAI Project No. 5420

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HAHN AND ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS

October 18, 2001

Mr. Joe Mollusky The Port of Portland P.O. Box 3529 Portland, Oregon 97208

Port Project /Task No. 52099/111 HAI Project No. 5420

Subject: Report on Phase II Environmental Site Assessment Activities, 6.04-Acre Parcel, North Force Avenue, Portland Oregon

Dear Mr. Mollusky:

1. Introduction

At the request of the Port of Portland (the Port), Hahn and Associates, Inc. (HAI) has completed Phase II Environmental Site Assessment (ESA) activities at the above-referenced site (Figure 1). The Phase II activities were conducted to determine: 1) soil quality relating to storm water outfall areas; 2) soil quality relating to a former underground storage tank (UST) landfarm area; and 3) baseline soil and groundwater quality of the site.

2. Background

In June 2000, PBS Environmental conducted a Phase I ESA¹ of the site for Metro, the current property owner. The PBS Phase I ESA did not identify any recognized environmental conditions (RECs) for the property. However, based on a review of the PBS report conducted by HAI at the request of the Port (including a Shannon & Wilson, Inc. geotechnical report² in the PBS report appendix), and a December 20, 2000, site meeting with the Port, several areas of environmental concern were identified:

- 1) Extensive fill activities have been conducted at the property. Reportedly, up to 47,000 cubic yards of demolition debris consisting of concrete, asphalt, and some household refuse, 8,000 cubic yards of sawdust, and an undetermined quantity of "disturbed" fill have been placed at the site.
- 2) Approximately 564 cubic yards of gasoline-impacted soil were "land farmed" and remain on the northeast portion of the site; the design of the treatment cell could not be determined.

¹ PBS Environmental (2000). Phase One Environmental Site Assessment Update for 11-Acre Site – North Force Avenue, Portland, Oregon. June 2000.

² Shannon & Wilson, Inc. (1988). Geotechnical Investigation, Proposed RV Park Development, Expo Center, Portland, Oregon. October 12, 1988.

- 3) A storm water outfall was identified that discharges to the northeastern portion of the property. The source of the outfall is reportedly from the Expo Center property. In addition, a sump on the adjacent Harbor Oil property reportedly discharged to an outfall in the southeastern low-lying area at the site.
- 4) Harbor Oil, a site under investigation by the U. S. Environmental Protection Agency (EPA) and Oregon Department of Environmental Quality (DEQ), is located immediately adjacent to the site across North Force Avenue.

3. Field Activities

3.1 Harbor Oil Sump Outfall Determination

Prior to initiation of field activities, research was conducted to determine if the site received Harbor Oil sump discharge. Based on an August 14, 2001, Metro electronic mail to the Port (Alison Campbell to Rebecca Sonniksen), there is no record of a Harbor Oil outfall on the property (Appendix A). In addition, an outfall was not observed during HAI's August 20, 2001, field activities.

3.2 UST Soil Treatment Area Determination

Approximately 564 cubic yards of gasoline impacted soil were reportedly "land farm" treated and remain on the northeast portion of the site. Although the design of the land farm treatment cell was not documented in the Phase I ESA (PBS 2000), the treatment area was indicated to measure approximately 68 feet wide by 168 feet long by 16 to 18 inches deep.

On August 20, 2001, prior to initiation of sampling activities, Mr. Randy Downs, the Portland Metropolitan Exposition Center (Expo Center) Operations Manager, was on-site to identify the general location of the former UST soil treatment pile (Figure 2). The location indicated by Mr. Downs was consistent with that identified in the Phase I ESA report (PBS 2000).

3.3 Investigation Methods and Locations

A combination of investigative methods was used for the collection of soil and groundwater quality samples including surface samples, test pits, and push probe borings. The locations of surface, test pit, and push probe borings are depicted on Figure 2.

3.3.1 Surface Soil Sampling

Storm water discharges onto the northeast corner of the property and flows on the eastern side of the property into a low-lying area. Recently, the storm water system was up-graded and re-routed to approximately the same discharge point as the previous outfall area. The source of the storm water is from the adjoining Expo Center property.

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Five surface soil samples (SS-2 through SS-6) were collected from the eastern low-lying area to assess the storm water system; all soil samples were collected at a depth of 0.5 feet below ground surface (bgs). Surface soil sample SS-2 was collected immediately beneath the former storm water outfall. Additional soil samples (SS-3, SS-4, SS-5, and SS-6) were collected at approximate 200-foot intervals down-gradient from the outfall point. Sawdust fill, as documented in the geotechnical report (Shannon and Wilson 1988), was not identified at any of the surface soil samples and therefore not sampled as proposed.

During field activities, one area of darkly colored soil was observed near TP-7. Accordingly, one surface soil sample (SS-1) was collected at a depth of 0.5 feet bgs from this area.

3.3.2 Test Pit Installation

Ten test pits (TP-1 through TP-10) were excavated with a small excavator by Cherokee General Corporation, of Portland, Oregon, under the supervision of HAI. Four test pits (TP-1, TP-2, TP-3, and TP-10) were installed in the vicinity of the former UST soil treatment area and six test pits (TP-4 through TP-9) were installed at various locations to assess baseline soil conditions within the fill at the site. Test pits were installed to a maximum depth of 5 feet bgs and sampled at depths of approximately 1, 2, and 3 feet bgs. Following completion, each test pit was backfilled with the removed soils and compacted using the excavator bucket in two-foot lifts to land surface.

3.3.3 Push Probe Installation

Five push probe borings (B-1 through B-5) were installed to assess baseline soil and groundwater quality at the site. The push probe borings were installed to depths of 12 to 24 feet bgs. Push probe boring B-5 served a dual purpose in that it was placed to evaluate groundwater quality in the vicinity of the former UST soil treatment area. Groundwater samples were collected from all five borings.

The push probes were installed by Geo-Tech Explorations, Inc. of Tualatin, Oregon with a truck-mounted Geo-Probe Systems hydraulic hammer unit. The push probes were installed with 2-inch outside diameter (OD) hydraulically-driven steel rods. Continuous soil cores were collected using a 4-foot long, 2-inch OD Macro-Core Sampler.

3.3.4 Soil Field Screening

Soil samples were field-screened for the presence of potential contamination by visual, olfactory, sheen, and headspace vapor methods. Screening for the presence of organic vapors was conducted by the headspace method using a Photovac MicroTip model MP-100 equipped with a 10.6 ev lamp and photoionization detector (PID). Immediately following the collection of the sample, approximately 4 ounces of soil was placed in a quart-size plastic bag and sealed. The sample was then set aside for a 20-minute stabilization period, whereupon the detector probe was inserted through the seal into the bag.

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With two exceptions, soil impacts were not observed at any location. An area of darkly colored surface soil was observed at location SS-1 (near TP-7). In addition, a slight sheen was observed in soil located above a buried concrete slab at test pit TP-2. A summary of test pit and push probe installation and field screening parameters are included on Table 1.

3.3.5 Groundwater Sampling

Groundwater samples were collected from a temporary well point installed in all five push probe borings. To collect the groundwater samples, a 4-foot section of 1-inch OD, 0.010-inch slotted stainless steel well screen was set beneath the groundwater level. The well screens at ranged in depths of between 8-12 and 20-24 feet bgs. Immediately following well point placement, a water level measurement was made with an electric water level meter to verify appropriate well screen placement. Water was detected at depths ranging from 10 to 22 feet bgs. Following purging of approximately 1 quart of water with a vacuum pump, all well points were sampled with new disposable bailer tubing.

Following completion of the push probe activities, the borings were backfilled with 3/8-inch bentonite chips to ground surface.

3.4 Decontamination Procedures

All push probe sampling equipment was steam cleaned with potable water prior to use, and between boring locations in order to prevent cross-contamination.

All soil sampling equipment was decontaminated after each sample by using a detergent solution wash, and two potable water rinses. Decontamination was not necessary for water sampling equipment, as new disposable tubing was used during groundwater sampling activities.

3.5 Investigative Derived Waste

Soil wastes were not generated during the investigative activities. Since a sheen was not observed on the equipment decontamination water, it was placed on the vegetated ground surface near borings B-1 and B-2 for percolation.

4. Analytical Tests

The soil and groundwater samples were shipped with chain-of-custody documentation in sealed and chilled containers to North Creek Analytical Laboratory located in Beaverton, Oregon, for analysis on a normal basis.

Selected soil samples were analyzed for the following parameters:

Parameter	Method
Hydrocarbon Identification (HCID)	NW TPH-HCID
Gasoline-range petroleum hydrocarbons	NW TPH-Gx
Diesel/Oil-range petroleum hydrocarbons	
(silica gel cleanup)	NW TPH-Dx SG
Benzene, toluene, ethylbenzene, xylene	U. S. Environmental
and naphthalene	Protection Agency (EPA) 8021
Volatile Organic Compounds (VOCs)	EPA 8260
Semi-VOCs (SVOCs)	EPA 8270
Priority Pollutant Metals/Lead	EPA 6010B/7000 Series

Five groundwater samples were analyzed for the presence of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, and total (unfiltered) priority pollutant metals by EPA Method 6010B/7000.

The laboratory reports and chain-of-custody documentation for the soil and groundwater sample analyses are in Appendices B and C, respectively. A summary of soil sample analytical testing results are presented on Tables 2 and 3. Results of groundwater sample analytical testing are presented on Table 4.

5. Results and Discussion

5.1 Subsurface Conditions

The subsurface soils encountered during the investigation activities were generally mixtures of silt, sand, and gravel depending on location at the site. In general, native silts, sandy silts, and silty sands were overlain by 0 to 4.5 feet of fill. Fill composed of sandy gravel and sandy silt with gravel was encountered at the former UST soil treatment area and near the slope toe of the Expo Center parking expansion area. Specifically, apparent fill soil was observed in TP-1, TP-2, TP-3, TP-10, and B-5 to a depth of approximately 1.5 feet bgs. The fill was observed on top of a 0.5-foot thick concrete slab encountered at a depth of 1.5 feet bgs in TP-2, TP-3, TP-10 and B-5. In addition, sandy silt with gravel was encountered in B-1, B-2 and TP-8 to depths between 1.5 and 4.5 feet bgs, and likely represents fill soil similar to that observed by Shannon & Wilson, Inc. (1988). Beneath the fill soil, silt, silty sand, and sandy silt were encountered to the maximum depth of investigation at 24 feet bgs.

Groundwater was encountered at depths ranging from 10 to 22 feet bgs in the push probe borings. Topography and nearby hydrologic features do not indicate a clear uppermost groundwater flow direction beneath the site; it may be to the west towards Force Lake or east-southeast towards an unnamed creek.

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5.2 Soil Testing Results

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Analytical testing results indicate BTEX, naphthalene, and VOCs were not detected in any of the soil samples where analyzed, and petroleum hydrocarbons were only detected above laboratory reporting limits in two soil samples (SS-2 and SS-4). Oil-range petroleum hydrocarbons were detected in surface soil samples SS-2 and SS-4, located at the storm water outfall and approximately 490 feet down-gradient of the outfall, respectively, at concentration of 335 parts per million (ppm) and 65 ppm. The oil detected in sample SS-4 was flagged in the analytical report as not having a pattern consistent with typical petroleum products. In a September 28, 2001, telephone communication (Guy Tanz to Joy Chang) the analytical laboratory indicated the detected hydrocarbons in SS-4 are likely biogenic and not petroleum hydrocarbons. Petroleum hydrocarbons were not detected in the UST soil treatment area samples or in any of the baseline soil samples.

SVOCs, where analyzed, were not detected in soil samples with the exception of surface soil sample SS-2 from beneath the storm water outfall where benzo(a)pyrene, benzo(b)fluoranthene, pyrene, and bis(2-ethylhexyl)phthalate (DEHP) were detected. The detection of petroleum-related SVOCs (with the exception of DEHP) in SS-2 is not surprising since oil was detected in this sample at a concentration of 335 ppm. With the exception of benzo(a)pyrene, none of the detected SVOCs exceed EPA Region 9 Preliminary Remediation Goals (PRGs) for residential soils. The detected benzo(a)pyrene concentration of 0.377 ppm at SS-2 exceeds both the residential and industrial PRGs of 0.062 and 0.29 ppm, respectively. Although the laboratory reporting limits of the SVOC analyses are above a number of PRG-based screening levels, the results of this investigation should be adequate to evaluate baseline soil conditions at the site. Based on the analytical results at SS-3, SS-4, and SS-5, it appears the extent of petroleum impacts from the storm water outfall defined and limited to the immediate area of storm water discharge.

Concentrations of total metals were detected in all soil samples collected at the site. However, only arsenic was detected at concentrations that exceed EPA Region 9 PRGs for residential soils. Arsenic was detected at concentrations ranging from 2.5 to 7.41 ppm, which exceed the EPA PRG of 0.39 ppm. However, all detected arsenic concentrations are within the typical natural background concentrations for the area.

Since the Port may decide to utilize this property for wetlands mitigation, DEQ Level II Screening Benchmark Values (updated March 2001), where established, were compared to soil results to provide a preliminary risk screening for ecologic terrestrial receptors. Concentrations above the most-stringent terrestrial Level II Screening Benchmark Values do not necessarily mean that risks are unacceptable; rather further evaluation of site risks compared to endpoint species may be warranted.

The results of the Level II Screening indicate that DEHP (2.14 ppm) in SS-2 exceeds the most stringent terrestrial Level II Screening Benchmark value of 0.91 ppm (Table 3). In addition, concentrations of metals chromium, copper, lead, nickel, selenium, and zinc exceed the Level II Screening Benchmark Values at various locations across the site. The storm water outfall (SS-2) is the only location where all six referenced metals exceed Level II Screening Benchmark Values. Most of the exceedences for chromium, nickel, and zinc appear to be related to natural background levels (except at SS-2). Lead appears to be elevated above background at both the storm water outfall and soil UST soil treatment area.

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5.3 Groundwater Testing Results

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Analytical testing of the five groundwater samples from borings B-1 through B-5 did not detect BTEX, naphthalene, VOCs, or SVOCs above laboratory reporting limits. Although the detection limits for benzene, and the SVOC analyses are above a number of PRG-based screening levels, the results of this investigation should be adequate to evaluate baseline groundwater conditions at the site.

Of 13 total (unfiltered) metals analyzed, arsenic at all locations, and lead at one location (B-5), were detected in groundwater at concentrations above EPA Region 9 PRGs for tap water. Concentrations of arsenic ranged from 4.69 to 9.0 parts per billion (ppb) exceeding the EPA PRG of 0.045 ppb. There is no PRG established for lead in groundwater. Lead at B-5 was detected at a concentration of 35.8 ppb, which is above the Safe Drinking Water Act (SDWA) action level of 15 ppb.

The methodology for collecting screening-level groundwater samples from push probe borings often results in turbid samples (potentially releasing metals into the sample) and may not be representative of the true quality of groundwater. Since the initial screening of metals was conducted on unfiltered samples, one sample 5420-010820-205 with the highest concentration of total arsenic and lead was analyzed for dissolved (filtered) metals. The unfiltered concentrations of arsenic (9. ppb) and lead (35.8 ppb) were reduced to below laboratory method reporting limits and 2.64 ppb, respectively. The results suggest that arsenic and lead occurrence in groundwater is attributable to background levels with the detected variability being related to the sampling methodology. The results suggest that all of the detected metals in groundwater at the Site are within the realm of background concentrations for an uppermost water-bearing zone in this area.

6. Conclusions and Recommendations

The results of Phase II ESA investigations indicate that the quality of soil relating to the former UST soil treatment area, and baseline soil and groundwater quality at the site, have been adequately characterized. Petroleum impacted soil is documented in the vicinity of the storm water outfall, and is likely limited to the near proximity of the outfall point. Benzo(a)pyrene exceeds EPA PRGs in soil at the outfall point. In addition, concentrations of DEHP and six metals (chromium, copper, lead, nickel, selenium, and zinc) at the outfall area exceed Level II Screening Benchmark Values. Because of the elevated petroleum hydrocarbons, benzo(a)pyrene, DEHP, and metals values in soil at the storm water outfall, further risk evaluation and/or cleanup of this area appear warranted. In addition, it is recommended that the party responsible for storm water received by the property evaluate, and if needed upgrade, their storm water system to mitigate future impacts to the property.

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7. Limitations

The samples discussed in this report were collected, analyzed, and interpreted following the standards of care, skill, and diligence ordinarily provided by a professional in the performance of similar services as of the time the services were performed. This report and the conclusions and/or recommendations contained in it are based solely upon physical sampling and analytical activities that were conducted. The data presented in this report document only the concentrations of the target analytes in the particular sample and not the property as a whole.

If there are any comments or questions, please contact the undersigned. Thank you for the opportunity to be of service to the Port of Portland.

Sincerely,

Sugh. Oang Guy H. Tanz, R.G.

Associate

gtanz@hahnasoc.com

attachments

TABLE 1
Summary of Test Pit and Push Probe Logs
Phase II Environmental Site Assessment
6.04-Acre Parcel
North Force Avenue Property
Portland, Oregon

Project No. 5420

	Boring/	Install	Total	Install :	Groundwa	iter Data S	ummary	Section 1	en en gement de e		<i>i</i>	Soil Data Summary	Project No. 5420					
Process Proc		> Date				220722182-2520	Stall Sections	Bottom of	4.	m::		Soil Type/			• •	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		
TT-1	Number								1.17			USCS Designation				<u>,, </u>		
Fig. 1 20 Aug. 01 3.5 Exercisor - - - - 1.5 0.00 0.0			(feet bgs)		The second second second	T. 1877. N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1,100.	11 1 1 1 E 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No.			-	Odor	Visual	Sheen	1 ' ' '		
Part	TP-1	20-Aug-01	3.5	Excavator	•	•	•	1.5	001	0.0			no	no	no			
TP-9	1							2.5	002	1.5	į	Silt with trace Sand (ML)	no	no	no			
FF-2								3.5	003		3.5		no	no				
TP-5	TP-2	20-Aug-01	3.5	Excavator	-	•	•	1.5	004	0.0	1.5	Sandy Gravel (fill)(GP)	no	<u> </u>	 	 		
TF-4								-	-	1.5	2.0					0.0		
T1-3	1					•		2.5	005	2.0			, no					
TP-4								3.5	006		3.5							
TP-6	TP-3	20-Aug-01	3.5	Excavator	•		_	1.5	007	0.0	 	Sandy Gravel (611)(CD)	 					
TP-6								-								!		
TP-4								2.5	008									
TP-4	ł									2.0	3.5	Sitt with trace Sand (ML)						
TP-5 20-Aug-01 2.5 Exervator	TP-4	20-Aug-01	5.0	Excavator						0.0	3.5	Combination of the Combination o	 		no			
TP-5										0.0	E 0	Sandy Sift (ML)		no	no			
TP-6 20-Aug-01 2.5 Exervator	TP-5	20-Aug-01	2.5	Excavator		<u> </u>				0.0	3.0	G. J. GW. O.T.	no	no	no			
TF-6						-	-			0.0		Sandy Silt (ML)		no	no			
TP-7 20-Aug-01 2.5 Excavator	TP-6	20-Aug-01	2.5	Excavator							2.5		no	no	no	0.0		
TP-7					_	-	-			υ.0		Sandy Silt (ML)	no	no	no	0.0		
TP-8 20-Aug-01 2.5 Excavator 1.5 019 0.0 1.5 Sandy Sitt (with Gravel in no	TP-7	20-Aug-01	2.5	Evceyetor							2.5		no	no	no	0.0		
TP-8			2.0	Dacavalor	•	-	•			0.0	_	Sandy Silt (ML)	no	no	no	0.0		
TP-0 28-Aug-01 2.5 Excevator	TP-8	20-Ang-01	25	Everynter						·	ļ	Sandy Cilt with Consul	no	no	no	0.0		
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TP-10 20-Aug-01 3.5 Excavator - - -	TTP_0	20-4119-01	0.5	Tiber a section							2.5		no	no	no	0.0		
B-1 20-Aug-01 20.0 Push Probe 18 16-20 201 1.5 101 0.0 3.5 3.5 12.0 3.5 3.5 12.0 3.5		 				-					 		no	no	no	0.0		
B-1 20-Aug-01 20.0 Fush Probe 18 16-20 201 1.5 101 0.0 3.5 Sandy Silt with Gravel (fill (ML) no no no no no 0.0 no 0.0 no no no no 0.0 no	11-10	20-Aug-01	3.5	Excavator	-	•	•	1.5	022		1.5	(fill)(ML)	no	no	по	0.0		
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B-2 20-Aug-01 12.0 Push Probe 10 8-12 202 1.5 103 3.5 112 3.5 112 3.5 114 3.5 115 3.5 112 3.5 3.	P.1	00 4 01							024		3.5		no	no	no	0.0		
B-2 20-Aug-01 12.0 Push Probe 10 8-12 202 1.5 107 0.0 4.5 (III) (ML) Silt vith trace Sand (ML) no no no 0.0 0.0 no no 0.0 0.0 no no no 0.0 0.0 no no no 0.0 no no no no no 0.0 no no no no 0.0 no no no no no 0.0 no no no no no 0.0 no	P-1	20-Aug-01	20.0	Push Probe	18	16-20	201	1.5	101	0.0	3.5	Sandy Silt with Gravel (fill) (ML)	no	no	no	0.0		
B-2 20-Aug-01 12.0 Push Probe 10 8-12 202 1.5 104 3.5 112.0 11								3.5	102	3.5	12.0	Silt with trace Sand	no	no	no	0.0		
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B-4 20-Aug-01 19.0 Push Probe 15 12-16 204 1.6 113 0.0 4.5 Silty Sand (SP) no no no no 0.0 0.0 13.5 117 12.0 14.0 Sandy Silt (ML) no no no no 0.0 0.0 13.5 117 12.0 14.0 Sandy Silt with trace Sand (ML) no no no no 0.0 10.0 13.5 117 12.0 14.0 Sandy Silt with trace Sand (ML) no no no no 0.0 10.0 13.5 117 12.0 14.0 Sandy Silt with trace Silt (SP) no no no no 0.0 10.0 13.5 117 12.0 14.0 16.0 Sandy Silt with trace Silt (SP) no no no no 0.0 10.0 11.5 11.5 11.5 11.5 11.5 11.5	- P.O	00 A 01	10.0						109		12.0		no	no	no	0.0		
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B-4 20-Aug-01 19.0 Push Probe 15 12-16 204 1.5 113 0.0 4.5 Silty Sand (SP) no no no no 0.0 10.0 115 115 115 115 115 115 115 115 115 11									111	2.5		Silt with trace Sand (ML)	no	no	no	0.0		
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B-5 20-Aug-01 24.0 Push Probe 22 20-24 205 0.0 1.5 Sandy Silt with Gravel (fill) (ML) no no no 0.0 1.5 (fill) (ML) no no no no 0.0 1.5 (fill) (ML) no no no no 0.0 1.5 (fill) (ML) no no no no no 0.0 1.5 (fill) (ML) no no no no no no 0.0 1.5 (fill) (ML) no					j		j	ŀ	116		12.0		no	no	no	}		
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2024 203	Dr	20. 4 05	010	D. 1 = 1				16.0		14.0			no	no	no	0.0		
4.0 - 2.0 Concrete	6-a	20-Aug-01	24.0	Push Probe	22	20-24	205	-	•	0.0	1.5	Sandy Silt with Gravel (fill) (ML)	no	no	no	0.0		
8.0 - 12.0 - 16.0 - 10.0 no				ŀ				-	-	1.5		1	-					
8.0 -							1	4.0	-	2.0	İ	Silty Sand (SP)	no	no	no	0.0		
12.0 - 16.0 - 10.0 no no no no no no no no no no no no no]						1	8.0	-				no	no	no			
16.0 - no no no no 0.0 no no no no 0.0 no no no no no no no no no no no no no								12.0	-				no	no	no			
20.0 - no no no no 0.0						-	1	16.0	-				no	no	no	l l		
								20.0					no	no	no	1		
	<u> </u>							24.0			24.0		no	no	no	0.0		

Note:

1 = Sample No. prefix is 5106-010820-

bgs = below ground surface

ppm = parts per million

USCS = Unified Soil Classification System

TABLE 2 Summary of Analytical Results for Soil Samples

Phase II Environmental Site Assessment 6.04-Acre Parcel North Force Avenue Property Portland, Oregon

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 Project No. 5420

Location	Sample	Sample	Sample	Location	Analytical Results—mg/kg (ppm)											
	Number ¹	Date	Depth	Description	NW M	lethod TPI	I-HCID	NW Method TPH-Gx	(silica ge	od TPH-Dx l cleanup)	EPA 80	21 or 8260B	EPA 8260E	EPA 8270	EPA 6010/7000	
			(feet bgs)		Gasoline	Diesel	Oil	Gasoline	Diesel	Oil	BTEX	Naphthalene	VOCs	SVOCs (Table 3)	Metals (Table 4)	
Storm Wa	ter Outfall	Assessment		.,												
					10 10 10 10 10 10 10											
SS-2	025	20-Aug-01	0.5	Beneath outfall	ND>20	ND>50	Detected		ND>50	335.	ND	ND>0.2	ND	Detected	Detected	
SS-3	026	20-Aug-01	0.5	230 feet south of outfall	ND>20	ND>50	ND>100	-	•	-					-	
SS-4	027	20-Aug-01	0.5	440 feet south of outfall	ND>20	ND>50	Detected		ND>25	65.2	ND	ND>0.2	ND	ND	Detected	
SS-5	028	20-Aug-01	0.5	650 feet south of outfall	ND>20	ND>50	ND>100	ļ.		<u>-</u>	•	-		•		
SS-6	029	20-Aug-01	0.5	820 feet south of outfall	ND>20	ND>50	ND>100	ļ.		-	-			•	-	
Former Sc	il Treatme	nt Area Asse	ssment												1	
TP-1	001	20-Aug-01	1.5	Suspected fill	•	-	-		-	•	-	-		· · · · · · · · · · · · · · · · · · ·	Detected	
	002	20-Aug-01	2.5	-	-	-	-	ND>2	•	•	ND>0.05	ND>0.05	-		-	
TP-2	004	20-Aug-01	1.5	Soil on concrete (fill)	-		•	ND>2	-	•	ND	ND>0.2	ND	•	Detected	
}	005	20-Aug-01	2.5	Soil beneath concrete	-	•	-	ND>2	•	•	ND>0.05	ND>0.05	•	-	-	
TP-3	007	20-Aug-01	1.5	Soil on concrete (fill)	-	-	•	-	•	•	ND	ND>0.2	ND		Detected	
[008	20-Aug-01	2.5	Soil beneath concrete	-	•	-	ND>2	-	•	ND>0.05	ND>0.05	-	•	-	
TP-10	022	20-Aug-01	1.5	Soil on concrete (fill)	-	•	-	•	-	•	•	-	•	•	Detected	
	023	20-Aug-01	2.5	Soil beneath concrete	-		-	ND>2	•	•	ND>0.05	ND>0.05	-	•	•	
Baseline A	ssessment															
SS-1	018	20-Aug-01	0.5	Surface discoloration	ND>20	ND>50	ND>100	•	-	•				-	-	
TP-4	010	20-Aug-01	1.5	•	ND>20	ND>50	ND>100	•	-	•	•	-	-	•	-	
TP-5	012	20-Aug-01	1.5	•	ND>20	ND>50	ND>100	-	•	-	ND	ND>0.2	ND	ND	Detected	
TP-6	014	20-Aug-01	. 1.5	•	ND>20	ND>50	ND>100	•	-	•	•	-	•	•	-	
TP-7	016	20-Aug-01	1.5	-	ND>20	ND>50	ND>100	•	-	-	_	-		•	-	
TP-8	019	20-Aug-01	- 1.5	Suspected fill	ND>20	ND>50	ND>100	-	-	-	-	-	-	•	•	
TP-9	021	20-Aug-01	1.5	•	ND>20	ND>50	ND>100	-	•	-	•	-		•	-	
B-1	101	20-Aug-01	1.5	Suspected fill	ND>20		ND>100	•	-		ND	ND>0.2	ND	ND	Detected	
B-2	107	20-Aug-01	-1.5	Suspected fill	ND>20	ND>50	ND>100		-	_	•	-	-	•	_	
B-3	110	20-Aug-01	1.5	•	ND>20		ND>100	-	-		ND	ND>0.2	ND	ND	Detected	
B-4	113	20-Aug-01	1.5				ND>100	•	-		ND				Detected	

Note:

- = not analyzed

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, xylene

DEHP = bis(2-ethylhexyl)phthalate

EPA = U.S. Environmental Protection Agency

HCID = hydrocarbon identification

mg/kg = milligrams per kilogram

ND = not detected above detection limit indicated

NW = Northwest Method

PAHs = polynuclear aromatic hydrocarbons

ppm = parts per million

SVOCs = semi-volatile organic compounds

TPH = total petroleum hydrocarbons

VOCs = volatile organic compounds

^{1 =} Sample number prefix: 5420-010820-

^{2 =} The detected hydrocarbons do not have a pattern consistent with typical petroleum products, and are likely bigenic in nature

TABLE 3

Summary of Analytical Results for Soil Samples: SVOCs

Phase II Environmental Site Assessment 6.04-Acre Parcel North Force Avenue Property Portland, Oregon

Project No. 5420

Location:	- Sample	Sample	# # 10 00 00 00 00 00 00 00 00 00 00 00 00	Location	Analytical Results – mg/kg (ppm) SVOCs by EPA Method 8270									
	Number!	Date	Depth	Description										
			(feet bgs)		Benzo(a) pyrene	Benzo(b) fluoranthene	Bis (2-ethylhexyl) phthalate	Pyrene	Other SVOCs					
Storm Wa	ter Outfall	Assessment						Tigran, A ZhiAperez (A., je)	Care Streets W					
SS-2	025	20-Aug-01	0.5	Beneath outfall	0.377	0.617	2012	0.4	ND					
SS-4	027	20-Aug-01	0.5	440 feet south of outfall	ND>0.33	ND>0.33	ND>2.	ND>0.33	ND					
Baseline A	ssessment	,												
TP-5	012	20-Aug-01	1.5	-	ND>0.33	ND>0.33	ND>2.	ND>0.33	ND					
B-1	101	20-Aug-01	1.5	Suspected fill	ND>0.33	ND>0.33	ND>2.	ND>0.33	ND					
B-3	110	20-Aug-01	1.5	•	ND>0.33	ND>0.33	ND>2.	ND>0.33	ND					
B-4	113	20-Aug-01	. 1.5		ND>0.33	ND>0.33	ND>2.	ND>0.33	ND					
		EPA Region 9	PRG - Rês	idential Soils>	0.062	0.62	.35.	2,300.	TOTAL CONTRACTOR					
		DEQ II Screen	ing Bench	mark Value ² ->	7.	#	0.91	#*************************************						

Note:

= not established

bgs = below ground surface

DEQ = Oregon Department of Environmental Quality

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

ppm = parts per million

PRG = Preliminary Remediation Goal

SVOCs = semi-volatile organic compounds

Bold numbers indicate concentrations in excess of residential EPA PRGs (November 2000)

Shaded numbers indicate concentrations in excess of DEQ

Level II Screening Benchmark Values (March 2001)

1 = Sample number prefix: 5420-010820-

2 = Lowest Level II Screening Benchmark Values for ecological receptors (March 2001)

Updated: 10/18/01 GHT File: 5420-02/3 Soil Rslts PRG

TABLE 4 Summary of Analytical Results for Soil Samples: Metals

Phase II Environmental Site Assessment 6.04-Acre Parcel North Force Avenue Property Portland, Oregon

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Project No. 5420

Location	Sample	Sample	Sample	Location	11.		10 m	* :	A	nalytical	Results –	mg/kg (pp	m)		••.		
	Number ¹	Date	Depth	Description				er e	To	tal Metals	by EPA 60	10/7000 Se	ries				
	·		(feet bgs)		Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Storm Wa	ter Outfall Asses	ssment															
SS-2	025	20-Aug-01	0.5	Beneath outfall	ND>0.5	7.41	0.823	2.18	3 (# G.EV)	7.9.9	ચારા	ND>0.1	1.55	(Estério)	ND>0.5	ND>0.5	701.
SS-4	027	20-Aug-01	0.5	440 feet south of outfall	1.24	2.5	ND>0.5	ND>0.5	3573	30.5	79.2	ND>0.1	17.1		1 ND>0.5	ND>0.5	1/43
Former S	oil Treatment Ar	ea Assessmen	t														
TP-1	001	20-Aug-01	1.5	Suspected fill	-	-	-	-	-	-	19.9	-	_	-	-	-	_
TP-2	004	20-Aug-01	1.5	Soil on concrete (fill)		-	-	-	-	-	1884	-	_	-		-	-
TP-3	007	20-Aug-01	1.5	Soil on concrete (fill)	-	-		_	-	-	24.3	_		_	-		-
TP-10	022	20-Aug-01	1.5	Soil on concrete (fill)	-	-	•	-	-	-	7686	-	_				
Baseline A	ssessment																
TP-5	012	20-Aug-01	1.5	•	ND>0.5	4.72	1.16	ND>0.5	1 3337	30.4	12.2	ND>0.1	3(6.5)	ND>0.5	ND>0.5	ND>0.5	106
B-1	101	20-Aug-01	1.5	Suspected fill	ND>0.5	5.28	0.853	ND>0.5	1.02 at	29.4	14.8	ND>0.1		ND>0.5		ND>0.5	7 (P.
B-3	110	20-Aug-01	1.5	•	ND>0.5	3.25	0.874	ND>0.5	29 1	36.2	8.75	ND>0.1	 -		ND>0.5	ND>0.5	& F. 5
B-4	113	20-Aug-01	1.5	•	ND>0.5	5.79	1.22	ND>0.5	1 013731	35.5	12.5	ND>0.1	37.70		ND>0.5		1861
	tien Tien in hij		EPA Region	9 PRG - Residential Soils>	31.	0.39	150%	37:	210.	2,900.	400.	23.	1,600:	390.	390.	5.2	124789
		DEQ.I	Level II Scre	ening Benchmark Value²->	5.	8.	» 8 1.	4.	0.4	50.	50.	0.1	80.	1.	2.	1.	. 50.

Note: -= not analyzed

bgs = below ground surface

DEQ = Oregon Department of Environmental Quality

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

ND = not detected above detection limit indicated

PRG = Preliminary Remediation Goal

ppm = parts per million

1 = Sample number prefix: 5420-010820-

2 = Lowest Level II Screening Benchmark Values for ecological receptors (March 2001)

Bold numbers indicate concentrations in excess of EPA Region 9 Residential PRGs

Shaded numbers indicate concentrations in excess of DEQ Level II Screening Benchmark Values (March 2001)

TABLE 5

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Summary of Analytical Results for Groundwater Samples

Phase II Environmental Site Assessment

6.04-Acre Property

North Force Avenue Property

Portland, Oregon

Project No. 5420

Boring	Screen	Sample Number ¹	Sample		Analytical Results ug/l (ppb)																					
Numbe	Interval		Date			EPA Method 8260B			EPA M	PA Method 8270 Metals by EPA Method 6000/7000 Series																
	(feet bgs)										Total N					Metals (unf	etals (unfiltered)							Dissolved Metals (filtered)		
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Other VOCs	PAHs	Other SVOCs	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Arsenic	Lead
Baseline Investigation																										
B-1	16 - 20	201	20-Aug-01	ND>1.	ND>1.	ND>1.	ND>2.	ND>2.	ND	ND	ND	ND>1.	5.46	1.27	ND>1.	47.3	47.	13.5	0.27	34.6	1.6	1.32	ND>1.	128.	•	•
B-2	8 - 12	202	20-Aug-01	ND>1.	ND>1.	ND>1.	ND>2.	ND>2.	ND	ND	ND	1.35	4.69	ND>1.	1.74	24.4	92.1	11.5	ND>0.2	43.6	4.72	1.08	ND>1.	73.2	•	•
B-3	8 - 12	203	20-Aug-01	ND>1.	ND>1.	ND>1.	ND>2.	ND>2.	ND	ND	ND	ND>1.	5.91	1.48	ND>1.	58.8	51.9	13.1	0.21	44.6	1.21	ND>1.	ND>1.	138.	•	-
B-4	12 - 16	204	20-Aug-01	ND>1.	ND>1.	ND>1.	ND>2.	ND>2.	ND	ND	ND	ND>1.	7.17	1.99	ND>1.	47.1	61.	14.8	0.2	37.5	2.01	ND>1.	ND>1.	111.		•
B-5	20 - 24	205	20-Aug-01	ND>1.	ND>1.	ND>1.	ND>2.	ND>2.	ND	ND	ND	ND>1.	9.	3.22	1.04	105.	154.	35.8	1.56	77.2	1.64	ND>1.	ND>1.	235.	2.64	ND>1.
	E	PA PRG for T	lap Water>	0.35	720	1,300.	1,400.	6.2	varies	varies	varies	15.	0.045	73.	18.	110.	1,400.	15.²	11.	730.	180.	180.	2.4	11,000.	0.045	15. 3

Note: -= not analyzed

bgs = below ground surface

EPA = U.S. Environmental Protection Agency

ND = not detected above detection limit indicated

PAHs = polynuclear aromatic hydrocarbons ppb = parts per billion

PRG = EPA Region 9 Preliminary Remediation Goal (11/00)

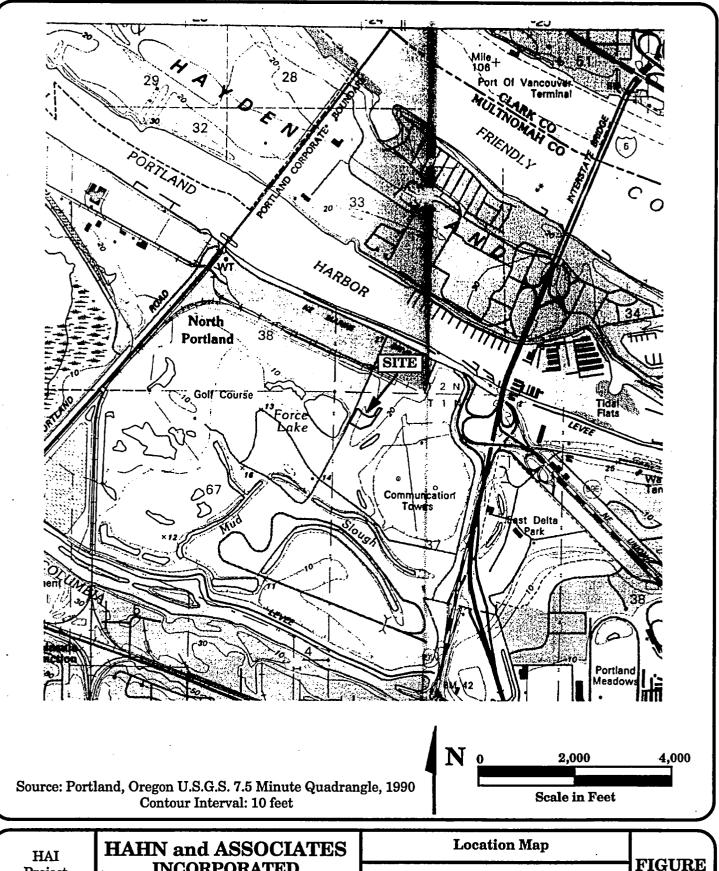
SVOCs = semi-volatile organic compounds

TPH = total petroleum hydrocarbons
ug/l = micrograms per liter

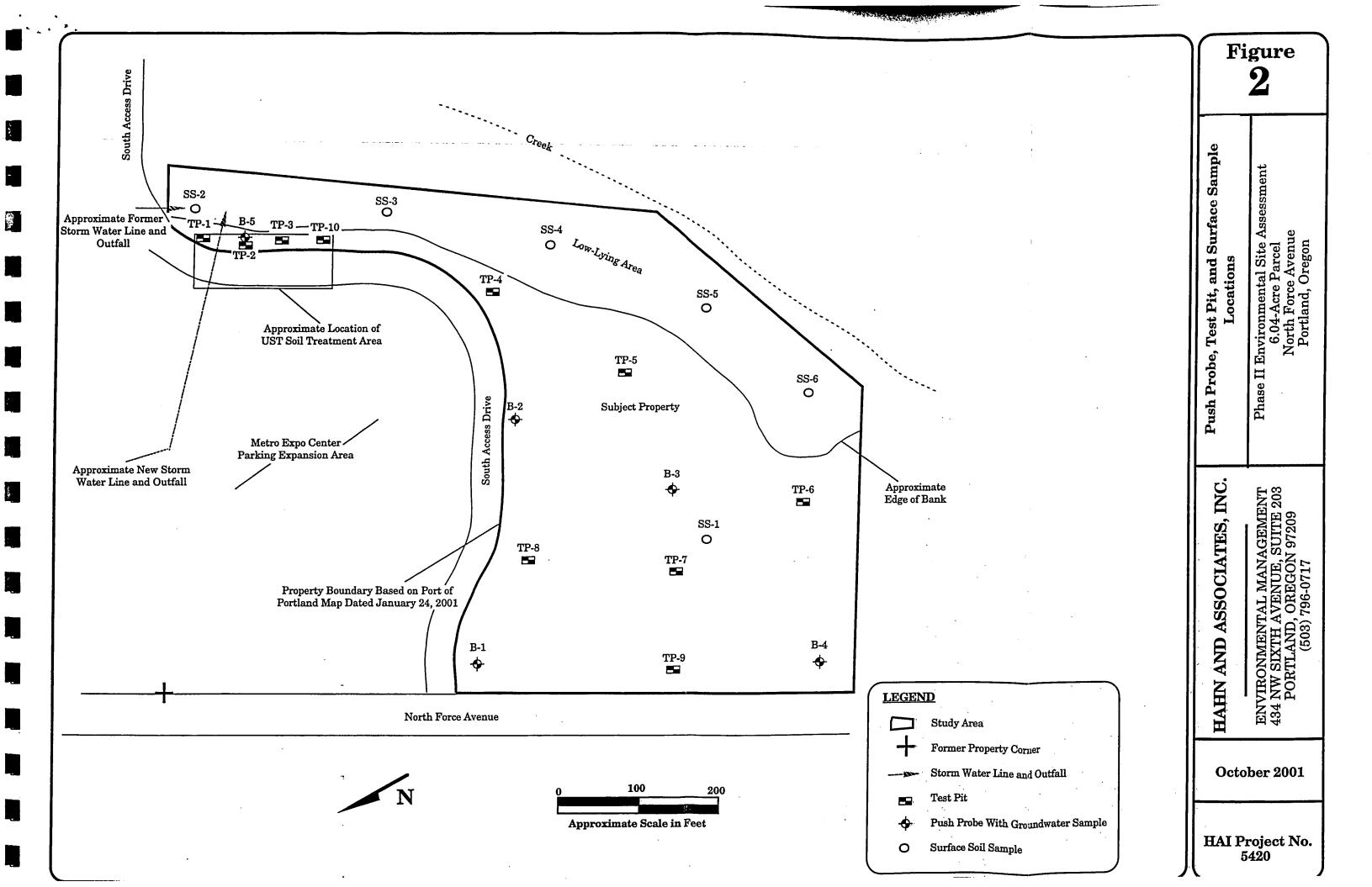
VOCs = volatile organic compounds

1 = sample number prefix: 5420-010820-

2 = EPA Primary Drinking Water Regulation Action Level Bold = Concentration in excess of PRG for tap water



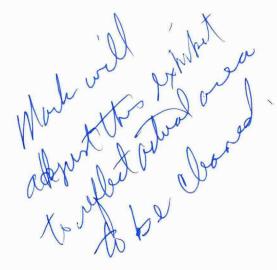
HAI	HAHN and ASSOCIATES	Location Map			
Project	INCORPORATED	Phase II Environmental Site Assessment 6.04-Acre Parcel	FIGURE		
October 2001	ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	North Force Avenue Portland, Oregon	1		







EXPO SITE ANALYSIS Land Swap with Metro



Approximate Parcel Boundary (approx. 11 acre)



Concrete Slab Area (approx. 1.48 acre)

Scale: 1" = 100'