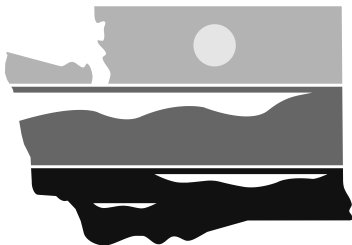


DRAFT CLEANUP ACTION PLAN

FOR

PHILLIPS RESIDENTIAL PROPERTY

6719 SOUTH D STREET, TACOMA, WA



DEPARTMENT OF
ECOLOGY
State of Washington

PREPARED BY:
WASHINGTON STATE DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM, SWRO

PROJECT MANAGER
MARIAN ABBETT, PE

SITE MANAGER
JOHN ZINZA, PE

APRIL 18, 2013

EXECUTIVE SUMMARY

The Phillips Residential Property at 6719 South D Street, Tacoma, WA is currently vacant due to health concerns and actions taken by the Tacoma-Pierce County Health Department (TPCHD) as documented in their “Health Order” dated September 8, 2008. Soil sampling confirms the presence of lead above the Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land use. This Cleanup Action Plan identifies the selected alternative of excavation and removal. This selected cleanup alternative meets MTCA requirements by offering a permanent solution by removing the contaminated soil to the point of compliance.

TABLE OF CONTENTS

Executive Summary	ii
Abbreviation and Acronyms	v
1.0 Introduction	1
2.0 Background	2
2.1 Property Location and Description	2
2.2 History of Contamination.....	2
2.3 Initial Response by TPCHD and Ecology	2
2.4 Nature and Extent of Contamination.....	7
3.0 Proposed Cleanup Action.....	9
3.1 Selected Alternative – Excavation and Removal.....	9
3.2 Rational for Selected Alternative	10
3.3 Rejected Alternatives.....	10
3.4 Applicable State and Federal Laws.....	11
4.0 Lead Cleanup Level and Point of Compliance.....	12
4.1 Lead Cleanup Level	12
4.2 Point of Compliance.....	12
5.0 Schedule for Implementation.....	13
6.0 Institutional Controls and Property Use Restrictions	14
7.0 Public Participation Plan	15
8.0 References	16

LIST OF TABLES

Table 2-1 January 22, 2008 Sampling Results

Table 2-2 February 28, 2008 Sampling Results

Table 2-3 February 28, 2008 Sampling Results

Table 2-4 Property 6725 Sampling Results

Table 2-5: Concentration of lead and copper in samples collected on Nov. 14, 2008

Table 4-1: Lead Cleanup Levels

Table 5-1: Timeline for Cleanup and Restoration Activities

APPENDICES

Appendix A: Figures and Photo Logs

Figure A-1 January 22, 2008 sampling figure and photo log

Figure A-2 February 22, 2008 sampling figure and photo log

Figure A-3 February 28, 2008 sampling figures and photo log

Figure A-4 Neighbor properties sampled

Figure A-5 Property 6725 sampling locations

Figure A-6 August 27/28, 2008 photo log

Appendix B: TPCHD Health Orders

Appendix C: Access Agreement

Appendix D: Phase II Site Investigation Report (2008)

Appendix E: Cleanup Plan Set

Appendix F: Public Participation Plan

ABBREVIATIONS AND ACRONYMS

CAP	Cleanup Action Plan
Ecology	Washington State Department of Ecology
MTCA	Model Toxics Control Act
NPDES	National Pollutant Discharge Elimination System
RCW	Revised Code of Washington
TPCHD	Tacoma-Pierce County Health Department
WAC	Washington Administrative Code

1.0 INTRODUCTION

This Draft Cleanup Action Plan (CAP) establishes the cleanup standards and presents the selected cleanup action that will meet the standards for the Phillips Residential Property at 6719 South D Street in Tacoma, Washington. This document was prepared to meet the requirements of WAC 173-340-380, Cleanup Action Plan.

The work under this Draft Cleanup Action Plan (CAP) was developed in accordance with WAC 173-340-350 through 173-340-390. The work will:

1. Meet threshold requirements for cleanup by protecting human health and the environment; complying with cleanup standards, and complying with applicable state and federal laws;
2. Provide a permanent solution to the maximum extent practicable;
3. Provide for reasonable restoration time frame; and
4. Consider other public concerns.

2.0 BACKGROUND

2.1 PROPERTY LOCATION AND DESCRIPTION

The Phillips Residential Property is located at 6719 South D Street in the City of Tacoma, Pierce County, Washington. The property is located within a residential sub-division of single family homes. The house sits on the back portion of the parcel (east end of the property). A garage and concrete driveway front the property on South D Street, with the driveway extending along the south side of the garage.

2.2 HISTORY OF CONTAMINATION

The property owner, George “Joe” Phillips, is reported to have melted lead into blocks for reuse. This occurred on the property from 1985 to January 2008. Mr. Phillips apparently melts lead as a hobby. It is reported that he used a 3/8-inch thick steel pot that could hold greater than a ton of lead. Mr. Phillips’ melting operation occurred under a portable carport and tarped area alongside his garage.

The residence was occupied by a family with three children from March 2007 – January 8, 2008. The three children were tested for lead in November 2007. The mother’s blood lead level was reported as normal. All three children had elevated blood lead levels (EBLL). The levels were highest in the youngest child. The Tacoma-Pierce County Health Department was notified of the EBLLs.

During January 2008, Mr. Phillips is reported to have hosed down the side of the garage next to his melting area (Initial Investigation Field Report, March 14, 2008).

2.3 INITIAL RESPONSE BY TPCHD AND ECOLOGY

As part of Environmental Response Tracking System (ERTS) S603197 response, TPCHD performed a site visit on January 22, 2008. During this initial site visit numerous 5 gallon buckets containing metal pieces and debris were stacked along the south side of the driveway.

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

The back yard contained various metal debris including a large empty tank (reported to be a liquid oxygen tank). Two soil samples were collected from the edges of the concrete driveway where water would have drained from the garage cleaning and tested for arsenic, cadmium, lead, barium, and chromium. See Figure A-1 for sampling locations and photo logs. The results from the two samples are listed in Table 2-1 below with respective MTCA cleanup levels provided for reference. The lead results from the east edge and north edge were 16,000 mg/kg and 75,000 mg/kg respectively. (TPCHD letter to Mr. George Phillips, February 4, 2008)

Table 2-1 January 22, 2008 Sampling Results

Analyte	Sample S100-012208	Sample S200-012208	MTCA CUL
Arsenic	59	200	20
Cadmium	3.3	3.3	2.0
Lead	16,000	75,000	250
Barium	150	160	
Chromium	47	51	19/2000

Bold = exceeds MTCA
Units = ppm

On February 7, 2008, the Washington State Department of Health (DOH) prepared a Health Consult to identify the harmful human health effects resulting from exposure to the contaminants found in the soil at this site. The Health Consult concluded that a public health hazard existed for residents exposed to the lead and arsenic in the soil at this property. Following the Health Consult, TPCHD issued a health order on February 11, 2008, declaring the property “Unfit for Use” due to the contamination detected in the soil samples, and the likelihood that the EBLs found in the three children residing at the property was at least partially the result of lead exposure during that residence period. A copy of the health order is in Appendix B.

On February 22, 2008, TPCHD and the Environmental Protection Agency (EPA) conducted a second site visit. EPA took XRF readings on materials in the yard, soil and garage. Soil results

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

were as high as 81,000 ppm for lead. See Figure A-2 for sampling locations, photo log and results. (Thangamani email to Sharon Bell, February 27, 2008)

On February 28, 2008, TPCHD and Ecology conducted a third site visit and collected additional soil samples. Eight core samples from the 0-6 inch depth were collected throughout the site for analysis of lead, arsenic and cadmium, and a subset of three samples was also analyzed for hexavalent chromium.

Table 2-2 February 28, 2008 Sampling Results

6719 South D Street				
0-6"				
Boring	Arsenic	Lead	Cadmium	Chromium
1	15.00	2000.00	2.70	
2	5.40	170.00	0.80	0.80
3	11.00	2300.00	1.10	
4	7.20	480.00	0.99	0.95
5	8.60	790.00	1.20	
6	6.10	220.00	0.74	0.82
7	6.70	190.00	0.48	
8	7.60	220.00	0.58	
<i>Average</i>	8.45	796.25	1.07	0.86
<i>Max</i>	15.00	2300.00	2.70	0.95

Bold = exceeds MTCA

Units = ppm

An additional 5 surface soil samples were collected – one each from the four corners of the property and one from the central part of the property. The four corner samples were analyzed for the RCRA-8 Metals, and the central sample was analyzed for hexavalent chromium.

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

Table 2-3 February 28, 2008 Sampling Results

6719 South D Street

	Arsenic	Barium	Cadmium	Chromium	Hex-Chrom	Lead	Mercury	Selenium	Silver
S1-00-Central	NA	NA	NA	NA	ND	NA	NA	NA	NA
S2-00-SW	ND	73	ND	32	NA	230	ND	ND	ND
S3-00-NW	ND	100	ND	41	NA	470	ND	ND	ND
S4-00-NE	ND	78	ND	21	NA	4600	ND	ND	ND
S5-00-SE	ND	180	ND	42	NA	340	ND	ND	ND

ND = not detected

NA = not analyzed

Bold = exceeds MTCA

Units = ppm

Again, the lead results were above MTCA Method A cleanup level of 250 ppm. See Figure A-3 for sampling locations and photo log. (Sharon Bell – Phillips Site Sample Results, March 4, 2008)

On March 18, Ecology received the Initial Investigation Field Report as prepared by TPCHD. TPCHD recommended listing the site on the Confirmed and Suspected Contaminated Sites List.

Ecology secured access for investigation and cleanup with an Access Agreement signed February 28, 2008. The Access Agreement is included as Appendix C. Ecology coordinated closely with TPCHD during their initial responses. Ecology agreed with TPCHD recommendation for listing the site, and sent Mr. Phillips an Early Notice letter on May 1, 2008.

Both Ecology and TPCHD were concerned that the lead contamination may extend beyond the Phillips property. The agencies coordinated on sampling neighbor yards. Fact sheets were sent to the neighboring property owners with information on lead contamination, and the proposed sampling. TPCHD planned to sample the adjacent properties and then move on to more distant properties if the contamination appeared to be widespread. In March 2008, TPCHD sampled three adjacent properties, and one nearby. See Figure A-4 for the sampled properties. Lead levels were below the MTCA cleanup levels on all properties, except the property to the south of the Phillips property. Soils on the property south had elevated lead levels along the fence line

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

next to the lead melting operation. Table 2-4 shows the sampling results, and Figure A-5 shows the sampling locations on that property.

Table 2-4 Property 6725 Sampling Results

6725 South D Street		
	Lead	Lead
Boring	0-2"	2-6"
1	250	230
2	180	200
3	160	130
4	290	160
5	200	180
6	160	140
7	230	230
8	120	97
9	130	110
10	85	77
11	170	140
12	180	150
13	160	110
14	160	140
15	100	66
16	200	200
17	180	180
18	140	190
19	220	320
20	370	430
<i>Average</i>	184	174
<i>Max</i>	370	430

Bold = exceeds MTCA

Units = ppm

Ecology and TPCHD interacted with Mr. Phillips in regards to cleaning up lead dust on the house and garage prior to any soil cleanup action in the yard, as contamination on the house could cause recontamination of soil. Ecology contacted an environmental service provider to assess the level of lead contamination in the dusts in and on the house. Lead based paint was

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

present on window sills, and lead levels were elevated in the dust. Lead abatement measures were recommended. (Lead Inspection/Risk Assessment, October 23, 2008).

On August 26, 2008, the TPCHD was notified that truckloads of soil were being removed from the property. TPCHD conducted follow-up visits on August 27 and 28, noting that a significant amount of brush, debris and soil had apparently been removed from the property. Figure A-6 is a photo log from the follow-up visits. There is no documentation as to who performed the work, how much contaminated soil was removed, or where the soil was disposed.

On August 28, 2008, TPCHD issued a second health order requiring Mr. Phillips to provide receipt verifying proper disposal of any brush, soil, debris or other articles removed from the property since February 11, 2008. The order also required the property owner to bring the property into compliance with all applicable local, state and federal laws.

On September 8, 2008, TPCHD issued a third health order which discontinued water service to the residence. See Appendix B for copies of the health orders.

Following the soil disturbance activities of August 2008, Mr. Phillips placed a sandy fill material across the property.

2.4 NATURE AND EXTENT OF CONTAMINATION

Mr. Phillips contracted with Langseth Environmental Services, Inc to conduct a Phase II Investigation. On November 14, 2008, twenty-one soils samples were collected from ten locations on the Phillips property. At each sampling location, the imported sandy fill type material was removed and soil samples were collected from a depth of 0- to 6-inches, and from 12- to 18-inches in the 'native soil'. A sample was also collected from the imported sand material placed over the 'native' soils. Based on the photo log in the Phase II report, the depth of the sandy material appears to be 4-12 inches.

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

Lead and copper levels in the sandy fill material were below the MTCA cleanup level. Copper levels were also below the MTCA cleanup level in the ‘native’ soil; however lead levels in the ‘native’ soil are above the MTCA cleanup level. A summary of the sample results are provided in Table 2-5 below. The Phases II Site Investigation Report is provided in Appendix D.

Table 2-5: Concentrations of lead and copper in samples collected on November 14, 2008.

MTCA cleanup level	Lead		Copper	
	250 ppm		2960 ppm	
	0-6 inch	12-18 inch	0-6 inch	12-18 inch
TP-1	230	88	32	19
TP-2	190	77	49	16
TP-3	420	500	30	30
TP-4	410	73	33	14
TP-5	640	160	73	22
TP-5 (dup)	800	200	82	25
TP-6	310	72	51	16
TP-7	690	120	230	25
TP-8	64	58	15	12
TP-9	180	110	29	20
Average	393.4	145.8	62.4	19.9
TP-10 (sandy fill material)	47		14	

Bold = exceeds MTCA
Units = ppm

The report concluded that “lead contaminated soil above the MTCA Method A cleanup level for unrestricted land use, was detected in five of ten soil sampling locations at the site. Additional remediation of the site soil will need to be accomplished.”

Based on the nature and extent of contamination, Ecology has determined that further remedial action is necessary at the Phillips Residential Property at 6719 South D Street.

3.0 PROPOSED CLEANUP ACTION

The work proposed to achieve cleanup goals is removing the soils by traditional excavation combined with confirmation sampling and restoration. This selected alternative is discussed in more detail below.

3.1 SELECTED ALTERNATIVE - EXCAVATION AND REMOVAL

The remedial cleanup will consist of excavating contaminated soils in two adjacent areas. Soils in Area One (southwest corner of the property adjacent to the garage) will be excavated to 24-inches in a 900 square foot area. Soils in Area Two (north central portion of the property adjacent to the home) will be excavated to 18-inches in a 1,300 square foot area. Area Two includes a broken concrete sidewalk that will be removed along with underlying soils. The depth of excavation is based on sample results collected in November 2008. Please refer to the plan set provided in Appendix E for the project location maps, and the detailed cleanup design.

The excavation will be performed by traditional methods. Excavated soils will be hauled to and disposed at a Subtitle D landfill. Erosion and sediment control measures will include dust control. Health and safety measures will include personal monitoring for dust exposure.

After the Contractor removes soils to the initial design depths, Ecology will collect confirmation samples from the excavation base and sidewalls. Sample results will be compared to MTCA cleanup levels. Additional excavation will occur at locations where contaminant levels exceed MTCA cleanup levels. An additional round of confirmation samples will be collected and reviewed at the locations of additional excavation to verify if the cleanup levels are met.

The cleaned site will be backfilled with clean granular fill from the excavation depth to 12-inches below the pre-project ground surface. Clean topsoil will be imported to bring the site back up to grade. The sidewalk will be replaced with a new concrete sidewalk with underlying structural fill. An appropriate lawn seed mix will be applied by hydroseed method in the lawn areas.

3.2 RATIONAL FOR SELECTED ALTERNATIVE

The above described cleanup alternative was selected as it achieves the threshold requirements for cleanup actions under MTCA, and is a cost effective permanent solution. This cleanup alternative:

- Protects human health and the environment as contaminated soils will be permanently removed from the property.
- Complies with cleanup standards as contaminated soil above the lead cleanup level will be removed. Remaining soil will meet the cleanup level at the point of compliance.
- Uses permanent solutions to the maximum extent practicable.

The removal of the soils is appropriate due to the shallow nature of the contamination, the relatively small site, and the residential use of the property.

3.3 REJECTED ALTERNATIVES

Cleanup alternatives such as capping or soil mixing were rejected due to the goal of achieving a permanent solution on a residential property.

Capping would entail removal of the surface soil, placement of a marker fabric, and replacement with clean soil while maintaining existing grade. The depth of excavation for capping (one to two feet) is about the same as Excavation and Removal.

The concentration of lead and depth of contamination do not lend to a mixing alternative. The concentrations and depth are too great to achieve sufficient dilution.

This cleanup action plan presents a permanent solution by excavating contaminated soils from the site.

3.4 APPLICABLE STATE AND FEDERAL LAWS

The selected cleanup alternative will comply with applicable state and federal laws. The cleanup action will comply with MTCA by permanently removing contaminated soil, and appropriate disposal off-site at a Subtitle D facility. If the contaminated soil is a dangerous waste, it will be disposed of at a Subtitle C facility.

4.0 LEAD CLEANUP LEVEL AND POINT OF COMPLIANCE

4.1 LEAD CLEANUP LEVEL

There are a limited number of contaminants at this site. Lead is the primary contaminant of concern, and is the indicator hazardous substance for this cleanup action. Cleanup for lead will address any other contamination on the property such as copper. This cleanup action will be conducted to meet MTCA Method A soil cleanup level for lead, which is presented in the below table.

Table 4-1: Lead Cleanup Level

	Lead Average	Lead Maximum
State Cleanup Level	250	500

Units = ppm

4.2 POINT OF COMPLIANCE

The cleanup levels are based on exposure via direct contact or other exposure pathways such as dust. The point of compliance is from the ground surface to fifteen feet below the ground surface (WAC 173-340-740 (6)(d)).

5.0 SCHEDULE FOR IMPLEMENTATION

The proposed schedule for implementation of this CAP is presented below table.

Table 5.1: Timeline for cleanup and restoration activities

ACTION	DATE
Public Works Bidding Process	April 2013
Contractor Notice to Proceed	Early May 2013
Remediation Work (Removal of Contaminated Soils)	Mid May 2013
Confirmation Sampling	Mid May 2013
Restoration Work (Importing clean fill, concrete work, seeding)	Late May to early June 2013
Maintenance of Restoration Work (Watering Seed)	June 2013

6.0 INSTITUTIONAL CONTROLS AND PROPERTY USE RESTRICTIONS

The property is currently unoccupied and secured by a locked gate. The TPCHD “Health Order” dated September 8, 2008 limits the use of this property. During the course of the work and upon completion of the work, the Contractor will be securing the site. The work planned by Ecology includes fixing the broken portion of the chainlink fence on the south side of the property. Ecology will file a report of cleanup and restoration activities to the TPCHD. Ecology anticipates that TPCHD will review the cleanup activities and results; evaluate the requirements of their “Health Order” and make modifications as applicable. Upon completions of the remedial action, no other institutional controls (e.g., environmental covenants) should be necessary related to the soil contamination.

7.0 PUBLIC PARTICIPATION PLAN

The public participation plan is provided for in Appendix F.

8.0 REFERENCES

Initial Investigation Field Report, March 14, 2008.

TPCHD letter to Mr. George Phillips, February 4, 2008

Thangamani email to Sharon Bell, February 27, 2008

Sharon Bell – Phillips Site Sample Results, March 4, 2008

Lead Inspection/Risk Assessment, prepared by Environmental Resolutions, Inc, October 23,
2008

APPENDIX A

Sampling Figures and Photo Logs

Figure A-1 January 22, 2008 sampling figure and photo log

Figure A-2 February 22, 2008 sampling figure and photo log

Figure A-3 February 28, 2008 sampling figures and photo log

Figure A-4 Neighbor properties sampled

Figure A-5 Property 6725 sampling locations

Figure A-6 August 27/28, 2008 photo log

Figure A-1 January 22, 2008 sampling figure and photo log

ERTS S603197, Phillips Property, 6719 S. D St., Tacoma

01.22.08 Soil Sample Locations



- Map Legend
- Tax Parcels
 - Roads
 - Interstate Limited Access State Routes
 - Other State Routes
 - Ramps
 - Major Arterial
 - Collector
 - Local Access
 - County - 2005 - Ortho

Scale 1:268



A

Printed: 3/14/08 9:09 AM



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. The County makes no warranty of fitness for a particular purpose.

ERTS S603197, Phillips Residential Property, 6719 S. D St., Tacoma
Photos taken by S. Bell, 01.22.08



Driveway and yard area; not visible in this photo are stack of buckets on the right side, some containing metal debris.



Fine material, reported to be metal byproduct from the lead melting operation.



Metal debris



Back yard, soil sample *S100-012208* was collected from the area immediately adjacent to the concrete.

ERTS S603197, Phillips Residential Property, 6719 S. D St., Tacoma
Photos taken by S. Bell, 01.22.08



Closeup of location for sample *S100-012208*



Back yard area between garage and house, soil sample *S200-012208* was collected from the area immediately adjacent to the concrete



Closeup of location for sample *S200-012208*

**INTENTIONALLY
LEFT
BLANK**

Figure A-2 February 22, 2008 sampling figure and photo log

ERTS S603197, Phillips Property, 6719 S. D St., Tacoma

1998 Aerial Photo



- Map Legend
- Tax Parcels
 - Roads
 - Interstate Limited Access State Routes
 - Other State Routes
 - Ramps
 - Major Arterial
 - Collector
 - Local Access
 - County - 2002 - Ortho (Urban)
 - County - 2002 - Ortho (Rural)

Scale 1:225



A

Printed: 3/14/08 9:17 AM



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. The County makes no warranty of fitness for a particular purpose.

ERTS S603197, Phillips Site, 6719 S. D Street, Tacoma
Photos taken by S. Bell, 02.22.08



ERTS S603197, Phillips Site, 6719 S. D Street, Tacoma
Photos taken by S. Bell, 02.22.08



Tacoma D Street Lead Smelting Site- DRAFT Fielding Screening Data

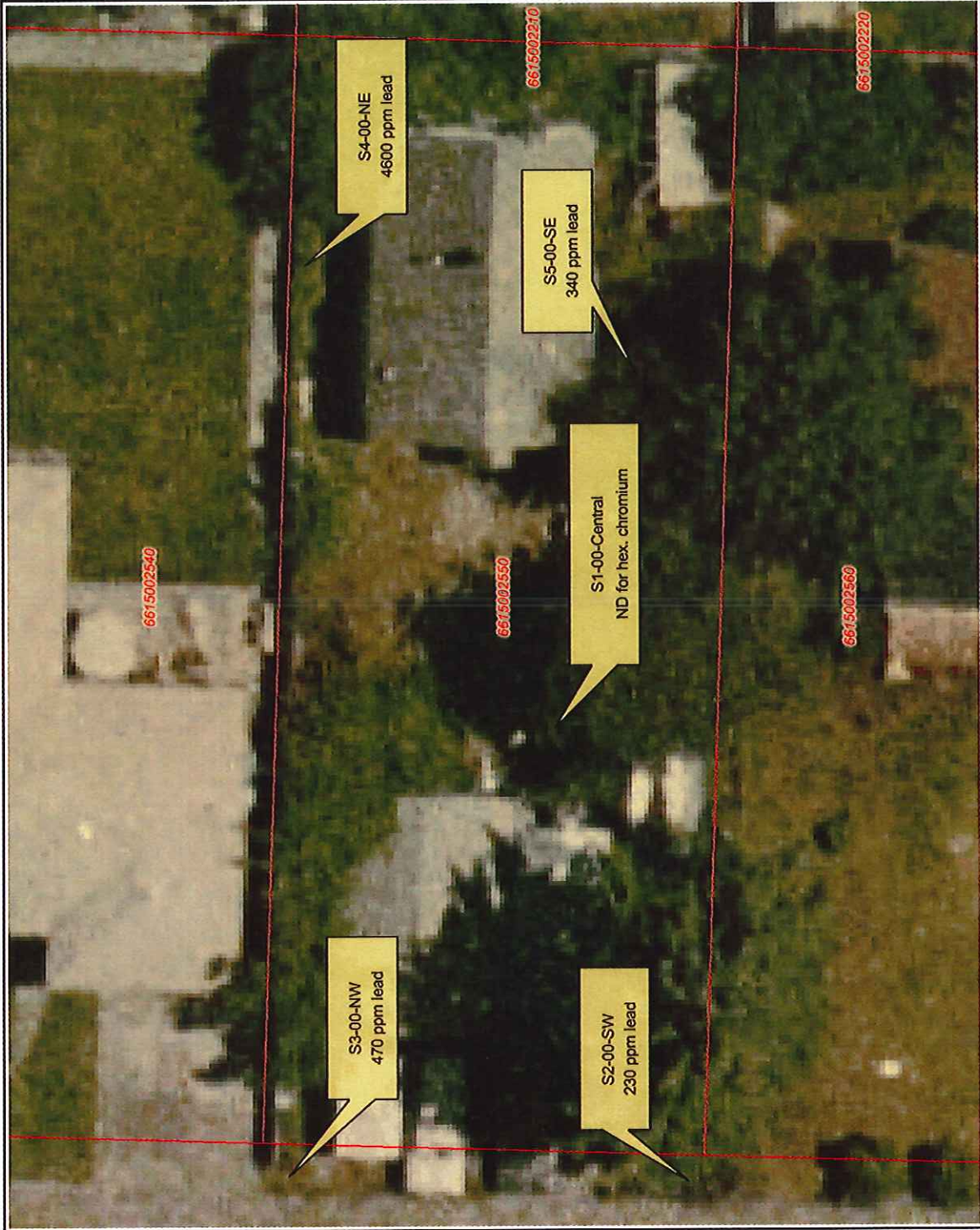
**Results should not be used for cleanup guidelines*

Pb(ppm)	Pb +/- (ppm)	Location
5391.3	91.5	NIST standard
601.6	20.7	side of garage
307.4	14.7	side of camper
18.9	3.1	pallet on side of garage
1319.6	29.6	tarp overhang on side of garage
8388.2	114.1	pavement by camper
81970.9	1674.3	soil by camper
13119.8	183.8	sidewalk from garage to house
11807.8	149.7	soil in front of the house
3026.9	51.3	front steps of house
53.3	7.6	house siding
186.0	9.0	side of shed
425.9	10.1	fence
71297.3	1342.6	ditch by garage
3612.6	51.8	shingle on roof of garage
11090.2	134.4	window ledge, side of garage
1708.2	22.6	wood in yard
1605.7	22.0	wood in yard
10952.6	153.9	pavement in front of garage
3590.3	60.3	end of driveway, by street
2178.1	36.1	sidewalk, east
3926.5	60.8	sidewalk, west
674.4	17.7	(disregard)
1318.1	28.0	sidewalk, west
702.6	19.3	sidewalk, west (neighbor's) sidewalk, south (across the street)
169.1	9.4	sidewalk, east (neighbor's)
2751.7	44.6	sidewalk, east (neighbor's)
1637.3	33.1	sidewalk, east (neighbor's)
1853.5	33.3	sidewalk, east
114.3	7.8	neighbor's yard, east neighbor's yard, east (near camper)
754.7	15.6	neighbor's yard, east (south corner)
272.1	9.6	neighbor's sidewalk, west
264.6	11.5	neighbor's sidewalk, west
218.7	10.3	neighbor's sidewalk, west
423.0	53.6	fencing in front of garage
4040.0	111.3	centrifugal exhaust fan in yard
1423.5	62.1	barrel in yard
1444.1	58.8	stove in yard
5376.3	87.8	NIST standard
179.3	54.0	Standardized clip

Figure A-3 February 28, 2008 sampling figures and photo log

ERTS S603197, Phillips Residential Property, 6719 S. D St., Tacoma

02.28.08 Soil sampling locations and results



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. The County makes no warranty of fitness for a particular purpose.

Phillips, 6719 S. D Street, Tacoma 98408

Sampling Date: 2.28.2008



ERTS S603197, Phillips Residential Property, 6719 S. D Street, Tacoma
Photos taken by Lisa Pearson, 02.28.08



Location of surface soil sample # S1-00-Central, taken from the east edge of the concrete driveway.



Location of surface soil sample S2-00-SW, collected from the SW corner of the Phillips property.



Street view of the Phillips property showing the garage, concrete pad and driveway, and the dilapidated carport.



Area on the south side of the property, between the driveway and fence is depicted; Phillips house is in the background on the left and neighbor's house is on the right.

ERTS S603197, Phillips Residential Property, 6719 S. D Street, Tacoma
Photos taken by Lisa Pearson, 02.28.08



Location of surface soil sample S3-00-NW, collected from the NW corner of the Phillips property.



Location of surface soil sample S4-00-NE, collected from the NE corner of the property, about 1/2 way along the north side of the house.



Location of surface soil sample S5-00-SE, collected from the SE corner of the property, west of the dog kennel.



South side of the house and a portion of the dog kennel, looking towards the east edge of the property.

Figure A-4 Neighbor properties sampled

Phillips, 6719 S. D Street, Tacoma 98408

And Surrounding Properties
March 7, 2008



Figure A-5 Property 6725 sampling locations

Sample Points at 6725 South D Street

March 14, 2008

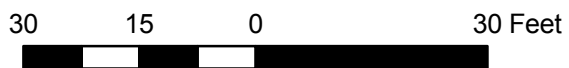


Figure A-6 August 27/28, 2008 photo log

Along North side of house where work to fix side-sewer was occurring. Puddle of sewage and plumbing debris.



August 27, 2008



Look from north side of house toward the back of the garage.

August 27, 2008



looking from house to back of flat bed trailer on site loaded with prunings from tree.



looking from northwest corner of house toward south side of property.

August 27, 2008



Looking from back (south east) corner of property toward the street.

"Bart" along the south property line directly across from the garage. Former lead melting area.

August 27, 2008



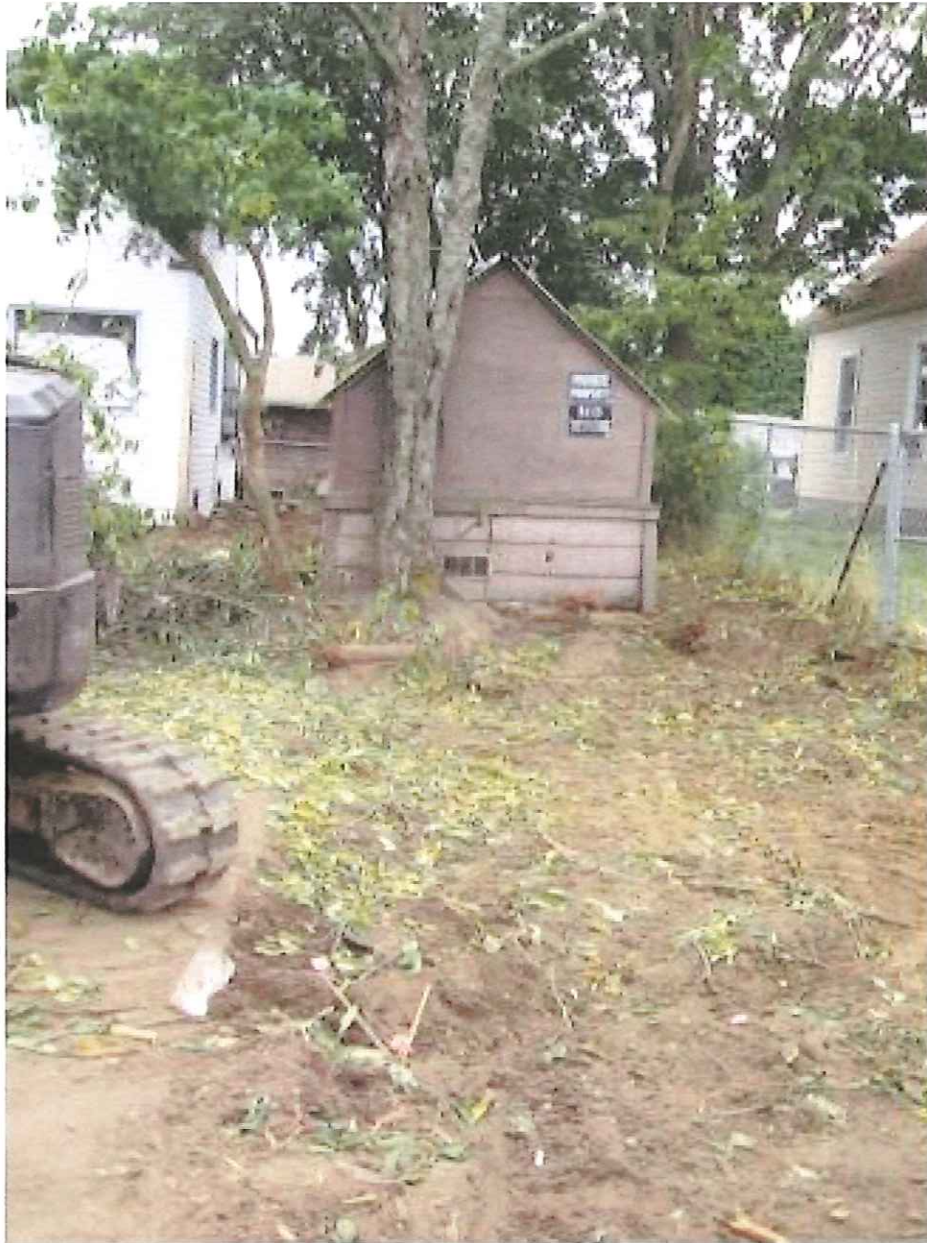
"Bart" climbing onto pile of yard debris loaded in bed of pickup truck parked on "D" St in front of the property.

August 27, 2008



Side sewer work area – north west corner of house

August 27, 2008



South side of the property looking from the street to the back (east) portion of property.

August 27, 2008



Empty dump truck on "D" St in front of property.



looking from street down driveway toward house. Garage on left, mini-trackhoe in front of house.

August 27, 2008



View from street toward front of garage. Wheel barrow of dirt in front of garage door. Supposed location of 55 gallons drums containing dirt.

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

APPENDIX B

TPCHD Health Orders

TACOMA-PIERCE COUNTY HEALTH DEPARTMENT

HEALTH ORDER

Findings of Fact

Upon Information and Belief:

1. On November 30, 2007 the Tacoma-Pierce County Health Department (DEPARTMENT) received notification from the State of Washington Department of Health (WADOH) for a nine (9) month old male child residing in Pierce County with an elevated blood lead level.
2. On December 6, 2007, in follow-up to this notification a DEPARTMENT employee had a telephone conversation with the child's mother to provide information regarding health effects of "blood poisoning" and to determine the source(s) of lead exposure.
3. The mother of the child indicated that the family was renting the dwelling located at 6719 South D Street, Tacoma, WA 98408-6218 and also known as Pierce County tax parcel number 6615002550 (the Property) and began occupancy of the dwelling in March 2007. Mr. George Phillips is the owner of record for the Property (the Property Owner). According to Pierce County tax records, the Property is a 6,250 square foot parcel with a 1,320 square foot single unit dwelling.
4. The mother indicated that in late November 2007, she and her three children had their blood sampled by the family's primary care physician for purposes of checking for lead. The mother's blood lead level was not elevated (below 10 ug/dL), however all 3 of her children had elevated blood lead levels (greater than 10 ug/dL).
5. According to the mother, the Property Owner, Mr. George Phillips, melts lead-containing items for re-use as a base material to make other lead containing products and was engaged in this practice in the yard of the Property at the time the family was occupying the dwelling.
6. Handling, storing and melting of lead-containing products can result in the release of lead into the surrounding soil and air and can also result in the deposition of lead on adjacent surfaces. Melting of lead results in the volatilization of lead and is considered to be a high-risk source of lead exposure. Scientific research has also shown that lead present in the environment surrounding a home can make its way into the home on the soles of shoes, surfaces of clothing or on other articles brought into the home or on the paws and fur of pets. Lead brought into the home can then contaminate objects, surfaces and dust in the home and become a source of exposure to residents.
7. Pierce County, WA tax assessor records indicate the dwelling located on the Property was constructed in 1908. The presence of lead-based paint in a dwelling of this age is highly probable and could pose a significant additional source of lead exposure to the residents.

8. Young children are particularly at risk to lead exposure because of their behaviors that commonly include placing their hands and objects into their mouth and crawling on the floor. Children are also particularly vulnerable to the health impacts of lead because: (1) they absorb lead at a greater rate in comparison to adults, (2) their small body size results in a higher "dose" of exposure and (3) they have developing body systems, including a developing nervous system, which can be irreversibly damaged.
9. Health impacts to children from exposure to lead can include damage to the brain and other parts of the nervous system, learning delays, slowed growth, hearing problems, hyperactivity and headaches.
10. According to the mother the youngest child in the family has been exhibiting developmental delays and is currently seeing a developmental specialist and a physical therapist to address these concerns.
11. Due to concerns about health impacts from lead exposure, the mother and children moved out of the above-referenced property at the end of November 2007. The father remained in the residence until the end of January 2008.
12. On January 22, 2008 a DEPARTMENT employee went to the Property for purposes of collecting and analyzing environmental samples on the Property to investigate for the presence of lead and other possible sources of environmental contamination.
13. Analyses of paint in the dwelling and collected soil samples indicate the presence of lead in the dwelling and extremely high levels of lead along with elevated levels of arsenic and cadmium in soils on the Property. See sample results set forth in attached Exhibit "A." The concentrations of lead, arsenic and cadmium on the Property are all significantly above the standards allowed under state law. See Model Toxics Control Act (MTCA) Method A Unrestricted Land Use Cleanup Levels, Chapter 173-340 of the Washington State Administrative Code.
14. On February 4, 2008 a letter was sent to the Property Owner, Mr. George Phillips, by the DEPARTMENT summarizing the results of the sample collection along with requirements for clean up of the Property. See attached Exhibit "A."
15. At the request of the DEPARTMENT, WA DOH conducted a Health Consultation for purposes of evaluating the potential health hazard posed by lead found at the Property. The Health Consultation report, dated February 7, 2008 concludes, "A public health hazard exists for residents exposed to lead and arsenic in the soil at this residential property." Recommendations made by WA DOH include:
 - a. Not permitting children to access the property until the contaminated areas have been remediated
 - b. Posting signs to indicate potential health hazards from lead paint in the home and lead and arsenic in the soils.
 - c. Testing the drinking water from the tap for presence of lead.
 - d. Additional soil sampling and soil replacement to meet the above referenced MTCA standards.

ANALYSIS AND CONCLUSION

1. As described above, contamination of soil is present on the Property at concentrations that exceed the state cleanup levels adopted pursuant to the Model Toxics Control Act, Chapter 70.105D RCW.
2. It is plausible and probable that the occurrence of elevated blood-lead levels discovered in three children residing at the Property was wholly or partially the result of a lead exposure that occurred while in residence at the Property.
3. Given the levels of lead contamination found on the Property the risk of lead exposure to future residents or tenants of the Property, particularly young children, is very high.
4. Until the Property can be sufficiently remediated to reduce the presence of lead and other metals to acceptable health-based standards, it will continue to pose a health risk to any future tenants and adjacent neighbors and the Property is therefore deemed to be unfit for human occupancy and use ("Unfit for Use").
5. RCW 70.05.070 (2) requires the local health officer take such action as is necessary to maintain health and sanitation supervision over the territory within his or her jurisdiction. RCW 70.05.070 (1) requires the local health officer to enforce the public health statutes of the State and all local health rules, regulations and ordinances within his or her jurisdiction.

ORDER

As authorized by RCW 70.05.070, I, Victor A. Harris, Ph. D., Interim Director of Health and Health Officer, order as follows:

1. The Property shall be posted by a DEPARTMENT employee or agent of the DEPARTMENT as Unfit for Use. This posting shall remain in effect until it can be determined by the DEPARTMENT that the Property has been satisfactorily remediated to safely allow for occupancy and use (as described below). When such a determination is made, the DEPARTMENT will issue a "RELEASE FOR REUSE" (Fit for Use) declaration.
2. The Property Owner shall bring the Property into compliance with all applicable local, state and federal laws as required for the Property to be suitable and safe for human occupancy and health.
3. Environmental sampling analysis results associated with future site assessment, remediation, and post-remediation environmental activities shall be sent to the DEPARTMENT within 30 business days of the Property Owner's receipt as required to fully assess the suitability of the Property for occupancy and use (Fit for Use).
4. Until such time as the DEPARTMENT determines that the Property is suitable for occupancy and use (Fit for Use), the Property Owner shall minimize to the extent practical the likelihood of

the Property posing a health risk to area residents by taking steps necessary to contain existing lead and other metals contamination on the Property and to prevent the release or exposure to the environment of said contamination to adjacent private or publicly owned properties.

5. Any person or legal entity to which such an Order is directed shall obey the Order immediately upon receiving notice of the Order. Failure to obey a lawful Emergency Health Order shall be a misdemeanor punishable by a fine of up to \$1,000 and as further set forth in Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 3, and RCW 70.05.120.
6. Anyone adversely affected by compliance with an Emergency Health Order may appeal the order or its application to the DEPARTMENT's Hearing's Examiner, but such appeal shall not stay the Emergency Health Order pending review. Appeal must be brought in accordance with Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 4, Appeals.
7. The DEPARTMENT shall send Mr. George Phillips a copy of this order by certified mail return receipt requested and by first class mail. Faxing is an acceptable means of notification.
8. This Order shall take effect immediately and shall stay in effect until rescinded or other modified. It shall be binding on successors and assigns and shall be recorded in the official records of the Pierce County Auditors office.

Ordered by:

Victor Harris, Interim Director of Health and Health Officer
Tacoma-Pierce County Health Department
February 11, 2008

TACOMA-PIERCE COUNTY HEALTH DEPARTMENT

HEALTH ORDER

Findings of Fact

Upon Information and Belief:

1. On February 11, 2008 the Tacoma-Pierce County Health Department (DEPARTMENT) issued a Health Order detailing the declarations of "Unfit for Use" for the property located at 6719 S. D Street, Tacoma, Washington (PROPERTY) owned by Mr. George Phillips. As the legal property owner you are responsible for satisfying the conditions of that order. (Attached)
2. The February 11, 2008 DEPARTMENT Health Order was issued due to documented lead contamination present on the property both in the residence and on the grounds and outbuildings present on the property. Also, three children who were living in the residence on the property were found to have elevated blood-lead levels (>10 ug/dL).
3. A condition of the February 11, 2008 Health Order is to remediate the property for lead so it no longer poses a health risk anyone occupying, visiting or living in proximity to the PROPERTY.
4. On August 26, 2008 the DEPARTMENT received notification that truckloads of soil were being removed from the PROPERTY. Follow-up visits to the PROPERTY by DEPARTMENT staff on August 27 and Augusts 28, 2008 revealed that a significant amount of brush, debris and soil had apparently been removed from the PROPERTY.
5. As of the date of issuance of this Health Order (August 28, 2008) none of the soil found on the PROPERTY has undergone remediation for lead making exposure to the soil a significant health risk. In addition, verification for the proper disposal of the brush, debris and soil removed from the PROPERTY has not been provided to the DEPARTMENT.

ANALYSIS AND CONCLUSION

1. As described above and in the February 11, 2000 DEPARTMENT Health Order, testing documents the presence of harmful levels of lead in the soil found on the PROPERTY.
2. Exposure to the soil can result in the unintended inhalation or ingestion of lead contaminated dust or soil that could plausibly result in significant health impacts particularly to children who are most vulnerable to lead exposure.
3. RCW 70.05.070 (2) requires the local health officer take such action as is necessary to maintain health and sanitation supervision over the territory within his or her jurisdiction. RCW 70.05.070 (1) requires the local health officer to enforce the public health statutes

of the State and all local health rules, regulations and ordinances within his or her jurisdiction.

ORDER

As authorized by RCW 70.05.070, I, Laurie A. Jinkins, Interim Director of Health and Health Officer, order as follows:

1. No soil, dust, dirt, debris, brush or other articles likely to contain lead or lead-contaminated soil shall be removed from the PROPERTY without the explicit approval from the DEPARTMENT or Washington State Department of Ecology (ECOLOGY).
2. Within 5 days of the issuance of this Health Order, Mr. George Phillips shall provide to the DEPARTMENT receipts verifying proper disposal of any brush, soil, debris or other articles removed from the PROPERTY since February 11, 2008. Failure to provide such receipts may result in the initiation of enforcement proceedings by the DEPARTMENT to reduce the likelihood of additional health risks posed by the lead-contaminated soil or debris to community members, particularly children.
3. Any future removal of soil, brush, debris or other articles for disposal removed from the property shall only occur upon the approval of either the DEPARTMENT or ECOLOGY. All soil, brush, debris or articles for disposal removed from the property must be taken to a permitted solid or dangerous waste handling facility. Receipts indicating proper disposal of the soil or other debris must be kept and provided upon request by the DEPARTMENT or ECOLOGY in order to verify proper disposal.
4. This order shall remain in effect until testing and analysis of the soil and dirt found on the property, reviewed and deemed satisfactory by the DEPARTMENT or ECOLOGY, finds that the soil and dirt no longer poses a plausible health risk.
5. The DEPARTMENT Health Order issued on February 11, 2008 shall remain in effect in full until the PROPERTY owner, Mr. George Phillips, has fulfilled the conditions of such Health Order.
6. The Property Owner shall bring the Property into compliance with all applicable local, state and federal laws as required for the Property to be suitable and safe for human occupancy and health.
7. Any person or legal entity to which such an Order is directed shall obey the Order immediately upon receiving notice of the Order. Failure to obey a lawful Emergency Health Order shall be a misdemeanor punishable by a fine of up to \$1,000 and as further set forth in Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 3, and RCW 70.05.120.
8. Anyone adversely affected by compliance with an Emergency Health Order may appeal the order or its application to the Department's Hearing's Examiner, but such appeal shall

not stay the Emergency Health Order pending review. Appeal must be brought in accordance with Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 4, and Appeals.

9. The DEPARTMENT shall send Mr. George Phillips a copy of this order by certified mail return receipt requested and by first class mail. Faxing is an acceptable means of notification.

10. This Order shall take effect immediately and shall stay in effect until rescinded or other modified. It shall be binding on successors and assigns and shall be recorded in the official records of the Pierce County Auditors office.

Ordered by:

Laurie A. Jinkins, Interim Director of Health and Health Officer
Tacoma-Pierce County Health Department
August 28, 2008

TACOMA-PIERCE COUNTY HEALTH DEPARTMENT

HEALTH ORDER

FINDINGS OF FACT

Upon Information and Belief:

1. On February 11, 2008 the Tacoma-Pierce County Health Department (DEPARTMENT) issued a Health Order detailing the declarations of "Unfit for Use" for the property located at 6719 S. D Street, Tacoma, Washington (PROPERTY) owned by Mr. George Phillips. Mr. Phillips is responsible for satisfying the conditions of that Health Order and of the subsequent August 28, 2008 Health Order.
2. The February 11, 2008 Health Order was issued due to documented lead contamination present in the residence and on the grounds and outbuildings present on the property. Three children who were living in the residence on the property were found to have elevated blood-lead levels (>10 ug/dL).
3. A condition of the February 11, 2008 Health Order is to remediate the PROPERTY for lead so it no longer poses a health risk to anyone occupying, visiting, or living in proximity to, the PROPERTY.
4. On August 26, 2008 the DEPARTMENT received notification that truckloads of soil were being removed from the PROPERTY. Follow-up visits to the PROPERTY by DEPARTMENT staff on August 27 and Augusts 28, 2008 revealed that a significant amount of brush, debris and soil had apparently been removed from the PROPERTY without proper characterization and without appropriate sampling and analysis.
5. As of August 28, 2008 none of the soil found on the PROPERTY had undergone remediation for lead, making exposure to the soil a significant health risk. In addition, evidence of proper disposal of the brush, debris and soil removed from the PROPERTY has not been provided to the DEPARTMENT.
6. As of August 28, 2008 the DEPARTMENT had not received information regarding the extent of lead contamination in the residence nor any evidence of remediation.

ANALYSIS AND CONCLUSION

1. As described above and in the February 11, 2008 and August 28, 2008 DEPARTMENT Health Orders, testing documents the presence of harmful levels of lead in the soil found on the PROPERTY.
2. The property owner has failed to comply with requirements to characterize and abate the lead contamination at this PROPERTY, including in the residence.
3. Exposure to elevated levels of lead is likely with use or occupancy of the residence, grounds or outbuildings at this PROPERTY.
4. Exposure to elevated levels of lead on, in, and at this PROPERTY can result in the unintended inhalation or ingestion of lead that may plausibly result in significant health impacts--particularly to children, who are most vulnerable to lead exposure.
5. The DEPARTMENT finds it necessary to prevent continued or future occupancy of the PROPERTY until such time as the property owner demonstrates compliance with the Health Orders dated February

11, 2008 and August 28, 2008 and, further, satisfies such requirements as may be established by the Washington Department of Ecology.

6. RCW 70.05.070 (2) requires the local health officer take such action as is necessary to maintain health and sanitation supervision over the territory within his or her jurisdiction. RCW 70.05.070 (1) requires the local health officer to enforce the public health statutes of the State and all local health rules, regulations and ordinances within his or her jurisdiction.

ORDER

Therefore, as authorized by RCW 70.05.070, I, Laurie A. Jinkins, Interim Director of Health and Health Officer, order as follows:

1. Tacoma Water shall discontinue water service to the residence commonly known as 6719 South "D" Street, and further identified as Assessor's Parcel Number 6615002550, as soon as feasible. Water service shall not be re-established without authorization from the DEPARTMENT.
2. Any person or legal entity to which such an Order is directed shall obey the Order immediately upon receiving notice of the Order. Failure to obey a lawful Emergency Health Order shall be a misdemeanor punishable by a fine of up to \$1,000 and as further set forth in Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 3, and RCW 70.05.120.
3. Anyone adversely affected by compliance with an Emergency Health Order may appeal the order or its application to the Department's Hearing's Examiner, but such appeal shall not stay the Emergency Health Order pending review. Appeal must be brought in accordance with Tacoma-Pierce County Board of Health Resolution 2002-3411, Section 4, Appeals.
4. The DEPARTMENT shall send a copy of this order both by certified mail return receipt requested and by first class mail to Tacoma Water, Attention: Mr. John Kirner, Water Superintendent. Faxing is an acceptable means of notification.
5. This Order shall take effect immediately and shall stay in effect until rescinded or modified. It shall be binding on successors and assigns and shall be recorded in the official records of the Pierce County Auditor's office.

Ordered by:

Laurie A. Jinkins, Interim Director of Health and Health Officer
Tacoma-Pierce County Health Department
September 8, 2008

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

APPENDIX C


Ecology Access Agreement

ACCESS AGREEMENT
between the
Washington State Department of Ecology
and
Mr. George J. Phillips

The Washington State Department of Ecology ("Ecology") and George J. Phillips ("Mr. Phillips"), agree to following terms and conditions of this Access Agreement:

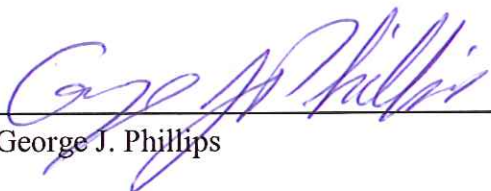
1. Ecology is responsible for the investigation and remediation of hazardous waste sites in Washington pursuant to the Model Toxics Control Act (MTCA), Chapter 70.105D RCW and Chapter 173-340 WAC.
2. Upon reasonable notice (unless an emergency prevents such notice), Ecology has authority to enter upon any property to conduct investigations of a release of a hazardous substance, and to conduct remedial actions (including investigations) to remedy releases of hazardous substances. RCW 70.105D.030(1)(a) & (b); WAC 173-340-800.
3. Mr. Phillips is the owner of property on which a release of hazardous substances has occurred. The site at which these hazardous substances have come to be located is generally located at 6719 South D Street, Tacoma, Washington 98408. The property is in Section 28, Township 20, Range 03, Quarter 21.
4. Ecology believes that credible evidence exists that may show ---- is a potentially liable person pursuant to RCW 70.105D.040(1)(b) and WAC 173-340-500. Ecology intends to send Mr. Phillips an early notification of such status in the near future.
5. By signing this Access Agreement, Mr. Phillips grants full access rights to Ecology and/or any authorized representative of Ecology for the purpose of investigating and remediating the release(s) of hazardous substances at the Site. These access rights include authorizing Ecology and/or any authorized representative of Ecology to immediately take actions to restrict public access to the site, to conduct and take samples at the site and to conduct remedial actions at the site, including the use of heavy equipment to remove contaminated material from the site.
6. Ecology and Mr. Phillips shall be responsible for the negligent acts or omissions of their respective employees and/or authorized representatives while performing under the terms of this Access Agreement.
7. Ecology and Mr. Phillips may mutually amend this Access Agreement. Any amendments shall not be binding on either party unless such amendments are in writing and signed by an authorized representative of each party. The effective date of the Agreement shall be the date that it is signed by both parties.
8. Ecology hereby reserves its right to file an action, if necessary, against any party, including Mr. Phillips, to recover remedial action costs incurred by Ecology for any investigative and remedial actions at the Site. RCW 70.105D.050(3); WAC 173-340-550. Ecology further hereby reserves all its rights to take any other enforcement action authorized by law.

9. Upon request, Ecology agrees to provide to Mr. Phillips, at no cost to Mr. Phillips, copies of any documents, including testing information, which relate to the investigation and remedial work that is the subject of this Access Agreement. Upon request, Ecology agrees to provide to Mr. Phillips split samples of any tests at the Site.
10. This Access Agreement between Ecology and Mr. Phillips contains all the terms and conditions agreed upon by and between the parties. No other understandings, verbal or otherwise, regarding the subject matter of this agreement shall be enforceable against any of the parties.

fac: 

Rebecca S. Lawson, P.E.
Regional Section Manager
Toxics Program Cleanup
Department of Ecology

Date: 28 Feb 08



George J. Phillips

Date: 2-28-08

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

APPENDIX D

Phase II Site Investigation Report (2008)



RECEIVED
DEC 0 8 2008
Washington State
Department of Ecology

December 4, 2008

Mr. Joe Phillips
joe@jetcity.com
253-312-5103

RE: Phase II Site Investigation / Soil Sampling Project
Site: 6719 South D Street

Dear Mr. Phillips,

Enclosed is the **Phase II Site Investigation Report** for the recently completed soil sampling project at your property, 6719 South D Street in Tacoma, WA. As summarized in the report the soil sample analytical results have indicated that lead, above the MTCA Method A cleanup level for unrestricted land use, was detected in five of the sampled locations at the site. Based on the levels of lead detected in the obtained samples, at least some of any excavated soil would be designated a dangerous waste and as such would require special handling and special disposal. Any soil excavation at the site should be completed by a licensed hazardous waste contractor.

Thank you for the opportunity to work with you on this project. Please give me a call if you have any questions regarding this or any future projects.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Langseth", is written over the word "Sincerely,".

Tom Langseth
Langseth Environmental Services, Inc.

Cc: Marian Abbett, DOE SW Regional Office



RECEIVED

DEC 0 8 2008

Washington State
Department of Ecology

PHASE II SITE INVESTIGATION REPORT

6719 SOUTH D STREET

Property Tax Parcel # 6615002550

SITE LOCATION:
6719 South D Street
Tacoma, WA 98408

SITE CONTACT:
Joe Phillips
joe@jetcity.com
253-312-5103

Site Investigation and Soil Sampling Project

December 4, 2008

PHASE II SITE INVESTIGATION REPORT

6719 SOUTH D STREET

SITE LOCATION:
Currently Vacant
6719 South D Street
Tacoma, WA 98408
Parcel # 6615002550

PROJECT CONTACT:
Joe Phillips
joe@jetcity.com
253-312-5103

This report was compiled by Tom Langseth, registered and licensed with the Washington State Department of Ecology to perform environmental site assessments in accordance with WAC 173-360-600 through the International Code Council.

This report is intended to document the work completed regarding the Phase II Site Investigation soil sampling project completed at the Joe Phillips property, 6719 South D Street in Tacoma, WA. The site is located south of Tacoma city center in a residential area. The subject property is sized at approximately 6,250 square feet and is occupied by a single-family residence and garage/storage building. Previous soil sampling by the Tacoma Pierce County Health Department (TPCHD) found elevated levels of lead in the surface soil. The purpose of this project was to determine the extent of possible contamination in the surface and subsurface soil. The obtained soil samples will be laboratory analyzed for total lead and total copper. All activities to be completed at the site are explained in the Sampling and Quality Assurance Project Plan (copy enclosed).

On November 14, 2008, twenty-one soil samples were obtained from the 6719 South D Street site. Ten locations were sampled. Samples were collected from locations numbered one (1) through nine (9), as per the enclosed site and sampling location map. Duplicate samples were obtained from location number five (5). One additional grab sample was obtained from location number ten (10). This sample was obtained from the sandy fill type material that had been placed over the site 'native' soil. At each sampling location, samples were collected from a depth of 0 – 6 inches and from 12 – 18 inches, in the 'native' soil. No groundwater was encountered in any of the sampling locations. The

Phase II Site Investigation Report

December 4, 2008

Page 2

laboratory analytical results of the obtained samples indicated that lead, above the MTCA Method A cleanup level of 250 parts per million (ppm), was present in five of the sampled locations. Lead was present in the sample obtained from location number one at a level of 230 ppm.

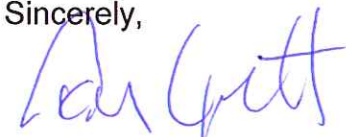
Soil sampling was conducted in accordance with Washington State Department of Ecology guidelines. The soil samples were collected and handled per the enclosed SQAPP.

Based on the soil sample analytical results obtained during this Site Investigation and sampling project, lead contaminated soil, above the MTCA Method A cleanup level for unrestricted land use, was detected in five of ten soil sampling locations at the site. Additional remediation of the site soil will need to be accomplished. The total lead levels indicate that some of the remediated soil would be designated a dangerous waste and as such, special handling and special disposal will be required. Any soil excavation at the site should be completed by a licensed hazardous waste contractor.

Marian Abbett, Unit Supervisor with the DOE Southwest Regional Office, Toxics Cleanup Program, was on site during the investigation to observe the soil sampling activities. Enclosed are site and sampling location maps, the laboratory analytical results, and the chain of custody forms. Laboratory QA/QC data and photographs taken throughout the project are included at the end of the report. The photographs document the soil sample locations and the depth of fill material over the 'native' soil.

This report has been prepared for the exclusive use of Mr. Joe Phillips and his agents, in accordance with generally accepted professional practices for the nature and condition of the work completed in the same or similar localities, at the time the work was performed. The findings contained herein are relevant to the date of the Langseth Environmental Services, Inc. Phase II Site Investigation project and should not be relied upon to represent conditions at later dates. No additional warranty is expressed or implied. In the event that changes in the nature, usage or layout of the property or nearby properties are made, the conclusions and recommendations contained in this report may not be valid. If additional information becomes available, it should be provided to Langseth Environmental Services, Inc. so that the original conclusions and recommendations can be modified as necessary.

Sincerely,



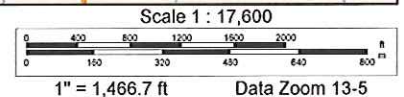
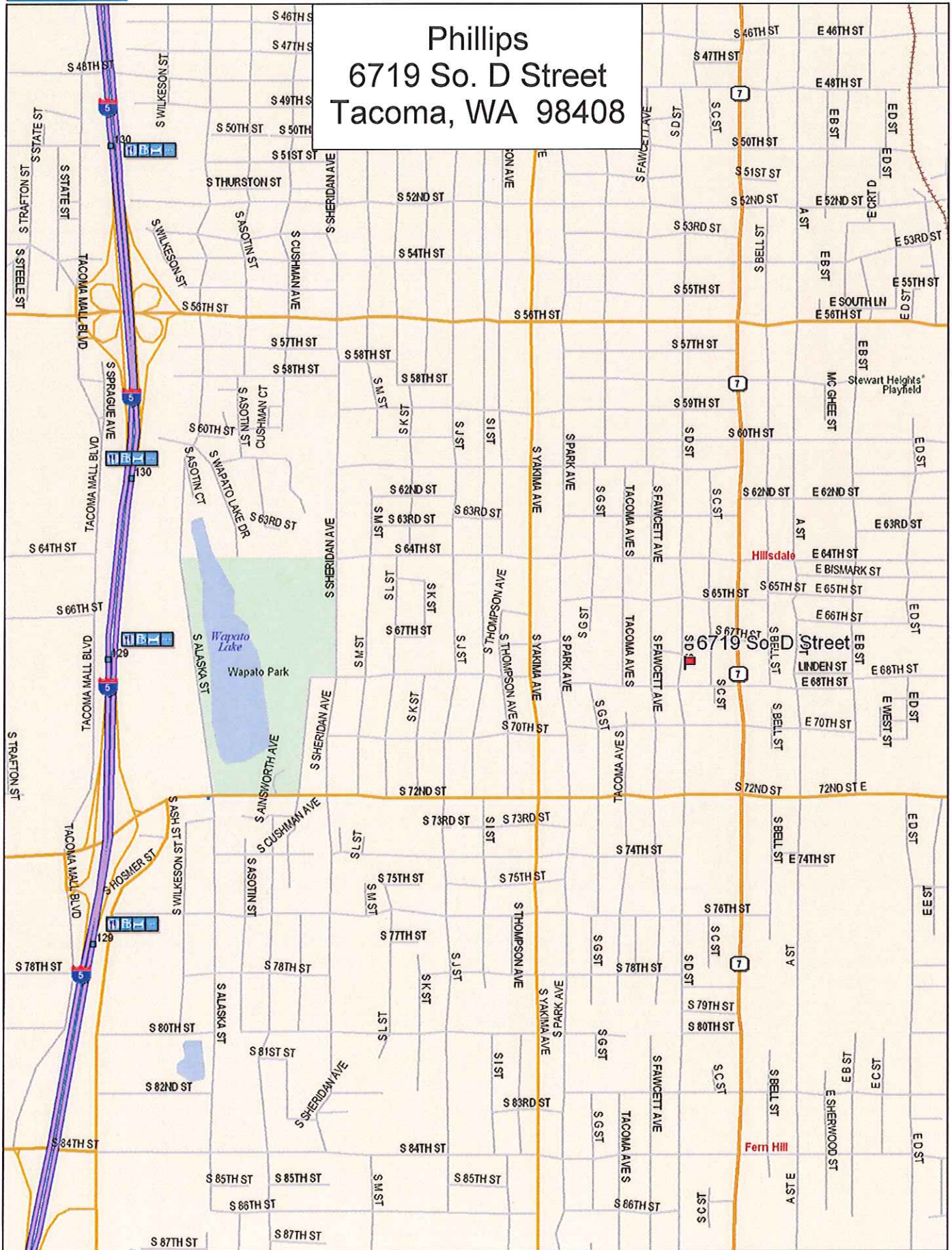
Tom Langseth
Registered Site Assessor
Langseth Environmental Services, Inc.

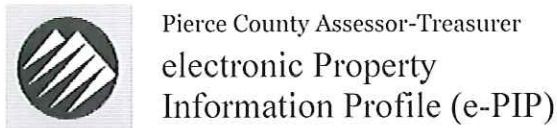
Cc: Marian Abbett, DOE S/W Regional Office

SITE & SAMPLING

LOCATION MAPS

Phillips 6719 So. D Street Tacoma, WA 98408





Ken Madsen
Assessor-Treasurer



[Pierce County Home](#)
[Assessor-Treasurer Home](#)
[Parcel Search](#)
[Sales Search](#)
[Recorded Documents](#)
[Permits](#)
[Summary](#)
[Taxes/Values](#)
[Land](#)
[Buildings](#)
[Sales](#)
[Map](#)

Land Characteristics for 6615002550

10/08/2008 11:12 AM

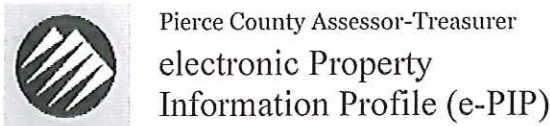
Taxpayer Details Taxpayer Name: PHILLIPS GEORGE J Mailing Address: 6719 S D ST TACOMA WA 98408-6218		Property Details Parcel Number: 6615002550 Site Address: 6719 S D ST Account Type: Real Property Category: Land and Improvements Use Code: 1101-SINGLE FAMILY DWELLING	
Location: LEA: 182201 RTSQQ: 03-20-28-2-1		Size SF: 6,250 Acres: 0.14 Front Ft: 50	
Amenities WF Type: View Quality: Street Type: Paved		Utilities Electric: Power Installed Sewer: Sewer/Septic Installed Water: Water Installed	

Warning: Appraisal data provided is for informational purposes only and is incomplete for determination of value.

I acknowledge and agree to the prohibitions listed in RCW 42.17.260(9) against releasing and/or using lists of individuals for commercial purposes. Neither Pierce County nor the Assessor-Treasurer warrants the accuracy, reliability or timeliness of any information in this system, and shall not be held liable for losses caused by using this information. Portions of this information may not be current or accurate. Any person or entity who relies on any information obtained from this system, does so at their own risk. **All critical information should be independently verified.**

Pierce County Assessor-Treasurer
Ken Madsen
 2401 South 35th St Room 142
 Tacoma, Washington 98409
 (253)798-6111 or Fax (253)798-3142
www.piercecountywa.org/atr

(c) 2008 Pierce County Assessor-Treasurer



Ken Madsen
Assessor-Treasurer



Pierce County Home Assessor-Treasurer Home Parcel Search Sales Search Recorded Documents Permits
Summary Taxes/Values Land Buildings Sales Map

Building Characteristics for 6615002550

10/08/2008 11:13 AM

Taxpayer Details Taxpayer Name: PHILLIPS GEORGE J Mailing Address: 6719 S D ST TACOMA WA 98408-6218	Property Details Parcel Number: 6615002550 Site Address: 6719 S D ST Account Type: Real Property Category: Land and Improvements Use Code: 1101-SINGLE FAMILY DWELLING
---	--

Building ID: 1 2

Construction	Size	Other
Built-As: 1½ Story Fin Condition: Average Quality: Fair Exterior: Frame Siding Class: Roof: Composition Shingle HVAC: Electric Baseboard Year Built: 1908 Adj Year Built: 1950	Stories: 2 SF: 1,320 Fin Attic SF: Total Bsmnt SF: Fin Bsmnt SF: Garage SF: Det Garage SF: Bsmnt Gar Door:	Property Type: Residential Neighborhood: 182201 Occupancy: Single Family Residential Bedrooms: 3 Bathrooms: 1 Fireplaces: Net SF: Sprinkler SF: Units: 1

Warning: Appraisal data provided is for informational purposes only and is incomplete for determination of value.

I acknowledge and agree to the prohibitions listed in RCW 42.17.260(9) against releasing and/or using lists of individuals for commercial purposes. Neither Pierce County nor the Assessor-Treasurer warrants the accuracy, reliability or timeliness of any information in this system, and shall not be held liable for losses caused by using this information. Portions of this information may not be current or accurate. Any person or entity who relies on any information obtained from this system, does so at their own risk. **All critical information should be independently verified.**

Pierce County Assessor-Treasurer
 Ken Madsen
 2401 South 35th St Room 142
 Tacoma, Washington 98409
 (253)798-6111 or Fax (253)798-3142
 www.piercecountywa.org/atr

(c) 2008 Pierce County Assessor-Treasurer



Pierce County Assessor-Treasurer
electronic Property
Information Profile (e-PIP)



Ken Madsen
Assessor-Treasurer



Pierce County Home Assessor-Treasurer Home Parcel Search Sales Search Recorded Documents Permits
Summary Taxes/Values Land Buildings Sales Map

Parcel Map for 6615002550

10/08/2008 11:13 AM

Taxpayer Details	Property Details
Taxpayer Name: PHILLIPS GEORGE J	Parcel Number: 6615002550
Mailing Address: 6719 S D ST TACOMA WA 98408-6218	Site Address: 6719 S D ST
	Account Type: Real Property
	Category: Land and Improvements
	Use Code: 1101-SINGLE FAMILY DWELLING

For additional mapping options, visit [Public GIS](#)

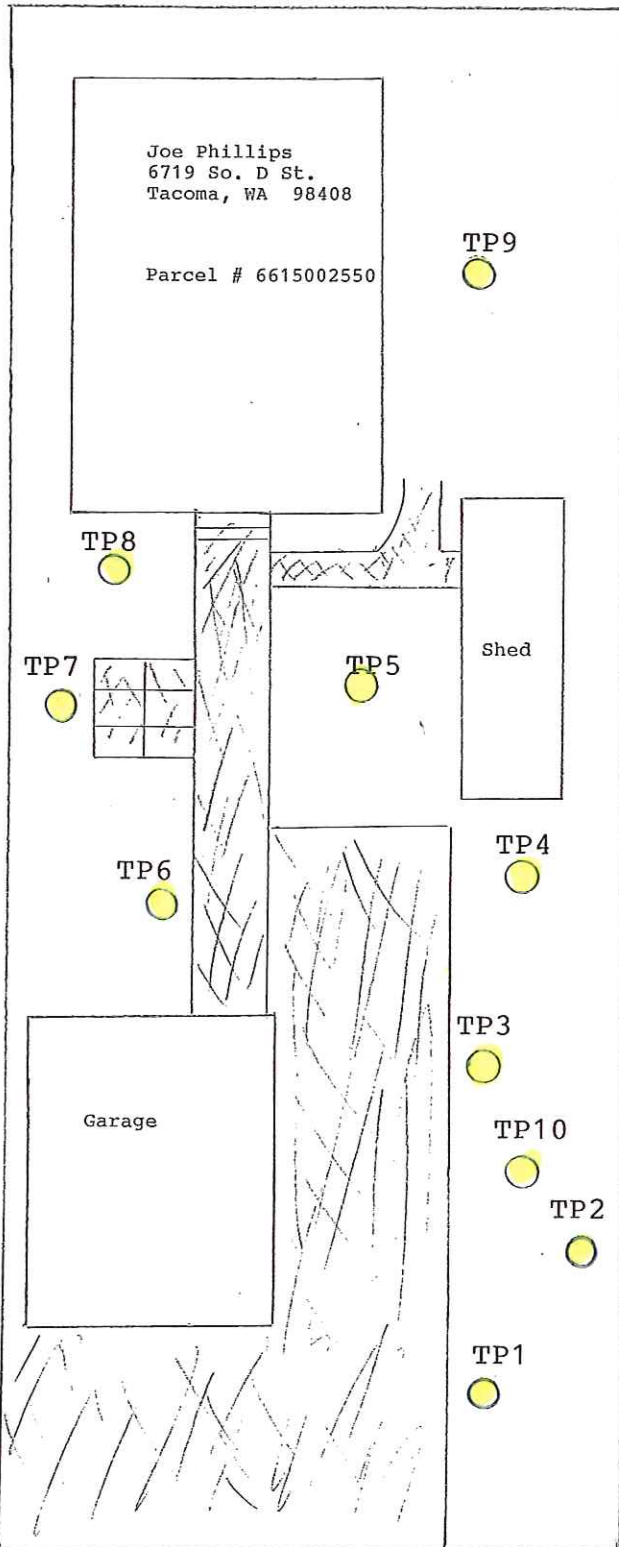
I acknowledge and agree to the prohibitions listed in RCW 42.17.260(9) against releasing and/or using lists of individuals for commercial purposes. Neither Pierce County nor the Assessor-Treasurer warrants the accuracy, reliability or timeliness of any information in this system, and shall not be held liable for losses caused by using this information. Portions of this information may not be current or accurate. Any person or entity who relies on any information obtained from this system, does so at their own risk. **All critical information should be independently verified.**

Pierce County Assessor-Treasurer
Ken Madsen
2401 South 35th St Room 142
Tacoma, Washington 98409
(253)798-6111 or Fax (253)798-3142
www.piercecountywa.org/atr

(c) 2008 Pierce County Assessor-Treasurer

SITE & SAMPLING LOCATION MAP

Phillips
6719 So. D Street
Tacoma, WA 98408



Sample & Location	Lead	Copper
TP 1 0"-6"	230	32
TP 1 12"-18"	88	19
TP 2 0"-6"	190	49
TP 2 12"-18"	77	16
TP 3 0"-6"	420	30
TP 3 12"-18"	500	30
TP 4 0"-6"	410	33
TP 4 12"-18"	73	14
TP 5 0"-6"	640	73
TP 5 12"-18"	160	22
TP 5 0"-6" (Dup)	800	82
TP 5 12"-18" (Dup)	200	25
TP 6 0"-6"	310	51
TP 6 12"-18"	72	16
TP 7 0"-6"	690	230
TP 7 12"-18"	120	25
TP 8 0"-6"	64	15
TP 8 12"-18"	58	12
TP 9 0"-6"	180	29
TP 9 12"-18"	110	20
TP 10 Grab Surface Fill Material	47	14



Concrete Driveway & Sidewalks



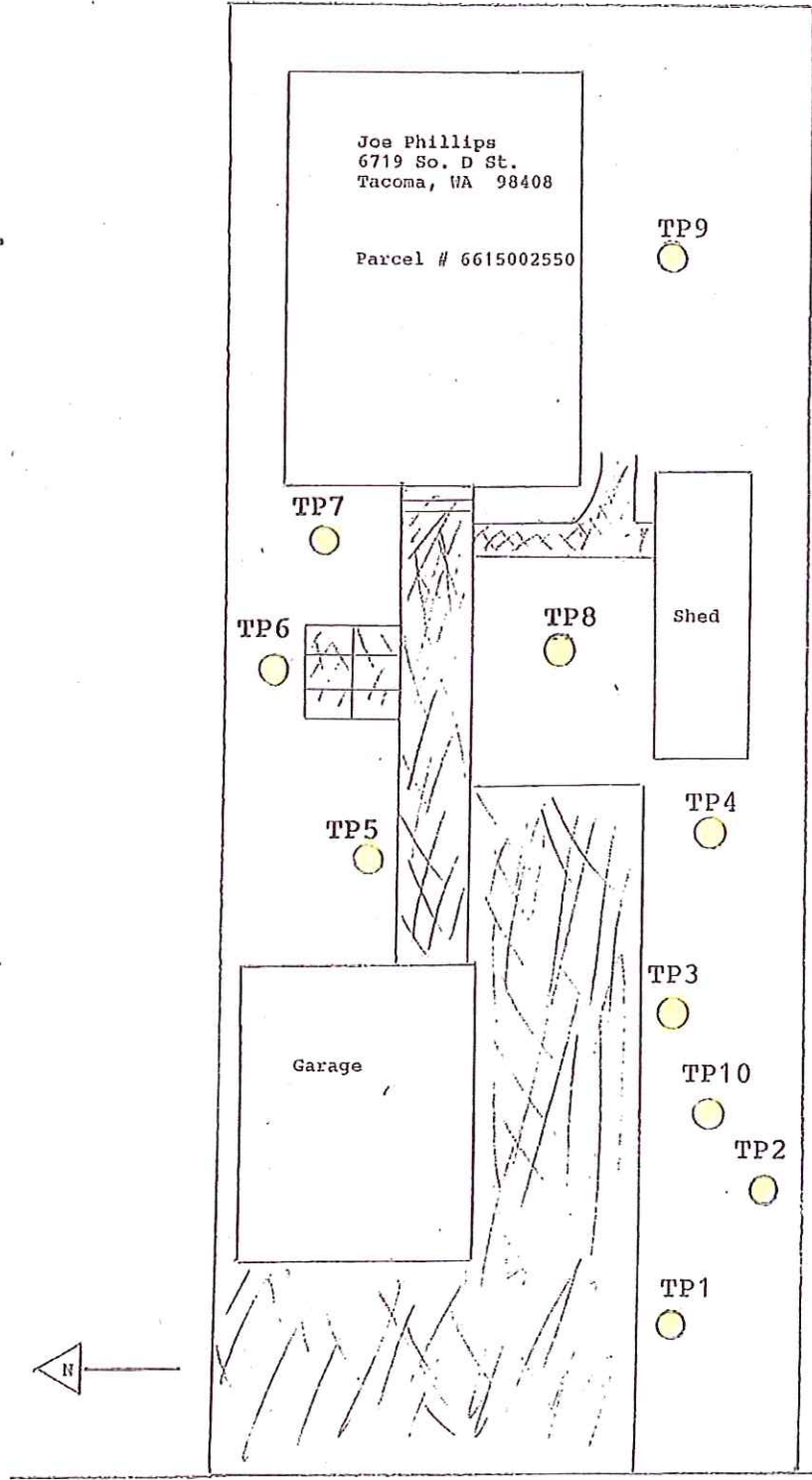
Sampling Locations

Scale: 1"=10'

Corrected

SITE & SAMPLING LOCATION MAP

Phillips
6719 So. D Street
Tacoma, WA 98408



Sample & Location	Lead	Copper
TP 1 0"-6"	230	32
TP 1 12"-18"	88	19
TP 2 0"-6"	190	49
TP 2 12"-18"	77	16
TP 3 0"-6"	420	30
TP 3 12"-18"	500	30
TP 4 0"-6"	410	33
TP 4 12"-18"	73	14
TP 5 0"-6"	640	73
TP 5 12"-18"	160	22
TP 5 0"-6" (Dup)	800	82
TP 5 12"-18" (Dup)	200	25
TP 6 0"-6"	310	51
TP 6 12"-18"	72	16
TP 7 0"-6"	690	230
TP 7 12"-18"	120	25
TP 8 0"-6"	64	15
TP 8 12"-18"	58	12
TP 9 0"-6"	180	29
TP 9 12"-18"	110	20
TP 10 Grab Surface Fill Material	47	14



Concrete Driveway & Sidewalks



Sampling Locations

Scale: 1"=10'

SOIL SAMPLE RESULTS TABLE

6719 South D Street

Site Location:

6179 South D Street
Tacoma, WA 98408

Sample & Location	Lead	Copper	Sample Date
TP 1 0"-6"	230	32	11/14/2008
TP 1 12"-18"	88	19	"
TP 2 0"-6"	190	49	"
TP 2 12"-18"	77	16	"
TP3 0"-6"	420	30	"
TP 3 12"-18"	500	30	"
TP 4 0"-6"	410	33	"
TP 4 12"-18"	73	14	"
TP 5 0"-6"	640	73	"
TP 5 12"-18"	160	22	"
TP 5 0"-6" (Dup)	800	82	"
TP 5 12"-18" (Dup)	200	25	"
TP 6 0"-6"	310	51	"
TP 6 12"-18"	72	16	"
TP 7 0"-6"	690	230	"
TP 7 12"-18"	120	25	"
TP 8 0"-6"	64	15	"
TP 8 12"-18"	58	12	"
TP 9 0"-6"	180	29	"
TP 9 12"-18"	110	20	"
TP 10 Grab Surface Fill Material	47	14	"
MTCA Method A Cleanup Level	250		
MTCA Method B Cleanup Level		2960	

Results reported in mg/Kg = ppm (parts per million)
BOLD indicates above the MTCA cleanup level

**SOIL SAMPLE
ANALYTICAL DATA**

SQAPP

SAMPLING AND QUALITY ASSURANCE PROJECT PLAN

6719 S. D Street
Tacoma, Washington

1.0 PURPOSE

This Sampling and Quality Assurance Project Plan (SQAPP) describes the sampling and analytical methodology, and quality assurance/quality control to be used during the soil sampling at the 6719 S D Street site in Tacoma, Washington.

Previous soil sampling by the Tacoma-Pierce County Health Department (TPCHD) found elevated concentrations of lead in the surface soil. Lead concentrations ranged from 170 to 75,000 ppm. Potential sources for the lead in soil are past lead melting on the property and/or the spread of copper dust on the soil.

The purpose of the soil sampling is to determine the extent of contamination in the surface and subsurface soil. Soil sampling results will be used to evaluate potential remedial alternatives for contaminated soil. Soil samples will be analyzed for total lead and copper. The soil samples will be archived for possible TCLP lead.

2.0 SOIL SAMPLE COLLECTION

The soil has been significantly disturbed since the original sampling by TPCHD. Most recently, a large quantity of sand has been placed on a new concrete pad. This sand has been pushed onto the "native" soil layer. Soil samples should only be collected from the "native" soil, not the imported sand.

To determine the extent of soil contamination, soil samples will be collected from nine (9) sampling locations as noted on Figure 1. Samples will be collected from 0-6 inches and 12-18 inches of "native" soil. Two additional samples will be collected from one of the sampling locations as duplicates. A total of 20 soil samples will be collected.

Soil samples will be collected using a shovel and a clean stainless steel spoon on side walls at the 0-6 inch depth. At the 12-18 inch depth a clean hand coring device will be utilized. Soil for each selected depth interval will be placed in a clean stainless steel bowl and homogenized with a clean stainless steel spoon. The homogenized soil sample will be transferred into a sterile 8 oz glass jar provided by the laboratory. Samples will be labeled with sample

identification, date and time collected, and the sampler's initials. Samples will be stored in ice-packed coolers pending delivery to the analytical laboratory.

To prevent the cross-contamination of samples, sampling devices (e.g., stainless steel spoons, stainless steel bowls, coring device, shove) will be cleaned of adhering soil after each sample is collected. The sampling devices will be cleaned using Liqui-nox[®] detergent, deionized water and a bottlebrush. Liqui-nox[®] detergent is made by Alconox, Inc. and does not contain any phosphates that could affect sample results. The detergent must be diluted, 10 ml Liqui-nox[®] per one liter of deionized water. The sampling devices will be washed and rinsed twice using a spray bottle of deionized water. The wastewater generated from washing and rinsing digging tools will be discarded on the site, away from the sample collection area.

3.0 SAMPLE LABELING AND CHAIN-OF-CUSTODY

A sample label will be affixed to each sample container. Each label includes the following information:

- Sample number
- Sampling event location
- Date and time of sample collecting
- Preservatives added to the sample
- Parameter(s) for which the sample is to be analyzed.

After sampling is complete, all samples will be packed for shipping and placed in an iced transport container. The chain-of-custody (COC) form will be taped to the inside lid of the cooler or shipping container. The COC form should include information such as sample names, sample times, the sample date, the type of media, and the analyses requested. Every person who takes possession of the samples while transporting the samples from the field to the laboratory must sign the COC form. After the samples are analyzed by the analytical laboratory, laboratory personnel will store the samples in a secure location at the laboratory for the remainder of their holding times.

4.0 LABORATORY ANALYSIS

Laboratory analytical services will be provided by Spectra Laboratories, of Tacoma, Washington, a state-certified laboratory. Spectra Lab will analyze the samples for total lead

and total copper using EPA Method 6010. Reporting limits should be sufficiently low to compare results to Model Toxics Control Act (MTCA) screening levels.

Analyte	Reporting Limit (mg/kg)	MTCA screening level (mg/kg)
Copper	.6 mg/kg	2960 mg/kg (Method B)
Lead	4 mg/kg	250 mg/kg (Method A)

5.0 REPORTING

Soil sampling results will be summarized in a report including a figure of actual sampling locations.

SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

11/21/2008

Langseth Environmental
7517 Portland Ave
Suite A
Tacoma, WA 98404
Attn: Tom Langseth

Project: Philips
Sample Matrix: Soil
Date Sampled: 11/14/2008
Date Received: 11/14/2008
Spectra Project: 2008110267

<u>Client ID</u>	<u>Spectra #</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
TP 1 0"-6"	1	Total Copper	32	mg/Kg	SW846 6010B
TP 1 0"-6"	1	Total Lead	230	mg/Kg	SW846 6010B
TP 1 12"-18"	2	Total Copper	19	mg/Kg	SW846 6010B
TP 1 12"-18"	2	Total Lead	88	mg/Kg	SW846 6010B
TP 2 0"-6"	3	Total Copper	49	mg/Kg	SW846 6010B
TP 2 0"-6"	3	Total Lead	190	mg/Kg	SW846 6010B
TP 2 12"-18"	4	Total Copper	16	mg/Kg	SW846 6010B
TP 2 12"-18"	4	Total Lead	77	mg/Kg	SW846 6010B
TP 3 0"-6"	5	Total Copper	30	mg/Kg	SW846 6010B
TP 3 0"-6"	5	Total Lead	420	mg/Kg	SW846 6010B
TP 3 12"-18"	6	Total Copper	30	mg/Kg	SW846 6010B
TP 3 12"-18"	6	Total Lead	500	mg/Kg	SW846 6010B
TP 4 0"-6"	7	Total Copper	33	mg/Kg	SW846 6010B
TP 4 0"-6"	7	Total Lead	410	mg/Kg	SW846 6010B
TP 4 12"-18"	8	Total Copper	14	mg/Kg	SW846 6010B
TP 4 12"-18"	8	Total Lead	73	mg/Kg	SW846 6010B
TP 5 0"-6"	9	Total Copper	73	mg/Kg	SW846 6010B
TP 5 0"-6"	9	Total Lead	640	mg/Kg	SW846 6010B
TP 5 12"-18"	10	Total Copper	22	mg/Kg	SW846 6010B
TP 5 12"-18"	10	Total Lead	160	mg/Kg	SW846 6010B
TP 5 0"-6" (Dup)	11	Total Copper	82	mg/Kg	SW846 6010B
TP 5 0"-6" (Dup)	11	Total Lead	800	mg/Kg	SW846 6010B
TP 5 12"-18" (Dup)	12	Total Copper	25	mg/Kg	SW846 6010B

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager

a7/scj

SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

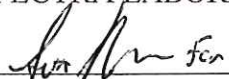
11/21/2008

Langseth Environmental
7517 Portland Ave
Suite A
Tacoma, WA 98404
Attn: Tom Langseth

Project: Philips
Sample Matrix: Soil
Date Sampled: 11/14/2008
Date Received: 11/14/2008
Spectra Project: 2008110267

<u>Client ID</u>	<u>Spectra #</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
TP 5 12"-18" (Dup)	12	Total Lead	200	mg/Kg	SW846 6010B
TP 6 0"-6"	13	Total Copper	51	mg/Kg	SW846 6010B
TP 6 0"-6"	13	Total Lead	310	mg/Kg	SW846 6010B
TP 6 12"-18"	14	Total Copper	16	mg/Kg	SW846 6010B
TP 6 12"-18"	14	Total Lead	72	mg/Kg	SW846 6010B
TP 7 0"-6"	15	Total Copper	230	mg/Kg	SW846 6010B
TP 7 0"-6"	15	Total Lead	690	mg/Kg	SW846 6010B
TP 7 12"-18"	16	Total Copper	25	mg/Kg	SW846 6010B
TP 7 12"-18"	16	Total Lead	120	mg/Kg	SW846 6010B
TP 8 0"-6"	17	Total Copper	15	mg/Kg	SW846 6010B
TP 8 0"-6"	17	Total Lead	64	mg/Kg	SW846 6010B
TP 8 12"-18"	18	Total Copper	12	mg/Kg	SW846 6010B
TP 8 12"-18"	18	Total Lead	58	mg/Kg	SW846 6010B
TP 9 0"-6"	19	Total Copper	29	mg/Kg	SW846 6010B
TP 9 0"-6"	19	Total Lead	180	mg/Kg	SW846 6010B
TP 9 12"-18"	20	Total Copper	20	mg/Kg	SW846 6010B
TP 9 12"-18"	20	Total Lead	110	mg/Kg	SW846 6010B
# 10 Grab Surface Fill Material	21	Total Copper	14	mg/Kg	SW846 6010B
# 10 Grab Surface Fill Material	21	Total Lead	47	mg/Kg	SW846 6010B

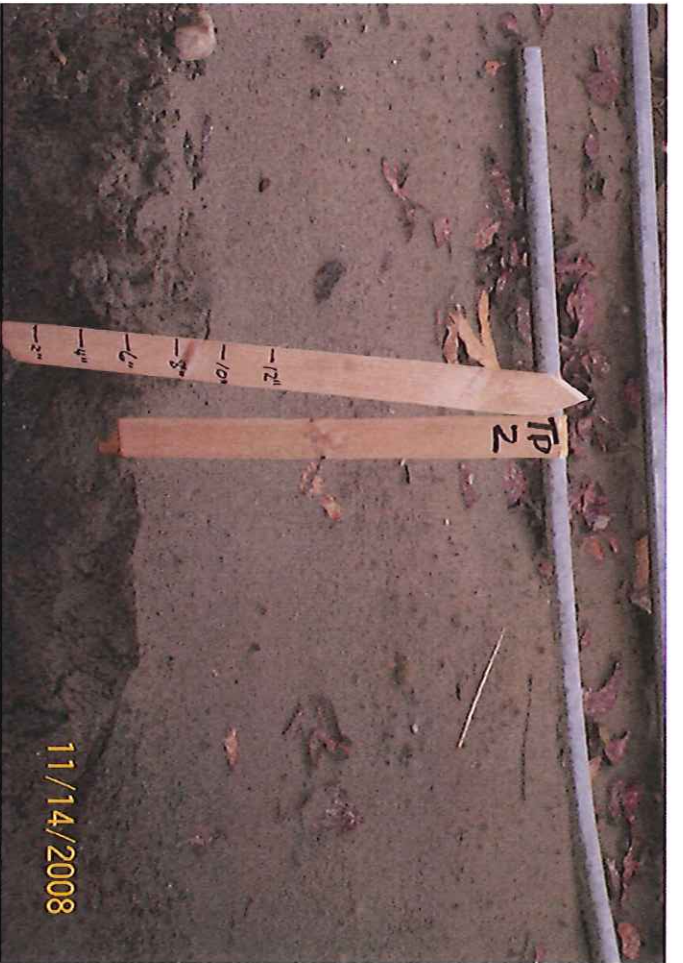
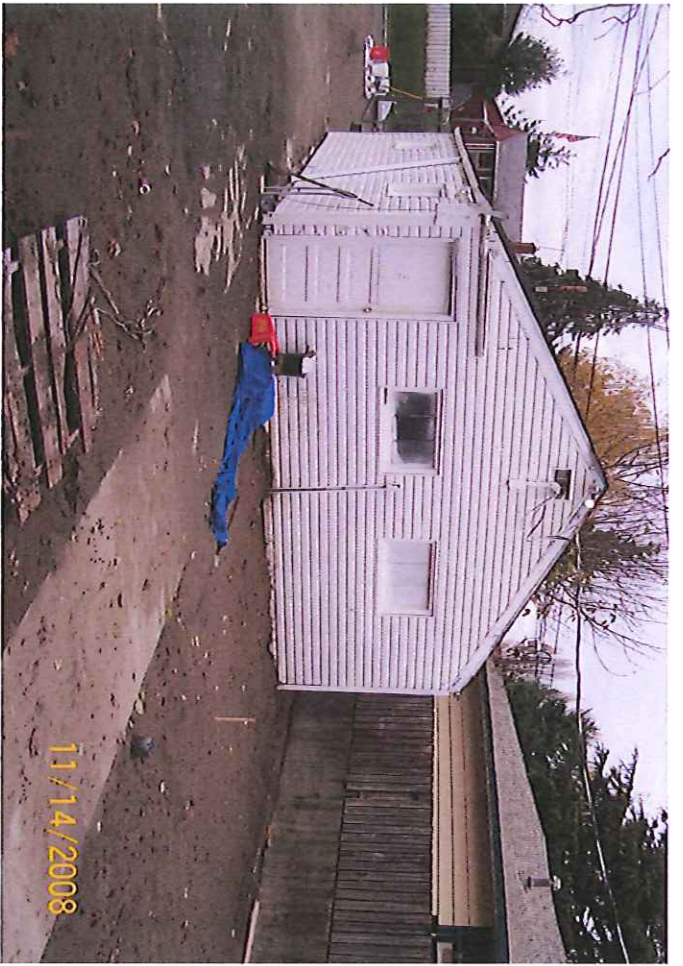
SPECTRA LABORATORIES

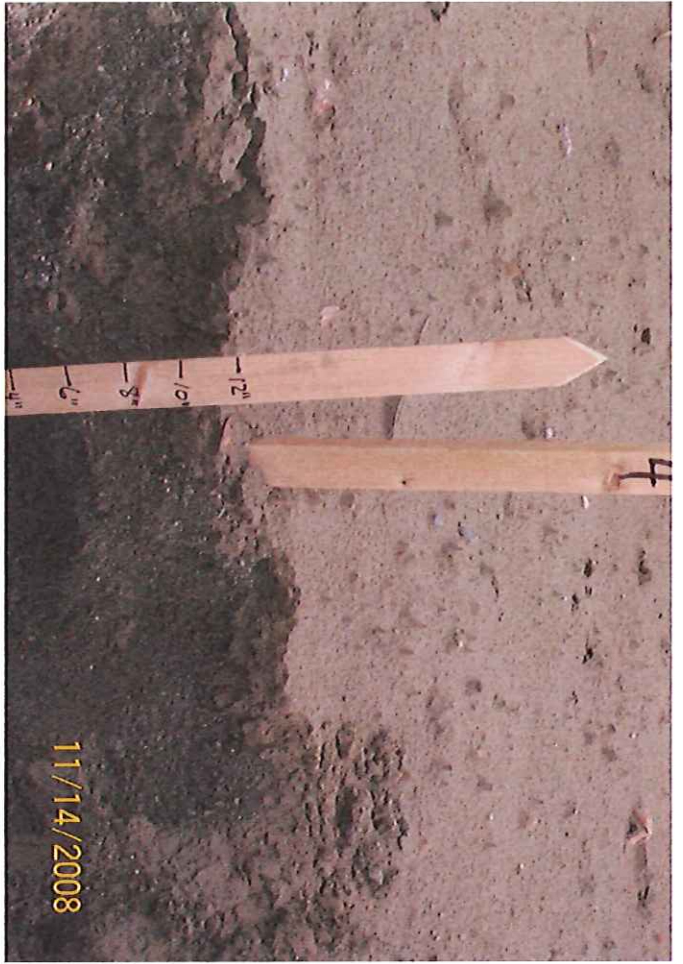
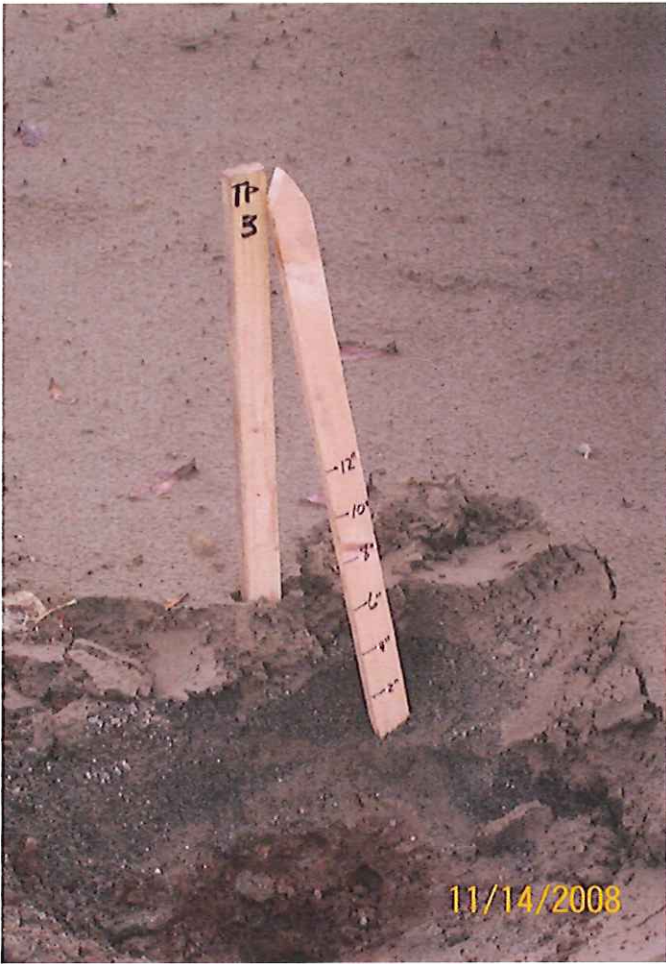

Steve Hibbs, Laboratory Manager

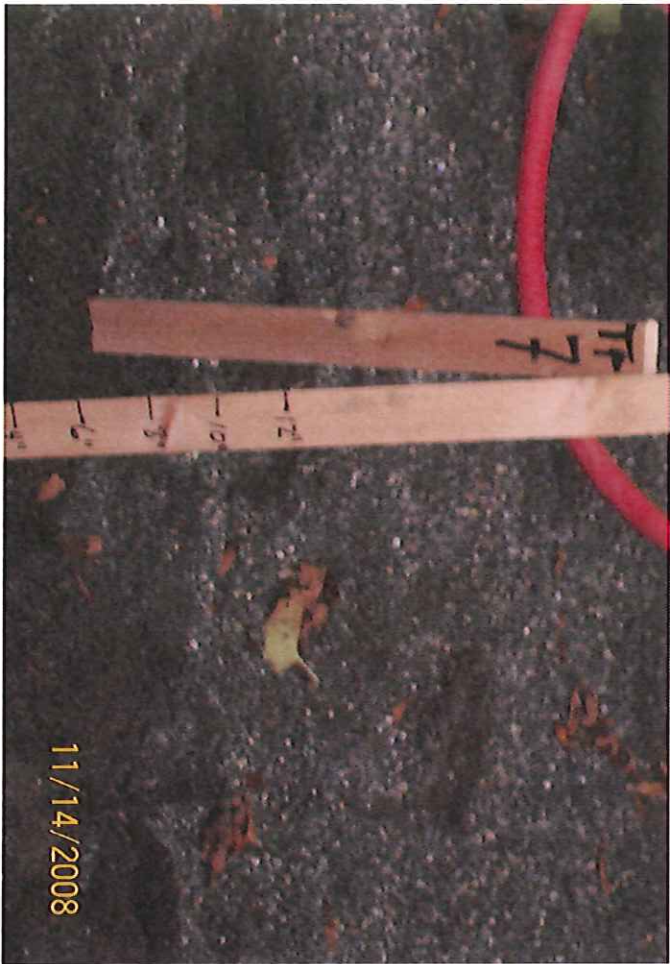
a7/scj

PHOTOGRAPHS

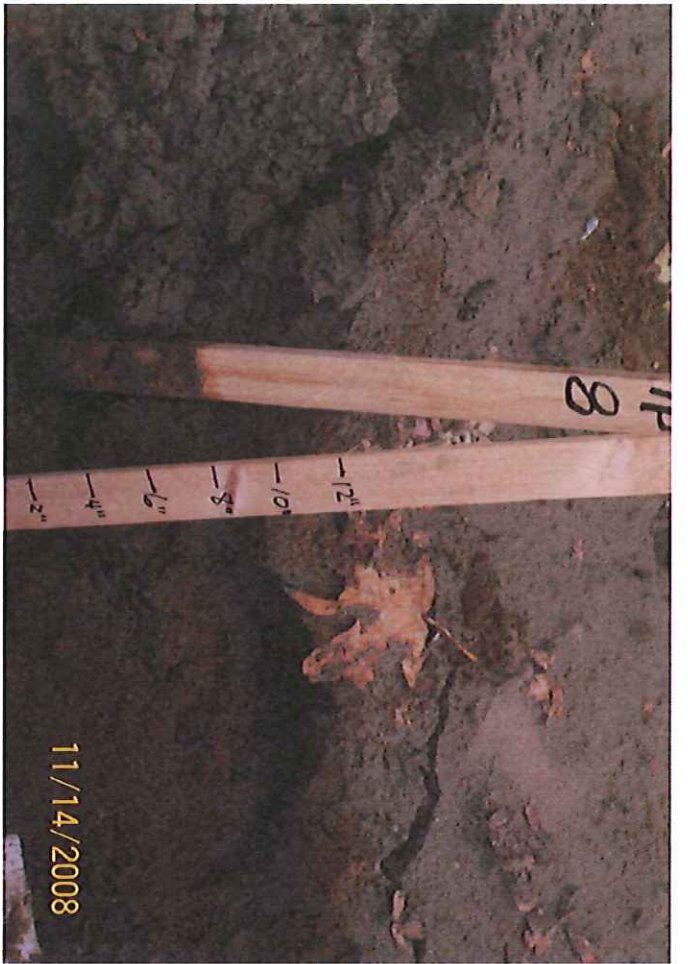




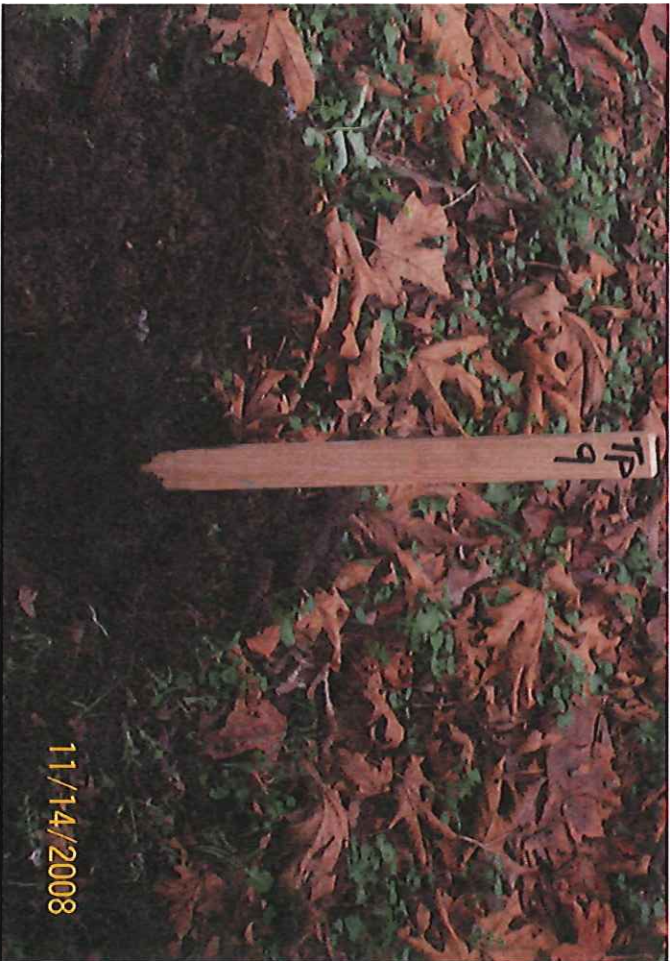




11/14/2008



11/14/2008



11/14/2008

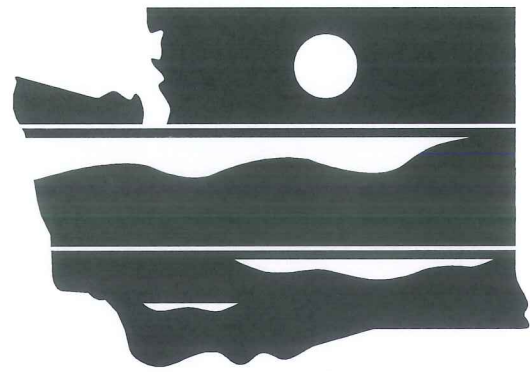


11/14/2008

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

APPENDIX E

Cleanup Plan Set



DEPARTMENT OF
ECOLOGY
State of Washington

HEADQUARTERS
MAIA D. BELLON, DIRECTOR

TOXICS CLEANUP PROGRAM, SOUTHWEST REGIONAL OFFICE
JOE WARD, PE, CONTRACTS OFFICER
MARIAN ABBETT, PE, PROJECT ENGINEER
JOHN ZINZA, PE, SITE MANAGER

STATE TOXICS CLEAN UP ACCOUNT

PHILLIPS RESIDENTIAL CLEANUP—2013 MAY

VICINITY MAP—NOT TO SCALE



PROJECT LOCATION MAP—NOT TO SCALE



SHEET INDEX

1. COVER
2. GENERAL NOTES
3. OVERALL SITE PLAN & TESC
4. TESC DETAILS
5. REMEDIAL/RESTORATION PLAN
6. DETAILS—REMEDIAL/RESTORATION
7. DETAIL—TREE ROOT PROTECTION

SITE: PHILLIPS PROPERTY
6719 SOUTH D STREET
TACOMA, WA 98408-6218
Lon: -122.436221° Lat: 45.195799° N
PARCEL: 6615002550

DRAWING SET
APR. 10, 2013

**PREVIOUS SAMPLE RESULTS
6719 S D STREET (COLLECTED NOV. 14, 2008)**

SAMPLE LOCATION	LEAD, ppm		COPPER, ppm	
	0-IN TO 6-IN	12-IN TO 18-IN	0-IN TO 6-IN	12-IN TO 18-IN
TP-1	230	88	32	19
TP-2	190	77	49	16
TP-3	420	500	30	30
TP-4	410	73	33	14
TP-5	640	160	73	22
TP-5 (DUP)	800	200	82	25
TP-6	310	72	51	16
TP-7	690	120	230	25
TP-8	64	58	15	12
TP-9	180	110	29	20
TP-10 *	47		14	
AVERAGE	348	140		
MAXIMUM	800	500		

* = GRAB SURFACE FILL MATERIAL
 MTCA CLEANUP LEVELS:
 LEAD AVERAGE = 250 ppm, LEAD MAXIMUM = 500 ppm

GENERAL NOTES:

1. DETAILS WITHIN THESE PLANS ARE TYPICAL SECTIONS AND DETAILS. COORDINATE WITH ECOLOGY ENGINEER REGARDING SITE SPECIFIC CONDITIONS.
2. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ECOLOGY SPECIFICATIONS.
3. CONTRACTOR SHALL VERIFY ALL UTILITIES BY CALLING 1-800-424-5555 AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION. NO EXCAVATION SHALL BE PERFORMED UNTIL THE SITE UTILITIES HAVE BEEN FIELD LOCATED ANY UTILITIES DAMAGED, AS A RESULT OF CONTRACTOR'S OPERATIONS, SHALL BE RESTORED AND REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
4. STANDARD DETAILS ARE NOT APPLICABLE TO WORK IN OR NEAR STREAMS OR CRITICAL AREAS SUCH AS WETLANDS. COORDINATE WITH ECOLOGY BEFORE DISTURBING AREAS OF POTENTIAL CONCERN.
5. UNLESS OTHERWISE INDICATED, THE CONTENT OF REMEDIATION EXCAVATION AND RESTORATION IS TO REMOVE CONTAMINATED SOIL AND RESTORE DISTURBED AREA TO THE ORIGINAL TOPOGRAPHY WITH A TOLERANCE OF ± 0.05 FT. SURFACE WATER AND STORMWATER DRAINAGE PATHWAYS SHALL NOT BE ALTERED.
6. COORDINATE WITH ECOLOGY BEFORE REMOVING ANY VEGETATION EXCEPT GRASS.
7. INSTALL ALL PERIMETER BMPS AND TESC MEASURES WITHIN A ZONE 3-FT OUTSIDE THE REMEDIATION LIMITS INDICATED, EXCEPT DO NOT DISTURBE FLOWER BEDS, PLAY AREAS, TRAILS, STRUCTURES OR SIMILAR FEATURES WITHOUT ECOLOGY APPROVAL. WHERE THESE FEATURES EXIST INSTALL PERIMETER BMPS AND TESC MEASURES AS CLOSE AS PRACTICAL TO THE REMEDIATION LIMITS. THE OUTER BOUNDARY OF EITHER THE REMEDIATION LIMITS OF THE PERIMETER BMPS AND TESC MEASURES SHALL CONSTITUTE THE PROJECT WORK LIMITS AND THE CONTRACTOR SHALL LIMIT ALL ACTIVITIES, ACCESS, AND STAGING TO THE PROJECT WORK LIMITS AND TO AREAS SPECIFICALLY DESIGNATED FOR CONSTRUCTION ACCESS AND STAGING. AREAS OUTSIDE THE WORK LIMITS SHALL NOT BE USED OR ACCESSED BY THE CONTRACTOR.

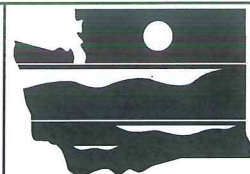
SITE NOTES:

1. AVAILABLE WORK HOURS: MONDAY THROUGH FRIDAY FROM 7:00 AM TO 6:00 PM PST. CONTRACTOR NOT ALLOWED TO WORK ONSITE ON SATURDAY, SUNDAY, AND FEDERAL AND STATE HOLIDAYS.
2. NO INSPECTIONS OR SITE MEETINGS WILL BE SCHEDULED FOR FRIDAYS.
3. CONTRACTOR RESPONSIBLE FOR SECURING SITE BY LOCKING

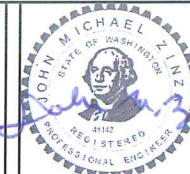
ABBREVIATIONS:

AVG = AVERAGE
 BMPS = BEST MANAGEMENT PRACTICES
 CESCL = CERTIFIED EROSION AND SEDIMENT CONTROL LEAD
 ECY OR ECOLOGY = STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY
 FT = FOOT OR FEET
 IN = INCH OR INCHES
 MAX = MAXIMUM
 MPH = MILES PER HOUR
 MTCA = MODEL TOXICS CONTROL ACT
 OHP = OVERHEAD POWER
 OHTEL = OVERHEAD TELEPHONE
 ppm = parts per million
 PST = PACIFIC STANDARD TIME
 SS = SANITARY SEWER LINE
 TESC = TEMPORARY EROSION AND SEDIMENT CONTROL

**DRAWING SET
4/10/2013**



**DEPARTMENT OF
ECOLOGY**
State of Washington



BAR IS ONE INCH ON ORIGINAL
DRAWING (11-IN X 17-IN)

0 1
VERIFY SCALE

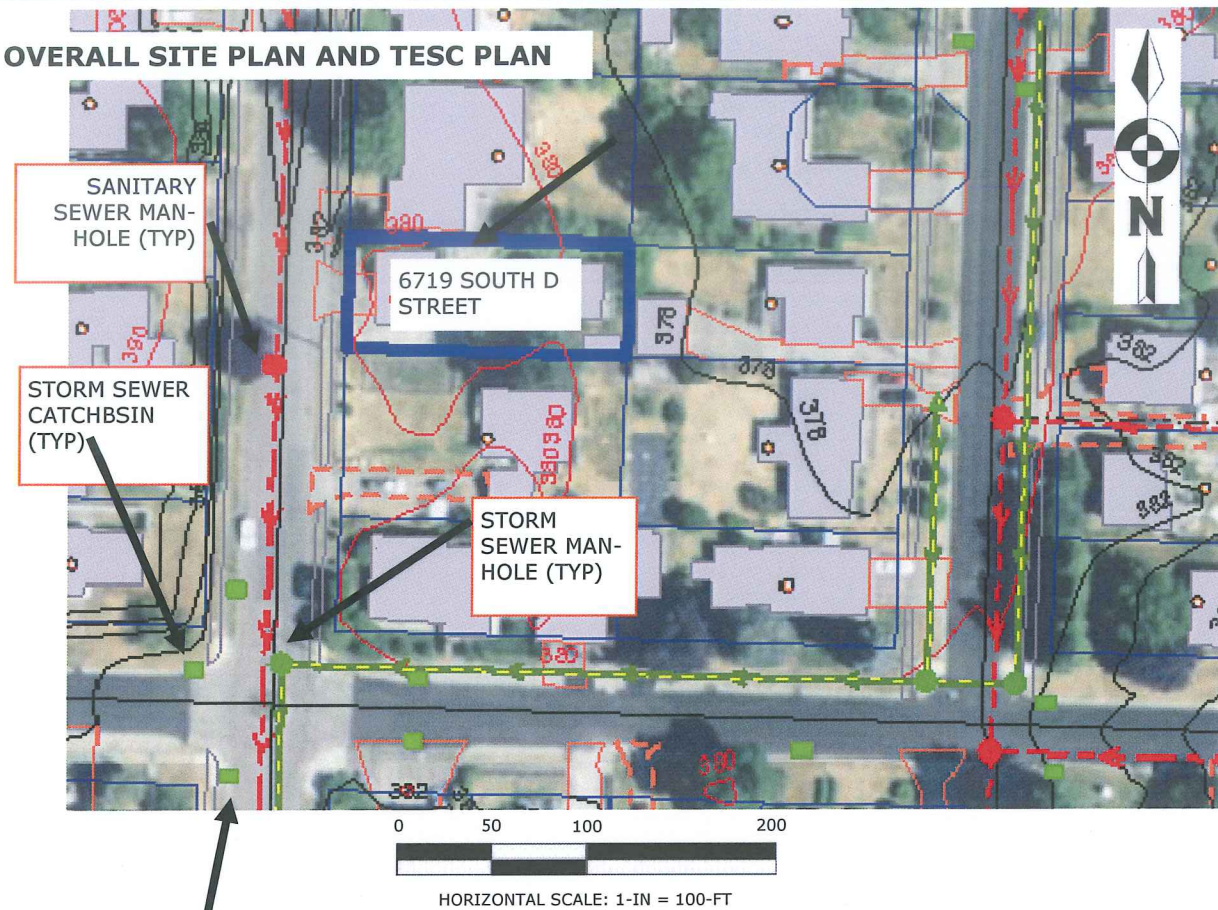
*38
4/10/13*

**STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY**

GENERAL NOTES

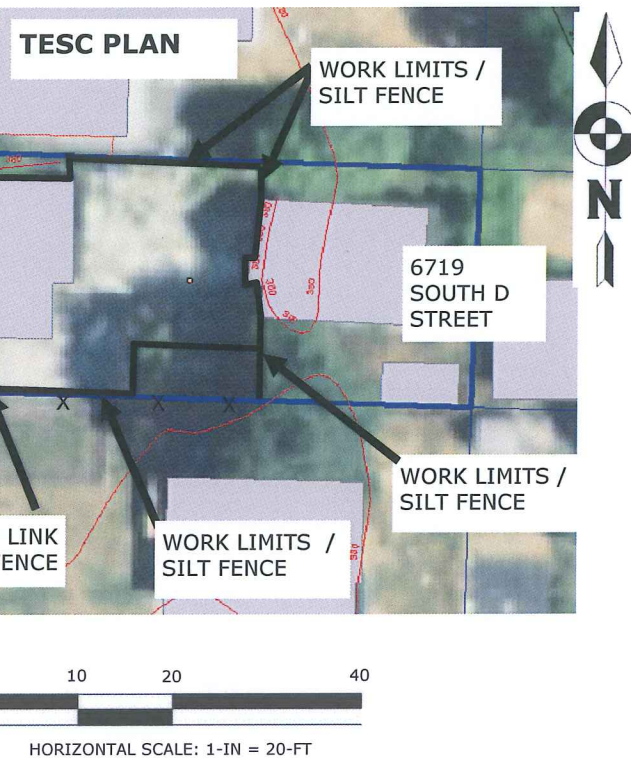
DRAWN: JMZ	PROJECT:
DESIGN: JMZ	SCALE:
DESIGN:	DATE: 2 / 22 / 2013
SHEET NO.	2 of 7

OVERALL SITE PLAN AND TESC PLAN



STANDARD TESC NOTES (CITY OF TACOMA):

1. THE IMPLEMENTATION OF THESE TESC PANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF TESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, VEGETATION/LANDSCAPING IS ESTABLISHED AND THE ENTIRE SITE IS STABILIZED.
2. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
3. THE TESC FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED PRIOR TO AND/OR IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM OR ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
4. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
5. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTION.
6. THE TESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT OR AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTION.
7. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN SEDIMENT TRAP.
8. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
9. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
10. ADDITIONAL NOTE: CONTRACTOR SHALL INSTALL REQUIRED BMP'S IN ACCORDANCE WITH ECOLOGY'S 2012 STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON, AND THE CITY OF TACOMA 2012 STORMWATER MANAGEMENT MANUAL.
11. ADDITIONAL NOTE: THE CONTRACTOR SHALL ABIDE BY THE ABOVE RECOMMENDED ESC CONSTRUCTION SEQUENCE WHERE IT AGREES WITH THE SITE PLANS AND SPECIFICATIONS.
12. ADDITIONAL NOTE: ALL EXPOSED AREAS TO BE TOPSOILED, SEED & MULCHED BY OWNER AT THE TIME OF COMPLETION OF CONSTRUCTION OR IF LEFT UNWORKED FOR 7 DAYS FROM MAY 1 TO SEPTEMBER 30 AND 2 DAY FROM OCTOBER 1 TO APRIL 30. CITY OF TACOMA BMPS C121, C126 & C120 WILL BE UTILIZED.



CONTAMINATED SOIL TESC NOTES:

1. DUST CONTROL: IMPLEMENT AGGRESSIVE DUST CONTROL PRIOR TO CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION ACTIVITY.
2. CLEAN AREA PROTECTION: PROTECT CLEAN AREAS WITH VISQUEEN PRIOR TO START OF CONTAMINATED SOIL REMOVAL.
3. STOCKPILES AND LOADING: ALL STOCKPILES TO BE PLACED ON VISQUEEN AND COVERED AT THE END OF THE DAY. ALL AREAS WHERE LOADING CONTAMINATED SOILS TO BE COVERED WITH VISQUEEN PRIOR TO ACTIVITY. USE EQUIPMENT/TECHNIQUE AND MATERIALS AS NECESSARY TO PROTECT VISQUEEN FROM RIPPING, SUCH AS PLYWOOD. COVER AND SECURE STOCKPILES AT END OF DAY.
4. BOTTOM OF EXCAVATION: THE BOTTOM OF THE EXCAVATED AREA (AND SIDEWALLS) WILL BE COVERED WITH VISQUEEN ONCE DEPTH AND LIMITS OF EXCAVATION ARE ACHIEVED. VISQUEEN TO REMAIN IN PLACE UNTIL CONTRACTOR STARTS BACKFILLING WITH CLEANSOILS. VISQUEEN REMOVED PRIOR TO BACKFILLING.

DRAWING SET
4/10/2013



BAR IS ONE INCH ON ORIGINAL
DRAWING (11-IN X 17-IN)

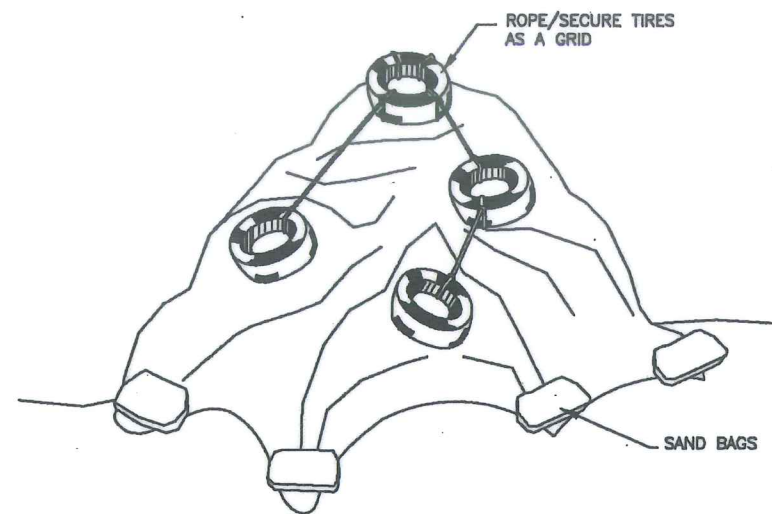


STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY

OVERALL SITE PLAN AND TESC PLAN

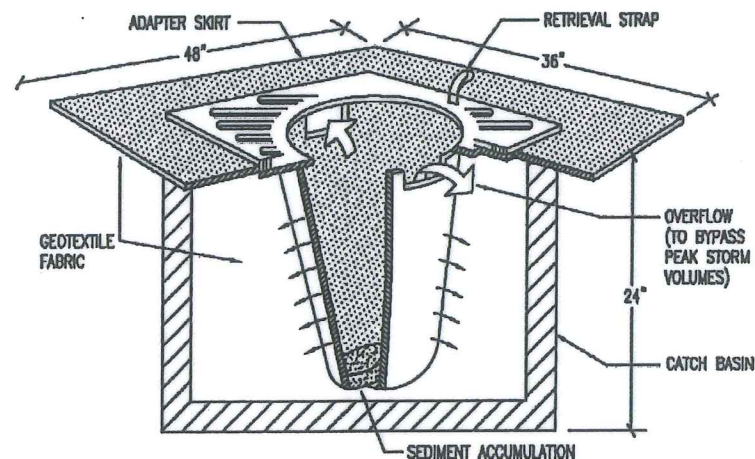
DRAWN: JMZ	PROJECT:
DESIGN: JMZ	SCALE:
DESIGN:	DATE: 2 / 22 / 2013

SHEET NO.	3 of 7
-----------	--------



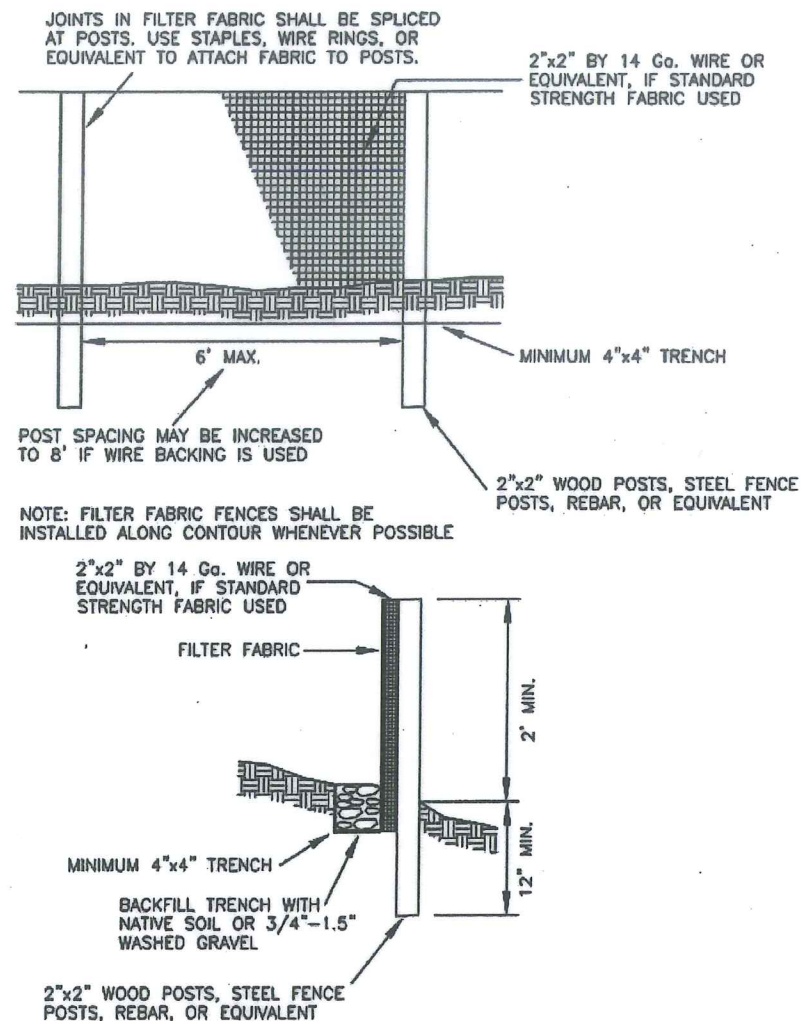
**SOIL EROSION PROTECTION—PLASTIC COVERING
DETAIL (NTS):**

- NOTE:
1. USE OLD TIRES OR SAND BAGS OR EQUIVALENT TO ANCHOR PLASTIC COVERING.

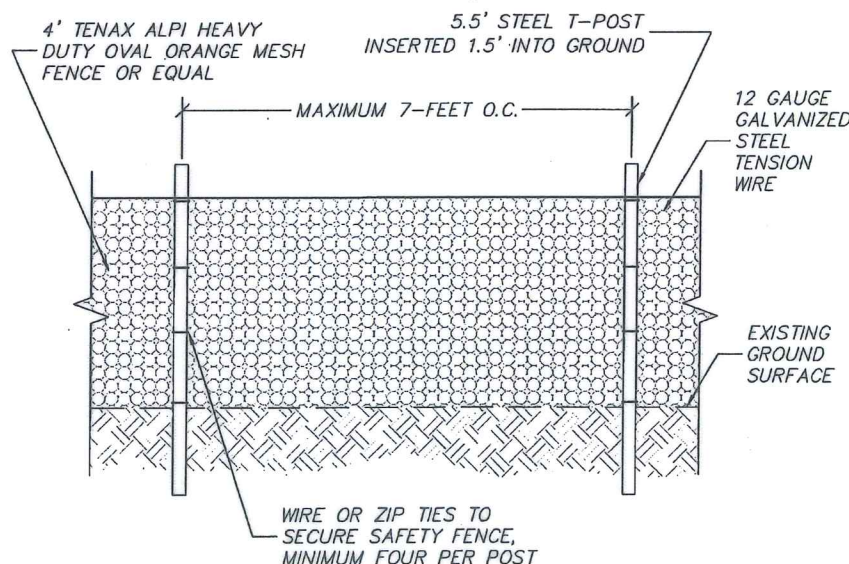


CATCH BASIN FILTER DETAIL (NTS):

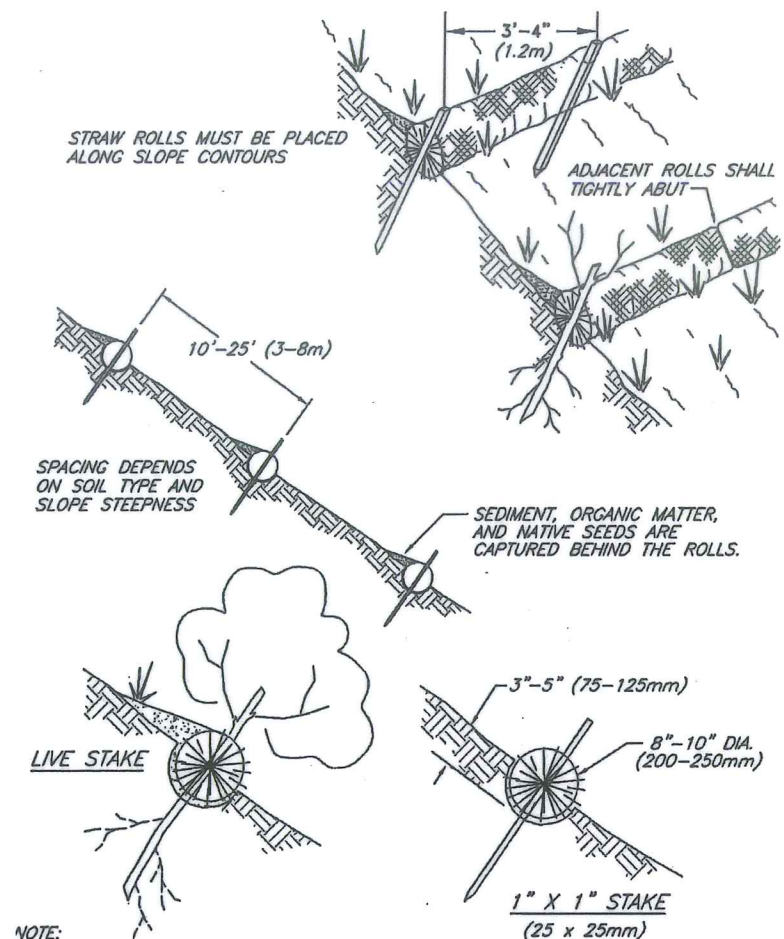
- INLET INSPECTION NOTES:
1. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVEN AND CLEANED OR REPLACED WHEN 1/3 FULL.



SILT FENCE DETAIL (NTS):



WORK AREA SAFETY FENCE (NTS):



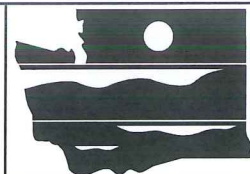
STRAW WATTLES DETAIL (NTS):

- NOTES:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

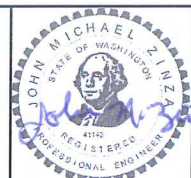
- NOTES:
1. THE CONTRACTOR SHALL BE REQUIRED TO ERECT SAFETY FENCING TO SECURE THE WORK AREA FROM ACCESS TO THE PUBLIC AS NECESSARY TO CONTROL THE SITE.
2. ALL SAFETY FENCING SHALL COMPLETELY ENCLOSE THE WORK AREAS. THE CONTRACTOR SHALL POST SIGNING AS REQUIRED BY THE ENGINEER TO DIRECT THE PUBLIC.
3. INSTALL FENCE WITH A TOP TENSION WIRE TO PREVENT LOOSE/SAGGING FENCING.
4. THE CONTRACTOR SHALL SUBMIT A FENCE ERECTION PLAN FOR EACH AREA TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLING ANY SAFETY FENCING. THE CONTRACTOR SHALL COMPLY WITH ANY MODIFICATIONS MADE TO THE PLAN BY THE ENGINEER. ANY LOOSE/SAGGING FENCING SHALL BE IMMEDIATELY REPAIRED WITH PLASTIC STRAP TIES AT 1' INTERVALS.
5. ACCESS PANEL SHALL BE RIGGED FOR SECURE FASTENING WHEN THE CONTRACTOR IS NOT ON SITE.

WORK AREA SAFETY FENCE NOTES:

DRAWING SET
4/10/2013



DEPARTMENT OF
ECOLOGY
State of Washington



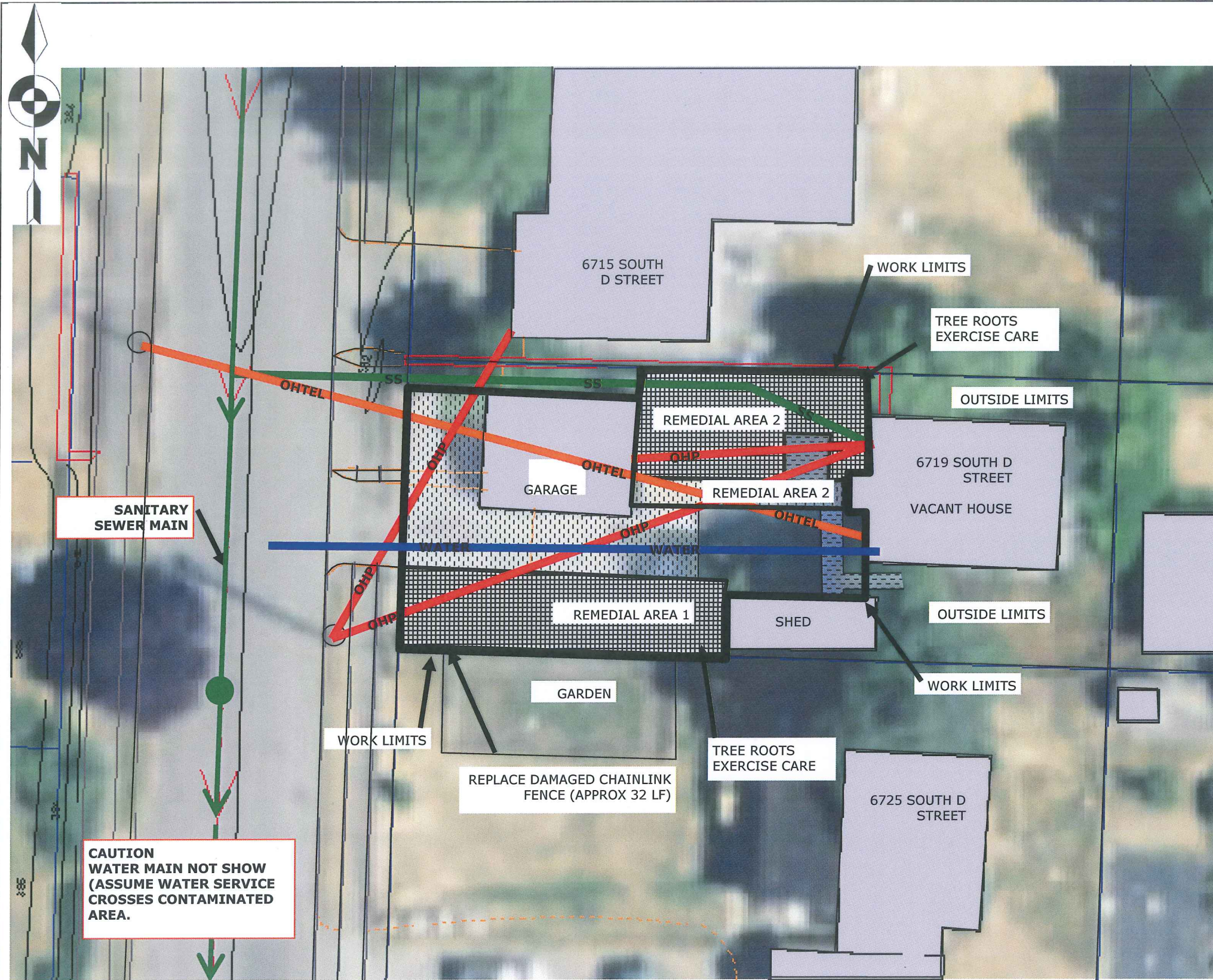
BAR IS ONE INCH ON ORIGINAL
DRAWING (11-IN X 17-IN)



STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY

TESC PLAN DETAILS

DRAWN: JMZ	PROJECT:
DESIGN: JMZ	SCALE:
DESIGN:	DATE: 2 / 22 / 2013
SHEET NO.	4 of 7







REMEDICATION PLAN NOTES:

1. CONDUCT LOCATES
2. ESTABLISH: TESC, WORK LIMITS & ACCESS
3. INSTALL BMPS TO CONTROL CONTAMINATED SOIL, INCLUDING LINING LOADING AREA ON CONCRETE
4. SITE SURVEY, PRE-CONSTRUCTION
5. EXCAVATE CONTAMINATED SOILS USING TRADITIONAL METHODS.
6. CONFIRMATION SAMPLING (5-DAY WINDOW)
7. CONDUCT PRE-BACKFILL SURVEY TO VERIFY DEPTHS
8. ENGINEER MAY DIRECT CONTRACTOR TO CONDUCT ADDITIONAL EXCAVATION.
9. CONDUCT SECOND PRE-BACKFILL SURVEY IF ADDITIONAL SOILS REMOVED

RESTORATION PLAN NOTES:

1. RESTORATION NOT TO START UNTIL ENGINEER APPROVES OF REMEDIATION.
2. INSTALL REPLACEMENT GRANULAR FILL
3. INSTALL REPLACEMENT TOPSOIL
4. POST BACKFILL SURVEY
5. HYDROSEED
6. CLEAN UP SITE
7. MAINTAIN TESC UNTIL SITE STABILIZED
8. REMOVE TESC AFTER SITE STABILIZED

LEGEND:

-  EX. CONCRETE / REPLACE CONCRETE IN REMEDIAL AREA 2
-  LAWN REMEDIATION EXTENTS
-  LAWN AREAS NO WORK
-  EXISTING STRUCTURE

REMEDIAL EXCAVATION QUANTITIES

REMEDIAL AREA	APPROX. AREA (SF)	APPROX. DEPTH (IN)	EX. INPLACE VOLUME, (CY)
ONE	900	24^	70
TWO	1,300	18^	75

KEY: ^ = INITIAL EXCAVATION DEPTH
ADDITIONAL EXCAVATION DEPENDANT ON CONFIRMATION SAMPLE RESULTS

RESTORATION TREATMENTS & QUANTITIES

AREA	RESTORATION TYPE (SEE DETAILS)	APPROX. AREA, (SF)
EX. LAWN	HYDROSEED/TOP SOIL/GRAVEL BORROW	1,900
CONCRETE SIDE-WALK	CONCRETE	300

0 10 20 40
HORIZONTAL SCALE: 1-IN = 20-FT

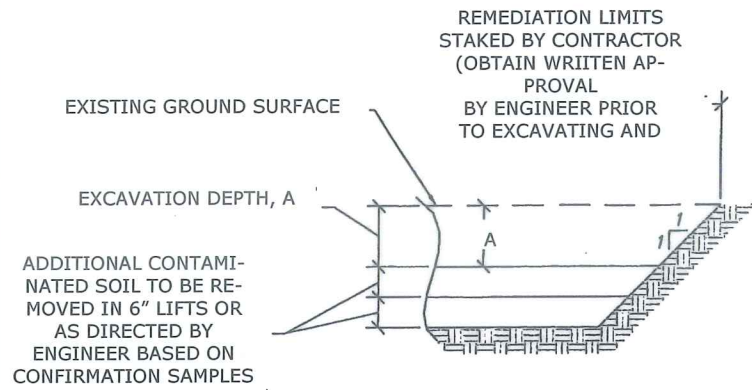
DRAWING SET
4/10/2013



BAR IS ONE INCH ON ORIGINAL DRAWING (11-IN X 17-IN)
0 1
VERIFY SCALE

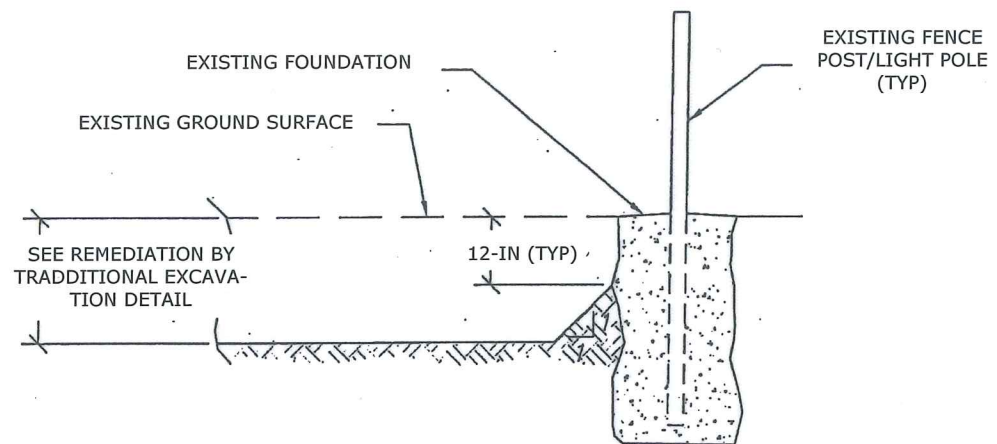
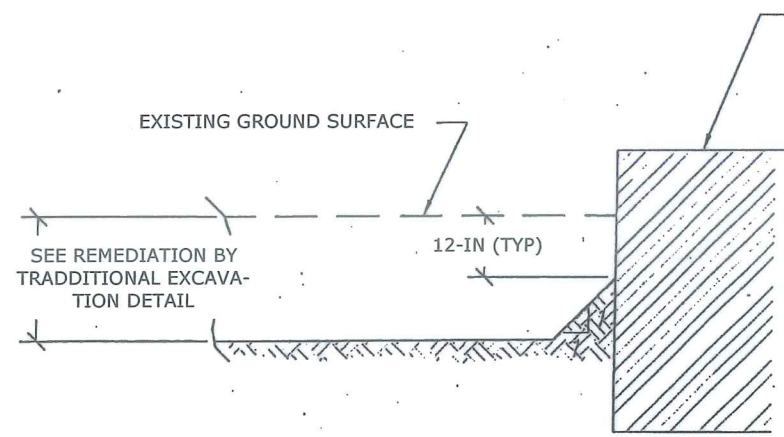
STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY
REMEDIAL / RESTORATION PLAN

DRAWN: JMZ PROJECT:
DESIGN: JMZ SCALE:
DESIGN: DATE: 2 / 22 / 2013
SHEET NO. **5 of 7**



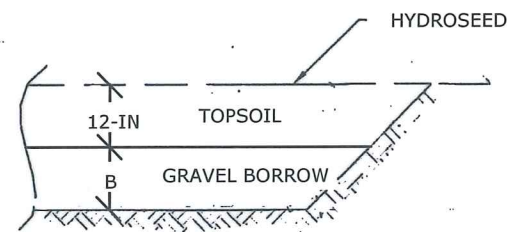
- NOTES:
1. REMEDIAL AREA 1. A = 24-INCHES
 2. REMEDIAL AREA 2. A = 18-INCHES
 3. DISPOSE OF CONTAMINATED SOIL PER SPECIFICATIONS.

**REMEDICATION BY TRADITIONAL EXCAVATION
TYPICAL SECTION
NOT TO SCALE**



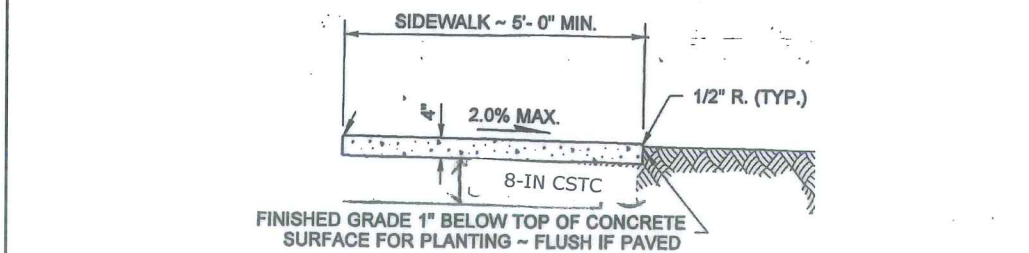
- NOTES:
1. POT HOLE BY SHOVEL ADJACENT TO FENCE POST TO VERIFY DEPTH OF EXISTING CONCRETE FOUNDATION.
 2. SUPPORT FENCE POSTS WITH BOARDS TO KEEP PLUMP.

**REMEDICATION EXCAVATION ADJACENT TO
STRUCTURES
TYPICAL SECTION
NOT TO SCALE**

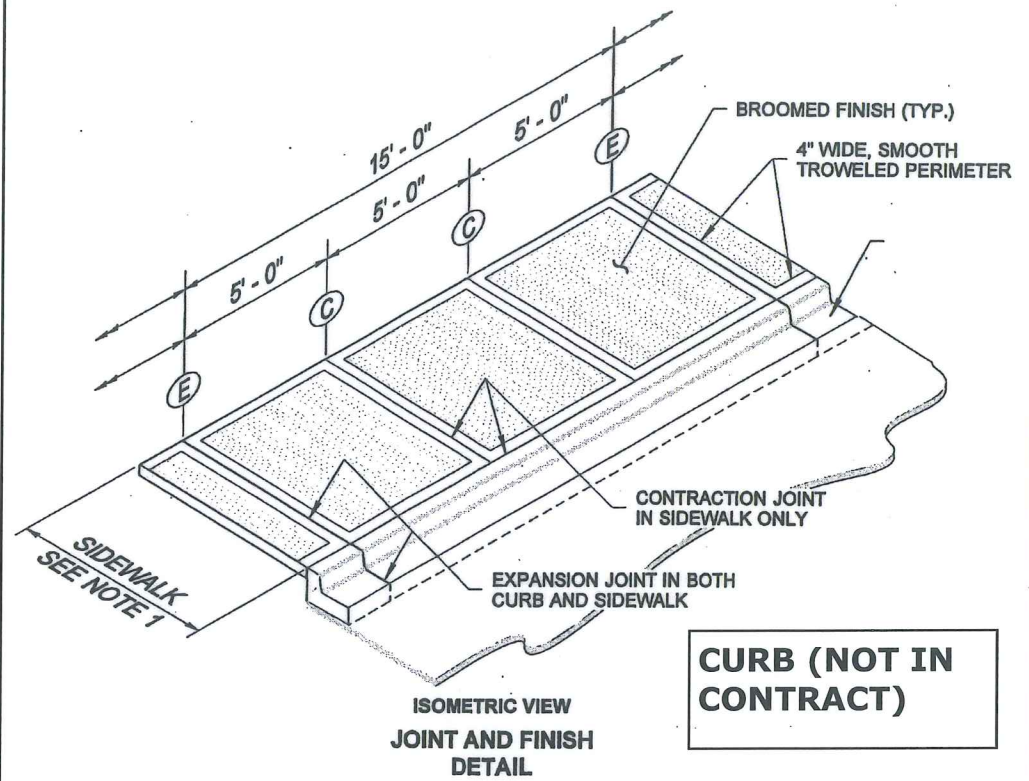


- NOTES:
1. REMEDIAL AREA 1. B = 12-IN, PLUS ANY ADDITIONAL EXCAVATION IN ACCORDANCE WITH ENGINEER'S DIRECTION BASED ON POST EXCAVATION CONFIRMATION SAMPLE RESULTS
 2. REMEDIAL AREA 1. B = 12-IN, PLUS ANY ADDITIONAL EXCAVATION IN ACCORDANCE WITH ENGINEER'S DIRECTION BASED ON POST EXCAVATION CONFIRMATION SAMPLE RESULTS.
 3. BEDDING: BED ALL EXPOSED UTILITIES WITH MINIMUM 6-INCH OF BEDDING SAND.

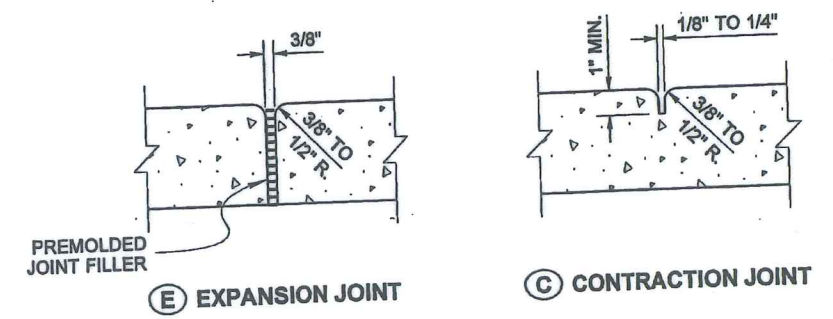
**GENERAL BACKFILL AND RESTORATION
TYPICAL SECTION
NOT TO SCALE**



- NOTES:
1. GRAVEL BORROW BELOW CSTC

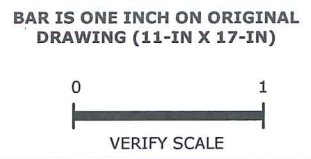


- NOTES:
2. EXPAND SIDEWALK TO INCLUDE SMALL CONCRETE PAD ON EAST SIDE OF SIDEWALK, APPROX. 8-FT BY 8-FT.



**CEMENT CONCRETE SIDEWALK
NOT TO SCALE**

DRAWING SET
4/10/2013

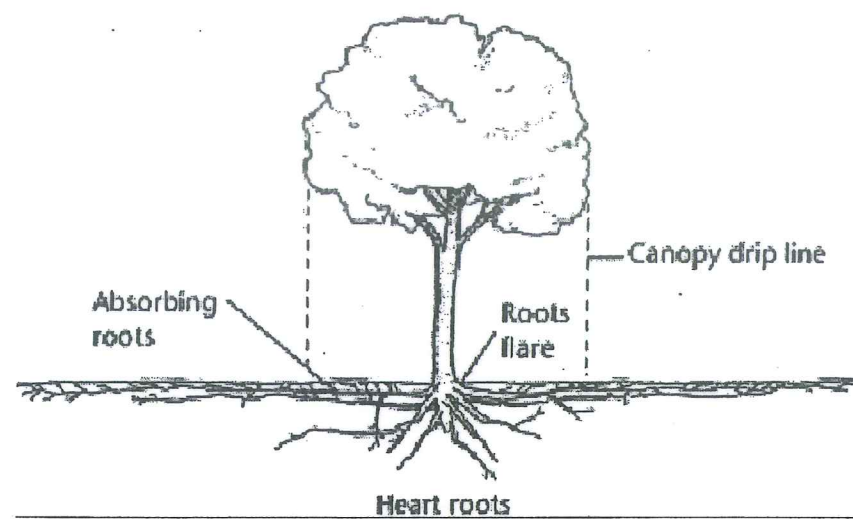


STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY

DETAILS—REMEDIAL / RESTORATION

DRAWN: JMZ	PROJECT:
DESIGN: JMZ	SCALE:
DESIGN:	DATE: 2 / 22 / 2013
SHEET NO.	6 of 7

1.

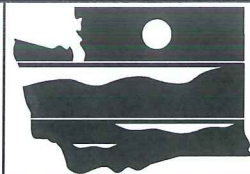


NOTES:

1. HAND DIG AROUND ALL ROOTS.
2. EXERCISE EXTREME CARE WITHIN CANOPY DRIP LINE
3. SOIL TO BE REMOVED BELOW ABSORBING ROOTS, PER REMEDIAL AREA EXCAVATION DEPTH.
4. HEART ROOTS NOT TO BE UNDERMINED BY SOIL REMOVAL.
5. PLACE WET MULCH AS NECESSARY TO PROTECT EXPOSED ROOTS

**TYPICAL TREE PROTECTION DETAIL
NOT TO SCALE**

DRAWING SET
4/10/2013



DEPARTMENT OF
ECOLOGY
State of Washington



BAR IS ONE INCH ON ORIGINAL
DRAWING (11-IN X 17-IN)



STATE TOXICS CLEANUP ACCOUNT
PHILLIPS RESIDENCE CLEANUP - 2013 MAY

DETAILS—TREE ROOT PROTECTION

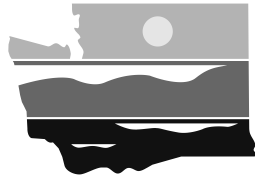
DRAWN: JMZ	PROJECT:
DESIGN: JMZ	SCALE:
DESIGN:	DATE: 2 / 22 / 2013
SHEET NO.	

7 of 7

**DRAFT – CLEANUP ACTION PLAN
PHILLIPS RESIDENTIAL PROPERTY
6719 S. D STREET, TACOMA, WA**

APPENDIX F

Public Participation Plan



DEPARTMENT OF
ECOLOGY
State of Washington

PUBLIC PARTICIPATION PLAN

Phillips Residential Property Tacoma, Washington

Prepared by
Washington State Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
PO Box 47775
Olympia, Washington 98504-7775

April 2013

INTRODUCTION

Public participation plans promote meaningful involvement during cleanups. This plan describes the tools Ecology will use to inform the public about the Phillips Residential Property cleanup and gather input. Ecology is managing and funding the cleanup because the homeowner has not yet taken action. The homeowner must pay back the state funding once the cleanup is done.

LOCATION AND SITE BACKGROUND

The site is located at 6719 South D Street in the South End of Tacoma (map on page 4). It is a home in a residential neighborhood, contaminated with lead. For 23 years, the homeowner melted scrap lead to make fishing weights. Fumes from this process spread lead across the property.

Lead is a toxic metal that poses a risk to anyone living in the home or using the yard. In children, lead can delay development and learning. It can also lead to anemia, high blood pressure, and other health issues in adults. In 2008, Tacoma-Pierce County Health Department closed the home because of the health risk from the lead. Ecology and the health department sampled soils at the site and in neighboring yards. The results showed the yard needed cleanup.

PUBLIC PARTICIPATION ACTIVITIES AND RESPONSIBILITIES

The purpose of this Public Participation Plan is to promote public understanding and participation in the cleanup. This section describes what tools and activities Ecology will use to share information and take public comments.

Formal Public Comment Periods

Ecology gets feedback from the public on proposed cleanup decisions during 30-day comment periods. The Model Toxics Control Act (state cleanup law) requires comment periods at key points during the cleanup, before final decisions are made. The public can comment in writing.

Ecology reviews all comments and may respond in a document called a Responsiveness Summary. Ecology considers the need for changes to a document or decision based on input from the public. If there are major changes, Ecology may hold a second comment period. If there are no major changes, Ecology will finalize the draft document(s).

Site information and comment period documents will be available on Ecology's website at: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2107>

Public Meetings and Hearings

Ecology may hold public meetings at key points during the cleanup. Ecology will also hold a public meeting if ten or more people request one. These meetings will be at places and times convenient to the public.

Information Repositories

These are places where the public can review site information, including public comment period documents. Ecology has two repositories for this site:

- Tacoma Public Library, Moore Branch, 215 South 56th St., Tacoma 98408. (253) 341-4848.
- Washington State Department of Ecology, 300 Desmond Drive, Lacey 98516. Please call (360) 407-6045 for an appointment.

See also Ecology's website: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=3801>

Site Register

Ecology's Toxics Cleanup Program uses its bimonthly Site Register to announce public meetings and comment periods, and many other activities. To receive the Site Register by e-mail, contact Seth Preston at (360) 407-6848 or Seth.Preston@ecy.wa.gov. It is also on Ecology's website: http://www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html.

Mailing List

Ecology's mailing list for this site includes neighboring landowners and businesses, public agencies, and other known interested parties. Ecology's Southwest Regional Office maintains the list and will update it as needed. Please contact Hannah Aoyagi at (360) 407-6790 or Hannah.Aoyagi@ecy.wa.gov if you would like to have your address added to or deleted from this mailing list.

Fact Sheets

Ecology will mail fact sheets to people and groups interested in this cleanup. Fact sheets will announce comment periods and public events. Ecology also may mail fact sheets with updates on cleanup progress.

Newspaper Display Ads

Ecology will place ads in the Tacoma News Tribune to announce public comment periods and public events for the site.

Contacts

John Zinza
WA Department of Ecology
PO Box 47775
Olympia, WA 98504-7775
Tel: (360) 407-6249
Email: John.Zinza@ecy.wa.gov

Hannah Aoyagi
WA Department of Ecology
Tel: (360) 407-6790
Email: Hannah.Aoyagi@ecy.wa.gov

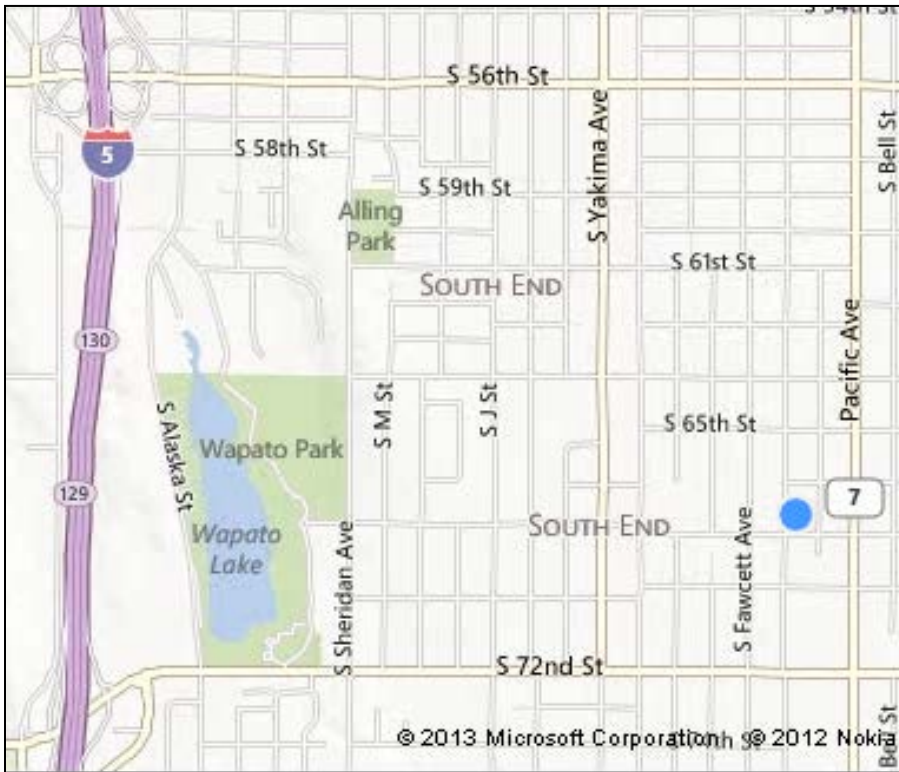


Figure 1. Map of the Phillips Residential Property cleanup site at 6719 South D Street, Tacoma

GLOSSARY

Cleanup: Actions that deal with a release, or threatened release of hazardous substances that could affect public health or the environment. Ecology often uses the term "cleanup" broadly to describe response actions or phases of cleanup.

Contaminant: Any hazardous substance that does not occur naturally or occurs at greater than natural background levels

Model Toxics Control Act (MTCA): A law passed by Washington voter initiative in 1988. Its purpose is to find, investigate, and clean up places where hazardous substances have been released. It defines Ecology's role and encourages public involvement in cleanup decisions.

Risk: The probability that a hazardous substance, when released into the environment, will cause an adverse effect in the exposed humans or living organisms.

Site: Any area where a hazardous substance, other than a consumer product in consumer use, has come to be located.