



Electronic Copy

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

October 4, 2010

Ms. Netta E. Groat  
Groat Brothers Inc.  
P.O. Box 1630  
Woodland, WA 98674

**Re: Partial Sufficiency and Further Action at the following Site:**

- **Site Name:** Groat Brothers Inc.
- **Site Address:** 618 and 608 West Scott Avenue, Woodland
- **Facility/Site No.:** 36354352
- **VCP Project No.:** SW0519

Dear Ms. Groat:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Groat Brothers Inc. facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

**Issue Presented and Opinion**

---

1. Does your cleanup meet some cleanup standards at the Site?

**YES. Ecology has determined that your cleanup meets the following cleanup standards at the Site:**

- **Petroleum hydrocarbons and associated constituents in Soil.**
- **Metals including cadmium, chromium, and lead in Soil.**
- **Metals including cadmium, chromium, and lead in Ground Water.**

**This opinion is dependent on the continued performance and effectiveness of the post-cleanup controls and monitoring specified below.**

2. Is further remedial action still necessary to meet other cleanup standards at the Site?

**YES. Further remedial action is still necessary to meet the following cleanup standards at the Site:**

- **Petroleum hydrocarbons and associated constituents in Ground Water.**



This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

### **Description of the Site**

---

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- **Petroleum hydrocarbons and associated constituents in Soil.**
- **Metals including cadmium, chromium, and lead in Soil.**
- **Metals including cadmium, chromium, and lead in Ground Water.**
- **Petroleum hydrocarbons and associated constituents into the Ground Water.**

**Enclosure A** includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

### **Basis for the Opinion**

---

This opinion is based on the information contained in the following documents:

1. KHM Environmental Management, Inc., **Phase II Limited Investigation Report, Former Gasoline Station Site, 608 West Scott Ave., Woodland, WA**, September 23, 2002.
2. Maul Foster & Alongi, Inc., **Characterization of Soil and Groundwater from an Underground Injection Well; Former Service Station, 608 West Scott Avenue, Woodland, Washington**, March 26, 2003.
3. Maul Foster & Alongi, Inc., **Final Remedial Investigation Report, Groat Brothers, Inc., 618 West Scott Avenue, Woodland, Washington**, March 27, 2003.
4. Stoel Rives, LLP, "Letter – Re: Groat Brother Site", July 22, 2003.
5. State of Washington, Department of Ecology, **Interim No Further Action Letter Re: The Site at 608-618 West Scott Avenue, Woodland, Washington**, September 4, 2003.

6. Maul Foster & Alongi, Inc., **Underground Injection Control Well and Underground Storage Tank Decommissioning Report, Former Service Station, 608 West Scott Avenue, Woodland, Washington**, November 7, 2003.
7. Maul Foster & Alongi, Inc., **Groundwater Monitoring Remedial Investigation Final Report, Groat Brothers, Inc., Woodland, Washington**, November 9, 2004.
8. State of Washington, Department of Ecology, "Letter – Re: 608-618 West Scott Avenue, Woodland, WA Site- Request to Issue a NFA Letter for Groundwater", December 5, 2004.
9. Maul Foster & Alongi, Inc., **Supplemental Investigation of Groundwater at Former Underground Injection Control Well, 608 West Scott Avenue, Woodland, Washington**, April 6, 2005.
10. State of Washington, Department of Ecology, **Partial Sufficiency and Further Action Determination under WAC 173-340-515(5) for the following Hazardous Waste Site: Groat Brothers, Inc., 608-618 W. Scott Avenue, Woodland, WA, Facility/Site No. 36354352, VCP No.: SW0411**, May 18, 2006.
11. Maul Foster & Alongi, Inc., **Groundwater and Soil Characterization at Groat Brothers, Inc. Former Service Station, 608 West Scott Avenue, Woodland, Washington 98674, Voluntary Cleanup Program Number SW0519**, June 14, 2007.
12. State of Washington, Department of Ecology, **Partial Sufficiency and Further Action Determination under WAC 173-340-515(5) for the following Hazardous Waste Site: Groat Brothers/Former Service Station, 608 West Scott Avenue, Woodland, WA 98674, Facility/Site No.: 5365021, VCP No.: SW0519**, September 7, 2007.
13. Maul Foster & Alongi, Inc., **Feasibility Study Report, Former Service Station Property, Woodland, Washington**, July 2, 2009.
14. Maul Foster & Alongi, Inc., **Groundwater Monitoring, July 2010, Groat Brothers, Inc., Woodland, Washington**, September 29, 2010.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

## **Analysis of the Cleanup**

---

This opinion is based on the following analysis:

### **1. Characterization of the Site.**

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

*A number of investigations have been conducted at 618 and 608 West Scott Avenue. Both of these addresses are located on Cowlitz County Tax Parcel #50603. Ecology has defined the Site as the combined 618/608 addresses. Previously, both addresses had been considered separate sites. In 1978, Lowell and Netta Groat, Donald Groat, and Elvira Groat purchased the Site. On January 2, 1998, Donald L. Groat and Elvira J. Groat converted their ½ of the property to the Groat Living Trust. On March 31, 2004, Donald L. Groat, as Trustee of the Groat Living Trust, deeded the Trust's portion of the parcel to Woodridge LLC. Woodridge LLC would appear to be a Limited Liability Company operated by Lloyd and Netta Groat who lease the Service Station (608 West Scott Avenue) to Groat Brothers, Inc. (GBI).*

*The Final Remedial Investigation Report, dated March 26, 2003, documents the characterization of the 618 West Scott Avenue portion of the Site and evaluates the potential impacts to shallow soil and ground water. As a result of the investigation and remediation of that portion of the Site, Ecology issued a Partial Sufficiency and Further Action Determination, dated May 18, 2006. Petroleum hydrocarbons, volatile organic compounds (VOCs), and metals in the soil were considered to have been addressed by the various actions. However, the independent remedial actions were not sufficient to meet the substantive requirements of MTCA for petroleum hydrocarbons, VOCs, and metals in ground water at the Service Station. Subsequently, Ecology issued a Partial Sufficiency and Further Action Determination, dated September 17, 2007. VOCs were considered to meet the substantive requirements of MTCA in ground water at the Site. However, petroleum hydrocarbons as diesel range organics (DRO) were still present in the ground water at the Service Station, specifically at the location of borehole GP-79.*

*Site investigations determined that there were three areas of concern that included: 1) an underground injection control (UIC) dry well located on the northern Service Station boundary; 2) an underground storage tank (UST); and, 3) the resulting impact beneath the Service Station building.*

*In 2003, GBI decommissioned the UIC well on the Site. The UIC well was connected to a former double-chambered sump located within the bay of the former service station by a*

4-inch cast iron drain line. The double-chambered sump was apparently used to collect spent oil during automotive repair, and acted as a collection point for wash-water (Figure 3). The UIC well was composed of a 10-inch diameter cement pipe that extended approximately 5 feet below ground surface (ft bgs). The bottom of the pipe was open to allow for drainage into the silty sandy soil. Prior to decommissioning, Maul Foster & Alongi, Inc. (MFA) collected soil and ground-water samples within the UIC well, on February 10, 2003, and adjacent the UIC well, on May 13, 2003. The original UIC well soil samples had indicated residual concentrations of VOCs, total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), DRO, heavy oil range organics (ORO), and cadmium at 5.5 ft bgs above MTCA Method A cleanup levels (CULs). GRO, DRO, ORO, benzene, tetrachloroethylene (PCE), total cadmium, total chromium, and total lead were detected above MTCA Method A CULs at 6 ft bgs in the ground water within the UIC well. The May 2003 borehole results indicated that only DRO ground-water impacts were evident approximately 30 ft to the south and 10 ft to the north of the UIC well. However, because VOCs were present in the soil and ground water within the UIC well, Ecology requested that additional soil and ground-water samples be collected within the UIC well to determine the vertical extent of VOC contamination. On October 13, 2004, ground-water samples were collected to 24 ft bgs. No VOC concentrations were detected above CULs below the original depth (5.5 ft bgs, soil and 6 ft bgs, ground water) detected on February 10, 2003. In addition, because of Ecology concerns, boreholes GP-85 through GP-87 were drilled in January 2007. Borehole GP-85 was drilled to 50 ft bgs and sampled for ground water to 45 ft bgs. Boreholes GP-86 and GP-87 were constructed to the east of boring GP-79 to determine the residual chemical concentrations outside of that borehole. Ecology subsequently provided a Partial Sufficiency & Further Action letter for the VOCs in the ground water.

During the decommissioning, approximately 72 tons of soil was removed from the UIC well area to a depth of approximately 10 ft bgs. Confirmation soil and water samples collected in the excavation indicated that residual contamination had been removed. Reconnaissance ground-water samples were also collected below the depth of the excavation in 2004 and 2007 as requested by Ecology. Samples collected after the removal action did not detect any contaminants above MTCA Method A CULs. The reconnaissance samples indicated that impacts related to the former UIC well were not present at depth, and the removal action had removed the impacts to the environment, except in the area of borehole GP-79.

In 2003, GBI had a 1,000-gallon UST properly decommissioned on the Site. The UST was used for storage of used oil related to the former service station. Confirmation soil samples did not detect chemicals above MTCA CULs. Three other USTs used to store fuel, which were located near the former pump islands, were properly decommissioned in

1990. Sampling was conducted in 2002 by KHM Environmental Management, Inc. that confirmed the former USTs had not impacted the environment.

The characterization effort has determined that only DRO ground-water impacts still persist approximately 30 ft to the south and 10 ft to the north of the UIC well. This is approximately beneath the extent of the present former service station building. More recently, Site ground-water monitoring has indicated that ORO constituents above the MTCA CUL are present in ground water at the edge of the parcel. This is in the area adjacent to the drainage swale where Method B CULs were established for localized soil concentrations that exceeded Method A CULs. Ecology's Method B worksheets were used to calculate the MTCA Method B soil cleanup levels for unrestricted land use. The Extractable Petroleum Hydrocarbon (EPH) analytical results from samples collected in the swale area were incorporated into the spreadsheets. A soil CUL of 7,762 milligrams per kilogram (mg/kg) was calculated for direct contact for ORO from these samples. The Ecology four-phase model does not predict significant ground-water impacts at any concentration for the ORO composition. Thus the residual soil concentrations in the swale area were not expected to adversely impact ground water through the leaching pathway. This was confirmed from ground-water monitoring data collected from monitoring wells near the drainage swale (monitoring wells MW-4, MW-5, MW-6, and MW-7), until the most recent sampling events. Table 2 summarizes the latest ground-water results. Monitoring wells MW-4, MW-5, and MW-7 show ORO or DRO ground-water concentrations that range from 563 micrograms per liter (ug/l) to 640 ug/l.

## 2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

Historically, benzene, cadmium, chromium, DROs, GROs, lead, OROs, VOCs, and toluene have been detected on the Site above MTCA CULs in the ground water. However, after interim actions were performed, in particular the UIC well decommissioning, the only contaminant remaining on the Site that exceeds a MTCA CUL is DROs in ground water at boring GP-79 and OROs at the edge of the parcel. DRO is present in GP-79 at a concentration of 3,000 ug/l. DRO is considered the contaminant of concern and the contaminant that will need to be addressed by any additional remedial actions. This is based on the interim action confirmatory sampling, and borehole samples collected prior to and following interim remedial actions. The ground-water MTCA Method A CUL for DRO and ORO TPH is 500 ug/l, for each constituent. The standard point of compliance for ground water is defined to be throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be affected by the Site. In addition, OROs in ground water at the edge

*of the parcel and the point of compliance for ground water for the Site will need to be below the CUL for ORO before a No Further Action (NFA) can be issued for the Site. Monitoring wells MW-4, MW-5, MW-6, and MW-7 should be adequate as points of compliance until monitoring indicates that the drainage swale area needs to be characterized to determine the extent of contamination in this area.*

### **3. Selection of cleanup action.**

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

*Previously, soils had been removed adjacent to the above ground storage tanks (ASTs) and the underground storage tank (UST) and treated on Site. In addition, the area adjacent to the UIC well was excavated as described above and below in the next section.*

*The selected cleanup action from the feasibility study for the Service Station is alternative 1, which includes the following:*

- *The interim measures already completed.*
- *Institutional controls, including a) a Site Management Plan, in case the area is excavated in the future, with the intent to ensure worker protection from DRO contamination in ground water or soil (soil within the restricted area is assumed to contain hazardous materials above acceptable risk levels unless sampling demonstrates otherwise), b) the existing restrictive covenant that limits the use of ground water as potable water beneath the Site.*
- *Natural Attenuation.*

### **4. Cleanup.**

Ecology has determined the cleanup you performed meets the following cleanup standards:

- Petroleum hydrocarbons and associated constituents in Soil.
- Metals including cadmium, chromium, and lead in Soil.
- Metals including cadmium, chromium, and lead in Ground Water.

However, Ecology has determined the cleanup you performed does not meet the following cleanup standards:

- Petroleum hydrocarbons and associated constituents in Ground Water.

*Impacted soil in the former AST area was excavated between August 14, 2002, and August 19, 2002. Confirmation samples were collected to determine that the impacted material had been adequately removed. Results of soil excavation, removal, and assessment were reported to Ecology in an October 11, 2002 letter. The excavated materials were placed in a soil containment and treatment cell. The cell was constructed by grading a 110 ft by 300 ft area, placing a 12-millimeter reinforced polyethylene (RPE) liner over the area, covering the liner with a 1.5 ft lift of bark dust, and then placing the excavated soil on this material. All of this was covered with a 12-millimeter RPE liner. Stockpiled soil was sampled on October 2, 2002 to evaluate initial soil concentrations. The cell was gridded off into grid cells containing approximately 515 cubic yards of material. A random-number generator determined discrete sample locations. A second round of sampling was conducted on November 19, 2002, to confirm TPH soil concentrations in the containment and treatment cell. Soil samples were analyzed for DROs and OROs using the NW-TPH-Dx method and for GROs using the NW-TPH-Gx method. Analytical results for the residual concentrations and for the final stockpile sampling event indicated that the soil was below MTCA Method A CULs.*

*In 2003, GBI decommissioned the UIC well on the Site. During the decommissioning, approximately 72 tons of soil was removed from the UIC well area to a depth of approximately 10 ft bgs. The excavated soil was sent to TPS Technologies, Inc., Portland, Oregon. Water in the excavation was purged, and a water sample was collected following purging. The analytical results of the excavation water, as well as ground water samples collected and analyzed from borings, indicated contaminated ground water had been removed. A restrictive covenant had been placed on the Site in August 2003. The restrictive covenant restricts the use of ground water at the Site. The restrictive covenant is attached as Enclosure B.*

***Before an NFA can be issued, the following activities will need to be conducted:***

- 1. Quarterly sampling will need to be conducted to demonstrate that all constituents of concern are below MTCA CULs in all wells that monitor ground water at the Site. Four consecutive quarters below MTCA ground-water CULs will be necessary to demonstrate compliance. In addition, because concentrations in the drainage swale exceed MTCA ground-water regulatory CULs, it is recommended that a quarterly sampling plan be generated to be attached to the restrictive covenant. Unless concentrations decrease to below regulatory levels, additional monitoring wells may need to be constructed to determine the extent of this contamination adjacent the swale area.***



2. ***Before an NFA Letter can be submitted, all sampling data shall be submitted to Ecology according to the requirements of WAC 173-340-840(5), in printed form and in electronic form capable of being transferred into the Department's data management system. Electronic data submittal requirements are provided at <http://www.ecy.wa.gov/eim/>.***

### **Post-Cleanup Controls and Monitoring**

---

Post-cleanup controls and monitoring are remedial actions performed after the cleanup to maintain compliance with cleanup standards. This opinion is dependent on the continued performance and effectiveness of the following:

1. **Compliance with institutional controls.**

Institutional controls prohibit or limit activities that may interfere with the integrity of engineered controls or result in exposure to hazardous substances. The following institutional controls are necessary at the Site:

- Limitations on use of ground water on the Site.
- Limitations on any activities that may result in a release of or exposure to hazardous substances.

To implement those controls a Restrictive Covenant was recorded August 18, 2003 on the following parcel of real property in Cowlitz County:

- 50603.

*The restrictive covenant that applies to the 618 West Scott Avenue facility also applies to the Groat Brothers Inc. 608 West Scott Avenue former service station Site. Ecology approved the recorded Covenant September 4, 2003. A copy of the Covenant is included in Enclosure B.*

2. **Performance of confirmational monitoring.**

Confirmational monitoring is necessary at the Site to confirm the long-term effectiveness of the cleanup. The monitoring data will be used by Ecology during periodic reviews of post-cleanup conditions. *Presently, monitoring is being conducted on an 18-month frequency. Because ground-water concentrations are present in monitoring wells MW-4, MW-5, and MW-7 that exceed MTCA ground-water CULs for DRO or ORO, quarterly*

*sampling may be necessary to determine actual conditions in the drainage swale area. Should it be determined that concentrations persist above CULs, additional monitoring wells may be necessary to determine the extent of contamination in this area.*

### **Periodic Review of Post-Cleanup Conditions**

---

Ecology will conduct periodic reviews of post-cleanup conditions at the Site to ensure that they remain protective of human health and the environment. As stated above, Ecology has determined that the cleanup you performed meets some cleanup standards. If Ecology determines, based on a periodic review, that further remedial action is necessary to achieve or maintain compliance with those standards, then Ecology will withdraw this opinion.

### **Listing of the Site**

---

Based on this opinion, Ecology will update the status of remedial action at the Site on our database of hazardous waste sites. However, because further remedial action is still required at the Site, we will not remove the Site from our lists of hazardous waste sites.

### **Limitations of the Opinion**

---

**1. Opinion does not settle liability with the state.**

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

**2. Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

Ms. Netta E. Groat  
October 4, 2010  
Page 11

**3. State is immune from liability.**

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

**Contact Information**

---

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). As your cleanup progresses, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion, please contact me by phone at (360) 407-6267 or e-mail at [CHCL461@ecy.wa.gov](mailto:CHCL461@ecy.wa.gov).

Sincerely,



Charles S. Cline  
SWRO Toxics Cleanup Program

CSC/ksc:Groat Brother 608 West Scott Avenue Property site partial sufficiency

Enclosures (3): A – Description and Diagrams of the Site  
B – Environmental Covenant for Institutional Controls

By certified mail: (7009 1410 0002 4420 1157)

cc: Mr. Alan R. Hughes, LG, Maul Foster & Alongi, Inc.  
Mr. Louis A. Ferreira, Stoel Rives LLP  
Mr. Paul Turner, Ecology  
Mr. Scott Rose, Ecology  
Ms. Dolores Mitchell, Ecology w/o enclosures

## **Enclosure A**

### **Description and Diagrams of the Site**

## Site Description

*In this opinion letter, the Site is defined as the combined 618/608 addresses, and the Service Station is defined as the former service station property location at 608 West Scott Avenue, Woodland, Washington. The Site is located along Interstate 5 in Woodland, Cowlitz County, Washington. Figure 1 shows the general location of the Site and Figures 2 and 2A show the Site. Figure 3 shows the relationship of the Service Station to the general Site. The Service Station was reportedly used as a gasoline retail station and automobile repair shop by Humble Oil and Refining Company from approximately 1966 until approximately 1990, when the underground storage tanks (USTs) were removed from the Site. In 2002, the Service Station was reportedly used as a consignment shop and for repair of used farm and lawn tractors and associated equipment. In 1978, Lowell and Netta Groat, Donald Groat, and Elvira Groat purchased the parcel that included the Service Station. Shortly thereafter, the Groats began leasing both the Service Station and the rest of the Site. Apparently, the Site is presently owned by Woodridge LLC. The Service Station is leased by Groat Brothers, Inc. (GBI).*

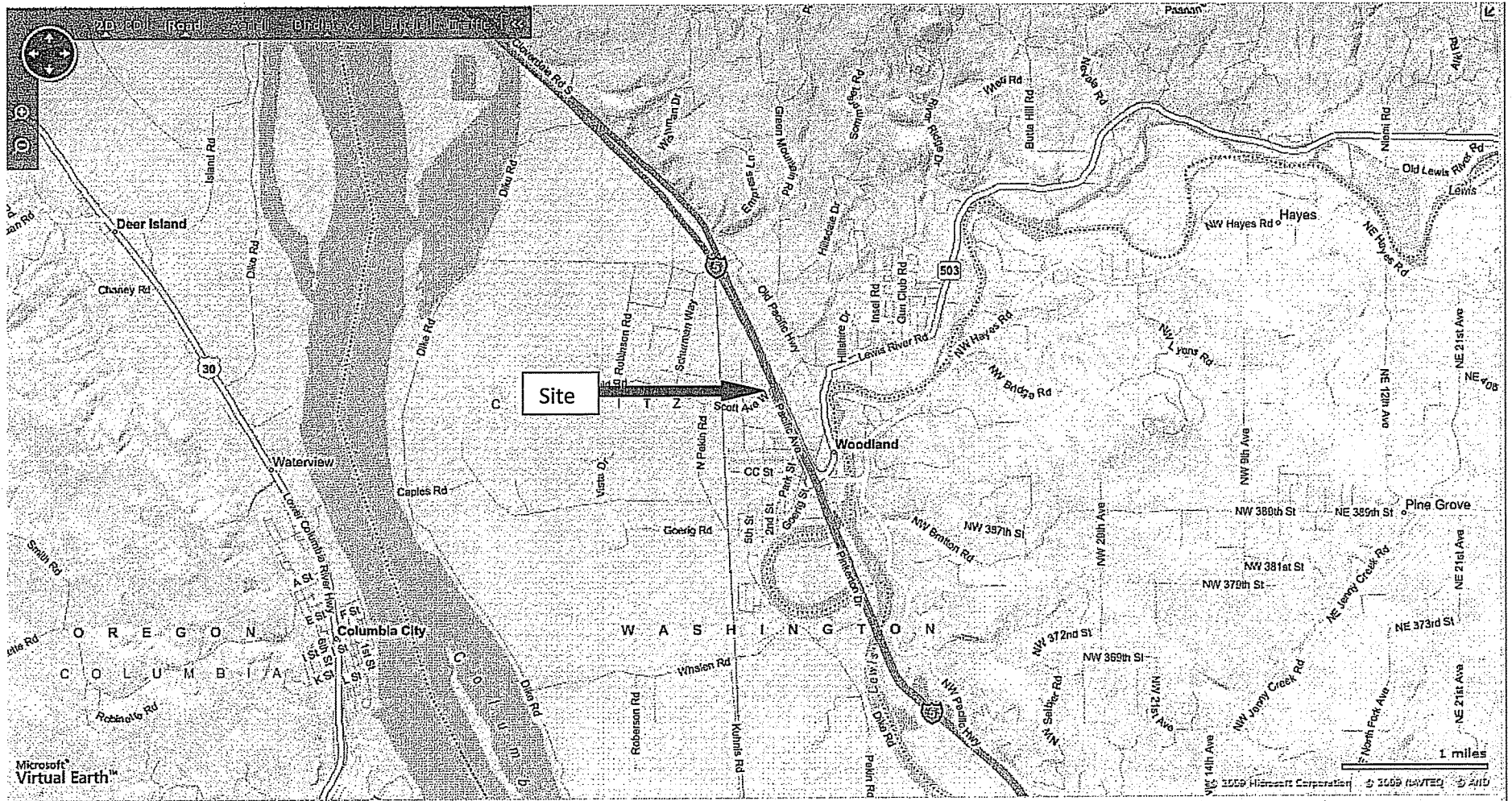
*The Site is located approximately 2,000 feet (ft) west of the north fork of the Lewis River. The topography of the Site is generally flat with a ground surface elevation of approximately 20 ft above mean sea level. Although the Lewis River is closer to the facility, drainage from the Site is routed to the Columbia River. The paved portion of the Site appears to drain to Scott Avenue and a nearby catch basin, which ultimately discharges to the Columbia River.*

*The Site generally is overlain by fill material, which is composed of asphalt and silty sand approximately 0.5 ft to 1.0 ft thick. Underlying the fill are fine-grained alluvial sediments composed of unconsolidated silts and sands. The soils are stratified and typically display gradational contacts between bedding sequences. A dry, dense confining layer was not observed beneath the Site. Slight variations in moisture content were observed. Ground-water measurements from on-Site monitoring wells indicate that the top of the water-bearing zone is typically encountered at a depth of 6 ft below ground surface (bgs). Water levels fluctuate seasonally with precipitation and have been observed as deep as 10 ft bgs. The ground-water flow direction on the Site appears to reverse from east to west during the seasonal low-water levels (fall and summer) to west to east during the seasonal high-water levels (spring and winter). The gradient throughout the year, independent of direction, is slight, averaging approximately 0.001 to 0.002 ft per ft. Figures 4 and 5 show the flow directions at various times of the year.*

## Site Diagrams

## **Enclosure B**

# **Environmental Covenant for Institutional Controls**



Groat Brothers, Inc. Site  
608 & 618 West Scott Avenue, Woodland





Figure 2 – Groat Brothers Site  
608-618 West Scott Avenue, Woodland

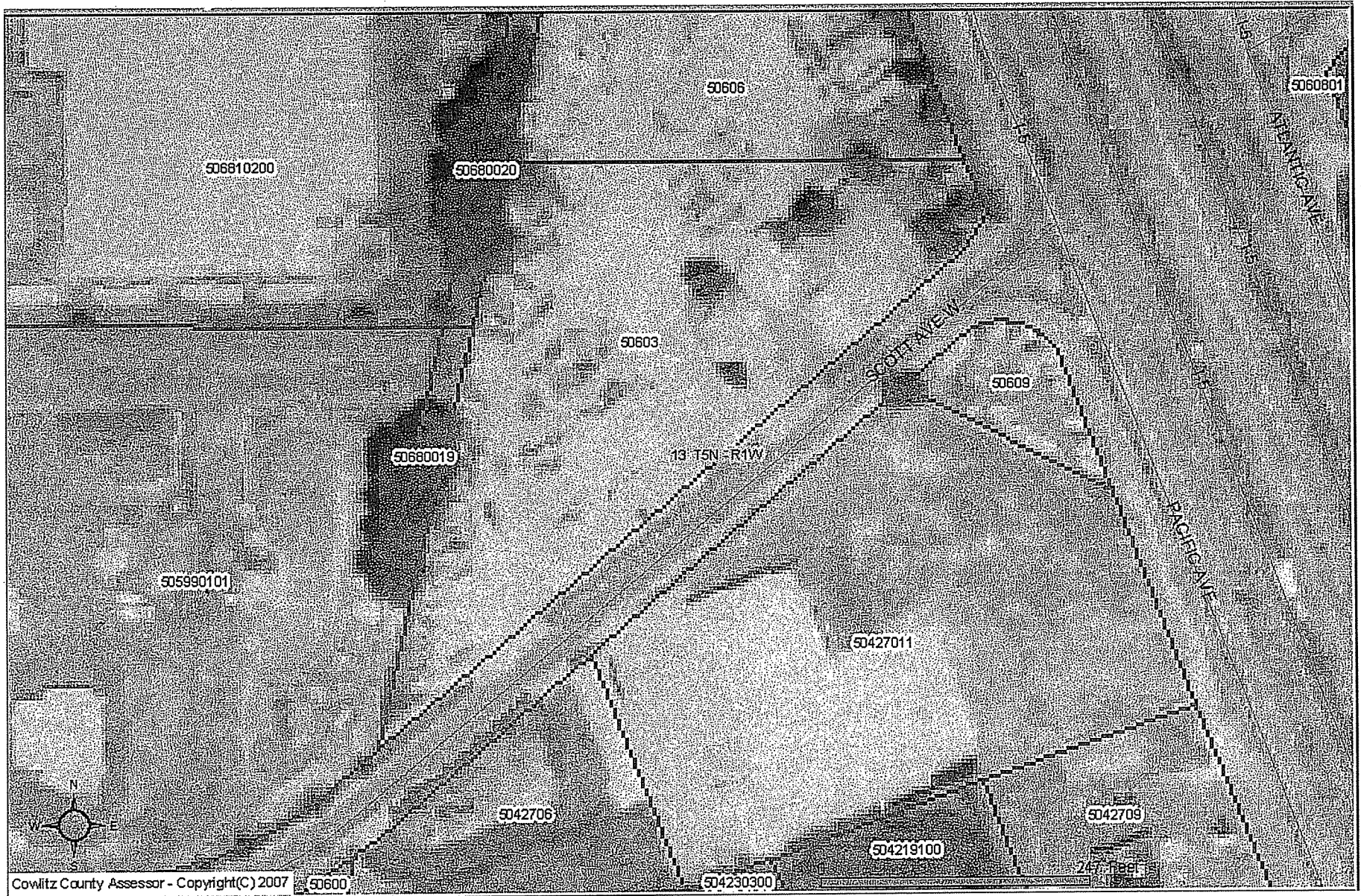
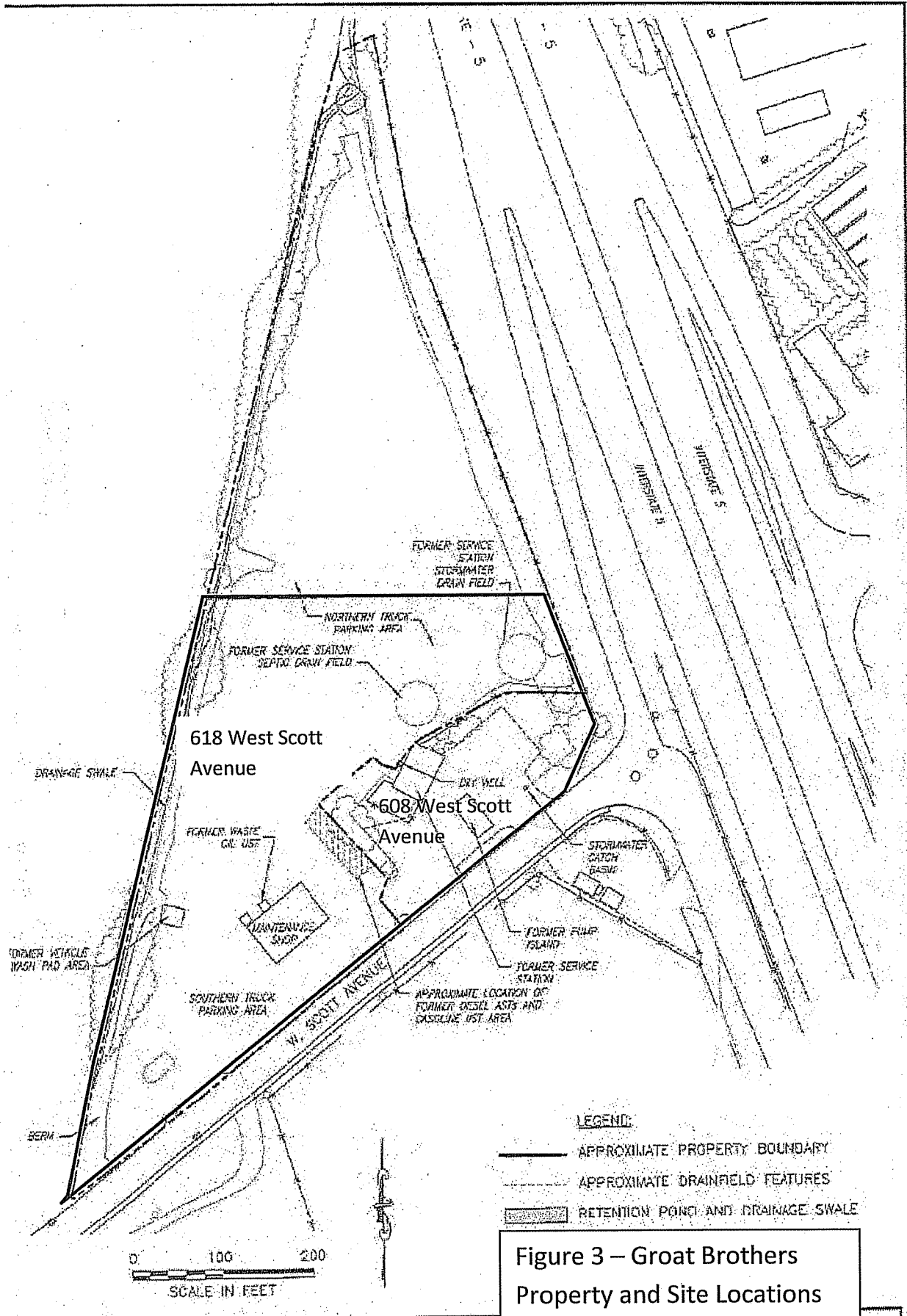


Figure 2A – Cowlitz County Assessor Map of Groat Brothers Property – Parcel #50603



**Figure 3 – Groat Brothers Property and Site Locations**



MAUL FOSTER ALONGI

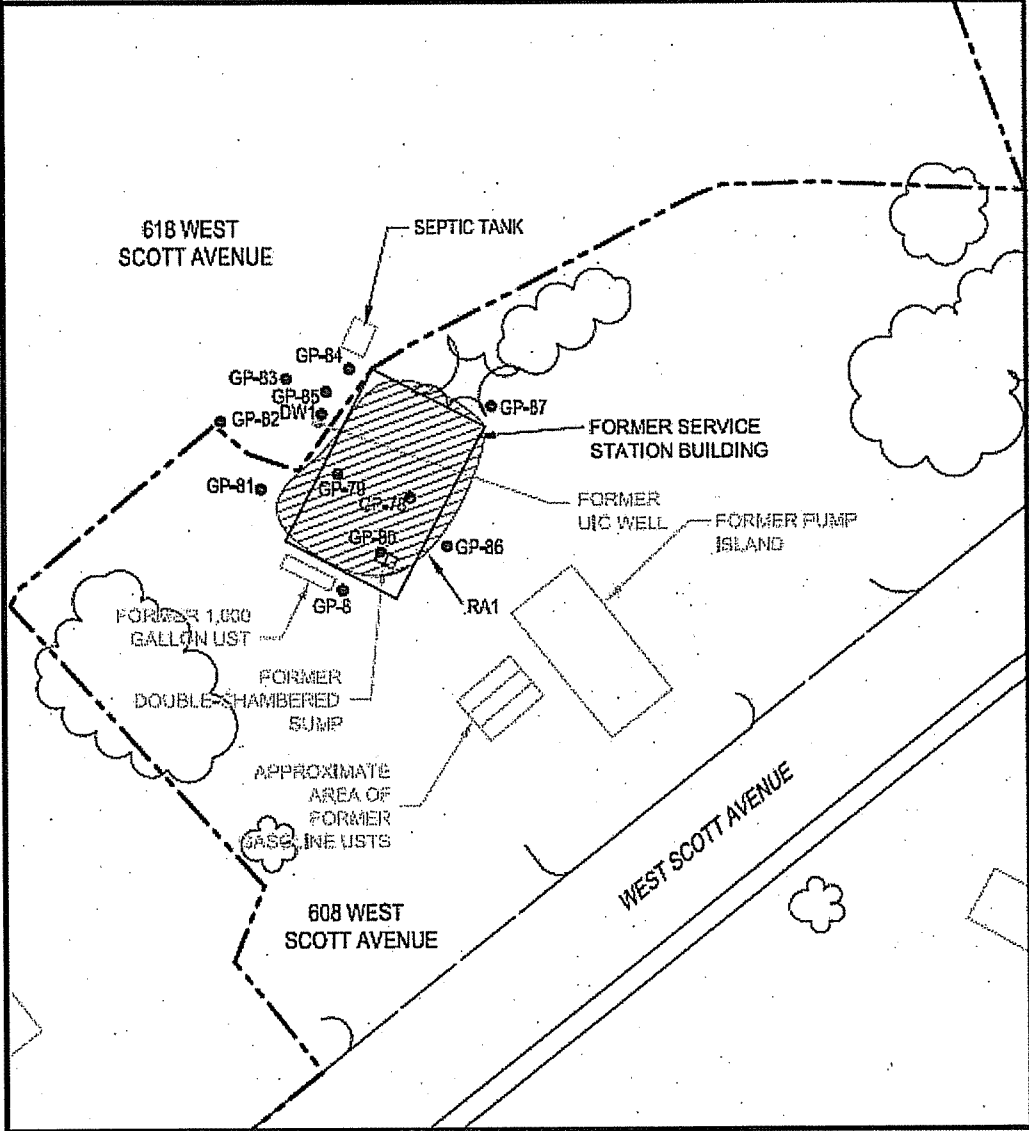
**Figure 4**  
**Sample Locations**

**LEGEND:**

- Property Line
- Former Underground Injection Control (UIC) Well
- Geoprobe Boring
- UST
- Approximate Remediation Area (RA1)

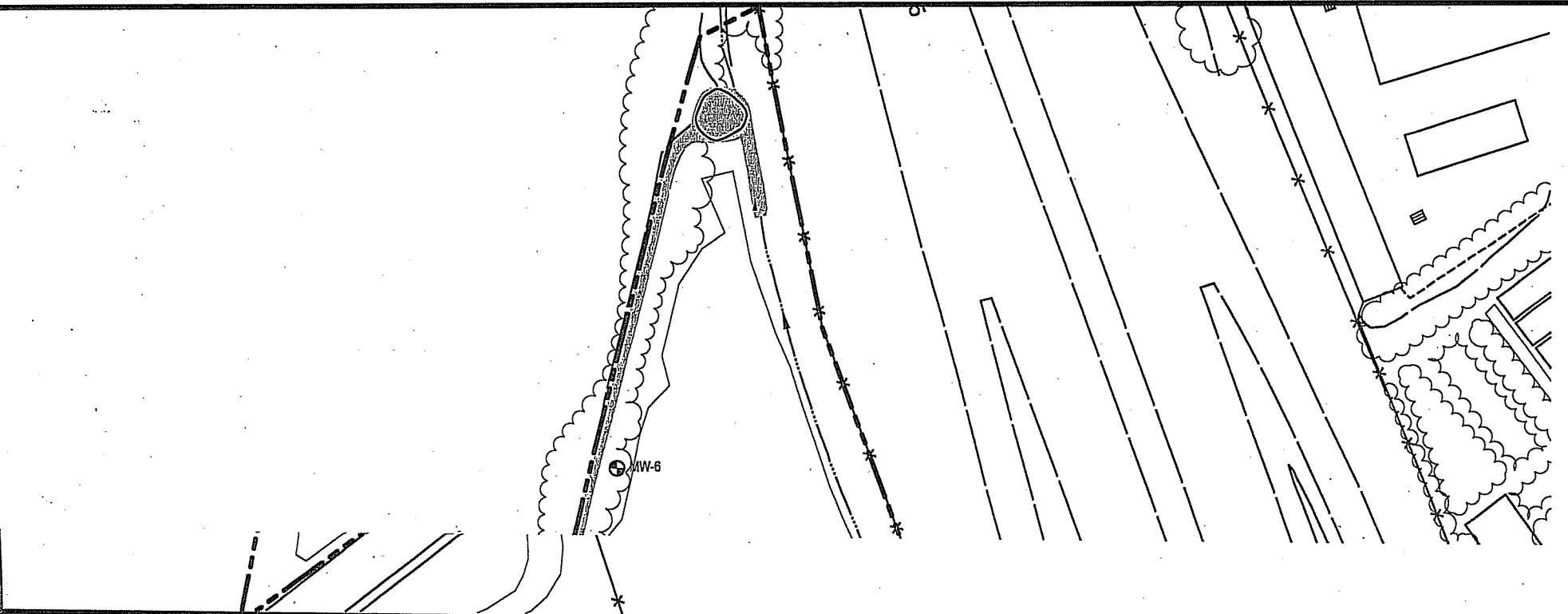
0 40 80  
FEET

**Groat Brothers, Inc.**  
**608 West Scott Avenue**  
**Woodland, Washington**







D:\020506\Groat Brothers\Map Sheet\AV01\_03 Report\2006\Fig4-Fig5-Sample-Map.dwg, 11/02/06 12:15:00 PM, PLOT Size: 11.00x17.00

Project: 8006.07.01, Site Map.dwg, 4/22/2009 3:45:15 PM, PDF

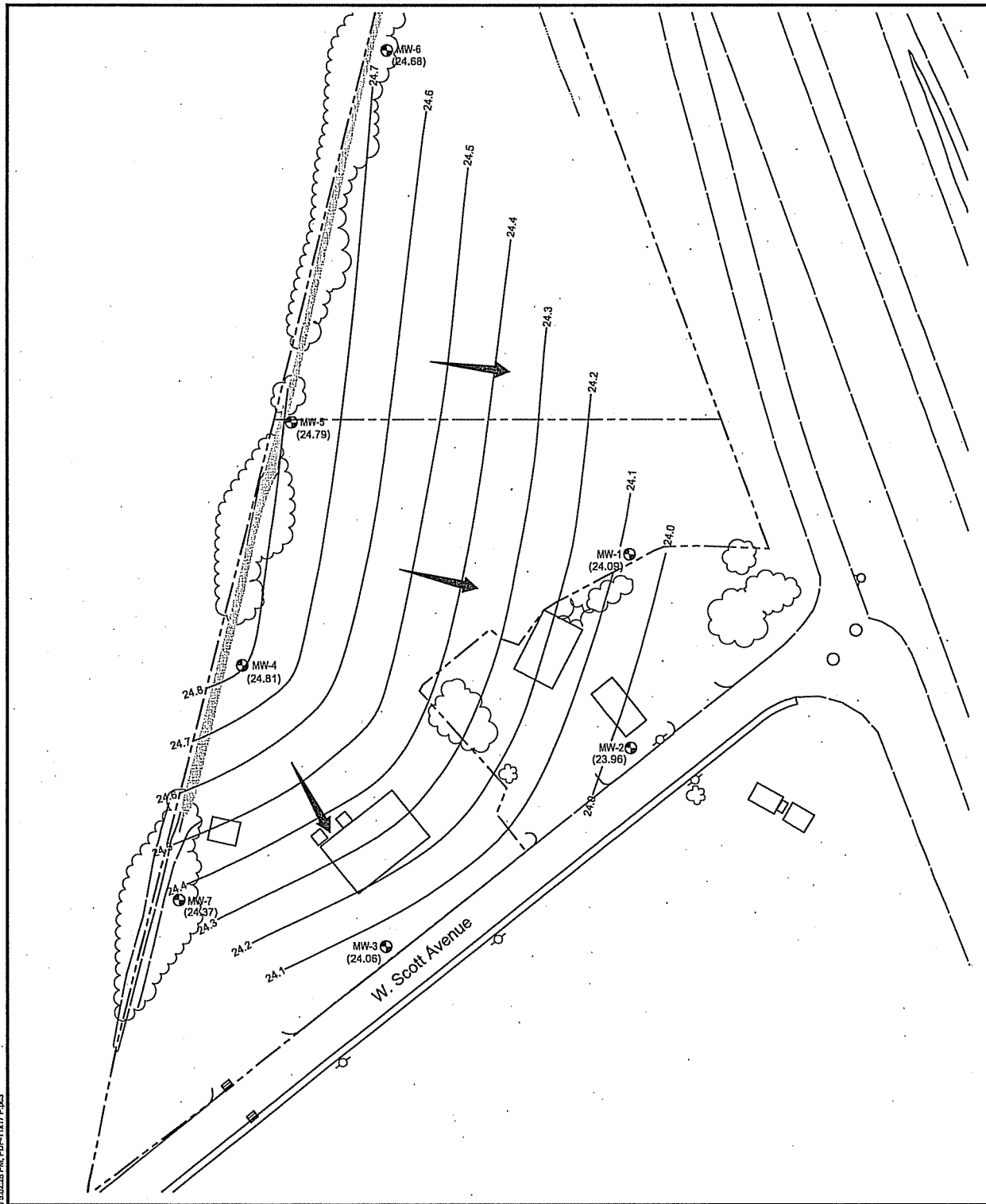


**Figure 5  
Site Map**







**Groat Brothers, Inc.  
Woodland, Washington**

- Legend:**
-  Approximate Property Boundary
  -  Approximate Drainfield Features
  -  Drainage Swale
  -  Shallow Monitoring Well



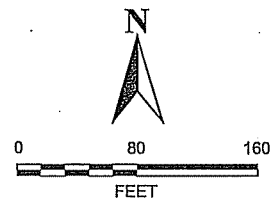


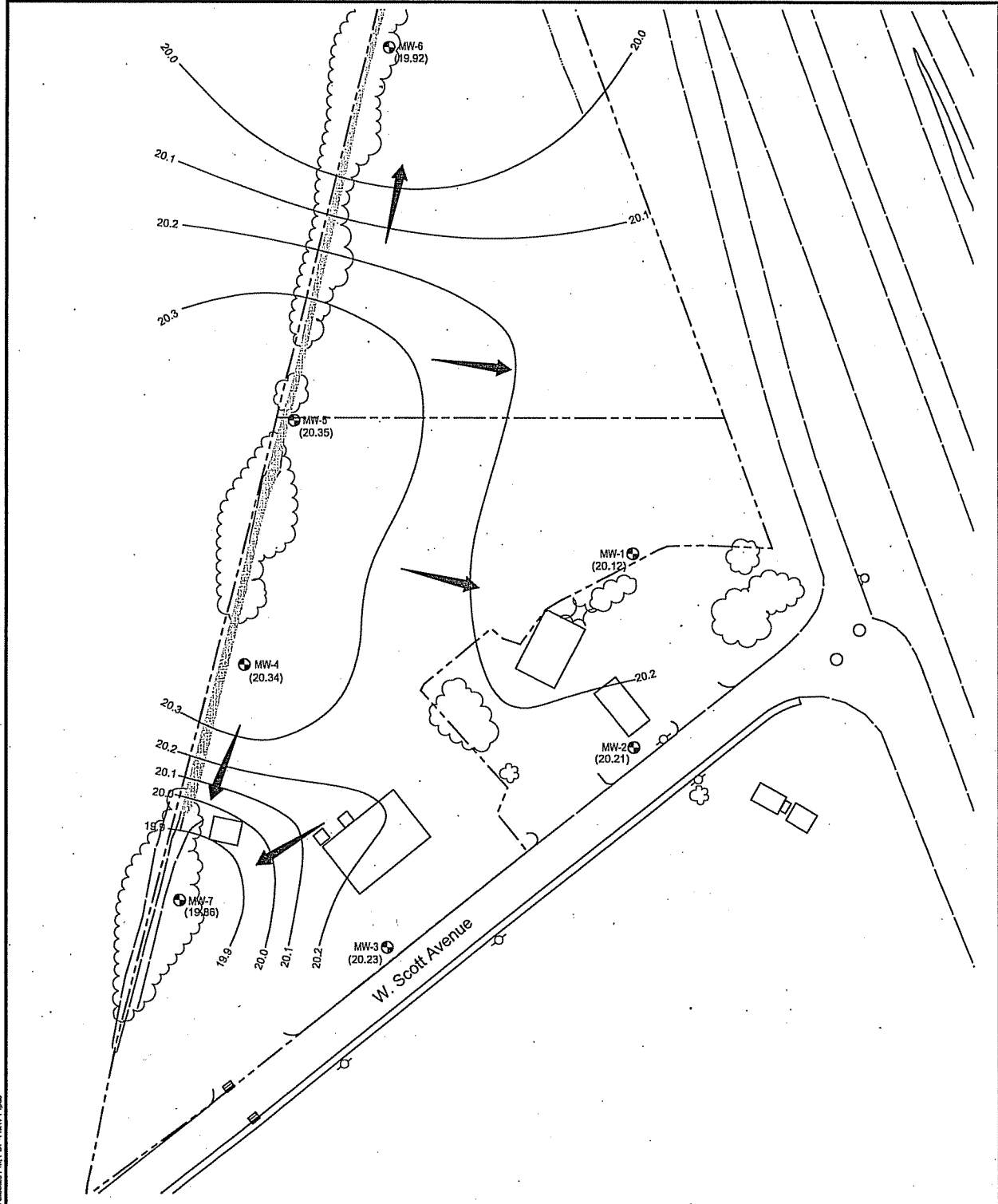
G:\9223.01 Groat Brother, Inc\01\_Jan10 GW Record\Fig03\_WTL-012706.dwg, 5/30/2010 5:02:28 PM, PDF-11x17 P.03

- Legend:**
-  Shallow Monitoring Well
  -  Drainage Swale
  -  (24.06) Water Level Elevation (feet National Geodetic Vertical Datum 1988 [NGVD 88])
  -  Estimated Equipotential Contour (feet NGVD 88, 0.1-foot Contour Interval)
  -  Approximate Property Boundary
  -  Direction of Flow

**Figure 6**  
**Water Table Map**  
**January 27, 2006**

**Groat Brothers, Inc.**  
**Woodland, Washington**



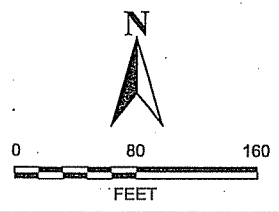


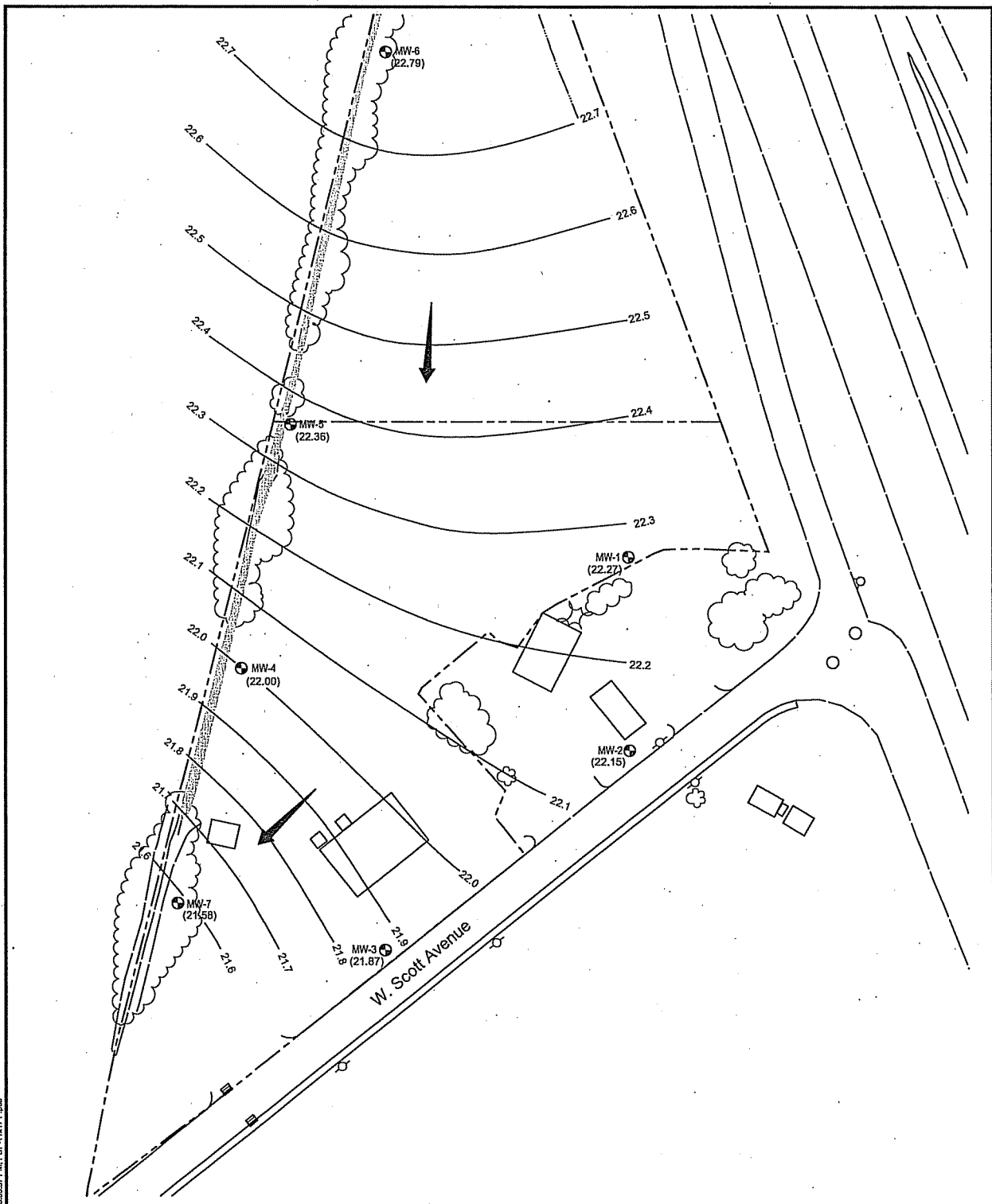
G:\9023.01 Groat Brother, Inc\01\_Jun10 GW Report\Fig4\_VTL\_071107.dwg, 8/30/2010 5:55:29 PM, PDF-11x17 P.pcd

- Legend:**
- Shallow Monitoring Well
  - Drainage Swale
  - (20.23) Water Level Elevation (feet National Geodetic Vertical Datum 1988 (NGVD 88))
  - Estimated Equipotential Contour (feet NGVD 88, 0.1-foot Contour Interval)
  - Approximate Property Boundary
  - Direction of Flow






**Figure 4**  
**Water Table Map**  
**July 11, 2007**

**Groat Brothers, Inc.**  
**Woodland, Washington**



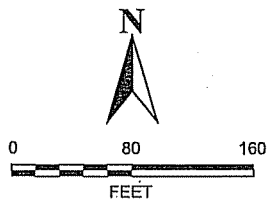


C:\923231.D1\_Groat Brothers, Inc\01\_Jan10\_GW Report\Fig05\_WTL\_412009.dwg, 8/20/2010 5:05:57 PM, PDS-11177 P.d3

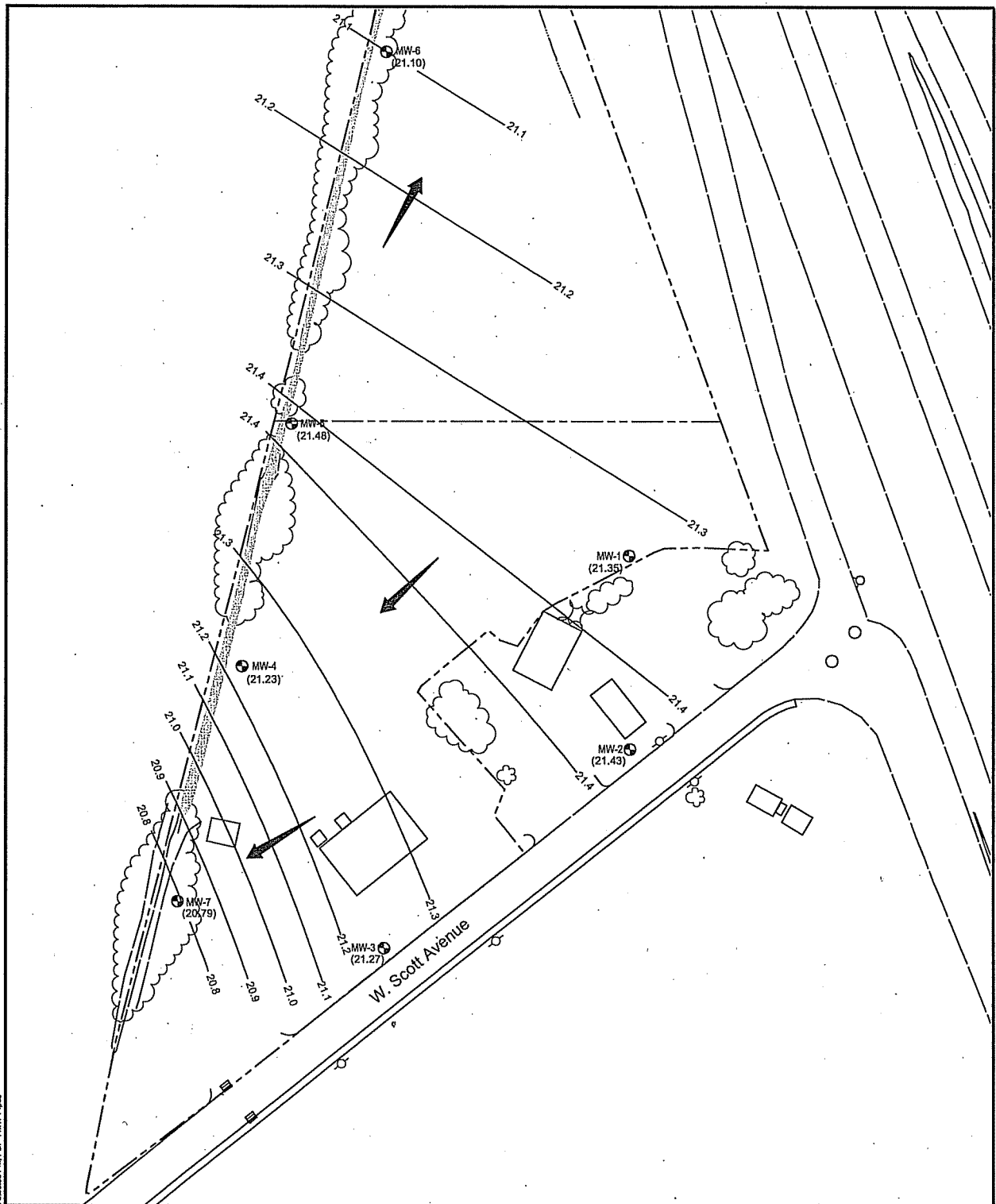
- Legend:**
-  Shallow Monitoring Well
  -  Drainage Swale
  - (21.87)** Water Level Elevation (feet National Geodetic Vertical Datum 1988 [NGVD 88])
  -  Estimated Equipotential Contour (feet NGVD 88, 0.1-foot Contour Interval)
  -  Approximate Property Boundary
  -  Direction of Flow

**Figure 8**  
**Water Table Map**  
**January 20, 2009**






**Groat Brothers, Inc.**  
**Woodland, Washington**





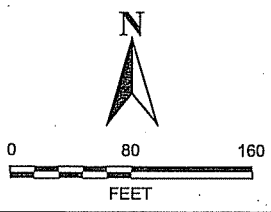


G:\9023.01 Groat Brother, Inc\01\_Jan10\_GW\_Report\Fig02\_VTL-072310.dwg, 8/30/2010 5:20:33 PM, PDF-11x17 P.03

- Legend:**
-  Shallow Monitoring Well
  -  Drainage Swale
  - (21.27) Water Level Elevation (feet National Geodetic Vertical Datum 1988 (NGVD 88))
  -  Estimated Equipotential Contour (feet NGVD 88, 0.1-foot Contour Interval)
  -  Approximate Property Boundary
  -  Direction of Flow

**Figure 4**  
**Water Table Map**  
**July 29, 2010**

**Groat Brothers, Inc.**  
**Woodland, Washington**



**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MTCA Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-1	MW1-092602	09/26/2002	250 U	500 U	50 U
	MW1-012203	01/22/2003	240 U	480 U	50 U
	MW1-041703	04/17/2003	250 U	500 U	50 U
	MW1-070903	07/09/2003	250 U	500 U	50 U
	MW1-101603	10/16/2003	250 U	500 U	50 U
	MW1-012004	01/20/2004	250 U	500 U	50 U
	MW1-041604	04/16/2004	250 U	500 U	50 U
	MW1-071304	07/13/2004	280 U	560 U	250 U
	MW1-012706	01/27/2006	270 U	530 U	250 U
	MW1-071107	07/11/2007	260 U	520 U	250 U
	MW1-012009	01/20/2009	242 U	483 U	100 U
MW1-072910	07/29/2010	79 U	200 U	100 U	
MW-2	MW2-092602	09/26/2002	250 U	500 U	50 U
	MW2-012203	01/22/2003	240 U	480 U	50 U
	MW2-041703	04/17/2003	250 U	500 U	50 U
	MW2-070903	07/09/2003	250 U	500 U	50 U
	MW2-101603	10/16/2003	250 U	500 U	50 U
	MW2-012004	01/20/2004	250 U	500 U	50 U
	MW2-041604	04/16/2004	250 U	500 U	50 U
	MW2-071304	07/13/2004	260 U	510 U	250 U
	MW2-012706	01/27/2006	260 U	520 U	250 U
	MW2-071107	07/11/2007	270 U	530 U	250 U
	MW2-012009	01/20/2009	237 U	475 U	100 U
MW2-072910	07/29/2010	80 U	200 U	100 U	
MW-3	MW3-092602	09/26/2002	250 U	500 U	50 U
	MW3-012203	01/22/2003	240 U	480 U	50 U
	MW3-041703	04/17/2003	250 U	500 U	50 U
	MW3-070903	07/09/2003	250 U	500 U	50 U
	MW3-101603	10/16/2003	250 U	500 U	50 U
	MW3-012004	01/20/2004	250 U	500 U	50 U
	MW3-041604	04/16/2004	260 U	520 U	50 U
	MW3-071304	07/13/2004	250 U	500 U	250 U
	MW3-012706	01/27/2006	260 U	520 U	250 U
	MW3-071107	07/11/2007	250 U	500 U	250 U
	MW3-012009	01/20/2009	251 U	503 U	100 U
MW3-072910	07/29/2010	78 U	190 U	100 U	

**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MTC A Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-4	MW4-092602	09/26/2002	250 U	500 U	50 U
	MW4-012203	01/22/2003	240 U	480 U	50 U
	MW4-041703	04/17/2003	250 U	500 U	50 U
	MW4-070903	07/09/2003	250 U	500 U	50 U
	MW4-101603	10/16/2003	250 U	500 U	50 U
	MW4-012004	01/20/2004	270 U	530 U	50 U
	MW4-041604	04/16/2004	250 U	500 U	50 U
	MW4-071304	07/13/2004	250 U	500 U	250 U
	MW4-012706	01/27/2006	280 U	550 U	250 U
	MW4-071107	07/11/2007	330	530 U	250 U
	MW4-012009	01/20/2009	261	<b>563</b>	100 U
MW4-072910	07/29/2010	490	<b>790</b>	100 U	
MW-5	MW5-101602	10/16/2002	250 U	500 U	50 U
	MW5-012203	01/22/2003	240 U	480 U	50 U
	MW5-041703	04/17/2003	250 U	500 U	50 U
	MW5-070903	07/09/2003	250 U	500 U	50 U
	MW5-101603	10/16/2003	250 U	500 U	50 U
	MW5-012004	01/20/2004	250 U	500 U	50 U
	MW5-041604	04/16/2004	260 U	520 U	50 U
	MW5-071304	07/13/2004	260 U	520 U	250 U
	MW5-012706	01/27/2006	260 U	520 U	250 U
	MW5-071107	07/11/2007	<b>600</b>	530 U	250 U
	MW5-012009	01/20/2009	248	<b>569</b>	100 U
MW5-072910	07/29/2010	330	<b>630</b>	100 U	
MW-6	MW6-101602	10/16/2002	250 U	500 U	50 U
	MW6-012203	01/22/2003	240 U	480 U	50 U
	MW6-041703	04/17/2003	250 U	500 U	50 U
	MW6-070903	07/09/2003	250 U	500 U	50 U
	MW6-101603	10/16/2003	250 U	500 U	50 U
	MW6-012004	01/20/2004	250 U	500 U	50 U
	MW6-041604	04/16/2004	250 U	500 U	50 U
	MW6-071304	07/13/2004	250 U	500 U	250 U
	MW6-012706	01/27/2006	270 U	530 U	250 U
	MW6-012706-Dup	01/27/2006	260 U	520 U	250 U
	MW6-071107	07/11/2007	270	530 U	250 U
	MW6-071107-Dup	07/11/2007	270 U	530 U	250 U
	MW6-012009	01/20/2009	237 U	500	100 U
	MW6-012009-Dup	01/20/2009	237 U	498	100 U
	MW6-072910	07/29/2010	150	280	100 U
MW6-072910-Dup	07/29/2010	160	330	100 U	

**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MTC Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-7	MW7-070903	07/09/2003	250 U	500 U	50 U
	MW7-101603	10/16/2003	250 U	500 U	50 U
	MW7-012004	01/20/2004	260 U	520 U	50 U
	MW7-041604	04/16/2004	250 U	500 U	50 U
	MW7-071304	07/13/2004	260 U	510 U	250 U
	MW7-012706	01/27/2006	290	<b>640</b>	250 U
	MW7-042006	04/20/2006	250 U	500 U	NA
	MW7-071107	07/11/2007	270 U	530 U	250 U
	MW7-012009	01/20/2009	291	<b>639</b>	100 U
	MW7-072910	07/29/2010	220	500	100 U

**Enclosure B**

**Environmental Covenant  
for Institutional Controls**

## Site Diagrams

**RESTRICTIVE COVENANT**

**Lloyd L. Groat and Netta E. Groat and Donald L. Groat**

**608-618 West Scott Avenue, Woodland, Washington**

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Lloyd L. Groat and Netta E. Groat and The Groat Living Trust dated November 25, 1997 (the "Owners"), their successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following documents:

Focused Site Assessment Report, May 22, 2002, Maul Foster Alongi

Phase 2 Supplemental Environmental Assessment, August 6, 2002, Maul Foster Alongi

Final Remedial Investigation Report, March 30, 2003, Maul Foster Alongi

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of total petroleum hydrocarbons ("TPH") and related constituents which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for groundwater established under WAC 173-340-720. The groundwater contaminations were specifically found in the former above-ground and underground storage tanks area, the truck parking area, the maintenance shop area and the area of the former service station stormwater drain field. These groundwater contaminations are documented in Final Remedial Investigation Report, March 30, 2003, Maul Foster Alongi.

Page 2

Lloyd L. Groat and Netta E. Groat and The Groat Living Trust are the fee owners of real property (hereafter "Property") in the County of Cowlitz, State of Washington that is subject to this Restrictive Covenant. The Property is legally described as follows:

That portion of the Squire and Milly Bozarth Donation Land Claim in Section 13m Township 5 North, Range 1 West of the W.M., in the County of Cowlitz, State of Washington, described as follows:

Beginning at the Southwest corner of a 15-acre tract conveyed by S. J. Bozarth to Stanford L. Gates, as described in Volume 26 of Deeds, page 318, records of Cowlitz County; thence South 87° 33' 00" East along said South line 417.36 feet to an iron rod at the intersection of said South line with the Westerly right of way line of State Highway No. 1; then South 19° 49' 10" East along said right of way a distance of 41.94 feet to an iron rod at station 905+94.65; thence South 30° 51' 30" West along said right of way 87.97 feet to an iron rod at the intersection of the Northwesterly line of Scott Avenue; thence along said Northwesterly line the following courses: South 51° 13' 50" West 468.44 feet; thence on the arc of a 477.46 foot radius curve 156.28 feet; thence South 33° 13' 50" West 116.28 feet; thence on the arc of a 218.73 foot radius curve 27.17 feet to an intersection with the West line of the Squire and Milly Bozarth Donation Land Claim; thence North 11° East along said West line 680.5 feet, more or less, to the point of beginning.

Lloyd L. Groat, Netta Groat and The Groat Living Trust make the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").



Page 3

Section 1. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 2. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 3. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 4. NO GROUNDWATER MAY BE TAKEN FROM THE PROPERTY FOR ANY USE. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 5. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant, Ecology may approve any inconsistent use only after public notice and comment.

Section 6. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.

Page 4

Section 7. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

*Lloyd L. Groat*  
Lloyd L. Groat

9-27-03

Date

STATE OF WASHINGTON )  
County of Cowlitz ) ss.  
~~Clark~~

On this day personally appeared before me LLOYD L. GROAT, to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that she signed the same as free and voluntary act for the uses and purposes therein mentioned.

Given under my hand and official seal this 27<sup>th</sup> <sup>August</sup> ~~July~~, 2003.



Signature: *Elizabeth Carol Rounds*  
Name (Print) Elizabeth Carol Rounds  
NOTARY PUBLIC in and for the State of Washington,  
residing at Woodland  
My appointment expires: 7-1-07

Page 5

*Netta E. Groat*  
\_\_\_\_\_  
Netta E. Groat

*August 27, 2003*  
\_\_\_\_\_  
Date

STATE OF WASHINGTON )

County of *Cowlitz* ) ss.  
County of *Clark* )

On this day personally appeared before me NETTA E. GROAT, to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that she signed the same as free and voluntary act for the uses and purposes therein mentioned.

Given under my hand and official seal this *27th* <sup>August</sup> ~~July~~, 2003.



Signature: *Elizabeth Carol Rounds*  
Name (Print): *ELIZABETH CAROL ROUNDS*  
NOTARY PUBLIC in and for the State of Washington,  
residing at *WOODLAND*  
My appointment expires: *7-1-07*

Page 6

Donald L. Groat

Donald L. Groat

Living Trust dated November 25, 1997

August 18, 2003

Date

STATE OF WASHINGTON )  
County of Clark ) ss.

On this day personally appeared before me DONALD L. GROAT, Trustee of The Groat Living Trust, to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that she signed the same as free and voluntary act for the uses and purposes therein mentioned.

Given under my hand and official seal this 18 August ~~July~~, 2003.

Signature: Pat L. Pabst

Name (Print): PAT L. PABST

NOTARY PUBLIC in and for the State of Washington,  
residing at Camas, WA

My appointment expires: 4-15-2004

