



October 15, 2013

Karl Beaster  
Enbridge Energy  
1320 Grand Avenue  
Superior WI 54880

**KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS**

**SUBJECT:** Post Closure Review and Change in Continuing Obligations  
Former Lakehead Pipeline Booster Pump #56 Site (DV 566 Valve)  
Enbridge Energy Superior Terminal, Superior, WI  
WDNR BRRTS Activity #: 02-16-338051

Dear Mr. Beaster:

On December 3, 2012, you notified the Department of Natural Resources (DNR) that crude oil impacted soil had been discovered during maintenance excavation activities near the DV 566 Valve. Further investigation and sampling results indicated the presence of contaminated soil. Based on additional documentation submitted to the DNR on May 6, 2013 and on July 31, 2013, this contamination appears to be historic contamination associated with the former Lakehead Pipeline Booster Pump #56 site, which was closed on July 14, 2006. At the time of closure, the site was placed on the Remediation and Redevelopment Program's internet accessible Geographic Information System (GIS) Registry, to provide notice of residual soil and groundwater contamination. The 2013 investigation also revealed that existing piping acts as a structural impediment, limiting the ability to adequately define the degree and extent of existing contamination.

Because of the updated information submitted for the site, and the change in the continuing obligations, the Department requested updated documentation for modification of the GIS Registry packet for the site, and fees for a post-closure review and GIS Registry modifications. The Department received the appropriate fees, in accordance with s. NR 749.04(1), Wis. Adm. Code, on August 13, 2013.

The Department considers the Lakehead Pipeline Booster Pump #56 Site closed, with continuing obligations. No further investigation or remediation is required at this time. However, you and future property owners must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter and any attachments listed at the end of this letter to anyone who purchases this property from you.

This final closure decision is based on the correspondence and data provided, and is issued under ch. NR 726, Wis. Adm. Code. The conditions of closure and continuing obligations required were based on the property being used for industrial purposes.

#### Continuing Obligations

The continuing obligations for this site are summarized below. Further details on actions required are found in the section Closure Conditions.

- Groundwater contamination is present above ch. NR 140, Wis. Adm. Code enforcement standards.
- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- If a structural impediment that obstructed a complete site investigation or cleanup is removed or modified, additional environmental work must be completed.

The following DNR fact sheet, "Continuing Obligations for Environmental Protection", RR-819, was included with this letter, to help explain a property owner's responsibility for continuing obligations on their property. If the fact sheet is lost, you may obtain a copy at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

#### Closure Conditions

Compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter are met. If these requirements are not followed, the DNR may take enforcement action under s. 292.11, Wis. Stats. to ensure compliance with the specified requirements, limitations or other conditions related to the property.

#### Residual Groundwater Contamination (ch. NR 140, 812, Wis. Adm. Code)

Groundwater contamination greater than enforcement standards is present on this contaminated property, as shown on the attached Figure 6, Dissolved Phase Benzene Isoconcentration Contours, Superior Terminal Booster Pump 56, prepared by LHB Engineers & Architects and dated October 2002. If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval.

#### Residual Soil Contamination (ch. NR 718, chs. 500 to 536, Wis. Adm. Code or ch. 289, Wis. Stats.)

Soil contamination remains in the vicinity of Booster Pump 56 and the DV 566 Valve as indicated on the attached maps: Figure 3 Approximate Lateral Extent of NR 720 Exceeding Soil, Superior Terminal Booster Pump 56 prepared by LHB Engineers & Architects and dated October 2002; Figure 3, 2012 DV 566 Valve Excavation, Superior Terminal, Enbridge Energy; and Figure 4, 2002 and 2012 Excavation Extents and Sampling Points, Superior Terminal, Enbridge Energy. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval.

In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

Depending on site-specific conditions, construction over contaminated soils or groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

Structural Impediments (s. 292.12 (2) (b), Wis. Stats.)

The existing piping in the vicinity of Booster Pump 56 and the DV 566 Valve, as shown on the attached Figure 4, 2002 and 2012 Excavation Extents and Sampling Points, Superior Terminal, Enbridge Energy, made complete investigation and/or remediation of the soil contamination on this property impracticable. If the structural impediment is to be removed, the property owner shall notify the DNR before removal and conduct an investigation of the degree and extent of petroleum contamination below the structural impediment. If contamination is found at that time, the contamination shall be properly remediated in accordance with applicable statutes and rules.

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Erin Endsley at 715-392-3126 or via email at [erin.endsley@wisconsin.gov](mailto:erin.endsley@wisconsin.gov).

Sincerely,

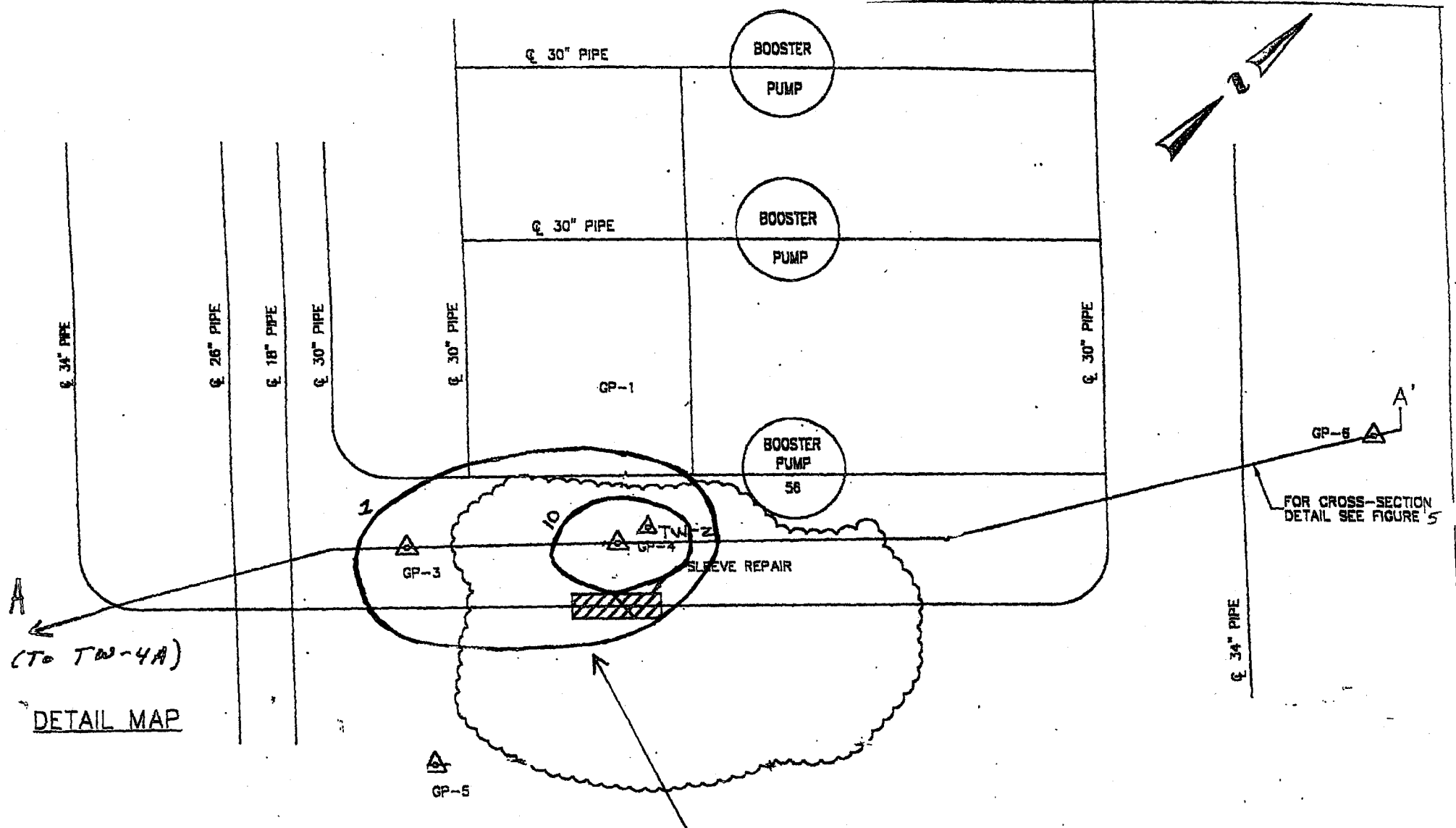


John Robinson  
Northern Region Team Supervisor  
Remediation & Redevelopment Program

Attachments:

- Figure 6, Dissolved Phase Benzene Isoconcentration Contours, Superior Terminal Booster Pump 56, LHB Engineers & Architects, October 2002
- Figure 3, Approximate Lateral Extent of NR 720 Exceeding Soil, Superior Terminal Booster Pump 56, LHB Engineers & Architects, October 2002
- Figure 3, 2012 DV 566 Valve Excavation, Superior Terminal, Enbridge Energy
- Figure 4, 2002 and 2012 Excavation Extents and Sampling Points, Superior Terminal, Enbridge Energy
- RR 819 Continuing Obligations for Environmental Protection

cc: Ryan Erickson, Barr Engineering



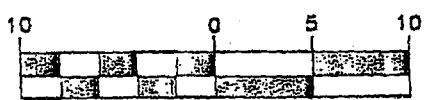
A  
(To TW-4A)  
DETAIL MAP

FOR CROSS-SECTION  
DETAIL SEE FIGURE 5

Dissolved Phase Benzene  
Isoconcentration Contours ( $\mu\text{g/l}$ )

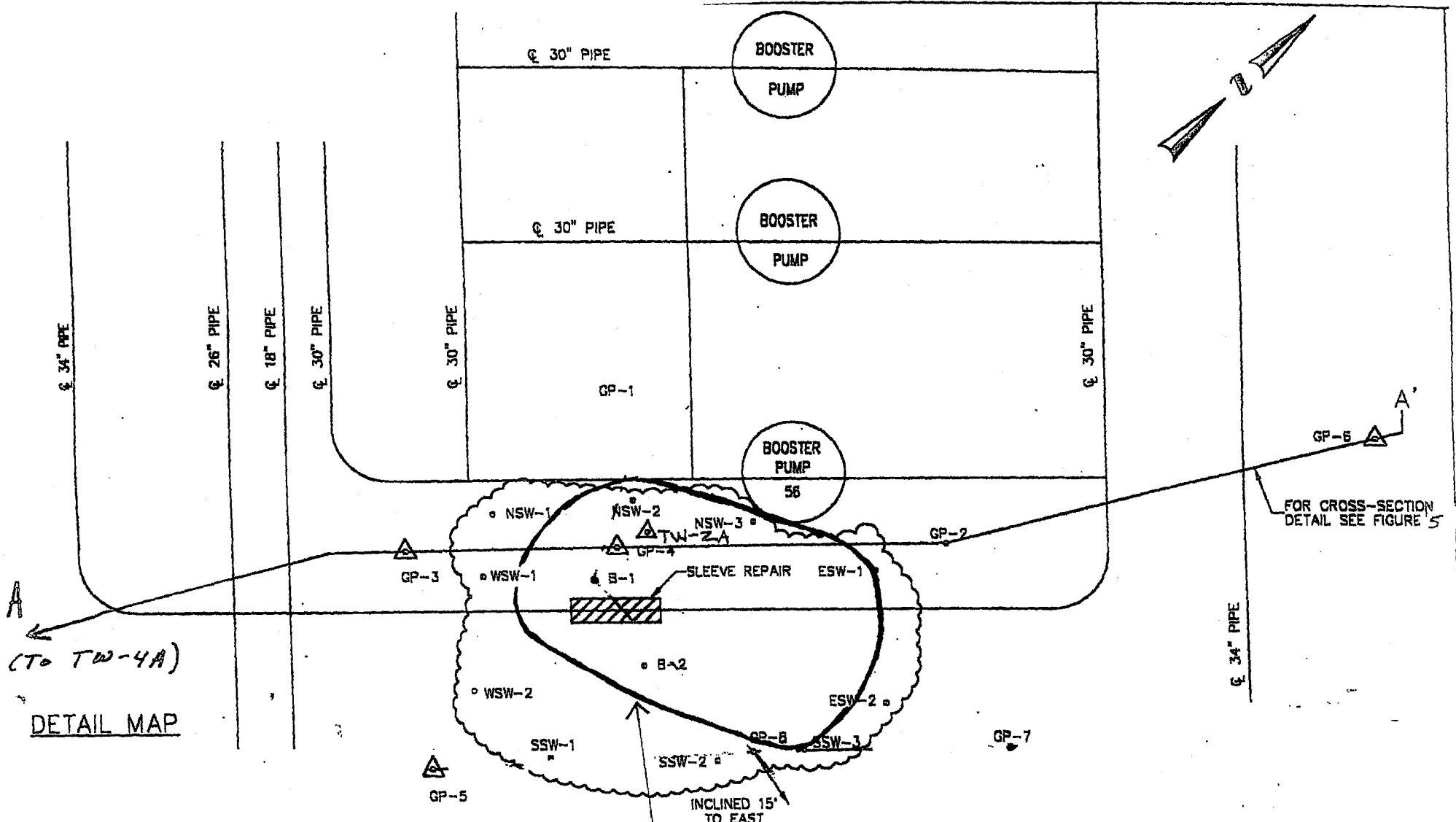
**LEGEND**

- TEMPORARY GW MONITORING WELL
- APPROXIMATE LIMITS OF EXCAVATION
- CROSS-SECTION



SCALE 1" = 10'

<b>LHB Engineers &amp; Architects</b> DULUTH, MINNESOTA 55802				<b>Natural Resources Engineering Company</b> DULUTH, MINNESOTA 55802			
NO.	REVISION	DATE	APPR.	<b>SUPERIOR TERMINAL BOOSTER PUMP 56 SITE</b>			
1	ISSUED FOR REVIEW	11/28/02	HELDT				
2	RECLINES PER TV	11/27/02	HELDT				
				SUPERIOR, WI TERMINAL			
	DATE	DRAWN	APPROVED	LHB PROJ. NO.	DRAWING NO.		
	OCT. 2002	HEB	DAH	01807.62	FIGURE 6		



A  
(To TW-4A)  
DETAIL MAP

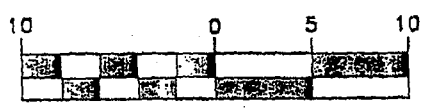
FOR CROSS-SECTION  
DETAIL SEE FIGURE 5

Approximate Lateral Extent  
of NR 720 Exceeding Soil

INCLINED 15°  
TO EAST

**LEGEND**

- WSW = SOIL SAMPLE POINT (EXCAVATION)
- GP = GEOPROBE
- △ TEMPORARY GW MONITORING WELL
- ☁ APPROXIMATE LIMITS OF EXCAVATION
- A A' CROSS-SECTION



SCALE 1" = 10'

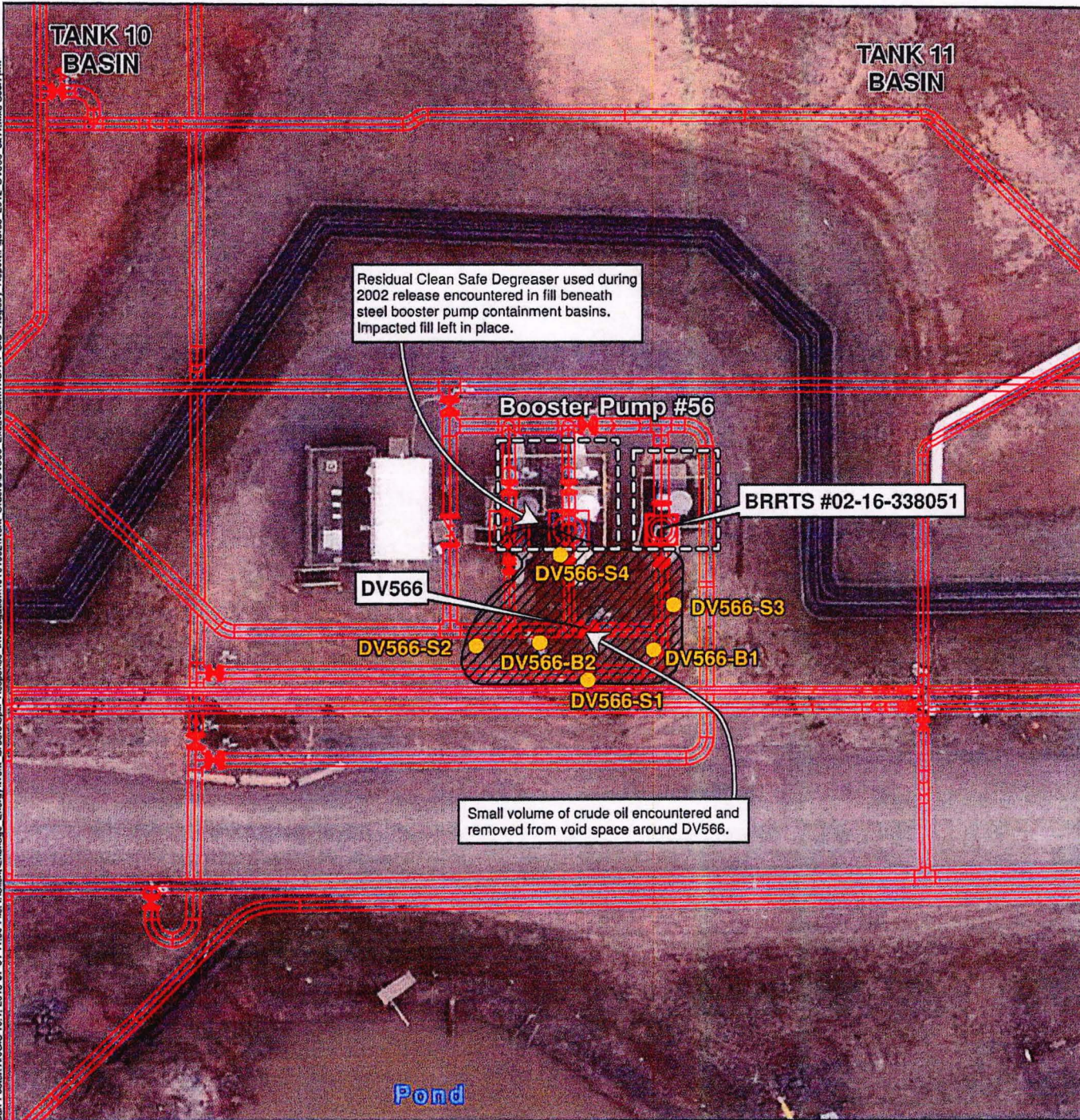
**LHB Engineers & Architects**  
DULUTH, MINNESOTA 55802

**Natural Resources Engineering Company**  
DULUTH, MINNESOTA 55802

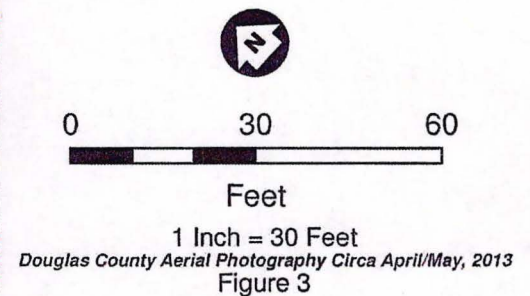
NO.	REVISION	DATE	APPR.
1	ISSUED FOR REVIEW	11/08/02	HELDT
2	REDLINES PER TJ	11/27/02	HELDT

SUPERIOR TERMINAL BOOSTER PUMP 56 SITE				
SUPERIOR, WI TERMINAL				
DATE	DRAWN	APPROVED	LHB PROJ. NO.	DRAWING NO.
OCT 2002	HEB	DAH	01807.62	FIGURE 3

Barr Footer: ArcGIS 10.1, 2013-07-31 11:00 File: H:\Client\Enbridge Energy\Work Orders\Soil Response Investigation\49161022\Work Orders\DV566 Excavation\WIDNR GIS Registry Report\Figure3 2012 DV566 & 11.mxd User: lmk



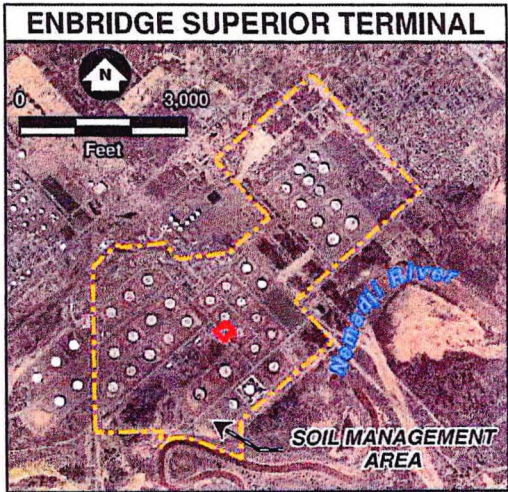
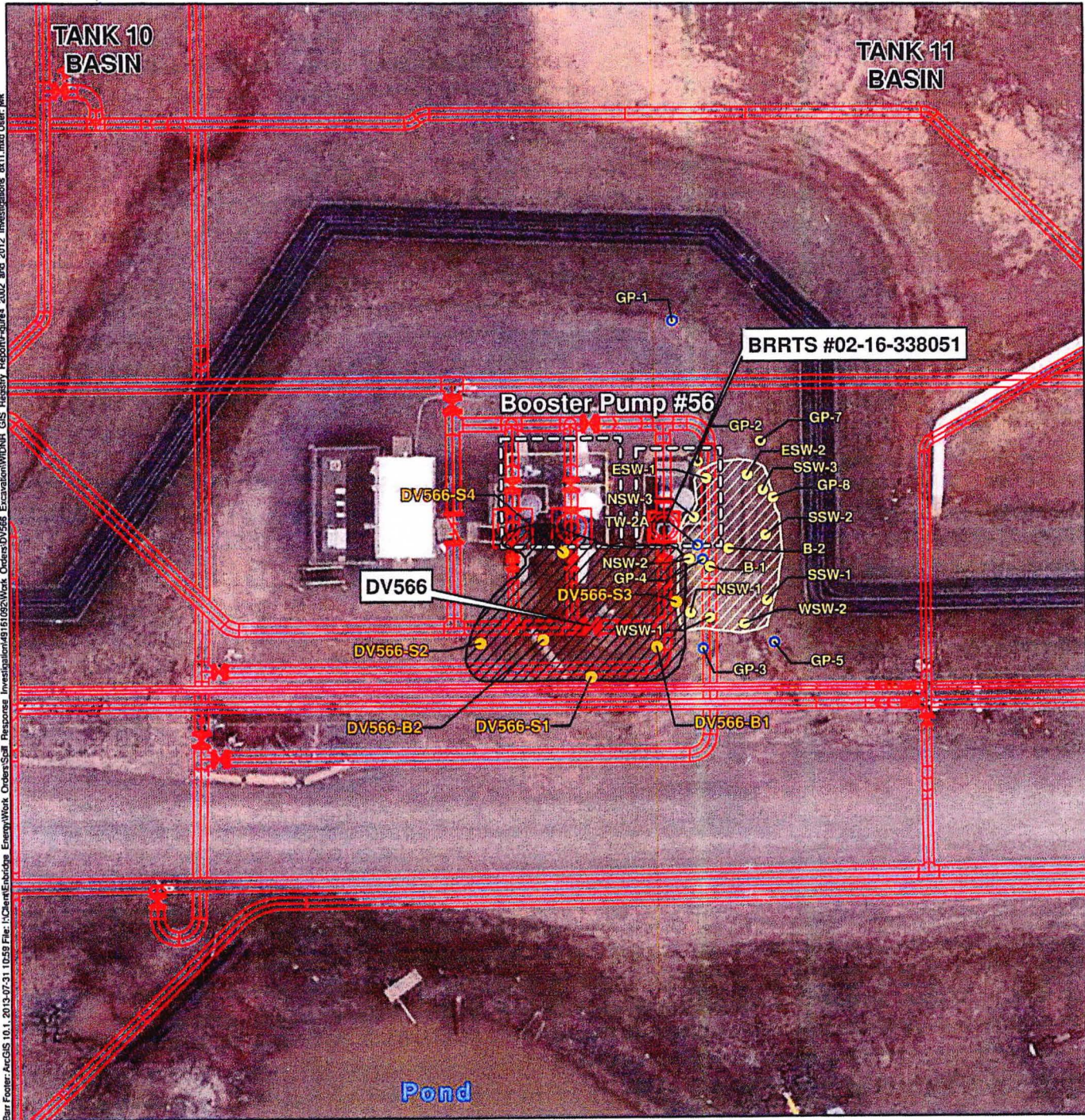
- 2012 DV566 Valve Excavation (Barr)**
- Excavation Soil Samples
  - Approximate Excavation Extent
  - Pipeline Infrastructure
  - Terminal Property Boundary
  - Steel Booster Pump Containment Basins



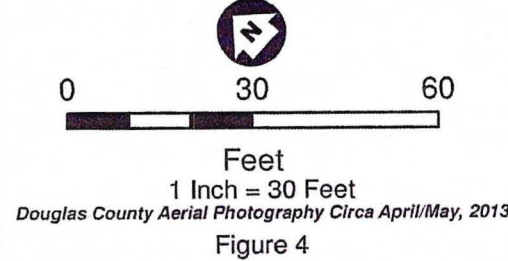
**2012 DV566 VALVE EXCAVATION  
SUPERIOR TERMINAL**  
Enbridge Energy, L.P.  
Superior, Wisconsin



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- 2002 Release Investigation (NRE)**
- Soil Samples
  - Geoprobe Borings
  - Geoprobe Borings / Temporary Groundwater Monitoring Wells
  - Approximate 2002 Excavation Extent
- 2012 DV566 Valve Excavation (Barr)**
- Excavation Soil Samples
  - Approximate 2012 Excavation Extent
  - Steel Booster Pump Containment Basins
  - Pipeline Infrastructure
  - Terminal Property Boundary



**2002 AND 2012 EXCAVATION EXTENTS AND SAMPLING POINTS SUPERIOR TERMINAL**  
 Enbridge Energy, L.P.  
 Superior, Wisconsin

