

US EPA ARCHIVE DOCUMENT

**CONSTRUCTION COMPLETION REPORT  
REMEDIATION OF LEAD IN SOILS AT VARIOUS LOCATIONS  
ON THE SOLUTIA W. G. KRUMMRICH PLANT  
SAUGET, ILLINOIS**

**Submitted To:**

**U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Blvd.  
Chicago, Illinois**

**February 27, 2009**

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### Remedy Certification Statement

Facility Name: Solutia Inc. W. G. Krummrich Plant, Sauget, IL

Illinois EPA Identification Number: 16312100006

USEPA Identification Number: ILD000802702

Name of Remediated Unit(s): Lead Remediation Areas

The unit(s) identified above have been remediated in accordance with a plan approved with conditions and modifications by the U.S. Environmental Protection Agency. A report demonstrating that remediation was carried out in accordance with the approved plan, and therefore remediation objectives were attained, is attached.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G. M. Rinaldi      2/27/09  
Signature of Project Manager      Date

G. M. Rinaldi, Manager, Remediation  
Name and Title of Project Manager

Mailing Address of Project Manager:

Solutia Inc.  
575 Maryville Centre Drive  
St. Louis, MO 63141

## **1. Introduction and Background**

This document presents the Construction Completion Report (CCR) for remediation of lead in soils in various areas of the Solutia W.G. Krummrich facility in Sauget, Illinois.

The need for the investigation and corrective action was identified in the “Final Decision and Response to Comments for Solutia Inc., Sauget, Illinois, U.S. EPA No. ILD 000 802 702” (Final Decision) that was issued by the U.S. Environmental Protection Agency (U.S. EPA) on February 26, 2008, and received by Solutia on February 28, 2008. That document required the remediation of surface soils (in the depth range of 0 to 2 feet) that contain lead at concentrations in excess of 700 mg/kg. Specifically, the areas of concern identified in the Final Decision are in the vicinity of RCRA Facility Investigation (RFI) sample locations S0716, S0707, S0717, S0715, S0610, S0703, and S0720. The locations of these samples are shown on Figure 1.

A Work Plan that defined the scope of the investigation was prepared and hand-delivered to the U.S. EPA on March 27, 2008, and was approved with comments by letter dated April 10, 2008. The Work Plan was revised to incorporate the Agency’s comments, and a final version was submitted on June 20, 2008.

In summary, the initial investigation consisted of soil sampling on a grid pattern surrounding each of the locations of concern. The grid nodes were spaced on 10 foot centers and the grid extended for at least 30 feet on all sides of the location of concern, or until the next known sampling location with a lead concentration less than 700 mg/kg was encountered, whichever came first. Samples were taken over the depth interval of 0 to 2 feet below the base of the existing gravel cover using Direct Push Technology (DPT). All samples were analyzed for lead and analyses were performed in a step-wise manner. The eight closest samples were analyzed first and, if any of the results exceeded 700 mg/kg of lead, then additional samples further away from the location of concern were analyzed. The results of the initial investigation were summarized in the document titled “Technical Memorandum for Remediation of Lead in Soils” which was submitted

to the U.S. EPA by Solutia on August 25, 2008. U.S. EPA provided comments on September 6, 2008. Pursuant to the August 25, 2008, and September 6, 2008, documents, Solutia completed additional delineation in the vicinity of sample locations S0717 and S0720. The results of the initial and subsequent delineation activities (including Tables and Figures showing areas where lead exceeded remedial objectives) were summarized in a November 21, 2008, e-mail submittal to U.S. EPA.

As communicated to U.S. EPA via e-mail on December 9, 2008, the construction of the remedial covers for S0703, S0716, S0717, and S0720 was initiated the week of November 24, 2008, and completed on November 28, 2008. Construction of the remedial covers for S0610 and S0715 was completed on December 8, 2008. The areas where lead exceeded remedial objectives and covers were installed were subsequently surveyed on January 14, 2009, to identify the boundaries that are subject to the engineered barrier requirements including deed restriction. It is noted that the remedial cover for S0715 is temporary as this area is scheduled to be incorporated into subsequent remedial actions for a PCB hot spot at the same location.

## **2. Results And Remedial Actions**

The results of the investigation are presented in Tables 1 through 7 and summarized on Figures 2 through 4. Each of the locations of concern is separately discussed below. The corrective measures in each of the areas were intended to isolate surficial soils (in the depth range of 0 to 2 feet) that contain lead at concentrations in excess of 700 mg/kg.

### **2.1 Sample Location S0716**

Sampling point S0716 is located just off the edge of pre-existing asphalt pavement, immediately adjacent to a railway spur. Given the limited distance between the spur and the edge of the asphalt, the only additional investigation that was required was to define the lateral extent of the cover along the rail siding (north and south of S0716). To obtain that information, samples were taken at 20-foot intervals north and south of S0716. Four

samples were collected on the north side (midway to the next sampling point known to have surficial lead concentrations less than 700 mg/kg, S0706) and a like number were collected on the south side. Four of these samples were analyzed and the results show that lead concentrations in the soil exceed 700 mg/kg in one sample on either side of S0716 (refer to Table 1). Assuming that the 700 mg/kg boundary lies midway between adjacent points with lead concentrations less than and greater than 700 mg/kg, the lateral extent of the area containing lead at a concentration in excess of 700 mg/kg is approximately 60 feet.

As indicated in the "Technical Memorandum for Remediation of Lead in Soils", the corrective action was to extend the asphalt pavement over the impacted area. Per Section 3 - Remedial Objectives and Remedial Alternatives of the Revised Work Plan, the cover consisted of installing 3 inches of asphalt from the present edge of the asphalt to the edge of the rail lines and extended approximately 30 feet on either side of S0716 along the railway line. The area that was covered by asphalt is shown on Figure 2 and in Attachment B - Photographic Log.

## **2.2 Sample Location S0707**

All of the samples surrounding S0707 contained less than 700 mg/kg of lead as shown on Table 2. Consequently, the area of impacted soil is approximately 10 feet square. However, the area was already covered by 4 inches of asphalt and 8 inches of gravel. The cover extends for at least 30 feet on all sides of location of concern and, consequently, no further corrective actions were required at this location. The area covered by asphalt is shown on Figure 2 and in Attachment B - Photographic Log.

## **2.3 Sample Location S0717**

The results of the investigation around this location of concern are presented in Table 3 and summarized on Figure 3. The extent of soils containing lead in excess of 700 mg/kg is approximately 150 ft along the facility boundary up to 50 feet northwards to the limit shown in Figure 3.

The area of concern is in the midst of a number of active railway spur lines and previously covered by approximately 2 inches of gravel. As indicated in the "Technical Memorandum for Remediation of Lead in Soils", the corrective action was to install asphalt pavement over the impacted area. Per Section 3 – Remedial Objectives and Remedial Alternatives of the Revised Work Plan, the cover consisted of installing 3 inches of asphalt along the property fence northwards to the limit shown in Figure 3. The eastern and western limits of the asphalt cover were defined by the additional sampling. The area covered by asphalt is shown in Attachment B - Photographic Log.

#### **2.4 Sample Location S0715**

The results of the sampling in this area of concern are presented in Table 4 and summarized on Figure 2. The extent of soils containing lead in excess of 700 mg/kg in this area of concern is approximately 20 feet long and 10 feet wide, as shown on Figure 2. The area was previously covered by 12 inches of gravel. Per Section 3 - Remedial Objectives and Remedial Alternatives of the Revised Work Plan, this existing cover was augmented by adding an extra 12 inches of gravel (CA-6 type rock) so the minimum thickness was 24 inches. The additional gravel was subsequently graded to promote drainage.

#### **2.5 Sample Location S0610**

The results of the sampling in this area are presented in Table 5 and summarized on Figure 2. Like sample location S0715, the area of soils containing lead in excess of 700 mg/kg is limited, being approximately 30 feet long and 15 feet wide. It is bounded on the north side by a secondary containment berm for a small storage tank farm and was previously covered by 12 inches of gravel. This cover was augmented by an additional 12 inches of gravel (CA-6 type rock) so the minimum thickness was 24 inches. The additional gravel was subsequently graded to promote drainage.

## **2.6 Sample Location S0703**

Like sample location S0707, all of the samples surrounding S0703 contained less than 700 mg/kg of lead as shown in Table 6 and summarized on Figure 2. Consequently, the area of impacted soil is approximately 10 feet square. The area was previously covered by 2 inches of asphalt. This was augmented by an additional inch of asphalt so the minimum thickness was 3 inches over the 10-foot-square area of concern.

## **2.7 Sample Location S0720**

The results of the sampling in this area are presented in Table 7 and are summarized on Figure 4. The majority of the area with soils containing lead at concentrations greater than 700 mg/kg was already covered by 4 inches of asphalt (everything west of sampling point 31 shown on Figure 4). Consequently, corrective measures were only required in the area previously covered by gravel. In this area, a 3-inch-thick asphalt cover was constructed to the limits shown in Figure 4. Delineation west of S0720-B32, 28, 30, 33, 35 and 38 was not possible because of existing structures (buildings, tanks, containment), but these areas will be subject to the institutional controls and maintenance requirements outlined in Sections 3 and 4 of the CCR.

## **3. Institutional Controls**

Institutional controls will be implemented to protect the remedy and prevent inappropriate site uses. The institutional controls include an Environmental Land Use Control (ELUC) that outlines current site conditions and appropriate site restrictions and an as-built survey. Attachment A provides as-built surveys and legal descriptions, indicating the locations of the asphalt/gravel cover engineered barriers with respect to permanent benchmarks, prepared by Zahner and Associates, a professional land surveyor licensed in the State of Illinois. Upon approval by U.S. EPA and Illinois EPA, the ELUC and associated as-built surveys will be submitted to the St. Clair County Recorder of Deeds for filing with the deed for the property. Future access and construction activities will be controlled by the ELUC

#### **4. Cover Maintenance**

The engineered barriers are intended to ensure protection of human health and the environment. Areas where lead exceeded the remedial objective are covered with a minimum of 3 inches of asphalt in the case of areas S0720, S0716, S0707, S0717, and S0703. Areas where lead exceeded the remedial objective are covered with a minimum of 24 inches of gravel in the case of areas S0715 and S0610.

Maintenance procedures for the lead engineered barrier systems will be implemented at the Solutia W.G. Krummrich Plant. Specific procedures for the lead engineered barrier systems will include the following:

- Annual inspections for structural integrity, settlement, erosion and cracking;
- Performance of repairs as required; and
- Completion of inspection logs.

Required repairs will be made by qualified personnel and recorded on inspection log sheets that will be maintained in on-site files. A copy of the inspection log is included as Attachment C.

## TABLES

**Table 1**  
**Lead in Soils - Analytical Results for S0716**

Sample Location ID	Sample Collected	Lab Result (mg/kg)	Lab Qualifier
<b>S0716</b>	<b>10/28/03</b>	<b>1200</b>	
S0716-B-1	07/17/08	960	B
S0716-B-2**	07/17/08	730	B
S0716-B-3	07/17/08	26	B
S0716-B-4	07/17/08	85	B

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

**Table 2**  
**Lead in Soils - Analytical Results for S0707**

Sample Location ID	Sample Collected	Lab Result (mg/kg)	Lab Qualifier
<b>S0707</b>	<b>03/26/03</b>	<b>1700</b>	
S0707-B-1	07/17/08	270	B
S0707-B-2	07/17/08	220	B
S0707-B-3**	07/17/08	130	B
S0707-B-4	07/17/08	25	B
S0707-B-5	07/17/08	280	B
S0707-B-6	07/17/08	350	B
S0707-B-7	07/17/08	590	B
S0707-B-8	07/17/08	270	B

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

**Table 3**  
**Lead in Soils - Analytical Results for S0717**

Sample Location ID	Sample Collected	Lab Result (mg/kg)	Lab Qualifier
<b>S0717</b>	<b>10/28/03</b>	<b>3300</b>	
S0717-B-1**	07/17/08	2700	
S0717-B-2	07/17/08	2300	B
S0717-B-3	07/17/08	1100	B
S0717-B-4	07/16/08	480	B
S0717-B-5	07/16/08	2300	B
S0717-B-6	07/16/08	13	B
S0717-B-7	07/16/08	410	B
S0717-B-8	07/16/08	3900	B
S0717-B-9	07/21/08	2200	
S0717-B-10	07/21/08	2000	
S0717-B-11	07/17/08	2500	
S0717-B-12	07/16/08	1700	
S0717-B-13	07/16/08	17	
S0717-B-14	07/16/08	680	
S0717-B-16	07/17/08	1300	
S0717-B-20	07/16/08	19000	
S0717-B-21	07/16/08	520	
S0717-B-22	07/17/08	160	
S0717-B-23	07/17/08	240	
S0717-B-24	07/17/08	580	
S0717-B-25	08/05/08	490	B
S0717-B-26	08/05/08	720	B
S0717-B-27	08/05/08	4500	B
S0717-B-28	08/05/08	1600	B
S0717-B-33	08/05/08	1100	B
S0717-B-34	08/05/08	1300	B
S0717-B-35**	09/18/08	530	
S0717-B-36	09/18/08	130	
S0717-B-37	09/18/08	320	
S0717-B-38	09/18/08	2100	
S0717-B-39	09/18/08	460	
S0717-B-40	09/18/08	1700	
S0717-B-41	09/18/08	NA	
S0717-B-42	09/18/08	NA	
S0717-B-43	09/18/08	NA	
S0717-B-44	09/18/08	630	
S0717-B-45**	10/02/08	55	

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

**Table 4**  
**Lead in Soils - Analytical Results for S0715**

Sample Location ID	Sample Collected	Lab Result (mg/kg)	Lab Qualifier
<b>S0715</b>	<b>10/29/03</b>	<b>1300</b>	<b>NE</b>
S0715-B-1	07/16/08	270	B
S0715-B-2	07/16/08	370	B
S0715-B-3	07/16/08	1000	B
S0715-B-4**	07/16/08	210	B
S0715-B-5	07/16/08	140	B
S0715-B-6	07/16/08	150	B
S0715-B-7	07/16/08	91	B
S0715-B-8	07/16/08	210	B
S0715-B-10	07/16/08	260	
S0715-B-12	07/16/08	430	

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.  
E = Estimated due to interference.  
N = Spiked sample recovery not within limits.

**Table 5**  
**Lead in Soils - Analytical Results for S0610**

Sample Location ID	Sample Collected	Lab Results (mg/kg)	Lab Qualifier
<b>S0610</b>	<b>10/30/03</b>	<b>830</b>	
S0610-B-1**	07/15/08	1700	B
S0610-B-2	07/15/08	340	B
S0610-B-3	07/15/08	67	B
S0610-B-4	07/15/08	370	B
S0610-B-5	07/15/08	370	B
S0610-B-9	07/15/08	35	
S0610-B-11	07/15/08	310	

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

**Table 6**  
**Lead in Soils - Analytical Results for S0703**

Sample Location ID	Sample Collected	Lab Results (mg/kg)	Lab Qualifier
<b>S0703</b>	<b>03/21/03</b>	<b>880</b>	<b>N</b>
S0703-B-1	07/15/08	640	B
S0703-B-2	07/15/08	190	B
S0703-B-3	07/15/08	8.2	B
S0703-B-4**	07/15/08	180	B
S0703-B-5	07/15/08	69	B
S0703-B-6**	07/15/08	49	B
S0703-B-7	07/15/08	10	B
S0703-B-8	07/15/08	12	B

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg)
2. \*\* indicates analytical result shown as higher of two sample results.

**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

N = Spiked sample recovery not within limits.

**Table 7**  
**Lead in Soils - Analytical Results for S0720**

Sample Location ID	Sample Collected	Lab Result (mg/kg)	Lab Qualifier
<b>S0720</b>	<b>10/28/03</b>	<b>1600</b>	
S0720-B-1	07/17/08	56	B
S0720-B-2	07/17/08	120	B
S0720-B-3	07/17/08	320	B
S0720-B-4	07/17/08	3500	B
S0720-B-5**	07/17/08	76	B
S0720-B-6	07/17/08	270	B
S0720-B-7	07/17/08	790	B
S0720-B-8	07/17/08	38	B
S0720-B-11**	09/18/08	74	
S0720-B-14**	07/17/08	6400	
S0720-B-20	07/17/08	49	
S0720-B-21	07/17/08	220	
S0720-B-22	07/17/08	86	
S0720-B-23	07/17/08	1600	
S0720-B-24	07/17/08	2700	
S0720-B-27	08/05/08	130	B
S0720-B-28**	08/05/08	840	B
S0720-B-29	08/05/08	1100	B
S0720-B-30	08/05/08	1000	B
S0720-B-31	09/18/08	88	
S0720-B-32	09/18/08	230	
S0720-B-33	09/18/08	1900	
S0720-B-34	10/02/08	5000	
S0720-B-35	10/02/08	6100	
S0720-B-36	10/16/08	740	
S0720-B-37**	10/16/08	7800	
S0720-B-38	10/16/08	520	
S0720-B-39	10/16/08	200	
S0720-B-40	10/16/08	140	
S0720-B-41**	10/16/08	730	

**NOTES**

1. Highlight indicates analytical result higher than screening level (700 mg/kg).
2. \*\* indicates analytical result shown as higher of two sample results.

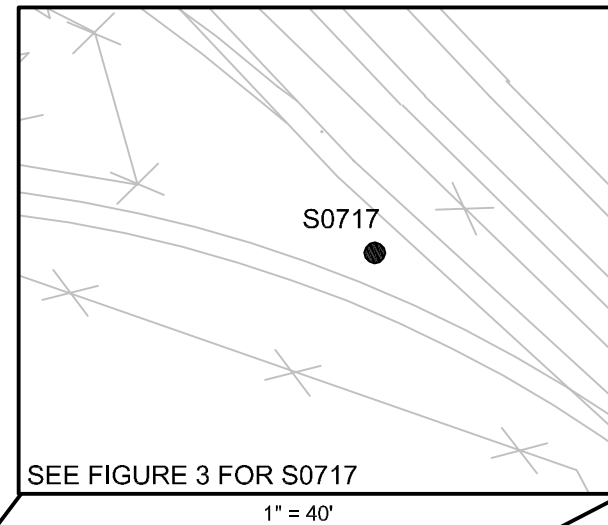
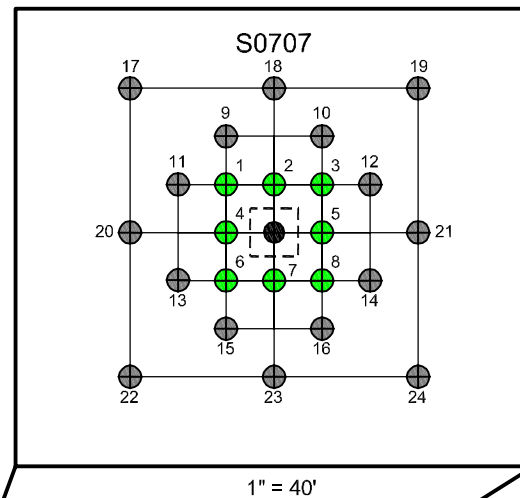
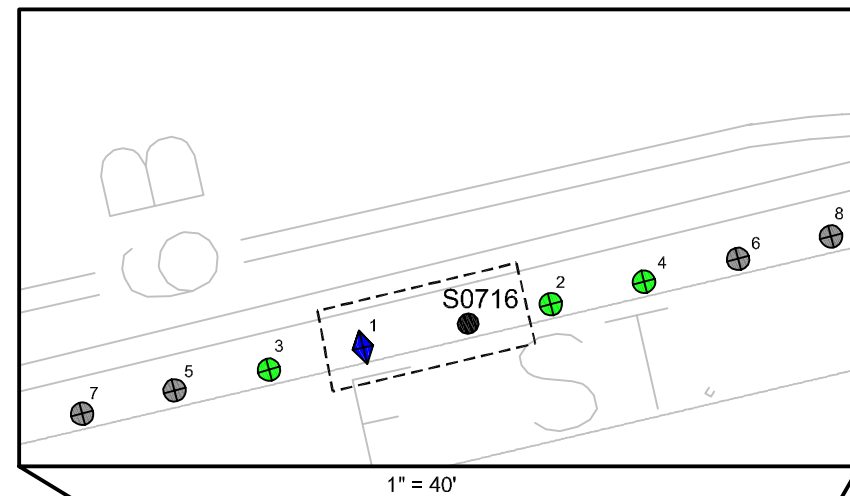
**LAB QUALIFIERS**

B = Compound was found in the blank and sample.

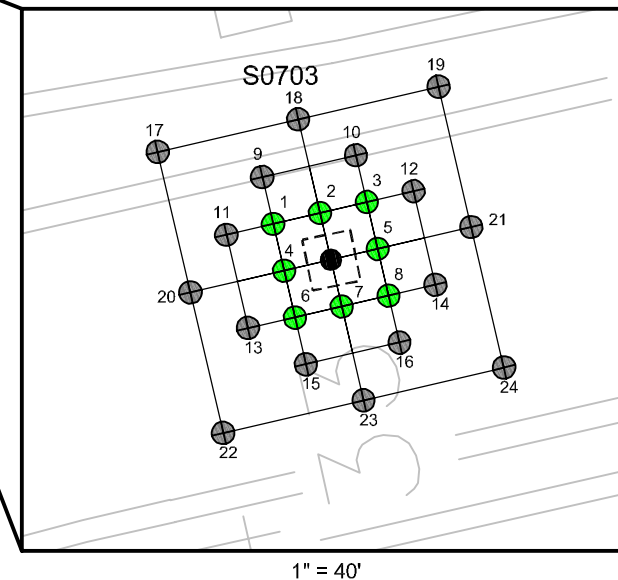
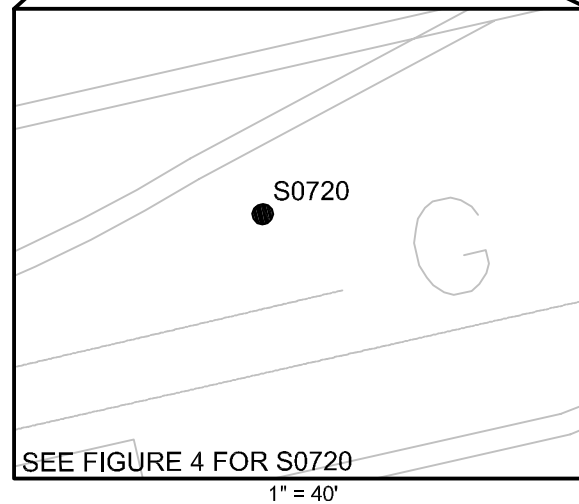
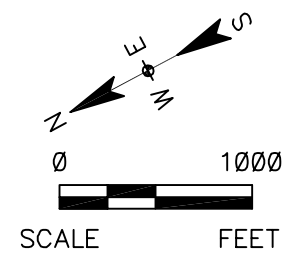
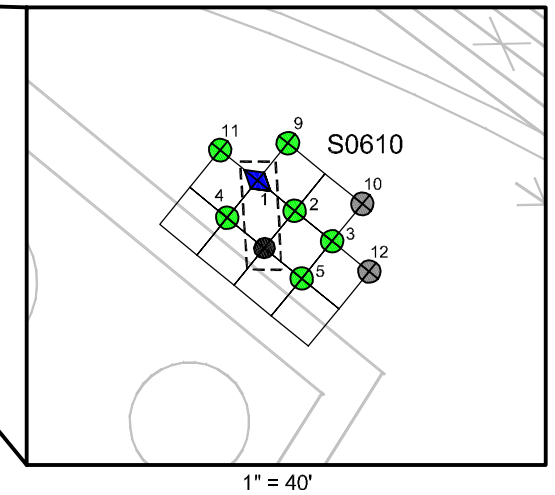
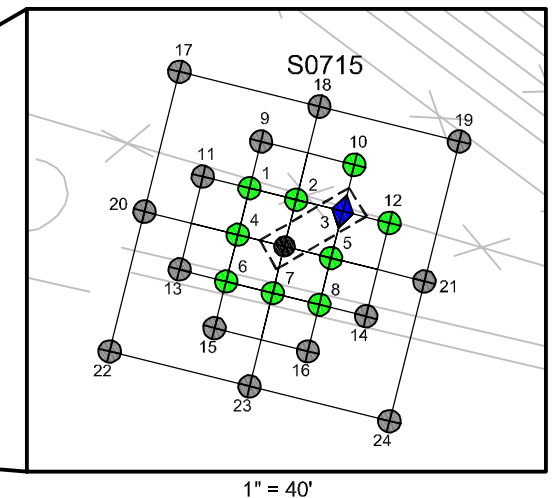
## FIGURES



File: P:\ENVIRONMENTAL\21562059 SOLUTIA W&G PCB-LEAD DELINEATION\FIGURES\LEAD FIGURES 2-09\FIGURE 2-09\FIGURE 2-09 RESULTS OF LEAD SAMPLING.DWG Last edited: 02/23/09 @ 4:19 p.m. WC-ST LOUIS, MO

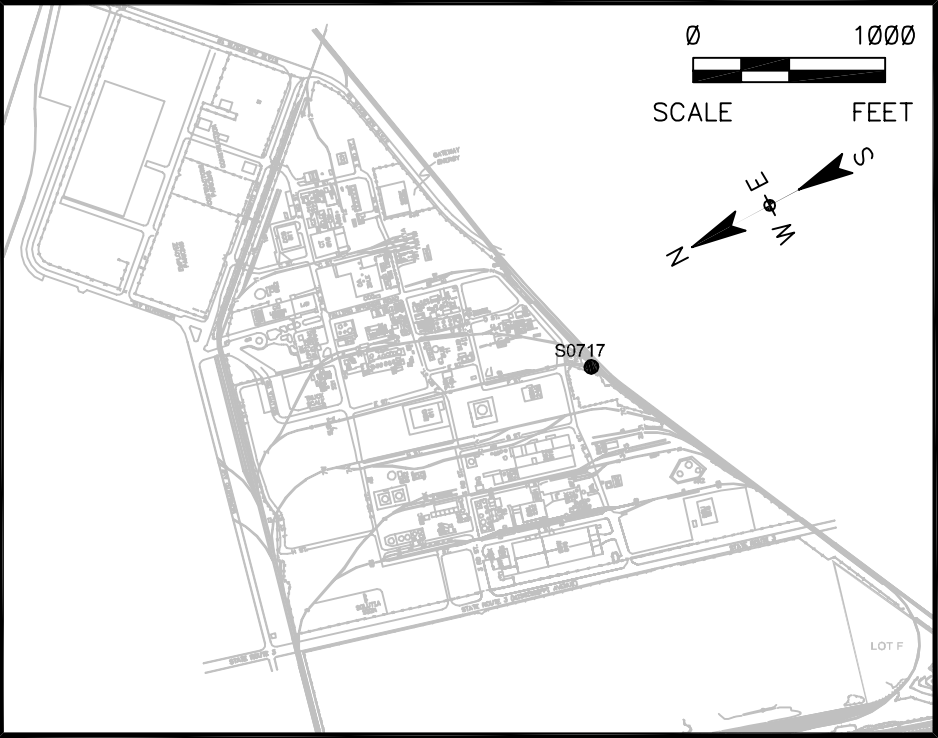
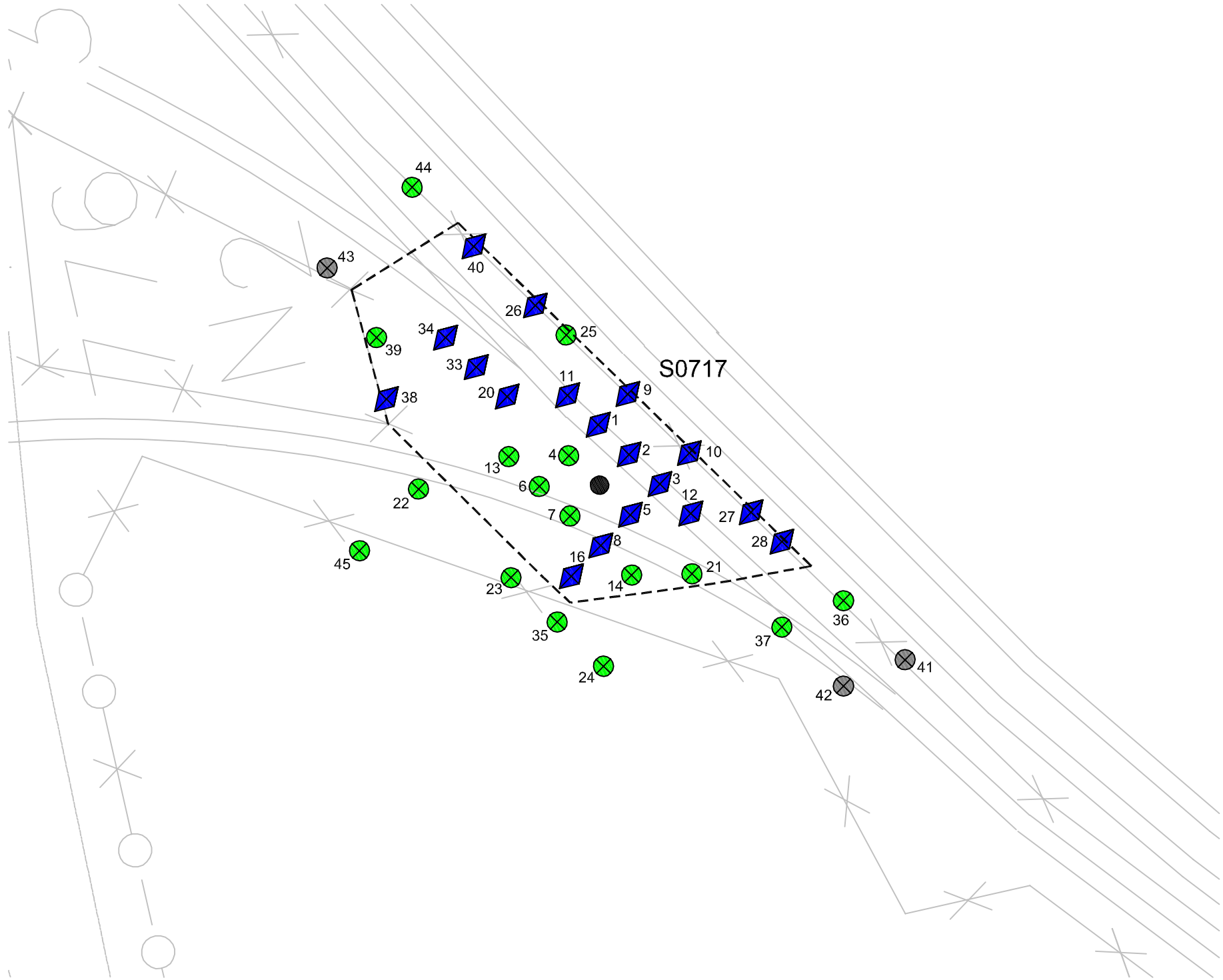


- LEGEND**
- COVERED AREA(S)
  - BELOW 700 mg/kg LEAD
  - ◆ ABOVE 700 mg/kg LEAD
  - ⊗ NOT ANALYZED
  - SOIL BORING LOCATION



CONSTRUCTION COMPLETION REPORT FOR REMEDIATING LEAD IN SOILS W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS		PROJECT NO. 21562059
<b>URS</b>		
DRN. BY: djd 2/23/09 DSGN. BY: mpm CHKD. BY:	Results of Lead Sampling	FIG. NO. 2

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**KEYMAP**

**LEGEND**

- COVERED AREA(S)
- ⊗ BELOW 700 mg/kg LEAD
- ⊠ ABOVE 700 mg/kg LEAD
- HISTORICAL SOIL BORING LOCATION
- ⊗ NOT ANALYZED

CONSTRUCTION COMPLETION REPORT FOR REMEDIATING LEAD IN SOILS  
W.G. KRUMMRICH FACILITY  
SAUGET, ILLINOIS

PROJECT NO.  
21562059

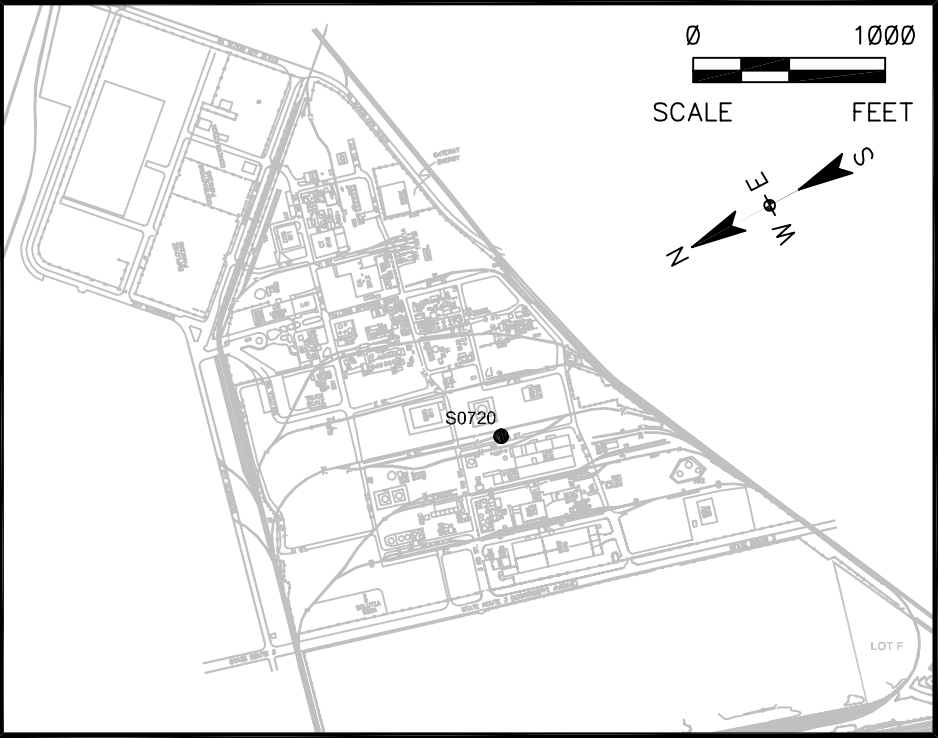
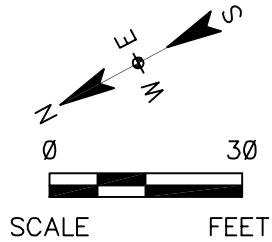
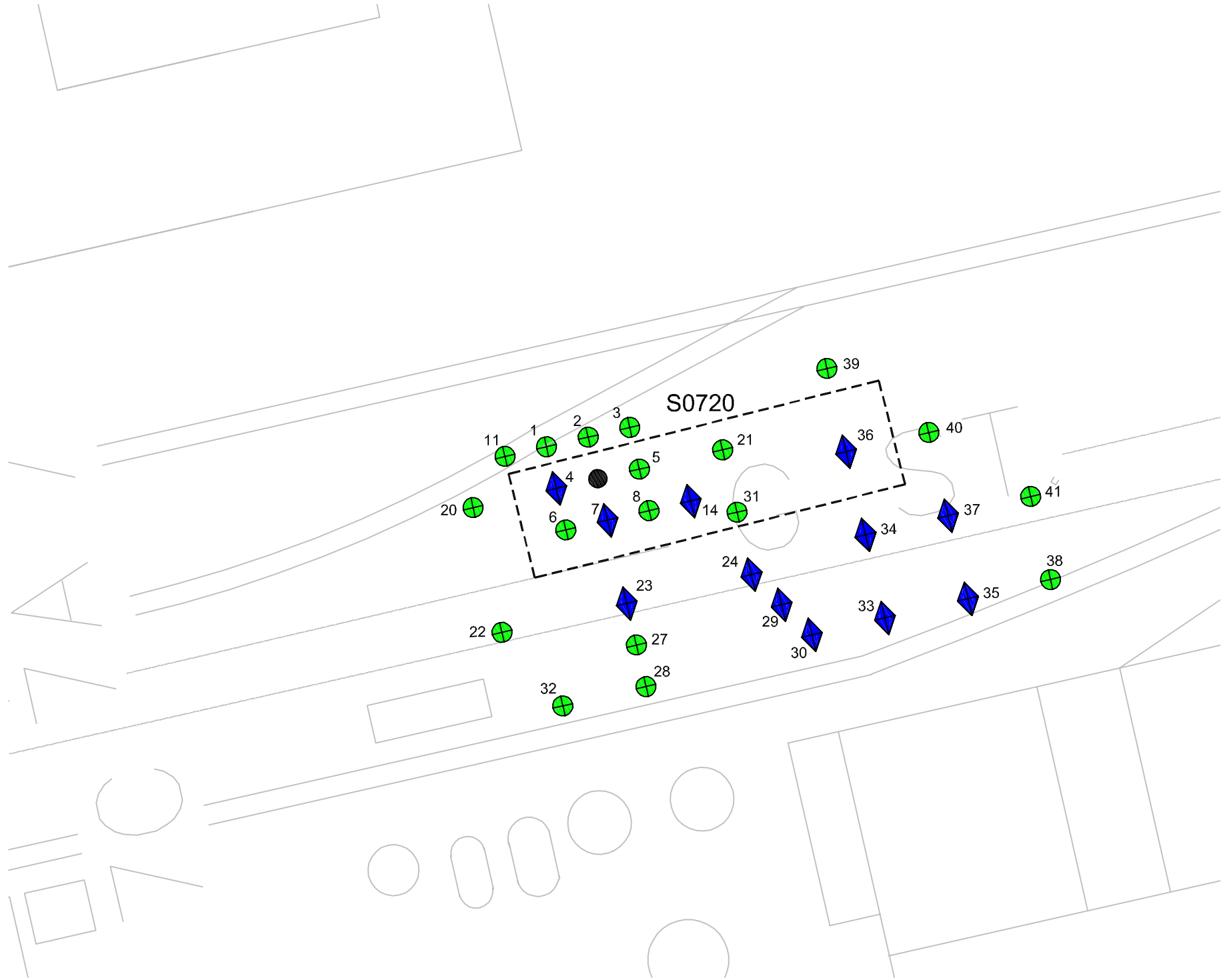


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DSGN. BY: mpm  
CHKD. BY:

**Results of Lead Sampling  
Around S0717**

FIG. NO.  
3

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## KEYMAP

- LEGEND**
- COVERED AREA(S)
  - BELOW 700 mg/kg LEAD
  - ◆ ABOVE 700 mg/kg LEAD
  - HISTORICAL SOIL BORING LOCATION

CONSTRUCTION COMPLETION REPORT FOR REMEDIATING LEAD IN SOILS  
W.G. KRUMMRICH FACILITY  
SAUGET, ILLINOIS

PROJECT NO.  
21562059

**URS**

DRN. BY: djd 2/23/09  
DSGN. BY: mpm  
CHKD. BY:

**Results of Lead Sampling  
Around S0720**

FIG. NO.  
4

## ATTACHMENTS

**ATTACHMENT A**  
**SCALED MAPS AND LEGAL DESCRIPTIONS**



## ZAHNER & ASSOCIATES, INC.

### PROFESSIONAL LAND SURVEYORS

26 North Jackson Street  
Perryville, Missouri 63775

(573) 547-1771  
Fax (573) 547-1452

1-800-773-1771  
zahner@zahnerinc.com

“Lead Area S0716”  
1458 Sq.Ft. (0.03 Ac.)

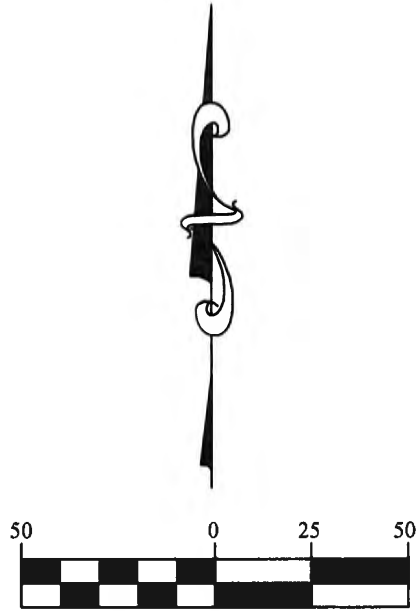
A tract of land being part of Lot No. 223 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $43^{\circ}13'38''$  East a distance of 1591.41 feet to a PK nail, said PK nail being the point of beginning of the tract herein described; Thence North  $00^{\circ}00'16''$  West a distance of 62.58 feet to a PK nail; Thence South  $88^{\circ}28'46''$  East a distance of 23.26 feet to a cottonpicker spindle; Thence South  $00^{\circ}25'40''$  East a distance of 61.59 feet to a cottonpicker spindle; Thence South  $89^{\circ}05'39''$  West a distance of 23.71 feet to the point of beginning containing 1458 square feet (0.03 acre).

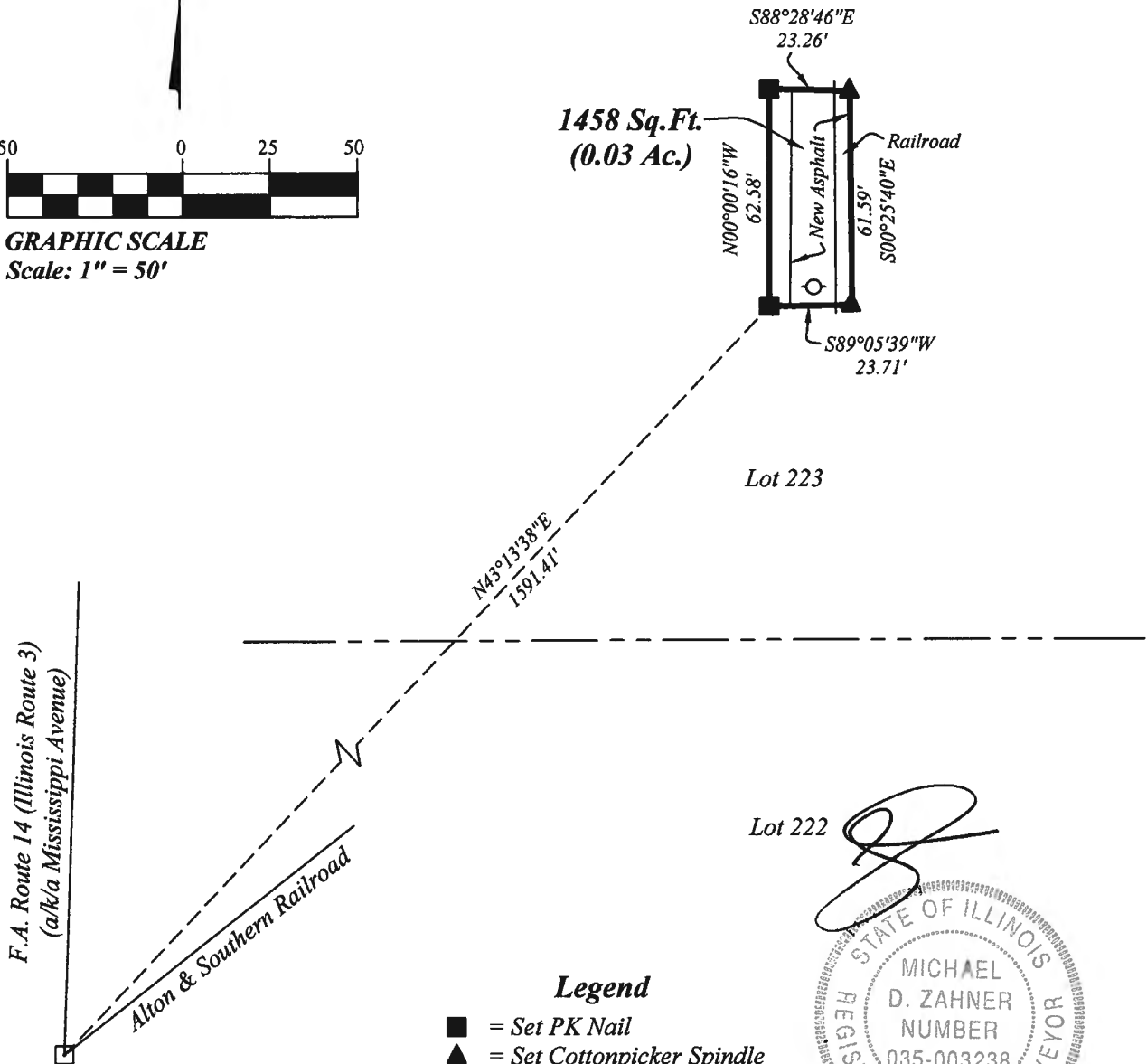


# Drawing of "Lead Area S0716"

*Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W*

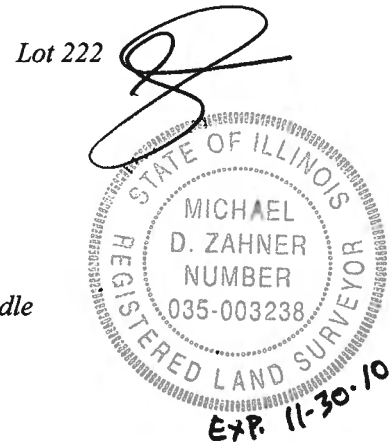


**GRAPHIC SCALE**  
Scale: 1" = 50'



## Legend

- = Set PK Nail
- ▲ = Set Cottonpicker Spindle
- = Found Iron Pipe
- = Power Pole



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0716  
Date: 2-23-09  
Drawn By: LH



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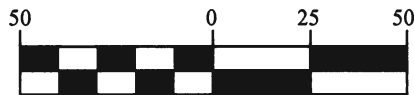
“Lead Area S0707”  
100 Sq.Ft.

A tract of land being part of Lot No. 222 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $48^{\circ}05'42''$  East a distance of 1545.67 feet to a PK nail, said PK nail being the point of beginning of the tract herein described; Thence North  $02^{\circ}03'09''$  East a distance of 9.92 feet to a PK nail; Thence South  $85^{\circ}29'30''$  East a distance of 10.07 feet to a PK nail; Thence South  $02^{\circ}03'00''$  West a distance of 10.05 feet to a PK nail; Thence North  $84^{\circ}44'17''$  West a distance of 10.08 feet to the point of beginning containing 100 square feet.



# Drawing of "Lead Area S0707"



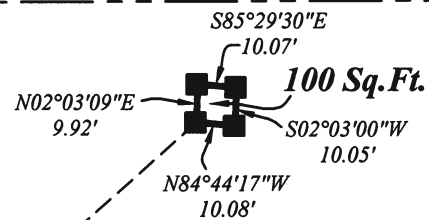
**GRAPHIC SCALE**  
Scale: 1" = 50'

## Legend

- = Set PK Nail
- = Found Iron Pipe

Lot 223

**Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W**



Lot 222

F.A. Route 14 (Illinois Route 3)  
(a/k/a Mississippi Avenue)

Alton & Southern Railroad

N48°05'42"E  
1545.67'

Approx. R/W  
Alton & Southern Railroad



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0707  
Date: 2-23-09  
Drawn By: LH



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“Lead Area S0717”  
0.14 Ac.

A tract of land being part of Lot No. 222 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $53^{\circ}28'37''$  East a distance of 1258.55 feet to a cottonpicker spindle, said cottonpicker spindle being the point of beginning of the tract herein described; Thence North  $00^{\circ}39'13''$  West a distance of 23.53 feet to a PK nail; Thence North  $39^{\circ}45'55''$  East a distance of 2.64 feet to a PK nail; Thence North  $02^{\circ}10'02''$  West a distance of 7.08 feet to a PK nail; Thence North  $18^{\circ}27'42''$  East a distance of 40.55 feet to a PK nail; Thence North  $54^{\circ}55'02''$  East a distance of 50.36 feet to a PK nail; Thence North  $28^{\circ}07'36''$  East a distance of 9.07 feet to a cottonpicker spindle; Thence North  $80^{\circ}40'41''$  East a distance of 12.27 feet to a PK nail; Thence South  $72^{\circ}50'53''$  East a distance of 40.56 feet to a PK nail; Thence South  $03^{\circ}03'26''$  West a distance of 9.17 feet to a PK nail; Thence North  $53^{\circ}55'49''$  East a distance of 3.64 feet to a PK nail; Thence South  $19^{\circ}15'19''$  East a distance of 8.59 feet to a PK nail; Thence South  $29^{\circ}45'40''$  East a distance of 6.40 feet to a cottonpicker spindle; Thence South  $58^{\circ}09'54''$  West a distance of 55.25 feet to a PK nail; Thence South  $56^{\circ}58'29''$  West a distance of 43.17 feet to a PK nail; Thence South  $55^{\circ}17'18''$  West a distance of 43.40 feet to feet to the point of beginning containing 0.14 acre.

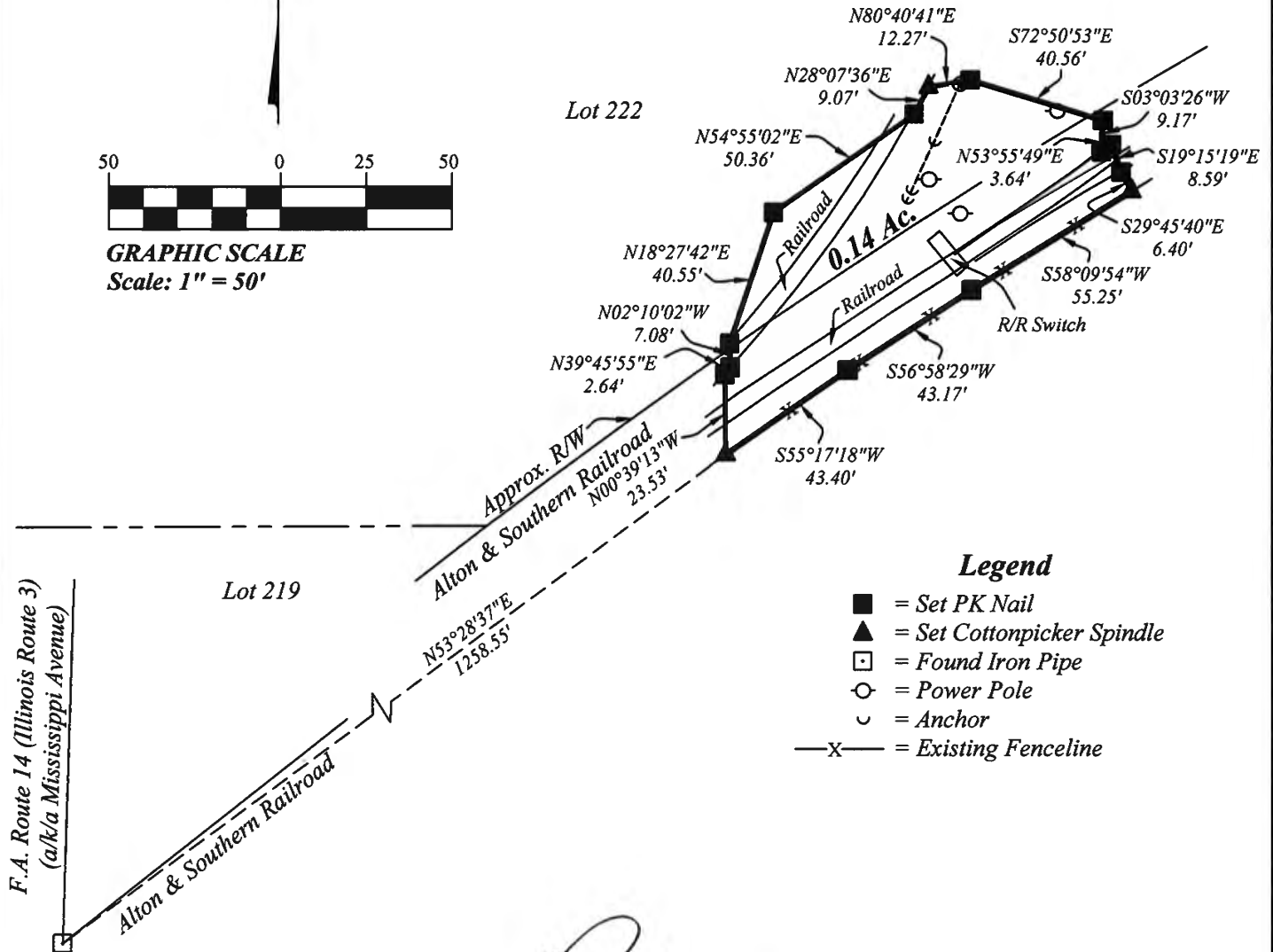


# Drawing of "Lead Area S0717"

*Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W*



**GRAPHIC SCALE**  
Scale: 1" = 50'



## Legend

- = Set PK Nail
- ▲ = Set Cottonpicker Spindle
- = Found Iron Pipe
- = Power Pole
- ⌒ = Anchor
- X— = Existing Fenceline



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0717  
Date: 2-23-09  
Drawn By: LH



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“Lead Area S0715”  
245 Sq.Ft.

A tract of land being part of Lot 219 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $51^{\circ}44'09''$  East a distance of 983.22 feet to an iron pin, said iron pin being the point of beginning of the tract herein described; Thence North  $36^{\circ}24'26''$  East a distance of 20.04 feet to an iron pin; Thence South  $55^{\circ}58'33''$  East a distance of 12.21 feet to an iron pin; Thence South  $36^{\circ}19'05''$  West a distance of 20.00 feet to an iron pin; Thence North  $56^{\circ}10'51''$  West a distance of 12.24 feet to the point of beginning containing 245 square feet.



# Drawing of "Lead Area S0715"



Lot 222



**GRAPHIC SCALE**  
Scale: 1" = 50'

Lot 219

**Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W**

**245 Sq.Ft.  
(0.01 Ac.)**

N36°24'26"E 20.04'  
S55°58'33"E 12.21'  
N56°10'51"W 12.24'  
S36°19'05"W 20.00'

Approx. R/W  
Alton & Southern Railroad

F.A. Route 14 (Illinois Route 3)  
(a/k/a Mississippi Avenue)

Alton & Southern Railroad

## Legend

- = Set Iron Pin
- = Found Iron Pipe



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0715  
Date: 2-23-09  
Drawn By: LH



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### PROFESSIONAL LAND SURVEYORS

26 North Jackson Street  
Perryville, Missouri 63775

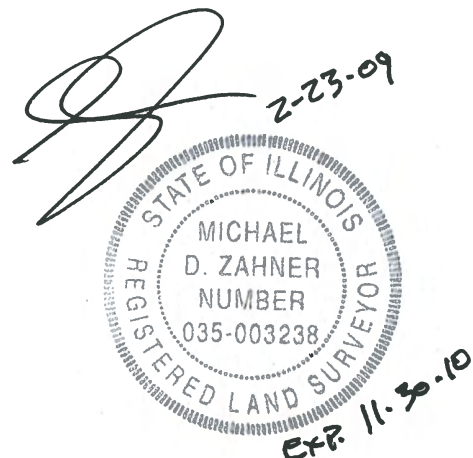
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zahner@zahnerinc.com

**"Lead Area S0610"**  
507 Sq.Ft. (0.01 Ac.)

A tract of land being part of Lot No. 218 and Lot No. 219 of the "Third Subdivision of the Cahokia Commons", Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $48^{\circ}42'48''$  East a distance of 568.32 feet to an iron pin, said iron pin being the point of beginning of the tract herein described; Thence North  $54^{\circ}08'16''$  East a distance of 30.00 feet to an iron pin; Thence South  $41^{\circ}21'36''$  East a distance of 15.12 feet to an iron pin; Thence South  $47^{\circ}11'22''$  West a distance of 30.04 feet to an iron pin; Thence North  $40^{\circ}51'13''$  West a distance of 18.75 feet to the point of beginning containing 507 square feet (0.01 acre).



# Drawing of "Lead Area S0610"



**GRAPHIC SCALE**  
Scale: 1" = 50'

Lot 219

**Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W**

**507 Sq.Ft.  
(0.01 Ac.)**

S41°21'36"E  
15.12'

N54°08'16"E  
30.00'

Lot 218

N40°51'13"W  
18.75'

S47°11'22"W  
30.04'

Approx. R/W  
Alton & Southern Railroad

N48°42'48"E  
568.32'

F.A. Route 14 (Illinois Route 3)  
(a/k/a Mississippi Avenue)

Alton & Southern Railroad

## Legend

- = Set Iron Pin
- = Found Iron Pipe



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0610  
Date: 2-23-09  
Drawn By: LH



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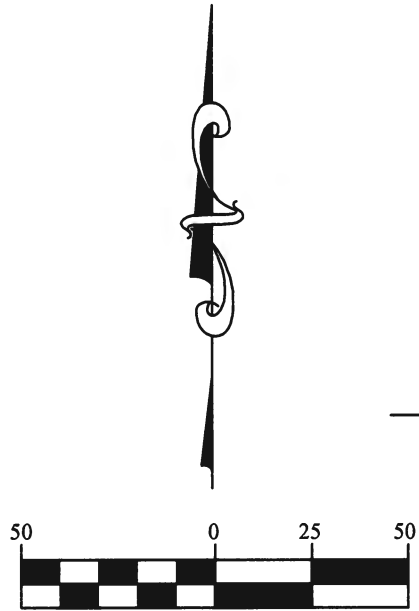
“Lead Area S0703”  
103 Sq.Ft.

A tract of land being part of Lot No. 219 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $41^{\circ}20'42''$  East a distance of 944.18 feet to a cottonpicker spindle, said cottonpicker spindle being the point of beginning of the tract herein described; Thence South  $88^{\circ}53'57''$  East a distance of 10.35 feet to a cottonpicker spindle; Thence South  $00^{\circ}28'31''$  West a distance of 10.09 feet to a cottonpicker spindle; Thence North  $87^{\circ}34'13''$  West a distance of 10.28 feet to a cottonpicker spindle; Thence North  $00^{\circ}02'01''$  East a distance of 9.85 feet to the point of beginning containing 103 square feet.



**Drawing of  
"Lead Area S0703"**



**GRAPHIC SCALE**  
Scale: 1" = 50'

Lot 222

103 Sq.Ft.  
S88°53'57"E 10.35'  
S00°28'31"W 10.09'  
N00°02'01"E 9.85'  
N87°34'13"W 10.28'

Lot 219

**Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W**

F.A. Route 14 (Illinois Route 3)  
(a/k/a Mississippi Avenue)

Alton & Southern Railroad

N41°20'42"E  
944.18'

**Legend**

- ▲ = Set Cottonpicker Spindle
- ◻ = Found Iron Pipe



*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0703  
Date: 2-23-09  
Drawn By: LH



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“Lead Area S0720”  
0.14 Acre

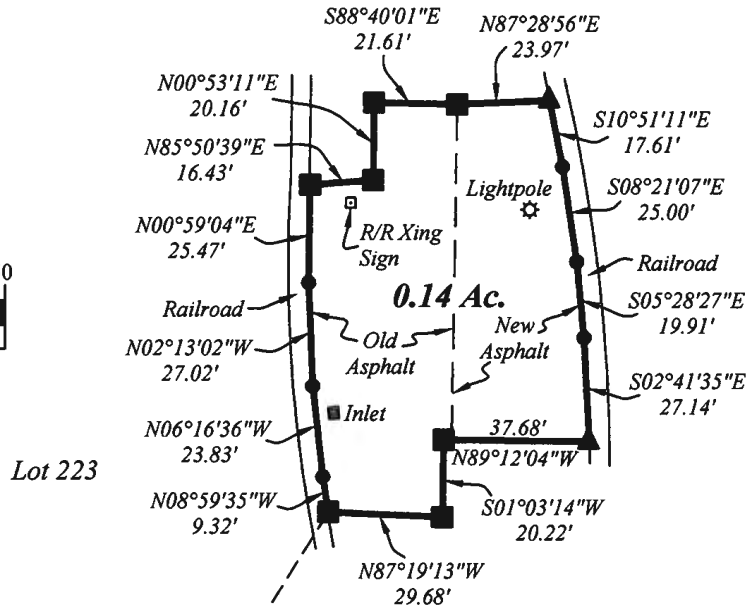
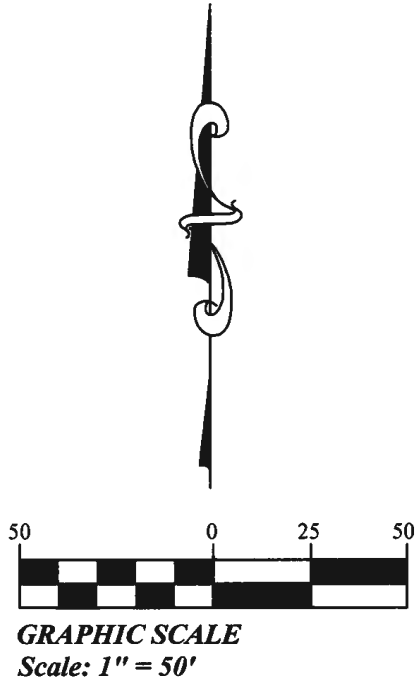
A tract of land being part of Lot No. 223 of the “Third Subdivision of the Cahokia Commons”, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County, Illinois, and being more particularly described as follows:

Commencing at an iron pipe at the intersection of the Northwest right-of-way line of the Alton & Southern Railroad with the East line of F.A. Route 14 (Illinois Route 3) (a/k/a Mississippi Avenue); Thence North  $31^{\circ}53'30''$  East a distance of 1465.43 feet to a PK nail, said PK nail being the point of beginning of the tract herein described; Thence North  $08^{\circ}59'36''$  West a distance of 9.32 to a point; Thence North  $06^{\circ}16'35''$  West a distance of 23.83 feet to a point; Thence North  $02^{\circ}13'02''$  West a distance of 27.02 feet to a point; Thence North  $00^{\circ}59'04''$  East a distance of 25.47 feet to a PK nail; Thence North  $85^{\circ}50'39''$  East a distance of 16.43 feet to a PK nail; Thence North  $00^{\circ}53'11''$  East a distance of 20.16 feet to a PK nail; Thence South  $88^{\circ}40'01''$  East a distance of 21.61 feet to a PK nail; Thence North  $87^{\circ}28'56''$  East a distance of 23.97 feet to a cottonpicker spindle; Thence South  $10^{\circ}51'11''$  East a distance of 17.61 feet to a point; Thence South  $08^{\circ}21'07''$  East a distance of 25.00 feet to a point; Thence South  $05^{\circ}28'27''$  East a distance of 19.91 feet to a point; Thence South  $02^{\circ}41'35''$  East a distance of 27.14 feet to a cottonpicker spindle; Thence North  $89^{\circ}12'04''$  West a distance of 37.68 feet to a PK nail; Thence South  $01^{\circ}03'14''$  West a distance of 20.22 feet to a PK nail; Thence North  $87^{\circ}19'13''$  West a distance of 29.68 feet to the point of beginning containing 0.14 acre.



# Drawing of "Lead Area S0720"

Lot 226



**Third Subdivision  
of the  
Cahokia Commons  
T 2 N, R 10 W**

F.A. Route 14 (Illinois Route 3)  
(aka Mississippi Avenue)

Alton & Southern Railroad

## Legend

- = Set PK Nail
- ▲ = Set Cottonpicker Spindle
- = Found Iron Pipe
- = Calculated Position - No Monument Set




*This drawing does not depict a  
property boundary survey and is not  
intended for fee conveyance.*

Job No. SI09104  
Drawing No. SI09104-S0720  
Date: 2-23-09  
Drawn By: LH

**ATTACHMENT B**  
**PHOTOGRAPHIC LOG**

<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> <b>1</b>	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0716 - View looking north-northwest towards F Street, Little MO is pictured at the top			

<b>Photo No.</b> <b>2</b>	<b>Date:</b> 02/24/09	
<b>Description:</b>  S0716 - View looking south-southwest towards 5th Street, building to the right is BBN245		

<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> <b>3</b>	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0717 - View looking west-southwest along property fence			

<b>Photo No.</b> <b>4</b>	<b>Date:</b> 02/24/09	
<b>Description:</b>  S0717 - View looking east-northeast along property fence		




## PHOTOGRAPHIC LOG

<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> <b>5</b>	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0715 - View looking north-northwest towards rail track #7C			

<b>Photo No.</b> <b>6</b>	<b>Date:</b> 02/24/09	
<b>Description:</b>  S0715 - View looking south-southeast towards property fence		




## PHOTOGRAPHIC LOG

<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> <b>7</b>	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0610 - View looking north-northeast towards rail track #8			

<b>Photo No.</b> <b>8</b>	<b>Date:</b> 02/24/09	
<b>Description:</b>  S0610 - View looking south-southwest towards property fence		

<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> 9	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0703 - View looking southwest in between existing rail lines			

<b>Photo No.</b> <b>10</b>	<b>Date:</b> 02/24/09
<b>Description:</b>  S0720 - View looking east-northeast along G Street, Little MO is pictured at the top	



<b>Client Name:</b> Solutia Inc.		<b>Site Location:</b> Sauget, Illinois	<b>Project No.</b> 21562059
<b>Photo No.</b> <b>11</b>	<b>Date:</b> 02/24/09		
<b>Description:</b>  S0720 - View looking east-southeast along G Street, building BBN245 is pictured at the top			

<b>Photo No.</b> <b>12</b>	<b>Date:</b> 02/24/09	
<b>Description:</b>  S0720 - View looking south-southwest along G Street, building BBZ is pictured at the right		

**ATTACHMENT C**  
**INSPECTION LOG**

## Maintenance Inspection Log

### Lead Areas

INSPECTOR

Date of Inspection

[illegible]

If Yes, describe below

## MAINTENANCE / REPAIR REQUIREMENTS

Describe any items requiring work. Mark the location of the item on figures if necessary. Add other sheets if necessary.

[illegible]