



Illinois Environmental Protection Agency

2520 West Iles Avenue • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Site Remediation Program Form (DRM-2)

(To be Submitted with all Plans and Reports)

You may complete this form in Acrobat, save a copy, print, sign, and mail it to the address above.

I. Site Identification

Site Name: Manners Park

Street Address: 18 Manners Park Road

City: Taylorville

State: IL

Zip Code: 62568

Phone: 217-820-3110

Bureau of Land ID Number: 1671200020

II. Remediation Applicant

Applicant's Name: Ms. Marlane Miller

Company: Taylorville Park District

Street Address: 18 Manners Park Road

P.O. Box: _____

City: Taylorville

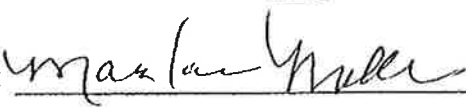
State: IL

Zip Code: 62568

Phone: 217-820-3110

Email Address: laneymm84@gmail.com

I hereby request that the Illinois EPA review and evaluate the attached project documents in accordance with the terms and conditions of the Environmental Protection Act (415 ILCS 5), implementing regulations, and the review and evaluation services agreement.

Remediation Applicant's Signature: 

Date: 6-16-2026

III. Consultant

Contact's Name: Ms. Catherine Case, PE

Company: Midwest Environmental Consulting Services, Inc.

Street Address: 2551 North Bridge Street

P.O. Box: _____

City: Yorkville

State: IL

Zip Code: 60560

Phone: 6305533989

Email Address: ccase@mec-us.com



June 18, 2026

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
2520 West Isles Avenue
Post Office Box 19276
Springfield, IL 62794-9276

Attention: Mr. Aaron S. Gregory – Project Manager

Re: 0210605129 – Christian County
Taylorville/Manners Park
18 Manners Park Road, Taylorville, IL
Site Remediation Program – Response to IEPA Comments
MEC Project: 26-02-0115-EC

Dear Mr. Gregory:

On behalf of the Taylorville Park District, please find enclosed a signed DRM-2 form and two hard copies of the response to IEPA comments from the letter dated July 21, 2025, in reference to Manners Park located at 18 Manners Park Road in Taylorville, Christian County, Illinois (Subject Property). An electronic copy has been sent to you via electronic mail.

Please contact the undersigned if you have questions or would like to discuss the submittal.

Sincerely,

Midwest Environmental Consulting Services, Inc.

A handwritten signature in blue ink, appearing to read "Catherine Case".

Catherine Case, PE
Senior Project Manager
630-768-3523
ccase@mec-us.com

A handwritten signature in blue ink, appearing to read "Jennifer R. Anderson".

Jennifer Anderson
Senior Project Manager
331-216-9798
janderson@mec-us.com

Enclosure: DRM-2 Form
Response to IEPA Comments

cc: Marlane Miller, parkadmin@taylorvilleparkdistrict.com (via electronic mail)



IV. Professional Engineer's or Geologist's Seal or Stamp

Documents Submitted

- | | |
|--|---|
| ☐ Site Investigation Report - Comprehensive | ☐ Remedial Action Completion Report |
| ☐ Site Investigation Report - Focused | ☒ Sampling Plan |
| ☐ Remediation Objectives Report - Tier 1 or 2 | ☐ Dry Cleaner Trust Fund - Budget |
| ☐ Remediation Objectives Report - Tier 3 | ☐ Dry Cleaner Trust Fund - Reimbursement Request |
| ☐ Remedial Action Plan | ☐ Other: _____ |

I attest that all site investigations or remedial activities that are subject of this plan(s) or report(s) were performed under my direction, and this document and all attachments were prepared under my direction or reviewed by me, and to the best of my knowledge and belief, the work described in the plan and report has been designed or completed in accordance with the Illinois Environmental Protection Act (415 ILCS 5), 35 Ill. Adm. Code 740, and generally accepted engineering practices or principles of professional geology, and the information presented is accurate and complete.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 Felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Engineer's or
Geologist's Name: Catherine Case, PE

Company: Midwest Environmental Consulting Services, Inc.

Registration Number: 062.063700

Phone: 6305533989

License Expiration Date: 11/30/2027

Signature: 

Date: 6/17/2026

Note: The authority of a Licensed Professional Geologist to certify documents submitted to the Illinois Environmental Protection Agency for review and evaluation pursuant to Title XVII of the Environmental Protection Act is limited to Site Investigation Reports (415 ILCS 58.7(f), as amended by P.A. 92-0735, effective July 25, 2002. A Licensed Professional Geologist cannot certify to Remediation Objectives Reports, Remedial Action Plans or Remedial Action Completion Reports.

Professional Engineer's or Geologist's
Seal or Stamp





May 28, 2026

IEPA – Bureau of Land
Remedial Project Management Section
2520 West Isles Avenue
PO Box 19276
Springfield, Illinois 62794-9276

Attention: Mr. Aaron S. Gregory – Project Manager

**Subject: Response to IEPA Comments
0210605129/Christian County
Taylorville/Manners Park
Site Remediation Program
MEC Project: 26-02-0115-EC**

Dear Mr. Gregory:

On behalf of the Taylorville Park District, Midwest Environmental Consulting Services, Inc. (MEC) is submitting the following response to Illinois Environmental Protection Agency (IEPA) comments from the letter dated July 21, 2025, in reference to Manners Park located at 18 Manners Park Road in Taylorville, Illinois (Subject Property). A copy of the IEPA letter is provided as **Attachment 1**.

The following presents each IEPA comment followed by our response.

1. The previously submitted DRM-1 Form (received September 23, 2024/Log No. 24-78792) indicates that a Comprehensive No Further Remediation (NFR) Letter is being pursued. Sampling and analysis of all Target Compound List (TCL) analytes have not been completed throughout the various investigations performed on-site. In order to receive a Comprehensive NFR Letter, additional sampling (in accordance with the comments below) must be performed for TCL analytes. Please clarify whether site closure will be comprehensive or focused.

Response: The Taylorville Park District is electing to pursue a Focused NFR Letter rather than a Comprehensive NFR Letter. The focused scope is anticipated to address the constituents of concern identified through previous investigations and supplemental investigation activities, including lead, arsenic, manganese, and selected semivolatile organic compounds/polynuclear aromatic hydrocarbons, including benzo(a)pyrene. Volatile organic compounds will be retained in the conceptual site model because of the Subject Property's proximity to the former manufactured gas plant and previous soil vapor evaluation; however, based on available data, volatile organic compounds do not appear to be a primary driver for soil remediation at this time.

The focused scope may be refined based on the results of the supplemental investigation, groundwater evaluation, and IEPA review.



2. The investigations performed on-site to date have not evaluated subsurface soils or groundwater. Subsurface soil and groundwater sampling must be performed across the site with respect to general site characterization and delineation of previously identified exceedances of Tier 1 objectives.

Various hydrogeologic data such as hydraulic conductivity, hydraulic gradient, and groundwater flow direction will also be necessary in order to eventually evaluate pathway exclusion options.

Response: A subsurface soil and groundwater investigation, including obtaining the various hydrogeologic data, is proposed in the Supplemental Focused Site Investigation Work Plan (Work Plan) provided as **Attachment 2**. The Work Plan includes targeted soil borings, permanent groundwater monitoring wells, groundwater sampling, groundwater elevation measurements, hydraulic conductivity testing, and evaluation of apparent groundwater flow direction and hydraulic gradient.

3. The FSIR indicates concentrations of lead on-site exceeded the toxicity characteristic value for hazardous waste. Additional sampling must be performed both vertically and laterally to delineate the area where these concentrations exist. Sample location P7 should also be resampled for Toxicity Characteristic Leaching Procedure (TCLP) lead due to the previously identified elevated concentration of total lead.

Response: As discussed in the Work Plan, soil boring locations will include locations needed to further evaluate areas where previous total lead and/or TCLP lead results indicate the potential for characteristically hazardous soil. At a minimum, locations near previous samples S14 and S16 will be evaluated to further delineate the vertical and lateral extent of lead concentrations associated with previous TCLP lead results above 5 milligrams per liter. Previous sample location P7 will also be resampled for total lead and TCLP lead to evaluate whether leachable lead is present at that location.

4. It is not clear how the X-ray Fluorescence (XRF) sample location naming convention corresponds to the gridded area and grab sample locations displayed in Figure 2. Please explain the naming convention and provide greater detail on where each XRF sample was taken. Additionally, please provide the rationale for which analytical sample locations were determined by XRF screening results. Additional sampling may be requested based on the screening values and locations.

Response: MEC has prepared comprehensive figures, provided in the Supplemental Focused Site Investigation Work Plan in **Attachment 2**, including:

- Figure 1: Site Location Diagram
- Figure 2: Comprehensive Sample Location Diagram
- Figure 3: Lead – Surface Soil & XRF Screening
- Figure 4: Arsenic – Surface Soil & XRF Screening
- Figure 5: Manganese – Surface Soil & XRF Screening
- Figure 6: PNA Surface Soil Results and Soil Vapor Results
- Figure 7: Summary of Elevated Surface Soil Areas

Based on our interpretation of the data, Andrews Engineering conducted approximately 400 XRF screening measurements across a defined grid system (Grids 1 through 47, 60 through 68, and grouped grids 48–59).

XRF screening identified multiple grids containing elevated lead, arsenic, and manganese concentrations. Available documentation does not identify precise individual XRF measurement coordinates within each grid, limiting the ability to associate screening results with exact point locations. As a result:

- Screening results can be associated with a grid area;
- Precise point locations within each grid cannot be confirmed;
- Delineation of impacted areas remains approximate.

Laboratory-confirmed soil samples collected within certain grids show concentrations both above and below screening values, indicating variability within grid boundaries. Table 2 in **Attachment 3** summarizes the XRF data.

Total metals were analyzed in surface soil by both IEPA (P-series samples) and Andrews Engineering (S-series samples). Exceedances of residential criteria were identified for Lead, Arsenic and Manganese.

Notable findings include:

- Lead concentrations exceeding the TACO Tier 1 residential ingestion remediation objective of 400 milligrams per kilogram (mg/kg) in select locations (e.g., P7, S14, S16);
- Arsenic concentrations exceeding the TACO Tier 1 residential ingestion remediation objective of 11.3 mg/kg in select samples;
- Manganese concentrations exceeding the TACO Tier 1 residential ingestion remediation objective of 1,600 mg/kg in limited locations (e.g., S1 and S16).

The distribution of elevated metals appears heterogeneous across the Subject Property.

5. The portion of the remediation site to the south of the baseball diamonds and path was not included in the XRF screening area and has not yet been sampled. Additional screening/sampling should be performed in this southern area to characterize the entirety of the remediation site. Alternatively, the remediation site boundary may be revised to include the previously investigated area. A legal description should be provided for the final remediation site boundary, and all forthcoming figures should more clearly display the site boundary.

Response: The requested additional screening is proposed in the Work Plan in **Attachment 2**. The proposed 2026 XRF grid includes targeted southern boundary verification cells. Once the remediation site boundary is confirmed, MEC will retain a licensed surveyor to prepare a legal description and survey of the remediation site.

6. Pursuant to 35 Illinois Administrative Code (IAC) 710.435(d)(C)(ii), a focused site investigation report must include the results of a potable well survey within 2,500 feet of the remediation site. Please provide this information.

Response: A potable water well survey will be completed to evaluate potential potable water use within 2,500 feet of the remediation site, consistent with 35 IAC 740.435(c)(2)(C)(ii). The survey will include available potable water well records, public water supply information, and applicable local groundwater use restrictions or ordinances, if available. The results of the potable water well survey will be used to support evaluation of the soil component of the groundwater ingestion exposure route and groundwater pathway considerations, and will be provided in the future FSIR report after completion of field work.

7. Please provide figures which display all identified recognized environmental conditions (RECs) and the sampling locations of all investigations to date (i.e. Andrews, UES and Illinois EPA). Sample data from the previous investigations should also be included in a set of tables as part of the FSIR and just in the appendices.

Response: A Phase I Environmental Site Assessment was not conducted for the Subject Property, as the investigation was initiated in response to public concerns related to adjacent remedial activities. However, potential environmental conditions were evaluated based on available site history, adjacent property records, and known remedial activities at the Ameren site, as summarized in Section 3 of the Work Plan in **Attachment 2**.

The following comprehensive tables are provided as **Attachment 3**:

Table 1: Inorganics Surface Soil Analytical Results

Table 2: XRF Screening (Grid) Summary

Table 3: Soil Vapor Results Summary

Table 4: PNA Surface Soil Results

8. The figures and tables included in the provided copy of the UES Environmental Soil and Vapor Sampling and Testing Report are not legible. Please provide more legible copies of the figures and tables.

Response: MEC has incorporated the information from the UES report in the figures and tables discussed in previous responses above. In summary, UES completed soil vapor sampling and surface soil sampling.

Soil vapor samples were analyzed for volatile organic compounds using EPA Method TO-15. No detected concentrations exceeded the Tier 1 Table G Soil Gas Remediation Objectives for the outdoor inhalation exposure route.

Based on available data, volatile organic compounds in soil vapor do not appear to represent a primary driver for further corrective action at this time. Soil vapor results are summarized in Table 3.

IEPA and UES identified detections of PNAs in surface soil. PNAs are a class of SVOCs historically associated with manufactured gas plant operations. Five surface soil samples analyzed for PNAs/SVOCs, P8, P12, SS-1, SS-13, and SS-14, exhibited benzo(a)pyrene concentrations above the Tier 1 residential ingestion remediation objective but below the applicable non-metropolitan background concentration, as summarized in Table 4. These exceedances were limited in number and distribution based on currently available data.

MEC appreciates your timely review of our submittal. If you have any questions regarding this submittal, please call the undersigned at 630-553-3989.

Sincerely,

Midwest Environmental Consulting Services, Inc.



Catherine Case, PE
Senior Project Manager



Jennifer Anderson
Senior Environmental Consultant

Enclosures:

Attachment 1:	IEPA July 21, 2025 Letter
Attachment 2:	Supplemental Focused Site Investigation Work Plan
Attachment 3:	Comprehensive Summary Tables

Cc: Ms. Marlane Miller, Taylorville Park District via email

ATTACHMENT 1

IEPA JULY 21, 2025 LETTER



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2520 WEST ILES AVENUE, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JAMES JENNINGS, ACTING DIRECTOR

217/524-3300

July 21, 2025

Attn: Ms. Marlane Miller
Taylorville Park District
18 Manners Park Road
Taylorville, Illinois 62568

Re: 0210605129/Christian County
Taylorville/Manners Park
Site Remediation/Technical

Dear Ms. Miller:

The *Focused Site Investigation* ("FSIR") (received June 23, 2025/Log No. 25-79957), as prepared by Andrews Engineering Inc. for the above-referenced Remediation Site, has been reviewed by the Illinois Environmental Protection Agency ("Illinois EPA"). The Illinois EPA disapproves the *FSIR* with the following comments:

1. The previously submitted DRM-1 Form (received September 23, 2024/Log No. 24-78792) indicates that a Comprehensive No Further Remediation (NFR) Letter is being pursued. Sampling and analysis of all Target Compound List (TCL) analytes has not been completed throughout the various investigations performed on-site. In order to receive a Comprehensive NFR Letter, additional sampling (in accordance with the comments below) must be performed for TCL analytes. Please clarify whether site closure will be comprehensive or focused.
2. The investigations performed on-site to date have not evaluated subsurface soils or groundwater. Subsurface soil and groundwater sampling must be performed across the site with respect to general site characterization and delineation of previously identified exceedances of Tier 1 objectives.

Various hydrogeologic data such as hydraulic conductivity, hydraulic gradient, and groundwater flow direction will also be necessary in order to eventually evaluate pathway exclusion options.

3. The *FSIR* indicates concentrations of lead on-site exceed the toxicity characteristic value for

2125 S. First Street, Champaign, IL 61820 (217) 278-5800
115 S. LaSalle Street, Suite 2203, Chicago, IL 60603
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000

595 S. State Street, Elgin, IL 60123 (847) 608-3131
2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

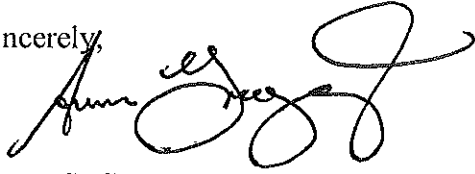
hazardous waste. Additional sampling must be performed both vertically and laterally to delineate the area where these concentrations exist. Sample location P7 should also be resampled for Toxicity Characteristic Leaching Procedure (TCLP) lead due to the previously identified elevated concentrations of total lead.

4. It is not clear how the X-ray Fluorescence (XRF) sample location naming convention corresponds to the gridded area and grab sample locations displayed in Figure 2. Please explain the naming convention and provide greater detail on where each XRF sample was taken. Additionally, please provide the rationale for which analytical sample locations were determined by XRF screening results. Additional sampling may be requested based on the screening values and locations.
5. The portion of the remediation site to the south of the baseball diamonds and path was not included in the XRF screening area and has not yet been sampled. Additional screening/sampling should be performed in this southern area to characterize the entirety of the remediation site. Alternatively, the remediation site boundary may be revised to include the previously investigated area. A legal description should be provided for the final remediation site boundary, and all forthcoming figures should more clearly display the site boundary.
6. Pursuant to 35 Illinois Administrative Code (IAC) 740.435(2)(C)(ii), a focused site investigation report must include the results of a potable well survey within 2,500 feet of the remediation site. Please provide this information.
7. Please provide figures which display all identified recognized environmental conditions (RECs) and the sampling locations of all investigations to date (i.e. Andrews, UES, and Illinois EPA). Sample data from the previous investigations should also be included in a set of tables as part of the *FSIR* and not just in the appendices.
8. The figures and tables included in the provided copy of the UES *Environmental Soil and Vapor Sampling and Testing Report* are not legible. Please provide more legible copies of the figures and tables.
9. Please note that future report submittals should meet the specified content and formatting requirements stipulated at 35 IAC Section 740 Subpart D: Site Investigations, Determination of Remediation Objectives, Preparation of Plans and Reports. Submitted reports not meeting these requirements may be disapproved on this basis, necessitating that a revised report be sent to the Illinois EPA.

Please provide the Illinois EPA with two (2) paper copies and one (1) electronic copy of any future information submitted regarding the above-referenced site.

If you have any questions, please feel free to contact me at (217) 558-0932, the above address or by e-mail at Aaron.Gregory@illinois.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron S. Gregory', with a large, stylized flourish at the end.

MC Aaron S. Gregory
Site Remediation Program
Remedial Project Management Section
Division of Remediation Management
Bureau of Land

cc: Mr. Steve Gobelman
Andrews Engineering Inc.
sgobelman@andrews-eng.com

Bureau of Land File

ATTACHMENT 2

SUPPLEMENTAL FOCUSED SITE INVESTIGATION WORK PLAN

SUPPLEMENTAL FOCUSED SITE INVESTIGATION WORK PLAN

Prepared for:

Taylorville Park District

18 Manners Park Road
Taylorville, Illinois 62568



Manners Park

*18 Manners Park Road
Taylorville, Illinois 62568*

REPORT DATE: May 28, 2026

MEC PROJECT: 26-02-0115-EC



TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE DESCRIPTION AND BACKGROUND.....	2
2.1	Site Location and Current Use	2
2.2	Previous Investigations	2
3.0	AREAS OF ENVIRONMENTAL CONCERN AND CONSTITUENTS OF CONCERN.....	4
4.0	PURPOSE AND OBJECTIVES	6
5.0	APPLICABLE SCREENING CRITERIA AND DATA EVALUATION FRAMEWORK	7
6.0	SITE-SPECIFIC SAMPLING PLAN.....	8
6.1	Sampling Rationale.....	8
6.2	Proposed Soil Sampling.....	8
6.3	XRF Screening	10
6.4	Laboratory Analysis	12
6.5	Groundwater and Hydrogeologic Data Collection.....	12
6.6	Remediation Site Boundary Survey	13
6.7	Field Documentation	13
7.0	FIELD INVESTIGATION, ACCESS, AND WASTE MANAGEMENT PROCEDURES	15
7.1	Site Access, Public Use Controls, and Utility Clearance	15
7.2	Soil Sample Collection and Handling	15
7.3	Decontamination.....	15
7.4	Investigation-Derived Waste Management.....	16
8.0	QUALITY ASSURANCE AND QUALITY CONTROL	17
9.0	CLOSURE STRATEGY EVALUATION AND NEXT STEP RECOMMENDATIONS.....	18
10.0	REPORTING	19
11.0	SCHEDULE.....	20
12.0	LIMITATIONS.....	20
13.0	REFERENCES	21

TABLE OF CONTENTS - CONTINUED

FIGURES

FIGURE 1:	SITE LOCATION DIAGRAM
FIGURE 2:	PREVIOUS COMPREHENSIVE SAMPLE LOCATION DIAGRAM
FIGURE 3:	PREVIOUS LEAD – SURFACE SOIL & XRF SCREENING
FIGURE 4:	PREVIOUS ARSENIC – SURFACE SOIL & XRF SCREENING
FIGURE 5:	PREVIOUS MANGANESE – SURFACE SOIL & XRF SCREENING
FIGURE 6:	PREVIOUS PNA – SURFACE SOIL AND SOIL VAPOR
FIGURE 7:	SUMMARY OF ELEVATED SURFACE SOIL AREAS
FIGURE 8:	PROPOSED 2026 SAMPLING GRID

TABLES

TABLE 1:	PROPOSED MOBILIZATION 1 SURFACE SOIL SAMPLE SUMMARY AND RATIONALE
TABLE 2:	PROPOSED ANALYTICAL PARAMETERS AND DECISION LOGIC

1.0 INTRODUCTION

Midwest Environmental Consulting Services, Inc. (MEC) has prepared this Supplemental Focused Site Investigation Work Plan (Work Plan) on behalf of the Taylorville Park District for the property known as Manners Park, located at 18 Manners Park Road in Taylorville, Christian County, Illinois. This Work Plan describes proposed supplemental investigation activities intended to further evaluate arsenic, lead, and manganese in surface and near-surface soil at the Subject Property, while also summarizing previous evaluation of manufactured gas plant (MGP)-related constituents, including volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PNAs).

The proposed work is being developed using the general framework of the Illinois Site Remediation Program (SRP), including the focused site investigation provisions of Title 35 Illinois Administrative Code (IAC) Part 740. Although formal Illinois Environmental Protection Agency (IEPA) approval of this Work Plan may not be requested, the scope and organization have been prepared to be generally consistent with SRP expectations for focused site investigation activities.

Previous environmental investigations at the Subject Property have included surface soil and soil vapor sampling by Geotechnology, LLC dba UES, surface soil sampling by the IEPA, and X-ray fluorescence (XRF) screening and confirmatory soil sampling by Andrews Engineering, Inc. These investigations evaluated, to varying degrees, VOCs, semi-volatile organic compounds (SVOCs) including PNAs, and metals. The available data indicate that select surface and near-surface soil samples contained arsenic, lead, and/or manganese at concentrations above applicable comparison criteria. Previous sampling also identified detections of PNAs associated with the former MGP site, including benzo(a)pyrene. Benzo(a)pyrene is discussed specifically in this Work Plan because it was reported above the Tier 1 residential soil remediation objective in select samples, although the reported concentrations were below the applicable non-metropolitan background concentration.

The supplemental investigation results will be used to support closure strategy evaluation and next step recommendations.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 Site Location and Current Use

Manners Park is located at 18 Manners Park Road in Taylorville, Christian County, Illinois. The Subject Property is a public park operated by the Taylorville Park District and includes recreational amenities such as ball fields, walking paths, playground areas, and other public recreation features. The area of investigation is located within the park and includes portions of the ball field/recreational areas where previous surface soil and XRF screening data were collected. A Site Location Diagram is provided as Figure 1 and the site layout, including the approximate remediation boundary is shown on Figure 2.

Manners Park has historically been used for public recreation and community activities. According to information provided by the Taylorville Park District, the Manners Park property was purchased by the City of Taylorville in 1913 and was later deeded to the Taylorville Community Pleasure Driveway and Park District in 1951. The park has remained in recreational use and currently includes ball fields, walking paths, playground areas, and other public recreation features. This long-term public park use is considered relevant to evaluation of potential exposure pathways and future closure strategy considerations.

The Subject Property is located in a mixed-use area of Taylorville and is located immediately east of the former Ameren CIPS Taylorville Manufactured Gas Plant site along South Webster Street. The former manufactured gas plant site has been identified as a Superfund site (BOL ID #0218160007) and has reportedly been subject to remedial investigation and corrective actions since the mid-1990s.

Historic operations at the former manufactured gas plant reportedly resulted in releases of VOCs and SVOCs, including PNAs, to soil, groundwater, and air. The 1992 Record of Decision identified benzene, toluene, ethylbenzene, and xylenes and PNAs as primary contaminants of concern at the former manufactured gas plant site.

Previous investigations at the Subject Property were completed, in part, to evaluate whether constituents associated with historical manufactured gas plant operations or other potential sources were present at the Subject Property.

2.2 Previous Investigations

Several environmental investigations have been completed at the Subject Property or in targeted areas of Manners Park. These investigations are summarized below to provide context for the proposed supplemental investigation. A summary of previous analytical results and previous sample locations are shown on **Figures 2 through 7**.

2.2.1 UES Soil and Soil Vapor Sampling

Geotechnology, LLC dba UES completed environmental soil and soil vapor sampling at Manners Park in 2024. The investigation included surface soil sampling and soil vapor sampling to assess potential exposure concerns related to VOCs, SVOCs, and PNAs associated with the nearby former manufactured gas plant. UES surface soil and soil vapor sample locations are shown on **Figure 2**.

Based on the reported results, VOCs were not identified at concentrations requiring additional evaluation in the targeted sampling area. Select PNA constituents, including benzo(a)pyrene,

were reported above the Tier 1 residential soil remediation objective but below the applicable non-metropolitan background concentration. Soil vapor analytical results were also reported below applicable screening levels for the evaluated exposure routes. A summary of previous analytical results are shown on **Figures 3 through 7**.

2.2.2 IEPA Surface Soil Sampling

The IEPA collected surface soil samples from Manners Park in 2024. The samples were analyzed for VOCs, SVOCs, and metals. IEPA sample locations are shown on **Figure 2**. Reported results identified metals at concentrations above applicable comparison criteria at select locations, as summarized on **Figures 3 through 7**. Constituents identified for further consideration included arsenic, lead, and manganese.

2.2.3 Andrews Engineering Focus Site Investigation

Andrews Engineering, Inc. completed XRF screening and confirmatory soil sampling as part of a Focus Site Investigation. XRF screening was completed across gridded areas, and selected locations were advanced for confirmatory laboratory analysis. Andrews sample locations and XRF screening grids are shown on **Figure 2**. The results identified arsenic, lead, and manganese impacts in select surface and near-surface soil samples, as summarized on **Figures 3 through 6**.

Select lead results were elevated above applicable soil remediation objectives. Select samples also exhibited Toxicity Characteristic Leaching Procedure (TCLP) lead results above 5 milligrams per liter, indicating that additional evaluation is warranted before future soil management or closure decisions are made. Figures summarizing previous lead, arsenic, and manganese results are attached and will be used to support selection of proposed supplemental sampling locations.

3.0 AREAS OF ENVIRONMENTAL CONCERN AND CONSTITUENTS OF CONCERN

The previous investigation documents reviewed for this Work Plan did not identify formal recognized environmental conditions for the Subject Property. However, IEPA has requested additional discussion of recognized environmental conditions or environmental concerns associated with the Subject Property. For purposes of this Work Plan, the discussion below identifies the environmental concerns and constituents of concern that form the basis for the proposed supplemental investigation.

The initial environmental concern at Manners Park was related to the Subject Property's location immediately east of the former Ameren CIPS Taylorville Manufactured Gas Plant site and public concerns regarding the potential migration of contaminants from the former manufactured gas plant to the park. Previous investigation materials indicate that the former manufactured gas plant has a history of releases of VOCs and SVOCs, including PNAs, to environmental media. The IEPA subsequently collected surface soil samples at Manners Park in response to public concerns regarding potential contamination linked to activities at the Ameren site.

Based on the previous investigations, the constituents of concern or potential concern for the Subject Property include:

- Arsenic
- Lead
- Manganese
- PNAs, including benzo(a)pyrene
- VOCs, including benzene, toluene, ethylbenzene, and xylenes

Previous soil vapor and surface soil sampling completed by UES and the IEPA evaluated VOCs and PNAs associated with the former manufactured gas plant. VOCs were not identified at concentrations requiring additional evaluation in the targeted areas based on the applicable comparison criteria used in those reports. Select PNAs, including benzo(a)pyrene, were reported above the Tier 1 residential soil remediation objective but below the applicable non-metropolitan background concentration. Benzo(a)pyrene was reported above the Tier 1 residential criterion of 0.09 milligrams per kilogram at samples P8, P12, SS-1, SS-13, and SS-14; however, each of these reported concentrations was below the non-metropolitan background value of 0.98 milligrams per kilogram. PNAs therefore remain relevant to the overall site history and environmental concern because they are recognized manufactured gas plant-related constituents and were included in previous sampling programs.

Metals, including arsenic, lead, and manganese, were identified above applicable comparison criteria in select surface and near-surface soil samples. These metals are a primary focus of the proposed supplemental investigation because the existing data indicate that additional horizontal and vertical delineation is warranted to support closure strategy evaluation and next step recommendations.

PNAs, including benzo(a)pyrene, also remain part of the focused evaluation because they are associated with the historical MGP concern and were detected above the Tier 1 residential criterion in select previous samples. Although reported benzo(a)pyrene concentrations were below the applicable non-metropolitan background concentration, the public park setting and IEPA comments regarding semivolatile compound screening exceedances warrant limited

supplemental evaluation of PNAs. Therefore, selected surface soil and/or subsurface soil samples will be analyzed for SVOCs/PNAs to support evaluation of whether additional PNA delineation is warranted. Additional evaluation of VOCs, soil vapor, groundwater constituents beyond the selected analytical scope, or sediment is not proposed at this time; however, these constituents and media may be reconsidered if field observations, supplemental analytical data, or IEPA comments indicate that additional evaluation is warranted.

4.0 PURPOSE AND OBJECTIVES

The purpose of this Supplemental Focused Site Investigation Work Plan is to describe proposed field and data evaluation activities to address remaining data needs associated with arsenic, lead, manganese, and selected PNAs in soil at the Subject Property. The Work Plan also documents the basis for the investigation, including the Subject Property's proximity to the former Ameren CIPS Taylorville MGP site and previous evaluation of MGP-related constituents, including VOCs and PNAs.

The objectives of the supplemental investigation are to:

1. Further evaluate the horizontal extent of arsenic, lead, manganese, and selected PNAs in surface and near-surface soil.
2. Further evaluate the vertical extent of arsenic, lead, manganese, and selected PNAs at selected locations where previous results indicated elevated concentrations or where additional pathway evaluation is warranted.
3. Collect laboratory analytical data sufficient to support comparison to applicable Illinois Tiered Approach to Corrective Action Objectives soil remediation objectives and background values, as applicable.
4. Evaluate whether select soil exhibits leachable lead concentrations that may affect future soil management decisions.
5. Refine the current understanding of affected areas to support closure strategy evaluation and development of next step recommendations.

5.0 APPLICABLE SCREENING CRITERIA AND DATA EVALUATION FRAMEWORK

Analytical results generated during the supplemental investigation will be compared to applicable Illinois Tiered Approach to Corrective Action Objectives values and related comparison criteria, as appropriate for the project objectives. The data evaluation framework is also intended to address IEPA comments regarding subsurface soil, groundwater, hydrogeologic information, potable well survey information, and remediation site boundary documentation. These may include:

- Tier 1 soil remediation objectives for residential properties.
- Tier 1 soil remediation objectives for construction worker exposure, where applicable.
- Soil component of the Class I groundwater ingestion exposure route, where applicable.
- Applicable background concentrations for non-metropolitan statistical area counties.
- Hazardous waste toxicity characteristic threshold for lead, as evaluated using the TCLP.

The project is located in Christian County, which is considered a non-metropolitan statistical area county for purposes of applicable background comparisons. The data evaluation will consider both total metals concentrations and leachable concentrations, where leaching data are collected.

A potable water well survey will be completed to evaluate potential potable water use within 2,500 feet of the remediation site, consistent with 35 IAC 740.435(c)(2)(C)(ii). The survey will include available potable water well records, public water supply information, and applicable local groundwater use restrictions or ordinances, if available. The results of the potable water well survey will be used to support evaluation of the soil component of the groundwater ingestion exposure route and groundwater pathway considerations.

Hydrogeologic data will also be collected or evaluated to support groundwater pathway assessment. The hydrogeologic evaluation will include depth to groundwater, groundwater elevation, apparent groundwater flow direction, hydraulic gradient, and hydraulic conductivity, as applicable based on field conditions and installed groundwater monitoring points. Soil physical property data, including organic content or fraction organic carbon, will be collected from selected soil samples as needed to support pathway evaluation, Tier 2 modeling, or evaluation of soil-to-groundwater exposure route assumptions.

6.0 SITE-SPECIFIC SAMPLING PLAN

The supplemental investigation will be completed using a phased field approach consisting of two mobilizations. Mobilization 1 will include XRF screening and surface soil sampling. Mobilization 2 will include targeted soil borings, subsurface soil sampling, groundwater evaluation, and collection of hydrogeologic data selected based on the results of Mobilization 1, previous investigation data, and the need to evaluate vertical extent and groundwater pathway conditions.

This phased approach is intended to allow the XRF screening and surface soil analytical results to guide placement of soil borings and groundwater evaluation points, thereby supporting a more focused evaluation of horizontal extent, vertical extent, and groundwater pathway conditions. The soil boring, groundwater sampling, and hydrogeologic evaluation procedures are included in this Work Plan so that Mobilization 2 can be completed following review of the Mobilization 1 results without preparation of a separate work plan, unless field conditions or analytical results identify a materially different scope of work.

6.1 Sampling Rationale

Supplemental sampling locations have been selected based on previous IEPA sample results, Andrews Engineering confirmatory soil sample results, previous XRF screening data, and IEPA comments regarding areas not previously included in the XRF screening area. Sampling will be completed in areas where prior data identified arsenic, lead, manganese, and/or selected PNA concentrations above applicable comparison criteria, where the lateral or vertical extent of impacts remains uncertain, and in the southern portion of the remediation site that was not included in the previous XRF screening area. The proposed supplemental sampling locations are summarized in **Table 2** and shown on **Figure 8**.

The supplemental sampling program will include locations near previous samples P7, P3, P9, S14, S16, and S17, selected surrounding grid areas where XRF screening indicated elevated concentrations, and the previously unscreened/sampled southern portion of the remediation site south of the baseball diamonds and path. The rationale for each proposed sampling area is summarized in Table 2. Surface soil sampling locations for the first mobilization will be shown on Figure 3. Soil boring, groundwater evaluation, and hydrogeologic data collection locations for the second mobilization will be selected after the first mobilization results are reviewed and will be documented on a subsequent boring/groundwater evaluation location figure or field decision memorandum.

6.2 Proposed Soil Sampling

6.2.1 Mobilization 1: XRF Screening and Surface Soil Sampling

During the first mobilization, XRF screening will be completed, at a minimum, within the selected 50-foot grid cells shown on Figure 3, with additional screening completed as needed based on field conditions and elevated screening results. The grid will include the previously identified area of concern and targeted southern boundary verification cells in the portion of the remediation site south of the baseball diamonds and path that was not included in previous XRF screening. Surface soil samples will be collected from approximately 0 to 0.5 feet below ground surface at selected locations based on previous analytical results, XRF screening results, and the need to obtain laboratory confirmation of surface soil conditions. Selected surface soil samples will also be analyzed for SVOCs/PNAs, including benzo(a)pyrene, to evaluate previous PNA detections relative to residential soil remediation objectives and applicable background concentrations. Surface soil samples will be collected from below the vegetative/organic surface layer, where

present. Vegetative matter, thatch, roots, gravel, and debris will be excluded from laboratory samples to the extent practicable.

Surface soil samples will be collected using hand tools or hand auger equipment. The first mobilization will be used to evaluate the horizontal extent of arsenic, lead, manganese, and selected PNAs in surface soil and to identify areas requiring vertical delineation during the second mobilization.

6.2.2 Mobilization 2: Targeted Soil Borings

During Mobilization 2, targeted soil borings will be advanced at locations selected based on the Mobilization 1 XRF screening results, Mobilization 1 surface soil analytical results, previous investigation results, and the need to evaluate vertical extent and groundwater pathway conditions. Soil borings will be advanced in areas where XRF screening and/or laboratory analytical results indicate elevated arsenic, lead, manganese, or selected PNA concentrations, at selected boundary locations to support evaluation of lateral extent, and at selected locations to support subsurface soil and groundwater characterization.

Mobilization 2 is anticipated to include a minimum of approximately 20 soil borings, with the final number and distribution of borings determined after review of Mobilization 1 XRF screening results, Mobilization 1 surface soil analytical results, previous investigation data, field observations, and groundwater pathway evaluation needs. The number of borings will not be limited to a predetermined maximum; additional borings may be advanced, as needed, to evaluate lateral or vertical extent, support groundwater pathway evaluation, or address field conditions encountered during the investigation. Priority will be given to locations with the highest concentrations, locations at or near applicable screening criteria, locations where TCLP lead evaluation may be warranted, locations near previous PNA detections where subsurface evaluation is warranted, and locations needed to evaluate the outer limits of elevated field-screening results.

Soil boring locations will include locations needed to further evaluate areas where previous total lead and/or TCLP lead results indicate the potential for characteristically hazardous soil. At a minimum, locations near previous samples S14 and S16 will be evaluated to further delineate the vertical and lateral extent of lead concentrations associated with previous TCLP lead results above 5 milligrams per liter. Previous sample location P7 will also be resampled for total lead and TCLP lead to evaluate whether leachable lead is present at that location.

The final number and distribution of soil borings will be determined after Mobilization 1 results are reviewed. The number of borings will not be limited to a predetermined count; rather, borings will be selected to provide sufficient information to evaluate vertical extent in areas of elevated concentrations and to support closure strategy evaluation. Priority will be given to locations with the highest concentrations, locations at or near applicable screening criteria, locations where TCLP lead evaluation may be warranted, locations near previous PNA detections where subsurface evaluation is warranted, and locations needed to evaluate the outer limits of elevated field-screening results.

Borings will be advanced using direct-push equipment, hollow-stem auger, or other appropriate methods based on site access, soil conditions, utility constraints, target depths, and whether groundwater monitoring wells are installed. Selected borings will be advanced to approximately 30 feet below ground surface, groundwater, or refusal, whichever is encountered first, unless field

conditions or project objectives indicate that an alternate termination depth is appropriate. Borings completed for shallow vertical delineation may be terminated at shallower depths where sufficient data are obtained to evaluate vertical extent.

Soil will be logged continuously from each boring for lithology, color, moisture, staining, odors, debris, and other notable field observations. Field screening will be completed using XRF for arsenic, lead, and manganese, where appropriate. Soil samples will be collected from surface and near-surface intervals and at approximately 5-foot intervals thereafter to the boring termination depth. Additional samples may be collected from intervals exhibiting elevated XRF readings, visual evidence of impacts, changes in lithology, or other field observations relevant to delineation or pathway evaluation.

At a minimum, soil samples from the upper intervals most relevant to direct-contact exposure and previously identified surface soil impacts will be submitted for laboratory analysis. Additional intervals selected for laboratory analysis may include the interval with the highest XRF reading, intervals immediately below elevated results, deeper intervals needed to define vertical extent, boundary intervals needed to evaluate whether concentrations decrease with depth, and selected samples for physical property analysis such as organic content or fraction organic carbon.

Deeper interval samples may be placed on laboratory hold pending review of the upper interval analytical results, XRF screening results, and field observations. Held samples will be analyzed if needed to evaluate vertical delineation, soil-to-groundwater pathway conditions, or closure strategy considerations, provided applicable sample preservation and holding-time requirements can be met.

Field personnel will document soil type, color, moisture, debris, staining, odors, and other notable observations. Sample locations will be documented using a handheld GPS unit, field measurements from known site features, or other appropriate survey methods.

6.3 XRF Screening

XRF screening will be used as a field screening tool to support real-time evaluation of arsenic, lead, and manganese concentrations. XRF screening will be conducted in general accordance with USEPA SW-846 Method 6200 and manufacturer instructions. The XRF instrument will be operated in accordance with manufacturer instructions and project-specific procedures.

XRF screening will be completed using a systematic and adaptive screening approach. Initial screening will be completed within approximately 175 selected 50-foot grid cells shown on Figure 8. The selected grid cells include interior portions of the investigation area and perimeter cells surrounding the previously identified exceedance areas. One initial XRF screening reading will be collected within each selected grid cell where accessible.

The XRF screening grid will be identified using a new alphanumeric labeling system independent of previous investigation sample identification systems. Grid rows will be labeled alphabetically and grid columns will be labeled numerically. Grid cell identifiers will be assigned using the corresponding row letter and column number, such as A1, A2, B1, and B2. Previous sample identifiers from prior investigations will be retained only for historical reference and comparison purposes.

Proposed XRF screening locations are shown as labeled 50-foot grid cells on Figure 8. One initial XRF screening reading will be collected within each labeled grid cell. The screening location will be completed near the center of the grid cell where accessible; however, the location may be shifted within the same grid cell based on field conditions, surface cover, utilities, park features, or other access limitations.

At each XRF screening location, surficial vegetation, thatch, loose organic material, gravel, or debris will be removed as needed to expose soil for screening. The exposed soil surface will be smoothed to provide direct contact between the XRF instrument window and the soil. In maintained turf areas, disturbance will be limited to the extent practicable, and removed sod or soil will be replaced after screening and/or sample collection.

XRF screening locations will be established in the field using the proposed 50-foot grid shown on Figure 8. Screening locations will be located by field measurement from identifiable site features, grid baselines, measuring tape, measuring wheel, handheld global positioning system equipment, or other equivalent field layout methods. If a planned screening location is inaccessible due to utilities, park features, surface cover, fencing, trees, or other field conditions, the screening location will be shifted to the nearest accessible soil location within the same grid cell, and the adjusted location will be documented in the field notes.

If XRF screening identifies elevated arsenic, lead, or manganese concentrations within a grid cell, additional screening readings will be collected within that grid cell and in adjacent grid cells, as needed, to further evaluate the apparent horizontal extent of elevated readings. Additional readings will be collected at reduced spacing until XRF results are below the applicable screening criterion or are consistent with surrounding conditions. This adaptive screening approach is intended to evaluate metals concentrations within the previously identified area of concern and provide screening data along the outer boundary to support evaluation of lateral extent.

Additional XRF readings collected within a labeled grid cell will be identified using the applicable grid cell designation and a sequential suffix, where needed. For example, the initial reading in grid cell A1 will be identified as XRF-A1, and additional readings within the same grid cell may be identified as XRF-A1-01, XRF-A1-02, and so forth.

XRF screening results will be used to support field decision-making and selection of laboratory samples during the first mobilization. Laboratory confirmation samples will be selected to represent the lower, middle, and upper range of XRF results, including samples at or near applicable screening criteria and samples from locations used to evaluate the apparent lateral extent of elevated metals concentrations. At a minimum, laboratory confirmation samples will be collected at a frequency of approximately one (1) confirmation sample per twenty (20) XRF readings, consistent with USEPA SW-846 Method 6200; however, additional confirmation samples will be collected as needed to support project-specific data quality objectives, regulatory comparison, and closure strategy evaluation.

Based on approximately 175 initial XRF screening readings, a minimum of approximately nine (9) laboratory confirmation samples will be collected during Mobilization 1. Additional confirmation samples will be collected to support delineation and data quality objectives; the anticipated number of Mobilization 1 laboratory confirmation samples is approximately 18 to 25.

Following receipt and review of surface soil analytical results, the XRF screening results and laboratory data will be used to select targeted soil boring locations for the second mobilization.

XRF results will not replace laboratory analytical results where laboratory confirmation is needed for regulatory evaluation, closure strategy evaluation, or future soil management decisions.

6.4 Laboratory Analysis

Selected surface soil samples from the first mobilization and selected soil boring samples from the second mobilization will be submitted to an Illinois-accredited analytical laboratory under chain-of-custody procedures. The number of laboratory confirmation samples submitted during the first mobilization will be based on the XRF, distribution of previous exceedances, and the confirmation frequency described in Section 6.3. Laboratory analysis will include:

- Total arsenic, lead, and manganese by USEPA SW-846 Method 6010 or 6020, as appropriate.
- TCLP lead by USEPA SW-846 Method 1311 extraction followed by metals analysis for samples with elevated total lead concentrations, samples collected from areas where previous TCLP lead results exceeded 5 milligrams per liter, and the sample collected near previous location P7.
- Synthetic Precipitation Leaching Procedure (SPLP) metals by USEPA SW-846 Method 1312 extraction followed by metals analysis for samples identified for evaluation of the soil component of the groundwater ingestion exposure route.
- pH and percent solids for samples submitted for laboratory analysis.
- Soil physical property parameters, including organic content or fraction organic carbon, for selected samples used to support groundwater pathway evaluation or Tier 2 modeling.
- SVOCs/PNAs, including benzo(a)pyrene, for selected surface soil and/or subsurface soil samples based on previous detections, IEPA comments, field observations, and the closure strategy being pursued.

For Mobilization 2 borings, laboratory analysis will initially focus on intervals most likely to define vertical extent, including the upper soil intervals, the interval with the highest XRF reading, and intervals immediately below elevated results. Additional deeper interval samples may be placed on laboratory hold and analyzed, as needed, based on the initial analytical results and applicable holding-time requirements.

Groundwater samples, if collected, will be analyzed for constituents selected based on previous detections, IEPA comments, and pathway evaluation needs. At a minimum, groundwater analytical parameters will be selected to support evaluation of metals and MGP-related constituents where applicable. Laboratory reporting limits will be reviewed to confirm that they are appropriate for comparison to applicable screening criteria.

Groundwater samples may also be analyzed for selected SVOCs/PNAs and/or VOCs if needed to evaluate MGP-related constituents, groundwater pathway conditions, or IEPA comments regarding groundwater sampling.

6.5 Groundwater and Hydrogeologic Data Collection

Groundwater and hydrogeologic data will be collected during Mobilization 2 to support evaluation of groundwater pathway conditions and potential pathway exclusion options. Permanent groundwater monitoring wells will be installed at selected locations to support groundwater elevation measurements, groundwater sampling, hydraulic conductivity testing, and potential

future resampling, as needed. Temporary groundwater sampling points may be used only if field conditions prevent installation of permanent wells or if a specific location is needed for limited field screening purposes.

A minimum of four borings are anticipated to be completed as permanent groundwater monitoring wells to support groundwater sampling, water-level measurements, hydraulic gradient evaluation, apparent groundwater flow direction evaluation, and hydraulic conductivity testing. Additional monitoring wells may be installed if needed based on field conditions, groundwater occurrence, or investigation results.

Monitoring wells will be constructed using appropriate well casing, screen, filter pack, annular seal, and surface completion materials based on field conditions and target groundwater-bearing intervals. Each well will be completed with a protective surface casing or flush-mount protective cover, as appropriate based on the location and park-use considerations. Groundwater elevation data will be collected from installed monitoring wells and used to evaluate apparent groundwater flow direction and hydraulic gradient. Hydraulic conductivity will be evaluated using slug testing, field permeability testing, or other appropriate methods, where practicable. Groundwater samples will be collected from selected monitoring wells using appropriate low-flow or other applicable sampling methods based on well construction and field conditions.

Monitoring well locations and measuring point elevations will be surveyed to support groundwater elevation calculations, groundwater flow direction, and hydraulic gradient evaluation. Monitoring wells will be developed following installation and before groundwater sampling. Wells will be secured between sampling events to allow future access for resampling, water-level measurements, or additional hydrogeologic evaluation, if needed. Hydrogeologic data will be summarized in the subsequent investigation report or technical memorandum.

6.6 Remediation Site Boundary Survey

A professional surveyor will be retained to survey the final remediation site boundary and prepare a legal description for the remediation site. The surveyed remediation site boundary will be used for future figures and SRP documentation. If the supplemental investigation identifies impacts or areas requiring evaluation outside the currently depicted remediation site boundary, the remediation site boundary will be revised, as appropriate, to include the area requiring regulatory evaluation.

6.7 Field Documentation

Field activities will be documented using field notes, sample logs, photographs, sample location sketches, XRF screening logs, and chain-of-custody records. Documentation will include:

- Date and time of sampling.
- Weather conditions.
- Field personnel.
- Sample identification.
- Sample depth interval.
- Sampling method.
- Field screening results, including XRF readings for arsenic, lead, and manganese.

- Grid cell identification and adjusted location notes, where applicable.
- Soil descriptions and field observations.
- Equipment decontamination procedures.
- Deviations from the Work Plan, if any.

7.0 FIELD INVESTIGATION, ACCESS, AND WASTE MANAGEMENT PROCEDURES

7.1 Site Access, Public Use Controls, and Utility Clearance

Site access and scheduling will be coordinated with the Taylorville Park District before each mobilization. Because field activities will occur within a public park, work will be coordinated to limit disturbance to park features and public-use areas to the extent practicable. Work areas will be temporarily controlled, as needed, using cones, flags, caution tape, or equivalent measures while screening, sampling, or boring activities are being completed.

For Mobilization 1, XRF screening and surface soil sampling will be completed using shallow, minimally intrusive methods. Utility clearance is not anticipated to be required for XRF screening alone. If surface soil sampling or other shallow intrusive work is completed in areas where utilities may be present, sampling locations will be adjusted or utility clearance will be completed before intrusive work proceeds.

Before Mobilization 2 soil boring and monitoring well installation activities begin, proposed boring and monitoring well locations will be marked and utility clearance will be requested through Illinois One-Call/JULIE. A private utility clearance survey, including ground-penetrating radar, will also be completed in the proposed boring and monitoring well areas prior to intrusive activities. Boring and monitoring well locations will be adjusted, as needed, based on Illinois One-Call/JULIE responses, private utility clearance results, access limitations, surface conditions, or park features.

7.2 Soil Sample Collection and Handling

Soil samples will be collected using clean sampling equipment. Surface soil samples will be collected from below the vegetative/organic surface layer, where present. Vegetative matter, thatch, roots, gravel, and debris will be excluded from laboratory samples to the extent practicable. Disposable gloves will be changed between sample locations. Reusable sampling equipment will be decontaminated between sample locations using an appropriate non-phosphate detergent wash and potable or distilled water rinse.

Soil selected for laboratory analysis will be placed directly into laboratory-supplied containers, labeled, preserved as required, and placed in a cooler with ice. Samples will be submitted to the analytical laboratory under standard chain-of-custody procedures.

Boreholes generated during Mobilization 2 will be backfilled following sample collection using soil cuttings, bentonite, or other appropriate material based on boring depth, field conditions, and park restoration needs. Disturbed surface areas will be restored to the extent practicable following completion of sampling activities.

7.3 Decontamination

Reusable sampling equipment will be decontaminated before use and between sample locations. Decontamination procedures may include removal of visible soil, detergent wash, water rinse, and final rinse, as appropriate for the sampling method and equipment used.

7.4 Investigation-Derived Waste Management

Investigation-derived waste may include soil cuttings, disposable sampling supplies, personal protective equipment, decontamination water, monitoring well development water, groundwater purge water, and groundwater sampling water. Investigation-derived waste will be managed in accordance with applicable requirements and project-specific conditions.

Soil cuttings generated during sampling and boring activities will be containerized or otherwise managed appropriately pending characterization or evaluation. If field screening or prior data indicate that soil may contain elevated lead concentrations, the material will be managed in a manner protective of workers, park users, and the environment until appropriate management decisions are made.

Water generated during monitoring well development, purging, sampling, or equipment decontamination will be containerized or otherwise managed appropriately pending characterization or evaluation. Management of investigation-derived water will be based on field observations, analytical results, and applicable disposal requirements.

Waste management procedures described herein are limited to investigation-derived waste generated during the supplemental investigation.

8.0 QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control procedures will be implemented to support collection of representative and defensible data.

XRF screening will be performed by personnel trained in operation of the instrument and applicable radiation safety procedures. The instrument will be operated in accordance with manufacturer instructions, applicable licensing requirements, and project-specific health and safety procedures.

XRF quality control procedures will include instrument calibration or standardization checks at the beginning of each field day, periodic calibration verification checks during field screening, and an end-of-day instrument check. Duplicate XRF readings will be collected at a minimum frequency of approximately one duplicate reading per 20 screening locations. Calibration checks, duplicate readings, instrument settings, and corrective actions, if needed, will be documented in the field notes.

Soil and groundwater sampling quality assurance and quality control procedures will include:

- Use of laboratory-supplied sample containers.
- Proper sample labeling and documentation.
- Chain-of-custody documentation from sample collection through laboratory receipt.
- Sample preservation and temperature control, as applicable.
- Equipment decontamination between sampling locations.
- Collection of field duplicate soil samples at a minimum frequency of approximately one duplicate per 20 soil samples.
- Collection of field duplicate groundwater samples at a minimum frequency of approximately one duplicate per 20 groundwater samples.
- Collection of matrix spike and matrix spike duplicate samples, if requested by the laboratory or warranted by the project data quality objectives.
- Collection of field blanks, equipment blanks, trip blanks, or other quality control samples, as warranted by the sampling methods, analytical parameters, and project data quality objectives.
- Review of laboratory quality control data and qualifiers.

Analytical data will be reviewed to evaluate whether the results are usable for the intended project objectives. Data qualifiers will be considered during interpretation of the results.

9.0 CLOSURE STRATEGY EVALUATION AND NEXT STEP RECOMMENDATIONS

Following receipt and review of the supplemental investigation data, MEC will evaluate potential closure strategies and prepare next step recommendations. This evaluation will be based on the nature and extent of arsenic, lead, manganese, and selected PNAs identified in soil, groundwater and hydrogeologic data, comparison of analytical results to applicable regulatory criteria, and consideration of current and reasonably anticipated future site use.

The closure strategy evaluation may include consideration of:

- Whether the supplemental data adequately define the horizontal and vertical extent of metals and select PNA impacts.
- Whether additional investigation appears warranted.
- Whether the data support development of a remedial action plan.
- Whether institutional controls, engineered barriers, targeted soil management, or other closure approaches may require future evaluation.
- Whether additional Illinois SRP submittals are recommended.

Remedial options, if warranted, will be evaluated after the supplemental investigation results are reviewed.

10.0 REPORTING

After laboratory analytical results are received, the data will be tabulated and evaluated relative to applicable comparison criteria. The evaluation will include review of previous and supplemental data to assess whether remaining data gaps are present.

A Supplemental Focused Site Investigation Report will be prepared to summarize the completed work. The report will follow IEPA SRP requirements and may include:

- Summary of field activities.
- Description of sampling methods.
- Sample location figure.
- Analytical results tables.
- Comparison of results to applicable screening criteria.
- Summary of XRF screening results, if used.
- Summary of quality assurance and quality control findings.
- Evaluation of horizontal and vertical extent of metals impacts.
- Evaluation of select PNA results, including benzo(a)pyrene, relative to residential soil remediation objectives and applicable background concentrations.
- Summary of groundwater receptor review and potable well survey results within 2,500 feet of the remediation site.
- Summary of groundwater and hydrogeologic data, including depth to groundwater, groundwater elevations, apparent flow direction, hydraulic gradient, and hydraulic conductivity, as applicable.
- Surveyed remediation site boundary and legal description.
- Closure strategy evaluation.
- Next step recommendations.

11.0 SCHEDULE

Field activities will be completed in two mobilizations. The first mobilization will include XRF screening and surface soil sampling, including screening and sampling in the southern portion of the remediation site not previously included in the XRF screening area. After the first mobilization analytical results are received and reviewed, targeted soil boring, groundwater evaluation, and hydrogeologic data collection locations will be selected for the second mobilization. The second mobilization will include advancement of targeted soil borings, collection of vertical delineation samples, groundwater evaluation, and hydrogeologic data collection, as applicable based on field conditions. A professional surveyor will also be retained to survey the final remediation site boundary and prepare a legal description. Laboratory analytical turnaround time, survey timing, and reporting schedule will be coordinated based on project needs.

12.0 LIMITATIONS

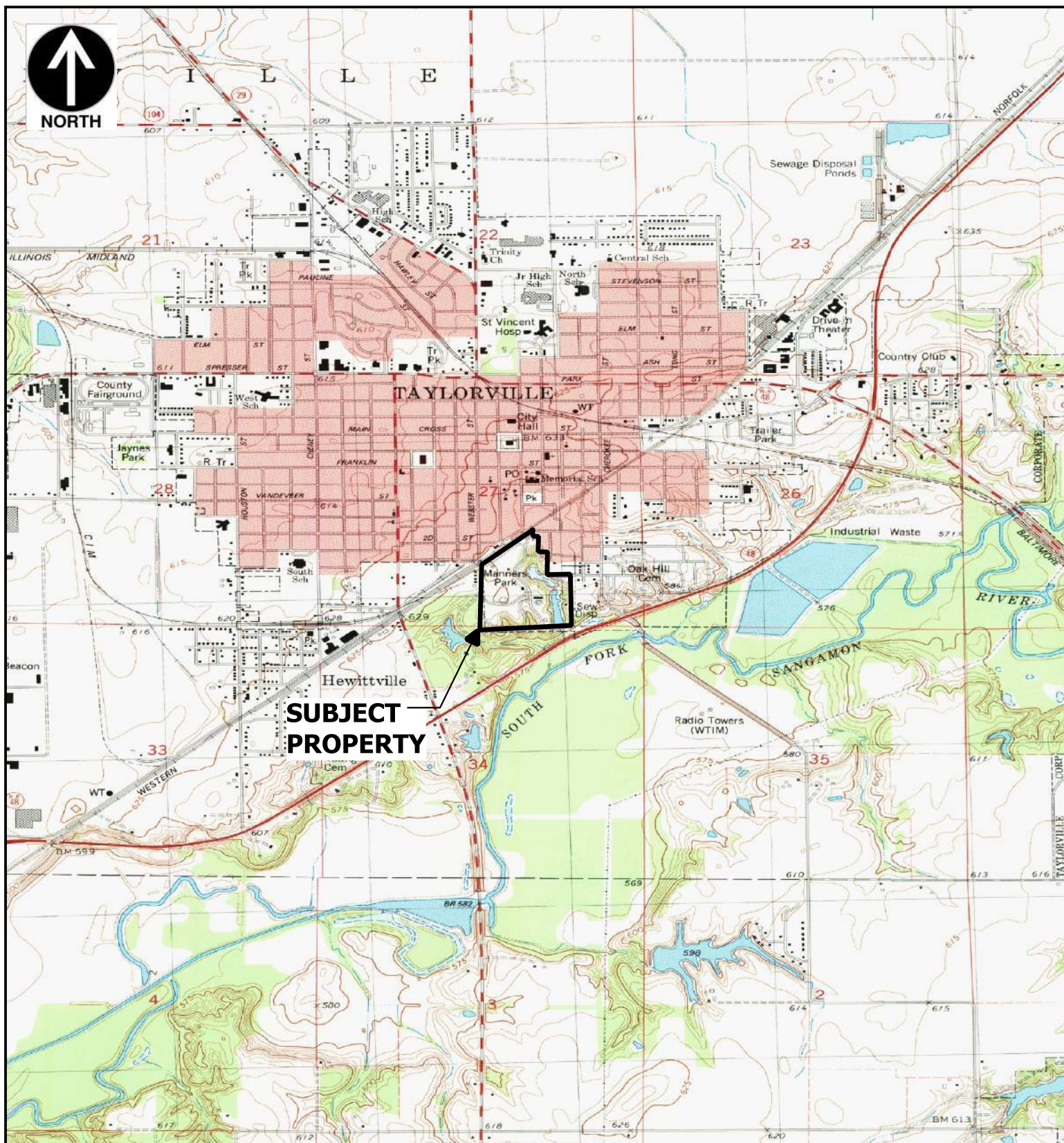
The proposed supplemental investigation is intended to evaluate specific data needs associated with arsenic, lead, manganese, selected PNAs, groundwater pathway conditions, and hydrogeologic data at the Subject Property. Conclusions and recommendations will be based on the data obtained during the supplemental investigation, previous available investigation data, and applicable regulatory criteria at the time of evaluation.

13.0 REFERENCES

The following documents and regulatory references were reviewed or relied upon during preparation of this Work Plan:

- Andrews Engineering, Inc. Focus Site Investigation Report, Manners Park, Taylorville, Illinois. February 2025.
- Geotechnology, LLC dba UES. Environmental Soil and Soil Vapor Sampling and Testing, Manners Park, 18 Manners Park Road, Taylorville, Illinois. May 20, 2024.
- Illinois Environmental Protection Agency. Manners Park Sampling Event Report. August 14, 2024.
- Illinois Environmental Protection Agency. Correspondence regarding Manners Park Focus Site Investigation / Site Remediation Program review. July 2025.
- Illinois Administrative Code, Title 35, Part 740, Site Remediation Program.
- Illinois Administrative Code, Title 35, Part 742, Tiered Approach to Corrective Action Objectives.
- United States Environmental Protection Agency. SW-846 Method 6200, Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment.

FIGURES



REFERENCES

1. Basemap: U.S. Geological Survey
National Map Topographic Service,
accessed 05/13/2026

0 1000 2000 ft



Midwest Environmental
Consulting Services, Inc.
2551 North Bridge Street
Yorkville, IL 60560
Ph. 630.553.3989
Fax 630.553.3990
www.mec-us.com

Prepared For:

TAYLORVILLE PARK DISTRICT

18 MANNERS PARK ROAD
TAYLORVILLE, ILLINOIS

Drawn By:

CAC

Date:

05/13/2026

Checked By:

CAC

Date:

05/13/2026

Approved By:

JA

Date:

05/13/2026

MANNERS PARK

SUPPLEMENTAL FOCUSED SITE
INVESTIGATION WORK PLAN
18 MANNERS PARK ROAD
TAYLORVILLE, ILLINOIS

Project No:

26-02-0115-EC

Scale:

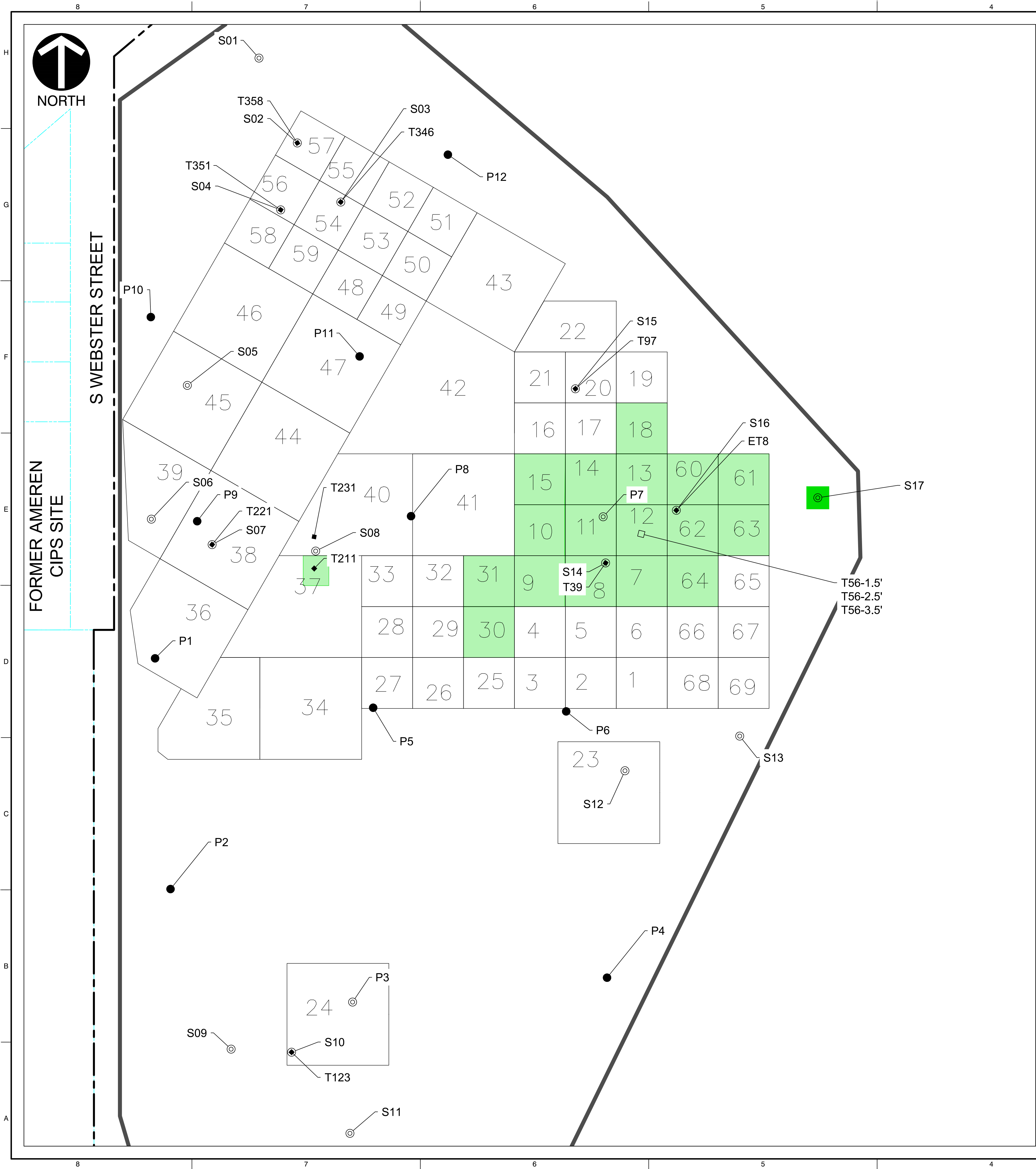
1:18861.646054

Figure No:

1

SITE LOCATION DIAGRAM

C:\Users\lccase\Midwest Environmental\2026-Projects - Documents\VAZ_02_0115_Taylorville_Park_District_Manners_Park\EC\CAD\2602015-Figures.dwg[2] LS(6/17/2026 - ccase) - LP: 6/17/2026 10:48 AM



XRF SCREENING LOCATION SUMMARY

GRID(S)	XRF SAMPLE ID
1	T1-T5
2	T6-T10
3	T11-T15
4	T16-T20
5	T21-T25
6	T26-T30
7	T31-T35
8	T36-T40
9	T41-T45
10	T46-T50
11	T51-T55
12	T56-T60
13	T61-T65
14	T66-T70
15	T71-T75
16	T76-T80
17	T81-T85
18	T86-T90
19	T91-T95
20	T96-T100
21	T101-T105
22	T106-T110
23	T111-T120
24	T121-T130
25	T131-T135
26	T136-T140
27	T141-T145
28	T146-T150
29	T151-T155
30	T156-T160
31	T161-T165
32	T166-T170
33	T171-T175
34	T176-T185
35	T186-T195
36	T196-T205
37	T206-T215
38	T216-T225
39	T226-T230
40	T231-T240
41	T241-T250
42	T251-T260
43	T261-T270
44	T271-T280
45	T281-T290
46	T291-T300
47	T301-T310
48-59	T311-T370
60	ET42-ET50
61	ET51-ET55
62	ET8-ET14
63	ET37-ET41
64	ET1-ET7
65	ET32-ET36
66	ET15-ET21
67	ET27-ET31
68	ET22-ET26
69	No records located

LEGEND

- T1 XRF Sample Location (Known Location)
- P1 IEPA Surface Soil Sample Location
- S1 Andrews Surface Soil Sample Location
- 43 Andrews XRF Sampling Grid
- Site Property Line
- Parcel Boundary
- Lead (Pb) ≥ 400 mg/kg¹
- Approximate Remediation Site Boundary

SURFACE SOIL ANALYTICAL AND CO-LOCATED XRF SCREENING RESULTS - SELECTED SAMPLES

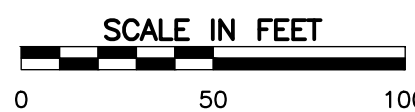
SAMPLE ID	RESULT (MG/KG)	XRF SCREENING RESULT (MG/KG)
P7	3,030	--
S14	2,220	2,119
S16	6,030	500
S17	680	452

NOTES

- SHADED GRIDS INDICATE ONE OR MORE XRF EXCEEDANCES WITHIN THE GRID; INDIVIDUAL XRF MEASUREMENT LOCATIONS WITHIN A GRID WERE NOT IDENTIFIED IN AVAILABLE DOCUMENTATION. LABORATORY ANALYTICAL RESULTS SHOWN FOR SAMPLES COLLECTED WITHIN SHADED GRIDS MAY BE LESS THAN THE REFERENCED SCREENING VALUE. ND: NOT DETECTED ABOVE INSTRUMENT REPORTING LIMIT.
- : XRF SCREENING NOT PERFORMED AT THIS LOCATION.

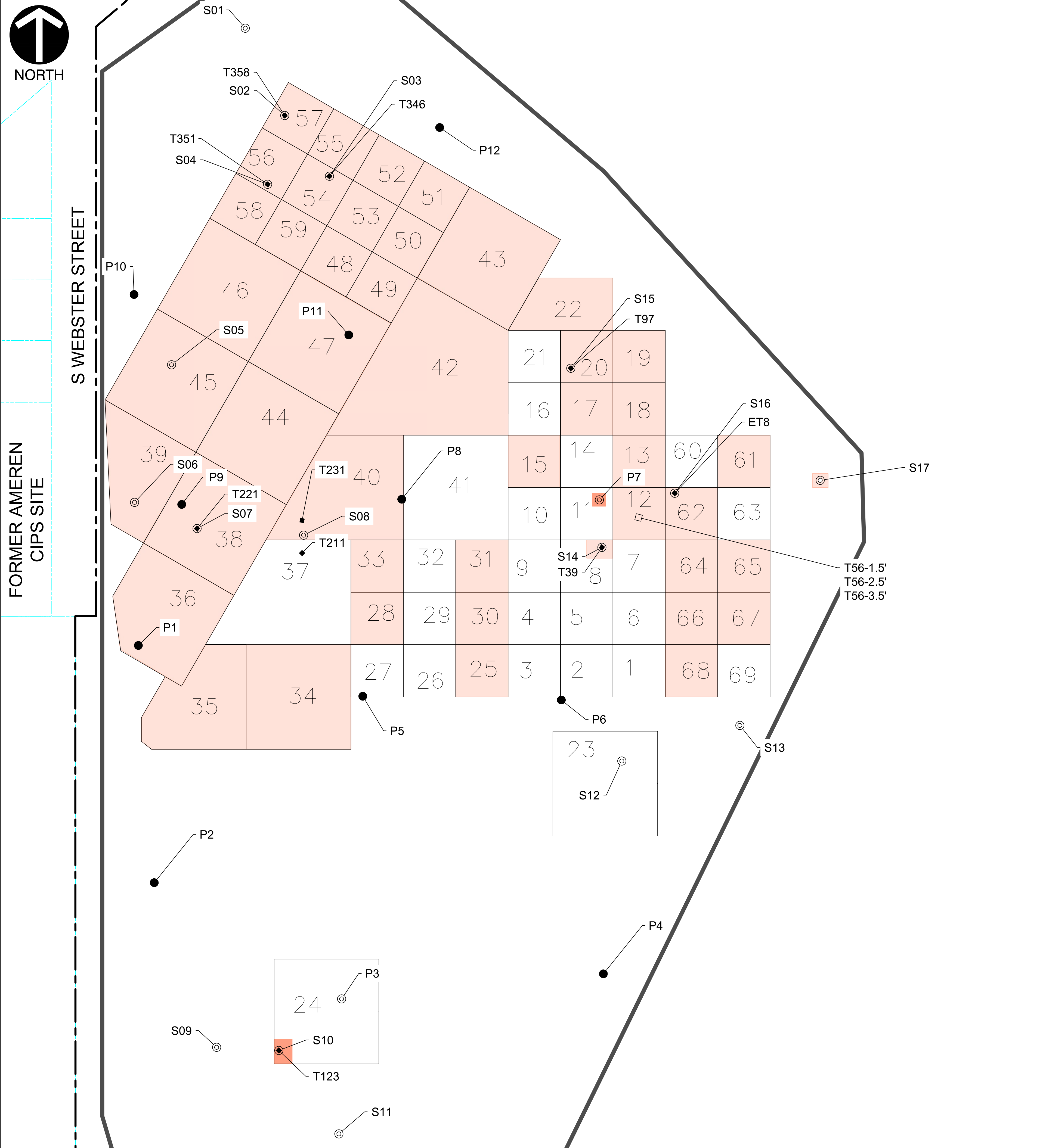
REFERENCES

- "S" SAMPLE LOCATIONS, XRF DATA, AND ANALYTICAL RESULTS OBTAINED FROM *FOCUS SITE INVESTIGATION REPORT*, ANDREWS ENGINEERING DATED FEBRUARY 2025.
- "P" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *MANNERS PARK SAMPLING EVENT REPORT*, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, DATED AUGUST 14, 2024.
- "SS" AND "SVP" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *ENVIRONMENTAL SOIL AND SOIL VAPOR SAMPLING AND TESTING MANNERS PARK*, GEOTECHNOLOGY, LLC (dba UES), DATED MAY 20, 2024.



REVISION RECORD	
NO	DATE
MIDWEST ENVIRONMENTAL CONSULTING SERVICES, INC. 2551 NORTH BRIDGE STREET YORKVILLE, IL 60560 PH. 630.553.3989 FAX 630.553.3990 WWW.MEC-US.COM	
TAYLORVILLE PARK DISTRICT MANNERS PARK SUPPLEMENTAL FSI WORK PLAN 18 MANNERS PARK ROAD TAYLORVILLE, ILLINOIS	
PREVIOUS LEAD - SURFACE SOIL & XRF SCREENING	
DRAWING NO.: 3	DATE: 05/18/2026 DWG SCALE: AS SHOWN
CAC	DRAWN BY: JA
JA	CHECKED BY: 26-02-0115-EC
	APPROVED BY: 06/17/2026
SHEET 1	OF 6

C:\Users\lccase\Midwest Environmental\2026-Projects - Documents\VAZ_0115_Taylorville_Park_District_Manners_Park\EC\CAD\2602015-figures.dwg(1) LS(6/17/2026 - ccase) - LP: 6/17/2026 10:48 AM



XRF SCREENING LOCATION SUMMARY	
GRID(S)	XRF SAMPLE ID
1	T1-T5
2	T6-T10
3	T11-T15
4	T16-T20
5	T21-T25
6	T26-T30
7	T31-T35
8	T36-T40
9	T41-T45
10	T46-T50
11	T51-T55
12	T56-T60
13	T61-T65
14	T66-T70
15	T71-T75
16	T76-T80
17	T81-T85
18	T86-T90
19	T91-T95
20	T96-T100
21	T101-T105
22	T106-T110
23	T111-T120
24	T121-T130
25	T131-T135
26	T136-T140
27	T141-T145
28	T146-T150
29	T151-T155
30	T156-T160
31	T161-T165
32	T166-T170
33	T171-T175
34	T176-T185
35	T186-T195
36	T196-T205
37	T206-T215
38	T216-T225
39	T226-T230
40	T231-T240
41	T241-T250
42	T251-T260
43	T261-T270
44	T271-T280
45	T281-T290
46	T291-T300
47	T301-T310
48-59	T311-T370
60	ET42-ET50
61	ET51-ET55
62	ET8-ET14
63	ET37-ET41
64	ET1-ET7
65	ET32-ET36
66	ET15-ET21
67	ET27-ET31
68	ET22-ET26
69	No records located

LEGEND

T1

XRF Sample Location (Known Location)

P1

IEPA Surface Soil Sample Location

S1

Andrews Surface Soil Sample Location

43

Andrews XRF Sampling Grid

--

Site Property Line

Arsenic (As) ≥11.3 mg/kg¹

Approximate Remediation Site Boundary

SURFACE SOIL ANALYTICAL AND CO-LOCATED XRF SCREENING RESULTS - SELECTED SAMPLES		
SAMPLE ID	RESULT (MG/KG)	XRF SCREENING RESULT (MG/KG)
P1	6.9	--
P7	17	--
P8	7.49	--
P9	7.43	--
P11	7.44	--
S1	7.34	11
S2	4.37	6
S3	4.540	ND
S4	4.54	7
S5	8.39	10
S6	9.66	8
S7	7.07	12
S8	7.15	13
S10	7.42	14
S14	17.4	ND
S15	5.4	13
S16	73.8	ND
S17	11.3	ND

- NOTES
1.

SHADED GRIDS INDICATE ONE OR MORE XRF EXCEEDANCES WITHIN THE GRID; INDIVIDUAL XRF MEASUREMENT LOCATIONS WITHIN A GRID WERE NOT IDENTIFIED IN AVAILABLE DOCUMENTATION. LABORATORY ANALYTICAL RESULTS SHOWN FOR SAMPLES COLLECTED WITHIN SHADED GRIDS MAY BE LESS THAN THE REFERENCED SCREENING VALUE.
2.

ND: NOT DETECTED ABOVE INSTRUMENT REPORTING LIMIT.
3.

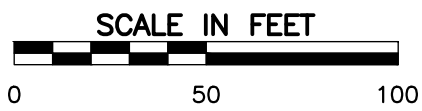
--: XRF SCREENING NOT PERFORMED AT THIS LOCATION.

- REFERENCES
1.

"S" SAMPLE LOCATIONS, XRF DATA, AND ANALYTICAL RESULTS OBTAINED FROM *FOCUS SITE INVESTIGATION REPORT*, ANDREWS ENGINEERING DATED FEBRUARY 2025.
2.

"P" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *MANNERS PARK SAMPLING EVENT REPORT*, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, DATED AUGUST 14, 2024.
3.

"SS" AND "SVP" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *ENVIRONMENTAL SOIL AND SOIL VAPOR SAMPLING AND TESTING MANNERS PARK*, GEOTECHNOLOGY, LLC (dba UES), DATED MAY 20, 2024.



REVISION RECORD

NO	DATE	DESCRIPTION

MIDWEST ENVIRONMENTAL CONSULTING SERVICES, INC.

2551 NORTH BRIDGE STREET

YORKVILLE, IL 60560

PH. 630.553.3989 | FAX 630.553.3990 | WWW.MEC-US.COM

TAYLORVILLE PARK DISTRICT MANNERS PARK

SUPPLEMENTAL FSI WORK PLAN

18 MANNERS PARK ROAD

TAYLORVILLE, ILLINOIS

PREVIOUS ARSENIC - SURFACE SOIL & XRF SCREENING

DRAWING NO.: 4

SHEET 1 OF 6

DATE: 05/18/2026
DWG SCALE: AS SHOWN
PROJECT NO.: 26-02-0115-EC
APPROVED BY: 06/17/2026

CAC
JAC
JAC

C:\Users\lccase\Midwest Environmental\2026-Projects - Documents\VAZ_0115_Taylorville_Park_District_Manners_Park\EC\CAD\2602015-figures.dwg[5/15/6/11/2026 - ccase] - LP: 6/11/2026 10:48 AM



XRF SCREENING LOCATION SUMMARY	
GRID(S)	XRF SAMPLE ID
1	T1-T5
2	T6-T10
3	T11-T15
4	T16-T20
5	T21-T25
6	T26-T30
7	T31-T35
8	T36-T40
9	T41-T45
10	T46-T50
11	T51-T55
12	T56-T60
13	T61-T65
14	T66-T70
15	T71-T75
16	T76-T80
17	T81-T85
18	T86-T90
19	T91-T95
20	T96-T100
21	T101-T105
22	T106-T110
23	T111-T120
24	T121-T130
25	T131-T135
26	T136-T140
27	T141-T145
28	T146-T150
29	T151-T155
30	T156-T160
31	T161-T165
32	T166-T170
33	T171-T175
34	T176-T185
35	T186-T195
36	T196-T205
37	T206-T215
38	T216-T225
39	T226-T230
40	T231-T240
41	T241-T250
42	T251-T260
43	T261-T270
44	T271-T280
45	T281-T290
46	T291-T300
47	T301-T310
48-59	T311-T370
60	ET42-ET50
61	ET51-ET55
62	ET8-ET14
63	ET37-ET41
64	ET1-ET7
65	ET32-ET36
66	ET15-ET21
67	ET27-ET31
68	ET22-ET26
69	No records located

LEGEND

T1

XRF Sample Location (Known Location)

P1

IEPA Surface Soil Sample Location

S1

Andrews Surface Soil Sample Location

43

Andrews XRF Sampling Grid

--

Site Property Line

Manganese (Mn) ≥1,600 mg/kg¹

Approximate Remediation Site Boundary

SURFACE SOIL ANALYTICAL AND CO-LOCATED XRF SCREENING RESULTS - SELECTED SAMPLES		
SAMPLE ID	RESULT (MG/KG)	XRF SCREENING RESULT (MG/KG)
P9	2,060	--
S1	876	4,605
S16	1,810	2,074

- NOTES
1.

SHADED GRIDS INDICATE ONE OR MORE XRF EXCEEDANCES WITHIN THE GRID; INDIVIDUAL XRF MEASUREMENT LOCATIONS WITHIN A GRID WERE NOT IDENTIFIED IN AVAILABLE DOCUMENTATION. LABORATORY ANALYTICAL RESULTS SHOWN FOR SAMPLES COLLECTED WITHIN SHADED GRIDS MAY BE LESS THAN THE REFERENCED SCREENING VALUE.
2.

ND: NOT DETECTED ABOVE INSTRUMENT REPORTING LIMIT.
3.

--: XRF SCREENING NOT PERFORMED AT THIS LOCATION.

- REFERENCES
1.

"S" SAMPLE LOCATIONS, XRF DATA, AND ANALYTICAL RESULTS OBTAINED FROM *FOCUS SITE INVESTIGATION REPORT*, ANDREWS ENGINEERING DATED FEBRUARY 2025.
2.

"P" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *MANNERS PARK SAMPLING EVENT REPORT*, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, DATED AUGUST 14, 2024.
3.

"SS" AND "SVP" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *ENVIRONMENTAL SOIL AND SOIL VAPOR SAMPLING AND TESTING MANNERS PARK*, GEOTECHNOLOGY, LLC (dba UES), DATED MAY 20, 2024.

REVISION RECORD

NO	DATE	DESCRIPTION

MIDWEST ENVIRONMENTAL CONSULTING SERVICES, INC.

2551 NORTH BRIDGE STREET

YORKVILLE, IL 60560

PH. 630.553.3989 | FAX 630.553.3990 | WWW.MEC-US.COM

Midwest Environmental Consulting Services, Inc.

Geotechnical Engineers Scientists

TAYLORVILLE PARK DISTRICT

MANNERS PARK

SUPPLEMENTAL FSI WORK PLAN

18 MANNERS PARK ROAD

TAYLORVILLE, ILLINOIS

PREVIOUS MANGANESE - SURFACE SOIL & XRF SCREENING

DRAWING NO.: 5

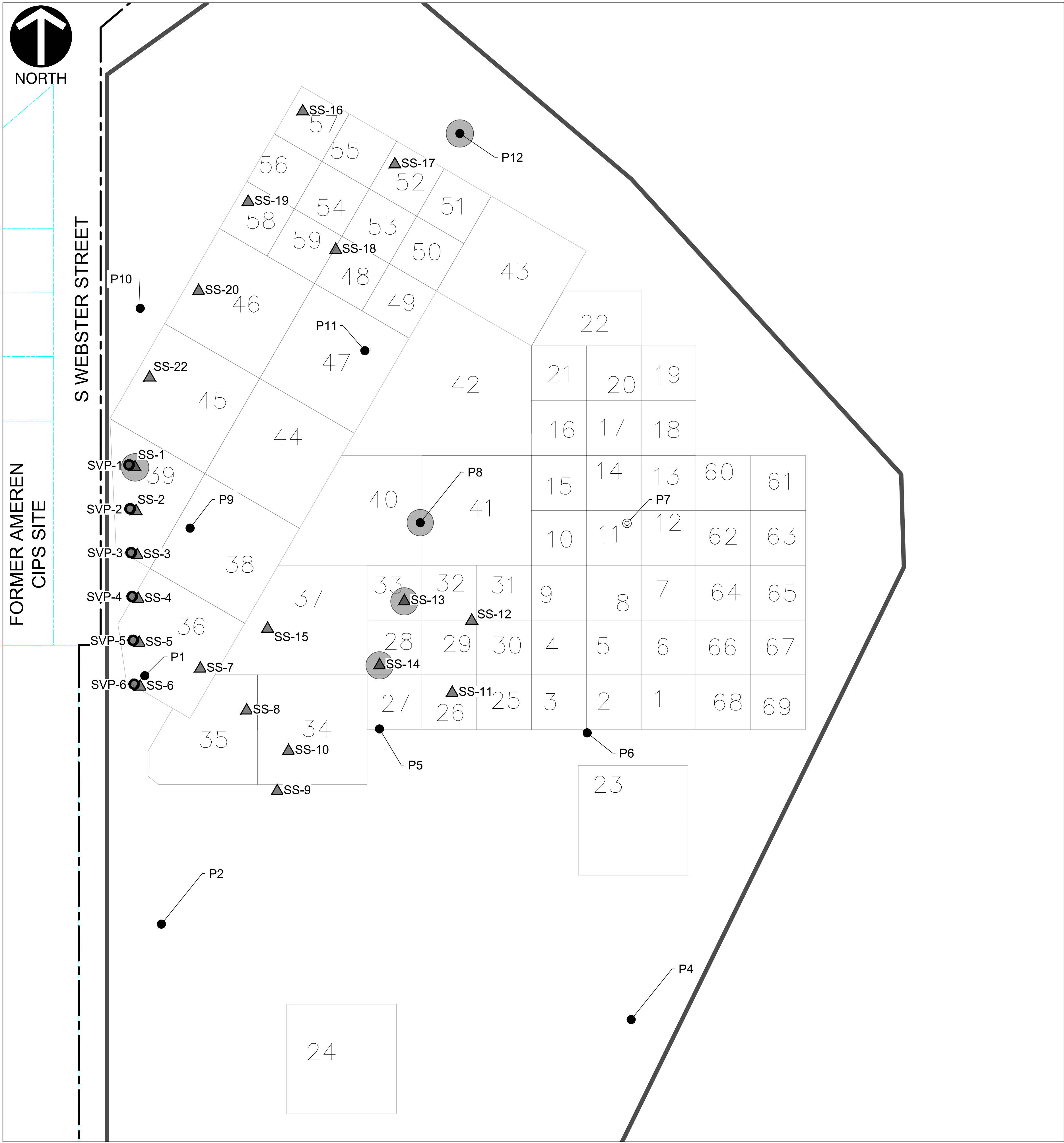
SHEET 1 OF 6

DATE: 05/18/2026
DWG SCALE: AS SHOWN

DRAWN BY: JAC
CHECKED BY: JAC

PROJECT NO: 26-02-0115-EC
APPROVED BY: 06/17/2026

C:\Users\lccase\Midwest Environmental\2026-Projects - Documents\VAZ_02_0115_Taylorville_Park_District_Manners_Park\EC\CAD\2602015-figures.dwg(6/15/2026) - LPS: 6/17/2026 10:48 AM



LEGEND

- SVP-1 UES Soil Vapor Probe Sample Location
- SS-1 UES Surface Soil Sample Location
- P1 IEPA Surface Soil Sample Location
- S1 Andrews Surface Soil Sample Location
- 43 Andrews XRF Sampling Grid
- Site Property Line
- Benzo(a)pyrene >0.09 mg/kg
- Approximate Remediation Site Boundary

BENZO(A)PYRENE – SURFACE SOIL RESULTS EXCEEDING RESIDENTIAL CRITERION (0.09 MG/KG)

SAMPLE ID	RESULT (MG/KG)
P8	0.27
P12	0.14
SS-1	0.665
SS-13	0.487
SS-14	0.322

NOTES

- NO SOIL VAPOR RESULTS EXCEEDED APPLICABLE RESIDENTIAL SCREENING CRITERIA.

REFERENCES

- "S" SAMPLE LOCATIONS, XRF DATA, AND ANALYTICAL RESULTS OBTAINED FROM *FOCUS SITE INVESTIGATION REPORT*, ANDREWS ENGINEERING DATED FEBRUARY 2025.
- "P" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *MANNERS PARK SAMPLING EVENT REPORT*, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, DATED AUGUST 14, 2024.
- "SS" AND "SVP" SAMPLE LOCATIONS AND ANALYTICAL DATA OBTAINED FROM *ENVIRONMENTAL SOIL AND SOIL VAPOR SAMPLING AND TESTING MANNERS PARK*, GEOTECHNOLOGY, LLC (dba UES), DATED MAY 20, 2024.

REVISION RECORD

NO	DATE	DESCRIPTION

MIDWEST ENVIRONMENTAL
CONSULTING SERVICES, INC.
2551 NORTH BRIDGE STREET
YORKVILLE, IL 60560
PH. 630.553.3989 | FAX 630.553.3990 | WWW.MEC-US.COM



TAYLORVILLE PARK DISTRICT
MANNERS PARK
SUPPLEMENTAL FSI WORK PLAN
18 MANNERS PARK ROAD
TAYLORVILLE, ILLINOIS

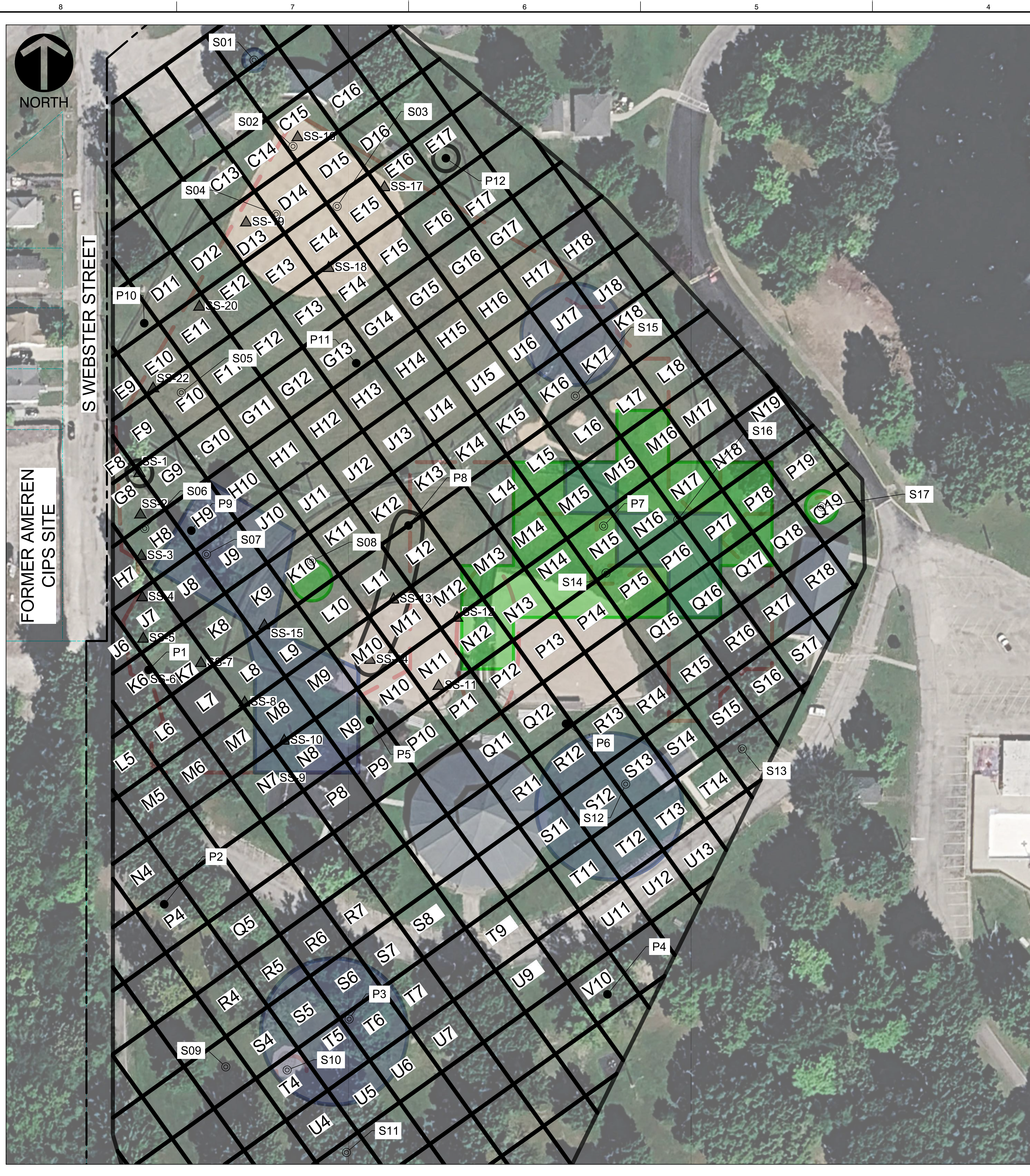
PREVIOUS PNA - SURFACE SOIL
AND SOIL VAPOR

DRAWING NO.:

6

SHEET OF 6

C:\Users\lccase\OneDrive - Environmental\2026-Projects - Documents\18_02_0115_Taylorville_Park_District_Manners_Park\EC\CAD\18020115-Figure.dwg(1) LS(6/17/2026 - ccase) - LP: 6/17/2026 10:49 AM



LEGEND

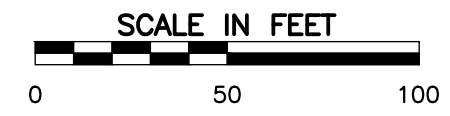
- Approximate Area of Elevated Arsenic Levels, ≥ 11.3 mg/kg
- Approximate Area of Elevated Lead Levels, ≥ 400 mg/kg
- Approximate Area of Elevated Manganese Levels, $\geq 1,600$ mg/kg
- Approximate Area of Elevated Benzo(a)pyrene Levels, ≥ 0.09 mg/kg
- Site Property Line
- Approximate Remediation Site Boundary
- Proposed 50-foot by 50-foot Sampling Grid

NOTES

- APPROXIMATED AREAS ARE BASED ON AVAILABLE DATA, WHICH INCLUDED ONLY SURFACE SAMPLES.
- EXCEEDANCES ARE BASED ON THE IEPA TACO TIER 1 RESIDENTIAL INGESTION (MOST STRINGENT) EXPOSURE ROUTE.
- PROPOSED XRF SCREENING GRID CONSISTS OF SELECTED APPROXIMATE 50-FOOT BY 50-FOOT GRID CELLS WITHIN THE SUPPLEMENTAL INVESTIGATION AREA.
- ONE INITIAL XRF SCREENING READING WILL BE COLLECTED WITHIN EACH LABELED GRID CELL WHERE ACCESSIBLE. SCREENING LOCATIONS WILL GENERALLY BE COMPLETED NEAR THE CENTER OF EACH SELECTED GRID CELL.
- XRF SCREENING LOCATIONS MAY BE SHIFTED WITHIN THE SAME GRID CELL BASED ON FIELD CONDITIONS, INCLUDING UTILITIES, SURFACE COVER, TREES, FENCING, PARK FEATURES, OR ACCESS LIMITATIONS. ADJUSTED LOCATIONS WILL BE DOCUMENTED IN FIELD NOTES.
- SELECTED GRID CELLS INCLUDE INTERIOR PORTIONS OF THE PREVIOUSLY IDENTIFIED AREA OF CONCERN, PERIMETER CELLS SURROUNDING PREVIOUS EXCEEDANCE AREAS, AND TARGETED SOUTHERN BOUNDARY VERIFICATION CELLS SELECTED TO ADDRESS THE PORTION OF THE REMEDIATION SITE SOUTH OF THE BASEBALL DIAMONDS AND PATH THAT WAS NOT INCLUDED IN PREVIOUS XRF SCREENING.
- ADDITIONAL XRF READINGS MAY BE COLLECTED WITHIN SELECTED GRID CELLS OR ADJACENT GRID CELLS AT REDUCED SPACING WHERE ELEVATED ARSENIC, LEAD, OR MANGANESE READINGS ARE IDENTIFIED. ADDITIONAL READINGS WILL BE USED TO FURTHER EVALUATE THE APPARENT HORIZONTAL EXTENT OF ELEVATED METALS CONCENTRATIONS.
- SURFACE SOIL CONFIRMATION SAMPLES WILL BE COLLECTED FROM SELECTED GRID CELLS BASED ON XRF SCREENING RESULTS, PREVIOUS ANALYTICAL DATA, FIELD OBSERVATIONS, AND LABORATORY CONFIRMATION NEEDS. FINAL LABORATORY SAMPLE LOCATIONS MAY BE ADJUSTED IN THE FIELD.
- XRF RESULTS WILL BE USED FOR FIELD SCREENING AND SAMPLE SELECTION AND WILL NOT REPLACE LABORATORY ANALYTICAL RESULTS WHERE LABORATORY CONFIRMATION IS NEEDED FOR REGULATORY COMPARISON, CLOSURE STRATEGY EVALUATION, OR FUTURE SOIL MANAGEMENT DECISIONS.
- GRID LOCATIONS AND BOUNDARIES ARE APPROXIMATE AND ARE INTENDED FOR FIELD PLANNING PURPOSES. FINAL SAMPLE LOCATIONS WILL BE DOCUMENTED FOLLOWING COMPLETION OF FIELD ACTIVITIES.

REFERENCES

- AERIAL IMAGERY PROVIDED BY MAXAR TECHNOLOGIES AND U.S. GEOLOGICAL SURVEY (2026), IMAGERY DATED OCTOBER 2, 2022; ACCESSED FEBRUARY 10, 2026.



REVISION RECORD	
NO.	DATE

MIDWEST ENVIRONMENTAL CONSULTING SERVICES, INC.
2551 NORTH BRIDGE STREET
YORKVILLE, IL 60560
PH. 630.553.3989 | FAX 630.553.3990 | WWW.MEC-US.COM

**TAYLORVILLE PARK DISTRICT
MANNERS PARK
SUPPLEMENTAL FSI WORK PLAN
18 MANNERS PARK ROAD
TAYLORVILLE, ILLINOIS**

**PROPOSED 2026 MOBILIZATION 1
XRF SCREENING AND SURFACE
SOIL SAMPLING GRID**

DATE:	05/18/2026	DRAWN BY:	CAC
DWG SCALE: <td>AS SHOWN<td>CHECKED BY:<td>JA</td></td></td>	AS SHOWN <td>CHECKED BY:<td>JA</td></td>	CHECKED BY: <td>JA</td>	JA
PROJECT NO: <td>26-02-0115-EC<td>APPROVED BY:<td>06/17/2026</td></td></td>	26-02-0115-EC <td>APPROVED BY:<td>06/17/2026</td></td>	APPROVED BY: <td>06/17/2026</td>	06/17/2026

DRAWING NO.: **8**

SHEET 1 OF 6

TABLES

Table 1: Proposed Mobilization 1 Surface Soil Sample Summary and Rationale

Proposed Sample Area / Grid Cell(s)	Basis for Inclusion	Planned Field Activity	Laboratory Analysis	Rationale / Decision Logic
Selected 50-foot grid cells shown on Figure 3	Systematic screening of previously identified area of concern	XRF screening; one initial reading per selected grid cell, where accessible	Laboratory confirmation samples selected based on XRF results	Establish updated field-screening dataset using a new alphanumeric grid system independent of prior investigation numbering.
Grid cells surrounding previous lead exceedance areas	Previous lead exceedances reported in surface soil and/or XRF screening results	XRF screening; additional infill screening as needed	Total lead; TCLP lead where total lead is elevated; SPLP lead where warranted	Evaluate horizontal extent of elevated lead and identify locations requiring vertical delineation during Mobilization 2.
Grid cells surrounding previous arsenic exceedance areas	Previous arsenic exceedances or XRF readings above applicable comparison criteria	XRF screening; additional infill screening as needed	Total arsenic; SPLP arsenic where warranted	Evaluate horizontal extent of elevated arsenic and support laboratory confirmation of XRF screening results.
Grid cells surrounding previous manganese exceedance areas	Previous manganese exceedances or XRF readings above applicable comparison criteria	XRF screening; additional infill screening as needed	Total manganese; SPLP manganese where warranted	Evaluate horizontal extent of elevated manganese and determine whether additional subsurface evaluation is needed.
Southern boundary verification cells	IEPA comment regarding southern portion of remediation site not previously included in XRF screening area	XRF screening in selected southern grid cells; surface soil sampling where warranted	Total arsenic, lead, and manganese; SVOCs/PNAs where selected	Address previously unscreened/sampled southern portion of the remediation site and support evaluation of the remediation site boundary.
Selected locations near previous PNA detections	Previous benzo(a)pyrene detections above Tier 1 residential criterion but below non-metropolitan background	Surface soil sampling at selected locations; no XRF screening for PNAs	SVOCs/PNAs, including benzo(a)pyrene	Evaluate whether limited supplemental PNA data are needed to support closure strategy evaluation for public park use.

Table 1: Proposed Mobilization 1 Surface Soil Sample Summary and Rationale

Proposed Sample Area / Grid Cell(s)	Basis for Inclusion	Planned Field Activity	Laboratory Analysis	Rationale / Decision Logic
Locations with XRF results near applicable criteria	XRF readings at or near applicable screening criteria	Additional XRF readings and/or surface soil sample collection	Total arsenic, lead, and manganese; TCLP/SPLP as warranted	Support laboratory confirmation of borderline field-screening results and improve confidence in lateral boundary decisions.
Locations with elevated XRF results relative to surrounding grid cells	Adaptive screening trigger during Mobilization 1	Infill XRF screening at reduced spacing; surface soil sample collection where warranted	Total arsenic, lead, and manganese; TCLP/SPLP as warranted	Refine apparent horizontal extent and help select Mobilization 2 boring locations.
Background / lower-range confirmation locations	XRF readings below applicable screening criteria and representative of lower concentration ranges	Surface soil sample collection at selected locations	Total arsenic, lead, and manganese	Provide confirmation samples representing the lower range of XRF results, consistent with Method 6200 confirmation concepts.
Field duplicate location(s)	Quality assurance / quality control	Duplicate sample collection at selected location(s)	Same analysis as parent sample	Evaluate sampling and analytical precision.

Final Mobilization 1 laboratory sample locations will be selected based on XRF screening results, previous analytical data, field observations, and the need to represent lower, middle, and upper XRF result ranges. Laboratory confirmation samples will be collected at a minimum frequency of approximately one confirmation sample per 20 XRF readings, with additional confirmation samples collected as needed to support project data quality objectives.

Table 2: Proposed Analytical Parameters and Decision Logic

Medium / Sample Type	Proposed Analysis	Analytical Method / Basis	When Analysis Will Be Performed	Purpose
Surface soil, 0–0.5 ft below ground surface	Total arsenic, lead, and manganese	USEPA SW-846 Method 6010 or 6020, as appropriate	Selected Mobilization 1 confirmation samples	Confirm XRF screening results and compare to applicable soil remediation objectives and background values.
Surface soil, 0–0.5 ft below ground surface	SVOCs/PNAs, including benzo(a)pyrene	USEPA SW-846 Method 8270 SIM or equivalent laboratory method	Selected samples near previous PNA detections or where additional PNA confirmation is warranted	Evaluate previous benzo(a)pyrene detections relative to residential soil remediation objectives and applicable background concentrations.
Subsurface soil from borings	Total arsenic, lead, and manganese	USEPA SW-846 Method 6010 or 6020, as appropriate	Selected Mobilization 2 boring intervals	Evaluate vertical extent of elevated metals and support closure strategy evaluation.
Subsurface soil from borings	SVOCs/PNAs, including benzo(a)pyrene	USEPA SW-846 Method 8270 SIM or equivalent laboratory method	Selected boring intervals near previous PNA detections or where field observations warrant	Evaluate whether PNA impacts extend below surface soil in selected areas.
Soil with elevated total lead	TCLP lead	USEPA SW-846 Method 1311 extraction followed by metals analysis	Samples with elevated total lead or where previous data indicate leachable lead requires additional evaluation	Evaluate potential hazardous waste characteristic and future soil management considerations.
Selected soil samples	SPLP metals	USEPA SW-846 Method 1312 extraction followed by metals analysis	Samples selected for soil component of groundwater ingestion exposure route evaluation	Support evaluation of leaching potential and groundwater pathway considerations.
Selected soil samples	pH and percent solids	Laboratory standard methods	Samples submitted for laboratory analysis, as appropriate	Support data interpretation and comparison to applicable criteria.
Selected soil samples	Organic content or fraction organic carbon	Laboratory standard method, as appropriate	Selected samples used for groundwater pathway or Tier 2 evaluation	Support evaluation of soil-to-groundwater exposure route assumptions and potential modeling inputs.
Groundwater from permanent monitoring wells	Total/dissolved metals, as appropriate	USEPA SW-846 Method 6010 or 6020, as appropriate	Mobilization 2 monitoring well samples	Evaluate groundwater quality beneath the Subject Property and support groundwater pathway assessment.
Groundwater from permanent monitoring wells	VOCs and/or SVOCs/PNAs	USEPA Method 8260 and/or 8270 SIM, as appropriate	If needed based on previous detections, IEPA comments, or groundwater pathway objectives	Evaluate MGP-related constituents in groundwater, where applicable.
Monitoring wells	Groundwater elevation measurements	Field water-level measurements	During Mobilization 2 and/or subsequent monitoring events	Evaluate apparent groundwater flow direction and hydraulic gradient.
Monitoring wells	Hydraulic conductivity testing	Slug testing, field permeability testing, or equivalent method	Selected monitoring wells, where practicable	Provide hydrogeologic data requested for pathway evaluation and potential pathway exclusion assessment.
Field quality control samples	Field duplicate samples	Same methods as parent sample	At appropriate frequency based on sample type and data quality objectives	Evaluate sampling and analytical precision.
Laboratory quality control samples	Matrix spike / matrix spike duplicate	Same methods as parent sample	As requested by laboratory or project data quality objectives	Support laboratory quality control review and data usability evaluation.

XRF results will be used for field screening and sample selection but will not replace laboratory analytical results where laboratory confirmation is needed for

Final analytical parameters may be refined based on field observations, XRF screening results, Mobilization 1 laboratory results, IEPA feedback, and the

ATTACHMENT 3

COMPREHENSIVE SUMMARY TABLES

Sample ID: Sample Depth (ft): Sample Date: Sampler: pH: TCLP Hazardous Waste Threshold (mg/L)				P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	S1			
				0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0.5	XRF
				5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	10/3/2024	10/3/2024
				IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	Andrews	Andrews
				--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.62	--
Analyte	TACO Background Level (mg/kg)	TACO Tier 1 Residential Ingestion SRO (mg/kg)		Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)		
Aluminum	9,200	78,000*	-	11,400	10,000	8,380	9,190	9,940	10900	9,150	8,590	10,700	9,860	13,900	11,400	--	--		
Antimony	3	31	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Arsenic	11.3	11.3	-	6.9 B2	10.7 B2	3.18 B2	4.8 B2	6.5 B2	8.02 B2	17 B2	7.49	7.43 B2	6.16 B2	7.44 B2	7.82 B2	7.34	11		
Barium	122	5,500	-	205	200	217	135	172	189	141	183 B2	229	209	174	181	--	--		
Cadmium	0.5	78	-	3.75 B2	3.64 B2	2.98 B2	2.93 B2	3.5 B2	3.79 B2	3.15 B2	3.13 B2	3.57 B2	3.7 B2	4.33 B2	3.85 B2	--	--		
Calcium	5,525	21,500*	-	2,970	3100	1,520	1,860	2,790	2,870	843	1,140	1,200	2,450	2,310	3,180	--	--		
Chromium	13	230	-	14.5	13.7	13.3	12.7	13.4	14.7	12.9	12.1	14.2	14	16.8	15	--	--		
Cobalt	8.9	4,700	-	12.1	10.3	10.8	6.89	9.87	11	9.46	11.1	14.6	9.53	12.7	10.8	--	--		
Copper	12	2,900	-	11.9	13.9	9.65	9.54	14.3	15.8	13.8	13.4	11.2	14.3	16.2	13.4	--	--		
Iron	15,000	55,000	-	15,400	14,000	12,000	12,300	13,900	14,600	13,300	12,500	14,400	14,400	17,400	15,700	--	--		
Lead	20.9	400	-	20.3 B1	65.7 B1	41 B1	82.3 B1	222 B1	187 B1	3,030 B1	138 B1	33.6 B1	78.7 B1	37.9 B1	38.7 B1	52	46		
Magnesium	2,700	104,000*	-	1,900	1,580	1,370	1,550	1,680	1,800	1,410	1,410	1,700	1,620	2,290	2,030	--	--		
Manganese	630	1,600	-	1,350	1,420	1,970	954	1,270	1,360	1,280	1,360	2,060	1,240	1,200	1,190	876	4,605		
Nickel	13	1,600	-	22.3	21.2	18	12.3	18.5	21	13.3	16.3	19.6	17.2	18.5	18	--	--		
Potassium	1,100	22,100*	-	1,590	1,460	1,330	1090	1,550	1,710	1,450	1,220	1,460	1,890	2,140	2,060	--	--		
Selenium	0.37	390	-	6.62 B2	2.81 B2	4.27 B2	4.81 B2	6	5.48 B2	5.09 B2	4.24 B2	9.39 B2	2.9 B2	5.32 B2	5.52 B2	--	--		
Strontium	-	47,000*	-	20.3	12	16.1	11.7	18.7	21.2	9.34	11.5	14.1	19.1	17.5	22.4	--	--		
Thallium	0.42	6.3	-	3.37 B1	3.21 B1	2.94 B1	2.98 B1	3.15 B1	3.79 B1	3.31 B1	3.74 B1	4.24 B1	3.64 B1	3.61 B1	3.78 B1	--	--		
Vanadium	25	550	-	27.9 B1	25.1 B1	21.8 B1	21.9 B1	23.8 B1	25.9 B1	23.2 B1	23.3 B1	26.9 B1	25.3 B1	31.1 B1	27.1 B1	--	--		
Zinc	60.2	23,000	-	57.2	131	56	65.6	89.3	100	70	66.1	58.1	93.2	90.3	84.8	--	--		
Analyte	TACO Tier 1 Class I GRO (mg/L)	TACO Tier 1 Class II GRO (mg/L)	TCLP Hazardous Waste Threshold (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)		
TCLP Arsenic	0.050	0.2	5.0	--	--	--	--	--	--	--	--	--	--	--	--	<0.0087	--		
TCLP Lead	0.0075	0.1	5.0	--	--	--	--	--	--	--	--	--	--	--	--	<0.004	--		
TCLP Manganese	0.15	10.0	NA	--	--	--	--	--	--	--	--	--	--	--	--	0.223	--		
SPLP Lead	0.0075	0.1	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SPLP Manganese	0.15	10.0	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SPLP Arsenic	0.050	0.2	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Notes:

B1

B2

BOLD

BOLD

NA

--

The sample matrix caused possible effects on measurement. The result may be biased low.

The sample matrix caused possible effects on measurement. The result may be biased high.

Sample was detected above the screening levels.

Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

TCLP results compared to federal Toxicity Characteristic thresholds (40 CFR 261.24).

SPLP and TCLP results compared to TACO Tier 1 Groundwater Remediation Objectives (35 IAC 742 Appendix B Table E).

No objective available

sample not analyzed for this parameter

Table 1: Inorganics Surface Soil Analytical Results
Data Gap Analysis
Manners Park, Taylorville, Illinois

Analyte				Sample ID:	S2		S3		S4		S5		S6		S7	
				Sample Depth (ft):	0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF
				Sample Date:	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024
				Sampler:	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews
				pH:	8.47	--	8.35	--	8.56	--	6.27	--	6.97	--	5.28	--
				TACO Background Level (mg/kg)	TACO Tier 1 Residential Ingestion SRO (mg/kg)	TCLP Hazardous Waste Threshold (mg/L)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
Aluminum	9,200	78,000*	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	3	31	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	11.3	11.3	-	4.37	6	4.54	ND	4.54	7	8.39	10	9.66	8	7.07	12	
Barium	122	5,500	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.5	78	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	5,525	21,500*	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	13	230	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	8.9	4,700	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	12	2,900	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	15,000	55,000	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	20.9	400	-	6.64	7	7.28	7	7.28	11	20.3	16	71.6	60	28.3	22	
Magnesium	2,700	104,000*	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	630	1,600	-	267	6	251	232	251	286	991	520	1290	803	1,340	945	
Nickel	13	1,600	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	1,100	22,100*	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.37	390	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Strontium	-	47,000*	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.42	6.3	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	25	550	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	60.2	23,000	-	--	--	--	--	--	--	--	--	--	--	--	--	--
Analyte	TACO Tier 1 Class I GRO (mg/L)	TACO Tier 1 Class II GRO (mg/L)	TCLP Hazardous Waste Threshold (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)
TCLP Arsenic	0.050	0.2	5.0	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	--
TCLP Lead	0.0075	0.1	5.0	<0.004	--	<0.004	--	<0.004	--	<0.004	--	<0.004	--	<0.004	--	--
TCLP Manganese	0.15	10.0	NA	0.742	--	0.301	--	0.301	--	0.0222	--	0.0156	--	0.11	--	--
SPLP Lead	0.0075	0.1	NA	--	--	--	--	--	--	--	--	--	--	--	--	--
SPLP Manganese	0.15	10.0	NA	--	--	--	--	--	--	--	--	--	--	--	--	--
SPLP Arsenic	0.050	0.2	NA	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

B1

B2

BOLD

BOLD

NA

--

The sample matrix caused possible effects on measurement. The result may be biased low.

The sample matrix caused possible effects on measurement. The result may be biased high.

Sample was detected above the screening levels.

Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

TCLP results compared to federal Toxicity Characteristic thresholds (40 CFR 261.24).

SPLP and TCLP results compared to TACO Tier 1 Groundwater Remediation Objectives (35 IAC 742 Appendix B Table E).

No objective available

sample not analyzed for this parameter

Table 1: Inorganics Surface Soil Analytical Results
Data Gap Analysis
Manners Park, Taylorville, Illinois

Analyte	TACO Background Level (mg/kg)	TACO Tier 1 Residential Ingestion SRO (mg/kg)	pH: TCLP Hazardous Waste Threshold (mg/L)	Sample ID:		S8		S9		S10		S11		S12		S13	
				Sample Depth (ft):		0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF
				Sample Date:		10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024
				Sampler:		Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews
				pH:		5.57	--	4.89	--	6.68	--	4.83	--	7.38	--	6.3	--
						Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
Aluminum	9,200	78,000*	-			--	--	--	--	--	--	--	--	--	--	--	--
Antimony	3	31	-			--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	11.3	11.3	-			7.15	13	5.26	9	7.42	14	6.84	10	6.13	ND	8.13	10
Barium	122	5,500	-			--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.5	78	-			--	--	--	--	--	--	--	--	--	--	--	--
Calcium	5,525	21,500*	-			--	--	--	--	--	--	--	--	--	--	--	--
Chromium	13	230	-			--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	8.9	4,700	-			--	--	--	--	--	--	--	--	--	--	--	--
Copper	12	2,900	-			--	--	--	--	--	--	--	--	--	--	--	--
Iron	15,000	55,000	-			--	--	--	--	--	--	--	--	--	--	--	--
Lead	20.9	400	-			128	57	37.1	33	21.8	21	14.1	17	118	90	65.4	49
Magnesium	2,700	104,000*	-			--	--	--	--	--	--	--	--	--	--	--	--
Manganese	630	1,600	-			1,470	937	1,810	1,217	1,280	1,415	915	659	1350	954	1270	506
Nickel	13	1,600	-			--	--	--	--	--	--	--	--	--	--	--	--
Potassium	1,100	22,100*	-			--	--	--	--	--	--	--	--	--	--	--	--
Selenium	0.37	390	-			--	--	--	--	--	--	--	--	--	--	--	--
Strontium	-	47,000*	-			--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.42	6.3	-			--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	25	550	-			--	--	--	--	--	--	--	--	--	--	--	--
Zinc	60.2	23,000	-			--	--	--	--	--	--	--	--	--	--	--	--
Analyte	TACO Tier 1 Class I GRO (mg/L)	TACO Tier 1 Class II GRO (mg/L)	TCLP Hazardous Waste Threshold (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)
TCLP Arsenic	0.050	0.2	5.0	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--	<0.0087	--
TCLP Lead	0.0075	0.1	5.0	0.0262	--	<0.004	--	0.0126	--	<0.004	--	<0.004	--	<0.004	--	<0.004	--
TCLP Manganese	0.15	10.0	NA	0.0501	--	0.0669	--	0.116	--	0.152	--	0.244	--	0.0657	--		--
SPLP Lead	0.0075	0.1	NA	<0.004	--	--	--	<0.004	--	--	--	--	--	--	--	--	--
SPLP Manganese	0.15	10.0	NA	--	--	--	--	--	--	0.0467	--	0.0109	--	--	--	--	--
SPLP Arsenic	0.050	0.2	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

B1

B2

BOLD

BOLD

The sample matrix caused possible effects on measurement. The result may be biased low.

The sample matrix caused possible effects on measurement. The result may be biased high.

Sample was detected above the screening levels.

Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

TCLP results compared to federal Toxicity Characteristic thresholds (40 CFR 261.24).

SPLP and TCLP results compared to TACO Tier 1 Groundwater Remediation Objectives (35 IAC 742 Appendix B Table E).

NA

--

No objective available

sample not analyzed for this parameter

Table 1: Inorganics Surface Soil Analytical Results
Data Gap Analysis
Manners Park, Taylorville, Illinois

Analyte	TACO Background Level (mg/kg)	TACO Tier 1 Residential Ingestion SRO (mg/kg)	pH: TCLP Hazardous Waste Threshold (mg/L)	Sample ID:		S14		S15		S16		S17	
				Sample Depth (ft):		0.5	XRF	0.5	XRF	0.5	XRF	0.5	XRF
				Sample Date:		10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024	10/3/2024
				Sampler:		Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews	Andrews
				pH:		5.22	--	6.54	--	4.61	--	6.26	--
						Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
Aluminum	9,200	78,000*	-			--	--	--	--	--	--	--	--
Antimony	3	31	-			--	--	--	--	--	--	--	--
Arsenic	11.3	11.3	-			17.4	ND	5.4	13	73.8	ND	11.3	ND
Barium	122	5,500	-			--	--	--	--	--	--	--	--
Cadmium	0.5	78	-			--	--	--	--	--	--	--	--
Calcium	5,525	21,500*	-			--	--	--	--	--	--	--	--
Chromium	13	230	-			--	--	--	--	--	--	--	--
Cobalt	8.9	4,700	-			--	--	--	--	--	--	--	--
Copper	12	2,900	-			--	--	--	--	--	--	--	--
Iron	15,000	55,000	-			--	--	--	--	--	--	--	--
Lead	20.9	400	-			2220	2,119	38	118	6030	500	680	452
Magnesium	2,700	104,000*	-			--	--	--	--	--	--	--	--
Manganese	630	1,600	-			1370	375	463	419	1000	2,074	781	504
Nickel	13	1,600	-			--	--	--	--	--	--	--	--
Potassium	1,100	22,100*	-			--	--	--	--	--	--	--	--
Selenium	0.37	390	-			--	--	--	--	--	--	--	--
Strontium	-	47,000*	-			--	--	--	--	--	--	--	--
Thallium	0.42	6.3	-			--	--	--	--	--	--	--	--
Vanadium	25	550	-			--	--	--	--	--	--	--	--
Zinc	60.2	23,000	-			--	--	--	--	--	--	--	--
Analyte	TACO Tier 1 Class I GRO (mg/L)	TACO Tier 1 Class II GRO (mg/L)	TCLP Hazardous Waste Threshold (mg/L)	Result (mg/L)		Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)	Result (mg/L)
TCLP Arsenic	0.050	0.2	5.0	0.0471		--	<0.0087	--	0.0692	--	<0.0087	--	--
TCLP Lead	0.0075	0.1	5.0	5.6		--	<0.004	--	30.5	--	0.964	--	--
TCLP Manganese	0.15	10.0	NA	0.106		--	0.0331	--	0.593	--	0.0364	--	--
SPLP Lead	0.0075	0.1	NA	0.043		--	--	--	0.0661	--	0.0242	--	--
SPLP Manganese	0.15	10.0	NA	--		--	--	--	0.0285	--	--	--	--
SPLP Arsenic	0.050	0.2	NA	--		--	--	--	0.0364	--	--	--	--

Notes:

B1

B2

BOLD

BOLD

The sample matrix caused possible effects on measurement. The result may be biased low.

The sample matrix caused possible effects on measurement. The result may be biased high.

Sample was detected above the screening levels.

Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

TCLP results compared to federal Toxicity Characteristic thresholds (40 CFR 261.24).

SPLP and TCLP results compared to TACO Tier 1 Groundwater Remediation Objectives (35 IAC 742 Appendix B Table E).

NA

--

No objective available

sample not analyzed for this parameter

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T1	9/25/2024	1	81	444	
ET1	10/2/2024	64	830	1478	
T2	9/25/2024	1	97	1169	
ET2	10/2/2024	64	5117	627	
ET3	10/2/2024	64	3166	921	
T4	9/25/2024	1	58	635	
ET4	10/2/2024	64	918	1677	
T5	9/25/2024	1	88	765	
ET5	10/2/2024	64	1793	1726	
T6	9/25/2024	2	93	982	
ET6	10/2/2024	64	943	1012	
T7	9/25/2024	2	50	992	
ET7	10/2/2024	64	91	1069	13
T8	9/25/2024	2	43	468	
ET8	10/2/2024	62	3190	1041	
T9	9/25/2024	2	83	588	
ET9	10/2/2024	62	2440	1285	
T10	9/25/2024	2	34	902	
ET10	10/2/2024	62	3012	1384	
T11	9/25/2024	3	127	1225	
ET11	10/2/2024	62	1229	4740	
T12	9/25/2024	3	179	1106	
ET12	10/2/2024	62	681	825	
T13	9/25/2024	3	29	453	
ET13	10/2/2024	62	54	1526	16
T14	9/25/2024	3	36	371	
ET14	10/2/2024	62	439	1365	
T15	9/25/2024	3	35	487	
ET15	10/2/2024	66	465	1044	
T16	9/25/2024	4	88	373	
ET16	10/2/2024	66	517	747	
T17	9/25/2024	4	42	823	
ET17	10/2/2024	66	177	804	20
T18	9/25/2024	4	24	553	
ET18	10/2/2024	66	202	1079	9
T19	9/25/2024	4	105	557	
ET19	10/2/2024	66	150	1476	
T20	9/25/2024	4	57	646	
ET20	10/2/2024	66	119	498	10
T21	9/25/2024	5	60	441	
ET21	10/2/2024	66	155	753	

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T22	9/25/2024	5	56	430	
ET22	10/3/2024	68	100	629	13
T23	9/25/2024	5	67	807	
ET23	10/3/2024	68	399	870	
T24	9/25/2024	5	58	513	
ET24	10/3/2024	68	122	1054	12
T25	9/25/2024	5	45	642	
ET25	10/3/2024	68	60	606	10
T26	9/25/2024	6	26	493	
ET26	10/3/2024	68	196	743	
T27	9/25/2024	6	47	652	
ET27	10/3/2024	67	82	619	20
T28	9/25/2024	6	61	670	
ET28	10/3/2024	67	257	389	
T29	9/25/2024	6	48	900	
ET29	10/3/2024	67	31	298	12
T30	9/25/2024	6	71	988	
ET30	10/3/2024	67	11	317	
T31	9/25/2024	7	119	873	
ET31	10/3/2024	67	38	324	9
T32	9/25/2024	7	40	725	
ET32	10/3/2024	65	514	619	
T33	9/25/2024	7	250	821	
ET33	10/3/2024	65	412	699	
T34	9/25/2024	7	649	610	
ET34	10/3/2024	65	63	737	13
T35	9/25/2024	7	996	1185	
ET35	10/3/2024	65	56	379	13
T36	9/25/2024	8	33	720	
ET36	10/3/2024	65	263	452	
T37	9/25/2024	8	48	853	
ET37	10/3/2024	63	408	640	
T38	9/25/2024	8	48	798	
ET38	10/3/2024	63	260	802	
T39	9/25/2024	8	1802	1420	
ET39	10/3/2024	63	172	1139	
T40	9/25/2024	8	810	1097	
ET40	10/3/2024	63	575	589	
T41	9/25/2024	9	77	494	
ET41	10/3/2024	63	1204	268	
T42	9/25/2024	9	181	983	

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
ET42	10/3/2024	60	459	808	
T43	9/25/2024	9	138	944	
ET43	10/3/2024	60	310	860	
T44	9/25/2024	9	706	1010	
ET44	10/3/2024	60	725	665	
T45	9/25/2024	9	76	724	
ET45	10/3/2024	60	607	689	
T46	9/25/2024	10	173	1575	
ET46	10/3/2024	60	31	317	10
T47	9/25/2024	10	584	1157	
ET47	10/3/2024	60	61	582	9
T48	9/25/2024	10	620	1154	
ET48	10/3/2024	60	120	804	
T49	9/25/2024	10	345	951	
T50	9/25/2024	10	447	1203	
T51	9/25/2024	11	657	1150	
ET51	10/3/2024	61	686	944	
T52	9/25/2024	11	436	787	
ET52	10/3/2024	61	613	788	
T53	9/25/2024	11	857	1091	
ET53	10/3/2024	61	1220	910	
T54	9/25/2024	11	1203	1312	
ET54	10/3/2024	61	70	680	16
T55	9/25/2024	11	2307	826	
ET55	10/3/2024	61	298	646	15
T56_1.5ft	10/2/2024	12	48	407	
T56_2.5ft	10/2/2024	12	91	587	14
T56_3.5ft	10/2/2024	12	52	347	18
T61	9/26/2024	13	850	954	
T62	9/25/2024	13	453	1385	
T63	9/26/2024	13	440	1206	28
T64	9/26/2024	13	672	1220	
T65	9/26/2024	13	180	966	13
T126	9/26/2024	24	38	1547	9
T127	9/26/2024	24	31	1247	9
T128	9/26/2024	24	75	1574	
T129	9/26/2024	24	91	1593	
T130	9/26/2024	24	74	1494	
T131	9/26/2024	25	156	1200	
T132	9/26/2024	25	119	858	
T133	9/26/2024	25	288	1089	

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T134	9/26/2024	25	138	1118	27
T135	9/26/2024	25	198	1008	
T136	9/26/2024	26	394	1029	
T137	9/26/2024	26	148	752	
T138	9/26/2024	26	137	962	11
T139	9/26/2024	26	172	1104	
T140	9/26/2024	26	9	360	5
T141	9/26/2024	27	225	1407	
T142	9/26/2024	27	95	708	
T143	9/26/2024	27	72	977	10
T144	9/26/2024	27	40	673	11
T145	9/26/2024	27	79	945	
T146	9/26/2024	28	24	428	7
T147	9/26/2024	28	27	846	9
T148	9/26/2024	28	39	1150	13
T149	9/26/2024	28	19	397	7
T150	9/26/2024	28	34	656	10
T151	9/26/2024	29	26	511	8
T152	9/26/2024	29	17	359	8
T153	9/26/2024	29	50	658	10
T154	9/26/2024	29	34	520	9
T155	9/26/2024	29	41	548	
T155	9/26/2024	30			11
T156	9/26/2024	30	14	382	9
T157	9/26/2024	30	206	1473	11
T158	9/26/2024	30	68	1064	13
T159	9/26/2024	30	179	1154	
T160	9/26/2024	30	587	1212	
T161	9/26/2024	31	447	1123	
T162	9/26/2024	31	81	724	12
T163	9/26/2024	31	349	1290	
T164	9/26/2024	31	374	1189	
T165	9/26/2024	31	201	1022	20
T166	9/26/2024	32	115	828	8
T167	9/26/2024	32	39	679	10
T168	9/26/2024	32	365	1101	
T169	9/26/2024	32	229	1012	
T170	9/26/2024	32	301	1237	
T171	9/26/2024	33	9	578	7
T172	9/26/2024	33	43	553	13
T173	9/26/2024	33	151	1282	7

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T174	9/26/2024	33	169	1142	12
T175	9/26/2024	33	122	1318	11
T176	9/30/2024	34	162	878	
T177	9/30/2024	34	51	1026	10
T178	9/30/2024	34	67	926	10
T179	9/30/2024	34	84	1433	8
T180	9/30/2024	34	284	1672	
T181	9/30/2024	34	84	769	9
T182	9/30/2024	34	69	1316	8
T183	9/30/2024	34	61	1203	13
T184	9/30/2024	34	100	1261	10
T185	9/30/2024	34	84	857	7
T186	9/30/2024	35	36	1014	10
T187	9/30/2024	35	32	836	7
T188	9/30/2024	35	28	1400	13
T189	9/30/2024	35	30	648	11
T190	9/30/2024	35	49	849	
T191	9/30/2024	35	33	880	13
T192	9/30/2024	35	56	1148	6
T193	9/30/2024	35	42	960	
T194	9/30/2024	35	30	1026	9
T195	9/30/2024	35	58	772	12
T196	9/30/2024	36	19	966	12
T197	9/30/2024	36	20	1010	7
T198	9/30/2024	36	36	787	7
T199	9/30/2024	36	38	908	11
T200	9/30/2024	36	24	734	9
T201	9/30/2024	36	23	546	9
T202	9/30/2024	36	33	890	16
T203	9/30/2024	36	36	1413	7
T204	9/30/2024	36	29	590	11
T205	9/30/2024	36	50	966	12
T206	9/30/2024	37	16	201	6
T207	9/30/2024	37	66	927	8
T208	9/30/2024	37	21	1244	8
T209	9/30/2024	37	58	952	11
T210	9/30/2024	37	56	1466	11
T211	9/30/2024	37	483	1238	
T212	9/30/2024	37	36	894	10
T213	9/30/2024	37	84	1022	9
T214	9/30/2024	37	60	885	

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T215	9/30/2024	37	95	757	
T216	10/1/2024	38	30	1072	8
T217	10/1/2024	38	18	8606	10
T218	10/1/2024	38	25	503	12
T219	10/1/2024	38	28	1184	7
T220	10/1/2024	38	32	1283	12
T221	10/1/2024	38	25	1005	13
T222	10/1/2024	38	38	905	
T223	10/1/2024	38	177	1150	
T224	10/1/2024	38	27	1052	12
T225	10/1/2024	38	60	964	10
T226	10/1/2024	39	72	1159	11
T227	10/1/2024	39	29	957	12
T228	10/1/2024	39	38	780	12
T229	10/1/2024	39	28	1047	12
T230	10/1/2024	39	50	982	19
T231	10/1/2024	40	52	772	12
T232	10/1/2024	40	79	1195	7
T233	10/1/2024	40	309	703	
T234	10/1/2024	40	46	905	6
T235	10/1/2024	40	81	1328	9
T236	10/1/2024	40	39	1209	10
T237	10/1/2024	40	68	835	10
T238	10/1/2024	40	70	831	11
T239	10/1/2024	40	63	709	
T240	10/1/2024	40	42	973	9
T241	10/1/2024	41	230	778	
T242	10/1/2024	41	232	554	
T243	10/1/2024	41	360	949	
T244	10/1/2024	41	190	638	10
T245	10/1/2024	41	163	772	
T246	10/1/2024	41	186	870	
T247	10/1/2024	41	110	675	
T248	10/1/2024	41	100	927	
T249	10/1/2024	41	115	722	10
T250	10/1/2024	41	198	832	
T251	10/1/2024	42	306	1205	
T252	10/1/2024	42	155	682	
T253	10/1/2024	42	272	767	
T254	10/1/2024	42	33	669	9
T255	10/1/2024	42	62	965	

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T256	10/1/2024	42	22	697	11
T257	10/1/2024	42	81	980	11
T258	10/1/2024	42	194	940	
T259	10/1/2024	42	33	541	13
T260	10/1/2024	42	23	704	12
T261	10/1/2024	43	35	625	7
T262	10/1/2024	43	28	612	
T263	10/1/2024	43	20	786	7
T264	10/1/2024	43	38	859	8
T265	10/1/2024	43	54	1185	12
T266	10/1/2024	43	70	758	10
T267	10/1/2024	43	32	673	13
T268	10/1/2024	43	57	657	11
T269	10/1/2024	43	80	844	8
T270	10/1/2024	43	89	821	11
T271	10/1/2024	44	43	1052	12
T272	10/1/2024	44	28	945	11
T273	10/1/2024	44	19	924	14
T274	10/1/2024	44	19	528	10
T275	10/1/2024	44	22	630	7
T276	10/1/2024	44	27	812	12
T277	10/1/2024	44	42	963	10
T278	10/1/2024	44	67	1040	9
T279	10/1/2024	44	273	757	11
T280	10/1/2024	44	25	853	13
T281	10/1/2024	45	16	998	12
T282	10/1/2024	45	27	843	12
T283	10/1/2024	45	34	1007	16
T284	10/1/2024	45	27	890	12
T285	10/1/2024	45	10	690	8
T286	10/1/2024	45	16	672	14
T287	10/1/2024	45	21	773	8
T288	10/1/2024	45	20	958	11
T289	10/1/2024	45	31	846	9
T290	10/1/2024	45	33	1112	16
T291	10/1/2024	46	33	1050	11
T292	10/1/2024	46	36	802	9
T293	10/1/2024	46	33	875	12
T294	10/1/2024	46	60	895	
T295	10/1/2024	46	45	1045	9
T296	10/1/2024	46	40	873	11

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T297	10/1/2024	46	60	798	20
T298	10/1/2024	46	43	755	13
T299	10/1/2024	46	19	307	6
T300	10/1/2024	46	30	486	8
T301	10/1/2024	47	44	1268	12
T302	10/1/2024	47	48	955	15
T303	10/1/2024	47	35	1429	10
T304	10/1/2024	47	25	676	13
T305	10/1/2024	47	22	690	12
T306	10/1/2024	47	38	862	13
T307	10/1/2024	47	36	1467	10
T308	10/1/2024	47	45	754	11
T309	10/1/2024	47	33	944	11
T310	10/1/2024	47	30	815	15
T311	10/2/2024	48-59	11	323	9
T312	10/2/2024	48-59	30	924	12
T313	10/2/2024	48-59	15	372	
T314	10/2/2024	48-59	12	293	
T315	10/2/2024	48-59	6	287	6
T316	10/2/2024	48-59	39	177	7
T317	10/2/2024	48-59	25	679	9
T318	10/2/2024	48-59	26	346	10
T319	10/2/2024	48-59	10	306	5
T320	10/2/2024	48-59	21	898	9
T321	10/2/2024	48-59	14	357	10
T322	10/2/2024	48-59	25	1075	
T323	10/2/2024	48-59	16	531	8
T324	10/2/2024	48-59	6	383	7
T325	10/2/2024	48-59	29	1294	19
T326	10/2/2024	48-59	7	307	5
T327	10/2/2024	48-59	81	1083	
T328	10/2/2024	48-59	40	825	9
T329	10/2/2024	48-59	29	617	10
T330	10/2/2024	48-59	67	1485	13
T331	10/2/2024	48-59	10	300	4
T332	10/2/2024	48-59	9	988	12
T333	10/2/2024	48-59	10	347	7
T334	10/2/2024	48-59	41	652	12
T335	10/2/2024	48-59	12	504	6
T336	10/2/2024	48-59	9	327	6
T337	10/2/2024	48-59	10	342	6

Table 2: XRF Screening (Grid) Summary

Data Gap Analysis
Manners Park, Taylorville, Illinois

Sample ID	Sample Date	Grid_Final	Lead (mg/kg)	Manganese (mg/kg)	Arsenic (mg/kg)
T338	10/2/2024	48-59	7	264	6
T339	10/2/2024	48-59	10	379	7
T340	10/2/2024	48-59	6	260	4
T341	10/2/2024	48-59	16	419	10
T342	10/2/2024	48-59	12	428	10
T343	10/2/2024	48-59	6	362	7
T344	10/2/2024	48-59	7	373	
T345	10/2/2024	48-59	10	327	6
T346	10/2/2024	54	14	474	7
T347	10/2/2024	48-59	13	604	13
T348	10/2/2024	48-59	11	264	6
T349	10/2/2024	48-59	15	317	11
T350	10/2/2024	48-59	19	246	8
T351	10/2/2024	48-59	7	270	4
T352	10/2/2024	48-59	14	283	8
T353	10/2/2024	48-59	9	502	4
T354	10/2/2024	48-59	27	1386	12
T355	10/2/2024	48-59	14	383	
T356	10/2/2024	48-59	6	302	7
T357	10/2/2024	56	8	430	8
T358	10/2/2024	57	15	838	12
T359	10/2/2024	48-59	20	294	7
T360	10/2/2024	48-59	30	499	14
T361	10/2/2024	48-59	10	469	4
T362	10/2/2024	48-59	16	432	10
T363	10/2/2024	48-59	11	394	9
T364	10/2/2024	48-59	10	310	10
T365	10/2/2024	48-59	8	327	8
T366	10/2/2024	48-59	14	540	8
T367	10/2/2024	48-59	13	357	6
T368	10/2/2024	48-59	11	317	7
T369	10/2/2024	48-59	7	839	4
T370	10/2/2024	48-59	9	344	

Notes: No T3 sample was recorded

Blank cell indicates non-detect reading

Data obtained from pdf scans of field notes in *Andrews Focus Site Investigation Report* dated February 2025

Bold Text: Lead reading >400 mg/kg (Tier 1 Residential Ingestion SRO)

Bold Text: Arsenic reading > 11.3 mg/kg (Tier 1 Residential Ingestion SRO)

Bold Text: Manganese reading > 1,600 mg/kg (Tier 1 Residential Ingestion SRO)

Table 3: Soil Vapor Results Summary
Data Gap Analysis
Manners Park, Taylorville, Illinois

Parameter	Sample No.	Tier I ¹ (mg/m ³)	SVP-1 4/18/2024	SVP-2 4/18/2024	SVP-3 4/18/2024	SVP-4 4/18/2024	SVP-5 4/18/2024	SVP-6 4/18/2024	SVP-7 (Ambient) 4/18/2024	SVP-8 (DUP) 4/18/2024
	Date Collected									
1,1,2-Trichlorotrifluoroethane		NE	0.0005 J	0.0008 J	< 0.0192	0.0025 J	0.0029 J	< 0.0192	< 0.0192	< 0.0192
1,2,4-Trimethylbenzene		NE	0.0007 J	0.0047	0.0064 J	0.0145	< 0.0049	0.0129	< 0.0123	0.0093
1,3,5-Trimethylbenzene		NE	< 0.0025	< 0.0025	< 0.0123	0.0041 J	< 0.0049	0.0049 J	< 0.0123	< 0.0123 J
1,3-Butadiene		NE	0.0006 J	0.0122	0.0192	0.027	< 0.0044	0.0125	< 0.0111	0.0163
1,4-Dichlorobenzene		6,400/1,200	< 0.003	< 0.003	< 0.015	< 0.015	< 0.006	< 0.015	< 0.015	< 0.015 J
2-Butanone		15,000/6,400	0.0029 J	0.001 J	0.0021 J	0.0026 J	0.0008 J	0.0019 J	< 0.0147	0.0018
4-Methyl-2-pentanone		NE	0.0003 J	< 0.002	< 0.0102	< 0.0102	0.0005 J	< 0.0102	< 0.0102	< 0.0102
Acetone		750,000/750,000	0.0222	0.0201	< 0.0238	0.0572	< 0.0095	< 0.0238	0.0368	< 0.0238
Acetonitrile		NE	0.0004 J	< 0.0008	0.0205	0.0207	< 0.0017	0.0069	< 0.0042	< 0.0042
Acrylonitrile		NE	0.0004 J	0.0293	< 0.0054	< 0.0054	< 0.0022	< 0.0054	< 0.0054	< 0.0054
Benzene		1,100/0.37	0.0009 J	0.0164	0.0147	0.0235	0.0013 J	0.0081	< 0.008	0.039
Carbon disulfide		48,000/780	0.0008 J	0.0651	0.1049	0.1124	0.0024 J	0.0782	< 0.0078	0.0648
Carbon tetrachloride		770/0.21	0.0004 J	0.0005 J	< 0.0157	< 0.0157	< 0.0063	< 0.0157	< 0.0157	< 0.0157
Chloroform		290/0.11	< 0.0024	0.0005 J	< 0.0122	< 0.0122	< 0.0049	< 0.0122	< 0.0122	< 0.0122
Chloromethane		NE	0.0011	0.0002 J	< 0.0052	< 0.0052	< 0.0021	0.0008 J	0.0011 J	< 0.0052
Cyclohexane		NE	< 0.0017	0.0105	0.0076 J	0.0055 J	0.0008 J	0.0041 J	< 0.0086	0.0088
Ethanol		NE	0.0073 J	0.0047 J	0.0671	< 0.0471	< 0.0188	< 0.0471	< 0.0471	0.0245 J
Ethylbenzene		8,500/1.3	0.0005 J	0.0213	0.0159	0.0185	0.0004 J	0.014	< 0.0109	0.0231
Ethyl-tert-butyl ether		NE	0.001 J	< 0.0021	< 0.0104	< 0.0104	< 0.0042	< 0.0104	< 0.0104	< 0.0104
Isooctane		NE	0.0004 J	0.0589	0.0366	0.0098 J	0.0006 J	0.0107 J	< 0.0117	0.0388
Isopropanol		NE	0.0022 BJ	0.0017 BJ	< 0.0369	< 0.0369	< 0.0147	< 0.0369	< 0.0369	< 0.0369
Isopropylbenzene		30,000/600	< 0.0025	0.0016 J	< 0.0123	< 0.0123	< 0.0049	< 0.0123	< 0.0123	< 0.0123
m,p-Xylene		3,100/130	0.0016 J	0.0293	0.0324	0.0521	0.001 J	0.0486	< 0.0217	0.0439
Methylene chloride		5,100/5.6	0.0006 J	0.0003 J	< 0.0174	< 0.0174	< 0.0069	< 0.0174	< 0.0174	< 0.0174
n-Butylbenzene		NE	< 0.0027	0.0007 J	< 0.0137	< 0.0137	< 0.0055	< 0.0137	< 0.0137	< 0.0137
n-Heptane		NE	0.0011 J	0.0537	0.0832	0.031	< 0.0041	0.0193	< 0.0102	0.0451
n-Hexane		NE	0.0017 J	0.1392	0.1346	0.0913	0.0048	0.0338	< 0.0088	0.1029
n-Propylbenzene		NE	< 0.0025	0.003	0.0027 J	0.0038 J	< 0.0049	0.0035 J	< 0.0123	0.0036
o-Xylene		2,600/120	0.0017 J	0.0156	0.0156	0.019	< 0.0043	0.015	< 0.0109	0.0227
p-Ethyltoluene		NE	< 0.0025	0.005	0.0041 J	0.0046 J	< 0.0049	0.0044 J	< 0.0123	0.0049 J
Propylene		NE	0.0263	2.1169	2.1857	2.8225	0.0325	0.8743	< 0.0043	0.9896
tert-Butyl alcohol		NE	0.0053	0.0043	< 0.0076	< 0.0076	0.0018 J	< 0.0076	< 0.0076	0.0028 J
Tetrachloroethene		970/0.55	0.0014 J	0.0074	0.0048 J	0.0051 J	0.0043 J	0.003 J	< 0.017	0.0059 J
Tetrahydrofuran		NE	0.0014 J	< 0.0015	< 0.0074	< 0.0074	< 0.0029	< 0.0074	< 0.0074	< 0.0074
Toluene		50,000/6,200	0.0471	2.5475	6.7832	0.1138	0.0021 J	0.0644	< 0.0094	4.6729
Trichlorofluoromethane		220,000/860	0.0012 J	0.0015 J	< 0.014	0.0015 J	0.0011 J	0.0014 J	< 0.014	< 0.014
Vinyl chloride		3,000/0.29	< 0.0013	< 0.0013	< 0.0064	< 0.0064	< 0.0026	< 0.0064	< 0.0064	0.0026 J

Results are in milligrams/cubic meter (mg/m³).
< = Result less than laboratory reporting limit.
¹ Tier I = Tiered Approach to Corrective Action Objectives Section 742 Appendix B - Table G Tier 1 Soil Gas Remediation Objectives for Outdoor Inhalation Exposure Route
- construction worker and indoor inhalation - residential. J = Estimated value below quantitation limit.
NE = Not established.
SOURCE: *Environmental Soil and Soil Vapor Sampling and Testing Manners Park* by Geotechnology, LLC dba UES dated May 20, 2024.

Table 4: PNA Surface Soil Analytical Results
Data Gap Analysis
Manners Park, Taylorville, Illinois

Analyte	TACO Background Level	TACO Tier 1 RO (mg/kg)	Sample ID:	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
			Sample Depth (ft):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
			Sample	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024	5/16/2024
			Sampler:	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA	IEPA
				Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
1-Methylnaphthalene															
2-Methylnaphthalene	0.29														
Acenaphthene	0.04	4,700													
Acenaphthylene	0.04														
2-Butanone (MEK)										0.0082					
Acetone		70,000								0.05	0.0095				
Anthracene	0.14	23,000									0.07				
Benzo(a)anthracene	0.72	0.9									0.25				0.14
Benzo(a)pyrene	0.98	0.09		0.066							0.27		0.067		0.14
Benzo(b)fluoranthene	0.7	0.9		0.093	0.089		0.094				0.33	0.063	0.094		0.19
Benzo(ghi)perylene	0.84										0.1				0.095
Benzo(k)fluoranthene	0.63	9									0.14				0.069
Biphenyl															
Bis(2-ethylhexyl)phthalate		46													
Chrysene	1.1	88		0.72	0.062		0.066				0.25		0.08		0.16
Dibenzo(a,h)anthracene	0.15	0.09													
Diethyl phthalate		63,000													
Dimethyl phthalate															
Di-n-butyl phthalate		7,800													
Fluoranthene	1.8	3,100		0.12	0.11		0.11				0.38	0.076	0.11		0.24
Fluorene	0.04	3,100													
Indeno(1,2,3-cd)pyrene	0.51	1													
m,p-Cresol															
Naphthalene	0.17	1,600													
o-Cresol		3,900													
Phenanthrene	0.99	1790		0.075							0.3		0.064		0.14
Pyrene	1.2	2,300		0.11	0.09		0.09				0.34	0.08	0.11		0.22

Notes:

- B1 The sample matrix caused possible effects on measurement. The result may be biased low.
- B2 The sample matrix caused possible effects on measurement. The result may be biased high.
- BOLD** Sample was detected above the screening level, but below background
- IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table
- Analytical results were compared to the applicableTACO Tier 1 Residential soil remediation objective (most stringent)

Table 4: PNA Surface Soil Analytical Results

Data Gap Analysis

Manners Park, Taylorville, Illinois

Analyte	TACO Background Level	TACO Tier 1 RO (mg/kg)	Sample ID: Sample Depth (ft): Sample Date: Sampler:	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11
				surface	surface	surface	surface	surface	surface	surface	surface	surface	surface	surface
				4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024
				UES	UES	UES	UES	UES	UES	UES	UES	UES	UES	UES
				Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
1-Methylnaphthalene				0.024	<0.0223	<0.0213	<0.0204	<0.0211	<0.0194	<0.0204	0.0025	0.0041	<0.0195	<0.0185
2-Methylnaphthalene	0.29			0.028	<0.0223	<0.0213	<0.0204	<0.0211	<0.0194	<0.0204	0.0021	0.0037	<0.0195	<0.0185
Acenaphthene	0.04	4,700		0.0315	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	<0.0042	<0.0040	<0.0038
Acenaphthylene	0.04			0.0688	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	0.0025	<0.0040	<0.0038
2-Butanone (MEK)														
Acetone		70,000												
Anthracene	0.14	23,000		0.108	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	0.0054	0.0019	<0.0038
Benzo(a)anthracene	0.72	0.9		0.594	0.0031	<0.0128	<0.0122	<0.0126	<0.0116	0.011	0.0083	0.0534	0.0265	0.0037
Benzo(a)pyrene	0.98	0.09		0.665	0.0058	0.0034	0.0024	<0.0043	0.0019	0.0143	0.0108	0.0646	0.0347	0.0044
Benzo(b)fluoranthene	0.7	0.9		0.798	0.008	<0.0043	0.0028	<0.0043	0.0027	0.02	0.0161	0.102	0.0498	0.0063
Benzo(ghi)perylene	0.84			0.397	0.004	0.0021	<0.0041	<0.0043	<0.004	0.009	0.0062	0.0319	0.0152	0.0022
Benzo(k)fluoranthene	0.63	9		0.285	0.0031	<0.0043	<0.0041	<0.0043	<0.004	0.0069	0.0066	0.0335	0.0175	<0.0038
Biphenyl				<0.0201	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	<0.0042	<0.0040	<0.0038
Bis(2-ethylhexyl)phthalate		46		<0.395	<0.0894	<0.0855	<0.0817	<0.0845	<0.0779	<0.0818	<0.0832	0.022	0.027	0.035
Chrysene	1.1	88		0.653	0.0049	0.0034	0.0016	<0.0043	0.0016	<0.0818	0.0108	0.0666	0.0273	0.0041
Dibenzo(a,h)anthracene	0.15	0.09		0.0865	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	0.0091	0.0035	<0.0038
Diethyl phthalate		63,000		<0.59	<0.134	<0.128	<0.122	<0.126	<0.116	<0.122	<0.124	<0.124	<0.117	<0.111
Dimethyl phthalate				<0.59	<0.134	<0.128	<0.122	<0.126	<0.116	<0.122	<0.124	<0.124	<0.117	<0.111
Di-n-butyl phthalate		7,800		<0.201	<0.0454	<0.0434	<0.0415	<0.0429	<0.0396	<0.0415	<0.0422	<0.0422	<0.0397	<0.0377
Fluoranthene	1.8	3,100		1.23	0.008	0.006	0.0028	<0.0043	0.0043	0.0204	0.0182	0.123	0.0537	0.007
Fluorene	0.04	3,100		0.0354	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	<0.0042	<0.0040	<0.0038
Indeno(1,2,3-cd)pyrene	0.51	1		0.342	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	0.0073	0.0058	0.0286	0.0148	<0.0038
m,p-Cresol				<0.059	<0.0134	<0.0128	<0.0122	<0.0126	<0.0116	<0.0122	<0.0124	<0.0124	<0.0117	<0.0111
Naphthalene	0.17	1,600		<0.0985	<0.0223	<0.0213	<0.0204	<0.0211	<0.0194	<0.0204	<0.0207	<0.0207	<0.0195	<0.0185
o-Cresol		3,900		<0.0201	<0.0045	<0.0043	<0.0041	<0.0043	<0.004	<0.0042	<0.0042	<0.0042	<0.0040	<0.0038
Phenanthrene	0.99	1790		0.777	<0.008	<0.0077	<0.0073	<0.0076	<0.007	0.0086	0.0137	0.0455	0.0167	0.0052
Pyrene	1.2	2,300		1.38	0.0107	0.0077	0.0037	<0.0043	0.0035	0.022	0.0203	0.104	0.0475	0.0066

Notes:

B1 The sample matrix caused possible effects on measurement. The result may be biased low.

B2 The sample matrix caused possible effects on measurement. The result may be biased high.

BOLD Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

Analytical results were compared to the applicableTACO Tier 1 Residential soil remediation objective (most stringent)

Table 4: PNA Surface Soil Analytical Results

Data Gap Analysis

Manners Park, Taylorville, Illinois

Analyte	TACO Background Level	TACO Tier 1 RO (mg/kg)	Sample ID: Sample Depth (ft): Sample Date: Sampler:	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18	SS-19	SS-20	SS-21	SS-22
				surface	surface	surface	surface	surface	surface	surface	surface	surface	surface	surface
				4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024	4/15/2024
				UES	UES	UES	UES	UES	UES	UES	UES	UES	UES	UES
				Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
1-Methylnaphthalene				<0.0198	0.0022	0.0022	0.0024	<0.0186	<0.0193	<0.0190	<0.0191	<0.0209	<0.0201	<0.00125
2-Methylnaphthalene	0.29			<0.0198	0.003	0.0029	0.002	<0.0186	<0.0193	<0.0190	<0.0191	0.0025	<0.0201	<0.00125
Acenaphthene	0.04	4,700		<0.0040	0.0115	0.0101	<0.004	<0.0038	<0.0039	<0.0039	<0.0039	<0.0043	<0.0041	<0.00025
Acenaphthylene	0.04			<0.0040	<0.0038	<0.0037	0.0016	<0.0038	<0.0039	<0.0039	<0.0039	0.0017	<0.0041	<0.00025
2-Butanone (MEK)														
Acetone		70,000												
Anthracene	0.14	23,000		0.0028	0.0308	0.0311	0.002	0.0026	0.0038	0.0042	<0.0039	0.0088	0.0044	<0.00025
Benzo(a)anthracene	0.72	0.9		0.0225	0.414	0.296	0.0192	0.0215	0.0223	0.0208	0.0057	0.0547	0.0273	<0.00025
Benzo(a)pyrene	0.98	0.09		0.0197	0.487	0.322	0.0216	0.0219	0.0223	0.0178	0.0061	0.0459	0.0245	<0.00025
Benzo(b)fluoranthene	0.7	0.9		0.0248	0.627	0.432	0.0322	0.0274	0.0281	0.0242	0.008	0.0601	0.0326	<0.00025
Benzo(ghi)perylene	0.84			0.0126	0.189	0.122	0.0114	0.0082	0.0092	0.0076	0.0038	0.0238	0.0145	<0.00025
Benzo(k)fluoranthene	0.63	9		0.0091	0.217	0.153	0.0118	0.0108	0.01	0.0087	0.0034	0.0238	0.0133	<0.00025
Biphenyl				<0.0040	<0.0038	0.0029	<0.0040	<0.0038	<0.0039	<0.0039	<0.0039	<0.0043	<0.0041	<0.00025
Bis(2-ethylhexyl)phthalate		46		0.025	0.117	0.0791	<0.0789	0.021	<0.0774	<0.0761	<0.0766	<0.0839	<0.0808	0.00508
Chrysene	1.1	88		0.0221	0.459	0.339	0.0196	0.0204	0.0185	0.0163	0.0057	0.0517	0.0213	<0.00025
Dibenzo(a,h)anthracene	0.15	0.09		0.0032	0.059	0.0401	0.0031	0.0026	0.0031	0.0023	<0.0039	0.0083	0.0044	<0.00025
Diethyl phthalate		63,000		<0.118	<0.111	<0.108	<0.118	<0.111	<0.115	<0.114	<0.114	<0.125	<0.121	0.0004
Dimethyl phthalate				<0.118	<0.111	<0.108	<0.118	<0.111	<0.115	<0.114	<0.114	<0.125	<0.121	<0.00250
Di-n-butyl phthalate		7,800		<0.0402	<0.0379	<0.0369	<0.0401	<0.0378	<0.0393	<0.0386	<0.0389	<0.0426	<0.0410	0.0007
Fluoranthene	1.8	3,100		0.0264	0.572	0.415	0.0357	0.0285	0.0312	0.0303	0.0088	0.0759	0.0446	<0.00025
Fluorene	0.04	3,100		<0.0040	0.0045	0.0051	<0.0040	<0.0038	<0.0039	<0.0039	<0.0039	<0.0043	<0.0041	<0.00025
Indeno(1,2,3-cd)pyrene	0.51	1		0.0095	0.185	0.116	0.0102	0.0082	0.0089	0.0072	0.0034	0.0234	0.0141	<0.00025
m,p-Cresol				<0.0118	<0.0111	<0.0108	<0.0118	<0.0111	<0.0115	<0.0114	<0.0114	<0.0125	<0.0121	<0.00025
Naphthalene	0.17	1,600		<0.0198	<0.0186	<0.018	<0.0197	<0.0186	<0.0193	<0.0190	<0.0191	<0.0209	<0.0201	<0.00025
o-Cresol		3,900		<0.0040	<0.0038	<0.0037	<0.0040	<0.0038	<0.0039	<0.0039	<0.0039	<0.0043	<0.0041	<0.00025
Phenanthrene	0.99	1790		0.017	0.176	0.162	0.0192	0.0133	0.0181	0.0201	<0.0069	0.0434	0.0237	<0.00025
Pyrene	1.2	2,300		0.026	0.520	0.368	0.0377	0.026	0.0281	0.0261	0.0084	0.0697	0.0422	<0.00025

Notes:

B1 The sample matrix caused possible effects on measurement. The result may be biased low.

B2 The sample matrix caused possible effects on measurement. The result may be biased high.

BOLD Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

Analytical results were compared to the applicableTACO Tier 1 Residential soil remediation objective (most stringent)

Table 4: PNA Surface Soil Analytical Results

Data Gap Analysis

Manners Park, Taylorville, Illinois

Analyte	TACO Background Level	TACO Tier 1 RO (mg/kg)	Sample ID:	SS-23DUP	SS-24DUP
			Sample Depth (ft):	surface	surface
			Sample	4/15/2024	4/15/2024
			Sampler:	UES	UES
				Result (mg/kg)	Result (mg/kg)
1-Methylnaphthalene				<0.00109	<0.0845
2-Methylnaphthalene	0.29			<0.00109	<0.0845
Acenaphthene	0.04	4,700		<0.00022	<0.0172
Acenaphthylene	0.04			<0.00022	0.0067
2-Butanone (MEK)					
Acetone		70,000			
Anthracene	0.14	23,000		<0.00022	0.014
Benzo(a)anthracene	0.72	0.9		<0.00022	0.132
Benzo(a)pyrene	0.98	0.09		<0.00022	0.142
Benzo(b)fluoranthene	0.7	0.9		<0.00022	0.202
Benzo(ghi)perylene	0.84			<0.00022	0.103
Benzo(k)fluoranthene	0.63	9		<0.00022	0.0725
Biphenyl				<0.00022	<0.0172
Bis(2-ethylhexyl)phthalate		46		0.0014	<0.339
Chrysene	1.1	88		<0.00022	0.143
Dibenzo(a,h)anthracene	0.15	0.09		<0.00022	0.0253
Diethyl phthalate		63,000		<0.00217	<0.506
Dimethyl phthalate				<0.00217	<0.506
Di-n-butyl phthalate		7,800		0.0005	<0.172
Fluoranthene	1.8	3,100		<0.00022	0.243
Fluorene	0.04	3,100		<0.00022	<0.0172
Indeno(1,2,3-cd)pyrene	0.51	1		<0.00022	0.0843
m,p-Cresol				<0.00022	<0.0506
Naphthalene	0.17	1,600		<0.00022	<0.0845
o-Cresol		3,900		<0.00022	<0.0172
Phenanthrene	0.99	1790		<0.00022	0.0877
Pyrene	1.2	2,300		<0.00022	0.246

Notes:

B1 The sample matrix caused possible effects on measurement. The result may be biased low.

B2 The sample matrix caused possible effects on measurement. The result may be biased high.

BOLD Sample was detected above the screening level, but below background

IEPA samples were analyzed for VOCs, SVOCs, and Metals. Only analytes exhibiting laboratory detections are listed in the table

Analytical results were compared to the applicableTACO Tier 1 Residential soil remediation objective (most stringent)