

Preliminary Environmental Site Assessment

Village of [REDACTED], [REDACTED] County

MFT Section Number: [REDACTED]

[REDACTED] Lane and [REDACTED] Way – Interior Roads

[REDACTED]

[REDACTED]

Prepared For:

[REDACTED] Services, Inc.

[REDACTED] Road

[REDACTED], Illinois [REDACTED]

Submitted on

November 24, 2015

Preparer & Reviewer:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312 of 40 CFR Part 312, and

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and settings of the Site. I have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR 312.



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Senior Project Manager

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1.0 EXECUTIVE SUMMARY

This is the Final Report of a Preliminary Environmental Site Assessment (PESA) prepared by A3 Environmental, LLC (A3E). This assessment identifies natural and man-made hazards that may be encountered during the construction and maintenance of the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park in [REDACTED], Illinois. This report identifies and evaluates known or potential regulated substance issues and natural hazards within the Site limits and adjoining properties.

A3E performed this PESA in conformance with the scope and limitations of *The American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13)* and [REDACTED] Services, Inc. (Wendler) authorization to proceed on November 13, 2015 per A3E's proposal dated November 9, 2015. The ASTM protocols area consistent with the PESA requirements outlined by *Illinois Department of Transportation (IDOT) in Bureau of Design and Environment (BDE) 95-12, BDE 96-8*, and the *Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects*. The Site includes the proposed roads known as [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park located east of [REDACTED] Street and south of [REDACTED] Road. Any exceptions to, or deletions from, these processes are described in *Section 2.4* of this report.

As part of this PESA, A3E reviewed historic land uses of the Site and surrounding properties from reasonably ascertainable historical records, environmental regulatory databases and a Site reconnaissance. Inquiries made as part of this PESA were conducted in accordance with generally accepted practices within the environmental consulting industry for the proposed scope of work, which was performed within time and budgetary constraints. The Site was developed as agricultural land as early as 1934 and has been agricultural until early 2015 when construction of the 30-acre industrial park began. The surrounding properties were historically agricultural, residential or commercial use and continue to be characterized as such as of the preparation of this PESA.

Based upon the findings of this PESA and as of November 20, 2015, the date of the last physical examination of the project area, it has been determined that the Site has NO Risk for the occurrence of regulated substances or natural hazards. Appendix A contains the PESA Risk Assessment Information and Appendix B contains the Responsible Property Transfer Act (RPTA) Compliance Information.

2.0 INTRODUCTION

2.1 PURPOSE

██████████ Services, Inc. (██████████) of ██████████ Road, ██████████, Illinois retained A3E to conduct a PESA of the following Site:

The Site includes the proposed roads and right-of-ways of ██████████ Lane and ██████████ Way within a 30-acre industrial park located east of ██████████ Street and south of ██████████ Road.

The purpose of the PESA is to determine the environmental conditions of the Site comprising of a roadway and related infrastructure associated with the acquisition and its improvement. Construction activities will include construction of a 2-lane roadway with shoulders and ditch. Drainage structures under the proposed roads will be constructed where prudent and necessary to maintain existing drainage patterns. Storm water detention basins will be constructed to manage increases in storm water flow rates. The PESA was performed in conformance with the ASTM Standard Practice for Environmental Assessments (E1527-13). The ASTM protocols are consistent with the PESA requirements outlined by IDOT in BDE 95-12, BDE 96-8, and *A Manual for Conducting Preliminary Environmental Site Assessments for IDOT Highway Projects*. It should be noted that this PESA was performed in compliance with the above referenced standards and not in accordance with the All Appropriate Inquiry (AAI) regulations that were enacted on November 1, 2013.

2.2 SCOPE OF SERVICES

The scope of services for the PESA, under the guidelines of the ASTM standard, includes the following areas of inquiry:

Environmental Record Review – Review of available federal, state, tribal, and local databases as maintained by the USEPA and respective state, tribal, and local environmental regulatory agencies. Existing environmental information relative to the Site, as provided by the client, owner or other data sources, will also be reviewed.

Historical Record Review – Review past land uses through review of historical aerial photographs, topographical maps, fire insurance maps and/or dated documentation, as available.

Site Reconnaissance – Conduct a Site visit to record on-site observations of existing conditions, obtain any pertinent field data, observe physical characteristics of the property and associated structures, identify current site operations, and observe surrounding property conditions and operations.

Report – Prepare an ESA report containing documentation to support the analysis, opinions, and conclusions generated by the qualified Environmental Professional.

2.3 ASSUMPTIONS AND LIMITATIONS

In performing this PESA, A3E made the following assumptions:

- Information obtained from interviews, record reviews, and government records are complete and accurate.

- Geologic and hydrogeologic conditions at the Site are assumed to be consistent with maps and other information provided by federal, state, and local agencies.
- The PESA does not include the testing or sampling of the surface and subsurface soil, water, groundwater, air, or building materials located on the Site.
- Environmental issues, such as the presence of asbestos-containing materials, radon, lead-based paint, PCBs, and wetland investigations were not part of this PESA.

This report contains information and opinions that are limited to the date the report was issued. No additional Site reconnaissance activities, data review or other investigation of the Site have been performed by A3E since the date of the report. A3E makes no representation with respect to, nor expresses any opinion about, the Site after the date of the report. A3E does not assume any obligation to update this report for any purpose whatsoever.

Performance of this PESA is intended to reduce, but not eliminate, uncertainty of environmental conditions associated with the Site. A3E is unable to represent that the Site or adjoining properties contain no hazardous waste, petroleum products, or other conditions beyond that detected or observed by A3E during PESA activities. The possibility for contaminants to migrate through surface and subsurface soil, water, groundwater or air always exists. The scope of this PESA cannot completely address the environmental risks associated with migration in these media.

2.4 EXCEPTIONS

At the time of report preparation, no exceptions to the ASTM standard, IDOT BDE 95-12, BDE 96-8, and *A Manual for Conducting Preliminary Environmental Site Assessments for IDOT Highway Projects* have been noted for this assessment.

2.5 SPECIAL TERMS AND CONDITIONS

This PESA was completed in accordance with the proposal authorized by [REDACTED] and subject to the noted terms, conditions, and limitations.

2.6 USER RELIANCE

[REDACTED]

3.0 SITE DESCRIPTION

3.1 LOCATION AND LEGAL DESCRIPTION

The Site includes the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park located east of [REDACTED] Street and south of [REDACTED] Road in [REDACTED] County, Illinois. Figure 1 illustrates the general location of the Site.

Permanent Tax Number:

Due to the type of property, no PIN numbers exist for the Site. The PIN for the 30-acre industrial park is [REDACTED].

Legal Description:

A3E was not provided with a legal description for the Site. The legal description for the 30-acre parcel is: [REDACTED].

3.2 CURRENT USE OF THE PROPERTY

The Site is identified as the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park. Currently the roads do not exist and the Site is currently in the process of being developed. The roadways will be inclusive of asphalt-paved roads and grass covered parkways.

3.3 CURRENT USE OF THE ADJOINING PROPERTIES

The vicinity surrounding the Site can be characterized as a mix of agricultural, residential, and commercial.

Direction	Land Use
North	Agricultural land is immediately north of the property.
South	Commercial – A truck wash/maintenance facility, JSP Mold, Unidentified Commercial properties.
West	Residential/Commercial - [REDACTED] Street [REDACTED] is located immediately west of the property. Beyond [REDACTED] Street are residential properties and a ComEd Substation.
East	Agricultural land is immediately east of the property.

3.4 GENERAL SITE AND VICINITY CHARACTERISTICS

The Site consists of the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park located at the southeast corner of [REDACTED] Road and [REDACTED] Street ([REDACTED]). No structures are present on the Site. Figure 2 illustrates the general land use of the adjoining properties. Photographs of the Site and adjoining properties are included in Appendix C.

3.5 DESCRIPTION OF SITE IMPROVEMENTS

The Site is not developed with any structures. The Site surface improvements include the proposed roadway and right-of-ways of [REDACTED] Lane and [REDACTED] Way. Multiple utilities are to be constructed within the roadway and right-of-ways inclusive of potable water lines and sanitary sewer mains. Ingress/egress onto the Site is to be made from [REDACTED] Street ([REDACTED]) and via curb cuts along the Site boundaries.

The Site is to contain underground and overhead utilities that service the adjoining properties. The following utility providers service the properties that have been developed within the vicinity of the Site:

Utility	Utility Provider	Comments/Status
Natural Gas	Nicor/LP	It is currently unknown if buried natural gas lines will be present to carry natural gas service to adjoining properties. Currently LP gas is provided to one adjoining property.
Electric	ComEd	It is presumed overhead, and possibly buried, power lines will carry electric service across to adjoining properties
Sanitary Sewer	Village of [REDACTED]	Sewer mains will be installed within the ROW of the Site to provide service to adjoining properties.
Potable Water	Village of [REDACTED]	Water service lines will be installed in the Site right-of-ways to provide potable water to adjoining properties.
Storm Water	N/A	Storm water will flow in roadway ditches and collected in two retention ponds located in the southwest corner and northeast corner.

4.0 PHYSICAL SETTING

4.1 TOPOGRAPHY AND SURFACE DRAINAGE

The 7.5-minute USGS topographic map of the area (██████████, IL Quadrangle, 2015) indicates that the *property* is located at an approximate elevation of 750 feet above mean sea level. The *property* and surrounding area are moderate with a slight gradient to the south-southeast towards the ██████████ Creek located approximately one-quarter mile away.

Surface drainage is generally controlled by surface topography. Once the site is developed, surface drainage will be transferred via roadway ditches and will collect in two retention ponds.

4.2 GENERAL GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

A review of the *Stack-Unit Mapping of Geologic Materials in Illinois to a depth of 15 Meters* (C542), published by the Illinois State Geologic Survey (ISGS), indicates the Site is predominantly underlain by less than six meters of Peoria Loess and Roxana Silt, overlying less than six meters of the Glasford Formation (Loamy and sandy diamictons) overlying between zero and six meters of Ordovician and Cambrian rocks (dolomite and some sandstone).

The *ISGS Potential for Contamination of Shallow Aquifers from Surface and near Surface Waste Disposal* by Berg et. al. (1984) classifies this area as “B2.” These materials are described as permeable bedrock between 5 and 20 feet of surface, overlain by silty or clayey till and loess; relatively impermeable weathered zone in till.

The *ISGS Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Waste* by Berg et. al. (1984) classifies this area as “C1,” permeable bedrock within 20 to 50 feet of surface, overlain by till or other fine-grained material. This has a moderate potential for aquifer contamination.

According to *ISGS Bedrock Geology of Illinois* (IM14), published by the ISGS, the underlying bedrock within the Site area is Ordovician aged Galena Group, which is mainly comprised of Trenton Limestone. The bedrock elevation is approximately 725 feet above mean seal level (msl), which is approximately 25-135 feet below ground surface.

Site-specific hydrogeologic information is not available. However, it is A3E’s experience that local shallow groundwater flow regimes mimic local topography and it can be expected that shallow groundwater flow at the Site is south southeast towards the ██████████ Creek approximately 0.25 miles away.

According to the Soil Survey of ██████████ County (published by the USDA’s Soil Conservation Service, 1990), the soils in the site area consist primarily of the Osco silt loam and Fayette silt loam.

Quaternary Deposits beneath the *property* are comprised of the Glasford Formation, which includes diamicton deposited as till and ice-marginal sediment.

According to *ISGS Coal Industry in Illinois* (IM14), published by the ISGS, no coal mines are located within the Site area.

According to the ISGS database of public and private wells, oil and gas wells, and engineering borings, two wells are located within 1000 feet of the Site. Both wells were located approximately 700 feet south of the Site on the [REDACTED] property. The first well was drilled in 1931 to a depth of 400 feet bgs through mostly dolomite and sandstone. The second well was drilled in 1959 to a depth of 1151 feet below ground surface (bgs) through the Knox, Ironton and Eau Claire Formations.

A3E reviewed the Illinois Environmental Protection Agency's (IEPA) online database to determine if the Site area was located within a designated groundwater protection area. According to the online map, the Site area is not located within a designated groundwater protection area.

A3E reviewed the ISGS Surface Water Intake GIS database and determined the Site is not within a public water supply surface water intake area.

4.3 FLOODPLAINS AND WETLANDS

A3E reviewed Federal Emergency Flood Hazard maps for the Site. The database search indicated that the Site is not located in a flood zone in the provided map. Prior to any Site development activities, the User should field verify the existence of on-Site floodplains. A copy of the Flood Insurance Rate Map is included in Appendix D.

National Wetlands Inventory Online Mapper was also reviewed by A3E for information concerning wetlands. Wetlands were not identified on the Site according to the information provided by the online map. Prior to any Site development activities, the User should field verify the existence of on-Site wetlands, if Site conditions are indicative of wetland formations. A copy of the wetland map generated from the U.S. Fish and Wildlife Service website (<http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>) is included in Appendix D.

According to *Karst Terrains and Carbonate Rocks of Illinois* (Weible and Panno, 1987) published by the Illinois Department of Natural Resources (DNR), the underlying bedrock is predominately carbonate, but no sinkhole areas were identified.

5.0 RECORDS REVIEW

5.1 STANDARD ENVIRONMENTAL RECORDS REVIEW

A3E subcontracted Environmental Data Resources, Inc. (EDR) to perform an environmental regulatory database search for the Site and/or its surrounding properties within respective, ASTM recommended minimum search distances. These records include only the sites that have been reported to the applicable regulatory agency for environmental tracking, confirmed contaminant releases, or potential contaminant releases at the time of the report publication. A copy of the *EDR Radius Map Report with GeoCheck®*, dated April 22, 2015 is included in Appendix E.

5.1.1 FEDERAL STANDARD DATABASE REVIEW

Federal Database Type	Federal Record Database	Minimum Search Distance (miles)	Total Sites Identified	On Property	On Adjoining Property
NPL	NPL	1.0	0	0	0
	Proposed NPL	1.0	0	0	0
Delisted NPL	Delisted NPL	0.5	0	0	0
CERCLIS	CERCLIS List	0.5	0	0	0
	Federal Facility	0.5	0	0	0
CERCLIS NFRAP	CERCLIS NFRAP	0.5	0	0	0
RCRA CORRACTS	RCRA CORRACTS	1.0	0	0	0
Non-CORRACTS TSD	RCRA non-CORRACTS TSD	0.5	0	0	0
RCRA Generators	LQG	0.25*	0	0	0
	SQG	0.25*	0	0	0
	CESQG	0.25*	1	0	0
Engineering Control/Institutional Control Registries	US Engineering Controls	0.5*	0	0	0
	US Institutional Controls	0.5*	0	0	0
ERNS	ERNS	Property	0	0	0

*EDR increased search distance beyond the ASTM minimum search distance.

National Priority List (NPL)

The NPL is a database of abandoned and/or uncontrolled hazardous waste sites identified for priority remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Superfund Program.

Neither the Site nor any of the surrounding properties within the 1.0-mile search distance were listed within the NPL database.

Proposed NPL

This database includes sites that have been proposed for listing on the NPL through the issuance of a proposed rule in the Federal Register.

Neither the Site nor any of the surrounding properties within the 1.0-mile search distance were listed within the Proposed NPL database.

Delisted NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establish the criteria that the USEPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425 (e), sites may be deleted from the NPL where no further response is appropriate.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the Delisted NPL database.

CERCLIS

The CERCLIS list is a compilation of sites that the USEPA has investigated or is currently investigating for a release or threatened release of hazardous substances. The list also identifies sites that are either proposed for inclusion or on the NPL.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the CERCLIS database.

Federal Facility

This database includes a listing of NPL and Base Realignment and Closure (BRAC) sites found in the CERCLIS database where USEPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the Federal Facility database.

CERCLIS NFRAP

The CERCLIS “No Further Remedial Action Planned” (NFRAP) list is a compilation of sites that the USEPA has investigated, and has determined that the facility does not pose a threat to human health or the environment, under the CERCLA framework.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the CERCLIS NFRAP database.

Resource Conservation and Recovery Act (RCRA) CORRACTS

The RCRA Corrective Action Sites (CORRACTS) list contains information concerning sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA with reported corrective action.

The Site was/was not identified within the RCRA CORRACTS database. One surrounding property was identified within the 1.0-mile search distance.

RCRA non-CORRACTS TSD

The RCRA non-CORRACTS TSD list contains information pertaining to sites that treat, store or dispose (TSD Facility) of hazardous waste as defined by RCRA.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the RCRA non-CORRACTS TSD list.

RCRA Generators

The Resource Conservation Recovery Information System (RCRIS) Generators List identifies sites that generate hazardous waste as defined by the RCRA. There are three basic categories of generators: conditionally exempt, small quantity, and large quantity. Conditionally exempt generators are facilities that generate less than 100 kilograms (kg) of non-acutely hazardous waste per month. Small quantity generators (SQG) are facilities that generate 100 kg to 1,000 kg per month of non-acutely hazardous waste and large quantity generators (LQG) generate greater than 1,000 kg per month of non-acutely hazardous waste.

The *property* was/was not listed within the RCRA Generators database. One surrounding property was identified, and is described in detail below.

██████████, located at ██████████, is approximately 966 feet south-southeast and 16 feet lower to the Site. The facility is located as a conditionally exempt small quantity generator of mercury. A compliance visit in January of 2002 did not indicate any violations and no violations have been noted to date. Based on intervening distance, location with predicted groundwater flow and regulatory status, this property is not considered a *recognized environmental condition* at the Site.

US Engineering Controls

The US Engineering Controls Listing identifies sites with engineering controls in place to prevent exposure to contaminants remaining on site.

Neither the Site nor any of the surrounding properties within the 0.5-mile search distance were listed within the US Engineering Controls database.

US Institutional Controls

The US Institutional Controls Listing identifies sites with institutional controls in place to prevent exposure to contaminants remaining on site.

Neither the Site nor any of the surrounding properties within the one-half mile search distance were listed within the US Institutional Controls database.

Emergency Response Notification System (ERNS)

The ERNS database contains information on reported releases of oil and hazardous substances.

The Site was not listed within the ERNS database.

5.1.2 STATE AND TRIBAL STANDARD DATABASE REVIEW

State Database Type	State Record Database	Minimum Search Distance (miles)	Total Sites Identified	On Property	On Adjoining Property
Hazardous Waste Sites	IL SSU	1.0	0	0	0
Landfill and/or Solid Waste Landfill Sites	SWF/LF	0.5	0	0	0
	Landfill Special Waste	0.5	0	0	0
	NIPC	0.5	0	0	0
	CCDD	0.5	0	0	0
Leaking Underground Storage Tank Lists	LUST	0.5	6	0	0
	LUST Trust	0.5	0	0	0
	Indian Trust	0.5	0	0	0
Registered Underground Storage Tank Lists	UST	0.25*	4	0	0
	Indian UST	0.25*	0	0	0
	FEMA UST	0.25*	0	0	0
Institutional Control/Engineering Control Registries	Engineering Controls	0.5*	0	0	0
	Institutional Controls	0.5*	0	0	0
Voluntary Cleanup Sites	SRP	0.5	0	0	0
	Indian VCP	0.5	0	0	0
Brownfield Sites	Brownfields	0.5	0	0	0

*EDR increased search distance beyond the ASTM minimum search distance.

State Sites Unit Listing (IL SSU)

State Sites Unit Listings area priority sites planned for cleanup using state funds and are identified with sites where potentially responsible parties will pay for cleanup. IL SSU sites may or may not already be listed on the Federal NPL list.

The Site and surrounding properties within the 1.0-mile search distance were not listed within the IL SSU database.

Solid Waste Facilities/Landfill Sites (SWF/LF)

The Illinois Environmental Protection Agency (IEPA) maintains the SWF/LF List containing an inventory of solid waste disposal facilities or landfills. They may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the SWF/LF database.

Landfill Special Waste

The landfill special waste database consists of a list of landfills that accept non-hazardous special waste pursuant to the IEPA Non-Hazardous Special Waste Definition.

The Site and surrounding properties within the 0.5-mile radius were not identified within the Landfill Special Waste database.

Illinois Solid Waste Landfill Inventory (NIPC)

Northeastern Illinois Planning Commission (NIPC) maintains an inventory of active and inactive solid waste disposal sites. This list includes numerous sites that previously had not been identified largely because there was no obligation to register such sites prior to 1971.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the NIPC database.

Clean Construction or Demolition Debris (CCDD)

This database includes sites that accept construction and demolition debris considered non-hazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures and roads.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the CCDD database.

State Leaking Underground Storage Tanks (LUST)

The LUST database provides a listing of reported LUST incidents and potentially their status within the program.

The Site was not listed within the LUST database. Six surrounding properties were identified within the 0.5-mile search distance.

Site Name	Distance/Direction from Site	Location with Respect to Predicted Groundwater Flow Direction	Status of LUST Incident
[REDACTED]	1270 ft. South-Southwest	32 ft. Lower/Down-Gradient	Open Incident
[REDACTED]	2032 ft. South	25 ft. Lower/Down-Gradient	Non-LUST Determination 10/13/1992
[REDACTED]	2151 ft. West-Southwest	7 ft. Lower/Down-Gradient	NFA/NFR 2/10/2009
[REDACTED]	2216 ft. West-Southwest	11 ft. Lower/Down-Gradient	NFA/NFR 11/18/2008
[REDACTED]	2355 ft. South	25 ft. Lower/Down-Gradient	NFA/NFR 3/2/2005
[REDACTED]	2490 ft. South-Southwest	27 ft. Lower/Down-Gradient	NFA/NFR 7/8/1998

As noted in the table, there are six (6) properties of which four (4) LUST incidents have received a No Further Remediation (NFR) letter from the Illinois EPA indicating that they have met the minimum requirements of state regulatory standards and therefore do not represent an off-Site *recognized environmental condition* at the Site.

Of the remaining two (2) incidents one was issued a Non-LUST determination letter, indicating a release did not occur and the second is determined to be down-gradient from the Site with respect to the predicted groundwater flow at the Site, the intervening distances between the properties and the Site or the reported geologic conditions that are present in the area minimized the potential for impact to the Site and therefore do not present an off-Site *recognized environmental condition* at the Site.

LUST Trust

This database contains a listing of LUST facilities with insufficient funds available in the Underground Storage Tank Fund.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the LUST Trust database.

Indian LUST

This database, maintained by the USEPA, contains a list of LUST sites located on Indian land.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the Indian LUST database.

State Registered Underground Storage Tank List (UST)

The UST list identifies USTs regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the Office of the State Fire Marshall for Illinois, the state department responsible for administering the UST program.

The Site is not listed in the UST database. Four surrounding properties were identified within the 0.25-mile search distance. The closest property listed is [REDACTED], located at [REDACTED], approximately 966 feet south southeast and 16 feet lower to the Site. The property is listed as having a removed 550-gallon gasoline UST. The OSFM UST online database search has the tank removed on December 7, 1989.

Based on intervening distance, location with predicted groundwater flow and regulatory status, this property and the remaining three UST properties are not considered a *recognized environmental condition* at the Site.

Indian UST

The Indian UST list, maintained by the USEPA, contains a list of USTs on Indian land.

The Site and surrounding properties within the 0.25-mile search distance were not identified within the Indian UST database.

FEMA UST

This database includes a listing of all FEMA-owned USTs.

The Site and surrounding properties within the 0.25-mile search distance were not identified within the FEMA UST database.

State Engineering Controls List

The State Engineering Controls Listing identifies sites with engineering controls in place that eliminate the pathway for regulated substances to enter the environment or effect human health.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the State Engineering Controls database.

State Institutional Controls List

The State Institutional Controls Listing identifies sites with institutional controls in place that eliminate the pathway for regulated substances to enter the environmental or affect human health.

The Site was/was not listed within the State Institutional Controls database. One surrounding property was identified within the 0.5-mile search distance.

Site Remediation Program (SRP)

The Site Remediation Program (SRP) database identifies the status of all voluntary remediation projects administered through the Pre-Notice Site Cleanup Program (1989 to 1995) and the Site Remediation Program (1996 to the present).

The Site was/was not listed within the SRP database. One surrounding property was identified within the 0.5-mile search distance.

Indian Voluntary Cleanup Priority listing (Indian VCP)

The Indian VCP database includes sites on Indian Land listed on the voluntary cleanup priority list.

The Site and surrounding properties within the 0.5-mile search distance were not identified within the Indian VCP database.

The *property* was not listed within the Indian VCP database. Two surrounding properties were identified within the 0.5-mile search distance. [REDACTED].

Brownfields

The Office of Brownfields Assistance (OBA) database identifies the status of all Municipal Brownfields Redevelopment Grant (MBRG) project sites administered through OBA.

The Site and surrounding properties within the 0.5-mile search distance were not listed within the Brownfields database.

5.1.3 ADDITIONAL FEDERAL, STATE, TRIBAL AND LOCAL ENVIRONMENTAL RECORD SOURCES

EDR also provided a search of their proprietary databases. The list of records that were searched by EDR can be reviewed in Appendix E. The following is a brief description of databases with sites that were identified in the project area and may be indicative of *recognized environmental conditions*.

Hazardous Materials Incident Reporting System (HMIRS)

The HMIRS database includes spills reported to the U.S. Department of Transportation.

Incident Management Database (IMD)

The IMD includes records of emergency release reports.

EDR Manufactured Gas Plants (MGP)

The EDR MGP database includes records of coal gas plants compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950 to produce a

gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

The Site and surrounding properties were not listed within the EDR Manufactured Gas Plants (MGP) database.

EDR US Historic Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

The Site and surrounding properties were not listed within the US Historic Auto Stations database.

EDR US Historic Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry, etc.

The Site and surrounding properties were not listed within the US Historic Cleaners database.

5.1.4 ORPHAN SITE SUMMARY

Orphan Sites are properties for which a geographic location cannot be pinpointed because of insufficient information on the address.

No Orphan Sites were identified in the database search.

5.2 FREEDOM OF INFORMATION ACT REVIEW

A3E, under the Freedom of Information Act (FOIA), requested documentation on-file from the Village of Brookfield and Cook County concerning environmental information of the surrounding area. Online database reviews were performed for the Illinois Emergency Management Agency (IEMA) database available online at <http://tier2.iema.state.il.us/FOIAHazmatSearch/> and Office of the State Fire Marshall (OSFM) database available online at <http://webapps.sfm.illinois.gov/ustsearch/>. FOIA requests and responses are included in Appendix F.

The following table summarizes the FOIA responses:

Date	Agency	Response
11/20/2015	Village of [REDACTED]	Documentation on file; reviewed in person at the City Clerk's office, included deed transfers, and past ownership information.
11/20/2015	Village of [REDACTED] Volunteer Fire Department	No records on file.
11/22/15	IEMA Online Incident Database	No records on file for Site area.
11/22/2015	OSFM Online UST Database	No records on file for Site area.
11/22/2015	[REDACTED] County	Deed Information and Tax Information

5.3 HISTORICAL USE INFORMATION

A3E performed a document review of historical information to generate a historical summary of the Site and the surrounding properties, from the present, back to the Site's initial development, or back to 1940, whichever is earlier. Historical information was ascertained from available aerial photographs, fire insurance maps, city directories, property ownership/development records, topographic maps, chain-of-title records, interviews and previous environmental reports.

5.3.1 AERIAL PHOTOGRAPHS

Aerial photographs provided by EDR were reviewed for this PESA and are described below. Copies of the aerial photographs are included in the Appendix G.

Year	Description
1939	Site: The photograph identifies the <i>Site</i> as agricultural land. Surrounding Area: Surrounding properties also appear to be utilized for agriculture to the north, east and south. [REDACTED] Street or [REDACTED] appears in the photograph to the west of the Site. [REDACTED] is visible to the north. West of [REDACTED] Street the area appears as residential.
1953	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1939 photograph.
1958	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1953 photograph.
1981	The <i>Site</i> and adjoining properties to the north, and east appear to be unchanged from the 1958 aerial photograph. The adjoining and surrounding properties to the south are now developed with what appears to be commercial buildings. [REDACTED] Street is now visible to the south as well. The west adjoining property appears more developed with additional residential properties visible.
1988	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1981 photograph.
1994	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1988 photograph.
1996	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1994 photograph.
2005	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 1996 photograph with the exception of the northwest adjoining property. This property is now developed as the [REDACTED] High School.
2006	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2005 photograph.
2007	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2006 photograph.
2009	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2007 photograph.

2010	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2009 photograph.
2011	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2010 photograph.
2012	The <i>Site</i> , adjoining and surrounding properties appear unchanged from the 2011 photograph.

5.3.2 FIRE INSURANCE MAPS

Fire insurance maps were originally created in the late 1800’s and early 1900’s for assessing fire insurance liability in urbanized areas of the United States. These maps include detailed town and building information.

EDR conducted a search for historical fire insurance maps for the *property* and surrounding area. According to EDR, the *property* was not identified on any of the maps searched by EDR. A copy of the “No Coverage” notification is included in Appendix H.

5.3.3 USGS TOPOGRAPHIC MAPS

Historical topographic maps were obtained from the USGS Online Historical Map Explorer. The following is a brief description of the topographic maps reviewed. Copies of the historical topographic maps are included in the Appendix I.

Year	Source	Description
1934	██████████, IL 1:62,500 Map	The map identifies moderate topographic relief across the Site, but no structures. ██████████ is visible west of the Site. The town of ██████████ is visible to the west. ██████████ Creek is visible to the south-southeast.
1940	██████████ 1:62,500 Map	No significant changes from the 1934 map have been identified.
1961	██████████ 1:250,000 Map	No significant changes from the 1940 map have been identified.
1985	██████████, IL 7.5-Minute Map	No significant changes from the 1961 map have been identified, with the exception of the ComEd substation is identified west of the Site.

5.3.4 LOCAL STREET DIRECTORIES

Local street directories were published by private (or sometimes government) sources and show ownership and/or use of sites by reference to street address. The directories are generally not comprehensive and may contain gaps in time periods.

City directories were not researched as part of this assessment given the rural nature of the Site with no structures present and only two newly constructed adjoining properties with no known addresses at the time of this assessment.

5.4 ADDITIONAL RECORD SOURCES

5.4.1 VILLAGE OF ██████████

A3E interviewed the City Clerk, ██████████ of the Village of ██████████ on November 20, 2015 in person. Ms. ██████████ stated the 30-acre Site area was purchased from ██████████ in June 2008 when it was purchased by and annexed into the Village. The Site area was then

sold to [REDACTED] in May 2015. According to Ms. [REDACTED], no environmental concerns are associated with or historical known about the Site area.

5.4.2 [REDACTED] COUNTY

A3E submitted a FOIA request to the [REDACTED] County. A FOIA response from the County was not received at the time of the completion of this PESA. A3E did review information from the [REDACTED] County GIS online database. According to the information obtained, the parcel identification number (PIN) associated with the Site area is [REDACTED] and is for a 40-acre parcel, of which, 30.30 acres was split to the Village of [REDACTED] for an industrial park. A3E will review any responses when the information becomes available. If the reviewed information alters A3E's findings and conclusions, an addendum to this report will be issued.

5.4.3 VILLAGE OF [REDACTED] FIRE DEPARTMENT

A3E interviewed, via telephone on November 20, 2015, Mr. [REDACTED] of the Village of [REDACTED] Volunteer Fire Department. According to Mr. [REDACTED], the Fire Department had no records of any incidents, hazardous response calls, or environmental concerns associate with the Site area.

5.4.4 PREVIOUS OWNER

A3E interviewed, via telephone on November 20, 2015, Mr. [REDACTED] the previous owner of the Site Area. According to Mr. [REDACTED], members of his family owned the Site area since the early 1970's. Mr. [REDACTED] stated that no structures were ever present on the property and to the best of his knowledge no environmental concerns, dumping, hazardous spills have been associated with the Site area.

6.0 SITE RECONNAISSANCE

Ms. Alisa Allen, an Environmental Professional as defined in ASTM 1527-13 and AAI, performed a Site reconnaissance on November 20, 2015 to document existing Site conditions. Photographs of the Site and surrounding properties are included in the Appendix C.

6.1 METHODOLOGIES AND LIMITING CONDITIONS

A3E completed a reconnaissance of the Site, boundary areas, and adjoining properties to document Site conditions and identify evidence of dumping, storage tanks, electrical equipment, drummed wastes, and improper storage of hazardous materials, surface staining, unusual odors and other indicators of potential environmental releases. These conditions may be indicative of *recognized environmental conditions*.

Weather conditions during Site reconnaissance activities were partly cloudy with temperatures in the low 40 degrees Fahrenheit range. It should be noted, A3E did not enter any of the adjacent properties to perform this inspection; observations were made from locations on the Site or public right-of-ways to determine the presence of conditions that may be indicative of *recognized environmental conditions*.

6.2 GENERAL SITE SETTING

The Site includes the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park located east of [REDACTED] Street and south of [REDACTED] Road. Figure 1 illustrates the general location of the Site.

A3E inspected the Site for known or observed environmental conditions (past or present) that could potentially be *recognized environmental conditions* consistent with ASTM standards. If a *recognized environmental condition* is noted, a detailed explanation of the concern and possible impact on the Site is also discussed. The following list summarizes the findings from the Site.

Observed	Not Observed	Environmental Condition
	X	Suspected Hazardous Substances in Connection with Site Use
	X	Petroleum Products in Connection with Site Use
	X	Aboveground or Underground Storage Tanks (ASTs/USTs)
	X	Suspect Containers Not in Connection with Site Use
	X	Electrical or Mechanical Equipment Likely to Contain PCBs
	X	Interior Staining or Corrosion
	X	Drains or Sumps
	X	Wastewater Discharges
	X	Septic or Sewage
	X	Pits, Ponds, or Lagoons
	X	Pools of Liquid or Standing Water

X	Solid Waste Disposal, Landfills, or Suspect Fill Material
X	Exterior Staining
X	Stressed Vegetation
X	Wells
X	Odors
X	Other Environmental Conditions

6.3 SURROUNDING PROPERTY SETTINGS

A3E inspected adjacent properties for known or observed environmental conditions (past or present) that could potentially be *recognized environmental conditions* consistent with ASTM standards. It should be noted, A3E did not enter any of the adjacent properties to perform this inspection; observations were made from locations on the Site or public ROWs. If a *recognized environmental condition* is noted, a detailed explanation of the concern and possible impact on the Site is also discussed. The following list summarizes the findings from the adjacent properties.

Observed	Not Observed	Environmental Condition
	X	Suspected Hazardous Substances in Connection with Site Use
	X	Petroleum Products in Connection with Site Use
	X	Aboveground or Underground Storage Tanks (ASTs/USTs)
	X	Suspect Containers Not in Connection with Site Use
X		Electrical or Mechanical Equipment Likely to Contain PCBs
	X	Interior Staining or Corrosion
	X	Drains or Sumps
	X	Wastewater Discharges
	X	Septic or Sewage
	X	Pits, Ponds, or Lagoons
	X	Pools of Liquid or Standing Water
	X	Solid Waste Disposal, Landfills, or Suspect Fill Material
	X	Exterior Staining
	X	Stressed Vegetation
	X	Wells
	X	Odors
	X	Other Environmental Conditions

Electrical or Mechanical Equipment Likely To Contain PCBs

This property was identified as having a pad-mounted transformer during Site reconnaissance activities.

- ComEd Station on [REDACTED] Street, west of Site Area.

Some common sources of PCBs are transformers, electrical equipment and lifts that use PCB-containing dielectric fluids, hydraulic fluids, transfer fluids and lubricants. Fluorescent light ballasts manufactured before 1979 may include capacitors, which contain up to 1.5 ounces of PCB oil; however, the presence of fluorescent light ballasts need not be noted in a Phase I ESA per the ASTM standard.

Several pad-mounted transformer was observed to the west of the Site. No indications of releases were observed and the transformer appeared to be in good condition. Based on observations the transformer is not indicative of a *recognized environmental condition*.

De Minimis Environmental Conditions are those that do not present a material risk of harm to public health or the environment and that generally would not be the subject of enforcement action if brought to the attention of the appropriate government agencies. No *De Minimis Environmental Conditions* were identified on the adjacent properties.

6.4 OTHER CONDITIONS OF CONCERN

No other conditions of concern were noted during Site reconnaissance activities.

7.0 FINDINGS AND OPINIONS

This PESA consisted of a review of historic land uses of the Site and vicinity from aerial photographs, fire insurance san born maps, topographic maps, regulatory agency databases, FOIA records, city directories and a Site reconnaissance. These reviews were performed to determine the environmental status of the Site and determine the potential for environmental impact from historic and current uses of the surrounding properties.

Based upon the information reviewed during this PESA, and pursuant to the minimum requirements ASTM E1527-13, IDOT in BDE 95-12, BDE 96-8, and *A Manual for Conducting Preliminary Environmental Site Assessments for IDOT Highway Projects*, the following findings and opinions are presented below.

The Site was first developed sometime before 1938 as agricultural land. The Site is currently under construction to be [REDACTED] Lane and [REDACTED] Way. The surrounding properties continue to be utilized by residences, agricultural, and commercial as of the preparation of this PESA. Historically, the vicinity surrounding the Site can be characterized as a mix of residential, agricultural and commercial. A3E did not identify any conditions during historical review activities.

A3E completed a reconnaissance of the Site, boundary areas and surrounding properties to document Site conditions and identify evidence of dumping, storage tanks, electrical equipment, drummed wastes, and improper storage of hazardous materials, surface staining, unusual odors and other indicators of potential environmental releases. A3E did not identify any conditions during Site reconnaissance activities.

8.0 CONCLUSIONS

A3E performed this PESA in conformance with the scope and limitations of The American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13) and [REDACTED] Services, Inc. ([REDACTED]) authorization to proceed on November 13, 2015. The ASTM protocols are consistent with the PESA requirements outlined by Illinois Department of Transportation (IDOT) in Bureau of Design and Environment (BDE) 95-12, BDE 96-8, and the Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects. The PESA was performed on the Site, which includes the proposed roads and right-of-ways of [REDACTED] Lane and [REDACTED] Way within a 30-acre industrial park located east of Washington Street and south of Shannon Road.

Any exceptions to, or deletions from, these processes are described in Section 2.4 of this report.

Based upon the findings of this PESA and as of November 20, 2015, the date of the last physical examination of the project area, it has been determined that the Site has NO Risk for the occurrence of regulated substances or natural hazardous. Appendix A contains the PESA Risk Assessment Information and Appendix B contains the Responsible Property Transfer Act (RPTA) Compliance Information.

9.0 REFERENCES

Resources	Agency/Provider/Contact Information	
<i>Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process</i> , November 2013 (ASTM1527-13)	ASTM International	
<i>Illinois Department of Transportation (IDOT) in Bureau of Design and Environment (BDE) 95-12 & BDE 96-8</i>	Illinois Department of Transportation 2300 S. Dirksen Parkway Springfield, IL 62764 217.782.7820	
<i>A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects</i> , OFS-1996-5	Department of Natural Resources Illinois State Geological Survey 615 E. Peabody Drive Champaign, Illinois 61820 217.333.4747	
<i>Environmental Data Resources (EDR) Radius Map with GeoCheck</i> , November 16, 2015	EDR, Inc. 6 Armstrong Road, 4 th Floor Shelton, Connecticut 06484 800.352.0050	Environmental database records, physical characteristics, and water well records
<i>EDR- The EDR Aerial Photo Decade Package</i> November 16, 2015	EDR, Inc. 6 Armstrong Road, 4 th Floor Shelton, Connecticut 06484 800.352.0050	Historical Aerial Photographs
<i>Stack-Unit Mapping of Geologic Materials in Illinois to a Depth of 15 Meters ISGS</i> , date (C542)	Illinois State Geological Survey, Natural Resource Building 615 East Peabody Dr. Champaign, Illinois 61820 217.333.4747	Geological Information
<i>Potential for Contamination of Shallow Aquifers from Surface and Near Surface Waste Disposal in Illinois ISGS</i> , 1984	Illinois State Geological Survey	Geological Information
<i>Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Wastes in Illinois ISGS</i> , 1984	Illinois State Geological Survey	Geological Information
<i>Bedrock Geology Illinois ISGS</i> , date (IM14)	Illinois State Geological Survey	Geological Information
<i>Quaternary Deposits Illinois ISGS</i> , 2005	Illinois State Geological Survey	Geological Information
<i>Coal Industry in Illinois ISGS</i> , 2013	Illinois State Geological Survey	Geological Information
<i>Kart Terrains and Carbonate Rocks of Illinois</i> , IDNR, 1997	Illinois Department of Natural Resources	Geological Information
<i>Soil Survey</i>	United States Department of Agriculture Natural Resources Conservation Service (http://www.soils.usda.gov/)	Soil Information

Historic Topographic Maps	USGS Historical Topographic Map Explorer (http://historicalmaps.arcgis.com/usgs/)	
Environmental Release Information	Illinois Environmental Protection Agency 1021 North Grand Avenue Springfield, Illinois 62794	Bureaus of Land, Air and Water, Office of Emergency Response FOIAs
Underground Storage Tanks	Office of the State Fire Marshall 1035 Stevenson Drive Springfield, Illinois 62703 (http://webapps.sfm.illinois.gov/ustsearch/)	On-line Registered Tank Database
Environmental Release Information	Illinois Emergency Management Agency FOIA Officer, Legal Office 1035 Outer Park Drive Springfield, IL 62704 (http://tier2.iema.state.il.us/FOIAHazmatSearch/)	On-line Hazardous Incident Reports
Flood Insurance Rate Map (FIRM)	Federal Emergency Management Agency (FEMA) (http://www.fema.gov)	
National Wetlands Inventory On-line Mapper	U.S. Fish and Wildlife Service Website (http://wetlandsfws.er.usgs.gov/wtlnds/launch.html)	
Village of [REDACTED]	[REDACTED]	Environmental Records
[REDACTED] County	[REDACTED]	Environmental, Deed, Tax Records
Mr. [REDACTED]	[REDACTED]	Site Information, Drawings and Reconnaissance
Mr. [REDACTED]	[REDACTED]	[REDACTED] Fire Department
Mr. [REDACTED]	[REDACTED]	Previous Owner