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# Benchmark Environmental Services, INC.

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## All Appropriate Inquiry (AAI) Phase I Environmental Site Assessment

Vacant Lots C1 and C1-A  
South Vollmer Road and West of S. Cicero Avenue  
Matteson, IL 60443



Prepared For:  
Mr. Michael McCann  
First Strategic Capital, LLC  
300 E. Northwest Highway  
Palatine, IL 60067

Benchmark Project #18162  
February 6, 2018

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# Benchmark Environmental Services, INC.

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February 6, 2018

Mr. Michael McCann  
First Strategic Capital, LLC  
300 E. Northwest Highway  
Palatine, IL 60067

**Re: All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment at:  
Vacant Lots C1 and C1-A South of Vollmer Road and West of S. Cicero Avenue  
Matteson, IL 60443 - Benchmark Project #18162**

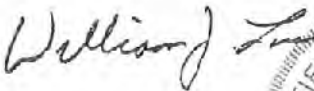
Dear Mr. McCann,

Benchmark Environmental Services, Inc. (Benchmark) performed an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment per EPA 40 CFR Part 312 & ASTM E 1527-13 of the property located at the above referenced property. The on-site reconnaissance of the subject property was performed on January 26, 2018. In evaluating the property, Benchmark ascertained whether any environmental hazards or liabilities might exist on or around the site that would represent a potential risk or financial liability to a buyer, or a lending institution with interest in the property.

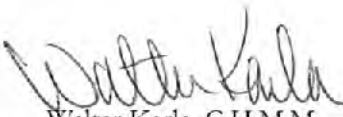
If you should have any questions regarding this report, please feel free to contact the undersigned at 1-800-400-5811.

Sincerely,

BENCHMARK ENVIRONMENTAL SERVICES, INC.

  
William J. Liniewicz, C.H.M.M.  
Principal



  
Walter Karla, C.H.M.M.  
Senior Project Manager

All Appropriate Inquiry (AAI)  
Phase I Environmental Site Assessment (ESA) per EPA 40 CFR Part 312 & ASTM E 1527-13

Performed at:  
Vacant Lots C1 and C1-A  
South of Vollmer Road and West of S. Cicero Avenue  
Matteson, IL 60443

Performed for:  
Mr. Michael McCann  
First Strategic Capital, LLC  
300 E. Northwest Highway  
Palatine, IL 60067

Performed by:  
Benchmark Environmental Services, Inc.  
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Submitted on February 6, 2018 by:  
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Environmental Scientist

Reviewed on February 6, 2018 by:  
William J. Liniewicz, Master C.H.M.M.  
Principal

Project # 18162

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- ❖ Prior Phase I Report by O'Brien & Associates, Inc. dated 11/21/2002
- ❖ Environmental Data Resources (EDR) Sanborn Fire Insurance Maps – No Coverage Letter
- ❖ Environmental Data Resources (EDR) FirstSearch Regulatory Database Report

## 1.0 – Executive Summary

Benchmark Environmental Services, Inc. (Benchmark) was retained by Mr. Michael McCann of First Strategic Capital LLC, Palatine, Illinois to perform an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment (ESA) per EPA 40 CFR Part 312 & ASTM E 1527-13 at Vacant Lots C1 and C1-A, Matteson, Illinois, as required for financial documentation.

Mr. Walter Karla, Benchmark Senior Project Manager and Josh Cox, Environmental Scientist, performed the onsite reconnaissance of the property on January 26, 2018 and were unescorted.

According to the Cook County Assessor online databases and other information reviewed, the subject site consists of eight (8) vacant parcels of land, totaling approximately 437,878 square-feet (10 acres) in size. The subject site is partially improved land with an asphalt drive/parking area at the northeast, a stormwater retention pond at the southeast with the remainder of the property consisting of low vegetation. Sewer and water utilities were observed along the property boundaries. Based on the historical aerial photograph review, the subject site formerly contained a structure at the northeast section of the property in 2005 and a farmstead along the northeast property line in the 1962 aerial photograph. The property is currently owned by First Strategic Capital LLC.

Based on the onsite inspection, historical research, database review, interviews and other available sources, ***“Recognized Environmental Condition” (REC)*** were revealed at the subject site.

- During Benchmarks onsite reconnaissance two (2) 55-gallon drums of unknown materials were observed centrally located on Lot C1. These drums appeared to be full of liquid and were rusting and bulging at the ends. This poses a Material Threat and a REC in regards to the threat of future release to the environment, at the subject site. Benchmark recommends that the drums be immediately removed by a licensed hazardous waste disposal company to eliminate the potential for leakage and impacts to soil and groundwater.

Benchmark recommends removal of the two (2) 55-drums to address the above mentioned REC. A scope of work/cost estimate will be provided upon request of the client.

\*“Recognized Environmental Conditions,” (RECs)-the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment: (2) under conditions indicative of a release to the environment: or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

## **2.0– Introduction**

Benchmark Environmental Services, Inc. (Benchmark) was retained by Mr. Michael McCann of First Strategic Capital LLC, Palatine, Illinois to perform an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment (ESA) per EPA 40 CFR Part 312 & ASTM E 1527-13 at Vacant Lots C1 and C1-A, Matteson, Illinois, as required for financial documentation.

This assessment is an initial step in the examination of the possible environmental risks and liabilities that may exist on this site. Whenever our review reveals any irregularities requiring a more active auditing of the property, we will recommend specific actions necessary to fully evaluate those unusual situations.

## **2.1 – Purpose**

The purpose of this study is to identify any “Recognized Environmental Conditions” in association with the property or adjoining properties that may be impacting the subject site as required for financial documentation.

## **2.2 – Detailed Scope of Services**

- On-Site Reconnaissance
- Surrounding Site Usage
- Aerial Photographs
- Interviews
- Engineering and / or Institutional Controls
- Historical Resource Investigation
- Regulatory Status and Environmental Conditions
- Air Emissions
- Water Sources and Discharges
- Storm Water Discharges
- Hazardous Wastes and Materials/Petroleum Products/Wastes
- Underground Storage Tanks/Aboveground Storage Tanks
- Asbestos / Lead / Mold / Vapor Intrusion
- Polychlorinated Biphenyls (PCBs)
- Soil Conditions
- Wetland Conditions
- Surrounding Regulatory Sites
- Data Gaps

### 2.3 – Significant Assumptions, Limitations and Exceptions

The Phase I Environmental Site Assessment detailed in this report has been performed in accordance with generally accepted methods and practices of the environmental consulting profession. This report was performed in accordance with All Appropriate Inquiry (AAI) per EPA 40 CFR Part 312 & ASTM E 1527-13. The scope and depth of this study were as directed, and agreed to, by the client.

Benchmark uses experienced and trained professionals in attempting to locate and identify hazardous materials or conditions. We do not warrant that all such materials have been identified. It is possible that some materials containing a hazardous substance were not visible or accessible to the environmental professional or for various other reasons were not observed.

All findings are based on a visual on-site reconnaissance, historical research, interviews and regulatory record review. These findings are not to be considered scientific certainties. The intent of this study was to identify environmental concerns that would be obvious to a skilled, knowledgeable professional, applying accepted standards. This report is not intended to represent an exhaustive research of all potential hazards that may exist at these sites.

This report also does not purport to be representative of future conditions or events. Activities, which transpire subsequent to this report, which result in adverse environmental impacts, are not to be construed as relevant to this study.

### 2.4 – Terms and Conditions (User Reliance)

This report has been performed for the exclusive use of the client. Our report and its findings shall not, in whole or part, be disseminated to any other party, nor be used by any other party without prior written consent by Benchmark Environmental Services, Incorporated and the client.

### **3.0 – Site Description**

#### **3.1 – Location and Description**

*Location:* Vacant Lots C1 and C1-A, Matteson, IL 60443

*Property Identification Numbers (PINs):* 31-16-210-001-0000, 31-16-211-003-0000, 31-16-211-002-0000, 31-16-210-006-0000, 31-16-210-005-0000, 31-16-210-004-0000, 31-16-210-003-0000 and 31-16-210-002-0000

*Description:* Part of Brookmere Subdivision being a Resubdivision of Matteson Commons Subdivision in the East ½ of Section 16, Township 35 North, Range 13, East of the Third Principle Meridian.

#### **3.2 – Site Characteristics**

The subject site consists of eight (8) relatively flat vacant parcels of land, totaling approximately 10 acres in size in a residential/commercial area located south of Vollmer Road and west of S. Cicero Avenue in the Village of Matteson, Cook County Illinois.

#### **3.3 – Current Use of the Property**

The subject site is currently vacant property, which was previously used for agricultural purposes and residential land.

#### **3.4 – Description of Subject Site Property Improvements**

The subject site is mostly vacant land, but is partially improved with an asphalt drive/parking area at the northeast area of the property and a stormwater retention pond at the southeast section of the property with no other improvements or buildings.

The subject site is currently vacant land and does not use water or produce any wastewater at this time. Benchmark observed fire hydrants and sewer manholes along the north, south and east sides of the subject site, which indicates that municipal water and sanitary sewer is available to the site. When developed, the subject site will obtain water from the City of Chicago Water Department via the Village of Matteson, and wastewater discharges will be received by the municipal sewer system which is under the jurisdiction of the Metropolitan Wastewater Reclamation District of Greater Chicago (MWRD). Electric and natural-gas will be provided by the local utility companies.

### 3.5 – Current Uses of Adjoining Properties

The area surrounding the subject site was observed in an effort to determine if practices on the surrounding properties could have a negative environmental impact to the subject site. The subject site is currently surrounded by the following:

North: To the north is Vollmer Road, followed by vacant land.

South: To the south is Matteson Avenue, followed by vacant land and residential properties.

West: To the west are residential properties and vacant land.

East: To the east is S. Cicero Avenue, followed by Circle K/Shell gasoline station (4755 Vollmer Road) and vacant land.

With the exception of the adjacent Circle K/Shell gasoline station to the east of S. Cicero Avenue, the surrounding properties do not visually appear to pose an environmental concern to the subject site. See section 5.1.1. for additional information pertaining to the gasoline station. No exterior storage of hazardous materials was observed on the adjacent properties.

#### **4.0 – User Provided Information**

##### **4.1 – Title Records:**

According to contractual agreements between Benchmark and the client, a full title records search was not performed. The EDR FirstSearch Regulatory Database report, which was commissioned by Benchmark, does not stipulate any environmental land use limitations on the property.

##### **4.2 – Environmental Liens or Activity and Land Use Limitations**

According to contractual agreements between Benchmark and the client, an environmental liens or activity and land use limitations search was not included in the scope of this report. The EDR database review did not indicate that an institutional or engineering control have been recorded for the subject property.

##### **4.3 – Specialized Knowledge**

The client did not provide any specialized knowledge about the property.

##### **4.4 – Commonly Known or Reasonably Ascertainable Information**

No information was provided regarding any commonly known or reasonably ascertainable information within the local community that is material to RECs in connection with the subject site property. Benchmark researched online sources for any obvious or commonly known and reasonably ascertainable information regarding the subject site property. No information was identified that is material to RECs in connection with the subject site property.

##### **4.5 – Valuation Reduction**

Section 6 of ASTM 1527-13 outlines “user responsibilities.” In valuation reduction (Section 6.5), the user is responsible for considering the relationship of the purchase price of the property to the fair market value of the property if the property was/is not affected by hazardous substances or petroleum products. If a concern is found, the user should provide written documentation to the environmental professional(s) for use in the Phase I ESA.

##### **4.6 – Owner, Property Manager and Occupant Information**

The subject site is currently listed as being owned by First Strategic Capital LLC. The property is currently unoccupied, with remnants from prior development.



#### 4.7 – Reason for Performing Phase I

The client informed Benchmark that the reason for performing this Phase I was mainly for financial documentation, however, if recognized environmental conditions were revealed, the report will qualify for U.S. Environmental Protection Agency (USEPA) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Liability Protection.

#### 4.8 – Additional Information Provided

Benchmark reviewed a prior Phase I Environmental Site Assessment (ESA) performed by O'Brien & Associates, Inc. dated 11/21/2002, which concluded the following:

*The Conclusion stated: "On the basis of the information obtained in this investigation, no RECs were identified on the Property. There were several State and Federal regulated facilities identified within the search protocols utilized for this investigation, however, based on readily available information, proximity to the Property and local hydrogeological conditions, none of these facilities are considered to be RECs."*

A copy of the prior Phase I ESA referenced above is included within the Appendix section of this report.

## 5.0 – Records Review:

### 5.1 – Standard Environmental Records Sources:

To establish a history of the subject site, Benchmark Environmental Services Inc., consulted sources such as Cook County, Village of Matteson, Environmental Data Resources (EDR), US Fish and Wildlife Service, U.S. Department of Agriculture – Natural Resources Conservation Services (USDA-NRCS) Soil Survey, United States Environmental Protection Agency (USEPA), U.S. Geological Survey (USGS), USEPA, Illinois Environmental Protection Agency (IEPA), Office of the State Fire Marshal (OSFM), Google Earth™ and personal interviews.

#### 5.1.1- Regulatory List Status Review

Benchmark retained EDR, to conduct a search of all-applicable state and federal databases, with regards to environmental issues. EDR maintains an up to date database of all regulatory lists required by the ASTM Standards for Environmental Site Assessments. The various state and federal regulatory agencies lists have been reviewed to determine if information was present in their files concerning environmental complaints associated with the subject property or surrounding sites. The following agency lists have been reviewed with the indicated results:

*(Distances demonstrated in this search may be more or less from the subject site as indicated in the report.)*

The Office of the Illinois State Fire Marshal (OSFM) Underground Storage Tank “UST” Listings were reviewed. The following USTs were registered for facilities near the subject site.

**Two (2) sites** were listed within one-quarter (0.25) mile of the subject site. **Two (2) sites** were listed within one-eighth (0.125) mile of the subject site.

*MATTESON RADIO	VOLLMER RD. & CICERO AVE.	0.03	NE
**CIRCLE K #6767	4755 VOLLMER RD.	0.05	NE

\*Matteson Radio, Vollmer Road & Cicero Avenue, is listed as having one (1) UST registered for the site. The UST consisted of one (1) 4,000-gallon diesel tank with a removal date of 11/1/1991. No leakage of the removed UST was reported, therefore this site is not considered to pose a REC to the subject site. During Benchmark’s reconnaissance the radio tower was observed approximately one-eighth (0.125) mile east of the subject site.

\*\*Circle K #6767, 4755 Vollmer Road, is listed as having six (6) USTs registered for the site. The USTs consisted of three (3) 9,438-gallon gasoline tanks with a removal date of 9/6/2007. The remaining three (3) USTs consist of one (1) 20,000-gallon gasoline tank, one (1) 12,000-gallon gasoline tank and one (1) 8,000-gallon diesel fuel tank which were installed on 9/27/2007 and are currently in use. This site is listed as being a LUST site. For more information see the LUST section of this report.

Leaking Underground Storage Tank (LUST) Lists were reviewed. The Illinois Environmental Protection Agency (IEPA) database listing of The Leaking Underground Storage Tank Incident Tracking ("LIT") that identifies the status of all Illinois LUST incidents reported to the Illinois Emergency Management Agency ("IEMA") and to the Illinois Environmental Protection Agency.

**One (1) site** was listed within one-half (0.50) mile of the subject site. **One (1) site** was listed within one-eighth (0.125) mile of the subject site.

* SHELL OIL PRODUCTS US	4755 VOLLMER RD.	0.05	NE
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\*Shell Oil Products US, 4755 Vollmer Road, (currently Circle K) (adjoining east across Cicero Avenue) is listed as being a LUST site. The site was reported to the IEMA on 9/6/2007 due to a release of unleaded gasoline. The site received an NFR letter on 3/18/2009 and has an on-site groundwater use restriction in place. Benchmark reviewed a prior Corrective Action Report and does not believe this LUST incident poses a concern to the subject site. See Section 5.2 for more information on this site.

Based on a review of direction and physical considerations of geological and hydro-geological factors, the listed site is not likely to have an impact on the subject site.

FINDS: The Facility Registry Services (FRS) is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The FRS provides Internet access to a single integrated source of comprehensive (air, water, and waste) environmental information about those facilities, sites, or places.

**No sites** were listed within one-half (0.50) mile of the subject site.

State Voluntary Cleanup Program (VCP) Site Remediation Program Databases were reviewed. These databases contain all voluntary remediation projects administered through the Pre-Notice Site Cleanup Program (1989 to 1995) and the Site Remediation Program (1996 to the present).

**No sites** were listed within one-half (0.50) mile of the subject site.

Engineering Control Site Remediation Program Database was reviewed. This database identifies sites that have Engineering Controls in place by the Illinois Environmental Protection Agency.

**No sites** were listed within one-half (0.50) mile of the subject site.

Institutional Control Site Remediation Program Database was reviewed. This database identifies sites that have Institutional Controls in place by the Illinois Environmental Protection Agency.

**No sites** were listed within one-half (0.50) mile of the subject site.

The Resource Conservation Recovery Act Lists of Conditionally Exempt Small Quantity Generators, Small Quantity Generators, Large Quantity Generators and Non-Hazardous Generators were reviewed. The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner. These databases contain listings of Conditionally Exempt Small Quantity Generators, RCRA non-hazardous waste generators, Large Quantity Generators and Small Quantity Generators.

**No sites** were listed within one-quarter (0.25) mile of the subject site.

The Resource Conservation and Recovery Information System-Corrective Action (RCRA-COR) Sites List was reviewed. This is a database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. RCRA-COR identifies hazardous waste handlers with RCRA corrective action activity.

**No sites** were listed within one (1.00) mile of the subject site.

The Resource Conservation and Recovery Act-Treatment, Storage, and Disposal (RCRA-TSD) Sites List was reviewed. RCRA-TSD provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

**No sites** were listed within one-half (0.50) mile of the subject site.

The National Priorities List (NPL-US) was reviewed. The National Priorities List (NPL) is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.

**No sites** were listed within one (1.00) mile of the subject site.

The Delisted National Priorities Sites List was reviewed. This database contains a listing of Delisted NPL sites. These are facilities that have been removed from the NPL list. The EPA may delete a final NPL site if it determines that no further response is required to protect human health or the environment.

**No sites** were listed within one (1.00) mile of the subject site.

The Emergency Response Notification System (ERNS-US) List was reviewed. The primary function of the National Response Center is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment. This database contains a listing of discharge locations.

**No sites** were listed within one-quarter (0.25) mile of the subject site.

Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS-Archived-US) Archived Sites with No Further Remedial Action Planned (NFRAP) List was reviewed. The EPA's database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL).

**No sites** were listed within one-half (0.50) mile of the subject site.

Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS-US) Listing was reviewed. CERCLIS is the Comprehensive Environmental Response, Compensation, and Liability Information System. CERCLIS contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL.

**No sites** were listed within one (1.00) mile of the subject site.

State Spills (Spills-IL) Illinois Hazardous Incident Reports was reviewed. This database includes of all Reported Hazardous Incidents in the state of Illinois from 1987 to current.

**Three (3) sites** were listed within one-half (0.50) mile of the subject site. **Three (3) sites** were listed within one-eighth (0.125) mile of the subject site.

*SHELL OIL PRODUCTS US LISTED (3x)	4755 VOLLMER RD.	0.05	NE
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\*Shell Oil Products US, 4755 Vollmer Road, (currently Circle K) is listed three (3) times as a registered Spill site. All of the Spills are related to the LUST incident that occurred on this site. For more information see the LUST section of this report.

Based on a review of direction and physical considerations of geological and hydro-geological factors, the listed sites are not likely to have an impact on the subject site.

Landfills- Special Waste (LF-SPW-IL) List was reviewed. This database contains landfills that receive Non-Hazardous special waste as reported by the Illinois Environmental Protection Agency.

**No sites** were listed within a one-quarter (0.25) mile of the subject site.

Licensed Dry Cleaners (Dry-Cleaners-IL): This database contains a listing of Licensed Dry Cleaners.

**No sites** were listed within a one-quarter (0.25) mile of the subject site.

Brownfield Sites were reviewed. These databases contain a listing of Brownfields sites listed under the "Cleanups in My Community" program maintained by EPA and the Office of Brownfield Assistance (OBA).

**No sites** were listed within a one-half (0.50) mile of the subject site.

Federal LIEN Sites (LIENS-US) was reviewed. This database contains sites that have had Federal Liens filed on them as reported by the EPA.

**No sites** were listed within a one-half (0.50) mile of the subject site.

#### **EDR Proprietary Lists of Historic Sites of Environmental Concern**

Benchmark reviewed the historic sites of environmental concern listed in the EDR database. The subject site was not listed.

\*P C P Enterprise Inc., 4755 Vollmer Road, (currently Circle K) is listed as being a historical auto from 1991-2014. More information on this site is included in section 5.2.

A copy of the EDR FirstSearch Regulatory Database Report is included in the Appendix of this report.

#### **5.2 – Additional Environmental Records Sources**

Benchmark reviewed a prior Corrective Action Report obtained from the IEPA Document Explorer online database for Shell Oil Products US, 4577 Vollmer Road, the adjoining east property (across S. Cicero Avenue). An exploratory soil and groundwater investigation was performed, dated 2/9/2008. On 5/2/2008 Groundwater & Environmental Services Inc. (GES) installed nine (9) soil borings on site and sampled for BTEX and MTBE. On 5/9/2008 Ziron Environmental Services, Inc. sampled groundwater wells for BTEX and MTBE. The soil ingestion exposure route was below IEPA Soil Remediation Objectives (SROs) indicating further investigation was not required. The soil inhalation exposure route showed that concentrations of benzene and xylenes were above Tier I residential and construction worker SROs. Groundwater sampling and analysis illustrated no groundwater impacts present. The soil component of the groundwater ingestion exposure route had concentrations of benzene which exceeds the Tier I SRO for Class II groundwater resulting in further action required. The site utilized an on-site groundwater use restriction to address the remaining soil impacts. The site then received an NFR Letter on 3/18/2009.

Copies of the Corrective Action Report and NFR letter are in the Appendix section of this report.

No additional environmental records were reviewed.

### 5.3 – Physical Setting Sources

#### 5.3.1 – Soil Conditions

According to the U.S. Department of Agriculture (USDA) - Natural Resource Conservation Service (NRCS), the subject site area is composed of the Milford and Martinton series.

The Milford series consists of very deep, poorly drained and very poorly drained soils formed in lacustrine sediments. These soils are on glacial lake plains. Slope ranges from 0 to 2 percent. The upper part of the series control section (Ap or A horizon) is silty clay loam. The middle part of the series control section (BA or Bg1 horizon) is silty clay. The lower part of the series (Bg2, Bg3 or Cg horizon) is clay loam with masses of oxidized iron in the matrix; neutral.

The Martinton series consists of very deep, somewhat poorly drained soils formed in lacustrine sediments on lake plains. Slope ranges from 0 to 6 percent. The upper part of the series control section (A or Ap horizon) texture is silty clay loam or silt loam. Reaction ranges from moderately acid to neutral depending upon liming practices. The second part of the series control section (Bt or Btg horizon) texture is silty clay loam or silty clay. Reaction ranges from moderately acid to neutral. The third part of the series control section (BCt, BCtg, Bg, or Btg horizon) it is silt loam, loam, or coarser textures in some subhorizon, or is stratified. Textures in the strata range from silty clay to sandy loam. Reaction is slightly alkaline or moderately alkaline and contains carbonates in some pedons. The lower part of the series control section (Cg horizon) it typically is stratified with textures of silt loam, fine sandy loam, silty clay.

During Benchmark's onsite reconnaissance, no significant soil/surface staining or stressed vegetation was observed.

#### 5.3.2 – USGS Topographic Map

Benchmark reviewed the USGS Topographic Map, which illustrated the subject site with an elevation of 695 feet above mean sea level and to be fairly level. Benchmark's observations correlate with the topographic map. Based on the topographic map review, assumed local direction of groundwater flow is to the south towards the Butterfield Creek.

#### 5.3.3 – Wetland Conditions

Wetlands are areas that are temporarily or permanently inundated by surface or groundwater, and support vegetation adapted for life in saturated soils. Characteristic hydrology, vegetation, and soils define such areas. Areas typically envisioned as wetlands are marshy, swampy, or tidal areas.

During Benchmark's assessment of the property, potential wetland indicators were observed on the

subject site a freshwater pond at the southeast portion of the subject site.

#### National Wetland Inventory Map

Benchmark personnel reviewed the National Wetland Inventory Map for the subject site area. The map did illustrate freshwater emergent wetlands on the subject site. The map did illustrate freshwater emergent wetland areas on the adjacent west properties.

Copies of the USDA-NRCS Soil Survey, USGS Topographic, and USFWS National Wetland Inventory Maps for the subject site area are included in the Appendix section of this report.

### **5.4 – Historical Use Information of the Property**

#### *5.4.1 – Aerial Photographs*

Benchmark personnel obtained the following aerial photographs from Google Earth, USGS, and Illinois Historical Aerial Photographs (ILHAP):

	<b>2017 Aerial Photograph</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO BE IN ITS CURRENT VACANT LAND CONFIGURATION WITH A DRIVEWAY/ROAD AT THE NORTH PORTION AND A PAVED AREA AT THE NORTHEAST CORNER
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY VACANT LAND
<b>SOUTH:</b>	MATTESON AVENUE, FOLLOWED BY VACANT LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AN APPARENT GASOLINE STATION AND VACANT LAND
<b>WEST:</b>	VACANT LAND AND RESIDENTIAL PROPERTIES

	<b>2010 Aerial Photograph</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO BE IN ITS CURRENT VACANT LAND CONFIGURATION WITH A DRIVEWAY/ROAD AT THE NORTH PORTION AND A PAVED AREA AT THE NORTHEAST CORNER
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY VACANT LAND
<b>SOUTH:</b>	MATTESON AVENUE, FOLLOWED BY VACANT LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AN APPARENT GASOLINE STATION AND VACANT LAND
<b>WEST:</b>	VACANT LAND

	<b>2005 Aerial Photograph</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO BE A IMPROVED WITH A TEMPORARY CONSTRUCTION TRAILER AT THE NORTHEAST CORNER OF THE SITE
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY VACANT LAND
<b>SOUTH:</b>	MATTESON AVENUE, FOLLOWED BY VACANT LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AN APPARENT GASOLINE STATION AND VACANT LAND
<b>WEST:</b>	VACANT LAND



	<b>1991 and 2002 Aerial Photographs</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO VACANT/AGRICULTURAL LAND
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY VACANT LAND
<b>SOUTH:</b>	VACANT LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AN APPARENT GASOLINE STATION AND VACANT LAND
<b>WEST:</b>	VACANT LAND

	<b>1962 Aerial Photograph</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO BE A FARMSTEAD AT THE EAST PROPERTY LINE AND AGRICULTURAL LAND
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY AGRICULTURAL LAND
<b>SOUTH:</b>	AGRICULTURAL LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AGRICULTURAL LAND
<b>WEST:</b>	AGRICULTURAL LAND

	<b>1938 and 1951 Aerial Photographs</b>
<b>SUBJECT SITE:</b>	THE SUBJECT SITE APPEARS TO BE AGRICULTURAL LAND
<b>NORTH:</b>	VOLLMER ROAD, FOLLOWED BY AGRICULTURAL LAND
<b>SOUTH:</b>	AGRICULTURAL LAND
<b>EAST:</b>	S. CICERO AVENUE, FOLLOWED BY AGRICULTURAL LAND
<b>WEST:</b>	AGRICULTURAL LAND

With the exception of the apparent adjacent gasoline station to the east (across S. Cicero Avenue) from 1991-2017, the review of the aerial photographs did not visually reveal any environmental concerns. See Section 5.2 for additional information.

Copies of the Aerial Photographs are included in the Appendix of this report.

#### 5.4.2 – Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were not available for the subject site per EDR.

A copy of the Sanborn Fire Insurance Maps-No Coverage letter is included in the Appendix of this report.

5.4.3 – City Directories

City Directories were not obtained for the subject site.

5.4.4 – Assessor Records

Benchmark reviewed records from the Cook County Assessor online database, which revealed the following:

- *Address:* 19930 S. Cicero Avenue
- *PIN:* 31-16-210-001-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 1.2 acres
  
- *Address:* 19948 W. Stoller Street
- *PIN:* 31-16-211-003-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 0.6 acres
  
- *Address:* 19958 W. Stoller Street
- *PIN:* 31-16-211-002-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 0.9 acres
  
- *Address:* 19929 W. Stoller Street
- *PIN:* 31-16-210-006-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 1.3 acres
  
- *Address:* 19949 W. Stoller Street
- *PIN:* 31-16-210-005-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 0.5 acres

- *Address:* 19959 W. Stoller Street
- *PIN:* 31-16-210-004-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 01.0 acres
  
- *Address:* 19960 S. Cicero Avenue
- *PIN:* 31-16-210-003-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 1.8 acres
  
- *Address:* 19950 S. Cicero Avenue
- *PIN:* 31-16-210-002-000
- *Township:* Rich
- *Property Class:* Vacant
- *Property Size:* 0.8 acres

A copy of the reviewed Cook County Assessor online database records can be found in the Appendix of this report.

#### 5.4.5 – Building Department / Fire Department

Benchmark submitted a Freedom of Information Act (FOIA) request to the Village of Matteson Fire Department and Building Department. The Village of Matteson did not respond within the time frame of this report.

A copy of the FOIA request is included in the Appendix of this report.

#### 5.4.6 – Title Records – Environmental Liens

According to contractual agreements between Benchmark and the client, an environmental liens or activity and land use limitations search was not included in the scope of this report. The Environmental Data Resources (EDR) database review did not indicate that institutional or engineering controls have been recorded for the subject property.

### **5.5 – Historical Use of Adjoining Properties**

Based on the historical background research, the adjoining properties have been predominantly utilized as residential/commercial since the development of the agricultural land after the late 1990's.

## **6.0 – Onsite Reconnaissance**

### **6.1 – Methodology and Limiting Conditions**

Benchmark personnel performed an onsite reconnaissance of the subject site on January 26, 2018. Benchmark attempted to assess the regulatory and environmental aspects of the property. Our study focused on the following areas: air emissions, water sources and discharges, stormwater discharges, hazardous wastes and materials, underground storage tanks, asbestos, Polychlorinated biphenyls (PCBs), soil conditions, wetlands, and a regulatory list review of surrounding sites.

Benchmark performs the on-site reconnaissance using experienced professionals. The property, improvements and surrounding areas are visually and physically inspected from ground level and normally accessible areas throughout the subject site property.

### **6.2 – General Site Setting**

The subject site consists of eight (8) parcels of land, approximately 10 acres in size, currently vacant and covered with low vegetation & shrubs/trees along the southeast and south property line. The site has an asphalt parking/drive area at the northeast corner of the site with a stormwater retention pond at the southeast section. Utilities are present along the north, south and east property lines. Benchmark observed concrete barriers, discarded wood fencing and construction equipment such as cones and signs. During Benchmark's onsite, two (2) 55-gallon drums were observed on the southeast section of the property.

#### 6.2.1 – Air Emissions

The Clean Air Act (CAA), enacted in 1963 and most recently amended in 2004, seeks to protect the public's health and welfare by safeguarding and improving the quality of our air. Under the CAA, the EPA sets air quality standards and relies on the states to develop programs to attain those standards. While the CAA regulates both "stationary" and "mobile" sources of air pollution, the stationary source restrictions are of primary concern to businesses. All facilities must meet permit requirements, even if that requires new control technologies in new or expanded facilities.

The subject site is currently unimproved vacant land and does not produce any air emissions at this time.

#### 6.2.2 – Water Sources and Discharges

The primary purpose of the Clean Water Act (CWA), enacted in 1977 and most recently amended in 2002, is to "restore and maintain the chemical and biological integrity of the nation's waters." Any company that discharges wastewater into the nation's navigable waters or a public sewer system must comply with CWA permits. The CWA contains extensive enforcement measures. In addition to the "self-enforcement" of businesses and publicly owned treatment works (POTWs) imposed by the CWA's monitoring and reporting requirements, the Act includes broad inspection powers and many enforcement approaches, including administrative orders, civil suits, and criminal prosecution.

#### Water Sources

The subject site is currently vacant land. When developed, the subject site will obtain water the Village of Matteson, which purchases its water from the City of Chicago Water Department. Benchmark obtained a copy of the 2016 Village of Matteson/City of Chicago Water Quality Report which confirmed that the source and supply is in compliance with drinking water regulations set by the Safe Drinking Water Act of 1986, the USEPA, and the IEPA. Fire hydrants were observed along the north, south and east boundaries.

#### Wastewater Discharges

The subject site is currently vacant land and therefore does not produce any wastewater at this time. When the site is developed the wastewater discharges will be received into the sanitary sewer system which is under the jurisdiction of the City of Chicago Metropolitan Wastewater Reclamation District of Greater Chicago (MWRD). Sewer manholes were observed along the north, south and east boundaries.

### 6.2.3 – Storm Water Discharge

On November 16, 1990, the USEPA published its final rule on National Pollutant Discharge Elimination System (NPDES) permitting of storm water discharges. All facilities included under the definition of "storm water discharge associated with industrial activity" must obtain a NPDES permit. NPDES storm water permits will be issued through existing permit authorities. Under this ruling, "storm water discharge associated with industrial activity" is defined as storm water directly related to manufacturing, process or raw materials storage areas at an industrial plant. Regulated storm water includes discharges from industrial yards, immediate access roads, and rail lines used by carriers of raw materials, material handling sites, refuse sites, etc., as described in the rule.

Based upon the current status of the subject site, Benchmark believes storm water permits are not applicable at this time but may be required prior to development.

### 6.2.4 – Hazardous Wastes and Materials / Petroleum Products/Wastes / Solid Wastes / Medical/Bio Wastes

At the time of Benchmark's assessment, materials deemed hazardous were searched for on the premises. Hazardous materials are evaluated according to provisions set forth by the Resource Conservation and Recovery Act (RCRA) and the Occupational Health and Safety Administration (OSHA) Final Ruling, which require Material Safety Data Sheets (MSDSs).

#### Hazardous Wastes/Materials

During Benchmark's on site reconnaissance, two (2) unlabeled 55-gallon drums of unknown contents were observed. The drums were rusting and the ends were bulging. Benchmark recommends that the drums be immediately removed by a licensed disposal company.

#### Petroleum Products/Wastes

Benchmark did not observe any petroleum products/wastes at the subject site other than the drums of unknown content during the onsite reconnaissance.

#### Solid Wastes

Benchmark did observe minor areas of dumping which consisted of tires and concrete debris.

#### Medical/Bio Wastes

Benchmark did not observe medical/bio wastes at the subject site.

6.2.5 – Underground Storage Tanks / Aboveground Storage Tanks

Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) are an environmental concern if leakage or spillage has occurred. Leaking or overfilled USTs/ASTs can contaminate the surrounding soil, as well as the groundwater. Our report includes a search of the database provided by EDR. We also visually inspect the site for obvious signs of tank placement, such as gas pumps; fill ports, and man-ways. Not so obvious tank related items such as vent stacks, petrometers, pipes, valves, raised concrete, etc., are also included in our onsite reconnaissance.

Benchmark did not observe any signs of UST or AST emplacements during the onsite reconnaissance.

Benchmark reviewed the Office of the State Fire Marshal (OSFM) Online Database to determine if USTs were on file for the subject site. No records for the subject site were found.

6.2.6 – Asbestos Materials

The subject site was visually inspected for asbestos. The purpose of this segment of our onsite reconnaissance was to identify visible areas, which may contain asbestos containing materials (ACM). This inspection is performed as a cursory examination of clearly visible materials located in the interior and exterior of the building(s). This onsite reconnaissance is not presented to fulfill the requirements of USEPA, National Emissions Standards for Hazardous Air Pollutants (NESHAPS), or other state or local programs. Prior to performing any renovation, demolition, or disturbance of suspect materials, proper inspection, sampling, and analysis would be required.

At the time of the onsite reconnaissance, Benchmark did not observe any possible asbestos containing material or potential asbestos fill materials.

#### 6.2.7 - Polychlorinated biphenyls, (PCBs)

PCBs are controlled by the Toxic Substance Control Act (TSCA) of 1974 and most recently amended in 2002. TSCA is charged with regulating the manufacture of substances that it considers toxic and harmful to health and the environment. For this reason, our onsite reconnaissance examines properties for items that could contain, or may have been contaminated with, PCBs. Although PCBs had many uses, the most widespread use was in the manufacture of nonflammable dielectric fluids (askarels) for electrical transformers, capacitors, and other liquid - cooled electrical equipment.

Lighting ballasts can be found within fluorescent, mercury lighting fixtures, sodium vapor lighting fixtures, and neon lights. These ballasts are composed of a small transformer, a capacitor, and a thermal cut-off switch. The capacitor is the only component that may contain PCB's. Ballasts manufactured in the US after 1978 are labeled "No PCBs" and therefore any unlabeled ballast from a US or foreign source should be assumed to contain PCBs (US EPA 1993).

During Benchmarks onsite three (3) pad mounted transformers were observed along the east property line of C1-A. No staining or leaking was present at the time of Benchmark's onsite. The remaining areas of subject site are vacant/undeveloped land, no potential PBCs were observed.

#### 6.2.8 – Lead-Based Paint

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and chips by disturbing lead-based paint, which can be harmful to adults and children. To protect against this risk, on April 22, 2008, EPA issued a rule requiring the use of lead-safe practices and other actions aimed at preventing lead poisoning. Under the rule, as of April 22, 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination.

The subject site is vacant/undeveloped land and no lead-based paint containing debris was observed.



6.2.9 – Mold

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) is working to inform the public as to the health hazards associated with mold, what can be done to minimize mold, and what ways can be effective in cleaning up mold.

Mold could develop in as short of a time as 24 - 48 hours of water exposure. Even worse, it may continue to grow until steps are taken to thoroughly dry out the premises and eliminate the source of moisture. The Centers for Disease Control and Prevention (CDC) says that you may recognize mold by the sight - wall and ceiling discoloration, and smell - a musty, earthy odor. Although mold is a naturally existing substance, it can be harmful to humans.

When airborne mold spores are present in large quantities, they can cause allergic reactions, asthma episodes, infections, and other respiratory problems. Continued exposure to mold may result in nasal or sinus congestion, eye, nose, or throat irritations, and adverse effects to the nervous system. Individuals who are at the greatest risk are infants and children, the elderly, those with immune compromised related diseases, pregnant women, and those with existing respiratory conditions.

The subject site is vacant/undeveloped land, therefore mold is not a concern at this time.

6.2.10 – Vapor Encroachment Concern (VEC)/Vapor Intrusion Condition (VIC)

Vapor Encroachment Concern (VEC) describes the migration of vapors anywhere onto a property or near a property (not necessarily underneath or into a structure on the property). The ASTM definition of a Vapor Encroachment Concern or “VEC” is “the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property.” Vapor Encroachment is a broader concern than Vapor Intrusion, which really focuses just on the potential for vapors to exist inside a building.

Vapor Intrusion Condition (VIC) occurs when volatile chemicals migrate from contamination in the soil or groundwater up into a building’s interior space. Vapor Intrusion can pose a potential health threat to the occupants of the building, especially to sensitive populations such as children. Vapor Intrusion has been a particular concern with regards to contamination caused by dry cleaning solvents (Perchloroethylene or “PCE” being one of the most common), because these chemicals are highly volatile and toxic. But, Vapor Intrusion can also occur with other contaminants such as petroleum products, which can also pose a health risk. Vapor Intrusion can be caused by contamination on-site or off-site from a property. Sometimes a plume of contamination from an off-site source (for example, a neighboring dry cleaner) can migrate onto the subject property and underneath (or in close vicinity of) the building, and thus pose a risk of entering the building.

Benchmark reviewed standard environmental records to identify if there are known or suspected sources of contamination within the area of concern. The approximate minimum search distance is based upon the chemical of concern (i.e. petroleum hydrocarbons vs. non-petroleum hydrocarbons) and the location of a known or suspected source of contamination. According to ASTM E 2600-08, the primary area of concern is limited to the subject site and immediately surrounding properties. The secondary area of concern is limited to vicinity properties situated hydro-geologically up gradient (unless otherwise stated, groundwater flow is approximated based on surface topography).

Based on a review of available information, no current sources of VOC/SVOC contamination that would pose a VEC were noted. A review of the adjoining east (across S. Cicero Avenue) gasoline station indicated that no groundwater impacts were present; therefore Benchmark does not consider Vapor Intrusion/Vapor Encroachment to pose a concern to the subject site at this time. The observed drums of unknown materials could potentially pose a VI concern if they are damaged or leak.

## **7.0 – Interviews**

### **7.1 – Interview with Owner**

An Environmental Questionnaire, as per ASTM E 1527-13 Standard Practices, was submitted to First Strategic Capital LLC, a representative for the owner of the property, to ascertain any specialized knowledge, both past and present, such as industrial activities, gasoline filling stations, dry-cleaning operations, junkyards and landfills, automotive repair facilities, storage of industrial drums, contaminated fill materials, underground and aboveground storage tanks, pits, ponds and lagoons, environmental liens and various other environmental issues (specified in the Questionnaire).

Benchmark was informed that the subject site has been bank-owned for approximately ten (10) years and the prior owner is not available for an interview and not able to fill out the Questionnaire.

### **7.2 – Interview(s) with Site Manager**

The site is vacant land and as such, there was no Site Manager.

### **7.3 – Interview(s) with Occupant(s)**

The site is vacant land and as such, there were no occupants.

### **7.4 – Interview(s) with Local Government Officials**

Benchmark submitted a Freedom of Information Act (FOIA) request to the Village of Matteson Fire Department and Building Department. The Village of Matteson did not respond within the time frame of this report.

A copy of the FOIA requests is included in the Appendix of this report.

### **7.5 – Interview(s) – Other**

No other interviews were conducted.

## 8.0 – Findings

Benchmark Environmental Services, Inc. (Benchmark) was retained by Mr. Michael McCann of First Strategic Capital LLC, Palatine, Illinois to perform an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment (ESA) per EPA 40 CFR Part 312 & ASTM E 1527-13 at Vacant Lots C1 and C1-A, Matteson, Illinois, as required for financial documentation.

This assessment is required as part of the financial documentation for this property. This report should satisfy the requirements presented by the lending institution.

During the course of our assessment, performed under Benchmark Project #18162 we have attempted to determine if any potential chemical and/or physical hazards are present on the site.

The following environmental concerns were found during the performance of Benchmark's investigation:

### Business Environmental Risks (BER)

No BERs were discovered at the subject property.

### Historical Recognized Environmental Conditions (HREC)

No HRECs were discovered at the subject property.

### Controlled Recognized Environmental Conditions (CREC)

No CRECs were discovered at the subject property.

### Material Threats

During Benchmarks onsite reconnaissance two (2) 55-gallon drums of unknown materials were observed centrally located on Lot C1. These drums appeared to be full of liquid and were rusting and bulging at the ends. This poses a material threat for the subject site. Benchmark recommends that the drums be immediately removed by a licensed disposal company to eliminate the potential for leakage and impacts to soil and groundwater.

### 8.1 – Data Gaps

Benchmark did not receive a FOIA response from the Village of Matteson or Completed Questionnaire within the time frame of this report, which represents a Data Gap. Based on other information obtained and reviewed, these Data Gaps do not constitute a REC. No additional Data Gaps were encountered during the performance of this assessment that would alter the conclusions and recommendations of this report.

### 9.0 – Professional Opinion

Based on a comprehensive visual inquiry at the subject site, improvements and surroundings properties and after a review of available historical information, databases and interviews it is the opinion of Benchmark Environmental Services, that **“Recognized Environmental Conditions”**\* exist at the subject site.

### 10.0 – Conclusions

Based on the onsite inspection, historical research, database review, interviews and other available sources, **“Recognized Environmental Conditions” (RECs)** were revealed at the subject site.

- During Benchmarks onsite reconnaissance two (2) 55-gallon drums of unknown materials were observed centrally located on Lot C1. These drums appeared to be full of liquid and were rusting and bulging at the ends. This poses a Material Threat and a REC in regards to the threat of future release to the environment, at the subject site. Benchmark recommends that the drums be immediately removed by a licensed hazardous waste disposal company to eliminate the potential for leakage and impacts to soil and groundwater.

### 11.0 – Deviations

Benchmark Environmental Services, Inc. has performed an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment per EPA 40 CFR Part 312 & ASTM E 1527-13. To the best of Benchmark’s knowledge, no deviations from the above listed standards were made during this study.

### 12.0 – Additional Services

While this study may exceed EPA 40 CFR Part 312 and ASTM Standard E 1527-13, no additional services were contractually outlined in conjunction with this study.

### 13.0 – References

IEPA  
OSFM  
USEPA  
ISGS  
USGS  
Environmental Data Resources (EDR)  
Google Earth™  
Personal Interviews  
USDA-NRCS Soil Survey  
U.S. Fish and Wildlife Service  
Village of Matteson  
Rich Township  
Cook County

\*“Recognized Environmental Conditions,” (RECs) — the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment: (2) under conditions indicative of a release to the environment: or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

\*“Historical Recognized Environmental Conditions” (HRECs) — a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

\*“Controlled Recognized Environmental Conditions” (CREC) — a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

\*“Business Environmental Risk (BER)” is a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of *commercial real estate*, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of *business environmental risk* issues may involve addressing one or more non-scope considerations.

\*“Material Threat” — a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment.

#### 14.0 – Signatures of Environmental Professionals

Benchmark Environmental Services, Inc. (Benchmark) was retained by Mr. Michael McCann of First Strategic Capital LLC, Palatine, Illinois to perform an All Appropriate Inquiry (AAI), Phase I Environmental Site Assessment (ESA) per EPA 40 CFR Part 312 & ASTM E 1527-13 at Vacant Lots C1 and C1-A, Matteson, Illinois, as required for financial documentation.

Benchmark Environmental Services, Inc. (Benchmark), performed an All Appropriate Inquiry (AAI) per EPA 40 CFR Part 312 & ASTM E 1527-13 at the property located at the above referenced addresses. The on-site reconnaissance of the subject property was performed on January 26, 2018. In evaluating the property, Benchmark ascertained whether any environmental hazards or liabilities might exist on or around the site that would represent a potential risk or financial liability to a buyer, or a lending institution with interest in the property.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR Part 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

If you should have any questions regarding this report, please feel free to contact the undersigned at 1-800-400-5811.

Sincerely,

BENCHMARK ENVIRONMENTAL SERVICES, INC.

  
William J. Liniewicz, C.E.M.  
Principal





## 15.0 – Qualifications of Environmental Professionals

### **WILLIAM J. LINIEWICZ, Master CHMM Principal**

Mr. Liniewicz received his Bachelor of Science degree in Chemistry, Biology, and Psychology from National Lewis University. He also has received his Certified Hazardous Materials Manager certification from the Illinois Institute of Technology and has taken numerous advanced graduate courses in Hazardous Waste Remediation, Groundwater Pollution Remedial Actions, and Monitoring Well Technology. Responsive to clients needs to maintain compliance with EPA, OSHA, DOT, and state regulations, concerning TSCA, RCRA, CERCLA, SARA, AHERA, CWA, CAA, LUST, and RPTA, directed at industries, state agencies, municipalities, banks, law firms, real estate, and other professionals.

Experienced and knowledgeable in the following areas:

- Phase I Environmental Site Assessments
- Phase II Investigations
- Remedial Investigations (RIFLC)
  - \*Soil Borings / GEOPROBE sampling
  - \*Groundwater Monitoring - well installation
  - \*Soil Vapor Surveys
  - \*Remedial Equipment Pilot Tests
- Remedial Investigation / Remedial Action Reports
- Remediation Systems Design
- Air, Storm Water, and Wastewater Permitting
- Hazardous and Special Waste Management
- Aboveground and Underground Storage Tank System Management
- Baseline Monitoring Reports (BMRs)
- Spill Prevention Containment and Countermeasures Plans (SPCC)

**Walter Karla, C.H.M.M.  
Senior Project Manager**

Mr. Karla has over twenty years' experience in performing and managing Phase I Environmental Site Assessments, Phase II Subsurface Investigations, Site Characterizations / Investigations, Remedial Investigations, Corrective Action Planning and Design, Wetland Delineations, Asbestos Inspections, Lead Inspections and regulatory agency reporting and negotiations leading to site closure.

**Education**

- Northeastern Illinois University – Bachelor's Degree in Environmental / Earth Science-Geology

**Certifications – Licenses**

- Licensed Professional Geologist-Tennessee
- Certified Hazardous Materials Manager
- IDPH Licensed Asbestos Inspector
- Wisconsin DHS Licensed Asbestos Inspector
- IDPH Licensed Lead Inspector/Risk Assessor

**Special Training**

- OSHA 40 Hour Hazardous Materials Training and Refresher Courses
- OSHA Hazardous Waste Site Supervisor Training
- Army Corps of Engineers Wetland Delineation & Management Training
- ASTM RBCA Training
- USEPA Radiation Worker Training

**Kalina Naydenova**  
**Relations Manager/ Environmental Scientist**

Mrs. Naydenova has been the company's Relations Manager since 2009. Main responsibilities include developing and maintaining Benchmark's relationship with clients.

Additionally, Mrs. Naydenova has over eight years of experience in performing detailed Environmental Site Assessments including RSRA, TSA and Phase I ESA reports. Current responsibilities include leading environmental educational presentations, overseeing the quality control of Environmental Assessments, performing different levels of Environmental Assessments, environmental background research, onsite reconnaissance, SBA and HUD Environmental Assessments.

**Education**

- Sofia University of Bulgaria, EU – Bachelor of Science Degree in Ecology and Environmental Protection – 2003.
- The University of Chemical Technology and Metallurgy, Bulgaria, EU – Master of Science Degree in Ecology and Environmental Protection – 2005.
- The University of Chemical Technology and Metallurgy, Bulgaria, EU – Master of Science Degree in Biotechnology – 2005.

**Kyle Kesselhuth**  
**Environmental Specialist**

Mr. Kesselhuth is attending Loyola University in Chicago and is currently working toward his Bachelor's in Environmental Science Degree. He has completed his Environmental Health and Safety program at the College of Lake County and applies what he learns academically towards his work.

Currently Mr. Kesselhuth assists in composing detailed Phase I Environmental Site Assessments and identifying potential environmental concerns through the research of site photographs, soil survey maps, topographic maps, wetland maps, and environmental regulatory list review, as well as comprehensive visual inspections of buildings including building materials, and parcels of land.

**Education**

- College of Lake County

**Special Training**

- 40 hr OSHA Hazardous Waste Operations and Emergency Response Standard and Refresher Courses
- 16 hr OSHA Confined Space Entry Training
- RCRA Hazardous Waste Generator Training
- Advanced Air Monitoring Certification

**Josh Cox**  
**Environmental Scientist**

Mr. Cox graduated from Augustana College, receiving a Bachelor Degree in Environmental Studies. His unique interdisciplinary education lends to his experience with resource management, geography, wildlife ecology, conservation, and soil sampling.

**Education**

- Augustana College, BA in Environmental Studies

Mr. Cox's coursework included multiple geography classes focusing in identification, historical and field-based investigation. He also has an in-depth background in biological and ecological indicators of environmental issues, and an understanding of environmental ethics and the philosophy of science, paired with a long history with independent research, field assessments and observations, and analysis.

**Experience**

Currently, Mr. Cox assists in compiling Phase I Environmental Site Assessments and identifying potential environmental concerns through research of Sanborn Fire Insurance Maps, aerial photographs, soil survey maps, topographic maps, wetlands, local and state databases and environmental regulatory list review, as characteristics, and historical research of parcels of land.

Previously, Mr. Cox worked with the Illinois Crop Improvement Association on field monitoring projects around Northern and Central Illinois. Since graduation Mr. Cox developed the ability during onsite environmental reconnaissance to quickly identify stressed vegetation and other indicators of environmental issues.

**Allison Mann**  
**Environmental Scientist**

Ms. Mann graduated from Carthage College, receiving a Bachelor Degree in Environmental Science. Her unique interdisciplinary education lends to her experience with resource management, geography, ecology, conservation, environmental law, and soil sampling.

**Education**

- Carthage College, BA in Environmental Studies - 2015

Ms. Mann's coursework included multiple geography and biology classes focusing in identification, historical and field-based investigation. She also has an in-depth background in biological and ecological indicators of environmental issues, environmental behavior, environmental law, an understanding of environmental ethics, paired with a history with independent research, field assessments and observations, and analysis.

**Experience**

Currently, Ms. Mann assists in compiling Phase I Environmental Site Assessments and identifying potential environmental concerns through research of Sanborn Fire Insurance Maps, aerial photographs, soil survey maps, topographic maps, wetlands, local and state databases and environmental regulatory list review, as characteristics, and historical research of parcels of land.

Since graduation Ms. Mann developed the ability during onsite environmental reconnaissance to quickly identify stressed vegetation and other indicators of environmental issues.

**Adam K. Zakroczymski III,  
Environmental Professional (EP)**

Mr. Zakroczymski (Zak) has 18 years of experience in the environmental consulting field managing projects as a technician, senior environmental specialist and supervisor of environmental site assessments. In the industry, Mr. Zak has performed hundreds of environmental site inspections and been responsible for drawing conclusions regarding potential “Recognized Environmental Conditions” (REC’s), as well as developing a course of action to investigate and remediate contaminated properties. Additionally, Mr. Zak was responsible for training new employees and educating them about the laws and standards governing the industry. Mr. Zak has attended many seminars and independently studied the EPA 40 Part 312 and ASTM 1527-13 standards. From there, Mr. Zak conducted many training seminars to clients and potential clients regarding changes within the industry, as well as new standards and practices. Mr. Zak has experience in Phase II Subsurface Investigations, UST Removals, Remedial Activities, as well as hours logged in Asbestos Demolition Inspections.

**Education**

- Carmel High School – Mundelein, Illinois
- College of Lake County – Grayslake, Illinois – General undergraduate studies with honors
- Trinity International University – Deerfield, Illinois – General undergraduate studies
- Columbia College – Chicago, Illinois – Graduated with a Bachelor’s of Arts with honors

**Additional Training**

- OSHA 40 Hour Hazardous Material Training
- 8 Hour HAZWOPER Refresher Training (2015)
- American Petroleum Institute (API) WorkSafe Safety Key Certified

## 16.0 – APPENDIX

- ❖ Site Location Map
- ❖ Site Photographs
- ❖ Area Diagram
- ❖ Aerial Photographs
- ❖ USDA-NRCS Soil Survey Map
- ❖ USGS Topographic Map
- ❖ USFWS Wetland Inventory Map
- ❖ Cook County Assessor's Records
- ❖ Village of Matteson Building & Fire Department FOIA Request
- ❖ OSFM FOIA Request
- ❖ IEPA FOIA Request/Response
- ❖ IEPA Online Documents
- ❖ Village of Matteson and City of Chicago 2016 Water Quality Reports
- ❖ Prior Phase I Report by O'Brien & Associates, Inc. dated 11/21/2002
- ❖ Environmental Data Resources (EDR) Sanborn Fire Insurance Maps – No Coverage Letter
- ❖ Environmental Data Resources (EDR) FirstSearch Regulatory Database Report



16.0

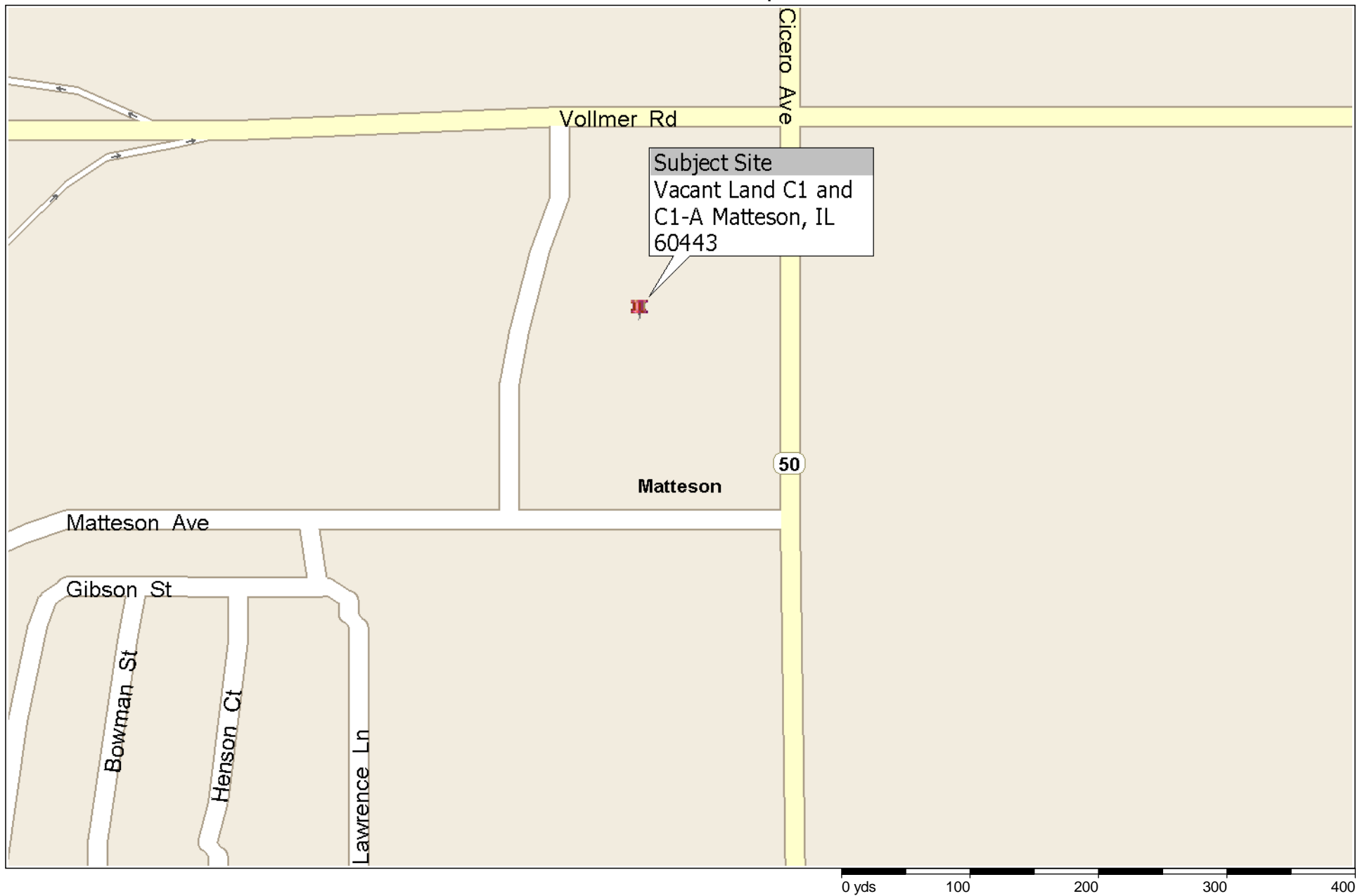
APPENDIX



## SITE LOCATION MAP



## Site Location Map



## SITE PHOTOGRAPHS



## SITE PHOTOGRAPHS



Subject site north property line facing east



Subject site east property line facing north



Subject site south property line facing west



Subject site facing north



Adjacent property to the north across Vollmer Road



Adjacent property to the east across Cicero Avenue



## SITE PHOTOGRAPHS



Adjacent property to the south across Matteson Ave.



Adjacent properties to the west



Sewer utilities along the north property line



Fire hydrant along the north property line



Fire hydrant along the east property line



Communication utilities along the south property line



## SITE PHOTOGRAPHS



Fire hydrant along the south property line



Pad-mounted transformers at northwest property line



Two discarded, full (2) 55-gallon drums-central



Asphalt drive/parking area along the east property line



Potential wetland/drainage swale area



Storm water retention pond at southeast side

## SITE PHOTOGRAPHS



Subject site facing north



Subject site facing northwest



Concrete barriers and discarded wood fencing



Natural gas marker along west property line



AREA DIAGRAM



# AREA DIAGRAM



## AERIAL PHOTOGRAPHS



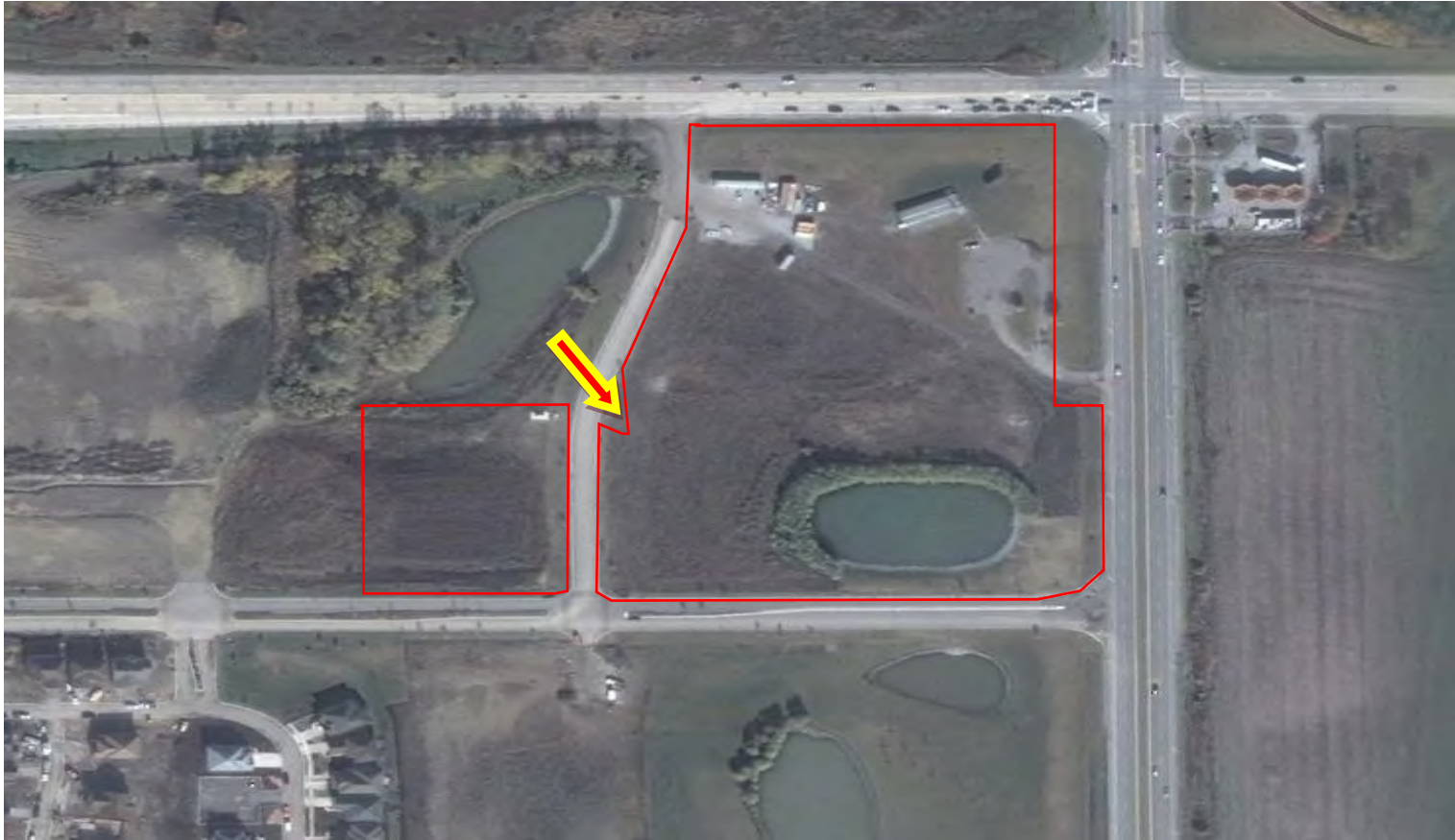


**Image Source: Google Earth  
2017 Aerial Photograph**

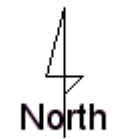
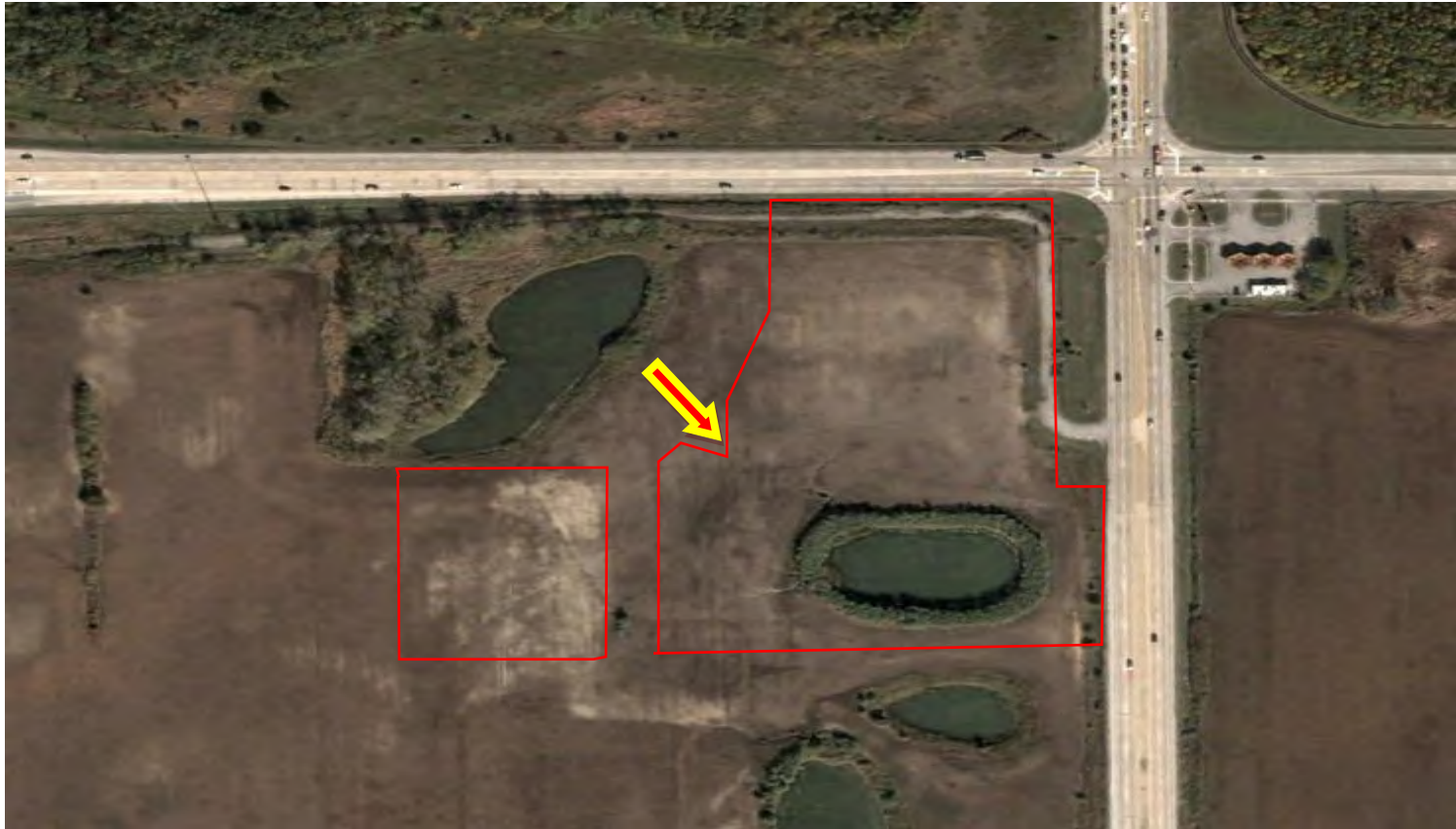




**Image Source: Google Earth  
2010 Aerial Photograph**



**Image Source: Google Earth  
2005 Aerial Photograph**



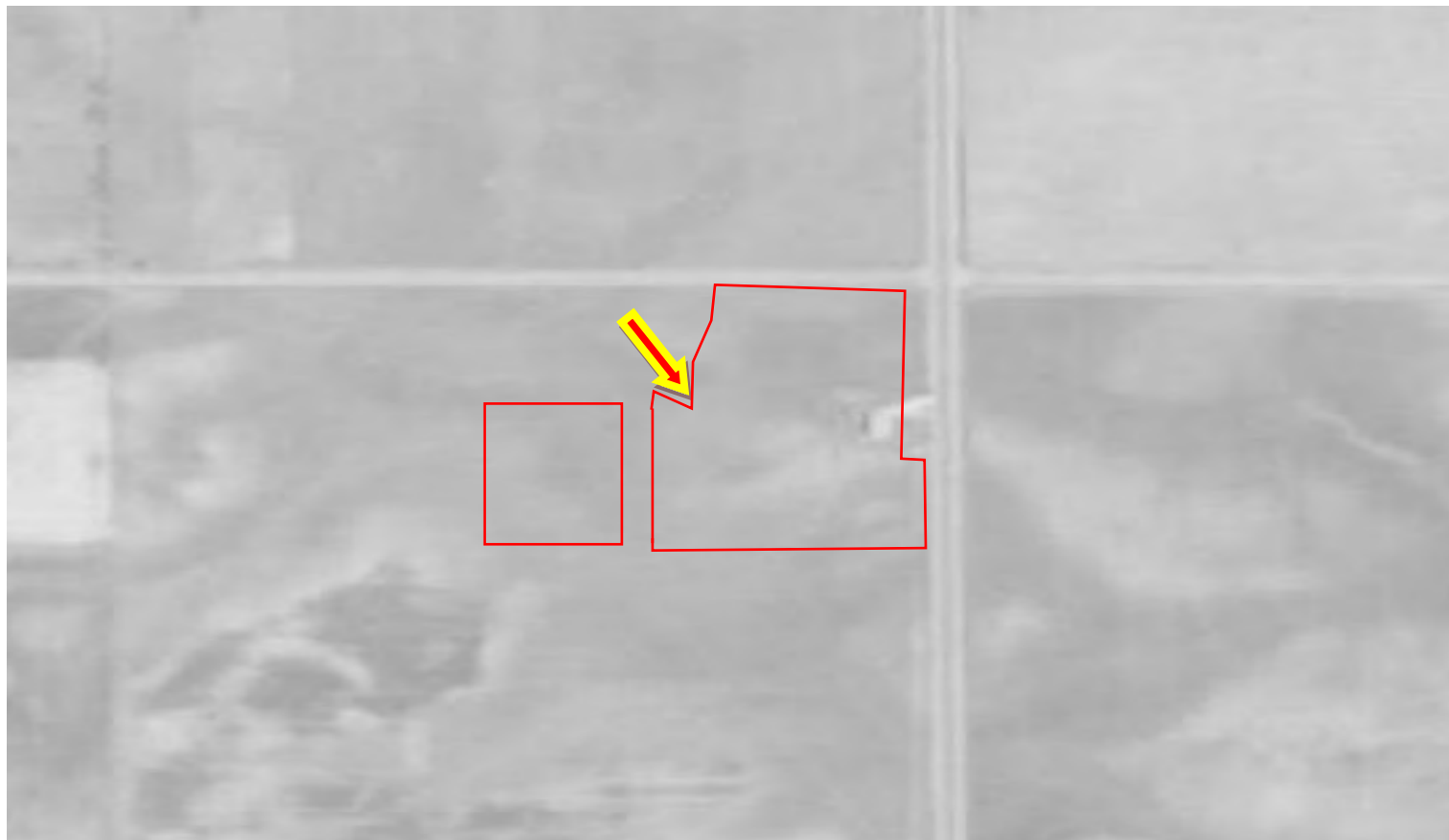
**Image Source: Google Earth  
2002 Aerial Photograph**



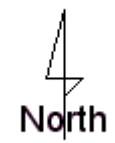
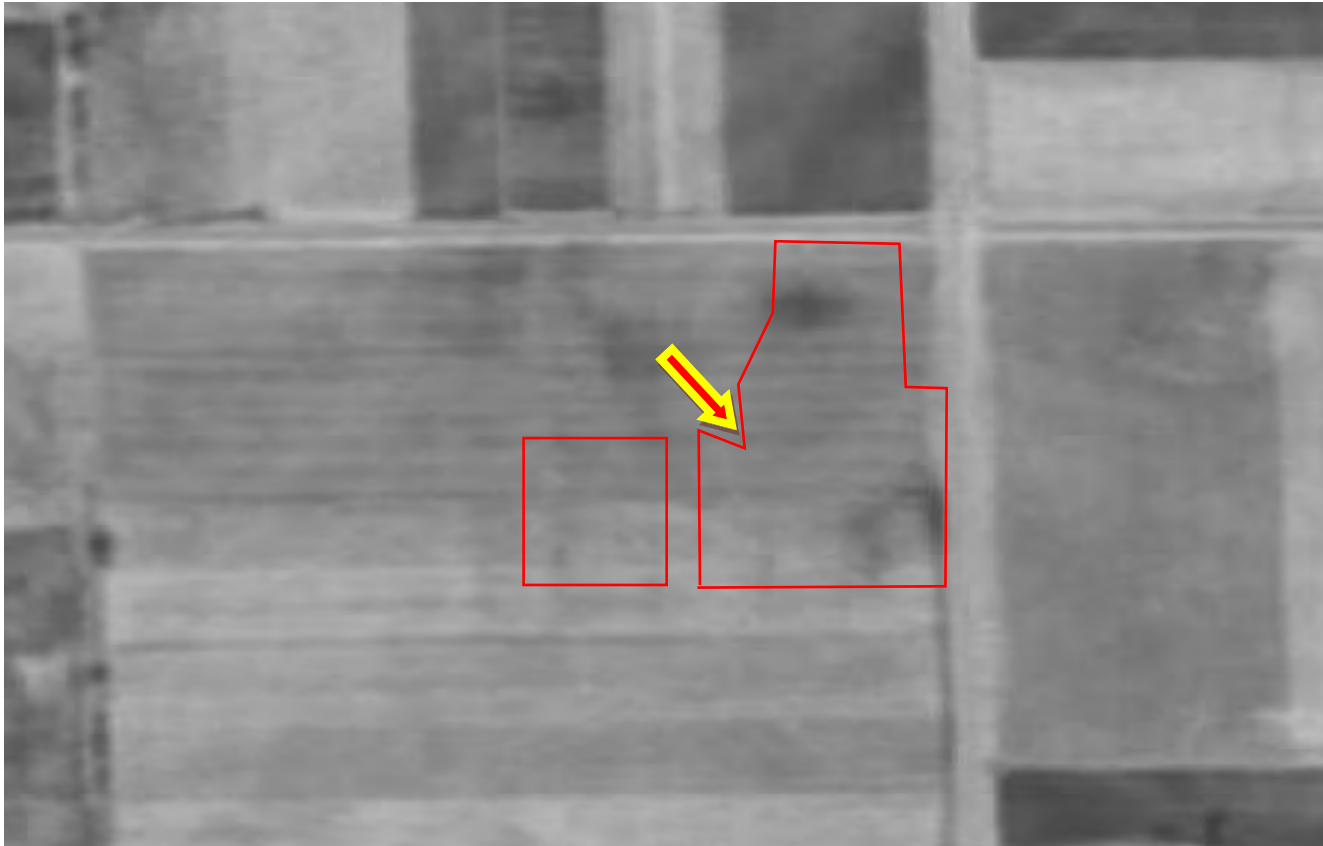


**Image Source: Google Earth  
1999 Aerial Photograph**

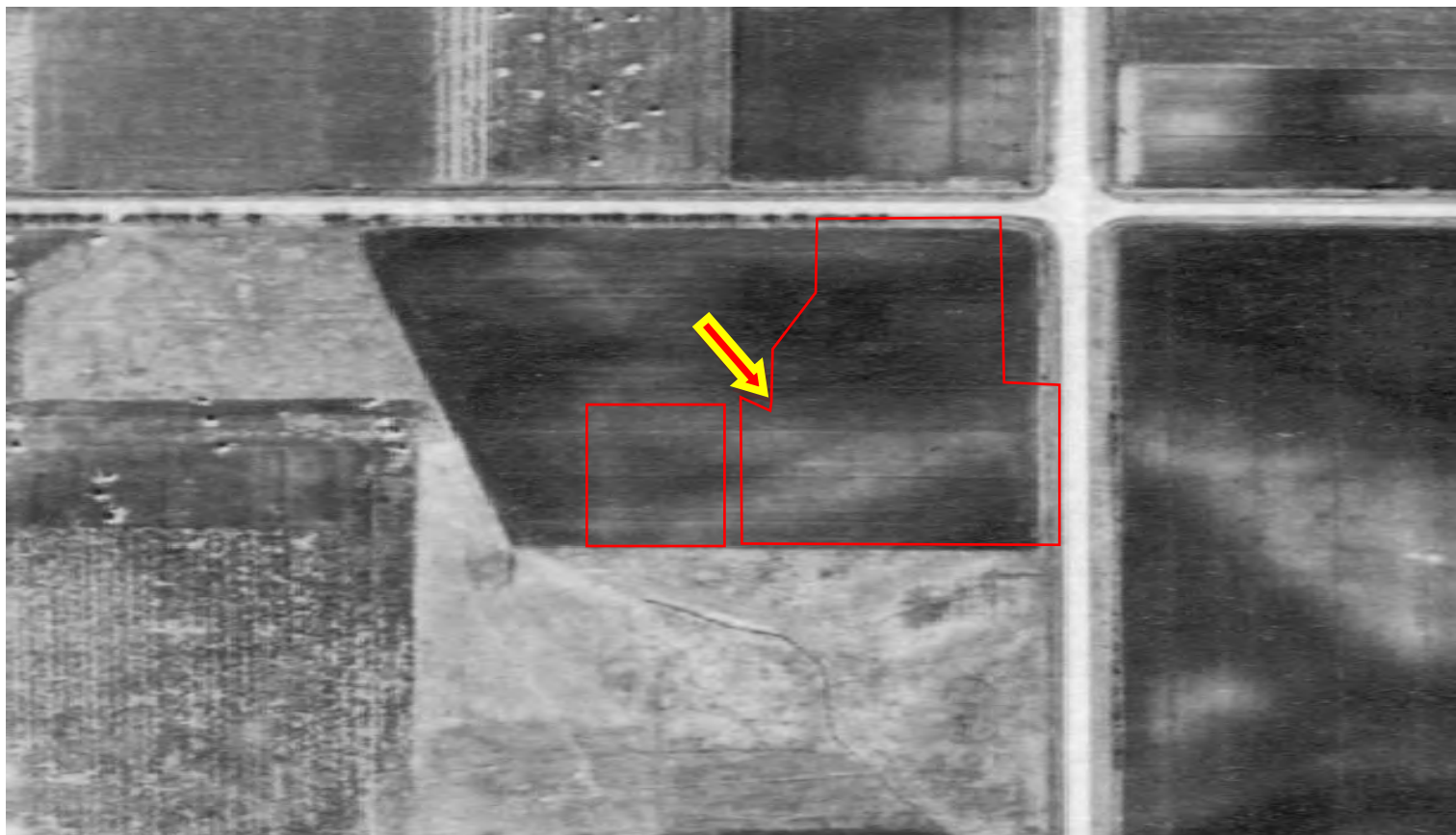




**Image Source: USGS  
1962 Aerial Photograph**



**Image Source: USGS  
1951 Aerial Photograph**



**Image Source: Illinois Historical Aerial Photographs (ILHAP)**  
**1938 Aerial Photograph**

## USDA-NRCS SOIL SURVEY MAP



Soil Map—Cook County, Illinois  
(MATTESON, ILLINOIS)



Map Scale: 1:2,140 if printed on A landscape (11" x 8.5") sheet.

0 30 60 120 180 Meters

0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84




Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

1/30/2018  
Page 1 of 3

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois

Survey Area Data: Version 11, Sep 20, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 31, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
69A	Milford silty clay loam, 0 to 2 percent slopes	8.3	77.2%
189A	Martinton silt loam, 0 to 2 percent slopes	2.5	22.8%
<b>Totals for Area of Interest</b>		<b>10.8</b>	<b>100.0%</b>

USGS TOPOGRAPHIC MAP



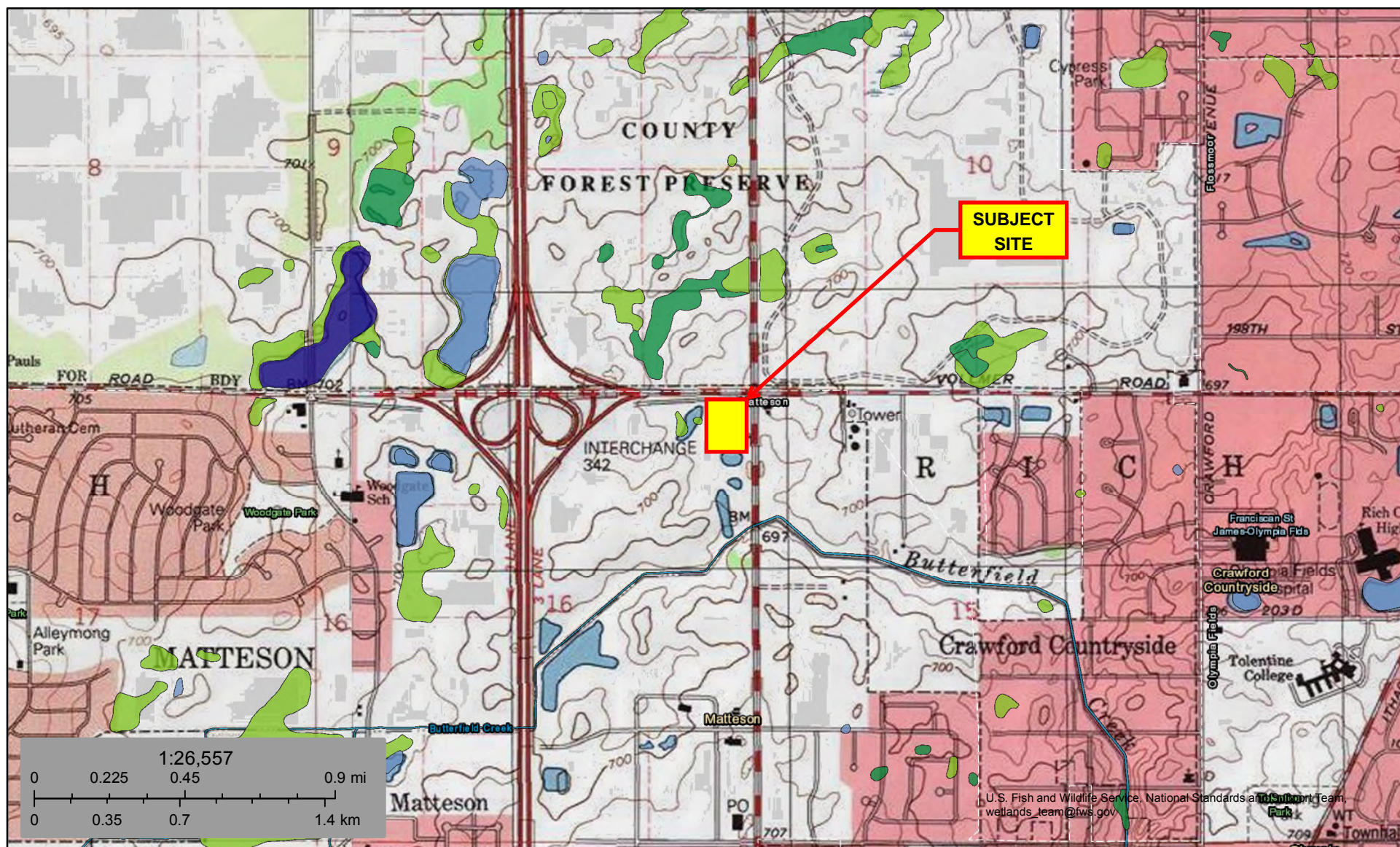




U.S. Fish and Wildlife Service

VACANT LOTS C-1 & C-1A IN MATTESON, ILLINOIS

## USGS TOPOGRAPHIC MAP



January 30, 2018

### Wetlands

 Estuarine and Marine Deepwater	 Freshwater Emergent Wetland	 Lake
 Estuarine and Marine Wetland	 Freshwater Forested/Shrub Wetland	 Other
	 Freshwater Pond	 Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## USFWS WETLAND INVENTORY MAP



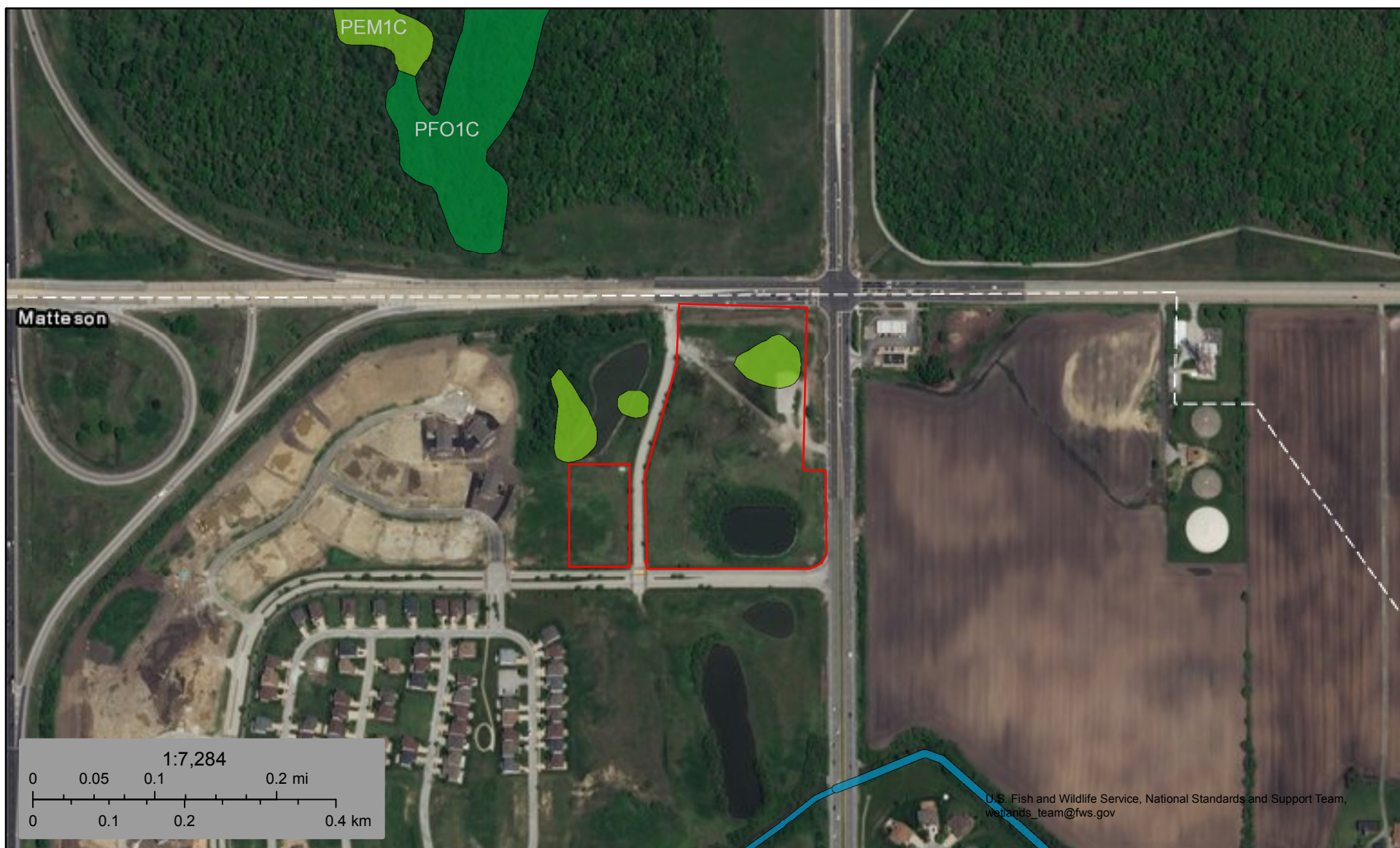




U.S. Fish and Wildlife Service

VACANT LOTS C-1 & C-1A IN MATTESON, ILLINOIS

# USFWS WETLAND INVENTORY MAP



January 30, 2018

## Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Freshwater Forested/Shrub Wetland		Freshwater Pond		Other
	Estuarine and Marine Wetland				Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## COOK COUNTY ASSESSOR RECORDS



[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-001-0000

**\*Property Location:** 19930 S CICERO AVE

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 50,592

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	12,648	11,383
Building Assessed Value	0	0
Total Assessed Value	12,648	11,383

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

\* "Property Location" is not a legal/postal mailing address. Its sole purpose is to help our Office locate the property. Therefore, you should not utilize the property location for any purpose, however, you may update the Property Location with your Legal/Postal Mailing Address should you choose to do so. Updating the address will not change the Property Location to a Legal/Postal Mailing Address.

\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-211-003-0000

**\*Property Location:** 19948 W STOLLER ST

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 24,310

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	6,077	5,469
Building Assessed Value	0	0
Total Assessed Value	6,077	5,469

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

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\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-211-002-0000

**\*Property Location:** 19958 W STOLLER ST

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 39,805

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	9,951	8,956
Building Assessed Value	0	0
Total Assessed Value	9,951	8,956

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

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\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-006-0000

**\*Property Location:** 19929 W STOLLER ST

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 55,931

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	13,982	12,584
Building Assessed Value	0	0
Total Assessed Value	13,982	12,584

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

\* "Property Location" is not a legal/postal mailing address. Its sole purpose is to help our Office locate the property. Therefore, you should not utilize the property location for any purpose, however, you may update the Property Location with your Legal/Postal Mailing Address should you choose to do so. Updating the address will not change the Property Location to a Legal/Postal Mailing Address.

\*\* Information may be available by submitting an FOIA Request



[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-005-0000

**\*Property Location:** 19949 W STOLLER ST

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 20,615

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	5,153	4,638
Building Assessed Value	0	0
Total Assessed Value	5,153	4,638

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

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\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-004-0000

**\*Property Location:** 19959 W STOLLER ST

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 44,585

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	16,719	10,031
Building Assessed Value	0	0
Total Assessed Value	16,719	10,031

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

\* "Property Location" is not a legal/postal mailing address. Its sole purpose is to help our Office locate the property. Therefore, you should not utilize the property location for any purpose, however, you may update the Property Location with your Legal/Postal Mailing Address should you choose to do so. Updating the address will not change the Property Location to a Legal/Postal Mailing Address.

\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-003-0000

**\*Property Location:** 19960 S CICERO AVE

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 79,068

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	3,953	3,953
Building Assessed Value	0	0
Total Assessed Value	3,953	3,953

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

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\*\* Information may be available by submitting an FOIA Request

[Property Data](#)[Exemption History](#)[Appeal History](#)[Certificate of Error](#)

## Property Characteristics

### 2017 Tax Year Property Information

**PIN:** 31-16-210-002-0000

**\*Property Location:** 19950 S CICERO AVE

**City:** MATTESON

**Township:** Rich

**Property Classification:** 100

**Square Footage (Land):** 34,653

**Neighborhood:** 220

**Taxcode:** 32180



### Assessed Valuation

	2017 Assessor Certified	2016 Board of Review Certified
Land Assessed Value	8,663	7,796
Building Assessed Value	0	0
Total Assessed Value	8,663	7,796

### Property Characteristics

Estimated 2017 Market Value N/A

Estimated 2016 Market Value N/A

Description \*\*

Age \*\*

Building Square Footage \*\*

Assessment Pass Assessor Certified

\* "Property Location" is not a legal/postal mailing address. Its sole purpose is to help our Office locate the property. Therefore, you should not utilize the property location for any purpose, however, you may update the Property Location with your Legal/Postal Mailing Address should you choose to do so. Updating the address will not change the Property Location to a Legal/Postal Mailing Address.

\*\* Information may be available by submitting an FOIA Request

FOIA REQUESTS





Village of Matteson  
4900 Village Commons  
Matteson, IL 60443  
Phone 708-283-4900 Fax 708-748-5196  
FOIA@villageofmatteson.org

**Freedom of Information Act (FOIA) Request**

TO Angela Simington, Chief FOIA Officer

Date: 1/29/2018

I hereby request permission to inspect or receive copies of the following public records:  
(Please describe the documents/record requested to the best of your ability)

(19950 S. Cicero Avenue, Matteson, IL) (C1 and C1-A on plat survey)  
Building records - original building permit for prior buildings  
Fire Department records - reports of dumping on the property,  
hazardous and/or petroleum products information; underground/above ground  
storage tank information.

Is this request for commercial purposes? yes \_\_\_\_\_ no X

Josh Cox  
Name of Requester (Please print)

Josh Cox  
Signature

P.O. Box 424  
Street Address

Antioch  
City

IL  
State

60002  
Zip Code

Josh@benchmark-env.com  
email address

800-400-5411  
phone number

847-434-5415  
fax number

**For Office Use Only**

Date Received Village of Matteson

Received By (Name of Village Staff)

Delivery Mode (Personal Delivery, U.S. Mail, Fax, E-mail)

Date Rcvd. By FOIA Officer

Reply By Date

Extension Needed? (yes or no)

Adjusted Reply by Date

Date of Response to Request

Replied By (Name of Village Staff)



**Office of the Illinois State Fire Marshal**  
Freedom of Information Request System

## Electronic FOIA Request Form

Requestor:	<input type="text" value="Josh"/>
Business Name:	<input type="text" value="Benchmark"/>
Address:	<input type="text" value="P.O. Box 824"/>
City:	<input type="text" value="Antioch"/>
State:	<input type="text" value="Illinois"/>
Zip:	<input type="text" value="60002"/>
Phone:	<input type="text" value="800-400-5811"/>
Fax:	<input type="text" value="847-838-5815"/>
Email:	<input type="text" value="josh@benchmarkenv.com"/>
Preferred Contact Method:	<input type="text" value="Email"/>

Will any part of the requested information, records or documentation be used, in any form, for sale, resale, solicitation or advertisement for sales or services?

Information Requested:

Regarding PTN numbers 31-16-210-002-0000,  
31-16-210-003-0000, 31-16-210-004-0000,  
31-16-210-005-0000, 31-16-210-006-0000,  
31-16-211-002-0000 and 31-16-217-002-0000 in the  
Village of Matteson, IL. We are looking for any  
information regarding above ground/underground  
storage tanks for these sites.

**Fee Justification:** In accordance with 5 ILCS 140/6(c), fees for public records may be reduced or waived if determined by the Agency to be in the public interest. If applicable, please provide a justification in the comments field below.

Questions or Comments:



**Office of the Illinois State Fire Marshal**  
Freedom of Information Request System

## Electronic FOIA Request Form

Requestor:	<input type="text" value="Josh"/>
Business Name:	<input type="text" value="Benchmark"/>
Address:	<input type="text" value="P.O. Box 824"/>
City:	<input type="text" value="Antioch"/>
State:	<input type="text" value="Illinois"/>
Zip:	<input type="text" value="60002"/>
Phone:	<input type="text" value="800-400-5811"/>
Fax:	<input type="text" value="847-838-5815"/>
Email:	<input type="text" value="josh@benchmarkenv.com"/>
Preferred Contact Method:	<input type="text" value="Email"/>

Will any part of the requested information, records or documentation be used, in any form, for sale, resale, solicitation or advertisement for sales or services?

Looking for information regarding Volturno RD & Cicero Ave. Matteson, IL 60443 Cook facility ID: 2015438 and the status of the 4,000 gallon DST onsite.

Information Requested:

**Fee Justification:** In accordance with 5 ILCS 140/6(c), fees for public records may be reduced or waived if determined by the Agency to be in the public interest. If applicable, please provide a justification in the comments field below.

Questions or Comments:



# Freedom of Information Act (FOIA)

## Submit Request

Use this form to request copies of Illinois EPA records.

**If your request is for a commercial purpose, you must identify that it is for a commercial purpose.**

If you have questions concerning whether your request is for a commercial purpose, you may **review the FOIA FAQs**. (<http://epa.illinois.gov/foia/faqs/index>) Please note that it is a violation of the Freedom of Information Act to knowingly obtain a public record for a commercial purpose without disclosing this information, upon request.

Do you have an ID number for a site or facility?

Reference ID number (Optional)

311805032 x

Provide a date range for your request

Date Range

01/31/1991 - 01/31/2018

Providing a reasonable date range will prevent an excessive volume of responsive material. This large volume of documents and data can lead to high copy costs and may require extended processing time.

Submit my request

Is your request for a commercial purpose?

☐ Yes ☒ No

What do you want to receive?

Request Narrative

Looking for information regarding a LUST incident for 4755 Vollmer Road, Matteson, IL.



IEPA DOCUMENTS





**Equilon Enterprises LLC**  
dba Shell Oil Products US  
HSE/Environmental Services  
603 Diehl Road, Suite 103  
Naperville, Illinois 60563  
Tel (630) 276-4206  
Fax (713) 423-0544  
E-mail john.robbs@shell.com

April 28, 2009

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

**RECORDED  
NFR**

Mr. Steve Jones  
Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

0311805032

**Re: LPC# 031180532 - Cook County  
Matteson/Shell Service Station #137099  
4755 Vollmer Road  
LUST Incident #20071228  
LUST Technical File**

Dear Mr. Jones:

Enclosed, please find a copy of the recorded No Further Remediation letter for the above referenced facility.

If you have any questions or require clarification regarding this transmittal, please contact me at (630) 276-4206.

Sincerely,

John Robbins  
Senior Environmental Engineer  
HSE/Environmental Services  
Shell Oil Products US

Attachment

Cc: Ms. Melissa Powell, GES, Inc.

**RECEIVED  
APR 30 2009**

**IEPA/BOL**

**RELEASABLE**

**MAY 05 2009**

**REVIEWER CT**



**PREPARED BY:**

Name: John Robbins  
Shell Oil Products US

Address: 4755 Vollmer Road  
Matteson, IL 60443

Doc#: 0910718027 Fee: \$44.00  
Eugene "Gene" Moore  
Cook County Recorder of Deeds  
Date: 04/17/2009 11:40 AM Pg: 1 of 5

**RETURN TO:**

Name: John Robbins  
Shell Oil Products US

Address: 603 Diehl Road, Suite 103  
Naperville, IL 60563

**(THE ABOVE SPACE FOR RECORDER'S OFFICE)**

**LEAKING UNDERGROUND STORAGE TANK ENVIRONMENTAL NOTICE**

**THE OWNER AND/OR OPERATOR OF THE LEAKING UNDERGROUND STORAGE TANK SYSTEM(S) ASSOCIATED WITH THE RELEASE REFERENCED BELOW, WITHIN 45 DAYS OF RECEIVING THE NO FURTHER REMEDIATION LETTER CONTAINING THIS NOTICE, MUST SUBMIT THIS NOTICE AND THE REMAINDER OF THE NO FURTHER REMEDIATION LETTER TO THE OFFICE OF THE RECORDER OR REGISTRAR OF TITLES OF COOK COUNTY IN WHICH THE SITE DESCRIBED BELOW IS LOCATED.**

Illinois EPA Number: 0311805032

Leaking UST Incident No.: 20071228

Shell Oil Products US, the owner and/or operator of the leaking underground storage tank system(s) associated with the above-referenced incident, whose address is 603 Diehl Road, Suite 103, Naperville, Illinois, has performed investigative and/or remedial activities for the site identified as follows:

1. Legal Description or Reference to a Plat Showing the Boundaries: The North 260.00 feet of the West 291 feet of the West ½ of the North West ¼ of Section 15, Township 35 North, Range 13 East of the Third Principal Meridian (excepting therefrom that part taken for highway purposes for Cicero Avenue and Vollmer Road) all in Cook County, Illinois.
2. Common Address: 4755 Vollmer Road, Matteson, Illinois
3. Real Estate Tax Index/Parcel Index Number: 31-15-100-104-0000
4. Site Owner: Shell Oil Products US
5. Land Use Limitation: The groundwater under the site shall not be used as a potable water supply.
6. See the attached No Further Remediation Letter for other terms.

**RECEIVED**

**APR 30 2009**

**IEPA/BOL**

9  
SJShell #137099 (LUST 20071228) NFR.doc

Leaking Underground Storage Tank Environmental Notice



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-2829  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

DOUGLAS P. SCOTT, DIRECTOR

217/782-6762

**MAR 18 2009**

**CERTIFIED MAIL**

7008 1140 0004 7343 0576

Shell Oil Products US  
Attn: John Robbins  
603 Diehl Road, Suite 103  
Naperville, IL 60563

#137099  
**RECEIVED MAR 30 2009** *INCOMET 97738340*

Re: LPC # 0311805032 -- Cook County  
Matteson/Shell Oil Products US (Station #137099)  
4755 Vollmer Road  
Leaking UST Incident No. 20071228 - NFR Letter  
Leaking UST Technical File

Dr. Mr. Robbins:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the Corrective Action Plan/Corrective Action Completion Report submitted for the above-referenced incident. This information was dated March 5, 2009 and was received by the Illinois EPA on March 9, 2009. Citations in this letter are from the Environmental Protection Act (Act), as amended by Public Act 92-0554 on June 24, 2002, and 35 Illinois Administrative Code (35 Ill. Adm. Code).

The Corrective Action Completion Report and associated Licensed Professional Engineer Certification submitted pursuant to Section 57.7(b)(5) of the Act and 35 Ill. Adm. Code 734.135(d) indicate corrective action for the above-referenced site was conducted in accordance with the Corrective Action Plan approved by the Illinois EPA. The Corrective Action Completion Report demonstrates that the requirements of Section 57.7(b) of the Act have been satisfied.

Based upon the certification by David Tully, a Licensed Professional Engineer, and pursuant to Section 57.10 of the Act (415 ILCS 5/57.10), your request for a no further remediation determination is granted under the conditions and terms specified in this letter.

Issuance of this No Further Remediation Letter (Letter), based on the certification of the Licensed Professional Engineer, signifies that: (1) all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with; (2) all corrective action concerning the remediation of the occurrence has been completed; and (3) no further corrective action concerning the occurrence is necessary for the protection of human health, safety, and the environment. Pursuant to Section 57.10(d) of the Act, this Letter shall apply in favor of the following parties:

1. Shell Oil Products US, the owner or operator of the underground storage tank system(s).
2. Any parent corporation or subsidiary of such owner or operator.

*cc: ces 3/20/09*

3. Any co-owner or co-operator, either by joint tenancy, right-of-survivorship, or any other party sharing a legal relationship with the owner or operator to whom the Letter is issued.
4. Any holder of a beneficial interest of a land trust or inter vivos trust whether revocable or irrevocable.
5. Any mortgagee or trustee of a deed of trust of such owner or operator.
6. Any successor-in-interest of such owner or operator.
7. Any transferee of such owner or operator whether the transfer was by sale, bankruptcy proceeding, partition, dissolution of marriage, settlement or adjudication of any civil action, charitable gift, or bequest.
8. Any heir or devisee of such owner or operator.

This Letter and all attachments, including but not limited to the Leaking Underground Storage Tank Environmental Notice, must be filed within 45 days of receipt as a single instrument with the Office of the Recorder or Registrar of Titles in the county in which the above-referenced site is located. This Letter shall not be effective until officially recorded by the Office of the Recorder or Registrar of Titles of the applicable county in accordance with Illinois law so it forms a permanent part of the chain of title for the above-referenced property. Within 30 days of this Letter being recorded, an accurate and official copy of this Letter, as recorded, shall be obtained and submitted to the Illinois EPA. For recording purposes, it is recommended that the Leaking Underground Storage Tank Environmental Notice of this Letter be the first page of the instrument filed.

#### CONDITIONS AND TERMS OF APPROVAL

##### LEVEL OF REMEDIATION AND LAND USE LIMITATIONS

1. The remediation objectives for the above-referenced site, more particularly described in the Leaking Underground Storage Tank Environmental Notice of this Letter, were established in accordance with the requirements of the Tiered Approach to Corrective Action Objectives (35 Ill. Adm. Code 742) rules.
2. As a result of the release from the underground storage tank system(s) associated with the above-referenced incident, the above-referenced site, more particularly described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter, shall not be used in a manner inconsistent with the following land use limitation: There are no land use limitations. The groundwater under the site shall not be used as a potable water supply. It has been demonstrated that the groundwater under the site meets Class II (General Resource) groundwater criteria rather than Class I (Potable Resource) groundwater. Groundwater classifications are defined at 35 Ill. Adm. Code 620.Subpart B.
3. The land use limitation specified in this Letter may be revised if:
  - a. Further investigation or remedial action has been conducted that documents the attainment of objectives appropriate for the new land use; and

- b. A new No Further Remediation Letter is obtained and recorded in accordance with Title XVII of the Act and regulations adopted thereunder.

PREVENTIVE, ENGINEERING, AND INSTITUTIONAL CONTROLS

4. Preventive: The groundwater under the site described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter shall not be used as a potable supply of water. No person shall construct, install, maintain, or utilize a potable water supply well. In accordance with Section 3.65 of the Act, "potable" means generally fit for human consumption in accordance with accepted water supply principles and practices.  
  
Engineering: None.  
  
Institutional: This Letter shall be recorded as a permanent part of the chain of title for the above-referenced site, more particularly described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter.
5. Failure to establish, operate, and maintain controls in full compliance with the Act, applicable regulations, and the approved corrective action plan, if applicable, may result in voidance of this Letter.

OTHER TERMS

6. Any contaminated soil or groundwater removed or excavated from, or disturbed at, the above-referenced site, more particularly described in the Leaking Underground Storage Tank Environmental Notice of this Letter, must be handled in accordance with all applicable laws and regulations under 35 Ill. Adm. Code Subtitle G.
7. Further information regarding the above-referenced site can be obtained through a written request under the Freedom of Information Act (5 ILCS 140) to:  
  
Illinois Environmental Protection Agency  
Attention: Freedom of Information Act Officer  
Bureau of Land - #24  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276
8. Pursuant to 35 Ill. Adm. Code 734.720, should the Illinois EPA seek to void this Letter, the Illinois EPA shall provide Notice of Voidance to the owner or operator of the leaking underground storage tank system(s) associated with the above-referenced incident and the current title holder of the real estate on which the tanks were located, at their last known addresses. The notice shall specify the cause for the voidance, explain the provisions for appeal, and describe the facts in support of the voidance. Specific acts or omissions that may result in the voidance of this Letter include, but shall not be limited to:

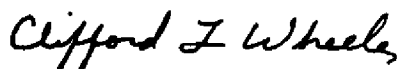
- a. Any violation of institutional controls or industrial/commercial land use restrictions;
- b. The failure to operate and maintain preventive or engineering controls or to comply with any applicable groundwater monitoring plan;
- c. The disturbance or removal of contamination that has been left in-place in accordance with the Corrective Action Plan or Completion Report;
- d. The failure to comply with the recording requirements for the Letter;
- e. Obtaining the Letter by fraud or misrepresentation; or
- f. Subsequent discovery of contaminants, not identified as part of the investigative or remedial activities upon which the issuance of the Letter was based, that pose a threat to human health or the environment.

Submit an accurate and official copy of this Letter, as recorded, to:

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

If you have any questions or need further assistance, please contact the Illinois EPA project manager, Steve Jones, at 217/524-1253.

Sincerely,



Clifford L. Wheeler  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

CLW:SJS Shell #137099 (LUST 20071228) NFR.doc

Attachments: Leaking Underground Storage Tank Environmental Notice

c: Groundwater & Environmental Services, Inc.  
BOL File





**Equilon Enterprises LLC**  
**dba Shell Oil Products US**  
HSE/Environmental Services  
603 Diehl Road, Suite 103  
Naperville, Illinois 60563  
Tel (630) 276-4206  
Fax (713) 423-0544  
E-mail john.robbs@shell.com

March 5, 2009

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Steve Jones  
Illinois Environmental Protection Agency  
Bureau of Land #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

**RE:   LPC #0311805032 -- Cook County**  
**Matteson/Shell Services Station #137099**  
**4755 Vollmer Road**  
**LUST Incident #20071228**  
**LUST Technical File**

**RECEIVED**  
**MAR 09 2009**  
**IEPA/BOL**

Dear Mr. Jones:

Enclosed, please find one original and one copy of the Illinois Environmental Protection Agency (IEPA) Corrective Action Plan (CAP) for the above-referenced facility. Based on the results provided in the CAP and Corrective Action Completion Report (CACR) form, a NFR letter is requested. The CACR Form, the Property Owner Summary Form, Budget, and Budget Certification Form have also been included for your review and approval.

Should you have any questions or require additional information, please contact me at (630) 276-4206.

Sincerely,

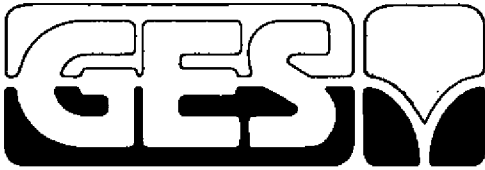
John Robbins  
Project Manager  
HSE/Environmental Services  
Shell Oil Products US

cc:       Melissa M. Powell, GES

**RELEASABLE**

**MAR 17 2009**

**REVIEWER MD**



**CORRECTIVE  
ACTION PLAN & BUDGET**

**Shell Service Station #137099  
4755 Vollmer Road  
Matteson, Cook County, Illinois  
LUST Incident #20071228  
LPC #0311805032**

**Prepared For:**

**Mr. John Robbins  
Project Manager  
Shell Oil Products US  
603 Diehl Road Suite 103  
Naperville, IL 60563**

**Prepared By:**

**Groundwater & Environmental Services, Inc.  
1050 Corporate Boulevard, Suite C  
Aurora, IL 60505**

**RECEIVED**

**MAR 09 2009**

**IEPA/BOL**

A handwritten signature in cursive script, reading 'Amber L. Verbick', written over a horizontal line.

**Amber L. Verbick  
Junior Geologist**

A handwritten signature in cursive script, reading 'Melissa M. Powell', written over a horizontal line.

**Melissa M. Powell  
Senior Project Manager**

**RELEASABLE**

**MAR 17 2009**

**March 5, 2009**

**REVIEWER MD**

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E.	TECHNICAL INFORMATION – CORRECTIVE ACTION PLAN .....	3
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### FIGURES

Figure 1	Well Location Map
Figure 2	Local Area Map
Figure 3	Site Map
Figure 4	Soil Analytical Data Map – May 1 & 2, 2008
Figure 5	Groundwater Analytical Map – May 9, 2008
Figure 6	Mass-Limiting Plume Dimensions Map

### TABLES

Table 1	Soil Analytical Data – BTEX/MTBE
Table 2	Groundwater Analytical Data – BTEX/MTBE
Table 3	Geotechnical and Geochemical Analytical Data

### APPENDICES

Appendix A	IEPA Letter Dated – December 8, 2008
Appendix B	TACO Calculation Spreadsheets
Appendix C	Budget and Certification Form
Appendix D	Corrective Action Completion Form
Appendix E	Property Owner Summary Form

RECEIVED

MAR 09 2009

IEPA/BOL

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Corrective Action Plan**

**A. Site Identification**

IEMA Incident # (6-8 digit): 20071228 IEPA LPC # (10 digit): 0311805032  
Site Name: Shell Service Station #137099  
Site Address (Not a P.O. Box): 4755 Vollmer Road  
City: Matteson County: Cook Zip Code: 60443

**Leaking UST Technical File**

**B. Site Information**

1. Will the owner/operator seek reimbursement from the Underground Storage Tank Fund ☒ Yes ☐ No
2. If Yes, is the budget attached? ☒ Yes ☐ No
3. Is this an amended Plan? ☐ Yes ☒ No
4. Identify the material released: Unleaded gasoline
5. This Corrective Action Plan is being submitted pursuant to:
  - a. 35 Ill. Adm. Code Section 731.166:  
The material released was:  
-petroleum ☐  
-hazardous substance (see Environmental Protection Act Section 3.215) ☐
  - b. 35 Ill. Adm. Code Section 732.404 ☐
  - c. 35 IAC Adm. Code Section 734.335 ☒

**RECEIVED**  
**MAR 09 2009**  
**IEPA/BOL**

**C. Proposed Methods of Remediation**

1. Soil Institutional Controls and Pathway Elimination – Site-specific soil remediation objectives (SROs) will be generated pursuant to 35 Illinois Administrative Code (IAC) Part 742 to address additional contaminants-of-concern (COC) above the Tier I values indicated in 35 IAC Part 742 – Appendix B.

**D. Soil and Groundwater Investigation Results** (for incidents subject to 35 Ill. Adm. Code (IAC) 731 only or 732 that were classified using Method One or Two, if not previously provided)

**Provide the following:**

**1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;**

Groundwater & Environmental Services, Inc. (GES) was contracted by Shell Oil Products US (Shell) to provide oversight of an exploratory soil and groundwater investigations at Shell Service Station #137099, located at 4755 Vollmer Road, Matteson, Illinois (Subject Property). The summary of the historical soil and groundwater investigation activities and the analytical data were submitted by GES, in the *Site Investigation Completion Report (SICR)*, dated September 25, 2008, to the Illinois Environmental Protection Agency (IEPA). The *SICR* was approved on December 8, 2008, by the IEPA. A copy of the Well Location Map, Local Area Map, and Site Map are provided as **Figure 1**, **Figure 2**, and **Figure 3**, respectively. A copy of the IEPA *SICR* approval letter is provided in **Appendix A**.

**2. Analytical results, chain-of-custody forms, and laboratory certifications;**

Copies of the soil and groundwater analytical reports, chain-of-custody forms and laboratory certifications were provided in the October 18, 2007, *45-Day Report*, the November 20, 2007, *Site Investigation Plan (SIP)*, and the September 25, 2008, *SICR*, submitted by GES.

**3. Tables comparing analytical results to applicable remediation objectives;**

The soil sample locations are illustrated on **Figure 4**. The soil sample analytical laboratory data are presented in **Table 1** and **Table 3**. The groundwater monitoring well locations are illustrated on **Figure 5**. The groundwater analytical laboratory data are presented in **Table 2**.

**4. Boring logs;**

Copies of the soil boring logs were provided in the October 18, 2007, *45-Day Report*, the November 20, 2007, *SIP*, and the September 25, 2008, *SICR*, submitted by GES.

**5. Monitoring well logs; and**

Copies of the monitoring well construction diagrams were provided in the October 18, 2007, *45-Day Report*, the November 20, 2007, *SIP*, and the September 25, 2008, *SICR*, submitted by GES.

**6. Site maps meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440 and showing:**

- a. Soil sample locations;  
Please refer to **Figure 3** and **Figure 4**.
- b. Monitoring well locations; and  
Please refer to **Figure 3** and **Figure 5**.
- c. Plumes of soil and groundwater contamination.  
Please refer to **Figure 6**.

## E. Technical Information – Corrective Action Plan

Provide the following:

1. **Executive summary identifying the objectives of the corrective action plan and the technical approach to be utilized to meet such objectives;**

In order to address the onsite BTEX and MTBE concentrations exceeding the most restrictive Tier 1 SROs and GROs, GES has conducted an exposure pathway evaluation of the release pursuant to 35 IAC Part 742. The individual exposure pathways are the following:

<i>Soil Ingestion Exposure Pathway:</i>	Subpart G (Tier 1 Soil Evaluation)
<i>Soil Inhalation Exposure Pathway:</i>	Subpart G (Tier 2 Soil Evaluation)
<i>Soil Component of the Groundwater Ingestion Exposure Pathway:</i>	Subpart G (Tier 2 Soil Evaluation)
<i>Groundwater Component of the Groundwater Ingestion Exposure Pathway:</i>	Subpart H (Tier 1 Groundwater Evaluation)

The Tier 1 evaluation was performed, in accordance with 35 IAC §742.500, by comparing concentrations of COC detected in the soil and groundwater to the remediation objectives provided in 35 IAC Part 742, Appendix B. For each COC, the corresponding Tier 1 remediation objective for soil and groundwater is the most conservative remediation objective value for the pathway under consideration. For the purposes of this Tier 1 evaluation, concentrations representative of the source area correspond to the maximum residual concentration of each COC detected. Concentrations of COC detected in the media that have been removed from the site were not used in the evaluation. If impacted media from relatively the same location were sampled and analyzed more than once, the results of the most recent sampling and analysis were used for the risk assessment.

The Tier 2 evaluation was completed, according to 35 IAC §742.600, if a COC was detected above the Tier 1 remediation objectives. The Tier 2 evaluation was performed by comparing the COC detected in the soil to developed site-specific SROs to determine if any COC under consideration exceeded the Tier 2 remediation objectives for the aforementioned exposure pathways.

- a. **The major components (e.g., treatment, containment, removal) of the corrective action plan;**

Shell proposes to move the point of human exposure for the release through the use of institutional controls. The institutional controls will consist of recording the No Further Remediation (NFR) letter to the deed of the Subject Property with the condition that groundwater beneath the site is prohibited from use as a potable water supply. In addition, any contaminated soil and groundwater removed, or excavated from, or disturbed at the Subject Property will be handled in accordance with all applicable laws and regulations.

- b. **The scope of the problems to be addressed by the proposed corrective action;**

In accordance with 35 IAC §742.500, a Tier 1 evaluation was performed by comparing COC detected in the soil and groundwater to residential remediation objectives provided in 35 IAC Part 742, Appendix B. For each COC, the controlling Tier 1 Cleanup Objective for soil and groundwater is the most conservative remediation objective value for the pathway under consideration. For the purposes of this Tier 1 evaluation, concentrations representative of the source area correspond to the maximum residual concentration of each COC detected in the impacted media.

According to 35 IAC §742.600, a Tier 2 evaluation has been completed for any remaining COC detected above the Tier 1 remediation objectives for residential properties. The Tier 2

evaluation was performed by comparing COC detected in the soil to developed site-specific remediation objectives to determine if any COC under consideration exceeded the Tier 2 remediation objectives.

**c. A schedule for implementation and completion of the plan;**

A Tier 2 analysis for the Inhalation Exposure Route and the SCGIER has been completed in this report. The TACO calculations are provided in **Appendix B**.

**d. Identification of the remediation objectives proposed for the site;**

In order to address the onsite and offsite COC exceeding the most restrictive Tier 1 SROs, an exposure pathway evaluation of the release pursuant to 35 IAC Part 742 was completed. Based upon this evaluation, the individual exposure pathways have been addressed as follows:

**Ingestion Exposure Route**

Soil analytical data available for the Subject Property were compared to Tier 1 residential and construction worker SROs for the soil ingestion exposure pathway. This comparison indicated that all concentrations of COC are below Tier 1 residential SROs. As a result, further evaluation of this pathway is not warranted.

Constituent of Concern	Soil Boring Location with Sample Depth	Maximum Detected Concentration (ppm)	Residential Ingestion Cleanup Objectives (ppm)	Construction Worker Remediation Objectives (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	12	2,300
toluene	NW-2 (8-feet bgs)	0.0564	16,000	410,000
ethylbenzene	NW-1 (8-feet bgs)	10.1	7,800	20,000
total xylenes	NW-1 (8-feet bgs)	12	160,000	41,000
MTBE	MTB-1 (16-feet bgs)	0.151	780	2,000

**Notes:**

ppm = parts per million = mg/Kg = milligrams per kilogram

### Inhalation Exposure Route

Soil analytical data for the Subject Property were compared to Tier 1 residential and construction worker SROs for the soil inhalation exposure pathway. This comparison indicated that the concentrations of benzene are above the Tier 1 inhalation remediation objectives for residential properties and construction workers and concentrations of total xylenes are above the Tier 1 inhalation remediation objectives for construction workers. As a result, further evaluation of this pathway is warranted.

Constituent of Concern	Soil Boring Location with Sample Depth	Maximum Detected Concentration (ppm)	Tier 1 Residential Remediation Objective (ppm)	Tier 1 Construction Worker Remediation Objectives (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	0.8	2.2
toluene	NW-2 (8-feet bgs)	0.0564	650	42
ethylbenzene	NW-1 (8-feet bgs)	10.1	400	58
total xylenes	NW-1 (8-feet bgs)	12	320	5.6
MTBE	MTB-1 (16-feet bgs)	0.151	8,800	140

Notes:

ppm = parts per million = mg/Kg = milligrams per kilogram

### Tier 2 Evaluation

Tier 2 inhalation remediation objectives were developed utilizing SSL equations S4/S5, S6/S7, and S26 located in 35 IAC Part 742, Appendix C – Table A. Remediation objectives spreadsheets for the SSL calculations are located in **Appendix B**. Input values are listed below:

### SSL EQUATIONS S4/S5 S6/S7, and S26 INPUT VALUES

Symbol	Unit	Default Parameters	Value	Source
URF	d <sup>-1</sup>	Unit Risk Factor – carcinogen (benzene)	$7.8 \times 10^{-6}$	USEPA Integrated Risk Information System (IRIS)
RfC	mg/m <sup>3</sup>	Inhalation Reference Concentration – non-carcinogen (total xylenes) - <i>Subchronic Reference Concentration</i>	1	USEPA IRIS
ED	yr	Exposure Duration – Residential	30	35 IAC 742 Appendix C – Table B
ED	yr	Exposure Duration – Construction Worker	1	35 IAC 742 Appendix C – Table B
EF	d	Exposure Frequency – Residential	350	35 IAC 742 Appendix C – Table B
EF	d	Exposure Frequency – Construction Worker	30	35 IAC 742 Appendix C – Table B
$\rho_b$	kg/L	Dry Soil Bulk Density – Silty Clay	1.65	35 IAC 742 Appendix C – Table B
Q/C		Inverse of the Mean Concentration at the center of a square source	97.78	35 IAC 742 Appendix C – Table H



Symbol	Unit	Site-Specific Parameters	Value	Source
---	Acre	Mass-Limiting – Area of contaminant Source	0.09	Figure 6 – Mass Limiting Plume Dimensions Map
$d_s$	m	Mass-Limiting – Depth of Contaminant Source	1.45 (5-feet)	Approximate depth of the water table beneath the site. This value corresponds to the thickness of the vadose zone beneath the Subject Property.

The calculations of equations S4/S5, S6/S7, S26, and S29 resulted in the following remediation objectives:

Constituent of Concern	Soil Boring Location with Sample Depth	Maximum Detected Concentration (ppm)	Tier 2 Residential Remediation Objective (ppm)	Tier 2 Construction Worker Remediation Objectives (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	11.464	401.225
total xylenes	NW-1 (8-feet bgs)	12	NA	320*

Notes:

**Bold** = values above the 35 IAC 742 Tier 1 Soil Cleanup Objectives

NA = Tier 2 SRO was not developed because soil concentrations are below the most stringent Tier 1 SRO

\* = if the Tier 2 site-specific SRO is less stringent than the COC soil saturation limit, then the soil saturation limit value was utilized

Inhalation Pathway Exclusion

Soil analytical data available for the Subject Property were compared to the site-specific SROs generated through the Tier 2 evaluation. Based on this comparison, all concentrations of COC are below the site-specific SROs. As a result, further evaluation of this pathway is not warranted.

Soil Component of the Groundwater Ingestion Exposure Route

Tier 1 Evaluation

Soil analytical data available for the Subject Property were compared to the Tier 1 residential SROs for the SCGIER. Soil analytical data indicated that the concentration of benzene exceeds the Tier 1 SRO for Class II groundwater at soil sample location NTB-2; therefore, further evaluation of this pathway is warranted.

Constituent of Concern	Soil Boring Location with Sample Depth	Maximum Detected Concentration (ppm)	Residential SCGIER Cleanup Objectives for Class II Groundwater (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	0.17
toluene	NW-2 (8-feet bgs)	0.0564	29
ethylbenzene	NW-1 (8-feet bgs)	10.1	19
total xylenes	NW-1 (8-feet bgs)	12	150
MTBE	MTB-1 (16-feet bgs)	0.151	0.32

Notes:

**Bold** = values above the 35 IAC 742 Tier 1 Soil Cleanup Objectives

ppm = parts per million = mg/Kg = milligrams per kilogram

### Tier 2 Evaluation

Tier 2 Cleanup Objectives were developed utilizing SSL equations S18/S28 located in 35 IAC Part 742, Appendix C – Table A. Remediation objectives spreadsheets for the SSL calculations are located in **Appendix B**. Input values are listed below:

#### **SSL EQUATIONS S18/S28 INPUT VALUES**

Symbol	Unit	Default Parameters	Value
$C_w$	mg/L	Target Soil Leachate Concentration Class II groundwater benzene	0.1
$I_{M-L}$	m/yr	Infiltration rate for migration to groundwater	0.18
$ED_{M-L}$	yr	Exposure duration for migration to groundwater	70

Symbol	Unit	Site-Specific Parameters	Value
$L$	m	Source Length Parallel to Groundwater Flow	21.341 (70-feet) – <b>Figure 6</b>
$d_a$	m	Aquifer Thickness – maximum depth explored onsite	4.878 (16-feet)
$d_s$	m	Mass-Limiting –Vertical Thickness of contamination	1.524 (5-feet)
$\rho_b$	kg/L	Dry Soil Bulk Density – Silty Clay	1.65
$K$	cm/sec	Hydraulic Conductivity Value (3/4/2005)	$8.425 \times 10^{-5}$

The results of the calculation of equation S28 for are given below:

Constituent of Concern	Sample Location with Sample Depth	Maximum Detected Concentration (ppm)	Tier 2 Residential SCGIER Cleanup Objectives for Class II groundwater (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	2.51

#### Notes:

**Bold** = values above the 35 IAC 742 Tier 1 Soil Cleanup Objectives

ppm = parts per million = mg/Kg = milligrams per kilogram

### SCGIER Pathway Exclusion

Soil analytical data available for the Subject Property were compared to the site-specific SROs generated through the Tier 2 evaluation. Based on this comparison, all concentrations of COC are below the site-specific SROs. As a result, further evaluation of this pathway is not warranted.

### Groundwater Ingestion Exposure Route

#### Tier 1 Evaluation

Groundwater analytical data available for the Subject Property were compared to the Tier 1 residential GROs for the Groundwater Ingestion Exposure Route (GIER). This comparison indicated that all concentrations of COC are below the Tier 1 GRO for Class II groundwater. As a result, further evaluation of this pathway is not warranted.

Constituent of Concern	Monitoring Well Location	Maximum Detected Concentration (ppm) March 28, 2008	GIER Cleanup Objectives for Class II Groundwater (ppm)
benzene	DW-1	<1	0.025
toluene	DW-1	<1	2.5
ethylbenzene	DW-1	<1	1.0
total xylenes	DW-1	<1	10
MTBE	DW-1	<1	0.07

Notes:

**Bold** = values above the 35 IAC 742 Tier 1 Groundwater Cleanup Objectives

ppm = parts per million = mg/L = milligrams per liter

3. **A description of the remedial technologies selected:**

- The feasibility of implementing the remedial technologies;**
- Whether the remedial technologies will perform satisfactory and reliably until the remediation objectives are achieved; and**
- A schedule of when the technologies are expected to achieve the applicable remediation objectives;**

Not applicable.

4. **A confirmation sampling plan that describes how the effectiveness of the corrective action activities will be monitored during their implementation and after their completion;**

Not applicable.

5. **A description of the current and projected future uses of the site;**

The Subject Property is currently an active Shell Service Station. Current site features include one canopy and one main commercial structure. A Site Map with existing site features is presented as **Figure 3**. The future utilization of the Subject Property is unknown; however, assumed to remain a gasoline petroleum retailer for the foreseeable future.

6. **A description of engineered barriers or institutional controls that will be relied upon to achieve remediation objectives;**

Shell will record the NFR letter to the deed of the Subject Property. In addition, any contaminated soil and groundwater removed, or excavated from, or disturbed at the Subject Property will be handled in accordance with all applicable laws and regulations.

- an assessment of their long-term reliability;**

Not applicable.

- operating and maintenance plans; and**

Not applicable.

- c. **maps showing area covered by barriers and institutional controls;**

Not applicable.

**7. The water supply well survey;**

- a. **Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;**

Maps showing the locations of office identified potable wells are provided as **Figure 1**.

- b. **Map(s) showing regulated recharge areas and wellhead protection areas;**

Maps showing the locations of office identified potable wells are provided as **Figure 1**. Upon review of the IEPA Source Water Assessment Program (SWAP) database information, provided in the October 18, 2007, *45-Day Report*, submitted by GES, it had been determined that the Subject Property is not located adjoining a regulated recharge area or wellhead protection area.

- c. **Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;**

A groundwater monitoring map is provided as **Figure 5**.

- d. **Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;**

Not applicable.

- e. **Tables listing the setback zone for each community water supply well and other potable water supply wells;**

The potable water supply information, obtained from the IEPA SWAP database was provided in the October 18, 2007, *45-Day Report*, submitted by GES.

- f. **A narrative identifying each entity contacted to identify potable water supply well, the name and title of each person contacted, and any field observations associated with any wells identified; and**

In accordance with 35 IAC §732.202(d)(2), GES conducted a well search, which included a 2,500-foot radius around the Subject Property, in order to determine the locations of wells potentially affected by the release. Specifically, GES obtained an Illinois Water Well Report from Environmental Data Resources, Inc. (EDR); a collection of the Illinois State Geological Survey (ISGS), the Illinois State Water Survey (ISWS), the IEPA Division of Public Water Supply, and the Illinois County Well Database. GES also searched the Illinois SWAP database and sent a Freedom of Information Act Request (FOIA) to the IEPA for additional information that may not have been included in the EDR report and/or the Illinois SWAP database. A table of the potable wells identified within 2,500-foot radius was provided in the October 18, 2007, *45-Day Report*, submitted by GES. A Well Location Map is provided as **Figure 1**.

- g. **A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted included information obtained as a result of the survey (certification of the plan satisfies this requirement);**

A Licensed Professional Engineer certification is on Page 14 of this report.

**8. Appendices:**

- a. **References and data sources report that are organized; and**

Not applicable.

**b. Field logs, well logs, and reports of laboratory analyses;**

Laboratory analytical results and remediation objectives are shown in tabular format on **Table 1** through **Table 3**. The soil and groundwater laboratory analytical reports and soil boring logs/monitoring well construction diagrams were provided in the October 18, 2007, *45-Day Report*, the November 20, 2007, *SIP*, and the September 25, 2008, *SICR*, submitted by GES.

**9. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440;**

Please refer to **Figure 1** through **Figure 6**.

**10. Engineering design specifications, diagrams, schematics, calculations, manufacturer's specifications, etc.,**

Not applicable.

**11. A description of bench/pilot studies;**

Not applicable.

**12. Cost comparison between proposed method or remediation and other methods of remediation;**

Not applicable.

**13. For the proposed Tier 2 or 3 remediation objectives, provide the following:**

**a. The equations used;**

**Tier 2**

*Inhalation* – site-specific SROs for the release were calculated utilizing SSL equations S6/S7/S26 located in 35 IAC Part 742, Appendix C-Table A.

*Soil Component of the Groundwater Ingestion Route* – site-specific SROs were developed utilizing SSL equations S18/S28 located in 35 IAC Part 742, Appendix C-Table A.

**b. A discussion of how input variables were determined;**

*Hydraulic conductivity (K)* – The site-specific hydraulic conductivity of  $8.425 \times 10^{-5}$  centimeters/second (cm/s) was utilized. The hydraulic conductivity calculations were provided in the September 25, 2008, *SICR*, submitted by GES.

*Soil bulk density* – A default value from 35 IAC Part 742 Appendix C – Table B was used in site specific calculations.

*Soil particle density* – A default value from 35 IAC Part 742 Appendix C – Table B was used in site specific calculations.

*Organic carbon content* – A default value from 35 IAC Part 742 Appendix C – Table B was used in site specific calculations.

**c. Map(s) depicting distances used in equations; and**

The distance utilized in modeling the SCGIER calculations is illustrated on **Figure 6**.

**d. Calculations;**

The Tier 2 Tiered Approach to Corrective Action (TACO) modeling calculations are provided in **Appendix B**.

**14. Provide documentation to demonstrate the following for alternative technologies:**

- a. **The proposed alternative technology has a substantial likelihood of successfully achieving compliance with all applicable regulations and remediation objectives;**  
Not applicable.
- b. **The proposed alternative technology will not adversely affect human health and safety or the environment;**  
Not applicable.
- c. **The owner or operator will obtain all Illinois EPA permits necessary to legally authorize use of the alternative technology;**  
Not applicable.
- d. **The owner or operator will implement a program to monitor whether the requirements of subsection (14)(a) have been met;**  
Not applicable.
- e. **Within one year from the date of the Illinois EPA approval, the owner or operator will provide to the Illinois EPA monitoring program results establishing whether the proposed alternative technology will successfully achieve compliance with the requirements of subsection (14)(a); and**  
Not applicable.
- f. **Demonstration that the cost of alternative technology will not exceed the cost of conventional technology and is not substantially higher than at least two other alternative technologies, if available and technically feasible.**

The proposed budget and budget certification form are provided in **Appendix C**.

**15. Property Owner Summary form.**

The Corrective Action Completion Form and Property Owner Summary Form are provided in **Appendix D** and **Appendix E**, respectively.

**F. Exposure Pathway Exclusion**

**Provide the following:**

- 1. A description of the tests to be performed in determining whether the following requirements will be met:**

- a. **Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;**

The natural organic carbon fraction ( $F_{OC}$ ) of the soil was not analyzed at the Subject Property.

- b. **Soil saturation limit will not be exceeded for any of the organic contaminants;**

As shown in the below table, the soil saturation limits for the organic contaminants were not exceeded.

Constituent of Concern	Soil Boring Location	Maximum Detected Concentration (ppm)	Soil Saturation Limit (C <sub>sat</sub> ) (ppm)
benzene	NTB-2 (16-feet bgs)	2.34	870
toluene	NW-2 (8-feet bgs)	0.0564	650
ethylbenzene	NW-1 (8-feet bgs)	10.1	400
total xylenes	NW-1 (8-feet bgs)	12	320
MTBE	MTB-1 (16-feet bgs)	0.151	8,800

- c. **Contaminated soil do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;**

Soil reactivity was not analyzed at the Subject Property.

- d. **Contaminated soils do not exhibit a pH  $\leq 2.0$  or  $\geq 12.$ ; and**

On May 1, 2008, GES collected a waste characterization sample from the Subject Property for pH analysis. It has been determined from soil analytical results that site-specific pH of subsurface soils is 7.11. The soil analytical data is presented on **Table 1** and **Table 3**.

- e. **Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury or selenium (or other associated salts) do not exist any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.**

A review of the Office of the State Fire Marshal (OSFM) records indicated that the USTs located at the Subject Property have stored unleaded gasoline; therefore, soils are not expected to exhibit toxicity characteristics of hazardous waste per 35 IAC §721.124.

**2. A discussion of how any exposure pathways are to be excluded.**

**Ingestion Exposure Route**

Soil analytical data available for the Subject Property were compared to Tier 1 residential and construction worker SROs for the soil ingestion exposure pathway. This comparison indicated that all concentrations of COC are below Tier 1 residential SROs. As a result, further evaluation of this pathway is not warranted.

**Inhalation Exposure Route**

Soil analytical data available for the Subject Property were compared to the site-specific SROs generated through the Tier 2 evaluation. Based on this comparison, all concentrations of COC are below the site-specific SROs. As a result, further evaluation of this pathway is not warranted.

**SCGIER**

Soil analytical data available for the Subject Property were compared to the site-specific SROs generated through the Tier 2 evaluation. Based on this comparison, all concentrations of COC are below the site-specific SROs. As a result, further evaluation of this pathway is not warranted.

**GIER**

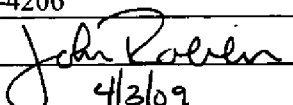
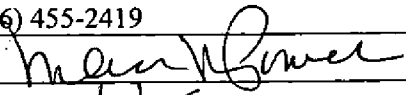
Groundwater analytical data available for the Subject Property were compared to the Tier 1 residential GROs for the Groundwater Ingestion Exposure Route (GIER). This comparison indicated that all concentrations of COC are below the Tier 1 GROs for Class II groundwater. As a result, further evaluation of this pathway is not warranted.

## G. Signatures

All Plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

### UST Owner or Operator

### Consultant

Name:	<u>John Robbins for</u> <u>Shell Oil Products US</u>	Company:	<u>Groundwater &amp; Environmental</u> <u>Services, Inc.</u>
Contact:	<u>Project Manager</u>	Contact:	<u>Melissa Powell</u>
Address:	<u>603 Diehl Road, Suite 103</u>	Address:	<u>1050 Corporate Blvd, Suite C</u>
City:	<u>Naperville</u>	City:	<u>Aurora</u>
State:	<u>Illinois</u>	State:	<u>Illinois</u>
Zip Code:	<u>60565</u>	Zip Code:	<u>60505</u>
Phone:	<u>(630) 276-4206</u>	Phone:	<u>(866) 455-2419</u>
Signature:	<u></u>	Signature:	<u></u>
Date:	<u>4/3/09</u>	Date:	<u>3/14/09</u>

I certify under penalty of law that all activities that are the subject of this plan were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan has been completed in accordance with the Environmental Protection Act [415 ILCS5], 35 Ill. Adm. Code 731, 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 or the Environmental Protection Act [415 ILCS 5/44 and 57.17].

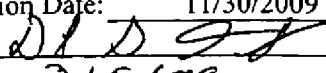
### Licensed Professional Engineer or Geologist

L.P.E. or L.P.G. Seal

RECEIVED

MAR 09 2009

IEPA/BOL

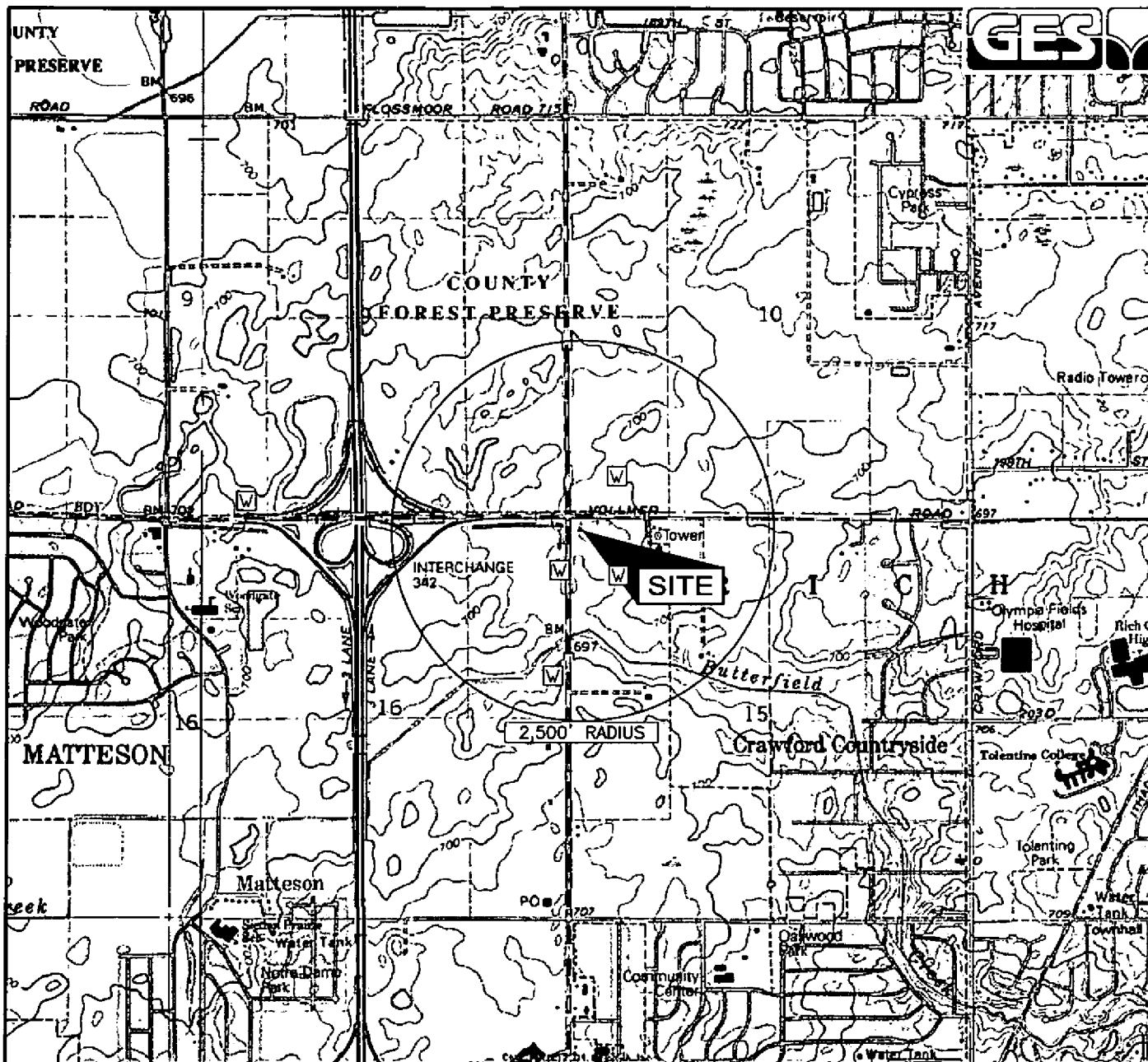
Name: David G. Tully, P.E.  
Firm: Groundwater & Environmental Services, Inc.  
Address: 1050 Corporate Blvd, Suite C  
City: Aurora  
State: Illinois  
Zip Code: 60505  
Phone: (866) 455-2419  
Ill. Registration No.: 062-053775  
License Expiration Date: 11/30/2009  
Signature:   
Date: 3/15/09





## FIGURES

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SOURCE: USGS 7.5 MINUTE SERIES  
TOPOGRAPHIC QUADRANGLE 1993  
HARVEY, ILLINOIS  
CONTOUR INTERVAL = 5'

TOWNSHIP - 35N  
RANGE - 13E  
SECTION - 15

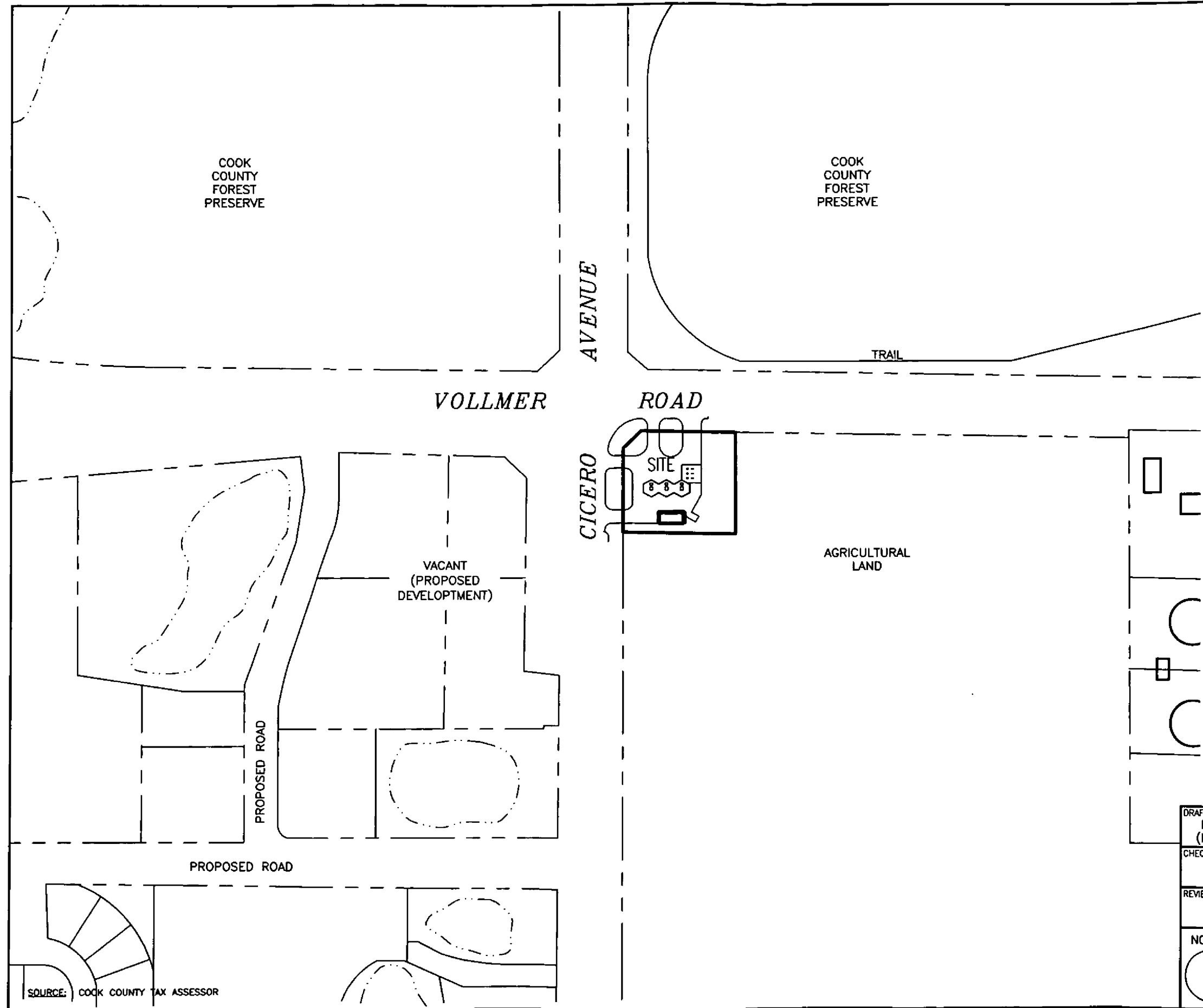


QUADRANGLE LOCATION

☒ POTABLE WELL LOCATION

(#) NUMBER OF WELLS AT LOCATION

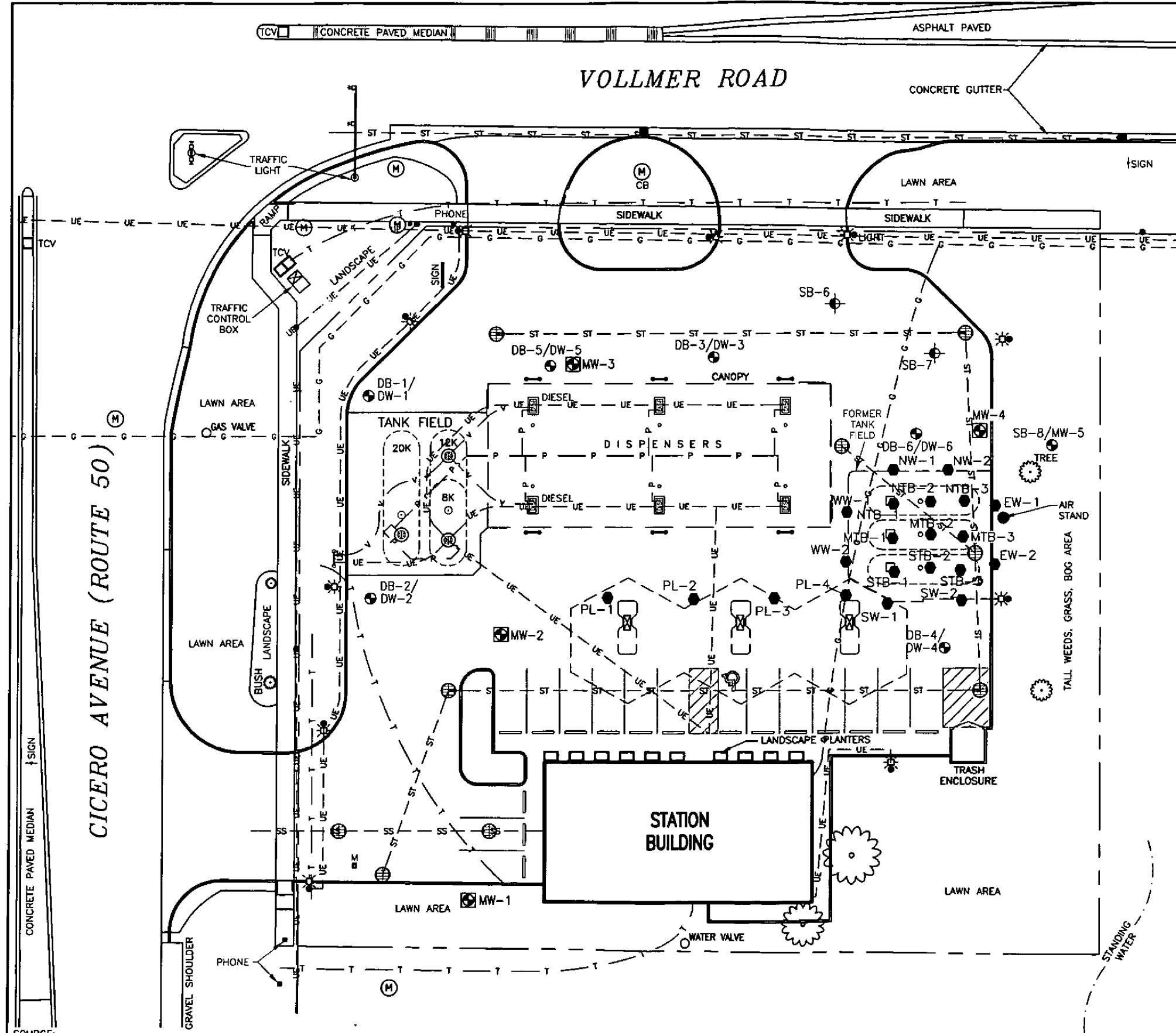
DRAFTED BY: T.M. (N.J.)	WELL LOCATION MAP		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP #137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60504		
NORTH 	SCALE IN FEET 	DATE 9-6-05	FIGURE 1



**RELEASABLE**  
MAR 17 2009  
**REVIEWER MD**

DRAFTED BY: E.V. (N.J.)	LOCAL AREA MAP		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP #137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60505		
NORTH 	SCALE IN FEET 	DATE 7-21-08	FIGURE <b>2</b>

SOURCE: COOK COUNTY TAX ASSESSOR



**LEGEND**

- PROPERTY BOUNDARY
- ☼ LIGHT
- Ⓜ UTILITY MANHOLE
- ⊕ STORM DRAIN
- TCV TRAFFIC CONTROL VAULT
- ⊙ MONITORING WELL
- ⊙ ABANDONED MONITORING WELL
- Ⓜ FORMER DISPENSER ISLAND
- UNDERGROUND PRODUCT LINE
- UNDERGROUND VENT LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE
- UNDERGROUND STORM SEWER
- UNDERGROUND SANITARY SEWER
- ⊙ SOIL BORING
- POST EXCAVATION SOIL SAMPLE

**RELEASABLE**

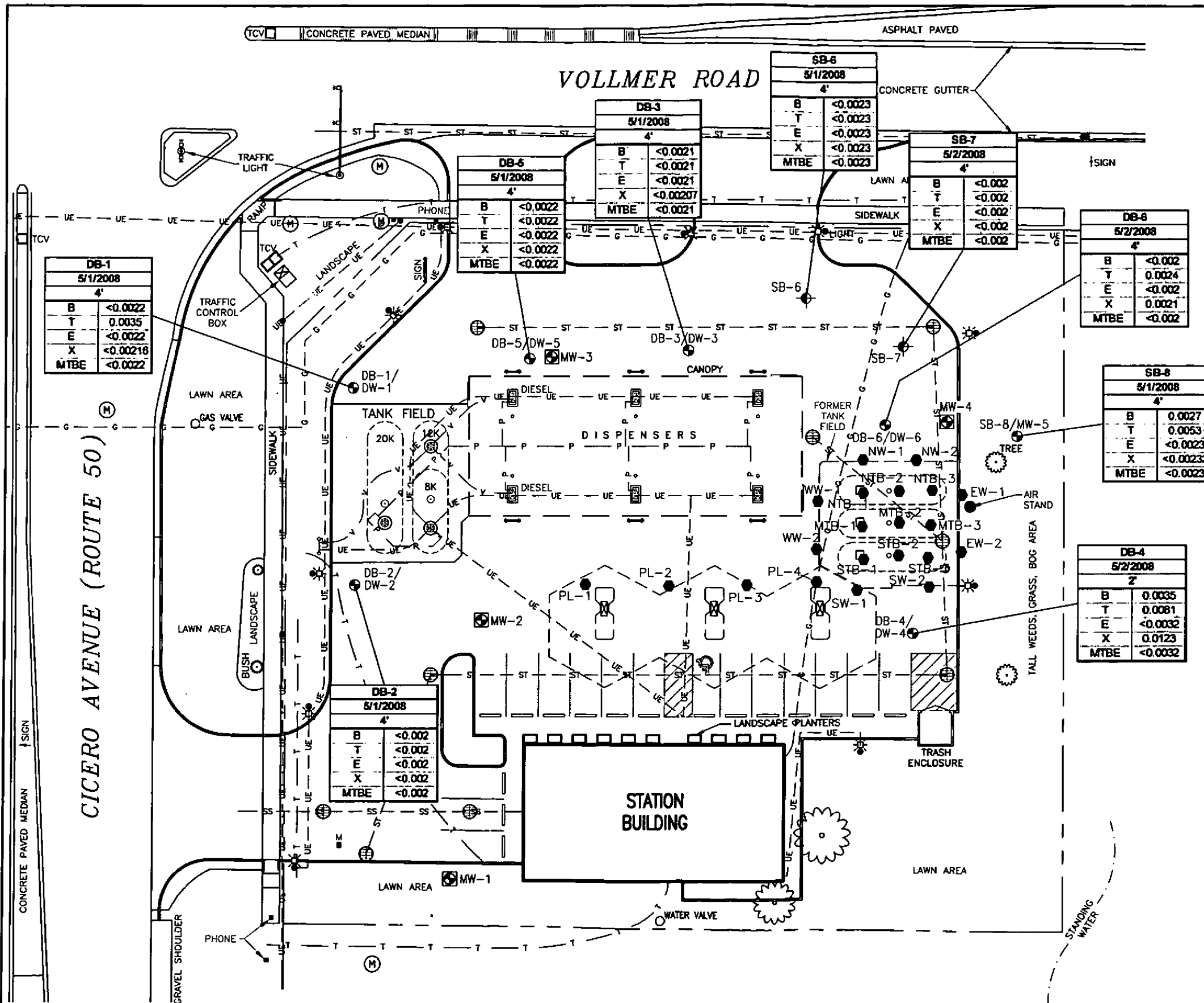
MAR 17 2009

**REVIEWER MD**

DRAFTED BY: E.M.E. (N.J.)	SITE MAP		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP# 137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60505		
NORTH 	SCALE IN FEET 	DATE 9-19-08	FIGURE <b>3</b>

M:\Graphics\11400-Chicago\Shell\137099 Matteson\137099 Matteson SM.dwg, 9/22/2008 2:27:31 PM, EEdwards

SOURCE:  
WARREN JOHNSON ARCHITECTS, INC.  
19 N. GREELEY STREET  
PALATINE, ILLINOIS 60067  
06-28-06.



### LEGEND

- PROPERTY BOUNDARY
  - ☀ LIGHT
  - ⊕ UTILITY MANHOLE
  - ⊕ STORM DRAIN
  - ⊕ TCV TRAFFIC CONTROL VAULT
  - ⊕ MONITORING WELL
  - ⊕ ABANDONED MONITORING WELL
  - ⊕ FORMER DISPENSER ISLAND
  - T --- UNDERGROUND PRODUCT LINE
  - V --- UNDERGROUND VENT LINE
  - UE --- UNDERGROUND ELECTRIC LINE
  - G --- UNDERGROUND GAS LINE
  - ST --- UNDERGROUND STORM SEWER
  - SS --- UNDERGROUND SANITARY SEWER
  - ⊕ SOIL BORING
  - POST EXCAVATION SOIL SAMPLE
- | DB-1     |          |
|----------|----------|
| 5/1/2008 |          |
| 4'       |          |
| B        | <0.0022  |
| T        | 0.0035   |
| E        | <0.0022  |
| X        | <0.00216 |
| MTBE     | <0.0022  |
- | DB-2     |        |
|----------|--------|
| 5/1/2008 |        |
| 4'       |        |
| B        | <0.002 |
| T        | <0.002 |
| E        | <0.002 |
| X        | <0.002 |
| MTBE     | <0.002 |
- | DB-3     |          |
|----------|----------|
| 5/1/2008 |          |
| 4'       |          |
| B        | <0.0021  |
| T        | <0.0021  |
| E        | <0.0021  |
| X        | <0.00207 |
| MTBE     | <0.0021  |
- | DB-4     |         |
|----------|---------|
| 5/2/2008 |         |
| 2'       |         |
| B        | 0.0035  |
| T        | 0.0081  |
| E        | <0.0032 |
| X        | 0.0123  |
| MTBE     | <0.0032 |
- | DB-5     |         |
|----------|---------|
| 5/1/2008 |         |
| 4'       |         |
| B        | <0.0022 |
| T        | <0.0022 |
| E        | <0.0022 |
| X        | <0.0022 |
| MTBE     | <0.0022 |
- | DB-6     |         |
|----------|---------|
| 5/1/2008 |         |
| 4'       |         |
| B        | <0.0022 |
| T        | <0.0022 |
| E        | <0.0022 |
| X        | <0.0022 |
| MTBE     | <0.0022 |
- | DB-7     |        |
|----------|--------|
| 5/2/2008 |        |
| 4'       |        |
| B        | <0.002 |
| T        | <0.002 |
| E        | <0.002 |
| X        | <0.002 |
| MTBE     | <0.002 |
- | DB-8     |        |
|----------|--------|
| 5/2/2008 |        |
| 4'       |        |
| B        | <0.002 |
| T        | 0.0024 |
| E        | <0.002 |
| X        | 0.0021 |
| MTBE     | <0.002 |
- | SB-6     |         |
|----------|---------|
| 5/1/2008 |         |
| 4'       |         |
| B        | <0.0023 |
| T        | <0.0023 |
| E        | <0.0023 |
| X        | <0.0023 |
| MTBE     | <0.0023 |
- | SB-7     |        |
|----------|--------|
| 5/2/2008 |        |
| 4'       |        |
| B        | <0.002 |
| T        | <0.002 |
| E        | <0.002 |
| X        | <0.002 |
| MTBE     | <0.002 |
- | SB-8     |          |
|----------|----------|
| 5/1/2008 |          |
| 4'       |          |
| B        | 0.0027   |
| T        | 0.0053   |
| E        | <0.0023  |
| X        | <0.00232 |
| MTBE     | <0.0023  |
- mg/kg MILLIGRAMS PER KILOGRAM  
MTBE METHYL *tert*-BUTYL ETHER  
<# WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN

RELEASABLE

MAR 17 2009

REVIEWER MD

SOURCE:  
WARREN JOHNSON ARCHITECTS, INC.  
19 N. GREELEY STREET  
PALATINE, ILLINOIS 60067  
06-28-06.

DRAFTED BY: E.M.E. (N.J.)	SOIL ANALYTICAL DATA MAP MAY 1 & 2, 2008		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP# 137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60505		
NORTH 	SCALE IN FEET 	DATE 9-19-08	FIGURE 4

# LEGEND

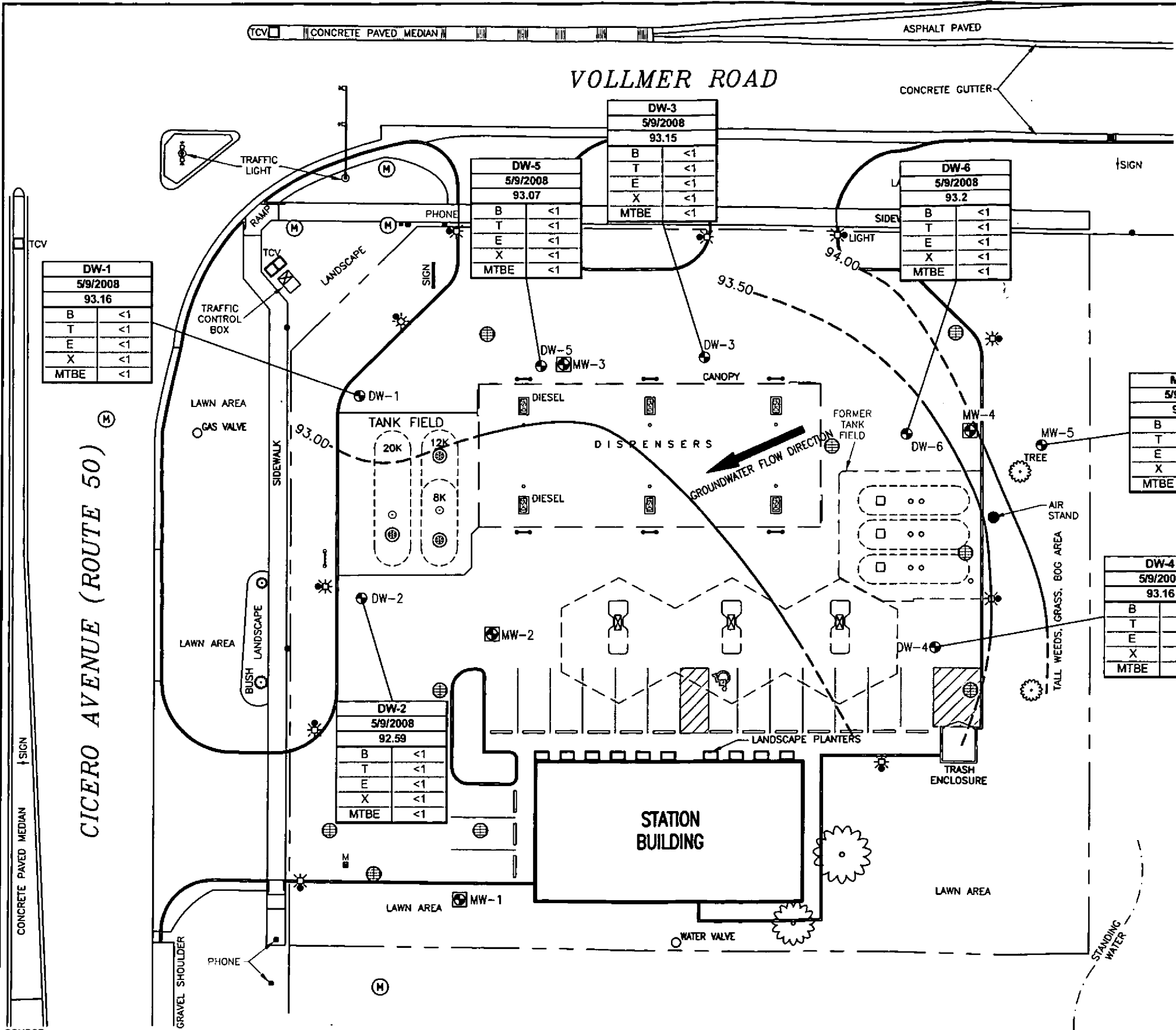
- PROPERTY BOUNDARY
  - ☼ LIGHT
  - ⊕ UTILITY MANHOLE
  - ⊕ STORM DRAIN
  - TCV TRAFFIC CONTROL VAULT
  - ⊕ MONITORING WELL
  - ⊕ ABANDONED MONITORING WELL
  - ⊕ FORMER DISPENSER ISLAND
- WELL IDENTIFICATION
- | DW-1 |    | 5/9/2008                          |  | 93.16 |  |
|------|----|-----------------------------------|--|-------|--|
| B    | <1 | GROUNDWATER ELEVATION (feet)      |  |       |  |
| T    | <1 | BENZENE CONCENTRATION (ug/L)      |  |       |  |
| E    | <1 | TOLUENE CONCENTRATION (ug/L)      |  |       |  |
| X    | <1 | ETHYLBENZENE CONCENTRATION (ug/L) |  |       |  |
| MTBE | <1 | XYLENES CONCENTRATION (ug/L)      |  |       |  |
|      |    | MTBE CONCENTRATION (ug/L)         |  |       |  |
- ug/L MICROGRAMS PER LITER
- MTBE METHYL *tert*-BUTYL ETHER
- <# WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN
- ~ GROUNDWATER CONTOUR (feet)  
INFERRED WHERE DASHED

RELEASABLE

MAR 17 2009

REVIEWER MD

DRAFTED BY: B.C.S. (N.J.)	GROUNDWATER ANALYTICAL MAP MAY 9, 2008		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP# 137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60505		
NORTH 	SCALE IN FEET 	DATE 7-25-08	FIGURE 5



SOURCE:  
WARREN JOHNSON ARCHITECTS, INC.  
19 N. GREELEY STREET  
PALATINE, ILLINOIS 60067  
06-28-06.

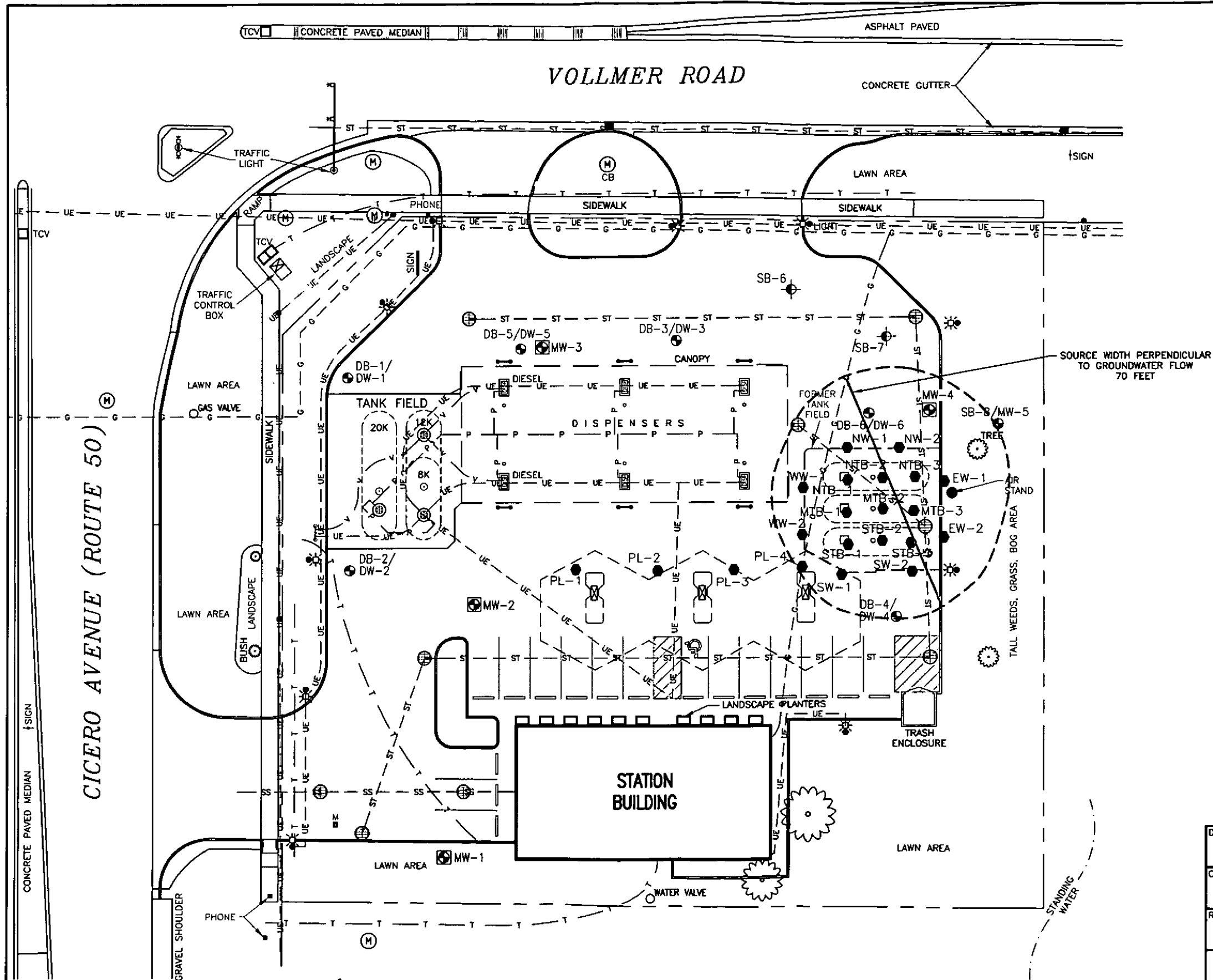






# LEGEND

- PROPERTY BOUNDARY
- ☼ LIGHT
- ⊕ UTILITY MANHOLE
- ⊕ STORM DRAIN
- TCV TRAFFIC CONTROL VAULT
- MONITORING WELL
- ⊕ ABANDONED MONITORING WELL
- ⊕ FORMER DISPENSER ISLAND
- UNDERGROUND PRODUCT LINE
- UNDERGROUND VENT LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE
- UNDERGROUND STORM SEWER
- UNDERGROUND SANITARY SEWER
- ⊕ SOIL BORING
- POST EXCAVATION SOIL SAMPLE
- EXTENT OF MASS-LIMITING PLUME (AREA ~ 0.09 ACRES)



SOURCE:  
WARREN JOHNSON ARCHITECTS, INC.  
19 N. GREELEY STREET  
PALATINE, ILLINOIS 60067  
06-28-06.

DRAFTED BY: M.L.T. (N.J.)	MASS-LIMITING PLUME DIMENSIONS MAP		
CHECKED BY:	SHELL OIL PRODUCTS US SHELL SERVICE STATION SAP# 137099 4755 VOLLMER ROAD MATTESON, ILLINOIS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1050 CORPORATE BOULEVARD, SUITE C, AURORA, IL 60505		
NORTH 	SCALE IN FEET 	DATE 2-11-09	FIGURE 6

## TABLES

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Table 1

## SOIL ANALYTICAL DATA - BTEX/MTBE

Shell Service Station #137099  
4755 Vollmer Road  
Matteson, Illinois

Tier 1 Soil Remediation Objectives for Residential Properties			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)
Ingestion - residential			12	16,000	7,800	16,000	780
Ingestion - construction worker			2,300	410,000	20,000	41,000	2,000
Inhalation - residential			0.8	650	400	320	8,800
Inhalation - construction worker			2.2	42	58	5.6	140
Class I Soil Cleanup Objectives			0.03	12	13	150	0.32
Class II Soil Cleanup Objectives			0.17	29	19	150	0.32
Soil Boring Description	Sample Date	Depth (ft)					
UST REMOVAL SAMPLES							
NW-1	09/07/07	8	0.0808	0.0368	10.1	12	<0.0039
NW-2	09/07/07	8	0.0302	0.0564	4.3	5.95	<0.00384
EW-1	09/07/07	8	0.0387	0.0129	3.78	1.57	<0.00383
EW-2	09/07/07	8	<0.00541	0.0102	0.00978	0.017	<0.00379
SW-1	09/07/07	8	0.0371	0.00763	1.42	0.0765	<0.00381
SW-2	09/07/07	8	0.00903	0.00774	1.98	0.0351	<0.00398
WW-1	09/07/07	8	0.0287	0.0408	0.0975	0.0672	<0.0037
WW-2	09/07/07	8	0.0326	0.00699	0.0137	0.0104	<0.00326
NTB-1	09/10/07	16	0.0574	0.00724	<0.00433	0.0163	<0.00303
NTB-2	09/10/07	16	2.34	0.029	3.08	0.179	<0.00331
NTB-3	09/10/07	16	0.00478	<0.00443	<0.00443	<0.00443	0.0587
MTB-1	09/10/07	16	0.041	<0.00521	<0.00521	<0.00521	0.151
MTB-2	09/10/07	16	0.161	0.0201	0.602	2.48	<0.00351
MTB-3	09/10/07	16	<0.00504	0.0074	0.00672	0.0107	0.007
STB-1	09/10/07	16	0.0768	0.00614	<0.00502	0.00625	0.0255
STB-2	09/10/07	16	<0.00493	<0.00493	<0.00493	<0.00493	0.0154
STB-3	09/10/07	16	<0.00467	0.00898	<0.00467	0.0088	<0.00327
PL-1	09/14/07	3	<0.00514	<0.00514	<0.00514	<0.00514	<0.0036
PL-2	09/14/07	2.5	<0.00437	<0.00437	<0.00437	<0.00437	<0.00306
PL-3	09/14/07	2.5	<0.00495	<0.00495	<0.00495	<0.00495	<0.00347
PL-4	09/14/07	2.5	<0.00459	<0.00459	<0.00459	<0.00459	<0.00321
2008 Divestment Assessment							
DB-1	05/01/2008	4	<0.0022	0.0035	<0.0022	<0.00216	<0.0022
DB-2	05/01/2008	4	<0.002	<0.002	<0.002	<0.002	<0.002
DB-3	05/01/2008	4	<0.0021	<0.0021	<0.0021	<0.00207	<0.0021
DB-4	05/02/2008	2	0.0035	0.0081	<0.0032	0.0123	<0.0032
DB-5	05/01/2008	4	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022
DB-6	05/01/2008	4	<0.002	0.0024	<0.002	0.0021	<0.002
SB-6	05/01/2008	4	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023
SB-7	05/02/2008	4	<0.002	<0.002	<0.002	<0.002	<0.002
SB-8	05/02/2008	4	0.0027	0.0053	<0.0023	<0.00232	<0.0023

**Notes:**

1) mg/kg= milligrams per kilogram or parts per million (ppm)

2) ft = Feet

3) &lt;0.002 = detected at a concentration below the laboratory method detection limit.

4) Bold = Contaminant exceeds the Tier I Soil Remediation Objectives for Class II groundwater

5). NA = Not analyzed

Table 2

## GROUNDWATER ANALYTICAL DATA - BTEX/MTBE

Shell Service Station #137099  
4755 Vollmer Road  
Matteson, Illinois

Tier I Groundwater Remediation Objectives	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)
<i>Class I Groundwater</i>	5	1,000	700	10,000	70
<i>Class II Groundwater</i>	25	2,500	1,000	10,000	70

Sample Location	Sample Date	Referenced Elevation	Depth to Groundwater	Groundwater Elevation					
DW-1	5/9/08	98.70	5.54	93.16	<1	<1	<1	<1	<1
DW-2	5/9/08	98.54	5.95	92.59	<1	<1	<1	<1	<1
DW-3	5/9/08	98.43	5.28	93.15	<1	<1	<1	<1	<1
DW-4	5/9/08	98.02	4.86	93.16	<1	<1	<1	<1	<1
DW-5	5/9/08	98.56	5.49	93.07	<1	<1	<1	<1	<1
DW-6	5/9/08	97.35	4.15	93.20	<1	<1	<1	<1	<1
MW-5	5/9/08	95.02	0.00	95.02	<1	<1	<1	<1	<1

## Notes:

- 1) ug/L = micrograms per liter or parts per billion (ppb)
- 2) <5 indicates concentration detected less than the method detection limit
- 3) NA = Not analyzed

Table 3

**GEOTECHNICAL AND GEOCHEMICAL ANALYTICAL DATA**

Shell Service Station #137099

4755 Vollmer Road

Matteson, Illinois

SOIL CHARACTERIZATION ANALYSIS			Fractional Organic Carbon (F <sub>oc</sub> )	Soil Bulk Density	Soil Particle Density	Moisture	pH
Soil Sample Location	Date	Depth (ft)	gr/gr	pcf	g/cc		%
WC-1	5/1/08	NA	NS	NS	NS	20.2	7.11

**APPENDIX A**

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**IEPA LETTER DATED – DECEMBER 8, 2008**



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-2829  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-6762

**CERTIFIED MAIL**

**DEC 08 2008**

**7007 2560 0003 2091 5605**

Shell Oil Products US  
Attn: John Robbins  
603 Diehl Road, Suite 105  
Naperville, IL 60563

Re: LPC # 0311805032 -- Cook County  
Matteson/Shell Oil Products US (Station #137099)  
4755 Vollmer Road  
LUST Incident No. 20071228  
LUST Technical File

Dr. Mr. Robbins:

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed the amended Site Investigation Completion Report (report) submitted for the above-referenced incident. This report, dated November 18, 2008, was received by the Illinois EPA on November 24, 2008. Citations in this letter are from the Environmental Protection Act (Act), as amended by Public Act 92-0554 on June 24, 2002, and 35 Illinois Administrative Code (35 Ill. Adm. Code).

The Illinois EPA has determined that the requirements of Title XVI of the Act have been satisfied (Sections 57.7(a)(5) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(a)). Therefore, the report is approved.

In addition, the budget for Stage 1 is approved for the amounts listed in Section 1 of Attachment A (Sections 57.7(a)(2) and 57.7(c) of the Act and 35 Ill. Adm. Code 734.505(b) and 734.510(b)). Be aware that the amount of payment from the Fund may be limited by Sections 57.8(d), 57.8(e), and 57.8(g) of the Act, as well as 35 Ill. Adm. Code 734.630 and 734.655.

Pursuant to Sections 57.7(b)(2) and (3) and 57.12(c) and (d) of the Act and 35 Ill. Adm. Code 734.100 and 734.125, the Illinois EPA requires submittal of a Corrective Action Plan and budget within 90 days from the date of this letter to:

Page 2

Illinois Environmental Protection Agency  
Bureau of Land - #24  
Leaking Underground Storage Tank Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, IL 62794-9276

Please note that the Illinois EPA does not require the submission of a budget if the owner or operator does not intend to seek payment from the Underground Storage Tank Fund.

Please submit all correspondence in duplicate and include the Re: block shown at the beginning of this letter.

If you have any questions or need further assistance, please contact the Illinois EPA project manager, Steve Jones, at 217/524-1253.

Sincerely,

*Clifford L. Wheeler*

Clifford L. Wheeler  
Unit Manager  
Leaking Underground Storage Tank Section  
Division of Remediation Management  
Bureau of Land

CLW:JS Shell #137099 (LUST 20071228 Nov 08 rpt.doc

Attachments: Attachment A

c: Groundwater & Environmental Services, attn: Melissa Powell  
Leaking UST Claims Unit  
BOL File



Attachment A

Re: LPC # 0311805032 -- Cook County  
Matteson/Shell Oil Products US (Station #137099)  
4755 Vollmer Road  
LUST Incident No. 20071228  
LUST Technical File

**SECTION 1**

**STAGE 1 Actual Costs**

The following amounts are approved:

\$1,468.93	Drilling and Monitoring Well Costs
\$1,007.94	Analytical Costs
\$1,535.15	Remediation and Disposal Costs
\$0.00	UST Removal and Abandonment Costs
\$0.00	Paving, Demolition, and Well Abandonment Costs
\$4,393.58	Consulting Personnel Costs
\$290.00	Consultant's Materials Costs

Handling charges will be determined at the time a billing package is reviewed by the Illinois EPA. The amount of allowable handling charges will be determined in accordance with Section 57.8(f) of the Environmental Protection Act (Act) and 35 Illinois Administrative Code (35 Ill. Adm. Code) 734.635.

Shell #137099 (LUST 20071228 Nov 08 rpt.doc



## **APPENDIX B**

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### **TACO CALCULATION SPREADSHEETS**

**S6/S7 Calculations - Soil Inhalation Exposure Route for Carcinogens  
Mass-Limited Model**

DATE: 9-Feb-09

SITE: Shell Service Station #137099

Parameter: Benzene

**Input Parameters**

Chemical Parameter =

Benzene

Unit Risk Factor (URF) =  $7.8E-06$  (ug/m<sup>3</sup>)<sup>-1</sup>

Soil Type =

Silty Clay

Dry Bulk Density ( $\rho_b$ ) =  $1.65$  g/cm<sup>3</sup>

Exposure scenario

Residential

Exposure Duration (ED) = 30 yr

Exposure Frequency (EF) = 350 days

Depth of Source/Source Thickness( $d_s$ )=

5 ft

Depth of Source/Source Thickness( $d_s$ )= 1.524 m

Source Area(A)=

0.09 Acres

Inverse of the mean concentration at the center of  
a square source (Q/C) =  $97.78$  (g/m<sup>2</sup>·s)/(kg/m<sup>3</sup>)

**Fixed Parameters**

Averaging time for Carcinogens (AT<sub>c</sub>)=

70 yr

Exposure Interval for Mass-Limit Volatilization  
Factor Equation S26 (T<sub>ML</sub>) =

30 yr

Target Cancer Risk (TR) =

$1.00E-06$  Unitless

**Calculations for supporting equation - SSL S26**

Mass Limit Volatilization factor - Residential, Industrial/Commercial(VF)=

36746.242

Mass Limit Volatilization factor - Construction Worker(VF') =

3674.624

Volatilization Factor used for equation S6/S7 =

36746.242

**Remediation Objective**

11.464 mg/kg

**S6/S7 Calculations - Soil Inhalation Exposure Route for Carcinogens  
Mass-Limited Model**

DATE: 9-Feb-09

SITE: Shell Service Station #137099

Parameter: Benzene

**Input Parameters**

Chemical Parameter =

Benzene

Unit Risk Factor (URF) =  $7.8E-06$  (ug/m3)<sup>-1</sup>

Soil Type =

Silty Clay

Dry Bulk Density ( $\rho_b$ ) =  $1.65$  g/cm<sup>3</sup>

Exposure scenario

Construction Worker

Exposure Duration (ED) = 1 yr

Exposure Frequency (EF) = 30 days

Depth of Source/Source Thickness( $d_s$ ) =

5 ft

Depth of Source/Source Thickness( $d_s$ ) = 1.524 m

Source Area(A) =

0.09 Acres

Inverse of the mean concentration at the center of a square source (Q/C) =  $97.78$  (g/m<sup>2</sup>·s)/(kg/m<sup>3</sup>)

**Fixed Parameters**

Averaging time for Carcinogens (AT<sub>e</sub>) =

70 yr

Exposure Interval for Mass-Limit Volatilization  
Factor Equation S26 (T<sub>ML</sub>) =

30 yr

Target Cancer Risk (TR) =

$1.00E-06$  Unitless

**Calculations for supporting equation - SSL S26**

Mass Limit Volatilization factor - Residential, Industrial/Commercial(VF) =

36746.242

Mass Limit Volatilization factor - Construction Worker(VF\*) =

3674.624

Volatilization Factor used for equation S6/S7 =

3674.624

**Remediation Objective**

401.225 mg/kg

**S4/S5 Calculations - Soil Inhalation Exposure Route for Non-Carcinogens  
Mass-Limited Model**

DATE: 9-Feb-09

SITE: Shell Service Station #137099

Parameter: Total Xylenes

**Input Parameters**

Chemical Parameter =

Total Xylenes

Inhalation Reference Concentration (RfC)=

0.1 mg/m<sup>3</sup>

Subchronic Reference Concentration for Construction  
Worker Exposure (RfC)=

0.4 mg/m<sup>3</sup>

Soil Type =

Silty Clay

Dry Bulk Density ( $\rho_b$ )=

1.65 g/cm<sup>3</sup>

Exposure scenario

Construction Worker

Exposure Duration (ED) =

1 yr

Exposure Frequency (EF) =

30 days

Averaging Time for NonCarcinogens (AT)=

0.115 yr

Depth of Source/Source Thickness( $d_s$ )=

5 ft

Inhalation Reference Concentration used for equations S4/S5 =

0.4 mg/m<sup>3</sup>

Depth of Source/Source Thickness( $d_s$ )=

1.524 m

Source Area(A)=

0.09 Acres

Inverse of the mean concentration at the center of a square  
source (Q/C) =

97.78 (g/m<sup>2</sup>-s)/(g/m<sup>3</sup>)

**Fixed Parameters**

Exposure Interval for Mass-Limit Volatilization  
Factor Equation S26 ( $T_{ML}$ ) =

30 yr

Target Hazard Quotient (THQ)=

1 Unitless

**Calculations for supporting equation - SSL S26**

Mass Limit Volatilization factor - Residential, Industrial/Commercial(VF)=

36746.242

Mass Limit Volatilization factor - Construction Worker(VF\*) =

3674.624

Volatilization Factor used for equation S4/S5 =

3674.624

**Remediation Objective**

2056.565 mg/kg

# S28 CALCULATION - SOIL COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE:

DATE: 10-Feb-09  
SITE: Shell Service Station #137099

Parameter: Benzene

## Input Parameters

Chemical Parameter =	Benzene		
Soil Type =	Silty Clay		
		Dry Soil Bulk Density ( $\rho_b$ ) =	1.65 g/cm <sup>3</sup>
Source Length Parallel to groundwater Flow(L) =	70 ft	Source Length Parallel to groundwater Flow(L) =	21.341 m
Aquifer Thickness ( $d_a$ ) =	16 ft	Aquifer Thickness ( $d_a$ ) =	4.878 m
Source Thickness ( $d_s$ ) =	5 ft	Source Thickness ( $d_s$ ) =	1.524 m
		Hydraulic Gradient (I) =	0.00398 m/m
Hydraulic Conductivity (K) =	8.43E-05 cm/sec	Hydraulic Conductivity (K) =	26.569 m/yr
Groundwater Classification (I or II)	II	Tier II Remediation Objective =	0.025 mg/L
		Infiltration Rate ( $i_{ML}$ ) =	0.18 m/yr
		Exposure Duration ( $ED_{ML}$ ) =	70 yr

## S28 Calculations

Mixing Zone Depth (d) = 7.134 ft > 2m, use 2m  
Dilution Factor(DF) = 1 ft < 20, use 20  
Target Soil Leachate Concentration (Cw) = 0.5

2.505E+00 mg/Kg

TIER 2 SOIL REMEDIATION OBJECTIVE

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

### A. Site Identification

IEMA Incident # (6- or 8-digit): 20071228 IEPA LPC # (10-digit): 0311805032  
 Site Name: Shell Service Station #137099  
 Site Address (not a P.O. Box): 4755 Vollmer Road  
 City: Matteson County: Cook Zip Code: 60443  
 Leaking UST Technical File

### B. Tier 2 Calculation Information

Equation(s) Used (ex: S12, S17, S28): S4/S5, S6/S7, and S28  
 Contact Information for Individual Who Performed Calculations:  
Amber L. Verbick, Junior Geologist, 1050 Corporate Blvd, Suite C, Aurora, Illinois, 60505, (888) 455-2419, ext. 4042

Land Use: Residential Soil Type: Silty Clay

Groundwater: ☐ Class I ☒ Class II

Mass Limit: ☒ Yes ☐ No If Yes, then Specify Acreage: ☒ 0.5 ☐ 1 ☐ 2 ☐ 5 ☐ 10 ☐ 30

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

Symbol	Unit	Symbol	Unit
AT (ingestion) =	yr	$d_a$ =	4.8768 m
AT (inhalation) =	yr	$d_s$ =	1.524 m
$AT_c$ =	70 yr	$D_A$ =	cm <sup>2</sup> /s
BW =	kg	$D_l$ =	cm <sup>2</sup> /s
$C_{sat}$ =	mg/kg	$D_w$ =	cm <sup>2</sup> /s
$C_w$ =	0.5 mg/L	DF =	20 unitless
d =	m	ED (ingestion of carcinogens) =	yr



Incident #: 20071228

Chemical: Benzene

Land Use: Residential

Symbol		Unit	Symbol		Unit
ED (inhalation of carcinogens)	=	yr	$K_{oc}$	= 58.9	cm <sup>3</sup> /g or L/kg
ED (ingestion of noncarcinogens)	=	yr	$K_s$	=	m/yr
ED (inhalation of noncarcinogens)	=	yr	L	= 21.341	m
ED (ingestion of groundwater)	=	yr	PEF	=	m <sup>3</sup> /kg
$ED_{M-L}$	= 70	yr	PEF'	=	m <sup>3</sup> /kg
EF	=	d/yr	Q/C (VF equations)	=	(g/m <sup>2</sup> -s)/(kg/m <sup>3</sup> )
F(x)	= 0.194	unitless	Q/C (PEF equations)	=	(g/m <sup>2</sup> -s)/(kg/m <sup>3</sup> )
$f_{oc}$	=	g/g	RfC	=	mg/m <sup>3</sup>
$GW_{obj}$	= 0.025	mg/L	RfD <sub>o</sub>	=	mg/(kg-d)
H'	= 0.228	unitless	S	=	mg/L
i	= 0.00398	m/m	SF <sub>o</sub>	=	(mg/kg-d) <sup>-1</sup>
I	= 0.3	m/yr	T	=	s
$I_{M-L}$	= 0.18	m/yr	$T_{M-L}$	= 30	yr
$IF_{soil-adj}$	= 114	(mg-yr)/(kg-d)	THQ	= 1	unitless
$IR_{soil}$	=	mg/d	TR	= 0.000001	unitless
$IR_w$	=	L/d	$U_m$	= 4.69	m/s
K	= 26.569	m/yr	URF	= 0.000007	(μg/m <sup>3</sup> ) <sup>-1</sup>
$K_d$ (non-ionizing organics)	=	cm <sup>3</sup> /g or L/kg	$U_l$	= 11.32	m/s
$K_d$ (ionizing organics)	=	cm <sup>3</sup> /g or L/kg	V	=	unitless
$K_d$ (inorganics)	=	cm <sup>3</sup> /g or L/kg	VF	= 36746.242	m <sup>3</sup> /kg

Incident #: 20051285Chemical: BenzeneLand Use: Residential

Symbol		Unit	Symbol		Unit
$VF'$	=	3674.624	$m^3/kg$	$\theta_w$	= 0.17 $L_{water}/L_{soil}$
$VF_{M-L}$	=		$m^3/kg$	$\rho_b$	= 1.65 $kg/L$ or $g/cm^3$
$VF'_{M-L}$	=		$m^3/kg$	$\rho_s$	= $g/cm^3$
$\eta$	=		$L_{pore}/L_{soil}$	$\rho_w$	= 1 $g/cm^3$
$\theta_a$	=		$L_{air}/L_{soil}$	$1/(2b+3)$	= unitless

Equation		Result	Unit(s)
S1	=		mg/kg
S2	=		mg/kg
S3	=		mg/kg
S4	=		mg/kg
S5	=		mg/kg
S6	=	11.694	mg/kg
S7	=		mg/kg
S17	=		mg/kg
S28	=	0.501	mg/kg
S29	=		mg/kg

## Illinois Environmental Protection Agency Leaking Underground Storage Tank Program SSL Input Parameters for Use with Tier 2 Calculations

### A. Site Identification

IEMA Incident # (6- or 8-digit): 20071228 IEPA LPC # (10-digit): 0311805032  
 Site Name: Shell Service Station #137099  
 Site Address (not a P.O. Box): 4755 Vollmer Road  
 City: Matteson County: Cook Zip Code: 60443  
 Leaking UST Technical File

### B. Tier 2 Calculation Information

Equation(s) Used (ex: S12, S17, S28): S4/S5, S6/S7, and S28  
 Contact Information for Individual Who Performed Calculations:  
Amber L. Verbick, Junior Geologist, 1050 Corporate Blvd, Suite C, Aurora, Illinois, 60505, (888) 455-2419 ext. 4042  
 Land Use: Residential Soil Type: Silty Clay

Groundwater: ☐ Class I ☒ Class II

Mass Limit: ☒ Yes ☐ No If Yes, then Specify Acreage: ☒ 0.5 ☐ 1 ☐ 2 ☐ 5 ☐ 10 ☐ 30

- Mass Limit Acreage other than defaults must always be rounded up.
- Failure to use site-specific parameters where allowed could affect payment from the Underground Storage Tank Fund.
- Maps depicting source width, plume dimensions, distance, etc. must also be submitted.
- Inputs must be submitted in the designated unit.

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AT (inhalation) =	yr	$d_s$ = 1.524	m
$AT_c$ = 70	yr	$D_A$ =	cm <sup>2</sup> /s
BW =	kg	$D_i$ =	cm <sup>2</sup> /s
$C_{sat}$ =	mg/kg	$D_w$ =	cm <sup>2</sup> /s
$C_w$ = 0.5	mg/L	DF = 20	unitless
$d$ =	m	ED (ingestion of carcinogens) =	yr

Incident #: 20071228

Chemical: Total Xylenes

Land Use: Residential

Symbol		Unit	Symbol		Unit
ED (inhalation of carcinogens)	=	yr	$K_{oc}$	= 58.9	cm <sup>3</sup> /g or L/kg
ED (ingestion of noncarcinogens)	=	yr	$K_s$	=	m/yr
ED (inhalation of noncarcinogens)	=	yr	L	= 21.341	m
ED (ingestion of groundwater)	=	yr	PEF	=	m <sup>3</sup> /kg
$ED_{M-L}$	= 70	yr	PEF'	=	m <sup>3</sup> /kg
EF	=	d/yr	Q/C (VF equations)	=	(g/m <sup>2</sup> -s)/(kg/m <sup>3</sup> )
F(x)	= 0.194	unitless	Q/C (PEF equations)	=	(g/m <sup>2</sup> -s)/(kg/m <sup>3</sup> )
$f_{oc}$	=	g/g	RfC	=	mg/m <sup>3</sup>
$GW_{obj}$	= 0.025	mg/L	RfD <sub>o</sub>	=	mg/(kg-d)
H'	= 0.228	unitless	S	=	mg/L
i	= 0.00398	m/m	SF <sub>o</sub>	=	(mg/kg-d) <sup>-1</sup>
l	= 0.3	m/yr	T	=	s
$I_{M-L}$	= 0.18	m/yr	$T_{M-L}$	= 30	yr
$IF_{soil-adj}$	= 114	(mg-yr)/(kg-d)	THQ	= 1	unitless
$IR_{soil}$	=	mg/d	TR	= 0.000001	unitless
$IR_w$	=	L/d	$U_m$	= 4.69	m/s
K	= 26.569	m/yr	URF	= 0.000007	(µg/m <sup>3</sup> ) <sup>-1</sup>
$K_d$ (non-ionizing organics)	=	cm <sup>3</sup> /g or L/kg	$U_i$	= 11.32	m/s
$K_d$ (ionizing organics)	=	cm <sup>3</sup> /g or L/kg	V	=	unitless
$K_d$ (inorganics)	=	cm <sup>3</sup> /g or L/kg	VF	= 36746.242	m <sup>3</sup> /kg

Incident #: 20051285Chemical: BenzeneLand Use: Residential

Symbol		Unit
VF'	= 3674.624	m <sup>3</sup> /kg
VF <sub>M-L</sub>	=	m <sup>3</sup> /kg
VF' <sub>M-L</sub>	=	m <sup>3</sup> /kg
η	=	L <sub>pore</sub> /L <sub>soil</sub>
θ <sub>a</sub>	=	L <sub>air</sub> /L <sub>soil</sub>

Symbol		Unit
θ <sub>w</sub>	= 0.17	L <sub>water</sub> /L <sub>soil</sub>
ρ <sub>b</sub>	= 1.65	kg/L or g/cm <sup>3</sup>
ρ <sub>s</sub>	=	g/cm <sup>3</sup>
ρ <sub>w</sub>	= 1	g/cm <sup>3</sup>
1/(2b+3)	=	unitless

Equation	Result	Unit(s)
S1	=	mg/kg
S2	=	mg/kg
S3	=	mg/kg
S4	=	mg/kg
S5	=	mg/kg
S6	= 2056.565	mg/kg
S7	=	mg/kg
S17	=	mg/kg
S28	=	mg/kg
S29	=	mg/kg

**APPENDIX C**

---

**BUDGET AND CERTIFICATION FORM**

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**IEPA/BOL**

## General Information for the Budget and Billing Forms

LPC #: 0311805032 County: Cook

City: Matteson Site Name: Shell Service Station #137099

Site Address: 4755 Vollmer Road

IEMA Incident No.: 20071228

IEMA Notification Date: September 6, 2007

Date this form was prepared: February 10, 2009

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This form is being submitted as a (check one, if applicable):

IEPA/BOL

- ☒ Budget Proposal
- ☐ Budget Amendment (Budget amendments must include only the costs over the previous budget.)
- ☐ Billing Package

Please provide the name(s) and date(s) of report(s) documenting the costs requested:

Name(s): CAP

Date(s): March 5, 2009

This package is being submitted for the site activities indicated below:

### 35 III. Adm. Code 734:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☐ Site Investigation ..... Stage 1: ☐ Stage 2: ☐ Stage 3: ☐
- ☒ Corrective Action Actual Costs

### 35 III. Adm. Code 732:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☐ Site Classification
- ☐ Low Priority Corrective Action
- ☐ High Priority Corrective Action

### 35 III. Adm. Code 731:

- ☐ Site Investigation
- ☐ Corrective Action

## General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: Shell Oil Products US

Send in care of: Environmental Project Manager - John Robbins

Address: 603 E. Diehl Road, Suite 103

City: Naperville

State: Illinois

Zip: 60563

The payee is the: Owner ☒ Operator ☒ (Check one or both.)

  
Signature of the owner or operator of the UST(s) (required)

If you have a change of address, [click here](#) to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: ☐ 101 or more: ☒

Number of USTs at the site: 6 (Number of USTs includes USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA for this site: 2

Incident Numbers assigned to the site due to releases from USTs: 20071228 20051081

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Gasoline +	10,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	20071228 +	Overfill
Gasoline +	10,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	20071228 +	Overfill
Gasoline +	10,000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	20071228 +	Overfill
Gasoline +	20,000	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Gasoline +	12,000	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Diesel Fuel +	8,000	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Add More Rows

Undo Last Add



## Budget Summary

Choose the applicable regulation: ☒ 734 ☐ 732

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
Drilling and Monitoring Well Costs Form	\$	\$	\$	\$	\$
Analytical Costs Form	\$	\$	\$	\$	\$
Remediation and Disposal Costs Form	\$	\$	\$	\$	\$
UST Removal and Abandonment Costs Form	\$	\$	\$	\$	\$
Paving, Demolition, and Well Abandonment Costs Form	\$	\$	\$	\$	\$ 1,144.50
Consulting Personnel Costs Form	\$	\$	\$	\$	\$ 6,172.36
Consultant's Materials Costs Form	\$	\$	\$	\$	\$
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.				
<b>Total</b>	\$	\$	\$	\$	\$ 7,316.86

## Paving, Demolition, and Well Abandonment Costs Form

### A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost (\$) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost

<b>Total Concrete and Asphalt Placement/Replacement Costs:</b>	
--	--

### B. Building Destruction or Dismantling and Canopy Removal

Item to Be Destroyed, Dismantled, or Removed	Unit Cost (\$)	Total Cost (\$)

<b>Total Building Destruction or Dismantling and Canopy Removal Costs:</b>	
--	--

<b>Total Paving, Demolition, and Well Abandonment Costs:</b>	<b>\$1,144.50</b>
--	-------------------

## Consulting Personnel Costs Form

Employee Name	Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category	Task			
	Geologist II	20.00	81.79	\$1,635.80
CCAP	Preparation of Corrective Action Plan Report			
	Geologist II	2.00	81.79	\$163.58
CCAP-Budget	Preparation of Corrective Action Plan Budget			
	Geologist II	6.00	81.79	\$490.74
TACO 2 or 3	TACO Calculations / Development of Tier 2 SROs and GROs			
	Draftperson/CAD III	6.00	59.98	\$359.88
CCAP	Preparation of Site Maps for Corrective Action Plan Report			
	Senior Project Manager	2.00	109.05	\$218.10
CCAP	Review of Corrective Action Plan Report			
	Senior Project Manager	1.00	109.05	\$109.05
CCAP-Budget	Review of Corrective Action Plan Budget			
	Senior Project Manager	1.00	109.05	\$109.05
TACO 2 or 3	Review of TACO Calculations			
	Senior Prof. Engineer	1.00	141.76	\$141.76
CCAP	Review of Corrective Action Plan Report			
	Senior Prof. Engineer	1.00	141.76	\$141.76
CCAP-Budget	Review of Corrective Action Plan Budget			

Employee Name		Personnel Title	Hours	Rate* (\$)	Total Cost
Remediation Category	Task				
		Senior Prof. Engineer	1.00	141.76	\$141.76
TACO 2 or 3	Review of TACO Calculations				
		Senior Acct. Technician	2.00	59.98	\$119.96
CA-Pay	Preparation of reimbursement submittal				
		Administrative Assistant III	2.00	38.17	\$76.34
CCAP	Corrective Action Plan duplication and submittal to IEPA				
		Geologist II	20.00	81.79	\$1,635.80
CACR	Preparation of the Corrective Action Completion Report				
		Senior Project Manager	2.00	109.05	\$218.10
CACR	Review of the Corrective Action Completion Report				
		Senior Prof. Engineer	2.00	141.76	\$283.52
CACR	Review of the Corrective Action Completion Report				
		Geologist II	4.00	81.79	\$327.16
CACR	Record NFR Letter with property deed				

\*Refer to the applicable Maximum Payment Amounts document.

<b>Total of Consulting Personnel Costs</b>	<b>\$6,172.36</b>
--	-------------------

## Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 20071228. I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

Costs associated with ineligible tanks.  
Costs associated with site restoration (e.g., pump islands, canopies).  
Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).  
Costs incurred prior to IEMA notification.  
Costs associated with planned tank pulls.  
Legal fees or costs.  
Costs incurred prior to July 28, 1989.  
Costs associated with installation of new USTs or the repair of existing USTs.

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Owner/Operator: Shell Oil Products US

Authorized Representative: John Robbins

Title: Environmental Project Manager

Signature: John Robbins

Date: 3/4/09

Subscribed and sworn to before me the 4<sup>th</sup> day of March, 2009

Donna J. Larson  
(Notary Public)

Seal:

"OFFICIAL SEAL"  
Donna J. Larson  
Notary Public, State of Illinois  
My Commission Expires 9/10/11

In addition, I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

L.P.E./L.P.G.: David G. Tully, P.E.

L.P.E./L.P.G. Seal:

L.P.E./L.P.G. Signature: David G. Tully

Date: 3/5/09

Subscribed and sworn to before me the 5<sup>th</sup> day of March, 2009

Donna J. Larson  
(Notary Public)

Seal:

"OFFICIAL SEAL"  
Donna J. Larson  
Notary Public, State of Illinois  
My Commission Expires 9/10/11

The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

**APPENDIX D**

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**CORRECTIVE ACTION COMPLETION FORM**

**RECEIVED**

**MAR 09 2009**

**IEPA/BOL**

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Corrective Action Completion Report**

**A. Site Identification**

IEMA Incident # (6- or 8-digit): 20071228 IEPA LPC# (10-digit): 0311805032  
Site Name: Shell Service Station #137099  
Site Address (Not a P.O. Box): 4755 Vollmer Road  
City: Matteson County: Cook ZIP Code: 60443  
Leaking UST Technical File

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**B. Site Information**

1. Has a Corrective Action Plan been approved? Yes ☐ No ☒ IEPA/BOL  
Date of approval letter: \_\_\_\_\_
2. This completion report is being submitted pursuant to:
- a. 35 Ill. Adm. Code 731.166 ☐
  - b. 35 Ill. Adm. Code 732.300(b) ☐
  - c. 35 Ill. Adm. Code 732.404 ☐
  - d. 35 Ill. Adm. Code 734.345 ☒
3. Method of remediation chosen:
- a. Soil \_\_\_\_\_
  - b. Groundwater \_\_\_\_\_
4. Quantity of contaminated media remediated and/or recovered:
- a. Soil \_\_\_\_\_ yds.<sup>3</sup>
  - b. Groundwater \_\_\_\_\_ gals.
  - c. Free Product \_\_\_\_\_ gals.

**C. Remedial (Corrective) Action**

1. An executive summary that identifies the overall objectives of the corrective action and the technical approach utilized to meet those objectives. The summary shall contain the following information:



- a. A brief description of the site, including but not limited to a description of the release, the applicable indicator contaminants, the contaminated media, and the extents of soil and groundwater contamination that exceeded the most stringent Tier 1 remediation objectives;
  - b. The major components (e.g., treatment, containment, removal) of the corrective action;
  - c. The scope of the problems corrected or mitigated by the corrective action; and
  - d. The anticipated post-corrective action uses of the site and areas immediately adjacent to the site;
2. A description of the corrective action activities conducted including:
  - a. A narrative description of the field activities conducted as part of corrective action;
  - b. A narrative description of the remedial actions implemented at the site and the performance of each remedial technology utilized;
  - c. Documentation of sampling activities:
    - i. Sample collection information;
    - ii. Sample preservation and shipment information;
    - iii. Analytical procedure information;
    - iv. Analytical results, chain of custody and control, and laboratory certification;
    - v. Field and lab blanks; and
    - vi. Table(s) comparing analytical results to remediation objectives approved for the site (include sample depths, date collected, and detection limits);
  - d. Soil boring logs and monitoring well construction diagrams.
3. A narrative description of any special conditions relied upon as part of corrective action including:
  - a. Engineered barriers utilized:
    - i. type of barrier(s); and
    - ii. map showing location(s) and dimension(s) of barrier(s);
  - b. Institutional controls utilized:
    - i. copy of fully executed institutional control(s); and
    - ii. map showing location(s) of controls;
  - c. Other conditions, if any, necessary for protection of human health and safety and the environment that are related to the issuance of a No Further Remediation Letter; and
  - d. Any information required regarding off-site access;
4. An analysis of the effectiveness of the corrective action that compares the confirmation sampling results to the remediation objectives approved for the site;
5. A conclusion that identifies the success in meeting the remediation objectives approved for the site;
6. Appendices containing references and data sources;

7. The water supply well survey:
- a. Map(s) showing locations of community water supply wells and other potable wells and the setback zone for each well;
  - b. Map(s) showing regulated recharge areas and wellhead protection areas;
  - c. Map(s) showing the current extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - d. Map(s) showing the modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives;
  - e. Table(s) listing the setback zones for each community water supply well and other potable water supply wells;
  - f. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and
  - g. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that the documentation submitted includes the information obtained as a result of the survey (certification of this report satisfies this requirement);
8. Site map(s) meeting the requirements of 35 Ill. Adm. Code 732.110(a) or 734.440.
9. Development of Tier 2 or 3 remediation objectives, if applicable:
- a. Equations used;
  - b. Discussion of how input variables were determined;
  - c. Map(s) depicting distances used in equation; and
  - d. Calculations; and
10. Property Owner Summary form.

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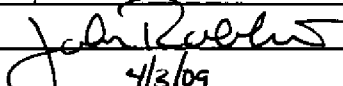
MAR 09 2009

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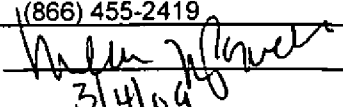
#### D. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

##### UST Owner or Operator

Name: Shell Oil Products US  
Contact: John Robbins, Project Manager  
Address: 603 Diehl Road, Suite 103  
City: Naperville  
State: Illinois  
ZIP Code: 60653  
Phone: (630) 276-4206  
Signature:   
Date: 4/3/09

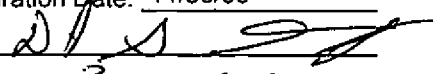
##### Consultant

Company: GES, Inc.  
Contact: Melissa Powell  
Address: 1050 Corporate Blvd., Suite C  
City: Aurora  
State: Illinois  
ZIP Code: 60505  
Phone: (866) 455-2419  
Signature:   
Date: 3/4/09

**E. Certification**

I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 731, 732, or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

**Licensed Professional Engineer**

Name: David G. Tully, P.E.  
Company: GES, Inc.  
Address: 1050 Corporate Blvd., Suite C  
City: Aurora  
State: Illinois  
ZIP Code: 60505  
Phone: (866) 455-2419  
Ill. Registration No.: 062-053775  
License Expiration Date: 11/30/09  
Signature:   
Date: 3/5/09

**L.P.E. Seal**

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**MAR 09 2009**

**IEPA/BOL**

**APPENDIX E**

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**PROPERTY OWNER SUMMARY FORM**

The Agency is authorized to require this information under Section 4 and Title XVI of the Environmental Protection Act (415 ILCS 5/4, 5/57 - 57.17). Failure to disclose this information may result in a civil penalty of not to exceed \$50,000.00 for the violation and an additional civil penalty of not to exceed \$10,000.00 for each day during which the violation continues (415 ILCS 5/42). Any person who knowingly makes a false material statement or representation in any label, manifest, record, report, permit, or license, or other document filed, maintained or used for the purpose of compliance with Title XVI commits a Class 4 felony. Any second or subsequent offense after conviction hereunder is a Class 3 felony (415 ILCS 5/57.17). This form has been approved by the Forms Management Center.

**Illinois Environmental Protection Agency  
Leaking Underground Storage Tank Program  
Property Owner Summary**

**RECEIVED**

**MAR 09 2009**

**A. Site Identification**

**IEPA/BOL**

IEMA Incident # (6- or 8-digit): 20071228 IEPA LPC# (10-digit): 0311805032

Site Name: Shell Service Station #137099

Site Address (Not a P.O. Box): 4755 Vollmer Road

City: Matteson County: Cook ZIP Code: 60443

Leaking UST Technical File

Engineered barriers, institutional controls, and other use restrictions, if any, proposed for this site may not be implemented without approval by the title holder(s) of record for the above-named property or the agent(s) of such person(s). These controls and restrictions will be identified in the No Further Remediation (NFR) Letter, which must be recorded in the chain of title for the property. Failure to maintain these controls is grounds for voidance of the NFR Letter.

**B. Preventive, Engineering, and Institutional Controls and Land Use Limitations**

The following controls and restrictions are proposed for the above-named site:

- ☐ Industrial/commercial land use limitation;
- ☒ On-site groundwater restriction prohibiting the use of groundwater beneath the site as a potable water supply;
- ☐ An engineered barrier: ☐ building, ☐ asphalt/concrete, or ☐ other  
(description) \_\_\_\_\_;
- ☐ Groundwater ordinance: ☐ with a MOU, ☒ without a MOU;
- ☐ Construction worker caution notification;
- ☐ Other: \_\_\_\_\_;
- ☐ None (There are no proposed institutional controls other than the NFR Letter.)

**C. Property Ownership Declaration**

I hereby affirm that I have reviewed the attached report entitled Corrective Action Plan/  
CACR & Budget and dated 03/05/09, and that I accept the  
terms and conditions set forth therein, including any land use limitations, that apply to property I  
own. I further affirm that I have no objection to the recording of a No Further Remediation Letter  
containing the terms and conditions identified in the report upon the property I own.

Name of Property Owner: Shell Oil Products US

Name of Officer or Agent: Mr. John Robbins

Mailing Address: 603 Diehl Road, Suite 103

City: Naperville

State: Illinois

ZIP Code: 60563

Signature: 

Date: 4/3/09

**D. Site Description**

Real Estate Tax/Parcel Index Number: 31-15-100-004-0000

Legal Description of Site (must be provided on a separate sheet)

EXHIBIT "A"  
COOK COUNTY, ILLINOIS

Tract 123. - 4755 Vollmer/Cicero, Matteson, COOK, WIC 212-4944-0203  
Tax Parcel # 31-15-100-004

The North 260.00 feet of the West 291 feet of the West 1/2  
of the North West 1/4 of Section 15, Township 35 North,  
Range 13 East of the Third Principal Meridian (excepting  
therefrom that part taken for highway purposes for Cicero  
Avenue and Vollmer Road) all in Cook County, Illinois.

CITY OF CHICAGO  
2016 WATER QUALITY REPORT





CITY OF CHICAGO • 2016

# WATER QUALITY REPORT



City of Chicago  
Rahm Emanuel  
Mayor



## PLEASE VISIT OUR WEBSITE FOR MORE INFORMATION

[www.cityofchicago.org/watermanagement](http://www.cityofchicago.org/watermanagement)

### WATER IN THE STREET OR BASEMENT

Call 311

### WATER QUALITY QUESTIONS

(312) 744-8190

### DEPARTMENT OF FINANCE

#### WATER BILL QUESTIONS

(312) 744-4H2O

TTY (312) 744-2968

### E-MAIL AND INTERNET

E-mail: [water@cityofchicago.org](mailto:water@cityofchicago.org)

[www.cityofchicago.org/watermanagement](http://www.cityofchicago.org/watermanagement)

### IEPA'S REGIONAL OFFICES (ILLINOIS)

(847) 608-3131

### EPA'S SAFE DRINKING WATER HOTLINE

(800) 426-4791

### EPA'S WATER RESOURCE CENTER

(800) 832-7828

### EPA'S GENERAL INFORMATION LINE

(312) 353-2000

TTY (312) 886-4658

If you have any questions about this report  
please contact Alan Stark at:

(312) 742-7499

# CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT (DWM) SOURCE WATER ASSESSMENT SUMMARY FOR THE 2016 CONSUMER CONFIDENCE REPORT (CCR)

This year, as in years past, your tap water met all USEPA and state drinking water health standards. Our system vigilantly safeguards its source water supply. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies.

## SOURCE WATER ASSESSMENT SUMMARY

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply.

## SOURCE WATER LOCATION

The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the Sawyer Water Purification Plant serves the southern areas of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great Lake by volume with 1,180 cubic miles of water and third largest by area.

## SUSCEPTIBILITY TO CONTAMINATION

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection, only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance, that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake.

Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-742-7499 or by going online at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

# DETECTED CONTAMINANTS

Contaminant (unit of measure) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
<b>MICROBIAL CONTAMINANTS</b>						
<b>TOTAL COLIFORM BACTERIA</b> (% pos/mo) Naturally present in the environment	<b>0</b>	<b>5%</b>	<b>0.9%</b>	<b>N/A</b>	-	-
<b>FECAL COLIFORM AND E. COLI</b> (# pos/mo) Human and animal fecal waste.	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</b>	-	-
<b>TURBIDITY</b> (NTU) Lowest Monthly % ≤ 0.3 NTU) Soil runoff.	<b>N/A</b>	<b>TT</b> (Limit: 95% ≤ 0.3 NTU)	<b>100%</b> (Lowest Monthly %)	<b>100% – 100%</b>	-	-
<b>TURBIDITY</b> (NTU/Highest Single Measurement) Soil runoff	<b>N/A</b>	<b>TT</b> (Limit: 1 NTU max)	<b>0.16</b>	<b>N/A</b>	-	-
<b>INORGANIC CONTAMINANTS</b>						
<b>BARIUM</b> (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	<b>2</b>	<b>2</b>	<b>0.0206</b>	<b>0.0196 - 0.0206</b>	-	-
<b>COPPER</b> (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.	<b>1.3</b>	<b>AL = 1.3</b>	<b>0.0782</b> (90 <sup>th</sup> percentile)	<b>0 sites</b> exceeding AL	-	6/1/2015-9/30/2015
<b>LEAD</b> (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	<b>0</b>	<b>AL = 15</b>	<b>9.1</b> (90 <sup>th</sup> percentile)	<b>3 sites</b> exceeding AL	-	6/1/2015-9/30/2015
<b>NITRATE</b> (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	<b>10</b>	<b>10</b>	<b>0.46</b>	<b>0.40 - 0.46</b>	-	-
<b>TOTAL NITRATE &amp; NITRITE</b> (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	<b>10</b>	<b>10</b>	<b>0.46</b>	<b>0.40 - 0.46</b>	-	-
<b>DISINFECTANT/ DISINFECTION BY-PRODUCTS</b>						
<b>TTHMs</b> [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water disinfection.	<b>N/A</b>	<b>80</b>	<b>25.7*</b>	<b>10.1-45.4</b>	-	-
<b>HAA5</b> [HALOACETIC ACIDS] (ppb) By-product of drinking water disinfection.	<b>N/A</b>	<b>60</b>	<b>14.0*</b>	<b>2.5-25.9</b>	-	-
<b>CHLORINE</b> (as Cl <sub>2</sub> ) (ppm) Water additive used to control microbes.	<b>4.0</b>	<b>4.0</b>	<b>1</b>	<b>1 - 1</b>	-	-
<b>TOC</b> [TOTAL ORGANIC CARBON] The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the IEPA.						
<b>UNREGULATED CONTAMINANTS</b>						
<b>SULFATE</b> (ppm) Erosion of naturally occurring deposits.	<b>N/A</b>	<b>N/A</b>	<b>25.7</b>	<b>25.0-25.7</b>	-	-
<b>SODIUM</b> (ppm) Erosion of naturally occurring deposits; Used in water softener regeneration.	<b>N/A</b>	<b>N/A</b>	<b>8.92</b>	<b>8.49-8.92</b>	-	-
<b>STATE REGULATED CONTAMINANTS</b>						
<b>FLUORIDE</b> (ppm) Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	<b>4</b>	<b>4</b>	<b>0.78</b>	<b>0.62-0.78</b>	-	-
<b>RADIOACTIVE CONTAMINANTS</b>						
<b>COMBINED RADIUM</b> (226/228) (pCi/L) Decay of natural and man-made deposits.	<b>0</b>	<b>5</b>	<b>0.84**</b>	<b>0.5-0.84</b>	-	2/11/2014
<b>GROSS ALPHA</b> excluding radon and uranium (pCi/L) Erosion of natural deposits.	<b>0</b>	<b>15</b>	<b>6.6**</b>	<b>6.1-6.6</b>	-	2/11/2014

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.

\*Data expressed as LRAA – Locational Running Annual Average (See Definition of terms for Details)

\*\*The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years



# EDUCATIONAL STATEMENTS REGARDING COMMONLY FOUND DRINKING WATER CONTAMINANTS

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water for their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity.

## Possible contaminants consist of:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## WATER QUALITY DATA TABLE FOOTNOTES

**TURBIDITY:** Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

**UNREGULATED CONTAMINANTS:** A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

**FLUORIDE:** Fluoride is added to the water supply to help promote strong teeth. The IL Department of Public Health has recommended an optimal fluoride level of 0.7 mg/L, with a range of 0.6 mg/L to 0.8 mg/L.

**SODIUM:** There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who are concerned about sodium intake due to dietary precau-

tions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

**LEAD:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with lead service lines and home plumbing. The Department of Water Management, City of Chicago, is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for over six hours, you can minimize the potential for lead exposure by flushing your tap for a minimum of 5 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested by calling 311 or going to [www.chicagowaterquality.org](http://www.chicagowaterquality.org). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Unit of Measurement

**ppm:** Parts per million, or milligrams per liter (mg/L)

**ppb:** Parts per billion, or micrograms per liter(µg/L)

**NTU:** Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

**%≤0.3 NTU:** Percent samples less than or equal to 0.3 NTU

**pCi/L:** Picocuries per liter, used to measure radioactivity

# DEFINITION OF TERMS

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in this calendar year.

**Range of Detections:** This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

**Date of Sample:** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

**Action Level (AL):** The concentration of a contaminant that triggers treatment or other required actions by the water supply.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**ND:** Not detectable at testing limits. **N/A:** Not applicable.

**Locational Running Annual Average (LRAA):** The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80µg/L for TTHM and 60 µg/L for HAA5.

## 2016 VOLUNTARY MONITORING

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporidium has not been detected in these samples, but Giardia was detected in 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced. Also, in compliance with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) Round 2, the City of Chicago has continued the 24 months long monitoring program that was started in April 2015, collecting samples from its source

water once per month to monitor for Cryptosporidium, Giardia, E. coli and turbidity, with no detections for Cryptosporidium and Giardia reported so far.

In 2016, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

[http://www.cityofchicago.org/city/en/depts/water/supp\\_info/water\\_quality\\_resultsandreports/city\\_of\\_chicago\\_emergincontaminantstudy.html](http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html)

## 2016 VIOLATION SUMMARY TABLE

The following table(s) lists all violations that occurred during 2016. We included a brief summary of the actions we took following notification of the violation.

CONTAMINANT OR PROGRAM	VIOLATION TYPE	MONITORING PERIOD START DATE – END DATE	VIOLATION EXPLANATION
Individual Filter Effluent Turbidity Monitoring	Minor Routine Monitoring (ISWTR/LT1)	10/01/2016 – 10/31/2016 11/01/2016 – 11/30/2016	We failed to complete all the required tests of our drinking water for the contaminant and period indicated.
Health Effects (if applicable)	None		
Actions we took:	The Department of Water Management has maintained all its turbidity meters and provided relevant training to its staff. This will ensure continuous filter effluent turbidity monitoring without interruption.		

## THIS REPORT IS GOING GREENER

Next year the Department of Water Management will offer a hard copy of this report to you on request. Water Management customers will receive notification in their water bills that will advise customers where on the internet a copy of this report will be available.

Next year, customers will also have the option to receive a hard copy like the one you are holding by calling 311. As in years past you can also obtain copies of this report at any Chicago Library Branch, or at the neighborhood Aldermanic Ward Office.

This Consumer Confidence Report and previous reports are available online at our web site at: <http://www.chicagoccr.org/>

# CROSS-CONNECTION CONTROL SURVEY

The City of Chicago Department of Water Management is required by the Illinois Environmental Protection Agency (IEPA) to survey all water services connected to our public drinking water supply. This survey will help us prevent accidental contamination of our drinking water system by determining whether a cross-connection may exist at your home or business. A cross-connection is an unprotected or

improper connection to the public drinking water system that may cause contamination or pollution to enter the system.

Please fill out the survey online at [www.chicagoccr.org](http://www.chicagoccr.org). Your answers are for the Department of Water Management's use only! Please be assured this survey is not an indication of any problems, but is required by the IEPA. Thank you for your cooperation.

## CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

In 2016, the City of Chicago Sawyer Water Purification Plant, formerly known as South Water Purification Plant, experienced two turbidity monitoring violations on one of its individual filters. Turbidity is a measurement of the cloudiness of water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

The first and second violations, affecting the same individual filter, occurred over two days in October and November of 2016, from Oct. 31, 2016 at 10:30 PM to Nov. 1, 2016 at 8:30 PM. The violation started when the light bulb of the turbidimeter for Filter #107 effluent had burned out, triggering the meter into a default setting that retained the last reading. This built-in default setting evaded detection by the plant's alarm system designed to alert the operator of a meter's failure. During the instrument failure, the individual filter remained in service for 22 hours without turbidity monitoring. As a corrective action, the default setting was adjusted on all the online turbidity meters at the two filtration plants in operation, SWPP and Jardine Water Purification Plant. Examination of water quality parameters, including turbidity and chlorine, of finished water during the period in question were found to be within acceptable limits.

Even though there was an interruption in continuous monitoring of the affected filter effluent in accordance with the United States Environmental Protection Agency's (USEPA) regulations, monitoring was manually performed regularly on the combined filter clearwells as well as the finished water leaving the treatment plant via the outlets by our on-duty water chemists. These tests showed that we remained within USEPA guidelines and acceptable limits, and that there was no change in water quality during the turbidity monitoring violations.

The Illinois Department of Environmental Protection Agency has determined that because there were two incidents of an extended interruption in continuous turbidity monitoring for the filter effluent, two monitoring violations occurred, requiring public notification. Based on this notification, there is nothing you need to do at this time. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct it. As a corrective action, the City of Chicago Department of Water Management has adjusted the default setting in all its turbidimeters to allow detection by the plant's alarm system when a meter fails and provided training to its staff to be more vigilant. This will ensure continuous filter effluent turbidity monitoring without interruption.

We routinely monitor your water for turbidity (cloudiness), caused by suspended particles. This tells us whether we are effectively filtering the water supply. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

### WHAT DOES THIS MEAN?

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

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### FOR MORE INFORMATION, PLEASE CONTACT

Alan Stark, Deputy Commissioner for the Bureau of Water Supply  
At 312-742-7499

Chicago Department of Water Management  
Bureau of Water Supply  
1000 East Ohio Street • Chicago, IL 60611  
Attn: Alan Stark

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

*This notice is being sent to you by: The City of Chicago, Department of Water Management Water System ID# IL0316000*



*Message from*  
**Mayor Rahm Emanuel**



Dear Chicago Water Customer,

I am pleased to join the Department of Water Management in providing you with the City of Chicago's 2016 Water Quality Report.

With this annual report we not only aim to share important information about our drinking water but also take the opportunity to update you on new projects and developments, and explain just what it takes to get that water to you and millions of other residents. From threatened budget cuts to the EPA by the federal government to the release of Hexavalent Chromium by US Steel into Lake Michigan, we will keep working closely with the EPA to ensure our environment and drinking water is protected. Our source water cannot be taken for granted so the Department of Water Management (DWM) continues to monitor the raw Lake water for any health or safety concerns to Chicago's drinking water supply. And I want you to know that Chicago water is clean and safe, and regularly exceeds all standards set by the USEPA, the Illinois EPA and the drinking water industry. The quality of Chicago tap water is monitored at every step of the process, 24 hours a day.

But to continue our city's reputation for high quality, good-tasting water it is imperative that we continue to pursue significant renewal of infrastructure. I am proud the Department of Water Management (DWM) reached its annual goal of installing 15,000 meters for the 2016 year which marked a milestone of more than 100,000 water meters installed since implementing the MeterSave program in 2009. Because of the new water meters, customers have seen an average savings of 50% on their water bills. In addition, DWM remains on pace with water main replacement efforts with 90 more miles of aging water main completed which provide infrastructure renewal, increased water supply, and reliability.

The Department provides this annual Consumer Confidence Report to inform all of our customers about the quality of Chicago tap water. This report is full of useful information that will help you manage your water consumption, improve your efficiency, and protect your family and your neighbors from flooding and other risks. And starting next year, this report is going greener – you will have the option to receive a hard copy like the one you are holding by calling a designated phone number, or by mailing a provided return post card. Also, as in years past you can also obtain copies of this report at any Chicago Library Branch, or at your neighborhood Aldermanic Ward Office. I hope that you look it over carefully.

If you are concerned about the quality of your water please don't hesitate to make a request online at [www.chicagowaterquality.org](http://www.chicagowaterquality.org) or call 311 to have your water quality checked. We are committed to ensuring that Chicago remains a world-class city built on a world-class foundation.

Sincerely,

A handwritten signature in black ink that reads "Rahm Emanuel".

Rahm Emanuel  
Mayor



# Do you have a WATER METER?

MeterSave is available to all eligible single family or two-flat non-metered homeowners in Chicago that volunteer to have a FREE water meter installed. With your FREE installation you will receive our 7-year guarantee that your water and sewer bill will not exceed what you would have paid as a non-metered customer, so long as you stay current on your bill. If you move, the guarantee does not transfer to the new owner.

By installing a water meter, you become more aware of your water usage. By making small changes in your everyday water habits, you

can easily save water and money. In addition to the installation of a FREE water meter and the 7-year guarantee, MeterSave participants may choose a FREE outdoor water conservation kit or indoor water conservation kit, while supplies last.

The water meter and installation are FREE!

Please Note: some meter installations may require more than one visit for completion.

## EXAMPLE 2-FLAT WATER BILL

### BEFORE METERSAVE



**AVG. 2016 MONTHLY BILL: \$136.16**  
(Based on Bi-Annual Assessment)

**BASED ON:**  
23' wide building with 2 floors:  
\$181.08 / 6 months  
30' hose frontage: \$53.63 / 6 months  
Toilet: \$75.42 / 6 months  
Sink: \$22.93 / 6 months  
Bath Tub: \$75.42 / 6 months  
Residential Sewer: \$408.48 / 6 months  
Assumes unlimited water use

### AFTER METERSAVE



**AVG. 2016 MONTHLY BILL: \$78.11**  
(Based on Billing Every 2 Months)

**Savings of 43% on bill by installing meter**

**BASED ON:**  
Water: \$3.81 per 1,000 gallons  
Sewer: 100% of water charge

**City of Chicago**  
**Rahm Emanuel, Mayor**  
The Department of Water Management  
Jardine Water Purification Plant  
1000 East Ohio Street  
Chicago, Illinois 60611



PRESORTED  
STANDARD  
U.S. POSTAGE  
PAID  
CHICAGO, IL  
PERMIT #412



PRIOR PHASE I REPORT BY O'BRIEN &  
ASSOCIATES, INC. DATED 11/21/2002



**PHASE I  
ENVIRONMENTAL SITE ASSESSMENT  
for  
Creskide at Matteson Commons  
Vollmer Road and Cicero Avenue  
Matteson, Illinois**

**O'BRIEN & ASSOCIATES, INC.**  
**CONSULTING ENGINEERS**  
1235 E. DAVIS ST/ARLINGTON HTS, IL 60005  
[847] 398-1441 • FAX [847] 398-2376



November 21, 2002

Lord & Essex Homes  
1135 Mitchell Road  
Aurora, Illinois 60504

Attn: Mr John J Popp, Jr.

Job No. 02346

Re: Phase I environmental site assessment for Creekside at Matteson Commons,  
Matteson, Illinois

Dear Mr. Popp:

Please find enclosed the results of the environmental site assessment (ESA) for the above project. This report is based on information obtained from aerial photographs, surveys of the area, records search, and contact with municipal and regulatory agencies, and is intended to satisfy the requirements for a Phase I investigation. This investigation was performed in accordance with our proposal E-0073 dated November 8, 2002 which we received authorization to proceed with on November 12, 2002.

If there are any questions with regard to the information submitted in this report, or if we can be of further assistance to you in any way, please do not hesitate to contact us.

Very truly yours,

O'BRIEN & ASSOCIATES, INC.

Vernon P. Brown  
Engineering Geologist

Dixon O'Brien, P.E.  
Vice President

VPB/DOB/vb  
enc.



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**Executive Summary  
for Creekside at Matteson Commons  
Vollmer Road and Cicero Avenue  
Matteson, Illinois**

OBA Job No. 02346

O'Brien & Associates, Inc. (OBA) has completed the Phase I Environmental Site Assessment (ESA) for the proposed Creekside at Matteson Commons project located at the southwest corner of Vollmer Road and Cicero Avenue in Matteson, Illinois, hence referred to as the Property. The Property is an approximately 150 acre parcel which has been documented to have only been used for agricultural and residential uses. At the time of our inspection performed on November 21, 2002, the Property was noted to be a relatively flat to gently undulating farmed parcel with no improvements present.

The work performed for this assessment included a site inspection; a review of geologic and geotechnical data; a review of the site history; and a review of information obtained from regulatory sources.

Based on the available information reviewed for this investigation, no Recognized Environmental Conditions (RECs) were identified on the Property related to past or current uses. There were several State and Federally documented regulated facilities identified within the search protocols employed for this investigation, however, based on readily available information, proximity to the Property and local hydrogeological conditions, it is our opinion that none of these facilities qualify as RECs.

## **1.0 INTRODUCTION**

We have completed the Phase I environmental site assessment (ESA) for the proposed Creekside at Matteson Commons parcel (Property), an approximately 150 acre parcel located at the southwest quadrant of Vollmer Road and Cicero Avenue, Matteson, Illinois (see Figure 1: Site Map). The available references and sources of information utilized for this report are listed in Appendix A. In addition to the listed sources, we reviewed readily available library references, in-house records which include nearby soil investigations, and a file of relevant newspaper and magazine articles. O'Brien and Associates, Inc. (OBA) performed a previous ESA for the Property for the current owners when it was part of a 209 acre parcel, Job No. 89121 dated February 9, 1989 and an updated investigation June 15, 1990.

Please note that we have not been provided with detailed dimensions of the Property for this investigation. However, it appears the bulk of the original parcel not included in this investigation consists of approximately fifty acres near the south margin of the site where a series of retention ponds have been developed as well as a new Municipal complex for the Village of Matteson, Illinois. The approximate configuration of the proposed development can be seen in Figure 2: Concept Plan, which was provided to OBA by Lord & Essex Homes.

The purpose of this report is to identify potential Recognized Environmental Conditions (RECs), i.e., environmental concerns relating to operating risks and potential liabilities resulting from past or current activities associated with the Property. It is our

understanding this investigation was requested as a precondition to Lord and Essex Homes purchasing and subsequently developing the Property. The data reviewed for this report were limited to those data which were readily available. Environmental conditions are subject to change depending upon future activities and this assessment is descriptive of the present conditions at the site. OBA is not responsible for conditions which were not disclosed in the course of review of the available data sources.

## **2.0 SITE AND AREA DESCRIPTION**

### **2.1 General**

The Property as identified to us for this investigation is an approximately 150 acre parcel located at the southwest quadrant of Vollmer Road and Cicero Avenue on the north side of the City of Matteson, Illinois. Please note that OBA was not provide with detailed dimensions of the Property to be investigated and that the figures and diagrams included in the Appendices of this report are only approximate.

### **2.2 Site Description**

The Property is relatively flat to gently undulating farmed field with a series of recently constructed retention ponds located in its northeast and southwest corners. There is a large stockpile of soil located near the west central portion of the site which is assumed to represent soils recovered from development of the retention ponds. The Property is bisected by Butterfield Creek which runs from near its southwest corner to the mid portion of the east margin. When we originally inspected the Property in 1989, there was a farm house and barn complex accessed off of Cicero Avenue near the southeast portion of the

site which has since been demolished. Included in Appendix B are site photographs that document the conditions noted at the time of our inspection performed on November 21, 2002

### 2.3 Area Description

- West:** The Property is bounded on the west and along its southwest margin by U. S. Interstate Route 57 and an exit ramp for the expressway. Further to the west across from the Interstate are vacant parcels and several parcels currently being developed as residential neighborhoods.
- South:** Located immediately south of the Property is a Matteson Police Station facility which was present at the time of OBA's original site inspection in 1989 and a new City of Matteson municipal complex which opened in 1998.
- North:** To the north across from Vollmer Road is a large wooded area owned by the Cook County Forest Preserve.
- East:** Located to the east across from Cicero Avenue at the southeast corner of Cicero and Vollmer is a Shell gas station. The remainder of the properties across from Cicero Avenue are farmed or vacant fields.

### 2.4 Site Inspection

On November 21, 2002, a reconnaissance and inspection of the Property was conducted by Mr. Vernon P. Brown, OBA Engineering Geologist. Following is a summary of observations relative to this inspection:

1. **Underground Storage Tanks:** There was no visual evidence of underground storage tanks (USTs) on the Property nor were any indications noted at the time of OBA's prior inspections of the site.
2. **PCB Containing Transformers:** There were no PCB containing transformers noted on site.
3. **Unusually discolored soil conditions, unexplained odors or distressed**



**vegetation patterns:** None were noted.

4. **Industrial operations:** None were noted in the immediate area that would be expected to be able to impact upon the site.
5. **Waste Streams:** The Property is currently vacant, therefor, the only waste stream identified is surface runoff which is directed to drainage swales on the Property margins and the Butterfield Creek which bisects the site.
6. **Chemical, petroleum or hazardous materials:** None were noted. There was some minor littering noted, however, this is considered to be a nuisance condition rather than a REC.

## **2.5 Site Inspection REC Summary**

Based on the general nature of the project site and its surrounding neighborhood, no obvious RECs were identified. Potential RECs in regards to regulatory concerns will be discussed in more detail in Section 5.0.

## **3.0 SITE GEOLOGY**

### **3.1 1930-32 ISGS Harvey Quadrangle Map**

The Property is noted to be a relatively flat parcel located within an old glacial lake bottom. Butterfield Creek is noted to traverse the Property as it does today. Included in Appendix C is a copy of the noted Quadrangle.

### **3.2 1971 ISGS Circular #486: Summary of the Geology of the Chicago Area/ISGS Geologic Materials to a Depth of 20' - South Cook County**

According to the referenced sources, the Property is located in an area where the surficial soils are noted to generally consist of Equality Formation soils of the Carmi Member overlying soils belonging to the Wadsworth Till Member of the Wedron Formation.

Equality Formation soils generally consist of bedded silts with some fine sand and contain beds of glacial lake clays. Wedron Formation soils generally consist of relatively impermeable clayey and silty clay tills.

### **3.3 USDI Wetland Harvey Quadrangle**

The only wetland areas identified within the limits of the Property (see Figure 3) are several small Palustrine Emergent Cless areas located in the northern portion of the site. This area appears to correspond to an area noted during our site inspection on November 21, 2002 which was recently surveyed and designated as a wetland area (See Photograph 4)

### **3.4 1984 ISGS Berg Circular #532: "Potential for Contamination of Shallow Aquifers in Illinois"**

According to the referenced circular, the Property is located within an E Zone which is defined as an area with in excess of 50-ft of relatively impermeable silty or clayey tills with no evidence of inter-bedded granular layers.

### **3.5 PSI Geotechnical Evaluation Report (Project No. 043-35000 dated 10/22/93)**

Native soils encountered on site were noted to consist of very tough silt and clay soils with discontinuous layers of sandy soils. No suspect odors or unexplained discolorations were noted on the boring logs provided for our review.

### **3.6 Geologic REC Summary**

Based on the above sources, no obvious geologic RECs were identified on site.

## **4.0 SITE HISTORY**

### **4.1 General**

Available information indicates that the Property has been located in a mostly rural area since before the 1900's and that the occupants of the site have used it only for dairy farm and crops. Following is a brief summary of land use in the area and the effects land use has had on the Property's environmental conditions. Sources of information identified with an asterisk (\*) are included in Appendix C. The remaining sources are available for review in our office, local libraries, or local government offices.

### **4.2 Historical Sources**

**1898 Property Plat Map\*:** The Property is noted to be located in an undeveloped rural area. The southern third of the site is owned by H. Eiskamp and the remainder is owned by H. Schroeder and H. Kampe.

**1930-32 ISGS Harvey Quadrangle\*:** The Property is still located in a minimally developed area and there are two (2) structures on site which are assumed to be farm house complexes. Butterfield Creek appears to have been redirected across the site since 1898 and appears to roughly corresponds to its current route.

**1941 Property Plat Map\*:** The southern portion of the Property is owned by D. Eiskamp and the remainder is owned by Theo. Kampe and Mrs. Fred Krumweid. The surrounding area still appears to be rural and the nearest population center is the downtown Matteson area approximately 1.5 miles to the southeast.

**1949 Aerial Photograph\*:** The Property is occupied by cultivated fields and there are three (3) farm house complexes on site. The surrounding area is still a minimally developed rural region.

**1970 Aerial Photograph:** The most significant area change is construction of Interstate 57 immediately west of the Property. The Property is still being farmed and the farm house complex which had been located on the west margin of the Property appears to have been abandoned. The surrounding area is still rural.

**1976 Aerial Photograph\*:** No significant changes noted since 1970.

**1987 Aerial Photograph\*:** The Property is still a farmed field with one farm house complex located near its southeast corner. Located adjacent to the southeast corner of the Property is the new Matteson Police Station facility and across from Cicero Avenue at the southeast corner of Vollmer and Cicero is a Shell gas station facility. Most of the remaining area near the Property is still vacant, however, there has been significant commercial and residential growth in the areas further to the south.

**1989:** At the time of OBA's site inspection performed in 1989, the Property and nearby area appeared as noted in the 1987 aerial photograph.

**1997 Aerial Photograph\*:** The farm house complex near the southeast corner of the Property is longer in place. According to a telephone interview with Ms. Fae Perry of Transcontinental Corporation, the current Property owner, no suspect conditions were encountered in this area when the farm house complex facility was demolished. It is also noted that there have been several retention ponds constructed on site in the northeast and southwest corners of the site since 1989 and the remainder of the property is still being farmed. Area changes include construction of an office building to the south of the previously noted Police Station and there has been significant commercial and residential growth in the surrounding area.

**Current:** Based on our site inspection performed on November 21, 2002, the most significant area changes since 1997 is construction of the Village of Matteson Municipal complex west of the Police Station facility and continued residential growth in the areas further from the Property. No changes are noted on the Property itself since 1997.

#### **4.3 Historical REC Summary**

Based on the above noted historical information, no obvious RECs were identified on site, nor were there any significant RECs identified on any immediately adjoining properties.

### **5.0 REGULATORY REVIEW**

#### **5.1 Regulatory Databases and Sources of Information Reviewed**

In an attempt to discover if there have been any documented environmental problems associated with the site or the surrounding area, we have reviewed data base listings obtained from Freedom of Information (FOI) requests to various Illinois State and Federal

Agencies and regulatory data bases. In addition to the regulatory agencies, we subcontracted with FirstSearch Technology Corporation (FirstSearch) to provide an Environmental Report. The FirstSearch report is used as a screening tool to identify sites with potential or existing environmental liabilities based on Federal and State supplied data bases in accordance with ASTM Standard E 1527. Included in the FirstSearch report are computer generated GIS Maps which locate the potential sites of concern. All regulatory sources referenced are listed in Appendix A.

We have reviewed and edited the FirstSearch information supplied to us, as necessary, to identify additional sites not mapped and correct errors as necessary. These omissions, errors and corrections are typically related to sites lacking sufficient geographic data to be properly located and/or typographical errors presented in the regulatory sources. Included in Appendix D are copies of the pertinent pages and the site maps provided by FirstSearch based on OBA's search protocol. The full report is available for review in our office.

In addition to obtaining the FirstSearch report, we have made FOI requests to various regulatory agencies, as necessary, to document potential concerns with regulated sites. All correspondence is available for review at our office and is summarized in Appendix A.

## **5.2 Regulated Facilities Summary**

Summarized in Tables D1 and D2, which are included in Appendix D, are descriptions of the Federal and State regulatory sources referenced and the search protocols utilized by OBA. All sites are referenced by the FirstSearch identifiers. Any facilities that we have added have been identified in a similar manner as referenced in the FirstSearch report and

have been superimposed on the FirstSearch Map. The results of the regulatory review are presented in Table 1: Regulated Facilities Summary which lists the facilities identified in accordance with OBA's protocols from the FirstSearch Report and our own in-house records, along with their addresses and proximity to the project site.

The locations noted in the FirstSearch Report are based on GIS procedures which use point source distances generated from projected location of the regulatory sources which are not always precise. The distances noted in the following text are determined by locating the facility on a recent aerial photograph or map, and then measuring to the nearest Property site margin. Adjoining properties within 200 feet of the Property which are contiguous or partially contiguous with it, but for a street, road or public thoroughfare separating them are identified in the direction from the project site. Facilities whose infrastructures or suspect sources of regulated conditions in excess of 200 feet from the site are not considered to be adjoining.

**TABLE 1: REGULATED FACILITIES SUMMARY**

Facility Name (ID#)	Address	Distance	Direction
Matteson Police Department (1)	20500 South Cicero	Adj.	South
Shell Oil Co. (3)	4755 Vollmer and Cicero	Adj.	East

Following is a summary of readily available regulatory sources for the project site and the facilities identified above.

#### **SITE**

The Property is not identified on any of the Illinois State or Federal database records reviewed for this assessment. In addition, the Illinois Emergency Management Agency (IEMA) has no reported spills or releases of hazardous materials, chemicals or petroleum

products on site nor on any of the adjoining roadways.

### **ADJOINING PROPERTIES**

**Matteson Police Department (1):** Illinois Office of the State Fire Marshall Records (OSFM) records indicate there have been two (2) Underground Storage Tanks (USTs) registered on site including one 550 gallon diesel tank which has been removed, and an existing 600 gallon diesel UST. The USEPA identifies this facility as a Large Quantity Generator (LQG) with no documented enforcement or violation records. In response to a Freedom of Information request made to the IEPA, the only significant information provided was a letter dated June 22, 2000 from the Village of Matteson indicating the Police Station has never generated hazardous waste and that the only regulated waste generated from this site was from an UST removal for a backup generator diesel UST when 250 gallons of waste water were disposed of. The IEMA has no reported spills or releases of hazardous materials, chemicals or petroleum products for this facility.

Comment: Based on readily available information and local hydrogeological conditions, no regulatory RECs were identified.

**Shell Oil Co. (3):** USEPA records identify this facility as a Small Quantity Generator (SQG) with no documented enforcement or violation records. Illinois OSFM indicate there are three (3) registered gasoline USTs present at this site. The IEMA has no reported spills or releases of hazardous materials, chemicals or petroleum products for this facility.

Comment: Based on readily available information and local hydrogeological conditions, no regulatory RECs were identified.

### **NON-ADJOINING PROPERTIES**

No other regulated facilities were identified in the state or federal data base records reviewed in accordance with the protocols utilized for this investigation.

### **5.3 Regulated REC Summary**

Based on a review of readily available regulatory sources, it is our opinion none of the regulated facilities identified in this investigation should be considered RECs.

**6.0 CONCLUSIONS & GENERAL QUALIFICATIONS**

On the basis of the information obtained in this investigation, no RECs were identified on the Property. There were several State and Federal regulated facilities identified within the search protocols utilized for this investigation, however, based on readily available information, proximity to the Property and local hydrogeological conditions, none of these facilities are considered to be RECs.

*Recognized Environmental Conditions*

The analysis and recommendations submitted in this environmental site assessment have been based on available information. The objective of this assessment was to give an overall opinion of any probable hazardous waste conditions for the proposed Creekside at Matteson Commons parcel located at the southwest quadrant of Vollmer Road and Cicero Avenue, Matteson, Illinois. This assessment is not intended to be deemed a legal opinion. As any additional information becomes available, that information should be brought to our attention to determine if it affects our analysis and recommendations.

This report is an instrument of service of O'Brien & Associates, Inc. The report was prepared for and is intended for the exclusive use of Lord & Essex Homes. The report's contents may not be relied upon by any party other than the above listed parties without the express written permission of O'Brien & Associates, Inc.

The report's findings are based on conditions that existed on the date of O'Brien & Associates' site visit and should not be relied upon to precisely represent conditions at any other time nor beyond ninety (90) days from the date of this report. The scope of service executed for this project does not comprise an audit for regulatory compliance nor does



it comprise a detailed condition survey for the presence of asbestos, lead paint, PCBs, and radon or other naturally occurring materials.

O'Brien & Associates, Inc. has based the conclusions included in this report on its observation of existing site conditions, its interpretation of site history, and its interpretation of the site usage information it was able to access. All conclusions are qualified by the fact that no environmental borings were made and no groundwater sampling or chemical testing was conducted. Conclusions about site conditions under no circumstances comprise a warranty that conditions in all areas within the site and beneath structures are of the same quality that O'Brien & Associates, Inc. has inferred from observable site conditions and readily available site history.

O'Brien & Associates' findings and conclusions must be considered probabilities based on professional judgement applied to the limited data O'Brien & Associates, Inc. was able to gather during the course of the site assessment. In performing this site assessment, O'Brien & Associates, Inc. has endeavored to observe the degree of care and skill generally exercised by other consultants undertaking similar studies at the same time, under similar circumstances and conditions, and in the same geographical area.

ENVIRONMENTAL DATA RESOURCES (EDR) SANBORN FIRE  
INSURANCE MAPS-NO COVERAGE LETTER



19950 S CICERO AVE  
19950 S CICERO AVE  
MATTESON, IL 60443

Inquiry Number: 5167034.5

January 24, 2018

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## Certified Sanborn® Map Report

01/24/18

**Site Name:**

19950 S CICERO AVE  
19950 S CICERO AVE  
MATTESON, IL 60443  
EDR Inquiry # 5167034.5

**Client Name:**

Benchmark Environmental Svcs.  
23540 W Beach Grove Road  
Antioch, IL 60002  
Contact: Josh@benchmarkenv.com



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Benchmark Environmental Svcs. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

### Certified Sanborn Results:

**Certification #** D3AA-49B3-A0B6

**PO #** NA

**Project** 18162

#### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: D3AA-49B3-A0B6

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

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ENVIRONMENTAL DATA RESOURCES (EDR) – PROVIDED  
FIRSTSEARCH REPORT



**19950 S CICERO AVE**  
19950 S CICERO AVE  
MATTESON, IL 60443

Inquiry Number: 05167034.2r  
January 24, 2018

## FirstSearch Area/Linear Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## Search Summary Report

**TARGET SITE      19950 S CICERO AVE  
MATTESON, IL 60443**

Category	Sel	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
<i>NPL</i>	Y	0	0	0	0	0	0	0
<i>NPL Delisted</i>	Y	0	0	0	0	0	0	0
<i>CERCLIS</i>	Y	0	0	0	0	-	0	0
<i>NFRAP</i>	Y	0	0	0	0	-	0	0
<i>RCRA COR ACT</i>	Y	0	0	0	0	0	0	0
<i>RCRA TSD</i>	Y	0	0	0	0	-	0	0
<i>RCRA GEN</i>	Y	0	0	0	-	-	0	0
<i>Federal IC / EC</i>	Y	0	0	0	0	-	0	0
<i>ERNS</i>	Y	0	0	0	-	-	0	0
<i>State/Tribal CERCLIS</i>	Y	0	0	0	0	0	0	0
<i>State/Tribal SWL</i>	Y	0	0	0	0	-	0	0
<i>State/Tribal LTANKS</i>	Y	0	1	0	0	-	0	1
<i>State/Tribal Tanks</i>	Y	0	2	0	-	-	0	2
<i>State/Tribal IC / EC</i>	Y	0	0	0	0	-	0	0
<i>State/Tribal VCP</i>	Y	0	0	0	0	-	0	0
<i>ST/Tribal Brownfields</i>	Y	0	0	0	0	-	0	0
<i>US Brownfields</i>	Y	0	0	0	0	-	0	0
<i>Other SWF</i>	Y	0	0	0	0	-	0	0
<i>Other Haz Sites</i>	Y	0	-	-	-	-	0	0
<i>Local Land Records</i>	Y	0	-	-	-	-	0	0
<i>Spills</i>	Y	0	3	-	-	-	0	3
<i>Other</i>	Y	0	1	0	-	-	0	1
<i>EDR Exclusive</i>	Y	0	1	0	0	0	0	1
- Totals --		0	8	0	0	0	0	8

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## Search Summary Report

**TARGET SITE: 19950 S CICERO AVE  
MATTESON, IL 60443**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
<b>NPL</b>	NPL	12/11/2017	1.000	0	0	0	0	0	0	0
	Proposed NPL	12/11/2017	1.000	0	0	0	0	0	0	0
	NPL LIENS	10/15/1991	TP	0	-	-	-	-	0	0
<b>NPL Delisted</b>	Delisted NPL	12/11/2017	1.000	0	0	0	0	0	0	0
<b>CERCLIS</b>	FEDERAL FACILITY	11/07/2016	0.500	0	0	0	0	-	0	0
	SEMS	12/11/2017	0.500	0	0	0	0	-	0	0
<b>NFRAP</b>	SEMS-ARCHIVE	12/11/2017	0.500	0	0	0	0	-	0	0
<b>RCRA COR ACT</b>	CORRACTS	09/13/2017	1.000	0	0	0	0	0	0	0
<b>RCRA TSD</b>	RCRA-TSDF	09/13/2017	0.500	0	0	0	0	-	0	0
<b>RCRA GEN</b>	RCRA-LQG	09/13/2017	0.250	0	0	0	-	-	0	0
	RCRA-SQG	09/13/2017	0.250	0	0	0	-	-	0	0
	RCRA-CESQG	09/13/2017	0.250	0	0	0	-	-	0	0
<b>Federal IC / EC</b>	LUCIS	05/22/2017	0.500	0	0	0	0	-	0	0
	US ENG CONTROLS	08/10/2017	0.500	0	0	0	0	-	0	0
	US INST CONTROL	08/10/2017	0.500	0	0	0	0	-	0	0
<b>ERNS</b>	ERNS	09/18/2017	0.250	0	0	0	-	-	0	0
<b>State/Tribal CERCLIS</b>	SSU	06/09/2015	1.000	0	0	0	0	0	0	0
<b>State/Tribal SWL</b>	SWF/LF	12/31/2016	0.500	0	0	0	0	-	0	0
	CCDD	05/23/2017	0.500	0	0	0	0	-	0	0
	LF SPECIAL WASTE	01/01/1990	0.500	0	0	0	0	-	0	0
	IL NIPC	08/01/1988	0.500	0	0	0	0	-	0	0
<b>State/Tribal LTANKS</b>	LUST	10/23/2017	0.500	0	1	0	0	-	0	1
	INDIAN LUST	04/14/2017	0.500	0	0	0	0	-	0	0
	LUST TRUST	06/06/2016	0.500	0	0	0	0	-	0	0
<b>State/Tribal Tanks</b>	FEMA UST	05/15/2017	0.250	0	0	0	-	-	0	0
	UST	10/24/2017	0.250	0	2	0	-	-	0	2
	INDIAN UST	04/14/2017	0.250	0	0	0	-	-	0	0
<b>State/Tribal IC / EC</b>	ENG CONTROLS	08/28/2017	0.500	0	0	0	0	-	0	0



## Search Summary Report

**TARGET SITE: 19950 S CICERO AVE  
MATTESON, IL 60443**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
	INST CONTROL	08/28/2017	0.500	0	0	0	0	-	0	0
<b>State/Tribal VCP</b>	INDIAN VCP	07/27/2015	0.500	0	0	0	0	-	0	0
	SRP	08/28/2017	0.500	0	0	0	0	-	0	0
<b>ST/Tribal Brownfields</b>	BROWNFIELDS	02/11/2010	0.500	0	0	0	0	-	0	0
<b>US Brownfields</b>	US BROWNFIELDS	08/21/2017	0.500	0	0	0	0	-	0	0
<b>Other SWF</b>	INDIAN ODI	12/31/1998	0.500	0	0	0	0	-	0	0
	DEBRIS REGION 9	01/12/2009	0.500	0	0	0	0	-	0	0
	ODI	06/30/1985	0.500	0	0	0	0	-	0	0
<b>Other Haz Sites</b>	US HIST CDL	07/13/2017	TP	0	-	-	-	-	0	0
	CDL	10/11/2017	TP	0	-	-	-	-	0	0
	US CDL	07/13/2017	TP	0	-	-	-	-	0	0
<b>Local Land Records</b>	LIENS 2	12/11/2017	TP	0	-	-	-	-	0	0
<b>Spills</b>	HMIRS	09/21/2017	TP	0	-	-	-	-	0	0
	SPILLS	09/18/2017	0.500	0	3	0	0	-	0	3
	SPILLS 90	07/18/2012	0.500	0	0	0	0	-	0	0
<b>Other</b>	RCRA NonGen / NLR	09/13/2017	0.250	0	1	0	-	-	0	1
	FUDS	01/31/2015	1.000	0	0	0	0	0	0	0
	DOD	12/31/2005	1.000	0	0	0	0	0	0	0
	SCRD DRYCLEANERS	01/01/2017	0.500	0	0	0	0	-	0	0
	US FIN ASSUR	10/17/2017	TP	0	-	-	-	-	0	0
	EPA WATCH LIST	08/30/2013	TP	0	-	-	-	-	0	0
	2020 COR ACTION	04/22/2013	0.250	0	0	0	-	-	0	0
	TSCA	12/31/2016	TP	0	-	-	-	-	0	0
	TRIS	12/31/2016	TP	0	-	-	-	-	0	0
	SSTS	12/31/2009	TP	0	-	-	-	-	0	0
	ROD	12/11/2017	1.000	0	0	0	0	0	0	0
	RMP	11/02/2017	TP	0	-	-	-	-	0	0
	RAATS	04/17/1995	TP	0	-	-	-	-	0	0
	PRP	10/25/2013	TP	0	-	-	-	-	0	0
	PADS	06/01/2017	TP	0	-	-	-	-	0	0
	ICIS	11/18/2016	TP	0	-	-	-	-	0	0
	FTTS	04/09/2009	TP	0	-	-	-	-	0	0
	MLTS	08/30/2016	TP	0	-	-	-	-	0	0
	COAL ASH DOE	12/31/2005	TP	0	-	-	-	-	0	0

## Search Summary Report

**TARGET SITE: 19950 S CICERO AVE  
MATTESON, IL 60443**

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
	COAL ASH EPA	07/01/2014	0.500	0	0	0	0	-	0	0
	PCB TRANSFORMER	05/24/2017	TP	0	-	-	-	-	0	0
	RADINFO	10/02/2017	TP	0	-	-	-	-	0	0
	HIST FTTS	10/19/2006	TP	0	-	-	-	-	0	0
	DOT OPS	07/31/2012	TP	0	-	-	-	-	0	0
	CONSENT	09/30/2017	1.000	0	0	0	0	0	0	0
	INDIAN RESERV	12/31/2014	1.000	0	0	0	0	0	0	0
	UMTRA	06/23/2017	0.500	0	0	0	0	-	0	0
	LEAD SMELTERS	10/10/2017	TP	0	-	-	-	-	0	0
	US AIRS	10/12/2016	TP	0	-	-	-	-	0	0
	US MINES	10/29/2017	0.250	0	0	0	-	-	0	0
	FINDS	07/23/2017	TP	0	-	-	-	-	0	0
	AIRS	12/31/2016	TP	0	-	-	-	-	0	0
	COAL ASH	10/01/2011	0.500	0	0	0	0	-	0	0
	DRYCLEANERS	11/19/2017	0.250	0	0	0	-	-	0	0
	Financial Assurance	09/14/2017	TP	0	-	-	-	-	0	0
	HWAR	12/31/2015	TP	0	-	-	-	-	0	0
	IMPDMENT	12/31/1980	0.500	0	0	0	0	-	0	0
	NPDES	04/16/2014	TP	0	-	-	-	-	0	0
	PIMW	09/18/2017	0.250	0	0	0	-	-	0	0
	TIER 2	12/31/2016	TP	0	-	-	-	-	0	0
	UIC	11/21/2017	TP	0	-	-	-	-	0	0
<b>EDR Exclusive</b>	EDR MGP	08/28/2009	1.000	0	0	0	0	0	0	0
	EDR Hist Auto	02/20/2007	0.250	0	1	0	-	-	0	1
	EDR Hist Cleaner	02/20/2007	0.250	0	0	0	-	-	0	0
	- Totals --			0	8	0	0	0	0	8

# Site Information Report

**Request Date:** JANUARY 24, 2018  
**Request Name:** JOSH@BENCHMARKENV.COM

**Search Type:** COORD  
**Job Number:** NA

**Target Site:** 19950 S CICERO AVE  
MATTESON, IL 60443

## Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>	<u>UTMs</u>
Longitude:	87.733759	87.7337590 - 87° 44' 1.53"	Easting: 438781.5
Latitude:	41.526463	41.5264630 - 41° 31' 35.26"	Northing: 4597249.0
Elevation:	695 ft. above sea level		Zone: Zone 16

## Demographics

**Sites:** 8                      **Non-Geocoded:** 0                      **Population:** N/A  
**RADON**

Federal EPA Radon Zone for COOK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for COOK COUNTY, IL

Number of sites tested: 82

<u>Area</u>	<u>Average Activity</u>	<u>% &lt;4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% &gt;20 pCi/L</u>
Living Area - 1st Floor	1.273 pCi/L	96%	4%	0%
Living Area - 2nd Floor	0.900 pCi/L	100%	0%	0%
Basement	1.740 pCi/L	93%	7%	0%

# Target Site Summary Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

TOTAL: 8

GEOCODED: 8

NON GEOCODED: 0

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
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No sites found for target address

## Sites Summary Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

TOTAL: 8

GEOCODED: 8

NON GEOCODED: 0

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
A1	UST --CLOSED --2019438 --Removed	MATTESON RADIO	VOLLMER RD & CICERO AVE MATTESON, IL 60443	0.04 NNE	+ 1	1
A2	SPILLS --20051081 --20071228	SHELL OIL PRODUCTS US	4755 VOLLMER ROAD MATTESON, IL 60443	0.06 NE	+ 0	2
A2	LUST --2009-03-18 --2005-10-17 --20071228 --20051081 --311805032	SHELL OIL PRODUCTS US	4755 VOLLMER ROAD MATTESON, IL 60443	0.06 NE	+ 0	3
A3	EDR Hist Auto	P C P ENTERPRISES INC	4755 VOLLMER RD MATTESON, IL 60443	0.06 NE	+ 0	4
A4	SPILLS		4755 VOLLMER RD. MATTESON, IL	0.06 NE	+ 0	5
A5	SPILLS		4755 VOLLMER RD. MATTESON, IL	0.06 NE	+ 0	6
A6	RCRA NonGen / NLR --ILD984911578	SHELL OIL PRODUCTS US	4755 VOLMER MATTESON, IL 60443	0.06 NE	+ 0	7
A7	UST --ACTIVE --2006942 --Removed --Currently in use	CIRCLE K #6767	4755 VOLLMER MATTESON, IL 60443	0.06 NE	+ 0	9

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

UST

**EDR ID:** U001134140      **DIST/DIR:** 0.037 NNE      **ELEVATION:** 696      **MAP ID:** A1

**NAME:** MATTESON RADIO      **Rev:** 10/24/2017  
**ADDRESS:** VOLLMER RD & CICERO AVE      ID/Status: CLOSED  
MATTESON, IL 60443      ID/Status: 2019438  
COOK      ID/Status: Removed  
**SOURCE:** IL Illinois State Fire Marshal

UST:  
Facility ID: 2019438  
Facility Status: CLOSED  
Facility Type: NONE  
Owner Id: U0000875  
Owner Name: At&T, Inc.  
Owner Address: 10 South Canal Street 27th Floor  
Owner City,St,Zip: Chicago, IL 60606

Tank Number: 1  
Tank Status: Removed  
Tank Capacity: 4000  
Tank Substance: Diesel Fuel  
Last Used Date: Not reported  
OSFM First Notify Date: 2/26/1986  
Red Tag Issue Date: Not reported  
Install Date: Not reported  
Green Tag Decal: Not reported  
Green Tag Issue Date: Not reported  
Green Tag Expire Date: Not reported  
Fee Due: Not reported  
Motor Fuel Permit Inspection Date: Not reported  
Motor Fuel Permit Expiration Date: Not reported  
MOTOR FUEL TYPE: Not reported  
Pending Nov: N  
IEMA: Not reported  
Equipment Type: Not reported  
Equipment: Not reported  
Last Passing Date: Not reported  
Test Expire Date: Not reported

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### SPILLS

**EDR ID:** S106984503      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A2

**NAME:** SHELL OIL PRODUCTS US

**Rev:** 09/18/2017

**ADDRESS:** 4755 VOLLMER ROAD  
MATTESON, IL 60443  
COOK

ID/Status: 20051081  
ID/Status: 20071228

**SOURCE:** IL Illinois EPA

#### SPILLS:

Incident ID: 20051081

Incident Date: Not reported

Date Received: 08/03/2005

Lust Ind: Yes

Facility Address: 4755 VOLLMER RD

Facility City: MATTESON

PRP Name: SHELL OIL PRODUCTS US

AC: Not reported

Source Table: dbo\_OCIN\_INCIDENTCUR

Incident ID: 20071228

Incident Date: Not reported

Date Received: 09/06/2007

Lust Ind: Yes

Facility Address: 4755 VOLLMER RD

Facility City: MATTESON

PRP Name: SHELL OIL PRODUCTS US

AC: Not reported

Source Table: dbo\_OCIN\_INCIDENTCUR

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### LUST

**EDR ID:** S106984503      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A2

<b>NAME:</b> SHELL OIL PRODUCTS US	<b>Rev:</b> 10/23/2017
<b>ADDRESS:</b> 4755 VOLLMER ROAD	ID/Status: 2009-03-18
MATTESON, IL 60443	ID/Status: 2005-10-17
COOK	ID/Status: 20071228
<b>SOURCE:</b> IL Illinois Environmental Protection Agency	ID/Status: 20051081
	ID/Status: 311805032

#### LUST:

Incident Num: 20071228  
IL EPA Id: 311805032  
Product: Unleaded Gas  
IEMA Date: 2007-09-06  
Project Manager: Jones  
Project Manager Phone: Not reported  
Email: Not reported  
PRP Name: Shell Oil Products US  
PRP Contact: John Robbins  
PRP Address: 603 Diehl Road, Suite 103  
PRP City,St,Zip: Naperville, IL 60563  
PRP Phone: 6302764206  
Site Classification: Not reported  
Section 57.5(g) Letter: 734  
Date Section 57.5(g) Letter: Not reported  
Non LUST Determination Letter: Not reported  
20 Report Received: 2007-09-17  
45 Report Received: 2007-10-22  
NFA/NFR Letter: 2009-03-18  
NFR Date Recorded: 2009-04-30

Incident Num: 20051081  
IL EPA Id: 311805032  
Product: Unleaded Gas  
IEMA Date: 2005-08-03  
Project Manager: Jones  
Project Manager Phone: Not reported  
Email: Not reported  
PRP Name: Shell Oil Products US  
PRP Contact: John Robbins  
PRP Address: 603 Diehl Road, Suite 103  
PRP City,St,Zip: Naperville, IL 60563  
PRP Phone: 6302764206  
Site Classification: Not reported  
Section 57.5(g) Letter: P.A.  
Date Section 57.5(g) Letter: Not reported  
Non LUST Determination Letter: Not reported  
20 Report Received: 2005-08-24  
45 Report Received: 2005-09-20  
NFA/NFR Letter: 2005-10-17  
NFR Date Recorded: 2005-12-02



## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### EDR Hist Auto

**EDR ID:** 1021984988 **DIST/DIR:** 0.059 NE **ELEVATION:** 695 **MAP ID:** A3

**NAME:** P C P ENTERPRISES INC

**Rev:** 02/20/2007

**ADDRESS:** 4755 VOLLMER RD  
MATTESON, IL 60443  
COOK

**SOURCE:** US EDR, Inc.

### EDR Hist Auto:

Year: Name: Type:

1991	MATTESON SHELL:	Gasoline Service Stations
1992	SHELL:	Gasoline Service Stations
1993	SHELL:	Gasoline Service Stations
1994	SHELL:	Gasoline Service Stations
1995	SHELL:	Gasoline Service Stations
1996	SHELL:	Gasoline Service Stations
1997	PCP ENTERPRISES INC:	Gasoline Service Stations
1998	PCP ENTERPRISES INC:	Gasoline Service Stations
1999	PCP ENTERPRISES INC:	Gasoline Service Stations
2000	P C P ENTERPRISES INC:	Gasoline Service Stations
2001	P C P ENTERPRISES INC:	Gasoline Service Stations
2002	P C P ENTERPRISES INC:	Gasoline Service Stations
2003	P C P ENTERPRISES INC:	Gasoline Service Stations
2004	P C P ENTERPRISES INC:	Gasoline Service Stations
2005	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2006	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2007	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2008	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2009	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2010	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2011	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2012	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2013	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC
2014	P C P ENTERPRISES INC:	Gasoline Service Stations, NEC

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### SPILLS

<b>EDR ID:</b>	S115768133	<b>DIST/DIR:</b>	0.059 NE	<b>ELEVATION:</b>	695	<b>MAP ID:</b>	A4
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<b>NAME:</b>		<b>Rev:</b>	09/18/2017
<b>ADDRESS:</b>	4755 VOLLMER RD. MATTESON, IL COOK		
<b>SOURCE:</b>	IL Illinois EPA		

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### SPILLS

<b>EDR ID:</b>	S115764649	<b>DIST/DIR:</b>	0.059 NE	<b>ELEVATION:</b>	695	<b>MAP ID:</b>	A5
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<b>NAME:</b>		<b>Rev:</b>	09/18/2017
<b>ADDRESS:</b>	4755 VOLLMER RD. MATTESON, IL COOK		
<b>SOURCE:</b>	IL Illinois EPA		

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### RCRA NonGen / NLR

**EDR ID:** 1015742382      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A6

**NAME:** SHELL OIL PRODUCTS US

**Rev:** 09/13/2017

**ADDRESS:** 4755 VOLMER  
MATTESON, IL 60443  
COOK

**ID/Status:** ILD984911578

**SOURCE:** US Environmental Protection Agency

#### RCRA NonGen / NLR:

Date form received by agency: 08/22/2012

Facility name: SHELL OIL PRODUCTS US

Facility address: 4755 VOLMER

MATTESON, IL 60443

EPA ID: ILD984911578

Contact: Not reported

Contact address: Not reported

Not reported

Contact country: US

Contact telephone: 000-000-0000

Contact email: Not reported

EPA Region: 05

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

#### Owner/Operator Summary:

Owner/operator name: RDK VENTURES LLC

Owner/operator address: 4080 W JONATHAN MOORE PIKE

COLUMBUS, IN 47201

Owner/operator country: US

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Operator

Owner/Op start date: 01/07/2010

Owner/Op end date: Not reported

Owner/operator name: RDK VENTURES LLC

Owner/operator address: 4080 W JONATHAN MOORE PIKE

COLUMBUS, IN 47201

Owner/operator country: US

Owner/operator telephone: Not reported

Owner/operator email: Not reported

Owner/operator fax: Not reported

Owner/operator extension: Not reported

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: 01/07/2010

Owner/Op end date: Not reported

- Continued on next page -

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### RCRA NonGen / NLR

**EDR ID:** 1015742382      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A6

**NAME:** SHELL OIL PRODUCTS US

**Rev:** 09/13/2017

**ADDRESS:** 4755 VOLMER  
MATTESON, IL 60443  
COOK

**ID/Status:** ILD984911578

**SOURCE:** US Environmental Protection Agency

#### Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

#### Historical Generators:

Date form received by agency: 02/03/1993  
Site name: SHELL OIL CO  
Classification: Small Quantity Generator

- . Waste code: D000
- . Waste name: Not Defined
- . Waste code: D001
- . Waste name: IGNITABLE WASTE
- . Waste code: D008
- . Waste name: LEAD
- . Waste code: D018
- . Waste name: BENZENE

Violation Status: No violations found

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

### UST

**EDR ID:** U000856714      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A7

**NAME:** CIRCLE K #6767      **Rev:** 10/24/2017  
**ADDRESS:** 4755 VOLLMER  
MATTESON, IL 60443  
COOK  
**SOURCE:** IL Illinois State Fire Marshal

ID/Status: ACTIVE  
ID/Status: 2006942  
ID/Status: Removed  
ID/Status: Currently in use

UST:  
Facility ID: 2006942  
Facility Status: ACTIVE  
Facility Type: SELF-SERVICE STATION  
Owner Id: U0035671  
Owner Name: RDK Ventures, LLC  
Owner Address: 550 Warrenville Rd., Suite 400  
Owner City,St,Zip: Lisle, IL 60532

Tank Number: 1  
Tank Status: Removed  
Tank Capacity: 9438  
Tank Substance: Gasoline  
Last Used Date: Not reported  
OSFM First Notify Date: 4/25/1986  
Red Tag Issue Date: Not reported  
Install Date: 1/1/1979  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016  
Green Tag Expire Date: 12/31/2018  
Fee Due: \$0.00  
Motor Fuel Permit Inspection Date: 10/26/2016  
Motor Fuel Permit Expiration Date: 12/31/2018  
MOTOR FUEL TYPE: SelfSrv  
Pending Nov: N  
IEMA: 05-1081, 07-1228  
Equipment Type: Corrosion Prot - Piping  
Equipment: Fiberglass Non-Corrosive  
Last Passing Date: N/A  
Test Expire Date: N/A

Tank Number: 2  
Tank Status: Removed  
Tank Capacity: 9438  
Tank Substance: Gasoline  
Last Used Date: Not reported  
OSFM First Notify Date: 4/25/1986  
Red Tag Issue Date: Not reported  
Install Date: 1/1/1979  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016  
Green Tag Expire Date: 12/31/2018  
Fee Due: \$0.00

- Continued on next page -

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

UST

**EDR ID:** U000856714      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A7

**NAME:** CIRCLE K #6767

**Rev:** 10/24/2017

**ADDRESS:** 4755 VOLLMER  
MATTESON, IL 60443  
COOK

ID/Status: ACTIVE  
ID/Status: 2006942  
ID/Status: Removed  
ID/Status: Currently in use

**SOURCE:** IL Illinois State Fire Marshal

Motor Fuel Permit Inspection Date: 10/26/2016  
Motor Fuel Permit Expiration Date: 12/31/2018  
MOTOR FUEL TYPE: SelfSrv  
Pending Nov: N  
IEMA: Not reported  
Equipment Type: Corrosion Prot - Piping  
Equipment: Fiberglass Non-Corrosive  
Last Passing Date: N/A  
Test Expire Date: N/A

Tank Number: 3  
Tank Status: Removed  
Tank Capacity: 9438  
Tank Substance: Gasoline  
Last Used Date: Not reported  
OSFM First Notify Date: 4/25/1986  
Red Tag Issue Date: Not reported  
Install Date: 1/1/1979  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016  
Green Tag Expire Date: 12/31/2018  
Fee Due: \$0.00  
Motor Fuel Permit Inspection Date: 10/26/2016  
Motor Fuel Permit Expiration Date: 12/31/2018  
MOTOR FUEL TYPE: SelfSrv  
Pending Nov: N  
IEMA: Not reported  
Equipment Type: Corrosion Prot - Piping  
Equipment: Fiberglass Non-Corrosive  
Last Passing Date: N/A  
Test Expire Date: N/A

Tank Number: 4  
Tank Status: Currently in use  
Tank Capacity: 20000  
Tank Substance: Gasoline  
Last Used Date: Not reported  
OSFM First Notify Date: 7/16/2008  
Red Tag Issue Date: Not reported  
Install Date: 9/27/2007  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016  
Green Tag Expire Date: 12/31/2018

- Continued on next page -

## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

UST

**EDR ID:** U000856714 **DIST/DIR:** 0.059 NE **ELEVATION:** 695 **MAP ID:** A7

**NAME:** CIRCLE K #6767

**Rev:** 10/24/2017

**ADDRESS:** 4755 VOLLMER  
MATTESON, IL 60443  
COOK

ID/Status: ACTIVE  
ID/Status: 2006942  
ID/Status: Removed  
ID/Status: Currently in use

**SOURCE:** IL Illinois State Fire Marshal

Fee Due: \$0.00  
Motor Fuel Permit Inspection Date: 10/26/2016  
Motor Fuel Permit Expiration Date: 12/31/2018  
MOTOR FUEL TYPE: SelfSrv  
Pending Nov: N  
IEMA: Not reported  
Equipment Type: Corrosion Prot - Piping  
Equipment: Flexible Non-Corrosive  
Last Passing Date: N/A  
Test Expire Date: N/A

Tank Number: 5  
Tank Status: Currently in use  
Tank Capacity: 12000  
Tank Substance: Gasoline  
Last Used Date: Not reported  
OSFM First Notify Date: 7/16/2008  
Red Tag Issue Date: Not reported  
Install Date: 9/27/2007  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016  
Green Tag Expire Date: 12/31/2018  
Fee Due: \$0.00  
Motor Fuel Permit Inspection Date: 10/26/2016  
Motor Fuel Permit Expiration Date: 12/31/2018  
MOTOR FUEL TYPE: SelfSrv  
Pending Nov: N  
IEMA: Not reported  
Equipment Type: Corrosion Prot - Piping  
Equipment: Flexible Non-Corrosive  
Last Passing Date: N/A  
Test Expire Date: N/A

Tank Number: 6  
Tank Status: Currently in use  
Tank Capacity: 8000  
Tank Substance: Diesel Fuel  
Last Used Date: Not reported  
OSFM First Notify Date: 7/16/2008  
Red Tag Issue Date: Not reported  
Install Date: 9/27/2007  
Green Tag Decal: R002907  
Green Tag Issue Date: 10/26/2016

- Continued on next page -



## Site Detail Report

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

UST

**EDR ID:** U000856714      **DIST/DIR:** 0.059 NE      **ELEVATION:** 695      **MAP ID:** A7

**NAME:** CIRCLE K #6767

**Rev:** 10/24/2017

**ADDRESS:** 4755 VOLLMER  
MATTESON, IL 60443  
COOK

ID/Status: ACTIVE  
ID/Status: 2006942  
ID/Status: Removed  
ID/Status: Currently in use

**SOURCE:** IL Illinois State Fire Marshal

Green Tag Expire Date: 12/31/2018

Fee Due: \$0.00

Motor Fuel Permit Inspection Date: 10/26/2016

Motor Fuel Permit Expiration Date: 12/31/2018

MOTOR FUEL TYPE: SelfSrv

Pending Nov: N

IEMA: Not reported

Equipment Type: Corrosion Prot - Piping

Equipment: Flexible Non-Corrosive

Last Passing Date: N/A

Test Expire Date: N/A

## Database Descriptions

NPL: NPL National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices. NPL - National Priority List Proposed NPL - Proposed National Priority List Sites. NPL LIENS - Federal Superfund Liens.

NPL Delisted: Delisted NPL The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA 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. Delisted NPL - National Priority List Deletions

CERCLIS: FEDERAL FACILITY A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities. FEDERAL FACILITY - Federal Facility Site Information listing SEMS - Superfund Enterprise Management System.

NFRAP: SEMS-ARCHIVE SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site. SEMS-ARCHIVE - Superfund Enterprise Management System Archive

RCRA COR ACT: CORRACTS CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

RCRA TSD: RCRA-TSDF RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste. RCRA-TSDF - RCRA - Treatment, Storage and Disposal

RCRA GEN: RCRA-LQG RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC: LUCIS LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties. LUCIS - Land Use Control Information System US ENG CONTROLS - Engineering Controls Sites List. US INST CONTROL - Sites with Institutional Controls.

ERNS: ERNS Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. ERNS - Emergency Response Notification System

## Database Descriptions

State/Tribal CERCLIS: SSU The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit. SSU - State Sites Unit Listing

State/Tribal SWL: SWF/LF LF WMRC - Waste Management & Research Center Landfill Database. CCDD - Clean Construction or Demolition Debris. Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these 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. CCDD - Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge LF SPECIAL WASTE - Special Waste Site List. IL NIPC - Solid Waste Landfill Inventory.

State/Tribal LTANKS: LUST Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. LUST - Leaking Underground Storage Tank Sites INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R5 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. LUST TRUST - Underground Storage Tank Fund Payment Priority List.

State/Tribal Tanks: FEMA UST A listing of all FEMA owned underground storage tanks. FEMA UST - Underground Storage Tank Listing UST - Underground Storage Tank Facility List. INDIAN UST R4 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R10 - Underground Storage Tanks on Indian Land. INDIAN UST R7 - Underground Storage Tanks on Indian Land. INDIAN UST R1 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land.

State/Tribal IC / EC: ENG CONTROLS Sites using of engineered barriers (e.g., asphalt or concrete paving). ENG CONTROLS - Sites with Engineering Controls Inst Control - Institutional Controls.

State/Tribal VCP: INDIAN VCP R1 SRP - Site Remediation Program Database. INDIAN VCP R7 - Voluntary Cleanup Priority Listing. A listing of voluntary cleanup priority sites located on Indian Land located in Region 7. INDIAN VCP R7 - Voluntary Cleanup Priority Listing

ST/Tribal Brownfields: BROWNFIELDS The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of \$240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment. BROWNFIELDS - Municipal Brownfields Redevelopment Grant Program Project Descriptions BROWNFIELDS - Redevelopment Assessment Database.

US Brownfields: US BROWNFIELDS Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs. US BROWNFIELDS - A Listing of Brownfields Sites

Other SWF: INDIAN ODI Location of open dumps on Indian land. INDIAN ODI - Report on the Status of Open Dumps on Indian Lands DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations. ODI - Open Dump Inventory.

## Database Descriptions

Other Haz Sites: US HIST CDL A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register. US HIST CDL - National Clandestine Laboratory Register CDL - Meth Drug Lab Site Listing. US CDL - Clandestine Drug Labs.

Local Land Records: LIENS 2 A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. LIENS 2 - CERCLA Lien Information

Spills: HMIRS Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System SPILLS - State spills. IEMA SPILLS - Illinois Emergency Management Agency Spills. SPILLS 90 - SPILLS90 data from FirstSearch.

Other: RCRA NonGen / NLR RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated FUDS - Formerly Used Defense Sites. DOD - Department of Defense Sites. FEDLAND - Federal and Indian Lands. SCRD DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing. US FIN ASSUR - Financial Assurance Information. EPA WATCH LIST - EPA WATCH LIST. 2020 COR ACTION - 2020 Corrective Action Program List. TSCA - Toxic Substances Control Act. TRIS - Toxic Chemical Release Inventory System. SSTS - Section 7 Tracking Systems. ROD - Records Of Decision. RMP - Risk Management Plans. RAATS - RCRA Administrative Action Tracking System. PRP - Potentially Responsible Parties. PADS - PCB Activity Database System. ICIS - Integrated Compliance Information System. FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). FTTS INSP - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). MLTS - Material Licensing Tracking System. COAL ASH DOE - Steam-Electric Plant Operation Data. COAL ASH EPA - Coal Combustion Residues Surface Impoundments List. PCB TRANSFORMER - PCB Transformer Registration Database. RADINFO - Radiation Information Database. HIST FTTS - FIFRA/TSCA Tracking System Administrative Case Listing. HIST FTTS INSP - FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing. DOT OPS - Incident and Accident Data. CONSENT - Superfund (CERCLA) Consent Decrees. BRS - Biennial Reporting System. INDIAN RESERV 2 - Indian Reservations. UMTRA - Uranium Mill Tailings Sites. LEAD SMELTER 1 - Lead Smelter Sites. LEAD SMELTER 2 - Lead Smelter Sites. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. US MINES - Mines Master Index File. US MINES 2 - Ferrous and Nonferrous Metal Mines Database Listing. US MINES 3 - Active Mines & Mineral Plants Database Listing. FINDS - Facility Index System/Facility Registry System. AIRS - Air Inventory Listing. COAL ASH - Coal Ash Site Listing. DRYCLEANERS - Illinois Licensed Drycleaners. Financial Assurance - Financial Assurance Information Listing. HWAR - Hazard Waste Annual Report. IMPDMENT - Surface Impoundment Inventory. NPDES - A Listing of Active Permits. PIMW - Potentially Infectious Medical Waste. TIER 2 - Tier 2 Information Listing. UIC - Underground Injection Wells.

EDR Exclusive: 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. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches. 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. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches. UIC - EDR Exclusive Historical Cleaners EDR MGP - EDR Proprietary Manufactured Gas Plants. EDR Hist Auto - EDR Exclusive Historical Auto Stations. EDR Hist Cleaner - EDR Exclusive Historical Cleaners.

## Database Sources

NPL: EPA

Updated Quarterly

NPL Delisted: EPA

Updated Quarterly

CERCLIS: Environmental Protection Agency

Varies

NFRAP: EPA

Updated Quarterly

RCRA COR ACT: EPA

Updated Quarterly

RCRA TSD: Environmental Protection Agency

Updated Quarterly

RCRA GEN: Environmental Protection Agency

Updated Quarterly

Federal IC / EC: Department of the Navy

Varies

ERNS: National Response Center, United States Coast Guard

Updated Quarterly

State/Tribal CERCLIS: Illinois Environmental Protection Agency

Updated Semi-Annually

State/Tribal SWL: Illinois Environmental Protection Agency

Updated Annually

State/Tribal LTANKS: Illinois Environmental Protection Agency

Updated Semi-Annually

State/Tribal Tanks: FEMA

Varies

## Database Sources

State/Tribal IC / EC: Illinois Environmental Protection Agency

Updated Quarterly

State/Tribal VCP: EPA, Region 7

Varies

ST/Tribal Brownfields: Illinois Environmental Protection Agency

Varies

US Brownfields: Environmental Protection Agency

Updated Semi-Annually

Other SWF: Environmental Protection Agency

Varies

Other Haz Sites: Drug Enforcement Administration

No Update Planned

Local Land Records: Environmental Protection Agency

Updated Semi-Annually

Spills: U.S. Department of Transportation

Updated Quarterly

Other: Environmental Protection Agency

Updated Quarterly

EDR Exclusive: EDR, Inc.

No Update Planned

Street Name Report for Streets near the Target Property

Target Property: 19950 S CICERO AVE  
MATTESON, IL 60443

JOB: NA

Street Name	Dist/Dir	Street Name	Dist/Dir
Bowman St	0.25 WSW		
Gibson St	0.18 SW		
Henson Ct	0.21 WSW		
IL-50	0.06 East		
Lawrence Ln	0.16 WSW		
Matteson Ave	0.07 South		
Ramp	0.11 NNE		
Stoller St	0.06 WNW		
Vollmer Rd	0.10 North		

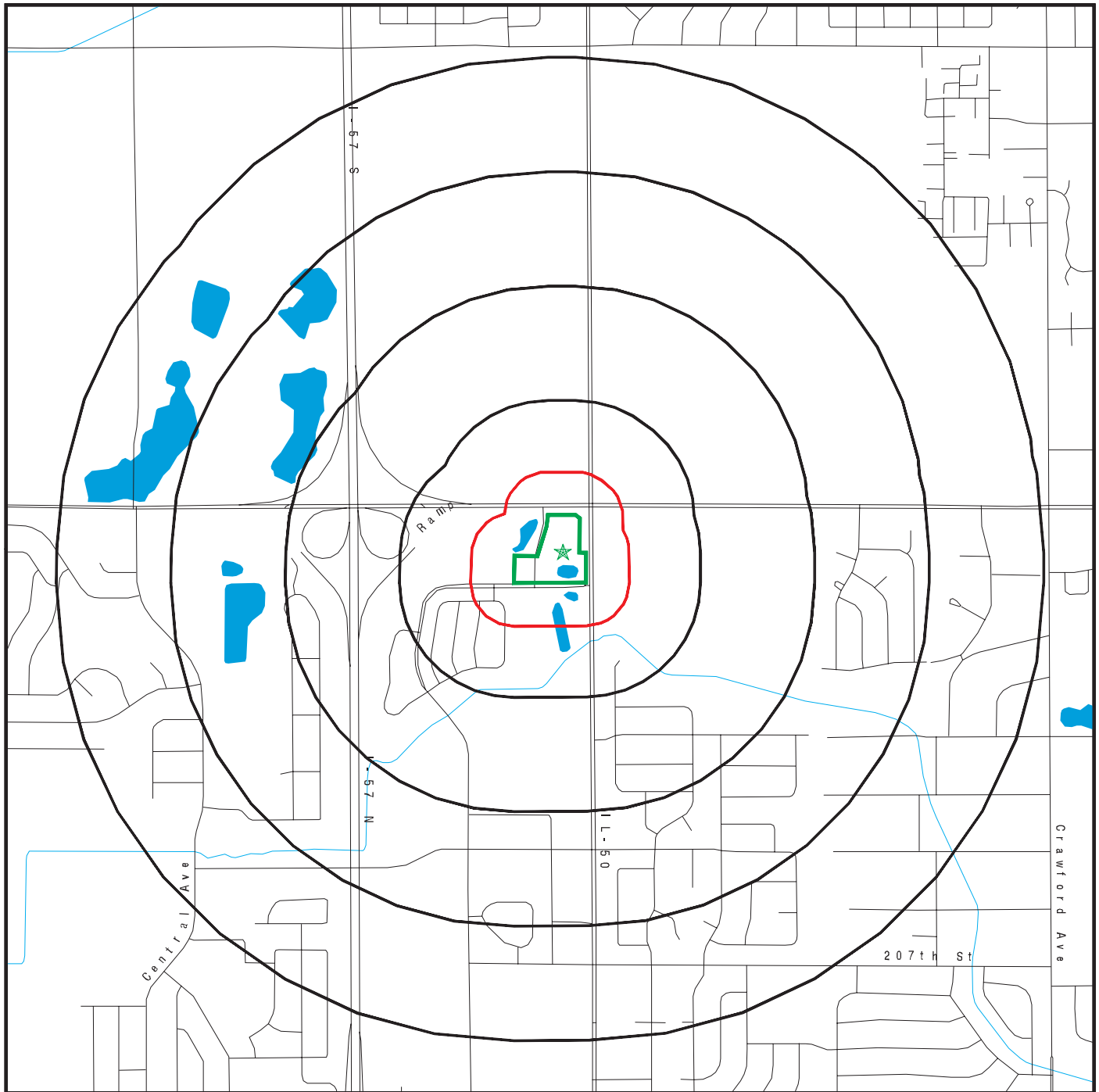
# Environmental FirstSearch

1,000 Mile Radius

ASTM MAP: NPL, RCRACOR, STATES Sites



19950 S CICERO AVE MATTESON, IL 60443

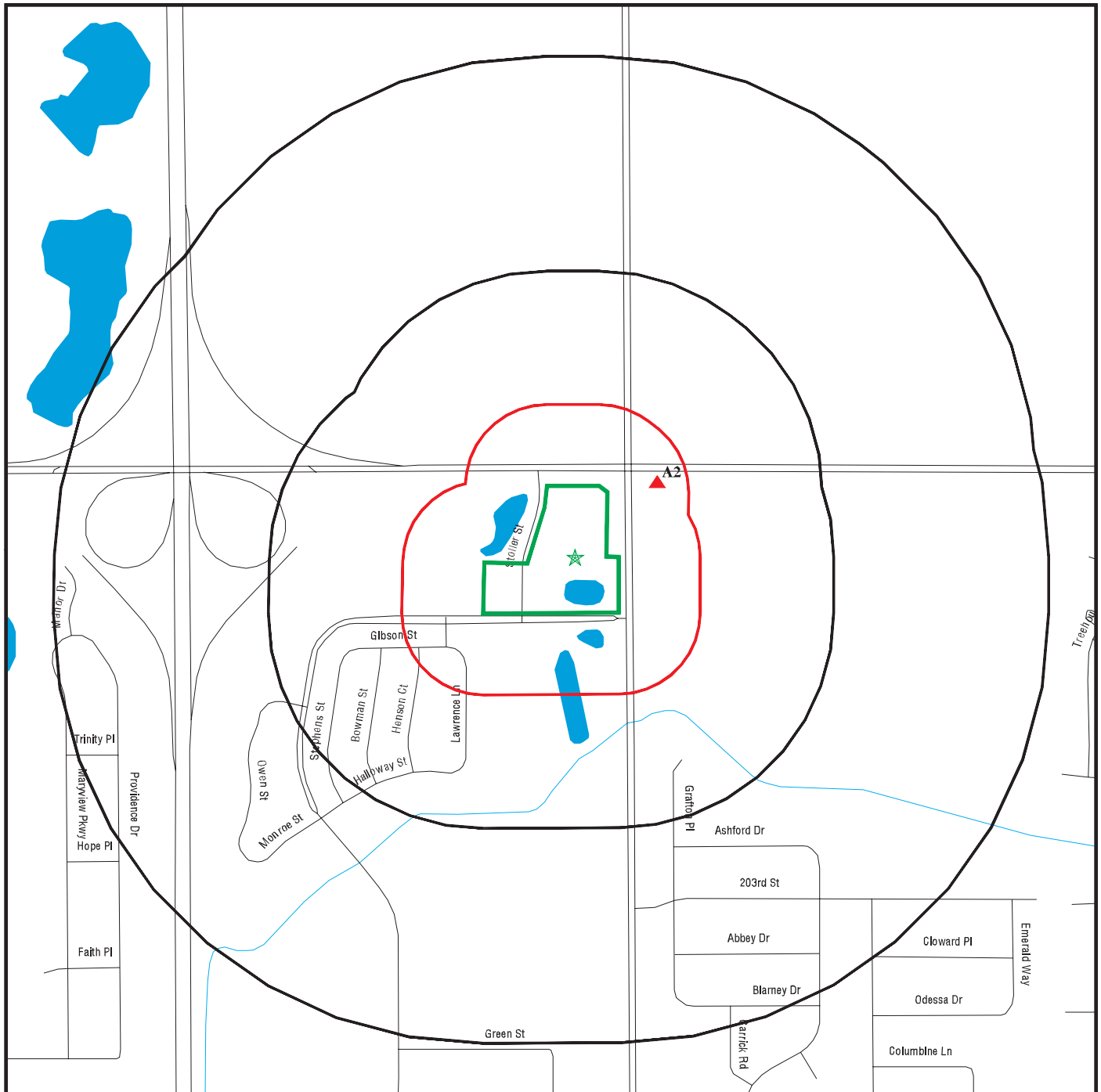


Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

- ★ Target Property (Latitude: 41.526463 Longitude: 87.733759)
- ▲ Identified Sites
- Indian Reservations BIA
- National Priority List Sites
- Dept. Defense Sites



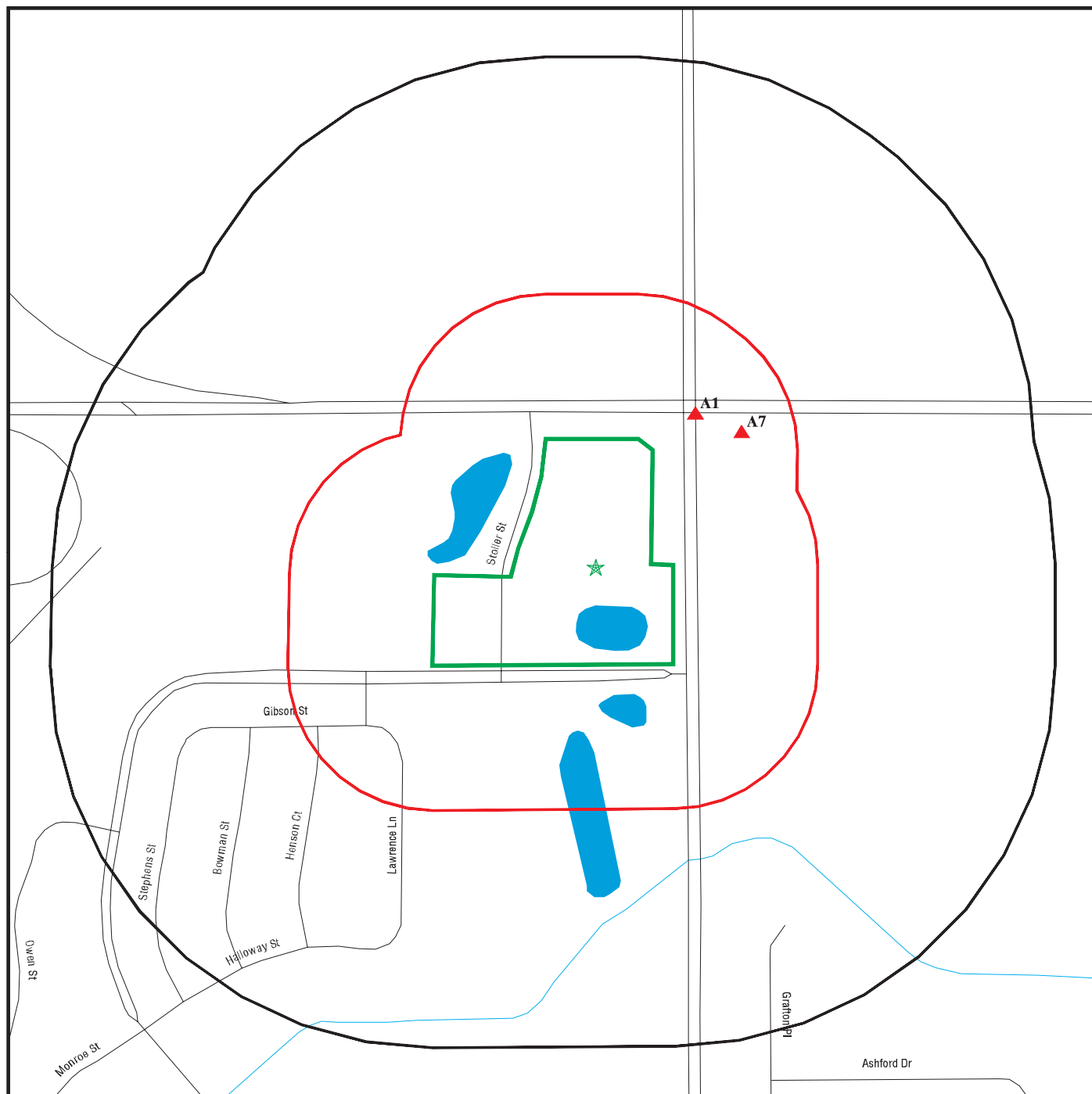
19950 S CICERO AVE MATTESON, IL 60443



**Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius**

- ★ Target Property (Latitude: 41.526463 Longitude: 87.733759)
- ▲ Identified Sites
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- National Priority List Sites
- Dept. Defense Sites

19950 S CICERO AVE MATTESON, IL 60443



**Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius**

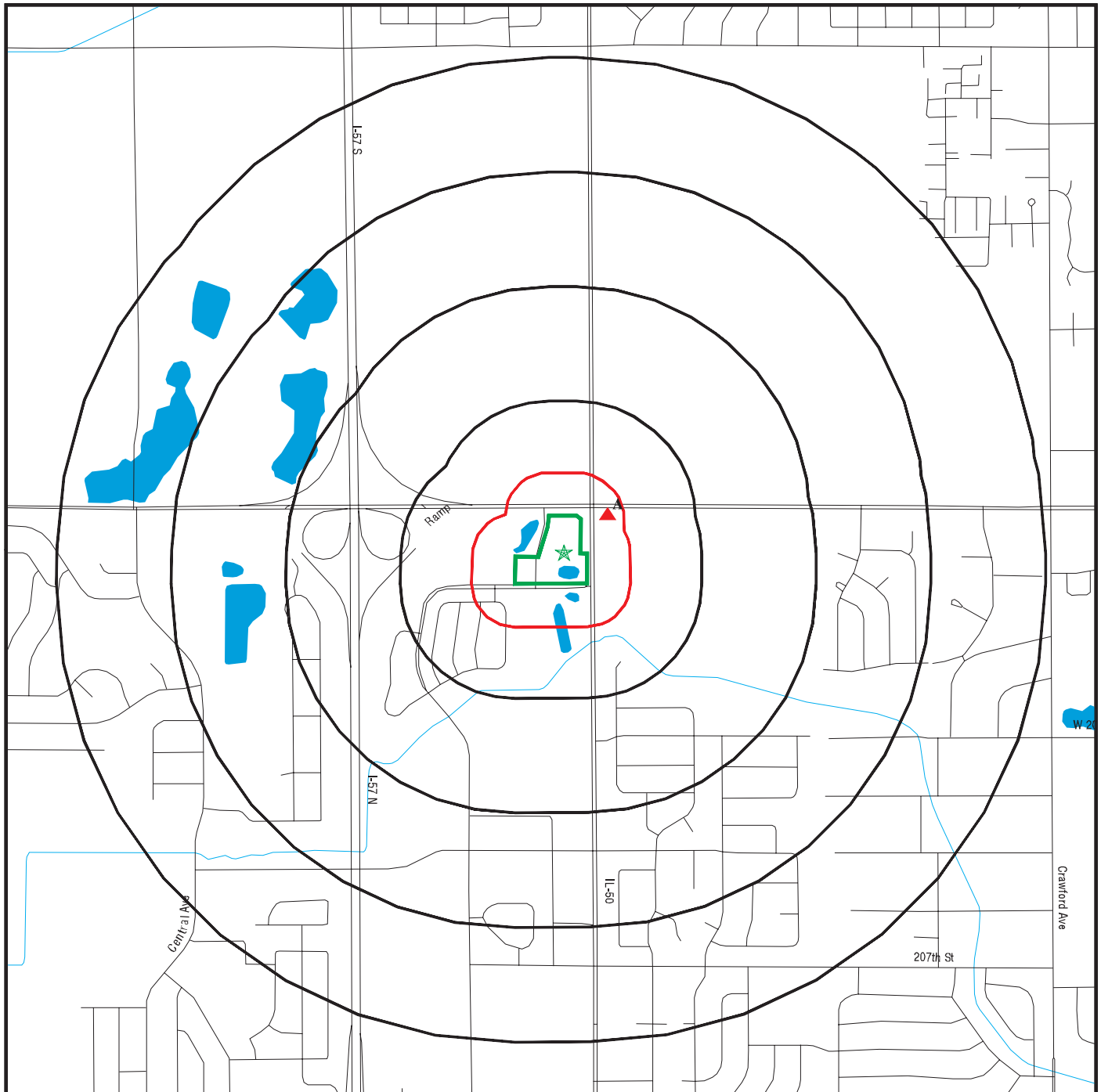
- ★ Target Property (Latitude: 41.526463 Longitude: 87.733759)
- ▲ Identified Sites
- Indian Reservations BIA
- National Priority List Sites
- Dept. Defense Sites

# Environmental FirstSearch

1,000 Mile Radius  
Non ASTM Map, Spills, FINDS



19950 S CICERO AVE MATTESON, IL 60443



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

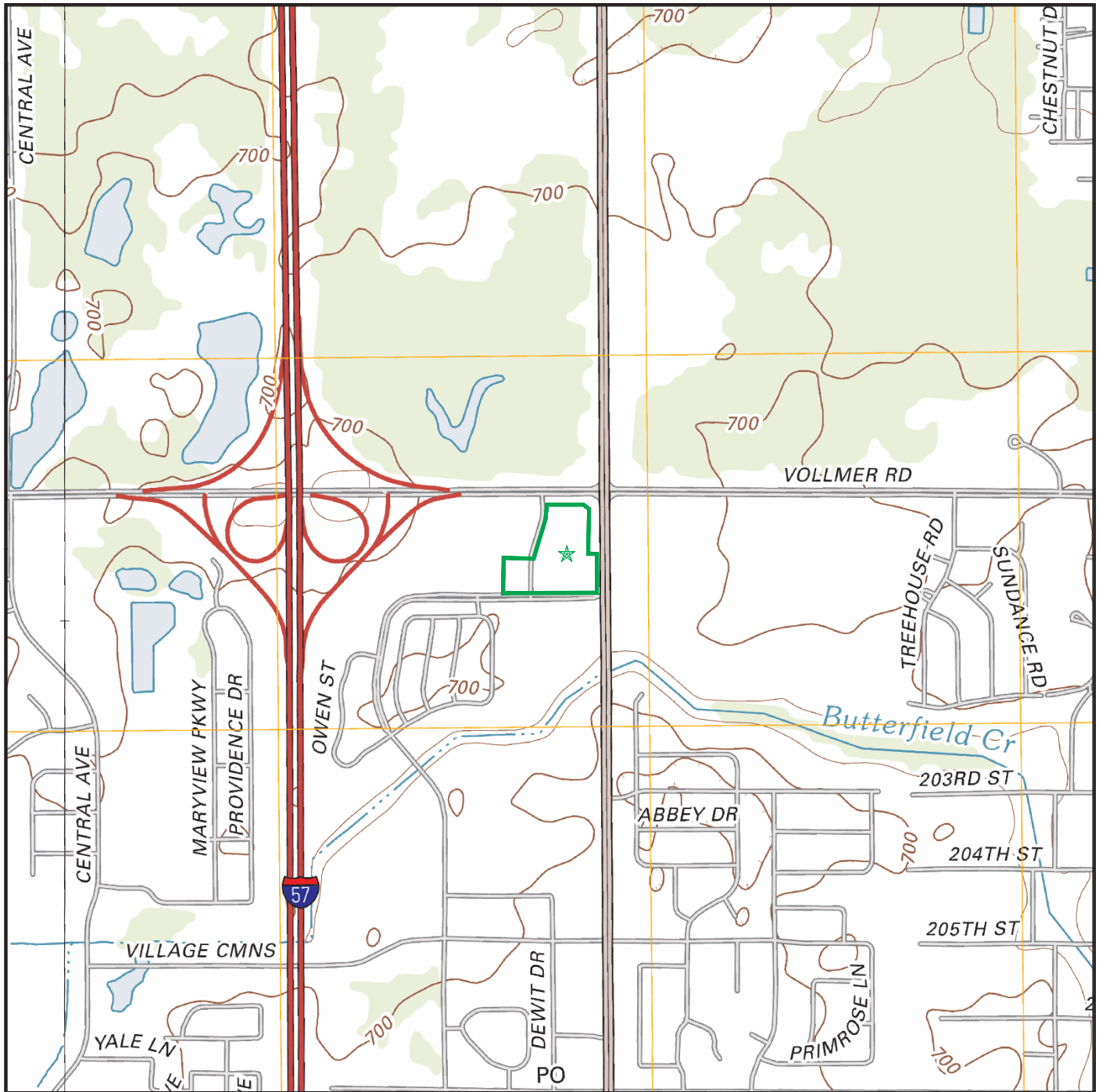
- ★ Target Property (Latitude: 41.526463 Longitude: 87.733759)
- ▲ Identified Sites
- 🏠 Sensitive Receptors
- 🏠 National Priority List Sites
- 🏠 Dept. Defense Sites
- 🏠 Indian Reservations BIA

# Site location Map

Topo: 0.75 Mile Radius



19950 S CICERO AVE MATTESON, IL 60443



Map Image Position: TP  
Map Reference Code & Name: 5680679 Harvey  
Map State(s): IL  
Version Date: 2012  
Map Image Position: NW  
Map Reference Code & Name: 5680701 Tinley Park  
Map State(s): IL  
Version Date: 2012