

Wetland & Other Waters of the United States Determination

Queensway Industrial Site
Searcy Sports Complex
White County, Arkansas

Prepared by:



September 2023

Table of Contents

	Page
Introduction	3
Property Location	3
Wetland Delineation Methodology	4
Hydrophytic Vegetation	4
Hydric Soil	5
Wetland Hydrology	5
Streams	5
General Description of the Property	6
Wetland Delineation and Stream Assessment – Findings	7
Summary	8
Attachments	9
Project Location Figure	
Topographic Figure	
Soils Figure	
Data Point Figure	
Streams Figure	
Floodplain Figure	
Lidar Figure	
Attachments	17
Photographs (12)	
Attachments	24
Data Sheets (3)	



Wetland Consultants Unlimited

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WETLAND & OTHER WATERS OF THE UNITED STATES DETERMINATION QUEENSWAY INDUSTRIAL PROPOSED SITE SEARCY, WHITE COUNTY, ARKANSAS

Introduction

Wetland Consultants Unlimited, LLC. conducted a wetland and other waters of the United States determination on the proposed Queensway Industrial Site (approx. 95 acres). The objective of the determination was to determine if waters of the United States and/or wetlands were present on the proposed site. If so, the boundaries were identified and acreages were calculated. The determination was conducted on the proposed site under the procedures outlined in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement of the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region. The identification of other waters of the United States on the proposed site was in accordance with the definitions provided in 33CFR328.3(a). **All findings on the project site are not official until concurred upon by the Little Rock District Corps of Engineers.**

Property Location

The proposed site is located in Searcy, White County, Arkansas. The proposed site is approximately 0.5 miles northwest of US 67/167 Exit 44. The proposed site is located on the east of Main St. and north of Booth Rd. The proposed site is currently the Searcy Sports Complex and Searcy Parks and Recreation Field Office. See Project Location Figure.

Proposed Site	USGS Quadrangle	Section	Township	Range
Queensway Industrial Site	Kensett	14	7N	7W

Wetland and Stream Delineation Methodology

Wetlands are defined as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are characterized by the following three parameters:

- a. Hydrophytic Vegetation
- b. Hydric Soils
- c. Wetland Hydrology

Hydrophytic Vegetation

“National List of Plant Species That Occur in Wetlands (Region 2) was used to conduct the wetland delineation for this project. The plants are listed in this document by indicator status based on the probability that each species occurs in wetlands. The indicator categories for vegetation are as follows:

- a. **Obligate Wetland (OBL)** – Occur almost always (estimated probability 99%) under natural conditions in wetlands.
- b. **Facultative Wetland (FACW)** – Usually occur in wetlands (estimated probability 67% to 99%), but occasionally found in non-wetlands.
- c. **Facultative (FAC)** – Equally likely to occur in wetlands and non-wetlands (estimated probability 34% to 66%).
- d. **Upland (UPL)** – Rarely occurs in wetlands, but occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

An area is determined to meet the required hydrophytic vegetation parameters when more than 50% of the dominant species are obligate wetland, facultative wetland or facultative.

Hydric Soil

Hydric soil indicators have been established to determine whether an area contains the required hydric soil parameters. Soil sample pits are dug and the soil profile is documented on data sheets. Munsell Soil Color Charts are used to determine the matrix and mottle colors of the soil. Other required soil characteristics are documented on the data sheets. The most common field indicators of hydric soils are low chroma colors (iron depletion) and mottling (redoximorphic features).

Wetland Hydrology

Wetland hydrology is more specifically defined as flooding, ponding or saturation of the surface for a long or very long duration during the growing season. Long duration is a single event that lasts 7 to 30 days. Very long duration is a single event that lasts more than 30 days. Wetland hydrology is sometimes defined as flooding, ponding or saturation for 3% - 5% of the growing season. In this part of Arkansas, that would be a minimum of 14 consecutive days. Field indicators have been developed to document whether an area meets the mandatory criteria to establish if the required wetland parameters exist. The presence of surface water on any given day is insufficient to establish that an area is flooded, ponded or saturated for 14 consecutive days. Other indicators have been established and used to assess the duration of soil saturations (i.e. water stained leaves, sediment deposits, watermarks, oxidized root channels, etc.). Likewise, the absence of water of the date of wetland delineations does not mean that wetlands are not present. Most wetlands are dry during portions of the year.

Streams

Streams are generally defined as water bodies that contain a streambed and stream bank (bed & bank). Streams are generally classified into one of three categories:

1. **Ephemeral** – Only flow during rain events, not influenced by groundwater.
2. **Intermittent** – Flows during certain times of the year and has no flow during dry times of the year, influenced by smaller tributaries upstream and groundwater.

3. **Perennial** – Typically flow year-round, influenced by groundwater and smaller tributaries upstream.

General Description of the Property

The proposed site is located in the White River drainage basin in the Arkansas Valley (Level III), Arkansas Valley Hills (Level IV) ecoregion. The Arkansas Valley contains plains, hills, floodplains, terraces, and scattered mountains. This ecoregion is largely underlain by interbedded Pennsylvanian sandstone, shale, and siltstone. Historically a mix of forest, woodland, savanna, and prairie dominated uplands whereas bottomland hardwoods covered floodplains and lower terraces. Today, less rugged areas have been cleared for pastureland or hay land. Poultry and livestock farming have become important land uses.

The Arkansas Valley Hills natural vegetation typically includes oak-hickory forest or oak-hickory-pine forest. Pastureland is extensive, but rugged areas are still forested. Poultry farming, livestock operations, and logging are important land uses.

The proposed site is an actively used sports complex located on the northwest side of U.S. Highway 67/167 in the city of Searcy, Arkansas. The proposed property is east of Main St. (Hwy. 67B) and is owned by the City of Searcy. Historically, the property was used for agricultural purposes or pastureland. The proposed property is bisected by one perennial stream.

The Natural Resource Conservation Service (NRCS) has identified/mapped four soil series located on the proposed site. The first soil series identified on the proposed site was Leadvale Silt Loam. Leadvale Silt Loam consists of deep to very deep, moderately well drained soils with slow to medium runoff. These soils have slow to moderately slow permeability and were formed in silty material in uplands or local silty alluvium from nearby uplands underlain largely by shale and siltstone. Leadvale soils are generally located on slightly concave toe slopes, benches, and terraces. The water table is perched at a depth of two to three feet in late winter and early spring.

The second soil series identified on the proposed site was Guthrie Silt Loam. Guthrie Silt Loam is a very deep, poorly drained soil with a fragipan. These soils were

formed in silty material on upland flats and depressions. Runoff is negligible to very slow with moderate permeability above the fragipan and very slow permeability below the fragipan. Ponding occurs for several weeks in the winter and spring.

The third soil series identified on the proposed site was Taft Silt Loam. Taft Silt Loam consists of very deep, somewhat poorly drained soils with slow runoff. Permeability is slow in these soils, which formed in silty mantle of loess or underlying residuum of limestone or shale. Taft soils contain a fragipan that is located in the subsoil. These nearly level soils are on upland flats, stream terraces, and found in depressions.

The fourth soil series identified on the proposed site was Allen Fine Sandy Loam. Allen Fine Sandy Loam is a very deep, well-drained soil that formed in alluvium or colluvium or residuum of sandstone and shale. These moderately permeable soils are commonly found on hillsides, foot slopes, and old high terraces. Runoff is medium on gently slopes and rapid on steep slopes. See Soil Figure.

Wetland Delineation and Stream Assessment – Findings

In accordance with the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, there was one perennial stream and no wetlands identified on the proposed site. The three parameters defined by the U.S. Army Corps of Engineers were used to determine the presence/absence of jurisdictional wetlands. See Data Sheets.

There was one perennial stream, Iorio Creek, which traverses west to east across the center of the proposed site. The perennial stream enters the property on the west side through a series of pipe culverts and traverses northeastward across the site. The stream exits the proposed site through a triple barrel box culvert under Queensway Street. Iorio Creek is a tributary to Gin Creek. The Iorio Creek channel has been heavily manipulated and channelized throughout the years due to complex construction and drainage patterns. See Wetland/Data Point Map.

Summary

There was one perennial stream and no wetlands identified on the proposed site. Approximately 1,200 linear feet of perennial stream was identified traversing across the proposed site. If stream impacts cannot be avoided, a Corps of Engineers Section 404 Permit will be required. If stream impacts are anticipated, impacts will be mitigated with permittee responsible mitigation or credits will need to be purchased from a Corps of Engineers approved mitigation bank site.

ATTACHMENTS

Project Location Figure

Topographic Figure

Soils Map

Data Point Map

Streams Figure

Floodplain Map

Lidar Map

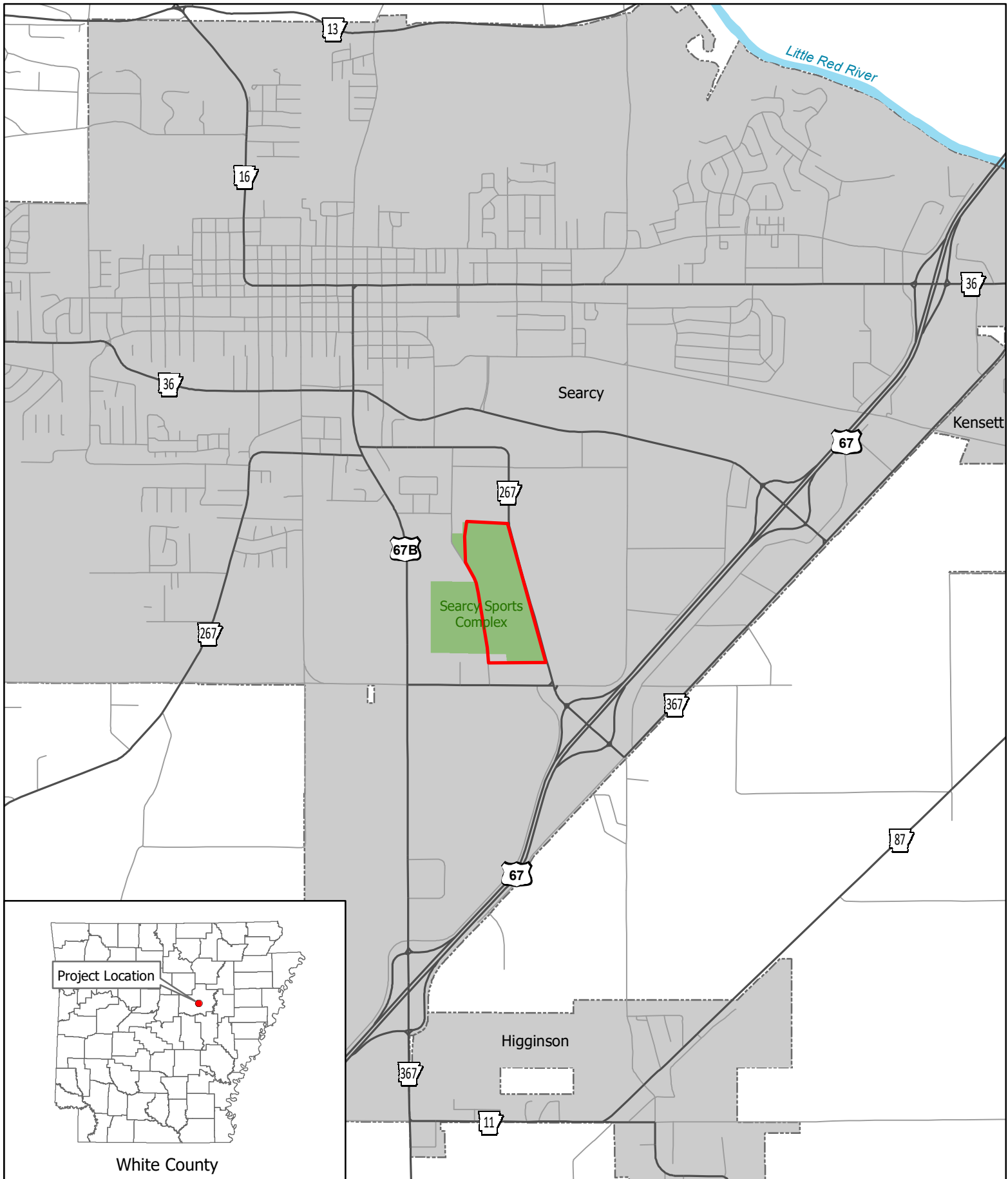


FIGURE 1
PROJECT LOCATION MAP
QUEENSWAY INDUSTRIAL SITE

 Project Location

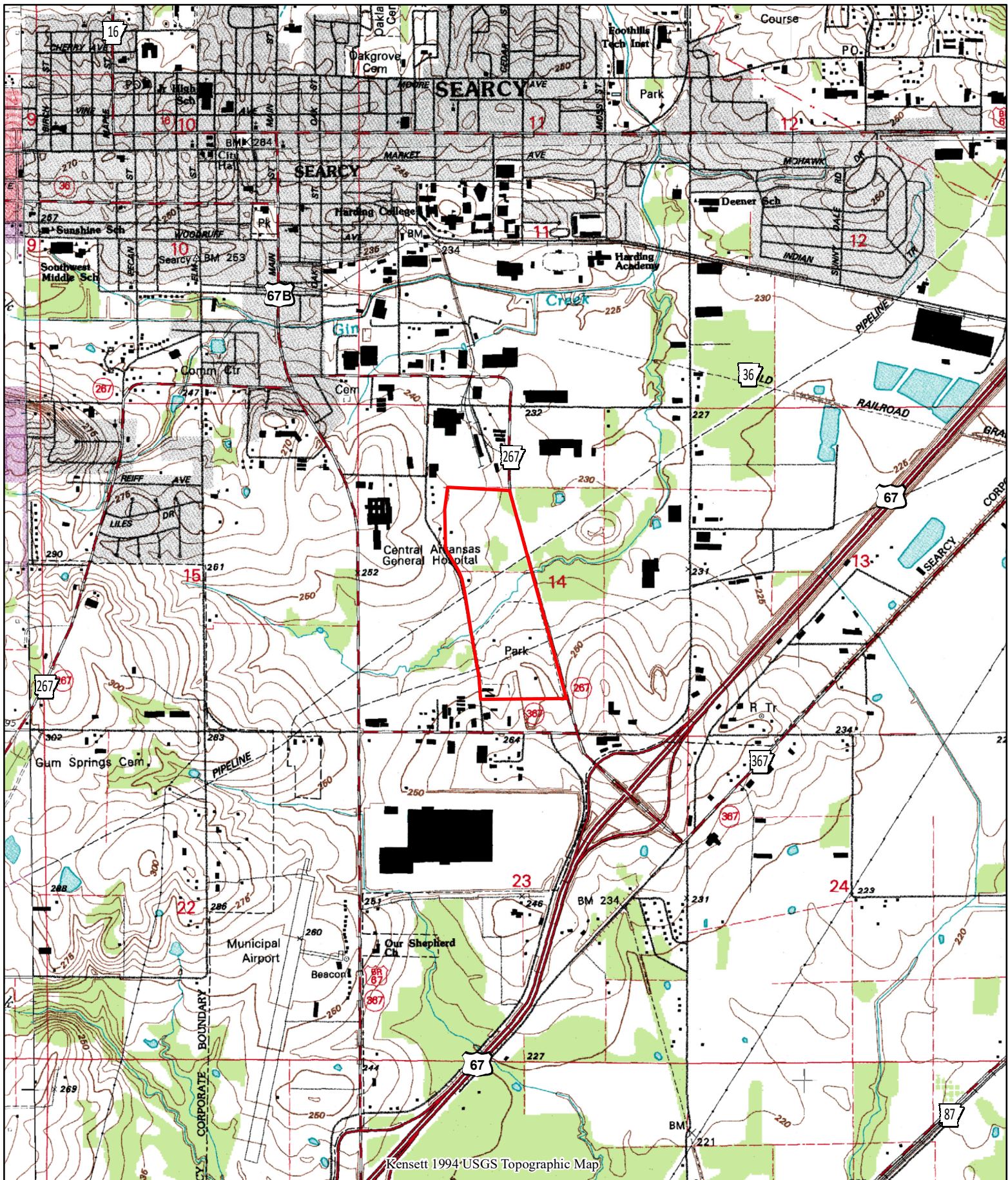


FIGURE 2
TOPOGRAPHIC MAP
QUEENSWAY INDUSTRIAL SITE

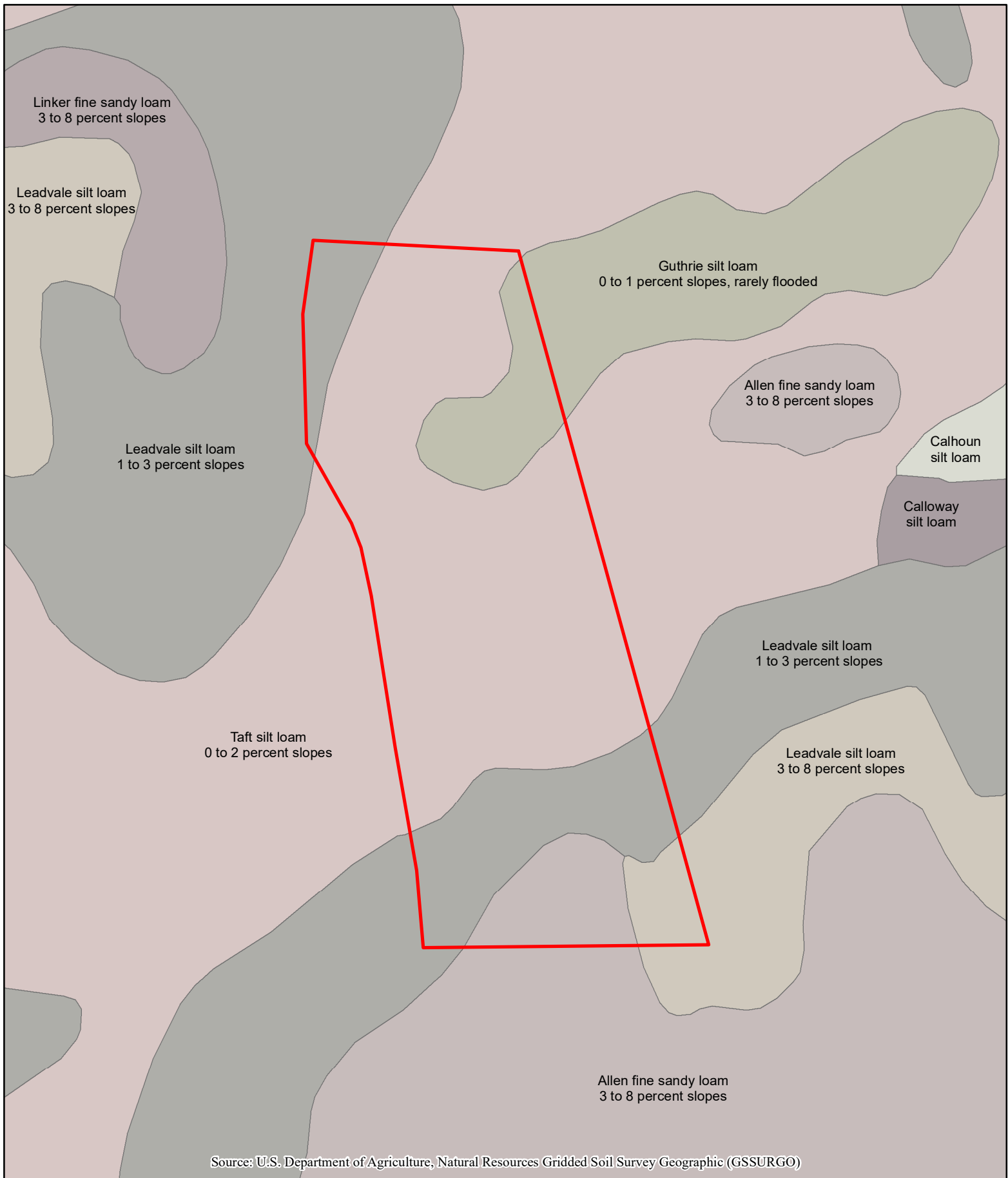
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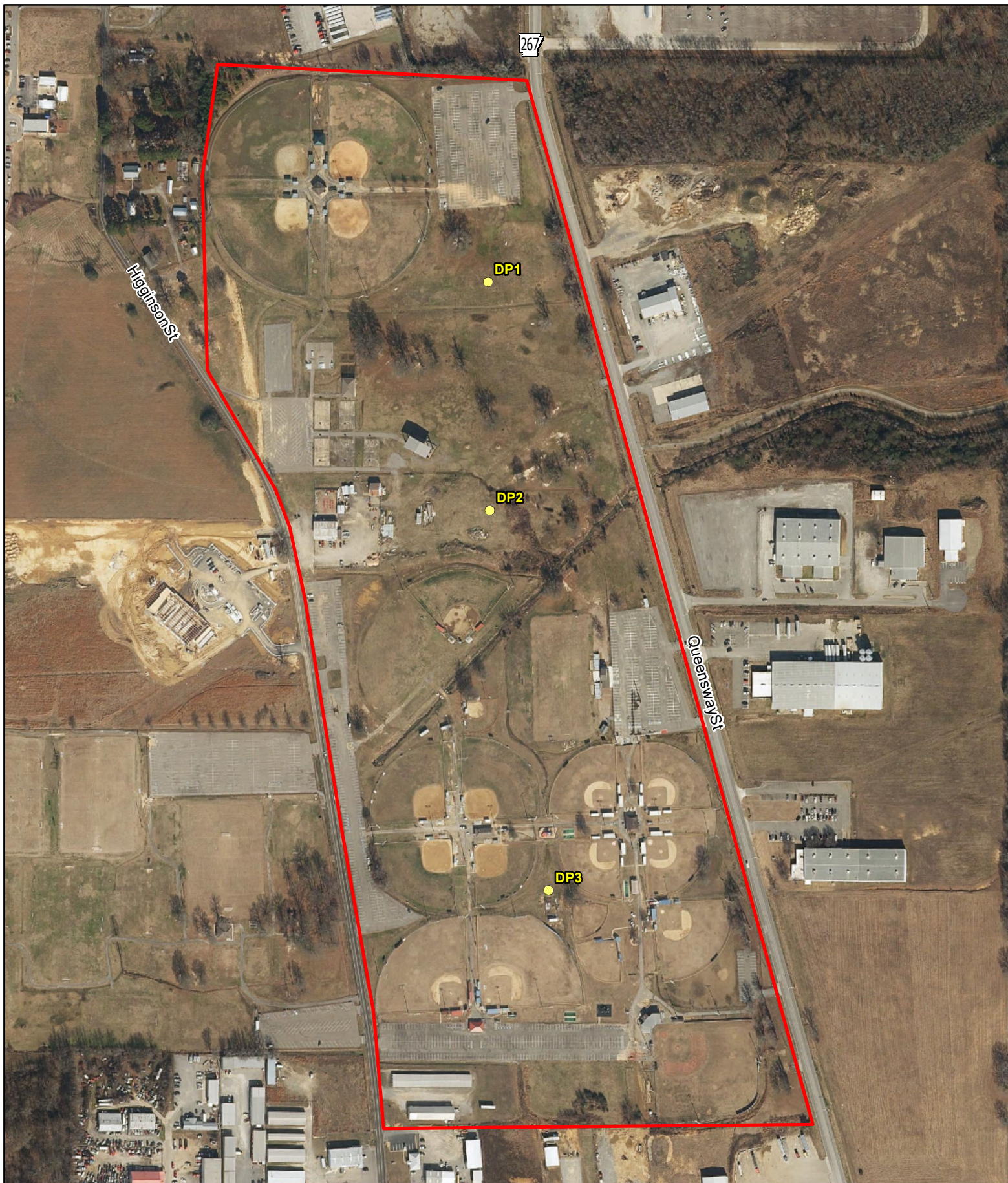
Project Location

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T7N - R7W - S14





0 200 400
Feet

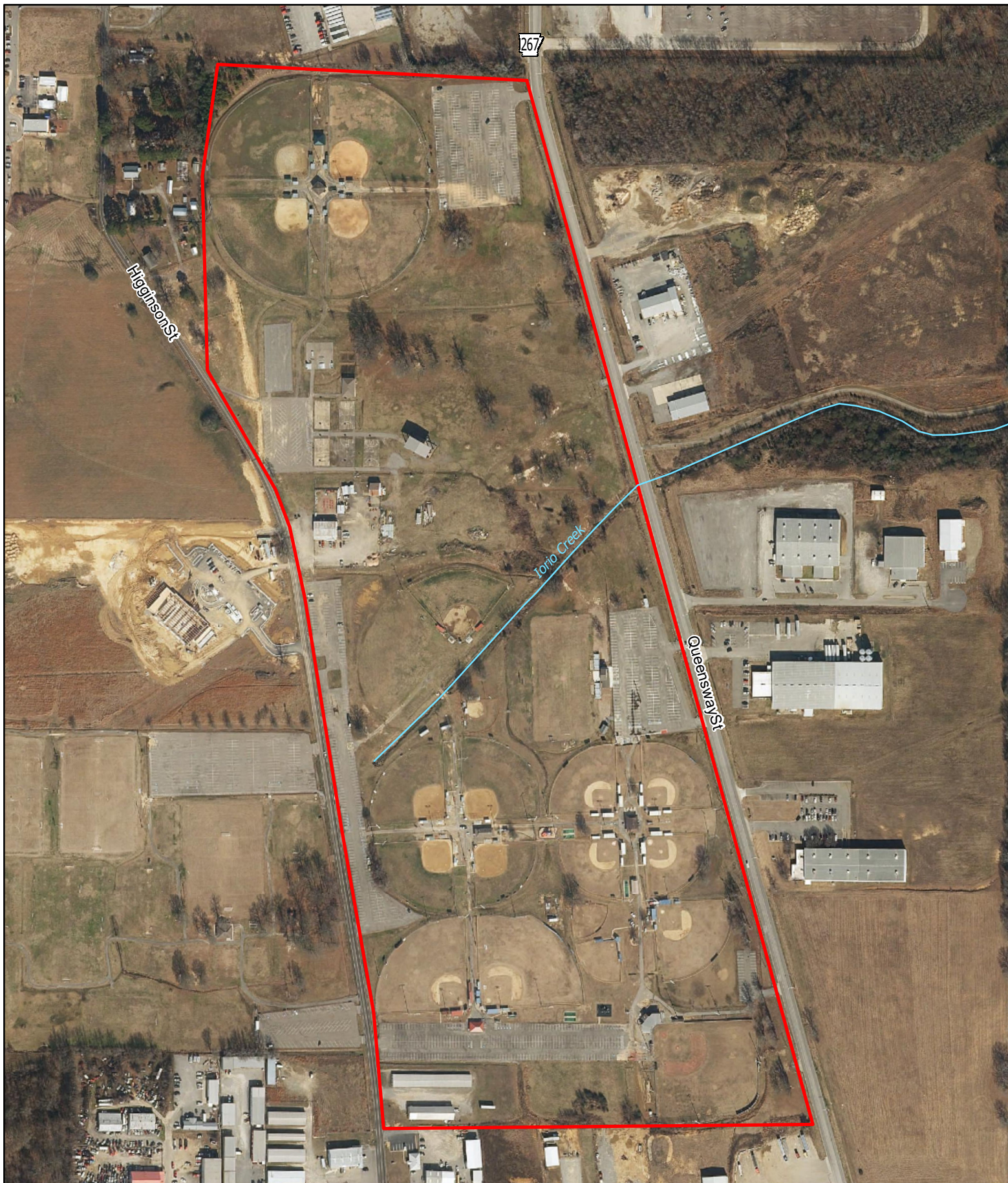


September 4, 2023

FIGURE 4
DATA POINTS
QUEENSWAY INDUSTRIAL SITE

- Data Point
- Project Location

Photography: ADOP 2017



0 200 400
Feet

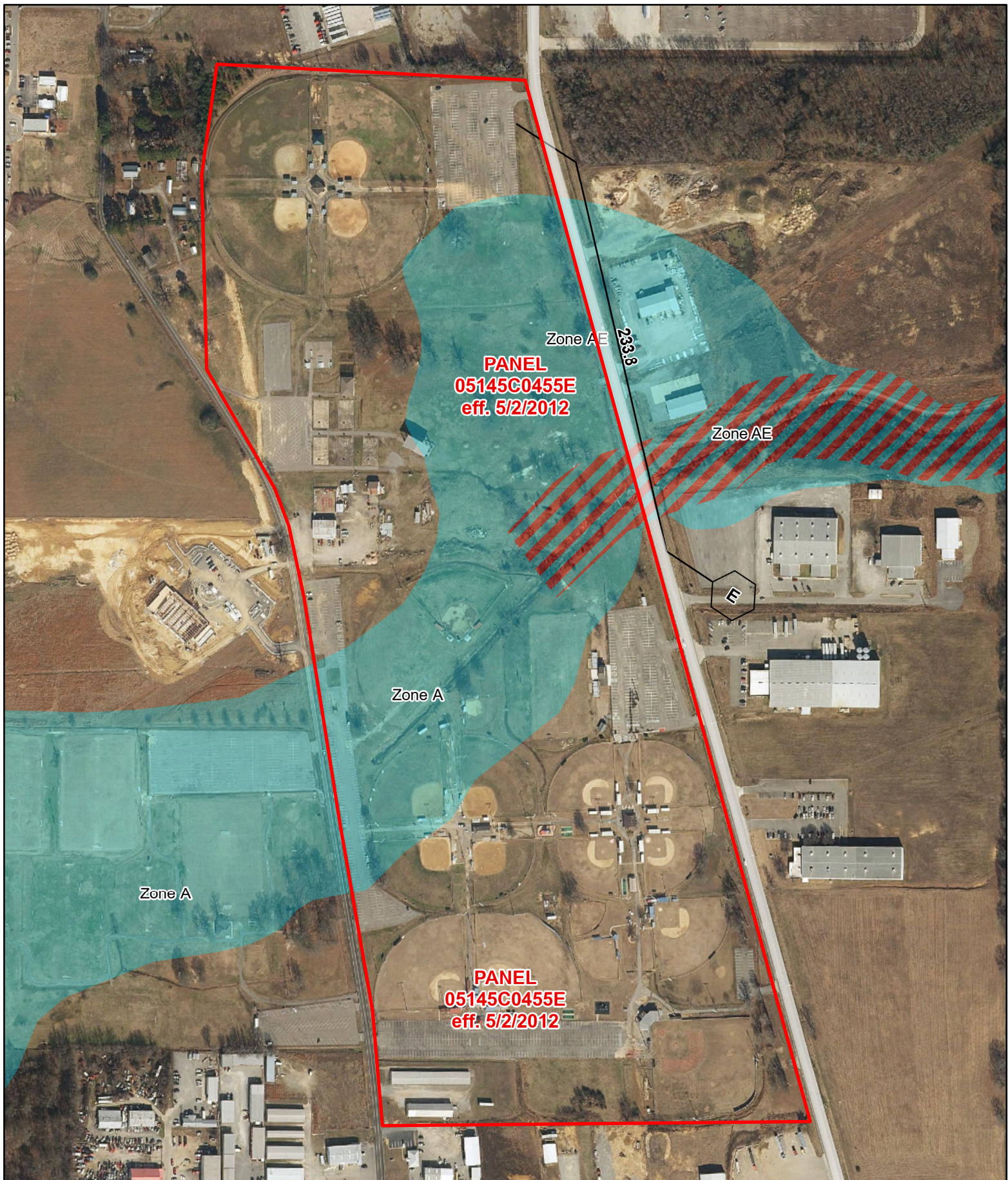
 Wetland Consultants
Unlimited

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FIGURE 5
STREAM LOCATION
QUEENSWAY INDUSTRIAL SITE

 Project Location

Photography: ADOP 2017



0 200 400 Feet



September 4, 2023

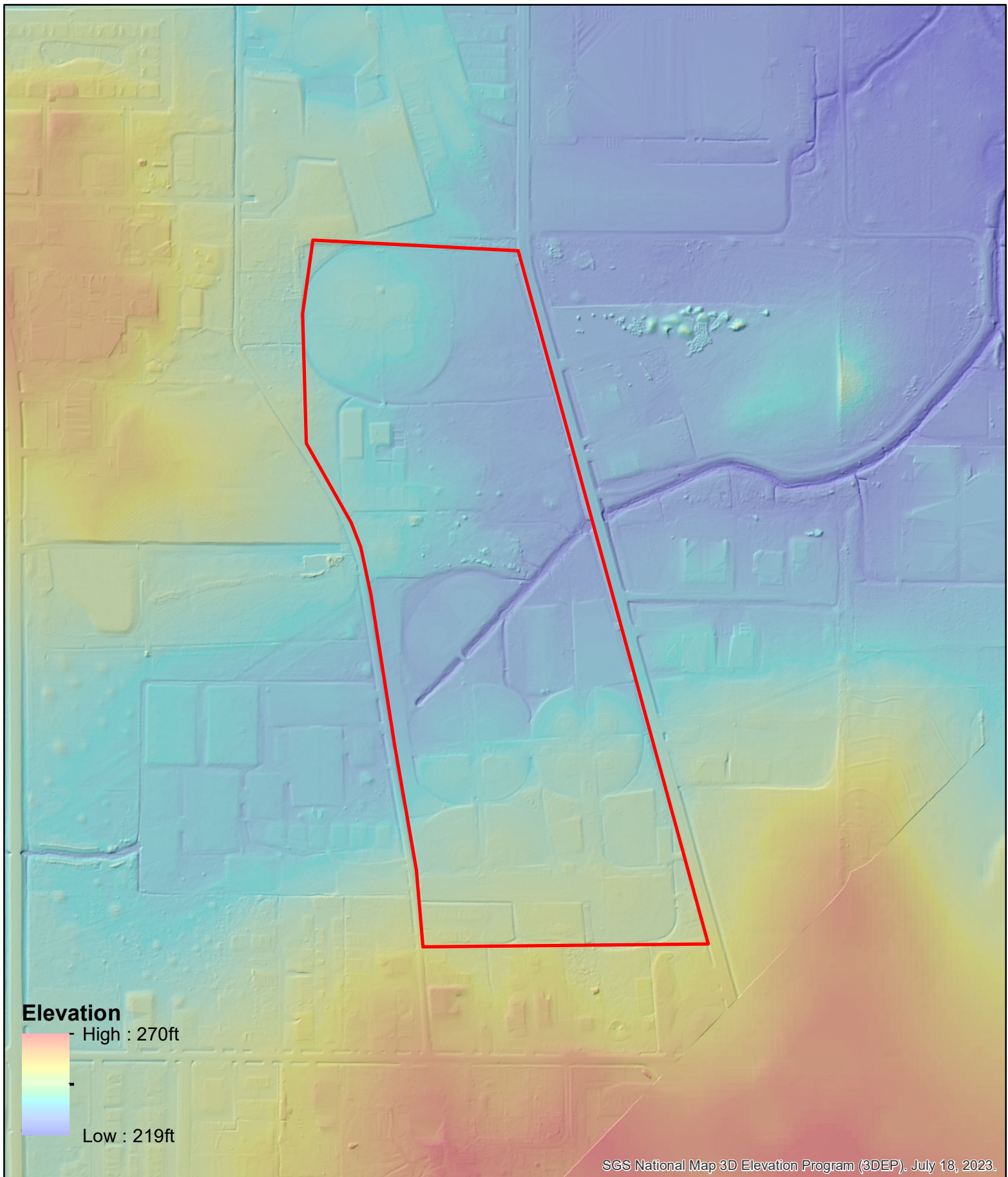
FIGURE 6
FLOODPLAIN MAP
QUEENSWAY INDUSTRIAL SITE

Project Location

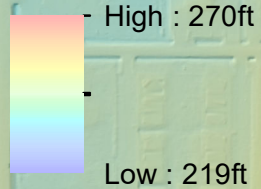
Flood Hazard Zones
Zone Type

1% Annual Chance Flood Hazard

Regulatory Floodway



Elevation



SGS National Map 3D Elevation Program (3DEP). July 18, 2023.

FIGURE 7
LIDAR BARE EARTH DEM
QUEENSWAY INDUSTRIAL SITE

 Project Location

ATTACHMENTS

Photographs (12)



Typical view of the south end of the Searcy Sports Complex



Typical view of the south end of the Searcy Sports Complex



Perennial stream entering the west side of the sports complex



Perennial stream entering west side of the complex through pipe culverts



Perennial stream along east side of the sports complex



Perennial stream exiting sports complex and the Queensway St. box culvert



Typical view of the sports complex looking north



Typical view of the sports complex looking north



Typical view of the sports complex looking northeast



Typical view of a drainage ditch, view is looking west



Typical view of sports complex looking northwest



Typical view of sports complex looking southwest

ATTACHMENTS

Data Sheets (3)

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Queensway Industrial Site City/County: Searcy/White Sampling Date: 8/30/2023
Applicant/Owner: City of Searcy State: AR Sampling Point: 1
Investigator(s): Bill Bailey and Clint Hutcheson; WCU Section, Township, Range: Section 14; T7N; R7W
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR or MLRA): LRRN Lat: 35.2330 Long: -91.7245 Datum: 83
Soil Map Unit Name: Taft Silt Loam NWI classification: herbaceous

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Sample point was taken within a sports complex.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒ Depth (inches): _____		
Water Table Present? Yes ☐ No ☒ Depth (inches): _____		
Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology was present		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 1

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>4</u></td> <td>x 4 = <u>16</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>4</u> (A)</td> <td><u>16</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>4</u>	x 4 = <u>16</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>4</u> (A)	<u>16</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>4</u>	x 4 = <u>16</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>4</u> (A)	<u>16</u> (B)																	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)														
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>30x30</u>)																		
1. <u>Cynodon dactylon</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>															
2. <u>Digitaria ciliaris</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>															
3. <u>Paspalum notatum</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>															
4. <u>Taraxacum officinale</u>	<u>10</u>	<u>N</u>	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>																		
Woody Vine Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>														

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 4/2	100					silt loam	
2-4	10YR 4/3	100					silt loam	
4-12	10YR 6/3	100					silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (MLRA 136, 147)			
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)	☐ Very Shallow Dark Surface (TF12)			
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Other (Explain in Remarks)			
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)				
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)				
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)				

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Queensway Industrial Site City/County: Searcy/White Sampling Date: 8/30/2023
Applicant/Owner: City of Searcy State: AR Sampling Point#
Investigator(s): Bill Bailey and Clint Hutcheson; WCU Section, Township, Range: Section 14; T7N; R7W
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR or MLRA): LRRN Lat: 35.2309 Long: -91.7244 Datum: 83
Soil Map Unit Name: Taft Silt Loam NWI classification: herbaceous

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: Sample point was taken within sport complex	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Water Table Present? Yes ☐ No ☒ Depth (inches): <u> </u>		
Saturation Present? Yes ☐ No ☒ Depth (inches): <u> </u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology present		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 2

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>3</u> (A)</td> <td><u>12</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>3</u> (A)	<u>12</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>3</u>	x 4 = <u>12</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>3</u> (A)	<u>12</u> (B)																	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>30x30</u>)																		
1. <u>Cynodon dactylon</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation¹ (Explain)</u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Paspalum notatum</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>															
3. <u>Digitaria ciliaris</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>															
4. <u>Cyperus esculentus</u>	<u>15</u>	<u>N</u>	<u>FAC</u>															
5. <u>Eleusine indica</u>	<u>10</u>	<u>N</u>	<u>FACU</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>																		
Woody Vine Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) (**LRR N**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) (**LRR N, MLRA 147, 148**)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbritic Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Queensway Industrial Site City/County: Searcy/White Sampling Date: 8/30/2023
Applicant/Owner: City of Searcy State: _____ Sampling Point: 3
Investigator(s): Bill Bailey and Clint Hutcheson; WCU Section, Township, Range: Section 14; T7N; R7W
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR or MLRA): LRRN Lat: 35.2275 Long: -91.7239 Datum: _____
Soil Map Unit Name: Leadvale Silt Loam NWI classification: herbaceous

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Sample point was taken within a sports complex.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		☐ Surface Soil Cracks (B6)
☐ Surface Water (A1)	☐ True Aquatic Plants (B14)	☐ Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)		☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ Microtopographic Relief (D4)
☐ Aquatic Fauna (B13)		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒ Depth (inches): _____		
Water Table Present? Yes _____ No ☒ Depth (inches): _____		
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No hydrology was present		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 3

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>2</u> (A)</td> <td><u>8</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>2</u> (A)	<u>8</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>2</u>	x 4 = <u>8</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>2</u> (A)	<u>8</u> (B)																	
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>30x30</u>)																		
1. <u>Cynodon dactylon</u>	<u>70</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation¹ (Explain)</u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Paspalum notatum</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>															
3. <u>Cenchrus longispinus</u>	<u>10</u>	<u>N</u>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>																		
Woody Vine Stratum (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 4/3	100					silt loam	
2-12	10YR 5/6	100					silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:		
☐ Histosol (A1)	☐ Dark Surface (S7)	☐ 2 cm Muck (A10) (MLRA 147)			
☐ Histic Epipedon (A2)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)	☐ Coast Prairie Redox (A16)			
☐ Black Histic (A3)	☐ Thin Dark Surface (S9) (MLRA 147, 148)	☐ (MLRA 147, 148)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Piedmont Floodplain Soils (F19)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ (MLRA 136, 147)			
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)	☐ Very Shallow Dark Surface (TF12)			
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Other (Explain in Remarks)			
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)				
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)				
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 136, 122)				
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)				
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147)				

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes _____ No ☒

Remarks: