

Exhibit G,  
Winnsboro Industrial Park  
Wetlands Delineation and  
Jurisdictional  
Determination Request



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***Wetlands Delineation and  
Jurisdictional Determination Request***

**Completed At:**

Proposed LED-Winnsboro Park Development Site  
Winnsboro, Franklin Parish, Louisiana

**Report Date:**

October 8, 2021

**Prepared By:**

Wetlands Unlimited, LLC  
PO Box 1892  
West Monroe, Louisiana 71294



## Table of Contents

1.0	EXECUTIVE SUMMARY .....	1
2.0	INTRODUCTION .....	3
3.0	SITE DESCRIPTION.....	3
4.0	METHODS .....	4
4.1	Field Procedures .....	5
	Transect A .....	5
	Transect B .....	5
	Transect C.....	6
5.0	SOILS DESCRIPTION .....	6
6.0	VEGETATIVE ANALYSIS .....	7
7.0	HYDROLOGY .....	7
8.0	CONCLUSIONS .....	8

## LIST OF FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Layout and Data Point Locations

Figure 3 – LIDAR Elevation Map

## LIST OF TABLES

Table 1 – Delineation Survey Results

## LIST OF APPENDICES

Appendix A - Site Photo Log

Appendix B - Wetland Data Forms

Appendix C - NRCS Hydric Soils Rating Report

## 1.0 EXECUTIVE SUMMARY

Wetlands Unlimited, LLC (WU) was contracted to complete a wetlands evaluation and delineation for a site proposed for listing in the Louisiana Certified Sites Program administered by Louisiana Economic Development to be a site for potential future development. The site is located approximately 2.73 miles north of downtown Winnsboro, Louisiana. The project boundary is an irregular shaped area located approximately 0.25 miles east of US Highway 425. The study area's western boundary is adjacent to Industrial Drive and directly south of Lumpkin Road in Winnsboro, Louisiana. The southern boundary of the study footprint is located directly north of Cajun Drive where a private business warehouse flanks the southwestern boundary and a privately owned forested area flanks the southeastern boundary. The northern boundary runs alongside Lumpkin Rd for 847.50 feet then turns southeast and runs along a powerline easement. The western boundary turns southwest and runs through overstory hardwood timber for approximately 551 feet, then turns west near Cajun Drive to form the southern extent of the study area. The center of the project is located at approximate Latitude 32° 12' 11.134"N and approximate Longitude 91° 43' 23.816"W.

An actively maintained field, presumably utilized for hay production, makes up much of the project area. Mature, forested timberland areas surround the maintained field where natural midstory regeneration was observed. There are some areas where mature overstory vegetation are absent and herbaceous ground cover is present. Elevations across the property appear to be slightly undulating throughout the study area, with the highest observed elevation along a ridge line in the open pasture area (32° 12' 10.554" N, 91° 43' 25.581" W). The lowest elevation areas were noted along the southeastern boundary and scattered along the western boundary. Both areas were found within forested sections of the property. No riverine systems were identified on the property during the field survey.

WU estimates approximately 1.74 acres of freshwater forested wetlands jurisdictional to the United States Army Corps of Engineers (USACE) are located within the proposed project footprint and designated area of this wetland delineation and evaluation. **Table 1 – Delineation Survey Results** lists the data points installed during the survey with corresponding geographic coordinates and wetland designation. Support figures are provided in the **Figures** section of the report and include **Figure 1 – Site Location Map**, **Figure 2 – Site Layout and Data Point Locations**, and **Figure 3 – LIDAR Elevation Mapping**. Data forms, site photos, and the NRCS Hydric Soils Rating Report for the site are provided in the **Appendices** section of the report.



Table 1: Delineation Survey Results			
Data Point	Wetland Designation	Latitude**	Longitude**
A-1	Non-Wet	32° 12' 15.000" N	91° 43' 30.710" W
A-2	Wet	32° 12' 15.195" N	91° 43' 27.980" W
A-3	Non-Wet	32° 12' 15.019" N	91° 43' 27.156" W
A-4	Non-Wet	32° 12' 15.041" N	91° 43' 23.860" W
A-5	Non-Wet	32° 12' 14.968" N	91° 43' 22.145" W
B-1	Wet	32° 12' 10.711" N	91° 43' 29.883" W
B-2	Non-Wet	32° 12' 10.601" N	91° 43' 24.644" W
B-3	Non-Wet	32° 12' 10.486" N	91° 43' 17.782" W
C-1	Non-Wet	32° 12' 6.987" N	91° 43' 19.241" W
C-2	Non-Wet	32° 12' 6.918" N	91° 43' 22.461" W
OT-1	Non-Wet	32° 12' 11.923" N	91° 43' 29.313" W
* Estimated Jurisdictional Wetland acreage = 1.74 acres			
** UTM Zone 15 North			

## 2.0 INTRODUCTION

A preliminary desktop evaluation was conducted to identify portions of the site as potential wetlands jurisdictional to the USACE. Upon completion of the desktop evaluation, wetland delineation field activities were conducted to confirm/invalidate the desktop findings and identify the boundaries between onsite uplands, wetlands, and streams likely considered jurisdictional to the USACE. These boundaries were determined based on the criteria described in the 1987 *Corps of Engineers Wetlands Delineation Manual* and 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain (Version 2.0)*. Other technical resources utilized include the Franklin Parish Soil Survey; Soil Mapping Units and Hydric Soils Designations – Louisiana, First Edition; Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Franklin Parish, Louisiana; ESRI 2017: ArcGIS Desktop: Release 10.5.1, Redlands, CA: Environmental Systems Research Institute; National List of Plant Species that occur in Wetlands: Southeast (Region 2), May 1988; Louisiana State University Department of Geography and Anthropology, Louisiana Statewide GIS Atlas; Munsell Soil Color Book, 2017 Edition; and various botanical references.

This document summarizes the delineation study and conclusions. The support exhibits for this report are included as figures and appendices. The **Figures** section of the report includes the following figures: **Figure 1 – Site Location Map**, **Figure 2 – Site Layout and Data Point Locations**, and **Figure 3 – LIDAR Elevation Mapping**. The appendices include the following: **Appendix A – Site Photo Log**, **Appendix B – Wetland Data Forms**, and **Appendix C – NRCS Hydric Soils Rating Report**.

## 3.0 SITE DESCRIPTION

The site is located approximately 2.73 miles north of downtown Winnsboro, Louisiana. The study area's western boundary is adjacent to Industrial Drive and south of Lumpkin Road in Winnsboro, Louisiana. The southern boundary of the wetland delineation study is located directly north of Cajun Drive where a private business warehouse flanks the southwestern boundary and a privately owned forested area flanks the southeastern boundary. The approximate center of the project area is located near latitude 32° 12' 11.134" N and longitude 91° 43' 23.816" W. The location is shown in the **Figures** section of this report as **Figure 1 – Site Location Map**.

The approximately 24.41-acre study area is mostly actively managed pastureland, presumably utilized for hay production, and hardwood flats and bottoms near the perimeters. Forested areas are sparse in comparison to the previously cleared pasture areas but host abundant overstory vegetation cover while also providing adequate sunlight to the forest floor for a high-density understory. Changes in elevation across the property originate from a ridge line located near the center of the hay field (32° 12' 10.554" N, 91° 43' 25.581" W), generally running north to south through the study footprint (**Figure 3 – LIDAR Elevation Map**). Elevations from this ridge decrease eastward and westward to the project boundaries.

Micro topography changes were observed within the forested areas of the study site, and provide most of the hydrology, via prolonged inundation retention, for identified wetland areas. Dominant vegetation types in both the overstory and midstory across the property were overcup oak (*Quercus lyrata*), Chinese tallow (*Triadica sebifera*), sweet pecan (*Carya illinoensis*), and willow oak (*Quercus phellos*). Dominant woody vine and herbaceous vegetation observed across the site included dallis grass (*Paspalum dilatatum*), maiden-cane (*Panicum hemitomon*), Eastern narrowleaf sedge (*Carex amphibola*), red vine (*Brunnichia ovata*), Japanese honey suckle (*Lonicera japonica*), and muscadine (*Vitis rotundifolia*).

The study area can largely be defined as an active hay field that is flanked by mature hardwood forests. No streams or other channelized water sources were observed during the field activities. Hydrology is mostly confined to low lying areas within the forested tracts, where standing water was observed. Soil properties are variable, depending on hydrology, but were mostly observed to be silty loam or clayey loam soils with light yellow/red matrices and abundant redox features.

#### **4.0 METHODS**

By definition, jurisdictional wetlands contain hydrophytic vegetation, hydric soils, and hydrology (periodic inundation or saturation in the upper 12 inches of the soil at some time during the growing season). All three elements must be present in an area to qualify as jurisdictional wetlands. With reference to **Figure 2**, eleven data points were installed to evaluate site characteristics in relation to wetland criteria. Soils, vegetation, and hydrology were examined at each data point.

Based on the methods outlined in the 1987 USACE Wetland Delineation Manual for areas greater than 5 acres in size, a baseline should be established perpendicular to a watercourse or parallel to the hydrologic gradient. Since the property is of an irregular shape and there are no watercourses within the project boundary, the baseline was allocated along the western boundary perpendicular to a stream offsite. Three sampling transects were allocated perpendicular to the baseline, within three baseline segments (**Figure 2 – Site Layout and Data Point Locations**).

Data point locations were allocated at irregular intervals along the transects, at the discretion of the delineator. Generally, any change in local elevation, hydrology, or vegetation cover was noted by the installation of a new datapoint along the transect. Each data point was monumented on the ground with flagging and labeled by corresponding data point number, in relation to the transect (A-1, B-1, C-1, etc.). If a data point was found to satisfy all three wetland conditions, the delineator traversed the area until sufficient dry points to confidently delineate the wetland area were located. One off-transect (OT) data point location was allocated between the B and C sampling transects to further delineate areas where wetlands were likely to exist and transect lines were inadequate for delineating the wetland boundaries. Wetland boundary flagging and GPS coordinates were collected along the wetland boundary line for each change in wetland/upland data point results.

GPS locations of each data point, and wetland boundary, were logged at plot center using a Trimble Geo7x Datalogger. Soils were evaluated by digging soil pits approximately 12-18 inches deep where soil descriptions and color could be compared to the published Franklin Parish Soil Survey and NRCS soils descriptions. Vegetation was evaluated by noting, at a minimum, the species exhibiting 20% or greater dominance in each stratum (tree, sapling, shrub, herb, and woody vine) within a 30-foot radius of the soil pit location.

#### **4.1 Field Procedures**

Transect locations and project site boundaries were loaded into the Trimble Geo7x GPS unit and used for navigation during field activities. The locations of the three transects and all data points established during the study are shown on **Figure 2 – Site Layout and Data Point Locations**.

##### **Transect A**

Transect A, the most northern transect was the first to be investigated. This area of the project site consisted of a naturally seeded mix of primarily oak, hickory, and ash in the overstory within the forested areas of the transect. Dallis grass (*Paspalum dilatatum*) was the dominant herbaceous vegetation in the open, pastureland portion of Transect A. Areas with highly diverse and abundant herbaceous cover were observed within the forested areas, despite the high vegetation density in the overstory. Four non-wetland points (A-1, A-3, A-4, and A-5) and one wetland point (A-2) were established along the transect. One wetland area (Wetland Area #1) was delineated along Transect A. All data points along Transect A passed the Dominance Test for hydrophytic vegetation and hydric soil was present at A-1 and A-4, but both were lacking hydrology. Approximately 1.40 acres of forested wetlands were delineated along Transect A.

##### **Wetland Area #1**

Wetland Area #1 was discovered to have approximately 1.40 acres of forested wetlands. The wetlands discovered in this area border the northern boundary of the project site where they continue further to the northwest to the tree line and turn southward towards OT-1, where elevations are slightly higher. Evidence of hydrology steadily declined as the investigators moved south, so the southern extent of this wet area was delineated along those minor elevation changes where hydrology was tapering off. Data pit A-2 was established within this wetland area.

##### **Transect B**

Transect B, which is located in the center of the study area, was the second transect within the project footprint to be evaluated for the presence of wetlands. This area of the project site consisted mainly of pastureland with some forested areas exhibiting similar species composition to that of Transect A. The two sections of forested areas along Transect B are at the western and eastern extents of the transect. Two non-wetland points (B-2 and B-3) and one wetland point (B-1) were established along the transect.

One wetland area (Wetland Area #2) was delineated along Transect B. All data points along Transect B passed the Dominance Test for hydrophytic vegetation and hydric soil was present at B-3 but the area was lacking hydrology. Approximately 0.34 acres of forested wetlands were delineated along Transect B.

Off-Transect Point 1 (OT-1) was established north of Transect B to determine a dry point between Wetland Areas #1 and #2. OT-1 passed the dominance test for hydrophytic vegetating but lacked hydric soils and hydrology.

## **Wetland Area #2**

Wetland Area #2 was determined to have approximately 0.34 acres of forested wetlands. The wetland area begins along a minor decrease in elevation adjacent to data pit B-1. The wetland area was delineated using observations of hydrology and changes in elevation. The wetland area extends as far south as the study property footprint boundary, near the southwestern corner, and extends east nearly to the transition from hardwood forest to the open pasture. Data point B-2 was established within Wetland Area #2, adjacent to its northern boundary.

## **Transect C**

Transect C, which is located in the southern portion of the study area, was the third and final transect within the project footprint to be evaluated for the presence of wetlands. This area of the project site consisted mainly of pastureland with some forested areas similar in composition to Transects A and B. The singular section of forested area along Transect C is located in the southeasternmost point of the project site. Two points (C-1 and C-2) were established along the C Transect and both were determined to be non-wetland points. Zero wetland areas were delineated along Transect C.

## **5.0 SOILS DESCRIPTION**

With reference to the NRCS Soils Map and the Franklin Parish Soil Survey, the subject property contains one primary soil type:

- Gigger-Gilbert complex, gently undulating

The NRCS hydric soils rating data for the property is provided in **Appendix C** of this report. Gigger-Gilbert complex, gently undulating soils are listed on the NRCS hydric soils listing for Franklin Parish, Louisiana.

According to the Franklin Parish Soil Survey, Gigger-Gilbert complex, gently undulating soils are a moderately well drained, moderately permeable soil series that was formed from loamy alluvium. Gigger-Gilbert complex, gently undulating soils are nearly level soils found near terraces with slopes ranging from 1 to 3 percent. They are not believed to be flooded by stream overflow, and ponding is infrequent. Its drainage class is moderately well drained, and their ability to transmit water is moderately low to

moderately high, so any inundation that does occur in the study area will most likely disperse quickly. This soils series is considered prime farmland throughout its range.

## 6.0 VEGETATIVE ANALYSIS

Vegetation at each of the observed data points was evaluated to determine the hydrophytic designation of the plant community in each plot. A wetland/non-wetland designation was ultimately determined for the vegetation across all strata within the plant community. Because many plants exhibit a wide hydrologic tolerance there may not be strong differences, if any, across soil series having similar characteristics. Individual plant species have been assigned a hydrologic tolerance indicator status based on the ability to exist in low soil oxygen - highly saturated soil environments. The individual plants and their indicator status present during the field study were recorded on the data sheets for each data point. To meet the hydrophytic plant criteria, the vegetation at a data point must test positive for one of three indicator tests:

- **Rapid Test:** all dominant species across all strata at a given data point are rated OBL or FACW, or a combination of the two categories, based on a visual assessment.
- **Dominance Test:** >50% of the dominant plants at a given data point must rate an indicator status of facultative (FAC), facultative wetland (FACW), or obligate wetland (OBL).
- **Prevalence Index:** data points with a value of 3.0 or less when the weighted-average of all plant species is calculated using the numeric system outlined in the ***Wetland Determination Data Form – Atlantic and Gulf Coastal Plain Region.***

A total of thirty-three species of plants listed in the USACE National Wetlands Plant List asserting 20% or greater dominance in their respective strata were recorded on the data points. Of these species, 5 were designated as FACU, 14 were designated as FAC, 9 were designated as FACW, and 5 was designated as OBL. A complete listing of the dominant and non-dominant species observed at each data point is provided in the data sheets in **Appendix B – Wetland Data Forms.**

## 7.0 HYDROLOGY

The term “wetland hydrology” encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. Such characteristics are usually present in areas that are inundated or have soils that are saturated to the surface for sufficient duration to develop hydric soils and support vegetation typically adapted for life in periodically anaerobic soil conditions (1987 Field Guide to Wetland Delineation, page 31).

At the time of the site visit, the majority of the property was noted to be relatively dry, with evidence of lingering inundation in a low area along the western property boundary, where standing water, high water table, and soil saturation were observed. Only two data points exhibited adequate characteristics of primary and/or secondary hydrologic indicators at the study site (A-2 and B-1), meaning wetland hydrology was present at those data point locations. Two of the data point locations passed the FAC neutral test (C-1 and OT-1) but did not have any other secondary hydrologic indicators, and therefore did not have wetland hydrology. Descriptions of primary and secondary hydrologic indicators can be found on the data forms in **Appendix B**.

## **8.0 CONCLUSIONS**

This approximately 24.41-acre project area located in Franklin Parish, Louisiana was examined for the occurrence of Waters of the United States that may be determined to be under USACE jurisdiction. As discussed in the text portion of this report and depicted in the attached figures and data sheets, evidence of approximately 1.74 acres of jurisdictional wetlands at the site does exist. The jurisdictional wetlands observed at the site appeared to be best classified as freshwater forested wetlands.

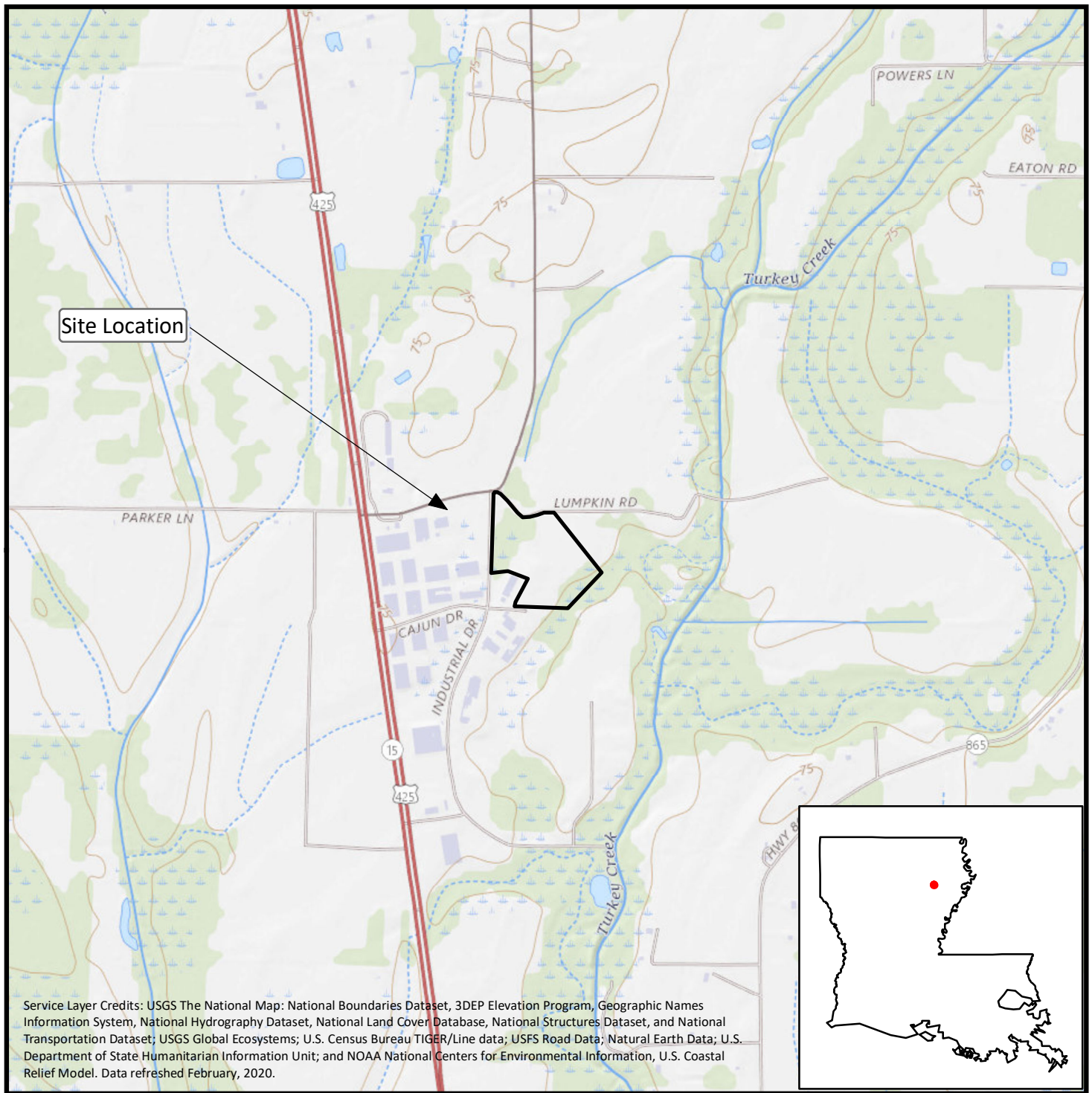
Eleven data points were analyzed for wetland indicators, and two were found to sufficiently exhibit the necessary hydrology, vegetation, and soil characteristics to be classified as a wetland area (A-2 and B-1). The locations of each of the observed data points are provided in **Figure 2 – Site Layout and Data Point Locations**.

The data point locations were mapped using a Trimble Geo7X asset surveyor and TerraSync Version 5.86 software. Landscape features are presented to be within 18 inches of their true global position (differentially corrected positions).

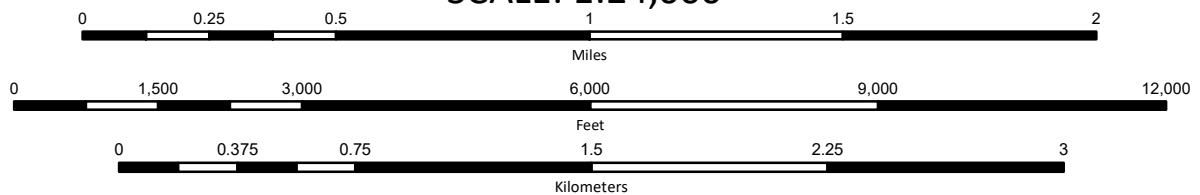
The wetland delineation and conclusions presented herein are the opinion of the investigator and should be considered as a preliminary determination. Final authority as to the presence of jurisdictional wetlands lies with the USACE.

## FIGURES





SCALE: 1:24,000



CHECK BY	MM
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DATE	09/30/21
SCALE	AS SHOWN
CAD NO.	N/A
PRJ NO.	2021.000

### Legend

Project\_Boundary

### SITE LOCATION MAP

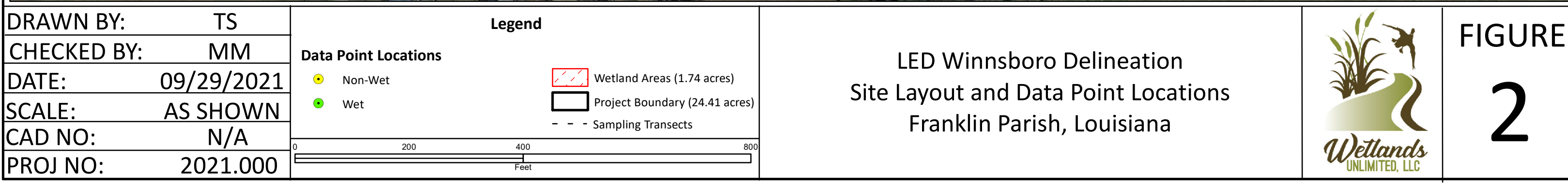
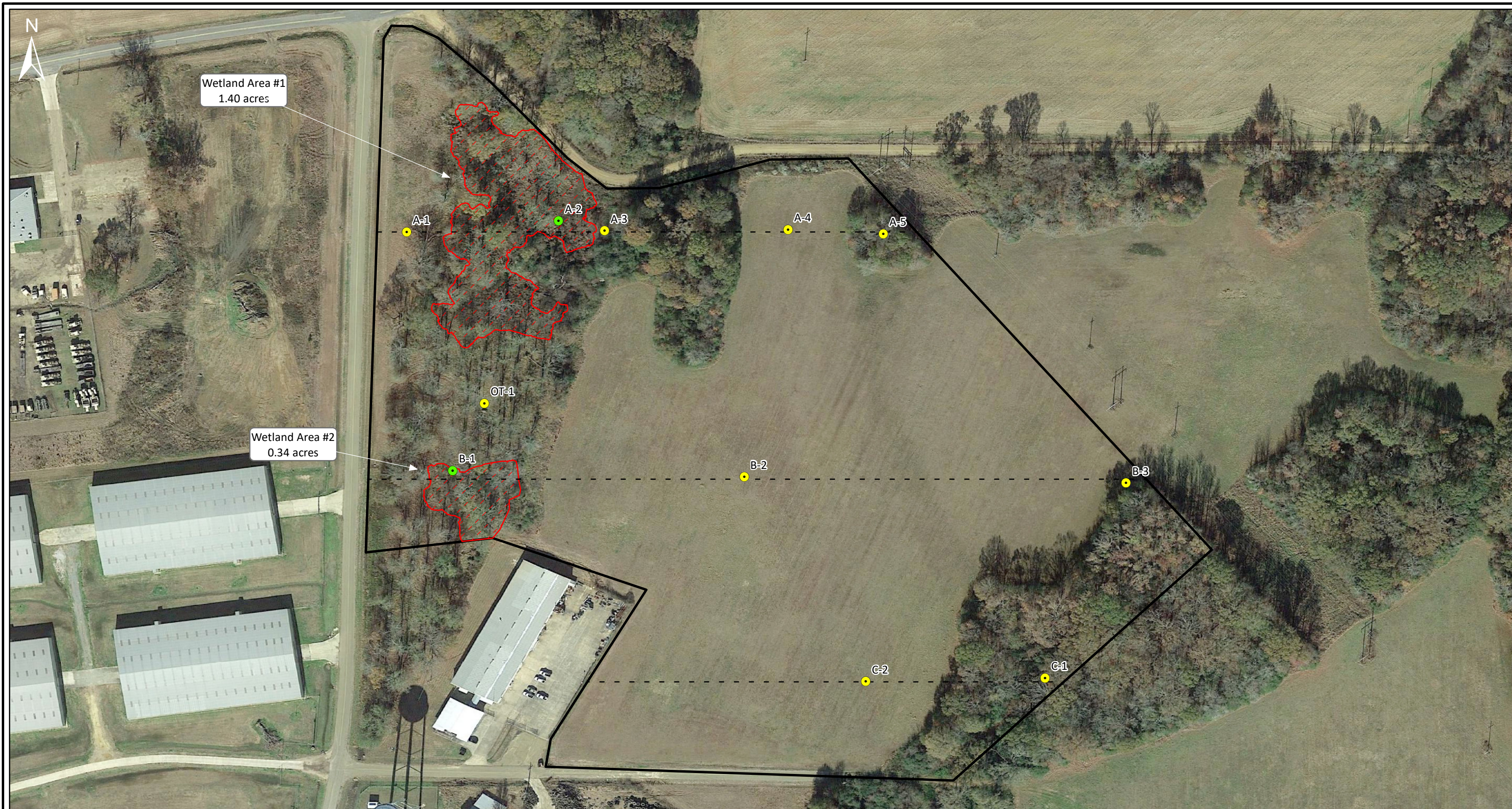
Winnsboro Park  
Wetland Delineation  
Franklin Parish, Louisiana



FIGURE

1









<b>DRAWN BY:</b>	TS	<p align="center"><b>Legend</b></p> <div style="display: flex; justify-content: space-between;"> <div> <p><b>Data Point Locations</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">●</span> Non-Wet</li> <li><span style="color: green;">●</span> Wet</li> <li><span style="border: 1px dashed red; padding: 2px;"> </span> Wetland Areas (1.74 acres)</li> <li><span style="border: 1px solid black; padding: 2px;"> </span> Project Boundary (24.41 acres)</li> </ul> </div> <div> <p><b>LiDAR</b></p> <p><b>Elevation (Feet)</b></p> <ul style="list-style-type: none"> <li><span style="background-color: #a6c9ec; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> &lt;69.50</li> <li><span style="background-color: #d9e1f2; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> 69.51 - 70.50</li> <li><span style="background-color: #f0f0f0; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> 70.51 - 71.50</li> <li><span style="background-color: #fde0dd; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> 71.51 - 72.50</li> <li><span style="background-color: #f4cccc; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> 72.51 - 73.50</li> <li><span style="background-color: #e06666; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> &gt;73.51</li> </ul> </div> </div>
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0      200      400      800

Feet



**APPENDIX A**  
**Site Photo Log**



**PHOTO NO. 1**  
**DESCRIPTION:**

Data Point A1: Center



**PHOTO NO. 2**  
**DESCRIPTION:**

Data Point A1: Soil Profile



**PHOTO NO. 3**  
**DESCRIPTION:**

Data Point A1: Facing North



**PHOTO NO. 4**  
**DESCRIPTION:**

Data Point A1: Facing East





**PHOTO NO. 5**  
**DESCRIPTION:**

Data Point A1: Facing South



**PHOTO NO. 6**  
**DESCRIPTION:**

Data Point A1: Facing West



**PHOTO NO. 7**  
**DESCRIPTION:**

Data Point A2: Center



**PHOTO NO. 8**  
**DESCRIPTION:**

Data Point A2: Soil Profile





**PHOTO NO. 9**  
**DESCRIPTION:**

Data Point A2: Facing North



**PHOTO NO. 10**  
**DESCRIPTION:**

Data Point A2: Facing East





**PHOTO NO. 11**  
**DESCRIPTION:**

Data Point A2: Facing South



**PHOTO NO. 12**  
**DESCRIPTION:**

Data Point A2: Facing West





**PHOTO NO. 13**  
**DESCRIPTION:**

Data Point A3: Center



**PHOTO NO. 14**  
**DESCRIPTION:**

Data Point A3: Soil Profile





**PHOTO NO. 15**  
**DESCRIPTION:**

Data Point A3: Facing North



**PHOTO NO. 16**  
**DESCRIPTION:**

Data Point A3: Facing East





**PHOTO NO. 17**  
**DESCRIPTION:**

Data Point A3: Facing South



**PHOTO NO. 18**  
**DESCRIPTION:**

Data Point A3: Facing West



**PHOTO NO. 19**  
**DESCRIPTION:**

Data Point A4: Center



**PHOTO NO. 20**  
**DESCRIPTION:**

Data Point A4: Soil Profile





**PHOTO NO. 21**  
**DESCRIPTION:**

Data Point A4: Facing North



**PHOTO NO. 22**  
**DESCRIPTION:**

Data Point A4: Facing East



**PHOTO NO. 23**  
**DESCRIPTION:**

Data Point A4: Facing South



**PHOTO NO. 24**  
**DESCRIPTION:**

Data Point A4: Facing West





**PHOTO NO. 25**  
**DESCRIPTION:**

Data Point A5: Center



**PHOTO NO. 26**  
**DESCRIPTION:**

Data Point A5: Soil Profile





**PHOTO NO. 27**  
**DESCRIPTION:**

Data Point A5: Facing North



**PHOTO NO. 28**  
**DESCRIPTION:**

Data Point A5: Facing East





**PHOTO NO. 29**  
**DESCRIPTION:**

Data Point A5: Facing South



**PHOTO NO. 30**  
**DESCRIPTION:**

Data Point A5: Facing West



**PHOTO NO. 31**  
**DESCRIPTION:**

Data Point B1: Center



**PHOTO NO. 32**  
**DESCRIPTION:**

Data Point B1: Soil Profile





**PHOTO NO. 33**  
**DESCRIPTION:**

Data Point B1: Facing North



**PHOTO NO. 34**  
**DESCRIPTION:**

Data Point B1: Facing East





**PHOTO NO. 35**  
**DESCRIPTION:**

Data Point B1: Facing South



**PHOTO NO. 36**  
**DESCRIPTION:**

Data Point B1: Facing West





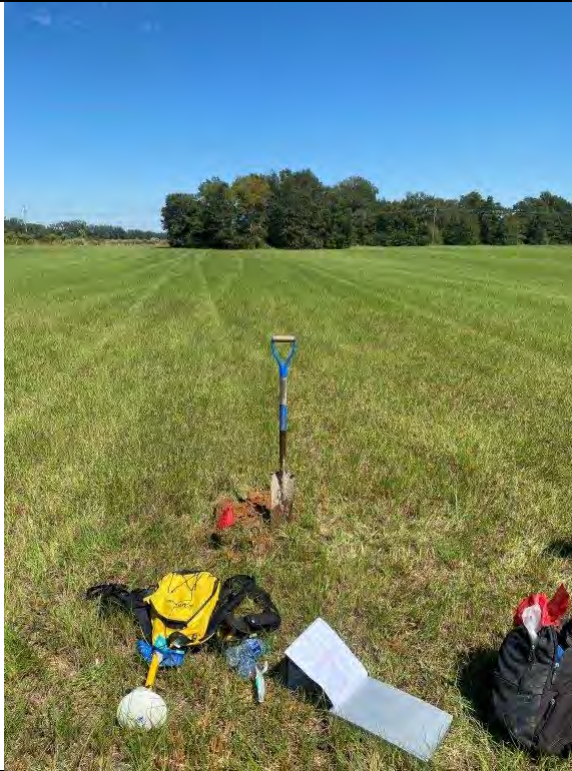
**PHOTO NO. 37**  
**DESCRIPTION:**

Data Point B2: Center



**PHOTO NO. 38**  
**DESCRIPTION:**

Data Point B2: Soil Profile



**PHOTO NO. 39**  
**DESCRIPTION:**

Data Point B2: Facing North



**PHOTO NO. 40**  
**DESCRIPTION:**

Data Point B2: Facing East





**PHOTO NO. 41**  
**DESCRIPTION:**

Data Point B2: Facing South



**PHOTO NO. 42**  
**DESCRIPTION:**

Data Point B2: Facing West



**PHOTO NO. 43**  
**DESCRIPTION:**

Data Point B3: Center



**PHOTO NO. 44**  
**DESCRIPTION:**

Data Point B3: Soil Profile





**PHOTO NO. 45**  
**DESCRIPTION:**

Data Point B3: Facing North



**PHOTO NO. 46**  
**DESCRIPTION:**

Data Point B3: Facing East



**PHOTO NO. 47**  
**DESCRIPTION:**

Data Point B3: Facing South



**PHOTO NO. 48**  
**DESCRIPTION:**

Data Point B3: Facing West





**PHOTO NO. 49**  
**DESCRIPTION:**

Data Point C1: Center



**PHOTO NO. 50**  
**DESCRIPTION:**

Data Point C1: Soil Profile





**PHOTO NO. 51**  
**DESCRIPTION:**

Data Point C1: Facing North



**PHOTO NO. 52**  
**DESCRIPTION:**

Data Point C1: Facing East





**PHOTO NO. 53**  
**DESCRIPTION:**

Data Point C1: Facing South



**PHOTO NO. 54**  
**DESCRIPTION:**

Data Point C1: Facing West





**PHOTO NO. 55**  
**DESCRIPTION:**

Data Point C2: Center



**PHOTO NO. 56**  
**DESCRIPTION:**

Data Point C2: Soil Profile





**PHOTO NO. 57**  
**DESCRIPTION:**

Data Point C2: Facing North



**PHOTO NO. 58**  
**DESCRIPTION:**

Data Point C2: Facing East



**PHOTO NO. 59**  
**DESCRIPTION:**

Data Point C2: Facing South



**PHOTO NO. 60**  
**DESCRIPTION:**

Data Point C2: Facing West





**PHOTO NO. 61**  
**DESCRIPTION:**

Data Point OT1: Center



**PHOTO NO. 62**  
**DESCRIPTION:**

Data Point OT1: Soil Profile





**PHOTO NO. 63**  
**DESCRIPTION:**

Data Point OT1: Facing North



**PHOTO NO. 64**  
**DESCRIPTION:**

Data Point OT1: Facing East





**PHOTO NO. 65**  
**DESCRIPTION:**

Data Point OT1: Facing South



**PHOTO NO. 66**  
**DESCRIPTION:**

Data Point OT1: Facing West





**APPENDIX B**  
**Wetland Data Forms**

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: A-1  
Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 0-1  
Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 15.000" N Long: 91° 43' 30.710" W Datum: NAD83  
Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: \_\_\_\_\_

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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: This area is actively mowed and maintained. Vegetation is significantly disturbed.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
<b>Field Observations:</b>			
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: A-1

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Paspalum dilatatum</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Juncus validus</u>	<u>1</u>		<u>FACW</u>	
3. <u>Solidago altissima</u>	<u>3</u>		<u>FACU</u>	
4. <u>Carex longii</u>	<u>2</u>		<u>OBL</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
		<u>106</u> = Total Cover		
50% of total cover: <u>53</u>		20% of total cover: <u>22</u>		
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**  
 Yes ☒ No ☐

**SOIL**

Sampling Point: A-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 <sup>1</sup>		
0-5	10YR 4/3	85	10YR 5/3	10	D	M	Silt Loam
			10YR 3/3	5	C	M	
5-8	10YR 4/3	65	10YR 5/2	25	D	M	Silt Loam
			10YR 3/1	10	C	M	
8-14	10YR 5/2	60	10YR 4/6	5	C	M	Silt Loam
	10YR 6/1	30	10YR 3/1	5	C	M	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: \_\_\_\_\_  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Bottom Local relief (concave, convex, none): Concave Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 15.195" N Long: 91° 43' 27.980" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>6-14</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1-14</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: A-2

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus lyrata</u>	<u>35</u>	<u>Yes</u>	<u>OBL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <u>Triadica sebifera</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>105</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
50% of total cover: <u>53</u> 20% of total cover: <u>21</u>				
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Triadica sebifera</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
<u>15</u> = Total Cover				
50% of total cover: <u>8</u> 20% of total cover: <u>3</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Cephalanthus occidentalis</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>10</u> = Total Cover				
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Persicaria hydropiperoides</u>	<u>100</u>	<u>Yes</u>	<u>OBL</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
2. <u>Typha latifolia</u>	<u>15</u>	_____	<u>OBL</u>	
3. <u>Panicum hemitomon</u>	<u>90</u>	<u>Yes</u>	<u>OBL</u>	
4. <u>Hibiscus grandiflorus</u>	<u>25</u>	_____	<u>OBL</u>	
5. <u>Rhynchospora corniculata</u>	<u>3</u>	_____	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>233</u> = Total Cover				
50% of total cover: <u>117</u> 20% of total cover: <u>47</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Brunnichia ovata</u>	<u>12</u>	<u>Yes</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>12</u> = Total Cover				
50% of total cover: <u>6</u> 20% of total cover: <u>3</u>				
Remarks: (If observed, list morphological adaptations below).				



SOIL

Sampling Point: A-2

**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 <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 6/1	100					Clay Loam	
3-5	7.5YR 5/6	80	10YR 6/1	20	D	M	Clay Loam	
5-15	10YR 6/1	95	7.5YR 5/8	5	C	PL	Clay Loam	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: A-3  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 15.019" N Long: 91° 43' 27.156" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: A-3

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Gleditsia triacanthos</u>	<u>20</u>		<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>8</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)
2. <u>Triadica sebifera</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Carya illinoensis</u>	<u>85</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>75</u> 20% of total cover: <u>30</u>				
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Ulmus americana</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>1</u> 20% of total cover: <u>1</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Ligustrum sinense</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>5</u> 20% of total cover: <u>2</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Andropogon virginicus</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
2. <u>Carex longii</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>7</u> 20% of total cover: <u>3</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Rubus trivialis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <u>Wisteria frutescens</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Smilax glauca</u>	<u>5</u>		<u>FAC</u>	
4. <u>Lonicera japonica</u>	<u>1</u>		<u>FACU</u>	
5. _____	_____	_____	_____	
_____ = Total Cover				
50% of total cover: <u>41</u> 20% of total cover: <u>17</u>				
Remarks: (If observed, list morphological adaptations below).				

## SOIL

Sampling Point: A-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 <sup>1</sup>	Loc <sup>2</sup>		
0-8	7.5YR 3/3	95	7.5YR 5/4	5	C	M	Silt Loam	
8-14	10YR 4/3	78	10YR 2/1	20	D	M	Silt Loam	
			7.5YR 5/8	2	C	M	Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5)<br><input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b><br><input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b><br><input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b><br><input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b><br><input type="checkbox"/> Sandy Gleyed Matrix (S4)<br><input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b> | <input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b><br><input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b><br><input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b><br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Marl (F10) <b>(LRR U)</b><br><input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b><br><input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b><br><input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b><br><input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b><br><input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b><br><input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b><br><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b> | <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b><br><input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b><br><input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b><br><input type="checkbox"/> Anomalous Bright Loamy Soils (F20)<br><b>(MLRA 153B)</b><br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Very Shallow Dark Surface (TF12)<br><input type="checkbox"/> Other (Explain in Remarks) |
|---|---|---|

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: A-4  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 15.041" N Long: 91° 43' 23.860" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: Non

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Located in an active hay field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: A-4

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
0 = Total Cover				
50% of total cover: 0		20% of total cover: 0		
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
0 = Total Cover				
50% of total cover: 0		20% of total cover: 0		
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
0 = Total Cover				
50% of total cover: 0		20% of total cover: 0		
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Paspalum dilatatum</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
100 = Total Cover				
50% of total cover: 50		20% of total cover: 20		
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
0 = Total Cover				
50% of total cover: 0		20% of total cover: 0		
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐



**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 <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 3/3	100					Silt Loam	
3-6	10YR 5/2	92	10YR 5/8	8	C	PL	Silt Loam	
6-14	10YR 6/1	96	10YR 5/8	4	C	PL	Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) **(LRR P, T, U)**  
☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**  
☐ Muck Presence (A8) **(LRR U)**  
☐ 1 cm Muck (A9) **(LRR P, T)**  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) **(MLRA 150A)**  
☐ Sandy Mucky Mineral (S1) **(LRR O, S)**  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**  
☐ Thin Dark Surface (S9) **(LRR S, T, U)**  
☐ Loamy Mucky Mineral (F1) **(LRR O)**  
☐ Loamy Gleyed Matrix (F2)  
☒ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) **(LRR U)**  
☐ Depleted Ochric (F11) **(MLRA 151)**  
☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**  
☐ Umbric Surface (F13) **(LRR P, T, U)**  
☐ Delta Ochric (F17) **(MLRA 151)**  
☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**  
☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**  
☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**  
☐ 2 cm Muck (A10) **(LRR S)**  
☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**  
☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: A-5  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Isolated Bottom Local relief (concave, convex, none): Cocave Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 14.968" N Long: 91° 43' 22.145" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Indicators were only found in historical ruts.		



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: A-5

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus phellos</u>	<u>35</u>	<u>Yes</u>	<u>FACW+</u>	
2. <u>Quercus nigra</u>	<u>15</u>		<u>FAC</u>	
3. <u>Ulmus alata</u>	<u>20</u>		<u>FACU</u>	
4. <u>Gleditsia triacanthos</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
5. _____				
6. _____				
<u>120</u> = Total Cover				
50% of total cover: <u>60</u> 20% of total cover: <u>24</u>				
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Ulmus alata</u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Quercus nigra</u>	<u>10</u>		<u>FAC</u>	
3. <u>Diospyros virginiana</u>	<u>1</u>		<u>FAC</u>	
4. _____				
5. _____				
6. _____				
<u>56</u> = Total Cover				
50% of total cover: <u>28</u> 20% of total cover: <u>12</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Sabal minor</u>	<u>3</u>		<u>FACW+</u>	
2. <u>Ligustrum sinense</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
<u>18</u> = Total Cover				
50% of total cover: <u>9</u> 20% of total cover: <u>4</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Carex blanda</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Solidago altissima</u>	<u>1</u>		<u>FACU</u>	
3. <u>Leersia virginica</u>	<u>5</u>	<u>Yes</u>	<u>FACW+</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>8</u> = Total Cover				
50% of total cover: <u>4</u> 20% of total cover: <u>2</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Smilax glauca</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Lonicera japonica</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
<u>45</u> = Total Cover				
50% of total cover: <u>23</u> 20% of total cover: <u>9</u>				

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)  
 Total Number of Dominant Species Across All Strata: 8 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75.00 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

 Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐

**SOIL**

Sampling Point: A-5

**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 <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/3	100					Silt Loam	
3-8	10YR 4/3	90	10YR 3/1	10	D	M	Silt Loam	
8-14	10YR 6/3	98	7.5YR 5/8	2	C	M	Silt Loam	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol (A1)                                  | <input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR S, T, U</b> )                 |
| <input type="checkbox"/> Histic Epipedon (A2)                           | <input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR S, T, U</b> )                       |
| <input type="checkbox"/> Black Histic (A3)                              | <input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR O</b> )                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                          | <input type="checkbox"/> Loamy Gleyed Matrix (F2)  |
| <input type="checkbox"/> Stratified Layers (A5)                         | <input type="checkbox"/> Depleted Matrix (F3)  |
| <input type="checkbox"/> Organic Bodies (A6) ( <b>LRR P, T, U</b> )     | <input type="checkbox"/> Redox Dark Surface (F6)   |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) ( <b>LRR P, T, U</b> ) | <input type="checkbox"/> Depleted Dark Surface (F7)  |
| <input type="checkbox"/> Muck Presence (A8) ( <b>LRR U</b> )            | <input type="checkbox"/> Redox Depressions (F8)  |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR P, T</b> )             | <input type="checkbox"/> Marl (F10) ( <b>LRR U</b> )   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)              | <input type="checkbox"/> Depleted Ochric (F11) ( <b>MLRA 151</b> )                           |
| <input type="checkbox"/> Thick Dark Surface (A12)                       | <input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR O, P, T</b> )                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) ( <b>MLRA 150A</b> ) | <input type="checkbox"/> Umbric Surface (F13) ( <b>LRR P, T, U</b> )                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) ( <b>LRR O, S</b> )   | <input type="checkbox"/> Delta Ochric (F17) ( <b>MLRA 151</b> )                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                       | <input type="checkbox"/> Reduced Vertic (F18) ( <b>MLRA 150A, 150B</b> )                     |
| <input type="checkbox"/> Sandy Redox (S5)                               | <input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 149A</b> )                |
| <input type="checkbox"/> Stripped Matrix (S6)                           | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) ( <b>MLRA 149A, 153C, 153D</b> ) |
| <input type="checkbox"/> Dark Surface (S7) ( <b>LRR P, S, T, U</b> )    |  |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (**LRR O**)
- ☐ 2 cm Muck (A10) (**LRR S**)
- ☐ Reduced Vertic (F18) (**outside MLRA 150A,B**)
- ☐ Piedmont Floodplain Soils (F19) (**LRR P, S, T**)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: B-1  
Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
Landform (hillslope, terrace, etc.): Downslope Local relief (concave, convex, none): Convex Slope (%): 0-1  
Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 10.711" N Long: 91° 43' 29.883" W Datum: NAD83  
Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: PFO1A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b>	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: B-1

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Triadica sebifera</u>	<u>95</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>95</u> = Total Cover 50% of total cover: <u>48</u> 20% of total cover: <u>19</u>				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A)      _____ (B)  Prevalence Index = B/A = _____
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Triadica sebifera</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>35</u> = Total Cover 50% of total cover: <u>18</u> 20% of total cover: <u>7</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Persicaria hydropiperoides</u>	<u>5</u>		<u>OBL</u>	
2. <u>Panicum hemitomon</u>	<u>75</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Juncus effusus</u>	<u>5</u>		<u>OBL</u>	
4. <u>Hibiscus grandiflorus</u>	<u>2</u>		<u>OBL</u>	
5. <u>Dichanthelium scabriusculum</u>	<u>1</u>		<u>OBL</u>	
6. <u>Carex amphibola</u>	<u>85</u>	<u>Yes</u>	<u>FACW</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>173</u> = Total Cover 50% of total cover: <u>87</u> 20% of total cover: <u>35</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Brunnichia ovata</u>	<u>75</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <u>Campsis radicans</u>	<u>3</u>		<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
<u>78</u> = Total Cover 50% of total cover: <u>39</u> 20% of total cover: <u>16</u>				

Remarks: (If observed, list morphological adaptations below).



SOIL

Sampling Point: B-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 <sup>1</sup>	Loc <sup>2</sup>		
0-2	7.5YR 3/3	60	7.5YR 5/2	40	D	M	Clay Loam	
6-14	7.5YR 5/1	96	7.5YR 4/6	4	C	PL	Clay Loam	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input checked="" type="checkbox"/> Redox Dark Surface (F6)                         |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: B-2  
Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 0-1  
Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 10.601" N Long: 91° 43' 24.644" W Datum: NAD83  
Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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.

<table style="width: 100%;"><tr><td style="width: 30%;">Hydrophytic Vegetation Present?</td><td style="width: 30%;">Yes <input checked="" type="checkbox"/></td><td style="width: 30%;">No <input type="checkbox"/></td></tr><tr><td>Hydric Soil Present?</td><td>Yes <input type="checkbox"/></td><td>No <input checked="" type="checkbox"/></td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes <input type="checkbox"/></td><td>No <input checked="" type="checkbox"/></td></tr></table>	Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<table style="width: 100%;"><tr><td style="width: 60%;"><b>Is the Sampled Area within a Wetland?</b></td><td style="width: 40%;">Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td></tr></table>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>										
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>										
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>										
<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>											
Remarks: <b>Located in an active hay field.</b>												

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>	
<b>Field Observations:</b>			
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: B-2

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
				<u>0</u> = Total Cover
50% of total cover: <u>0</u>				20% of total cover: <u>0</u>
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
				<u>0</u> = Total Cover
50% of total cover: <u>0</u>				20% of total cover: <u>0</u>
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
				<u>0</u> = Total Cover
50% of total cover: <u>0</u>				20% of total cover: <u>0</u>
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Paspalum dilatatum</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
				<u>100</u> = Total Cover
50% of total cover: <u>50</u>				20% of total cover: <u>20</u>
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
				<u>0</u> = Total Cover
50% of total cover: <u>0</u>				20% of total cover: <u>0</u>
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**  
 Yes ☒ No ☐

## SOIL

Sampling Point: B-2

**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 <sup>1</sup>	Loc <sup>2</sup>		
0-5	5YR 4/3	100					Silt Loam	
5-14	5YR 4/6	100					Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: B-3  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 10.486" N Long: 91° 43' 17.782" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Located on the edge of an active hay field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: B-3

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus nigra</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>35</u> = Total Cover 50% of total cover: <u>18</u> 20% of total cover: <u>7</u>				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A)      _____ (B)  Prevalence Index = B/A = _____
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Quercus nigra</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>5</u> = Total Cover 50% of total cover: <u>3</u> 20% of total cover: <u>1</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Ligustrum sinense</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>35</u> = Total Cover 50% of total cover: <u>18</u> 20% of total cover: <u>7</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
1. <u>Paspalum dilatatum</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>Vitis rotundifolia</u>	<u>7</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Lonicera japonica</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Rubus trivialis</u>	<u>1</u>		<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>11</u> = Total Cover 50% of total cover: <u>6</u> 20% of total cover: <u>3</u>				
Remarks: (If observed, list morphological adaptations below).				



## SOIL

Sampling Point: B-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 <sup>1</sup>	Loc <sup>2</sup>		
0-4	7.5YR 5/3	90	7.5YR 4/6	8	C	M	Silt Loam	
			7.5YR 2.5/1	2	C	M	Silt Loam	
4-8	7.5YR 6/2	73	7.5YR 4/4	25	C	M	Silt Loam	
			7.5YR 3/1	2	C	M	Silt Loam	
8-14	7.5YR 5/4	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) (LRR P, T, U)  
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)  
☐ Muck Presence (A8) (LRR U)  
☐ 1 cm Muck (A9) (LRR P, T)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) (MLRA 150A)  
☐ Sandy Mucky Mineral (S1) (LRR O, S)  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)  
☐ Thin Dark Surface (S9) (LRR S, T, U)  
☐ Loamy Mucky Mineral (F1) (LRR O)  
☐ Loamy Gleyed Matrix (F2)  
☒ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) (LRR U)  
☐ Depleted Ochric (F11) (MLRA 151)  
☐ Iron-Manganese Masses (F12) (LRR O, P, T)  
☐ Umbric Surface (F13) (LRR P, T, U)  
☐ Delta Ochric (F17) (MLRA 151)  
☐ Reduced Vertic (F18) (MLRA 150A, 150B)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)  
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)  
☐ 2 cm Muck (A10) (LRR S)  
☐ Reduced Vertic (F18) (outside MLRA 150A,B)  
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: C-1  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Bottom Local relief (concave, convex, none): Concave Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 6.987" N Long: 91° 43' 19.241" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: PFO1A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: C-1

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Ulmus americana</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A)  Total Number of Dominant Species Across All Strata: <u>8</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <u>Quercus lyrata</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
75 = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
50% of total cover: <u>38</u> 20% of total cover: <u>15</u>				
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Ulmus americana</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
3 = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: <u>2</u> 20% of total cover: <u>1</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Sabal minor</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
2. <u>Ligustrum sinense</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
15 = Total Cover				
50% of total cover: <u>8</u> 20% of total cover: <u>3</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Plantago major</u>	<u>3</u>	_____	<u>FAC</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <u>Carex longii</u>	<u>5</u>	_____	<u>OBL</u>	
3. <u>Juncus effusus</u>	<u>3</u>	_____	<u>OBL</u>	
4. <u>Rhynchospora corniculata</u>	<u>2</u>	_____	<u>OBL</u>	
5. <u>Commelina virginica</u>	<u>57</u>	<u>Yes</u>	<u>FACW</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
70 = Total Cover				
50% of total cover: <u>35</u> 20% of total cover: <u>14</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Vitis rotundifolia</u>	<u>12</u>	<u>Yes</u>	<u>FAC</u>	Remarks: (If observed, list morphological adaptations below).
2. <u>Smilax glauca</u>	<u>2</u>	_____	<u>FAC</u>	
3. <u>Rubus argutus</u>	<u>3</u>	_____	<u>FAC</u>	
4. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
5. <u>Campsis radicans</u>	<u>2</u>	_____	<u>FAC</u>	
34 = Total Cover				
50% of total cover: <u>17</u> 20% of total cover: <u>7</u>				



**SOIL**

Sampling Point: C-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 <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/1	99	10YR 4/6	1		M	Silt Loam	
4-14	10YR 5/2	75	10YR 2/1	23	C	M	Silt Loam	
			10YR 4/6	2	C	PL	Silt Loam	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: C-2  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Downslope Local relief (concave, convex, none): Convex Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 6.918" N Long: 91° 43' 22.461" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: None

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Located in an active hay field.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: C-2

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Paspalum dilatatum</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hydrocotyle umbellata</u>	<u>1</u>		<u>OBL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
		<u>101</u> = Total Cover		
50% of total cover: <u>51</u>		20% of total cover: <u>21</u>		
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)  
 Total Number of Dominant Species Across All Strata: 1 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**  
 Yes ☒ No ☐



**SOIL**

Sampling Point: C-2

**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 <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/4	100					Silt Loam	
4-14	10YR 4/6	100					Silt Loam	

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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 – Atlantic and Gulf Coastal Plain Region

Project/Site: Winnsboro Park Delineation City/County: Franklin Parish Sampling Date: 9-27-21  
 Applicant/Owner: Northeast Louisiana Economic Alliance State: LA Sampling Point: OT-1  
 Investigator(s): T.S., L.L. Section, Township, Range: S14 T14N R7E  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-1  
 Subregion (LRR or MLRA): MLRA 134 Lat: 32° 12' 11.923" N Long: 91° 43' 29.313" W Datum: NAD83  
 Soil Map Unit Name: Gigger-Gilbert complex, gently undulating NWI classification: PFO1A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: OT-1

Tree Stratum (Plot size: <u>30 Feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fraxinus pennsylvanica</u>	<u>100</u>	<u>Yes</u>	<u>FACW+</u>	
2. <u>Quercus lyrata</u>	<u>55</u>	<u>Yes</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>155</u> = Total Cover				
50% of total cover: <u>78</u> 20% of total cover: <u>31</u>				
<b>Sapling Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Fraxinus pennsylvanica</u>	<u>45</u>	<u>Yes</u>	<u>FACW+</u>	
2. <u>Juniperus virginiana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Triadica sebifera</u>	<u>5</u>	_____	<u>FAC</u>	
4. <u>Ulmus americana</u>	<u>3</u>	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>68</u> = Total Cover				
50% of total cover: <u>34</u> 20% of total cover: <u>14</u>				
<b>Shrub Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>None</u>	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<b>Herb Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Carex amphibola</u>	<u>95</u>	<u>Yes</u>	<u>FACW+</u>	
2. <u>Solidago altissima</u>	<u>3</u>	_____	<u>FACU</u>	
3. <u>Hibiscus grandiflorus</u>	<u>2</u>	_____	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover				
50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
<b>Woody Vine Stratum (Plot size: <u>30 Feet</u> )</b>				
1. <u>Brunnichia ovata</u>	<u>5</u>	<u>Yes</u>	<u>FACW+</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>5</u> = Total Cover				
50% of total cover: <u>3</u> 20% of total cover: <u>1</u>				

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)  
 Total Number of Dominant Species Across All Strata: 6 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33 (A/B)

**Prevalence Index worksheet:**  

Total % Cover of: _____	Multiply by: _____
OBL species _____ x 1 = _____	
FACW species _____ x 2 = _____	
FAC species _____ x 3 = _____	
FACU species _____ x 4 = _____	
UPL species _____ x 5 = _____	
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐



## SOIL

Sampling Point: OT-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 <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/3	100					Silt Loam	
6-10	10YR 3/2	55	10YR 5/3	45	C	M	Silt Loam	
10-14	10YR 5/2	99	10YR 5/8	1	C	M	Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ Organic Bodies (A6) (LRR P, T, U)  
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)  
☐ Muck Presence (A8) (LRR U)  
☐ 1 cm Muck (A9) (LRR P, T)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Coast Prairie Redox (A16) (MLRA 150A)  
☐ Sandy Mucky Mineral (S1) (LRR O, S)  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)  
☐ Thin Dark Surface (S9) (LRR S, T, U)  
☐ Loamy Mucky Mineral (F1) (LRR O)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Marl (F10) (LRR U)  
☐ Depleted Ochric (F11) (MLRA 151)  
☐ Iron-Manganese Masses (F12) (LRR O, P, T)  
☐ Umbric Surface (F13) (LRR P, T, U)  
☐ Delta Ochric (F17) (MLRA 151)  
☐ Reduced Vertic (F18) (MLRA 150A, 150B)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)  
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (LRR O)  
☐ 2 cm Muck (A10) (LRR S)  
☐ Reduced Vertic (F18) (outside MLRA 150A,B)  
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)  
☐ Anomalous Bright Loamy Soils (F20)  
**(MLRA 153B)**  
☐ Red Parent Material (TF2)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators 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:

**APPENDIX C**  
**NRCS Hydric Soils Rating Report**



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Franklin Parish, Louisiana**



February 16, 2021



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Contents

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<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Franklin Parish, Louisiana.....	13
Gh—Gigger-Gilbert complex, gently undulating.....	13
<b>Soil Information for All Uses</b> .....	15
Suitabilities and Limitations for Use.....	15
Land Classifications.....	15
Hydric Rating by Map Unit.....	15
<b>References</b> .....	20



# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.



# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



# Custom Soil Resource Report

## 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 1:24,000.

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: Franklin Parish, Louisiana  
Survey Area Data: Version 13, Jun 5, 2020

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

Date(s) aerial images were photographed: Jan 20, 2020—May 31, 2020

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
Gh	Gigger-Gilbert complex, gently undulating	25.0	100.0%
<b>Totals for Area of Interest</b>		<b>25.0</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Franklin Parish, Louisiana

### Gh—Gigger-Gilbert complex, gently undulating

#### Map Unit Setting

*National map unit symbol:* 1vfjv  
*Elevation:* 40 to 70 feet  
*Mean annual precipitation:* 47 to 65 inches  
*Mean annual air temperature:* 54 to 77 degrees F  
*Frost-free period:* 213 to 273 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Gigger and similar soils:* 51 percent  
*Gilbert and similar soils:* 35 percent  
*Minor components:* 14 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Gigger

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear

##### Typical profile

*H1 - 0 to 5 inches:* silt loam  
*H2 - 5 to 24 inches:* silt loam  
*H3 - 24 to 34 inches:* silt loam  
*H4 - 34 to 49 inches:* silt loam  
*H5 - 49 to 65 inches:* loam

##### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 12 to 30 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Low (about 5.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C/D  
*Hydric soil rating:* No

#### Description of Gilbert

##### Setting

*Landform:* Swales  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear



## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 15 inches:* silt loam  
*H2 - 15 to 38 inches:* silt loam  
*H3 - 38 to 70 inches:* silt loam

### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* About 0 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* High (about 12.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* Yes

### Minor Components

#### Minor components

*Percent of map unit:* 14 percent  
*Hydric soil rating:* No

# Soil Information for All Uses

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## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## Hydric Rating by Map Unit

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

## Custom Soil Resource Report

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

### References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

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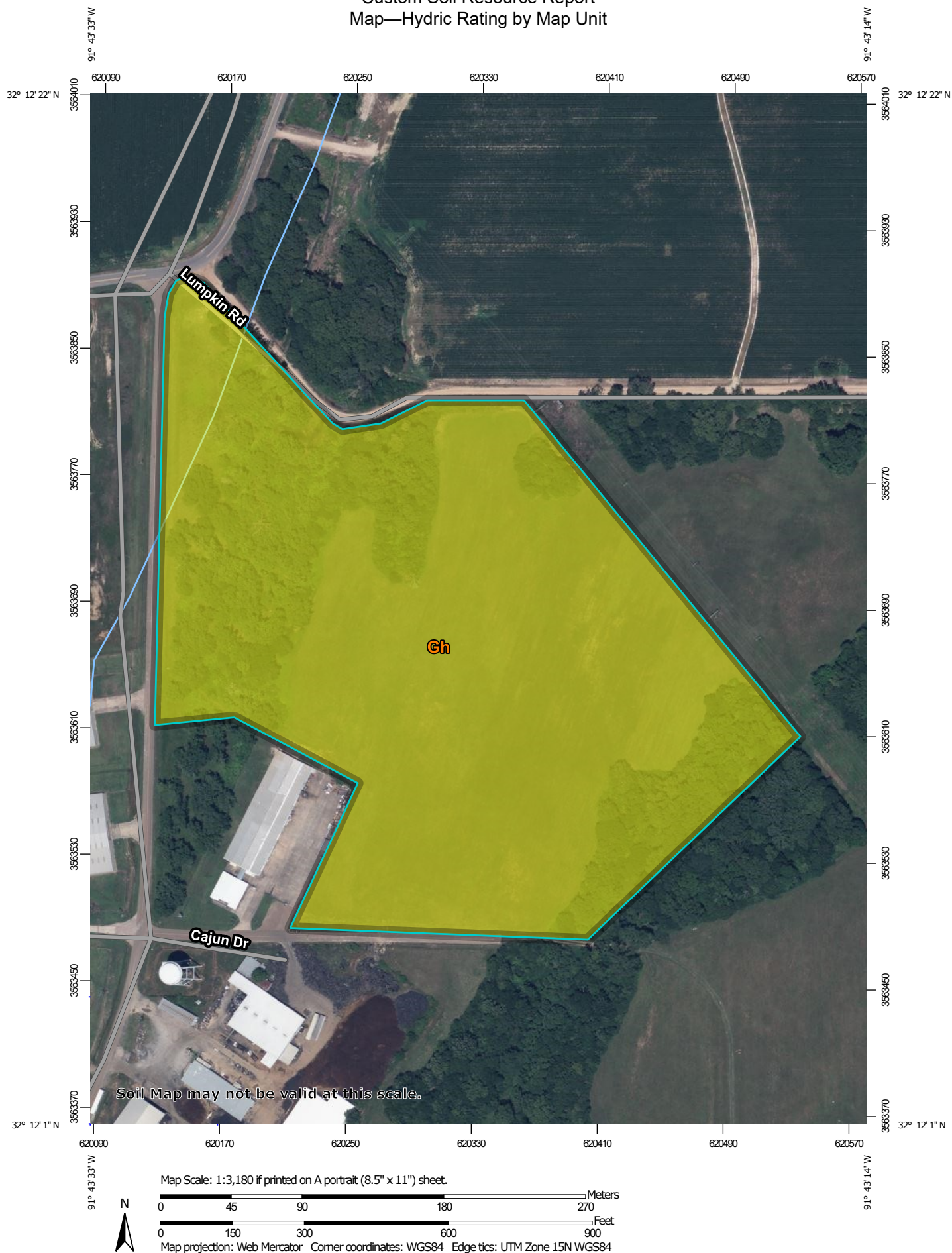
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## Custom Soil Resource Report Map—Hydric Rating by Map Unit









## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

 Hydric (100%)  
 Hydric (66 to 99%)  
 Hydric (33 to 65%)  
 Hydric (1 to 32%)  
 Not Hydric (0%)  
 Not rated or not available


#### Soil Rating Lines

 Hydric (100%)  
 Hydric (66 to 99%)  
 Hydric (33 to 65%)  
 Hydric (1 to 32%)  
 Not Hydric (0%)  
 Not rated or not available






#### Soil Rating Points

 Hydric (100%)  
 Hydric (66 to 99%)  
 Hydric (33 to 65%)  
 Hydric (1 to 32%)  
 Not Hydric (0%)  
 Not rated or not available


### 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 1:24,000.

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: Franklin Parish, Louisiana  
 Survey Area Data: Version 13, Jun 5, 2020

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

Date(s) aerial images were photographed: Jan 20, 2020—May 31, 2020

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.

**Table—Hydric Rating by Map Unit**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Gh	Gigger-Gilbert complex, gently undulating	35	25.0	100.0%
<b>Totals for Area of Interest</b>			<b>25.0</b>	<b>100.0%</b>

**Rating Options—Hydric Rating by Map Unit**

*Aggregation Method:* Percent Present

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Lower



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