



REPLY TO  
ATTENTION OF

Operations Division  
Surveillance and Enforcement Section

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

FEB 24 2016

EXHIBIT 11  
WETLANDS  
DELINEATION

Mr. Bart Pittman  
Pittman Environmental Services  
PO Box 1926  
Purvis, Mississippi 39475

Dear Mr. Pittman:

Reference is made to your request, on behalf of Pan American Engineers, for a U.S. Army Corps of Engineers' jurisdictional determination on property located in Sections 34 and 35, Township 4 North, Range 2 West, Rapides Parish, Louisiana (enclosed map). Specifically, this property is identified as a 45 acre tract on and north of the intersection of Frank Andrews Blvd and Vandenburg Drive in England Airpark.

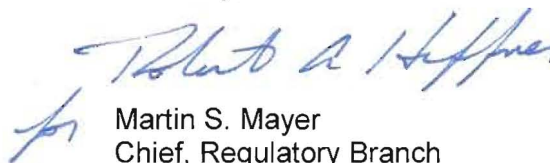
Based on review of recent maps, aerial photography, and soils data, we have determined that part of the property is wetland and may be subject to Corps' jurisdiction. The approximate limits of the wetland are designated in red on the map. A Department of the Army (DA) permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the United States. Additionally, a DA permit will be required if you propose to deposit dredged or fill material into other waters subject to Corps' jurisdiction. Other waters that may be subject to Corps' jurisdiction are indicated in blue on the map.

Additionally, federal projects are known to exist in this area that may require further engineering review prior to the initiation of any activities on this site. For more information, please contact Russel Beauvais of our Operations Division at (225) 492-2169.

You and your client are advised that this preliminary jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Should there be any questions concerning these matters, please contact Dr. Rosie Schwamenfeld at (337) 291-3045 and reference our Account No. MVN-2015-01676-SR. If you have specific questions regarding the permit process or permit applications, please contact our Western Evaluation Section at (504) 862-2261.

Sincerely,

  
Martin S. Mayer  
Chief, Regulatory Branch

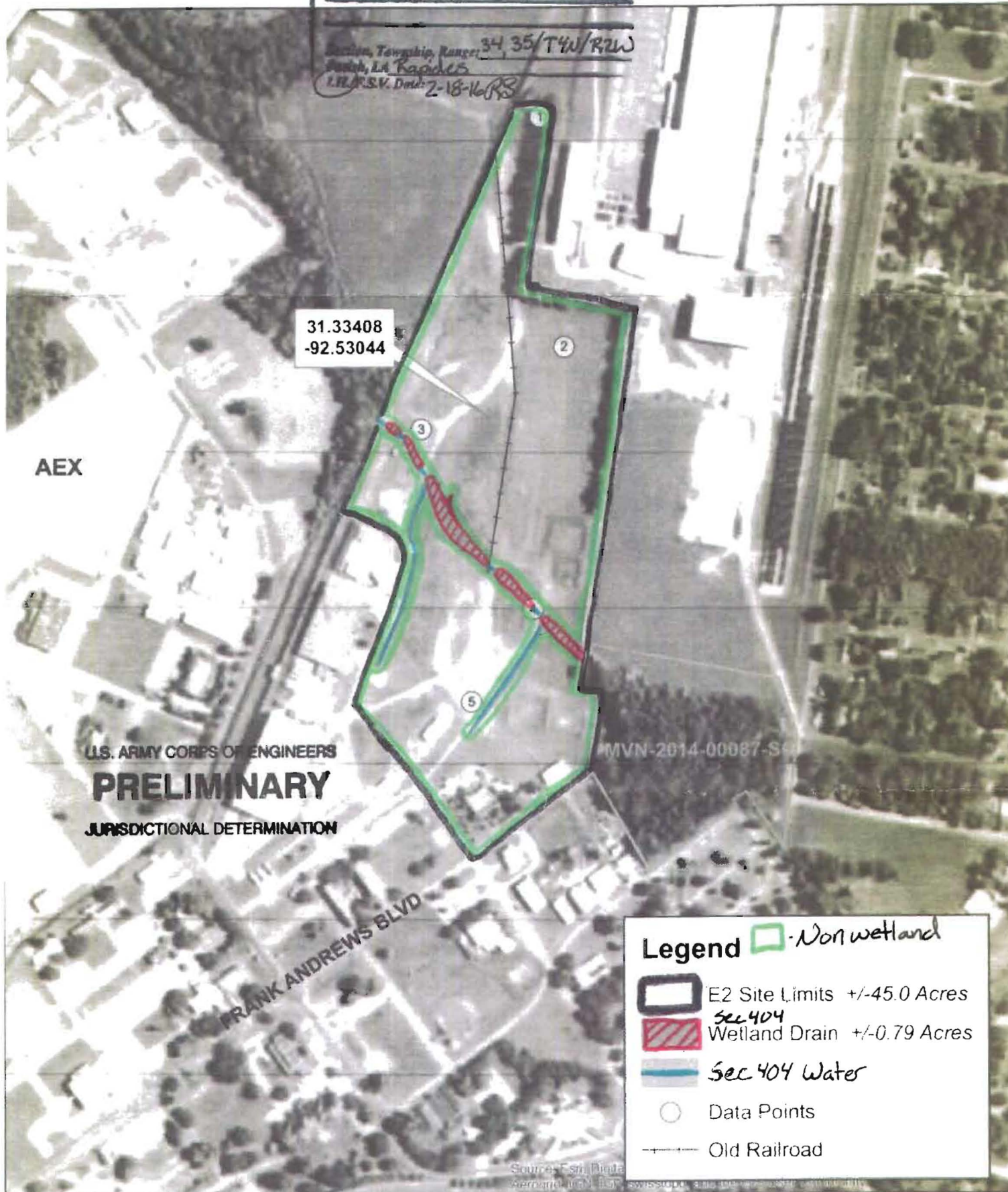
Enclosures

Wetland Delineation  
Approximately 45 Acres  
Land Airport, Site E2

FIGURE 1

USACE  
Account # MVN-2015-01676-SR  
For: Bart Pittman

Sections 34 & 35, T-4N, R-2W  
Rapides Parish, LA





# PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office New Orleans District

File/ORM # 2015-01676-SR

PJD Date: Feb 18, 2016

State LA City/County Rapides

Nearest Waterbody: unnamed tributary

Name/  
Address of  
Person  
Requesting  
PJD  
Bart Pittman  
Pittman Environmental Services  
PO Box 1926  
Purvis, MS 39475

Location: TRS, LatLong or UTM: T4N, R2W, Section 34 and 35  
Lat: 31.33408, Long: -92.53044

Identify (Estimate) Amount of Waters in the Review Area:

Non-Wetland Waters:

Stream Flow:

1350 linear ft width acres Pct. (seasonal)

Name of Any Water Bodies  
on the Site Identified as  
Section 10 Waters: Tidal:                       
Non-Tidal:                     

Wetlands: 0.70 acre(s) Cowardin  
Class: Palustrine, emergent

☒ Office (Desk) Determination  
☐ Field Determination:                     

Date of Field Trip:                     

**SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):**

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☐ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps
- ☐ Corps navigable waters' study:
- ☒ U.S. Geological Survey Hydrologic Atlas:
  - ☐ USGS NHD data.
  - ☒ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite quad name: Rapides
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS wss
- ☐ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is:
- ☒ Photographs: ☒ Aerial (Name & Date): CTR 98.04.10.13
  - ☒ Other (Name & Date): Google Earth
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

SCHWAMENFELD.ROSE.EL  
LEN PALUMBO.1388591702

Digitally signed by SCHWAMENFELD ROSE ELLEN  
PALUMBO 1388591702  
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,  
ou=SCHWAMENFELD ROSE ELLEN PALUMBO 1388591702  
Date: 2016.02.18 17:23:29 -06'00'

Signature and Date of Regulatory Project Manager  
(REQUIRED)

Bart Pittman by mail dated 8-4-15

Signature and Date of Person Requesting Preliminary JD  
(REQUIRED, unless obtaining the signature is impracticable)

## EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1 The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2 In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

# NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

**Applicant:** Pan American Engineers

**File No.:** MVN-2015-01676-SR

**Date:**

**FEB 24 2016**

Attached is:

See Section below

<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input checked="" type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Mr. Rob Heffner  
Chief, Surveillance and Enforcement Section  
U.S. Army Corps of Engineers, New Orleans District  
P.O. Box 60267  
New Orleans, LA 70160-0267  
504-862-1288

If you only have questions regarding the appeal process you may also contact the Division Engineer through:

Mr. Thomas McCabe  
Administrative Appeals Review Officer  
Mississippi Valley Division  
P.O. Box 80 (1400 Walnut Street)  
Vicksburg, MS 39181-0080  
601-634-5820 FAX: 601-634-5816

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

**Pittman Environmental Services, LLC**

P.O. Box 1926 ▪ Purvis, MS 39475 ▪ Phone: 601-297-2487

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August 3, 2015

Mr. Kyle Randall, PE  
Pan American Engineers, LLC  
1717 Jackson Street  
Alexandria, LA 71301

RE: England Airpark, Site E2  
Approximately 45 Acres  
Rapides Parish, Louisiana

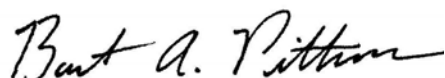
Dear Mr. Randall:

Pursuant to your request, a preliminary wetland delineation has been conducted for the above referenced site. Approximately 0.79 acres of the site was delineated as jurisdictional wetland (wetland drain). An additional 0.39 acres of vegetated ditch was delineated as potentially jurisdictional. The 0.39 acres of vegetated ditch has sufficient wetland indicators and similar features that I have delineated within other sites have been determined jurisdictional, the fact that these are man-made storm water conveyance features within non-wetlands offer a possibility that the COE might not consider them as jurisdictional. I did notice some small "borderline" areas with sedge species. These small pockets did not exhibit sufficient hydrology indicators at time of visit and were likely created by past disturbance. Although not likely, it is possible that the COE could visit the site to review my delineation and consider some of these "borderline" areas to be jurisdictional wetland.

**This delineation is preliminary; it is the responsibility of the U.S. Army Corps of Engineers to issue a jurisdictional determination. I will await your notice to proceed in sending a copy of this report to the COE for jurisdictional determination.**

If you have any questions, or need additional information please contact me at (601) 297-2487.

Sincerely,



Bart A. Pittman  
Environmental Specialist  
Pittman Environmental Services, LLC



## **Pittman Environmental Services, LLC**

P.O. Box 1926 ▪ Purvis, MS 39475 ▪ Phone: 601-297-2487

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**Preliminary Wetland Delineation  
England Site E2  
Approximately 45 Acres  
Rapides Parish, Louisiana**

**August 3, 2015**

### **INTRODUCTION**

At the request of the Pan American Engineers, a preliminary wetland delineation has been conducted for approximately 45 acres located in Sections 34 & 35, Township 4 North, Range 2 West, Rapides Parish Louisiana. The site is located within the England Airpark and was historically utilized for tank farm and rail spur. A recent Jurisdictional Determination (MVK-2014-00087-SC) was issued for property adjacent to the east. The approximate center coordinates of the site are 31.334082, -92.530449. The attached maps depict the exact location and extent of the approximately 45 acre site. This report will describe the results of a preliminary wetland delineation conducted for the said property to determine the presence and approximate extent of jurisdictional wetlands and “waters of the U.S.” as defined in Section 404 of the Clean Water Act. The onsite wetland delineation was conducted by Mr. Bart Pittman on July 29<sup>th</sup> and 30<sup>th</sup>, 2015.

### **SITE DESCRIPTION**

The ±45 acre site is located within the England Airpark and was until recently utilized for a tank farm with transecting rail spur. The tank farm and a portion of the rail spur have been removed. Industrial development surrounds the site with railroad along the western limits. With exception of tree line along the eastern and northern property limits, the entire site is comprised of herbaceous species. The site is nearly level to slightly sloping. The NRCS Web Soil Survey indicates the primary soil units within the site as Coughatta silt loam (Nd) and Coughatta silty clay loam (Nw). Pictures (**Attachment 2**) depict the current site conditions.

### **METHODOLOGY**

Methods utilized for identifying and delineating wetlands follow procedures outlined in Part IV of the “Corps of Engineers Wetlands Delineation Manual” dated January 1987 and the Atlantic/Gulf Cost Plain Regional Supplement. Wetland Delineation Data Forms (Atlantic and Gulf Cost Plain Region) were completed for each vegetative community represented within the property. These attached data forms (**Attachment 3**) provide a listing of parameters/indicators to

## **Pittman Environmental Services, LLC**

P.O. Box 1926 ▪ Purvis, MS 39475 ▪ Phone: 601-297-2487

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differentiate jurisdictional wetlands from non-wetlands. The completed forms confirm the presence or absence of the three required wetland criteria; hydrophytic vegetation, wetland hydrology, and hydric soils. The approximate location of each data point is shown on the attached preliminary wetland delineation map, (**Attachment 1**). The site was pedestrian surveyed for visual indicators of potential wetlands; soil profiles were examined in suspect areas to determine if any hydrology/hydric soil indicators were present.

### **RESULTS**

Once the presence and location of wetland was established, the boundaries were flagged. After flagging of boundaries was completed, mapping of the wetland areas was performed by use of a sub-meter GPS, (Ashtech Mobile Mapper). GPS data was overlaid with aerial imagery and the site limits in ArcMap 10.1 to provide the approximate location and extent of delineated features as depicted on the attached preliminary wetland delineation map, (**Attachment 1**).

After careful field review of the subject property and all available sources of information, approximately 0.79 acres of the site was delineated as jurisdictional wetland. An additional 0.39 acres of vegetated ditch was delineated as potentially jurisdictional. The location of delineated features and data points are shown in **Attachment 1**.

#### **Jurisdictional Wetland/Drain**

One wetland drain (approximately 0.79 acres) transects the site flowing northwest to Big Bayou. This drain is comprised of herbaceous vegetation with some pools of shallow inundation. FACW and OBL species is dominant within this drain. This drain collects storm water from smaller ditches that drain developed areas south of the site. Data point #4 was recorded within this wetland area.

#### **Potentially Jurisdictional Ditch**

Two vegetated ditches (approximately 0.39 acres combined) were delineated within the site. The two ditches drain storm water from the developed areas south of the site to the larger wetland drain. These ditches were created for storm water conveyance and are potentially jurisdictional.



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### Herbaceous Non-Wetland

The majority of the site is comprised of well drained, herbaceous non-wetland. Four non-wetland Data Points were recorded within the site. Dominant species include *Sorghum halepense*, *Ambrosia spp.*, *Setaria spp.*, *Campsis radicans*, and *Vernonia spp.* Hydrology and hydric soil indicators were absent within the delineated non-wetlands.

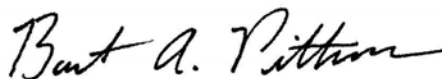
### SUMMARY

Based upon careful review of all available data and an onsite inspection, approximately 0.79 acres of the site was delineated as jurisdictional wetland. An additional 0.39 acres of vegetated ditch was delineated as potentially jurisdictional. The attached wetland delineation data forms (**Attachment 3**) confirm the conclusion of the preliminary study, indicating the presence or absence of sufficient wetland criteria at each data point. The location of delineated areas and of the data points are shown on the preliminary wetland delineation maps, **Attachment 1**.

*This wetland delineation is preliminary and should not be interpreted as a final determination. The responsibility of a final wetland determination is that of the U.S. Army Corps of Engineers, New Orleans District.*

Please call (601)-297-2487 if you have any questions or need additional information regarding this study.

Sincerely,



Bart A. Pittman  
Environmental Specialist  
Pittman Environmental Services, LLC

**Pittman Environmental Services, LLC**

P.O. Box 1926 ▪ Purvis, MS 39475 ▪ Phone: 601-297-2487

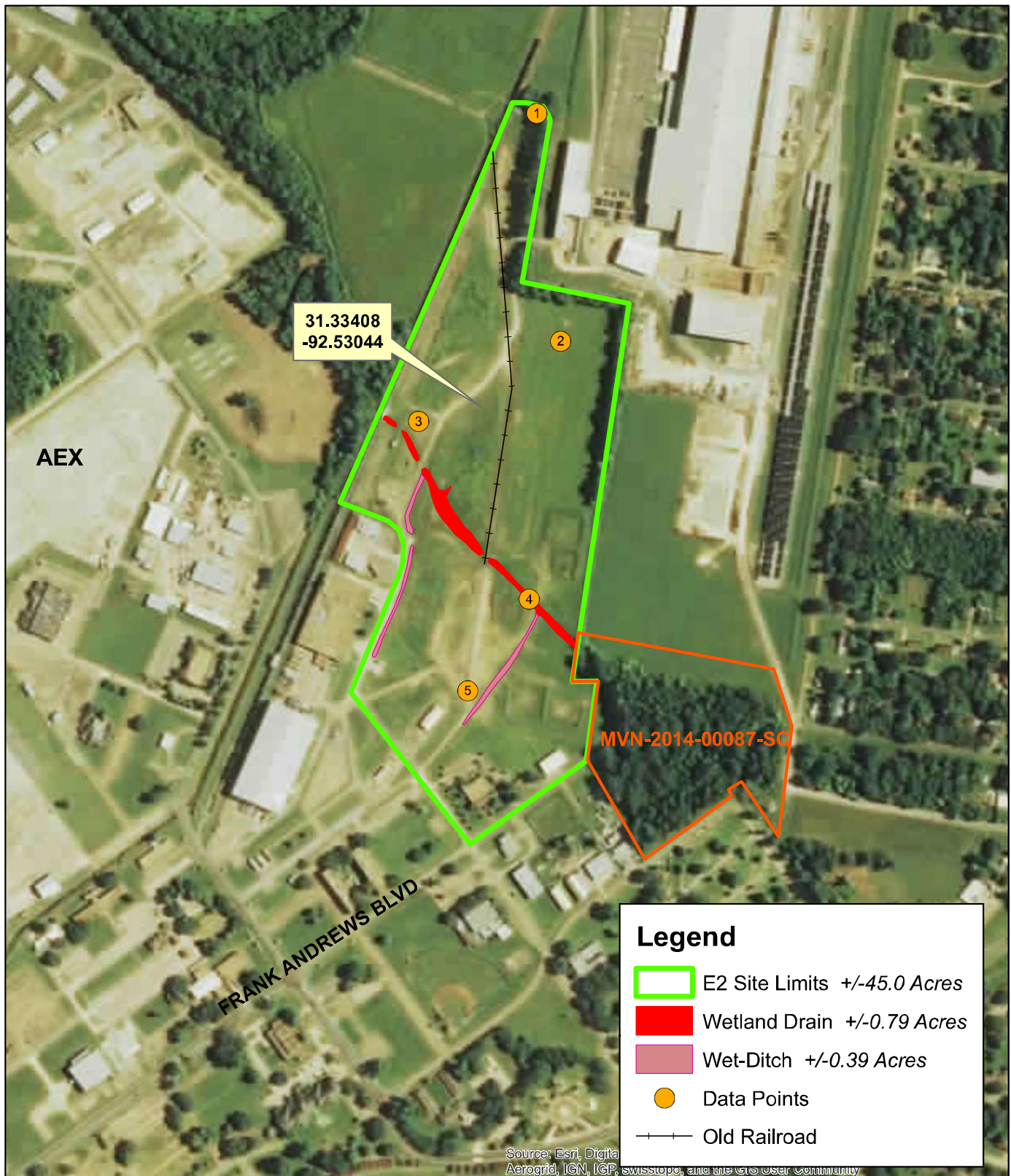
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**ATTACHMENT 1  
MAPS**

Preliminary Wetland Delineation  
Approximately 45 Acres  
England Airpark, Site E2

**FIGURE 1**

Sections 34 & 35, T-4N, R-2W  
Rapides Parish, LA

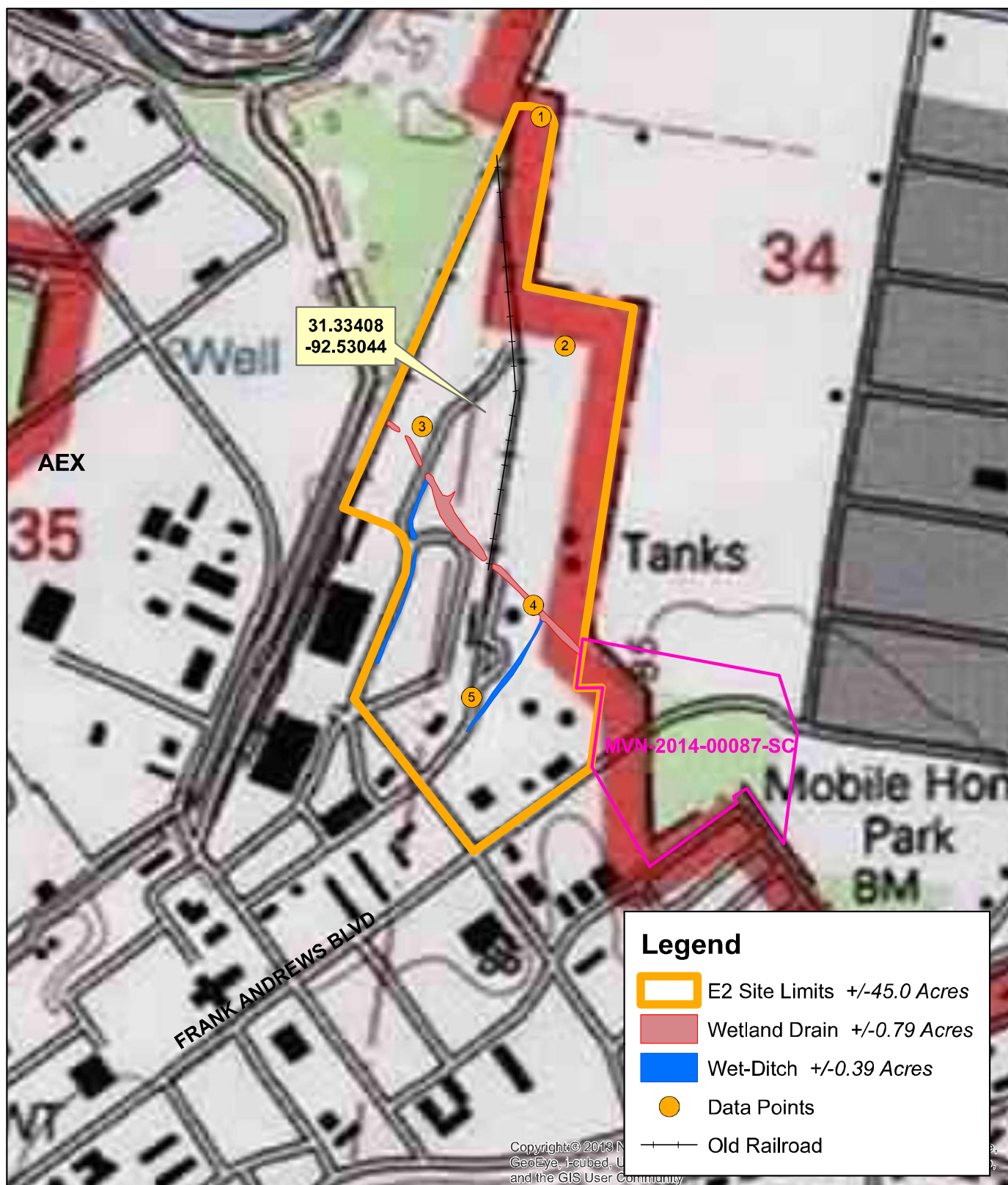




Preliminary Wetland Delineation  
Approximately 45 Acres  
England Airpark, Site E2

**FIGURE 2**

Sections 34 & 35, T-4N, R-2W  
Rapides Parish, LA





# Hydric Rating by Map Unit—Rapides Parish, Louisiana




**Natural Resources  
Conservation Service**

Web Soil Survey  
National Cooperative Soil Survey

7/29/2015  
Page 1 of 5







## 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: <http://websoilsurvey.nrcs.usda.gov>  
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: Rapides Parish, Louisiana  
Survey Area Data: Version 10, Sep 26, 2014

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

Date(s) aerial images were photographed: Feb 12, 2011—Mar 15, 2011

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.



## Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Rapides Parish, Louisiana (LA079)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MnA	Moreland clay, 0 to 1 percent slopes, rarely flooded	1	0.0	0.0%
Nd	Coushatta silt loam, 0 to 1 percent slopes	1	37.5	78.9%
Nw	Coushatta silty clay loam, 0 to 1 percent slopes	1	10.0	21.1%
Totals for Area of Interest			47.5	100.0%

**Pittman Environmental Services, LLC**

P.O. Box 1926 ▪ Purvis, MS 39475 ▪ Phone: 601-297-2487

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**ATTACHMENT 2  
SITE PHOTOGRAPHS**



Southern portion of site, facing east



Facing south from northern limits, railroad to right

Pittman Environmental  
Services, LLC

PROJECT:

E2 Site-England Airpark, Rapides Parish Louisiana

TITLE:

SITE PHOTOGRAPHS

PHOTOS

1-2





Wooded area of DP-1, northern property line



Soil matrix at DP-1

Pittman Environmental Services, LLC	PROJECT:	
	E2 Site-England Airpark, Rapides Parish Louisiana	
	TITLE:	PHOTOS
	SITE PHOTOGRAPHS	
		3-4



DP-2 facing south



Soil matrix at DP-2

Pittman Environmental Services, LLC	PROJECT:	
	E2 Site-England Airpark, Rapides Parish Louisiana	
	TITLE:	PHOTOS
	SITE PHOTOGRAPHS	
		5-6





DP-4, Wetland Drain facing NW



Soil matrix at DP-4

Pittman Environmental  
Services, LLC

PROJECT:

E2 Site-England Airpark, Rapides Parish Louisiana

TITLE:

SITE PHOTOGRAPHS

PHOTOS

7-8



Wet Ditch facing North



Facing north from DP-5

Pittman Environmental  
Services, LLC

PROJECT:

E2 Site-England Airpark, Rapides Parish Louisiana

TITLE:

SITE PHOTOGRAPHS

PHOTOS

9-10



**Pittman Environmental Services, LLC**

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**ATTACHMENT 3  
DATA FORMS**

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

Project/Site: Site E2, +/-45 Acres City/County: Alexandria/Rapides Sampling Date: 07/30/2015  
 Applicant/Owner: England Authority State: LA Sampling Point: Data Point 1  
 Investigator(s): B. Pittman Section, Township, Range: Section 34 T-4N, R-2W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): nearly level Slope (%): 1-2  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 31.337414 Long: -92.529755 Datum: NAD 83  
 Soil Map Unit Name: Coushatla silty clay loam (Nw) NWI classification: NA

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

## HYDROLOGY

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

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

Sampling Point: **DP-1**

<p><u><b>Tree Stratum</b></u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: center;">Absolute % Cover</th> <th style="width: 15%; text-align: center;">Dominant Species?</th> <th style="width: 30%; text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. Liquidambar styraciflua</td><td style="text-align: center;">30</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. Celtis laevigata</td><td style="text-align: center;">25</td><td style="text-align: center;">yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">55 = Total Cover</td><td colspan="2"></td></tr> <tr><td colspan="4" style="text-align: center;">50% of total cover: _____ 20% of total cover: _____</td></tr> </tbody> </table> <p><u><b>Sapling/Shrub Stratum</b></u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. Diospyros virginiana</td><td style="text-align: center;">10</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. Celtis laevigata</td><td style="text-align: center;">5</td><td style="text-align: center;">yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. Cornus drummondii</td><td style="text-align: center;">10</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">25 = Total Cover</td><td colspan="2"></td></tr> <tr><td colspan="4" style="text-align: center;">50% of total cover: _____ 20% of total cover: _____</td></tr> </tbody> </table> <p><u><b>Herb Stratum</b></u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. Toxicodendron radicans</td><td style="text-align: center;">4</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. Campsis radicans</td><td style="text-align: center;">4</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3. Carex spp.</td><td style="text-align: center;">3</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>4. Ambrosia trifida</td><td style="text-align: center;">8</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td></tr> <tr><td>11. _____</td><td></td><td></td><td></td></tr> <tr><td>12. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">19 = Total Cover</td><td colspan="2"></td></tr> <tr><td colspan="4" style="text-align: center;">50% of total cover: _____ 20% of total cover: _____</td></tr> </tbody> </table> <p><u><b>Woody Vine Stratum</b></u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">0 = Total Cover</td><td colspan="2"></td></tr> <tr><td colspan="4" style="text-align: center;">50% of total cover: _____ 20% of total cover: _____</td></tr> </tbody> </table>		Absolute % Cover	Dominant Species?	Indicator Status	1. Liquidambar styraciflua	30	yes	FAC	2. Celtis laevigata	25	yes	FACW	3. _____				4. _____				5. _____				6. _____				7. _____				8. _____				55 = Total Cover				50% of total cover: _____ 20% of total cover: _____				1. Diospyros virginiana	10	yes	FAC	2. Celtis laevigata	5	yes	FACW	3. Cornus drummondii	10	yes	FAC	4. _____				5. _____				6. _____				7. _____				8. _____				25 = Total Cover				50% of total cover: _____ 20% of total cover: _____				1. Toxicodendron radicans	4	yes	FAC	2. Campsis radicans	4	yes	FAC	3. Carex spp.	3	yes	FAC	4. Ambrosia trifida	8	yes	FAC	5. _____				6. _____				7. _____				8. _____				9. _____				10. _____				11. _____				12. _____				19 = Total Cover				50% of total cover: _____ 20% of total cover: _____				1. _____				2. _____				3. _____				4. _____				5. _____				0 = Total Cover				50% of total cover: _____ 20% of total cover: _____				<p><b>Dominance Test worksheet:</b></p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>8</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)</p> <p><b>Prevalence Index worksheet:</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>0</u> (A)</td> <td><u>0</u> (B)</td> </tr> </table> <p style="text-align: center;">Prevalence Index = B/A = _____</p> <p><b>Hydrophytic Vegetation Indicators:</b></p> <p><input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is &gt;50%</p> <p><input type="checkbox"/> 3 - Prevalence Index is ≤3.0<sup>1</sup></p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</p> <p><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p><b>Definitions of Four Vegetation Strata:</b></p> <p><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p><b>Woody vine</b> – All woody vines greater than 3.28 ft in height.</p> <p><b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	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: <u>0</u> (A)	<u>0</u> (B)
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## SOIL

Sampling Point: **DP-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>		
0-5	5 YR 4/3	97%				<b>VI</b>	clay loam	
5-19	5YR 4/4	97%					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.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR O</b> )
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR S</b> )
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR O</b> )	<input type="checkbox"/> Reduced Vertic (F18) ( <b>outside MLRA 150A,B</b> )
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>LRR P, S, T</b> )
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> ( <b>MLRA 153B</b> )
<input type="checkbox"/> 5 cm Mucky Mineral (A7) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) ( <b>LRR U</b> )	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR P, T</b> )	<input type="checkbox"/> Marl (F10) ( <b>LRR U</b> )	<input type="checkbox"/> Other (Explain in Remarks)
<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> )		

<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: Site E2, +/-45 Acres City/County: Alexandria/Rapides Sampling Date: 07/30/2015  
 Applicant/Owner: England Authority State: LA Sampling Point: Data Point 2  
 Investigator(s): B. Pittman Section, Township, Range: Section 34 T-4N, R-2W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): nearly level Slope (%): 1-2  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 31.334886 Long: -92.529454 Datum: NAD 83  
 Soil Map Unit Name: Coushatta silt loam (Nd) NWI classification: NA

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

## HYDROLOGY

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

No saturation, well drained.

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

 DP-2  
 Sampling Point: \_\_\_\_\_

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Herb Stratum</b> (Plot size: _____)				
1. <i>Setaria</i> spp.	30	yes	FAC	
2. <i>Campsis radicans</i>	15	yes	FAC	
3. <i>Sorghum halepense</i>	20	yes	FAC	
4. <i>Vernonia altissima</i>	10	yes	FAC	
5. UK grass	20	yes	FAC	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
95 _____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
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: 5 \_\_\_\_\_ (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: 0 _____ (A)	0 _____ (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 Four Vegetation Strata:**  
  
**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vine** – All woody vines greater than 3.28 ft in height.

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

## SOIL

Sampling Point: **DP-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>		
0-18	5 YR 5/6	80%					sandy loam	
	5YR 5/4	20%						

<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)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<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)		

<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: Site E2, +/-45 Acres City/County: Alexandria/Rapides Sampling Date: 07/30/2015  
 Applicant/Owner: England Authority State: LA Sampling Point: Data Point 3  
 Investigator(s): B. Pittman Section, Township, Range: Section 35 T-4N, R-2W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): nearly level Slope (%): 1-2  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 31.334017 Long: -92.531292 Datum: NAD 83  
 Soil Map Unit Name: Coushatta silt loam (Nd) NWI classification: NA

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 _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks:	

## HYDROLOGY

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

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

 DP-3  
 Sampling Point: \_\_\_\_\_

<p><b>Tree Stratum</b> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: center;">Absolute % Cover</th> <th style="width: 15%; text-align: center;">Dominant Species?</th> <th style="width: 30%; text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right; margin-right: 50px;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><b>Sapling/Shrub Stratum</b> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right; margin-right: 50px;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><b>Herb Stratum</b> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. Sorghum halepense</td><td style="text-align: center;">50</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. Campsis radicans</td><td style="text-align: center;">25</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3. Ambrosia trifida</td><td style="text-align: center;">7</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>4. Vitis spp.</td><td style="text-align: center;">10</td><td style="text-align: center;">yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>11. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>12. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right; margin-right: 50px;">92 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><b>Woody Vine Stratum</b> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right; margin-right: 50px;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p>		Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. Sorghum halepense	50	yes	FAC	2. Campsis radicans	25	yes	FAC	3. Ambrosia trifida	7	yes	FAC	4. Vitis spp.	10	yes	FAC	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____	12. _____	_____	_____	_____	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	<p><b>Dominance Test worksheet:</b></p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: 4 _____ (A)</p> <p>Total Number of Dominant Species Across All Strata: 4 _____ (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: 100 _____ (A/B)</p> <p><b>Prevalence Index worksheet:</b></p> <table style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species _____</td><td>x 1 = _____</td></tr> <tr><td>FACW species _____</td><td>x 2 = _____</td></tr> <tr><td>FAC species _____</td><td>x 3 = _____</td></tr> <tr><td>FACU species _____</td><td>x 4 = _____</td></tr> <tr><td>UPL species _____</td><td>x 5 = _____</td></tr> <tr> <td>Column Totals: 0 _____ (A)</td> <td>0 _____ (B)</td> </tr> </tbody> </table> <p style="text-align: center;">Prevalence Index = B/A = _____</p> <p><b>Hydrophytic Vegetation Indicators:</b></p> <p><input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is &gt;50%</p> <p><input type="checkbox"/> 3 - Prevalence Index is ≤3.0<sup>1</sup></p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</p> <p><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p><b>Definitions of Four Vegetation Strata:</b></p> <p><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p><b>Woody vine</b> – All woody vines greater than 3.28 ft in height.</p> <p><b>Hydrophytic Vegetation Present?</b></p> <p style="text-align: center;">Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	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: 0 _____ (A)	0 _____ (B)
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**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>		
0-18	5 YR 4/3	85%	5 YR 4/2	15%	R/M	M	sandy loam	some gravel

<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)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
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<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)		

<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:

area historically disturbed

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

Project/Site: Site E2, +/-45 Acres City/County: Alexandria/Rapides Sampling Date: 07/30/2015  
 Applicant/Owner: England Authority State: LA Sampling Point: Data Point 4  
 Investigator(s): B. Pittman Section, Township, Range: Section 34 T-4N, R-2W  
 Landform (hillslope, terrace, etc.): wetland drain Local relief (concave, convex, none): nearly level Slope (%): 1-2  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 31.332021 Long: -92.529830 Datum: NAD 83  
 Soil Map Unit Name: Coushatta silt loam (Nd) NWI classification: NA

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

Some pools of inundation within drain.



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

DP-4  
Sampling Point: \_\_\_\_\_

<p><u>Tree Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: center;">Absolute % Cover</th> <th style="width: 15%; text-align: center;">Dominant Species?</th> <th style="width: 30%; text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><u>Sapling/Shrub Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><u>Herb Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. <u>Juncus effusus</u></td><td style="text-align: center;">50</td><td style="text-align: center;">yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Typha latifolia</u></td><td style="text-align: center;">10</td><td style="text-align: center;">yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>3. <u>Cyperus spp.</u></td><td style="text-align: center;">20</td><td style="text-align: center;">yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4. <u>Juncus spp.</u></td><td style="text-align: center;">10</td><td style="text-align: center;">yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>11. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>12. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">90 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><u>Woody Vine Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p>		Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. <u>Juncus effusus</u>	50	yes	FACW	2. <u>Typha latifolia</u>	10	yes	OBL	3. <u>Cyperus spp.</u>	20	yes	FACW	4. <u>Juncus spp.</u>	10	yes	FACW	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____	12. _____	_____	_____	_____	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	<p><b>Dominance Test worksheet:</b></p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: 4 _____ (A)</p> <p>Total Number of Dominant Species Across All Strata: 4 _____ (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: 100 _____ (A/B)</p> <p><b>Prevalence Index worksheet:</b></p> <table style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> </thead> <tbody> <tr><td>OBL species _____</td><td>x 1 = _____</td></tr> <tr><td>FACW species _____</td><td>x 2 = _____</td></tr> <tr><td>FAC species _____</td><td>x 3 = _____</td></tr> <tr><td>FACU species _____</td><td>x 4 = _____</td></tr> <tr><td>UPL species _____</td><td>x 5 = _____</td></tr> <tr> <td>Column Totals: 0 _____ (A)</td> <td>0 _____ (B)</td> </tr> </tbody> </table> <p style="text-align: center;">Prevalence Index = B/A = _____</p> <p><b>Hydrophytic Vegetation Indicators:</b></p> <p><input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is &gt;50%</p> <p><input type="checkbox"/> 3 - Prevalence Index is ≤3.0<sup>1</sup></p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</p> <p><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p><b>Definitions of Four Vegetation Strata:</b></p> <p><b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p><b>Woody vine</b> – All woody vines greater than 3.28 ft in height.</p> <p><b>Hydrophytic Vegetation Present?</b></p> <p style="text-align: center;">Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	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: 0 _____ (A)	0 _____ (B)
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<p>Remarks: (If observed, list morphological adaptations below).</p>																																																																																																																																																							

## SOIL

Sampling Point: **DP-4****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>		
0-18	5 YR 4/3	50%	5 YR 4/2	40%	<del>R</del> MI	MI	sandy loam	some gravel
			5 YR 4/1	10%	<del>R</del> MI	MI		

<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)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input checked="" type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<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)		

<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: Site E2, +/-45 Acres City/County: Alexandria/Rapides Sampling Date: 07/30/2015  
 Applicant/Owner: England Authority State: LA Sampling Point: Data Point 5  
 Investigator(s): B. Pittman Section, Township, Range: Section 34 T-4N, R-2W  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): nearly level Slope (%): 1-2  
 Subregion (LRR or MLRA): \_\_\_\_\_ Lat: 31.331008 Long: -92.530648 Datum: NAD 83  
 Soil Map Unit Name: Coushatta silt loam (Nd) NWI classification: NA

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 _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks:	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
<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:			
No saturation, well drained.			

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

DP-5  
Sampling Point: \_\_\_\_\_

<p><u>Tree Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Absolute % Cover</th> <th style="width: 10%; text-align: center;">Dominant Species?</th> <th style="width: 20%; text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><u>Sapling/Shrub Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <p style="text-align: right;">0 _____ = Total Cover</p> <p style="text-align: right;">50% of total cover: _____ 20% of total cover: _____</p> <p><u>Herb Stratum</u> (Plot size: _____ )</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. 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Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	1. Sorghum halepense	35	yes	FAC	2. Setaria spp.	20	yes	FAC	3. Ambrosia trifida	20	yes	FAC	4. 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(7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p><b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p><b>Woody vine</b> – All woody vines greater than 3.28 ft in height.</p> <p><b>Hydrophytic Vegetation Present?</b></p> <p style="text-align: center;">Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	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: 0 _____ (A)	0 _____ (B)
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<p>Remarks: (If observed, list morphological adaptations below).</p>																																																																																																																																																							



## SOIL

Sampling Point: **DP-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>		
0-18	5 YR 5/8	85%	5 YR 4/2	15%	R/M	M	sandy loam	some gravel

<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)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<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)		

<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:

area historically disturbed, old tank farm location