ARABIE
ENVIRONMENTAL
SOLUTIONS

510 Clarence Street • Lake Charles, LA 70601
337 436-3248 • 800 259-3248 • fax: 337 436-3641

SENT VIA EMAIL

May 15, 2018

Mr. Taylor Gravois
CSRS, Inc.
6767 Perkins Road, Suite 200
Baton Rouge, Louisiana 70808

RE: Wetland Delineation Report
Beauregard Regional Airport Site
Beauregard Parish, Louisiana

Dear Mr. Gravois:

Arabie Environmental Solutions, LLC is pleased to provide this electronic copy of the Wetland Delineation Report for the referenced property. A copy of this Delineation report can be submitted to the Corps of Engineers with a request for a preliminary wetland determination upon your review and approval.

If you have any questions or need a bound copy of the report, please do not hesitate to contact us. We appreciate the opportunity to provide this service for you.

Sincerely,

C. Blaine Johnson, P.E.
Senior Engineer

Attachment

cc: Elliott Boudreaux, CSRS, Inc.

WETLAND DELINEATION
BEAUREGARD REGIONAL AIRPORT SITE
BEAUREGARD PARISH, LOUISIANA

Prepared for:

CSRS, Inc.
6767 Perkins Road, Suite 200
Baton Rouge, Louisiana 70808

May 15, 2018

C. Blaine Johnson P.E.
Senior Engineer

Cleveland R. Hoffpauir
Environmental Scientist

Prepared by:

Arabie Environmental Solutions, LLC
P.O. Box 928
Lake Charles, Louisiana 70602
(337) 436-3248

TABLE OF CONTENTS

FIGURES

ATTACHMENTS

SUMMARY

A tract of land totaling approximately 521 acres located south of Highway 190, north of Graybow Road, and west of Old Airport Road in DeRidder, Beauregard Parish, Louisiana was evaluated for the presence of jurisdictional wetlands. The wetland delineation was performed in accordance with the procedures and methods as described in the U.S. Department of the Army Corps of Engineers (COE) 1987 Manual for Wetland Delineations and the Atlantic and Gulf Coastal Plain Regional Supplement 2010. Based on the Soil Survey of Beauregard Parish, soils present on the property consists of Beauregard silt loam, 1 to 3 percent slopes, Beauregard silt loam, 3 to 5 percent slopes, Blevins very fine sandy loam, 1 to 3 percent slopes, Caddo-Messer complex, 0 to 1 percent slopes, Guyton-Ouachita silt loams, frequently flooded, Malbis fine sandy loam, 1 to 3 percent slopes, and Malbis fine sandy loam, 3 to 5 percent slopes. The vast majority of the property consists of pine plantation in various stages of maturity. Brushy Branch is located near the western boundary of the property and a pond is located in the southwestern corner of the tract.

Based on the results of this delineation approximately 441.5 acres of non-wetlands and 79.5 acres of forested wetlands were identified on the tract. 71.9 acres of these wetlands consists of pine plantation, and 7.6 acres are bottomland hardwood forest. It should be noted that the mixed wetland/non-wetland areas encompass approximately 175 acres. Of these 175 acres, 68 acres are wetlands and 107 acres are non-wetland. Eight small 100% wetland areas were identified and total 11.5 acres. In addition to wetlands, portions of Brushy Branch and a 0.4-acre pond are located within the property boundaries. The pond and creek will likely be considered Section 404 non-wetland waters by the Corps of Engineers.

1.0 INTRODUCTION

Arabie Environmental Solutions, LLC. (Arabie Environmental) was retained by CSRS, Inc. to conduct a wetland delineation of property located west of the Beauregard Regional Airport in DeRidder, Beauregard Parish, Louisiana. The tract is located in Sections 1, 2, 11, 12, and 14; Township 03 South, Range 10 West. The center of the property is located at Latitude 30º 49’ 5.30” Longitude 93º 21’ 19.68”. The purpose of the delineation was to evaluate the tract for the potential presence of wetlands. A site location map is included as **Figure 1** and a site diagram is included as **Figure 2**. LIDAR imagery was also reviewed and is included as **Figure 3**. LIDAR is a remote sensing method that uses a near-infrared laser to map changes in elevation of the surface of the Earth.

Cleve Hoffpauir of Arabie Environmental performed the field evaluations. Mr. Hoffpauir has a Bachelors of Science Degree in Environmental Science and has experience in wetland ecosystem evaluation and wetland vegetation identification, in addition to specialized training in performing wetland delineations. Mr Hoffpauir has been performing wetland delineations for approximately ten years. Blaine Johnson managed the project. Mr. Johnson has over twenty-five years experience in environmental

investigation and permitting, with over fifteen years experience in wetland permitting. Copies of the applicable Certificates of Training are included as **Attachment A**.

2.0 METHODOLOGY

The wetland delineation performed by Arabie Environmental was conducted in accordance with technical guidelines and methods for wetland delineations set forth by the U.S. Department of the Army Corps of Engineers (COE) in the 1987 Manual for Wetland Delineations and the Atlantic and Gulf Coastal Plains Regional Supplement 2010. These technical guidelines and methods utilize a multi-parameter approach to identify and delineate wetlands for the purposes of Section 404 of the Clean Water Act.

According to the COE 1987 Manual for Wetland Delineations, a site must have hydrophytic vegetation, hydric soils, and wetland hydrology in order for it to be classified as a wetland.

The following definitions are from the COE 1987 Manual for Wetland Determinations:

Hydrophytic vegetation – the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. When hyrophytic vegetation comprises a community where indicators of hydric soils and wetland hydrology also occur, the area has wetland vegetation.

Wetland soils – a soil that is saturated, flooded, ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (US Department of Agriculture – Soil Conservation Service 1985). Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils.

Wetland hydrology – the sum total of wetness characteristics in areas that are inundated or have saturated soils for sufficient duration to support hydrophytic vegetation.

Prior to the site visit, the Web Soil Survey prepared by the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) was reviewed. The purpose of that review was to determine the soil types as mapped by USDA. As indicated by the Web Soil Survey, soils on the delineated site include seven soil types: Beauregard silt loam, 1 to 3 percent slopes (BdB), Beauregard silt loam, 3 to 5 percent slopes (BdC), Blevins very fine sandy loam, 1 to 3 percent slopes (BpB), Caddo-Messer complex, 0 to 1 percent slopes (CdA), Guyton-Ouachita silt loams, frequently flooded (GYA), Malbis fine sandy loam, 1 to 3 percent slopes (MbB), and Malbis fine sandy loam, 3 to 5 percent slopes (MbC). CdA and GYA soil types are listed as hydric Beauregard Parish. In addition to the soils map, an infrared aerial photograph from 2004 was also reviewed. The soils map and infrared photograph reviewed is included as **Attachment B**.

The delineation was begun by traversing the site and making a general evaluation of the topography and drainage features. After a general evaluation of the tract, four transects were traversed in the areas mapped CdA to determine the percentage of wetlands in these areas. These soils exhibited a "pimple mounded" topography with wetlands and non-wetlands so intermingled that they could not be mapped separately.

Transects 1, 2 and 3 were traversed in the central and southern portions of the property. This area exhibited a "pimple mounded" topography which is typical of this soil type. This area was determined to be 38% wetlands based on the results of these transects.

Transect 4 was traversed in the northern portion of the property. This area also exhibited a "pimple mounded" topography which is typical of this soil type. This area was determined to be 52% wetlands based on the results of this transect.

Along each transect, wetlands and non-wetlands were measured. The percentage of wetlands found within these "pimple mounded" areas was determined from the results. The Transect Data Form is included as **Attachment C**.

The remainder of the wetlands on the site are associated with creeks and drainage features. The majority of the northwestern portion of the property, adjacent to Brushy Branch consisted of high banks that are well drained. The southern area adjacent to Brushy Branch consist of floodplains and were determined to be wetlands. Several drainage swales are present on the tract. These drainage swales were determined to be 100% wetlands.

Sample points were selected at appropriate locations to properly characterize the soil, vegetation, and hydrology. Sixteen representative sample points were selected and detailed evaluations were conducted at these locations. The data collected at these sample points were recorded on Wetland Data Forms. The Wetland Data Forms are included as **Attachment D**.

3.0 SITE DESCRIPTION

The delineated tract is irregular in shape and encompasses approximately 521 acres. The property is located approximately 4 miles west of DeRidder, along and west of Old Airport Road. The vast majority of the tract consists of pine plantation in various stages of maturity with some areas recently clear cut. Brushy Branch is located near the western property boundary. Drainage swales associated with the nearby creeks are scattered throughout the property. The majority of the portions of the property mapped BdB, BdC, BpB, BpC, MbB, and MbC are moderately well drained, to well drained and did not demonstrate wetland characteristics. These areas generally sloped towards the creeks and/or drainage swales. The majority of the CdA soils on the site exhibit a "pimple mounded" topography with wetlands in the intermound areas and non-wetlands on the mound areas. In these mounded areas the wetlands and non-wetlands are so intermingled that they could not be mapped separately. Transects were traversed to estimate the percentage of wetlands in these areas mapped CdA. Eight small areas were determined

to contain 100% wetlands. These areas stay inundated and or saturated for long periods of time. A small pond is located on the tract and is shown on Figure 2.

Photographs of site features and data points were taken and are included as **Attachment E**.

4.0 FINDINGS

The tract of land was inspected with respect to the potential presence of wetlands. Sixteen sample points were selected to characterize both upland and wetland areas. At these sample points, the soils, hydrology and vegetation were characterized and the information recorded on Wetland Data Forms. The findings of the delineation are described in the following sections.

4.1 VEGETATION

The typical dominant plant species that were encountered at the site included the following:

UPLAND

Rhus copallinium (Winged Sumac)

FACULTATIVE UPLAND

Prunus serotine (Black Cherry)
Plantago virginica (Pale Seed Plantain)
Rubus trivialis (Southern Dew Berry)
Callicarpa americana (American Beautyberry)
Muhlenbergia capillaris (Gulf Coast Muhly)
Vaccinium arboreum (Tree Sparkle Berry)
Eupatorium capillifolium (Dogfennel)
Schizachyrium scoparium (Little Bluestem)

FACULTATIVE

Ilex vomitoria (Yaupon)
Triadica sebifera (Chinese Tallow)
Vitis rotundifolia (Muscadine)
Pinus taeda (Loblolly Pine)
Liquidambar styraciflua (Sweetgum)
Smilax glauca (Cat Greenbrier)
Morella cerifera (Wax Myrtle)
Amplopsis arboreum (Peppervine)
Rubus argutus (Saw tooth Blackberry)
Pinus palustris (Longleaf Pine)

Muhlenbergia capillaris (Hair Awn Muhly)
Gelsemium sempervirens (Evening Trumpet Flower)
Andropogon virginicus (Broomsedge)
Toxicodendron radicans (Poison Ivy)
Smilax rotundifolia (Greenbrier)
Lygodium japonicum (Japanese Climbing Fern)
Acer rubrum (Red Maple)
Symplocos tinctoria (Sweetleaf)
Ilex opaca (American Holly)
Athyrium filix-femina (Ladyfern)

FACULTATIVE WET

Pinus elliottii (Slash Pine)
Juncus marginatus (Grassleaf Rush)
Platanus occidentalis (American Sycamore)
Cyperus acuminatus (Tapertip Flatsedge)
Smilax laurifolia (Laurel Leaf Greenbier)

OBLIGATE WETLAND

Hyptis alata (Cluster Bush Mint)
Panicum hemitomon (Maidencane)

4.2 SOILS

The review of the Soil Survey indicated that the delineated tract is located on nine soil types. Below is a description, from the Beauregard Parish Soil Survey prepared by the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), of the soils present on the property.

- BdB soils are gently sloping and moderately well drained. They are on broad, slightly concave ridgetops. Areas are irregular in shape and range from 20 to 100 acres. Slopes range from 1 to 3 percent. This soil is not listed as hydric in Beauregard Parish.

- BdC soils are moderately sloping and moderately well drained. They are on slightly concave side slopes. Areas are long and narrow and range from 20 to 85 acres. Slopes are short and smooth and range from 3 to 5 percent. This soil is not listed as hydric in Beauregard Parish.

- BpB soils gently sloping and well drained. They are on convex ridgetops. Areas are irregular in shape and range from 20 to 300 acres. Slopes are generally long and smooth and range from 1 to 3 percent. A few small areas have mounded surfaces. This soil is not listed as hydric in Beauregard Parish.

- BpC soils are moderately sloping and well drained. They are on convex ridgetops and side slopes. Areas are irregular in shape and range from 20 to 300 acres. Slopes are generally long and smooth and range from 3 to 5 percent. This soil is not listed as hydric in Beauregard Parish.

- CdA soils are level to gently sloping and poorly drained to moderately well drained. The Caddo soil is on broad flats and the Messer soil is on small, convex mounds. The mounds are generally circular in shape and range from 30 to 150 feet across and from 1 to 6 feet in height. The mounds have been smoothed for cultivation in some areas. Areas are irregular in shape and range from 30 to 1,500 acres. Slopes are 0 to 1 percent. This soil is listed as hydric in Beauregard Parish.

- GYA soils are level to nearly level and are poorly drained and well drained. The Guyton soil is on low flats; the Ouachita soil is on low ridges. These soils are located in flood plains. Areas are elongated and can be up to several thousand acres. This soil is listed as hydric in Beauregard Parish.

- MbB soils are gently sloping and are moderately well drained. They are on broad convex ridgetops. Slopes generally are long and smooth and range from 1 to 3 percent. Areas are irregular in shape and range from 20 to 300 acres. This soil is not listed as hydric in Beauregard Parish.

4.3 HYDROLOGY

General observations and inspections of soil samples were performed to evaluate for wetland hydrology. Potential primary indicators include inundated areas, saturated soil in the upper 12 inches, free water in the soil, water marks, drainage patterns of wetlands, and sediment deposits. One primary indicator or two secondary indicators must be present for an area to have wetland hydrology. Sample plots 1, 5, 6, 13, 14 and 16 exhibited wetland hydrology indicators. In the remainder of the sample plots wetland hydrology indicators were absent.

5.0 CONCLUSIONS

A 521.4-acre tract located along Old Airport Road in DeRidder, Beauregard Parish, Louisiana was evaluated for the presence of jurisdictional wetlands. The wetland delineation was performed in accordance with the procedures and methods as described in the COE 1987 Manual for Wetland Delineations. Based on the results of this delineation, wetlands were identified on portions of the property.

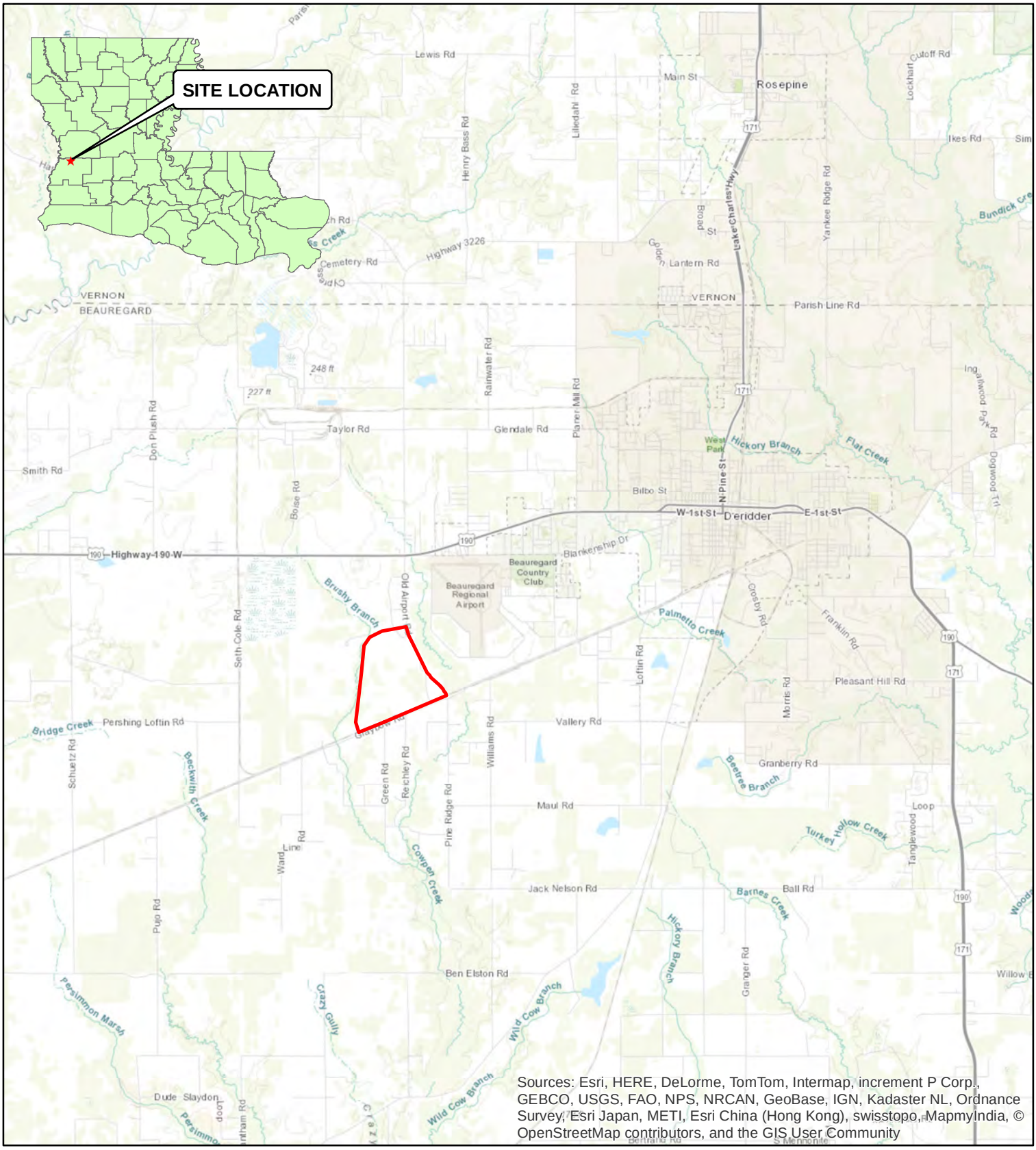
A large portion of the tract, approximately 175 acres, contains CdA soil type. The majority of the CdA soils on the investigated property exhibits a “pimple mounded” topography with non-wetlands on the mound areas and wetland in the intermound areas. Four transects were traversed in these mounded areas. The results of these transects were used to determine the percentage of wetlands and non-wetlands in the areas observed to have similar characteristics (See Figure 2). Approximately 68 acres of wetlands are

located in the areas made up of CdA soil. Eight small areas, totaling 11.5 acres, were identified to contain 100% wetlands. The remainder of the tract appeared to be well drained and did not demonstrate characteristics typical of a wetland.

Based on the results of this delineation, approximately 79.5 acres of wooded wetlands were identified on the property. 71.9 acres of these wetlands are pine plantation, and 7.6 acres are bottomland hardwood forest. This resulted in approximately 441.5 acres of non-wetland acres, 334.6 acres which are not intermingled with wetlands. Approximately 408 linear feet of Brushy Branch and a 0.4 acre pond is located on the property. This pond and creek will likely be considered Section 404 non-wetland waters by the Corps of Engineers.

FIGURE 1

Site Location Map



ARABIE ENVIRONMENTAL SOLUTIONS

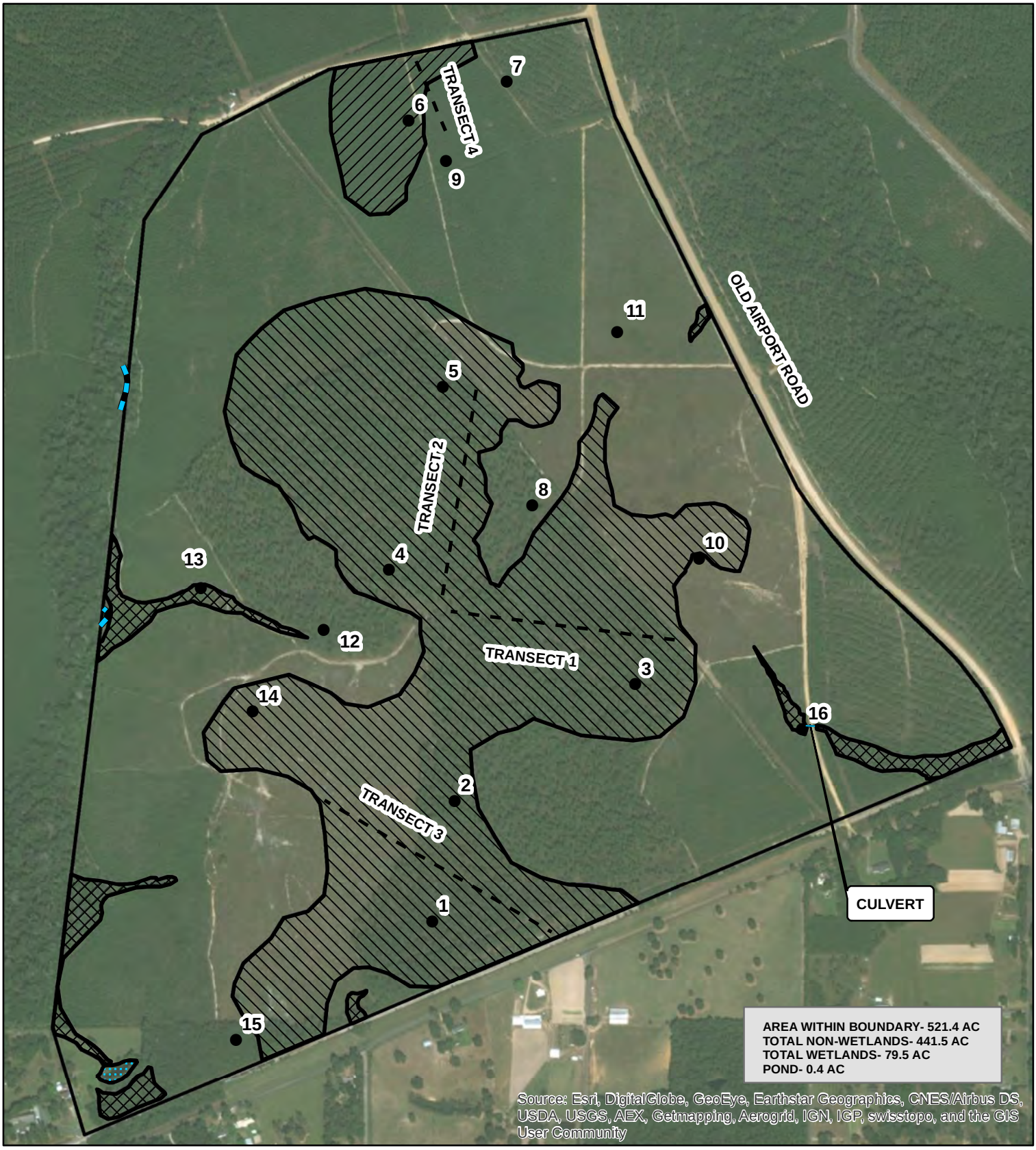
FIGURE 1
SITE LOCATION MAP

CSRS, INC.
BEAUREGARD AIRPORT SITE
DERIDDER, BEAUREGARD PARISH

Drawn By:	CRH	Date:	5/7/18	AES Project #	11675
Checked By:	CBJ	Date:	5/7/18	Revised:	

FIGURE 2

Site Diagram



0 375 750 1,500 Feet

- NON-WETLAND (TOTAL=441.5 AC)
- 38% WETLAND (62.1 AC WET-101.4 AC NON-WET)
- 52% WETLAND (5.9 AC WET-5.5 AC NON-WET)
- 100% WETLAND (11.5 AC WET)
- POND (0.4 AC)
- BRUSHY BRANCH (408 LF)

ARABIE ENVIRONMENTAL SOLUTIONS

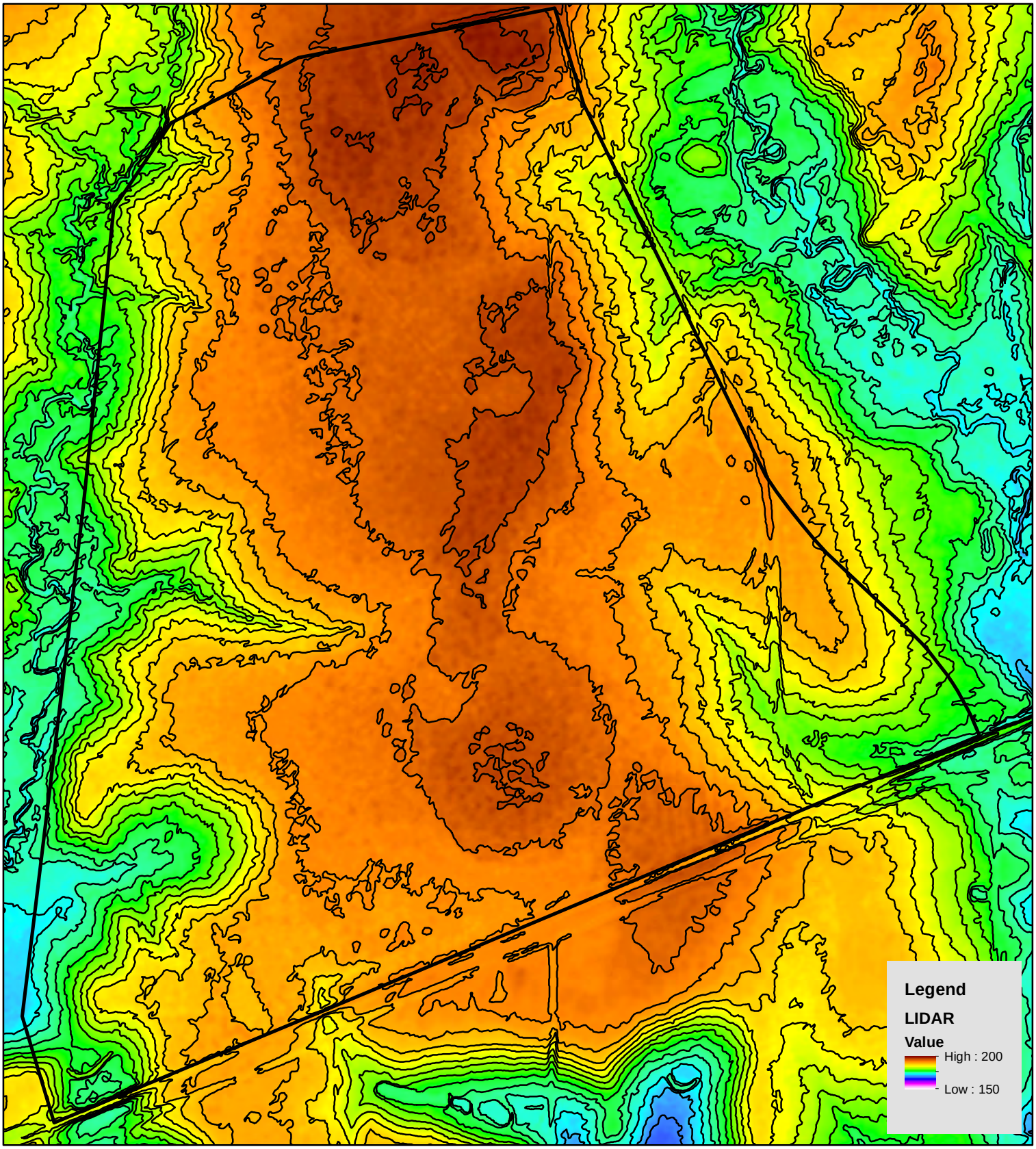
FIGURE 2
SITE DIAGRAM

CSRS, INC.
BEAUREGARD AIRPORT SITE
DERIDDER, BEAUREGARD PARISH

Drawn By:	CRH	Date:	5/7/18	AES Project #	11675
Checked By:	CBJ	Date:	5/7/18	Revised:	

FIGURE 3

LIDAR Imagery



0 375 750 1,500 Feet

SITE BOUNDARY

ARABIE ENVIRONMENTAL SOLUTIONS

FIGURE 3
LIDAR IMAGERY

CSRS, INC.
BEAUREGARD AIRPORT SITE
DERIDDER, BEAUREGARD PARISH

Drawn By:	CRH	Date:	5/7/18	AES Project #	11675
Checked By:	CBJ	Date:	5/7/18	Revised:	

ATTACHMENT A

Certificates of Training

Richard Chinn Environmental Training, Inc.

certifies that

Cleve Hoffpauir

has successfully completed a

4 day 38 hour Army Corps of Engineers Wetland Delineation Training Program

issued Certificate No. 4666 and 3.8 CEUs on this first day of June, 2007, in Austin, Texas

Richard Chinn, PWS, CET,

Richard Chinn Environmental Training, Inc.
804 Cottage Hill Way, Brandon, FL 33511-8098
1.800.427.0307 • FAX: 1.888.457.6331 • info@richardchinn.com • http://www.richardchinn.com

This training has been based in part on the U. S. Army Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1 (1987 manual), as provided for in the training materials developed in conjunction with Section 307(e) of the Water Resources Development Act of 1990 for the Wetland Delineator Certification Program.

BIOTIC CONSULTANTS, Inc.

This Certifies that

Cleve Hoffpauir

Has completed the course entitled:

Wetland Plant Identification

Given at Lafayette, LA

On October 30 - November 2, 2007

Robert H. Mohlenbrock

Course Coordinator

GA75-451

Certificate of Training

Hydric Soil Updates

This certifies that

Cleveland Hoffpauir

has participated in 2 hours of instruction.

Date: March 22, 2018

SwampSchool, LLC

RALEIGH, NC 27603
1-877-479-2673

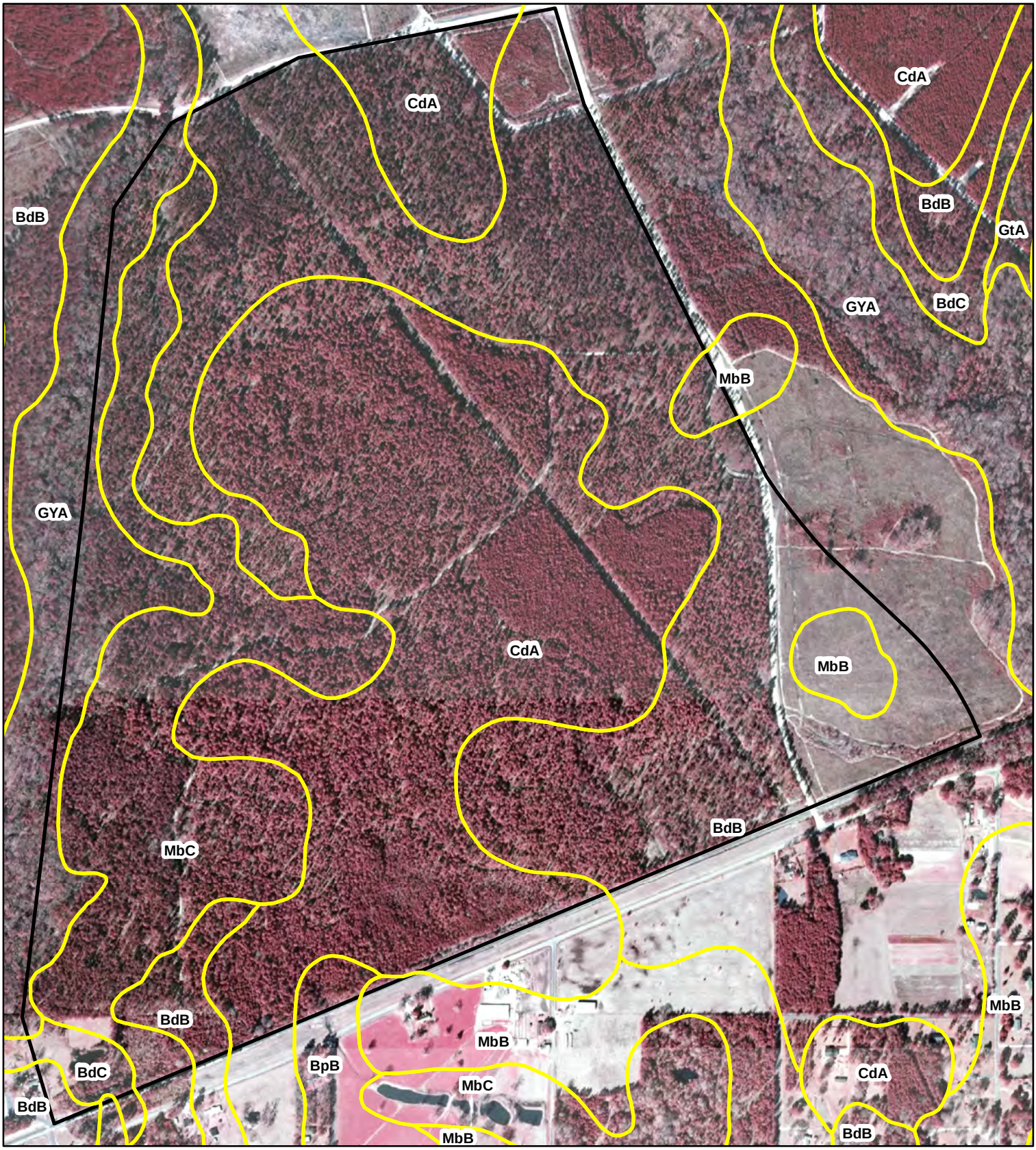
www.SwampSchool.org

SWS PCP PWS MARC SEELINGER 00001236 PROFESSIONAL WETLAND SCIENTIST

SIGNATURE OF AUTHORIZATION

ATTACHMENT B

Infrared and Soil Maps



SITE BOUNDARY

SOIL CLASSIFICATION BOUNDAY

ARABIE ENVIRONMENTAL SOLUTIONS

ATTACHMENT B
INFRARED AND SOIL MAP

CSRS, INC.
BEAUREGARD AIRPORT SITE
DERIDDER, BEAUREGARD PARISH

Drawn By:	CRH	Date:	5/7/18	AES Project #	11675
Checked By:	CBJ	Date:	5/7/18	Revised:	

ATTACHMENT C

Transect Data

WETLAND DELINEATION TRANSECT FORM

PROJECT/SITE: Beauregard Airport Site **APPLICANT/OWNER:** CSRS, Inc.

TRANSECT ID #: 1 **INVESTIGATOR(S):** C. Hoffpauir

LOCATION: CdA soil type, traversing from east to west.

Counter Numbers:

				Total Feet
0	to	**16**	wet	**16**
16	to	**133**	up	**117**
133	to	**160**	wet	**27**
160	to	**216**	up	**56**
216	to	**258**	wet	**42**
258	to	**298**	up	**40**
298	to	**342**	wet	**44**
342	to	**460**	up	**118**
460	to	**510**	wet	**50**
510	to	**568**	up	**58**
568	to	**610**	wet	**42**
610	to	**634**	up	**24**
634	to	**643**	wet	**9**
643	to	**722**	up	**79**
722	to	**754**	wet	**32**
754	to	**789**	up	**35**
789	to	**800**	wet	**11**
800	to	**831**	up	**31**
831	to	**854**	wet	**23**
854	to	**885**	up	**31**
885	to	**951**	wet	**66**
951	to	**1002**	up	**51**
1002	to	**1049**	wet	**47**
1049	to	**1067**	up	**18**
1067	to	**1082**	wet	**15**
1082	to	**1124**	up	**42**
1124	to	**1167**	wet	**43**
1167	to	**1201**	up	**34**
1201	to	**1223**	wet	**22**
1223	to	**1278**	up	**55**
1278	to	**1320**	wet	**42**
1320	to	**1343**	up	**23**
		Total:		**1343**

Total Upland Linear Feet **812**

Total Wetland Linear Feet **531**

% UPLAND **60%**

% WETLAND **40%**

WETLAND DELINEATION TRANSECT FORM

PROJECT/SITE: Beauregard Airport Site **APPLICANT/OWNER:** CSRS, Inc.

TRANSECT ID #: 2 **INVESTIGATOR(S):** C. Hoffpauir

LOCATION: CdA soil type, traversing south to north.

Counter Numbers:

				Total Feet
0	to	**21**	wet	**21**
21	to	**61**	up	**40**
61	to	**85**	wet	**24**
85	to	**149**	up	**64**
149	to	**220**	wet	**71**
220	to	**364**	up	**144**
364	to	**398**	wet	**34**
398	to	**445**	up	**47**
445	to	**474**	wet	**29**
474	to	**502**	up	**28**
502	to	**520**	wet	**18**
520	to	**579**	up	**59**
579	to	**606**	wet	**27**
606	to	**704**	up	**98**
704	to	**742**	wet	**38**
742	to	**817**	up	**75**
817	to	**844**	wet	**27**
844	to	**882**	up	**38**
882	to	**896**	wet	**14**
896	to	**1019**	up	**123**
1019	to	**1047**	wet	**28**
1047	to	**1063**	up	**16**
1063	to	**1074**	wet	**11**
1074	to	**1092**	up	**18**
1092	to	**1118**	wet	**26**
1118	to	**1155**	up	**37**
1155	to	**1180**	wet	**25**
1180	to	**1242**	up	**62**
1242	to	**1285**	wet	**43**
		Total:		**1285**

Total Upland Linear Feet **849**

Total Wetland Linear Feet **436**

% UPLAND **66%**

% WETLAND **34%**

WETLAND DELINEATION TRANSECT FORM

PROJECT/SITE: Beauregard Airport Site **APPLICANT/OWNER:** SJB Group LLC

TRANSECT ID #: 3 **INVESTIGATOR(S):** C. Hoffpauir

LOCATION: CdA soils, traversing from southeast to northwest.

Counter Numbers:

				Total Feet
0	to	**62**	wet	**62**
62	to	**89**	up	**27**
89	to	**120**	wet	**31**
120	to	**172**	up	**52**
172	to	**258**	wet	**86**
258	to	**303**	up	**45**
303	to	**371**	wet	**68**
371	to	**441**	up	**70**
441	to	**457**	wet	**16**
457	to	**510**	up	**53**
510	to	**529**	wet	**19**
529	to	**605**	up	**76**
605	to	**634**	wet	**29**
634	to	**719**	up	**85**
719	to	**736**	wet	**17**
736	to	**757**	up	**21**
757	to	**773**	wet	**16**
773	to	**857**	up	**84**
857	to	**889**	wet	**32**
889	to	**987**	up	**98**
987	to	**1001**	wet	**14**
1001	to	**1099**	up	**98**
1099	to	**1113**	wet	**14**
1113	to	**1152**	up	**39**
1152	to	**1173**	wet	**21**
1173	to	**1274**	up	**101**
1274	to	**1354**	wet	**80**
1354	to	**1413**	up	**59**
1413	to	**1428**	wet	**15**
1428	to	**1459**	up	**31**
1459	to	**1569**	wet	**110**
		Total:		**1569**

Total Upland Linear Feet	**939**
Total Wetland Linear Feet	**630**
% UPLAND	**60%**
% WETLAND	**40%**

WETLAND DELINEATION TRANSECT FORM

PROJECT/SITE: Beauregard Airport Site **APPLICANT/OWNER:** CSRS, Inc.

TRANSECT ID #: 4 **INVESTIGATOR(S):** C. Hoffpauir

LOCATION: CdA soils, traversing northwest to southeast

Counter Numbers:

				Total Feet
0	to	0	wet	0
0	to	6	up	6
6	to	15	wet	9
15	to	18	up	3
18	to	20	wet	2
20	to	31	up	11
31	to	42	wet	11
42	to	83	up	41
83	to	126	wet	43
126	to	455	up	329
		Total:		126

Total Upland Linear Feet	**61**
Total Wetland Linear Feet	**65**
% UPLAND	**48%**
% WETLAND	**52%**

Area not used in percent calculations.

ATTACHMENT D

Wetland Data Forms

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 1-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Flat/Intermound Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): LRR-T Lat: 3408816.80 Long: 465971.74 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-16

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 1-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus elliottii	50	YES	FACW
2. Liquidambar styraciflua	10	NO	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	60	= Total Cover	

50% of total cover: 30 20% of total cover: 12

Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	10	YES	FAC
2. Symplocos tinctoria	5	YES	FAC
3. Morella cerifera	5	YES	FAC
4.			
5.			
6.			
7.			
8.			
	20	= Total Cover	

50% of total cover: 10 20% of total cover: 4

Herb Stratum (Plot size: 30)			
1. Panicum hemitomon	50	YES	OBL
2. Ampelopsis arboreum	20	YES	FAC
3. Rhynchospora gracilenta	10	NO	OBL
4. Xyris caroliniana	5	NO	OBL
5. Sisyrinchium atlanticum	2	NO	FACW
6. Hypericum hypericoides	2	NO	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	89	= Total Cover	

50% of total cover: 44.5 20% of total cover: 17.8

Woody Vine Stratum (Plot size: 30)			
1. Ampelopsis arboreum	5	YES	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	

50% of total cover: 2.5 20% of total cover: 1

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 1-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10 YR 5/1	95	5YR 4/6	5	C	M, PL	Silt Loam	Saturated
6-16	10 YR 5/2	95	5YR 4/6	5	C	M, PL	Silt Loam	Saturated

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

[2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 2-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Mound/Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3409036.48 Long: 46611.49 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 2-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	50	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	60	YES	FAC
2. Triadica sebifera	10	NO	FAC
3. Pinus palustris	5	NO	FAC
4. Callicarpa americana	2	NO	FACU
5. Symplocos tinctoria	2	NO	FAC
6. Sassafras albidum	2	NO	FACU
7. Morella cerifera	2	NO	FAC
8. Quercus nigra	2	NO	FAC
	85 = Total Cover		
50% of total cover: 42.5	20% of total cover: 17		
Herb Stratum (Plot size: 30)			
1. Andropogon virginicus	20	YES	FAC
2. Triadica sebifera	10	NO	FAC
3. Smilax glauca	10	NO	FAC
4. Smilax rotundifolia	10	NO	FAC
5. Juncus marginatus	5	NO	FACW
6. Muhlenbergia capillaris	5	NO	FACU
7. Eupatorium rotundifolium	2	NO	FAC
8. Rubus argutus	2	NO	FAC
9.			
10.			
11.			
12.			
	64 = Total Cover		
50% of total cover: 32	20% of total cover: 12.8		
Woody Vine Stratum (Plot size: 30)			
1. Smilax rotundifolia	10	YES	FAC
2. Smilax glauca	10	YES	FAC
3.			
4.			
5.			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 5		

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: (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 2-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10 YR 3/2	100					Silt Loam	
6-16	10 YR 6/4	98	10YR 5/6	2	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 3-A

Investigator(s): C. Hoffpauir Section, Township, Range: S12 T3S R10W

Landform (hillslope, terrace, etc.): Mound/Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 340925.15 Long: 466340.13 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 3-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	50	YES	FAC
2. Liquidambar styraciflua	5	NO	FAC
3. Triadica sebifera	5	NO	FAC
4.			
5.			
6.			
7.			
8.			
	60	= Total Cover	
50% of total cover: 30	20% of total cover: 12		

Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	40	YES	FAC
2. Triadica sebifera	10	NO	FAC
3. Sassafras albidum	10	NO	FACU
4. Callicarpa americana	5	NO	FACU
5. Rhus copallinum	5	NO	UPL
6. Ilex vomitoria	5	NO	FAC
7.			
8.			
	75	= Total Cover	
50% of total cover: 37.5	20% of total cover: 15		

Herb Stratum (Plot size: 30)			
1. Schizachyrium scoparium	30	YES	FACU
2. Rubus argutus	10	NO	FAC
3. Callicarpa americana	5	NO	FACU
4. Helianthus angustifolius	2	NO	FACW
5. Toxicodendron radicans	2	NO	FAC
6. Eupatorium rotundifolium	2	NO	FAC
7. Gelsemium sempervirens	2	NO	FAC
8.			
9.			
10.			
11.			
12.			
	53	= Total Cover	
50% of total cover: 26.5	20% of total cover: 10.6		

Woody Vine Stratum (Plot size: 30)			
1. Smilax rotundifolia	5	YES	FAC
2. Vitis rotundifolia	5	YES	FAC
3.			
4.			
5.			
	10	= Total Cover	
50% of total cover: 5	20% of total cover: 2		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 3-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10 YR 5/3	95	5YR 4/6	5	C	M, PL	Silt Loam	
6-16	10 YR 6/4	98	5YR 4/6	2	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 4-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Mound/Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3409459.58 Long: 465888.81 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 4-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	50	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		
Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	30	YES	FAC
2. Rhus copallinum	10	NO	FAC
3. Sassafras albidum	5	NO	FACU
4. Triadica sebifera	2	NO	FACU
5. Morella cerifera	5	NO	UPL
6. Ilex opaca	2	NO	FAC
7.			
8.			
	54 = Total Cover		
50% of total cover: 27	20% of total cover: 10.8		
Herb Stratum (Plot size: 30)			
1. Schizachyrium scoparium	30	YES	FACU
2. Dichanthelium sphaerocarpon	10	NO	FACU
3. Rubus argutus	5	NO	FAC
4. Eupatorium rotundifolium	2	NO	FAC
5. Toxicodendron radicans	2	NO	FAC
6. Callicarpa americana	2	NO	FACU
7. Tephrosia onobrychoides	2	NO	NI
8.			
9.			
10.			
11.			
12.			
	53 = Total Cover		
50% of total cover: 26.5	20% of total cover: 10.6		
Woody Vine Stratum (Plot size: 30)			
1. None			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 4-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 5/3	100					Silt Loam	
8-16	10 YR 6/4	100					Silt Loam	

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

[2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 5-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Intermound/Flat Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR or MLRA): LRR-T Lat: 3409807 Long: 465983 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0-3
Water Table Present?	Yes X	No _____	Depth (inches): @ 6" BGS
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-14"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Area with surface water within plot 5-A

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

Sampling Point: 5-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus elliottii	60	YES	FACW
2. Nyssa sylvatica	10	NO	FAC
3. Crataegus opaca	5	NO	FACW
4. Triadica sebifera	5	NO	FAC
5.			
6.			
7.			
8.			
	80	= Total Cover	
50% of total cover: 40		20% of total cover: 16	

Sapling/Shrub Stratum (Plot size: 30)			
1. Morella cerifera	20	YES	FAC
2. Symplocos tinctoria	5	YES	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25	= Total Cover	
50% of total cover: 12.5		20% of total cover: 5	

Herb Stratum (Plot size: 30)			
1. Juncus marginatus	10	YES	FACW
2. Aristida purpurascens	5	NO	FACW
3. Andropogon virginicus	5	NO	FAC
4. Eupatorium rotundifolium	2	NO	FAC
5. Rubus argutus	2	NO	FAC
6. Pluchea foetida	2	NO	OBL
7. Xyris caroliniana	2	NO	OBL
8. Hypericum densiflorum	2	NO	FACW
9.			
10.			
11.			
12. Eupatorium rotundifolium			
	30	= Total Cover	
50% of total cover: 15		20% of total cover: 6	

Woody Vine Stratum (Plot size: 30)			
1. None			
2.			
3.			
4.			
5.			
		= Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 5-A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 4/1	95	5YR 4/6	5	C	M, PL	Silt Loam	Saturated
8-16	10 YR 5/2	90	5YR 4/6	10	C	M, PL	Silt Loam	Saturated

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

[2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 6-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): LRR-T Lat: 341287.8 Long: 465928.73 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-16"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 6-A

Tree Stratum (Plot size: 20x30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Triadica sebifera	5	YES	FAC
2. Platanus occidentalis	2	YES	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	7 = Total Cover		
50% of total cover: 3.5	20% of total cover: 1.4		
Sapling/Shrub Stratum (Plot size: 20x30)			
1. Pinus elliottii	2	YES	FACW
2. Triadica sebifera	2	YES	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	4 = Total Cover		
50% of total cover: 2	20% of total cover: 0.8		
Herb Stratum (Plot size: 20x30)			
1. Andropogon virginicus	10	YES	FACW
2. Cyperus acuminatus	5	NO	OBL
3. Ampelopsis arboreum	10	YES	FAC
4. Eleocharis microcarpa	5	NO	OBL
5. Ludwigia palustis	2	NO	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	32 = Total Cover		
50% of total cover: 16	20% of total cover: 6.4		
Woody Vine Stratum (Plot size: 20x30)			
1. None			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 6-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 5/1	90	5YR 4/6	10	C	M, PL	Silt Loam	Saturated
8-16	10 YR 6/2	70	7.45YR 5/8	30	C	M, PL	Silt Loam	Saturated

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

[2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/2/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 7-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3410356.73 Long: 466105.73 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 7-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	40	YES	FAC
2. Pinus taeda	40	YES	FAC
3. Triadica sebifera	5	NO	FAC
4. Quercus nigra	2	NO	FAC
5.			
6.			
7.			
8.			
	87 = Total Cover		
50% of total cover: 43.5	20% of total cover: 17.4		
Sapling/Shrub Stratum (Plot size: 30)			
1. Ilex vomitoria	60	YES	FAC
2. Vaccinium arboreum	10	NO	FAC
3. Rhus copallinum	5	NO	FACU
4. Callicarpa americana	5	NO	FACU
5. Morella cerifera	2	NO	UPL
6.		NO	FAC
7.			
8.			
	82 = Total Cover		
50% of total cover: 41	20% of total cover: 16.4		
Herb Stratum (Plot size: 30)			
1. Callicarpa americana	5	YES	FACU
2. Muhlenbergia capillaris	5	YES	FACU
3. Vaccinium arboreum	5	YES	FAC
4. Tephrosia onobrychoides	5	YES	FAC
5. Rubus argutus	2	NO	FAC
6. Vernonia gigantea	2	NO	FACU
7. Andropogon virginicus	2	NO	NI
8.			
9.			
10.			
11.			
12.			
	26 = Total Cover		
50% of total cover: 13	20% of total cover: 5.2		
Woody Vine Stratum (Plot size: 30)			
1. Smilax glauca	5	YES	FAC
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

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 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 7-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 6/3	100					Silt Loam	
7-11	10 YR 5/3	100					Silt Loam	
11-16	10yr 6/3	95	5yr 5/8	5	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 8-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3409594 Long: 466147 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Non-wet Ridge
Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 8-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	50	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		

Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	30	YES	FAC
2. Rhus copallinum	20	YES	UPL
3. Callicarpa americana	10	NO	FACU
4. Ilex vomitoria	10	NO	FAC
5. Prunus serotina	10	NO	FACU
6. Vaccinium arboreum	5	NO	FACU
7. Pinus palustris	5		FAC
8. Morella cerifera	2		FAC
	94 = Total Cover		
50% of total cover: 47	20% of total cover: 18.8		

Herb Stratum (Plot size: 30)			
1. Schizachyrium scoparium	70	YES	FACU
2. Rhus copallinum	10	NO	UPL
3. Mimosa hystricina	5	NO	FACU
4. Rubus argutus	5	NO	FAC
5. Eupatorium rotundifolium	2	NO	FAC
6. Lygodium japonicum	2	NO	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	94 = Total Cover		
50% of total cover: 47	20% of total cover: 18.8		

Woody Vine Stratum (Plot size: 30)			
1. Smilax glauca	5	YES	FAC
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 8-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	10 YR 5/3	100					Silt Loam	
9-16	10 YR 6/4	100					Silt Loam	

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

[2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 9-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3410214.02 Long: 465993.34 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Well Drained- Sloping.
Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 9-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus taeda	70	YES	FAC
2. Nyssa sylvatica	10	NO	FAC
3. Sassafras albidum	5	NO	FACU
4. Quercus nigra	2	NO	FAC
5. Liquidambar styraciflua	2	NO	FAC
6.			
7.			
8.			
	89 = Total Cover		
50% of total cover: 44.5	20% of total cover: 17.8		

Sapling/Shrub Stratum (Plot size: 30)			
1. Ilex vomitoria	40	YES	FAC
2. Prunus serotina	10	YES	FACU
3. Callicarpa americana	5	NO	FACU
4. Sassafras albidum	5	NO	FACU
5. Vaccinium arboreum	5	NO	FACU
6. Ilex opaca	2	NO	FAC
7.			
8.			
	67 = Total Cover		
50% of total cover: 33.5	20% of total cover: 13.4		

Herb Stratum (Plot size: 30)			
1. Athyrium filix-femina	40	YES	FAC
2. Toxicodendron radicans	5	NO	FAC
3. Vitis rotundifolia	5	NO	FAC
4. Rubus argutus	5	NO	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55 = Total Cover		
50% of total cover: 27.5	20% of total cover: 11		

Woody Vine Stratum (Plot size: 30)			
1. Smilax glauca	10	YES	FAC
2.			
3.			
4.			
5.			
	10 = Total Cover		
50% of total cover: 5	20% of total cover: 2		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 9-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 5/3	98	7.5YR 4/6	2	C	M	Silt Loam	
8-11	10 YR 6/4	95	5YR 4/6	5	C	M	Silt Loam	
11-16	10 YR 6/6	95	5YR 4/6	5	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 10-A

Investigator(s): C. Hoffpauir Section, Township, Range: S12 T3S R10W

Landform (hillslope, terrace, etc.): Gentle Slope Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3409482.21 Long: 466456.58 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Area recently clearcut, replanted with Loblolly seedlings

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 10-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 30)			
1. Pinus taeda	30	YES	FAC
2. Morella cerifera	20	YES	FACU
3. Vaccinium arboreum	5	NO	FACU
4. Quercus stellata	2	NO	FACU
5.		NO	FACU
6.		NO	FAC
7.			
8.			
	57 = Total Cover		

50% of total cover: 28.5 20% of total cover: 11.4

Herb Stratum (Plot size: 30)			
1. Schizachyrium scoparium	70	YES	FACU
2. Dichanthelium acuminatum	10	NO	FAC
3. Pinus taeda	5	NO	FAC
4. Muhlenbergia capillaris	5	NO	FACU
5. Rubus argutus	2	NO	FAC
6. Athyrium filix-femina	2	NO	FAC
7. Sassafras albidum	2	NO	FACU
8. Eupatorium rotundifolium	2	NO	FAC
9.			
10.			
11.			
12.			
	98 = Total Cover		

50% of total cover: 49 20% of total cover: 19.6

Woody Vine Stratum (Plot size: 30)			
1. None			
2.			
3.			
4.			
5.			
	= Total Cover		

50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X

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

SOIL

Sampling Point: 10-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 5/3	100					Silt Loam	
8-16	10 YR 6/4	95	5YR 4/6	5	C	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 12-15-15

Applicant/Owner: SJB Group LLC State: LA Sampling Point: 11

Investigator(s): C. Hoffpauir Section, Township, Range: S12 T3S R10W

Landform (hillslope, terrace, etc.): Ridge Slope Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 466312 Long: 3409898 Datum: UTM NAD 83

Soil Map Unit Name: Beauregard Silt Loam, 1-3 Percent Slopes (BdB) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology observed.

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

Sampling Point: 11

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus taeda	20	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 4		

Sapling/Shrub Stratum (Plot size: 30)			
1. Pinus taeda	30	YES	FAC
2. Rhus copallinum	5	NO	UPL
3. Vaccinium arboreum	5	NO	FACU
4. Morella cerifera	2	NO	FAC
5.			
6.			
7.			
8.			
	42 = Total Cover		
50% of total cover: 21	20% of total cover: 8.4		

Herb Stratum (Plot size: 30)			
1. Schizachyrium scoparium	40	YES	FACU
2. Solidago altissima	10	NO	FAC
3. Athyrium asplenioides	5	NO	FACU
4. Dichanthelium acuminatum	5	NO	FAC
5. Muhlenbergia capillaris	5	NO	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65 = Total Cover		
50% of total cover: 32.5	20% of total cover: 13		

Woody Vine Stratum (Plot size: 30)			
1. Rubus trivialis	5	5	FACU
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X

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

SOIL

Sampling Point: 11

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 3/2	100					Silt Loam	
3-9	10 YR 4/3	100					Silt Loam	
9-16	7.5 YR 5/6	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 12-15-15

Applicant/Owner: SJB Group LLC State: LA Sampling Point: 12

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Ridge Local relief (concave, convex, none): Convex Slope (%): 3-5

Subregion (LRR or MLRA): LRR-T Lat: 465770 Long: 3409354 Datum: UTM NAD 83

Soil Map Unit Name: Malbis Fine Sandy Loam, 3-5 Percent Slopes (MbC) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

Recent rainfall

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 12

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris	30	YES	FAC
2. Pinus taeda	10	YES	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	40 = Total Cover		
50% of total cover: 20	20% of total cover: 8		
Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	10	YES	FAC
2. Ilex vomitoria	10	YES	FAC
3. Morella cerifera	10	YES	FAC
4. Prunus serotina	2	NO	FACU
5. Vaccinium arboreum	2	NO	FACU
6.			
7.			
8.			
	34 = Total Cover		
50% of total cover: 17	20% of total cover: 6.8		
Herb Stratum (Plot size: 30)			
1. Andropogon virginicus	30	YES	FAC
2. Muhlenbergia capillaris	10	YES	FAC
3. Panicum rigidulum	2	NO	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	42 = Total Cover		
50% of total cover: 21	20% of total cover: 8.4		
Woody Vine Stratum (Plot size: 30)			
1. Rubus argutus	5	YES	FAC
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 8 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 12

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 4/3	100					Silt Loam	
12-16	10 YR 5/4	100					Silt Loam	

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

[2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 12-15-15

Applicant/Owner: SJB Group LLC State: LA Sampling Point: 13

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Drain swale Local relief (concave, convex, none): Concave Slope (%): 0-1

Subregion (LRR or MLRA): LRR-T Lat: 465551 Long: 3409430 Datum: UTM NAD 83

Soil Map Unit Name: Guyton-Ouachita Silt Loams, Frequently Flooded (GYA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Recent rainfall

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☑ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 0-4"
Water Table Present?	Yes X	No _____	Depth (inches): @ 13" BGS
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-16"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Area is adjacent to small drain leading to creek

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

Sampling Point: 13

Tree Stratum (Plot size: 20)	Absolute % Cover	Dominant Species?	Indicator Status
1. None	N/A	N/A	N/A
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	N/A = Total Cover		

50% of total cover: N/A 20% of total cover: N/A

Sapling/Shrub Stratum (Plot size: 20)			
1. Pinus taeda	20	YES	FAC
2. Liquidambar styraciflua	10	YES	FAC
3. Morella cerifera	10	YES	FAC
4.			
5.			
6.			
7.			
8.			
	40 = Total Cover		

50% of total cover: 20 20% of total cover: 8

Herb Stratum (Plot size: 20)			
1. Andropogon virginicus	50	YES	FAC
2. Panicum rigidulum	10	NO	FACW
3. Andropogon capillipes	10	NO	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		

50% of total cover: 35 20% of total cover: 14

Woody Vine Stratum (Plot size:)			
1. Smilax laurifolia	5	YES	FACW
2.			
3.			
4.			
5.			
	5 = Total Cover		

50% of total cover: 2.5 20% of total cover: 1

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: (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ____

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

SOIL

Sampling Point: 13

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 4/2	100					Silt Loam	Saturated
3-10	10 YR 5/2	90	7.5 YR 5/8	10	C	M, PL	Silt Loam	Saturated
10-12	10 YR 6/2	80	7.5 YR 4/6	20	C	M, PL	Silt Loam	Saturated; Fe&Mn masses

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 14-A

Investigator(s): C. Hoffpauir Section, Township, Range: S11 T3S R10W

Landform (hillslope, terrace, etc.): Flat/Intermound Local relief (concave, convex, none): none Slope (%): 0-1

Subregion (LRR or MLRA): LRR-T Lat: 3409201.08 Long: 465638.73 Datum: UTM NAD 83

Soil Map Unit Name: Caddo-Messer complex (CdA) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Pimple Mounded Area
Area recently clearcut, replanted with Loblolly seedlings

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-16

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 14-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Liquidambar styraciflua	2	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	2 = Total Cover		
50% of total cover: 1	20% of total cover: 0.4		
Sapling/Shrub Stratum (Plot size: 30)			
1. Pinus taeda	30	YES	FAC
2. Liquidambar styraciflua	20	YES	FAC
3. Acer rubrum	10	NO	FAC
4. Morella cerifera	10	NO	FAC
5. Baccharis halimifolia	5	NO	FAC
6. Ilex vomitoria	5	NO	FAC
7. Vaccinium arboreum	2	NO	FACU
8.			
	82 = Total Cover		
50% of total cover: 41	20% of total cover: 16.4		
Herb Stratum (Plot size: 30)			
1. Andropogon virginicus	70	YES	FAC
2. Aristida purpurascens	10	NO	FACW
3. Rubus argutus	5	NO	FAC
4. Juncus brachycarpus	5	NO	FACW
5. Eleocharis microcarpa	2	NO	OBL
6. Eupatorium capillifolium	2	NO	FACU
7. Juncus marginatus	2	NO	FACW
8.			
9.			
10.			
11.			
12.			
	96 = Total Cover		
50% of total cover: 48	20% of total cover: 19.2		
Woody Vine Stratum (Plot size: 30)			
1. None			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 14-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/1	95	5YR 4/6	5	C	M, PL	Silt Loam	Saturated
7-16	10 YR 6/2	80	7.5YR 4/8	20	C	M, PL	Silt Loam	Saturated

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

[2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 15-A

Investigator(s): C. Hoffpauir Section, Township, Range: S14 T3S R10W

Landform (hillslope, terrace, etc.): Ridge Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR or MLRA): LRR-T Lat: 3408598.97 Long: 465608.27 Datum: UTM NAD 83

Soil Map Unit Name: Beauregard silt loam, 1 to 3 percent slopes (BdB) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Loblolly Pine Forest

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Ridge-Well Drained

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

Sampling Point: 15-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus taeda	60	YES	FAC
2. Nyssa sylvatica	5	NO	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	65 = Total Cover		
50% of total cover: 32.5	20% of total cover: 13		
Sapling/Shrub Stratum (Plot size: 30)			
1. Liquidambar styraciflua	30	YES	FAC
2. Ilex vomitoria	10	YES	FAC
3. Vaccinium arboreum	5	NO	FACU
4. Callicarpa americana	5	NO	FACU
5.			
6.			
7.			
8.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		
Herb Stratum (Plot size: 30)			
1. Toxicodendron radicans	5	YES	FAC
2. Smilax glauca	2	NO	FAC
3. Ilex vomitoria	5	YES	FAC
4. Liquidambar styraciflua	5	YES	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	17 = Total Cover		
50% of total cover: 8.5	20% of total cover: 3.4		
Woody Vine Stratum (Plot size: 30)			
1. Toxicodendron radicans	2	YES	FAC
2.			
3.			
4.			
5.			
	2 = Total Cover		
50% of total cover: `	20% of total cover: 0.4		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 15-A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 3/2	100					Silt Loam	
12-16	10 YR 5/3	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Beauregard Airport Site City/County: DeRidder/Beauregard Sampling Date: 5/3/18

Applicant/Owner: CSRS, Inc. State: LA Sampling Point: 16-A

Investigator(s): C. Hoffpauir Section, Township, Range: S12 T3S R10W

Landform (hillslope, terrace, etc.): Drainage Swale Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): LRR-T Lat: 3409167.48 Long: 466647.79 Datum: UTM NAD 83

Soil Map Unit Name: Beauregard silt loam, 1 to 3 percent slopes (BdB) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Drainage Swale-Forested

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☑ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ 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)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0-16

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Narrow Drainage Swale

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

Sampling Point: 16-A

Tree Stratum (Plot size: 10X30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Triadica sebifera	20	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	20 = Total Cover		
50% of total cover: 10	20% of total cover: 4		

Sapling/Shrub Stratum (Plot size: 10X30)			
1. Triadica sebifera	20	YES	FAC
2. Cephalanthus occidentalis	5	NO	OBL
3. Morella cerifera	2	NO	FAC
4. Liquidambar styraciflua	2	NO	FAC
5.			
6.			
7.			
8.			
	29 = Total Cover		
50% of total cover: 14.5	20% of total cover: 5.8		

Herb Stratum (Plot size: 10X30)			
1. Cyperus acuminatus	20	YES	FACW
2. Panicum hemitomon	10	NO	OBL
3. Andropogon glomeratus	10	NO	FACW
4. Hyptis alata	5	NO	OBL
5. Eupatorium perfoliatum	5	NO	FACW
6. Ludwigia alternifolia	2	NO	OBL
7. Pluchea foetida	2	NO	OBL
8. Scirpus cyperinus	2	NO	OBL
9. Toxicodendron radicans	2	NO	FAC
10.			
11.			
12.			
	60 = Total Cover		
50% of total cover: 20	20% of total cover: 12		

Woody Vine Stratum (Plot size: 10X30)			
1. NONE			
2.			
3.			
4.			
5.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (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[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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 X No

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

SOIL

Sampling Point: 16-A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-11	10 YR 4/2	90	5YR 4/6	10	C	M, PL	Silt Loam	Saturated
11-13	10 YR 5/2	90	10YR 5/8	10	C	M, PL	Silt Loam	Saturated
13-13	10YR 6/2	70	10YR 5/8	30	C	M, PL	Sand	Saturated

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ☐ 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)

[3]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** X **No** _____

Remarks:

ATTACHMENT E

Site Photographs

Photograph 1
Data Plot 1

Photograph 2
General View of Plot 1

Photograph 3
Data Plot 2

Photograph 4
General View of Plot 2

Photograph 5
Data Plot 3

Photograph 6
General View of Plot 3

Photograph 7
Data Plot 4

Photograph 8
General View of Plot 4

Photograph 9
Data Plot 5

Photograph 10
General View of Plot 5

Photograph 11
Data Plot 6

Photograph 12
General View of Plot 6

Photograph 13
Data Plot 7

Photograph 14
General View of Plot 7

Photograph 15
Data Plot 8

Photograph 16
General View of Plot 8

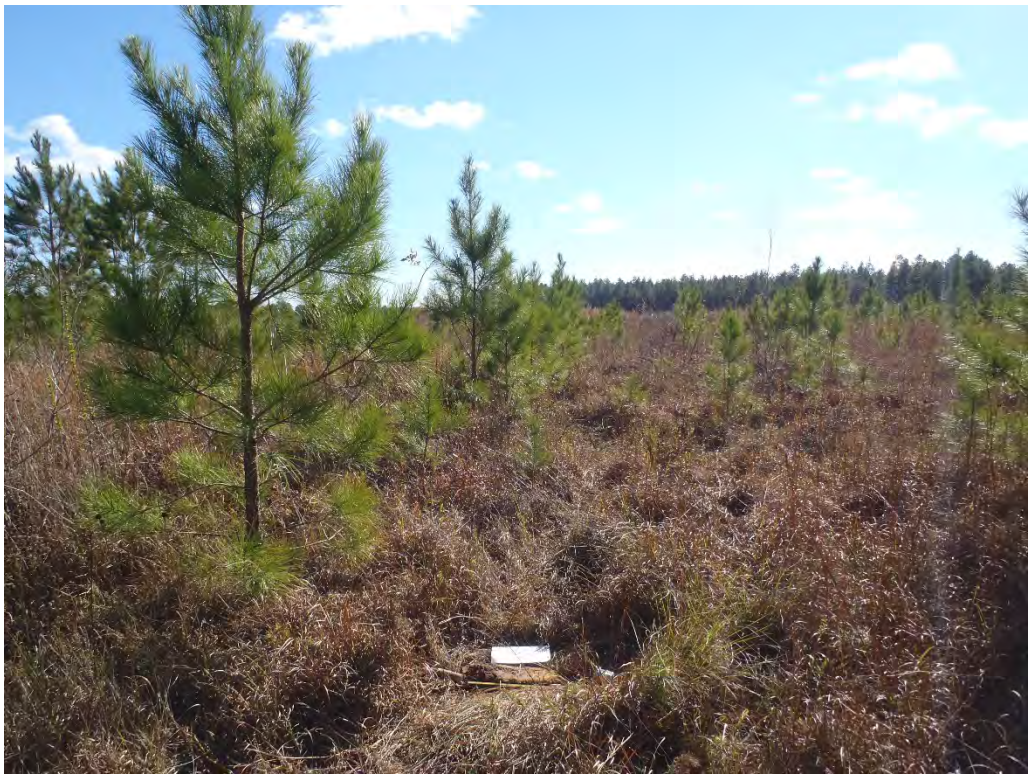
Photograph 17
Data Plot 9

Photograph 18
General View of Plot 9

Photograph 19
Data Plot 10

Photograph 20
General View of Plot 10

Photograph 21
Data Plot 11



Photograph 22
General View of Plot 11

Photograph 23
Data Plot 12

Photograph 24
General View of Plot 12

Photograph 25
Data Plot 13

Photograph 26
General View of Plot 13

Photograph 27
Data Plot 14

Photograph 28
General View of Plot 14

Photograph 29
Data Plot 15

Photograph 30
General View of Plot 15

Photograph 31
Data Plot 16

Photograph 32
General View of Plot 16