CSRS | BUILDING STRONGER, SMARTER COMMUNITIES TOGETHER.

Exhibit.EE
Cenac Park
Wetlands Delineation Report

LOUISIANA ECONOMIC DEVELOPMENT CERTIFIED SITE

ONEACADIANA™

LAFAYETTE ECONOMIC DEVELOPMENT AUTHORITY

Cenac Park Wetlands Delineation Report

Wetland Delineation Report

Cenac Park Site
Lafayette Parish, Louisiana

Prepared for

One Acadiana

March 2020

Prepared by

Chenier Environmental Consulting, LLC
P.O. Box 82466
Baton Rouge, LA 70884-2466

Contents

SECTION 1

Introduction

1.1 Background

Chenier Environmental Consulting, LLC (Chenier) has been retained by One Acadiana to prepare a wetland delineation on an approximately 35-acre site located adjacent to and east of Interstate 49 near Carencro, Lafayette Parish, Louisiana (Figure 1).

The purpose of this report is to present field data, habitat descriptions, and other pertinent information on the three diagnostic characteristics of wetlands and non-wetland waters of the United States (WOUS) within the survey boundary (Site).

Please be advised that PJDs are non-binding, advisory in nature, and cannot be appealed. Furthermore, when the USACE provides a PJD, or authorizes an activity based on a PJD, the Corps is making no legally binding determination of any type regarding whether jurisdiction exists over the particular water body or wetland in question governed by Clean Water Act or Rivers and Harbors Act of 1899. A recipient of a PJD can later request and obtain an approved jurisdictional determination if that becomes necessary during the permitting process.

Chenier conducted a site visit on February 14, 2020 to identify and delineate potential WOUS features, including wetlands, which occur within the proposed project area. Chenier identified one 0.33-acre potential jurisdictional wetland, 732 linear feet of non-wetland Waters of the U.S., and 1,303 linear feet of non-jurisdictional drainage ditches.

Based on communication with the USACE, no previous PJD requests have been made for the site and no Section 404 Permit Applications have been submitted to the USACE.

SECTION 2

Methodology

2.1 Desktop Review

Prior to conducting field surveys, a desktop review of potential wetlands and non-wetland WOUS and jurisdictional status of these features was completed using Natural Resources Conservation Service (NRCS) soil data; Lafayette Parish Soil Survey Reports; U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) data; United States Geological Survey (USGS) 7.5-minute topographic maps; and color-infrared aerial photography; and the USGS National Hydrographic Dataset (Figure 2). The information gathered during the desktop review is further discussed in Section 3. The presence of wetlands and other WOUS was confirmed by a field visit during which the boundaries of these features were defined.

2.2 WOUS Delineation

Field delineations were conducted following procedures set forth in the Interim Regional Supplement of the USACE Wetlands Delineation Manual: Atlantic and Gulf Coast Region (USACE 2010). Chenier biologist followed USACE standard procedures to evaluate wetlands and other WOUS subject to regulation under the Clean Water Act (jurisdictional waters), as established in the Atlantic and Gulf Coast Supplement (USACE 2010) and the USACE Jurisdictional Determination Form Instructional Guidebook (USACE 2007), respectively. For the purpose of this report, streams are classified as follows:

- **Perennial stream:** A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.
- **Intermittent stream:** An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.
- **Ephemeral stream:** An ephemeral stream has flowing water only during and for a short duration after precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

The Corps of Engineers Wetlands Delineation Manual (USACE 1987) defines wetlands as areas that have positive indicators for hydrophytic vegetation, wetland hydrology, and hydric soils, or as:

> *"Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

2.3 Definition of Boundaries

The limits of USACE jurisdiction for non-tidal waters (not including wetlands) of the United States (creeks, streams, etc.) are identified by the presence of ordinary high-water marks (OHWMs). The OHWM is defined as

> *"That line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding areas" (USACE 2007).*

The wetland/upland boundary is determined when one of the mandatory criteria (soils, vegetation, and hydrology; described later in this section) does not exist.

2.4 Field Documentation

The following text describes the methods used during the WOUS surveys.

2.4.1 WOUS and Wetlands

The Routine Onsite Determination Method involves the following steps:

1. Locate the project area;
2. Identify the community type(s);
3. Select representative observation points;
4. Characterize each plant community type;
5. Record the indicator status of dominant species;
6. Determine whether hydrophytic vegetation is present and dominant;
7. Determine whether wetland hydrology is present;
8. Determine whether hydric soils are present.

Under this method, areas exhibiting a presence of wetland hydrology, hydric soils, and a dominance of hydrophytic vegetation are defined as wetlands. The method requires that additional consideration be given to sites with atypical conditions (evidence of sufficient natural or human-induced alterations that significantly alter the soils, vegetation, or hydrology) and sites where normal environmental conditions are not present during the wetland delineation (i.e., no hydrophytic vegetation due to annual or seasonal fluctuations in precipitation or groundwater levels).

Data was collected at representative observation points within each plant community type. USACE Atlantic and Gulf Coastal Plain wetland data forms were completed for each observation point. The figures included in Appendix A, Figures 3 and 4 depict the potential jurisdictional wetlands/WOUS features and observation points recorded during the survey. The wetland and upland data forms are presented in Appendix B, and photographs of sampling points are located in Appendix C.

Each identified wetland was classified based on the U.S. Fish and Wildlife Service classification system (Cowardin, Carter, et al. 1979). Dominant vegetation was noted according to stratum: tree, shrub/sapling, woody vine, or herb. The wetland indicator status (Table 1) for each species was identified using the National Wetlands Inventory List of Plants that Occur in Wetlands (Reed 1988) and subsequent approved modifications to this list. Plants were identified using current taxonomic references, such as Aquatic and

Wetland Plants of the Southeastern United States (Godfrey and Wooten 1981, Godfrey and Wooten 1980). Where recent taxonomic changes resulted in plant names that were not included in the National Wetlands Inventory List of Plants that Occur in Wetlands (Reed 1988), appropriate synonymy was used to reference the national list.

TABLE 1
Definitions for Wetland Indicator Status

Code	Term	Definition
OBL	Obligate	Species occurs in wetlands greater than 99% of the time.
FACW	Facultative Wetland	Species occurs in wetlands 67% to 99% of the time.
FAC	Facultative	Species occurs in wetlands 34% to 66% of the time.
FACU	Facultative Upland	Species occurs in wetlands 1% to 33% of the time.
UPL	Upland	Species occurs in wetlands less than 1% of the time.

Soil information was obtained from the Natural Resources Conservation Service (NRCS) Web Soil Survey for Lafayette Parish, Louisiana (NRCS 2019). Within each area investigated, soil samples were inspected for hydric soil indicators, as provided for on the wetland data forms. Using the Munsell Soil Color Charts (Munsell 1994), the value and chroma of soil samples were recorded. Soil texture and any observations of redoximorphic features were recorded. Wetland hydrology observations included soil saturation, evidence of any standing or ponded water, the presence of drainage patterns, and/or drift lines, and any additional primary or secondary hydrology indicator as defined by the Interim Regional Supplement of the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coast Region (USACE 2010).

SECTION 3

Desktop Review

3.1 Location

The site is located in Carencro, Lafayette Parish, Louisiana (Figure 1). The site is irregularly shaped and is approximately 35 acres (Figure 3). The Site is bordered by Rue Des Etoiles Road to the north; Gauthiers' Rental (Pac Van) to the south; residential subdivision to the east; Southeaster Freight Lines and Don's Specialty Meats to the west. The site is in Section 94, Township 8 South, Range 4 East and can be accessed off Rue de Cotton Road from the Interstate 49 Service Road.

Lafayette Parish is located in the south west part of Louisiana and is in the Western Gulf Coast Plain Ecoregion of Louisiana (Figure 1) and falls within the *Gulf Coast Marsh Major Land Resource Area* (MLRA 134) (NRCS 2006).

3.2 Geology

The Site is located within the Lafayette Loess Plains region of the Western Gulf Coastal Plain. Soils include Quaternary-age deltaic sands, silts, clays and gravel that are capped with a loess veneer associated with the Mississippi Valley. The specific soil types that underly the Site are discussed below.

3.3 Hydrology

The site slopes gradually towards the middle and is well-drained. The primary hydrology feature is a ephemeral stream that originates on the west side of the property at the end of Rue de Cotton Road. The stream is connected to the municipal drainage system which runs along Rue de Cotton Road. The stream flows northward following the contour of the property. Two other man-made drainage ditches run along the southern and southeastern edges of the property. Surface runoff from the southern part of the property flows down-hill towards the southeast corner and into a deeply-incised coulee that runs south of the property.

The Site is in the Mississippi River Basin. The Hydrologic Unit Code (HUC) for this area is 08080103. The USFWS National Wetland Inventory (NWI) Map depicts no wetlands or WOUS on the site.

According the FEMA National Flood Insurance Hazard website, the Site is located within DFIRM Zone X and ground elevation ranges from 17 to 21 feet above mean sea level (FEMA https://hazards-fema.maps.arcgis.com).

3.4 Soils

The soil series located within Lafayette Parish are described by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service on the Web Soil Survey (http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx). According to the Web Soil

Survey, the Site is underlain primarily by Memphis silt loam (MbA) and a small area of Frost silt loam (FrA).

Figures 2 and 3 shows the distribution of the soil series across the Site and surrounding area.

3.4.1 Memphis silt loam

The Memphis series consists of very deep, moderately permeable, well drained soils that formed in loess deposits more than 48 inches (121.92 cm) in thickness. These soils are on terraces and uplands of the Coastal Plain. Slopes range from 0 to 50 percent. The upper three horizons of a representative profile of a Calhoun Silt Loam soil consist of:

- 0 to 10 cm (0 to 4 in); dark grayish brown (10YR 4/2) silt loam; weak fine and medium granular structure
- 10 to 23 cm (4 to 9 in); brown (10YR 4/3) silt loam; weak medium and fine granular structure
- 23 to 58 cm (9 to 23 in); brown (7.5YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure

Memphis silt loam is included on the 2014 National Hydric Soils List for Lafayette Parish (NRCS 2018).

3.4.2 Frost silt loam

The Frost series consists of very deep, poorly drained, slowly permeable soils that formed in silty alluvium or loess. These soils are in broad depressional areas and in drainageways on late Pleistocene age terraces. Slope is dominantly less than 0.5 percent, but it ranges to 1 percent along narrow drainageways.

- 0 to 6 inches; grayish brown (10YR 5/2) silt loam; weak medium granular structure
- 6 to 10 inches; grayish brown (10YR 5/2) silt loam; weak medium granular structure
- 10 to 22 inches; light brownish gray (10YR 6/2) and gray (10YR 6/1) silt loam; weak medium subangular blocky structure

Frost silt loam is included on the 2014 National Hydric Soils List for Lafayette Parish (NRCS 2018).

3.5 Vegetation and Land Use

The site is located off Rue de Cotton road, and directly east of Don’s Specialty Meats (4120 NE Evangeline Throughway). The site is primary used as agricultural land, where herbaceous plants are grown for hay. Based on a review of historical topographic maps, the site appears to have been agricultural land since at least the 1930s.

SECTION 4

Site Visit Results

4.1 Wetlands and WOUS

Field investigations identified one potential jurisdictional wetland and a non-wetland Water of the U.S. on the Site. The Preliminary Jurisdictional Wetland Map (Appendix A, Figures 3 and 4) shows the non-wetland waters identified during this investigation.

4.1.1 Wetland Habitat Descriptions

One potentially jurisdictional wetland (W1) met the three (3) mandatory wetland criteria. The following is a description of the wetland identified:

> **W1** is palustrine emergent (PEM) wetland that has formed adjacent to and at the end of an ephemeral stream (S1) that crosses the site. The wetland data points include DP5, and DP6 and dominant vegetation consists of mostly FAC species including: Kidney weed (*Dichondra micrantha* - FAC), Creeping buttercup (*Ranunculus repens* - FAC), Curly dock (*Rumex crispus* - FAC), Annual rye grass (*Festuca perennis* - FAC), Brazilian Vervain (*Verbena brasiliensis* - FAC), and Beaked cornsald (*Valerianella radiata* - FAC).

- Primary wetland hydrology indicators present include surface water, high water table, saturation, and watermarks. Secondary indicators include drainage patterns, and geomorphic position.
- The primary hydric soil indicator includes dark surfaces.

4.1.2 Non-wetland Waters of the U.S. Descriptions

The following are descriptions of the potentially jurisdictional non-wetland waters (ditches, streams, etc.) on the Site:

- **S1** is an ephemeral stream that originates on the west side of the property at the end of Rue de Cotton Road. The stream is connected to the municipal drainage system which runs along Rue de Cotton Road. Based on the odor and discoloration of the water, the drainage system appears to convey wastewater from the businesses along Interstate 49. The stream itself was overgrown with senesced vegetation at the time of the site visit and standing water was observed. S1 is approximately 850 feet long and mean high water appeared to be approximately 6-12 inches based on the water line visible. A small drain also included as part of the S1 drainage system flows north to south into the main S1 channel. It is approximately 250 feet long and appears to capture much of the surface runoff from the northern most field and hydrologic movement appears to be southward. S1 forms W1 at the base of the slight hill.

4.2 Upland Feature Descriptions

The site is a typical hay field covered with a variety of herbaceous species with dense forested tree lines bordering the perimeter. The upland data points include DP1, DP2, DP3, DP4, DP7,

DP8, and DP9. Dominant vegetation consists of mostly FAC species and typical species found throughout the upland parts of the site include: Bermuda grass (*Cynodon dactylon*), Annual rye grass (*Festuca perennis*), Little bluestem (*Schizachyrium scoparium*), Butterweed (*Packera glabella*), Wild geranium (*Geranium pretense*), Beaked cornsalad (*Valerianella radiata*) and muscadine (*Vitis rotundifolia*). The dominant trees and shrubs found in the forested area include: water oak (*Quercus nigra*), sweet pecan (*Carya illinoinensis*) and Chinese privet (*Ligustrum sinense*) (see Appendix A, Figures 3 and 4).

SECTION 5

Conclusion

This report summarizes the results of the wetland delineation conducted in February 2020 on an approximately 35-acre site in Carencro, Lafayette Parish, Louisiana. This report identifies one 0.33-acre potential jurisdictional wetland, 732 linear feet of non-wetland Waters of the U.S., and 1,303 linear feet of non-jurisdictional drainage ditches.

Wetlands and watercourses were delineated in accordance with the USACE Wetland Delineation Manual (USACE Environmental Laboratory 1987) and Interim Regional Supplement of the Corps of Engineers Wetlands Delineation Manual: Atlantic and Gulf Coast Region (USACE 2010). These features were described based on field assessments and reviews of readily available data, including NWI maps, NRCS soil surveys, 7.5-minute USGS topographic quadrangles maps, and USGS NHD data.

The USACE, under the authority of Section 404 of the Clean Water Act and of Section 10 of the Rivers and Harbor Act, has the authority to make the final determination of the location and extent of jurisdictional wetlands and navigable waters for this project area, respectively. This report represents the opinion of the Chenier investigators and should be considered preliminary until final concurrence is obtained from the USACE New Orleans District.

Responses to Specific Questions Provided in Solicitation

1. Identify any bodies of water on or abutting the site and identify the authority with jurisdiction over them.

Response: A unnamed stream (coulee) borders the southeast corner of the site (See Figure 2). This stream will fall under the jurisdiction of the USACE under the Clean Water Act.

2. Do wetlands and/or other waterways exist on or near the site? a. If yes, provide map and shapefile.

Response: Yes. Approximately 0.33 acres of potentially-jurisdictional emergent wetlands exist on the site. See Figure 3 and 4. A shapefile is provided with this submittal.

3. If wetlands are present, has a Section 404 Permit Application been submitted to USACE? a. If yes, please provide a copy of the Permit application

Response: According to the USACE, no jurisdictional determination has been issued for the site. A jurisdictional determination would be required prior to issuing a Section 404 permit on the site.

4. If wetlands are present, has the Section 404 Permit been received from USACE? a. If yes, please provide a copy of the approved Permit.

Response: see #3

5. If wetlands are present, have all wetlands on the site been mitigated? a. If yes, provide document showing signed agreement with wetlands bank or other substation.

Response: see #3

SECTION 6

References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. *Classification of wetlands and deepwater habitats of the United States.* USFWS/OBS-79/31, U.S. Fish and Wildlife Service, Biological Services Program, 1979.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. *Classifications of wetlands and deepwater habitats of the United States.* Washington D.C.: U.S. Department of the Interior, U.S. Fish and Wildlife Service, 1979.

FEMA. Flood Map Service Center. https://msc.fema.gov/portal/ Accessed February 2020.

Godfrey, R.K, and J.W. Wooten. *Aquatic and wetland plants of the southeastern United States: Dicotyledons.* The Univeristy of Georgia Press, 1981.

Godfrey, R.K., and J.W. Wooten. *Aquatic and Wetland Plants of the Southeastern United States: Monocotyledons.* The University of Georgia Press, 1980. https://gulfcoast.harc.edu/Biodiversity/Ecoregions/MississippiAlluvialSoutheastUSCoastalPlains/tabid/2250/Default.html. Accessed November 2018.

Munsell. "Munsell soil color charts." Baltimore, Maryland: Kollmorgen Corporation, 1994.

Natural Resources Conversation Service. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed August 2019.

Natural Resource Conservation Service. "National Hydric Soils List." March 2014. http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.

Natural Resources Conservation Service, U.S. Department of Agriculture. *Official Soil Series Descriptions.* n.d. https://soilseries.sc.egov.usda.gov/osdname.asp Accessed August 2019.

Reed, P.B. *National list of plant species that occur in wetlands.* U.S. Fish and Wildlife Service in cooperation with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and the U.S. Soil Conservation Service, 1988.

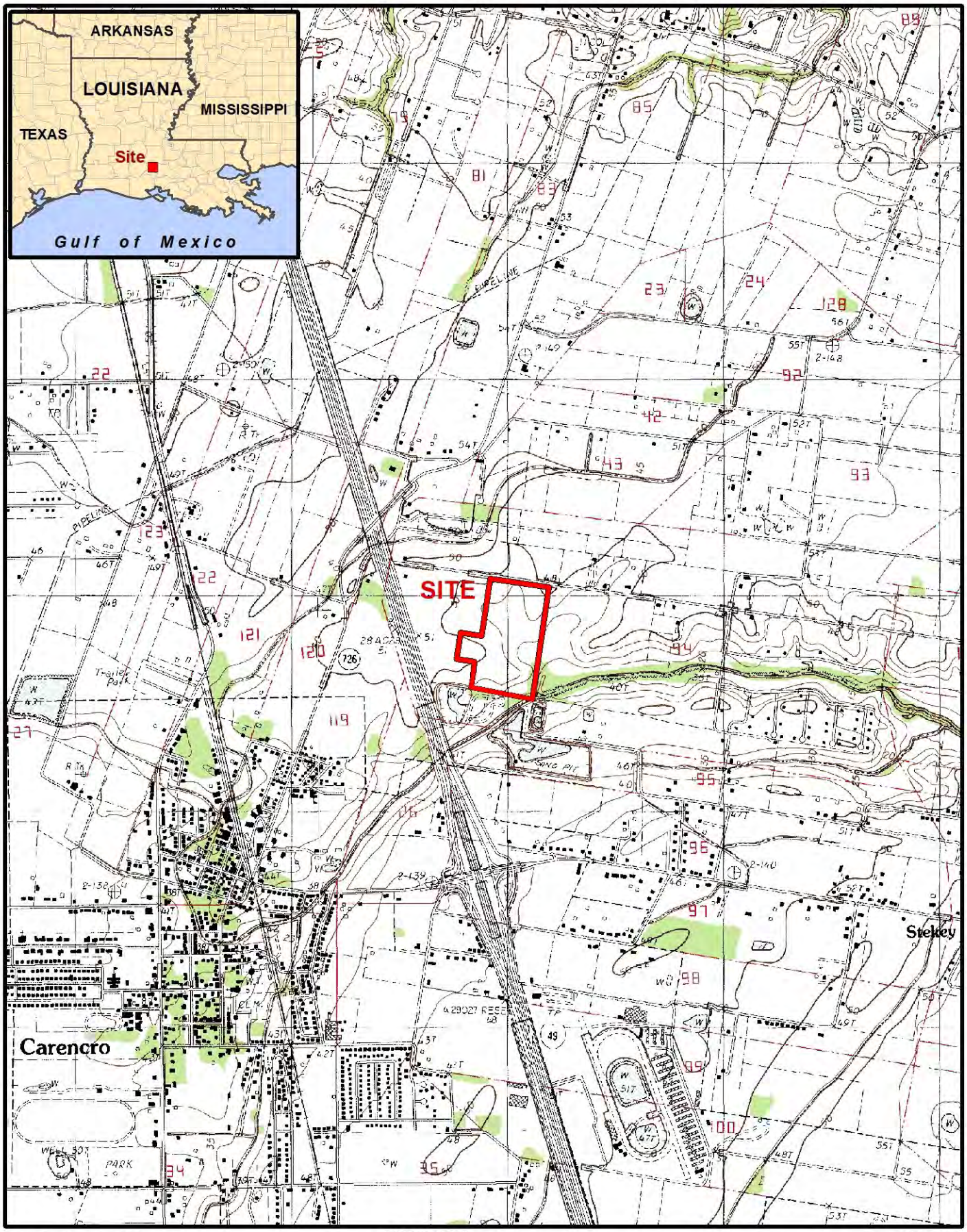
U.S. Army Corps of Engineers Environmental Laboratory. *Corps of Engineers Wetlands Delineation Manual.* Y-87-1, Vicksburg, Mississippi: U.S. Army Corps of Engineers Waterways Experiement Station, 1987.

U.S. Army Corps of Engineers. *Regional Supplement of the Corps of Engineers Wetlands Delineation Manual: Atlantic and Gulf Coast Region (Version 2.0).* ERDC/EL TR-10-20, Vicksburg, Mississippi: U.S. Army Corps of Engineers Engineer Research and Development Center, 2010.

U.S. Geological Survey. National Hydrographic Dataset. https://www.usgs.gov/core-science-systems/ngp/national-hydrography/national-hydrography-dataset?qt-science_support_page_related_con=0#qt-science_support_page_related_con. Accessed August 2019.

U.S. Geological Survey. 1997. *Hydrologic Unit Map-1974*. State of Louisiana. U.S. Geological Survey, 1977.

Appendix A
Figures



Map Scale: 1:24,000
1 Inch = 2,000 Feet

0 500 1,000 2,000 Feet

N

FIGURE 1
Vicinity Map

Routine Wetland Delineation
Cenac Site
Lafayette Parish, Louisiana

Date: 03/03/2020
Map ID: CMS2020-001

Source: State of Louisiana; Projection: UTM Z15N, NAD 83; 1:24,000 USGS Quadrangle Map

Chenier Environmental Consulting, LLC

LEGEND

Project Area

USGS NHD Stream

FIGURE 2
Existing Conditions Map

Routine Wetland Delineation
Cenac Site
Lafayette Parish, Louisiana

Map Scale: 1:12,000
1 Inch = 1,000 Feet

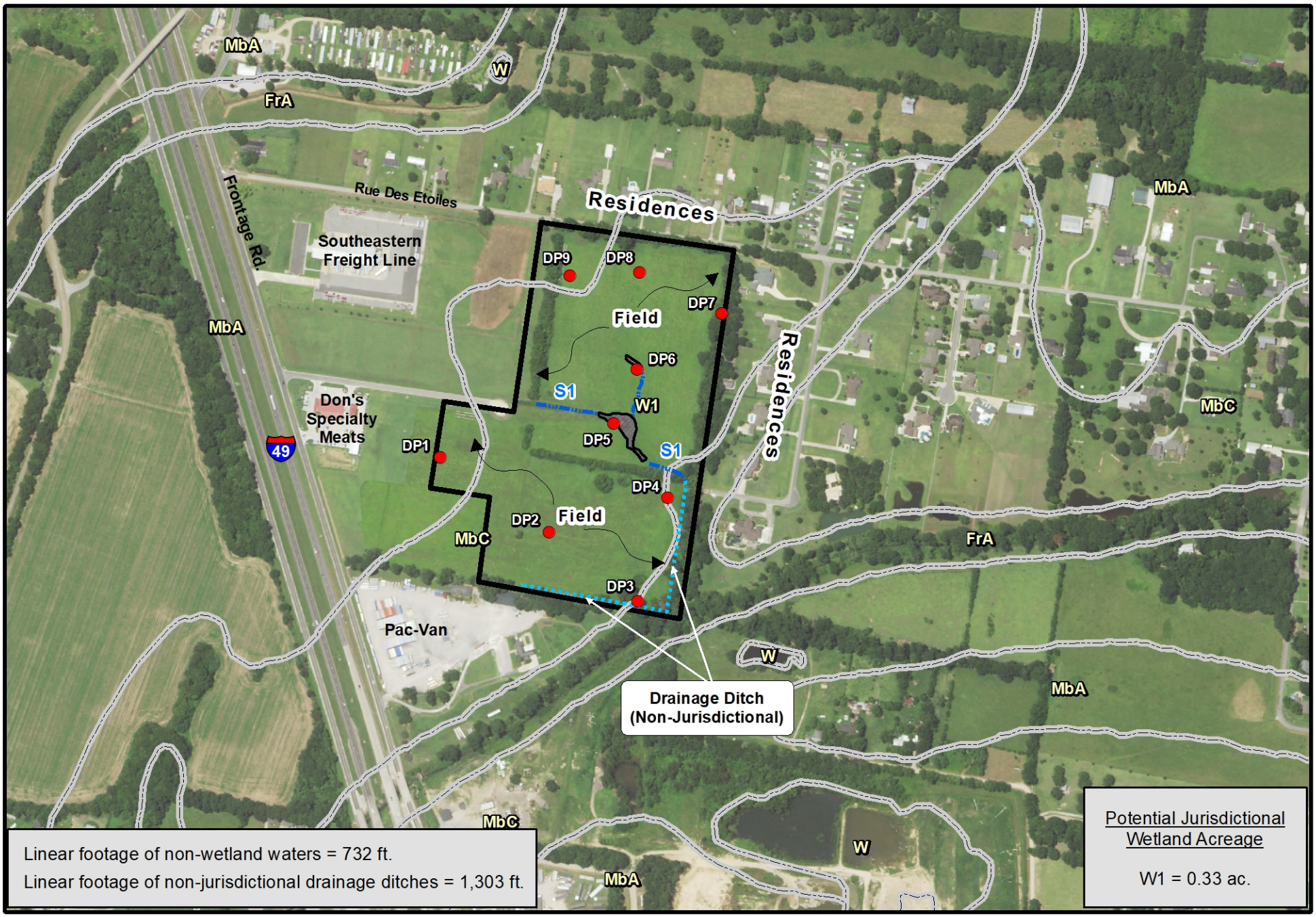
0 250 500 1,000 Feet

N

Date: 03/03/2020
Map ID: CMS2020-002

Chenier Environmental Consulting, LLC

Source: State of Louisiana, Lafayette Parish; Projection: UTM Z15N, NAD 83; 2019 NAIP Imagery



LEGEND

- Observation Point
- Non-Wetland Waters
- Potential Jurisdictional Wetlands
- Project Area
- NRCS Soils (SSURGO)

FIGURE 3
Preliminary Jurisdictional Wetlands Map
Routine Wetland Delineation
Cenac Site
Lafayette Parish, Louisiana

Map Scale: 1:7,200
1 Inch = 600 Feet

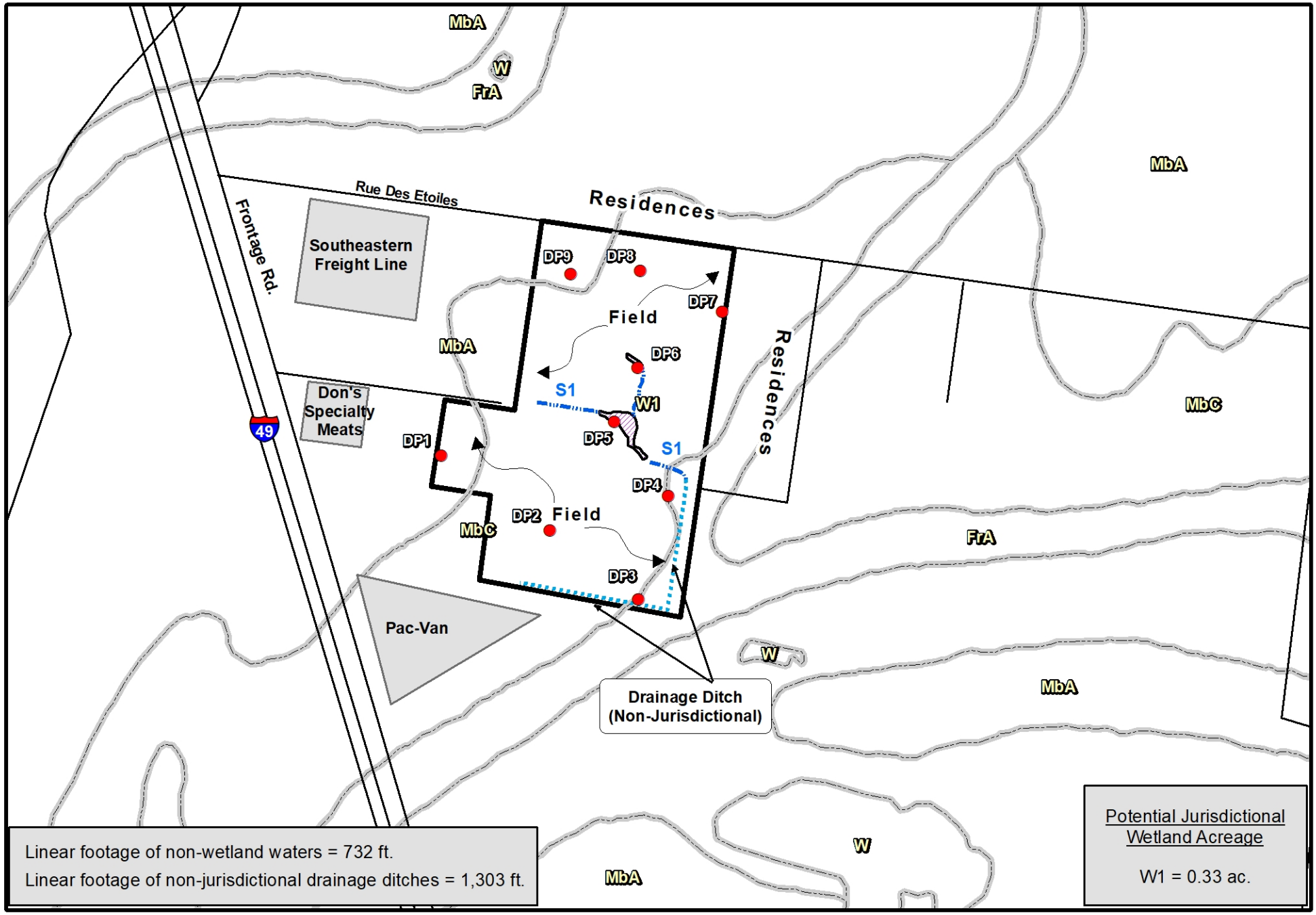
0 150 300 600 Feet

N

Date: 08/31/2020
Map ID: CMS2020-003b

Chenier Environmental Consulting, LLC

Source: State of Louisiana, Lafayette Parish; Projection: UTM Z15N, NAD 83; 2019 NAIP Imagery



Linear footage of non-wetland waters = 732 ft.

Linear footage of non-jurisdictional drainage ditches = 1,303 ft.

LEGEND

- Observation Point
- Non-Wetland Waters
- Potential Jurisdictional Wetlands
- Project Area
- NRCS Soils (SSURGO)

FIGURE 4
Preliminary Jurisdictional Wetlands Map
Routine Wetland Delineation
Cenac Site
Lafayette Parish, Louisiana

Map Scale: 1:7,200
1 Inch = 600 Feet

0 150 300 600 Feet

N

Date: 08/31/2020
Map ID: CMS2020-004b

Chenier Environmental Consulting, LLC

Source: State of Louisiana, Lafayette Parish; Projection: UTM Z15N, NAD 83

Appendix B
U.S. Army Corps of Engineers Wetland Field Data Sheets

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP1

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Terrace Local relief (concave, convex, none): None Slope (%): 0-1

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'54.61"N Long: 92° 2'7.04"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 0 to 1 percent slopes (MbA) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the furthest west portion of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Area appears to be a well-drained with hydrological movement to the east, towards the tree line.

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

Sampling Point DP1

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Festuca perennis	60	Y	FAC
2. Valerianella radiata	10	N	FAC
3. Rumex crispus	10	N	FAC
4. Ranunculus repens	5	N	FAC
5. Erigeron philadelphicus	5	N	FAC
6. Solidago canadensis	5	N	FAC
7. Verbena brasiliensis	5	N	FAC
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

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

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
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: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	100	3	300
FACU species		4	
UPL species		5	
Column Totals:	100		300 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 11 and 12

SOIL

Sampling Point: DP1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					Silt	Dark brown
6-16	10YR 4/3	100					Silt/ clay	Light brown

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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 Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP2

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Terrace Local relief (concave, convex, none): Concave Slope (%): 1-5

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'51.28"N Long: 92° 2'0.01"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slope (MbC) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the southcentral portion of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be greater than DP1 and the site appears well-drained with hydrological movement to the northeast, towards the tree line and east ditch.

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

Sampling Point DP2

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Cynodon dactylon	40	Y	FACU
2. Schizachyrium scoparium	25	Y	FACU
3. Verbena brasiliensis	10	N	FAC
4. Allium sp.	5	N	FAC
5. Solidago canadensis	10	N	FAC
6. Geranium pratense	5	N	FAC
7. Rosa multiflora	5	N	FACU
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

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

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	30	3	90
FACU species	70	4	280
UPL species		5	
Column Totals:	100		370 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 13 and 14

SOIL

Sampling Point: DP2

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Silt	Dark brown
3-6	10YR 3/3	100					Silt	
6-16	10YR 3/4	100					Silt/ clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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 Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP3

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Base of hillslope Local relief (concave, convex, none): None Slope (%): 0-1

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'48.09"N Long: 92° 1'55.38"W Datum: WGS84

Soil Map Unit Name: Frost silt loam, 0 to 1 percent slopes, occasionally flooded (FrA) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the southeast corner of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be less than DP2 and the site appears well-drained with hydrological movement to the south and east, towards the south and east ditches.

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

Sampling Point DP3

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Packera glabella	30	Y	OBL
2. Geranium pretense	25	Y	FAC
3. Viola sororia	15	N	FAC
4. Rosa multiflora	15	N	FACU
5. Galium aparine	5	N	FACU
6. Rumex crispus	5	N	FAC
7. Trifolium repens	5	N	FAC
8. Festuca perennis	5	N	FAC
9.			
10.			
11.			
12.			
	105	= Total Cover	

50 % of total cover: 52.5 20 % of total cover: 21

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

50 % of total cover: _____ 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	1	30
FACW species		2	
FAC species	55	3	165
FACU species	20	4	80
UPL species		5	
Column Totals:	105		275 (B)

Prevalence Index = B/A = 2.62

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 15 and 16

SOIL

Sampling Point: DP3

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/3	100					Silt	Dark brown
3-9	10YR 3/4	100					Silt	Light brown
9-16	10YR 2/2	100					Silt	Black

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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 Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP4

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

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

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'52.79"N Long: 92° 1'53.78"W Datum: WGS84

Soil Map Unit Name: Frost silt loam, 0 to 1 percent slopes, occasionally flooded (FrA) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the southeast edge of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be less than DP2 but similar to DP3. The site appears well-drained with hydrological movement to the east, towards the east ditch.

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

Sampling Point DP4

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Valerianella radiata	65	Y	FAC
2. Trifolium repens	25	N	FAC
3. Ranunculus repens	5	N	FAC
4. Festuca perennis	15	N	FAC
5. Verbena brasiliensis	5	N	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115	= Total Cover	

50 % of total cover: 57.5 20 % of total cover: 23

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

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

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	115	3	345
FACU species		4	
UPL species		5	
Column Totals:	115		345 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 17 and 18

SOIL

Sampling Point: DP4

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Silt	Dark brown
3-11	10YR 3/3	100					Silt	Lighter Brown
11-16	10YR 2/2	100					Silt	Dark Brown/ Almost Black

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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 Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP5

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Bottom of hillslope Local relief (concave, convex, none): Concave Slope (%): 1-5

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'56.23"N Long: 92° 1'56.58"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slope (MbC) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes 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:
The sample point is located on the edge of an ephemeral stream within a agricultural field that has been recently mowed.

Sample point is located in the central portion of the site.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- X Saturation (A3)
- X 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 on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- X Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- X 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): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
Hydrology indicators observed. Site is located at the base of a hillslope, beginning at an ephemeral stream. It appears, hydrological movement is to the southeast. Data point was taken within 5 feet of surface water.

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

Sampling Point DP5

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Ranunculus repens	50	Y	FAC
2. Rumex crispus	30	N	FAC
3. Geranium pretense	10	N	FAC
4. Festuca perennis	5	N	FAC
5. Galium aparine	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

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

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

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

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	95	3	285
FACU species	5	4	20
UPL species		5	
Column Totals:	100		(B)

Prevalence Index = B/A = 3.05

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 19 and 20

SOIL

Sampling Point: DP5

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	95	10YR 4/3	5	D	M	Silt	Brown with reddish streaking
3-7	10YR 2/2	100					Silt	Dark Brown
7-16	10YR 3/2	100					Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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)
_X_ Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (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]:

_X_ 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:

Project/Site: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP6

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Terrace Local relief (concave, convex, none): Concave Slope (%): 1-5

Subregion (LRR or MLRA): MLRA 134 Lat: 30°19'58.61"N Long: 92° 1'55.34"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slope (MbC) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes 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:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the central portion of the site.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- X Saturation (A3)
- X 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 on 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)
- X Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- X 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): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
Hydrology indicators observed. Site is located at the base of a hillslope, beginning at an ephemeral stream. It appears, hydrological movement is to the south and connects to DP5 site. Data point was taken within 5 feet of surface water.

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

Sampling Point DP6

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Dichondra micrantha	40	Y	FAC
2. Allium sp.	5	N	FAC
3. Verbena brasiliensis	5	N	FAC
4. Festuca perennis	35	Y	FAC
5. Rumex crispus	5	N	FAC
6. Solidago canadensis	5	N	FAC
7. Valerianella radiata	5	N	FAC
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

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

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

50 % of total cover: _____ 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	100	3	300
FACU species		4	
UPL species		5	
Column Totals:	100		300 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 21 and 22

SOIL

Sampling Point: DP6

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 %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Silt	Dark brown/ moist
5-16	10YR 3/3	100					Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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)
_X_ Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP7

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Terrace Local relief (concave, convex, none): Concave Slope (%): 1-5

Subregion (LRR or MLRA): MLRA 134 Lat: 30°20'1.14"N Long: 92° 1'50.85"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slope (MbC) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located on the border of an agricultural field that has been recently mowed.

Sample point is located in the northeast corner of the site, inside the tree line.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be greater than DP5 and DP6. The site appears well-drained with hydrological movement to the south, towards the east ditch.

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

Sampling Point DP7

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus nigra	50	Y	FAC
2. Ligustrum japonicum	20	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	70	= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Ligustrum japonicum	60	Y	FAC
2. Quercus nigra	10	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	70	= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Galium aparine	5	N	FACU
2. Rosa multiflora	5	N	FAC
3. Quercus nigra	15	N	FAC
4. Ligustrum japonicum	25	Y	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50	= Total Cover	

50 % of total cover: 25 20 % of total cover: 10

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Vitis rotundifolia	25	Y	FAC
2.			
3.			
4.			
5.			
	25	= Total Cover	

50 % of total cover: 12.5 20 % of total cover: 5

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		1	
FACW species		2	
FAC species	210	3	630
FACU species	5	4	20
UPL species		5	
Column Totals:	215		650 (B)

Prevalence Index = B/A = 3.02

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 23 and 24

SOIL

Sampling Point: DP7

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Silt loam	Dark brown/ moist
3-6	10YR 4/2	100					Silt loam	
6-16	10YR 4/3	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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 Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP8

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Terrace Local relief (concave, convex, none): Concave Slope (%): 1-5

Subregion (LRR or MLRA): MLRA 134 Lat: 30°20'3.00"N Long: 92° 1'55.19"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 1 to 5 percent slope (MbC) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the northcentral portion of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be greater than DP5 and DP6, but similar to DP1. The site appears well-drained with hydrological movement to the north, towards the north ditch.

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

Sampling Point DP8

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Festuca perennis	70	Y	FAC
2. Trifolium repens	10	N	FAC
3. Valerianella radiata	5	N	FAC
4. Solidago canadensis	2	N	FAC
5. Galium aparine	5	N	FACU
6. Ranunculus repens	3	N	FAC
7. Allium sp.	2	N	FAC
8. Rumex crispus	3	N	FAC
9. Daucus carota	2	N	UPL
10. Erigeron philadelphicus	3	N	FAC
11.			
12.			
	105	= Total Cover	

50 % of total cover: 52.5 20 % of total cover: 21

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

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

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	98	3	294
FACU species	5	4	20
UPL species	2	5	10
Column Totals:	105		324 (B)

Prevalence Index = B/A = 3.08

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 25 and 26

SOIL

Sampling Point: DP8

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 %	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 3/2	100					Silt	
5-9	10YR 3/2	100					Silt/ clay	
9-16	10YR 3/3	100					Silt/ clay	Streaking

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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)
_X_ Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
_X_ 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: One Acadiana/ Cenac Park City/County: Carencro/ Lafayette Sampling Date: 02/14/2020

Applicant/Owner: One Acadiana State: Louisiana Sampling Point: DP9

Investigator(s): Aaron Bass; Donnie Day Section, Township, Range: N/A

Landform (hillslope, terrace, etc.) Top of hillslope Local relief (concave, convex, none): None Slope (%): 0-1

Subregion (LRR or MLRA): MLRA 134 Lat: 30°20'2.90"N Long: 92° 1'58.84"W Datum: WGS84

Soil Map Unit Name: Memphis silt loam, 0 to 1 percent slopes (MbA) NWI Classification: N/A

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
The sample point is located within an agricultural field that has been recently mowed.

Sample point is located in the northwest corner of the site.

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 on 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:
USGS 7.5-minute topographic map, aerial photographs

Remarks:
No hydrology indicators observed. Elevation appears to be greater than DP5 and DP6, but similar to DP1 and DP8. The site appears well-drained with hydrological movement to the southeast, towards DP6 and the east ditch.

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

Sampling Point DP9

Tree Stratum (Plot size: 20 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Sapling/Shrub Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

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

Herb Stratum (Plot size: 20 ft radius)			
1. Geranium pretense	65	Y	FAC
2. Trifolium repens	15	N	FAC
3. Ranunculus repens	2	N	FAC
4. Galium aparine	3	N	FACU
5. Erigeron philadelphicus	2	N	FAC
6. Rumex crispus	5	N	FAC
7. Festuca perennis	10	N	FAC
8.			
9.			
10.			
11.			
12.			
	102	= Total Cover	

50 % of total cover: 51 20 % of total cover: 20.4

Woody Vine Stratum (Plot size: 20 ft radius)			
1. Not applicable			
2.			
3.			
4.			
5.			
		= Total Cover	

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

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		1	
FACW species		2	
FAC species	99	3	297
FACU species	3	4	12
UPL species		5	
Column Totals:	102		309 (B)

Prevalence Index = B/A = 3.03

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

X 3 – Prevalence Test 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 Vegetation Strata:

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

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

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

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

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Photographs 27 and 28

SOIL

Sampling Point: DP9

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 %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Silt	Dark brown/ moist
5-11	10YR 4/3	100					Silt	
11-16	10YR 4/4	100					Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___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)
_X_ Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Suface (S9) **(LRR S, T, U)**
___Loamy Gleyed Matrix (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:

Appendix C
Photographic Documentation

1. Entrance to site facing east down Rue de Cotton Road

2. Southwestern part of site

3. Storm drain adjacent to Rue de Cotton Road

4. Overgrown part of S1 at the end of Rue de Cotton Road

5. Landscape view of north side of site

6. Northerly view along the west site boundary

7. Southerly view across the middle of the site from the north boundary

8. Drainage ditch along the east edge of the site

9. Overview of the south side of the site

10. Ditch along the southern edge of the site

11. DP1 landscape view

12. DP1 soils

13. DP2 landscape view

14. DP2 soils

15. DP3 landscape view

16. DP3 soils

17. DP4 landscape view

18. DP4 soils

19. DP5 landscape view

20. DP5 soils

21. DP6 landscape view

22. DP6 soils

23. DP7

24. DP7 soils

25. DP8 landscape view

26. DP8 soils

27. DP9 landscape view

28. DP9 soils