



Exhibit EE. Rebecca Development Park North Wetlands Delineation Report



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WETLAND DELINEATION REPORT U.S. ARMY CORPS OF ENGINEERS

Rebecca Development Park North Wetlands Delineation Report

Located in

Terrebonne Parish, Louisiana

Prepared for

TERREBONNE ECONOMIC DEVELOPMENT AUTHORITY

Prepared by

MORRIS P. HEBERT, INC. ENVIRONMENTAL SERVICES

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Acronyms

CWA Clean Water Act

EPA Environmental Protection Agency

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Maps

GPS Global Positioning System

MPH Morris P. Hebert, Inc.

NRCS Natural Resources Conservation Service

NWI National Wetland Inventory

OHWM Ordinary high water mark

RHA Rivers and Harbor Act

TEDA Terrebonne Economic Development Authority

TNW Traditional Navigable Water

U.S. United States

USACE U.S. Army Corps of Engineers

USDA U.S. Department of Agriculture

USGS U.S. Geological Survey

USFWS U.S. Fish and Wildlife Service



1 Introduction

Morris P. Hebert, Inc. (MPH) was authorized by Terrebonne Economic Development Authority (TEDA) to delineate wetlands, waterbodies, and other special aquatic sites for the proposed Rebecca Plantation North Site development in Terrebonne Parish, Louisiana. For the purposes of this report the ±713.42-acre corridor associated with the Rebecca Plantation North Site will be referred to as "Survey Area". The Survey Area is located at the intersection of United States (U.S.) Highway 90 and Louisiana Highway 311 (Appendix A).

This Wetland Delineation Report contains a delineation of all resources that potentially fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE), as well as other non-jurisdictional resources.

November 28, 2018 MPH biologists delineated the Survey Area to determine:

- If potential jurisdictional wetlands exist within the Survey Area;
- If "Waters of the U.S." exist as defined by Section 404 of the Clean Water Act (CWA);
- If "Waters of the U.S." exist as defined by Section 10 of the Rivers and Harbors Act (RHA); and
- Approximate boundaries of potential jurisdictional wetlands within the Survey Area.

The results of the assessment are summarized in this report.



2 Methodology

A routine wetland delineation of the Survey Area was conducted November 28, 2018. MPH biologists performed all wetland delineation surveys in accordance with the USACE Wetland Delineation Manual (Environmental Laboratory 1987) in conjunction with the Atlantic and Gulf Coastal Plain Regional Supplement to the USACE Wetland Delineation Manual (Version 2.0) (Environmental Laboratory 2010).

2.1 Desktop Review

MPH biologists accumulated data from the U.S. Department of Agriculture (USDA)-Natural Resource Conservation Service (NRCS) website for soil data in Terrebonne Parish, Louisiana and by reviewing various maps including Aerial Photography, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, and U.S. Geological Survey (USGS) Quadrangle maps. The data were used in developing an on-site delineation plan and identifying areas with high and low probability of wetlands within the Survey Area. The preliminary determination of hydric and/or non-hydric soils and soil types was obtained from the USDA Soil Survey Maps for Terrebonne Parish, Louisiana and from the *Hydric Soils of the United States* (National Technical Committee for Hydric Soils 2009). Aerial Photography, USGS Quadrangle maps and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were used to determine existing land usage and drainage patterns.

2.2 Wetlands

Wetlands are collectively defined by the USACE (Federal Register 1982) and the U.S. Environmental Protection Agency (EPA) (Federal Register 1980) as those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. An area is a wetland if it meets the wetland hydrology, hydrophytic vegetation, and hydric soil criteria established in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and Regional Supplements (Environmental Laboratory 2010).

MPH biologists delineated the Survey Area for the presence/absence of wetlands and completed Wetland Determination Data Forms (Atlantic and Gulf Coastal Plains Region) for upland and wetland observation plots within the Survey Area (Appendix B). The location of observation plots and wetlands within the Survey Area are depicted in the maps located in Appendix A.

2.2.1 <u>Vegetation</u>

Hydrophytic vegetation is defined as "the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present" (Environmental Laboratory 1987). As previously stated, hydrophytic vegetation is one of the three mandatory criteria for an area to be considered a wetland. Dominant vegetation was identified and categorized in accordance with the regional indicator status in the *National Wetland Plant List:* 2016 Update of Wetland Ratings (Lichvar 2016). The indicator status of a plant species is expressed in terms of the estimated probability of that species to occur in wetland conditions within a given region. Table 2-1 lists the plant indicator



status categories. A vegetative community would be determined to be hydrophytic if more than 50 percent of the dominant species present were facultative plants (FAC), facultative wetland plants (FACW), or obligate plants (OBL).

Table 2-1 Plant Indicator Status Categories

Indicator Category	Indicator Symbol	Frequency of Occurrence in Wetlands (percent)
Obligate Wetland Plants	OBL	Plants that occur almost always (estimated probability >99%) in wetlands under natural conditions, but which may also occur rarely (estimated probability <1%) in nonwetlands.
Facultative Wetland Plants	FACW	Plants that occur usually (estimated probability 67-99%) in wetlands, but also occurring in both wetlands and nonwetlands.
Facultative Plants	FAC	Plants with a similar likelihood (estimated probability of 33-67%) of occurring in both wetlands and non-wetlands.
Facultative Upland Plants	FACU	Plants that occur sometimes (estimated probability 1-33%) in wetlands, but occur more often (estimated probability 67-99%) in non-wetlands.
Obligate Upland Plants	UPL	Plants that occur rarely (estimated probability <1%) in wetlands, but almost always (>99% estimated probability) in nonwetlands.

2.2.2 <u>Hydrology</u>

Wetland hydrology includes all hydrologic characteristics of areas that are periodically inundated or have soils saturated within the upper 12 inches of the soil surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively (Environmental Laboratory 1987).

Wetland hydrology was determined to be present if a minimum of one primary wetland hydrology indicator was present, and/or through the presence of sufficient (two) secondary wetland hydrology indicators.

2.2.3 Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper stratum. In general, hydric soils are flooded, ponded, or saturated for a week or more during the growing season when soil temperatures are above 41 degrees Fahrenheit. The anaerobic conditions created by repeated or prolonged saturation or flooding result in



MPH Project Number 13295

permanent changes in soil color and chemistry, and are used to differentiate hydric from non-hydric soils (Environmental Laboratory 1987).

At each recorded observation plot, a pit up to 16-inches deep was excavated for evaluation. Using the *Munsell Soil Color Chart* (Munsell 2009), soils were surveyed for horizon profile, matrix, value, chroma, texture, and concretions.

Hydric soils were determined to be present if one significant hydric soil indicator was present. Background soils information of the Survey Area was obtained from the Terrebonne Parish Web Soil Survey prepared by the USDA – NRCS.

2.3 Waterbodies

Waterbodies in the vicinity of the Survey Area were identified on USGS quadrangle maps and aerial imagery. Section 328.4 (c) 1 of the Federal Register defines the lateral limit of jurisdiction in non-tidal waters as the Ordinary High Water Mark (OHWM), provided the jurisdiction is not extended by the presence of wetlands. Typical OHWM indicators include the existing water level, the presence of shelving, changes in soils, scouring, damage of terrestrial vegetation, or a distinct change between terrestrial and aquatic vegetation.

Typical waterbody classifications include: perennial streams, flowing continuously throughout the year due to the constant influence of groundwater; intermittent streams, which are described as having seasonal flow from groundwater input and flow in response to precipitation events; and ephemeral streams, which are waterways that convey water from precipitation events, but not groundwater.

2.4 Mapping

The surveying and global positioning system (GPS) equipment used to obtain positioning in the Survey Area consisted of a TrimbleTM GeoXH Differential Global Positioning System (DGPS) utilizing TerrasyncTM software. The DGPS data was post-processed using TrimbleTM Pathfinder Office software to achieve submeter accuracy. Observation plots and wetland boundaries were marked in the field using neon green flagging tape and pink flagging tape respectively. ArcGIS 10.1 was used for mapping the observation plots to depict wetland/non-wetland boundaries within the Survey Area (Appendix A).

2.5 Site Photographs

Site photographs were used to document site conditions as they existed during the field delineation. For each observation plot collected, photographs were taken of the vegetative community and soil profile. A photograph log of typical features encountered during the field delineation is provided in Appendix C.



3 Discussion and Results

3.1 Site Description

MPH biologists conducted the site investigation November 28, 2019. During the site investigations data were recorded at 11 observation plots throughout the Survey Area. The Survey Area is located entirely within an active sugar cane farm. The western side of the Survey Area is bordered with a drainage canal, Highway 90 is to the south, and Highway 311 marks the eastern boundary (Appendix A).

3.2 Vegetation Community Types

MPH biologists identified one major vegetation community within the Survey Area: herbaceous uplands. These uplands were located within fields of various stages of sugarcane production, farm roads, and equipment staging areas (Appendix A). Community identification was based on the presence/absence of wetland indicators with an emphasis on dominant vegetation. Table 3-1 provides a list of typical dominant species encountered and their indicator status by community type. The USACE Wetland Determination Data Forms (Appendix B) provide observation plot specific vegetative community species occurrences.

Table 3-1 Typical Dominant Species Observed Within Herbaceous Uplands

Stratum	Species	Indicator Status
Herb	Saccharum officinaris	FACU
Herb	Paspalum dilatatum	FAC
Herb	Cynodon dactylon	FACU
Herb	Sonchus asper	FACU
Herb	FACU	

3.3 Hydrology

The Survey Area generally slopes and drains westward towards the drainage ditch along the western boundary. Agricultural land use has resulted in a network of numerous small drainage ditches which efficiently remove surface water rapidly after rainfall. The Survey Area is located in the new Chacahoula – Gibson Drainage Basin project, and is anticipated to remain well drained.

3.4 Soils

Soils information was obtained from the Terrebonne Parish Web Soil Surveys prepared by the NRCS (NRCS 2018). *The Munsell Soil Color Chart* (Munsell 2009) was used for soil identification. Appendix C contains photographs of typical soil profiles taken from observation plots and the Wetland Determination Data Forms (Appendix B) contain detailed soil profile descriptions and hydric soil criteria for each observation plot.



The six soils mapped by NRCS within the Survey Area are Cancienne silt loam, 0 to 1 percent slopes (CbA), Cancienne silty clay loam, 0 to 1 percent slopes (CdA), Gramercy silty clay loam, 0 to 1 percent slopes (GaA), Gramercy-Cancienne silty clay loams, 0 to 1 percent slopes (GcA), Schriever clay, 0 to 1 percent slopes (ShA), and Schriever clay, 0 to 1 percent slopes, occasionally flooded (SrA). All six soil types mapped within the Survey Area are listed on the National Hydric Soils List for Terrebonne Parish, Louisiana (NRCS 2018).

3.4.1 Cancienne Series Soils

The Cancienne series consists of very deep, level to gently undulating, somewhat poorly drained mineral soils that are moderately slowly permeable. These soils formed in loamy and clayey alluvium. They are on high and intermediate positions on natural levees and deltaic fans of the Mississippi River and its distributaries. Slopes range from 0 to 3 percent (NRCS 2018).

3.4.1.1 Typical Profile

- 0 to 10 inches: 2.5YR 4/2 silt loam
- 10 to 16 inches: 2.5YR 4/2 silt loam (8 percent 10YR 4/6 and 2 percent 7.5YR 4/6 and 10YR 3/2 masses, 2 percent 2.5YR 6/1 depletions)

3.4.2 **Gramercy Series Soils**

The Gramercy series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey over fine-silty alluvium. These soils are on alluvial flats and on the lower parts of natural levees on the alluvial plain of the Mississippi River and its distributaries. Slope is dominantly less than 0.5 percent but ranges to 3 percent (NRCS 2018).

3.4.2.1 Typical Profile

- 0 to 6 inches: 10YR 3/1 silty clay
- 6 to 11 inches: 10YR 3/1 silty clay (3 percent 10YR 4/2 masses)
- 11 to 22 inches: 10YR 5/1 silty clay (10 percent 10YR 4/3 and 5 percent 7.5YR 4/4 masses)

3.4.3 Schriever Series Soils

The Schriever series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey alluvium. These soils are on the lower parts of natural levees and in backswamp positions on the lower Mississippi River alluvial plain. Slope is dominantly less than 1 percent but ranges up to 3 percent (NRCS 2018).

3.4.3.1 Typical Profile

- 0 to 4 inches: 10YR 4/1 clay (1 percent 10YR 4/4 masses)
- 4 to 15 inches: 10YR 5/1 clay (20 percent 7.5YR 4/4 masses)
- 15 to 23 inches: 2.5YR 5/1 clay (20 percent 10YR 4/4 and 1 percent 10YR 3/2 masses)



3.5 Wetlands

MPH biologists delineated the Survey Area for the presence/absence of wetlands (Appendix A). There were no areas identified within the Survey Area that possessed the three USACE criteria for wetlands (hydrophytic vegetation, wetland hydrology and hydric soils).

3.6 Waterbodies

MPH biologists delineated the Survey Area for the presence/absence of waterbodies which possessed an OHWM. There were 3 manmade ditches possessing an OHWM observed within the Survey Area totaling approximately 6.65 acres. The waters observed within the Survey Area consisted of routinely maintained manmade agricultural drainage ditches (Appendix A).



4 Conclusion

On November 28, 2018 MPH biologists delineated for wetlands, waterbodies, and other special aquatic sites within the Survey Area located in Terrebonne Parish, Louisiana. MPH biologists recorded data at 11 observation plots and documented no wetlands and 3 waters totaling approximately 6.65 acres.

This delineation report describes all wetland and waterbody resources that could potentially fall under the jurisdiction of the USACE. This report also contains detailed maps and tables for all resources delineated within the USACE – New Orleans District's jurisdictional boundary. While this report represents MPH's best professional judgment, TEDA is advised that the USACE and the EPA have final discretionary authority over all jurisdictional determinations of "Waters of the U.S.", including wetlands, under Section 404 of the CWA.



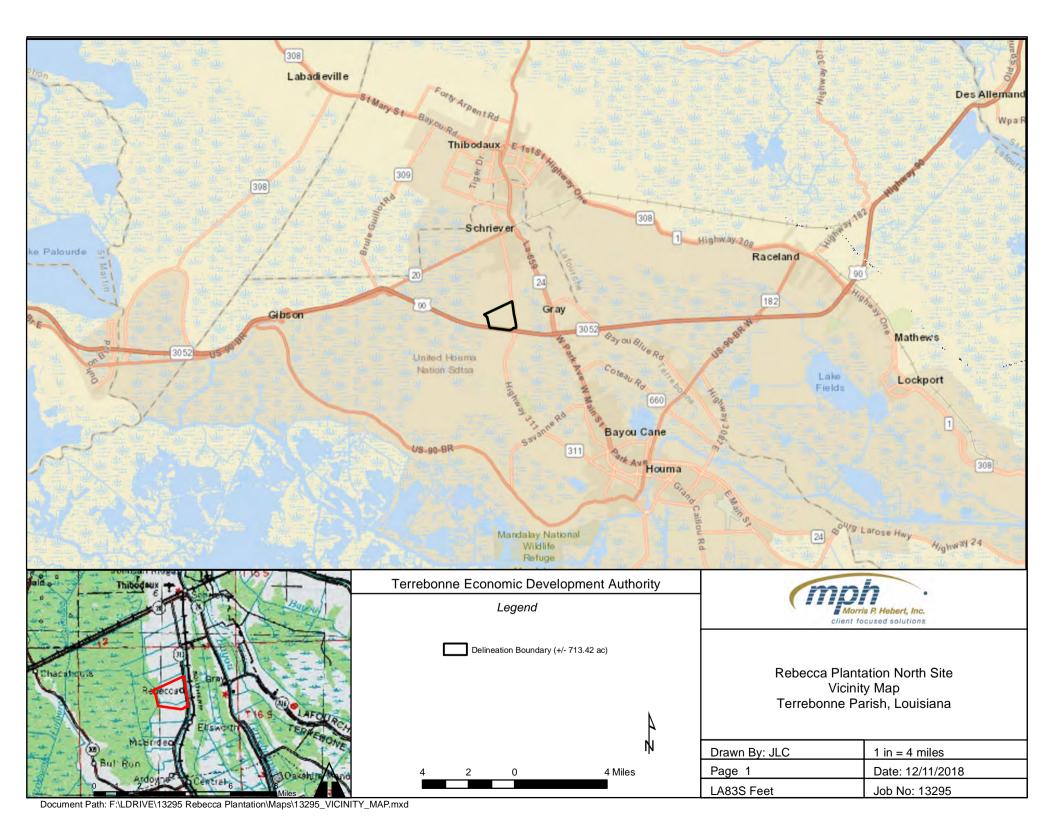
5 References

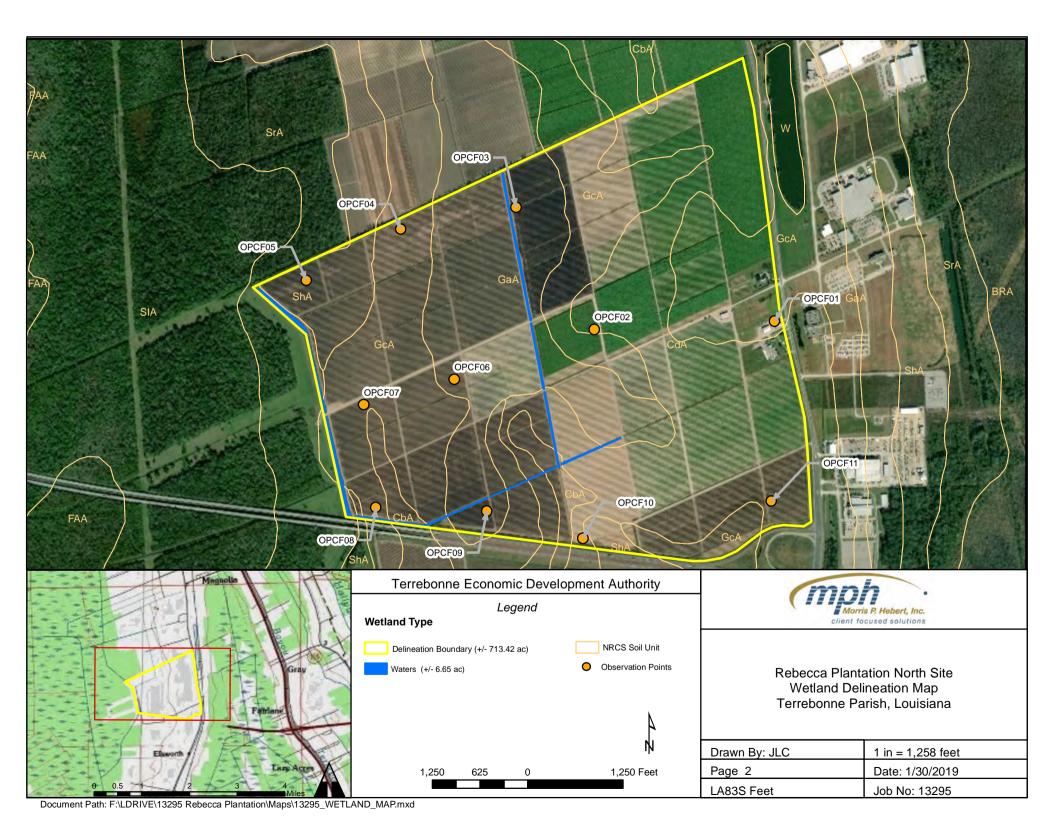
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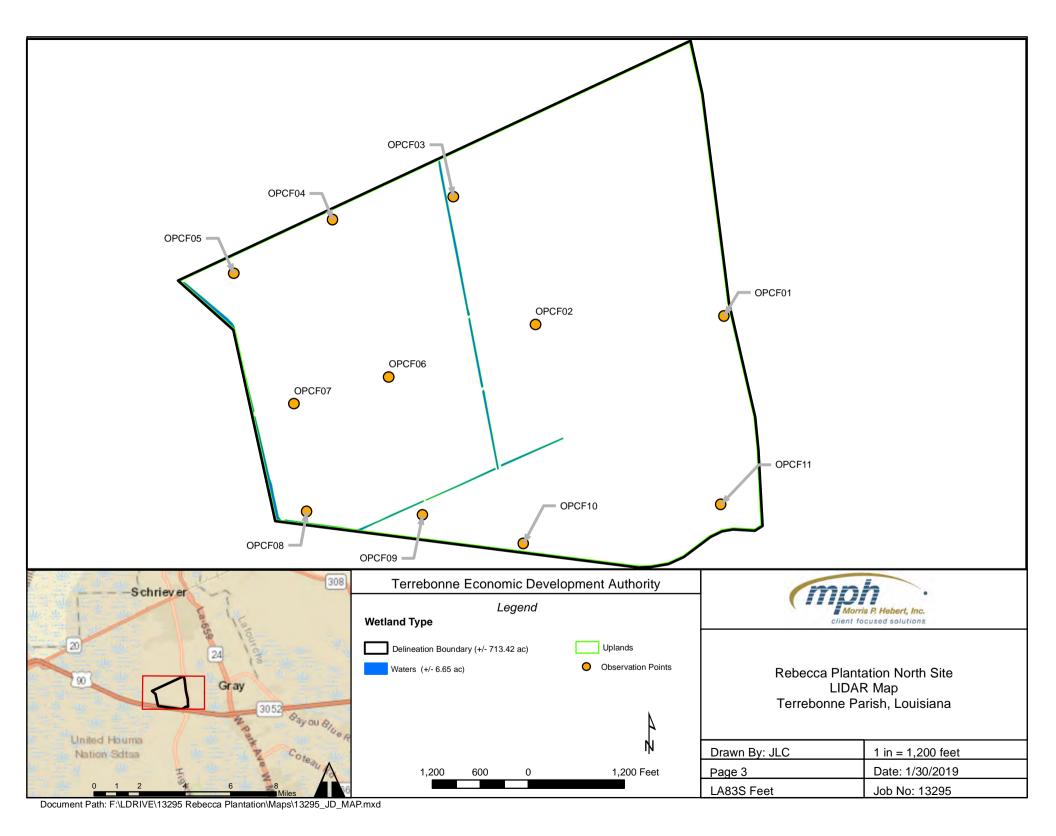


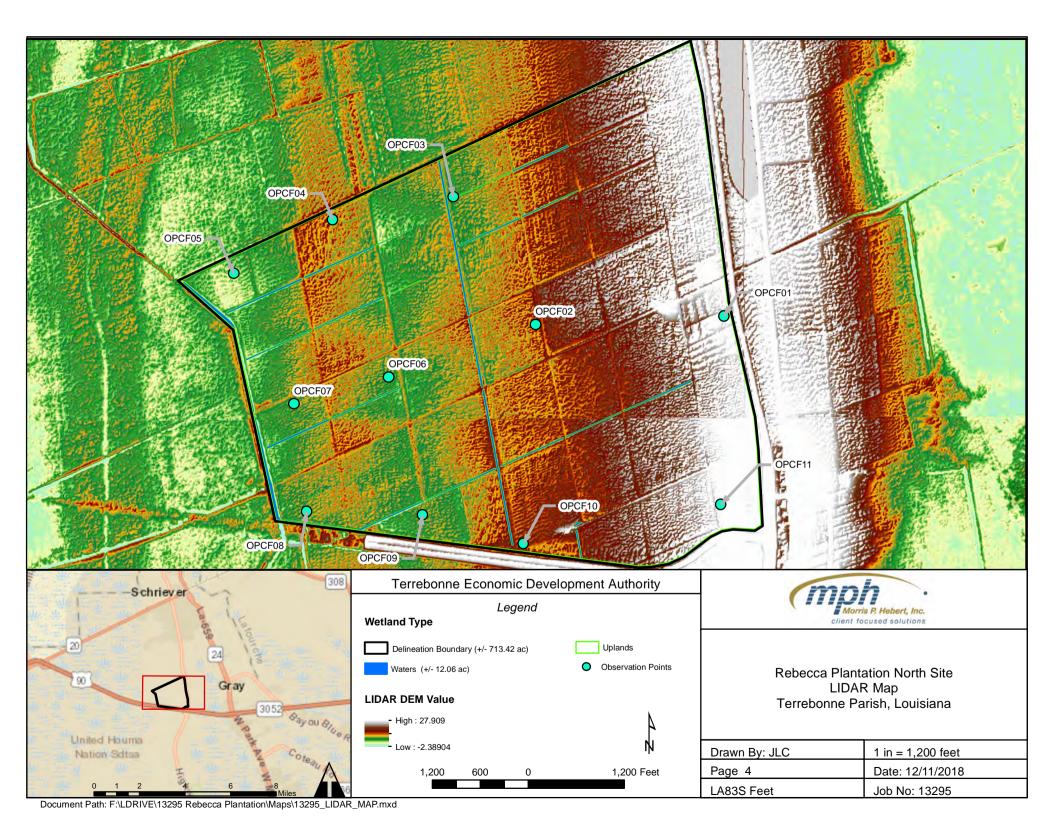
Appendix A Maps

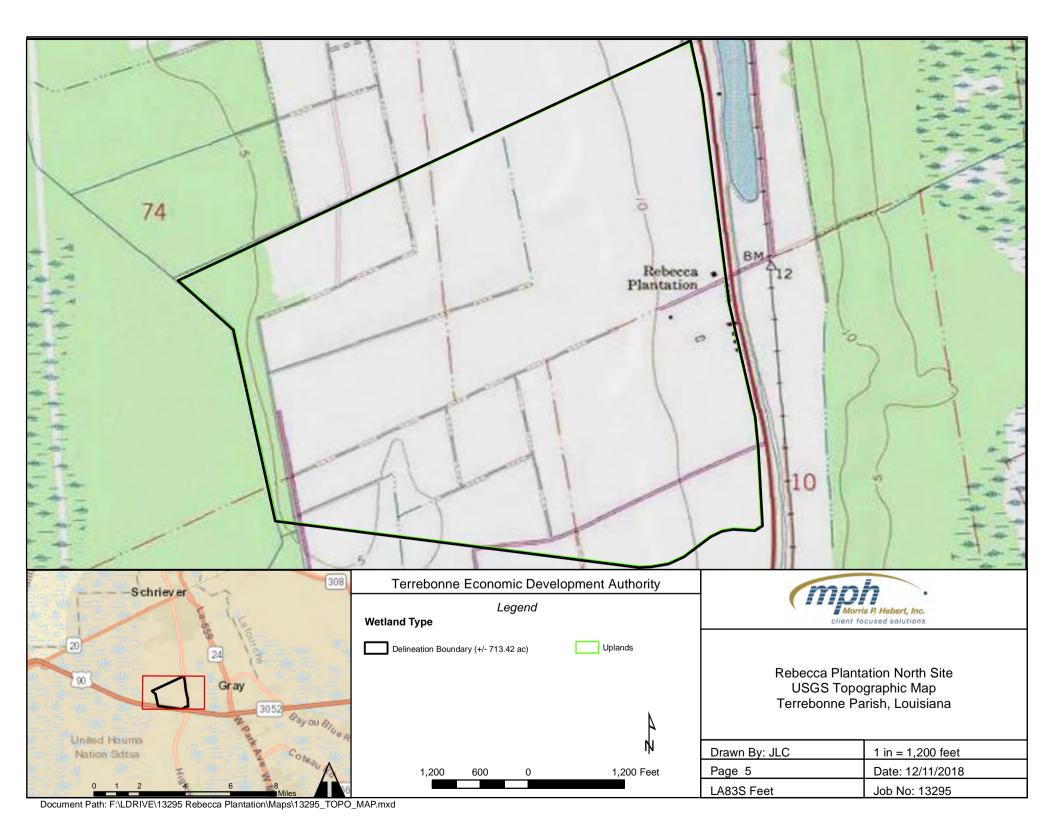


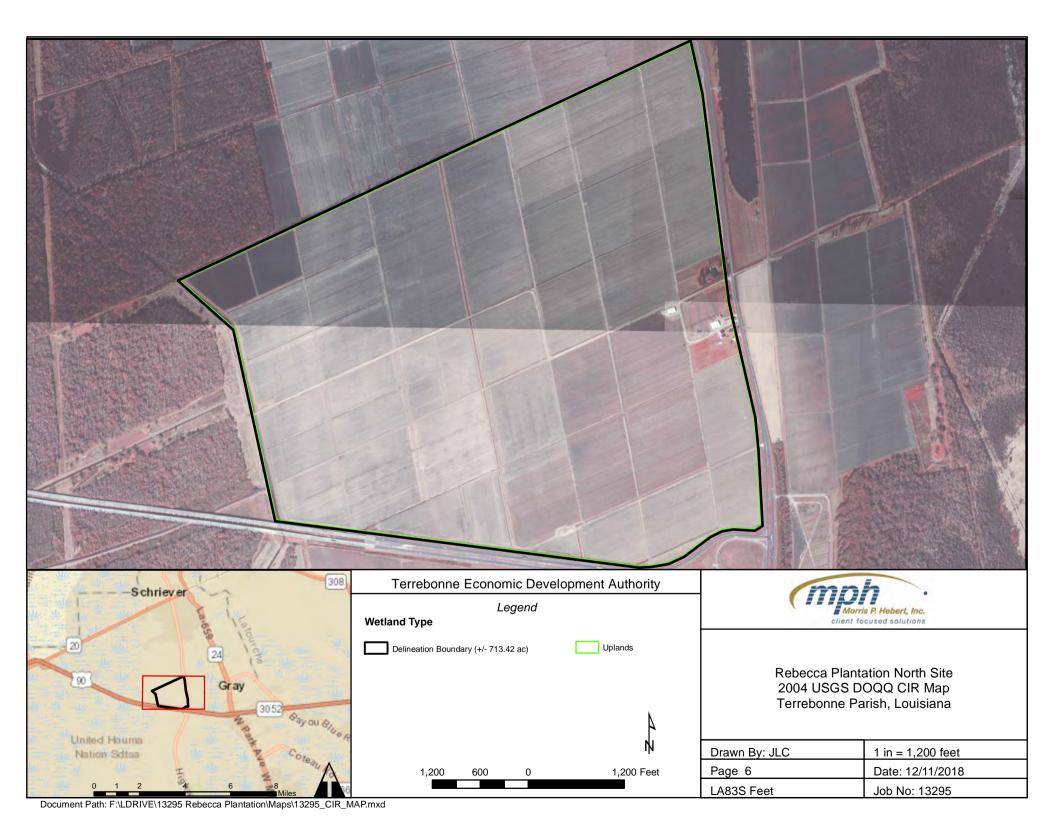












Appendix B USACE Wetland Determination Data Forms



Project/Site: Rebecca Plantation (North Development) City/County:	Terrebonne Parish	Sampling Date: 11/28/2018			
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 1			
Investigator(s): Cal R. Fontenot, Richard Martin Section, Township, Range: Sec 10; T16S-R16E					
Landform (hillslope, terrace, etc.): flat Local relief ((concave, convex, none): none	Slope (%):1-3			
Subregion (LRR or MLRA): LRR-O Lat: 29.691001°	Long: -90.813291°	Datum: St. Pl. 83			
Soil Map Unit Name: Gramercy-Cancienne silty clay loams, 0-1 perce					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in I	Remarks.)			
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes ✓ No			
	(If needed, explain any answ				
SUMMARY OF FINDINGS - Attach site map showing sampling	g point locations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes No✓	<u> </u>	20 ER POSE			
Hydric Soil Present? Yes No J	e Sampled Area				
Wetland Hydrology Present? Yes No withi	in a Wetland? Yes	No			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indic	cators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)					
		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)			
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U)					
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I				
Water Marks (B1) — Oxidized Rhizospheres along L		Water Table (C2)			
Sediment Deposits (B2) Presence of Reduced Iron (C4)		STATE OF THE STATE			
Drift Deposits (B3) Recent Iron Reduction in Tilled		Crayfish Burrows (C8) (C6) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surface (C7)		c Position (D2)			
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu				
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra				
Water-Stained Leaves (B9)		moss (D8) (LRR T, U)			
Field Observations:	opnagnam	111035 (20) (21111 1, 0)			
Surface Water Present? Yes No _ ✓ Depth (inches):					
Water Table Present? Yes No ✓ Depth (inches):					
Saturation Present? Yes No ✓ Depth (inches):		ent? Yes No_✓			
(includes capillary fringe)	FIRSTED VICTORIAL SELECTION CONTROL SELECTION	intr resNov			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous i	inspections), if available:				
Demostra					
Remarks:					

VEGETATION (Five Strata) – Use scientific names of p
--

/EGETATION (Five Strata) – Use scientific nar	nes of pla	ants.		Sampling Point: Plot 1
30 379	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Densir out
3				Total Number of Dominant Species Across All Strata: 2 (B)
4.				Specifica / in ordina.
				Percent of Dominant Species That Are OBL FACW or FAC: 50 (A/B)
5		*		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
_	9	= Total Co		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	: <u>0</u>	OBL species x 1 =0
Sapling Stratum (Plot size: 30')				FACW species 15 x 2 = 30
1				
2				FAC species x 3 = 100
3.				FACU species 30 x 4 = 120
4.				UPL species x 5 =0
				Column Totals:115 (A)360 (B)
5	8		0 0	
6				Prevalence Index = B/A = 3.13
	76 10	= Total Co		Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of	total cover	: 0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')				2 - Dominance Test is >50%
1		<u> </u>		3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4.				1
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5	70	VD		The state of the s
b			-	Definitions of Five Vegetation Strata:
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover: 0 Herb Stratum (Plot size: 30')	20% of	total cover	: 0	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Pasapalum dilatatum	50	yes	FAC	Sapling – Woody plants, excluding woody vines,
2. Cynodon dactylon	25	yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Setaria pumila	15	no	FAC	than 3 in. (7.6 cm) DBH.
Axonopus fissifolius	10	no	FACW	Shrub – Woody plants, excluding woody vines,
W.S. U				approximately 3 to 20 ft (1 to 6 m) in height.
5. Acmella oppositifolia	_5	<u>no</u>	FACW	And the Control of th
6. Symphyotrichum ontarionus		<u>no</u>	FAC	Herb – All herbaceous (non-woody) plants, including
7. Sonchus asper	_5	<u>no</u>	<u>FACU</u>	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				M. 1. 5. 20
10				Woody vine – All woody vines, regardless of height.
11		da		
9.00 <u> </u>		= Total Cov	/er	
50% of total cover: <u>57.5</u>	10			
	20% 01	total cover	25	
Woody Vine Stratum (Plot size: 30')				
1				
2	-		×	
3		10 Th		
4		3		
5				Hydrophytic
	0	= Total Cov	/er	Vegetation
50% of total cover: 0		total cover		Present? Yes No
		LOCAL COVE		
Remarks: (If observed, list morphological adaptations belo	w/).			

Sampling Point: Plot 1

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	<u> </u>	ype ¹ Loc		Remarks	
0-4	10YR 4/1	<u> 25 </u>			* ,	clay	a 8	
	10YR 4/2	75					S *-	
4-16	10YR 4/1	50			3 -	clay	15% aggregate	
	10YR 4/2	30		·				
	10YR 3/1	<u> 5</u>		×3 ×			<u> </u>	
	§			·		- 6		
1= 0.0						2,	- 	
	oncentration, D=De ndicators: (Appli					76.000.098.000.000.0000	 PL=Pore Lining, M=Mates for Problematic Hydric 	1775-1777
NA 45 101 AUG		Cable to all Li						SUIIS .
Histosol	10 90		Polyvalue Be			5 SS	Muck (A40) (LRR O)	
SERVICE SERVICES	pipedon (A2)		Thin Dark Su				Muck (A10) (LRR S)	MI DA 450A D)
Black Hi	N		Loamy Muck				iced Vertic (F18) (outside	1 . 1
370	n Sulfide (A4) I Layers (A5)		Loamy Gleye Depleted Ma		E.	77.	mont Floodplain Soils (F19 nalous Bright Loamy Soils	
	Bodies (A6) (LRR	P T 11\	Redox Dark			(0)	LRA 153B)	(F20)
	cky Mineral (A7) (L		Depleted Dai		7)		Parent Material (TF2)	
	esence (A8) (LRR		Redox Depre	AND TOWNSHIP OF USAN I	()		Shallow Dark Surface (TF	12)
The second contract of the second	ck (A9) (LRR P, T)	107.61	Marl (F10) (L				r (Explain in Remarks)	12)
FOR 11 TO THE PARTY PART	Below Dark Surfa		Depleted Ocl		LRA 151)		(Explain in Homaino)	
AND THE PERSON NAMED IN COLUMN	irk Surface (A12)		Iron-Mangan), P. T) ³ Inc	licators of hydrophytic veg	etation and
	airie Redox (A16)	(MLRA 150A)					etland hydrology must be i	100
	lucky Mineral (S1)		Delta Ochric		5		nless disturbed or problem	19
	leyed Matrix (S4)		Reduced Ver			0B)		
Sandy R	edox (S5)		Piedmont Flo	odplain Soils	(F19) (MLR/	A 149A)		
Stripped	Matrix (S6)		Anomalous E	right Loamy	Soils (F20) (N	ILRA 149A, 153	C, 153D)	
Dark Su	rface (S7) (LRR P,	S, T, U)						
Restrictive I	ayer (if observed):						
Туре:			_					
Depth (inc	ches):					Hydric So	il Present? Yes	_ No <u>√</u> _
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County: Terro	ebonne Parish	Sampling Date: 11/28/2018	
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 2	
Investigator(s): Cal R. Fontenot, Richard Martin Section, Township	Range: Sec 9; T16S-R1	6E	
Landform (hillslope, terrace, etc.): flat Local relief (concar	ve, convex, none): none	Slope (%): 1-3	
Subregion (LRR or MLRA): LRR-O Lat: 29.690735°	Long: -90.820718°	Datum: St. Pl. 83	
Soil Map Unit Name: Cancienne silty clay loams, 0-1 percent slopes (CdA	THE REPORT OF TAXABLE	- C 1 T NA - C C A C A C A C A C A C A C A C A C	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	lo (If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" p	resent? Yes _ ✓ No	
	If needed, explain any answer		
SUMMARY OF FINDINGS - Attach site map showing sampling poi			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No Yes No No Within a Wo		No	
Sugar Cane field			
HYDROLOGY			
Wetland Hydrology Indicators:	Secondary Indicat	tors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil (Cracks (B6)	
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pat		
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lii	NAME OF THE OWNER O	
Water Marks (B1) Oxidized Rhizospheres along Living R		Water Table (C2)	
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burn		
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (ZANDED	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic I		
Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7)	Shallow Aquit FAC-Neutral		
Water-Stained Leaves (B9)		loss (D8) (LRR T, U)	
Field Observations:	Ophagham m	1055 (D0) (LIKK 1, U)	
Surface Water Present? Yes No _ ✓ Depth (inches):			
Water Table Present? Yes No _✓ Depth (inches):			
Saturation Present? Yes No _ ✓ Depth (inches):	Wetland Hydrology Present	t? Yes No 🗸	
(includes capillary fringe)	PRESERVE AND	ti lesNo	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:		
Remarks:			

VEGETATION (Five Strata)	- Use scientific names of plants.	Sampling Point: Plot 2

001			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'	% Cover	<u>Species</u>	? Status	Number of Dominant Species That Are OBL FACIAL or FAC:
1	-			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5	-	-		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
	9 8	= Total Co		Total % Cover of: Multiply by:
50% of total cover: 0	20% c	of total cove	er: <u>0</u>	OBL species x 1 =0
Sapling Stratum (Plot size: 30')				FACW species 0 x 2 = 0
1				FAC species x 2 = 15
2			-	FACU species 30 x 4 = 120
3	<u>-</u>	· ·		UPL species x 5 =
4	*			Column Totals: 35 (A) 135 (B)
5	0		+ +	Column Totals. 33 (A) 133 (B)
6				Prevalence Index = B/A = 3.85
500/ 000/ 000	76 H	= Total Co		Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% c	or total cove	er: <u>U</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.01
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must
5	y a			be present, unless disturbed or problematic.
6		T (100 to the trans		Definitions of Five Vegetation Strata:
		= Total Co		Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% c	of total cove	er: <u>0</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')				(7.6 cm) or larger in diameter at breast height (DBH).
1. Saccharum officinarum	20	yes	<u>FACU</u>	Sapling – Woody plants, excluding woody vines,
2. Cynodon dactylon	_10	yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Cyperus esculentus	5	no	FAC	than 3 in. (7.6 cm) DBH.
4	-			Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6		7 70	o	Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8.			70 25 AS	plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.			8 8 - 8	The Same and the S
10			-	Woody vine – All woody vines, regardless of height.
11.		3 35	0. 10 0.	
		= Total Co	wer	
50% of total cover: _17.5				
	20% 0	i total cove	i. <u>/</u>	
Woody Vine Stratum (Plot size: 30'				
1				
2				
3				
4	-	-		
5	-			Hydrophytic
	_0	= Total Co	over	Vegetation Present? Yes No ✓
50% of total cover: 0	20% c	of total cove	er: <u>0</u>	1 1626HT: 162 NO V
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: Plot 2

Profile Desc	cription: (Describ	e to the de	oth needed to docur	nent the	indicator	or confiri	m the absence	of indicators.)
Depth (inches)	Matrix	0/		x Feature		1052	Taytura	Domorko
(inches) 0-16	Color (moist) 10YR 4/1	- <u>%</u> 60	Color (moist) 10YR 5/8	2	Type'	Loc ²	Texture	Remarks
0-16	85	_65	<u>`</u>	•	_ <u>C</u>	<u>PL</u>	clay lom	9
	10YR 3/2	_ 33	10YR 4/6	5	_ <u>C</u>	<u> </u>		3
	29					·	-	
	9.6			100				
	#P	70 (L	·	707	_ %			<u> </u>
	8	200	2	Jan 1	_ 94	\$		
	1.5	1350		74200	- 10.	2		
¹Type: C=Ce	oncentration, D=De	pletion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
		•	LRRs, unless othe					for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be				U) 1 cm N	/luck (A9) (LRR O)
and a soul	oipedon (A2)		Thin Dark Su				75. TA	Muck (A10) (LRR S)
	stic (A3) en Sulfide (A4)		Loamy Muck Loamy Gleye	76		R O)	17 D	ed Vertic (F18) (outside MLRA 150A,B) ont Floodplain Soils (F19) (LRR P, S, T)
550 00	d Layers (A5)		✓ Depleted Ma		(Г2)		77.	alous Bright Loamy Soils (F20)
100002000000000000000000000000000000000	Bodies (A6) (LRR	P, T, U)	Redox Dark		F6)		(0)	RA 153B)
	ıcky Mineral (A7) (l						THE PROPERTY OF THE PROPERTY O	arent Material (TF2)
	esence (A8) (LRR		Redox Depre	had between the second of the second	- 8)		W 34 34 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37	challow Dark Surface (TF12)
No. 17 months to the second	ick (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) (L Depleted Oc	TO SHOW THE PARTY OF THE PARTY	(MIRA1	51)	Other	(Explain in Remarks)
or more North Court	ark Surface (A12)	00 (/ (/ / /	Iron-Mangan		MINES	anana 1980 ya 1991 ya 1991	, T) ³ Indic	ators of hydrophytic vegetation and
Coast P	rairie Redox (A16)	(MLRA 150	A) Umbric Surfa	ce (F13)	(LRR P, 1	Γ, U)	wet	land hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	(A					ess disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver Piedmont Flo					
	Matrix (S6)						43A) RA 149A, 153C	. 153D)
	rface (S7) (LRR P,	S, T, U)				O mission of the control of		,
Restrictive	Layer (if observed):						
Туре:								
Depth (in	ches):						Hydric Soil	Present? Yes <u>√</u> No
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County: Te	errebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 3
Investigator(s): Cal R. Fontenot, Richard Martin Section, Towns	hip, Range: Sec 9; T16S-R	16E
Landform (hillslope, terrace, etc.): flat Local relief (cor		
Subregion (LRR or MLRA): <u>LRR-O</u> Lat: <u>29.695135°</u>	Long: -90.823924°	Datum: St. Pl. 83
Soil Map Unit Name: Gramercy silty clay loam, 0-1 percent slopes (GaA		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transect	s, important features, etc.
Hydric Soil Present? Yes V No	ampled Area Wetland? Yes	No
Recently harvested Sugar Cane field		
HYDROLOGY	25.5	
Wetland Hydrology Indicators:		eators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	
Surface Water (A1) Aquatic Fauna (B13)		egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)		atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I	TOTAL CONTRACTOR OF THE CONTRA
Water Marks (B1) Oxidized Rhizospheres along Livin		Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	
Drift Deposits (B3) Recent Iron Reduction in Tilled Soi		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)		c Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu FAC-Neutra	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	10 10	moss (D8) (LRR T, U)
Field Observations:	Spriagrium	moss (Do) (ERR 1, U)
Surface Water Present? Yes No _ ✓ Depth (inches):		
The state of the s	-	
		-12 V N- /
Saturation Present? Yes No _✓ Depth (inches):	_ Wetland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	pections), if available:	
Remarks:		

VEGETATION (Five Strat	a) – Use scientific names of plants.	Sa
VEOLIATION (1 IVE Offat	a) — Osc solcritilo harres of plants.	06

/EGETATION (Five Strata) – Use scientific nar	nes of plants.	Sampling Point: Plot 3
7 20 20 20 20 20 20 20 20 20 20 20 20 20	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.	 	Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 0 (A/B)
6		Prevalence Index worksheet:
500/ official control 0	0 = Total Cover	Total % Cover of: Multiply by:
50% of total cover: 0 Sapling Stratum (Plot size: 30')	20% of total cover: U	OBL species 0 x 1 = 0
		FACW species0 x 2 =0
1		FAC species x 3 = 0
2		FACU species15 x 4 =60
4		UPL species
5		Column Totals:(A)(B)
6.		Drevelence Index = D/A = 4
	0 = Total Cover	Prevalence Index = B/A =4 Hydrophytic Vegetation Indicators:
50% of total cover: 0	76 10	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')	1,5 min p. m. 400 hoom been all all all all and a service of beautiful and	2 - Dominance Test is >50%
J		3 - Prevalence Index is ≤3.0¹
2		Problematic Hydrophytic Vegetation¹ (Explain)
3		
4		¹ Indicators of hydric soil and wetland hydrology must
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
	0 = Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover: <u>0</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')		(7.6 cm) or larger in diameter at breast height (DBH).
	15 yes FACU	Sapling – Woody plants, excluding woody vines,
2		approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3.	- 35 - 12 - 1	
4		Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5		September 1 Principal Control of
6		Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7		plants, except woody vines, less than approximately
8		3 ft (1 m) in height.
9		Woody vine – All woody vines, regardless of height.
10		
3.113	15 = Total Cover	
50% of total cover: 7.5	20% of total cover: 3	
Woody Vine Stratum (Plot size: 30')	- water water a company of the compa	
1		
2.		
3.		
4		
5		Hydrophytic
	0 = Total Cover	Vegetation
50% of total cover: 0	20% of total cover: <u>0</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).	•
Site disturbed due to harvesting activities		
ű		

SOIL Sampling Point: Plot 3

Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	n the absence of	findicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc ²	Texture	Remarks
0-16	2.5YR 4/1	60	10YR 4/6	5	C	M	clay lom	Remarks
0-10	10YR 3/2		10111 4/0	<u> </u>		IVI	<u>ciay ioiii</u>	
	101R 3/2	_ 35	Ş 	0	- 9		- 8 0-	
	S9	-201						
	93	_	9	(1)	-			
100	H ^Q	_	4	***			<u> </u>	
	65		2		_ 79	š	<u> </u>	
70	3.5	194	Mr.	Mila	- 107	,	G A 12	
¹ Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
			LRRs, unless other					or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be					ck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
	stic (A3) n Sulfide (A4)		Loamy Muck Loamy Gleye	76		R O)		Vertic (F18) (outside MLRA 150A,B) t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma		(Г2)		77.	bus Bright Loamy Soils (F20)
	Bodies (A6) (LRR	P, T, U)	Redox Dark		F6)			(153B)
5 cm Mu	ıcky Mineral (A7) (L	.RR P, T, U	Depleted Dai	rk Surface	e (F7)		Red Pare	ent Material (TF2)
THE STATE OF THE S	esence (A8) (LRR	107.80	Redox Depre	A STATE OF THE STA	8)		A M MANAGEMENT OF THE STATE OF	allow Dark Surface (TF12)
AC 71 - AC 75	ick (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) (L Depleted Ocl		(MIDA 1	51)	Other (E)	xplain in Remarks)
ar man Non in Jane	ark Surface (A12)	ce (ATT)	Iron-Mangan	25 m. 160	CONTRACTOR AND ADDRESS OF	many 350 mg yan 1919	T) ³ Indicat	ors of hydrophytic vegetation and
1000	rairie Redox (A16)	(MLRA 150						nd hydrology must be present,
	lucky Mineral (S1)	(LRR O, S)	Delta Ochric					s disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver Piedmont Flo					
	ledox (S5) Matrix (S6)						ғэ <i>м)</i> RA 149A, 153C, 1	53D)
	rface (S7) (LRR P,	S, T, U)		g. 1. 2 0 5	,	. ==/ (=1	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	352,
Restrictive	Layer (if observed):						
Туре:								
Depth (in	ches):						Hydric Soil Pi	resent? Yes <u>√</u> No
Remarks:								

Project/Site: Rebecca Plantation (North Development) city/County: T	errebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 4
Investigator(s): Cal R. Fontenot, Richard Martin Section, Towns	ship, Range: Sec 74; T16S-I	R16E
Landform (hillslope, terrace, etc.): flat Local relief (co	ncave, convex, none): none	Slope (%):1-3
Subregion (LRR or MLRA): LRR-O Lat: 29.694368°		
Soil Map Unit Name: Gramercy-Cancienne silty clay loams, 0-1 percen	The second secon	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes _ ✓ No
Are Vegetation, Soil, or Hydrology naturally problematic?		
SUMMARY OF FINDINGS – Attach site map showing sampling p		
Hydric Soil Present? Yes V	Sampled Area a Wetland? Yes	No <u></u> ✓
Fallow Sugar Cane field		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	l Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I	TO THE STATE OF TH
Water Marks (B1) Oxidized Rhizospheres along Livir		Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	
Drift Deposits (B3) Recent Iron Reduction in Tilled So		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)		c Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	A 2
Water-Stained Leaves (B9) Field Observations:	Spnagnum	moss (D8) (LRR T, U)
The state of the s	-	
Water Table Present? Yes No _ ✓ Depth (inches):		
Saturation Present? Yes No _✓ Depth (inches):	_ Wetland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins	pections), if available:	
Remarks:		

	VEGETATION (Five Strata)) – Use scientific names of plants.
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/EGETATION (Five Strata) – Use scientific na	mes of pla	ants.		Sampling Point: Plot 4
001		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1	.9	Species?	state 17	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	-	§ •		Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5		<u> </u>		That Are OBL, FACW, or FAC: 0 (A/B)
6				Prevalence Index worksheet:
	0	= Total Co	ver	
50% of total cover: 0	20% of	total cover	r: <u>0</u>	
Sapling Stratum (Plot size: 30')				FACW species 0 x 2 = 0
1				FAC species 0 x 3 = 0
2				FACU species 10 x 4 = 40
3		¥z		UPL species 4 x 5 = 20
4		y		Column Totals: 14 (A) 60 (B)
5	e :	6 8		Column Totals: 14 (A) 00 (B)
6				Prevalence Index = B/A = 4.2%
	76 10	= Total Co		Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of	total cover	r: <u>0</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation¹ (Explain)
3			+	1973
4				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5	- 70 (0)	45	100 00	Particle H.3 ■ Particle (MAP 1000, 100 €) Control (State Office
ь		T-4-1 O-		Definitions of Five Vegetation Strata:
50% of total cover: 0		= Total Co		Tree - Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30')	20% 0	total cover	. <u>U</u>	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Sonchus asper	5	yes	FACU	
2. Packera obovata		yes	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
3. Verbena brasiliensis	2	no	UPL	than 3 in. (7.6 cm) DBH.
4. Lamium amplexicaule	2	no	UPL	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				
10				Woody vine – All woody vines, regardless of height.
11.		- 00 - 00		
	14	= Total Co	ver	
50% of total cover: _7	20% of	total cover	r: <u>2.8</u>	
Woody Vine Stratum (Plot size: 30')				
1.		9-		
2				
3	a		<u> </u>	
4				
5		<u> </u>		Hydrophytic
	0	= Total Co	ver	Vegetation
50% of total cover: 0	20% of	total cover	r: <u>0</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations bel	ow).			

SOIL Sampling Point: Plot 4

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirn	n the absence of	f indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc ²	Texture	Remarks
(inches) 0-16	10YR 4/1	60	10YR 4/6	5	. <u>Type</u> C	M	clay lom	Remarks
0-10	70		10111 4/0	. <u></u>		IVI	<u>ciay ioiii</u>	
	10YR 3/2	_ 35	3	()	-		ŧ	
	S 7	-207			- 1			
	10			127				
900	89			Y-9		i	<u> </u>	
	ÿ		2		<u> 2</u>			
101								
¹Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all	LRRs, unless other	wise not	ed.)			or Problematic Hydric Soils ³ :
Histosol	(f) (f)		Polyvalue Be					ck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
	stic (A3) n Sulfide (A4)		Loamy Mucky Loamy Gleye	7/	S	(0)		d Vertic (F18) (outside MLRA 150A,B) at Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted Mat		(12)		77.	ous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR	P, T, U)	Redox Dark		- 6)			A 153B)
	ıcky Mineral (A7) (L						LI PROMISSION OF THE	ent Material (TF2)
A POST AND MORE DESCRIPTION	esence (A8) (LRR	107.80	Redox Depre	SANTANCE COLORS	(8)			allow Dark Surface (TF12)
200 / C - 100 /	ick (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) (L Depleted Oct		(MIRA1	51)	Other (E.	xplain in Remarks)
an apparation in ages	ark Surface (A12)	00 (/////	Iron-Mangan				, T) ³ Indicat	ors of hydrophytic vegetation and
	rairie Redox (A16)		20 M - 21 - 22 - 22 - 23 - 24 - 25 - 25 - 25 - 25 - 25 - 25 - 25			⁻ , U)		nd hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric			O. A. A. CO. D.)		s disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver Piedmont Flo					
	Matrix (S6)						RA 149A, 153C, 1	153D)
- AMOUNTO ENDERGO TO	rface (S7) (LRR P,	S, T, U)		.	THE RESERVE !			9 (S00/5) 1 (House)
Restrictive	Layer (if observed):						
Туре:								,
Depth (in	ches):						Hydric Soil P	resent? Yes <u>√</u> No
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County:	Terrebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 5
Investigator(s): Cal R. Fontenot, Richard Martin Section, Tow	nship, Range: Sec 74; T16S-	R16E
Landform (hillslope, terrace, etc.): flat Local relief (c	oncave, convex, none): none	Slope (%):1-3
Subregion (LRR or MLRA): LRR-O Lat: 29.692543°	Long: -90.832587°	Datum: St. Pl. 83
S DE PORTOCO DE COMO PER A PROCESO DE COMO PORTOCO DE COMO PORTOCO DE COMO PER A PORTOCO DE PORTOCO PER A PORTOCO DE PORTOCO DE PORTOCO DE PORTOCO DE PORT	NWI classif	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes✓_ No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site map showing sampling		
Hydric Soil Present? Yes V	Sampled Area a Wetland? Yes	No <u></u>
Sugar Cane field		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	il Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim	Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Liv	ring Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	rrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled S	Soils (C6) Saturation \	Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic	c Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aq	uitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	al Test (D5)
Water-Stained Leaves (B9)	Sphagnum	moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No ✓ Depth (inches):		
Water Table Present? Yes No✓ Depth (inches):		
Saturation Present? Yes No ✓ Depth (inches):		ent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in	spections), if available:	
100 00 00 00 00 00 00 00 00		
Remarks:		

I (Five Strata) – Use scientific names of plants.

/EGETATION (Five Strata) – Use scientific nar	rries of plants.	Sampling Point: Plot 5
201	Absolute Dominant Indicator	
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1)	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 0 (A/B)
6		Prevalence Index worksheet:
500/-51/-0	0 = Total Cover	Total % Cover of: Multiply by:
	20% of total cover: 0	OBL species $0 x 1 = 0$
Sapling Stratum (Plot size: 30')		FACW species 0 x 2 = 0
1		FAC species 0 x 3 = 0
2		FACU species 20 x 4 = 80
3		UPL species <u>5</u> x 5 = <u>25</u>
4		Column Totals: <u>25</u> (A) <u>105</u> (B)
5		
6	0 = Total Cover	Prevalence Index = B/A = 4.2
50% of total cover: 0	20% of total cover: _0	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30')	2070 or total cover	1 - Rapid Test for Hydrophytic Vegetation
1		2 - Dominance Test is >50%
2.		- 3 - Prevalence Index is ≤3.0 ¹
3.		Problematic Hydrophytic Vegetation ¹ (Explain)
4.		The disease of heading and costs and head are sent
5.		 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6.		Definitions of Five Vegetation Strata:
	0 = Total Cover	Too 10/o di colo di constituti di constituti
50% of total cover: 0	20% of total cover: 0	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')		(7.6 cm) or larger in diameter at breast height (DBH).
Saccharum officinaris	20 yes FACU	Sapling – Woody plants, excluding woody vines,
2. Lamium amplexicaule	5 no UPL	approximately 20 ft (6 m) or more in height and less
3.		than 3 in. (7.6 cm) DBH.
4		Shrub – Woody plants, excluding woody vines,
5		approximately 3 to 20 ft (1 to 6 m) in height.
6	. <u> </u>	Herb – All herbaceous (non-woody) plants, including
7		herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8	6 } 	3 ft (1 m) in height.
9		Woody vine – All woody vines, regardless of height.
10		- Vivody Villo 7 il woody Villos, regulaless of Height.
11		-
	_ <u>25</u> = Total Cover	
2	5 20% of total cover: <u>5</u>	<u> </u>
Woody Vine Stratum (Plot size: 30')		
1		
2		-
3		-
4		-
5		- Hydrophytic
5	_ T-t-1 O	Vegetation
	= Total Cover 20% of total cover: <u>0</u>	Present? Yes No _✓

SOIL Sampling Point: Plot 5

Profile Desc	cription: (Describe	to the dep	h needed to docur	nent the i	indicator	or confirn	n the absence o	f indicators.)
Depth Matrix (inches) Color (moist) %		Redox Features Color (moist) % Type ¹ Loc ²			Loc ²	Texture	Remarks	
0-16	2.5Y 4/1	85	5YR 4/6	15	C	M	clay	Nomans
0 10	2.01 4/1		011(4/0	- 10		IVI	oldy	
	§	-(0	· (* 3	
	§ -	-			· .			
	95			(21)				
- 100	89			***				
	<u> </u>				• 1			
1Type: C-C	oncentration D-De	oletion PM-	·Daducad Matrix MS	S-Macker	d Sand Gr	aine	2l ocation: F	PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ :								
Histosol			Polyvalue Be			.RR S, T, U		uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)								d Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)							771 7/1	nt Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Anomalous Bright Loamy Soils (F20)								
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)						(MLRA 153B) Red Parent Material (TF2)		
Self-Mucky Millerar (A7) (LRR P, 1, 0) Depleted Dark Surface (P7) Muck Presence (A8) (LRR U) Redox Depressions (F8)						Very Shallow Dark Surface (TF12)		
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)								
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)								
1000 DWG 1000	ark Surface (A12)		Iron-Mangan				8 5	tors of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.								
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)								
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)								
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)								
	rface (S7) (LRR P,						ř.	
	Layer (if observed)	:						
Туре:	86 a 547 June 1 - 2000							No. 1 No.
Depth (in	cnes):						Hydric Soil P	Present? Yes No
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County:	Terrebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 6
Investigator(s): Cal R. Fontenot, Richard Martin Section, Tow	vnship, Range: Sec 74; T16S-I	R16E
Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none	Slope (%):1-3
Subregion (LRR or MLRA): LRR-O Lat: 29.688956°	Long: -90.826508°	Datum: St. Pl. 83
Soil Map Unit Name: Gramercy silty clay loam, 0-1 percent slopes (G	aA) NWI classifi	ication: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?		present? Yes _ ✓ No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site map showing sampling		
Hydric Soil Present? Yes V	e Sampled Area n a Wetland? Yes	No <u></u>
Sugar Cane field		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I	Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Li	ving Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	rrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled S	Soils (C6) Saturation \	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic	c Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	8 8
Water-Stained Leaves (B9)	Sphagnum	moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No _ ✓ Depth (inches):		
Water Table Present? Yes No _✓ Depth (inches):		
Saturation Present? Yes No ✓ Depth (inches):	Wetland Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in	nspections), if available:	
Remarks:		
Remarks.		

VEGETATION (Five Strata) – Use scientific names of plants.	VEGETATION	(Five Strata) -	Use scientific names of	plants.
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AND AND IN 182 BLUE IN 182 BLU	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'	% Cover Species? Status	Number of Dominant Species That Are ORL FACIAL or FAC:
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
_	0 = Total Cover	Total % Cover of:Multiply by:
Transformatic - Control of the Contr	20% of total cover: <u>0</u>	OBL species0 x 1 =0
Sapling Stratum (Plot size: 30'		FACW species 0 x 2 = 0
1		FAC species 0 x 3 = 0
2		FACU species 22 x 4 = 88
3		UPL species 0 x 5 = 0
4		Column Totals: 22 (A) 88 (B)
5	· — · · · · · · · · · · · · · · · · · ·	Column Totals: (A) (B)
6		Prevalence Index = B/A =4
FA0/101/11	0 = Total Cover	Hydrophytic Vegetation Indicators:
	20% of total cover: <u>0</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30'		2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0 ¹
2		Problematic Hydrophytic Vegetation ¹ (Explain)
3		
4		¹ Indicators of hydric soil and wetland hydrology must
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
_	0 = Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover: <u>0</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')		(7.6 cm) or larger in diameter at breast height (DBH).
1. Saccharum officinaris	20 yes FACU	Sapling – Woody plants, excluding woody vines,
2. Sonchus asper	2 no FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3		tilali 3 ili. (7.0 tili) DBH.
4		Shrub – Woody plants, excluding woody vines,
5		approximately 3 to 20 ft (1 to 6 m) in height.
6	. <u> </u>	Herb - All herbaceous (non-woody) plants, including
7		herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8		3 ft (1 m) in height.
9		W - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2
10		Woody vine - All woody vines, regardless of height.
11		
	22 = Total Cover	
50% of total cover: 11	20% of total cover: 4.4	
Woody Vine Stratum (Plot size: 30')		
1		
2		
3.		
4		
		25. 1. 1. 2. 21
5	_	Hydrophytic
500/-64-6-1	0 = Total Cover	Vegetation Present? Yes No _✓
50% of total cover: 0		2000,000
Remarks: (If observed, list morphological adaptations belo	DW).	

Sampling Point: Plot 6

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirn	n the absence o	of indicators.)
Depth (inches)	Matrix Color (moist)	<u></u> %	Redo Color (moist)	x Feature %	s Type ¹	Loc ²	Texture	Remarks
(inches) 0-16	10YR 4/1	90	10YR 5/6	10	С	M	clay	Remarks
0-10	10111 4/1	_ = = = = = = = = = = = = = = = = = = =	10110 3/0	10		IVI	<u>ciay</u>	
	0	-(9			
	8						-	
	10-			400				
	5			18				
	<u> </u>				-		- 1 0	
1- 00							2,	
	oncentration, D=De Indicators: (Applications)					ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol		cubic to un i	Polyvalue Be			PP S T I		uck (A9) (LRR O)
	oipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
	istic (A3)		Loamy Muck					ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		Piedmo	ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	tow most absorbest	✓ Depleted Ma		7-80-X-80-		(0)	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR I		Redox Dark					A 153B)
	ucky Mineral (A7) (L resence (A8) (LRR I		Depleted Da Redox Depre					rent Material (TF2) nallow Dark Surface (TF12)
A POR MARKON DECIMAL	ick (A9) (LRR P, T)	3,	Marl (F10) (L	Programme desired and other	0)		27 38 WOODS WINCO	Explain in Remarks)
200 / C - 100 /	d Below Dark Surfa	ce (A11)	Depleted Oc		(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangan				T) ³ Indica	ators of hydrophytic vegetation and
	rairie Redox (A16) (St. Martin and the state of the			', U)		and hydrology must be present,
	Mucky Mineral (S1) (LRR O, S)	Delta Ochric			OA 460E)		ss disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver Piedmont Flo					
	Matrix (S6)						RA 149A, 153C,	153D)
- Almost Control Control Control	rface (S7) (LRR P,	S, T, U)		•	*** 3 181807718 3			8 8500000000
Restrictive	Layer (if observed)	:						
Туре:								
Depth (in	ches):		<u></u>				Hydric Soil I	Present? Yes <u>√</u> No
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County: Te	errebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 7
Investigator(s): Cal R. Fontenot, Richard Martin Section, Towns	hip, Range: Sec 74; T16S-F	R16E
Landform (hillslope, terrace, etc.): flat Local relief (con	cave, convex, none): none	Slope (%):1-3
Subregion (LRR or MLRA): <u>LRR-O</u> Lat: <u>29.688055°</u>	Long: -90.830240°	Datum: St. Pl. 83
Soil Map Unit Name: Gramercy-Cancienne silty clay loam, 0-1 percent s		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?		present? Yes ✓ No
Are Vegetation, Soil, or Hydrology naturally problematic?		
SUMMARY OF FINDINGS – Attach site map showing sampling p		82
Hydric Soil Present? Yes V No	ampled Area Wetland? Yes	No <u></u>
Sugar Cane field		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil	Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim L	ines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living	g Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bur	rrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soi	ls (C6) Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	iitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral	8 8
Water-Stained Leaves (B9)	Sphagnum r	noss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No _ ✓ Depth (inches):	_	
Water Table Present? Yes No _✓ Depth (inches):	_	
Saturation Present? Yes No ✓ Depth (inches):	_ Wetland Hydrology Preser	nt? Yes No _✓
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	ections), if available:	
Demodes		
Remarks:		

VEGETATION (Five Strata) – Use scientific names of plants.	VEGETATION	(Five Strata) -	Use scientific names of p	lants.
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/EGETATION (Five Strata) – Use scientific na	mes of plants.	Sampling Point: Plot 7
0.01	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3	. — — — —	Species Across All Strata: (B)
4		Devent of Descinant Consider
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		Membrangstration of Membranish and excellenting their shall always a subserver and a subserver
	0 = Total Cover	Prevalence Index worksheet:
50% of total cover: 0	20% of total cover: <u>0</u>	
Sapling Stratum (Plot size: 30')		OBL species $0 x1 = 0$ FACW species $0 x2 = 0$
1		
2		FAC species $0 \times 3 = 0$
3		FACU species x 4 = 80
4		UPL species <u>5</u> x 5 = <u>25</u>
5		Column Totals: <u>25</u> (A) <u>105</u> (B)
6	es 57 87 82 94 55 94	Prevalence Index = B/A =4.2
	0 = Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of total cover: <u>0</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30'		2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0¹
2.		Problematic Hydrophytic Vegetation¹ (Explain)
3		
4.		¹ Indicators of hydric soil and wetland hydrology must
5		be present, unless disturbed or problematic.
6.		Definitions of Five Vegetation Strata:
ANC -	0 = Total Cover	Tana 200a adu mlanda avaludin avusadu vinas
50% of total cover: 0	20% of total cover: 0	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30'		(7.6 cm) or larger in diameter at breast height (DBH).
1. Saccharum officinaris	20 yes FACU	Sapling – Woody plants, excluding woody vines,
2. Lamium amplexicaule		approximately 20 ft (6 m) or more in height and less
2		than 3 in. (7.6 cm) DBH.
4		Shrub – Woody plants, excluding woody vines,
5.		approximately 3 to 20 ft (1 to 6 m) in height.
6.		Herb – All herbaceous (non-woody) plants, including
7.		herbaceous vines, regardless of size, and woody
8.		plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.		State
10.		Woody vine – All woody vines, regardless of height.
11.		
3000 <u></u>	25 = Total Cover	
50% of total cover: 12.	5 20% of total cover: 5	
Woody Vine Stratum (Plot size: 30')		
1		
2.		
3.		
4.		
5.		Hydrophytia
	0 = Total Cover	Hydrophytic Vegetation
50% of total cover: 0	20% of total cover: _0	Present? Yes No _✓
Remarks: (If observed, list morphological adaptations bel		

Profile Desc	ription: (Describe	e to the dep	th needed to docu	ment the i	indicator	or confirr	n the absence	of indicators.)
Depth (in shap)	Matrix	0/		x Feature		1.5-2	Toyluna	Domorto
(inches)	Color (moist)		Color (moist)	- <u>%</u> -	Type'	Loc ²	Texture	Remarks
0-16	10YR 4/1	_ 40	10YR 4/6	5	<u>C</u>	<u>M</u>	clay	
	10YR 4/2	_ <u>55</u>	3	-0			-	9
	χ.			100				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Ho.	_	Y	707				
	ž -		2		-	· ——	-	3
1	g)	- (a)	The BOARS HOUSE AND RESIDENCE HOUSE AND RESIDENCE AND RESIDENCE HOUSE AND RESIDENCE AN		CONTRACTOR ANDRESS			SI
			=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
1/4 // 1/1 // PA		cable to all	LRRs, unless othe			DD 0 T		DE BUS ANNOLOS MAE CINCIN DAN
Histosol	(A1) pipedon (A2)		Polyvalue Be Thin Dark St					Muck (A9) (LRR O) Muck (A10) (LRR S)
and a soul	stic (A3)		Loamy Muck				75 TA	ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley	76		,		ont Floodplain Soils (F19) (LRR P, S, T)
5760 50	d Layers (A5)		✓ Depleted Ma				77.	alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark					RA 153B)
	icky Mineral (A7) (L						El PUNTIFORMER STOCK	arent Material (TF2)
21 Carrier Management - 10 Carrier	esence (A8) (LRR		Redox Depre Marl (F10) (I	ELECTRONICA CONTRACTOR	8)			Shallow Dark Surface (TF12)
200 7 to 100 00 100 100 100 100 100 100 100 100	ick (A9) (LRR P, T) d Below Dark Surfa		Nan (F10) (I		(MIRA1	51)	Other	(Explain in Remarks)
or more North Court	ark Surface (A12)		Iron-Mangan				, T) ³ Indic	ators of hydrophytic vegetation and
Coast P	rairie Redox (A16)	(MLRA 150)	A) Umbric Surfa	ace (F13)	(LRR P, 1	r, U)		land hydrology must be present,
	lucky Mineral (S1)	(LRR O, S)	Delta Ochric					ess disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Ve		•		•	
	edox (S5) Matrix (S6)		Piedmont Flo				49A) RA 149A, 153C	153D)
	rface (S7) (LRR P,	S. T. UI	Anomalous i	Srigiit Loai	illy Solls ((FZO) (WILI	A 149A, 133C	, 133D)
	Layer (if observed							
Туре:	PRODUCTION OF STATE O							
1900	ches):						Hydric Soil	Present? Yes _ ✓ No
Remarks:								

Project/Site: Rebecca Plantation (North Development) City/County: To	errebonne Parish	Sampling Date: 11/28/2018
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 8
Investigator(s): Cal R. Fontenot, Richard Martin Section, Towns		
Landform (hillslope, terrace, etc.): flat Local relief (cor	ncave, convex, none): none	Slope (%):1-3
Subregion (LRR or MLRA): LRR-O Lat: 29.684356°		
Soil Map Unit Name: Gramercy-Cancienne silty clay loam, 0-1 percent	THE RESIDENCE OF THE PARTY OF T	- 1.1.60-00-00-0.2.0-0
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	_ No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?		
SUMMARY OF FINDINGS – Attach site map showing sampling p		
Hydric Soil Present? Yes V No	ampled Area a Wetland? Yes	No <u></u>
Sugar Cane field		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I	Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Livin	g Roots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	
Drift Deposits (B3) Recent Iron Reduction in Tilled So	A TO A CONTRACTOR OF THE PARTY	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)		Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	A 2
Water-Stained Leaves (B9)	Spnagnum	moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No / Depth (inches):	-	
Water Table Present? Yes No ✓ _ Depth (inches):		200 (200 ()
Saturation Present? Yes No _✓ Depth (inches):	PRESENTATION AND PROPERTY SECTION CONTRACTOR	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	pections), if available:	
Remarks:		

|--|

Sampling Point: Plot 8
Test worksheet:
ominant Species ., FACW, or FAC: (A)
of Dominant
ss All Strata: 1 (B)
ominant Species ., FACW, or FAC: 0 (A/B)
,TACII, GITAC (AB)
ndex worksheet:
Cover of: Multiply by:
0 x1 = 0
es <u>0</u> x 2 = <u>0</u>
x 3 =0
s <u>10</u> x 4 = <u>40</u>
<u>0</u> x 5 = <u>0</u>
s: <u>10</u> (A) <u>40</u> (B)
Louis an Day
nce Index = B/A =4
Vegetation Indicators:
Test for Hydrophytic Vegetation
nance Test is >50%
lence Index is ≤3.0 ¹
atic Hydrophytic Vegetation ¹ (Explain)
hydric soil and wetland hydrology must
nless disturbed or problematic.
f Five Vegetation Strata:
y plants, excluding woody vines,
/ 20 ft (6 m) or more in height and 3 in.
rger in diameter at breast height (DBH).
oody plants, excluding woody vines,
/ 20 ft (6 m) or more in height and less icm) DBH.
uii) bbn.
dy plants, excluding woody vines,
/ 3 to 20 ft (1 to 6 m) in height.
rbaceous (non-woody) plants, including
ines, regardless of size, <u>and</u> woody t woody vines, less than approximately
eight.
– All woody vines, regardless of height.
Yes No <u></u> ✓

Profile Des Depth	cription: (Describ Matrix	e to the de	oth needed to docur	nent the x Feature		or confirn	n the absence	of indicators.)
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type ¹	_Loc ²	Texture	Remarks
0-16	10YR 4/1	50	10YR 4/6	10	_C	<u>M</u>	clay	
	10YR 4/2	_ 40	· ·	-	- ;		 	s
	· 89				_			
g.	()(C	000		(0)	_			
- 22	f 195		-	7-0			<u></u>	a
	: % 	-(0		<i>-</i>	- 0			9
	93				_			9
		•	I=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.
M 45 101 10		icable to al	I LRRs, unless other					for Problematic Hydric Soils ³ :
Histoso	I (A1) pipedon (A2)		Polyvalue Be Thin Dark Su					Muck (A9) (LRR O) Muck (A10) (LRR S)
	listic (A3)		Loamy Muck					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma				100	alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark Depleted Da				3.000	RA 153B)
Once Decommended	ucky Mineral (A7) (I resence (A8) (LRR		Redox Depre		70 (37) 1006			arent Material (TF2) Shallow Dark Surface (TF12)
THE POST OF PROPERTY OF THE PARTY OF THE PAR	uck (A9) (LRR P, T	10.00	Marl (F10) (L	United Section Control of Control	0)		A 14 14 14 14 14 14 14 14 14 14 14 14 14	(Explain in Remarks)
	d Below Dark Surfa	ace (A11)	Depleted Oc				274	
1000 MANAGE - 10	ark Surface (A12)		Iron-Mangan					eators of hydrophytic vegetation and
	Prairie Redox (A16) Mucky Mineral (S1)	3				, U)		land hydrology must be present, ess disturbed or problematic.
70	Gleyed Matrix (S4)	(LKK 0, 3)	Reduced Ver			0A. 150B		ess disturbed or problematic.
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous E	Bright Loa	amy Soils (F20) (MLF	RA 149A, 153C	, 153D)
	ırface (S7) (LRR P,	COLUMN CONTRACT					ř	
	Layer (if observed	1):						
Type:	iches):						Hydric Soil	Present? Yes ✓ No
Remarks:							Tiyunc 30n	Fleseitt: 1es V NO
Nomarks.								

Project/Site: Rebecca Plantation (North Development) City/County: T	errebonne Parish	Sampling Date: 11/28/2018			
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 9			
Investigator(s): Cal R. Fontenot, Richard Martin Section, Town	ship, Range: Sec 75; T16S-I	R16E			
Landform (hillslope, terrace, etc.): flat Local relief (co	ncave, convex, none): none	Slope (%):1-3			
		Datum: St. Pl. 83			
Soil Map Unit Name: Gramercy silty clay loam, 0-1 percent slopes (Gaz					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes					
Are Vegetation, Soil, or Hydrology significantly disturbed?		present? Yes _ ✓ No			
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answe				
SUMMARY OF FINDINGS – Attach site map showing sampling					
Hydric Soil Present? Wetland Hydrology Present? Yes No within : Remarks:	Sampled Area a Wetland? Yes	No			
Sugar Cane field					
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	Cracks (B6)			
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)			
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)			
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I				
Water Marks (B1) Oxidized Rhizospheres along Livin		Water Table (C2)			
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	rrows (C8)			
Drift Deposits (B3) Recent Iron Reduction in Tilled Sc	oils (C6) Saturation \	/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surface (C7)		Position (D2)			
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu				
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)	Sphagnum	moss (D8) (LRR T, U)			
Field Observations:					
Surface Water Present? Yes No Depth (inches):					
Water Table Present? Yes No _✓ Depth (inches):					
Saturation Present? Yes No ✓ Depth (inches): (includes capillary fringe)	_ Wetland Hydrology Prese	nt? Yes No _✓_			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins	pections), if available:				
Remarks:					

VEGETATION	(Five Strata)	- Use scientific names of plants.	
VEGETATION	I IVE Otlata	- OSC SCICITING HATTICS OF Plants.	

/EGETATION (Five Strata) – Use scientific nar	mes of plants.	Sampling Point: Plot 9
001	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	·	Total Number of Dominant
3		Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 0 (A/B)
6		Westerdoods at the dealers were established the seasons to the seasons the seasons the seasons to the seasons the seasons the seasons the seasons to the seasons t
	0 = Total Cover	Prevalence Index worksheet:
50% of total cover: 0	20% of total cover: 0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30')		OBL species $0 \times 1 = 0$ FACW species $0 \times 2 = 0$
1		
2		FAC species 2 x 3 = 6
3		FACU species x 4 = 60
4		UPL species $0 \times 5 = 0$
5		Column Totals:(A)(B)
6		Prevalence Index = B/A =3.86
	0 = Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover: _0	20% of total cover: _0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')		2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0¹
2		Problematic Hydrophytic Vegetation¹ (Explain)
3.		Problematic Hydrophytic Vegetation (Explain)
4.		Indiactors of hydric cail and watland hydrology must
5.		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6.	7	Definitions of Five Vegetation Strata:
100	0 = Total Cover	THE TANK CAN AND AND AND AND AND AND AND AND AND A
50% of total cover: 0	20% of total cover: 0	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')		(7.6 cm) or larger in diameter at breast height (DBH).
1. Saccharum officinaris	15 yes FACU	Sapling – Woody plants, excluding woody vines,
2. Cyperus esculentus		approximately 20 ft (6 m) or more in height and less
3.		than 3 in. (7.6 cm) DBH.
4		Shrub – Woody plants, excluding woody vines,
5.		approximately 3 to 20 ft (1 to 6 m) in height.
6.		Herb – All herbaceous (non-woody) plants, including
7		herbaceous vines, regardless of size, and woody
8.		plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.		3 it (1 iii) iii neight.
10.		Woody vine - All woody vines, regardless of height.
11.		
333	17 = Total Cover	
50% of total cover: 8.5	20% of total cover: 3.4	
Woody Vine Stratum (Plot size: 30')	- Andrews and an angle of property of the prop	
1		
2.		
3.		
4.		
5.		Hydrophytic
	0 = Total Cover	Hydrophytic Vegetation
50% of total cover: 0	20% of total cover: _0	Present? Yes No _✓
Remarks: (If observed, list morphological adaptations belo		

Profile Desc	ription: (Describe	to the dep	th needed to docum	nent the	indicator	or confirm	n the absence o	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc ²	Texture	Remarks
(inches) 0-16	10YR 4/2	80	10YR 4/6	2	C Type	M	clay	Remarks
0-10	70		1011/4/0		<u>, C</u>	IVI	<u>Clay</u>	
	10YR 4/1	_ <u>18</u>	8	6	- (-			
	S 7		·					
	9							
	a <u>-</u>			18				
	9	-(3		- 1		8 - 1 2	
1- 00							20 11	
			=Reduced Matrix, MS LRRs, unless other			ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol		cable to all	Polyvalue Be			DD C T I		uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
	stic (A3)		Loamy Mucky					d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		50 S S	,		nt Floodplain Soils (F19) (LRR P, S, T)
_	d Layers (A5)		✓ Depleted Mat					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark S					A 153B)
	icky Mineral (A7) (L esence (A8) (LRR		 Depleted Dar Redox Depre 				DI PROGRESSION NO	rent Material (TF2) nallow Dark Surface (TF12)
THE CONTRACTOR OF THE CONTRACT	ick (A9) (LRR P, T)	107.80	Marl (F10) (L	STREET, SOUTH STREET, SOUNDS	0)		A SA SECURIOR	Explain in Remarks)
AC 71 - AC 75	d Below Dark Surfa		Depleted Oct		(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangan				, T) ³ Indica	ators of hydrophytic vegetation and
	rairie Redox (A16)		87 W - 25			⁻ , U)		and hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric			OA 450D)		ss disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver Piedmont Flo					
	Matrix (S6)						RA 149A, 153C,	153D)
	rface (S7) (LRR P,	S, T, U)	: Por Prioritary Prior	•	Pro- de l'allaction de			#16551744.2
Restrictive	Layer (if observed):						
Туре:								,
Depth (in	ches):						Hydric Soil F	Present? Yes <u>√</u> No
Remarks:							*	

Project/Site: Rebecca Plantation (North Development) City/County.	Terrebonne Parish	Sampling Date: 11/28/2018		
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 10		
Investigator(s): Cal R. Fontenot, Richard Martin Section, To		T		
Landform (hillslope, terrace, etc.): flat Local relief	(concave, convex, none): none	Slope (%):1-3		
Subregion (LRR or MLRA): LRR-O Lat: 29.683223°				
Soil Map Unit Name: Cancienne silty clay loam, 0-1 percent slopes (
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	✓ No (If no, explain in	Remarks.)		
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes ✓ No		
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answ			
SUMMARY OF FINDINGS - Attach site map showing sampling	g point locations, transect	s, important features, etc.		
Hydric Soil Present? Yes ✓ No	e Sampled Area in a Wetland? Yes	No		
Sugar Cane field				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indic	cators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface So	il Cracks (B6)		
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage P	atterns (B10)		
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim	Lines (B16)		
Water Marks (B1) Oxidized Rhizospheres along L	iving Roots (C3) Dry-Seasor	Water Table (C2)		
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	Crayfish Burrows (C8)		
Drift Deposits (B3) Recent Iron Reduction in Tilled	Soils (C6) Saturation \	Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphi	c Position (D2)		
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aq	uitard (D3)		
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	al Test (D5)		
Water-Stained Leaves (B9)	Sphagnum	moss (D8) (LRR T, U)		
Field Observations:				
Surface Water Present? Yes No / Depth (inches):				
Water Table Present? Yes No _✓_ Depth (inches):				
Saturation Present? Yes No _ ✓ Depth (inches):		ent? Yes No		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections), if available:			
Remarks:				

EGETATION (Five Strata) – Use scientific na	mes of plants.	Sampling Point: Plot 10
Tree Stratum (Plot size: 30')	Absolute Dominant Indicator	Dominance Test worksheet:
1		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
). · · · · · · · · · · · · · · · · · · ·		Total Number of Dominant
<u> </u>		Species Across All Strata: (B)
·		Percent of Dominant Species
i	- 	That Are OBL, FACW, or FAC: (A/B)
		Prevalence Index worksheet:
_	0 = Total Cover	Total % Cover of: Multiply by:
	20% of total cover: <u>0</u>	OBL species0 x 1 =0
Sapling Stratum (Plot size: 30')		FACW species $0 \times 2 = 0$
6 * <u></u>		FAC species x 3 = 0
		FACU species 20 x 4 = 80
S		UPL species 0 x 5 = 0
W		Column Totals: 20 (A) 80 (B)
. <u> </u>		(b)
		Prevalence Index = B/A =4
	0 = Total Cover	Hydrophytic Vegetation Indicators:
	20% of total cover: <u>0</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')		2 - Dominance Test is >50%
l. <u>.</u>		3 - Prevalence Index is ≤3.0 ¹
2		Problematic Hydrophytic Vegetation¹ (Explain)
S	 	
4.º		¹ Indicators of hydric soil and wetland hydrology must
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
	= Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover: <u>0</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30')	54011	(7.6 cm) or larger in diameter at breast height (DBH).
	20 yes FACU	Sapling - Woody plants, excluding woody vines,
2.		approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3.	4 2 4 2 4 2 4	diane in (1.5 din) BB11.
4		Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5		approximately 3 to 20 ft (1 to 6 ff) in height.
5	- 	Herb – All herbaceous (non-woody) plants, including
7 <u></u>		herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
B	6 3 8 5 6 3	3 ft (1 m) in height.
9		Woody vine – All woody vines, regardless of height.
0	- 	, and the second
1		
	= Total Cover	
·	20% of total cover: 4	
Woody Vine Stratum (Plot size: 30')		
- <u>-</u>		
2		
3		
4		
5		Hydrophytic
	0 = Total Cover	Vegetation Present? Yes No _✓
50% of total cover: 0	20% of total cover: <u>0</u>	Present? Yes No <u>✓</u>
Remarks: (If observed, list morphological adaptations bel	ow).	•

Soil Sampling Point: Plot 10

Profile Desc	cription: (Describ	e to the dep	oth needed to docur	nent the i	indicator	or confirm	n the absence o	of indicators.)
Depth (in shap)	Matrix	0/		x Feature	7	1.5-2	Toyture	Damarka
(inches) 0-16	Color (moist) 10YR 4/2	- <u>%</u> 75	Color (moist) 10YR 4/6	<u> </u>	Type'	Loc ²		Remarks
0-10	1 18		1011 4/0	. 5	<u>C</u>	<u>M</u>	Clay	
	10YR 4/1	_ 20	3	-	- (
			:	•:0:	- a			
	. ,							
	7 10 <u></u>		¥		. 19		<u></u>	
	i 0 		2		• 1	· ——	i - 1 8	
1	STATE OF THE STATE	-(c)		(D)	-		-	
		•	=Reduced Matrix, MS			ains.		PL=Pore Lining, M=Matrix.
14 /51 191 /51		capie to all	LRRs, unless other			DD 0 T 1		for Problematic Hydric Soils ³ :
Histosol	pipedon (A2)		Polyvalue Be Thin Dark Su					uck (A9) (LRR O) uck (A10) (LRR S)
	listic (A3)		Loamy Muck					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	76	S 5 5			ont Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		✓ Depleted Ma				77. 70.	ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark					A 153B)
	ucky Mineral (A7) (L						all managements and the	rent Material (TF2)
A POST PROPERTY OF THE PARTY	resence (A8) (LRR	10.00	Redox Depre	A STATE OF THE STA	8)		27 NO 180 (514 WINDOW)	nallow Dark Surface (TF12) Explain in Remarks)
AC 15 - 15 - 15 - 15 - 15 - 15 - 15 - 15	uck (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) (L Depleted Ocl		(MIRA1	51)	Other (E	Explain in Remarks)
ar montheur ages	ark Surface (A12)		Iron-Mangan				, T) ³ Indica	ators of hydrophytic vegetation and
100 March 100 Ma	Prairie Redox (A16)	(MLRA 150						and hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)						ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver					
	Redox (S5) d Matrix (S6)		Piedmont Flo				19A) RA 149A, 153C,	153D)
- AMOUNTO LABORATO LA	urface (S7) (LRR P,	S.T.UI	Alloinalous E	origini Loai	illy Solls ((FZO) (WILF	(A 149A, 133C,	1330)
	Layer (if observed							
Туре:		• 10						
Depth (in							Hydric Soil F	Present? Yes <u>√</u> No
Remarks:	ensive especial of Victor I		<u></u>					
personal State Section, pages 1998.								
1								

Project/Site: Rebecca Plantation (North Development) City/County:	Terrebonne Parish	Sampling Date: 11/28/2018		
Applicant/Owner: Terrebonne Economic Development Authority	State: LA	Sampling Point: Plot 11		
Investigator(s): Cal R. Fontenot, Richard Martin Section, Town	nship, Range: Sec 10; T16S-	R16E		
Landform (hillslope, terrace, etc.): flat Local relief (c				
Subregion (LRR or MLRA): LRR-O Lat: 29.684532°	Long: -90.813454°	Datum: St. Pl. 83		
Soil Map Unit Name: Cancienne silty clay loam, 0-1 percent slopes (C				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	No (If no, explain in	Remarks.)		
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transect	s, important features, etc.		
Hydric Soil Present? Yes ✓ No	Sampled Area a Wetland? Yes	No <u></u>		
Sugar Cane field				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indic	cators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soi	il Cracks (B6)		
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Pr	atterns (B10)		
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim I	Lines (B16)		
Water Marks (B1) Oxidized Rhizospheres along Liv	ing Roots (C3) Dry-Season	Water Table (C2)		
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Bu	Crayfish Burrows (C8)		
Drift Deposits (B3) Recent Iron Reduction in Tilled S	oils (C6) Saturation \	Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic	c Position (D2)		
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	uitard (D3)		
Inundation Visible on Aerial Imagery (B7)	FAC-Neutra	al Test (D5)		
Water-Stained Leaves (B9)	Sphagnum	moss (D8) (LRR T, U)		
Field Observations:		7 17		
Surface Water Present? Yes No ✓ Depth (inches):	_			
Water Table Present? Yes No ✓ _ Depth (inches):				
Saturation Present? Yes No ✓ Depth (inches):		ent? Yes No _✓_		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in:	spections), if available:			
100 UV 10 UV				
Remarks:				

VEGETATION (Five Strata) – Use scientific names of plants.	Sampling Point: Plot 11
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AND	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'	% Cover Species? Status	Number of Dominant Species That Are ORL FACIAL or FAC:
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
•	0 = Total Cover	Total % Cover of:Multiply by:
Trunch Andreada, Proprieta - Annual Angele - Autrus and Annual An	20% of total cover: 0	OBL species x 1 =
Sapling Stratum (Plot size: 30')		FACW species $0 \times 2 = 0$
1		FAC species 10 x 3 = 30
2		FACU species 50 x 4 = 200
3		UPL species 0 x 5 = 0
4		Column Totals: 60 (A) 230 (B)
5		Column Totals. OO (A) 250 (B)
6		Prevalence Index = B/A = 3.83
	0 = Total Cover	Hydrophytic Vegetation Indicators:
	20% of total cover: 0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30')		2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0 ¹
2		Problematic Hydrophytic Vegetation¹ (Explain)
3		
4		¹ Indicators of hydric soil and wetland hydrology must
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
	0 = Total Cover	Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% of total cover: 0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30'		(7.6 cm) or larger in diameter at breast height (DBH).
1. Saccharum officinaris	50 yes FACU	Sapling – Woody plants, excluding woody vines,
2. Cyperus esculentus	10 no FAC	approximately 20 ft (6 m) or more in height and less
3		than 3 in. (7.6 cm) DBH.
4		Shrub – Woody plants, excluding woody vines,
		approximately 3 to 20 ft (1 to 6 m) in height.
5		Herb – All herbaceous (non-woody) plants, including
7		herbaceous vines, regardless of size, and woody
7		plants, except woody vines, less than approximately
8		3 ft (1 m) in height.
9		Woody vine – All woody vines, regardless of height.
10		
11		
	60 = Total Cover	
	20% of total cover: <u>12</u>	
Woody Vine Stratum (Plot size: 30')		
1	: 	
2		
3		
4		
5		Hydrophytic
	0 = Total Cover	Vegetation
50% of total cover: 0	20% of total cover: 0	Present? Yes No _✓
Remarks: (If observed, list morphological adaptations belo		
	A Comment	

Soil Sampling Point: Plot 11

Profile Des	cription: (Describe	e to the dep	th needed to docum	nent the	indicator	or confirr	n the absence o	of indicators.)
Depth	Matrix	0/		x Feature	7	1.5-2	Tovt	Domortes
(inches) 0-16	Color (moist) 10YR 3/2	- <u>%</u> 85	Color (moist) 10YR 4/6	%	Type'	Loc ²	Texture clay	Remarks
0-10	35		10114/0	5	<u>C</u>	<u> M</u>	Clay	
	10YR 4/1	_ 10	3	<u> </u>	- ()		 	
	39			10				
	10							
	2)			161			-	
***	3		3	C 16	- /	· ——	 	
1- 0.0							20 (1)	
			=Reduced Matrix, MS LRRs, unless other			ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol		cable to all	Polyvalue Be			PPCTI		uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
0.000 miles	istic (A3)		Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye					ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	NAC NAC SECURITION	Depleted Mat		17 W 3 Ob		(5) (3)	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		✓ Redox Dark S					A 153B)
	ucky Mineral (A7) (L resence (A8) (LRR		Depleted Dar Redox Depre					rent Material (TF2) nallow Dark Surface (TF12)
A POR MARKOCKO RICKS	uck (A9) (LRR P, T)	1079	Marl (F10) (L	Sample of the Control	٥,		10 14 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Explain in Remarks)
	d Below Dark Surfa		Depleted Och	Sevene verman net	(MLRA 1	51)		
1000 DOM: 0.000 DOM: 0	ark Surface (A12)		Iron-Mangan				10 5	ators of hydrophytic vegetation and
	rairie Redox (A16)		20 M 20 10 10 10 10 10 10 10 10 10 10 10 10 10					and hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric Reduced Ver					ss disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo					
	Matrix (S6)						RA 149A, 153C,	153D)
Dark Su	ırface (S7) (LRR P,	S, T, U)	2. State of the local control of the			Principle (1975 - 1974)		Committee Committee
Restrictive	Layer (if observed):						
Туре:								
Depth (in	ches):						Hydric Soil I	Present? Yes <u>√</u> No
Remarks:							***	

Appendix C Photograph Log





Plot OPCF01–Soil Profile



Plot OPCF01 –Site Photo





Plot OPCF01 –Site Photo



Plot OPCF02 – Soil Profile





Plot OPCF02 –Site Photo



Plot OPCF02 -Site Photo





Plot OPCF03 –Soil Profile



Plot OPCF03 -Site Photo





Plot OPCF03 –Site Photo



Plot OPCF04-Soil Profile





Plot OPCF04-Site Photo



Plot OPCF04-Site Photo





Plot OPCF05 –Soil Profile



Plot OPCF05 – Site Photo





Plot OPCF05 – Site Photo



Plot OPCF06 -Soil Profile





Plot OPCF06 – Site Photo



Plot OPCF06 – Site Photo





Plot OPCF07 – Soil Profile



Plot OPCF07 -Site Photo





Plot OPCF07 –Site Photo



Plot OPCF08 -Soil Profile





Plot OPCF08 –Site Photo



Plot OPCF08 –Site Photo





Plot OPCF09 –Soil Profile



Plot OPCF09 -Site Photo





Plot OPCF09 –Site Photo



Plot OPCF10 - Soil Profile





Plot OPCF10 – Site Photo



Plot OPCF10 – Site Photo





Plot OPCF11 – Soil Profile



Plot OPCF11 – Site Photo





Plot OPCF11 – Site Photo



Plot OPCF11 - Site Photo

