

Exhibit P. Highland Park Mixed-Use Development Site Wetlands Delineation Report





Highland Park Mixed-Use Development Site Wetlands Delineation Report

Date: August 29, 2015

To: Mr. Joshua hays, P.E.

Lazenby and Associates, Inc.

2000 North 7th Street

West Monroe, Louisiana 71291

Re: Wetland Delineation for the Trenton Street Golf Course

Dear Mr. Hays:

A wetlands investigation was conducted for an approximately 60 acre tract of land (herein called the "Site") located at the southeast corner of Arkansas Road and North 7th Street in West Monroe, Ouachita Parish, Louisiana (Exhibit 1 and 2). The purpose of the investigation was to identify and delineate the boundaries of any wetlands and other *Waters of the U.S.* located on the Site. The investigator was Mr. Bill McAbee with McAbee Wetland Services, and the Site was investigated on June 26, 2015. Methodology of the investigation followed guidelines set forth in the 1987 Wetland Delineation Manual and the Regional Supplement Manual for the Atlantic and Gulf Coastal Plain Region (Version 2.0).

REFERENCE MATERIALS

The Ouachita Parish Soil Survey (Appendix A) showed that approximately 62% of the soils on the Site were Rilla silt loams 0-1% slopes, 28% were Perry clay frequently flooded, and the remaining soils were Waller loam.

Data from USFWS National Wetland Inventory (Appendix B) database was collected and reviewed for the Site. Mapped wetlands and other waters closely related to the final wetland delineation.

Historical aerial photography dating back to 1998 was reviewed on google earth to identify any possible recurring "wet" signatures such as inundation or saturation. These were noted and investigated during the site visit.

BACKGROUND

The Site has been maintained as a golf course for a minimum of 20 years. Areas of seasonal saturation and those that are impounded by natural land forms or by manmade levees have apparently been avoided and only the upland areas have been regularly maintained or manipulated to support the golf course operations.

Approximately 80% or greater of the Site is maintained as open area with Bermuda grass as the dominant vegetation, while there are some scattered trees in the uplands most of the forested sections of the Site are within the wetland boundaries.



FINDINGS

After reviewing the referenced background materials, a field investigation that included soil, vegetation, and hydrological evaluations was conducted. The field investigations confirmed that there are wetlands and Other Waters of the U.S. on the Site (Exhibit 3). Data forms are provided in Appendix C.

A total of 4.72 acres of cypress pond wetlands (Exhibit 4 and 5), 1.28 acres of forested wetlands (Exhibit 6 and 7), and 1.25 acres of ponds (Exhibit 8) were delineated on the Site. Additionally, approximately 2,340 linear feet of ditches were noted that could be jurisdictional waters of the U.S. Typical upland soils are shown in Exhibit 9.

Although the U.S. Army Corps of Engineers will make the final call if a permit application is submitted, it is highly likely that the identified wetlands would be considered jurisdiction waters under current regulations and any impacts to the wetlands would require a Section 404 permit. Since the ditches may be considered as important nexus to support the identified wetlands, these ditches could be determined to be jurisdictional waters of the U.S. and require a permit before they can be impacted.

I hope this helps you with your decision making process. If you have any additional questions please contact me any time.

Sincerely,

William C. "Bill" McAbee McAbee Wetland Services 655 Meadowbrook Road

William C. Methe

Jackson, MS 39206

Wcmcabee33@gmail.com

601.715.4803



EXHIBIT 1. SUBJECT PROPERTY GENERAL LOCATION MAP WITH AERIAL BACKGROUND.

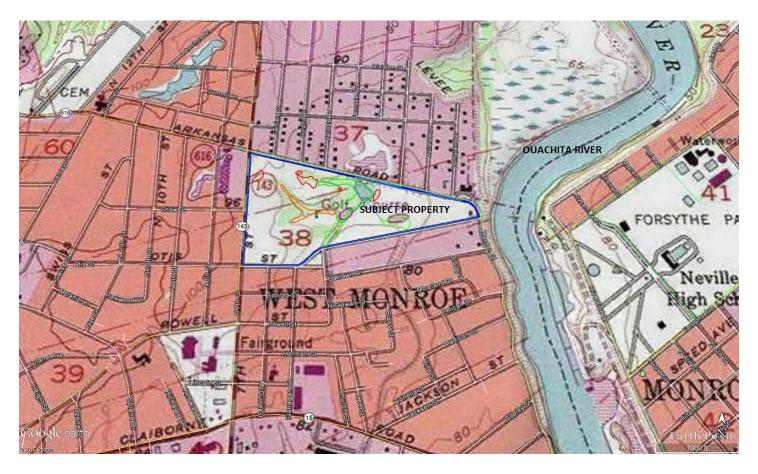


EXHIBIT 2. SUBJECT PROPERTY DETAILED LOCATION MAP WITH USGS BACKGROUND.

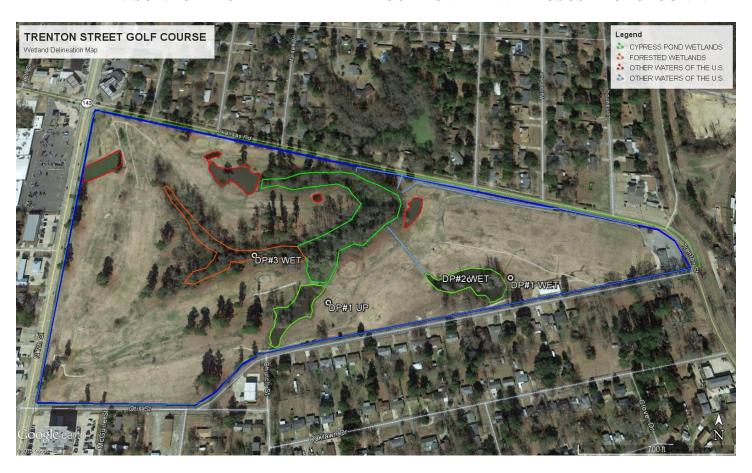


EXHIBIT 3. SUBJECT PROPERTY WETLANDS AND OTHER WATERS OF THE U.S.



EXHIBIT 4. CYPRESS POND WHERE DP#1 & 2 WET WERE LOCATED



EXHIBIT 5. CYPRESS POND WETLAND WITH DUCK WEED ON SURFACE.



EXHIBIT 6. FORESTED WETLAND AND LOCATION OF DP#3 WET.



EXHIBIT 7. SOIL AT DP#3 WET.



EXHIBIT 8. NON WETLAND, "OTHER WATERS" POND LOCATED ON NORTH SIDE OF THE SITE.



EXHIBIT 9. TYPICAL UPLAND SOIL AND LOCATION OF DP#1 UP.

APPENDIX A SOILS MAP



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

☑ Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

▲ Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Stony Spot

Wery Stony Spot

Spoil Area

Wet Spot
Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ouachita Parish, Louisiana Survey Area Data: Version 7, Sep 26, 2014

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

Date(s) aerial images were photographed: Jun 3, 2011—Jun 11, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Ouachita Parish, Louisiana (LA073)									
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI						
Ма	Made land	0.1	0.1%						
Pc	Perry clay, frequently flooded	16.0	28.4%						
RIA	Rilla silt loam, 0 to 1 percent slopes	35.1	62.4%						
Wa	Waller loam	5.1	9.0%						
Totals for Area of Interest		56.2	100.0%						

APPENDIX B USFWS NWI MAP



U.S. Fish and Wildlife Service

National Wetlands Inventory

highland park golf course

Aug 29, 2015

Wetlands Freshwater Emergent Freshwater Forested/Shrub Estuarine and Marine Deepwater Estuarine and Marine Freshwater Pond Lake Riverine Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

100 m

500 ft

APPENDIX C DATA FORMS

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Riverside Golf Course	City/County: Ouad	chita	Sampling Date: 6-26-2015
Applicant/Owner: City of West Monroe		State:	Sampling Date: 6-26-2015 LA Sampling Point: Up 1
Investigator(s): Bill McAbee	Section, Township	, Range: S38 T1	8N, R3E
torraco			flat 0.1
Subregion (LRR or MLRA): LRR O	32°31'29.78"N	Long: -92° 0	8' 36.00''W Datum:
Subregion (LRR or MLRA): LRR O Lat: Soil Map Unit Name: Rilla silt loams 0-1% slopes		N	WI classification: Upland pasture
Are climatic / hydrologic conditions on the site typical for this tim			
Are Vegetation, Soil, or Hydrology signif			
Are Vegetation, Soil, or Hydrology natur	45		any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho		a a a	(F)
Hydrophytic Vegetation Present? Yes No		pled Area	
Hydric Soil Present? Yes No X		etland?	Yes No X
Wetland Hydrology Present? Yes No _X Remarks:			
This upland is very typical of all uplands lo dominant vegetation being bermuda grass verify upland characteristics but this one p	s. Soil pits were o	completed th	roughout the site just to
HYDROLOGY			
Wetland Hydrology Indicators:		Secor	ndary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	🖺 s	urface Soil Cracks (B6)
Surface Water (A1)	na (B13)	L s	parsely Vegetated Concave Surface (B8)
F 400 10 10 10 10 10 10 10 10 10 10 10 10 1	ts (B15) (LRR U)		rainage Patterns (B10)
- 10 March 19 March 1	ulfide Odor (C1)	——————————————————————————————————————	loss Trim Lines (B16)
2	izospheres along Living R	Table Company	ry-Season Water Table (C2)
	Reduced Iron (C4) Reduction in Tilled Soils (rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Recent Iron ☐ Algal Mat or Crust (B4) ☐ Thin Muck S		55 S S S S S S S S S S S S S S S S S S	teomorphic Position (D2)
	ain in Remarks)	—	hallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	in in itomano,		AC-Neutral Test (D5)
Water-Stained Leaves (B9)			phagnum moss (D8) (LRR T, U)
Field Observations:		3 TO	
Surface Water Present? Yes No X Depth (inches):		
Water Table Present? Yes No X Depth (inches):		
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrol	ogy Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	l al photos, previous inspect	ions), if available:	
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.	Sampling Point: Up 1
---	----------------------

0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: 30' radius)		Species?	335	Number of Dominant Species	
1. Liquidambar styraciflua	_ 5	У	fac	That Are OBL, FACW, or FAC: 2	(A)
2	-0.5			Total Number of Dominant	
3				Species Across All Strata: 4	(B)
4		6			
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50	(A/B)
6.				That 740 OBE, 171000, of 1710.	(700)
7		9	-	Prevalence Index worksheet:	
8.	-			Total % Cover of: Multiply by:	_
o	5	Total Cov	er	OBL species x 1 =	
50% of total cover: 2.5				FACW species x 2 =	_
Annual Control of the	20% 01	total cover		FAC species x 3 =	_
Sapling/Shrub Stratum (Plot size: 30' radius) 1. Callicarpa americana	5	G.	facu	FACU species x 4 =	
	- 5	у	225	UPL species x 5 =	
2. Verbena hastata	· —	У	fac	Column Totals: (A)	
3				Column rotals (A)	_ (D)
4	- Co.			Prevalence Index = B/A =	
5	- NA			Hydrophytic Vegetation Indicators:	_
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8.	-9//	<i>y.</i>	<u>.</u>	3 - Prevalence Index is ≤3.0¹	
	10	= Total Cov	er	AND THE PROPERTY OF THE PROPER	
50% of total cover: 5				Problematic Hydrophytic Vegetation¹ (Explai	n)
Herb Stratum (Plot size: 30' radius)	20 70 01	total cover			
1 Cynodon dactylon	80	V	facu	Indicators of hydric soil and wetland hydrology no be present, unless disturbed or problematic.	nust
2. Trifolium repens	5	<u>n</u>	facu		
3. Paspalum notatum	5		facu	Definitions of Four Vegetation Strata:	
	- —	<u>n</u>	-iacu	Tree - Woody plants, excluding vines, 3 in. (7.6	
4				more in diameter at breast height (DBH), regardle	ess of
5				height.	
6				Sapling/Shrub - Woody plants, excluding vines,	
7	-2:3			than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All herbaceous (non-woody) plants, regar	dless
9				of size, and woody plants less than 3.28 ft tall.	u.ccc
10				W I	-
11.	-100			Woody vine – All woody vines greater than 3.28 height.	πın
12.	-			ino g.k.	
12.	90	= Total Cov			
50% of total cover: 46		total cover:			
CONTRACTOR OF THE PROPERTY OF	20% 01	total cover			
Woody Vine Stratum (Plot size: 30' radius)					
1					
2	· · · · · · · · · · · · · · · · · · ·				
3			 8		
4					
5	•			Hydrophytic	
		= Total Cov	er	Vegetation	
50% of total cover:	20% of	total cover	8	Present? Yes X No	

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

There were a few white ash, loblolly pine, pecan, and water oak trees scattered along some of the fairways and in narrow strips along some of the the forested fringes but the total percent cover of upland trees for the site was less than 5%. Verbena hastata, Callicarpa americana, Toxicodendron radicans, and Ligustrum sinense were often common along the forest fringes above the forested wetland were more sun and disturbance occur, they were just not included in the radius of the sample plot. These are all fac or facu species.

SOIL Sampling Point: Up 1

Profile Desc	ription: (Describe	to the depti	n needed to docur	nent the	indicator	or confirm	n the absence of in	dicators.)	
Depth	Matrix			x Feature		. 9	- 100 CO 100 CO 1	- Antidoperation	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	10YR 5/4	100	CONTRACT PRODUCTION OF THE PARKS		- %	15	loam		5-1 5-5
3-12	10YR 6/3	80	7.5YR 4/6	20	С	m	loam/silt		
	· •	-1.0		2650	- 36	2.			
7	<u>N</u>	-000			- 0		<u> </u>		1.4
=	100 100	-37			177 18 18				3
									
				-					
	•			100					
1Tyrpo: C=C	oncentration, D=De	olotion DM-I	Paduaad Matrix, MS	- ——— S-Macka	d Sand C	roine	2l contion: DI -l	Pore Lining, M=Matri	· · · · · · · · · · · · · · · · · · ·
	Indicators: (Appli					iaiiis.		Problematic Hydric	
Histosol	858 5 5	cable to all E	Polyvalue Be			IDDQTI		(A9) (LRR O)	Jons .
	pipedon (A2)		Thin Dark Su		Sand the san		CONTRACTOR OF THE PROPERTY OF	(A10) (LRR S)	
St. DESCRIPTION OF DEFINITE	stic (A3)		Loamy Muck		ASAM AGNA IN CARCOLLARY STORES	30 1080 110801	ACTUAL DE VANDE DE V	ertic (F18) (outside l	ALRA 150A B)
The same of the sa	en Sulfide (A4)		Loamy Gleye	Par acres tons			The second secon	loodplain Soils (F19)	
	d Layers (A5)		Depleted Ma		(/			Bright Loamy Soils (
	Bodies (A6) (LRR I	P, T, U)	Redox Dark		F6)		(MLRA 15		/
V 12	icky Mineral (A7) (L		Depleted Dai				- 43	Material (TF2)	
Muck Pr	esence (A8) (LRR I	J)	Redox Depre	essions (F	F8)		Very Shallo	w Dark Surface (TF1	2)
	ick (A9) (LRR P, T)		Marl (F10) (L	.RR U)			Other (Expla	ain in Remarks)	
Deplete	d Below Dark Surfac	ce (A11)	Depleted Ocl	hric (F11)	(MLRA 1	l 51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	ses (F12)	(LRR O, P	, T) ³ Indicators	of hydrophytic vege	tation and
The same of the sa	rairie Redox (A16) (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					hydrology must be pi	900
2	lucky Mineral (S1) (LRR O, S)	Delta Ochric					isturbed or problema	tic.
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Gleyed Matrix (S4)		Reduced Ver		350		N		
	Redox (S5)		Piedmont Flo	1.00				5)	
	Matrix (S6)	6 T III	Anomalous E	Bright Loa	my Soils	(F20) (IVILE	RA 149A, 153C, 153	ט)	
2	rface (S7) (LRR P, Layer (if observed)								
	Layer (II observed)	i.							
Туре:	21 No						20 200 200		v
Depth (in	ches):		 5/i				Hydric Soil Pres	ent? Yes	No <u>X</u>
Remarks:									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Riverside Golf Course	City/County: Ouachit	ta	Sampling Date: 6-26-2015
Applicant/Owner: City of West Monroe		State: LA	Sampling Date: 6-26-2015 Sampling Point: wet 1
Investigator(s): Bill McAbee	Section, Township, Ra	ange: S38 T18N, R3	E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave,	convex, none): none	Slope (%): <u>0-1%</u>
Subregion (LRR or MLRA): LRR O	2°31'30.59"N	Long: - 92° 8'25.53"	W Datum:
Subregion (LRR or MLRA): LRR O Lat: 32 Soil Map Unit Name: Perry clay frequently flooded		NWI class	sification: PEM
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are	"Normal Circumstance	s" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally	15	eeded, explain any ans	
SUMMARY OF FINDINGS – Attach site map show		12) DE EEDN	
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Remarks:	within a Wetla	d Area nd? Yes <u>X</u>	No
This is the only wetland on the Site that lies	outside of well de	fined sloughs, i	ponds, or streams. It is
a low depressed terrace adjacent to the cyp		and the second of the second o	to the state of th
the wetland beyond the cypress slough wetl	n Para series		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly)	Surface S	Soil Cracks (B6)
Surface Water (A1)	(B13)	Sparsely	Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage	Patterns (B10)
Saturation (A3) Hydrogen Sulfice	de Odor (C1)	Moss Trir	n Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizo	spheres along Living Roots	s (C3) 🔲 Dry-Seas	on Water Table (C2)
Sediment Deposits (B2)	duced Iron (C4)	✓ Crayfish I	Burrows (C8)
☐ Drift Deposits (B3) ☐ Recent Iron Re	duction in Tilled Soils (C6)	Saturation	n Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	ace (C7)	☐ Geomorp	hic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain i	in Remarks)	☐ Shallow A	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neu	tral Test (D5)
Water-Stained Leaves (B9)		☐ Sphagnui	m moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X Depth (incl	nes): surface		
Water Table Present? Yes No X Depth (incl			
Saturation Present? Yes X No Depth (incl (includes capillary fringe)	20	etland Hydrology Pre	sent? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections	s), if available:	
Remarks:			

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

ONITARILIA	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' radius)	% Cover	Species?	Status	Number of Dominant Species
1	- 10.			That Are OBL, FACW, or FAC: (A)
2			1013	Total Number of Dominant
3	- 0;			Species Across All Strata: (B)
4				Percent of Dominant Species
5	-00		00	That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	34 Se			OBL species x 1 =
50% of total cover:	20% of	total cover	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' radius)	-			FAC species x 3 =
1				FACU species x 4 =
2.			(c)()	UPL species x 5 =
				Column Totals: (A) (B)
3				10 00 00 00
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	_	S- 21 15 10		3 - Prevalence Index is ≤3.0 ¹
		= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	r:	
Herb Stratum (Plot size: 30' radius)				¹ Indicators of hydric soil and wetland hydrology must
1. Hydrocotyle bonariensis	75	У	facw	be present, unless disturbed or problematic.
2. Festuca Spp.	15	n	?	Definitions of Four Vegetation Strata:
3	■engl		·	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.		es Es		Sapling/Shrub – Woody plants, excluding vines, less
7		8		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Harb Allbartanana (a.a. waad Aalaata aa aa llaa
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				3- 10
11.	-1618		100 	Woody vine – All woody vines greater than 3.28 ft in height.
WWW.		-		neight.
12	90			
50% of total cover: 45		= Total Co		
	20% of	total cover	. <u> </u>	
Woody Vine Stratum (Plot size: 30' radius)				
1				
2				
3				
4	-:	x 		
5		<u> </u>		Hydrophytic
	90	= Total Co	ver	Vegetation
50% of total cover:	20% of	total cover	r:	Present? Yes <u>x</u> No
Remarks: (If observed, list morphological adaptations bel	ow).			

Sampling Point: wet1

SOIL Sampling Point: Wet 1

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	n the absence of	indicators.)	
Depth	Matrix	0/		x Feature		1 = 2	-	B	
(inches) 0-3	Color (moist) 10YR 5/2	_ <u>%</u> 100	Color (moist)		Type ¹	Loc ²	Texture	Remarks	
	Property of the control of the contr		7 5 4 5 5 6		· -				7-1 13
2-12	10YR 4/2	90	7.5YR 5/6	_ 10	<u>c</u>	_ <u>m</u>	sandy silt		
	2			****			2 5		46
20 0	42	<u> </u>	2	1749	100	24			9
10 No.	42	-1247	*	2462	To.		7. S		
-		- 1840		360	ų.		a. 3 , 3 .		,
	<u> </u>	-10		- (9)	- 1	0	7. 9		
17			Dados ad Matrice Mi	- <u> </u>		· ———	21 6 51	C Described M. Mat	i.
			Reduced Matrix, Matrix			ains.		L=Pore Lining, M=Mat r Problematic Hydric	
Histosol	873 77 72	cable to all	Polyvalue Be			PPSTI		ck (A9) (LRR O)	Cons .
The second contract c	pipedon (A2)		Thin Dark Su		and the second		the same of the sa	ck (A10) (LRR S)	
Black Hi	CONTRACTOR OF THE SECOND		Loamy Muck					Vertic (F18) (outside	MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		Piedmont	Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	Hall - Avinca has admitted	✓ Depleted Ma		4.0040		The second secon	us Bright Loamy Soils	(F20)
V	Bodies (A6) (LRR I	85 85 95	Redox Dark				☐ (MLRA	153B) ent Material (TF2)	
	icky Mineral (A7) (L esence (A8) (LRR I		Depleted Da Redox Depre					ini Material (1F2) Ilow Dark Surface (TF	12)
	ick (A9) (LRR P, T)	5 ,	Marl (F10) (L		0)			plain in Remarks)	12)
	d Below Dark Surfac	ce (A11)	Depleted Oc		(MLRA 1	51)	4 - 509 Mark 1000 (gg. 400 Az. 1000		
State of the state	ark Surface (A12)		Iron-Mangan				a out management	ors of hydrophytic veg	A CONTRACTOR STATES TO A STATE OF THE
220 020 0	rairie Redox (A16) (ACC NO. 10 NO. 10					nd hydrology must be p	3559
P	lucky Mineral (S1) (Gleyed Matrix (S4)	LKK U, S)	Delta Ochric Reduced Ver					disturbed or problem	atic.
1	ledox (S5)		Piedmont Flo		50				
	Matrix (S6)		47	1.00			RA 149A, 153C, 1	53D)	
- 12 12	rface (S7) (LRR P,		a:a						71
Restrictive	Layer (if observed)):							
Туре:	No.						Texts12 -12. (60579) (100589)	V	95%
010 10	ches):		3				Hydric Soil Pr	esent? Yes X	_ No
Remarks:									

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Riverside Golf Course	City/County: Ouachita Sampling Date: 6-26-2015
Applicant/Owner: City of West Monroe	State: LA Sampling Point: Wet 2
Investigator(s): Bill McAbee	Section, Township, Range: S38 T18N, R3E
Landform (hillslope, terrace, etc.): cypress pond	Local relief (concave, convex, none): concave Slope (%): 0-3
Subregion (LRR or MLRA): LRR O Lat: 32°3	31'30.72"N Long: - 92° 8'27.65"W Datum:
Soil Map Unit Name: Perry clay frequently flooded	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significant	
Are Vegetation, Soil, or Hydrology naturally p	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes X No	15 tilo Gampioa y il oa
Wetland Hydrology Present? Yes X No	within a Wetland? Yes X No
Remarks:	
This cypress pond is representative of all the	forested cypress ponds located on the subject
property.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	27 YES CES F25 71 27 SUSPENDE
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) High Water Table (A2) Marl Deposits (B	15) (LRR U) Drainage Patterns (B10)
Saturation (A3)	*
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
☐ Drift Deposits (B3) ☐ Recent Iron Redu ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface	announce C. C. Taranta and an an analysis and an an an analysis of the contract of the contrac
Iron Deposits (B5) Other (Explain in	· · ·
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 X No Depth (inche	s): surface
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes X No Depth (inche (includes capillary fringe)	es): surface Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
	n the up-slopes to determine the actual boundary for
A CONTRACTOR OF THE PROPERTY O	were not completed within the inundated portions of
the pond.	Word not completed within the managed politicals
and portal	

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

A A Property Washington	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' radius)	% Cover	Species?	Status	Number of Dominant Species
1. Taxodium distichum	40	У	obl	That Are OBL, FACW, or FAC: 5 (A)
2. Nyssa aquatica	15	У	obl	Total Number of Dominant
3				Species Across All Strata: 5 (B)
4	200			The state of the s
5.			· · · · · · · · · · · · · · · · · · ·	Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/R)
6.				That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
7	-00			Total % Cover of: Multiply by:
8	20		 .	OBL species x 1 =
40		= Total Cov		FACW species x 2 =
50% of total cover: 10	20% of	total cover:	4	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' radius)				
1	-60			FACU species x 4 =
2	-90			UPL species x 5 =
3				Column Totals: (A) (B)
4.				Provolongo Indov B/A -
5.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 30' radius)				¹ Indicators of hydric soil and wetland hydrology must
1. Juncus effusus	10	У	obl	be present, unless disturbed or problematic.
2. Saururus cernuus	10	У	obl	Definitions of Four Vegetation Strata:
3. Scirpus cyperinus	10	у	obl	~
4. Iemna minor	30	у	obl	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. ludwigia gradiflora	10	n	obl	height.
6. Hydrocotyl bonariensis	5	<u>n</u>	facw	,-
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 in. DBH and greater than 5.20 it (1 in) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9	-00		·	of size, and woody plants less than 3.28 ft tall.
10	-21)			Woody vine – All woody vines greater than 3.28 ft in
11	107 10			height.
12				
	60	= Total Cov	er	
50% of total cover: 30	15	total cover:		
Woody Vine Stratum (Plot size: 30' radius)		5.5753K - 5.5740544		
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:	20% of	total cover:	<u> </u>	Present? Yes X No
Remarks: (If observed, list morphological adaptations bel-	ow).			
,				

Sampling Point: wet2

SOIL Sampling Point: Wet 2

		e to the dep	oth needed to docu			or confire	n the absence o	f indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	Type ¹	Loc ²	Texture	Remarks	
0-3	10YR 6/3	100		2010			clay silt		
3-12	10YR 6/1	80	7.5YR 4/6	20	c		clay		
			-	-3/10/	- 4				-
-	3 14		3		- 1				<u>.</u>
			t i		-	¥ -	· 1 19		9
	: =		la.	- 390.	- 2				
	-		,		-				
¹ Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, M	S=Maske	d Sand G	rains.	² Location: P	L=Pore Lining, M=Mat	rix.
			LRRs, unless other					or Problematic Hydric	
. Histosol	(A1)		☐ Polyvalue B	elow Surfa	ace (S8) (LRR S, T,	U) 🔲 1 cm Mu	ck (A9) (LRR O)	
C. SERVINGASIONS CONTRACTOR	pipedon (A2)		Thin Dark S				ACTUAL DE VOICE DE VO	ck (A10) (LRR S)	
	istic (A3)		Loamy Muck	Par nara tare i		R O)		d Vertic (F18) (outside	
	en Sulfide (A4) d Layers (A5)		Loamy Gley ✓ Depleted Ma		(F2)		ATT TO THE REAL PROPERTY OF THE PERTY OF THE	it Floodplain Soils (F19 ous Bright Loamy Soils	2 97 5
The second secon	Bodies (A6) (LRR	P. T. U)	Redox Dark	16 8	F6)		Victoria de la companiona de la companio	A 153B)	(F20)
() () () () () () () () () ()	ucky Mineral (A7) (I	- 15 St St						ent Material (TF2)	
	esence (A8) (LRR		Redox Depr	essions (F	F8)		☐ Very Sha	allow Dark Surface (TF	12)
-	uck (A9) (LRR P, T		Marl (F10) (I				Other (E	xplain in Remarks)	
The state of the s	d Below Dark Surfa	ice (A11)	Depleted Oc		The second of the second		. 🖚 - 31		
y serious rocalisan	ark Surface (A12) rairie Redox (A16)	(MLRA 150	☐ Iron-Mangar A) ☐ Umbric Surfa		perception of the second	Anametrica new co	EU OUEL ENVIRONMENTALE	ors of hydrophytic veg nd hydrology must be p	
	Mucky Mineral (S1)		Delta Ochric					s disturbed or problem	
	Gleyed Matrix (S4)		Reduced Ve					• • • • • • • • • • • • • • • • • • • •	
	Redox (S5)		Piedmont FI	1.00					
S	Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLI	RA 149A, 153C, 1	153D)	
	rface (S7) (LRR P, Layer (if observed								,
Type:	Layer (II observed	·)·							
RESCRIPTION OF	ches):						Hydric Soil P	resent? Yes X	_ No
Remarks:	CITC3)		 3				Tiyane con i	1030111 103	- 110
S	ee comment	s on Hy	drology.						
		₹.	•						

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Riverside Golf C		City/C	ounty: Ouachita		Sampling Date: 6-26-2015
Applicant/Owner: City of Wes	t Monroe			State: LA	Sampling Point: wet 3
Investigator(s). Bill McAbee		Section	on Township Pange:	S38 T18N, R3E	
Landform (hillslope, terrace, etc.	hillslope	Local	relief (concave, conve	x. none): concave	Slope (%): 0-8 Datum:
Subregion (LRR or MLRA): LR	R 0	Lat: 32°31'31.8	3"N Long:	- 92° 8' 40.24"W	Datum:
Soil Map Unit Name: Perry cla	ay frequently flood		Long.	NWI classific	ation: PFO
Are climatic / hydrologic condition					
Are Vegetation, Soil					oresent? Yes X No
Are Vegetation, Soil				l, explain any answe	
				at of 550	, important features, etc.
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks: This wetland location sloughs/ponds. There low swale. There is experienced.	Yes X Yes X n is representa re are sloped o	on the outer edge	es with typically	not considere a wet and so	metimes inundated
HYDROLOGY					
Wetland Hydrology Indicato	rs:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum o		eck all that apply)		Surface Soil	of W Withouth
Surface Water (A1)		Aquatic Fauna (B13)	-		getated Concave Surface (B8)
High Water Table (A2)		Marl Deposits (B15) (LRF	₹ U)	Drainage Pat	ELV RESIDENCE FOR
Saturation (A3)	□ ⊦	lydrogen Sulfide Odor (0	21)	Moss Trim Li	nes (B16)
Water Marks (B1)	<u> </u>	Oxidized Rhizospheres a	long Living Roots (C3)	☐ Dry-Season ¹	Water Table (C2)
Sediment Deposits (B2)	✓ F	Presence of Reduced Iro	n (C4)	✓ Crayfish Burr	ows (C8)
Drift Deposits (B3)	<u></u>	Recent Iron Reduction in	Tilled Soils (C6)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	<u>□</u> 1	hin Muck Surface (C7)		☐ Geomorphic	Position (D2)
Iron Deposits (B5)	□ <	Other (Explain in Remark	s)	☐ Shallow Aqui	tard (D3)
Inundation Visible on Aeri	al Imagery (B7)			FAC-Neutral	Test (D5)
Water-Stained Leaves (B	9)			Sphagnum m	noss (D8) (LRR T, U)
Field Observations:	2000	D'ORGO			
Surface Water Present?	Yes <u>X</u> No	Depth (inches): surf	ace/minor_		
Water Table Present?		Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes X No	Depth (inches): <u>8</u>	Wetland	l Hydrology Presen	t? Yes X No
Describe Recorded Data (stre	am gauge, monitoring	g well, aerial photos, pre	vious inspections), if a	vailable:	
Remarks:	dia Was Mark and			and the same and t	
Soil pit was complete	ed on the mid	slope between ti	ne upland and	the lowest ele	vation of the wetland.
1					

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

/EGETATION (Four Strata) – Use scientific na	Sampling Point: wet 3						
	Absolute	Dominant	Indicator	Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	75.74	Species?	Status	Number of Dominant Species			
1. Triadici sebifera	30	У	fac	That Are OBL, FACW, or FAC: 4 (A)			
2. Nyssa aquatica	20	У	obl	Total Number of Dominant			
3. Salix nigra	15	<u>n</u>	obl	Species Across All Strata: 4 (B)			
4. Quercus nigra	15	n	facw				
5. Taxodium distichum	5	n	obl	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)			
6.	507. 35	20 20	· · · · · · · · · · · · · · · · · · ·	(11at 740 OBE, 1770W, 01 1770.			
7.		· ·		Prevalence Index worksheet:			
8.				Total % Cover of: Multiply by:			
	00	Total Cov		OBL species x 1 =			
50% of total cover: 40				FACW species x 2 =			
Sapling/Shrub Stratum (Plot size: 30' radius)	2070 01	total cover.	·	FAC species x 3 =			
	25	У	fac	FACU species x 4 =			
M/O				UPL species x 5 =			
2				Column Totals: (A) (B)			
3							
4				Prevalence Index = B/A =			
5				Hydrophytic Vegetation Indicators:			
6	-101		:	1 - Rapid Test for Hydrophytic Vegetation			
7				2 - Dominance Test is >50%			
8				3 - Prevalence Index is ≤3.0 ¹			
	25	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)			
50% of total cover:	20% of	total cover					
Herb Stratum (Plot size: 30' radius)				¹ Indicators of hydric soil and wetland hydrology must			
1. Cyperus esculentus	10	У	facw	be present, unless disturbed or problematic.			
2. Saururus cernuus	5	n	obl	Definitions of Four Vegetation Strata:			
3. Scirpus cyperinus	3	n	obl				
4.	199	<u>.</u>		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of			
5.				height.			
			 ;;				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
7							
8	•		-	Herb – All herbaceous (non-woody) plants, regardless			
9				of size, and woody plants less than 3.28 ft tall.			
10			 ;	Woody vine - All woody vines greater than 3.28 ft in			
11	-37		21	height.			
12							
_	27	= Total Cov					
50% of total cover: 9	20% of	total cover	6				
Woody Vine Stratum (Plot size: 30' radius)							
1							
1	-00)						
1							
1				Hydrophytic			
1		<u> </u>	<u> </u>	Hydrophytic Vegetation			
1		Total Cov	er				

SOIL Sampling Point: Wet 3

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	n the absence of	indicators.)	Ų.		
Depth Matrix		Redox Features			VEN SMOOTHING AND A SECTOR	*###**********************************					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks	-		
0-3	10YR 6/3	100			- 1	£	clay silt				
3-12	10YR 6/1	80	7.5YR 4/6	20	С	m	clay				
	- pa	- 1.23		- 153 	- 12-		p. 0, 0,		,,		
				-20	- :						
2	# <u>*</u>	-25			102 11 103	<u> </u>	2 3 3		7 m		
	-	_ : :-		100							
	•	-10		(6)	- y-		. 9.				
92 2 2	N 1975 800 800	N IN ESSES	225 K 2271227 RH 1925	975 2 875 Ø	02 025	· ——	2	n <u>en 488 ararr</u>			
	oncentration, D=De					rains.		L=Pore Lining, M=Matri or Problematic Hydric (
- 15 · · ·	Indicators: (Applic	cable to all I						9.5%	Solls :		
Histosol	0.271 177750		Polyvalue Be		navious washing a			ck (A9) (LRR O)			
St. DESCRIPTION OF DEFINITE	oipedon (A2)		Thin Dark Su				ACT TO SERVICE TO A STOCK AND	ck (A10) (LRR S)	U D A 450 A D)		
The same of the sa	stic (A3) n Sulfide (A4)		Loamy Muck	Par our or tour		K O)		l Vertic (F18) (outside N t Floodplain Soils (F19)			
	d Layers (A5)		Loamy Gleye ✓ Depleted Ma		(Г2)		A-1	us Bright Loamy Soils (I	28 - 420 - 50 - 12		
	Bodies (A6) (LRR I) T III	Redox Dark		E6)		(MLRA		20)		
V 12	icky Mineral (A7) (L		Depleted Dai				4.0	ent Material (TF2)			
	esence (A8) (LRR I		Redox Depre				Very Shallow Dark Surface (TF12)				
	ick (A9) (LRR P, T)		Marl (F10) (L		-,			Other (Explain in Remarks)			
	d Below Dark Surfac		Depleted Oc		(MLRA 1	151)		,			
The second second	ark Surface (A12)		Iron-Mangan		den en de la companya del companya del la companya del companya de la companya del companya de la companya del la companya de	1000000	, T) ³ Indicate	ors of hydrophytic veget	ation and		
Coast P	rairie Redox (A16) (MLRA 150A) 🔲 Umbric Surfa	ce (F13)	(LRR P,	T, U)	wetlan	nd hydrology must be pr	esent,		
Sandy N	lucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (M	LRA 151)		unless	s disturbed or problema	tic.		
Sandy G	Gleyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 1	50A, 150B)				
	Redox (S5)		Piedmont Flo	476							
	Matrix (S6)		Anomalous E	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C, 1	53D)			
- 12 12	rface (S7) (LRR P,						1				
Restrictive	Layer (if observed)) <u>:</u>									
Туре:								30			
Depth (in	ches):						Hydric Soil Pr	resent? Yes X	No		
Remarks:		a and I ford									
5	ee comments	s on Hya	rology.								