EXHIBIT 11- WETLANDS DELINEATION



Pittman Environmental Services, LLC

November 7, 2012

Mr. David Melancon Pan American Engineers, Inc. 1717 Jackson Street Alexandria, LA 71301

RE:

England Economic & Industrial Development District

Approximately 705 Acres Rapides Parish, Louisiana

Dear Mr. Melancon:

Pursuant to your request, a preliminary wetland delineation has been conducted for the above referenced site. The attached report and maps describe the results of the field wetland delineation conducted during October of 2012. Approximately 9.15 acres of the site was delineated as potentially jurisdictional wetland. Three stream/ditch features were delineated within limits of site, combining for approximately 8,982 linear feet (6.5 acres). All three stream/ditch features would likely be considered jurisdictional. Delineated non-wetlands were excluded from wetland status primarily due to absence of hydrology indicators and no obvious hydric soil indicators. The National Wetlands Inventory maps depict much of the wooded areas as wetland. It is possible that the COE could visit the site to review my delineation and consider more of the site to be jurisdictional wetland.

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

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

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Bart A. Pittman

Environmental Specialist

Preliminary Wetland Delineation England Economic & Industrial Development District Rapides Parish, Louisiana

Prepared By Pittman Environmental Services, L.L.C. November 6, 2012

At the request of the Pan American Engineers, a preliminary wetland delineation has been conducted for approximately 705 acres located in Sections 37, 38, 39, 73, & 74, Township 4 North, Range 2 West, Rapides Parish Louisiana. The 705 acre site is situated between Jimmy Brown Road and existing England Airpark. Attached maps depict the exact location and extent of the approximately 705 acre site. This report will describe the results of a preliminary wetland delineation conducted for the said property to determine the presence and approximate extent of jurisdictional wetlands and "waters of the U.S." as defined in Section 404 of the Clean Water Act. Pan American Engineers requested the preliminary wetland delineation, and the onsite inspection was conducted by Mr. Bart Pittman during October of 2012.

SITE DESCRIPTION

The ±705 acre site is situated between existing England Airport and Jimmy Brown Road. The majority of the site is comprised of row crop (cotton) and herbaceous field. Two wooded areas are located within limits of the site. The site is nearly level to slightly sloping. The NRCS Web Soil Survey indicates the soil units within the site as Moreland Clay (MnA) and Coushatta silt loam (Nw), both non-hydric soil types. Pictures (Attachment 2) depict the current state of the site and surrounding properties.

METHODOLOGY

Methods utilized for identifying and delineating wetlands follow procedures outlined in Part IV of the "Corps of Engineers Wetlands Delineation Manual" dated January 1987. Wetland Delineation Data Forms (Atlantic and Gulf Cost Plain Region) were completed for each vegetative community represented within the project. These attached data forms (Attachment 3) provide a listing of parameters/indicators to differentiate jurisdictional wetlands from non-wetlands. The completed forms confirm the presence or absence of the three required wetland criteria; hydrophytic vegetation, wetland hydrology, and hydric soils. The approximate location of each data point is shown on the attached preliminary wetland delineation map, (Attachment 1).

Preliminary Wetland Delineation England Economic & Industrial Development District ±705 Acre Site, Rapides Parish, Louisiana Page 2

Initial review of the subject property indicated that the majority of site would be comprised of well drained/non-hydric soil. The entire site was transected and observed for visual indicators of jurisdictional wetland. Soil profiles were examined throughout site for indictors of hydrology and hydric soil.

RESULTS

Once the presence and location of wetland/"other waters" was established, the boundaries were flagged. After flagging of boundaries was completed, mapping of the potentially jurisdictional areas was preformed by use of a sub-meter GPS, (Ashtech Mobile Mapper). GPS data was overlaid with the site boundaries to provide the approximate location and extent of delineated features as depicted on the attached preliminary wetland delineation map, (Attachment 1).

After careful field review of the subject property and all available sources of information, approximately 9.15 acres of the site was delineated as potentially jurisdictional wetland. Three stream/ditch features were delineated within limits of site, combining for approximately 8,982 linear feet (6.5 acres). The location of delineated features and data points are shown in **Attachment 1**.

DELINEATED AS POTENTIALLY JURISDICTIONAL

Delineated Wetland

Four wetland features were delineated within limits of site. The four features combine for approximately 9.15 acres. The largest of these wetland features is comprised of an approximately 7.76 acre depression area that appears to frequently inundate. This feature appears to have been at least partially created and also appears to be isolated. No surface water connection was observed to connect this feature to jurisdictional stream/OW. The three remaining features are comprised of one old ditch, one wetland/drain, and one small depression area. Only one of these features (0.24 acres) has a visible surface water connection to jurisdictional Other Waters. With the exception of the 0.24 acres, the

Preliminary Wetland Delineation England Economic & Industrial Development District ±705 Acre Site, Rapides Parish, Louisiana Page 3

remaining wetland areas are separated from "other waters" by non-jurisdictional areas. All delineated wetland areas are located within the wooded portion of site. A detailed description of delineated wetland areas are provided within two Wetland Delineation Data Forms, **Attachment 3**. The location and extent of each feature is shown on attached wetland delineation map.

Intermittent Ditch, "Other Waters"

Approximately 8,982 linear feet (6.5 acres) of intermittent ditch/OW was delineated within the limits of site. The majority of this area (±6,870 LF) is within one 30'-35' wide ditch that transects the center of the site. This ditch was apparently constructed to remove storm water from adjacent farm land. Much of this ditch has silted in and is partially vegetated with mature willow trees. No flow or pools of inundation were observed within this feature at time of visit. Two smaller intermittent stream/ditch features are located within the northern limits of the site. All of the delineated OW features are entirely rainwater driven and appear to have only seasonal flow. The location and extent of each feature is shown on attached wetland delineation map. Pictures depicting each feature are provided in **Attachment 2**.

DELINEATED AS NON-JURISDICTIONAL

Cotton Field & Herbaceous Field

The majority of the site is comprised of cotton field and herbaceous field. Approximately 50% of the site is comprised of cotton. Approximately 20% of the site is comprised of herbaceous field. Some of this herbaceous field is located within fence of existing airpark and is frequently mowed. Portions of the herbaceous field was recently cut for hay. The dominant species in area not cut for hay are recorded within Data Point #10, **Attachment 3**. No hydrology indicators or hydric soil indicators were recorded within the herbaceous field or areas of cotton.

Preliminary Wetland Delineation England Economic & Industrial Development District ±705 Acre Site, Rapides Parish, Louisiana Page 4

Wooded Non-Wetland

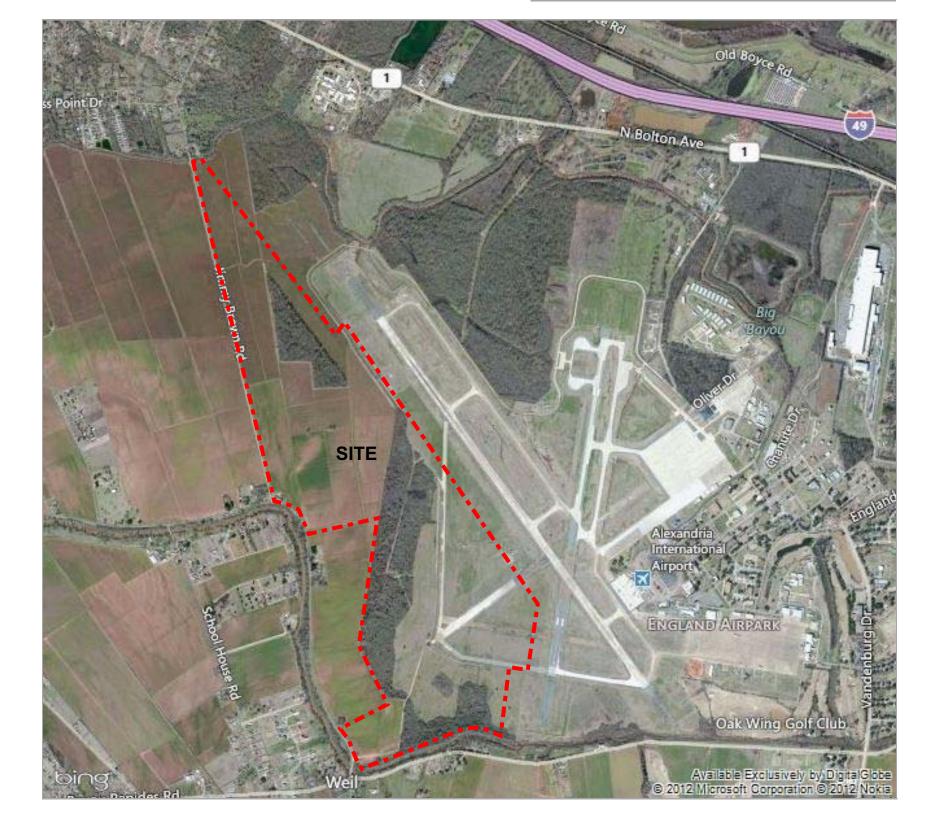
Two wooded areas are located within limits of site, comprising approximately 30% of total acreage. The northern wooded area is surrounded by cotton field. This wooded area is comprised of mature hardwood with shrub. One "isolated" wetland depression was delineated within this wooded area. The larger wooded area is comprised of a narrow strip that extends through the center of the site connecting to wooded area adjacent Bayou Rapides. Seven non-wetland Data Forms were recorded within the wooded areas of the site. Hydrology and/or hydric soil indicators were absent within the wooded areas delineated as non-wetland.

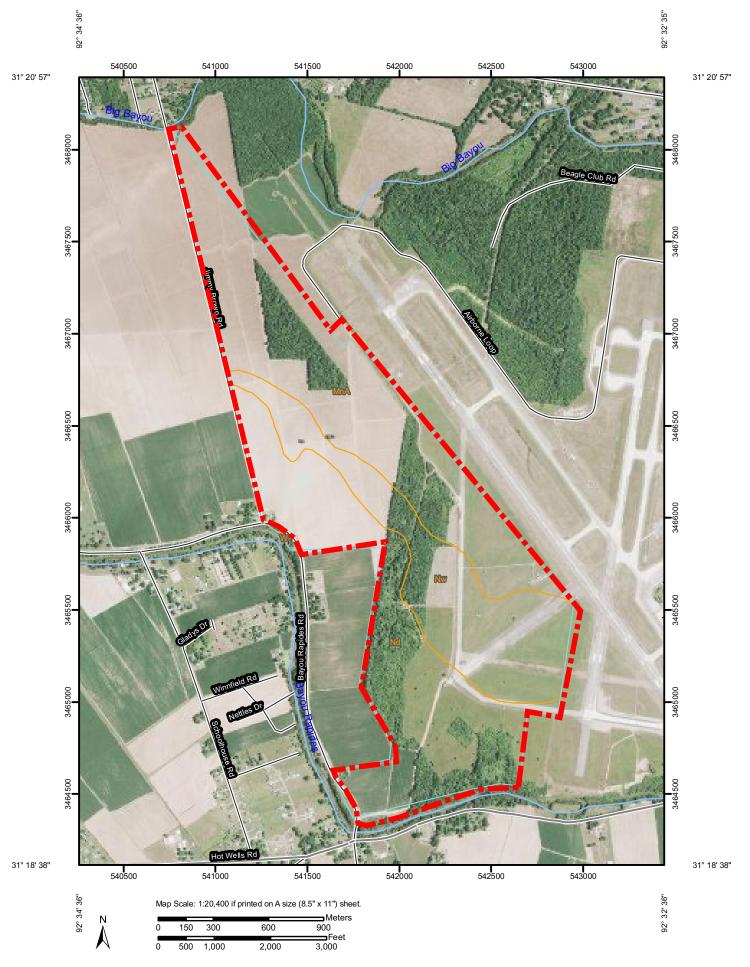
CONCLUSION

Based upon careful review of all available data and an onsite inspection, approximately 9.15 acres of the site was delineated as potentially jurisdictional wetland. Three stream/ditch features were delineated within limits of site, combining for approximately 8,982 linear feet (6.5 acres). All three stream/ditch features would likely be considered jurisdictional. The attached wetland delineation data forms (**Attachment 3**) confirm the conclusion of the preliminary study, indicating the presence or absence of sufficient wetland criteria at each sample point. Locations of delineated areas and of the data points are shown on the preliminary wetland delineation map, **Attachment 1**.

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

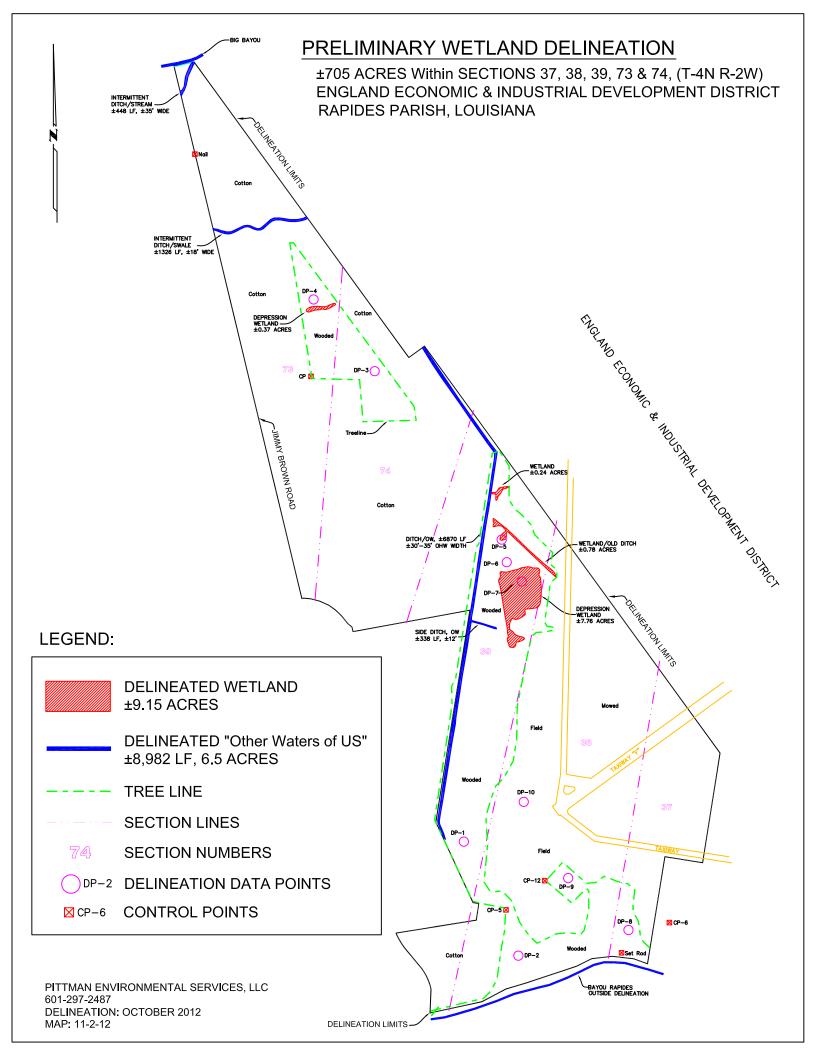
ATTACHMENT 1 MAPS





Map Unit Legend

Rapides Parish, Louisiana (LA079)							
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
MnA	Moreland clay, 0 to 1 percent slopes	278.8	38.6%				
Nd	Coushatta silt loam, 0 to 1 percent slopes	267.1	37.0%				
Nw	Coushatta silty clay loam, 0 to 1 percent slopes	176.7	24.4%				
W	Water	0.2	0.0%				
Totals for Area of Interest		722.9	100.0%				



ATTACHMENT 2 PHOTOGRAPHS



Data Point # 1, Facing North



Soil matrix at Data Point #1

Pittman Environmental Services, LLC	PROJECT: England Economic & Industrial Development District (705 Acre Site)	
Bervices, LLC	TITLE:	PHOTOS
	SITE PHOTOGRAPHS	1-2



Data Point #2, Facing East



Data Point #3, Facing SW

рнотоs 3-4

Pittman Environmental	PROJECT:	
Services, LLC		England Economic & Industrial Development District (705 Acre Site)
Scivices, LLC	TITLE:	
		SITE PHOTOGRAPHS



Ditch/OW facing South, central portion of site



Ditch/OW facing North, central portion of site

Pittman Environmenta	ι.
Services, LLC	

PROJECT

England Economic & Industrial Development District (705 Acre Site)

SITE PHOTOGRAPHS

рнотоs **5-6**



Ditch/Stream transecting the northern limits of site



Ditch/Swale within cotton field, facing East

Pittman Environmental Services, LLC	PROJECT:	England Economic & Industrial Development District (705 Acre Site)	
beivices, LLC	TITLE:		PHOTOS
		SITE PHOTOGRAPHS	7-8



Cotton field within the northern limits of site, facing $\ensuremath{\mathsf{SE}}$



Delineated Wetland at Data Point #7

Services, LLC	TITILE: SITE PHOTOGRAPHS	рнотоs 9-10
Pittman Environmental	England Economic & Industrial Development District (705 Acre Site)	



Wooded Non-Wetland at Data Point #8



Data Point #10 facing North

Pittman Environmental Services, LLC	England Economic & Industrial Development District (705 Acre Si	ite)
Services, LLC	TITLE:	PHOTOS
	SITE PHOTOGRAPHS	11-12



Herbaceous area near taxiway, eastern limits



Cotton field within southern portion of site

Pittman Environmenta	ιl
Services, LLC	

ROJECT:

England Economic & Industrial Development District (705 Acre Site)

SITE PHOTOGRAPHS

рнотоs 13-14

ATTACHMENT 3 DATA FORMS

Project/Site: +/-705 Acres EA	City/County: Avoy	elles	Sampling Date: 10/04/2012		
Applicant/Owner: England Economic & Industrial De			Sampling Point: Data Point 1		
Investigator(s): B. Pittman	Section, Township,	, Range: Section 39 T-4N,	R-2W		
	Local relief (concav				
Subregion (LRR or MLRA):	Lat: 31.318649	Long:92.559421	Datum: NAD 83		
Soil Map Unit Name: Coushatla (Nd)		NWI classific	cation: NA		
Are climatic / hydrologic conditions on the site typical for t	this time of year? Yes N	lo (If no, explain in R	Remarks.)		
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	re "Normal Circumstances" إ	present? Yes No		
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If needed, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site ma	p showing sampling poi	nt locations, transects	s, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Remarks:	No is the same	-	No		
Data Point taken within wooded area	ı, southern portion of	site.			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check a	ıll that apply)	Surface Soil	Cracks (B6)		
	tic Fauna (B13)		getated Concave Surface (B8)		
	Deposits (B15) (LRR U)	Drainage Pa			
	ogen Sulfide Odor (C1)	Moss Trim L			
	zed Rhizospheres along Living R		Water Table (C2)		
	ence of Reduced Iron (C4)	Crayfish Bur	` '		
	nt Iron Reduction in Tilled Soils (· —	risible on Aerial Imagery (C9)		
	Muck Surface (C7)		Position (D2)		
Iron Deposits (B5) Other Inundation Visible on Aerial Imagery (B7)	(Explain in Remarks)	Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)			
Field Observations:			11035 (D0) (ERR 1, 0)		
Surface Water Present? Yes No [Depth (inches):				
Water Table Present? Yes No ✓	Depth (inches):				
Saturation Present? Yes No V	Depth (inches):	Wetland Hydrology Preser	nt? Yes No✓_		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well	ll, aerial photos, previous inspect	ions), if available:			
Remarks:					
No hydrology indicators, dry conditio	ns at time of visit.				

Sampling Point:

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Celtis laevigata	5	yes	FACW	That Are OBL, FACW, or FAC: 8 (A)
2. Acer negundo	15	yes	FACW	Total Number of Dominant
3. Cornus drummondii	10	yes	FAC	Species Across All Strata: 8 (B)
4. Ulmus rubra	5	yes	FAC	Dercent of Deminent Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	35	= Total Cov	er	OBL species x 1 =
50% of total cover:				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1 Ulmus rubra	5	yes	FAC	FACU species x 4 =
2. Celtis laevigata	5	ves	FACW	UPL species x 5 =
Cornus drummondii	30		FAC	Column Totals: <u>0</u> (A) <u>0</u> (B)
Ligustrum sinense	5		FAC	
Quercus nigra	5		FAC	Prevalence Index = B/A =
		yes		Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	50	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Campsis radicans	3	yes	FAC	be present, unless disturbed or problematic.
2. Carex spp.	12	yes	FAC	Definitions of Four Vegetation Strata:
3.				
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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				and o m. BBH and grouter than 6.26 it (1 m) tail.
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				height.
12	45			
	15	= Total Cov	er	
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5.				Hydrophytic
	0	= Total Cov		Vegetation
50% of total cover:				Present? Yes Vo No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	>W).			

DP-1

Sampling Point: _

SOIL

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirr	n the absence of ir	ndicators.)
Depth	Matrix		Rede	ox Feature	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-10	5 YR 4/4	85%	5 YR 4/3	40%		IVI	silt loam	
10-20	5 YR 4/4	90%	5 YR 5/3	10%		IVI	silt loam	_
		_						
								_
		_						_
1Type: C=Co	oncentration, D=Dep	letion RM:		S=Masker	I Sand Gr	ains	2l ocation: PI =	Pore Lining, M=Matrix.
	ndicators: (Applic					шпэ.		Problematic Hydric Soils ³ :
Histosol		abio to un	Polyvalue B			DD C T I		
	(AT) ipedon (A2)		Polyvalue B		. , .		· —	(A10) (LRR S)
Black His				, ,				ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Mucl			(0)		Floodplain Soils (F19) (LRR P, S, T)
	, ,		Loamy Gley		ΓZ)			
	l Layers (A5) Rodies (A6) (LRR F	T 11\	Depleted Ma	` '	:6)		Anomalous (MLRA 1	Bright Loamy Soils (F20)
	Bodies (A6) (LRR F cky Mineral (A7) (Ll		Redox Dark Depleted Da	,	*		,	t Material (TF2)
	esence (A8) (LRR U		Redox Depr		, ,			ow Dark Surface (TF12)
	ck (A9) (LRR P, T)	,	Kedox Depl	•	0)			lain in Remarks)
	Below Dark Surfac	· (Δ11)	Nan (F10) (,	(MIRA 1	54)	Other (Expi	ialii iii Reiliaiks)
	rk Surface (A12)	<i>(</i> A11)	Iron-Mangar			-	T) ³ Indicators	s of hydrophytic vegetation and
	airie Redox (A12)	MI RA 1504					•	hydrology must be present,
	lucky Mineral (S1) (Delta Ochric			, 0,		disturbed or problematic.
	leyed Matrix (S4)	-	Reduced Ve		-	0A 150B		instance of problematic.
	edox (S5)		Piedmont FI					
	Matrix (S6)						RA 149A, 153C, 153	BD)
	face (S7) (LRR P, S	S. T. U)			, (• , (, ,, ,	,,
	ayer (if observed)							
Туре:	, (,	-						
	-h \.						Usadai - Osil Basa	
Depth (inc	nes):						Hydric Soil Pres	sent? Yes No
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoy	elles	Sampling Date: 10/04/2012		
Applicant/Owner: England Economic & Industrial De			Sampling Point: Data Point 2		
Investigator(s): B. Pittman	Section, Township	, Range: Section 38 T-4N,	R-2W		
	Local relief (concav				
Subregion (LRR or MLRA):	Lat: 31.314538	Long:92.557051	Datum: NAD 83		
Soil Map Unit Name: Coushatla (Nd)		NWI classific	cation: NA		
Are climatic / hydrologic conditions on the site typical for t	this time of year? Yes N	lo (If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	re "Normal Circumstances" ا	present? Yes No		
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If needed, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site ma	p showing sampling poi	nt locations, transects	s, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Remarks:	No within a We		No <u> </u>		
Data Point taken within wooded area	ı, southern property liı	mits.			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check a	ıll that apply)	Surface Soil	Cracks (B6)		
	tic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)		
	Deposits (B15) (LRR U)	Drainage Pa	·		
	ogen Sulfide Odor (C1)	Moss Trim L			
	zed Rhizospheres along Living R		Water Table (C2)		
	ence of Reduced Iron (C4)	_ '	Crayfish Burrows (C8)		
	nt Iron Reduction in Tilled Soils (· —	risible on Aerial Imagery (C9)		
	Muck Surface (C7)		Position (D2)		
Iron Deposits (B5) Other Inundation Visible on Aerial Imagery (B7)	(Explain in Remarks)	Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)			
Field Observations:		Ophaghum	11035 (D0) (ERR 1, 0)		
Surface Water Present? Yes No D	Depth (inches):				
Water Table Present? Yes No ✓	Depth (inches):				
Saturation Present? Yes No V	Depth (inches):	Wetland Hydrology Preser	nt? Yes No✓_		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well	ll, aerial photos, previous inspect	ions), if available:			
Remarks:					
No hydrology indicators, dry conditio	ns at time of visit.				

7P-2	
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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point:

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
Liquidambar styraciflua	60	yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				I I I I I I I I I I I I I I I I I I I
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover:	20% of	total cover	:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	_		540	FACU species x 4 =
1. Ulmus rubra	5	yes	FAC	UPL species x 5 =
2. Acer negundo	5	yes	FACW	
3. Cornus drummondii	7	yes	FAC	Column Totals: 0 (A) 0 (B)
4				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				
8.				
o	17	= Total Cov		3 - Prevalence Index is ≤3.0¹
500/ off-t-1				Problematic Hydrophytic Vegetation (Explain)
50% of total cover:	20% of	total cover	·	
Herb Stratum (Plot size:)	20	V00	FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Carex spp.		yes		be present, unless disturbed or problematic.
Toxicodendron radicans	3	yes	FAC	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4	_			more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
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 height.
				Height.
12	23			
500/ -51-1		= Total Cov		
50% of total cover:	20% of	total cover	·——	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4	_			
5				Hydrophytic
	0	= Total Cov	/er	Vegetation
50% of total cover:	20% of	total cover	:	Present? Yes Vo No No
Remarks: (If observed, list morphological adaptations bel				1
`	,			
Sweet Gum comprises 100% of canop	y at this	data p	oint loca	ation.

Sampling Point: ____

SOIL

Profile Desc	ription: (Describe	to the depti	n needed to docu	ment the i	ndicator	or confirm	n the absence o	of indicators.)
Depth	Matrix		Red	ox Feature:	S			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-18	5 YR 4/4	95%	5 YR 5/3	5%		IVI	clay loam	
				_				_
								_
								_
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=I	Reduced Matrix, M	S=Masked	l Sand Gr	ains.	² Location: F	PL=Pore Lining, M=Matrix.
	ndicators: (Applic						Indicators fo	or Problematic Hydric Soils ³ :
Histosol			Polyvalue B			RRSTI		uck (A9) (LRR O)
	ipedon (A2)		Thin Dark S		. , .		· —	uck (A10) (LRR S)
Black His			Loamy Mucl	, ,				d Vertic (F18) (outside MLRA 150A,B)
	, ,					(0)		nt Floodplain Soils (F19) (LRR P, S, T)
	n Sulfide (A4)		Loamy Gley		1 4)			
	Layers (A5)	T III	Depleted Ma	, ,	:e\			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	,	,		•	A 153B)
	cky Mineral (A7) (LI		Depleted Da		, ,			rent Material (TF2)
	esence (A8) (LRR U	וי	Redox Depr	,	D)			allow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (Other (E	Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Or		-	-	- -> 3, e	
	rk Surface (A12)		Iron-Mangai					tors of hydrophytic vegetation and
	airie Redox (A16) (I					, U)		and hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochrid		-			ss disturbed or problematic.
	leyed Matrix (S4)		Reduced Ve					
	edox (S5)		Piedmont FI					
	Matrix (S6)		Anomalous	Bright Loar	ny Solls (F20) (NILF	RA 149A, 153C,	153D)
	face (S7) (LRR P,							
Restrictive L	.ayer (if observed)	:						
Туре:			<u></u>					
Depth (inc	ches):						Hydric Soil F	Present? Yes No
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoy	elles	_ Sampling Date: 10/23/2012			
Applicant/Owner: England Economic & Industrial De			_ Sampling Point: Data Point 3			
Investigator(s): B. Pittman Section, Township, Range: Section 74 T-4N, R-2W						
• • • • • • • • • • • • • • • • • • • •		evel Slope (%): 0-2				
Subregion (LRR or MLRA):	Lat: 31.335698	Long: 92.563162	Datum: NAD 83			
Soil Map Unit Name: Moreland clay (MnA)		NWI classif				
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes N	lo (If no, explain in	Remarks.)			
Are Vegetation, Soil, or Hydrology			present? Yes No			
Are Vegetation, Soil, or Hydrology		If needed, explain any answ				
SUMMARY OF FINDINGS – Attach site map						
		it locations, transect	s, important reatures, etc.			
Hydrophytic Vegetation Present? Yes		oled Area				
Hydric Soil Present? Yes	No _ v within a We		No ✓			
Wetland Hydrology Present? Yes	No <u>√</u>					
Remarks:						
Data Point taken within wooded area	, northern portion of s	site.				
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)			
Primary Indicators (minimum of one is required; check a	Ill that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)				
	tic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
Surface Water (A1) Aquat High Water Table (A2) Marl [Sparsely Vegetated Concave Surface (B6) Drainage Patterns (B10)				
		Moss Trim Lines (B16)				
	ogen Sulfide Odor (C1) zed Rhizospheres along Living R					
	ence of Reduced Iron (C4)		Crayfish Burrows (C8)			
	nt Iron Reduction in Tilled Soils (
	Muck Surface (C7)	Geomorphic Position (D2)				
	(Explain in Remarks)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		✓ FAC-Neutra				
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)			
Field Observations:						
	Depth (inches):					
Water Table Present? Yes No D	Depth (inches):		_			
Saturation Present? Yes No C	Depth (inches):	Wetland Hydrology Prese	ent? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring wel	l. aerial photos, previous inspect	ions), if available:				
Describe Necestada Bata (diream gaage, memering wel	i, denai priotos, previode inspect	one), ii available.				
Remarks:						
No hydrology indicators, dry condition	ns at time of visit					
The fly drology indicators, ary condition	TIO GE GITTO OF VIOLE					

Sampling Point: __

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Celtis laevigata	24	yes	FACW	That Are OBL, FACW, or FAC: 8 (A)
2. Quercus nigra	20	yes	<u>FAC</u>	Total Number of Dominant
3. Ulmus rubra	10	yes	FAC	Species Across All Strata: 8 (B)
4				D (1D) (2)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				That Ale OBE, FAOW, OF FAO.
7.				Prevalence Index worksheet:
l				Total % Cover of: Multiply by:
8		= Total Cov		OBL species x 1 =
500/ -51-1-1				FACW species x 2 =
50% of total cover:	20% 01	rtotal cover	·	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	_		FAC	FACU species x 4 =
1. Quercus nigra	- 5	yes	FAC	UPL species x 5 =
2. Celtis laevigata	10	yes	FACW	Column Totals: 0 (A) 0 (B)
3. Sabal minor	_ 12	yes	<u>FACW</u>	Column Totals. (A)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				
8				
0		= Total Cov	·or	☐ 3 - Prevalence Index is ≤3.01
EOO/ of total acres				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% 0	total cover		
Herb Stratum (Plot size:)	2	1/00	FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Campsis radicans	- 3	yes		be present, unless disturbed or problematic.
2. Carex spp.	10	yes	FAC	Definitions of Four Vegetation Strata:
3. Toxicodendron radicans	3	yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Smilax bona-nox	3	yes	FAC	more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	19			
		= Total Cov		
50% of total cover:	20% of	ftotal cover	:	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	 /er	Vegetation
50% of total cover:				Present? Yes V No No
Remarks: (If observed, list morphological adaptations bel		1000100101	·	
	OW).			
Mature Hardwood, with palmetto				

SOIL

Sampling Point: DP-3

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	n the absence o	f indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)		Type'	Loc²	<u>Texture</u>	Remarks
0-19	5 YR 4/3	98%		- ——		IVI	clay	
	-							
 								
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
•	Indicators: (Applic	cable to all LF	•		,			or Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Be				-	uck (A9) (LRR O) uck (A10) (LRR S)
ı —	istic (A3)		Loamy Muck	, ,				d Vertic (F18) (outside MLRA 150A,B)
_	en Sulfide (A4)		Loamy Gley			. •,		nt Floodplain Soils (F19) (LRR P, S, T)
ı —	d Layers (A5)		Depleted Ma		,			ous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark				(MLRA	A 153B)
	ıcky Mineral (A7) (L		Depleted Da		` '			ent Material (TF2)
	esence (A8) (LRR U	J)	Redox Depre	,	3)			allow Dark Surface (TF12)
_	ick (A9) (LRR P, T) d Below Dark Surfac	se (Δ11)	Marl (F10) (I	•	(MIRA 1	51)	Other (E	Explain in Remarks)
	ark Surface (A12)	<i>(</i> A11)	Iron-Mangar		•		T) ³ Indicat	tors of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A)					•	and hydrology must be present,
Sandy N	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (M L	RA 151)		unles	ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont Fl	•		•	•	450D)
	l Matrix (S6) rface (S7) (LRR P, 3	e T III	Anomaious i	Bright Loar	ny Solis (F2U) (IVILR	RA 149A, 153C, 1	153D)
	Layer (if observed)						_	
Type:	, (,	•						
	ches):		<u></u>				Hydric Soil P	Present? Yes No V
Remarks:							1 -	

Project/Site: +/-705 Acres EA	City/County: Avoye	elles	Sampling Date: 10/23/2012			
Applicant/Owner: England Economic & Industrial De			_ Sampling Point: Data Point 4			
Investigator(s): B. Pittman Section, Township, Range: Section 73 T-4N, R-2W						
• ' '		evel Slope (%): 0-2				
Subregion (LRR or MLRA):			Datum: NAD 83			
Soil Map Unit Name: Moreland clay (MnA)		NWI classif				
Are climatic / hydrologic conditions on the site typical for t						
Are Vegetation, Soil, or Hydrology			present? Yes No			
Are Vegetation, Soil, or Hydrology		f needed, explain any answ				
SUMMARY OF FINDINGS – Attach site map						
		it locations, transect	s, important reatures, etc.			
Hydrophytic Vegetation Present? Yes		led Area				
Hydric Soil Present? Yes	No _ vithin a Wes		No✓			
Wetland Hydrology Present? Yes	No <u>√</u>					
Remarks:						
Data Point taken within wooded area	, northern portion of s	ite.				
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)			
Primary Indicators (minimum of one is required; check a	III that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)				
	ic Fauna (B13)	Surface Soll Cracks (B6) Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Marl E		Sparsely Vegetated Concave Surface (B6) Drainage Patterns (B10)				
Saturation (A3) Hydro						
	zed Rhizospheres along Living Ro		Moss Trim Lines (B16) C3) Dry-Season Water Table (C2)			
	nce of Reduced Iron (C4)	Crayfish Burrows (C8)				
	nt Iron Reduction in Tilled Soils (C					
	Muck Surface (C7)	Geomorphi	c Position (D2)			
Iron Deposits (B5) Other	(Explain in Remarks)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		✓ FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)			
Field Observations:						
	Depth (inches):					
Water Table Present? Yes No ✓	Depth (inches):					
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring wel	L aerial photos, previous inspection	ons), if available:				
Describe Nessraed Bata (Stream gauge, memoring war	i, acriai priotoc, previous inspessi	ono), ii avallabio.				
Remarks:						
No hydrology indicators, dry condition	ns at time of visit					
Two flydrology findicators, dry condition	is at time of visit.					

Sampling Point: _

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Celtis laevigata	15	yes	FACW	That Are OBL, FACW, or FAC: 9 (A)
2. Quercus nigra	22	yes	FAC	Total Number of Densir and
3. Ulmus rubra	5	yes	FAC	Total Number of Dominant Species Across All Strata: 9 (B)
4 Liquidambar styraciflua	13	yes	FAC	(2)
5				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
	55	= Total Cov	⁄er	
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1 Quercus nigra	5	yes	FAC	FACU species x 4 =
2 Celtis laevigata	8	ves	FACW	UPL species x 5 =
3. Sabal minor	10	yes	FACW	Column Totals: 0 (A) 0 (B)
4. Ulmus rubra	5	yes	FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
	28	= Total Cov		l
EON/ of total account				Problematic Hydrophytic Vegetation (Explain)
50% of total cover:	20% 01	total cover	·——	
Herb Stratum (Plot size:)	0		E40	¹ Indicators of hydric soil and wetland hydrology must
1. Campsis radicans	2	yes	FAC	be present, unless disturbed or problematic.
2. Carex spp.	8	yes	FAC	Definitions of Four Vegetation Strata:
3. Toxicodendron radicans	5	yes	FAC	To a 10 (a a de miles de media de miles de 17 C anol an
4. Smilax bona-nox	2	yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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				than 3 in. DBH and greater than 3.28 ft (1 m) tail.
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				height.
12.				110191111
12.	17	= Total Cov		
500/ 5/ /				
50% of total cover:	20% of	total cover	·	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5				Hydrophytic
		= Total Cov		Vegetation
50% of total cover:	20% of	total cover	:	11030IK: 103 <u>——</u> 110 <u>——</u>
Remarks: (If observed, list morphological adaptations bel-	ow).			
Matura Hardwood with nalmotta				
Mature Hardwood, with palmetto				

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the ir	ndicator	or confirm	n the absence of i	ndicators.)
Depth	Matrix		Redo	x Features	i			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	5 YR 3/2	90%				IVI	loam	
2-20	5 YR 4/4	100%				IVI	clay	
2-20	3 1 1 4/4						— Clay	
								-
1= 0 0				· ——	0		21 13 121	Dans Lining M. Makin
	oncentration, D=De					ains.		=Pore Lining, M=Matrix.
	ndicators: (Appli	cable to all Li						Problematic Hydric Soils ³ :
Histosol			Polyvalue Be				· —	
	ipedon (A2)		Thin Dark Su	, ,				(A10) (LRR S)
Black Hi	, ,		Loamy Muck			(O)		/ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		-2)			Floodplain Soils (F19) (LRR P, S, T)
	l Layers (A5)		Depleted Ma	. ,				s Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	,	*		(MLRA 1	•
	cky Mineral (A7) (L		Depleted Dai					t Material (TF2)
	esence (A8) (LRR I	,	Redox Depre	`)			ow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (L				Other (Exp	olain in Remarks)
	d Below Dark Surfac	ce (A11)	Depleted Ocl			-	3	
	rk Surface (A12)		Iron-Mangan				•	s of hydrophytic vegetation and
	airie Redox (A16) (,	_			, U)		I hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric		-			disturbed or problematic.
	leyed Matrix (S4)		Reduced Ver					
	edox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous E	Bright Loan	ny Soils (F20) (MLF	RA 149A, 153C, 15	3D)
	face (S7) (LRR P,							
Restrictive L	.ayer (if observed)) :						
Туре:			_					
Depth (inc	ches):						Hydric Soil Pre	sent? Yes No
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoye	elles	Sampling Date: 10/24/2012				
Applicant/Owner: England Economic & Industrial De			Sampling Point: Data Point 5				
Investigator(s): B. Pittman Section, Township, Range: Section 39 T-4N, R-2W							
	Local relief (concav						
Subregion (LRR or MLRA):							
Soil Map Unit Name: Moreland clay (MnA)	Lat.	Long NWI classifi					
Are climatic / hydrologic conditions on the site typical for t							
Are Vegetation, Soil, or Hydrology		re "Normal Circumstances"	present? Yes No				
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (I	f needed, explain any answe	ers in Remarks.)				
SUMMARY OF FINDINGS - Attach site maj	ρ showing sampling poin	nt locations, transects	s, important features, etc.				
Understands the Versatation Brassant	Ne						
	No Is the Samp		,				
Wetland Hydrology Present?	No within a We	tland? Yes <u>√</u>	No				
Remarks:							
Data Point taken within delineated we	etland denression are	adjacent to old	ditch				
Data i Oint taken within defineated wi	stianu, uepression are	sa aujacent to olu t	diteri.				
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)				
Primary Indicators (minimum of one is required; check a	II that apply)	Surface Soil	Cracks (B6)				
Surface Water (A1) Aquat	Sparsely Ve	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2) Marl [Deposits (B15) (LRR U)	Drainage Pa	Drainage Patterns (B10)				
Saturation (A3) Hydro	gen Sulfide Odor (C1)	Moss Trim L	Moss Trim Lines (B16)				
	zed Rhizospheres along Living Ro	oots (C3) Dry-Season	Dry-Season Water Table (C2)				
Sediment Deposits (B2) Prese	nce of Reduced Iron (C4)		Crayfish Burrows (C8)				
	nt Iron Reduction in Tilled Soils (C		/isible on Aerial Imagery (C9)				
	Muck Surface (C7)		✓ Geomorphic Position (D2)				
	(Explain in Remarks)	Shallow Aqu					
Inundation Visible on Aerial Imagery (B7)			✓ FAC-Neutral Test (D5)				
Water-Stained Leaves (B9) Field Observations:		Spnagnum i	moss (D8) (LRR T, U)				
	Depth (inches):						
	Depth (inches):						
Saturation Present? Yes No V	Depth (inches):	Watland Hydrology Press	nt? Yes No				
(includes capillary fringe)			iiti Tes NO				
Describe Recorded Data (stream gauge, monitoring wel	I, aerial photos, previous inspecti	ons), if available:					
Remarks:							
No herbaceous vegetation, appears	to have shallow inund	ation during winter	r and spring. Dry				
conditions at time of visit.							

Sampling Point: __

	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Species	
1. Celtis laevigata	35	yes	FACW	That Are OBL, FACW, or FAC: 3	(A)
2. Liquidambar styraciflua	_ 15	yes	FAC	Total Number of Dominant	
3. Ulmus rubra	10	yes	FAC	Species Across All Strata:	(B)
4				Percent of Dominant Species	
5					(A/B)
6					
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	-
	60	= Total Cov	er	OBL species x 1 =	
50% of total cover:				FACW species x 2 =	.
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =	
1. Celtis laevigata	10	yes	FAC	FACU species x 4 =	.
2.				UPL species x 5 =	
				Column Totals: 0 (A)	(B)
3					
4				Prevalence Index = B/A =	-
5				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		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover:			
Herb Stratum (Plot size:)				Indicators of hydric soil and wetland hydrology mu	ust
1				be present, unless disturbed or problematic.	
2				Definitions of Four Vegetation Strata:	
3				Tree 10(and) plants avaluating since 2 in (7 Ca)	/
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cr more in diameter at breast height (DBH), regardle:	
5.				height.	
6				Conling/Chrub Woody plants avaluding vines	laaa
7		-		Sapling/Shrub – Woody plants, excluding vines, I than 3 in. DBH and greater than 3.28 ft (1 m) tall.	1622
				-	
8				Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	dless
9				or size, and woody plants less than 5.20 it tall.	
10				Woody vine - All woody vines greater than 3.28 f	t in
				height.	
12	0				
		= Total Cov			
50% of total cover:	20% of	total cover:			
Woody Vine Stratum (Plot size:)					
1					
2					
3					
4					
5	_			Hydrophytic	
	0 :	= Total Cov	er	Vegetation	
50% of total cover:	20% of	total cover:		Present? Yes No	
Remarks: (If observed, list morphological adaptations bel					
(··	,.				

Sampling Point: DP-5

SOIL

Profile Desc	ription: (Describe	to the dept	n needed to docu	ment the	indicator	or confirm	n the absence of	indicators.)
Depth	Matrix		Redo	ox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	5 YR 4/4	95%	5 YR 4/2	5%	U	IVI	clay loam	
				-				
								_
								_
								_
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: Pl	_=Pore Lining, M=Matrix.
	ndicators: (Applic						Indicators for	r Problematic Hydric Soils ³ :
Histosol			Polyvalue B			RRSTI		k (A9) (LRR O)
	pipedon (A2)		Thin Dark S		. , .		· —	k (A10) (LRR S)
Black Hi			Loamy Muck	,				Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)					(0)		Floodplain Soils (F19) (LRR P, S, T)
	` '		Loamy Gley		(174)			
	I Layers (A5)	T 11	Depleted Ma	, ,	EG)			us Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	,	,		(MLRA	•
	cky Mineral (A7) (L		Depleted Da					nt Material (TF2)
	esence (A8) (LRR U	1)	Redox Depr	•	٠٥)			llow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (I	•			Other (Ex	plain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc		-		- > 3, , ,	
	rk Surface (A12)		Iron-Mangar					ors of hydrophytic vegetation and
	airie Redox (A16) (_			, U)		d hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric		-			disturbed or problematic.
	leyed Matrix (S4)		Reduced Ve					
	edox (S5)		Piedmont FI					
	Matrix (S6)		Anomalous	Bright Loa	my Soils ((F20) (WLF	RA 149A, 153C, 1	53D)
	face (S7) (LRR P,							
Restrictive I	_ayer (if observed)	:						
Туре:								
Depth (inc	ches):						Hydric Soil Pr	esent? Yes <u>Y</u> No <u>L</u>
Remarks:							1	

Project/Site: +/-705 Acres EA	City/County: Avoye	elles	Sampling Date: 10/24/2012		
Applicant/Owner: England Economic & Industrial De			Sampling Point: Data Point 6		
• •	Section, Township, Range: Section 39 T-4N, R-2W				
	Local relief (concave				
Subregion (LRR or MLRA):	Lat: 31.328782	Long: 92.557534	Datum: NAD 83		
Soil Map Unit Name: Moreland clay (MnA)		NWI classif			
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes No	o (If no, explain in	Remarks.)		
Are Vegetation, Soil, or Hydrology			present? Yes _ ✓ No		
Are Vegetation, Soil, or Hydrology		needed, explain any answ			
SUMMARY OF FINDINGS – Attach site map					
			o, important routures, etc.		
Hydrophytic Vegetation Present? Yes		led Area			
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		tland? Yes	No <u>√</u>		
Wetland Hydrology Present? Yes	NO Y				
Data Point taken within wooded area	between two delineat	ted wetland areas			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check a	II that apply)		Surface Soil Cracks (B6)		
	ic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)			
I .	Deposits (B15) (LRR U)	Drainage Patterns (B10)			
	zed Rhizospheres along Living Ro	Moss Trim oots (C3) Dry-Seasor	Water Table (C2)		
Sediment Deposits (B2) Prese	Crayfish Burrows (C8)				
Drift Deposits (B3) Recer	(6) Saturation	/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 Aq	uitard (D3)		
Inundation Visible on Aerial Imagery (B7)		✓ FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)		
Field Observations:					
	Depth (inches):				
Water Table Present? Yes No _✓ □	Depth (inches):				
	Depth (inches):	Wetland Hydrology Prese	nt? Yes No✓		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring wel	I, aerial photos, previous inspection	ons), if available:			
	, , , , , , , , ,	,			
Remarks:					
No hydrology indicators, dry condition	ns at time of visit				
The flydrology maleutere, dry condition	TO GE CITIO OF VIOLE.				

P.	.6
	. ()

VEGETATION (Four Strata) – Use scientific na	ames of pl	lants.		DP-6 Sampling Point:	
· · · · · · · · · · · · · · · · · · ·	•	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Species _	
1. Celtis laevigata	38	yes	FACW	That Are OBL, FACW, or FAC: 7 (A)	
2. Acer negundo	_ 7	yes	FACW	Total Number of Dominant	
3				Species Across All Strata: 7 (B)	
4				Dersont of Deminant Species	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)	
6					
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	
		= Total Cov	er	OBL species x 1 =	
50% of total cover:				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =	
1 Cornus drummondii	22	yes	FAC	FACU species x 4 =	
2 Celtis laevigata	- 5	ves	FACW	UPL species x 5 =	
3. Ulmus rubra	- 5	yes	FAC	Column Totals: 0 (A) 0 (B)	
4				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0 ¹	
	32	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover:				(2.p.z)	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must	
1 Campsis radicans	3	yes	FAC	be present, unless disturbed or problematic.	
2 Carex spp.	15	yes	FAC	Definitions of Four Vegetation Strata:	
3 Toxicodendron radicans	5	yes	FAC		
<u> </u>	_			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or	
4				more in diameter at breast height (DBH), regardless of height.	
5					
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
7				than 3 in. DBH and greater than 3.20 it (1 in) tail.	
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				height.	
12					
	23	= Total Cov	er		
50% of total cover:	20% of	f total cover	·		
Woody Vine Stratum (Plot size:)					
1					
2.					
3.					
4					
5	_			Hydrophytic	
		= Total Cov		Vegetation Present? Yes No	
50% of total cover:		total cover	·		
Remarks: (If observed, list morphological adaptations bel	ow).				
Mature Hardwood, dense roughleaf					

Sampling Point: ____

SOIL

Depth Matrix Redox Features (inches) Solor (mosts) % Color (mosts) % Type Loc Texture Remarks
Color (moist) % Color (moist) % Type Loc² Texture Remarks
8:20 5 YR 4/6 100% IVI clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histic Spipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic CA3) Loamy Mucky Mineral (F1) (LRR S, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Stratified Layers (A8) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Depleted Dork CH70 (LRR U) Depleted Dork CH70 (LRR D, T, U) Depleted Dork CH70 (LRR D, T, U) Depleted Dork Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (A5) Sandy Redox (S5) Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR O, S) Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR O, S) Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR O, S) Dark Surface (S12) Deptetic Octric (F17) (MLRA 150A) Dark Surface (A15) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F19)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Concentration PL=Pore Lining, M=Matrix. Hydric Soil Indicators for Problematic Hydric Soils ² : Histosol (A1)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Concentration PL=Pore Lining, M=Matrix. Hydric Soil Indicators for Problematic Hydric Soils ² : Histosol (A1)
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A3) Hydrogen Sulfide (A4) Horrigen Sulfide (A4) Horrigen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide Marka 150A, Boll (LRR
Histosol (A1)
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A,B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix (F3) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) I cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Delow Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Delta Ochric (F17) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) Meduced Vertic (F18) (outside MLRA 150A) Reduced Vertic (F18) (outside MLRA 150A, 150B) Piedmont Floodplain Soils (F20) Reduced Vertic (F18) (MLRA 149A, 153C, 153D) No Popleted Natrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes
Black Histic (A3)
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Beleted Matrix (F3) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Beleted Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Deita Ochric (F17) (MLRA 150A) Derived Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Dark Surface (F13) (MLRA 150A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Hydric Soil Present? Yes No Mari (F10) (LRR P, S, T) Red Parent Material (TF2) (MLRA 153B) Red Parent Material (TF2) (MLRA 153B) Red Parent Material (TF2) Wet Parent Material (TF2) (MLRA 151) Cher (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydrophytic vegetation and wetland hydrology must be present, unle
Stratified Layers (A5)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) 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) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and Wetland hydrology must be present, United Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) United Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Reduced Vertic (F18) (MLRA 149A) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
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) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and 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 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) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delted Ochric (F11) (MLRA 0, P, T) Iron-Manganese Masses (F12) (LRR 0, P, T) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Siripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR 0, P, T) Wetland hydrology must be present, Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, Umbric Surface (F17) (MLRA 150A) Wetland hydrology must be present, Unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) No Wetland hydrology must be present, Unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Wetland hydrology must be present, Unless disturbed or problematic. Hydric Soil Present? Yes
Thick Dark Surface (A12)
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 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) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
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) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
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) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Sandy Redox (S5)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Type:
Depth (inches): Hydric Soil Present? Yes No V
Depth (inches): Hydric Soil Present? Yes No V
<u> </u>

Project/Site: +/-705 Acres EA City/County:	Avoyelles Sampling Date: 10/24/2012							
	State: LA Sampling Point: Data Point 7							
••	Investigator(s): B. Pittman Section, Township, Range: Section 39 T-4N, R-2W							
Landform (hillslope, terrace, etc.): depression								
Subregion (LRR or MLRA): Lat: 31.328084								
	NWI classification: NA							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes $\underline{\hspace{1.5cm}}$	No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No							
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling	g point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes No Is th								
Hydric Soil Present?	e Sampled Area							
Wetland Hydrology Present? Yes No	in a Wetland? Yes No							
Remarks:								
Data Point taken within 7.76 acre wetland area, depre	ession area old disturbance.							
HYDROLOGY								
Wetland Hydrology Indicators:	Secondary Indicators (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 Patterns (B10)							
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)							
✓ Water Marks (B1) Oxidized Rhizospheres along L								
Sediment Deposits (B2) Presence of Reduced Iron (C4)								
Drift Deposits (B3) Recent Iron Reduction in Tilled Algal Mat or Crust (B4) Thin Muck Surface (C7)	Soils (C6) Saturation Visible on Aerial Imagery (C9) ✓ Geomorphic Position (D2)							
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aguitard (D3)							
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):	Wetland Hydrology Present? Yes No							
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections) if available:							
Describe Recorded Data (stream gauge, monitoring well, aeriai priotos, previous	inspections), ii avaliable.							
Remarks:								
12" water marks on trees at deepest point, appears to	nave snallow inundation during winter and							
spring. Dry conditions at time of visit.								

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

Sampling Point: DP-7

seet:
cies

Trop Stratum (Diet size:		Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	65		OBL	Number of Dominant Species That Are OBL FACW or FAC: 3
1. Salix nigra		yes		That Are OBL, FACW, or FAC: $\frac{3}{}$ (A)
2. Sapium sebiferum	10	yes	FAC	Total Number of Dominant
3. Acer rubrum	10	yes	FAC	Species Across All Strata: 3 (B)
4				Develop of Develop and Consider
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				That it to to be, i i i to to
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0		= Total Cov		OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% of	total cover:		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)			0.01	FACU species x 4 =
1. Salix nigra	10	yes	OBL	
2				UPL species x 5 =
3				Column Totals: 0 (A) 0 (B)
4				Prevalence Index = B/A =
5.				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	40			U 3 - Prevalence Index is ≤3.01
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	ftotal cover:		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2.				Definitions of Four Vegetation Strata:
3.				
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				g.n.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Managhardan Allamanda dinang manadan than 2 20 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				
12.	0	= Total Cov		
500/ -5t-t-1				
50% of total cover:	20% 01	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5.				Hydrophytic
	0	= Total Cov	 er	Vegetation
EOO/ of total agreer				Present? Yes V No No
50% of total cover:		total cover.		
Remarks: (If observed, list morphological adaptations bel	OW).			
Dense stand of willow trees				

Sampling Point: ____

SOIL

Profile Desc	ription: (Describe	to the depti	n needed to docu	ment the	indicator	or confirm	n the absence o	f indicators.)
Depth	Matrix		Redo	ox Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-18	5 YR 4/3	95%	5 YR 4/2	5%	U	IVI	clay	
								_
								_
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=l	Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applic	able to all L	RRs, unless othe	rwise not	ted.)		Indicators fo	or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue B	elow Surfa	ace (S8) (I	RRSTI	U) 1 cm Ми	ick (A9) (LRR O)
	pipedon (A2)		Thin Dark S		. , .		· —	ick (A10) (LRR S)
Black Hi			Loamy Muck	,				d Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley			νο,		nt Floodplain Soils (F19) (LRR P, S, T)
	I Layers (A5)		Depleted Ma		(12)			ous Bright Loamy Soils (F20)
	• '	T 11\	Depleted Ma	, ,	E6)			A 153B)
	Bodies (A6) (LRR F			,	,		,	,
	cky Mineral (A7) (L		Depleted Da					ent Material (TF2) allow Dark Surface (TF12)
	esence (A8) (LRR U	,	Redox Depr	•	-0)			* *
	ck (A9) (LRR P, T)	- (644)	Marl (F10) (I	•	(04) 5 4	E41	Other (E	xplain in Remarks)
	d Below Dark Surfac	e (ATT)	Depleted Oc		-		T) 31	
	rk Surface (A12)	MI DA 450A	Iron-Mangar				•	tors of hydrophytic vegetation and
	airie Redox (A16) (I					, 0)		nd hydrology must be present,
	lucky Mineral (S1) (LKK (), (3)	Delta Ochrid		-	50 A 450 D		s disturbed or problematic.
	leyed Matrix (S4)		Reduced Ve					
	edox (S5)		Piedmont FI					LEOD)
	Matrix (S6)	. =	Anomaious	Bright Loa	my Solls (F20) (IVILE	RA 149A, 153C, 1	1930)
	face (S7) (LRR P,						1	
Restrictive I	ayer (if observed)	:						
Туре:								$\overline{\mathcal{L}}$
Depth (inc	ches):						Hydric Soil P	resent? Yes 🔽 No 📖 📗
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoy	relles	Sampling Date: 10/25/2012		
Applicant/Owner: England Economic & Industrial De	Sampling Point: Data Point 8				
Investigator(s): B. Pittman	Section, Township	, Range: Section 37 T-4N,	R-2W		
	Local relief (concav				
Subregion (LRR or MLRA):	Lat: 31.315442	Long:92.552391	Datum: NAD 83		
Soil Map Unit Name: Coushatla (Nd)		NWI classific	cation: NA		
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes N	√o (If no, explain in R	Remarks.)		
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	۹re "Normal Circumstances" إ	present? Yes No		
Are Vegetation, Soil, or Hydrology	_ naturally problematic? ((If needed, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site ma	p showing sampling poi	nt locations, transects	s, important features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes Yes Yes	No within a We	-	No		
Data Point taken within wooded area	, southeastern portion	n of site.			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required; check a	II that apply)	Surface Soil	Cracks (B6)		
Surface Water (A1) Aquat	tic Fauna (B13)	Sparsely Ve	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl [Deposits (B15) (LRR U)	Drainage Pa	Drainage Patterns (B10)		
Saturation (A3) Hydro	ogen Sulfide Odor (C1)	Moss Trim L	Moss Trim Lines (B16)		
	zed Rhizospheres along Living R		Dry-Season Water Table (C2)		
	ence of Reduced Iron (C4)	Crayfish Bur	` '		
	nt Iron Reduction in Tilled Soils (· —	isible on Aerial Imagery (C9)		
	Muck Surface (C7)		: Position (D2)		
	(Explain in Remarks)	Shallow Aqu			
Inundation Visible on Aerial Imagery (B7)		✓ FAC-Neutral			
Water-Stained Leaves (B9)		Sphagnum n	moss (D8) (LRR T, U)		
Field Observations:	Name to Construct				
Surface Water Present? Yes No [Depth (inches):				
Water Table Present? Yes No _ V	Depth (inches):				
Saturation Present? Yes No _ C (includes capillary fringe)	Depth (inches):	Wetland Hydrology Preser	nt? Yes No		
Describe Recorded Data (stream gauge, monitoring well	l, aerial photos, previous inspect	ions), if available:			
Remarks:					
No hydrology indicators, dry conditio	ns at time of visit.				

Sampling Point: __

		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size:)	_	Species?		Number of Dominant Species	
1. Quercus nigra	<u>15</u>	yes	FAC	That Are OBL, FACW, or FAC: 7 (A	A)
2. Acer negundo	15	yes	FACW	Total Number of Dominant	
3. Cornus drummondii	10	yes	<u>FAC</u>	7	В)
4. Diospyros virginiana	5	yes	FAC		
5. Carya illinoinensis	10	yes	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: 100	Δ/R)
6.				That Ale OBE, FAOW, OF FAO.	~UD)
7.				Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
8	55	= Total Cov		OBL species x 1 =	
5004 54 4 4				FACW species x 2 =	
50% of total cover:	20% of	total cover		FAC species x 3 =	
Sapling/Shrub Stratum (Plot size:)			540	FACU species x 4 =	
1. Cornus drummondii	20	yes	FAC	UPL species x 5 =	
2. Ligustrum sinense	18	yes	<u>FAC</u>		(D)
3				Column Totals: 0 (A) 0	(B)
4				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6.				1 - Rapid Test for Hydrophytic Vegetation	
7.				1	
8.				2 - Dominance Test is >50%	
0	38			3 - Prevalence Index is ≤3.0 ¹	
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover:	20% of	total cover	:		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology mus	st
1				be present, unless disturbed or problematic.	
2				Definitions of Four Vegetation Strata:	
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm	n) or
4				more in diameter at breast height (DBH), regardless	
5.				height.	
6.				Conling/Chruh Woody plants avaluding vince la	
				Sapling/Shrub – Woody plants, excluding vines, le than 3 in. DBH and greater than 3.28 ft (1 m) tall.	555
7				<u> </u>	
8				Herb – All herbaceous (non-woody) plants, regardle	ess
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	- ——			height.	
12					
	0	= Total Cov	⁄er		
50% of total cover:	20% of	f total cover	:		
Woody Vine Stratum (Plot size:)					
1. Vitis rotundifolia	5	yes	FAC		
2.					
3.					
4					
5				Hydrophytic	
		= Total Cov		Vegetation	
50% of total cover:	20% of	f total cover	:	100 <u> </u>	
Remarks: (If observed, list morphological adaptations bel	ow).				
Mature hardwood					
iviature riardwood					

Sampling Point: ____

SOIL

Profile Desc	ription: (Describe	to the dep	th needed to docui	ment the i	ndicator	or confirr	n the absence of indica	tors.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	5 YR 4/2	95%				IVI	loam	
3-12	5 YR 4/4	95%				IVI	clay loam	
12-19	5 YR 4/4	90%	5 YR 5/6	10%		IVI	clay loam	_
1Type: C=Co	ncentration D-Der	letion PM-		S-Macked	Sand Gr	aine	² Location: PL=Pore	Lining M-Matrix
			LRRs, unless othe			aiiis.		ematic Hydric Soils ³ :
Histosol		abio to all	Polyvalue Be			DD C T		
	ipedon (A2)		Polyvalde Be		. , .		U) 1 cm Muck (A9) 2 cm Muck (A10	
Black His			Loamy Muck					(F18) (outside MLRA 150A,B)
	n Sulfide (A4)					. 0)		plain Soils (F19) (LRR P, S, T)
	, ,		Loamy Gleye		F2)			, , , , , , , , , , , , , , , , , , , ,
	Layers (A5)	T 11\	Depleted Ma	` '	:6)			nt Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	,	*		(MLRA 153B)	erial (TE2)
	cky Mineral (A7) (L						Red Parent Mate	
	esence (A8) (LRR l	וי	Redox Depre	,	0)			rk Surface (TF12)
_	ck (A9) (LRR P, T)	- (Add)	Marl (F10) (L	•	(841 D.A.4	E4.)	Other (Explain in	Remarks)
	Below Dark Surfac	e (ATT)	Depleted Oc			-	T) 31	
	rk Surface (A12)		Iron-Mangan					ydrophytic vegetation and
	airie Redox (A16) (· —			, U)	•	ology must be present,
	lucky Mineral (S1) (LKK U, 3)	Delta Ochric		-	0.4.4.6.0.00		ped or problematic.
	leyed Matrix (S4)		Reduced Ve					
	edox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous I	Bright Loar	ny Solls (F20) (IVILI	RA 149A, 153C, 153D)	
	face (S7) (LRR P,						T	
	.ayer (if observed)	•						
Туре:								
Depth (inc	ches):						Hydric Soil Present?	Yes No V
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoy	elles	Sampling Date: 10/25/2012			
Applicant/Owner: England Economic & Industrial Development District State: LA Sampling Point: Data Po						
Investigator(s): B. Pittman	Section, Township,	, Range: Section 38 T-4N,	R-2W			
	Local relief (concav					
Subregion (LRR or MLRA):	Lat: 31.317337	Long:92.554949	Datum: NAD 83			
Soil Map Unit Name: Coushatla (Nd)		NWI classific	cation: NA			
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes N	lo (If no, explain in R	Remarks.)			
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	re "Normal Circumstances" إ	present? Yes No			
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If needed, explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - Attach site ma	p showing sampling poi	nt locations, transects	s, important features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes Yes	No within a We	-	No			
Data Point taken within wooded area	southern portion of s	site.				
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required; check a	II that apply)	Surface Soil	Cracks (B6)			
	tic Fauna (B13)	Sparsely Ve	getated Concave Surface (B8)			
	Deposits (B15) (LRR U)	Drainage Pa				
	ogen Sulfide Odor (C1)	Moss Trim L				
	zed Rhizospheres along Living R		Water Table (C2)			
	ence of Reduced Iron (C4)	Crayfish Bur	` '			
	nt Iron Reduction in Tilled Soils (· —	isible on Aerial Imagery (C9)			
	Muck Surface (C7)		: Position (D2)			
	(Explain in Remarks)	Shallow Aqu				
Inundation Visible on Aerial Imagery (B7)		✓ FAC-Neutral				
Water-Stained Leaves (B9)		Sphagnum n	moss (D8) (LRR T, U)			
Field Observations:	North Contract					
Surface Water Present? Yes No [Depth (inches):					
Water Table Present? Yes No C	Depth (inches):					
Saturation Present? Yes No C (includes capillary fringe)	Depth (inches):	Wetland Hydrology Preser	nt? Yes No			
Describe Recorded Data (stream gauge, monitoring well	I, aerial photos, previous inspect	ions), if available:				
Remarks:						
No hydrology indicators, dry condition	ns at time of visit.					

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

50% of total cover: ___

50% of total cover: ___

FAC

FAC

FAC

FAC

FAC

FAC

FAC

FAC

FAC

35 yes

45 = Total Cover

yes

yes

yes

yes

26 = Total Cover

yes

30 = Total Cover ___ 20% of total cover:

5____ = Total Cover

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

ves

10

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

____ 20% of total cover: ___

10 yes

Tree Stratum (Plot size: _____)

Sapling/Shrub Stratum (Plot size:

1. Sapium sebiferum

2. Carya illinoinensis

1. Sapium sebiferum

3. Acer rubrum

4. Ulmus rubra

Liquidambar styraciflua

Herb Stratum (Plot size: ___

1. Carex spp.

2. Toxicodendron radicans

DP-9 Sampling Point: Absolute Dominant Indicator Dominance Test worksheet: % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ FACU species _____ x 4 = _____ UPL species _____ x 5 = ____ Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = ___ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ☑ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in Hydrophytic Vegetation Present?

Remarks: (If observed	list morphological	adaptations below)
-----------------------	--------------------	--------------------

Woody Vine Stratum (Plot size:)

Chinese tallow

1. Vitis rotundifolia

SOIL

Sampling Point: DP-9

Depth	scription: (Describ <u>Matrix</u>	_	Red	ox Features	5		-	
(inches)	Color (moist)		Color (moist)		Type'	Loc ²	Texture	Remarks
0-8	5 YR 4/4	80%	5 YR 5/2			IVI	clay loam	
8-20	5 YR 4/6	95%				IVI	clay loam	
	-						-	
							<u> </u>	
Tupo: C=	Concentration, D=D	onletion DM			Sand Cr	oine	² l continu	PL=Pore Lining, M=Matrix.
	I Indicators: (Appl	•				aiiis.		for Problematic Hydric Soils ³ :
Histose	,		Polyvalue E		,	RR S. T.		uck (A9) (LRR O)
	Epipedon (A2)		Thin Dark S				· —	uck (A10) (LRR S)
Black I	Histic (A3)		Loamy Muc	ky Mineral ((F1) (LRF	(O)	Reduce	ed Vertic (F18) (outside MLRA 150A,E
	gen Sulfide (A4)		Loamy Gley		F2)			ont Floodplain Soils (F19) (LRR P, S, T
	ed Layers (A5)		Depleted M	` '	·o.			lous Bright Loamy Soils (F20)
_	ic Bodies (A6) (LRR ⁄lucky Mineral (A7) (Redox Dark Depleted Dark	,			,	A 153B) rent Material (TF2)
	Presence (A8) (LRR		Redox Depi		` '			nallow Dark Surface (TF12)
	/luck (A9) (LRR P, T		Marl (F10) (,	-,			Explain in Remarks)
	ed Below Dark Surf		Depleted O	chric (F11)	(MLRA 1	51)		
	Dark Surface (A12)		Iron-Manga					ators of hydrophytic vegetation and
	Prairie Redox (A16)			, , ,		', U)		and hydrology must be present,
	Mucky Mineral (S1) Gleyed Matrix (S4)	(LKK O, S)	Delta Ochri		-	.OΔ 150E		ss disturbed or problematic.
	Redox (S5)		Piedmont F					
	ed Matrix (S6)				, ,	•	RA 149A, 153C,	153D)
Dark S	Surface (S7) (LRR P	, S, T, U)	<u> </u>	_				
Restrictive	Layer (if observe	d):						
Туре: _								
Depth (i	nches):						Hydric Soil I	Present? Yes No V
Remarks:								

Project/Site: +/-705 Acres EA	City/County: Avoy	elles	Sampling Date: 10/25/2012				
Applicant/Owner: England Economic & Industrial De	Applicant/Owner: England Economic & Industrial Development District State: LA Sampling Point: Data Point 10						
Investigator(s): B. Pittman	Section, Township,						
	Local relief (concav						
Subregion (LRR or MLRA):							
Soil Map Unit Name: Coushatla (Nd)		NWI classifi					
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes V						
Are Vegetation, Soil, or Hydrology			present? Yes <u>√</u> No				
Are Vegetation, Soil, or Hydrology		If needed, explain any answe					
SUMMARY OF FINDINGS – Attach site ma			,				
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Yes Remarks:	No ✓ within a We		No				
Data Point taken within herbaceous	field.						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicate	ators (minimum of two required)				
Primary Indicators (minimum of one is required; check			Cracks (B6)				
	atic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
	Deposits (B15) (LRR U)		atterns (B10)				
	rogen Sulfide Odor (C1)	Moss Trim L					
	ized Rhizospheres along Living R ence of Reduced Iron (C4)	Crayfish Bui	Water Table (C2)				
	ent Iron Reduction in Tilled Soils (/isible on Aerial Imagery (C9)				
	Muck Surface (C7)		Position (D2)				
	er (Explain in Remarks)	Shallow Aqu	` '				
Inundation Visible on Aerial Imagery (B7)	, ,	FAC-Neutra					
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)				
Field Observations:							
Surface Water Present? Yes No	Depth (inches):						
Water Table Present? Yes No	Depth (inches):		_				
	Depth (inches):	Wetland Hydrology Prese	nt? Yes No <u>√</u>				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	ell. aerial photos, previous inspect	ions), if available:					
	,	,,					
Remarks:							
No hydrology indicators, dry condition	ons at time of visit.						

Sampling Point: _

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1		Species		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2	_			Total Number of Dominant Species Across All Strata: 3 (B)
4.				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8		_ = Total Co		OBL species x 1 =
50% of total cover:				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20%	n total cove	1	FAC species x 3 =
				FACU species x 4 =
1				UPL species x 5 =
2				Column Totals: 0 (A) 0 (B)
3				
4				Prevalence Index = B/A =
5				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 Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% c	of total cove	r:	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Andropogon virginicus	65	yes	FAC	be present, unless disturbed or problematic.
2. Sorghum halepense	30	yes	FACU	Definitions of Four Vegetation Strata:
3. Campsis radicans	5	yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				inorgini.
<u> </u>	100	= Total Co	ver	
50% of total cover:	20% (_		
Woody Vine Stratum (Plot size:				
1. Vitis rotundifolia	5	yes	FAC	
		<u> </u>		
2				
3 4				
	_			
5	5	= Total Co		Hydrophytic Vegetation
500/ -51-1-1				Present? Yes Vo No
50% of total cover:		or total cove	r	
Remarks: (If observed, list morphological adaptations bel	low).			
Open field, some of this area cut for ha	ay			

DP-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth <u>Matrix</u>			Redox Features					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	5 YR 4/4	95%		_		IVI	silt loam	
10-19	5 YR 4/4	80%	5 YR 5/6	20%		IVI	silt loam	
							-	
			-					
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 2 Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ :								
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O)								
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)							2 cm Muck (A10) (LRR S)	
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)						Reduced Vertic (F18) (outside MLRA 150A,B)		
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)						Piedmont Floodplain Soils (F19) (LRR P, S, T)		
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20)								
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)							•	RA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)						✓ Red Parent Material (TF2) ✓ Very Shallow Dark Surface (TF12)		
								· · · · · · · · · · · · · · · · · · ·
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)								
Depicted Below Bank Surface (A11)								
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 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)								
Dark Surface (S7) (LRR P, S, T, U)								
Restrictive I	.ayer (if observed)	:						
Туре:								
Depth (inc	ches):						Hydric Soil	Present? Yes No
Remarks:								