

DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT 7400 LEAKE AVENUE NEW ORLEANS LA 70118-3651

March 20, 2023

Regulatory Division Special Projects & Policy Team

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Application #: MVN-2008-00894-MB

PUBLIC NOTICE

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [**X**] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344), and/or [] Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 408).

COMITE PROPERTIES WETLANDS MITIGATION BANK ADDENDUM 1 TRACT C In EAST BATON ROUGE PARISH

NAME OF APPLICANT: First Louisiana Resource, LLC, c/o Resource Environmental Solution, LLC, 412 N. Fourth Street, Suite 300, Baton Rouge, Louisiana 70802.

LOCATION OF WORK: Located in East Baton Rouge Parish, approximately 6.6 miles easterly from Zachary, Louisiana, (lat. 30.645035, long. -91.045085), as shown within the enclosed drawings. (Hydrologic Unit Code 08070202, Lake Pontchartrain Basin Watershed)

CHARACTER OF WORK: The Sponsor proposes the expansion of the existing Comite Properties Wetlands Mitigation Bank via the additional of a 56.2-acre parcel referred to as Tract C that is currently wet pasture. Tract C abuts the existing Tract A to the north. The scope of work includes removal of fencing, degrading three (3) earthen plugs, a berm and field drains, removal of one (1) culvert, and backfilling an existing pond. An existing road will be degraded to grade but remain for access. Prior to planting with appropriate bottomland hardwood species, the site may be subsoiled to alleviate soil compaction from historical cattle grazing and hay production. All is more clearly defined in the enclosed Mitigation Work Plan.

The comment period on the requested Department of the Army Permit will close **30 days** from the date of this public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit request, and must be submitted so as to be received before or by the last day of the comment period. Letters and/or comments concerning the subject permit application must reference the Applicant's Name and the Permit Application Number and can be preferably emailed to the Corps of Engineer's project manager listed above or forwarded to the Corps of Engineers at the address above, ATTENTION: REGULATORY DIVISION, RG, Brian Breaux. Individuals or parties may also request an extension of time in which to comment on the proposed work by mail or preferably by emailing the specified project manager listed above. Any request for an extension of time to comment must be specific and substantively supportive of the requested extension and received by this office prior to the end of the initial comment period. The Branch Chief will review the request and the requester will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous and inclusive of the initial comment period and will not exceed a total of 30 calendar days. This public notice is also available for review online at https://go.usa.gov/xennJ

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. As deemed necessary, copies of this public notice will be sent to the State Archeologist, State Historic Preservation Officer, and federally listed tribes regarding potential impacts to cultural resources.

Our initial finding is that the proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species. Based on the Information Planning and Consultation (IPaC) tool for Endangered Species in Louisiana, as signed on January 27, 2020, between the U.S. Army Corps of Engineers, New Orleans and the U.S. Fish and Wildlife Service, it has been determined that the project would have no effect to any listed species.

Our initial finding is that the proposed work would have no effect on any species listed as endangered by the U.S. Department of Commerce, nor affect any habitat designated as critical to the survival and recovery of any such species.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal may result in the destruction, alteration, and/or disturbance of **0 acres** of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Louisiana Department of Environmental Quality before a Department of the Army permit could be issued.

Any person may request within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing, and can be <u>preferably</u> emailed to the USACE project manager listed above or mailed to the address listed above.

You are invited to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

Brad A. Guarisco Deputy Chief, Regulatory Division

Enclosure



COMITE PROPERTIES WETLANDS MITIGATION BANK – ADDENDUM I TRACT C

MITIGATION BANKING INSTRUMENT

Based on the 2018 CEMVN Template

Bottomland Hardwood / Hardwood Flatwoods Enhancement, Rehabilitation, and Re-Establishment

East Baton Rouge Parish, Louisiana

Sponsored By:

First Louisiana Resource, LLC c/o Resource Environmental Solutions, LLC 412 N. Fourth Street, Suite 300 Baton Rouge, Louisiana 70802

February 8, 2023

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MITIGATION WORK PLAN FOR BOTTOMLAND HARDWOOD/HARDWOOD FLATWOOD HABITAT

This mitigation work plan (MWP) provides details for establishing additional acreage as part of the existing Comite Properties Wetlands Mitigation Bank (CPWMB). The original CPWMB Mitigation Banking Instrument (MBI) was approved by the U.S. Army Corps of Engineers (USACE) – New Orleans District (CEMVN) on April 9, 2010, under permit MVN-2008-03135. The original CPWMB MWP and this Addendum MWP will set forth guidelines and responsibilities for the establishment, use, operation, protection, monitoring and maintenance of the CPWMB - Addendum I Tract C site (hereinafter referred to as Tract C).

This MWP provides site specific details about Tract C in the current CEMVN template as well as integrates information from the original CPWMB MWP. For convenience the information from the CPWMB MBI that is applicable to Tract C has been incorporated directly into this document and is denoted in italics and quotations. To aid in referencing the original CPWMB MBI text denoted in italics, applicable section numbers of the MBI are also provided in bold.

I. BANK PROPERTY

A. Property Location

The center point of Tract C is located at latitude 30.645035 and longitude -91.045085 in East Baton Rouge Parish, Louisiana (**Attachment MWP-A**, **Exhibit 1**). The location includes all or portions of Section 06, Township 05 South, and Range 02 East. Tract C is located approximately 6.6 miles east of Zachary, Louisiana and directly adjoining and south of Comite Property – Tract A. Tract C is in the Hydrologic Unit Code (HUC) 08070202 (Amite) and the Lake Pontchartrain LRAM Service Basin.

Driving directions to the main access point are as follows (Exhibit 2):

Starting in Zachary, Louisiana at the intersection of Main Street (LA 64) and LA 19 travel east on Main Street (LA-64) toward Plank Road (LA 67). Continue through the intersection for a total of approximately 5.3 miles. Turn left onto Peairs Road (Peairs Rd is 0.2 miles past Blackwater Rd). Then travel 1.3 miles to 11699 Peairs Road, Zachary, Louisiana 70791-8629. The main construction entrance is on the left.

B. Property Ownership

Title to the Fee Simple estate is vested in Thomas Joseph Millican, Kyle Michael Millican, Tucker Joseph Millican, Blythe Millican Stevenson, Shelby N. Millican, and Trevor J. Millican. First Louisiana Resource, L.L.C. will serve as the Sponsor assuming long-term management of the site.

C. Property Legal Definition

A certain parcel of land, together with all buildings and improvements thereon, and all of the rights, ways, privileges, servitudes, prescriptions, advantages and appurtenances thereunto belonging, or in anywise appertaining, situated as stated above and more fully described as follows (**Exhibit 3a-3b**):

The perimeter of Tract C is defined by the following coordinates in latitude/longitude:

30.64382N	91.04269W	30.64386N	91.04403W
30.6439N	91.04279W	30.644N	91.04423W
30.64382N	91.04326W	30.64419N	91.04441W
30.64385N	91.04368W	30.64426N	91.04478W

30.64417N	91.04504W	30.64396N	91.05012W
30.64429N	91.04525W	30.64409N	91.05029W
30.64458N	91.04547W	30.64417N	91.0504W
30.6448N	91.04551W	30.64419N	91.05052W
30.64491N	91.04568W	30.64634N	91.05053W
30.64496N	91.04573W	30.64623N	91.04089W
30.64501N	91.04593W	30.64341N	91.04088W
30.64497N	91.04613W	30.64285N	91.04088W
30.64487N	91.04635W	30.64287N	91.04096W
30.64492N	91.0467W	30.64289N	91.04109W
30.64495N	91.04691W	30.6429N	91.04137W
30.64501N	91.04722W	30.64283N	91.04159W
30.64496N	91.04766W	30.64262N	91.04186W
30.64474N	91.04825W	30.64249N	91.04214W
30.64461N	91.0484W	30.64245N	91.04239W
30.64459N	91.0485W	30.64242N	91.04268W
30.64463N	91.04861W	30.64258N	91.04286W
30.64451N	91.04894W	30.64294N	91.04284W
30.64427N	91.04921W	30.64317N	91.04275W
30.6441N	91.04928W	30.64356N	91.04257W
30.64383N	91.04961W	30.64369N	91.04262W
30.64382N	91.0499W		

Said described tract contains 56.2 acres, more or less.

D. Recorded Liens, Encumbrances, Easements, Servitudes or Restrictions

Clear and merchantable title to Tract C has been documented by a title commitment (**Attachment MWP-F**) generated by Leader Title Company which will be updated via Title Opinion by Resource Environmental Solutions, LLC two weeks prior to execution of the conservation servitude. Any exceptions to the real estate title not subordinated to the conservation servitude are listed below:

There were no recorded liens, encumbrances, easements, servitudes, or restrictions that cannot be subordinated to the conservation servitude or would otherwise affect the restoration/ enhancement/ preservation efforts on the Property.

II. OBJECTIVES

The goals of Tract C remain the same as those stated in the **CPWMB MBI, Section V.**, which are to "re-establish, re-habilitate, and enhance [Tract A] as sustainable forested, hardwood, wetland ecosystems for compensatory mitigation purposes. The restoration and rehabilitation of hardwood flatwood wetland ecosystems will be accomplished by converting existing pasturelands and forests to a natural species composition indicative of a bottomland hardwood/hardwood flatwood forest and subsequently maintaining wetland functions, values, and services."

The CPWMB MBI proposed the enhancement, rehabilitation, and re-establishment of approximately 91.4 acres of hardwood flatwood habitats, 4.1 acres of upland buffer/inclusion, and 5.7 acres of wetland buffer/inclusion on Tract A as shown in *Figure 7* of the *CPWMB MBI* as well as **Exhibit 4a**.

Specifically, Tract C will increase the acreage of Tract A and will enhance, rehabilitate, and re-establish 54.9 acres of additional bottomland hardwood forest (BLH) with 1.3 acres of non-mitigation features composed of an access road and buffer along the southern boundary equating to a 56.2-acre addendum to the original CPWMB (**Table 1** and **Exhibit 4b**).

Table 1. Proposed Mitigation Habitats

BLH				
Mitigation Type	Acreage			
Enhancement	0.6			
Rehabilitation	52.3			
Re-establishment	2.0			
Total BLH	54.9			
Non-Mitigation Features	1.3			
Total Tract C Size	56.2			

A. Aquatic Resource Type and Functions to be Restored/Enhanced

As defined by *The Natural Communities of Louisiana* published in 2009 by the Louisiana Department of Wildlife and Fisheries (LDWF) and the Louisiana Natural Heritage program (LNHP), BLH forests are forested, alluvial wetlands occupying broad floodplain areas that flank large river systems. BLH forests may be called fluctuating water level ecosystems characterized and maintained by a natural hydrologic regime of alternating wet and dry periods. These forests support distinct assemblages of plants and animals associated with specific landforms, soils, and hydrologic regimes. They are important natural communities for maintenance of water quality, providing a very productive habitat for a variety of fish and wildlife, and are important in regulation of flooding and stream recharge.

This project will aid in the enhancement, rehabilitation, and/or re-establishment of the following wetland functions:

- 1. Wildlife habitat (food, water, shelter);
- 2. Biogeochemical cycling;
- 3. Flood retention;
- 4. Groundwater recharge; and

5. Atmospheric maintenance.

Per **Section V.** of the **CPWMB MBI**, "[t]he added functions to the Lake Pontchartrain/Breton Sound/Chandeleur Sound Watershed from these projects include increased habitat quality of forested wetland habitat for resident and migratory wildlife and reversion to a more natural ecosystem. In the future, as more areas are developed within the drainage area (agriculturally, commercially, and/or residentially), [Tract A] will provide a greater functional value to the reduction of flooding and point source pollution within the Lake Pontchartrain/Breton Sound/Chandeleur Sound Watershed."

B. Watershed Contributions

1. Watershed Need

The watershed needs that this project will aid with are identified below:

- a. Louisiana's Nutrient Management Strategy (LNMS) the May 2014 Edition, was developed as a concerted effort between numerous state and federal agencies and through engagement with stakeholders within Louisiana, for the purpose of managing nutrients (nitrogen and phosphorus) to protect, improve and restore water quality in Louisiana's inland and coastal waters. The vision is to manage nutrient levels in Louisiana to ensure the support of healthy aquatic communities, clean water for public, agricultural, and industrial use, to engage stakeholders at the local level and to actively support water quality protection, improvement, and restoration. Additionally, it is stated these protection, improvement and restoration strategies at the local level may have a cumulative and positive impact on the health of the receiving waterbodies both within the State and Gulf of Mexico.
- b. Louisiana's Nonpoint Source Management Plan (NPSMP) is prepared by Louisiana Department of Environmental Quality (LDEQ) and numerous state and federal partners. The NPSMP has a plan for the Lake Pontchartrain Basin, which encompasses the project area. The goal of NPSMP is to reduce nonpoint source pollution in urban and rural areas.
- c. BLH habitats are important for a variety of fauna, maintenance of water quality and important in regulating flooding and stream recharge. BLH forest loss is estimated to be 50 to 75% of the original pre-settlement acreage (LNHP 2009).
- d. Addition of Tract C to the CPWMB is needed to allow for mitigation to offset industrial and population growth.

2. Watershed Benefits

Tract C will provide the following watershed benefits based on watershed needs identified above:

- a. Addition of Tract C to the CPWMB accomplishes all aspects of the vision for the Louisiana Nutrient Management Strategy (LNMS) by reducing agricultural impacts and enhancing, rehabilitating, and reestablishing BLH, which shall increase the efficiency of biogeochemical cycling within Tract C, reducing nutrients in the receiving watersheds and transition the anthropogenically impacted area back to its native state.
- b. Tract C shall return the anthropogenically impacted site back into its native state of BLH, reducing nonpoint source pollution from agricultural practices within the tract and receiving basins, thus improving water quality, and aiding in achieving the NPSMP goal for the Lake Pontchartrain Basin.
- c. Tract C can improve total dissolved solids through restoring the natural functioning of the land by returning it to its native state.

- d. Tract C shall protect BLH habitats by adding to its diminishing acreage, reintroducing the natural hydrologic regime, and fostering native vegetation in perpetuity.
- e. Tract C may offer some potential to improve or create suitable habitat for species of concern. Habitat may be improved or created for species that require wetland habitat by improving water quality, in-and near-stream forage, and providing stable conditions not subject to regular maintenance.

III. SITE SELECTION

The following is a description of the selection criteria used to determine the appropriateness of Tract C for use as compensatory mitigation:

- 1. The mitigation habitats needed to be compatible with the surrounding habitats, adjacent land uses, existing watershed plans, and not adversely impact the surrounding lands;
- 2. The tract had to facilitate habitat connectivity by increasing the acreage of existing wetland habitats or have the potential to do so in the future and not act as a stand-alone feature in the landscape;
- 3. Soil characteristics of the tract had to be conducive to the establishment of the desired vegetative community;
- 4. Hydrology had to be such as to allow for hydrological restoration described in the *USACE Wetland Delineation Manual*, 1987 Manual;
- 5. The tract had to be ecologically important to the watershed and aid in increasing the chemical, physical, and biological functionalities important to the ecosystem; and
- 6. The tract had to aid in achieving the goals of various State and local management plans, such as the State's non-point source management plan.

IV. SITE PROTECTION INSTRUMENT

Per **Section III.** of the **CPWMB MBI**, a conservation servitude was established for the original CPWMB totaling approximately 185.3 acres. Tract C will add approximately 56.2 acres to the CPWMB, and therefore a conservation servitude will be granted over Tract C and will serve as the protection instrument (See **Section X.** of this MWP *Long-Term Protection and Maintenance, Subsection A. "Conservation Servitude*).

V. BASELINE INFORMATION

This section contains both the historical and current ecological and physical information about Tract C.

A. Land Use

1. Historical Land Use

During initial site selection, U.S. Geological Service (USGS) topographical quadrangle maps (**Exhibits 5a-5g**) and historical aerial photographs (**Exhibits 6a-6i**) were reviewed to investigate historical properties, adjacent land uses and to observe potential impacts. The historical conditions of Tract C were derived from the oldest topographical map, from 1954 (**Exhibit 5a**) and aerial photograph from 1952 (**Exhibit 6a**). The 1954 topographical map shows Tract C as an open area cleared of woody vegetation. The 1952 historical aerial photograph (**Exhibit 6a**) corresponds with the 1954 topographical map as the aerial shows Tract C cleared of most woody vegetation except for isolated clusters of trees along a fence row. Tract C site is relatively undeveloped and appears to have one or more light duty access roads crossing the property. The

1976 aerial (**Exhibit 6c**) suggests Tract C may have been used for row crops. Subsequent aerials from 1962 to 2020 continue to suggest the site remains relatively unchanged except for the addition of a pond in the center of the site in or prior to 1962. **Table 2** and **Table 3** below provide details of land use changes observed during the map and photograph review.

a) Review of USGS Topographical Quadrangles

Table 2. Detailed Historical USGS Topographical Quadrangle Review

Quadrangle Date	Observations
1954	Shown to be cleared of native vegetation. Areas of wooded marsh or swamp exist southwest and northeast of Tract C's boundaries. Hub Bayou can be seen on the outer perimeter of the southwest corner of the site.
1963	Shown to be unchanged from 1954 except for a pond waterbody appears in the center of the site.
1980	Shown to be relatively unchanged from 1963.
2002	Shown to be relatively unchanged from 1980.
2015	Shown to be relatively unchanged from 2002 except for the pond waterbody does not appear on the site.
2018	Shown to be relatively unchanged from 2015.
2020	Shown to be relatively unchanged from 2018.

Note: While the intervals between historical topographical maps span several years, the land use does not change significantly. Therefore, this discontinuous information is not considered a data gap.

b) Review of Aerial Photographs

Table 3. Historical Aerial Photograph Review

Aerial Date	Observations	
1952	Shown to cleared of native vegetation communities with some light duty access roads crossing the property. Appears to be predominately pasture.	
A pond waterbody appears to be constructed since the 1952 aerial. Drec material from pond construction appears to be placed on the western bank the pond. Areas of the site appear be inundated with scrub/shrub vegetat regenerating.		
1976	Signs of mowing can be seen. Appears to be predominately pasture. Forest habitat has expanded along a drainage running northwest to southeast that crosses the northeast corner of the site. Single-family homes and other housing structures appear on the property south of the site.	
1998	Scrub/shrub and/or forested habitat can be seen regenerating east of the pond waterbody. Small drainages appear to be constructed at various locations on the site. The remainder of the site appears to be pasture.	
2004	Shown to be mostly unchanged since 1998 with the exception that the scrub/shrub or forested habitat has been removed. trees appear more developed along the drainage in the northeastern corner of the site.	

Comite Properties	Wetlands	Mitigation	Bank -	Addendum	I Tract C

Aerial Date	Observations
2008	Shown to be mostly unchanged since 2004. Appears to be predominately pasture.
2010	Shown to be mostly unchanged since 2008. Appears to be predominately pasture.
2017	Shown to be mostly unchanged since 2010. Planted vegetation can be seen on the CPWMB site on the northern boundary.
2020	Shown to be mostly unchanged since 2017. Signs of mowing can be seen. Appears to be predominately pasture

Note: While the intervals between aerial photographs span several years, the land use does not change significantly. Therefore, this discontinuous information is not considered a data gap.

2. Current Land Use

As stated in **Section IV.A** of the **CPWMB MBI**, "[Tract A is] surrounded primarily by cropland/pasture (70%) and forested land (30%) with a minor amount of adjacent residential land use confined to parish road and state highway frontage. The property is zoned as Rural by the City and Parish of East Baton Rouge, which allows for agricultural or farming activities and single-family dwellings." Additional land use details for Tract C are provided below.

Tract C was acquired in 1970 by the previous owner for grazing dairy cattle and some portions were used for hunting. The current land use is predominately (87.4%) wet pasture that is actively maintained, managed, and utilized for hay production. Signs of the previous cattle grazing are still present. The remaining land use is comprised of woody wetlands (8.4%), herbaceous wetlands (3.6%), and open water (0.7%) (**Exhibit** 7).

The USDA 2020 Crop Data Layer (CDL) identifies the predominate landcover within one (1) mile of Tract C as grassland/pasture (47.0%), woody wetlands (25.9%), evergreen forest (9.4%), shrubland (6.3%), other hay/non alfalfa (4.8%), and developed/open space (3.2%) (**Exhibit 8**). Although there is development within one (1) mile of the Tract C boundary, this development is mostly residences. Based on current, on-site observations the adjacent land use is as follows:

- North of Tract C is the existing CPWMB Tract A which is BLH hardwood and flatwood forest.
 Further north are several cleared tracts with multiple forested windbreaks and tracts that appear to be undeveloped, mature forests.
- 2. **East** of Tract C are properties with single-family residences and cleared pastures interspersed with areas of BLH dominate forests or areas that appear to be undeveloped, mature forests.
- 3. **South** of Tract C are properties with single-family residences and cleared pasture and multiple pond waterbody features. Peairs Road, a two-lane Parish Road, abuts Tract C, however a drainage feature and cleared pasture lies between the southern boundary of the tract and Peairs Road.
- 4. **West** of Tract C are properties that have been cleared of most vegetation and appear to be kept in pasture.

B. Soils

As stated in the **CPWMA MBI, Section IV.C.,** "[Tract A] soils are mapped as Deerford-Verdun complex (DaA), Dexter very fine sandy loam (DrB), Frost silt (FrA), Gilbert silt loam (GeA and GtA), Oprairie silt (OpA), Satsuma silt (SaB), and Scotlandville silt (ScA).... The GeA, GtA and FrA series are listed as hydric soils while the DaA, DrB, OpA, and ScA series are listed as non-hydric. During the field investigation and baseline assessment, the presence of

hydric soils was confirmed based on the Field Indicators of Hydric Soils (NRCS 2002) [(Exhibit 9)]."

"Soils within [the original CPWMB] are mapped as:

OpA: Oprairie silt, 0 to1 percent slopes;

FrA: Frost silt, 0 to 1 percent slopes, occasionally flooded;

GeA: Gilbert silt loam, 0 to 1 percent slopes; and

DaA: Deerford-Verdun complex, 0 to 2 percent slopes."

Additional soil details for Tract C are provided below.

The NRCS Web Soil Survey and *Soil Survey for East Baton Rouge Parish* was reviewed to determine soil characteristics across Tract C. Web Soil Survey (Web Soil Survey 2019) shows the tract may be underlain by three (3) soil map units (**Exhibit 10**). **Table 4** provides the hydric status and percent cover for each identified soil map unit within Tract C (NRCS Survey Area Data, Version 3, September 12, 2019).

Table 4. Site Soils as Identified by the NRCS Web Soil Survey

MUN Symbol	MUN Name	% Hydric	% Cover
GeA	Gilbert silt loam, 0 to 1 percent slopes	85	39.7
GtA	Gilbert silt loam, occasionally flooded	85	9.6
ОрА	Oprairie silt, 0 to 1 percent slopes	2	50.2
W	Open Water	-	0.5

Generally, the soils that occur in Tract C are described in the SSURGO database as gently sloping and level. These soils exhibit very poorly drained soils to somewhat poorly drained soils and have a high to very high available water storage in the profile. Textures of these soils are predominately silt loam, silty clay loam, and clay and associated with natural levee and backswamp landforms (NRCS 2018). The dominant soil map units on Tract C are Oprairie silt, 0 to 1 percent slopes (OpA) (50.2%) and Gilbert silt loam, 0 to 1 percent slopes (GeA) (39.7%).

The **Opraire** series consists of somewhat poorly drained, soils that formed in loess deposits. These soils are on silty upland terraces of Pleistocene age. Slopes range from 0 to 3 percent. Drainage is somewhat poorly drained, and runoff is low to medium. Most Opraire series acreage is used for pasture or urban development.

The **Gilbert** series consists of very deep, poorly drained, very slowly permeable soils that formed in mixed loess and loamy sediments of late Pleistocene Age. These soils are on broad flats or narrow depressional areas. Slope gradients are less than 1 percent. Gilbert soils are poorly drained. Runoff is very slow, and permeability is very slow. A perched water table is at a depth of 0 to 1.5 feet below the surface during winter and early spring. Most Gilbert series acreage is cleared and used for cropland or pasture. The main crops are soybeans, cotton, and small grain. Woodland areas are predominately BLH species with some inclusions of pine species.

C. Hydrology

1. Historical Hydrology and Drainage Patterns

As stated in the **CPWMB MBI, Section IV.B.** "several field ditches drain the majority of the original [CPWMB] Tract A to the adjacent wooded areas southeast via surface flow, which in turn drains into Hub Bayou and

then to the Amite River. Portions of the northern area of [the CPWMB] flow into Beaver Creek, then to Sandy Creek and then to the Amite River. The contributing upstream drainage area for the CPWMB is 1,500 acres".

"The CPWMB receives water from rainfall, sheetflow from adjacent sites, and groundwater. Annual rainfall ranges from 53 to 73 inches, with an average of 54 inches (Natural Resources Conservation Service [NRCS] 2008). Groundwater levels range from ground surface to 18 inches below ground surface (BGS, NRCS 2008)." Based on elevation data, Tract A hydrology and drainage patterns appear to be driven by overland water flow from the northwest corner where elevations are approximately 98 feet mean sea level (MSL) to the southeast corner of Tract A where elevations are approximately 93 feet MSL (Exhibit 11a), which is on Tract C. Historical hydrology and drainage patterns specific to the Tract C site are provided below.

The historical drainage patterns for Tract C were derived from the contours shown on the historical 1954 USGS topographical map (**Exhibit 5a**), which suggests the site drains north to south. Surface elevation data suggests overland water flow is generally north from elevations of approximately 94 feet MSL to south with elevations of approximately 91 feet MSL. Also, the majority of Tract C appears to drain into the into the unnamed drainage feature along the southern boundary (**Exhibit 11b**). A small portion of Tract C near the western boundary drains east towards the center of the Site along decreasing elevations. Historical hydrology along with the contributing watersheds of 4.0 square miles and flow directional arrows are included on **Exhibit 12**.

2. Existing Hydrology and Drainage Patterns

Hydrology on Tract C is driven predominately by precipitation and overland flow associated with elevation changes across the site (**Exhibit 13**). Water moving along the soil surface eventually drains into the existing field drains on Tract C and/or into an unnamed drainage feature just beyond the southern boundary. This unnamed drainage then outfalls into Beaver Creek to the southeast of Tract C.

It's RES' understanding based on personal communication with Reginald Brumfield who is the Director of Maintenance and Drainage for East Baton Rouge that there is no drainage servitude on the waterway on the south side of the property. No drainage easements were identified in the title and as such the central waterway is considered unencumbered (**Attachment MWP-F**).

The unnamed drainage flows west to east and eventually outfalls into Beaver Creek. Three culverts (one 24", one 36," and one 48") exist within the drainage, these culverts are outside the Tract, are not needed for restoration and are positioned east to west so water can flow within the drainage feature. The culverts do not remove water from the Tract. During high water events, the unnamed drainage may overflow onto Tract C at locations where unremoved debris is located or where the drainage has a shallower waterbottom.

Hydrology on Tract C has been significantly altered by the conversion of the site to pastureland for cattle grazing until 2009 and to produce hay to present day. Cattle grazing is known to alter the amount and type of vegetation cover on the site, subsequently effecting the amount of water retained after precipitation events. Also, the constant trampling by cattle disturbs the topography of the land and inhibits the natural sinuous drainage pattern that typically inhibits the landscape when sheet flow is present. Additionally, installation of certain hydrologic modification, such as earthen plugs and berm during the construction of CPWMB Tract A has altered the hydrology on Tract C. It is suspected that the current field drains on Tract C were once connected to drainage features on Tract A. However, when the earthen plugs and berm were installed to complete construction of the original CPWMB, waterflow was impeded and over time, the field drains on Tract C have silted in, with depths ranging from 4 to 6 inches.

3. Anticipated Post-Construction Hydrology and Drainage Patterns

It is anticipated that post-construction hydrology will flow naturally across the landscape with surface water

flowing towards the dominant water feature that runs west to east just beyond the southern boundary which outfalls into Beaver Creek. The southwest portion of the site drains to Hub Bayou, which flows southeast away from the tract until its outfall into the Amite River approximately 5.5 miles southeast (**Exhibit 14**). There are three (3) culverts that will remain. These culverts face west to east and do not affect the hydrology of the site and are not needed for restoration. These culverts are also located directly outside the tract boundary. Please note the historical hydrology is anticipated to be returned to Tract C post-construction.

D. Vegetation

1. Historical Plant Community

The 1954 topographical map (**Exhibit 5a**) shows Tract C as an open area cleared of woody vegetation. An area of wooded marsh or swamp and a pond waterbody feature can be seen on the adjacent property to the west of Tract C. Both features are shown as hydrologically connected to Hub Bayou. Another wooded marsh or swamp feature appears on the property to the north of Tract C. Overall, adjacent properties to the north, east, south, and west are shown to be predominantly open areas with smaller, fragmented areas of woody vegetation.

The 1952 historical aerial photograph (**Exhibit 6a**) corresponds with the 1954 topographical map as the aerial shows Tract C cleared of most woody vegetation except for isolated clusters of trees along a fence row and the unnamed drainage feature just beyond the southern boundary. Isolated trees can also be seen along what appears to be a field drain that begins in the northeast corner of the site and travels southwest until it intersects with the unnamed drainage feature.

When considering the presence of hydric soils on approximately 60% of the site, coupled with the vegetation seen on historical aerials and topographic maps, elevation data, and historical hydrology and drainage patterns, the CPWMB and adjacent Tract C were most likely historically a BLH wetland prior to the natural vegetation community was clearing sometime before 1952.

As stated in **Section IV.D.** of the **CPWMB MBI**, the "CEMVN issued a jurisdictional determination for [the original CMB site] on July 18, 2009 (CEMVN project MVN-2008-00894-SY). The JD showed the [approximately 101.2 acres of Tract A of the] CPWMB site contained 38% jurisdictional wetlands and 62% non-wetlands. Non-wetland areas lacked sufficient hydrology and vegetation due to agricultural activities, including active management of the site for cattle pasture (i.e., manipulation of vegetation through disking, mowing and grazing, and the removal of surface water through numerous surface drains)."

2. Existing Plant Community

As part of the required Interim Success (Year-5) monitoring event, detailed in **Section VII.B.1.** of the **CPWMB MBI**, RES conducted a wetland delineation survey of CWPMB Tract A on February 11-12, 2015, and March 27-28, 2015, to determine the extent of potential wetlands and other waters of the United States (other waters) that established since construction of the mitigation habitats proposed in the CPWMB MBI. The survey identified approximately 94.1 acres of the 101.2-acre Tract A was composed of mature bottomland hardwood wetland forests and the 5-year-old planted bottomland hardwood wetland restoration areas. The remainder of Tract A (7.1 acres) was observed to be planted bottomland hardwood non-wetland forests (**Attachment MWP-E**).

The canopy of the mature forested wetland area was comprised of several bottomland hardwood species such as Texas red oak (*Quercus texana*), sugar-berry (*Celtis laevigata*), common persimmon (*Diospyros virginiana*), American elm (*Ulmus americana*), sweetgum (*Liquidambar styraciflua*), Drummond red maple (*Acer rubrum var. drummondii*), and water hickory (*Carya aquatica*). The sapling/shrub layer was primarily

comprised of the aforementioned species as well as deciduous holly (*Ilex decidua*), southern bayberry (*Morella cerifera*), and parsley hawthorn (*Crataegus marshallii*). The sparse herbaceous understory was comprised of only a few species including Cherokee sedge (*Carex cherokeensis*), trumpet-creeper (*Campsis radicans*), dwarf palmetto (*Sabal minor*), and laurel-leaf greenbrier (*Smilax laurifolia*).

The restored bottomland hardwood wetland habitat was planted with a mixture of native hardwood seedlings per **Section IV.D.** of the **CPWMB MBI**. Some naturally regenerating seedlings from trees in the adjacent forest had taken root. The trees within this area varied in height but were an average of approximately 10-12' tall. The species found within this area, making up the sapling and shrub layer, included Texas red oak, water oak (*Quercus nigra*), willow oak (*Quercus phellos*), green ash (*Fraxinus pennsylvanica*), water hickory, sweet-gum, sugarberry, common persimmon, Drummond red maple, southern bald-cypress (*Taxodium distichum*), honey-locust (*Gleditsia triacanthos*), American elm, laurel oak (*Quercus laurifolia*). The herbaceous layer in this habitat was primarily comprised of lamp rush (*Juncus effusus*), brownish beak sedge (*Rhynchospora capitellata*), common fox sedge (*Carex vulpinoidea*), Louisiana sedge (*Carex louisianica*), spiny-fruit buttercup (*Ranunculus muricatus*), common spike-rush (*Eleocharis palustris*), seaside goldenrod (*Solidago sempervirens*), giant ironweed (*Vernonia gigantea*), and purple-top vervain (*Verbena bonariensis*).

The restored bottomland hardwood non-wetland habitat was planted with the same species mixture of trees planted in the wetland area. The herbaceous layer in this habitat was very sparse due to the trees nearly having achieved canopy closure.

A wetland delineation survey was completed on Tract C from October 4-6, 2021 and identified palustrine emergent (PEM) and palustrine forested (PFO) wetlands on Tract C. The PEM and PFO habitats observed on site were composed of the following dominate vegetation:

Within the wet pasture or PEM habitats described in the wetland delineation report, dominate species observed included narrow-leaf carpet grass (*Axonopus fissifolius*), swamp smartweed (*Persicaria hydropiperoides*), lamp rush (*Juncus effusus*), torpedo grass (*Panicum repens*), bushy bluestem (*Andropogon glomeratus*), annual ragweed (*Ambrosia artemisiifolia*), blue mistflower (*Conoclinium coelestinum*), shortbristle horned beak sedge (*Rhynchospora corniculata*), and bog rush (*Juncus marginatus*).

Areas of mature hardwood forested areas or PFO habitats were dominated by species such as Chinese tallowtree (*Triadica sebifera*), water oak (*Quercus nigra*), trifoliate orange (*Poncirus trifoliata*), and sweetgum (*Liquidambar styraciflua*) in the tree stratum. The sapling/shrub stratum was dominated by Chinese tallowtree, water oak, trifoliate orange, sweetgum, green ash (*Fraxinus pennsylvanica*), groundseltree (*Baccharis halimifolia*), yaupon (*Ilex vomitoria*), and Eastern swamp-privet (*Forestiera acuminata*). Species such as lamp rush, narrow-leaf carpet grass, yaupon, Indian wood-oats (*Chasmanthium latifolium*), sawtooth blackberry (*Rubus argutus*), Cherokee sedge (*Carex cherokeensis*), red maple (*Acer rubrum*), Frank's sedge (*Carex frankii*), Long's sedge (*Carex longii*), globe flat sedge (*Cyperus echinatus*), peppervine (*Ampelopsis arborea*), and Chinese privet (*Ligustrum sinense*) dominated the herbaceous stratum.

The non-wetland herbaceous vegetation communities were dominated by narrow-leaf carpet grass, bushy bluestem, annual ragweed, blue mistflower, and lamp rush.

E. Jurisdictional Determination

RES biologists conducted a wetland delineation on Tract C from October 4-6, 2021, and collected field data on the three (3) diagnostic wetland parameters – soils, vegetation, and hydrology. Per the Preliminary Jurisdictional Determination received from the CEMVN on August 1, 2022 and provided as **Attachment MWP-E**, approximately 52.3 acres of palustrine emergent (PEM) and palustrine forested (PFO) wetlands and approximately 0.5 acre of non-wetland waters, as an open water pond, were identified during the delineation

survey. Approximately 0.4 acre of Tract C was mapped as non-wetland areas dominated by herbaceous vegetation communities.

VI. DESCRIPTION OF WORK

"RES will restore and maintain forested wetland habitats in compliance with the provisions of the original CPWMB MBI. The restoration and maintenance of forested wetland habitat on [Tract A] will include the planting of those areas previously cleared for agricultural purposes, which are currently in agricultural use, and the planting of small areas of fragmented, existing forest that are actively utilized by livestock for foraging and shade. Reforestation efforts will utilize one-year old seedlings representative of a species assemblage historically common to the hardwood flatwoods and spruce pine-hardwood flatwoods native to this region. These two habitat types have been combined into hardwood flatwoods, given they are very similar in species composition, geographical limits, physiographic setting, and hydrology regime."

Tract C will provide 0.6 acre of enhancement, 52.3 acres of rehabilitation, and 2.0 acres of re-established BLH wetland forest to compensate for unavoidable wetland impacts for the Lake Pontchartrain LRAM Basin area (**Table 1** and **Exhibit 4b**). To accomplish this task, the Sponsor shall complete the following work plan (**Exhibit 15**). Site preparation activities will be documented and provided in the *As-Built Report*.

A. Hydrologic and Soil Work Plan

Tract C shall satisfy the wetland criteria as described in the USACE 1987 Wetlands Delineation Manual and be capable of performing the important functions lost because of the project for which it is mitigating.

In converting the property to agricultural use, certain hydrological modifications were put in place to control site hydrology using anthropogenic methods. Per the original *CPWMB MBI*, *Section VI.C.*, previous hydrologic modifications made during the construction of the original CPWMB altered hydrology on Tract C. These modifications included "existing drainage ditches plugged to prevent excess drainage and to achieve greater wetland hydrology, and the agricultural drains present on [Tract A were] plugged and degraded to restore a natural surface drainage system and to restore sheet flow. Natural drains were left intact to the extent practical to restore a more natural waterway. Approximately 5,373 feet and 3,268 feet of drains were plugged and degraded on [Tract A]. All hydrologic restoration work was completed on February 1, 2009. Vegetative restoration was performed in all areas where hydrologic restoration occurred, in accordance with **Section VI.C.** of the **CPWMB MBI**. The goal of hydrologic restoration was to reduce nonpoint source runoff and improve water quality by returning the site to a more natural drainage regime."

To restore Tract C to a more natural hydrologic state and meet the restoration project objectives the following shall occur (**Exhibit 15**):

- 1. Approximately 3,010 L.F. of fencing will be removed along the northern boundary that creates separation from the CPWMA Tract A site.
- 2. Three (3) existing culverts (one 24", one 36" and one 48") within the drainage feature that runs along the outside of the southern boundary will remain as they allow water to flow west to east within the channel. They do not have direct connection to Tract C.
- 3. Three (3) existing earthen plugs located along the northern boundary will be degraded to re-establish hydrologic connectivity with the CPWMA Tract A site (**Exhibit 17a**).
- 4. One (1) existing berm located on the northern boundary of Tract C will be degraded to re-establish hydrologic connectivity to the CPWMA Tract A (**Exhibit 17b**).
- 5. Approximately 3,468 L.F. of existing field drains will be degraded to create depressional sloughs that allow for overland hydrologic connectivity across the site (**Exhibits 17c-17f**).

- 6. The existing 0.5-acre pond will be backfilled with *in-situ* material from a non-wetland berm adjacent to the pond's western bank line to allow for planting (**Exhibit 17g**).
- 7. One (1) existing culvert will be removed (**Exhibit 17g**)
- 8. The existing 520 L.F. access road will remain, however it shall be maintained or degraded such that it allows for overland flow (**Exhibit 17h**). Where necessary, rock fill will be placed in areas along the access road where elevations are slightly lower. This will aid in preventing erosion and maintaining a functional access road required maintenance and monitoring events. This road also serves as monitoring and maintenance access to Tract A.

1. Grading

Existing pastures shall be mechanically prepared for vegetative plantings through grading. Subsoiling may be used to alleviate soil compaction created after extended cattle grazing and hay production operations and encourage air and water pore space for root growth. Post-construction cross-sections will be provided as part of the *As-Built Report*, as detailed in **Section X.A** of this MWP.

2. Soil Management

The only anticipated intentional soil movement will be during site preparation and backfilling of the existing pond with *in-situ* earthen material.

3. Erosion Control Measures

Roads that experience erosion will be regraded and appropriate erosion control measures will be used. The roads are not proposed to be removed as they are to remain to facilitate maintenance and monitoring activities and will not impede hydrology.

B. Vegetation Work Plan

Section V.B. of the **CPWMB MBI** states "the site restoration was accomplished by preparing the site as needed (tilling, mowing, etc.) and by planting an appropriate species mixture indicative of hardwood flatwood ecosystems during the non-growing season (i.e., December to March) of 2009."

"The restoration areas have been planted using a mixture of both hard mast and soft mast species during the nongrowing season (i.e., December to March). Site preparation was conducted prior to planting by mechanical and chemical means such as mowing, disking, ripping, shredding, and herbicidal application. Invasive and undesirable species controls have been and will be conducted throughout the entire project area over the life of [Tract A]."

1. BLH Planting Specification for Re-establishment and Rehabilitation

The habitat restoration procedures will be the same as those noted in the **CPWMB MBI**, **Section V.B.**, and the same species mix as identified in **Table 3** of **Section V.B.** will be used. **Table 3** has been replicated and is shown as **Table 5** below and aligns with the species listed in the Louisiana Rapid Assessment Method (LRAM) Guidebook for BLH habitats (**Attachment MWP-D**).

"Favorable conditions for planting were established and maintained throughout the site preparation activities. Site preparation activities were documented with digital photographs and will be provided to the IRT members. The specified percentages of hard and soft mast trees that have been planted at the [Tract A] are listed in Table 3" and now presented as **Table 5**.

"Planting procedures will adhere to the following specifications:

1. One- to two-year old bare-root seedlings or potted plants, obtained from a registered licensed

regional nursery grower and of a regional eco-type species properly stored and handled to ensure viability, will be planted in the prepared tract during the period of December 15 through March 15 (planting season). Events such as spring flooding may warrant storage of trees with planting in late spring or early summer. If seedlings listed are not available, substitutions may be made if the substitution is approved by the IRT. The Sponsor will plant bottomland hardwood species in such a manner that will ensure adequate species diversity and ensure that monotypic tree rows will not be established." A Proposed Substitution List is provided in **Table 6**. The species proposed as substitutions have been provided but no percentages have been listed at this time, as their need is unknown. Quantities for substitution species would be provided in the *As-Built Report* if a species were used to replace another species in **Table 5**. Furthermore, if a species in **Table 5** was available, but the quantity available for purchase was insufficient (limited) to plant the site per specifications, a species from **Table 5** or **Table 6** may be used to satisfy the quantity requirements and adjusted accordingly. A detailed planting list will be provided in the *As-Built Report*.

- 2. "Seedlings will be planted at the appropriate spacing to achieve a minimum initial stand density of five hundred and thirty-eight (538) seedlings per acre.
- 3. Species selected for planting will be planted in a random mixture as dictated by terrain and edaphic conditions. Single species plantings will generally be avoided.
- 4. The planted site(s) will be maintained, on an as-needed basis, by the use of mechanical, [manual,] or chemical control, or some combination thereof, in order to control noxious/exotic species colonization or other plant competition.
- 5. Sponsor will use all prudent efforts, physical, chemical, or mechanical, to remove and control Chinese tallow tree and any other existing noxious/exotic vegetation from [Tract A] lands to the nearest seed sources for colonization by these species. [Tract A] will be monitored until canopy closure to prevent re-infestation by noxious/exotic vegetation. Noxious/exotic vegetation stem density should be controlled to 5 percent or less of the total stem density on an acre-by-acre basis."

Hard and soft mast species will be planted to achieve an overall composition, on average, of 50-60% hard mast species. The species mix may include any mixture of the native hard mast species listed in **Table 5**.

The specific list of planted species, which is dependent upon availability, shall be provided in the *As-Built Report*. Please note that due to the existing soft mast seed bank present (based on wetland delineation report), soft mast species are anticipated to naturally regenerate; therefore, the soft mast species diversity, over time, shall exceed that noted in **Table 5**.

Table 5. Proposed BLH/Hardwood Flatwood Habitats Planting List

Scientific Name	Common Name	Mast	Percent
Quercus phellos	Willow Oak	Hard	20
Carya glabra	Pignut Hickory	Hard	10
Quercus nigra	Water Oak	Hard	10
Quercus michauxii	Swamp Chestnut Oak	Hard	10
Quercus pagoda	Cherrybark Oak	Hard	5
Quercus laurifolia	Laurel Oak	Hard	5

Scientific Name	Common Name	Mast	Percent
Liquidambar styraciflua	Sweetgum	Soft	10
Fraxinus pennsylvanica	Green Ash	Soft	10
Acer rubrum	Drummond Red Maple	Soft	5
Nyssa sylvatica	Blackgum	Soft	5
Pinus glabra	Spruce Pine	Soft	5
Fraxinus carolininana	Carolina Ash	Soft	5

Table 6. Proposed Planting Substitutions for BLH/Hardwood Flatwood Habitats

Scientific Name	Common Name	Mast
Quercus texana	Nuttall Oak	Hard
Quercus lyrata	Overcup Oak	Hard
Quercus stellata	Post Oak	Hard
Carya aquatica	Water Hickory	Hard
Taxodium distichum	Bald Cypress	Soft
Ulmus americana	American Elm	Soft
Ulmus alata	Winged Elm	Soft
Celtis laevigata	Sugarberry	Soft

2. BLH Planting Specifications for Enhancement Areas

The habitat restoration procedures noted in the **CPWMB MBI**, **Section V.B.**, and mentioned above for Rehabilitation and Re-establishment habitat areas will also be used in Enhancement areas. The same species mix as identified in **Table 3** of **Section V.B.** and replicated as **Tables 5**, and the proposed species substitutions provided in **Table 6** above will be used for planting Enhancement habitat areas.

"Favorable conditions for planting were established and maintained throughout the site preparation activities. Site preparation activities were documented with digital photographs and will be provided to the IRT members. The specified percentages of hard and soft mast trees that have been planted at [Tract A] are listed in Table 3" and now presented as **Table 5**.

Planting procedures will adhere to the following specifications:

1. One- to two-year old bare-root seedlings or potted plants, obtained from a registered licensed regional nursery grower and of a regional eco-type species properly stored and handled to ensure viability, will be planted in the prepared tract during the period of December 15 through March 15 (planting season). Events such as spring flooding may warrant storage of trees with planting in late spring or early summer. If seedlings listed are not available, substitutions may be made if the substitution is approved by the IRT. The Sponsor will plant bottomland hardwood species in such a manner that will ensure adequate species diversity and ensure that monotypic tree rows will not be

established. A Proposed Substitution List is provided in Table 6.

- 2. Seedlings will be planted at the appropriate spacing to achieve a minimum initial stand density of [three hundred and two (302)] seedlings per acre.
- Species selected for planting will be planted in a random mixture as dictated by terrain and edaphic conditions. Single species plantings will generally be avoided.
- 4. The planted site(s) will be maintained, on an as-needed basis, by the use of mechanical, [manual], or chemical control, or some combination thereof, in order to control noxious/exotic species colonization or other plant competition.
- 5. Sponsor will use all prudent efforts, physical, chemical, or mechanical, to remove and control Chinese tallow tree and any other existing noxious/exotic vegetation from [Tract A] lands to the nearest seed sources for colonization by these species. [Tract A] will be monitored until canopy closure to prevent re-infestation by noxious/exotic vegetation. Noxious/exotic vegetation stem density should be controlled to 5 percent or less of the total stem density on an acre-by-acre basis.

VII. MAINTENANCE PLAN

It will be the responsibility of the Sponsor to act as long-term steward of the CPWMB - Addendum I Tract C and to manage the mitigation bank in its restored state in perpetuity. Very little active management is anticipated for Tract C due to the nature of BLH wetland restoration requirements. The Sponsor shall guard against encroachment of exotic vegetation and generally ensure that the integrity of the forested wetland systems that characterize the completed mitigation site are maintained as described in the MBI MWP. A monitoring report as described in the MBI shall be submitted to the Corps for Years-1, -5 and every 3 years until 80% canopy coverage and every 5 years thereafter or until the mitigation site has been determined to be successful to ensure compliance with the mitigation plan or released by Corps. The surveys will be conducted in the growing season to allow adequate time for planning and implementation of any corrective action that the Sponsor and the IRT might deem necessary for the successful achievement of the short-term and/or long-term success criteria.

VIII. PERFORMANCE STANDARDS

For Tract C to be considered acceptable for mitigating wetland impacts associated with DA permits, the Property will be restored in accordance with the MWP such that it meets wetland criteria as described in the 1987 Corps of Engineers Wetland Delineation Manual (the 1987 Manual) as well as the November 2010 Regional Supplement for the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0 (the 2010 Regional Supplement). Performance standards (success criteria) used to measure the success of Tract C are provided below.

A. Initial Success Criteria

1. Hydrology:

Ground surface elevations must be conducive to establishment and support of hydrophytic vegetation, and re-establishment and maintenance of hydric soil characteristics. To that end, all alterations of the natural topography (ditching, spoil banks, land leveling, bedding, fire breaks, etc.) that have affected the duration and extent of surface water have been removed or otherwise rendered ineffective in accordance with this MWP.

2. Vegetation:

A minimum of 250 planted seedlings per acre must survive through the end of the second spring following the planting (i.e., Year-1). Those surviving seedlings must be representative both in species composition

and percentage identified in this MWP*. This criterion will apply to initial plantings, as well as any subsequent replanting that may be needed to meet this requirement.

*The seedlings sampled on-site in Year-1 must be representative of the species and quantity as provided in the *As-Built Report*.

B. Interim Success Criteria

1. Hydrology:

By Year-5 (four years following attainment of the one-year survivorship criteria) site hydrology will be restored such that the Property meets the wetland criterion as described in the 1987 Manual as well as the 2010 Regional Supplement. The Sponsor will provide the CEMVN project manager with a wetland delineation to accompany the Year-5 monitoring report used in evaluating interim success criteria.

2. Vegetation and Vegetative Plantings:

- a. For a given planting, a minimum of 250 seedlings/saplings per acre must be present at the end of the fourth year (i.e., Year-5) following successful attainment of the one-year survivorship criteria. Trees established through natural recruitment may be included in this tally; however, no less than 125 hard mast-producing seedlings per acre must be present. Surviving hard mast seedlings must be representative of the species composition and percentage identified in this MWP*. Exotic/invasive species may not be included in this tally. If the Sponsor does not feel the above percentages are appropriate for the Tract, the Sponsor will provide appropriate supporting information to substantiate the request to adjust these percentages.
- b. By Year-5 (four years following successful attainment of the one-year survivorship criteria) Tract C and the perimeter will be virtually free (approximately 5% or less on an acre-by-acre basis) of exotic/invasive vegetative species.
- c. Developing plant community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions by Year-5. Achievement of wetland vegetation dominance is defined as a vegetation community where more than 50% of all dominant species are facultative (FAC) or wetter, using "routine delineation methods" as described in the 1987 Manual as well as the 2010 Regional Supplement.

*The seedlings sampled on-site in Year-1 must be representative of the species and quantity as provided in the As-Built Report.

C. Long-Term Success Criteria (Year-8 and Beyond)

- 1. Forest canopy coverage exceeds 80% of forested land mass as measured by an approved method. Forest canopy species abundance and composition is consistent with the restoration goals identified in the restoration plan (Section VI of this MWP) and credit assessment methodologies. The long-term species composition should fall within the range of 50:50 to 40:60 soft mast to hard mast ratio. If the Sponsor does not feel the above percentages are appropriate for the Tract, the Sponsor will provide appropriate supporting information to substantiate the request to adjust these percentages.
- 2. When forest canopy coverage exceeds 80%, the Tract will be essentially void of exotic/invasive vegetation (all seed-producing trees removed from Tract C and perimeter and less than 3% of the understory on an acre per acre basis). An active treatment program will continue as part of the long-term maintenance program.
- 3. If thinning to maintain or enhance the ecological value of the Tract is determined necessary by the IRT

- at this time, the Sponsor/steward will develop a thinning plan in coordination with the IRT. Thinning operations shall be performed by the Sponsor/steward per the requirements of the thinning plan.
- 4. The Sponsor will provide documentation that the "Long-Term Maintenance and Protection" escrow account is fully funded.
- 5. If CEMVN in conjunction with the IRT is questioning the wetland status of the Tract, the Sponsor shall provide the CEMVN project manager with a wetland delineation for review and verification by CEMVN.

IX. MONITORING REQUIREMENTS

The Sponsor agrees to perform all work necessary to monitor Tract C to demonstrate compliance with the success criteria established in this MWP. The Sponsor will monitor Tract C in the spring of each monitoring year using the guidelines in **Section VIII** of this MWP.

Surveys of permanent monitoring stations will occur in the following time frame:

- 1. Immediately following planting of the Tract to establish the post-construction baseline.
- 2. In Years 1, 5 and after achieving interim success criteria, monitoring will occur every 3 years until an average canopy coverage of 80% is established and then it will occur every 5 years thereafter.
- 3. If thinning is required after successfully achieving the long-term success criteria, the Tract will be surveyed prior to and following the first thinning operation following plantings.
- 4. If monitoring for any given year determines that the Tract is not progressing as expected, monitoring will occur on an annual basis until Tract C successfully meets or exceeds established milestones.

The survey of the permanent monitoring stations will collect data to evaluate the survival rate of planted vegetation; number, species and growth rates (average heights and diameter). In addition to planted seedlings, surveys will include the number by species of volunteering trees, shrubs and woody vines. Surveys will also collect information regarding colonizing plant species, the wetland plant status (scaled from obligate (OBL) to upland (UPL) of each) and the number by species of exotic/noxious specimens.

A. Permanent circular monitoring stations

Immediately following initial planting of the Tract, the Sponsor will randomly establish a permanent circular monitoring station for every 20 acres on the Tract. Each station will have a minimum area of 1/20th acre (radius=26 feet). Stations will be identified with a permanent marker (e.g., an 8-foot PVC pipe anchored with a metal T post at plot center) and coordinates will be recorded for each station. A map will be provided to CEMVN (See Reporting Protocols below) that depicts the location of the monitoring stations as well as a coordinating list containing the coordinates for each station. All individual planted seedlings/saplings falling within each monitoring station will be geo-marked with a numbered tag that uniquely identifies each seedling. These seedlings shall also be marked with fluorescent flagging tape for ease of location of specimens for initial site visits. A document providing seedling information shall be presented (to CEMVN) for each monitoring station and this document shall not only list the specific tag number for each seedling within the monitoring station, but also the species (by scientific and common name), height, diameter, wetland rating, hard mast or soft mast categorization, and general condition of each stem.

To establish baseline information this data will be obtained immediately following the initial planting of Tract C.

B. Transects

The Sponsor shall establish transects along planted rows to be used to determine overall survivorship of planted seedlings. Transects shall make up at least 3% of the total acreage of the Tract and arranged so that a representative sample of the entire site is obtained. The overall number of rows for the Tract shall be provided and the positioning of the transects shall be coordinated with the IRT prior to finalization of their location in the MBI and MWP. **Exhibit 16** shows the preliminary locations of transects and plots. The measurements (length x width) and location (GPS coordinates in decimal degrees) of each transect shall be provided along with the exact monitoring plot locations and depicted on a map that is submitted with the *As-Built Report* for Tract C. The beginning and ending points of each transect shall be marked with a permanent marker (e.g., an 8-foot PVC pipe anchored with a metal T-Post) and coordinates shall be recorded for these points as well.

To establish baseline information transects will be surveyed to determine the number by species of planted seedlings within 60 days of planting. The baseline survey shall record the species planted, wetland indicator status of such species, and the mast type of each species. Transects will be surveyed until successful attainment of the interim success criteria. Initial and interim transect surveys shall record the species present, the number of living seedlings for each species, the wetland indicator status of each species, the mast type of each species and describe the general condition of the seedlings. Any failed areas of plantings should be noted along with an explanation for the failure.

C. Wetland Delineation

At year 5, the Sponsor will be required to submit a wetland delineation to demonstrate that Tract C meets the wetland criterion as described in the 1987 Manual as well as the 2010 Regional Supplement. To submit the information for a wetland delineation the Sponsor will collect necessary data for Tract C and provide it to CEMVN project manager for review and verification.

D. Floristic Survey

To document the attainment of the long-term success criteria the Sponsor will complete a comprehensive floristic survey for Tract C as part of the monitoring requirements.

A floristic survey should be comprehensive over the entire site and should be conducted using systematic field techniques. This survey should provide a list of plants and communities existing on Tract C. If adverse conditions such as disease, drought, predation, or herbivory, etc. exist and have impacted the plantings then this information and these conditions need to be discussed in the report.

E. Photographs

Digital images shall be taken from ground level at each monitoring station and from elevated positions throughout Tract C to document overall conditions. These ground level images should provide a North, South, East, and West image for each station.

F. Qualitative Analysis

The Sponsor shall evaluate the entire extent of Tract C (or phase this report represents) and provided observations concerning overall seeding survivorship, colonization of Tract C by volunteer plant species, wildlife utilization and any other information that is pertinent to achievement of initial success criteria.

G. Hydrologic Conditions

A description of the condition of any applicable hydrology altering features (culverts, ditches, plugs, etc.) and a general discussion of hydrologic conditions at monitoring stations shall be provided.

H. Ledgers

The Sponsor will utilize the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS) as a ledger to show all transactions. The Sponsor will input the following information: transaction date, permittee name, credits/acres sold, DA permit number and CUP permit number (if applicable). No other reporting measures are required.

X. Monitoring Reports

Independent of the *As-Built Report* the Sponsor will submit monitoring reports documenting monitoring efforts at Tract C to the CEMVN by July 31st of the year monitoring occurs. Besides monitoring results for that monitoring year, reports will include a financial assurance report documenting withdrawals and deposits. The monitoring reports will follow the guidelines listed below and a summation of the important dates are provided in **Table 7**:

Table 7: Summation of Monitoring information requirements for BLH/Hardwood Flatwood Habitats

Information	Surveyed /Monitored	Report	Wetland Delineation	Notes
Baseline	Within 60 days of planting	-	-	-
As-Built	Within 60 days of planting	Within 60 days of planting		The Baseline information will be included in this report.
Initial (Year 1)	In the spring (April 15- May 31) of its second growing season	By July 31st of the year of the second growing season		
Interim (Year 5)	In the spring (April 15- May 31) of its fourth growing season following one-year survivorship criteria	By July 31st of the year of fourth growing season following one-year survivorship criteria	Sponsor must provide a wetland delineation with the Interim monitoring report.	
Long-Term (Year 8)	In Spring (April 15- May 31) of its 3rd growing season following successful attainment of interim success criteria	By July 31st of the year of its 8th growing season following one- year survivorship criteria		If Long-Term Criteria is not achieved at this point then monitoring reports will be provided every 3 years until average canopy coverage of 80% is obtained.

The monitoring report will include data sufficient for comparison to the performance standards found in **Section VIII** of this MWP. The Sponsor shall also include, in these reports, a discussion of all activities which took place on Tract C.

A. As-Built Report

An As-Built Report will be submitted to CEMVN within 60 days following completion of all work required to restore or enhance special aquatic sites. The As-Built Report will describe in detail the work performed and provide a list of species planted, the number of each species, the hard or soft mast categorization, and the wetland rating. No deviation from the MWP may occur without prior approval from the IRT. The As-Built Report will include a discussion of the coordination with IRT members, a description of and reasons for any approved deviation. The As-Built Report shall provide:

- a. A survey showing finished grades and plantings with written documentation, plan view and cross-sectional drawings of all construction and establishment work implemented on Tract C.
- b. Survey data collected from the permanent monitoring stations and transects. This survey data should include the number and species of the seedlings planted, timing of all work events, and maps showing the location (including latitude/longitude) of all monitoring stations as described in this MWP.
- c. Detailed descriptions of site preparation, planting procedures, etc.

B. Initial Success Criteria Report

The Sponsor shall monitor the Tract in the spring (April 15-May 31) of its second growing season following initial planting of the Tract. The Sponsor will provide an Initial Success Criteria Report by July 31st of that year.

The Sponsor shall provide details in accordance with this MWP, on any maintenance/management work conducted on Tract C after submission of the *As-Built Report*. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of interim success criteria.

1. Hydrology

As stated in **Section VII.A.1.** of the **CPWMB MBI** "[g]round surface elevations must be conducive to the establishment and support of wetland vegetation, as well as the maintenance of hydric soil characteristics."

2. Vegetation

a) Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all planted seedlings falling within each permanent circular monitoring plot as described and as established in accordance with **Section IX** of this MWP. A description of the general condition of the seedlings, including the number and species of surviving seedlings in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. A number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

b) Transect Data

The Sponsor shall provide data in tabular form for the total number of planted seedlings as described in **Section IX.B** of this MWP. A description of the general condition of the seedlings and the discussion

of likely causes of mortality, if appropriate shall also be provided. Exotic/invasive species should be noted along with information on the generalized amount of each and whether they are seed bearing trees or seedlings.

3. Hydrologic Data

The Sponsor shall provide a description of the condition of any applicable hydrology altering features (culverts, ditches, plugs, etc.) and a general discussion of hydrologic conditions at monitoring stations.

4. Photographs

The Sponsor must submit digital photographs in accordance with **Section IX.E.** of this MWP.

5. Qualitative Analysis

The Sponsor must provide a qualitative analysis of Tract C as described in **Section IX.F.** of this MWP.

6. Funding

The Sponsor shall provide copies of all correspondence from the Surety related to the performance bond to CEMVN upon request and in its monitoring report submittals. The Sponsor shall provide CEMVN with copies of the most recent financial account statements for the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g., receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

C. Interim Success Criteria Report

The Sponsor shall monitor Tract C in the spring (April 15-May 31) of its fourth growing season following attainment of the one-year survivorship criteria. The Sponsor will provide an Interim Success Criteria Report, and accompanying wetland delineation, by July 31st of that year.

1. Vegetation

Note: For a given planting, a minimum of 250 seedlings/saplings per acre must be present at the end of the fourth year (i.e., Year 5) following successful attainment of the one-year survivorship criteria. Trees established through natural recruitment may be included in this tally; however, no less than 125 hard mast-producing seedlings per acre must be present. Surviving hard mast seedlings must be representative of the species composition and percentage identified in the *As-Built Report*. Exotic/invasive species may not be included in this tally.

a) Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all planted seedlings falling within each permanent circular monitoring plot as described and as established in accordance with **Section IX**. of this MWP. A description of the general condition of the seedlings, including the number and species of surviving seedlings in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. A number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

b) Transect Data

The Sponsor shall provide data in tabular form for the total number of planted seedlings as described in **Section IX.B** of this MWP. A description of the general condition of the seedlings and the discussion

of likely causes of mortality, if appropriate shall also be provided. Exotic/invasive species should be noted along with information on the generalized amount of each and whether they are seed bearing trees or seedlings.

2. Hydrologic Data

The Interim Success Criteria will be reached by Year-5 (4 years following attainment of the one-year survivorship criteria), and **the Sponsor will provide the CEMVN project manager with a wetland delineation to demonstrate that site hydrology has been restored** such that the Property meets the wetland criterion as described in the 1987 Manual as well as the 2010 Regional Supplement.

3. Photographs

The Sponsor must submit digital photographs in accordance with Section IX.E. of this MWP.

4. Qualitative Analysis

The Sponsor must provide a qualitative analysis of Tract C as described in **Section IX.F.** of this MWP. The Sponsor shall provide details on any maintenance/management work conduction on Tract C after submission of the Initial Success Criteria Report. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of long-term success criteria.

Note: By year 5, four years following successful attainment of the one-year survivorship criteria, the developing community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions; Tract C and the perimeter will be virtually free (approximately 5% or less on an acre-by-acre basis) of exotic/invasive vegetation.

5. Funding

The Sponsor shall provide copies of all correspondence from the Surety related to the performance bond to CEMVN upon request and in its monitoring report submittals. The Sponsor shall provide CEMVN with copies of the most recent financial account statements for the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g., receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

D. Long-Term Success Criteria Report

1. Vegetation

a) Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all tree seedlings/stems as well as natural recruitments, falling within each permanent circular monitoring plot as described and as established in accordance with **Section IX** of this MWP. The report should also include a description of the general condition/health of the tree seedlings/stems, the number, species type and diameter at breast height (DBH) of surviving tree/seedlings/stems, as well as the percent canopy coverage in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. The number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

2. Hydrologic Data

The Sponsor will provide supporting documentation that the hydrology achieved at year five (5) still exists

on Tract C by supplying the CEMVN project manager with a wetland determination, to be reviewed and verified by CEMVN, to demonstrate that site hydrology has been restored such that the Property meets the wetland criterion as described in the 1987 Manual as well as the 2010 Regional Supplement.

3. Photographs

The Sponsor must submit digital photographs in accordance with **Section IX.E.** of this MWP. The Sponsor shall submit current aerial/imagery to provide verifiable data that overall forested canopy cover across the entire forested land mass as described in **Section VIII.C.1** is present.

4. Qualitative Analysis

The Sponsor must provide a qualitative analysis of Tract C as described in **Section IX.F.** of this MWP. The Sponsor shall provide details on any maintenance/management work conduction on Tract C after submission of the Interim Success Criteria Report. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of long-term success criteria.

Note: Long-Term Success Criteria Monitoring shall begin at year eight (8) (seven years following successful attainment of the one-year survivorship criteria) and continue every three (3) years until 80% canopy coverage is achieved. The developing community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions; Tract C and the perimeter will be virtually free (approximately 3% or less on an acre-by-acre basis) of exotic/invasive vegetation.

5. Funding

The Sponsor shall provide copies of all correspondence from the Surety related to the performance bond to CEMVN upon request and in its monitoring report submittals. The Sponsor shall provide CEMVN with copies of the most recent financial account statements for the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g., receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

XI. Bank Credits

A. Bank Service Area

The CWPMB – Addendum I Tract C is established to provide compensation for impacts to BLH forests, in USGS Hydrologic Cataloging Unit (HUC) 08070202: Amite River, 08070203: Tickfaw River, 08070204: Lake Maurepas, 08070205: Tangipahoa River, 08090201: Liberty Bayou–Tchefuncta River, 08090202: Lake Pontchartrain, and 08090203: Eastern Louisiana Coastal drainage basin. The primary service area would be the Louisiana Basin in which Tract C is located which is Lake Pontchartrain (**Exhibit 1**).

B. Credit Determination

Refer to Attachment MWP-C.

C. Schedule of Credit Availability

Upon submittal of all appropriate documentation by the Sponsor, and subsequent approval by CEMVN in consultation with the IRT, CEMVN will release credits for use by the Sponsor according to the following schedule (**Table 8**):

1. Thirty percent (30%) of total anticipated project credits will be available for debiting upon confirmation

- 2. An additional twenty percent (20%) of total anticipated credits will be available for debiting upon providing documentation that the vegetative plantings have been conducted and completion of the work necessary to restore site topography and wetland hydrology of Tract C as outlined in **Section VI**
- 3. An additional twenty percent (**20%**) of the total anticipated credits would be released upon successfully completing the initial success criteria (**Section VIII. A.** of this MWP)
- 4. An additional twenty percent (**20%**) of the total anticipated credits would be released upon successfully completing the interim success criteria (**Section VIII B** of this MWP).
- 5. The remaining ten percent (10%) of the total anticipated credits would be released once the long-term success criteria (**Section VIII. C** of this MWP) are met.

Table 8: Credit Release Schedule for Comite Mitigation Bank - Addendum I Tract C

that all items in **Section XI.F (1-7)** of this MWP have been completed.

Release	Action	Percent	Acres	Comments
1	All items in Section IX F. 1-7 of the MBI	30%	16.5	30% Release of Enh, Rehab, and Re-est
2	Documentation of vegetative plantings and completion of work necessary to restore site topography and wetland hydrology as outlined in this MWP; documentation of baseline conditions and establishment of transects and monitoring plots (Section XI. A and B of this MWP).	20%	11.0	20% Release of Enh, Rehab, and Re-est
3	Successful completion of Initial Success Criteria (minimum one year after completion of construction) as outlined in this MWP.	20%	11.0	20% Release of Enh, Rehab, and Re-est
4	Successful completion of Interim Success Criteria (at 4 years following successful attainment of one-year survivorship criteria) as outlined in this MWP.	20%	11.0	20% Release of Enh, Rehab, and Re-est
5	Successful attainment of Long-term Success Criteria as outlined in this MWP.	10%	5.4	10% Release of Enh, Rehab, and Re-est

XII. Adaptive Management Plan

of this MWP.

In the event Tract C fails to achieve any of the performance standards specified in **Section VIII** of this MWP, the Sponsor shall develop necessary contingency plans and implement appropriate remedial actions for Tract C in coordination with the IRT based on the existing conditions of Tract C. The Sponsor must notify the IRT if the project cannot be constructed in accordance with this MWP.

XIII. Long-Term Protection and Maintenance

To ensure long-term sustainability of the resource, the Sponsor shall burden the property with a perpetual conservation servitude as described in **Section II.D.** of the **CPWMB MBI**.

XIV. Funding

Section IX of the **CPWMB MBI** provides specific details about the funding for the Construction and Establishment (C&E) Activities for Tract C. An assessment of the initial and capital costs and ongoing management funds required to manage and monitor Tract C is included in **Attachment MWP-B** of this MWP.

A. Construction and Establishment (C&E) Funds

1. Estimate of C&E Funds Required

The Sponsor agrees to provide Financial Assurances sufficient to ensure satisfactory completion for the work described in this MWP and any future Adaptive Management Plan(s). The Sponsor is establishing the C&E bonds to ensure sufficient funds are available to perform work required to construct and establish Tract C through successful attainment of long-term success criteria.

2. C&E Funding Mechanism

The Sponsor proposes to establish two (2) performance bonds. A performance bond for the construction portion of the Mitigation Site (Year-0) (the "Construction Bond") and a performance bond for the establishment portion of the Mitigation Site, which covers Years 1 through 15 (the "Establishment Bond") and will automatically renew annually. The penal sum for the Construction Bond is \$20,576.26 and the penal sum for the Establishment Bond is \$42,646.96.

3. C&E Release Schedule

The Financial assurances shall be reduced as success criteria are achieved and the probability decreases that those funds would be needed according to the following schedule:

a) C&E Release Schedule Construction Bond

Upon verification that all hydrologic modifications, construction, and planting as describe in this MWP have been completed to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the Surety that the Construction Bond for **\$20,576.26** may be released in full.

b) C&E Release Schedule Establishment Bond

- i. Upon verification by CEMVN, in consultation with the IRT, that the initial success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the financial institution that the C&E financial assurance may be reduced to a penal sum of \$40,692.16.
- ii. Upon verification by CEMVN, in consultation with the IRT, that the interim success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the financial institution that the C&E financial assurance may be reduced to a penal sum of \$20,311.33.
- iii. Upon verification by CEMVN, in consultation with the IRT, that the long-term success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall notify the Sponsor and the Surety that the Establishment Bond shall be released in full.

The performance bond shall guarantee that the Surety or a third party to be designated by CEMVN will remedy all failures to comply with the MBI identified by CEMVN by a date set by CEMVN or that the Surety will make sufficient payment to a CEMVN-designated third party, as determined appropriate by the CEMVN in consultation with interested resource agencies, in the event that the Sponsor does not fulfill its obligations to perform, as specified in this MBI.

Release of bond requirements, or, if necessary, payment to a third party as identified by CEMVN, of a specified amount of the financial assurances shall be made upon written notification by CEMVN to the Surety.

B. Long-Term Maintenance/Management Funds

1. Long-term Management Needs

To ensure the long-term sustainability of the resource, the Sponsor will perform all necessary work to maintain Tract C consistent with the performance standards established in this MWP. Maintenance includes all monitoring, long-term management, reporting, adaptive management, if needed, and all work required and necessary under this MWP. Deviation from the approved MBI and MWP is subject to review and written approval by the CEMVN.

Specific long-term needs include:

- 1. Monitoring as established in this MWP;
- 2. Wetland delineations as established in this MWP;
- 3. Thinning, as needed;
- 4. Boundary Maintenance, as needed;
- 5. Eradication of noxious, undesirables, or invasive species, as needed; and
- 6. Supplemental planting events, as needed.
- 7. Maintenance needs such as Bank boundary clearing, installed hydrological modification replacement or repairs, access road repairs, etc.; and
- 8. Property taxes.

These issues will be identified, evaluated, and mapped during such site visits. Monitoring notes will be recorded as to the type, location and any other details that would be beneficial in dealing with such issues. Once details are recorded the long-term steward will implement a recommendation on how to remediate such conditions as well as avoid and/or minimize such situations in the future. Monitoring will be conducted to identify any issues that arise, and corrective actions as determined to be appropriate by the CEMVN, in the Adaptive Management Plan will be implemented. The long-term steward will, during site examinations, note any land use changes on adjacent lands and modify management activities accordingly (i.e., assure that fencing is present between the Mitigation Site and any adjacent grazed lands).

2. Annual Cost Estimates for Long-Term Needs

The average annualized cost of long-term management is **\$1,006.48 Attachment MWP-B** contains a description of the necessary work and an itemization of costs to perform the work for long-term management and protection of Tract C. The NFWF Endowment Payment Schedule describes the projected yearly costs for long-term management and protection.

3. Long-Term Maintenance and Protection Funding Mechanism

To ensure that sufficient funds are available to provide for the perpetual maintenance and protection of Tract C, the Sponsor is establishing the "Long-Term Maintenance and Protection" endowment account. Utilizing a capitalization rate of 3.5%, the principle needed to generate the annual amount identified in **Section XIV.B.2** is \$38,500.00. The Long-Term Maintenance and Management Funding Agreement will be entered by and among the Sponsor, the CEMVN, and the National Fish and Wildlife Foundation, a Congressionally chartered foundation and District of Columbia non-profit corporation.

The account will be fully funded at Year-0 with **\$38,500**. No incremental fund per credit sale or additional annual deposits are required.

Documentation that the account is fully funded is a pre-requisite for release of the remaining credits following attainment of the Long-term Success Criteria as identified in this Mitigation Work Plan. Accrued interest in excess of the value of the fully funded account may only be used for the administration, operation, maintenance and/or other purposed that directly benefit the Bank. The principal shall not be used and shall remain as part of the Bank's assets to ensure that sufficient funds are available should perpetual maintenance responsibilities be assumed by a third party. The Sponsor or Long-term Steward may withdraw the accumulated interest only with written approval from CEMVN and only to be used to maintain the Bank. The Sponsor shall provide copies of depository account statements to CEMVN upon request and in their monitoring reports.

XV. Other Information

A. Provisions of the MBI

This mitigation bank site must adhere to all provisions as outlined in the Comite Properties Wetlands Mitigation Bank Mitigation Banking Instrument as signed by the Corps of Engineers, New Orleans District.

B. List of contacts for MBI Section XVI. Other Provisions (H. Notice)

Landowner		
11665 Peairs Road	Point of Contact: Richard Franklin Millican*	
Zachary, Louisiana 70791	Title: Usufruct and Power of Attorney	
	Phone Number: (225) 301-0483	
Sponsor:		
First Louisiana Resource, LLC	Point of Contact: Frank Cuccio	
c/o Resource Environmental Solutions, LLC	Title: General Manager	
6575 West Loop South, Suite 300	Email: fcuccio@res.us	
Bellaire, Texas 77401	Phone Number: (337) 288-1497	
Agent:		
Resource Environmental Solutions, LLC	Point of Contact: Matt Genotte	
412 Settlers Trace, Suite200	Title: Regional Regulatory Manager	
Lafayette, Louisiana 70508	Email: mgenotte@res.us	
	Phone Number: (346) 310-6211	

Long-Term Steward and Management:	
First Louisiana Resource, LLC	Point of Contact: Matt Genotte
c/o Resource Environmental Solutions, LLC	Title: Regional Regulatory Manager
412 N. Fourth Street, Suite 300	Email: mgenotte@res.us
Baton Rouge, Louisiana 70802	Phone Number: (346) 310-6211
IRT Members:	
U.S. Army Corps of Engineers	Point of Contact: Brian Breaux
New Orleans District	Title: Project Manager
P.O. Box 60267	Email: Brian.W.Breaux@usace.army.mil
New Orleans, Louisiana 70160-0267	Phone Number: (504) 862-1938
U.S. Environmental Protection Agency	Point of Contact: Raul Gutierrez
Region 6, Wetlands Section	Title: Environmental Scientist
1445 Ross Avenue, Suite 120	Email: gutierrez.raul@epa.gov
Dallas, Texas 75202-2733	Phone Number: (214) 665-7482
Louisiana Department of Wildlife and Fisheries	Point of Contact: Joe Maryman
P.O. Box 98000	Title: Biologist
Baton Rouge, Louisiana 70808	Email: jmaryman@wlf.la.gov
	Phone Number: (225)765-2380

^{*} Richard Franklin Millican maintains a usufruct over the subject property with ownership vested in Thomas Joseph Millican, Kyle Michael Millican, Tucker Joseph Millican, Blythe Millican Stevenson, Shelby N. Millican, and Trevor J. Millican.

XVI. CITATIONS

- 1. Code of Federal Regulations, Title 33, Parts 325 and 332 and Title 40, Part 230, as published on pages 19594-19704 in the Federal Register dated 10 April 2008.
- 2. Louisiana Nutrient Management Strategy Interagency Team. 2014. Louisiana Nutrient Management Strategy: Protection, Improvement, and Restoration of Water Quality in Louisiana's Water Bodies. Coastal Protection and Restoration Authority of Louisiana, Louisiana Department of Agriculture and Forestry, Louisiana Department of Environmental Quality, and Louisiana Department of Natural Resources. May 2014. Baton Rouge, LA.
- 3. Louisiana Department of Environmental Quality.2012. Louisiana's Nonpoint Source Management Plan. November 2012. Baton Rouge, Louisiana.
- 4. Louisiana Wildlife and Fisheries Louisiana Natural Heritage Program. Updated 2009. The Natural Communities of Louisiana. Accessed March 2021.
- 5. United States Department of Agriculture Natural Resources Conservation Service, Web Soil Survey, Livingston Parish, Louisiana, Retrieved March 2021. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
- 6. United States Department of Agriculture Natural Resources Conservation Service, PLANTS Database USDA PLANTS, Retrieved March 2021. http://plants.usda.gov/

XVII. ATTACHMENTS

ATTACHMENT MWP-A Exhibits

EXHIBIT 1

Vicinity and Service Area Map

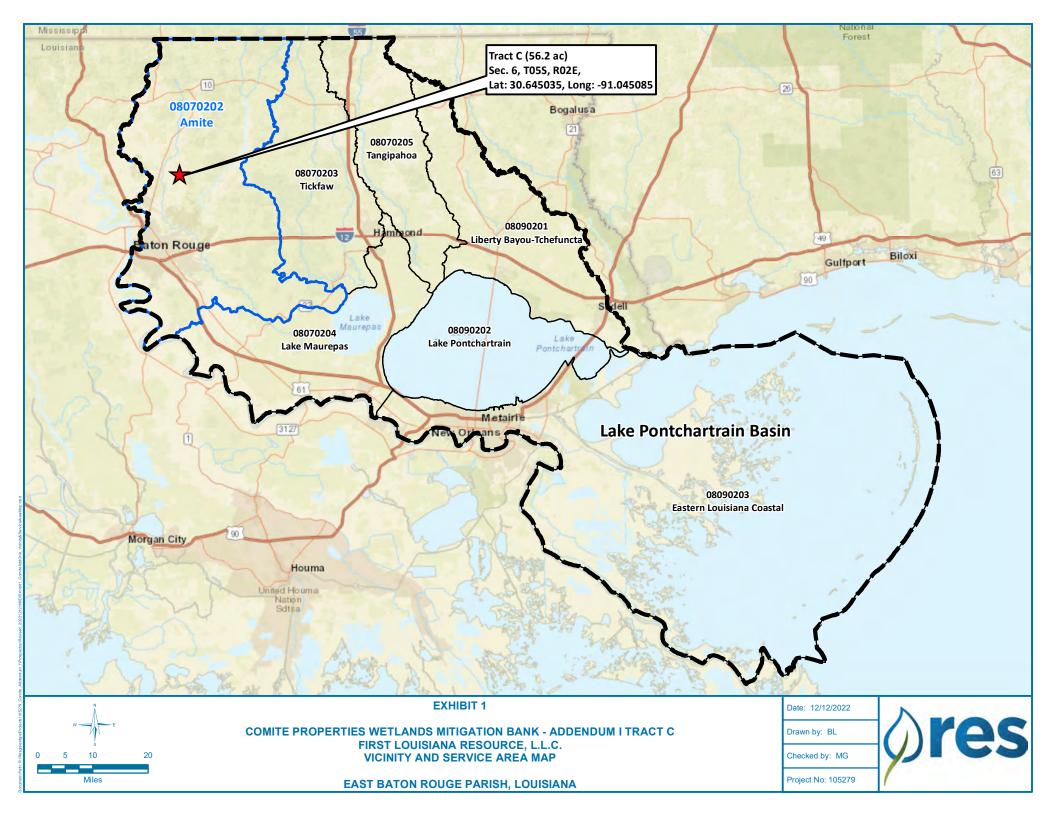
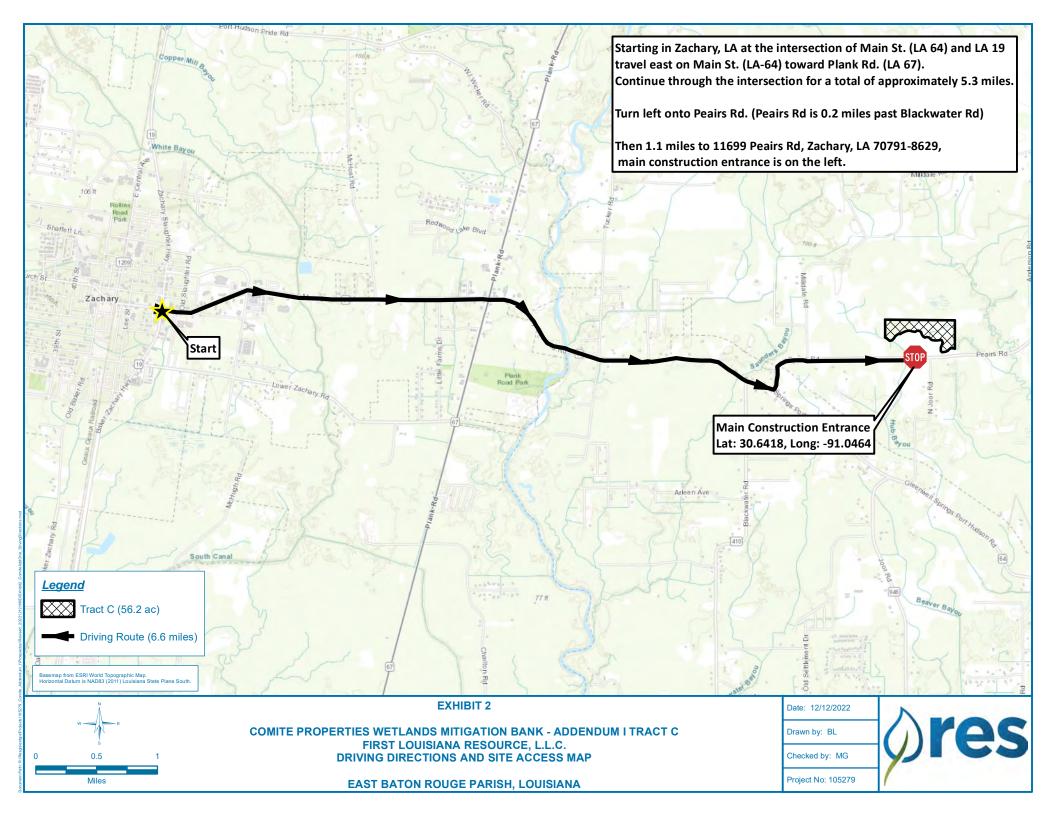


EXHIBIT 2

Driving Directions



EXHIBITS 3a-3b

Conservation Servitude Legal Description and Plat

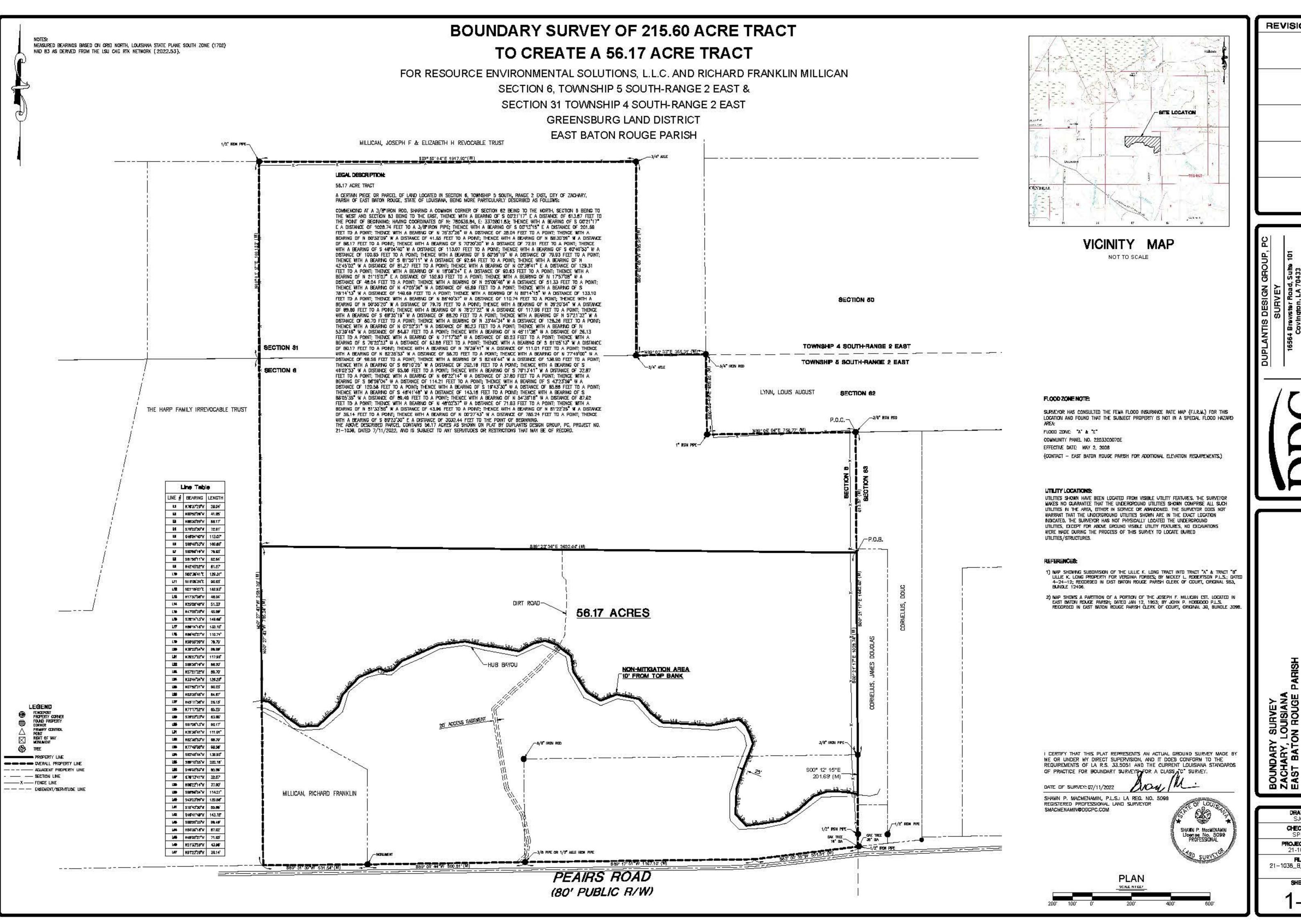
LEGAL DESCRIPTION 56.17 ACRE TRACT:

A CERTAIN PIECE OR PARCEL OF LAND LOCATED IN SECTION 6, TOWNSHIP 5 SOUTH, RANGE 2 EAST, CITY OF ZACHARY, PARISH OF EAST BATON ROUGE, STATE OF LOUISIANA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 3/8" IRON ROD, SHARING A COMMON CORNER OF SECTION 62 BEING TO THE NORTH, SECTION 6 BEING TO THE WEST AND SECTION 63 BEING TO THE EAST, THENCE WITH A BEARING OF S 00°21'17" E A DISTANCE OF 613.87 FEET TO THE **POINT OF BEGINNING**; HAVING COORDINATES OF N: 780636.84, E: 3372801.83; THENCE WITH A BEARING OF S 00°21'17" E A DISTANCE OF 1028.74 FEET TO A 3/8" IRON PIPE; THENCE WITH A BEARING OF S 00°12'15" E A DISTANCE OF 201.69 FEET TO A POINT; THENCE WITH A BEARING OF N 76°37'26" W A DISTANCE OF 28.04 FEET TO A POINT; THENCE WITH A BEARING OF N 80°52'09" W A DISTANCE OF 41.65 FEET TO A POINT; THENCE WITH A BEARING OF N 88°30'59" W A DISTANCE OF 88.17 FEET TO A POINT; THENCE WITH A BEARING OF S 70°20'30" W A DISTANCE OF 72.91 FEET TO A POINT; THENCE WITH A BEARING OF S 48°04'40" W A DISTANCE OF 113.07 FEET TO A POINT; THENCE WITH A BEARING OF S 60°40'53" W A DISTANCE OF 100.65 FEET TO A POINT; THENCE WITH A BEARING OF S 80°59'19" W A DISTANCE OF 79.93 FEET TO A POINT; THENCE WITH A BEARING OF S 81°55'11" W A DISTANCE OF 92.64 FEET TO A POINT; THENCE WITH A BEARING OF N 42°45'02" W A DISTANCE OF 81.27 FEET TO A POINT; THENCE WITH A BEARING OF N 02°38'41" E A DISTANCE OF 129.31 FEET TO A POINT; THENCE WITH A BEARING OF N 18°08'24" E A DISTANCE OF 90.63 FEET TO A POINT; THENCE WITH A BEARING OF N 21°15'07" E A DISTANCE OF 152.93 FEET TO A POINT; THENCE WITH A BEARING OF N 17°57'08" W A DISTANCE OF 48.04 FEET TO A POINT; THENCE WITH A BEARING OF N 25°09'46" W A DISTANCE OF 51.33 FEET TO A POINT; THENCE WITH A BEARING OF N 47°05'36" W A DISTANCE OF 45.89 FEET TO A POINT; THENCE WITH A BEARING OF S 78°14'13" W A DISTANCE OF 149.69 FEET TO A POINT; THENCE WITH A BEARING OF N 86°14'15" W A DISTANCE OF 133.10 FEET TO A POINT; THENCE WITH A BEARING OF N 86°40'57" W A DISTANCE OF 110.74 FEET TO A POINT; THENCE WITH A BEARING OF N 50°55'20" W A DISTANCE OF 79.75 FEET TO A POINT; THENCE WITH A BEARING OF N 39°20'54" W A DISTANCE OF 89.69 FEET TO A POINT: THENCE WITH A BEARING OF N 78°27'22" W A DISTANCE OF 117.96 FEET TO A POINT; THENCE WITH A BEARING OF S 68°35'19" W A DISTANCE OF 88.20 FEET TO A POINT; THENCE WITH A BEARING OF N 57°21'32" W A DISTANCE OF 80.70 FEET TO A POINT; THENCE WITH A BEARING OF N 33°44'34" W A DISTANCE OF 126.26 FEET TO A POINT; THENCE WITH A BEARING OF N 07°52'31" W A DISTANCE OF 80.23 FEET TO A POINT; THENCE WITH A BEARING OF N 53°39'46" W A DISTANCE OF 64.87 FEET TO A POINT; THENCE WITH A BEARING OF N 45°11'38" W A DISTANCE OF 26.13 FEET TO A POINT; THENCE WITH A BEARING OF N 71°17'52" W A DISTANCE OF 65.23 FEET TO A POINT; THENCE WITH A BEARING OF S 76°22'23" W A DISTANCE OF 63.88 FEET TO A POINT; THENCE WITH A BEARING OF S 61°05'13" W A DISTANCE OF 80.17 FEET TO A POINT; THENCE WITH A BEARING OF N 79°39'41" W A DISTANCE OF 111.01 FEET TO A POINT; THENCE WITH A BEARING OF N 82°36'53" W A DISTANCE OF 68.70 FEET TO A POINT; THENCE WITH A BEARING OF N 77°49'00" W A DISTANCE OF 98.56 FEET TO A POINT; THENCE WITH A BEARING OF S 82°48'44" W A DISTANCE OF 138.90 FEET TO A POINT; THENCE WITH A BEARING OF S 66°10'25" W A DISTANCE OF 202.18 FEET TO A POINT; THENCE WITH A BEARING OF S 46°02'53" W A DISTANCE OF 65.66 FEET TO A POINT; THENCE WITH A BEARING OF S 76°13'41" W A DISTANCE OF 32.87 FEET TO A POINT; THENCE WITH A BEARING OF N 66°22'14" W A DISTANCE OF 37.80 FEET TO A POINT; THENCE WITH A BEARING

OF S 66°59'04" W A DISTANCE OF 114.21 FEET TO A POINT; THENCE WITH A BEARING OF S 43°23'59" W A DISTANCE OF 120.58 FEET TO A POINT; THENCE WITH A BEARING OF S 19°43'30" W A DISTANCE OF 65.86 FEET TO A POINT; THENCE WITH A BEARING OF S 46°41'48" W A DISTANCE OF 143.18 FEET TO A POINT; THENCE WITH A BEARING OF S 88°05'35" W A DISTANCE OF 89.49 FEET TO A POINT; THENCE WITH A BEARING OF N 54°36'18" W A DISTANCE OF 87.62 FEET TO A POINT; THENCE WITH A BEARING OF N 51°33'56" W A DISTANCE OF 43.96 FEET TO A POINT; THENCE WITH A BEARING OF N 81°22'26" W A DISTANCE OF 36.14 FEET TO A POINT; THENCE WITH A BEARING OF N 00°27'43" W A DISTANCE OF 785.24 FEET TO A POINT; THENCE WITH A BEARING OF N 3032.44 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 56.17 ACRES AS SHOWN ON PLAT BY DUPLANTIS DESIGN GROUP, PC, PROJECT NO. 21-1038, DATED 7/11/2022, AND IS SUBJECT TO ANY SERVITUDES OR RESTRICTIONS THAT MAY BE OF RECORD.



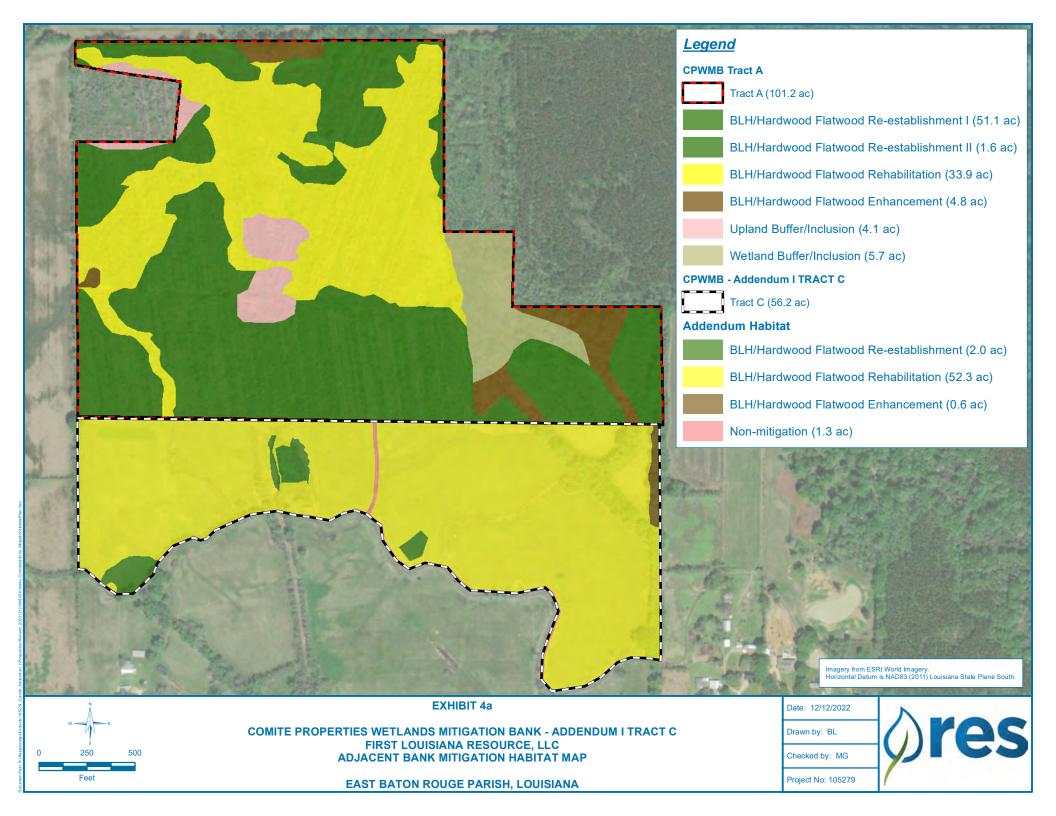
REVISION BY

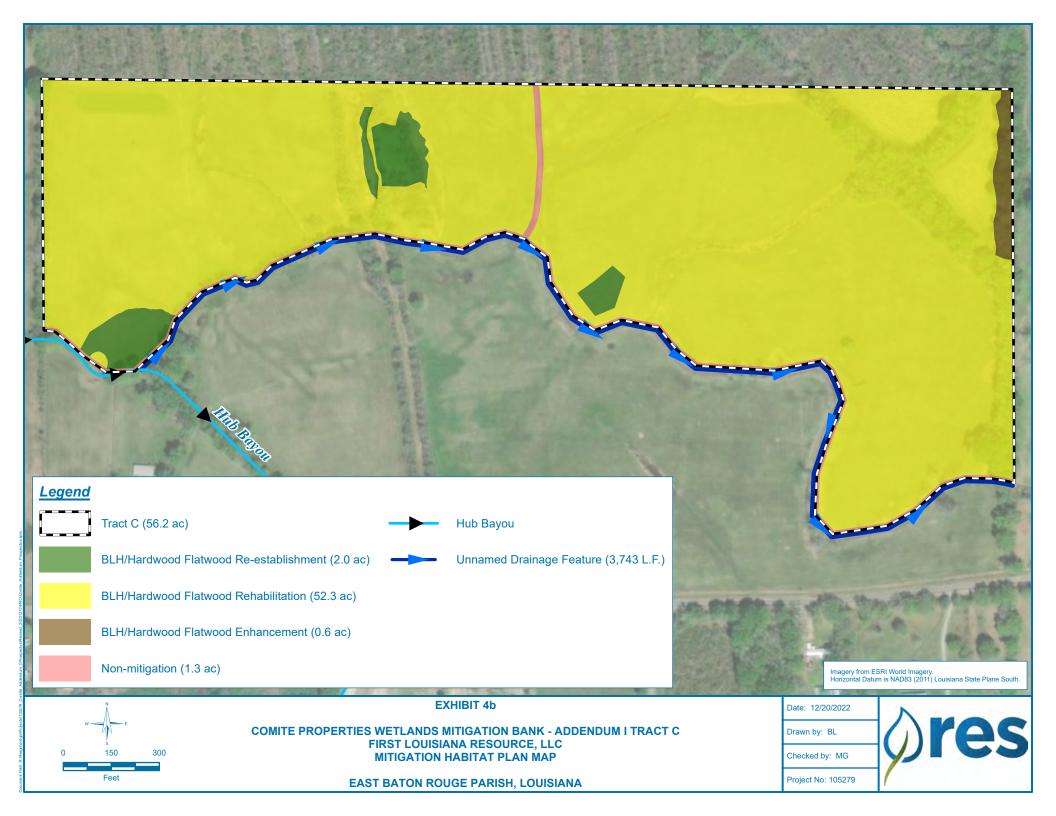
PROJECT NO. 21-1038

21-103B_B_D7132022

EXHIBITS 4a-4b

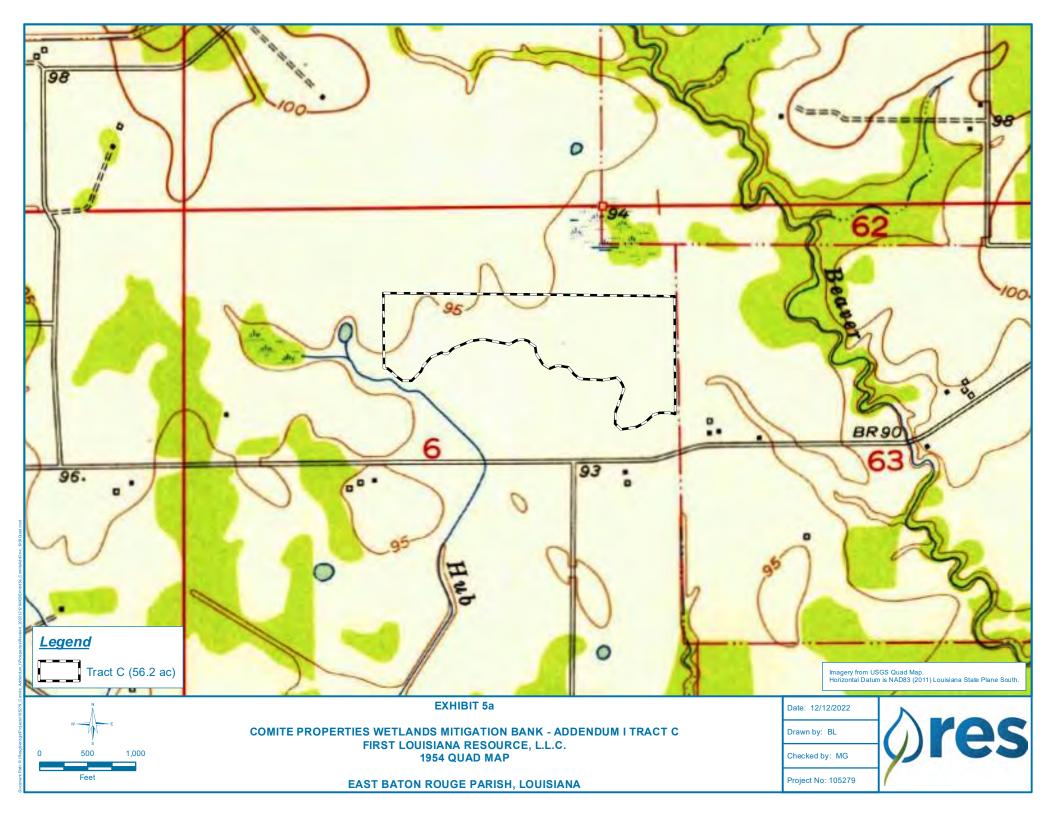
Mitigation Habitat Plans

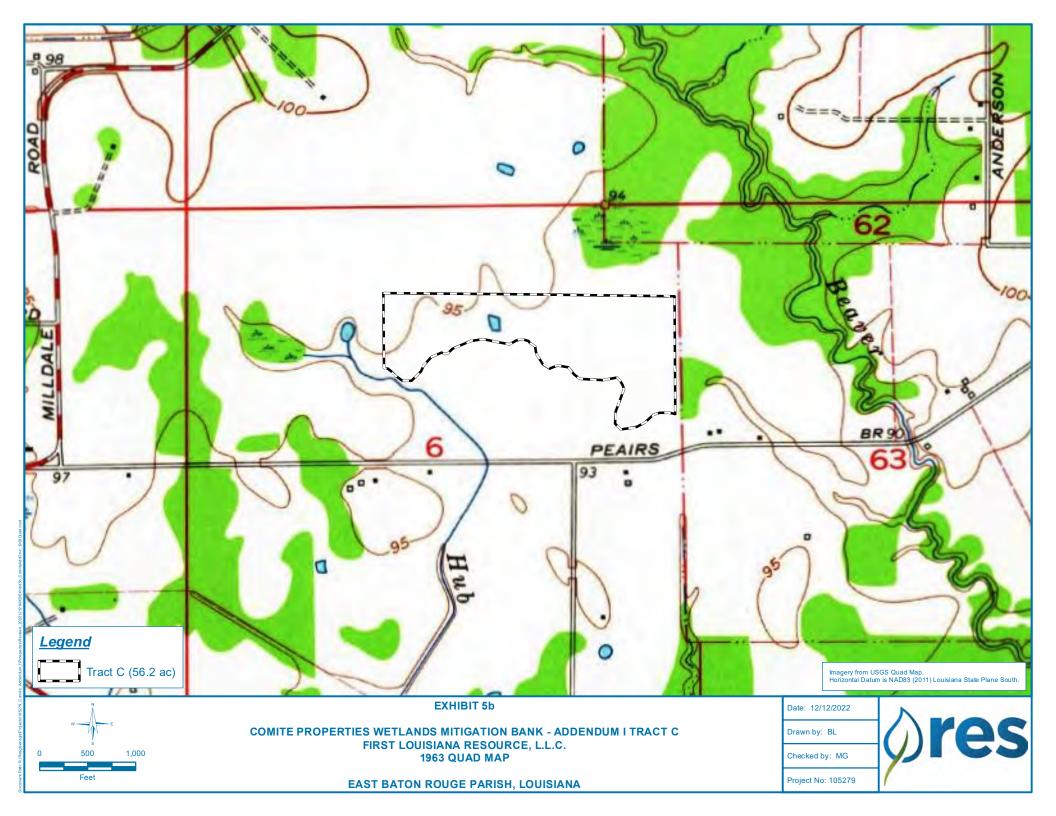


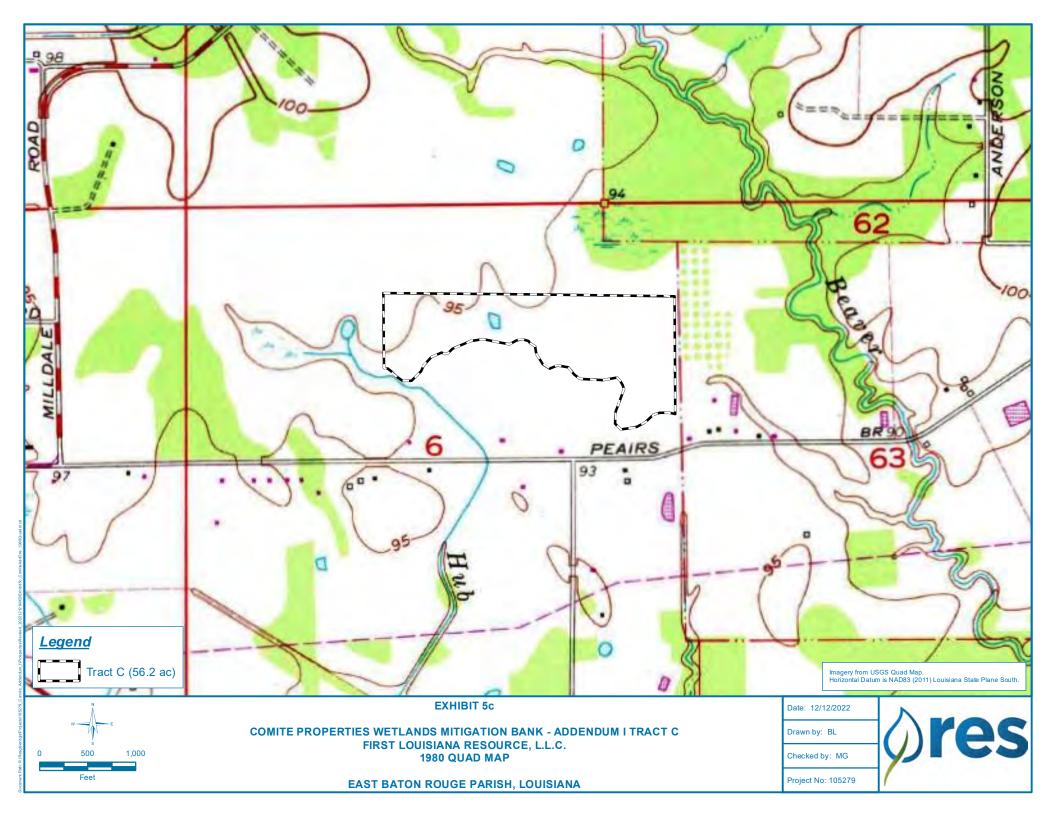


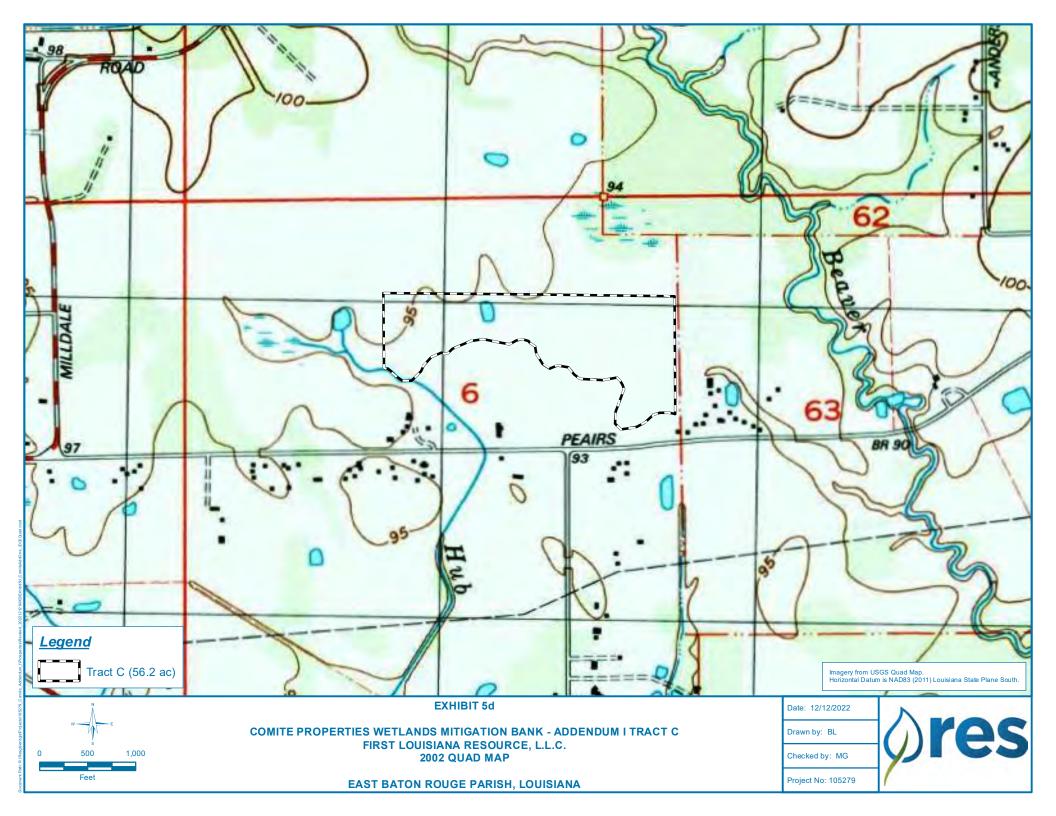
EXHIBITS 5a-5g

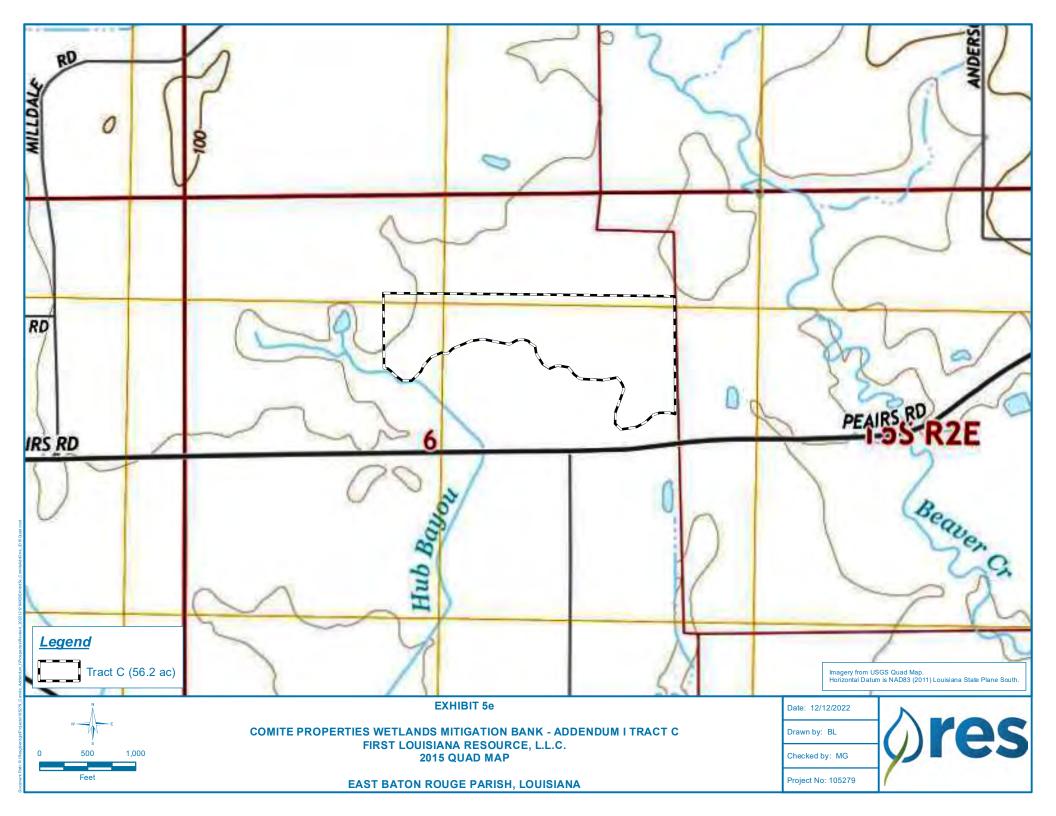
Historical USGS Topographical Quadrangle Maps Package

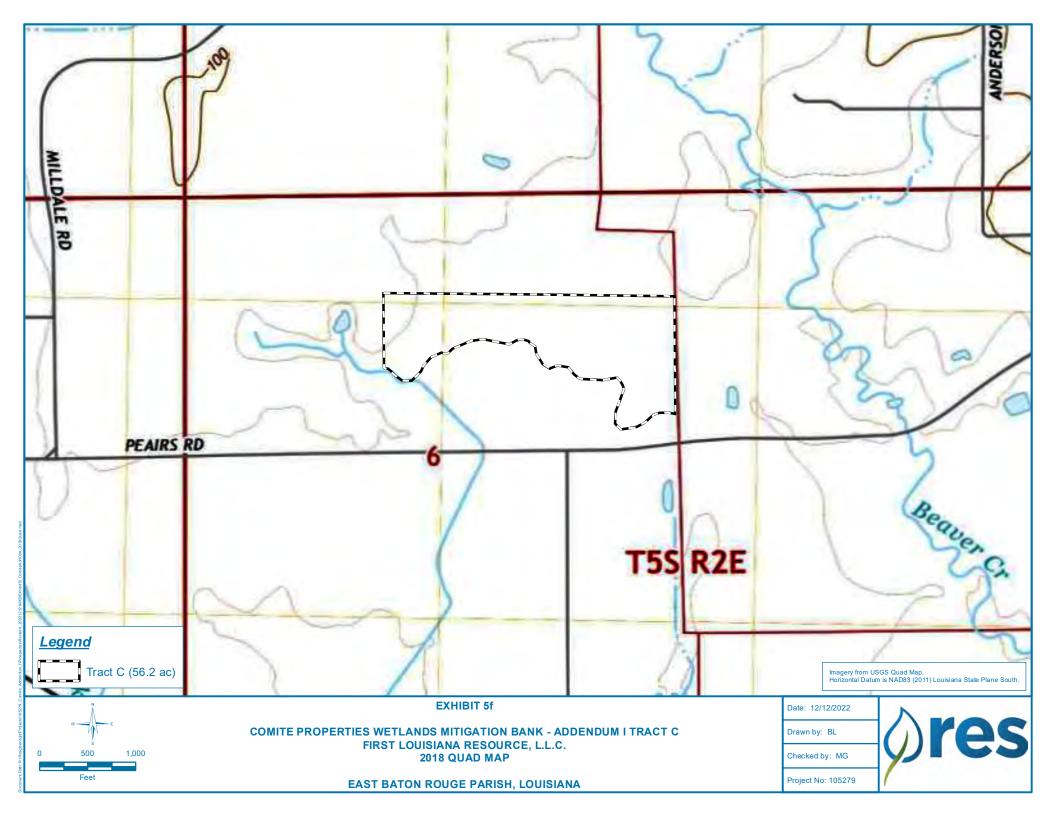


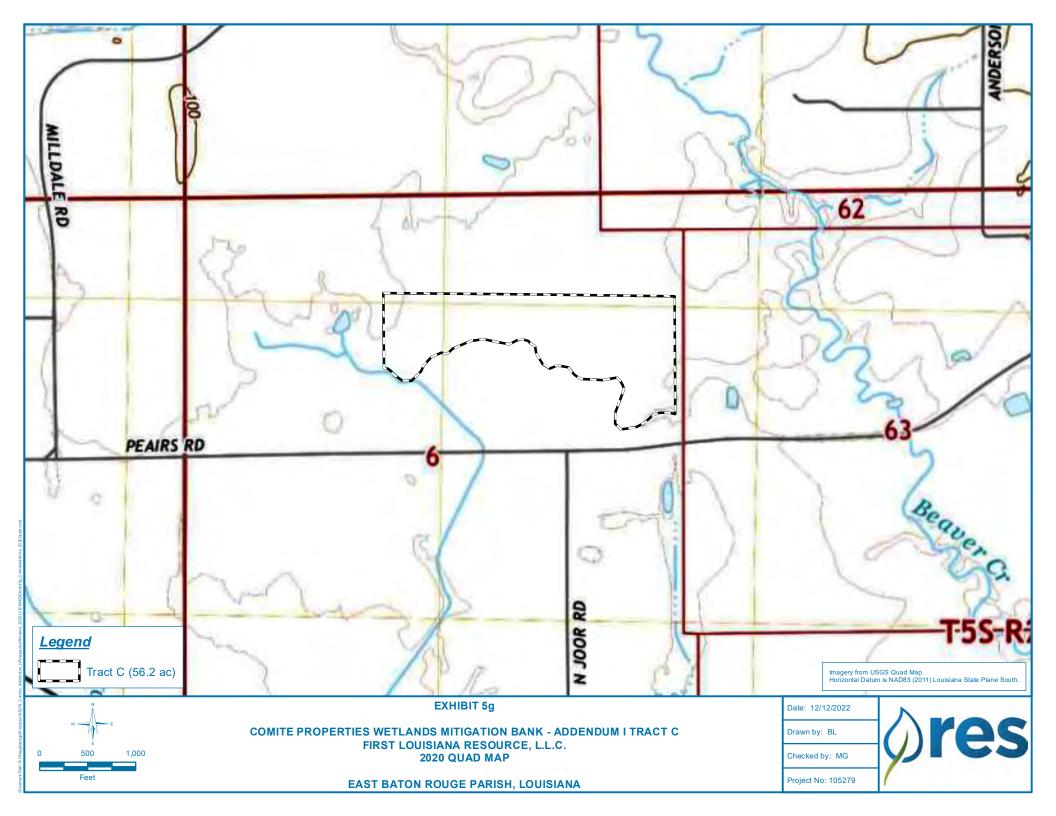






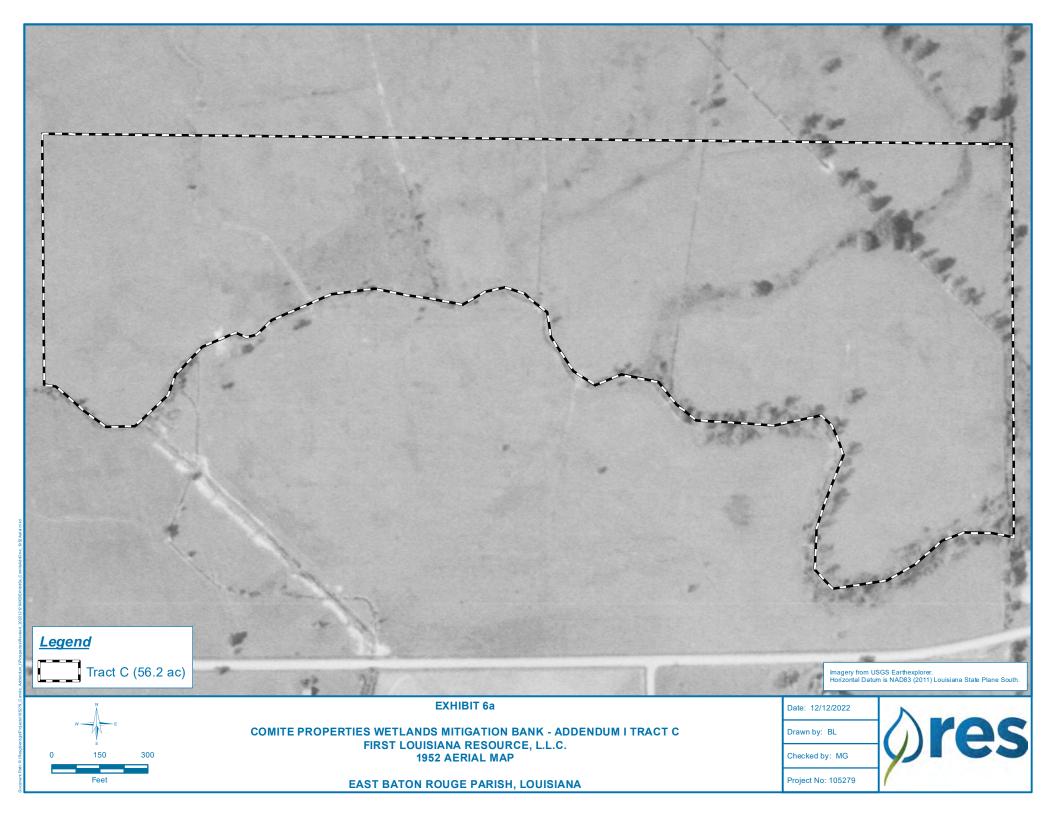


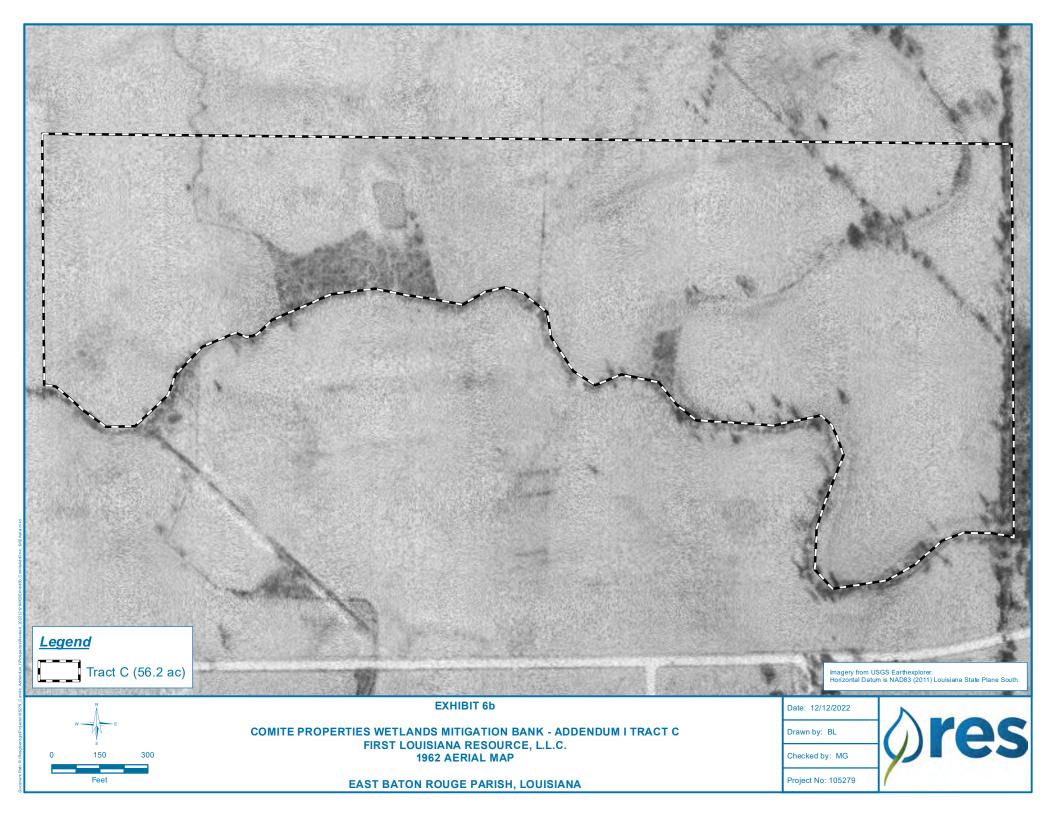


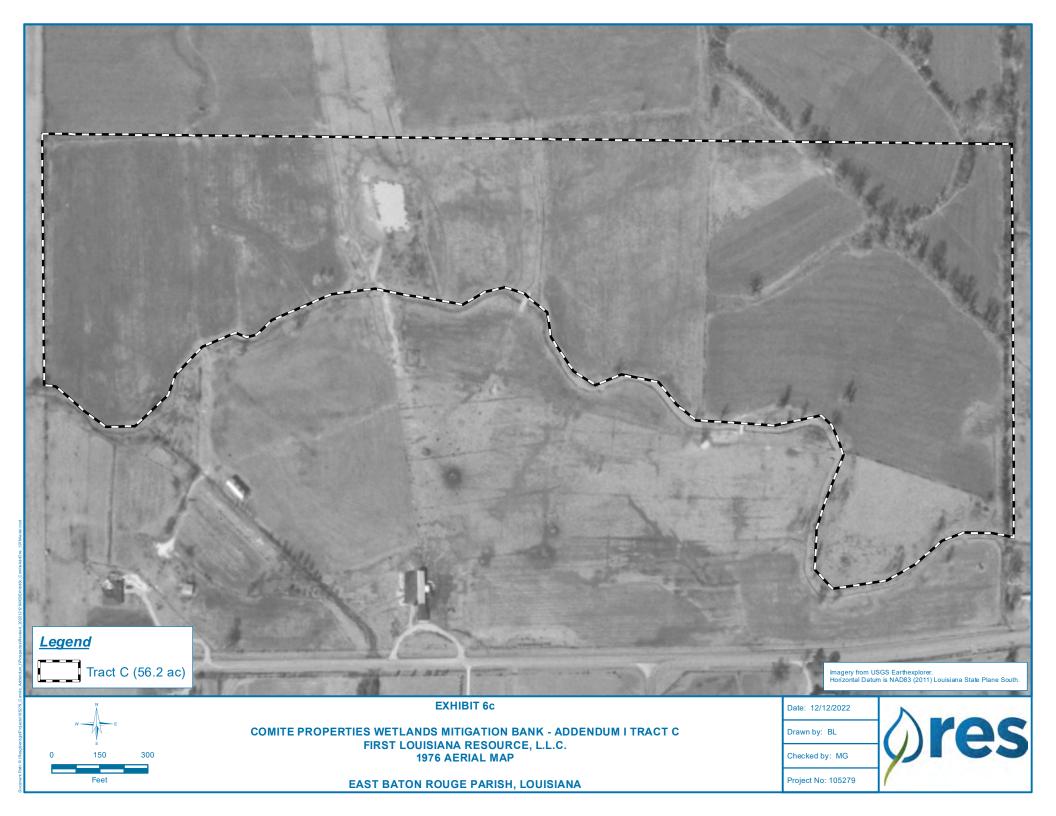


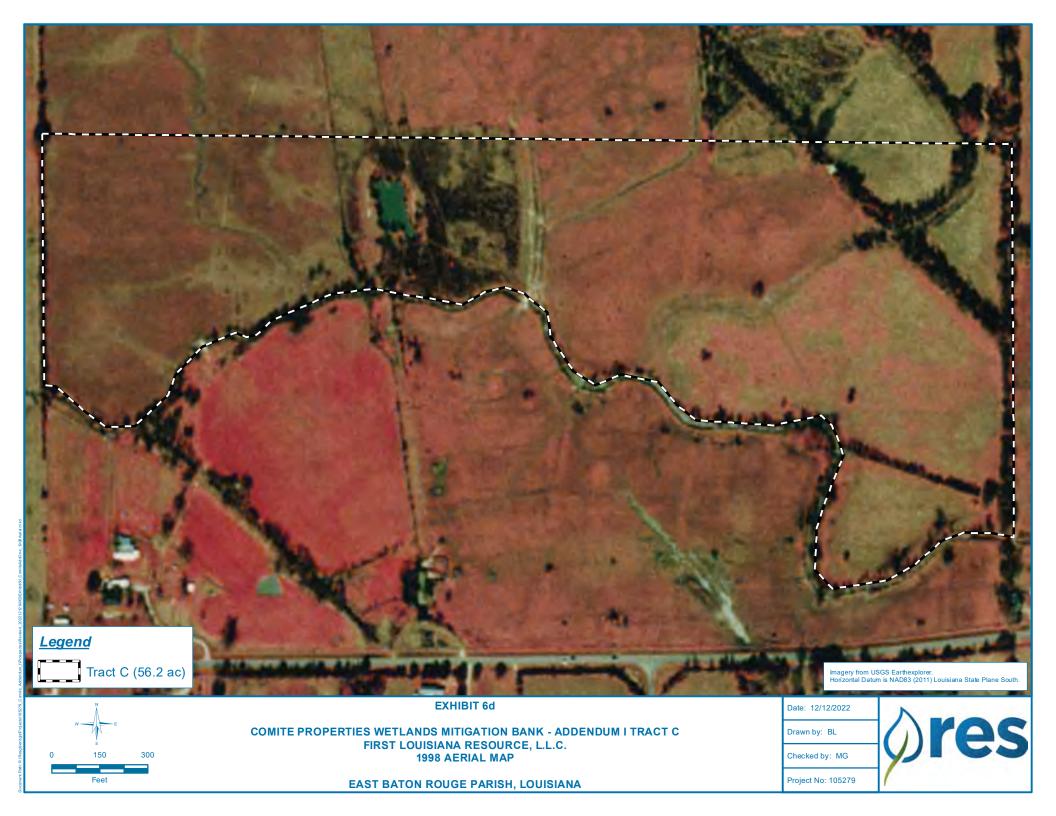
EXHIBITS 6a-6i

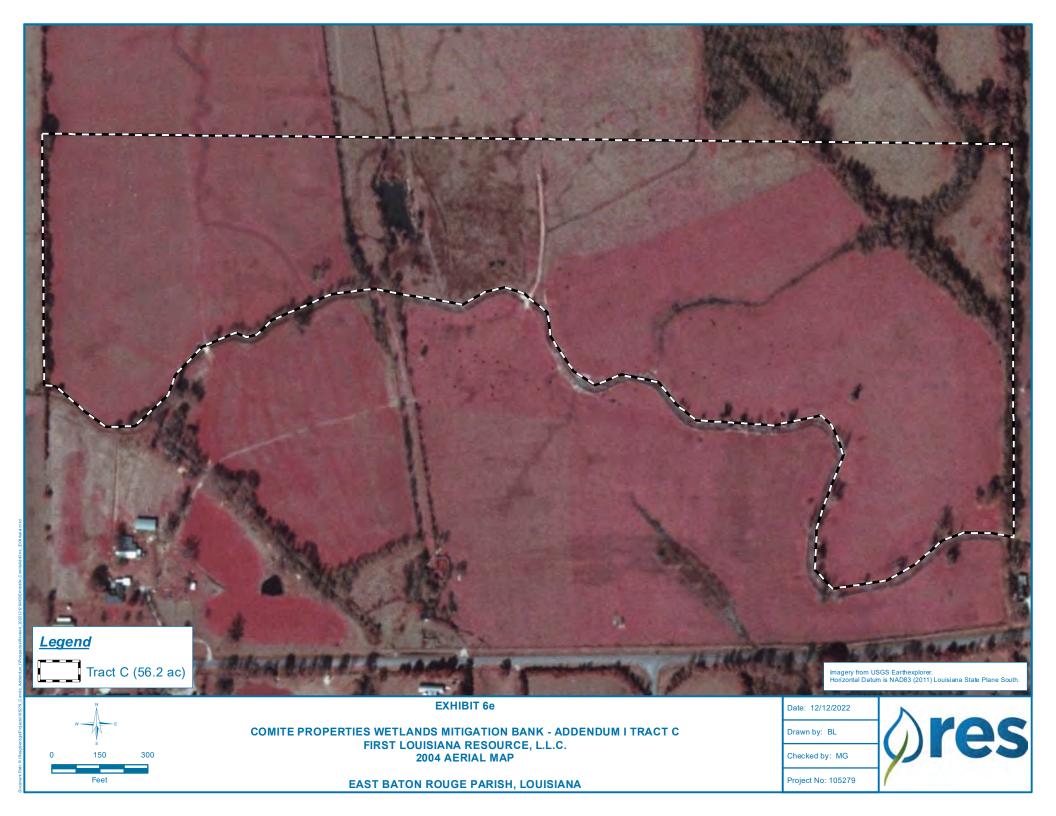
Historical Aerial Photographs Package

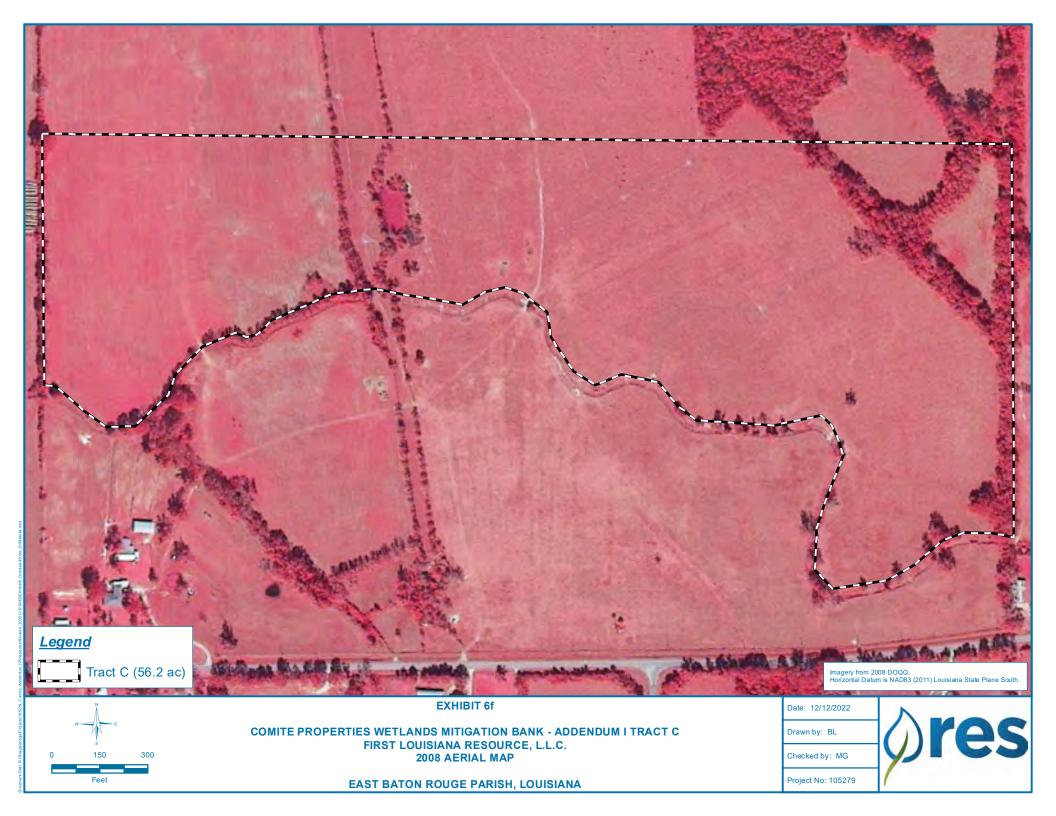












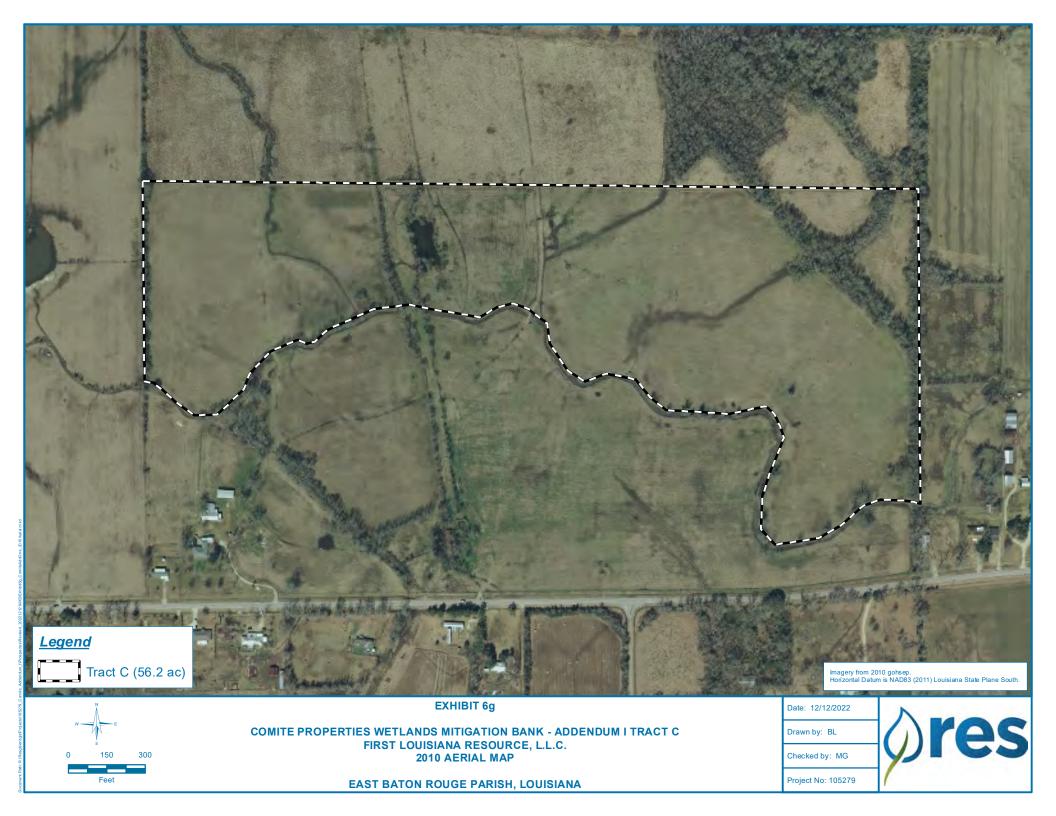






EXHIBIT 7

USDA Existing Land Use / Land Cover



EXHIBIT 8

USDA Existing Land Use / Land Cover Within One Mile

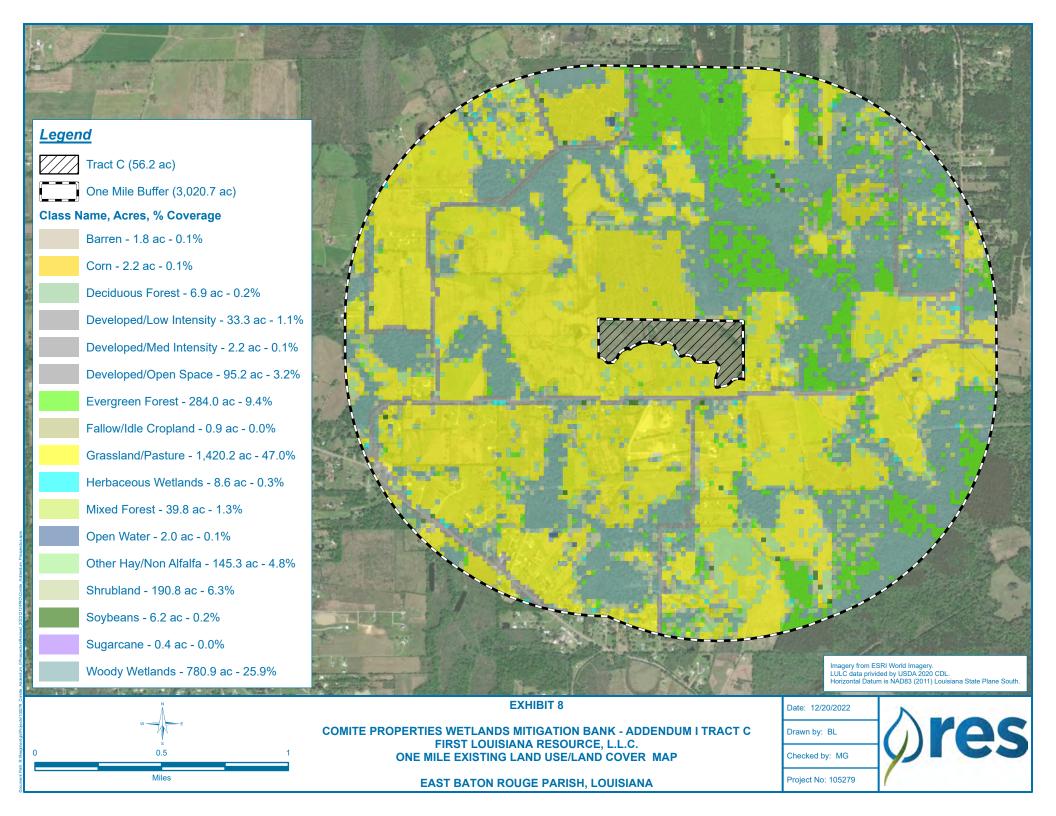


EXHIBIT 9

 $Tract\ A\ and\ Tract\ C-Soils\ Map$

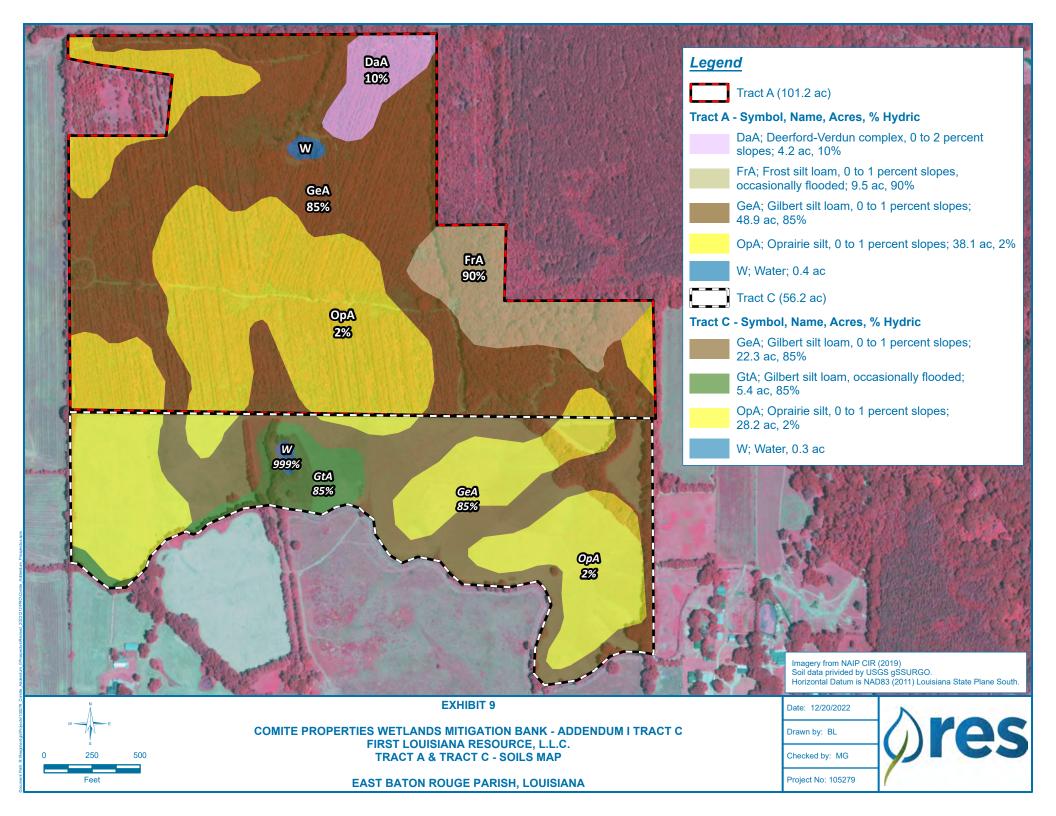
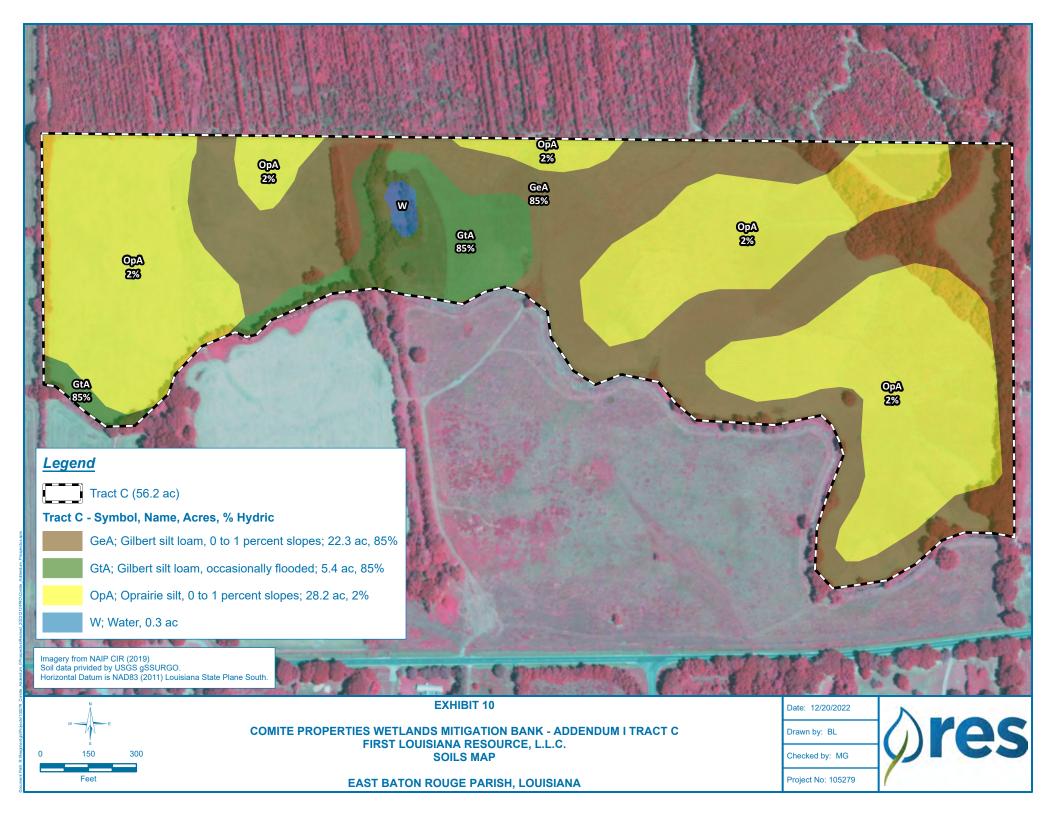


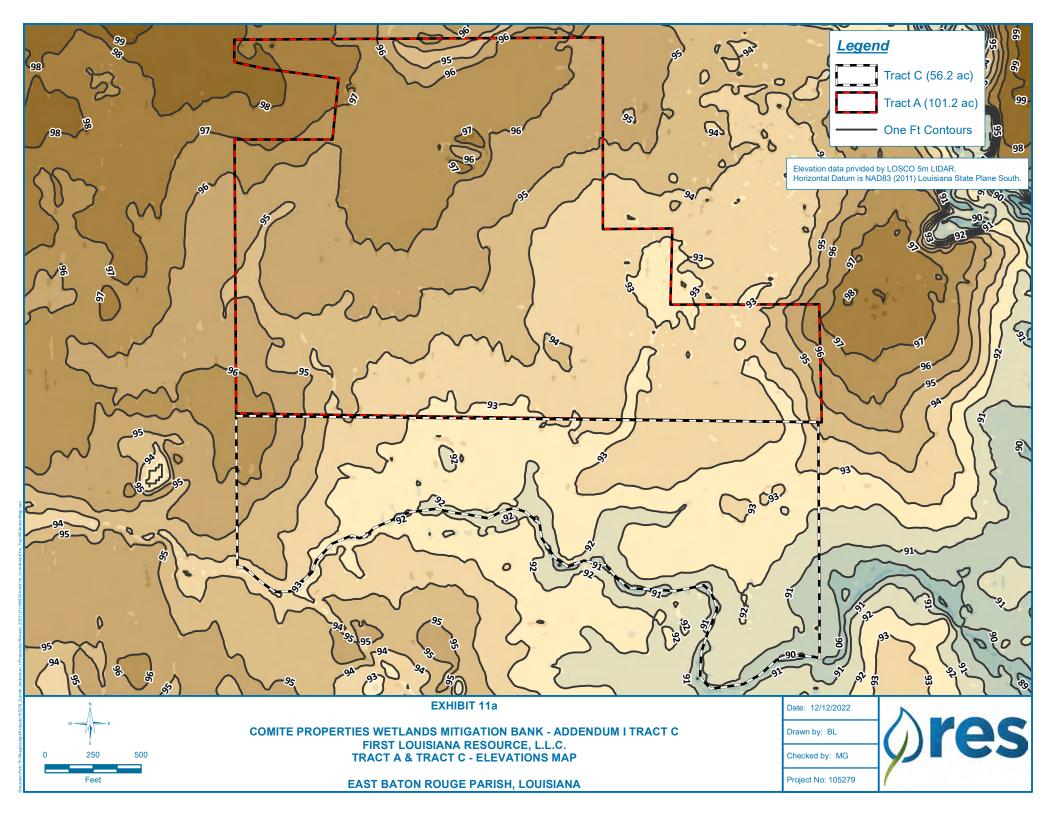
EXHIBIT 10

Soils Map



EXHIBITS 11a-11b

Elevations Map



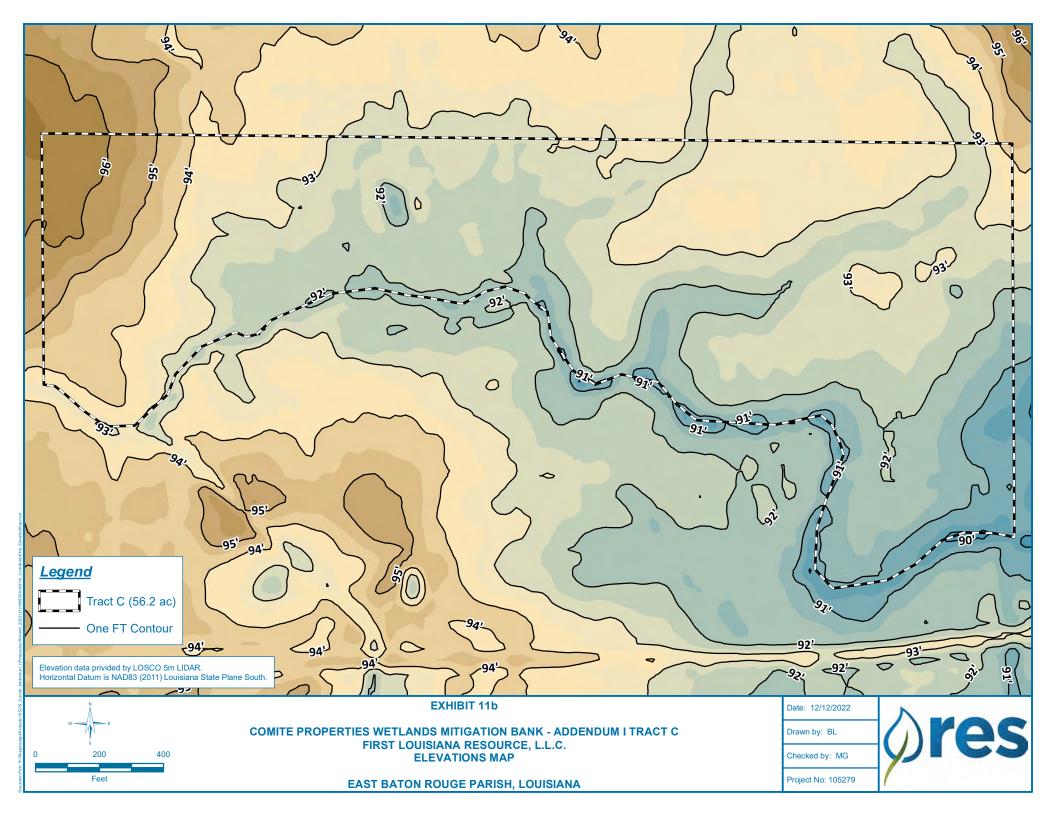


EXHIBIT 12

Contributing Watershed

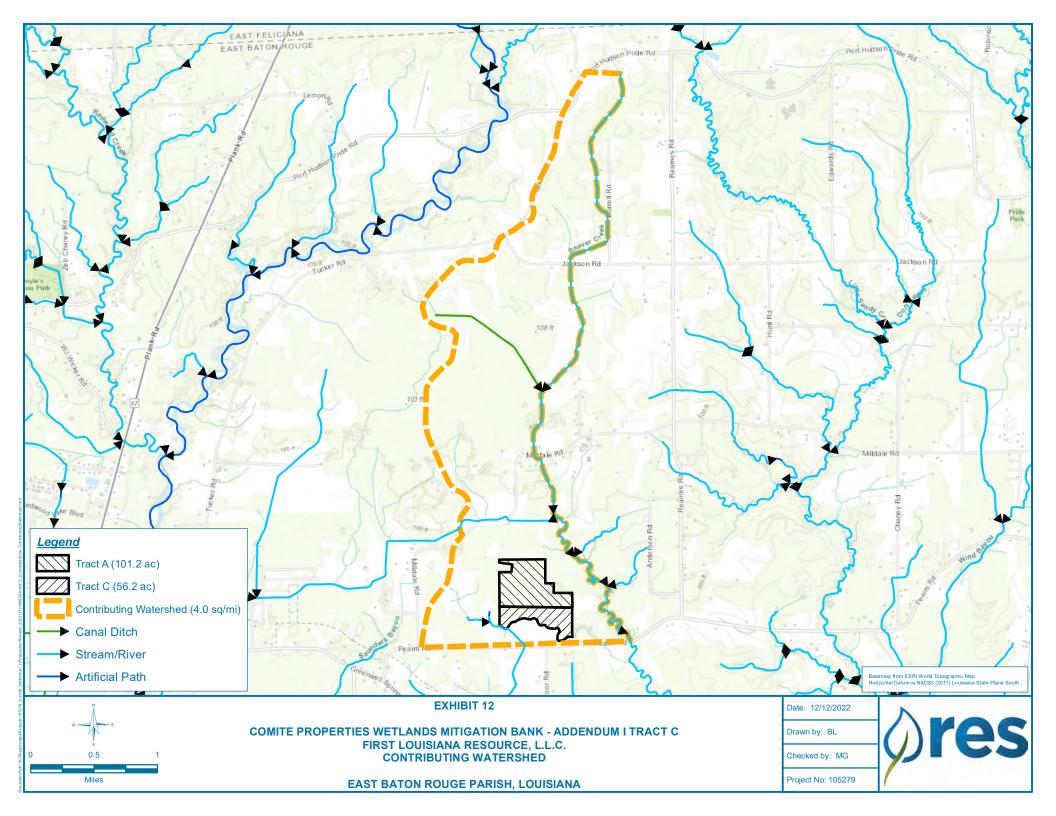


EXHIBIT 13

Existing Hydrologic Plan Map (Pre-Construction)

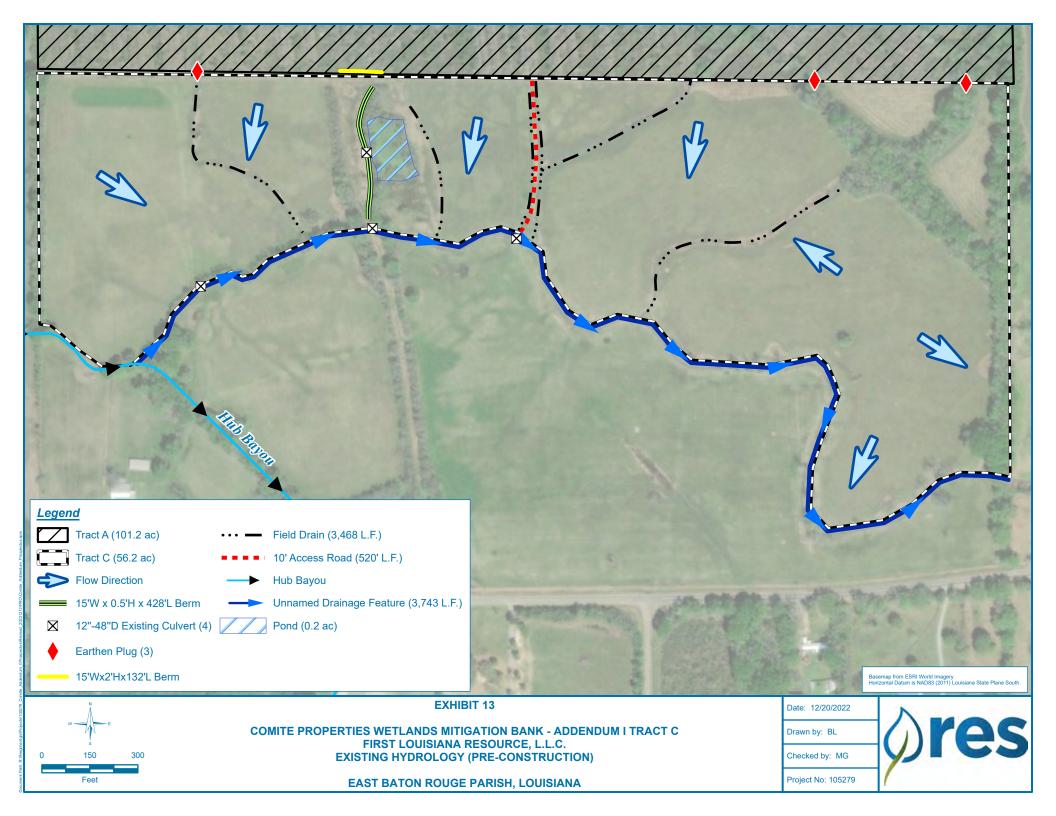


EXHIBIT 14

Post-Construction Hydrologic Plan Map

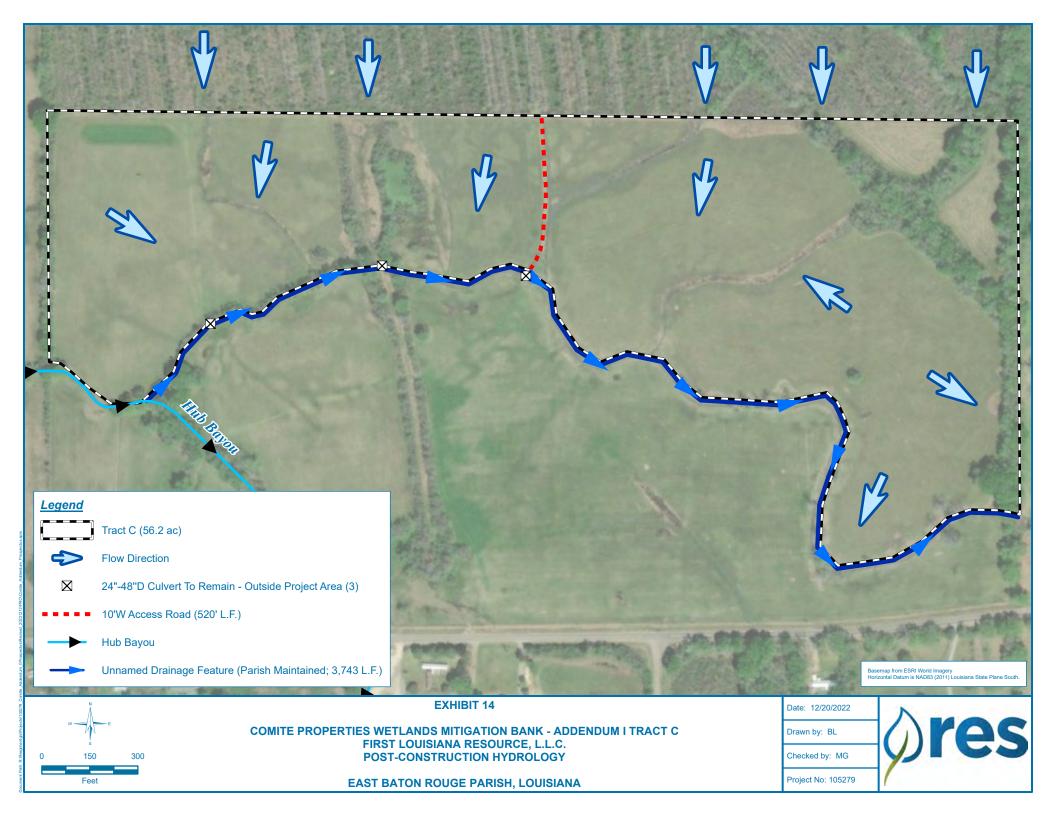


EXHIBIT 15

Construction Work Plan

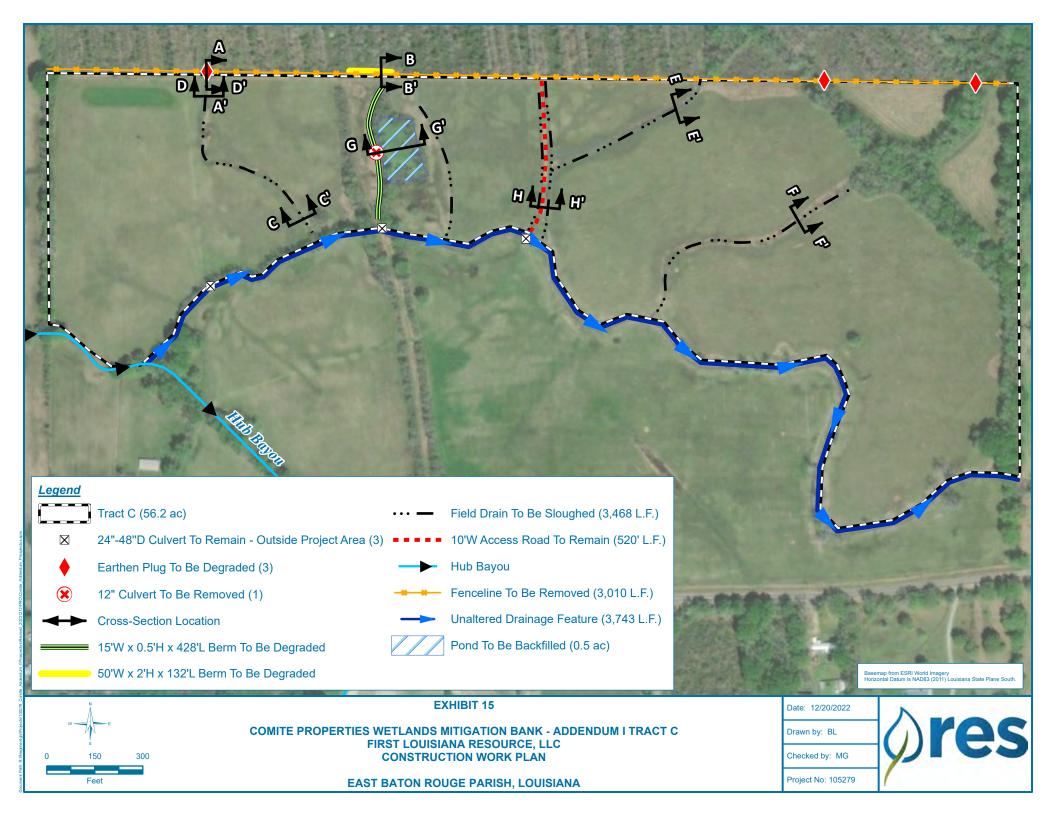
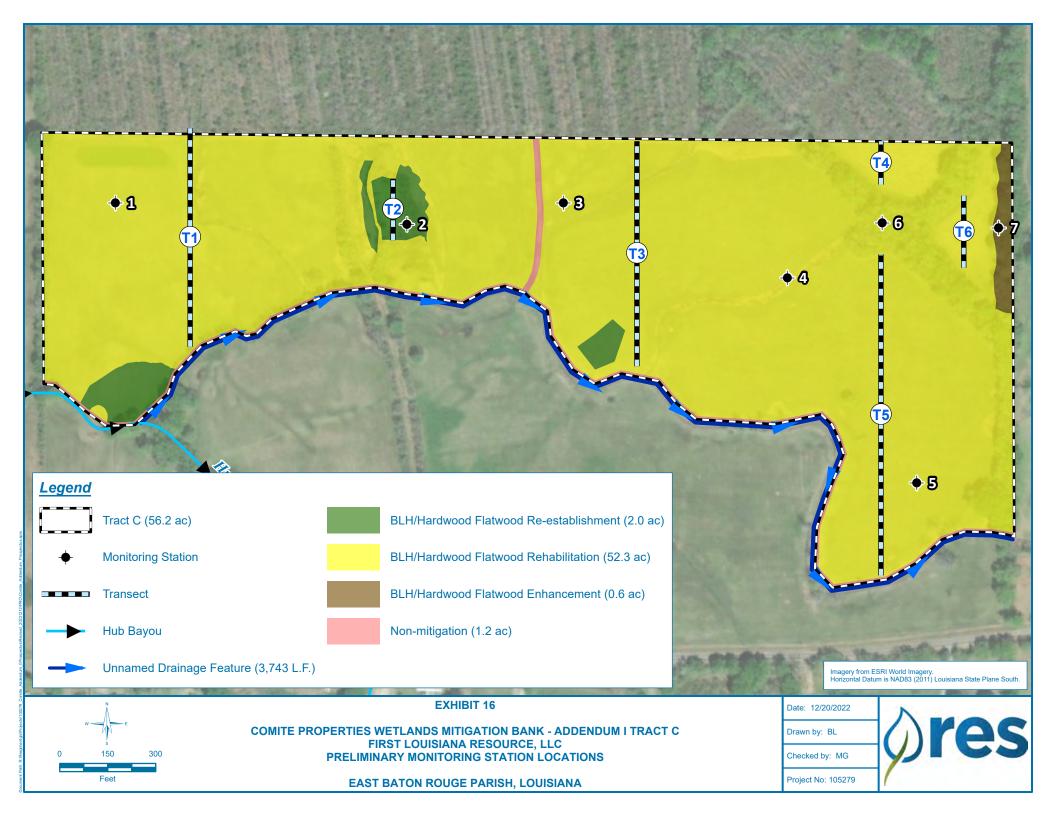


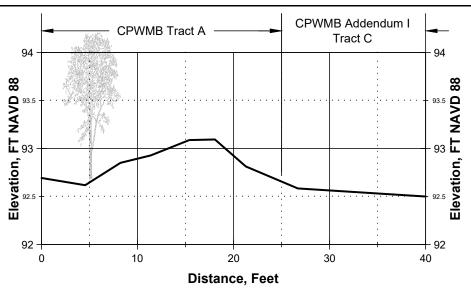
EXHIBIT 16

Preliminary Monitoring Station Locations

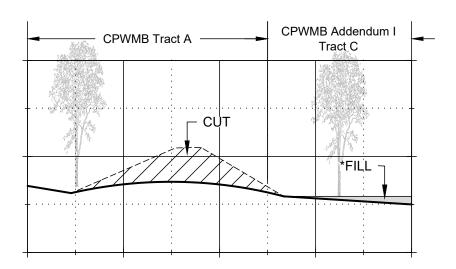


EXHIBITS 17a-17h

Construction Work Plan Cross-Sections



PRE-CONSTRUCTION EXISTING PLUG - CROSS SECTION A-A'



TYPICAL POST-CONSTRUCTION EXISTING PLUG DEGRADED - CROSS SECTION A-A'

*NOTE: SPOIL TO BE SPREAD EVENLY OR SOME SPOIL MAY BE USED TO FILL EXISTING POND.

EXHIBIT 17a

0 10'
HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - A-A'

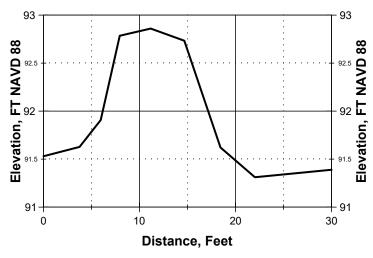
EAST BATON ROUGE PARISH, LOUISIANA

Date: 10/15/2021

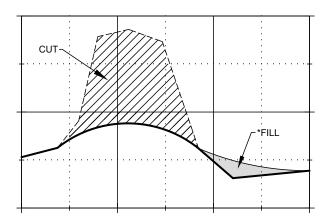
Drawn by: BL

Checked by: BM





PRE-CONSTRUCTION EXISTING BERM - CROSS SECTION B-B'



TYPICAL POST-CONSTRUCTION EXISTING BERM DEGRADED - CROSS SECTION B-B'

*NOTE: SPOIL TO BE SPREAD EVENLY OR SOME SPOIL MAY BE USED TO FILL EXISTING POND.

EXHIBIT 17b

HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

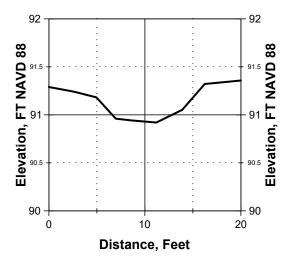
COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - B-B'

EAST BATON ROUGE PARISH, LOUISIANA

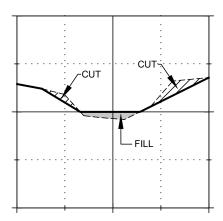
Date: 10/15/2021

Drawn by: BL





PRE-CONSTRUCTION EXISTING FIELD DRAIN - CROSS SECTION C-C'



TYPICAL POST-CONSTRUCTION EXISTING FIELD DRAIN - CROSS SECTION C-C'

EXHIBIT 17c

HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

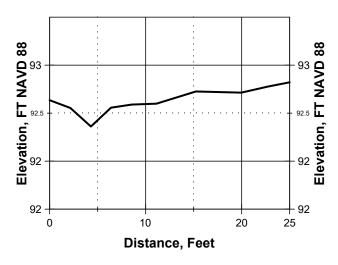
COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - C-C'

EAST BATON ROUGE PARISH, LOUISIANA

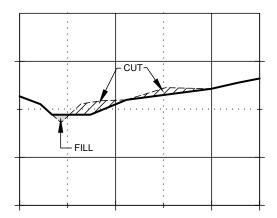
Date: 10/15/2021

Drawn by: BL





PRE-CONSTRUCTION EXISTING FIELD DRAIN - CROSS SECTION D-D'



TYPICAL POST-CONSTRUCTION EXISTING FIELD DRAIN - CROSS SECTION D-D'

EXHIBIT 17D

HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

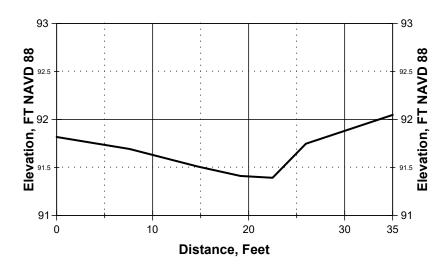
COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - D-D'

EAST BATON ROUGE PARISH, LOUISIANA

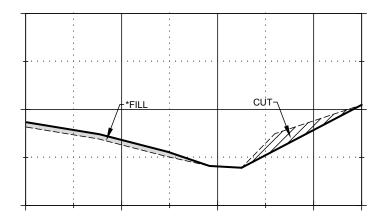
Date: 10/15/2021

Drawn by: BL





PRE-CONSTRUCTION FIELD DRAIN - CROSS SECTION E-E'



TYPICAL POST-CONSTRUCTION FIELD DRAIN - CROSS SECTION E-E'

*NOTE: SPOIL TO BE SPREAD EVENLY ON ADJACENT SURFACE.

EXHIBIT 17e



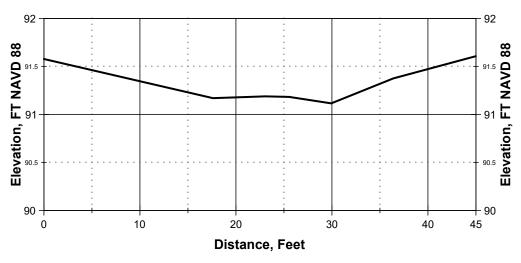
COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - E-E'

EAST BATON ROUGE PARISH, LOUISIANA

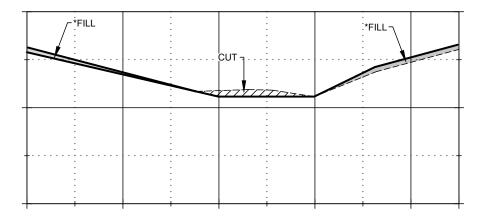
Date: 10/15/2021

Drawn by: BL





PRE-CONSTRUCTION FIELD DRAIN - CROSS SECTION F-F'



TYPICAL POST-CONSTRUCTION FIELD DRAIN - CROSS SECTION F-F'

*NOTE: SPOIL TO BE SPREAD EVENLY ON ADJACENT SURFACE.

EXHIBIT 17f

0 10'
HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

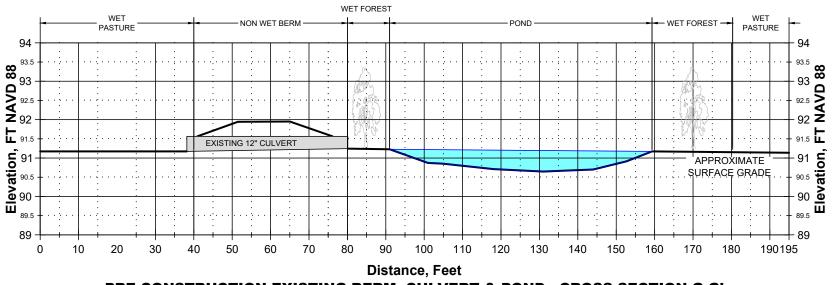
COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - F-F'

EAST BATON ROUGE PARISH, LOUISIANA

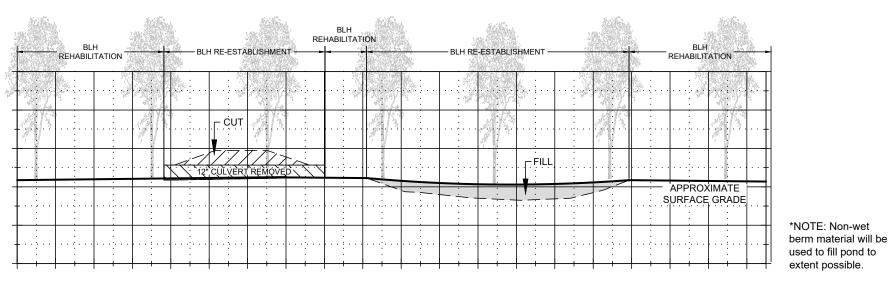
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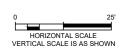




PRE-CONSTRUCTION EXISTING BERM, CULVERT & POND - CROSS-SECTION G-G'



TYPICAL POST-CONSTRUCTION BERM DEGRADED, CULVERT REMOVED & POND BACKFILLED - CROSS-SECTION G-G'



COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - G-G'

EXHIBIT 17g

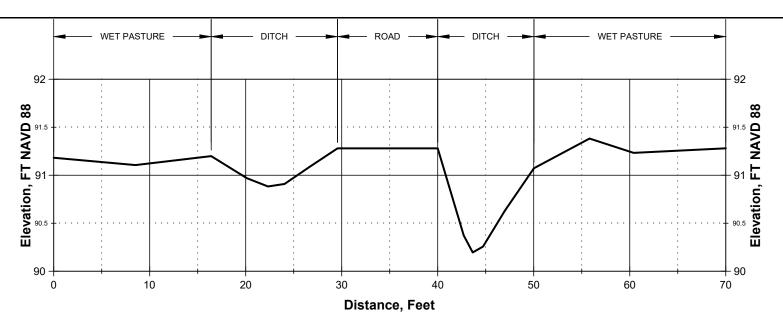
EAST BATON ROUGE PARISH, LOUISIANA

Date: 10/15/2021

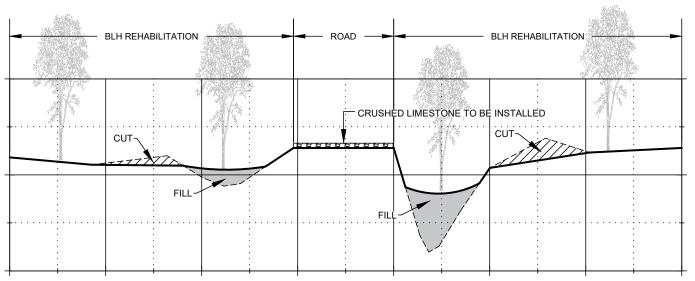
Drawn by: BL

Checked by: BM





PRE-CONSTRUCTION ACCESS ROAD TO REMAIN - CROSS SECTION H-H'



*NOTE: SPOIL TO BE USED TO FILL DITCHES TO EXTENT POSSIBLE.

TYPICAL POST-CONSTRUCTION ACCESS ROAD TO REMAIN - CROSS SECTION H-H'

EXHIBIT 17h

0 10'
HORIZONTAL SCALE
VERTICAL SCALE IS AS SHOWN

COMITE PROPERTIES WETLANDS MITIGATION BANK - ADDENDUM I TRACT C FIRST LOUISIANA RESOURCE, LLC CROSS-SECTION - H-H'

EAST BATON ROUGE PARISH, LOUISIANA

Date: 10/15/2021

Drawn by: BL



ATTACHMENT MWP-C

Assessment Method(s)

LOUISIANA WETLAND RAPID ASSESSMENT METHOD (LRAM) 2.0

CEMVN Acct #		Bank Name
Acres Mitigation	54.9	CPWMB-Addendum I Tract C
Watershed Basin	LakePont	

		Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8
	Mitigation Type	Enhanc	Rehab	Re-Est	Pick Here				
		3.0	5.0	6.0	0.0	0.0	0.0	0.0	0.0
	Management	None	None	None	Pick Here				
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Negative Influences	None	None	None	Pick Here				
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Size	500 : 100	500 : 100	500 : 100	Pick Here				
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Buffer / Upland	Pick Here							
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Sum:	3.0	5.0	6.0	0.0	0.0	0.0	0.0	0.0
	Area:	0.6	52.3	2.0					
	Sum x Area Affected:	1.8	261.5	12.0	0.0	0.0	0.0	0.0	0.0

∑ Mitigation: 275.3

Mitigation Potential: 5.0

COMMENTS

Mitigation Type	Re-estab in existing pond as this will be open water conversion to BLH; Rehab in wet pastures that have been out of agricultural use (cattle grazing) for 5+ years & existing BLH forested areas where tallow percent cover is >50%; Enhance in areas of existing BLH forested areas where tallow is <50%
Management	None; Hydrologic modifications are to aid in ease of access (LWCs) for future maintenance and monitoring events. Other Hydrologic modifications will restore the hydrologic connectivity to a natural, self sustaining system.
Negative Influences	None; the site is boardered on all sides by undeveloped land and an existing mitigation bank. There are no negative effects to the Site created by structural or hydrologic alterations due to anthropogenic influences.
Size	500:100; When combined with the exsiting Comite Mitigation Bank, the total Site acreage is approximately 240 acres.
Buffer/Upland	No upland buffer will be included in the boundary of the Bank

ATTACHMENT MWP-D

Species List for Bottomland Hardwood Forest Habitat per the LRAM Guidebook

BLH Tree Stratum Species:

Quercus lyrata (overcup oak)

- Q. texana (nuttall oak)
- Q. phellos (willow oak)
- Q. nigra (water oak)
- Q. pagoda (cherrybark oak)
- Q. laurifolia (laurel oak)
- Q. michauxii (swamp chestnut oak)
- Q. virginiana (live oak)

Liquidambar styraciflua (sweetgum)

Gleditsia aquatica (water locust)

Ulmus americana (American elm)

Fraxinus pennsylvanica (green ash)

Acer rubrum (red maple)

A. negundo (box elder)

Cornus foemina (swamp dogwood)

C. drummondii (roughleaf dogwood)

Celtis laevigata (hackberry)

Planera aquatica (planertree)

Plantanus occidentalis (American sycamore)

Carya aquatica (water hickory)

C. illinoinensis (sweet pecan)

Diospyros virginiana (persimmon)

Populus deltoides (cottonwood)

BLH Shrub Stratum Species:

Ilex decidua (deciduous holly)

Crataegus sp. (hawthorn)

Arundinaria gigantea (switchcane)

Cephalanthus occidentalis (buttonbush)

Forestiera acuminata (swamp privet)

Morus rubra (red mulberry)

ATTACHMENT MWP-E 2022 Preliminary Jurisdictional Determination



U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT 7400 LEAKE AVE NEW ORLEANS. LA 70118-3651

August 1, 2022

Regulatory Division

Jurisdiction and Enforcement Branch

Ms. Blain McNabb RES 412 North 4th Street, Suite 300 Baton Rouge, Louisiana 70802

Dear Ms. McNabb:

Reference is made to your request for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Section 6, Township 5 South, Range 2 East, East Baton Rouge Parish, Louisiana (enclosed map). Specifically, this property is identified as a 54.3-acre site north of Peairs Road located east of Zachary (30.645076, -91.045145).

Based on review of recent maps, aerial photography, soils data, the delineation report provided with your request, and a site inspection conducted on May 9, 2022, we have determined that part of the property contains wetlands and non-wetland waters that may be subject to Corps' jurisdiction. The approximate limits of the wetlands and non-wetland waters are designated in red and blue, respectively, on the map. A Department of the Army (DA) permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into waters of the U.S.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

You and your client are advised that this preliminary jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date. Additionally, this determination is only valid for the identified project or individual(s) only and is not to be used for decision-making by any other individual or entity.

