

# JOINT PUBLIC NOTICE

July 17, 2017

United States Army  
Corps of Engineers  
New Orleans District  
Regulatory Branch  
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New Orleans, LA. 70118

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Permit Application Number  
MVN-2015-02527-MB

State of Louisiana  
Department of Environmental Quality  
Post Office Box 4313  
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Attn: Water Quality Certifications

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Project Manager  
Elizabeth Hill  
WQC Application Number  
WQC # 170717-02

Interested parties are hereby notified that a prospectus and 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).

Application has also been made to the Louisiana Department of Environmental Quality, for a Water Quality Certification (WQC) in accordance with statutory authority contained in Louisiana Revised Statutes of 1950, Title 30, Chapter 11, Part IV, Section 2074 A(3) and provisions of Section 401 of the Clean Water Act (P.L.95-17).

## **INGLESIDE PLANTATION, L.L.C. MITIGATION BANK – LIVE OAK PLANTATION TRACT IN ASSUMPTION PARISH**

**NAME OF APPLICANT:** Ingleside Plantation, L.L.C., c/o AUX, LLC, Attn: Horace Thibodaux, 214 Pamela Place, Thibodaux, Louisiana, 70301.

**LOCATION OF WORK:** The site is located in Sections 32, 33, 34, 48, 49 and 50, T13S, R15E and Sections 42, 43 and 91, T14S, R15E, approximately 4.75 miles southeast of Napoleonville, Louisiana in Assumption Parish, as shown on enclosed drawings (Latitude: 29.89246 N, Longitude: -90.97881 W). The Project is located in U.S.G.S. HUC 08090301 in the Barataria Basin.

**CHARACTER OF WORK:** The proposed bank property totals approximately 462.6 acres of existing agricultural fields, associated infrastructure, and existing forest. The applicant/sponsor proposes the re-establishment of 200.8 acres of bottomland hardwood wetlands and preservation of 261.8 acres of existing bottomland hardwood forest wetlands. Aspects of the proposed restoration plan include backfilling field ditches to restore surface hydrology and planting appropriate vegetation. Specific details of the proposed restoration plan can be found in the attached prospectus.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **30 days** from the date of this joint 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 and/or this WQC request and must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. **Similar letters concerning the**

**Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above.**

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

### **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 New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Issuance of this public notice solicits input from the State Archeologist and State Historic Preservation Officer 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.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of N/A acre(s) 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 Department of Environmental Quality, before a permit is issued.

Any person may request, in writing, 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.

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

The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

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

Martin S. Mayer  
Chief, Regulatory Branch

Enclosure

**Prospectus for the**  
**Ingleside Plantation, L.L.C. Mitigation Bank**  
**Live Oak Plantation Tract**  
**Assumption Parish, Louisiana**

November 4, 2016  
Revised April 14, 2017  
Revised May 16, 2017

**SPONSOR**

Ingleside Plantation, L.L.C.  
P.O. Box 250  
Napoleonville, Louisiana 70390

**AGENT**

Horace Thibodaux  
AUX, LLC  
214 Pamela Place  
Thibodaux, LA 70301  
Phone: 985-387-0161

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**Table 1** Canopy and Understory Species Selected for Reforestation of the Mitigation Bank

**Table 2** Selected Species by Planting Zone for the Mitigation Bank.

## I. .RESTORATION SITE OBJECTIVES

**Ingleside Plantation, L.L.C.** is pleased to present the following prospectus and site restoration plan for the **Ingleside Plantation, L.L.C. Mitigation Bank Live Oak Plantation Tract** (Bank) to the IRT and USACE New Orleans District. We are requesting that this Bank be evaluated and approved as. The purpose of site restoration activities will be the re-establishment of bottomland hardwood wetland communities to provide compensation for unavoidable wetland impacts authorized by the issuance of the Department of the Army (DA) permits under Section 404 of the Clean Water Act and Sections 9 and 10 of the Rivers and Harbors Act of 1899. The specific objectives of the bank are the following:

- Restoration of self-sustaining, bottomland hardwood, floodplain and wetland hydrology to the **Bank**
- Re-establishment of self-sustaining, bottomland hardwood and wet hardwood communities appropriate to the area and to the hydrologic regimes located on-site
- Improved fish and wildlife habitat functions and values to adjacent, forested private lands and to the greater Barataria watershed through the re-establishment and rehabilitation of the bottomland hardwood ecological system on-site.
- Improvement in local water quality discharges from the **Bank** into local waterways and into the **Baker Canal** which drains into tributaries of the Barataria Basin.
- Increased flood water storage

## II. SITE LOCATION AND REGIONAL SIGNIFICANCE

The proposed **Mitigation Bank** is in Assumption Parish, Louisiana in Sections 32,33,34,48,49, and 50 T13S-R15E and Sections 42,43,91, and 92 T14S R15 E (**Figure 1**). The Bank totals approximately **463 ± acres (Re-establishment 201 acres of bottomland hardwoods and 262 acres of existing bottomland hardwood forest)**. The **Bank** is located approximately 4.75 miles southeast of Napoleonville, Louisiana on the left descending bank of Bayou Lafourche as depicted in **Figure 1**. **Figure 2** depicts the location of the proposed bank in Assumption Parish.

The contributing drainage area of the **Bank** includes The **Barataria basin Cataloging Unit 08090301 (Figure 4)**. The HUC area is from Donaldsonville in the north, west of the Mississippi River, east of Bayou Lafourche and south to the Gulf of Mexico.

The (existing) **Bank**, (**Figure 3** presently), contains a total of **201± acres** of proposed bottomland hardwood forest. **Figure 3** depicts the outline of the proposed bank on an aerial photograph. The proposed **Bank** will have a total of **463 ± acres** of bottom land hardwood forest.

Based on the historical aerial photography research and surrounding forested habitat, the **Bank**

most likely supported wet bottomland hardwood community types, as defined in the *Natural Communities of Louisiana* and electronically published by the LDWF and Louisiana Natural Heritage Program (LNHP). These imperiled bottomland hardwood community types are associations that occur within bottomland hardwood ecosystems on hydric soils, on poorly drained areas, depressions and small drainages and are generally not affected by overbank flooding. Wet hardwood are typically found on clays and silt loam soil series, which are soil characteristics similar to that of the soils found on the proposed **Bank** area.

The increased activity for development in the **Barataria watershed (HUC 08090301)** is resulting in the need for high quality mitigation within the watershed to offset unavoidable impacts to several bottomland hardwood wetland community types. This Site will be submitted under a mitigation bank agreement and, will provide for the restoration and enhancement of bottomland hardwood species being replanted within the proposed bank area.

Restoration of this site specifically will provide for 1) the restoration of impacted habitat types within the **HUC 08090301 Barataria watershed**, 2) high-quality habitat for wetland dependent wildlife and wildlife requiring mature forested ecosystems, 3) improved water quality through closure and backfilling of existing agricultural ditches, 4) increased flood storage and treatment via overland flow of non-point source runoff through the bank area, and finally, 5) improved wildlife dispersion and genetic diversity through a corridor and connectivity functions resulting from the interconnection of an existing large (**262±acres**) bottomland forested wetland habitat owned by the sponsor located east and adjacent to the proposed bank and within the **HUC 08090381 Barataria watershed area**.

**Ingleside Plantation, L.L.C.** does not own the mineral rights of the herein described property that consist of the **Live Oak Plantation Tract**.

### **III. PROPOSED SERVICE AREA**

The proposed service area will cover all areas located within **The Barataria Watershed Unit HUC 08090301** as depicted in **Figure 4**.

Beyond the area as herein described the purchase of mitigation from the proposed **Bank** will be determined by the **CEMVN** on a case by case basis.

### **IV. BACKGROUND AND CURRENT SITE CONDITIONS**

#### **A. Baseline Ecological Condition**

The area was cleared of forested wetlands and developed with drainage ditches to facilitate the growth of sugar cane and soybeans in the area. Small lateral ditch exists and drain to larger ditches located to the west, east, north and south on the site.



## B. Soils

The soils located within the proposed site are Thibaut Clay (TbA), Schriever Clay (SM), Schriever Clay (SkA), Gramercy Silty Clay (GrA) and Fausse Association(FA). **Figure 5** depicts a detailed plat of the soil types within the proposed **Bank** area. These soils are listed on the Hydric soils list for Assumption Parish.

## C. Surrounding Land Use

The surrounding land use consist of cultivated crop land and roads consisting of 1,465.85± acres, residential area consisting of no acres and existing forested woodlands consisting of 1,189.61± acres. **Figure 6** depicts an aerial photo layout of the land used within one-half mile of the proposed site.

## D. Existing Drainage

The existing storm drainage flows to small field ditches and culverts then into larger ditches which transports storm water into the **Baker Canal** located to the east of the proposed site. **Figure 8** depicts the existing drainage flow. Culverts exist in the drainage system to allow for passage by sugar cane farmers and to allow for equipment to cross ditches during maintenance.

Hydrology of the site consists of rainfall, overland flow from adjacent properties. The NRCS characterizes this area as receiving a mean annual precipitation ranging from 45-62 inches. The NRCS has classified a portion of the site as prior converted (**p.c.**), see attached **Figure 12** Wetland hydrology persists in areas claimed as jurisdictional wetlands (**Figure 11**). The confirmed presence of hydric indicators indicates that the site was historically saturated. Historic crop management with major and minor ditching effectively drained and removed wetland hydrology from most the site.

There are no known, existing hydrologic disturbances either on or adjacent to the site over which the Sponsor will not have control. All other on-site hydrologic conveyances are fully owned and controlled by the landowner. The existing **Baker Canal** is controlled by the Assumption Parish Police Jury.

Ingleside Plantation, L.L.C. has a private drainage servitude that must be maintained for carrying off storm water drainage from a residential subdivision located west of the **Bank** boundary. Ingleside Plantation, L.L.C. must also maintain drainage canals to carry off storm water from adjacent agricultural lands located north, south and west of the **Bank** area. These canals must remain open to allow storm water to be carried to the **Baker Canal** located east of the bank area.

Based on the information available, the flat topography of the area, and the soil types the site historically supported bottomland hardwood and wetlands. **Figure 12** depicts a plat from NRCS which depicts the **p.c. classification** of the agency. Depressional areas within the site likely maintained wetter bottomland hardwood community types, with longer hydroperiod durations

prior to ditching. Additionally, standing water on the site historically persisted longer after rainfall events, and slowly dispersed from the south and north across the site as overland flow to the north. The site ditching now quickly conveys surface water from the site, which decreases the amount of time standing water persists on the site before being discharged as channelized flow. Additionally, ditching effectively intercepts water that would normally find its way into the existing natural depression areas. The proposed hydrologic restoration plan will effectively restore historic hydrologic conditions by backfilling excavated ditches and drainage swales that currently exist in the improved pasture areas located in the central and southern areas of the site. Backfilling these agricultural drainage swales and ditches will impede the direct conveyance of surface water and increase the duration of standing water on-site. The hydrologic restoration will also increase water storage and hydroperiod durations within on-site depressions and restore localized watershed to the depressions currently drained by the ditching. The net effect will be increased hydroperiod durations able to support the bottomland hardwood community types and associations proposed for restoration.

**E. Existing Vegetative Communities**

Non-jurisdictional wet pasture areas of the site are primarily dominated by soybeans and sugar cane. A large jurisdictional forested wetland area within the **Bank** boundary exist southeast of the site (**262 acres**) and is dominated by green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), American elm (*Ulmus Americana*), water oak (*Quercus nigra*), maple ash (*Acer nequundo*) and hackberry (*Celtis Laevigata*) observed as common sub-dominants and associates.

**F. Existing Wetlands**

Approximately **262 acres** of existing forested wetlands occur within and east of the site. The initial on-site delineation was performed by PECCI, on behalf of the Sponsor, submitted the ASES wetland delineation report and supporting maps to the USACE New Orleans District (NOD) on November 16,2015. The approved USACE jurisdictional determination was received on September 1 ,2016 for the Bank and is provided in **Figure 11**.

**III. MITIGATION ACTIVITIES AND CONCEPTUAL RESTORATION PLAN**

**A. Wetland Mitigation Types**

The mitigation type proposed will be reestablishment of bottomland hardwood species. Specified as restoration mitigation, the sponsor proposed to do the following:

1. Reestablish bottomland hardwood forest **201 acres**
2. Existing bottomland hardwood forest **262 acres**

The sponsor proposes to reestablish hardwood species by replanting these species and developing hydrological activities to support the wetland areas (**See Figure 9**). Reestablishment of forested

woodlands will be accomplished through both vegetative plantings and hydrologic restoration activities as presented below.

**B. Hydrologic Restoration**

The current man-made ditch system is designed to facilitate drainage of surface water off the site. The existing small ditches will be filled with on-site soil material to allow for replanting of bottomland hardwood trees in the area (See Figure 10).

Backfilling man-made ditches and agricultural swales which exist on site will eliminate draining or runoff through these conveyances off site, these also will allow sheet flow more evenly across the site and resulting in recreation of historic overland flow conditions. By backfilling, the amount and force of the water currently discharging from these ditches will be dispersed over a broad area of the site. This will result in increased water storage and retain in depression areas with slower movement of water across the site by over land flow, thereby increasing retention of water on-site for longer periods and providing greater biological treatment of storm water runoff from site.

Ditch backfill will be accomplished using excavation material from the relocation of the existing drainage ditch, using stock piled on site material and any existing material present along ditches located on site. Should these materials not be sufficient to accomplish the proposed ditch backfilling, additional material for backfilling will be scraped from upland areas as needed. Backfilled ditch areas will be planted with native hardwood species. Backfilling excavated ditches and drainage swales in the non-wetland and wetland areas will effectively restore the historic hydrologic conditions of overland flow with depressional water storage. These measures will facilitate hydrologic restoration of wetlands on the proposed **Bank** area. No adverse off-site flooding effects are anticipated.

Ingleside Plantation, L.L.C. has a private drainage servitude that they must maintained for carrying off storm water drainage from a residential subdivision located west of the **Bank** boundary. Ingleside Plantation, L.L.C. must also maintain drainage canals to carry off storm water drainage from adjacent agricultural lands located north, south and west of the **Bank** boundary. These canals must remain open to allow storm water drainage to be carried to the **Baker Canal** which is located east of the **Bank** area.

**C. Vegetative Restoration**

The site will be planted at a minimum density of **538 trees per acre** with a mixture of bottomland hardwood trees. **Table 1** lists hard mast and soft mast canopy and sub-canopy species chosen for the

reforestation efforts. The species that are proposed for planting are typical of bottomland hardwood forest community types. **Table 2** lists the dominant species expected from both planting and natural recruitment from nearby hardwood sources. Planting stock will be **2-3-foot bare root seedlings planted on 9 foot centers.**

Major species' associations typical of bottomland hardwood floodplain forest community types and the topographic positions they occupy in the landscape are the basis for the planting zones depicted in **Figure 9** and outlined in **Tables 1 and 2.** The topographic positions of the various proposed planted species is intended to mimic the natural landscape, composition and spatial distribution associated with each species' physiology as well as their saturation/inundation preference for this region. Sound guidelines for restoring bottomland hardwood forests authored by Allen et al. (2001) were published through the United States Geological Survey technical report series, and were recently revised in 2004. This guidance provides a wealth of direction for determining species placement per topographic zone relative to their flood/saturation tolerance, and provides descriptions for major species' associations typical of bottomland hardwood wetlands. Inundation tolerance and topographic position are the basis for the planting zones depicted.

Determination of species placement within the planting zones was also based on community descriptions for bottomland hardwood floodplain forest from the Natural Communities of Louisiana electronically published by the LDWF and LNHP. Species associations, as depicted in the planting zones outlined in Figure 11 are taken from Table 14.1 of Allen et al. (2001) A Guide to Bottomland Hardwood Restoration and from the community descriptions published by LDWF and LNHP referenced above. However, certain species that can occur over a wider range of hydrologic conditions, or which have a greater range of inundation and/or saturation tolerance may be planted within several topographic or hydrologic zones to establish greater diversity throughout the extent of the restoration area.

**Table 1: Species of Bottomland Hardwoods to be Planted**

Hard Mast Species	Soft Mast Species
Water Oak ( <i>Quercus nigra</i> ) (30%)	
Bitter Pecan ( <i>Carya aquatica</i> ) (20%)	Drummond Red Maple ( <i>Acer rubrum</i> var. <i>drummondii</i> ) or Red Maple ( <i>Acer rubrum</i> ) (20%)
Nuttal Oak ( <i>Quercus texana</i> ) (10%)	American Elm ( <i>Ulmus Americana</i> ) (20%)

**Note: This is a list of suggested species based on availability and a survey of adjacent forested areas.**

**Table 2: Selected Species by Planting Zone for the Ingleside Plantation L.L.C. Mitigation Bank Live Oak Plantation Tract**

<b>Species Association/Planting Zone'</b>	<b>Dominant Species</b>	<b># of Trees</b>	<b>Acres</b>
HM--Nuttall Oak (10%)	Nuttall Oak	10,803	20
HM--Water Oak (30%)	Water Oak	32,408	61
HM--Bitter Pecan (20%)	Bitter Pecan	21,605	40
SM--Red Maple (20%)	Red Maple	21,605	40
SM--American Elm (20%)	American Elm	21,605	40
<b>See Figure 9 for planting areas</b>	<b>Total Plants Planted Initially</b>	<b>108,027</b>	
	<b>Total Acres Planted</b>		<b>201</b>

Site preparation will consist of mowing/burning, disking or sub soiling should the Site exhibit heavily compacted soils. Site preparation will take place no more than 6 months prior to planting during the December 15th to March 15th planting season. Trees will be placed in the appropriate planting zone, and hand planted in the planting zones identified in **Figure 9. Removal of Chinese tallow and privet or other noxious nuisance and exotic species that could compromise the restoration effort will be done prior to planting, and the Site will be maintained to a nuisance and exotic species level of less than 5 % coverage. Ditch relocation and backfilling will be completed prior to the planting effort.**

#### **D Monitoring Plan**

##### **MONITORING REPORTS:**

##### **1) The monitoring report shall:**

- a.** Identify seedling survivorship and colonization by volunteer mid-story and over story species. Results of vegetation survey including visual estimates of percentage (%) overall cover and % cover by each vegetation layer, species diversity, % exotic vegetation in each vegetation layer, total % “facultative” and total % “upland” species in each vegetation layer, survival rate of planted vegetation, an estimate of natural revegetation, and a qualitative estimate of plant vigor as measured by evidence of reproduction.
- b.** Discuss the general health of the planted trees.
- c.** Describe the vegetative communities developing within and the overall condition of the site.
- d.** Describe wildlife usage and herbivory/browse problems, if present.
- e.** Summarize the condition of the Restoration Area.
- f.** Identify maintenance activities performed.
- g.** Document measures to control exotic/invasive vegetation colonization/establishment.

##### **2) Schedule of monitoring reports:**

- a.** Vegetative monitoring and reports shall be completed in the spring (when new growth makes identification practicable) of years 1, 3, 5, 10, 15, and prior to and following the first thinning operation.

- b. If Year 1 success criteria is obtained, but all performance criteria have not been met in the 5th year, a monitoring report shall be required for each consecutive year until two annual sequential reports indicate that all criteria have been successfully satisfied (i.e., that corrective actions were successful).
- c. Reports discussing measures to control exotic/invasive vegetation shall be provided annually until all Initial Success Criteria and Interim Success Criteria identified in Sections VII.A and VII.B have been met and verified by the IRT. The annual reports should document items such as degree of exotic/invasive vegetation, method of treatment/control, machinery and/or chemical treatments utilized, timing of treatments/work, effectiveness of previous treatments/work, etc.
- d. **Reports will be submitted by December 31st of each monitoring year.**
- e. **Monitoring reports shall be provided to CEMVN.**

#### **E Maintenance Plan**

Semi-annual surveying and treatment of nuisance/exotic species and undesirable, competing undergrowth will be performed by means of mechanical and/or chemical control. Additionally, low-intensity prescribed fires prior to planting may be conducted to control competing nuisance/exotic herbaceous and woody vegetation and provide an immediate nutrient source for planted seedlings. Inspection of all permanent water control structures or ditch blocks for erosion or instability will also be performed during each annual monitoring event, and repair/stabilization will be conducted as necessary.

Should evidence of destructive deer, feral pig, beaver and/or nutria foraging activity be observed, wire fencing or protection devices may be installed around tree seedlings to control damage to seedlings from foraging, rubbing or rooting.

Should drought conditions result within the first year of planting, temporary irrigation measures will be taken to assist in the establishment and proper rooting of planted seedlings.

**Ingleside Plantation, L.L.C.** will not be responsible for replacement of seedlings or trees when mortality is due to an Act of God or other force majeure event that occurs after the initial, permitted success criteria are met. In the event of such mortality.

#### **VI. FUNCTIONAL EVALUATION OF ECOLOGICAL BENEFIT**

We propose to perform a Wetland Value Assessment (WVA) and/or LRAM assessment to quantify the expected ecological functional gain that will be provided by the mitigation activities proposed. The WVA assessment will be performed per guidance published January 10, 1994 by the Louisiana Department of Natural Resources. LRAM analysis will be performed per guidance published by the NOD entitled LMRA Guidebook for the Use of the Excel Workbook. The assessment will score the entire mitigation acreage for all parameters except for

the kind/location scenarios, thereby giving a baseline credits/acre for each type of mitigation provided. **Figure 13 depicts plats for LiDAR data.**

**VII. OWNERSHIP AND CONTROL**

**A. Sponsor Qualifications and Contact Information**

The subject property (**Live Oak Plantation Tract**) is owned fee simple by **Ingleside Plantation, L.L.C.** The principal members of **Ingleside Plantation, L.L.C.** are Michael Waguespack Member Manager, Joel P. Landry, Francis Robichaux and Rosedale Land Company, L.L.C. All project construction, monitoring and short term management will be conducted by Mr. Joey Robichaux with Assumption Land Company, L.L.C. Mr. Robichaux has managed and operated the Assumption Land Company, L.L.C. Mitigation Bank since 1999, having 17 years of experience in operation of a Mitigation Bank. The contact information for the sponsor, landowner and agent is provided below.

Sponsor: Ingleside Plantation, L.L.C.  
4404 Highway 308  
Napoleonville, Louisiana 70390

Agent: Horace Thibodaux  
AUX, LLC  
214 Pamela Place  
Thibodaux, LA 70301  
Phone: 985-387-0161

Landowner: Ingleside Plantation, L.L.C.  
4404 Highway 308  
Napoleonville, Louisiana 70390

**B. Long-Term Protection**

Long-term protection will be preferred under the conservation easement agreement.

**C. Financial Assurances**

**Ingleside Plantation, L.L.C.** is proposing to use a Letter to Credit and a short-term escrow



form of financial assurance and maintenance for the short-term construction (1 to 15 years) and proposes to use a long-term escrow account for the long term financial requirements from 16 years to 50 years.

**D. Contingency Measures**

**Problems which could occur at the site include but not limited to:**

<b>Problems which could occur</b>	<b>Correction of problems</b>
Seedlings & trees die off	Replant seedling & trees that do not grow
Evasive species growth	Control evasive species manually & by herbicides if necessary
Hydrologic barrier erosion	Inspect periodically for hydrologic failures and repair said findings as soon as possible

If **Ingleside Plantation, L.L.C.** or the Long-Term Steward are found to be in non-compliance by the CEMVN or IRT, the responsible party will institute a CEMVN and IRT approved adaptive management plan and submit a written corrective action plan to the CEMVN and IRT for review and approval. The corrective action plan will, at a minimum, identify the cause of the non-compliance, the remedial measures necessary, and a time line for implementing remedial measures to bring the **Ingleside Plantation L.L.C.** into compliance. To the extent practicable, the CEMVN and IRT will approve or disapprove the corrective action plan within **forty-five (45)** days of receipt, provided that sufficient information and acceptable measures are contained within the plan.

If **Ingleside Plantation, L.L.C.** or the Long-Term Steward is placed in non-compliance and either does not provide the adaptive management plan or does not implement the features of the corrective action plan within the time frame specified by the CEMVN and IRT, all or a portion of the funds in the escrow account will be released to a third party designated by the CEMVN or IRT at the time of default to effect necessary corrections or acquire equivalent ecological value elsewhere.

**VIII. LONG TERM MANAGEMENT**

The landowner **Ingleside Plantation, L.L.C.** will be the initial designated Long-Term Steward charged with long-term management and maintenance responsibility once the permitted long term success criteria are attained. The Long-Term Steward may be the recipient of the Long-Term Management Fund for use in addressing catastrophic events or land management requirements once all monitoring is completed.

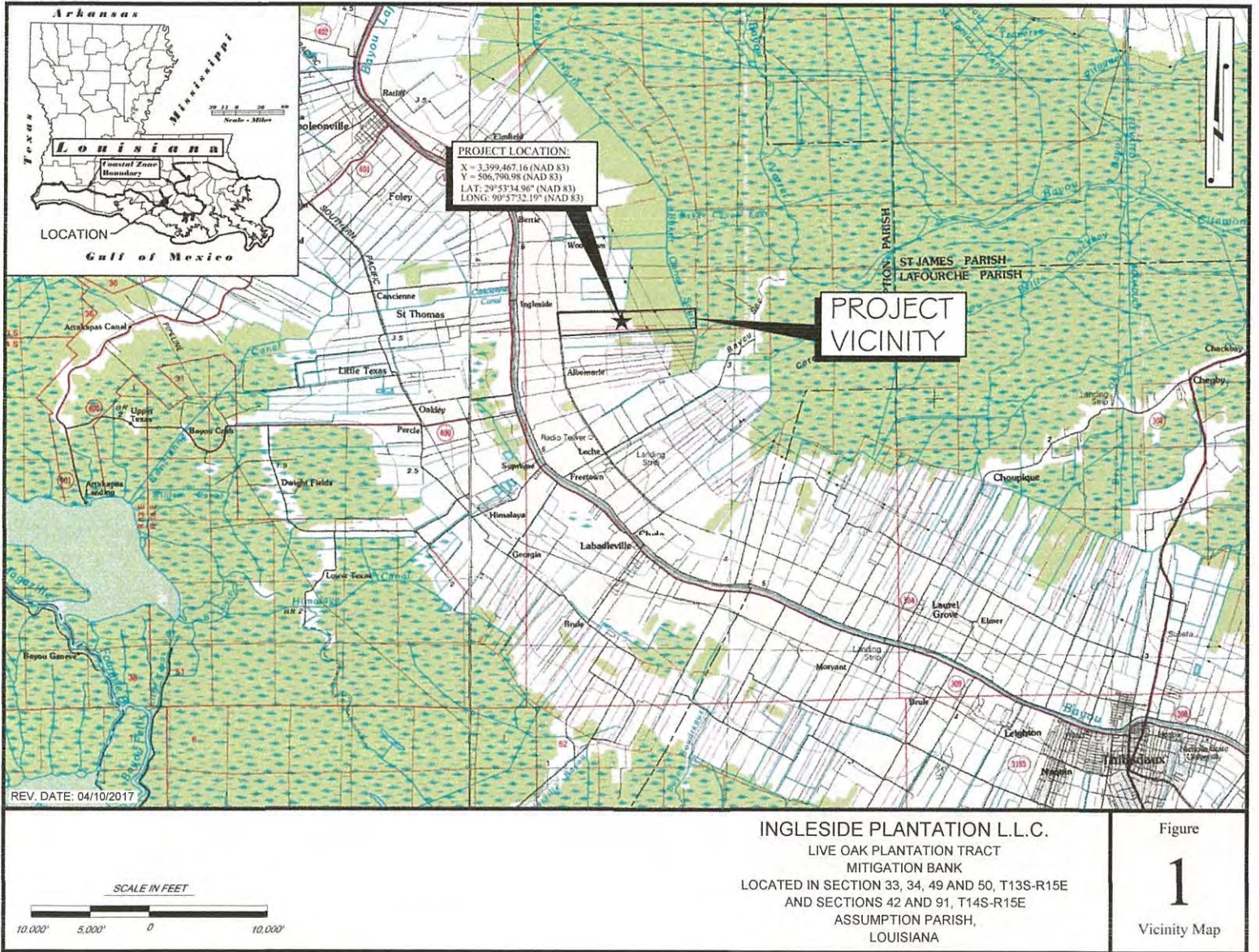
**IX. REFERENCES**

- Allen, J.A., Keeland, B.D., Stanturf, J.A., Clewell, A.F., and Kennedy, H.E., Jr., 2001 (revised 2004). *A Guide to Bottomland Hardwood Restoration*: U.S. Geological Survey, Biological Resources Division Information and Technology Report USGS/BRD/ITR-2000-0011, U.S. Department of Agriculture, Forest Service, Southern Research Station, General Technical Report SRS-40, 132 p.
- Buol, S.W., R.D. Hole, R.J. McCracken and R.J. Southard. 1997. *Soil Genesis and Classification*, Fourth Edition. Iowa State University Press: Ames, Iowa.
- Louisiana Department of Wildlife and Fisheries, Natural Heritage Program. 2004. *The Natural Communities of Louisiana*. Natural Heritage Program. URL: : <http://www.wlf.louisiana.gov/experience/naturalheritage/naturalcommunities/ncfactsheet.s.cfm>. Accessed June 8, 2009.
- Louisiana Department of Wildlife and Fisheries, Natural Heritage Program. 2008. *Rare, Threatened, & Endangered Species & Natural Communities Tracked by the Louisiana Natural Heritage Program East Baton Rouge Parish - April 2008*. Natural Heritage Program. URL: <http://www.wlf.louisiana.gov/pdfs/experience/naturalheritage/east%20baton%20rouge.pdf>. Accessed June 8, 2009.
- Petrides, G.A. and J. Wehr. 1988. Peterson Field Guide Series, *A Field Guide to Eastern Trees: Eastern United States and Canada, including the Midwest*. Houghton-Mifflin Company: New York, NY.
- Richardson, J.L. and M.J. Vespraskas. 2001. *Wetland Soils: Genesis, Hydrology, Landscapes and Classification*. Lewis Publishers: Boca Raton, Florida.
- Natural Resources Conservation Service, 2009. *National Hydric Soils List by State, Louisiana*. U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Staff. URL: <http://soils.usda.gov/use/hydric/lists/state.html>. Accessed June 8, 2009.
- United States Army Corps of Engineers. 1987. *Corps of Engineers Wetland Delineation Manual*. USACE Waterways Experiment Station Technical Report Y-87-1.
- United States Army Corps of Engineers, 2007. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation manual: Atlantic and Gulf Coastal Plain Region*. Ed. J. S Wakeley, R.W. Lichvar, and C.V. Noble. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- United States Geological Survey. 1986. *Land Use and Land Cover Digital Data from 1:250,000- and 1:100,000- Scale Maps, Data Users Guide 4*. Reston, Virginia.
- Roelle, J.E., G.T. Auble, D.B. Hamilton, R.L. Johnson and C.A. Segelquist, eds. 1987.

Results of a Workshop Concerning Ecological Zonation in Bottomland Hardwoods. USFWS, National Ecology Center, Fort Collins, CO. NEC-87/14. 241pp.

Roelle, J.E., G.T. Auble, D.B. Hamilton, R.L. Johnson and C.A. Segelquist, eds. 1987. Results of a Workshop Concerning Impacts of Various Activities on the Functions of Bottomland Hardwoods. USFWS National Ecology Center, Fort Collins, CO. NEC-87/15. 171 pp.

Roelle, J.E., G.T. Auble, D.B. Hamilton, R.L. Johnson and C.A. Segelquist, eds, 1987. Results of a Workshop Concerning Assessment of the Functions of Bottomland Hardwoods. USFWS National Ecology Center, Fort Collins, CO. NEC-87/16. 173 pp.

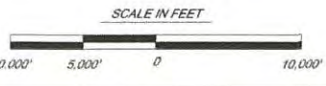


**PROJECT LOCATION:**  
 X = 3,399,467.16 (NAD 83)  
 Y = 596,790.98 (NAD 83)  
 LAT. 29°53'34.96\"/>

**PROJECT VICINITY**

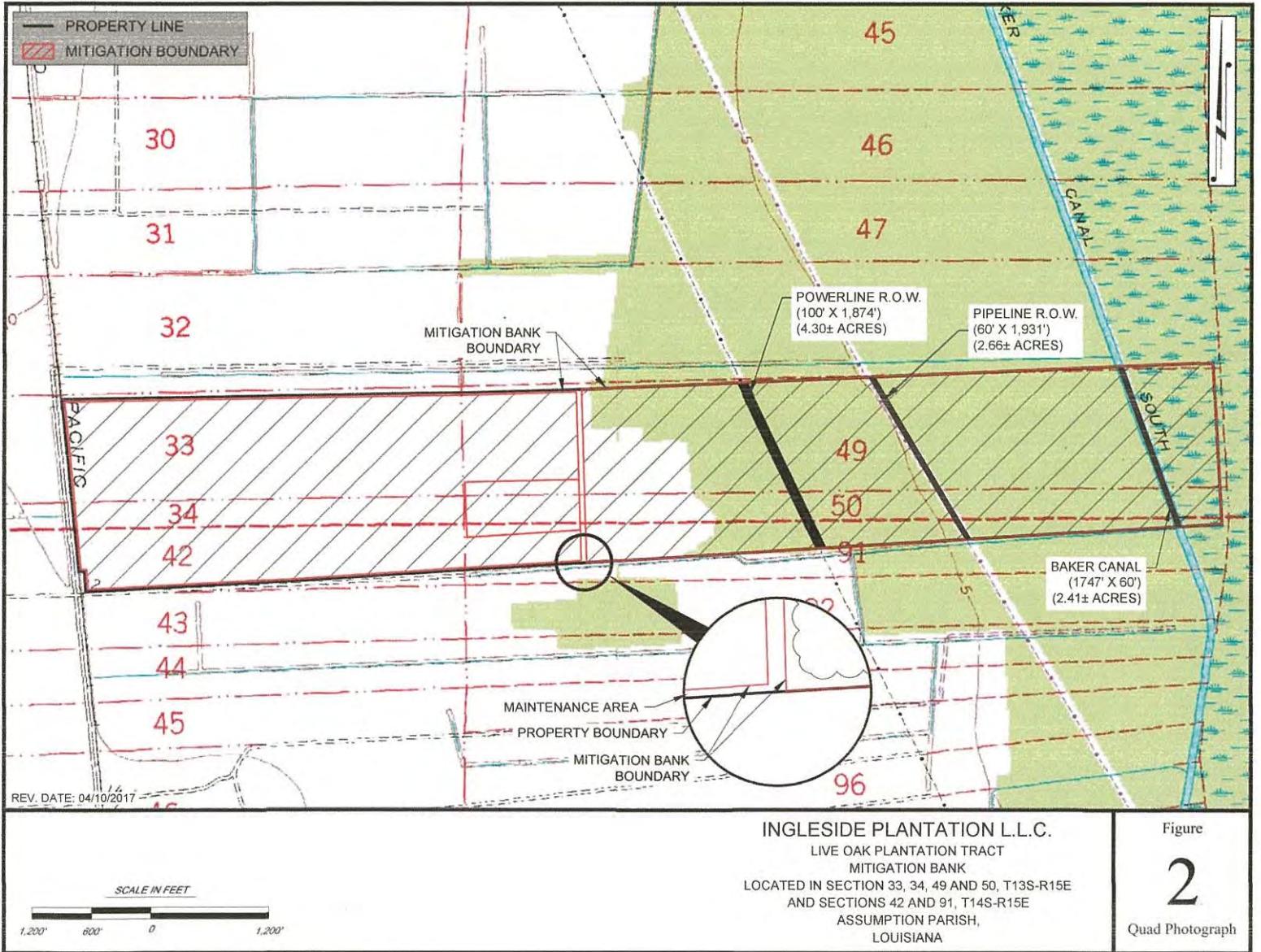


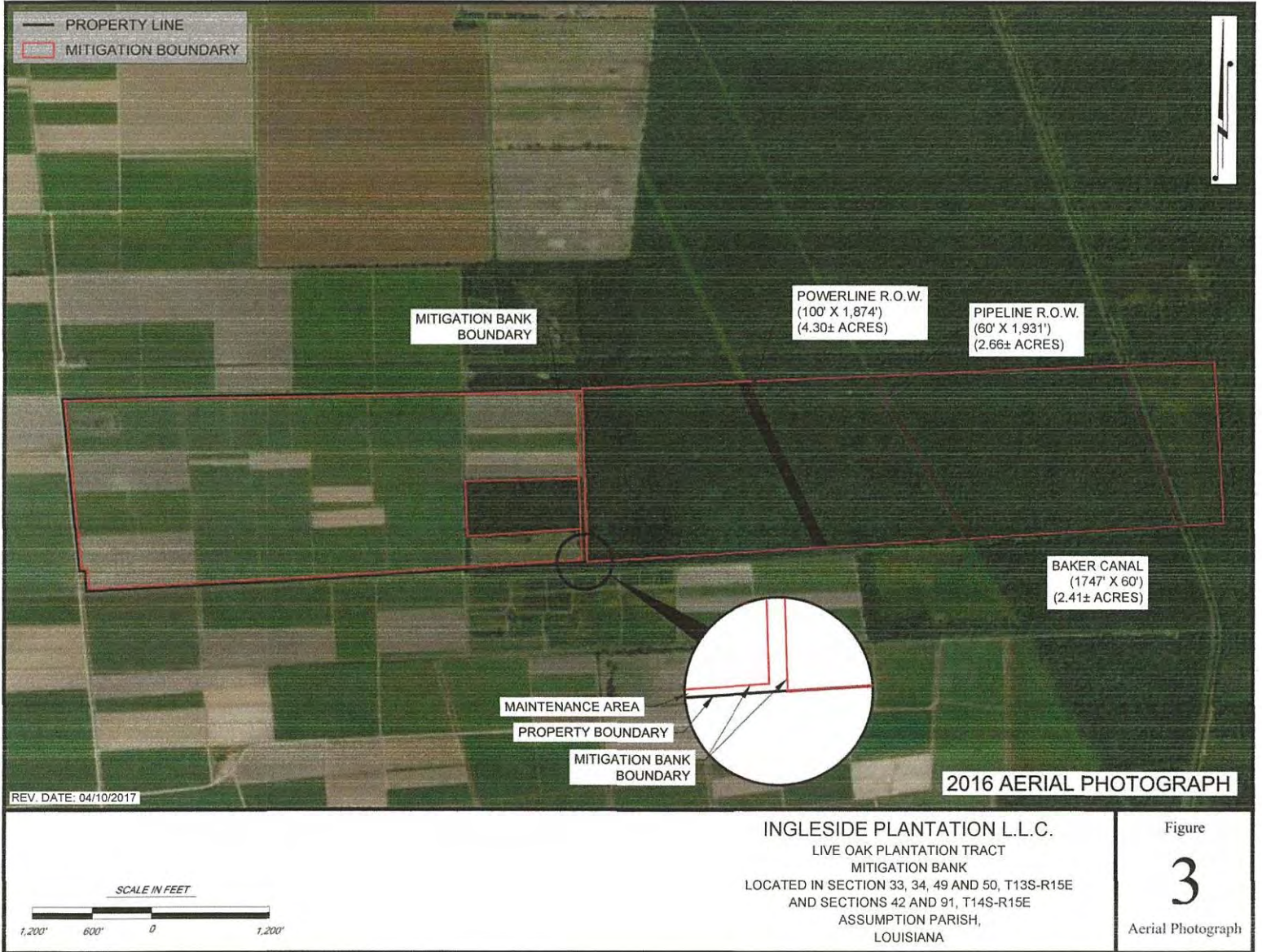
REV. DATE: 04/10/2017

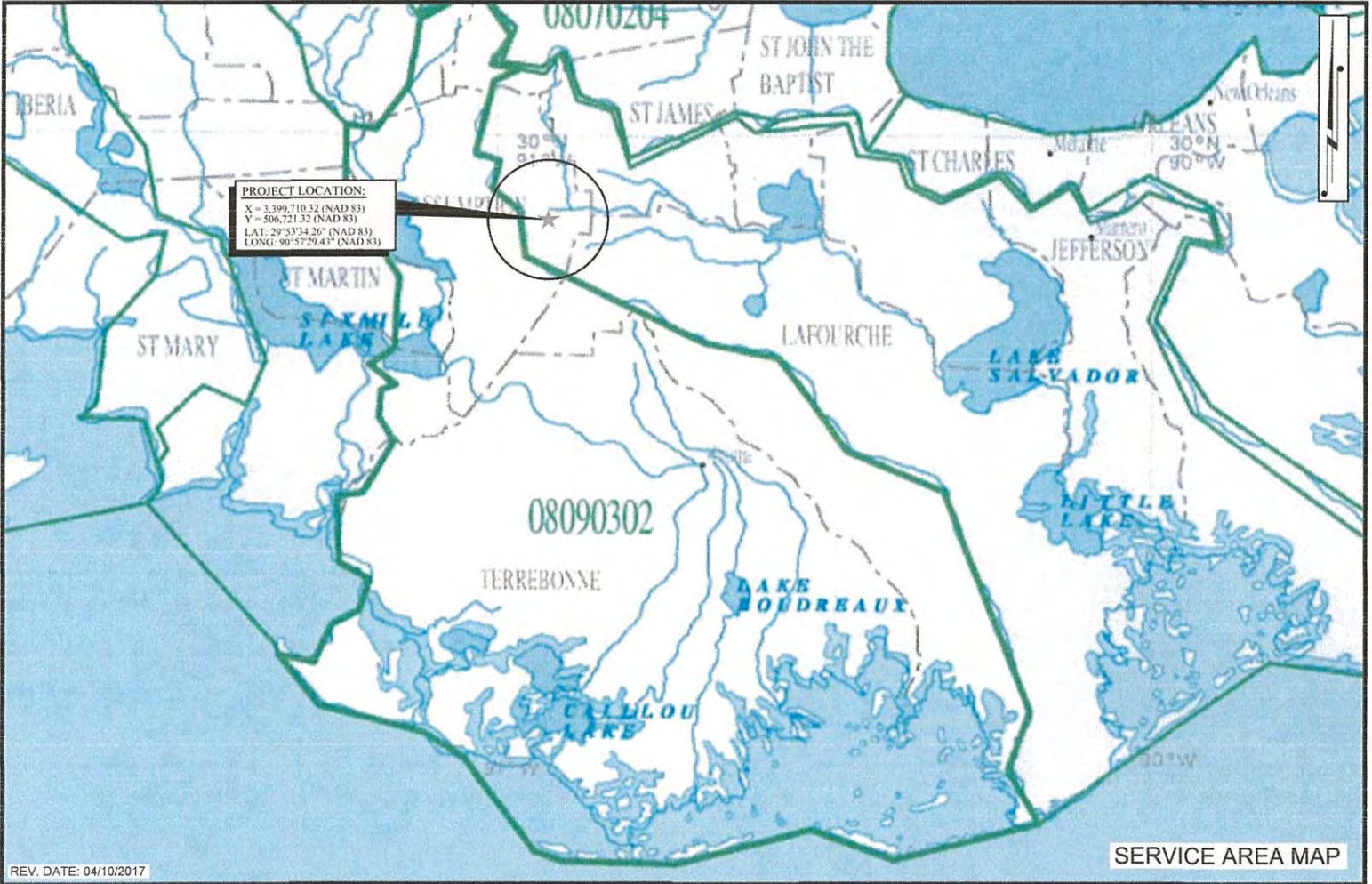


**INGLESIDE PLANTATION L.L.C.**  
 LIVE OAK PLANTATION TRACT  
 MITIGATION BANK  
 LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
 AND SECTIONS 42 AND 91, T14S-R15E  
 ASSUMPTION PARISH,  
 LOUISIANA

Figure  
**1**  
 Vicinity Map







REV. DATE: 04/10/2017

**SERVICE AREA MAP**

**INGLESIDE PLANTATION L.L.C.**  
LIVE OAK PLANTATION TRACT  
MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
AND SECTIONS 42 AND 91, T14S-R15E  
ASSUMPTION PARISH,  
LOUISIANA

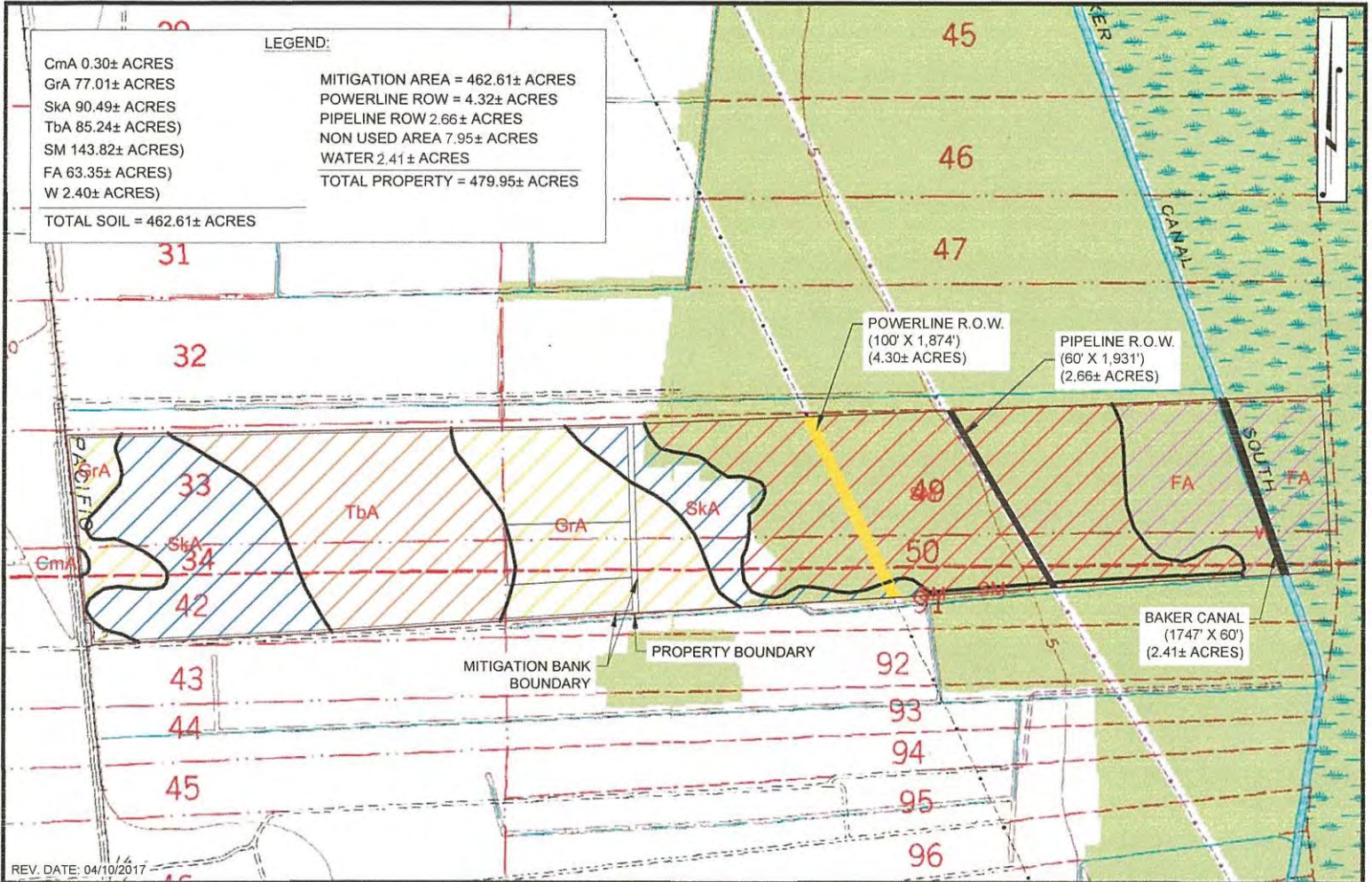
Figure

**4**

Service Area

**LEGEND:**

CmA 0.30± ACRES	MITIGATION AREA = 462.61± ACRES
GrA 77.01± ACRES	POWERLINE ROW = 4.32± ACRES
SkA 90.49± ACRES	PIPELINE ROW 2.66± ACRES
TbA 85.24± ACRES)	NON USED AREA 7.95± ACRES
SM 143.82± ACRES)	WATER 2.41± ACRES
FA 63.35± ACRES)	<b>TOTAL PROPERTY = 479.95± ACRES</b>
W 2.40± ACRES)	
<b>TOTAL SOIL = 462.61± ACRES</b>	



REV. DATE: 04/10/2017

**INGLESIDE PLANTATION L.L.C.**  
 LIVE OAK PLANTATION TRACT  
 MITIGATION BANK  
 LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
 AND SECTIONS 42 AND 91, T14S-R15E  
 ASSUMPTION PARISH,  
 LOUISIANA

Figure












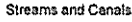
























**5**

Soil Map



Soil Map—Assumption Parish, Louisiana  
(Live Oak Plantation)

**MAP LEGEND**

<b>Area of Interest (AOI)</b>			Spoil Area
	Area of Interest (AOI)		Stony Spot
<b>Soils</b>			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
<b>Special Point Features</b>		<b>Water Features</b>	
	Blowout		Streams and Canals
	Borrow Pit	<b>Transportation</b>	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	<b>Background</b>	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

**MAP INFORMATION**

The soil surveys that comprise your AOI were mapped at 1:24,000. Please rely on the bar scale on each map sheet for map measurements.

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

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

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

Soil Survey Area: Assumption Parish, Louisiana  
Survey Area Data: Version 8, Sep 23, 2014

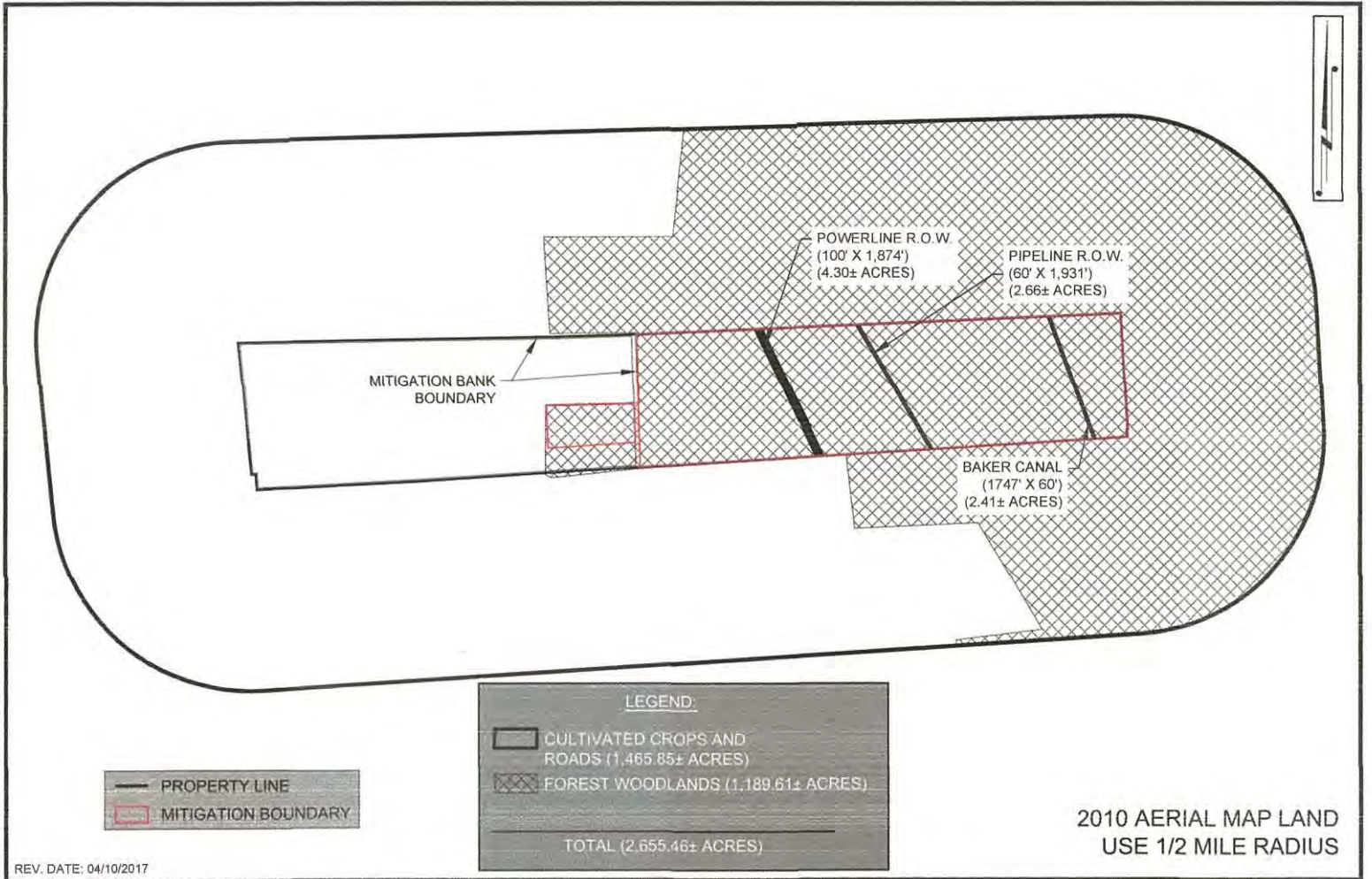
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 29, 2010—Jan 3, 2011

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

## Map Unit Legend

Assumption Parish, Louisiana (LA007)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CmA	Cancienne silt loam, 0 to 1 percent slopes	30.1	4.7%
CnA	Cancienne silty clay loam, 0 to 1 percent slopes	56.4	8.7%
FA	Fausse association, 0 to 1 percent slopes, frequently flooded	74.5	11.5%
GrA	Gramercy silty clay	118.7	18.4%
SkA	Schriever clay, 0 to 1 percent slopes	96.2	14.9%
SM	Schriever clay, 0 to 1% slopes, frequently flooded	148.4	23.0%
TbA	Thibaut clay	116.1	18.0%
W	Water	5.3	0.8%
<b>Totals for Area of Interest</b>		<b>645.8</b>	<b>100.0%</b>



REV. DATE: 04/10/2017

INGLESIDE PLANTATION L.L.C.  
LIVE OAK PLANTATION TRACT  
MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
AND SECTIONS 42 AND 91, T14S-R15E  
ASSUMPTION PARISH,  
LOUISIANA

Figure  
**6**  
Surrounding  
Land Use

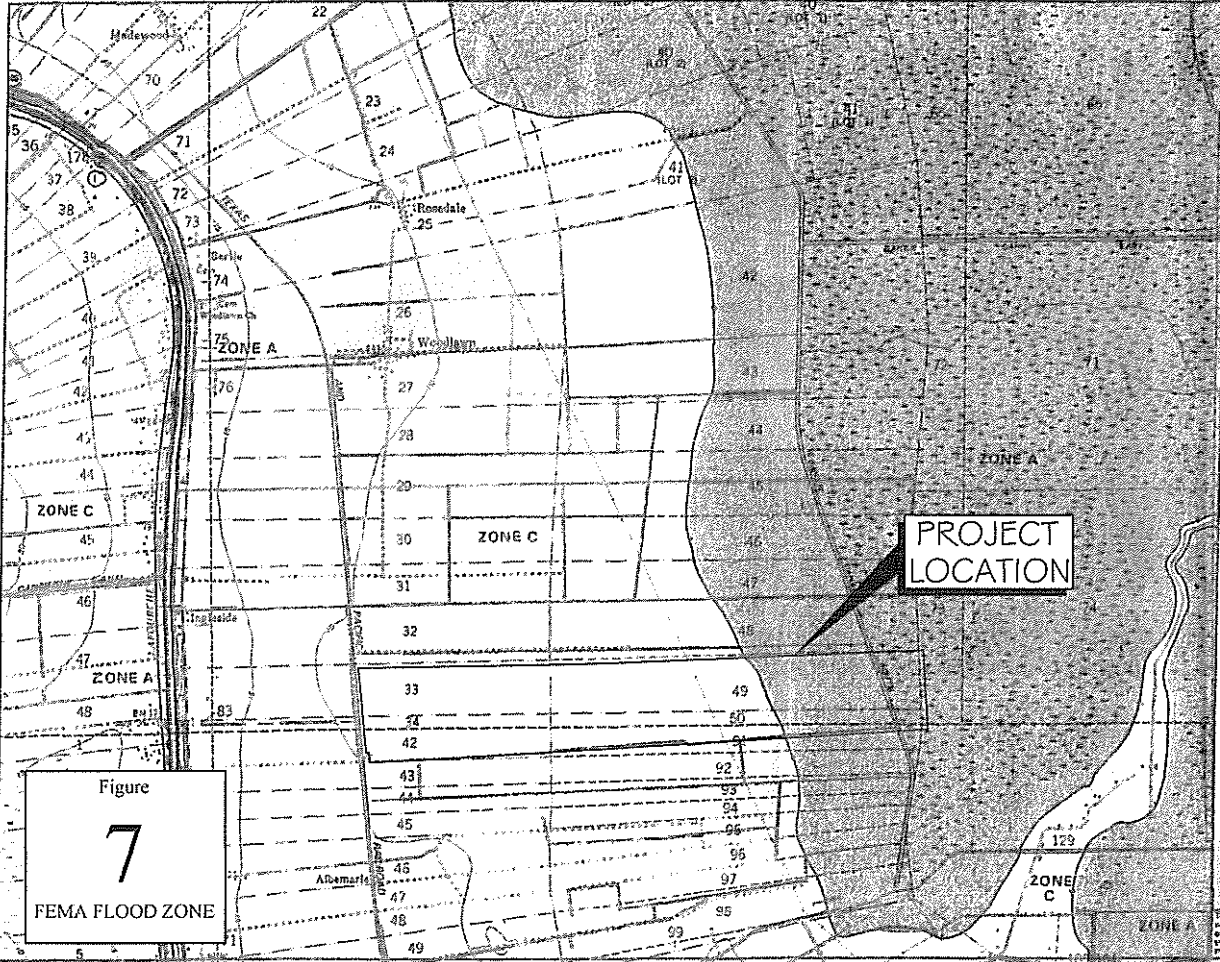


Figure  
**7**  
 FEMA FLOOD ZONE

  
 APPROXIMATE SCALE  
 2000 0 2000 FE

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
 FLOOD INSURANCE RATE MAP

ASSUMPTION PARISH,  
 LOUISIANA  
 (UNINCORPORATED AREAS)

PANEL 175 OF 275

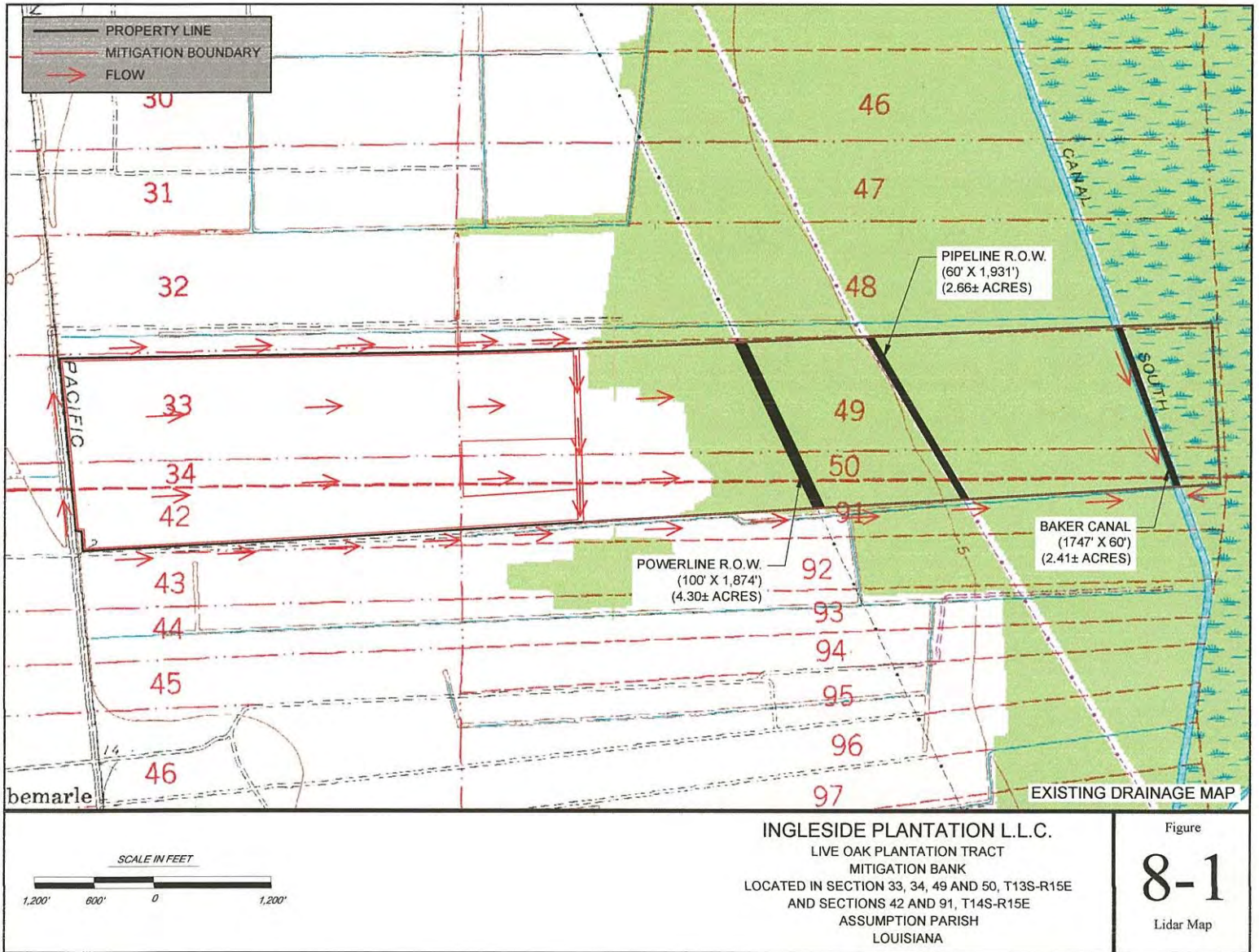
COMMUNITY PANEL NUMBER  
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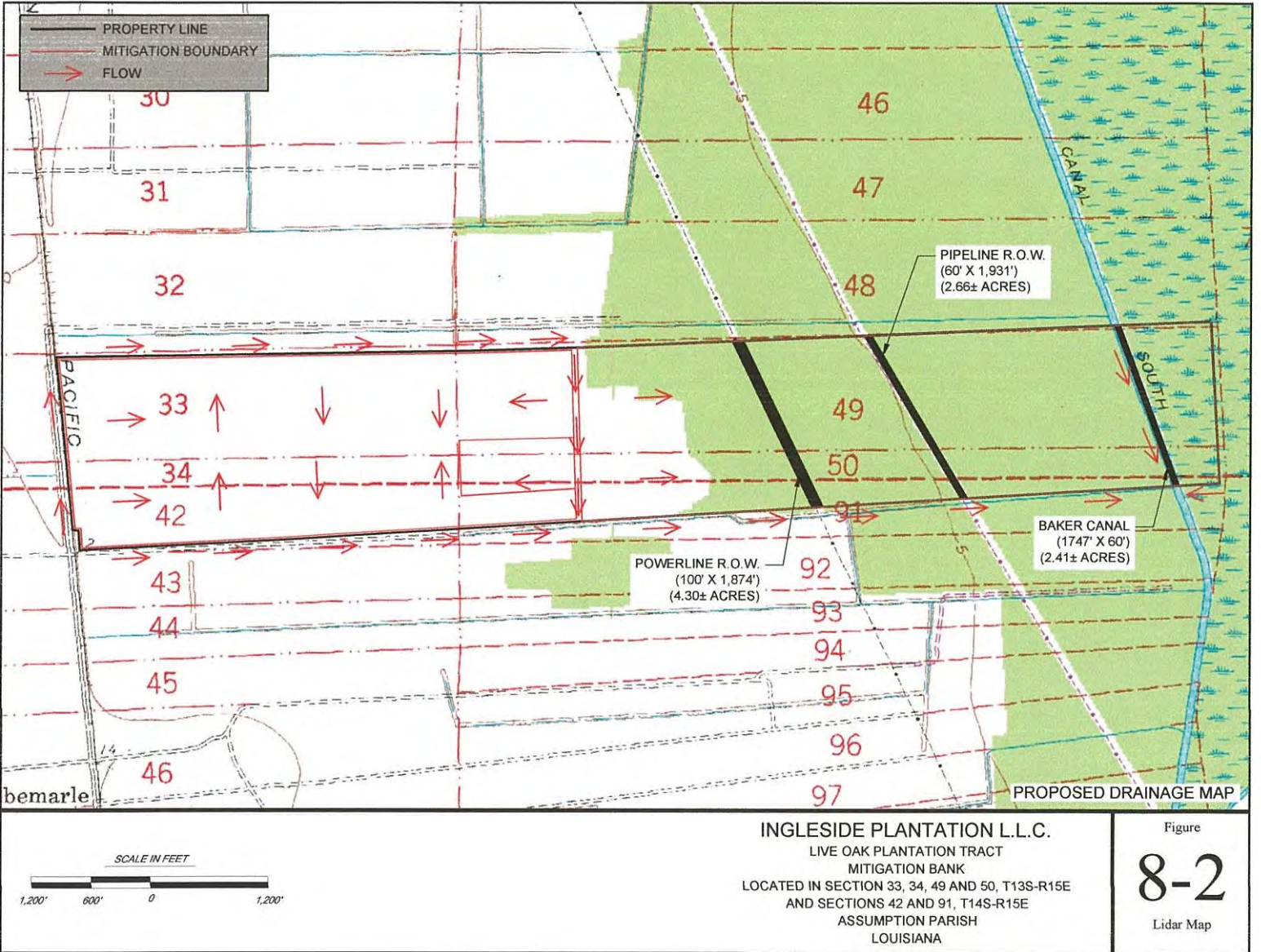
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


federal emergency management agency  
 federal insurance administration

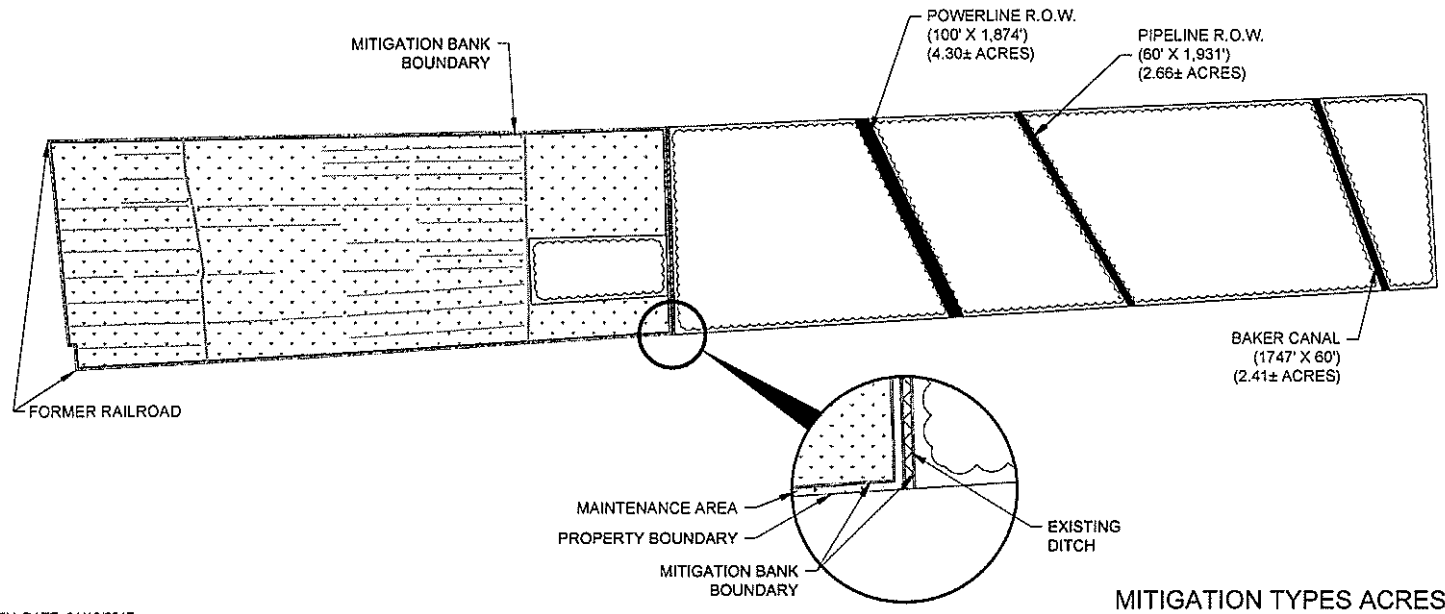
This is an official copy of a portion of the above referenced flood map. It was extracted using F 4077 on-line. This map does not reflect changes or amendments to this map. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.fema.gov.





**LEGEND**

-  PROPOSED PLANTING BLH TREES 200.79± ACRES  
(538 x 200.79± ACRES = 108,025± TREES)
-  108,025± BLH TREES TO BE PLANTED
-  EXISTING TREES (±261.85 ACERS)



REV. DATE: 04/10/2017

**MITIGATION TYPES ACRES**

INGLESIDE PLANTATION L.L.C.  
 LIVE OAK PLANTATION TRACT  
 MITIGATION BANK  
 LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
 AND SECTIONS 42 AND 91, T14S-R15E  
 ASSUMPTION PARISH,  
 LOUISIANA

Figure

**9**

Mitigation Types  
Acres



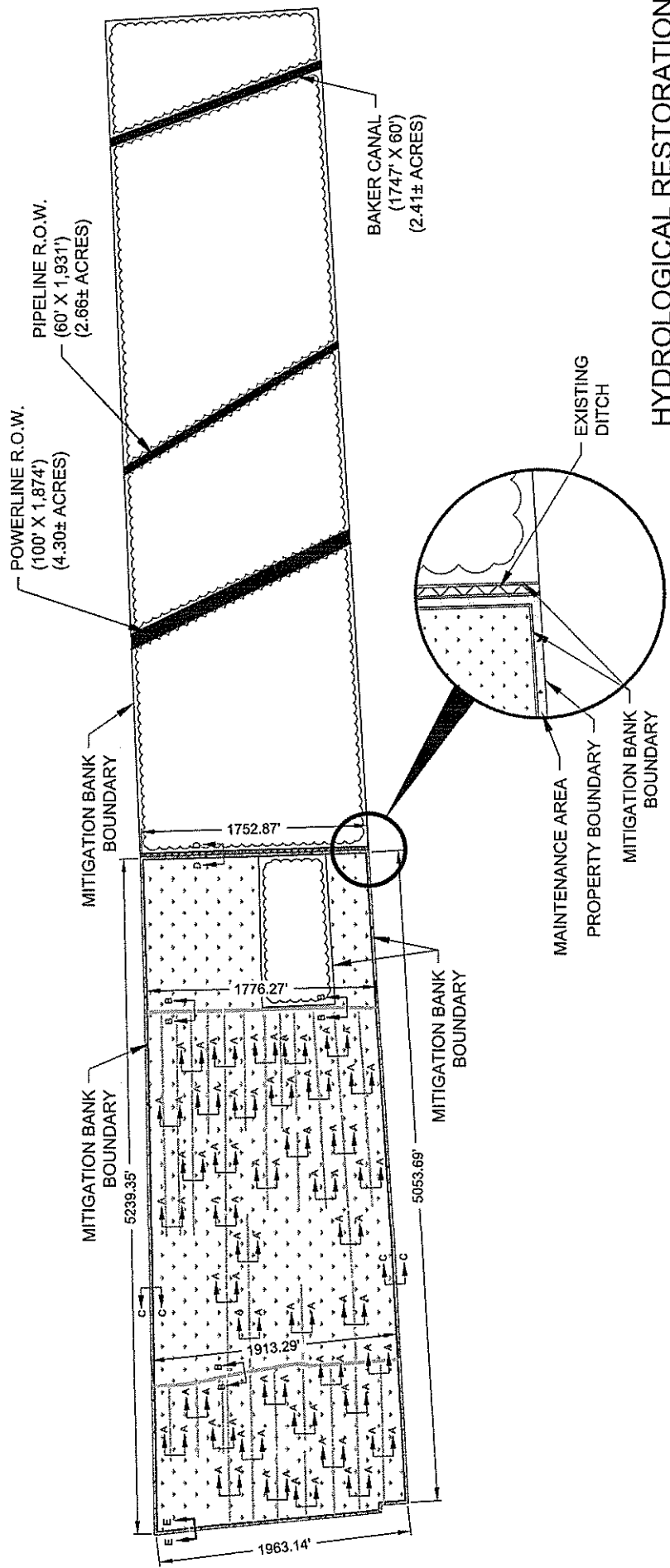
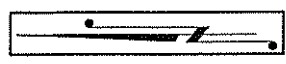
**LEGEND**

PROPOSED PLANTING BLH TREES (200.79± ACRES)

EXISTING FORESTED WOODLANDS (261.82± ACRES)

TOTAL ACRES = 462.61± ACRES

EXISTING DITCHES TO BE FILLED (3.31± ACRES)



**HYDROLOGICAL RESTORATION**

INGLESIDE PLANTATION L.L.C.  
LIVE OAK PLANTATION TRACT

MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
AND SECTIONS 42 AND 91, T14S-R15E  
ASSUMPTION PARISH,  
LOUISIANA

Figure

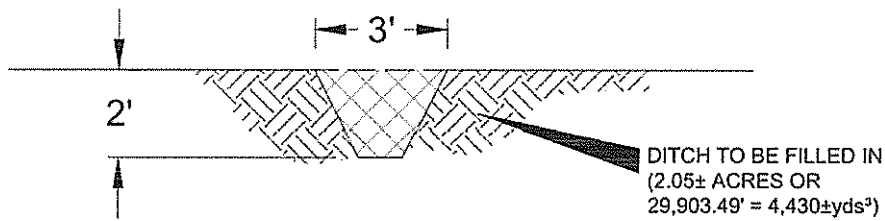
**10**

Hydrologic Restoration  
Planting Zone

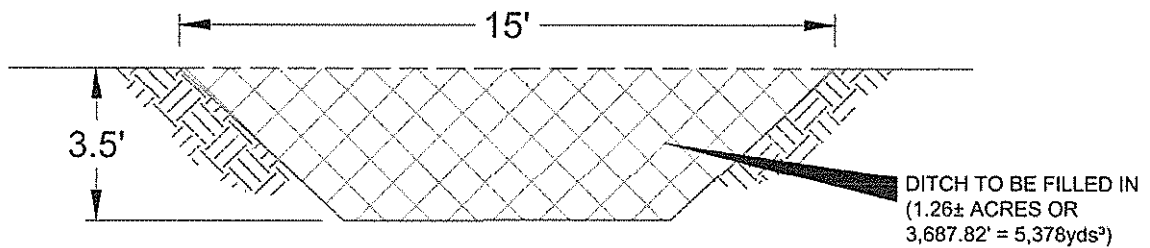
REV. DATE: 05/12/2017







TYPICAL FIELD DITCH CROSS SECTION A-A



TYPICAL FIELD DITCH CROSS SECTION B-B

REV. DATE: 04/10/2017

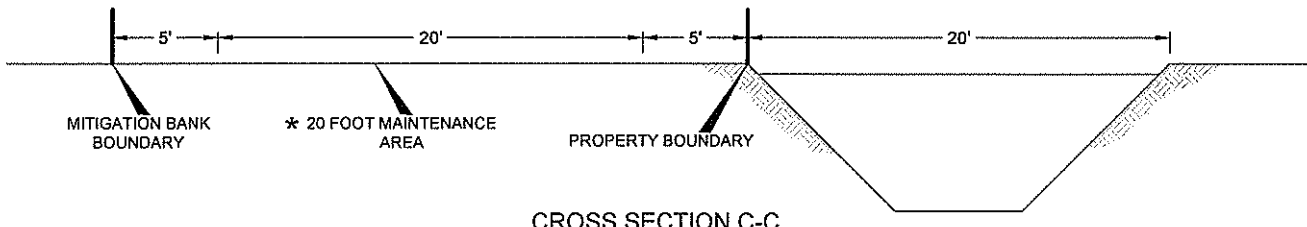
HYDROLOGICAL RESTORATION

INGLESIDE PLANTATION L.L.C.  
 LIVE OAK PLANTATION TRACT  
 MITIGATION BANK  
 LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
 AND SECTIONS 42 AND 91, T14S-R15E  
 ASSUMPTION PARISH,  
 LOUISIANA

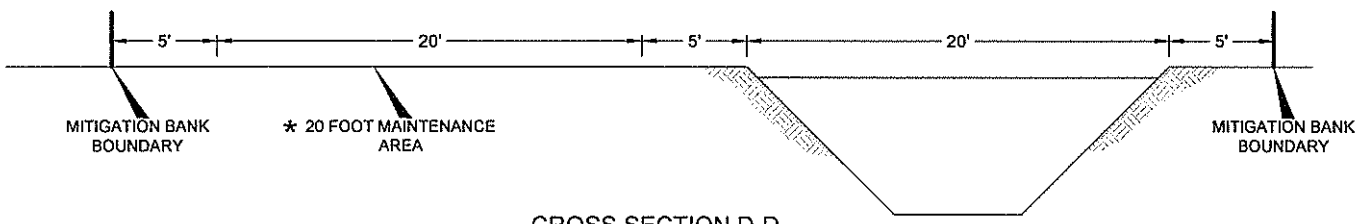
Figure

10-1

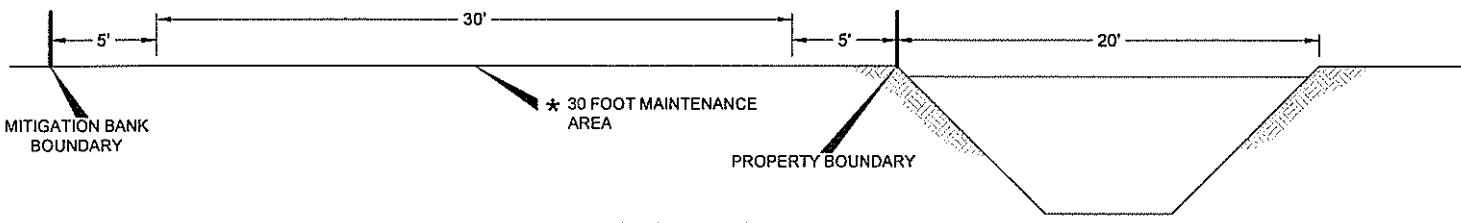
Hydrologic Restoration  
 Planting Zone



CROSS SECTION C-C



CROSS SECTION D-D



CROSS SECTION E-E

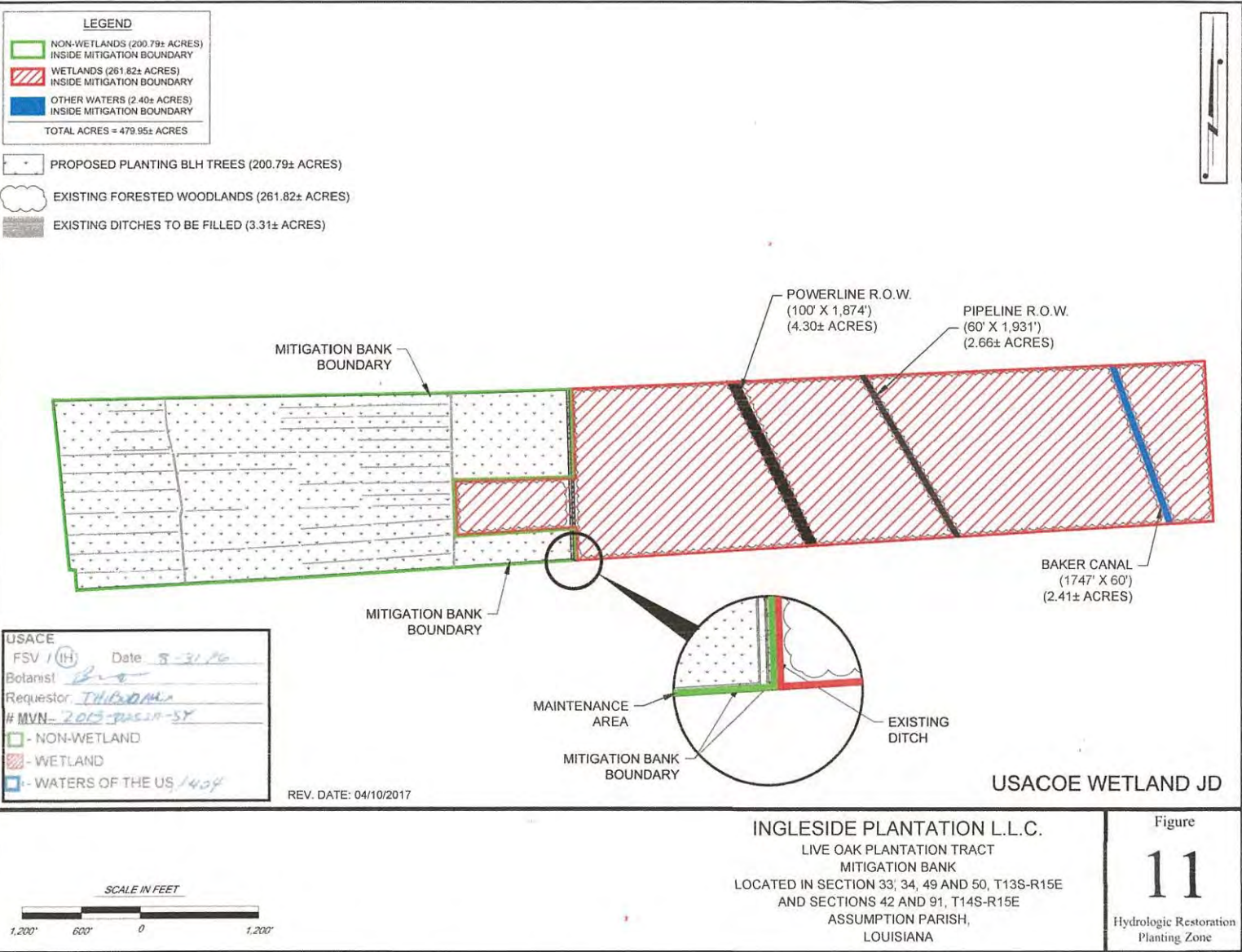
REV. DATE: 05/12/2017

**HYDROLOGICAL RESTORATION**

- \* Note 1: The 20' and 30' area is proposed for maintenance of the existing ditches with equipment as listed in 10L of the permit application.
- Note 2: No work is proposed at this time in the existing forested areas.

**INGLESIDE PLANTATION L.L.C.**  
 LIVE OAK PLANTATION TRACT  
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 ASSUMPTION PARISH  
 LOUISIANA

Figure  
**10-2**  
 Hydrologic Restoration  
 Planting Zone



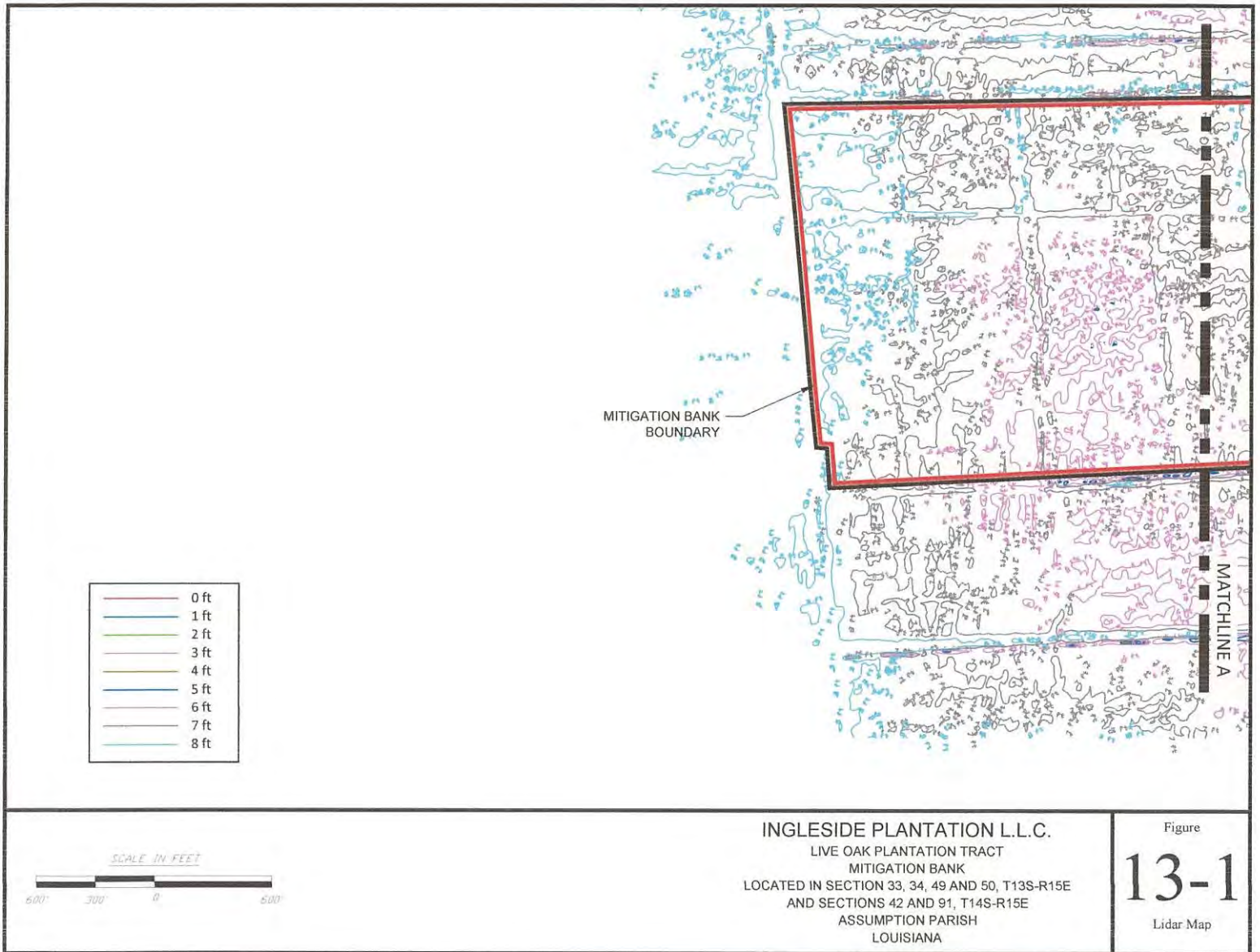


REV. DATE: 04/10/2017



INGLESIDE PLANTATION L.L.C.  
LIVE OAK PLANTATION TRACT  
MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
AND SECTIONS 42 AND 91, T14S-R15E  
ASSUMPTION PARISH,  
LOUISIANA

Figure  
**12**  
Aerial



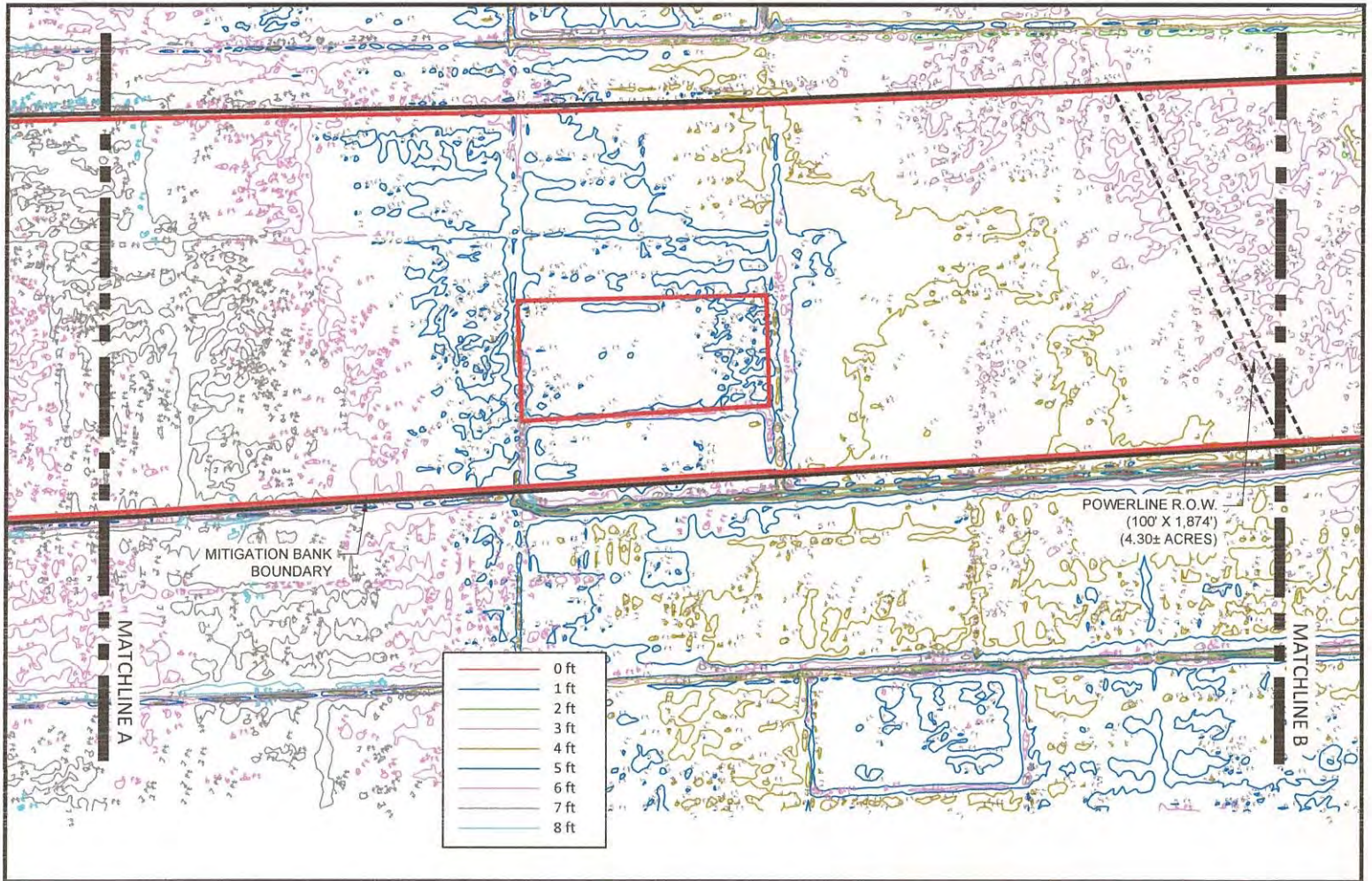
LIVE OAK TRACT (463 ACRES)

1. PROPOSED REFORESTED AREA

- A. AREA 5 FEET AND OVER= 143 ACRES
- B. AREA 5 FEET AND UNDER=58 ACRES
- C. TOTAL ACRES PER AREA =201 ACRES

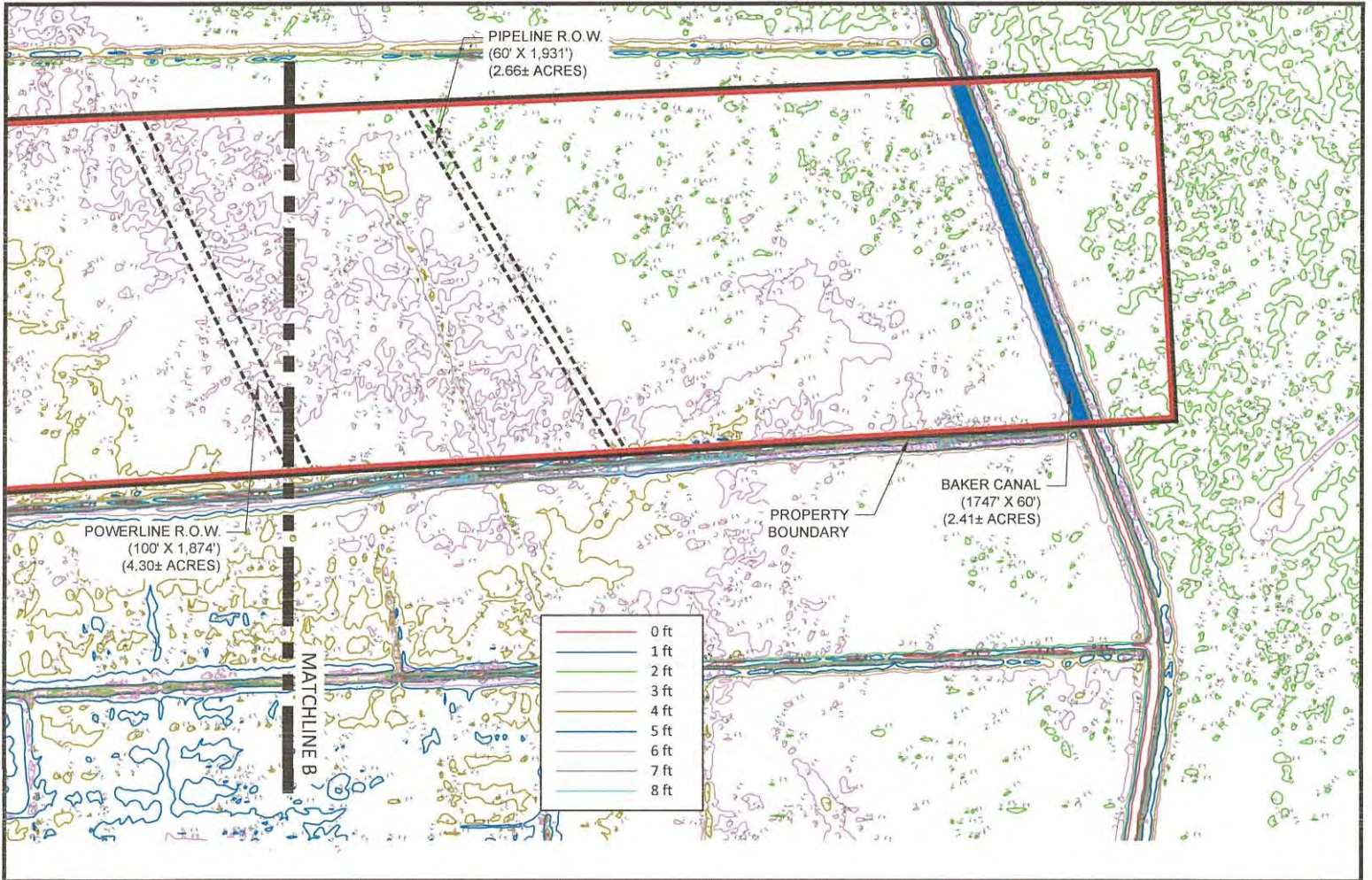
2. EXISTING FORESTED AREA

- A. AREA 5 FEET AND OVER= 0 ACERS
- B. AREA 5 FEET AND UNDER= 262 ACRES
- C. TOTAL ACRES PER AREA=262 ACRES



INGLESIDE PLANTATION L.L.C.  
LIVE OAK PLANTATION TRACT  
MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
AND SECTIONS 42 AND 91, T14S-R15E  
ASSUMPTION PARISH  
LOUISIANA

Figure  
**13-2**  
Lidar Map



INGLESIDE PLANTATION L.L.C.  
LIVE OAK PLANTATION TRACT  
MITIGATION BANK  
LOCATED IN SECTION 33, 34, 49 AND 50, T13S-R15E  
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ASSUMPTION PARISH  
LOUISIANA

Figure  
**13-3**  
Lidar Map