



Environmental Section

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John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

February 11, 2016

STATE PROJECT NO.: H.003014

FEDERAL AID PROJECT NO.: H003014

NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE

ROUTE: I-10

PARISHE: ST. MARTIN

Wes Bolinger
Division Administrator
Federal Highway Administration
5304 Flanders Drive, Suite A
Baton Rouge, Louisiana 70808

SUBJECT: Categorical Exclusion

ATTN: Mr. Mark Stinson
Mr. Bob Mahoney

Dear Mr. Bolinger:

Attached is the Environmental Checklist with a copy of the application for the captioned project. Based on the information contained herein, Louisiana Department of Transportation and Development (DOTD) believes this project meets the requirements for classification as a Categorical Exclusion.

On June 19, 2015, Louisiana State Historic Preservation Office (SHPO) concurred that this project would not affect historic properties. However, due to the addition of two roundabouts to the project description, DOTD resubmitted the Cultural Resources findings to SHPO on February 2, 2016. We anticipate concurrence on or around March 2, 2016. Upon receipt of the stamped SHPO concurrence letter, DOTD will forward the correspondence to your office.

Per the Wetland Finding (Appendix C), there are approximately **1.655 acre of potentially jurisdictional herbaceous wetlands** and approximately **3.366 acres of other waters of the U.S. within the project right-of-way**. The Department of the Army, New Orleans District, Corps of Engineers, will determine whether the identified areas are jurisdictional and the impact acreage that must be permitted with a Department of the Army, Clean Water Act permit prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the U.S.

In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations. Per request, **the project manager will include this stipulation on the construction plans to insure contractors are aware of the commitment.**

Mr. Wes Bolinger
February 10, 2016
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Additionally, a stormwater permit, a levee permit, and a U.S. Coast Guard, Navigational Lights determination will be required for this project. If you have any questions or comments please contact Maria Bernard Reid at (225) 242-4506.

Sincerely,

Noel Ardoin
Environmental Engineer Administrator



Maria Bernard Reid
Environmental Impact Manager

NA/MBR/mbr
attachments

cc: Nicholas Olivier

APPROVED

CARL M. HIGHSMITH
PROJECT DELIVERY TEAM LEADER
FEDERAL HIGHWAY ADMINISTRATION
DATE 2-18-16

REVIEWED AND RECOMMENDED FOR
APPROVAL 
DATE 2/17/2016

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

AND

**LOUISIANA DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT**

CATEGORICAL EXCLUSION

FOR

STATE PROJECT NO. H.003014

F.A.P. NO. H003014

I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE

ROUTE: I-10

ST. MARTIN PARISH



FEBRUARY 2016

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SUMMARY OF MITIGATION, PERMITS, AND ENVIRONMENTAL COMMITMENTS

Mitigation

The Louisiana Department of Transportation and Development (DOTD) will implement the following mitigation measures to ensure that adverse environmental impacts associated with the project are avoided or minimized to the extent practicable.

- The contractor will be required to adhere to the provisions established by the *Louisiana Standard Specifications for Roads and Bridges*, 2006 edition concerning erosion control, as well as other federal, state, and local permits that may be required.
- The proposed project would impact approximately **1.655 acre of jurisdictional herbaceous wetlands** and approximately **3.366 acres of other waters of the U.S.** This finding is pursuant to the *Army Corps of Engineers' 1987 Manual* (or *2010 Regional Supplement*) with subsequent clarification memoranda and pursuant to confirmation by the Army Corps of Engineers. The Department of the Army, New Orleans District, Corps of Engineers, will determine whether the project impact areas are jurisdictional and the impact acreage that must be permitted with a Department of the Army, Clean Water Act permit prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the U.S.

Permits

It is anticipated that DOTD would acquire the following permits prior to commencement of construction activities:

- Louisiana Pollutant Discharge Elimination System (LPDES), Stormwater Permit
- Department of the Army, Clean Water Act, Nationwide Permit 23
- Atchafalaya Basin Levee District, Levee Permit
- U.S. Coast Guard, Navigational Lights determination

Commitments

In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations. Per request, **the project manager will include this stipulation on the construction plans to insure contractors are aware of the commitment.**

The Louisiana Department of Environmental Quality (LDEQ) stated that all precautions should be observed to control nonpoint source pollution from construction activities. LDEQ requires stormwater general permits for construction areas equal to or greater than 1 acre.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ENVIRONMENTAL DETERMINATION CHECKLIST

STATE PROJECT NO.: H.003014

NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE

ROUTE: I-10

PARISH: ST. MARTIN

1. General Information

- | | | |
|--|---|---|
| <input type="checkbox"/> Conceptual Layout | <input type="checkbox"/> Line and Grade | <input checked="" type="checkbox"/> Preliminary Plans |
| <input type="checkbox"/> Survey | <input type="checkbox"/> Plan-in-Hand | <input type="checkbox"/> Advance Check Prints |

2. Class of Action

- | | |
|--|---|
| <input type="checkbox"/> Environmental Impact Statement (E.I.S.) | <input type="checkbox"/> State Funded Only (EE/EF/ER) |
| <input type="checkbox"/> Environmental Assessment (E.A.) | |
| <input checked="" type="checkbox"/> Categorical Exclusion (CE) | |
| <input type="checkbox"/> Programmatic CE (as defined in FHWA letter of agreement dated 03/15/95) | |

3. Project Description

The Louisiana Department of Transportation and Development (DOTD) proposes a full-depth pavement rehabilitation within the existing travel lanes of Interstate 10 (I-10) from the west side of the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana. Additionally, the west bound pavement would be widened to accommodate three traffic lanes, and two roundabouts would be built at the interstate ramp intersections with LA 347. Intersection improvements are proposed at LA 352 and LA 347. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres. DOTD does not anticipate the need for additional right-of-way. Refer to the Project Description Section (page 1) of the CE for additional project information.

4. Public Involvement

- ☒ Views were solicited. **April 6, 2015 and October 8, 2015 (See Appendix A of CE)**
- ☐ Views were not solicited.
- ☒ Public Involvement events held. (List events and dates in Section 11.)¹
- ☐ A public hearing/opportunity for requesting a public hearing required. (List dates in Section 11.)
- ☐ A public hearing/opportunity for requesting a public hearing not required.

5. Real Estate

- | | NO | YES | N/A |
|--|-------------------------------------|--------------------------|--------------------------|
| a. Will additional right-of-way be required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is right of way required from a burial/cemetery site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is right-of-way required from a Wetland Reserve Program (WRP) property? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is required right-of-way prime farmland ? (Use form AD 1006, if needed) ... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Will any relocation of residences or businesses occur? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Are construction or drainage servitudes required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

6. Section 4(f) and Section 6(f)

- | | NO | YES | N/A |
|--|-------------------------------------|--------------------------|--------------------------|
| a. Will historic sites or publicly owned parks, recreation areas, wildlife or waterfowl refuges (Section 4f) be affected? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Are properties acquired or improved with L&WC funds affected? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7. Cultural Section 106

		NO	YES	N/A
a.	Are any known historic properties adjacent or impacted by the project? (If so, list below).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ²
b.	Are any known archaeological sites adjacent or impacted by the project? (If so, list site # below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ²
c.	Would the project affect property owned by or held in trust for a federally recognized tribal government ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Natural & Physical Environment

		NO	YES	N/A
a.	Are wetlands affected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> ³
b.	Are other waters of the U.S. affected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> ³
c.	Are Endangered/Threatened Species/Habitat affected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Is project within 100-Year Floodplain ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> ⁴
e.	Is project in Coastal Zone Management Area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Is project in a Coastal Barrier Resources area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Is project on a Sole Source Aquifer ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> ⁵
h.	Is project impacting a navigable waterway ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Are any State or Federal Scenic Rivers/Streams impacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j.	Is a noise analysis warranted (Type I project)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k.	Is an air quality study warranted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l.	Is project in a non-attainment area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m.	Is project in an approved Transportation Plan, Transportation Improvement Program (TIP) and State Transportation Improvement Program (STIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
n.	Are construction air, noise, & water impacts major?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o.	Will the project affect or be affected by a hazardous waste site , leaking underground storage tank, oil/gas well, or other potentially contaminated site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Social Impacts

		NO	YES	N/A
a.	Will project change land use in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Are any churches and schools impacted by or adjacent to the project? (If so, list below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Has Title VI been considered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Will any specific groups be adversely affected? (i.e., <i>minorities, low-income, elderly, disabled, etc.</i>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Are any hospitals, medical facilities, fire police facilities impacted by or adjacent to the project? (If so, list below).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Will Transportation patterns change?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Is Community cohesion affected by the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	Are short-term social/economic impacts due to construction considered major?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Do conditions warrant special construction times ? (i.e., <i>school in session, congestion, tourist season, harvest</i>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j.	Were Context Sensitive Solutions considered? (If so explain below).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k.	Were bike and pedestrian accommodations considered? (explain below).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l.	Will the roadway/bridge be closed ? (If yes, answer questions below).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Will a detour bridge be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Will a detour road be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Will a detour route be signed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Permits (Check all permits that may be required)

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Corps Nationwide | <input type="checkbox"/> CUP/Consistency Determination | <input type="checkbox"/> LA Scenic Stream |
| <input type="checkbox"/> Corps Section 404/10 | <input type="checkbox"/> USCG Bridge | <input type="checkbox"/> DEQ WQC |
| <input checked="" type="checkbox"/> Levee | <input checked="" type="checkbox"/> USCG Navigational Lights | <input checked="" type="checkbox"/> LPDES Stormwater |
| <input type="checkbox"/> Other (explain below) | | |

11. Other (Use this space to explain or expand answers to questions above.)

¹**Section 4** – Two Public Meetings were held at the Recreational Building in Henderson, LA for this project: on May 28, 2015 and on November 19, 2015. Transcripts of the Public Meetings are included as Appendix B of the CE.

²**Section 7(a,b)** – Refer to Cultural Resources Section (page 3) and Appendices A and C of CE.

³**Section 8(a,b)** – Refer to Wetlands Section (page 4) and Appendix D of CE.

⁴**Section 8(d)** – Refer to Floodplains Section (page 5) and Appendix A of CE.

⁵**Section 8(g)** – Refer to Sole-Source Aquifer Section (page 5) and Appendix C of CE.

Preparer: Maria Bernard Reid
Title: Environmental Impact Manager
DOTD Environmental Section
Date: February 12, 2016

Attachments

- ☒ S.O.V. and Responses (April 6, 2015 and October 8, 2015, See Appendix A)
- ☒ Wetlands Finding (See Appendix D)
- ☐ Project Description Sheet
- ☐ Conceptual Stage Relocation Plan
- ☒ Noise Analysis (See Appendix E)
- ☐ Air Analysis
- ☒ Exhibits and/or Maps (See Appendix F)
- ☐ 4(f) Evaluation
- ☐ Form AD 1006 (Farmlands)
- ☒ 106 Documentation (See Appendix C)
- ☒ Other: Appendix B: Public Meeting Transcripts

PROJECT DESCRIPTION

The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitation within the existing right-of-way of Interstate 10 (I-10) from the west side of the Louisiana Highway (LA) 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana using federal funding. The project area is located in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30 or beginning at 30.314626, -91.836068 and ending at 30.323675, -91.791379.

Currently, I-10 consists of two travel lanes in each direction. The project would include full-depth replacement of the pavement within the existing lanes, widening the westbound pavement surface, and installing concrete median protection.

Pavement striping, raised markers, and rumble strips would also be installed. Post construction, eastbound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The westbound pavement will be striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 16-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the westbound Bayou Portage bridge.

Intersection improvements include the construction of two roundabouts at the eastbound and westbound I-10 ramp termini and access changes at the LA 347 and LA 352 signalized intersection.

- The roundabouts would have a single circular roadway with an 18-foot wide lane and a 13-foot wide truck apron. The roundabouts will be approximately 150 feet in diameter. The roadways approaching the roundabout (north and southbound LA 347 and I-10 on/off ramps) would have 12-foot wide lanes with 3-inch mountable curbs.
- The LA 347 and LA 352 intersection would be reconfigured, allowing right turns out of LA 352 going northbound on LA 347 and the signal would be removed. Motorists desiring to travel south on LA 347 from LA 352 would proceed north on LA 347, travel around the roundabout, to continue south on LA 347.

Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.

PURPOSE AND NEED

The purpose of and need for this project is to rehabilitate the existing pavement over the length of the corridor and to provide additional westbound capacity and to improve the flow of traffic at the intersections of the I-10 exit/entrance ramps and LA 347.

ALTERNATIVES

There are two alternatives for this project—the proposed Build Alternative and the No-Build Alternative. The Build Alternative would include a full-depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges and widen the westbound pavement. The Build Alternative also includes the construction of a roundabout at each of the intersections of the I-10 exit/entrance ramps and LA 347 and intersection improvements at LA 347 and LA 352. The No-Build Alternative would not change the existing I-10 pavement.

IMPACTS

Right-of-Way

The project area is approximately 119.6 acres. No additional right-of-way is required for this project. There will be no displacements as a result of this project.

Wetland Reserve Program

This project is not located within a wetland reserve program area.

Prime Farmland

The Natural Resources Conservation Service (NRCS), through its solicitation of views (SOV) response dated October 15, 2015, stated that the proposed construction areas are within existing rights-of-way and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act, Subtitle I of Title XV, Section 1539-1549.

Section 4(f)/Section 6(f) Properties

Section 4(f) Properties

Section 4(f) of the Department of Transportation Act (49 U.S.C. 303) requires the Department of Transportation to avoid public parks, recreation areas, wildlife and waterfowl refuges, and historic sites unless there is no prudent and feasible alternative to such use and all practical measures to minimize harm to the area have been included in the project. On June 19, 2015, Louisiana State Historic Preservation Office (SHPO) concurred that this project would not affect historic properties (see Appendix C).

Section 6(f) Properties

Section 6(f) refers to parks that receive funding through the Land and Water Conservation Fund Act (916 U.S.C. 4601-4 to 4601-11). Properties acquired or developed under this act cannot be converted to uses other than public outdoor recreation areas without the approval of the Secretary of the Interior.

The Department of Culture, Recreation & Tourism, Office of State Parks, through its SOV response dated April 14, 2015, stated that there are no parks, sites, or other recreational areas located near the project and has no objections or concerns. No 4(f) or 6(f) properties would be impacted by the proposed project.

Section 106 and Cultural Resources

Cultural Resources

The Areas of Potential Effect (APE) are the limits of construction within the existing rights-of-way.

DOTD staff consulted the GIS databases maintained by the Louisiana Divisions of Historic Preservation and Archaeology to determine if any historic properties, including archaeological sites or standing structures eligible for or listed on the National Register of Historic Places (NRHP) were located within the APE (the proposed project corridor). Two archaeological surveys have been conducted within the APE. No historic properties were identified within the APE as a result of these surveys. A Phase IA archaeological survey (22-2327), conducted by Earth Search, Inc. in 2000 for a proposed fiber optic route, extended the length of the APE. The survey consisted of a background/literature search, an inspection of the corridor, a site file check and a sensitivity assessment as well as site monitoring. A Phase I cultural resources survey (22-3760), conducted by URS Corporation in 2011, is partially within the APE and did not identify any sites within or adjacent to the APE. As a result of these surveys, the Louisiana Division of Archaeology (LDOA) recommended no further field investigations, because the proposed fiber optic route runs through existing Interstate right-of-way.

The Interstate System is over 50 years of age, however the Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption regarding effects to the Interstate Highway System on March 10, 2005. Although the Interstate is exempt, the proposed undertaking effect on other historic properties must be taken into consideration. All bridges and culverts within the APE (Table 1) on the Interstate are considered exempt.

Table 1: Interstate Bridges.

Structure No.	Year Constructed	Bridge Type	Crossing
03284500607492 03284500607491	1970	Steel Plate Girder Continuous	LA 347
03284500609522 03284500609521	1970	Concrete Pre-stressed Girders	Bayou Portage

On June 19, 2015, Louisiana SHPO concurred that this project would not affect historic properties (see Appendix C).

In their SOV response dated May 14, 2015, the Jena Band of Choctaw Indians request that a survey occur prior to ground disturbance and that all cultural or archaeological sites within one mile of the project area be examined and provided to the tribe for review. On June 22, 2015, DOTD provided the Section 106 documentation prepared for the project to the Jena Band of Choctaw Indians. On November 30, 2015, the Jena Band of Choctaw

concurred with DOTD's finding that no historic properties would be affected by the project. Due to the addition of the roundabouts to the project description, all Section 106 documentation was resubmitted to SHPO on February 2, 2016 and will be forwarded to the Jena Band of Choctaw upon receipt of SHPO concurrence on or about March 2, 2016.

The Alabama-Coushatta Tribe of Texas indicated in their SOV response dated May 15, 2015, that no immediately known impacts to cultural assets of the Tribe are anticipated. However, it is the Tribe's objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations. In the event of the inadvertent discovery of human remains and/or archaeological artifacts of American Indian origin, activity in proximity to the location must cease and appropriate authorities, including the Alabama-Coushatta Tribe of Texas, be notified without delay for additional consultations.

Natural Environment

Wetlands and Other Waters of the U.S.

The Department of the Army, New Orleans District, Corps of Engineers, through its SOV response dated April 14, 2015, stated that there are no anticipated adverse impacts to any Corps of Engineers projects resultant of this project. Based on review of recent maps, aerial photography, and soils data, the New Orleans District determined that the project area is indicative of the occurrence waters of the U.S., including wetlands. A Department of the Army permit under Section 404 of the Clean Water Act will be required for the deposition or redistribution of dredged or fill material on this site. Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may also be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

DOTD contracted Fenstermaker and Associates, LLC (Fenstermaker) to conduct a field survey for the project area. Fenstermaker biologists conducted surveys on February 12, 2015. Fenstermaker's delineation found that the proposed project would impact **approximately 3.366 acres of potentially jurisdictional Other Waters of the U.S. and 1.655 acre of potentially jurisdictional herbaceous wetlands.** The Wetland Finding Report can be found in Appendix D.

This recommendation will be sent to the New Orleans District, Corps of Engineers, which will determine the acreage of jurisdictional wetlands and other waters of the U.S. within the project area subject to regulation pursuant to Section 404 of the Clean Water Act. A Department of the Army Section 404 (Nationwide) permit will be required prior to beginning work.

Threatened/Endangered Species

On June 18, 2015, the U.S. Fish and Wildlife Service, through its on-line Endangered Species Act and Migratory Bird Treaty Act Project Review tool indicated that the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within this Parish. Therefore, a "no effect" conclusion is appropriate.

The Louisiana Department of Wildlife and Fisheries (LDWF), Habitat Section of the Coastal & Nongame Resources Division, through its SOV response dated April 29, 2015, stated that no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the project site.

Floodplain

The DOTD Office of Public Works and Water Resources, Floodplain Management program, through its SOV response dated October 23, 2015, indicated that portions of the proposed project are within designated floodplains. In order to assure compliance with the National Flood Insurance Program and to ensure that appropriate permits are obtained, DOTD Floodplain Management Program requested that the project proponents should also coordinate with the St. Martin Parish Floodplain Administrator, Ms. Shanny Dodge and the municipal coordinator Henderson, Ms. Sue Dupuis.

In addition, during the improvements and construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must be given to the responsibility for cleaning debris and keeping the surrounding area clear so as not to interfere with its function.

The Federal Emergency Management Agency, through its SOV response dated October 14, 2015 also requested compliance with Executive Orders 11988 and 11990 and coordination with local Floodplain Administrators.

No negative comments were received from the St. Martin Parish Floodplain Administrator (Ms. Shanny Dodge), the Town of Henderson Floodplain Administrator (Ms. Sue Dupuis), or the City Engineer.

Coastal Zone Management Area

The project is located outside of the Louisiana Coastal Zone Management Area.

Coastal Barrier Resources Area

The project is not located within a Coastal Barrier Resources Area.

Sole Source Aquifer

The U.S. Environmental Protection Agency, through its SOV response dated December 9, 2015, concluded that the project is located on the Chicot aquifer system which has been designated a sole source aquifer. Based on the project information provided in the SOV, the U.S. Environmental Protection Agency has determined that the project should not have an adverse effect on the quality of the ground water underlying the project site.

Navigability

The bridges along the project corridor cross one waterbody, Bayou Portage. The U.S. Coast Guard through correspondence dated December 11, 2014, determined that the crossings are exempt from permitting for Coast Guard Bridge Administration purposes under the Surface Transportation Authorization Act. The bridges should all be provide for navigational clearances to accommodate any recreational boating that may exist at high

water and should be at an appropriate elevation to pass floodwaters. However, the U.S. Coast Guard has also stated that the bridges are not exempt from the required lights and other signals. The Coast Guard required that DOTD requests the lighting exemptions and provide the reason, the only exemption being Title 22 CFR 118.40(b). The statement of the reason for this exemption must fulfill the requirements of this section. Specifically, if it is determined that no significant nighttime navigation occurs at these bridge sites, a statement to this effect is required before a decision can be made. This determination shall be made and provided to the U.S. Coast Guard prior to the start of construction.

Scenic Streams

There are no scenic streams located within the proposed project area.

Physical Environment

Noise

The current Louisiana Highway Traffic Noise Policy requires a noise analysis be conducted for a Type I project that involves the addition of through-traffic lanes (additional capacity) or a significant change in the horizontal or vertical alignment. The proposed project adds capacity in the west bound lanes.

A noise analysis was conducted by DOTD covering I-10 from LA 328 eastward to the Atchafalaya Floodway Bridge. Thirty-five sensitive noise receptors were identified in the analysis area, 11 of which are within the project area for this project. Noise levels were modeled for existing conditions, future levels without the project or a No Build alternative, and future levels with the implementation of the proposed project. The models showed that all 11 of the sensitive receivers are impacted currently with the existing conditions; all 11 sensitive receivers would be impacted in the future No Build alternative; and all 11 sensitive receivers would be impacted with the implementation of the proposed project. The noise analysis also determined if noise abatement barriers would be feasible and reasonable for the impacted areas within the project corridor. Multiple barrier simulations were modeled in order to determine effectiveness of installing a noise wall. Costs were generated using DOTD noise barrier cost estimates. None of the barriers modeled met the criteria for both reasonableness and feasibility; therefore, none will be built for this project. A summary of the findings are provided in Appendix E.

Air

Transportation conformity is a process required of Metropolitan Planning Organizations (MPOs) pursuant to the Clean Air Act Amendments of (CAAA) of 1990. CAAA require that transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved by the FHWA be in conformity with the State Implementation Plan, which represents the State's plan to either achieve or maintain the National Ambient Air Quality Standards (NAAQS) for a particular pollutant. The proposed project is not located in a nonattainment or maintenance area, so conformity does not apply to this project.

St. Martin Parish is classified as in attainment with the NAAQS and have no general conformity determination obligations.

Oil, Gas, and Water Wells

The Louisiana Department of Natural Resources (LDNR) through its SOV response on November 3, 2015, requested that DOTD use the Strategic Online Natural Resources Information System (SONRIS) to determine the location of oil, gas and water wells within the project area. SONRIS indicates that 20 oil or gas wells and two injection wells are located within 1 mile of the project area.

LDNR SONRIS identified 141 domestic and commercial water wells within 1 mile of the project area. The proposed project would not impact the quality or quantity of groundwater available.

Water

All precautions should be observed to control nonpoint source pollution from construction activities. Louisiana Department of Environmental Quality has stormwater general permits for construction areas equal to or greater than 1 acre. The project area is larger than 1 acre; therefore, a stormwater permit will be required.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment was not conducted for this project, because there is no requirement for right-of-way acquisition.

Construction Impacts

Short-term impacts, such as construction noise, possible traffic delays, and temporary increase in air pollution are expected. However, pursuant to Section 107.14 of the *Louisiana Standard Specifications for Roads and Bridges* entitled “Environmental Protection,” the contractor shall comply with federal, state, and local laws and regulations controlling pollution of the environment, including air, water, and noise.

Socio-Economic

Executive Order 12898 directs Federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of Federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The immediate area surrounding the project site is not densely populated. The area is mostly rural with some commercial and light industrial development. Generally, homes are not associated with planned neighborhoods.

U.S. Census population estimate for St. Martin Parish, 33.3 percent of the population are minorities and 18.2 percent of the populous lives below the poverty level. The proposed project would cause temporary increases in noise and fugitive dust emissions for residence near the project corridor during construction; however, normal ambient noise levels and air quality would return following the completion of construction. Generalized adverse impacts such as potential traffic delays during construction would be shared equally among all residents who travel the I-10 corridor. All residents would also equally enjoy the benefits of the projected improvements.

There is no information to suggest that any person's civil rights will be violated, as set forth in the U.S. Department of Transportation regulations relating to Title V of the Civil Rights

Act of 1964. Access opportunities for handicapped or non-literate individuals are not expected to be adversely impacted due to the proposed project. For pedestrians and persons who do not drive in the area, the proposed project does not decrease access opportunities.

As demonstrated above, no minority or low-income populations have been identified that would be disproportionately impacted by the proposed project. Therefore, no further environmental justice analysis is required.

COMMENTS AND COORDINATION

Early in the planning stage, SOV data were sent to all appropriate federal, state, and local agencies and officials on April 6, 2015 and again on October 8, 2015 in order to identify possible adverse social, economic, or environmental effects of the proposed highway location and/or design. No adverse or negative comments were received. Copies of the SOV letters, description, map, mailing list, and all responses are included in Appendix A.

Two public meetings were held to provide the public the opportunity to comment on the project. The open house-style meetings were held on May 28, 2015 and November 19, 2015 from 4:00 to 7:00 pm at the Henderson Recreation Building. No comments were received at the May meeting and three comments were received at the November Meeting. Transcripts of the meetings are provided in Appendix B. Two of the comments received in November were regarding the roundabouts on LA 347. Specifically, the concerns were that the roundabout concept is new for the area and residents may need educational help when learning to drive through the area; and concerns regarding the suitability of the roundabouts for bicycle traffic.

Appendix A

Solicitation of Views



Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

April 6, 2015

STATE PROJECT NO.: H.003014
FEDERAL AID PROJECT NO.: H003014
NAME: I-10: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISH: ST. MARTIN

SUBJECT: RE-SOLICITATION OF VIEWS

In the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist the Louisiana Department of Transportation (DOTD) in conjunction with the Federal Highway Administration (FHWA) with the early identification of possible adverse economic, social, or environmental efforts or concerns. Your assistance in this regard will be appreciated.

We have attached a map showing the general location of the proposed project, along with a preliminary project description.

Views for this project were solicited as part of a grouped solicitation of views (August 4, 2014) for projects along I-10 from I-49 to the Atchafalaya Floodway Bridge. **At the time of the grouped solicitation, the plans for this project did not include widening the travel surface.** Therefore, we request that you review the attached information and furnish us with your views and comments by **May 13, 2015**. Replies should be addressed to DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply.

If you have any questions or require additional information, please contact Maria Bernard Reid at (225) 242-4506.

Sincerely,

Noel Ardoin
Environmental Engineer Administrator

Maria Bernard Reid
Environmental Impact Manager

enclosure

NA/MBR/mbr

cc: Project Manager
District Administrator
District Traffic Operations Engineer

PRELIMINARY PROJECT DESCRIPTION

STATE PROJECT NO: H.003014: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE

FEDERAL AID PROJECT NO.: H003014

ROUTE: I-10

ST. MARTIN PARISH

The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitation and widening within the existing right-of-way of Interstate 10 (I-10) from the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana using federal funding. The project area is in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30, or more specifically, it begins at 30.314626, -91.836068 and ends at 30.323675, -91.791379.

Currently, I-10 consists of two travel lanes in each direction. The project would include full-depth replacement of the pavement within the existing the lanes and a widening of pavement surface in each direct within the existing median with concrete median protection. The 2.08-foot depth existing pavement would be completely removed and repaved with 12 inches of treated subgrade layer, 8 inches of class II base course soil cement, 4 inches of class II base course crushed stone or recycled Portland cement concrete pavement, 10 inches of superpave asphaltic concrete binder course, 2 inches of superpave asphaltic concrete wearing course, and 1 inch of thin asphaltic concrete.

Pavement striping, raised markers, and rumble strips would also be installed. Post construction, eastbound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. This extra pavement would be available for incident management. The westbound pavement will striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the Bayou Portage bridges.

Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.

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Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

October 8, 2015

STATE PROJECT NO.: H.003014
FEDERAL AID PROJECT NO.: H003014
NAME: I-10: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISH: ST. MARTIN

SUBJECT: RE-SOLICITATION OF VIEWS

In the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist the Louisiana Department of Transportation (DOTD) in conjunction with the Federal Highway Administration (FHWA) with the early identification of possible adverse economic, social, or environmental efforts or concerns. Your assistance in this regard will be appreciated.

We have attached a map showing the general location of the proposed project, along with a preliminary project description.

Views for this project were solicited as part of a grouped solicitation of views (August 4, 2014) for projects along I-10 from I-49 to the Atchafalaya Floodway Bridge. At the time of the grouped solicitation, the plans for this project did not include widening the travel surface, so a second solicitation was sent on April 6, 2015. **Roundabouts at the Interstate 10 ramp termini on LA 347 and intersection access changes at LA 352 were added to this project.** Therefore, we request that you review the attached information and furnish us with your views and comments by **November 9, 2015**. Replies should be addressed to DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply.

If you have any questions or require additional information, please contact Maria Bernard Reid at (225) 242-4506.

Sincerely,

Noel Ardoin
Environmental Engineer Administrator

enclosure

NA/MBR/mbr

cc: Project Manager
District Administrator
District Traffic Operations Engineer

PRELIMINARY PROJECT DESCRIPTION

STATE PROJECT NO: H.003014: LA 347 to ATCHAFALAYA

FLOODWAY BRIDGE

FEDERAL AID PROJECT NO.: H003014

ROUTE: I-10

ST. MARTIN PARISH

The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitation and widening within the existing right-of-way of Interstate 10 (I-10) from the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge and intersection improvements at the I-10 ramps and LA 347 intersections and at the LA 352 and LA 347 intersection near the town of Henderson, Louisiana in St. Martin Parish. The project area is in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30, or more specifically, it begins at 30.314626, -91.836068 and ends at 30.323675, -91.791379.

Currently, I-10 consists of two travel lanes in each direction. The project would include full-depth replacement of the pavement within the existing lanes, widening the westbound pavement surface, and installing concrete median protection.

Pavement striping, raised markers, and rumble strips would also be installed. Post construction, eastbound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The westbound pavement will be striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 16-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

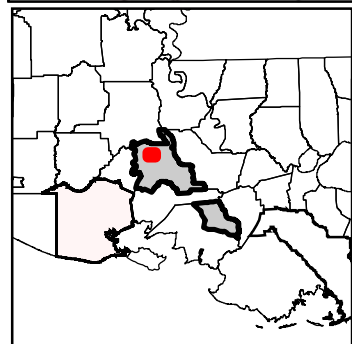
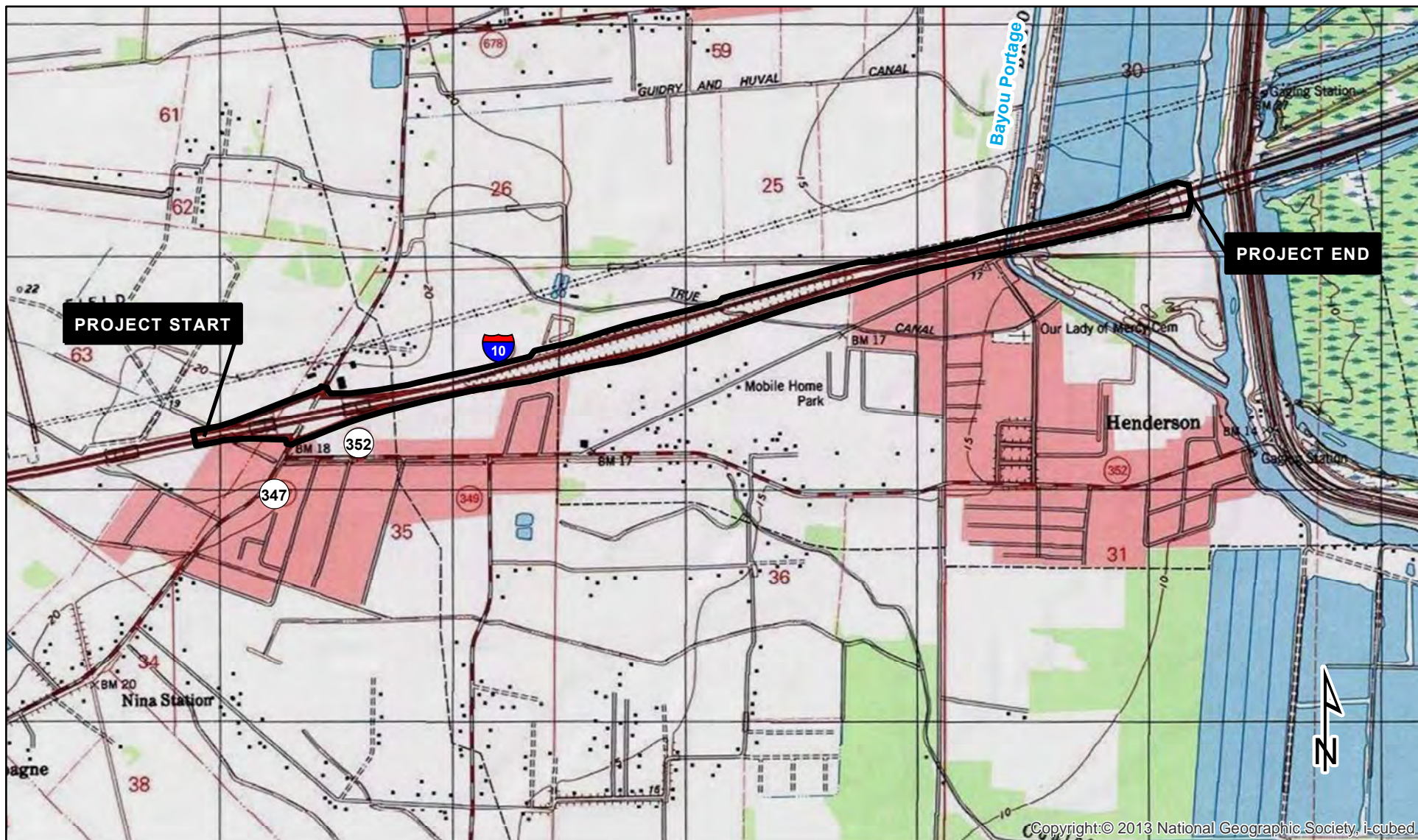
Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the westbound Bayou Portage bridge.

Intersection improvements include the construction of two roundabouts at the eastbound and westbound I-10 ramp termini and access changes at the LA 347 and LA 352 signalized intersection.

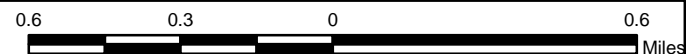
- The roundabouts would have a single circular roadway with an 18-foot wide lane and a 13-foot wide truck apron. The roundabouts will be approximately 150 feet in diameter. The roadways approaching the roundabout (north and southbound LA 347 and I-10 on/off ramps) would have 12-foot wide lanes with 3-inch mountable curbs.

- The LA 347 and LA 352 intersection would be reconfigured, allowing right turns out of LA 352 going northbound on LA 347 and the signal would be removed. Motorists desiring to travel south on LA 347 from LA 352 would proceed north on LA 347, travel around the roundabout, to continue south on LA 347.

Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.



Estimated Project Limits 



PROJECT LOCATION MAP

SOURCE: USGS 1:24,000 TOTOGRAPHIC MAP - CECILIA QUADRANGLE

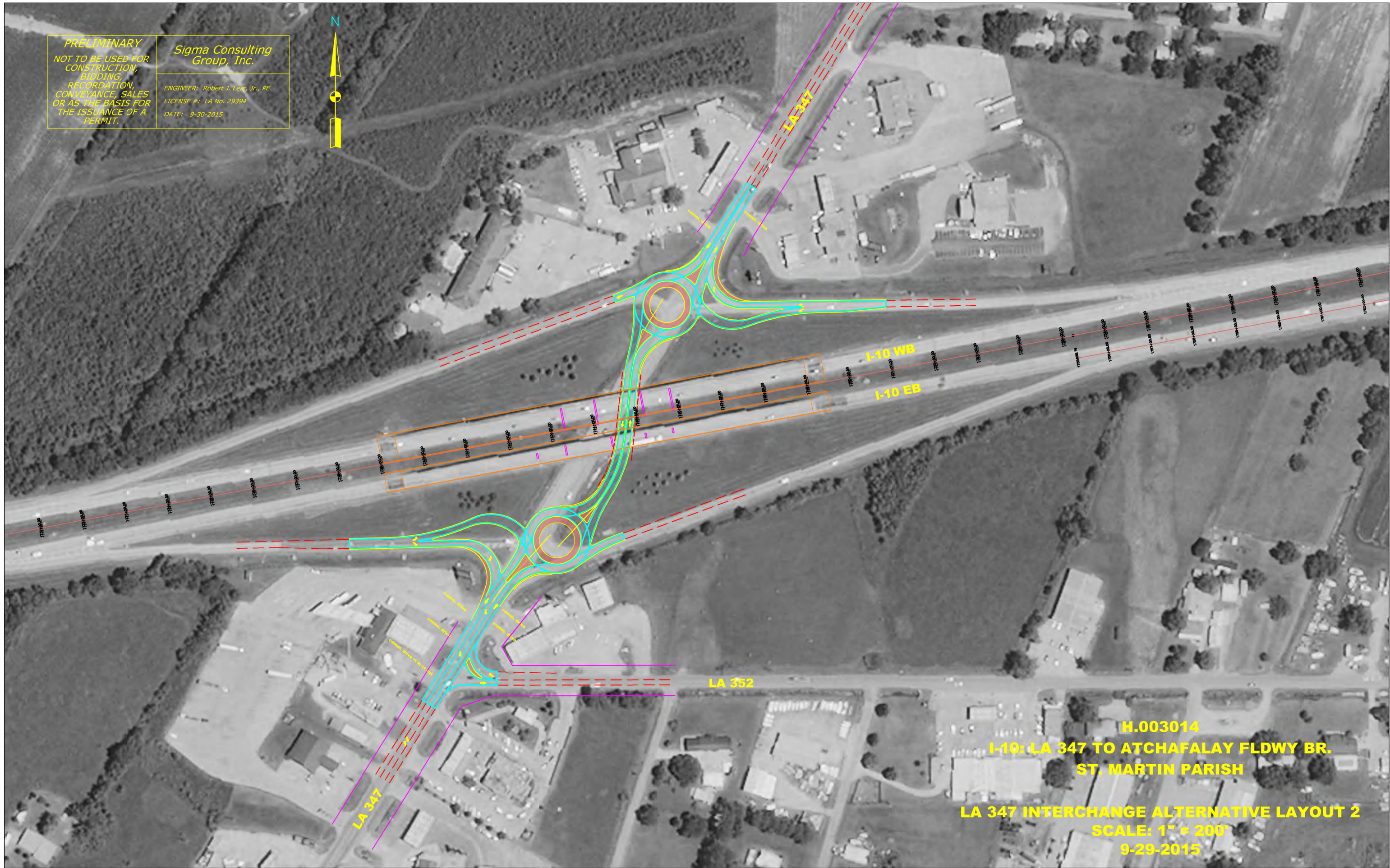
STATE PROJECT NO. H.003014
F.A.P. NO. H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH



PRELIMINARY
NOT TO BE USED FOR
CONSTRUCTION,
BIDDING,
RECORDATION,
CONVEYANCE, SALES
OR AS THE BASIS FOR
THE ISSUANCE OF A
PERMIT.

Sigma Consulting
Group, Inc.

ENGINEER: Robert J. Lenz, Jr., PE
LICENSE #: LA No. 29394
DATE: 9-30-2015



H.003014
I-10: LA 347 TO ATCHAFALAY FLDWY BR.
ST. MARTIN PARISH
LA 347 INTERCHANGE ALTERNATIVE LAYOUT 2
SCALE: 1" = 200'
9-29-2015

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FRC 800 NORTH LOOP 288
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FLOODPLAIN MANAGEMENT PROGRAM
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E-MAIL LETTERS TO KCARLETON@CHOCTAW.ORG
KCARLETON@CHOCTAW.ORG
Philadelphia MS 39350

NATURAL RESOURCES CONSERVATION SERVICE
KEVIN D. NORTON
3737 GOVERNMENT ST
Alexandria LA 71302

SEMINOLE NATION OF OKLAHOMA
EMAIL LETTERS TO NATALIE HARJO AT HARJO.N@SNO-NSN.
HARJO.N@SNO-NSN.GOV
Wewoka OK 74884

TUNICA-BILOXI TRIBE OF LOUISIANA
EARL J. BARBRY, JR., THPO
P.O. BOX 1589
Marksville LA 71351

U.S. FISH & WILDLIFE SERVICE
ONLINE USFWS SOV
WWW.FWS.GOV/LAFAYETTE
Lafayette LA 70506

U.S. GEOLOGICAL SURVEY
3535 S SHERWOOD FOREST STE 120
Baton Rouge LA 70806

U.S. HOUSE OF REPRESENTATIVES
HON. CEDRIC RICHMOND
(DISTRICT 2)
2021 LAKESHORE DR.
STE 309
NEW ORLEANS LA 70122

U.S. HOUSE OF REPRESENTATIVES
HON. CHARLES W. BOUSTANY, JR. MD
(DISTRICT 3)
800 LAFAYETTE ST.
SUITE 1400
Lafayette LA 70501

U.S. HOUSE OF REPRESENTATIVES
HON. GARRET GRAVES
(DISTRICT 6)
2351 ENERGY DRIVE, STE 1200
Baton Rouge LA 70808

U.S. HOUSE OF REPRESENTATIVES
HON. JOHN FLEMING
(DISTRICT 4)
6425 YOUREE DRIVE STE 350
Shreveport LA 71105

U.S. HOUSE OF REPRESENTATIVES
HON. RALPH ABRAHAM
(DISTRICT 5)
417 CANNON HOUSE OFFICE BUILDING
Washington DC 20515

U.S. HOUSE OF REPRESENTATIVES
HON. STEVE J. SCALISE
(DISTRICT 1)
110 VETERANS BLVD., STE. 500
METAIRIE LA 70005

U.S. NATIONAL PARK SERVICE
SOUTHEAST REGION
100 ALABAMA ST, SW
1924 BUILDING
Atlanta GA 30303

UNITED STATES SENATE
SENATOR BILL CASSIDY M.D.
5555 HILTON AVENUE
SUITE 100
Baton Rouge LA 70808

UNITED STATES SENATE
SENATOR DAVID VITTER
2800 VETERANS MEMORIAL BLVD STE 201
Metairie LA 70002

USEPA
REGION 6
6 EN-XP
1445 ROSS AVE, STE 1200
Dallas TX 75202-2733

8TH COAST GUARD DISTRICT (NO)
DISTRICT COMMANDER
HALE BOGGS FEDERAL BUILDING
500 POYDRAS ST
New Orleans LA 70130

ACADIANA REGIONAL DEV DISTRICT
DIRECTOR
PO BOX 90070
LAFAYETTE LA 70509

ALABAMA COUSHATTA TRIBE OF TEXAS
BRYANT CELESTINE, HISTORIC PRESERVATION
571 STATE PARK RD 56
LIVINGSTON TX 77351

CHITIMACHA TRIBE OF LOUISIANA
KIMBERLY WALDEN, CULTURAL DIRECTOR
P.O. BOX 661
CHARENTON LA 70523

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT CORPS
REGULATORY BRANCH
P O BOX 60267
NEW ORLEANS LA 70160-0267

HON. ELBERT L. GUILLORY
LOUISIANA STATE SENATE
(DISTRICT 24)
633 EAST LANDRY ST
OPELOUSAS LA 70570

HON. FRED H. MILLS JR.
LOUISIANA STATE SENATE
(DISTRICT 22)
1010 MARTIN ST
PARKS LA 70582

HON. MIKE HUVAL
LA HOUSE OF REPRESENTATIVES
(DISTRICT 46)
391 CANNERY RD.
BREAUX BRIDGE LA 70517

HON. RICK WARD III
LOUISIANA STATE SENATE
(DISTRICT 17)
3741 HIGHWAY 1
PORT ALLEN LA 70767

HON. SAM JONES
LA HOUSE OF REPRESENTATIVES
(DISTRICT 50)
733 MAIN ST
FRANKLIN LA 70538

HON. SAM JONES
LA HOUSE OF REPRESENTATIVES
(DISTRICT 50)
733 MAIN ST
FRANKLIN LA 70538

HON. TAYLOR BARRAS
LA HOUSE OF REPRESENTATIVES
(DISTRICT 48)
800 S. LEWIS ST.
STE.206 2ND FLOOR
NEW IBERIA, LA 70560

HON. TERRY LANDRY SR.
LA HOUSE OF REPRESENTATIVES
(DISTRICT 96)
800 S. LEWIS ST.
STE 201-B
NEW IBERIA LA 70560

KAREN CLEMENT
DEPT OF THE ARMY - TECH SUPPORT
ATTN: OD-W
P O BOX 60267
NEW ORLEANS LA 70538

LAFAYETTE CONSOLIDATED GOVERNMENT
METROPOLITAN PLANNING ORG
PO BOX 4017-C
LAFAYETTE LA 70502

LOUISIANA STATE POLICE
TROOP 1
121 EAST PONT DES MOUTON
LAFAYETTE LA 70507

ST MARTIN PARISH
FLOODPLAIN ADMINISTRATOR
P. O. BOX 9
ST MARTINVILLE LA 70582

ST MARTIN PARISH GOVERNMENT
P. O. BOX 9
ST MARTINVILLE LA 70582

ST MARTIN PARISH SCHOOL BOARD
P. O. BOX 859
ST MARTINVILLE LA 70582

ST. MARTIN IBERIA LAFAYETTE
SMILE COMMUNITY ACTION AGCY.
P.O. BOX 3343
LAFAYETTE LA 70502

ST. MARTIN PARISH SHERIFF
P. O. BOX 247
ST. MARTINVILLE LA 70582

ST. MARTIN SOIL & WATER
CONSERVATION DIST OF LA
114 COURTHOUSE STREET
BREAUX BRIDGE LA 70517



United States Department of Agriculture

April 10, 2015

Noel Ardoin
Environmental Engineer Administrator
LA DOTD
1201 Capitol Access Road
Baton Rouge, Louisiana 70802

RE: State Project No: H003014
Federal Aid Project No: H003014
Name: I-10: LA 347 to Atchafalaya Floodway Bridge
Route: I-10, St. Martin Parish

Dear Mr. Ardoin:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resources Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project maps and description submitted with your request indicates that the proposed construction areas are within existing right of ways, and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549.

For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location:

<http://websoilsurvey.nrcs.usda.gov/>

Please direct all future correspondence to me at the address shown above.

Respectfully,

Kevin D. Norton
State Conservationist

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: 1-844-325-6947
An Equal Opportunity Provider and Employer



October 15, 2015

LA DOTD, Environmental Section
Environmental Engineer Administrator
Attn: Noel Ardoin
P. O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views
State Project No. H.003014
I-10: LA 347 to Atchafalaya Floodway Bridge
St. Martin Parish

Dear Mr. Ardoin:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resources Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

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For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location:

<http://websoilsurvey.nrcs.usda.gov/>

Please direct all future correspondence to me at the address shown above.

Respectfully,

Kevin D. Norton
State Conservationist



JAY DARDENNE
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF STATE PARKS

CHARLES R. DAVIS
DEPUTY SECRETARY

DWIGHT LANDRENEAU
ASSISTANT SECRETARY

April 14, 2015

LA DOTD
P.O. Box 94245
Baton Rouge, La 70804

Re: State Project No. H.003014

Dear Noel Ardoin:

The Office of State Parks has reviewed your proposed project for improving and widening I-10 from LA 347 to the Atchafalaya Floodway Bridge in St. Martin Parish.

We have no parks, sites or other recreational areas located near this project and have no objections or concerns.

Best regards,

A handwritten signature in blue ink, appearing to read "Britt Evans".

Britt Evans
Natural Resources Manager

BE: be

Maria Reid

From: Alina Shively <ashively@jenachoctaw.org>
Sent: Thursday, May 14, 2015 10:56 AM
To: Maria Reid
Subject: H.003014, I-10-LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish

Dear Ms. Reid:

Thank you for providing us the Re-solicitation of Views for the above-mentioned project. Since the travel surface will be widened, the Jena Band of Choctaw Indians' THPO hereby requests a survey occur prior to ground disturbance and that any and all Cultural or Archaeological sites within one mile be examined and provided for review. Thank you.

Sincerely,

Alina J. Shively
Jena Band of Choctaw Indians
Deputy Tribal Historic Preservation Officer
P.O. Box 14
Jena, LA 71342
(318) 992-1205
ashively@jenachoctaw.org



ALABAMA-COUSHATTA TRIBE OF TEXAS

571 State Park Road 56 • Livingston, Texas 77351 • (936) 563-1100

May 15, 2015

DOTD

Environmental Engineer Administrator

P.O. Box 94245

Baton Rouge, LA 70804-9245

Dear Administrator:

On behalf of Mikko Colabe III Clem Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding H003014: Atchafalaya Floodway Bridge widening in St. Martin Parish.

Our Tribe maintains ancestral associations throughout the state of Louisiana despite the absence of written records to completely identify Tribal activities, villages, trails, or burial sites. However, it is our objective to ensure significances of American Indian ancestry, especially of Alabama-Coushatta origin, are administered with the utmost considerations.

Upon review of your April 6, 2015 submission, no known impacts to cultural assets of the Alabama-Coushatta Tribe of Texas are anticipated in conjunction with this proposal. In the event of the inadvertent discovery of archaeological artifacts and/or human remains, activity in proximity to the location must cease and appropriate authorities, including our Office, notified without delay for additional consultations.

Should you require further assistance, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryant J. Celestine".

Bryant J. Celestine

Historic Preservation Officer

Maria Reid

From: chandra.bondzie@dot.gov
Sent: Thursday, November 12, 2015 6:52 AM
To: Maria Reid
Cc: Robert.Mahoney@dot.gov
Subject: FW: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish) Choctaw Nation of Oklahoma

Good Morning Maria,

Please, see the information below from the Choctaw Nation regarding LA project H.003014. If I can provide any assistance with this matter, contact me at any time. Thank you and have a great morning.

Regards,

Chandra Bondzie | Community Planner | FHWA LA Division | 5304 Flanders Dr, Suite A Baton Rouge, LA 70808 | 225-757-7623

From: Lindsey Bilyeu [mailto:lbilyeu@choctawnation.com]
Sent: Monday, November 09, 2015 3:34 PM
To: Bondzie, Chandra (FHWA)
Subject: RE: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish) Choctaw Nation of Oklahoma

Chandra,

The Choctaw Nation of Oklahoma thanks the FHWA, Louisiana Division, for the correspondence regarding the above referenced project. St. Martin Parish, LA lies outside of the Choctaw Nation's area of historic interest. The Choctaw Nation Historic Preservation Department respectfully defers to the other Tribes that have been contacted.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu
NHPA Senior Section 106 Reviewer
Historic Preservation Department
Choctaw Nation of Oklahoma
P.O. Box 1210
Durant, OK 74701
580-924-8280 ext. 2631

From: chandra.bondzie@dot.gov [mailto:chandra.bondzie@dot.gov]
Sent: Wednesday, October 07, 2015 12:20 PM
To: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Cc: Maria.Reid@la.gov
Subject: FW: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish) Choctaw Nation of Oklahoma

Good Afternoon Lindsey,

Please, see the attached Solicitation of Views letter regarding LA project H.003014. Latitude and longitude coordinates are located on pg2 of the attachment. If you have need any further information, contact me at any time.

Thank you and have a great day.

Regards,

Chandra Bondzie | Community Planner | FHWA LA Division | 5304 Flanders Dr, Suite A Baton Rouge, LA 70808 | 225-757-7623

From: Jeannette Williams [<mailto:Jeannette.Williams@la.gov>]

Sent: Wednesday, October 07, 2015 11:49 AM

To: Bondzie, Chandra (FHWA)

Cc: Maria Reid

Subject: FW: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish) Choctaw Nation of Oklahoma

Please see attachment.

Thank you,

Jeannette Williams
Department of Transportation and Development
Environmental Department, Section 28
1201 Capitol Access Road
Baton Rouge, La. 70802
Jeannette.Williams@LA.gov
(225)242-4502

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.



Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

October 8, 2015

STATE PROJECT NO.: H003014
FEDERAL AID PROJECT NO.: H003014
NAME: I-10: LA 347 to ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISH: ST. MARTIN

SUBJECT: RE-SOLICITATION OF VIEWS


In the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist the Louisiana Department of Transportation (DOTD) in conjunction with the Federal Highway Administration (FHWA) with the early identification of possible adverse economic, social, or environmental efforts or concerns. Your assistance in this regard will be appreciated.

We have attached a map showing the general location of the proposed project, along with a preliminary project description.

Views for this project were solicited as part of a grouped solicitation of views (August 4, 2014) for projects along I-10 from I-49 to the Atchafalaya Floodway Bridge. At the time of the grouped solicitation, the plans for this project did not include widening the travel surface, so a second solicitation was sent on April 6, 2015. **Roundabouts at the Interstate 10 ramp termini on LA 347 and intersection access changes at LA 352 were added to this project.** Therefore, we request that you review the attached information and furnish us with your views and comments by **November 9, 2015**. Replies should be addressed to DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply.

If you have any questions or require additional information, please contact Maria Bernard Reid at (225) 242-4506.

Sincerely,



for Noel Ardoin
Environmental Engineer Administrator

enclosure

NA/MBR/mbr

cc: Project Manager
District Administrator
District Traffic Operations Engineer

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

 10-19-15
Phil Boggan Date
Deputy State Historic Preservation Officer



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

APR 14 2015

Ms. Noel Ardoin
Louisiana Department of
Transportation and Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Dear Ms. Ardoin:

This is in response to your Solicitation of Views request dated April 6, 2015, concerning the Interstate 10 pavement rehabilitation and widening within existing right-of-way from Louisiana Highway 347 to Atchafalaya Floodway Bridge project (State Project No. H.003014) in St. Martin Parish, Louisiana.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Information and signatures obtained from recent maps, aerial photography, information provided with your request, and local soil surveys concerning this site are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional wetlands or waters. If an approved delineation is needed, please furnish us with the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional wetlands or waters occurring on this property.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Darrell Barbara by telephone at (504) 862-2260 or by email at Darrell.Barbara@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2015-00779-MS. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

A handwritten signature in black ink that reads "Karen L. Clement". The signature is written in a cursive, flowing style.

Karen L. Clement
Solicitation of Views Manager



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

NOV 17 2015

Operations Division
Operations Manager,
Completed Works

Ms. Noel Ardoin
Louisiana Department of
Transportation and Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Dear Ms. Ardoin:

This is in response to your Solicitation of Views request dated October 8, 2015, concerning the addition of the Roundabouts at the Interstate 10 ramp termini on Louisiana Highway 347 and intersection access changes at Louisiana Highway 352 (State Project No. H003014) in St. Martin Parish, Louisiana.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

Information and signatures obtained from recent maps, aerial photograph, and local soil surveys concerning this site are indicative of the occurrence of waters of the United States, including wetlands. Department of the Army (DA) permits are required prior to the deposition or redistribution of dredged or fill material into jurisdictional wetlands or waters. If an approved delineation is needed, please furnish us with project drawings and the detailed field data concerning vegetation, soils, and hydrology that we require for all jurisdictional decisions. The fact that a field wetland delineation/determination has not been completed does not alleviate your responsibility to obtain the proper DA permits prior to working in jurisdictional wetlands or waters occurring on this property.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Darrell Barbara by telephone at (504) 862-2260 or by email at Darrell.Barbara@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2015-00779-MS. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

A handwritten signature in black ink that reads "Karen L. Clement". The signature is fluid and cursive, with the first name "Karen" being more prominent than the last name "Clement".

Karen L. Clement
Solicitation of Views Manager

Copy Furnished:

Ms. Christine Charrier
Coastal Zone Management
Department of Natural Resources
Post Office Box 44487
Baton Rouge, Louisiana 70804-4487



BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date April 29, 2015

Name Noel Ardoin

Company LA DOTD

Street Address P.O. Box 94245

City, State, Zip Baton Rouge, LA 70804-9245

Project State Project No. H.003014
I-10: LA 347 to Atchafalaya Floodway Bridge


Project ID

Invoice Number 15042908

Personnel of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats within Louisiana's boundary are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

for 
Amity Bass, Coordinator
Natural Heritage Program



BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date November 6, 2015

Name Noel Ardoin

Company LA DOTD

Street Address P.O. Box 94245

City, State, Zip Baton Rouge, LA 70804

Project State Project No.: H.003014
I-10: LA 347 to Atchafalaya Floodway Bridge


Project ID 2402015

Invoice Number 15110625

Personnel of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats within Louisiana's boundary are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,


Amity Bass, Coordinator
Natural Heritage Program



Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: Louisiana Department of Transportation and Development

Point of Contact: Maria Bernard Reid

Address: P.O. Box 94245

City: Baton Rouge

State: Louisiana

Zip Code: 70804

Phone Number 1: 225-242-4506

Phone Number 2: 225-242-4502

Email Address: maria.reid@la.gov

Proposed Project Information

Project Reference ID: 5107

Project Latitude: 30.31991 **Project Longitude:** -91.809529

Project Parish(es): Saint Martin

Project Description: The Louisiana Department of Transportation and Development (DOTD) proposes pavement rehabilitation within the existing travel lanes of Interstate 10 (I-10) from the west side of the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana using federal funding. The project area is located in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30 or beginning at 30.314626, -91.836068 and ending at 30.323675, -91.791379.

The project would include full-depth replacement of the pavement within the existing the lanes for the entire length of the project corridor with exception of the overpasses and bridges. The existing pavement would be completely removed and repaved with treated subgrade layer, class II base course soil cement, class II base course crushed stone or recycled Portland cement concrete pavement, superpave asphaltic concrete binder course, superpave asphaltic concrete wearing course, and a layer of thin asphaltic concrete. Pavement striping, raised markers, and rumble strips would also be installed.

Post construction, east bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The west bound pavement would



Louisiana Ecological Services Office

ESA Technical Assistance Form

striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 14-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the west bound Bayou Portage bridge.

Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.

Based on the information provided, the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within this Parish.

Therefore, a "no effect" conclusion is appropriate. No further ESA coordination with the Service is necessary for the proposed action, unless there are changes in the scope or location of the proposed project or the project has not been initiated one year from the date of this letter.

If the proposed project has not been initiated within one year, follow-up coordination via this website should be accomplished prior to making expenditures because our threatened and endangered species information is updated annually. If the scope or location of the proposed project is changed, coordination via this website should occur as soon as such changes are made.

This finding completes project review by the Service for effects to Federal trust resources under our jurisdiction and currently protected by the ESA.

Please keep a copy of this pre-development coordination for your records. Do not send it to the Lafayette ES Office.

If you have additional questions, please contact Louisiana ES Office Biological Science Technician at 337/291-3100 for further assistance.



Louisiana Ecological Services Office

6/18/2015

ESA Technical Assistance Form

Project Type: Other

Does the project propose to obtain, remodel, refurbish, or rehabilitate existing structures in such a way that does not significantly alter the present capacity or use, and does not alter surrounding land areas that were previously undisturbed? **No**

Does the project propose to reconstruct, resurface, or enhance infrastructure and/or cityscape (e.g. streets, sewers, sidewalks, etc.) within the current footprint of the infrastructure and in a manner that does not disturb previously undisturbed ground? **No**

Is the construction project located entirely within the footprint of an established urban/suburban area (incorporated villages, towns, or cities)? **Yes**



Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-379-3005 | fx: 225-379-3002

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

May 11, 2015

STATE PROJECT NO: H.003014
FEDERAL AID PROJECT NO: H003014
NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISHES: ST. MARTIN

Noel Ardoin
Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804

Subject: Solicitation of Views

Dear Noel:

Enclosed is a copy of St. Martin Parish's Flood Insurance Rate Maps (FIRM) indicating the proposed project.

During the improvements and construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must be given to the responsibility for cleaning debris and keeping the surrounding area clear so as not to interfere with its function.

In order to assure compliance with St. Martin Parish's requirements for the National Flood Insurance Program (NFIP), and ensure that appropriate permits are obtained, please contact the floodplain administrators for the Parish and the Town. The contact person for St. Martin Parish is Shanny Dodge, 303 W. Port Street, St. Martinville, LA 70582, and telephone number (337) 394-4252. Because the project is within the city limits of Henderson, you must also contact the floodplain administrator for the city. The contact person for Henderson is Sue Dupuis, P.O. Box 595, Henderson, LA 70517, and telephone number (337) 228-7115.

We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225)379-3005.

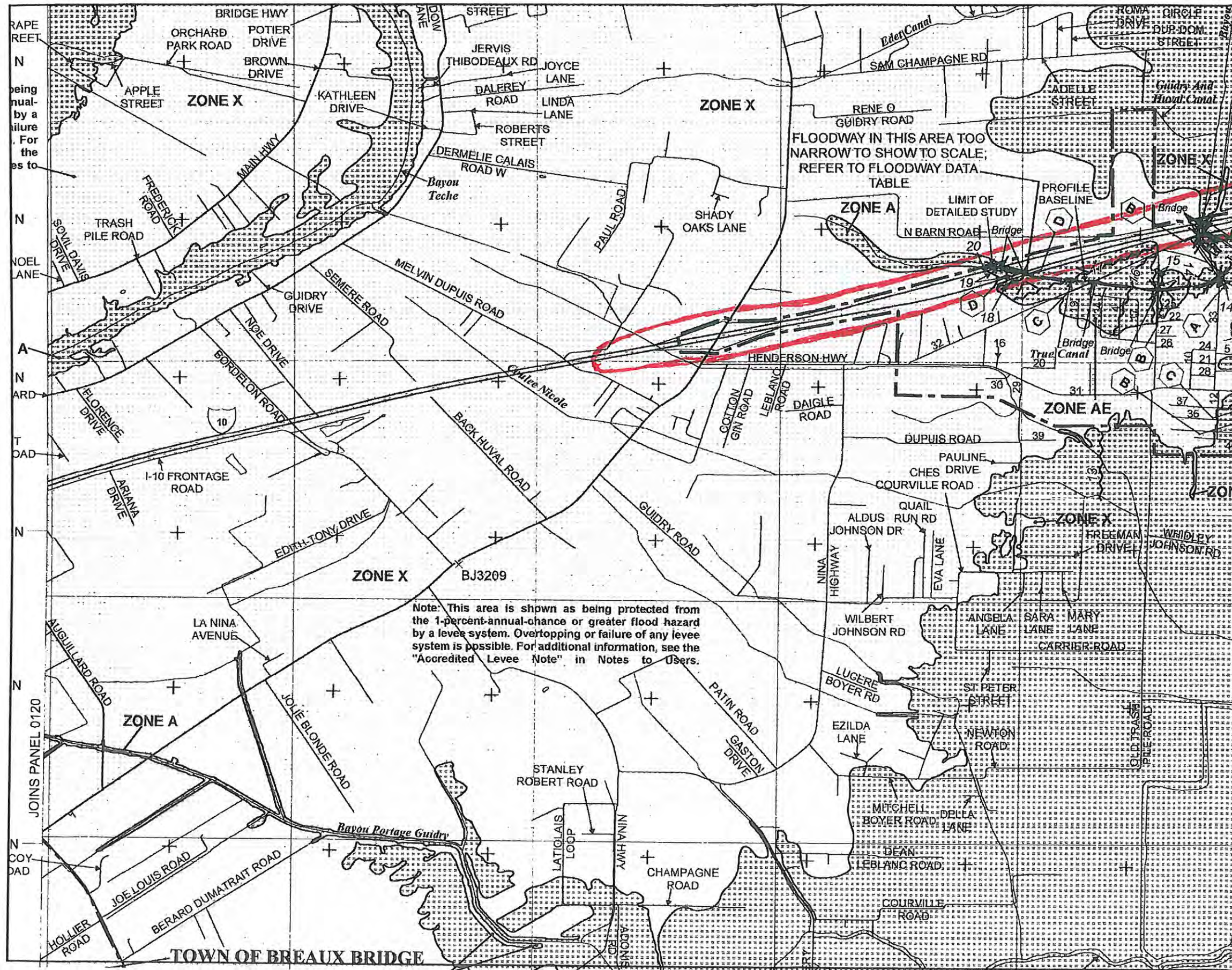
Sincerely,


Jennifer Deglandon Rachal

Floodplain Management Program Coordinator

Enclosure

pc: Shanny Dodge
Sue Dupuis





MAP SCALE 1" = 2000'

1000 0 2000 4000
FEET

PANEL 0150H

FIRM
FLOOD INSURANCE RATE MAP


**ST. MARTIN PARISH,
LOUISIANA
AND INCORPORATED AREAS**

PANEL 150 OF 700
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BREAUX BRIDGE, TOWN OF	220180	0150	H
HENDERSON, TOWN OF	220189	0150	H
ST. MARTIN PARISH	220176	0150	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

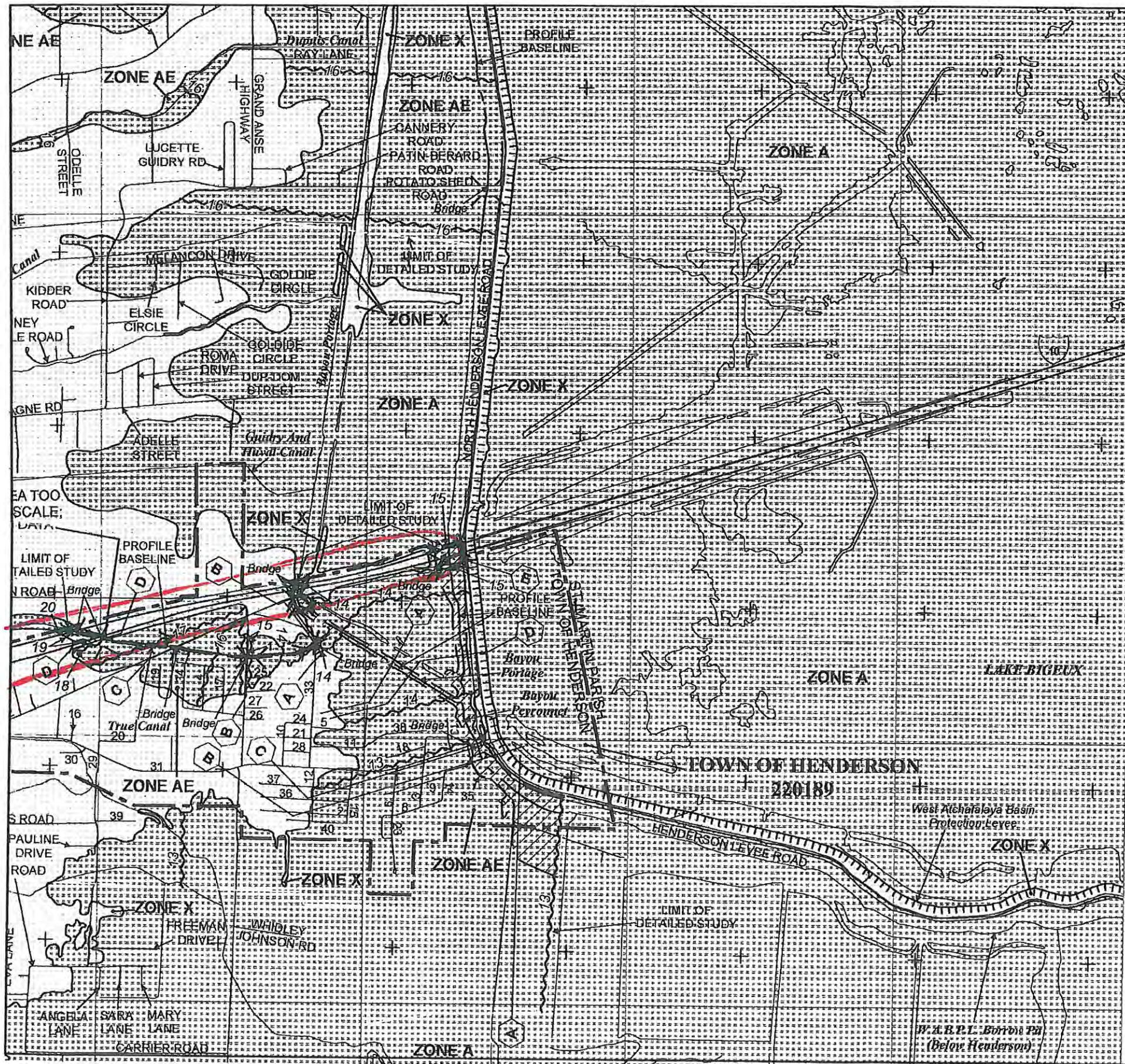



MAP NUMBER
22099C0150H
EFFECTIVE DATE
NOVEMBER 04, 2010

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

H. 003014: 1-10: LA 347 to Atchafalya Floodway Bridge 1 of 2





MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET

PANEL 0150H

FIRM

FLOOD INSURANCE RATE MAP


ST. MARTIN PARISH, LOUISIANA AND INCORPORATED AREAS

PANEL 150 OF 700
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BREAUX BRIDGE, TOWN OF	220180	0150	H
HENDERSON, TOWN OF	220189	0150	II
ST. MARTIN PARISH	220178	0150	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
22099C0150H

EFFECTIVE DATE
NOVEMBER 04, 2010

Federal Emergency Management Agency

670000 FT

KEY TO NUMBERED STREETS

- 1...PATIN STREET
- 2...DUPUIS STREET
- 3...HAYES STREET
- 4...JACK DRIVE
- 5...NOEL DRIVE
- 6...AMY STREET
- 7...WILLIAM DRIVE
- 8...WILTZ STREET
- 9...COLLETTE STREET
- 10...ALIDA DRIVE
- 11...LEBLANC DRIVE

665000 FT

- 12...BIJEAUX STREET
- 13...MELANCON
- 14...BERNARD STREET
- 15...ROBERTSON STREET
- 16...LOUIS DRIVE
- 17...ELIZABETH DRIVE
- 18...PERIOUX STREET
- 19...BENOIT DRIVE
- 20...BATISTE STREET
- 21...CANE DRIVE
- 22...EDITHA STREET
- 23...PARK DRIVE

660000 FT

- 24...LESTER DRIVE
- 25...ALCIDE STREET
- 26...NIG STREET
- 27...MOON STREET
- 28...HENDERSON DRIVE
- 29...LEGRANGE STREET
- 30...NUMA WYATT STREET
- 31...MAIN STREET
- 32...OLD HENDERSON HIGHWAY
- 33...HUVAL STREET
- 34...IRMA DRIVE
- 35...CANAL STREET
- 36...ROBIN STREET
- 37...DEVILLIER STREET
- 38...LEBLANC STREET
- 39...WALTER DRIVE
- 40...TALLEY STREET

655000 FT

H.003014: 1-10: LA 347 to Atchafalaya Floodway Bridge 2 of 2



Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-379-3005 | fx: 225-379-3002

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

October 23, 2015

STATE PROJECT NO: H.003014
FEDERAL AID PROJECT NO: H003014
NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISHES: ST. MARTIN

Noel Ardoin
Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804

Subject: Re-Solicitation of Views

Dear Noel:

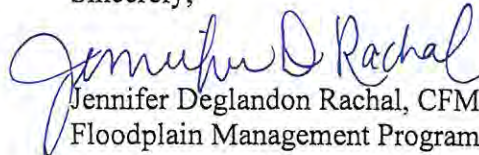
Enclosed is a copy of St. Martin Parish's Flood Insurance Rate Maps (FIRM) indicating the proposed project.

During the improvements and construction, there must be allowance for the adequate flow of water and assurance that there will be no back up of water. There must be no instance of the creation of flooding where there was no flooding prior to construction. At this time, consideration must be given to the responsibility for cleaning debris and keeping the surrounding area clear so as not to interfere with its function.

In order to assure compliance with St. Martin Parish's requirements for the National Flood Insurance Program (NFIP), and ensure that appropriate permits are obtained, please contact the floodplain administrators for the Parish and the Town. The contact person for St. Martin Parish is Shanny Dodge, 303 W. Port Street, St. Martinville, LA 70582, and telephone number (337) 394-4252. Because the project is within the city limits of Henderson, you must also contact the floodplain administrator for the city. The contact person for Henderson is Sue Dupuis, P.O. Box 595, Henderson, LA 70517, and telephone number (337) 228-7115.

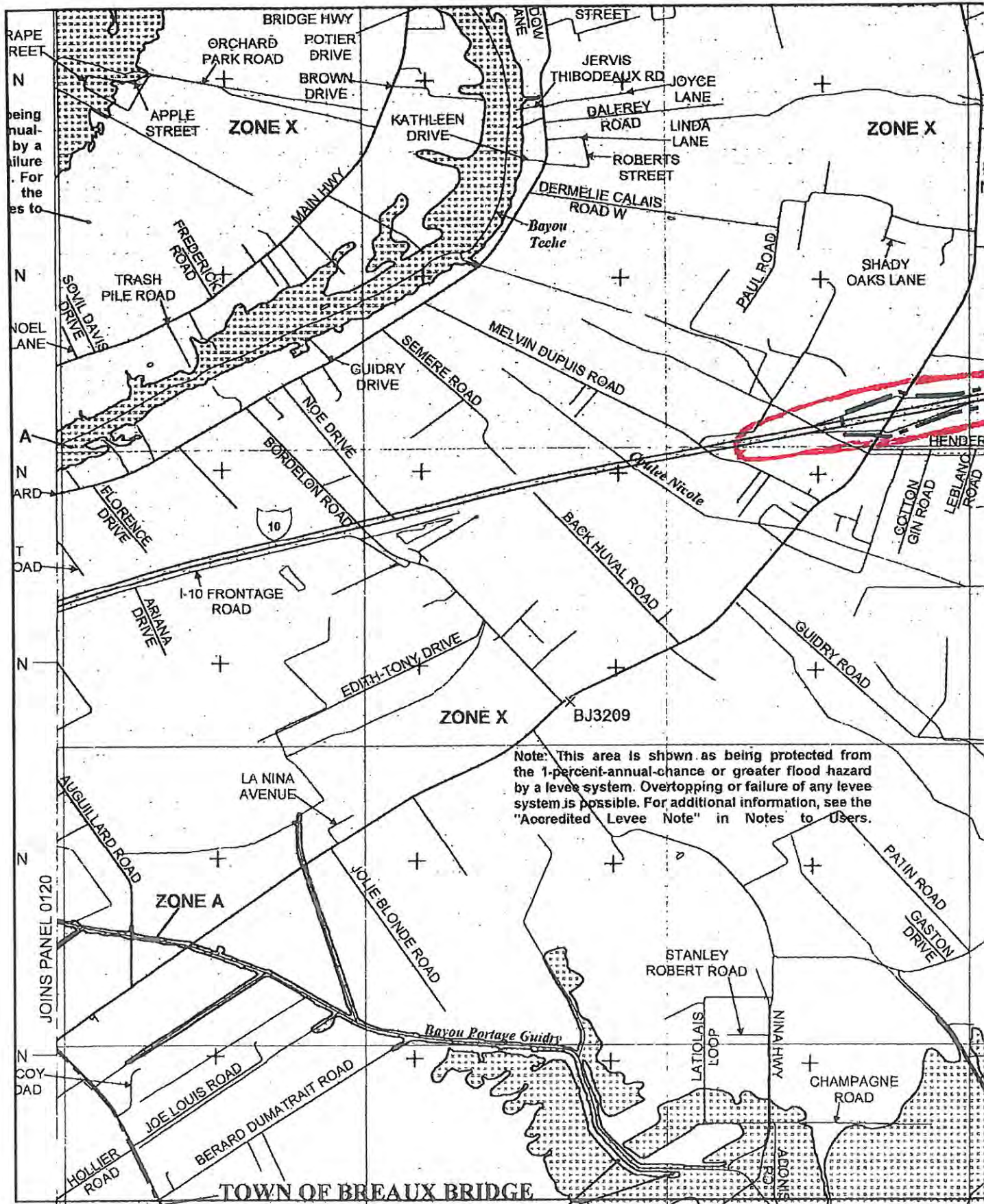
We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225)379-3005.

Sincerely,

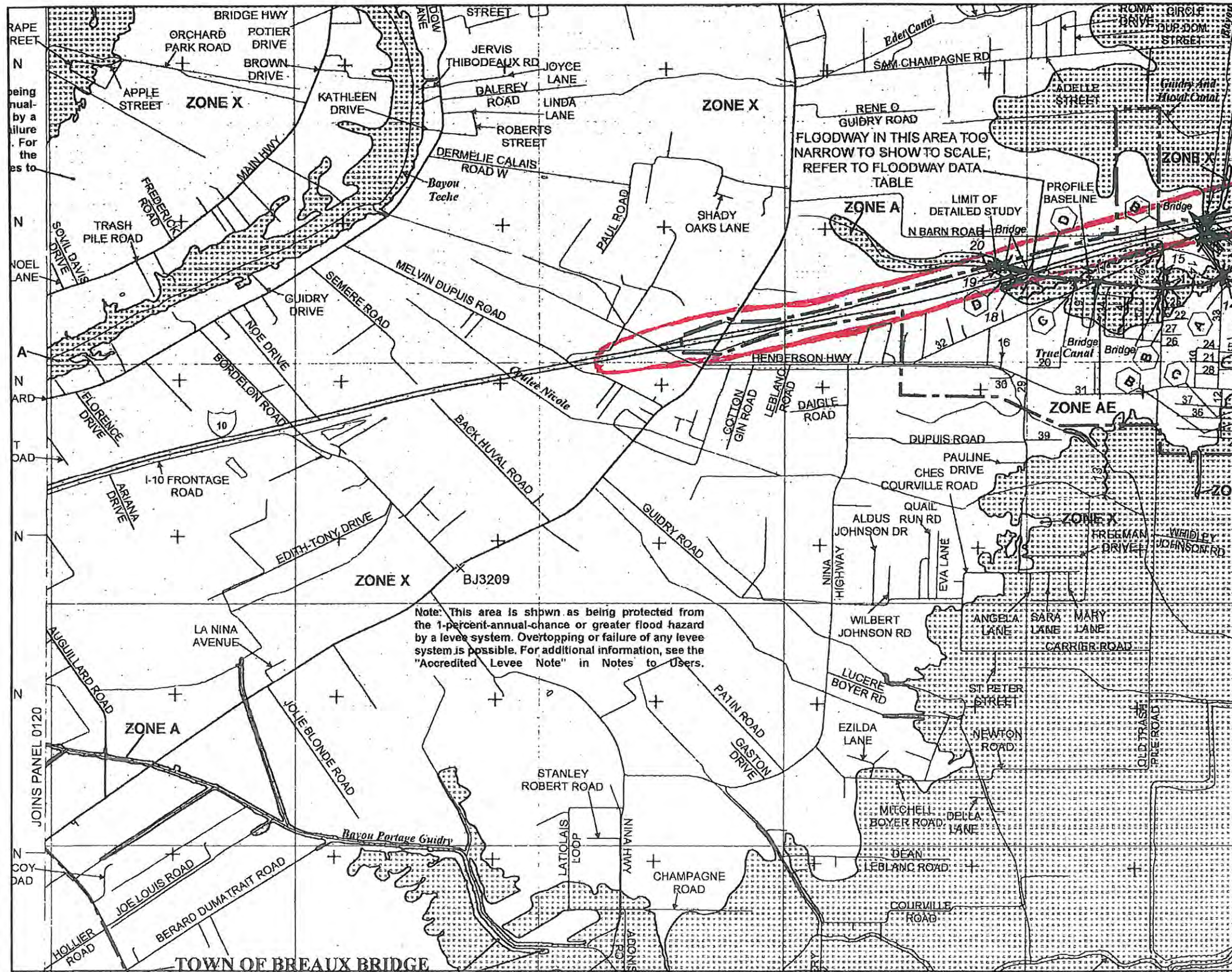


Jennifer Deglandon Rachal, CFM
Floodplain Management Program Coordinator

Enclosure
pc: Shanny Dodge
Sue Dupuis



H. 003014: I-10: LA 347 to Atchafalya Flood V



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0150H

FIRM
FLOOD INSURANCE RATE MAP

ST. MARTIN PARISH, LOUISIANA AND INCORPORATED AREAS

PANEL 150 OF 700
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BREAUX BRIDGE, TOWN OF	220190	0150	H
HENDERSON, TOWN OF	220189	0150	H
ST. MARTIN PARISH	220178	0150	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

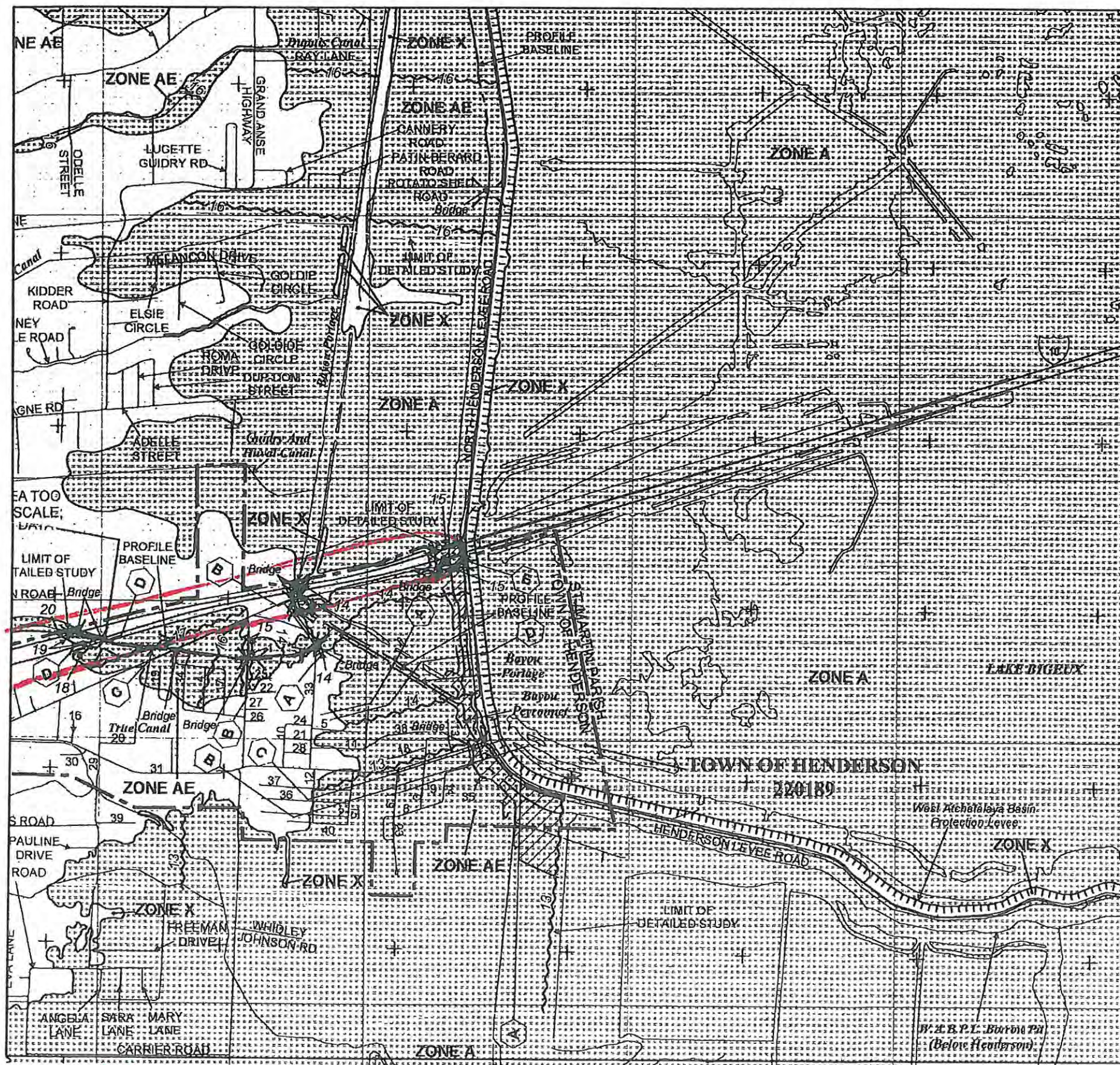
MAP NUMBER
22099C0150H

EFFECTIVE DATE
NOVEMBER 04, 2010

Federal Emergency Management Agency

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H. 003014: 1-10: LA 347 to Atchafalya Floodway Bridge 1 of 2



670000 FT

KEY TO NUMBERED STREETS

- 1...PATIN STREET
- 2...DUPUIS STREET
- 3...HAYES STREET
- 4...JACK DRIVE
- 5...NOEL DRIVE
- 6...AMY STREET
- 7...WILLIAM DRIVE
- 8...WILTZ STREET
- 9...COLLETTE STREET
- 10...ALIDA DRIVE
- 11...LEBLANC DRIVE


665000 FT

- 12...BIJEAUX STREET
- 13...MELANCON
- 14...BERNARD STREET
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- 16...LOUIS DRIVE
- 17...ELIZABETH DRIVE
- 18...PERIOUX STREET
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- 21...CANE DRIVE
- 22...EDITHA STREET
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660000 FT

- 24...LESTER DRIVE
- 25...ALCIDE STREET
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- 35...CANAL STREET
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- 37...DEVILLIER STREET
- 38...LEBLANC STREET
- 39...WALTER DRIVE
- 40...TALLEY STREET

655000 FT



MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0150H

FIRM

FLOOD INSURANCE RATE MAP


ST. MARTIN PARISH, LOUISIANA AND INCORPORATED AREAS

PANEL 150 OF 700
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
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HENDERSON, TOWN OF	220189	0150	II
ST. MARTIN PARISH	220176	0150	H

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MAP NUMBER
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EFFECTIVE DATE
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Federal Emergency Management Agency

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H.003014: 1-10: LA 347 to Atchafalaya Floodway Bridge 2 of 2



H.003014: 1-10: LA 347 to Atchafalaya Flood!



FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

WE WOULD REQUEST THAT THE COMMUNITIES' FLOODPLAIN ADMINISTRATORS BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO 13690 & EO 11990.

REVIEWER:

Mayra G. Diaz
Floodplain Management and Insurance Branch
Mitigation Division
(940) 898-5541

DATE: April 20, 2015



FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

WE WOULD REQUEST THAT THE COMMUNITIES' FLOODPLAIN ADMINISTRATORS BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO11988 & EO 11990.

REVIEWER:

Mayra G. Diaz
Floodplain Management and Insurance Branch
Mitigation Division
(940) 898-5541

DATE: October 14, 2015



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

April 29, 2015

Ms. Noel A. Ardoin
Environmental Engineer Administrator
LADOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Dear Ms. Ardoin:

We have received your April 6, 2015, letter requesting our evaluation of the potential environmental impacts which might result from the following project:

**Proposed Rehab & Widening Right of Way of I-10
I-10: LA 347 to Atchafalaya Floodway Bridge
STP No. H.003014
FAP No. H003014
St. Martin Parish
Henderson, Louisiana**

The project, proposed for financial assistance through the Louisiana Department of Transportation and Development funds, is located on the Chicot aquifer system which has been designated a sole source aquifer (SSA) by the EPA. Based on the information provided for the project, we have determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site.

This approval of the proposed project does not relieve the applicant from adhering to other State and Federal requirements, which may apply. This approval is based solely upon the potential impact to the quality of ground water as it relates to the EPA's authority pursuant to Section 1424(e) of the Safe Drinking Water Act.

If you did not include the parish, project description, project location or the federal funding agency, please do so in future SSA correspondence.

If you have any questions on this letter or the SSA program please contact me at (214) 665-8485.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Omar T. Martinez", is written over a circular blue ink stamp. The signature is fluid and cursive.

Omar T. Martinez, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Jesse Means, LDEQ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

December 9, 2015

Ms. Noel A. Ardoin
Environmental Engineer Administrator
LADOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Dear Ms. Ardoin:

We have received your October 8, 2015, letter requesting our evaluation of the potential environmental impacts which might result from the following project:

**I-10, LA 347 to Atchafalaya Floodway Bridge
T 8S, R 6E, S 25 & 26 & T 8S, R 7E, S 30: At the I-10 ramps
And LA 347 & at the LA 352 and LA 347 Intersection
STP No. H.003014 and FAP No. H003014
St. Martin Parish
Henderson, Louisiana**

The project, proposed for financial assistance through the Louisiana Department of Transportation and Development funds, is located on the Chicot aquifer system which has been designated a sole source aquifer (SSA) by the EPA. Based on the information provided for the project, we have determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site.

This approval of the proposed project does not relieve the applicant from adhering to other State and Federal requirements, which may apply. This approval is based solely upon the potential impact to the quality of ground water as it relates to the EPA's authority pursuant to Section 1424(e) of the Safe Drinking Water Act.

If you did not include the parish, project description, project location or the federal funding agency, please do so in future SSA correspondence.

If you have any questions on this letter or the SSA program please contact me at (214) 665-8485.

Sincerely yours,


Omar T. Martinez, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Jesse Means, LDEQ



16591C
December 11, 2014

MEMORANDUM

From: David M. Frank 
CGD EIGHT (dpb)

To: Carl M. Highsmith, Program Operations Manager
Federal Highway Administration

Subj: Surface Transportation Authorization Act (STAA) Concurrence

- 1) You have determined by letter dated December 9, 2014 regarding the proposed modification or replacement of bridges as part of the pavement widening project scope along Interstate 10 crossing Francois Coulee (Site# 1), Vermilion River (Site# 2), Bayou Teche (Site# 3) and Bayou Portage (Site# 4) in Lafayette and St. Martin Parishes, Louisiana are exempt under the STAA from Coast Guard Permitting. We concur with your findings (FAP: H.003003, H.010601 and H.003014).
- 2) Federal Highway Administration has the responsibility for the STAA and based on the information provided by Louisiana Department of Transportation and Development (LDOTD), the Coast Guard accepts your determination that these bridge projects meet the criteria for the STAA and are exempt from permitting for Coast Guard Bridge Administration purposes. Plans for the proposed bridge construction project should provide for navigational clearances to accommodate any recreational boating that may exist at high water and should be at an appropriate elevation to pass floodwaters.
- 3) However, these bridges are not exempt from the Coast Guard required lights and other signals, as the subject Act which amended Title 23 U.S. Code, to include 23 U.S.C. 144(c), did not exclude this category of bridges from the application of 14 U.S.C. 85. The later statute requires the establishment, maintenance, and operation of Coast Guard required lights and signals on fixed structures, including bridges. The owner, in this case, the LDOTD must request the lighting exemptions and provide the reason, the only exemption being Title 33 CFR 118.40(b). The statement of the reason for this exemption must fulfill the requirements of this section. Specifically, if it is determined that no significant nighttime navigation occurs at these bridge sites, a statement to this effect is required before a decision can be made. Once we receive the required information from the bridge owner, we will evaluate the specified conditions and respond accordingly.
- 4) If we can be of further assistance, please contact this office.

#

Copy: LDOTD, Ms. Traci Johnson
LDOTD, Ms. Noel Ardoin



BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

STEPHEN CHUSTZ
SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

April 16, 2015

TO: Ms. Noel Ardoin
Environmental Engineer Administrator
LADOTD
P. O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views
State & Federal Project No. H.003014
I-10: LA 347 to Atchafalaya Floodway Bridge
St.Martin Parish

Dear Ms. Ardoin:

In response to your letter dated April 6, 2015, concerning the referenced matter, please be advised that the Office of Conservation collects and maintains many types of information regarding oil and gas exploration, production, distribution, and other data relative to the petroleum industry as well as related and non-related injection well information, surface mining and ground water information and other natural resource related data. Most information concerning oil, gas and injection wells for any given area of the state, including the subject area of your letter can be obtained through records search via the SONRIS data access application available at:

<http://www.dnr.louisiana.gov>

A review of our computer records for the referenced project area indicates that there are oil and/or gas wells located near the project area. The DNR water well database indicates that there are no registered water wells in the vicinity of the project area. However, unregistered water wells may be located in the area.

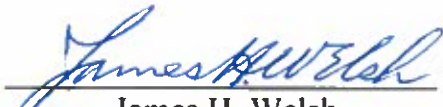
The Office of Conservation maintains records of all activities within its jurisdiction in paper, microfilm or electronic format. These records may be accessed during normal business hours, Monday through Friday, except on State holidays or emergencies that require the Office to be closed. Please call 225-342-5540 for specific contact information

or for directions to the Office of Conservation, located in the LaSalle Building, 617 North Third Street, Baton Rouge, Louisiana. For pipelines and other underground hazards, please contact Louisiana One Call at 1-800-272-3020 prior to commencing operations. Should you need to direct your inquiry to any of our Divisions, you may use the following contact information:

<u>Division</u>	<u>Contact</u>	<u>Phone No.</u>	<u>E-mail Address</u>
Engineering	Jeff Wells	225-342-5638	jeff.wells@la.gov
Pipeline	Steven Giambrone	225-342-2989	steven.giambrone@la.gov
Injection & Mining	Brad Bourgoyne	225-342-4286	brad.bourgoyne@la.gov
Geological	Mike Kline	225-342-3335	mike.kline@la.gov
Environmental	Gary Snellgrove	225-342-7222	gary.snellgrove@la.gov

If you have difficulty in accessing the data via the referenced website because of computer related issues, you may obtain assistance from our technical support section by selecting Help on the SONRIS tool bar and submitting an email describing your problems and including a telephone number where you may be reached.

Sincerely,


James H. Welsh
Commissioner of Conservation

JHW:MSK:msk



BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

STEPHEN CHUSTZ
SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

November 3, 2015

TO: Ms. Noel Ardoin
Environmental Engineer Administrator
DOTD
P. O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views
State Project No. H.003014
Route: I-10
St. Martin Parish

Dear Ms. Ardoin:

In response to your letter dated October 8, 2015, concerning the referenced matter, please be advised that the Office of Conservation collects and maintains many types of information regarding oil and gas exploration, production, distribution, and other data relative to the petroleum industry as well as related and non-related injection well information, surface mining and ground water information and other natural resource related data. Most information concerning oil, gas and injection wells for any given area of the state, including the subject area of your letter can be obtained through records search via the SONRIS data access application available at:

<http://www.dnr.louisiana.gov>

A review of our computer records for the referenced project area indicates that there are no oil, gas or injection wells located in the project area. The DNR water well database indicates that there are no registered water wells in the vicinity of the project area. However, unregistered water wells may be located in the area.

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<u>Division</u>	<u>Contact</u>	<u>Phone No.</u>	<u>E-mail Address</u>
Engineering	Jeff Wells	225-342-5638	jeff.wells@la.gov
Pipeline	Steven Giambrone	225-342-2989	steven.giambrone@la.gov
Injection & Mining	Brad Bourgoyne	225-342-4286	brad.bourgoyne@la.gov
Geological	Mike Kline	225-342-3335	mike.kline@la.gov
Environmental	Gary Snellgrove	225-342-7222	gary.snellgrove@la.gov

If you have difficulty in accessing the data via the referenced website because of computer related issues, you may obtain assistance from our technical support section by selecting Help on the SONRIS tool bar and submitting an email describing your problems and including a telephone number where you may be reached.

Sincerely,



James H. Welsh
Commissioner of Conservation

JHW:MSK:msk

Maria Reid

From: Jeannette Williams
Sent: Monday, November 02, 2015 3:37 PM
To: Maria Reid
Subject: FW: DEQ SOV 151013/1420 LA 347 to Atchafalaya Floodway Bridge

FYI! See email below!

Jeannette Williams
Department of Transportation and Development
Environmental Department, Section 28
1201 Capitol Access Road
Baton Rouge, La. 70802
Jeannette.Williams@LA.gov
(225)242-4502



From: Linda (Brown) Hardy
Sent: Monday, November 02, 2015 3:31 PM
To: Jeannette Williams
Cc: Yasooob Zia
Subject: DEQ SOV 151013/1420 LA 347 to Atchafalaya Floodway Bridge

November 2, 2015

Noel Ardoin, Environmental Engineering Administrator
LA DOTD
PO Box 94245
Baton Rouge, LA 70804-9245
Jeannette.Williams@LA.gov

RE: 151013/1420 LA 347 to Atchafalaya Floodway Bridge
H.003014 DOTD Funding
St. Martin Parish

Dear Ms. Ardoin:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit is required. An application or Notice of Intent will be required if the sludge management practice includes preparing biosolids for land application or preparing sewage sludge to be hauled to a landfill. Additional information may be obtained on the LDEQ website at <http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx> or by contacting the LDEQ Water Permits Division at (225) 219- 9371.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, St. Martin Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3954 or by email at linda.hardy@la.gov.

Sincerely,

Linda M. Hardy

Louisiana Department of Environmental Quality
Office of the Secretary
P.O. Box 4301
Baton Rouge, LA 70821-4301
Ph: (225) 219-3954
Fax: (225) 219-3971
Email: linda.hardy@la.gov



LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY
MIKE STRAIN DVM
COMMISSIONER



April 21, 2015

**Agricultural &
Environmental
Sciences**

P.O. Box 3596
Baton Rouge,
LA 70821
(225) 925-3770
Fax: 925-3760

**Agro-Consumer
Services**

P.O. Box 3098
Baton Rouge,
LA 70821
(225) 922-1341
Fax: 923-4877

**Animal Health
& Food Safety**

P.O. Box 1951
Baton Rouge,
LA 70821
(225) 925-3962
Fax: 925-4103

Forestry

P.O. Box 1628
Baton Rouge,
LA 70821
(225) 925-4500
Fax: 922-1356

**Management
& Finance**

P.O. Box 3481
Baton Rouge,
LA 70821
(225) 922-1255
Fax: 925-6012

**Soil & Water
Conservation**

P.O. Box 3554
Baton Rouge,
LA 70821
(225) 922-1269
Fax: 922-2577

DOTD

Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views

STATE PROJECT NOS.: H.003014
FEDERAL AID PROJECT NOS.: H003014
NAME: I-10: LA 347 TO ATCHAYFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISH: ST. MARTIN

Dear Ms. Ardoin,

I have no comment at this time regarding the above referenced project.

Sincerely,

Bradley E. Spicer
Assistant Commissioner

BES:kh



LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY
MIKE STRAIN DVM
COMMISSIONER



October 20, 2015

**Agricultural &
Environmental
Sciences**

P.O. Box 3596
Baton Rouge,
LA 70821
(225) 925-3770
Fax: 925-3760

**Agro-Consumer
Services**

P.O. Box 3098
Baton Rouge,
LA 70821
(225) 922-1341
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P.O. Box 3554
Baton Rouge,
LA 70821
(225) 922-1269
Fax: 922-2577

DOTD

Environmental Engineer Administrator

P.O. Box 94245

Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views

STATE PROJECT NOS.: H.003014

FEDERAL AID PROJECT NO.: H003014

NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE

ROUTE: I-10

PARISH: ST. MARTIN

To whom it may concern:

I have no comment at this time regarding the above referenced project.

Sincerely,

Bradley E. Spicer
Assistant Commissioner

BES:kh



State of Louisiana
Department of Health and Hospitals
Office of Public Health

April 17, 2015

LA DOTD
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, LA 70804-9245

**Re: Solicitation of Views; State Project Number H.003014; F.A.P. No. H003014;
Name: I-10, LA 347 to Atchafalaya Floodway Dridge
Route: I-10
Parish: St Martin Parish**

This office is in receipt of a Solicitation of Views regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comments on the referenced project(s).

In the event of any future discovery of evidence of non-compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any applicable public health laws or statutes which may have escaped our awareness during the course of this cursory review, please be advised that this office's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant of responsibility, if any, with respect to compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any other applicable public health laws or statutes.

Sincerely,

A handwritten signature in cursive script, appearing to read "Yuanda Zhu".

Yuanda Zhu, P.G., Ph.D.
Louisiana Department of Health and Hospitals
Office of Public Health Engineering Services
Telephone: (225) 342-7432
Electronic mail: yuanda.zhu@la.gov



State of Louisiana
Department of Health and Hospitals
Office of Public Health

October 16, 2015

LA DOTD
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, LA 70804-9245

Re: Solicitation of Views; State Project Number H.003014; F.A.P. No. H003014;
Name: I-10, LA 347 to Atchafalaya Floodway Bridge
Route: I-10
Parish: St Martin Parish

This office is in receipt of a Solicitation of Views regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comments on the referenced project(s).

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Sincerely,

A handwritten signature in cursive script, appearing to read "Yuanda Zhu".

Yuanda Zhu, P.G., Ph.D.
Louisiana Department of Health and Hospitals
Office of Public Health Engineering Services
Telephone: (225) 342-7432
Electronic mail: yuanda.zhu@la.gov



St. Martin Parish School Board

P.O. Box 1000 Breaux Bridge, Louisiana 70517

Telephone: 337-332-2105

Fax: 337-332-6628

LOTTIE P. BEEBE, Ed.D.
SUPERINTENDENT

MARK HEBERT
PRESIDENT

RICHARD POTIER
VICE PRESIDENT

April 20, 2015

Noel Ardoin
DOTD
Environmental Solutions
P. O. Box 94245
Baton Rouge LA 70804-9245

Dear Mr. Ardoin:

I have reviewed the information sent regarding State Project No: H.003014. Upon review, this project should have little to no impact on the St. Martin Parish School Boards' transportation system.

Sincerely,

Allen Blanchard, Jr.
Director of Human Capital & Operations

AB:tmf

- DISTRICT 1
STEVE FUSELIER
- DISTRICT 2
WANDA B. VITAL
- DISTRICT 3
AARON FLEGEANCE
- DISTRICT 4
JAMES BLANCHARD
- DISTRICT 5
RUSSEL C. FOTI
- DISTRICT 6
BURTON DUPUIS
- DISTRICT 7
RICHARD POTIER
- DISTRICT 8
FREDERIC STELLY
- DISTRICT 9
FLOYD KNOTT
- DISTRICT 10
MARK HEBERT

✦ "PARTNERS IN EDUCATION" ✦



Commission Des Ecoles De La Paroisse De St. Martin



Appendix B

Public Meeting Transcript

Open House Public Meeting Transcript
for
State Project No. H.003014
F.A.P. No. H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
St. Martin Parish

May 28, 2015

U.S. Department of Transportation
Federal Highway Administration
and
Louisiana Department of Transportation and Development



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Open House Public Meeting Notice

OPEN HOUSE PUBLIC MEETING

**STATE AND FEDERAL AID PROJECT NO. H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH**

The Louisiana Department of Transportation and Development (DOTD) is conducting an open house public meeting for the proposed I-10 project from the LA 347 (Henderson Cecilia Exit) east to the Atchafalaya Floodway Bridge. The proposed project would include full depth replacement of the pavement within the existing the lanes and widening of I-10 into the existing median.

The purpose of the meeting is to provide information about the project and to obtain input from interested parties. There will be a continuous multi-media presentation about the project. Additional project information will be available. Representatives from DOTD will be available at the open house to answer questions and discuss issues related to the project. Oral and written comments on the project can be submitted at the meeting. Comments can also be mailed to the DOTD address shown below, postmarked by June 10, 2015. The public meeting has been scheduled as follows:

**Thursday, May 28, 2015
4:00 – 7:00 p.m.
Henderson Recreational Building
1015 Park Avenue
Henderson, LA 70517**

Should you require special assistance, due to a disability, to participate in this public meeting, please contact DOTD by mail at the address shown below, or by telephone at 225.242.4506, at least five working days prior to the meeting.

**Louisiana Department of Transportation and Development
Environmental Engineer Administrator, Section 28
P.O. Box 94245
Baton Rouge, LA 70804-9245**

Open House Attendance Record

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 - ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
MAY 28, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): Gail Saroy

Mailing Address: 1069-B Guidry Rd.
Breaux Bridge, La. 70517

Name (Please Print): Ray Robin - Henderson-Mina Water System

Mailing Address: P.O. Box 556
Henderson, LA. 70517

Name (Please Print): _____

Mailing Address: _____

Name (Please Print): _____

Mailing Address: _____

Name (Please Print): _____

Mailing Address: _____

Name (Please Print): _____

Mailing Address: _____

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
MAY 28, 2015

ELECTED OFFICIALS

(If representing an elected official, please write both your name
and the name of the official you are representing.)

NAME

ELECTIVE OFFICE

Bill Lepp
Ray Mc
Capt. Tamm
Sherbin Collette

Commissioner Town of Hader
Police Chief T. H. Henderson
Henderson Police
Mayor Town of Henderson

MEDIA

STATION / PAPER

tech news

DOTD, FHWA, and OTHER AGENCY PERSONNEL
(Federal, State, Parish, and Local)

5

Open House Public Meeting Handout



**I-10: LA 347 –
ATCHAFALAYA FLOODWAY BRIDGE
OPEN HOUSE PUBLIC MEETING**



**STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA**

**Henderson Recreational Building
1015 Park Avenue
Henderson, LA 70517
May 28, 2015
4:00 – 7:00 p.m.**

Thank you for attending this Open House Public Meeting for the proposed Interstate 10 (I-10) project. In this handout you will find information about the proposed project, including a preliminary project description, a location map, and typical sections. Also included is a comment form.

Project team members are stationed throughout the room to discuss the project and answer your questions. These individuals are easily identified by their name tags. Please take this opportunity to discuss the project with team members. **There will be no formal presentation.**

As you enter the room, you will see four stations:

Station 1: Sign-in Table

At this station, there are sign-in sheets for General Public, Elected and Other Officials, Agency Personnel, and News Media. Please sign in on the appropriate sheet.

Station 2: Exhibits

This station will consist of a series of maps that illustrate the potential limits of construction super-imposed over aerial photographs and graphics of the typical design section that is proposed. The exhibit displays the entire proposed project in one large layout.

Station 3: Continuous PowerPoint Presentation

This short presentation will explain the environmental process and provide an overview of the proposed I-10 widening project. The presentation lasts approximately 8 minutes and will re-start automatically after a one-minute intermission. **The PowerPoint presentation and the exhibits shown tonight are available on the DOTD website at:** http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/default.aspx

Station 4: Comment Table

At this station, comments can be made orally or in writing. A tape recorder is available at this table for oral comments. The last page of this handout is a comment form that you may use. Comments can be turned in during this meeting or mailed to the address on the back of the form. Additional comment forms are also

available to be taken with you. **Please note that comments mailed after this meeting must be postmarked no later than June 10, 2015 to be included as part of the meeting transcript.**

We hope you will take advantage of this opportunity to provide input on the proposed I-10 pavement rehabilitation and widening project. Thank you for attending this meeting and for providing input.

PROJECT DESCRIPTION

The DOTD proposes pavement rehabilitation and widening within the existing right-of-way of Interstate 10 (I-10) from the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana using federal funding. The project area is in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30, or more specifically, it begins at 30.314626, -91.836068 and ends at 30.323675, -91.791379.

Currently, I-10 consists of two travel lanes in each direction. The project would include full-depth replacement of the pavement within the existing the lanes and a widening of pavement surface on the west bound lanes within the existing median with concrete or cable median protection. The 2.08-foot depth existing pavement would be completely removed and repaved with 12 inches of treated subgrade layer, 8 inches of class II base course soil cement, 4 inches of class II base course crushed stone or recycled Portland cement concrete pavement, 10 inches of superpave asphaltic concrete binder course, 2 inches of superpave asphaltic concrete wearing course, and 1 inch of thin asphaltic concrete. Pavement striping, raised markers, and rumble strips would also be installed.

Post construction, east bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The west bound pavement would striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 14-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the west bound Bayou Portage bridge.

Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.

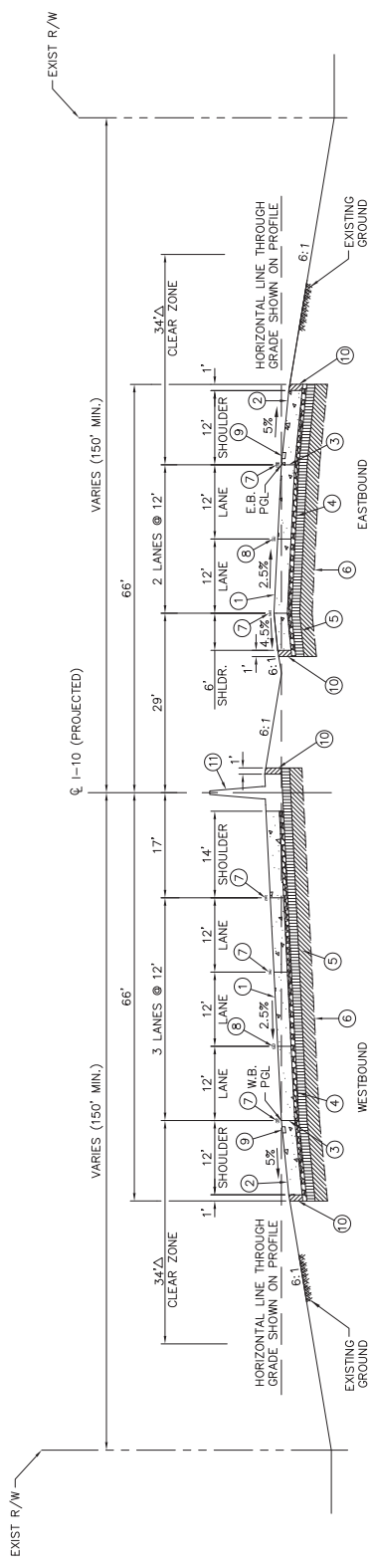
PURPOSE AND NEED

The purpose of and need for this project is to rehabilitate the existing pavement and increase westbound capacity.



LEGEND

- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
- 2 13" PORTLAND CEMENT CONCRETE SHOULDER
- 3 LONGITUDINAL JOINT
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT (INCLUDED IN PAYMENT OF BASE COURSE)
- 11 54" BARRIER ON FOOTING

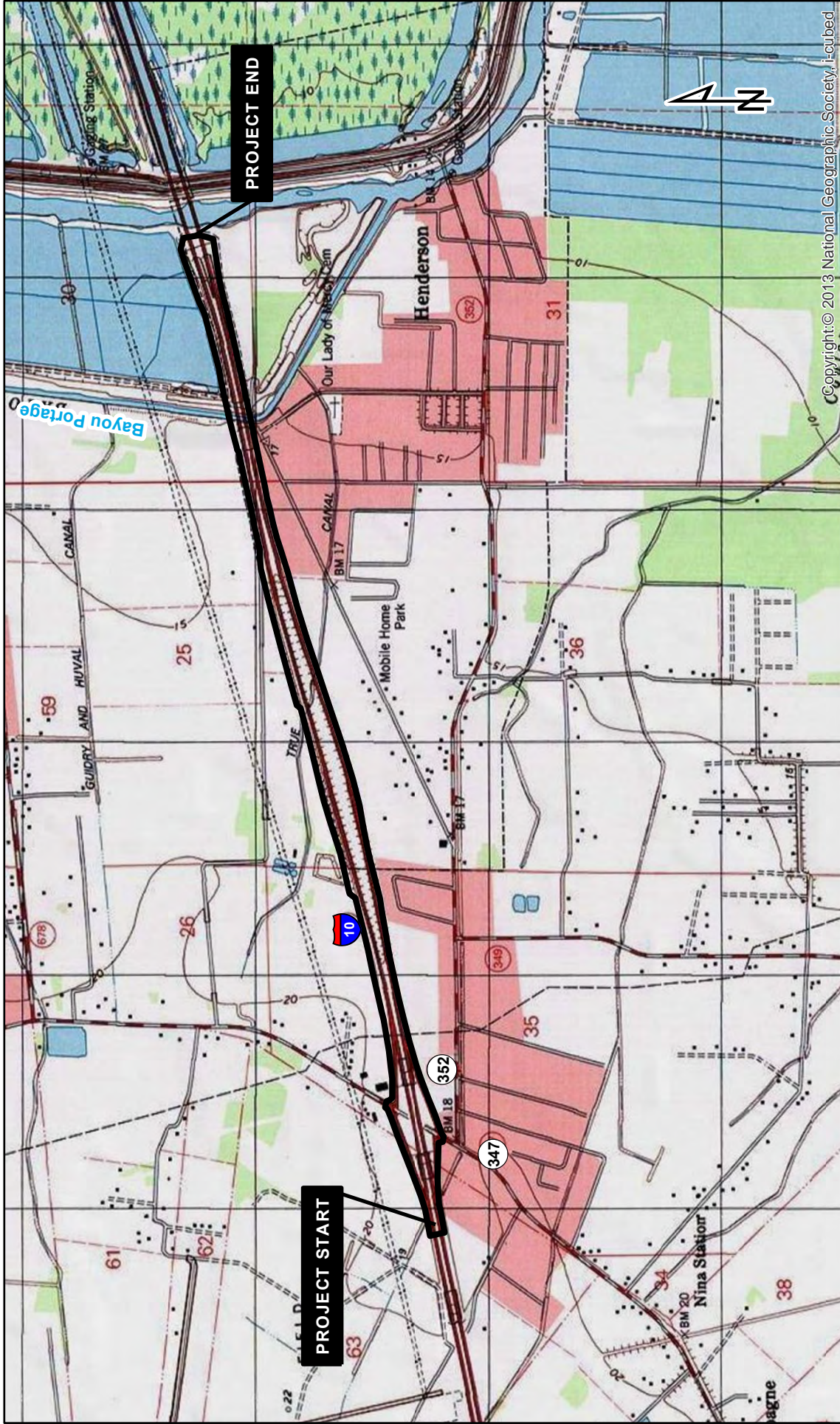


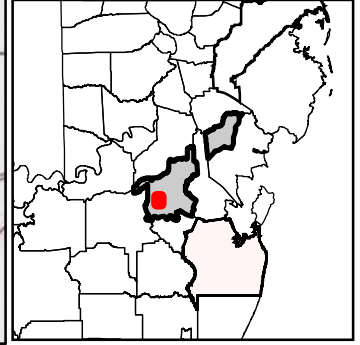

TYPICAL FINISHED SECTION



THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

DESIGNED	SEPEDA	CHECKED		REVISION OR CHANGE CHECK DESCRIPTION	BY	DATE	NO.
DRAWN	GIBBS	CHECKED					
STATE	MAY 2015	PROJECT	H.003014				
CONTRACT	450-06	SECTION					
PARISH	ST. MARTIN						
SHEET NUMBER	2						



	<div> <p>Estimated Project Limits</p> </div> <div> <h2>PROJECT LOCATION MAP</h2> </div> <div> <p>SOURCE: USGS 1:24,000 TOPOGRAPHIC MAP - CECILIA QUADRANGLE</p> </div> <div> <p>STATE PROJECT NO. H.003014 F.A.P. NO. H003014 I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE ST. MARTIN PARISH</p> </div> <div>  </div>
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STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 – Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **June 10, 2015** will become part of the transcript of this meeting.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NAME: _____

ADDRESS:

Louisiana Department of Transportation and
Development
Environmental Engineering Administrator, Sec. 28
P.O. Box 94245
Baton Rouge, LA 70804-9245

PLACE
STAMP
HERE


FOLD
HERE

Power Point Presentation Shown at
Meeting

**OPEN HOUSE PUBLIC MEETING
FOR
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH**
State Project No. H.003014
Federal Aid Project No. H003014




Welcome to the public meeting for the proposed pavement rehabilitation and widening of Interstate 10 from LA 347 (Henderson Cecilia Exit) to the Atchafalaya Floodway Bridge in St. Martin Parish. This project is jointly funded by the Federal Highway Administration and the Louisiana Department of Transportation and Development.




Project Description

- ❖ DOTD and FHWA propose full-depth replacement of the existing pavement for the entire length of the project with exception of the overpasses and bridges
- ❖ I-10 West would also be widened within the existing median, and a concrete median barrier or cable median barriers would be constructed




DOTD and FHWA propose full-depth replacement of the existing pavement for the entire length of the project with exception of the overpasses and bridges. I-10 West would also be widened within the existing median, and a concrete median barrier or cable median barriers would be constructed.



Project Purpose and Need

The purpose of and need for this project is to rehabilitate the existing pavement and increase west bound capacity.



The purpose and need for this project is to rehabilitate the existing pavement and to increase westbound capacity.



Meeting Agenda

In addition to this presentation, the following stations are available:

- A Sign-in and Handout Station;
- An Exhibit Station to review layouts of the proposed project and to ask questions to project staff; and
- A Comment Station for giving written and/or verbal comments (Written comments postmarked within 10 calendar days of meeting will also be included in the transcript).

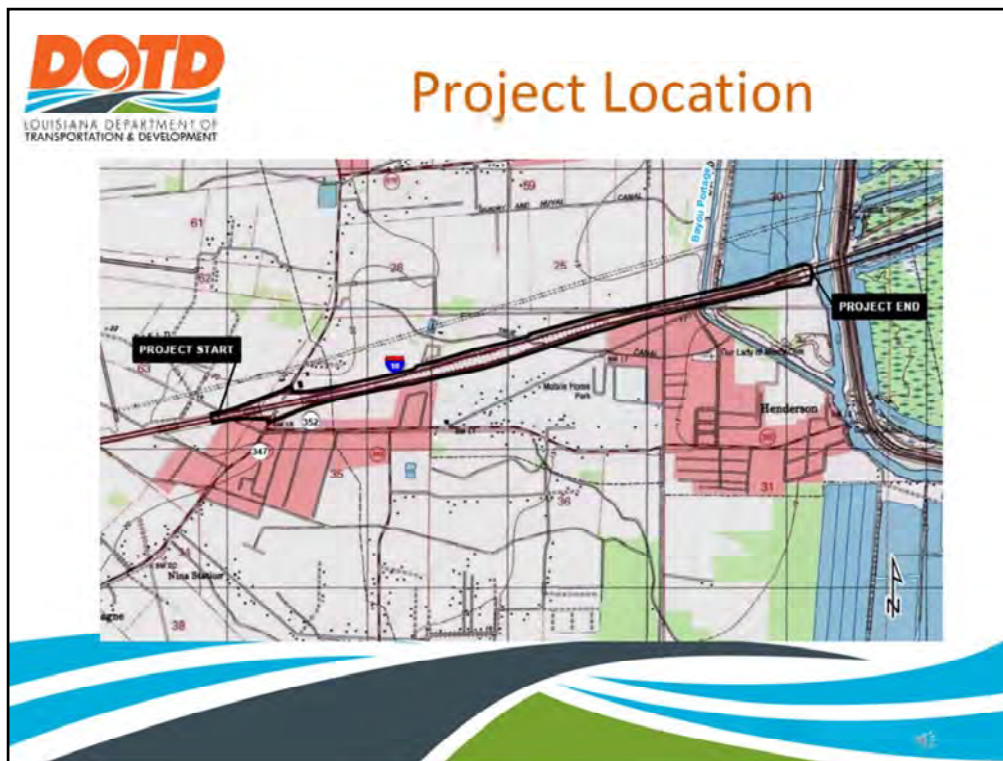
Project team members are available to assist you and receive your comments.



In addition to this presentation, the following stations are available tonight:

- A Sign-in and Hand-out Station
- An Exhibit Station to review layouts of the proposed project and to ask questions to project staff
- And a Comment Station for giving written and/or verbal comments. Comments received tonight and those postmarked within 10 days of this meeting will be included in the official meeting transcript.

Project team members are available to assist you and receive your comments.



As shown on this vicinity map, the proposed project is located along the I-10 corridor from the LA 347 Interchange (Henderson Cecilia Exit) to the Atchafalaya Floodway Bridge. The project includes work in St. Martin Parish.



Proposed Action

The project would include:

- Full-depth replacement of the pavement within the existing lanes of I-10 (except for the overpasses and bridges).
- Widening of the west bound pavement surface within the existing median.
- A concrete median barrier or cable median barriers would be installed.
- Pavement striping, raised markers, and rumble strips would also be installed.



The project would include full-depth replacement of the pavement within the existing lanes of I-10, except for overpasses and bridges.

Widening of the west bound pavement surface within the existing median.

A concrete median barrier or cable median barriers would be installed. Pavement striping, raised markers, and rumble strips would be installed.

Drainage improvements, including cross drain extensions and median drains via catch basins would also be installed where necessary.



Proposed Action

During construction:

- The west bound pavement would be widened and temporarily striped to allow for 4 lanes of traffic (2 lanes in each direction). A temporary barrier would be placed between the east bound and west bound lanes.
- The existing east bound I-10 lanes would be rehabilitated while the east bound traffic is moved onto the widened west bound pavement.

During construction:

The west bound pavement would be widened and temporarily striped to allow for 4 lanes of traffic (2 lanes in each direction). A temporary barrier would be placed between the east and west bound lanes.

The existing east bound I-10 lanes would be rehabilitated while the east bound traffic is moved onto the widened west bound pavement.



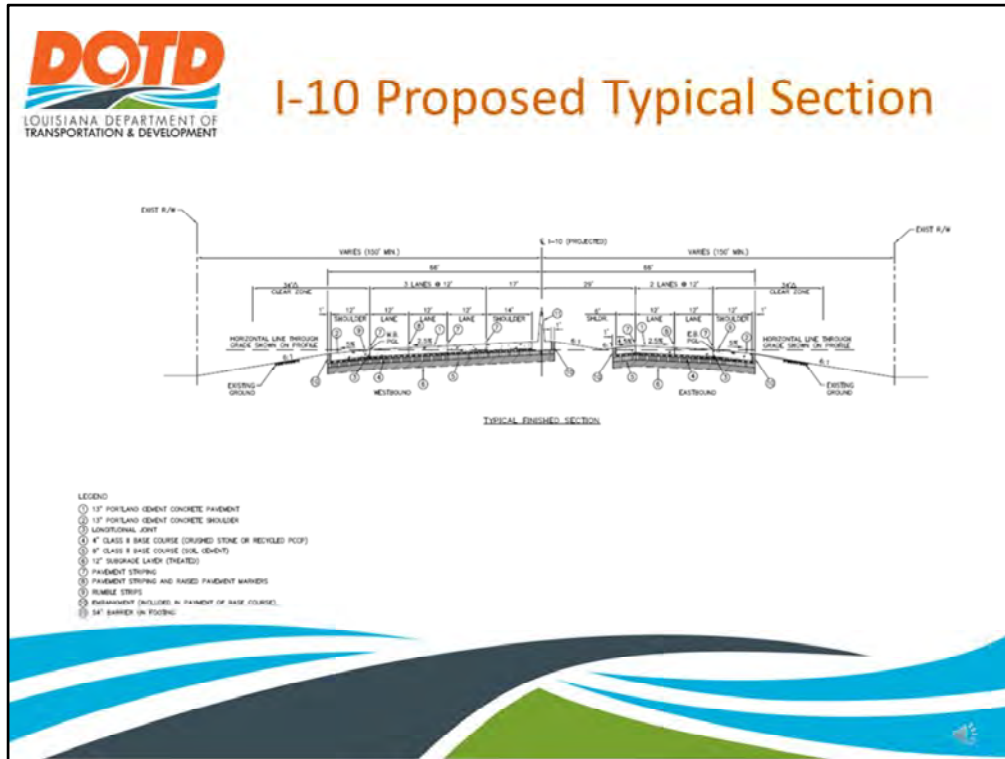
Proposed Action

Upon completion of construction:

- East bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder.
- The west bound pavement will striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 14-foot inside shoulder.

Upon completion of construction: East bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder and a 6-foot inside shoulder.

West bound I-10 would be striped for three 12-foot travel lanes, a 12-foot outside shoulder and a 14-foot inside shoulder.



Here is a typical section of what I-10 will look like, post construction.

The west bound side of I-10 would have three 12-foot wide travel lanes, with a 14-foot inside shoulder, and a 12-foot outside shoulder. The east bound side would have two 12-foot wide travel lanes, a 6-foot inside shoulder and a 12 foot outside shoulder.

A median barrier would separate the east bound and west bound lanes.



How Can You Help?

1. Sign-in tonight and review all materials.
2. Speak with a team member about your concerns.
3. Provide us with your written or recorded comment.

There are three ways you can help tonight.

1. Sign-in and review all materials.
2. Speak with a team member about your concerns.
3. Provide us with your written or recorded comment.



This is the end of the Presentation.

Thank you for your time. Please visit
the remaining stations to view the
exhibits and provide comments.

This is the end of the Presentation. Thank you for your time. Please visit the remaining stations to view the exhibits and provide comments.



The presentation will begin
shortly.



Transcript of Oral Comments

No oral comments were received.

Written Comments

No written comments were received.

Open House Public Meeting Transcript
for
State Project No. H.003014
F.A.P. No. H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
St. Martin Parish

November 19, 2015

U.S. Department of Transportation
Federal Highway Administration
and
Louisiana Department of Transportation and Development



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Open House Public Meeting Notice

OPEN HOUSE PUBLIC MEETING

**STATE AND FEDERAL AID PROJECT NO. H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH**

The Louisiana Department of Transportation and Development (DOTD) is conducting an open house public meeting for the proposed I-10 project from the LA 347 (Henderson Cecilia Exit) east to the Atchafalaya Floodway Bridge. The proposed project would include: full depth replacement of the pavement within the existing the lanes; widening the westbound pavement surface of I-10; installing median barriers; and intersection improvements, including roundabouts at the intersections of the I-10 ramps and LA 347 and access changes at the LA 347 and LA 352 signalized intersection.

The purpose of the meeting is to provide information about the project and to obtain input from interested parties. There will be a continuous multi-media presentation about the project. Additional project information will be available. Representatives from DOTD will be available at the open house to answer questions and discuss issues related to the project. Oral and written comments on the project can be submitted at the meeting. Comments can also be mailed to the DOTD address shown below, postmarked by December 2, 2015. The public meeting has been scheduled as follows:

**Thursday, November 19, 2015
4:00 – 7:00 p.m.
Henderson Recreational Building
1015 Park Avenue
Henderson, LA 70517**

Should you require special assistance, due to a disability, to participate in this public meeting, please contact DOTD by mail at the address shown below, or by telephone at 225.242.4506, at least five working days prior to the meeting.

**Louisiana Department of Transportation and Development
Environmental Engineer Administrator, Section 28
P.O. Box 94245
Baton Rouge, LA 70804-9245**

Open House Attendance Record

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 - ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
NOVEMBER 19, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): Francis Dapuis

Mailing Address: 1014 Numa Wyatt Rd
Breaux Bridge La 70517

Name (Please Print): JERRY SONNIER

Mailing Address: 1297 NURSERY Hwy
BREAUX BRIDGE, LA 70517

Name (Please Print): Butt Richard

Mailing Address: 1046 Sam Champant
Breaux Bridge, LA 70517

Name (Please Print): Barbara Latolais

Mailing Address: 1264 Derrillie Calais
Breaux Bridge La. 70517

Name (Please Print): Larry Smith

Mailing Address: 3120 Grand Point Hwy
Breaux Bridge La. 70517

Name (Please Print): Linda B Melancon

Mailing Address: 1053 Huval St.
Breaux Bridge, La 70517

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 - ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
NOVEMBER 19, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print):

Mailing Address:

Curtis D. McFarlane
1053 Hurst St.
Breaux Bridge, La 70517

Name (Please Print):

Mailing Address:

Elaine Taylor
1028 Shady Oaks Lane
Breaux Bridge, LA 70517

Name (Please Print):

Mailing Address:

Monique LeBlanc
1038 C LeBlanc Rd
Breaux Bridge LA 70517

Name (Please Print):

Mailing Address:

Johnny Hebert
1040 E Sidney Angelle Rd.
Breaux Bridge La. 70517

Name (Please Print):

Mailing Address:

Alphonse J. Roberts
P.O. Box 692
Cecil, La 70521

Name (Please Print):

Mailing Address:

Melinda Hebert
2815 Grand Pt Hwy
Breaux Bridge LA 70517

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 - ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
NOVEMBER 19, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): Michael E. McEnaney
Mailing Address: 1003 Martha Hebert Rd
Breaux Bridge, La. 70517

Name (Please Print): DARYL A. CORMIER
Mailing Address: 1066 Martha Hebert
BREAUX BRIDGE LA 70517

Name (Please Print): WAYNE ABLES
Mailing Address: 1026 WALTON DR
BREAUX BRIDGE, LA 70517

Name (Please Print): LOUIS WYATT JR.
Mailing Address: P.O. BOX 574
HENDERSON, LA. 70517

Name (Please Print): BAYOU BELLE TRUCK STOP
Mailing Address: 2924 GRAND POINT HWY
BREAUX BRIDGE, L.A. 70517

Name (Please Print): Nash Kherang
Mailing Address: 2924 Grand Point
P.O. Box LA 70517

OPEN HOUSE PUBLIC MEETING
I-10: LA 347 - ATCHAFALAYA FLOODWAY BRIDGE
H.003014
ST. MARTIN PARISH
NOVEMBER 19, 2015

GENERAL PUBLIC

(including business, industry, civic and non-profit organizations)

Name (Please Print): Chassim Richard Bayon Belle Truck Stop
Mailing Address: 2924 Grand Point Hwy
Breaux Bridge, LA 70517

Name (Please Print): Randy Hayes
Mailing Address: 1287 Nine Hwy
Breaux Bridge LA 70517

Name (Please Print): Patty Weiss
Mailing Address: 1671 Grand Anse Hwy
BB LA 70517

Name (Please Print): _____
Mailing Address: _____

Name (Please Print): _____
Mailing Address: _____

Name (Please Print): _____
Mailing Address: _____

DOTD, FHWA, and OTHER AGENCY PERSONNEL
(Federal, State, Parish, and Local)

6

MEDIA

STATION / PAPER

Karl peter

Tech news

Open House Public Meeting Handout



**I-10: LA 347 –
ATCHAFALAYA FLOODWAY BRIDGE
OPEN HOUSE PUBLIC MEETING**



**STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA**

**Henderson Recreational Building
1015 Park Avenue
Henderson, LA 70517
November 19, 2015
4:00 – 7:00 p.m.**

Thank you for attending this Open House Public Meeting for the proposed Interstate 10 (I-10) project. In this handout you will find information about the proposed project, including a preliminary project description, a location map, and typical sections. Also included is a comment form.

Project team members are stationed throughout the room to discuss the project and answer your questions. These individuals are easily identified by their name tags. Please take this opportunity to discuss the project with team members. **There will be no formal presentation.**

As you enter the room, you will see four stations:

Station 1: Sign-in Table

At this station, there are sign-in sheets for General Public, Elected and Other Officials, Agency Personnel, and News Media. Please sign in on the appropriate sheet.

Station 2: Exhibits

This station will consist of a series of maps that illustrate the potential limits of construction super-imposed over aerial photographs and graphics of the typical design section that is proposed.

Station 3: Continuous PowerPoint Presentation

This short presentation will explain the environmental process and provide an overview of the proposed I-10 widening project. The presentation lasts approximately 10 minutes and will re-start automatically after a one-minute intermission. **The PowerPoint presentation and the exhibits shown tonight are available on the DOTD website at:** http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/default.aspx

Station 4: Comment Table

At this station, comments can be made orally or in writing. A tape recorder is available at this table for oral comments. The last page of this handout is a comment form that you may use. Comments can be turned in during this meeting or mailed to the address on the back of the form. Additional comment forms are also available to be taken with you. **Please note that comments mailed after this meeting must be postmarked no later than December 2, 2015 to be included as part of the meeting transcript.**

PROJECT DESCRIPTION

The DOTD proposes pavement rehabilitation and widening within the existing right-of-way of Interstate 10 (I-10) from the LA 347 interchange continuing eastward to the Atchafalaya Floodway Bridge in St. Martin Parish, Louisiana using federal funding. The project area is in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30, or more specifically, it begins at 30.314626, -91.836068 and ends at 30.323675, -91.791379.

Currently, I-10 consists of two travel lanes in each direction. The project would include full-depth replacement of the pavement within the existing lanes, widening the westbound pavement surface, and installing concrete median protection.

Pavement striping, raised markers, and rumble strips would also be installed. Post construction, eastbound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The westbound pavement will be striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 16-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Two lanes in each direction would remain open to traffic during construction. Any lane closures limiting traffic to less than two open lanes would occur at night and would not be continuous throughout the project corridor. As part of project development, DOTD will widen the westbound Bayou Portage bridge.

Intersection improvements include the construction of two roundabouts at the eastbound and westbound I-10 ramp termini and access changes at the LA 347 and LA 352 signalized intersection.

- The roundabouts would have a single circular roadway with an 18-foot wide lane and a 13-foot wide truck apron. The roundabouts will be approximately 150 feet in diameter. The roadways approaching the roundabout (north and southbound LA 347 and I-10 on/off ramps) would have 12-foot wide lanes with 3-inch mountable curbs.
- The LA 347 and LA 352 intersection would be reconfigured, allowing right turns out of LA 352 going northbound on LA 347 and the signal would be removed. Motorists desiring to travel south on LA 347 from LA 352 would proceed north on LA 347, travel around the roundabout, to continue south on LA 347.

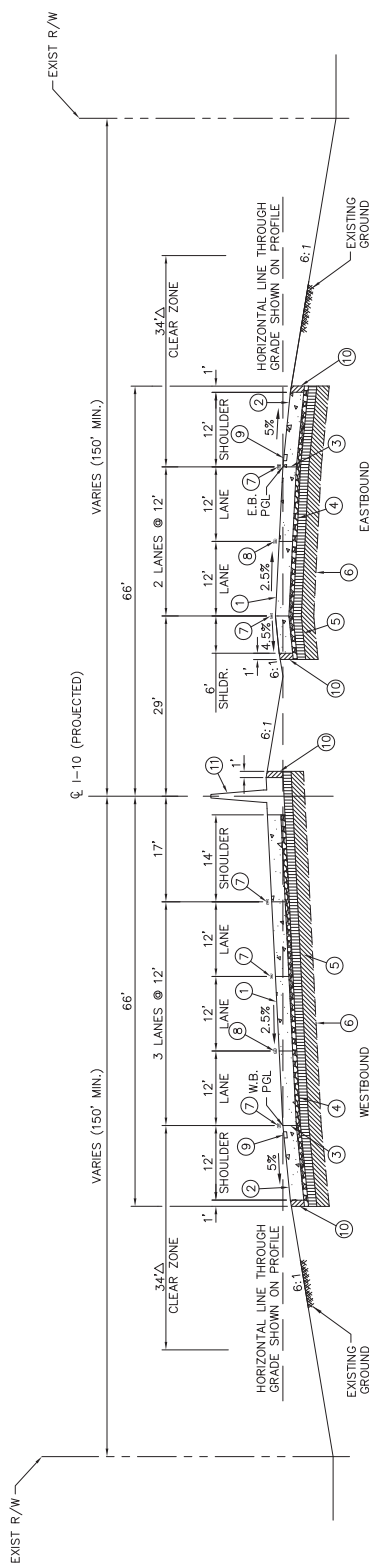
Estimated future Average Daily Traffic values for I-10 within the project area are 52,240 vehicles per day in 2015 and 70,359 vehicles per day in 2035. The project corridor is approximately 2.4 miles long and covers approximately 119.6 acres.

PURPOSE AND NEED

The purpose of and need for this project is to rehabilitate the existing pavement and increase westbound capacity.



60% PRELIMINARY PLANS



TYPICAL FINISHED SECTION

LEGEND

- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
- 2 13" PORTLAND CEMENT CONCRETE SHOULDER
- 3 LONGITUDINAL JOINT
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT (INCLUDED IN PAYMENT OF BASE COURSE)
- 11 54" BARRIER ON FOOTING



THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

2	SHEET NUMBER	DESIGNED	SEPEDA	CHECKED		NO.	DATE	REVISION OR CHANGE CHECK DESCRIPTION	BY	DESIGNED		NO.	DATE	REVISION OR CHANGE CHECK DESCRIPTION	BY	DESIGNED	MAY 2015	CHECKED		STATE	FL 003014	SHEET NUMBER																																																													
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ST. MARTIN												TYPICAL SECTION												1-10. L&A 347 TO ATCHAFALAYA FLOWY, BR.												P.C. CONCRETE ALTERNATE																																															





STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 – Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **December 2, 2015** will become part of the transcript of this meeting.

[illegible]

NAME: _____

ADDRESS:

FOLD
HERE

PLACE
STAMP
HERE


Louisiana Department of Transportation and
Development
Environmental Engineering Administrator, Sec. 28
P.O. Box 94245
Baton Rouge, LA 70804-9245

Power Point Presentation Shown at
Meeting

**OPEN HOUSE PUBLIC MEETING
FOR
I-10: LA 347 – ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH**
State Project No. H.003014
Federal Aid Project No. H003014




Welcome to the public meeting for the proposed pavement rehabilitation and widening of Interstate 10 from LA 347 (Henderson Cecilia Exit) to the Atchafalaya Floodway Bridge in St. Martin Parish. This project is jointly funded by the Federal Highway Administration and the Louisiana Department of Transportation and Development.




Project Description

- ❖ DOTD and FHWA propose full-depth replacement of the existing pavement for the entire length of the project with exception of the overpasses and bridges
- ❖ I-10 West would also be widened within the existing median, and a concrete median barrier or cable median barriers would be constructed
- ❖ At each of the I-10 ramp termini, a roundabout would be constructed to replace the existing signed intersections.




DOTD and FHWA propose full-depth replacement of the existing pavement for the entire length of the project with exception of the overpasses and bridges. I-10 West would also be widened within the existing median, and a concrete median barrier or cable median barriers would be constructed.



Project Purpose and Need

The purpose of and need for this project is to rehabilitate the existing pavement and increase west bound capacity.



The purpose and need for this project is to rehabilitate the existing pavement and to increase westbound capacity.



Meeting Agenda

In addition to this presentation, the following stations are available:

- A Sign-in and Handout Station;
- An Exhibit Station to review layouts of the proposed project and to ask questions to project staff; and
- A Comment Station for giving written and/or verbal comments (Written comments postmarked within 10 calendar days of meeting will also be included in the transcript).

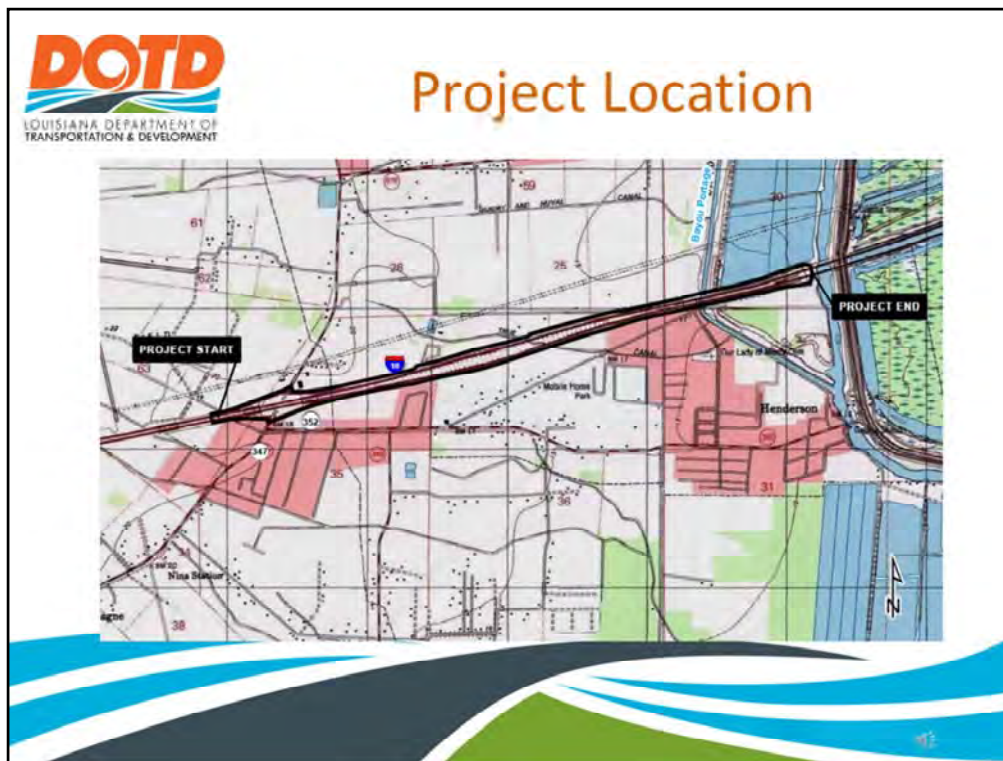
Project team members are available to assist you and receive your comments.




In addition to this presentation, the following stations are available tonight:

- A Sign-in and Hand-out Station
- An Exhibit Station to review layouts of the proposed project and to ask questions to project staff
- And a Comment Station for giving written and/or verbal comments. Comments received tonight and those postmarked within 10 days of this meeting will be included in the official meeting transcript.

Project team members are available to assist you and receive your comments.




As shown on this vicinity map, the proposed project is located along the I-10 corridor from the LA 347 Interchange (Henderson Cecilia Exit) to the Atchafalaya Floodway Bridge. The project includes work in St. Martin Parish.



Proposed Action

The project would include:

- Full-depth replacement of the pavement within the existing lanes of I-10 (except for the overpasses and bridges).
- Widening of the west bound pavement surface within the existing median.
- A concrete median barrier or cable median barriers would be installed.
- Pavement striping, raised markers, and rumble strips would also be installed.
- Construction of 2 roundabouts at the Interstate ramp intersections at LA 347.
- Intersection reconfiguration at LA 347 and LA 352



The project would include full-depth replacement of the pavement within the existing lanes of I-10, except for overpasses and bridges.

Widening of the west bound pavement surface within the existing median.

A concrete median barrier or cable median barriers would be installed. Pavement striping, raised markers, and rumble strips would be installed.

A roundabout would be constructed at each of the interstate ramp intersections with LA 347; and the intersection of LA 347 and LA 352 (Henderson Highway) would be reconfigured.



Proposed Action

During construction:

- The west bound pavement would be widened and temporarily striped to allow for 4 lanes of traffic (2 lanes in each direction). A temporary barrier would be placed between the east bound and west bound lanes.
- The existing east bound I-10 lanes would be rehabilitated while the east bound traffic is moved onto the widened west bound pavement.

During construction:

The west bound pavement would be widened and temporarily striped to allow for 4 lanes of traffic (2 lanes in each direction). A temporary barrier would be placed between the east and west bound lanes.

The existing east bound I-10 lanes would be rehabilitated while the east bound traffic is moved onto the widened west bound pavement.



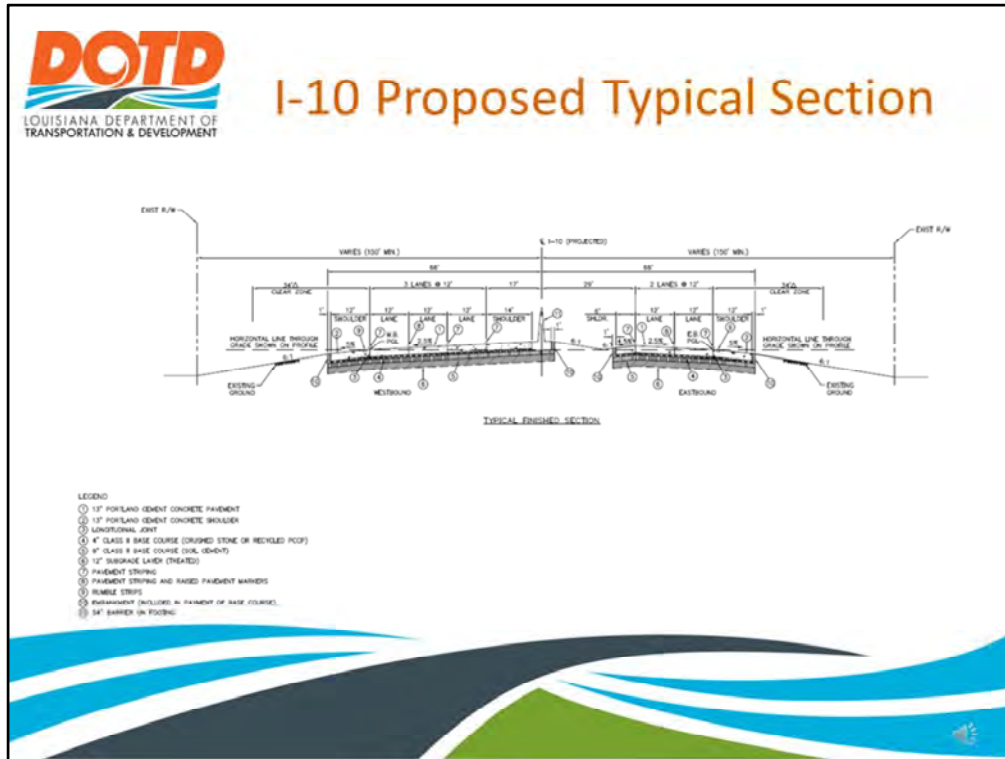
Proposed Action

Upon completion of construction:

- East bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder.
- The west bound pavement will striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 14-foot inside shoulder.

Upon completion of construction: East bound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder and a 6-foot inside shoulder.

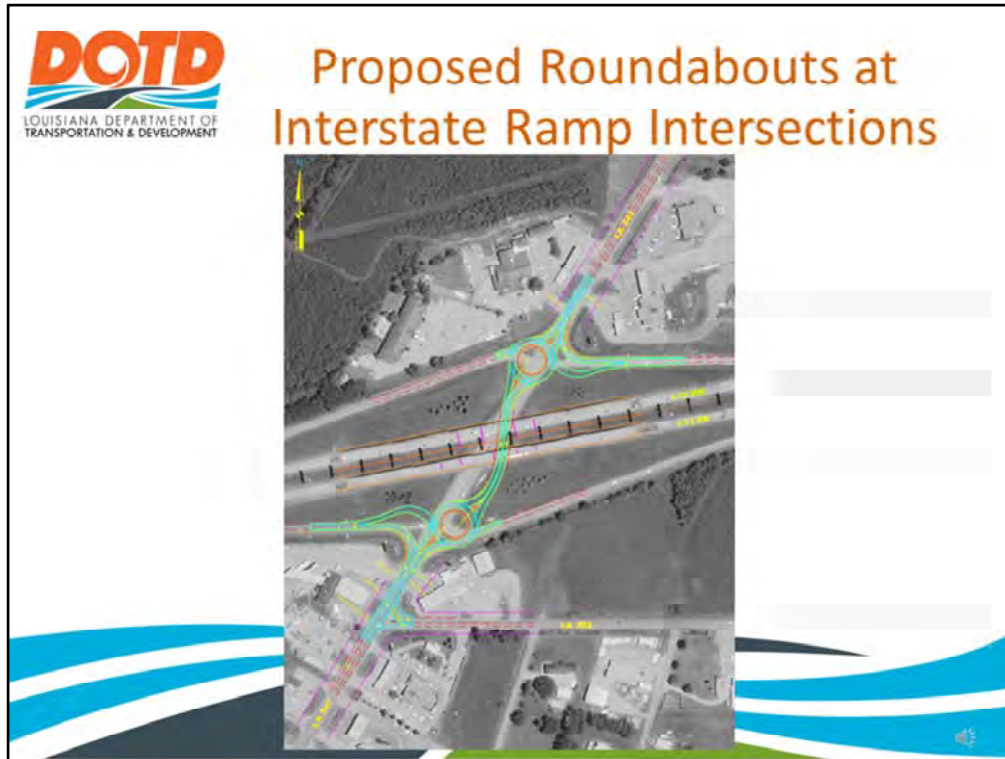
West bound I-10 would be striped for three 12-foot travel lanes, a 12-foot outside shoulder and a 14-foot inside shoulder.



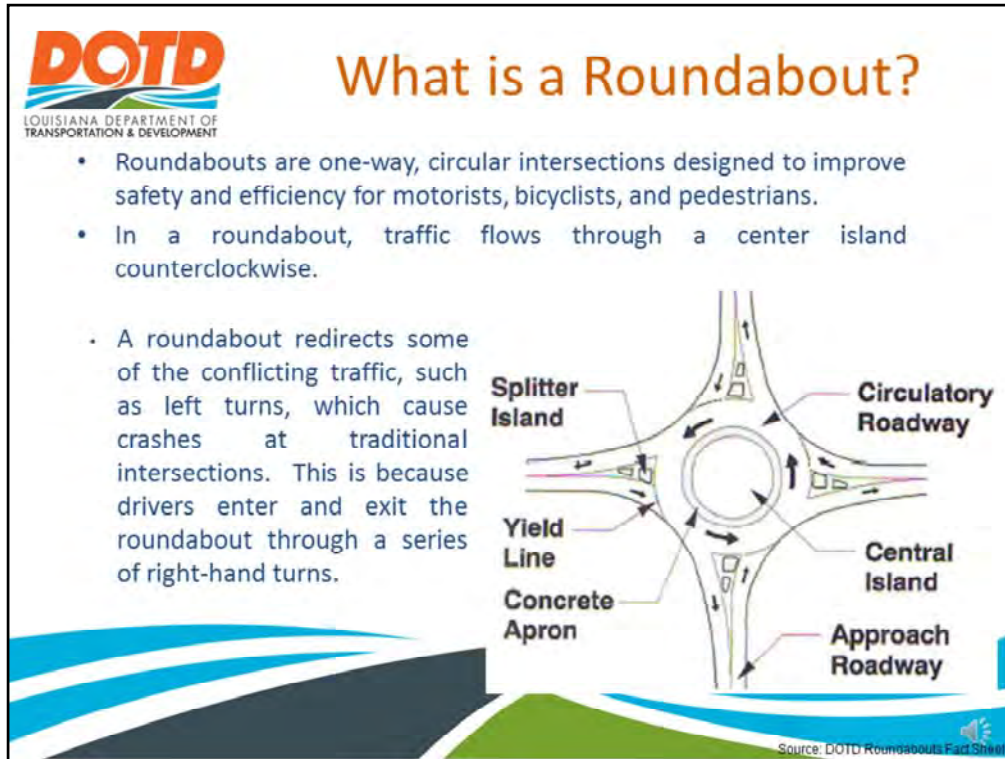
Here is a typical section of what I-10 will look like, post construction.

The west bound side of I-10 would have three 12-foot wide travel lanes, with a 14-foot inside shoulder, and a 12-foot outside shoulder. The east bound side would have two 12-foot wide travel lanes, a 6-foot inside shoulder and a 12 foot outside shoulder.

A median barrier would separate the east bound and west bound lanes.



The two proposed roundabouts would have a single circular roadway with an 18-foot wide lane and a 13-foot wide truck apron. The roundabouts would be approximately 150 feet in diameter. The roadways approaching the roundabout (north and southbound LA 347 and I-10 on/off ramps) would have 12-foot wide lanes with 3-inch mountable curbs. This figure also shows the new turning configurations at the LA 347 and LA 352 intersection. Left turns from LA 352 onto LA 347 south would not be allowed under the new configuration. In order to go southbound on LA 347 from LA 352, travelers must turn right at the intersection and make a full circle around the roundabout to continue southbound towards Nina and Breaux Bridge.




Let's discuss roundabout basics.

Roundabouts are one-way, circular intersections designed to improve safety and efficiency for motorists, bicyclists, and pedestrians.


In a roundabout, traffic flows through a center island counterclockwise.

A roundabout redirects some of the conflicting traffic, such as left turns, which cause crashes at traditional intersections. This is because drivers enter and exit the roundabout through a series of right-hand turns.



What are the advantages of Roundabouts?

- A well-designed roundabout can improve safety, operations and aesthetics of an intersection.
- Greater safety is achieved primarily by slower speeds and the elimination of more severe crashes. Operations are improved by smooth-flowing traffic with less stop-and-go than a signed intersection. Aesthetics are enhanced by the opportunity for more landscaping and less pavement.



Source: DOTD Roundabouts Fact Sheet

What are the advantages of Roundabouts?

A well-designed roundabout can improve safety, operations, and aesthetics of an intersection.

Greater safety is achieved primarily by slower speeds and the elimination of more severe crashes. Operations are improved by smooth-flowing traffic with less stop-and-go than a signed intersection. Aesthetics are enhanced by the opportunity for more landscaping and less pavement.



What do statistics from FHWA say about Roundabouts?

- **Roundabouts save lives**
 - Reduce fatalities by up to 90%
 - Reduce injury crashes by up to 76%
 - Reduce pedestrian crashes by up to 30% to 40%
 - Create up to 75% fewer conflict points than a four-way intersection. Conflict points are any point where the paths of two through or turning vehicles diverge, merge, or cross.



What do statistics from FHWA say about Roundabouts?

Roundabouts save lives

Studies show that roundabouts reduce fatalities by up to 90%; reduce injury crashes by up to 76%; reduce pedestrian crashes by up to 30% to 40%; and create up to 75% fewer conflict points than a four-way intersection. Conflict points are any point where the paths of two through or turning vehicles diverge, merge, or cross.



What do statistics from FHWA say about Roundabouts?

- **Roundabouts save money**
 - Reduce road electricity and maintenance costs by an average of \$5,000/year.
 - Eliminate the costs to install and repair signal equipment
 - Provide a 25-year service life when compared to the ten-year service life of signal equipment.



Roundabouts save money

Roundabouts reduce road electricity and maintenance costs by an average of \$5,000/year. Also, roundabouts provide a 25-year service life, compared to the ten-year service life of signal equipment.




What do statistics from FHWA say about Roundabouts?

- **Roundabouts provide environmental benefits**
 - Reduce vehicle delay and the number and duration of stops compared with signalized intersections, thus decreasing fuel consumption and carbon emissions. Fewer stops and hard accelerations mean less time idling.




Roundabouts provide environmental benefits

Roundabouts reduce vehicle delay and the number and duration of stops compared with signalized intersections, thus decreasing fuel consumption and carbon emissions. Fewer stops and hard accelerations mean less time idling.



What are the general principles of using a Roundabout?

- Think of roundabouts as a series of “T” intersections, where entering vehicles yield to one-way traffic coming from the left. A driver approaching a roundabout must slow down, stop or yield to traffic already in the roundabout, and yield to pedestrians in the crosswalk.
- Then, it’s a simple matter of making a right-hand turn onto a one-way street.
- Once in the roundabout, the driver proceeds around the central island, then takes the necessary right-hand turn to exit.




Source: DOTD Roundabouts Fact Sheet

For those of you who have never driven through a roundabout intersection, let’s discuss the general principles of using a Roundabout.

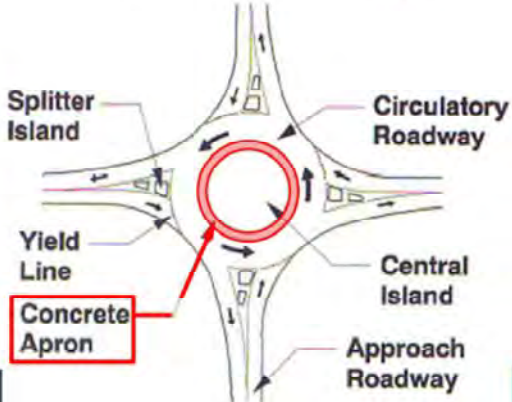
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Then, it’s a simple matter of making a right-hand turn onto a one-way street. Once in the roundabout, the driver proceeds around the central island, then takes the necessary right-hand turn to exit.



Can roundabouts accommodate larger vehicles?

- Yes. Roundabouts are designed to accommodate vehicles with a large turning radius such as buses, fire trucks and eighteen wheelers.
- Roundabouts provide an area between the circulatory roadway and the central island, known as a truck apron, over which the rear wheels of these vehicles can safely track.



Source: DOTD Roundabouts Fact Sheet

Can roundabouts accommodate larger vehicles?

The answer: Yes. Roundabouts are designed to accommodate vehicles with a large turning radius such as buses, fire trucks and eighteen wheelers. Roundabouts provide an area between the circulatory roadway and the central island, known as a truck apron, over which the rear wheels of these vehicles can safely track.



Video of traffic navigating roundabout in Youngsville, LA. Mayor Wilson Viator explains benefits of roundabout at high traffic intersection. Roundabout increases capacity without increasing lanes, decreases severity of crashes, and acts as a traffic calming device. The roundabout easily moves traffic in and out of Youngsville.



How Can You Help?

1. Sign-in tonight and review all materials.
2. Speak with a team member about your concerns.
3. Provide us with your written or recorded comment.

There are three ways you can help tonight.

1. Sign-in and review all materials.
2. Speak with a team member about your concerns.
3. Provide us with your written or recorded comment.



This is the end of the Presentation.

Thank you for your time. Please visit
the remaining stations to view the
exhibits and provide comments.

This is the end of the Presentation. Thank you for your time. Please visit the remaining stations to view the exhibits and provide comments.



The presentation will begin
shortly.



Transcript of Oral Comments

No oral comments were received.

Written Comments



I-10: LA 347 -
ATCHAFALAYA FLOODWAY BRIDGE
OPEN HOUSE PUBLIC MEETING



~~May 21, 2015~~ November 19, 2015



STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 - Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **December 2, 2015** will become part of the transcript of this meeting.

① I feel primary need to be looked at in this instance. We have many roads (state that is) that need to take precedence over this project. State Farm to market Road such as LA 3039 and many other guessing 90% need the attention first. 1st of these roads you need to take to drive speed limit is too far if using posted. Spend the money on these roads first. Get someone to regulate over loaded Sugar Cane truck that is just destroying our roads. They need to follow the rules that all the Trucking Industry has to follow. And you will save us tax payers a lot of money on road repair.

NAME: JERRY SOWNER
ADDRESS: 1299 Nursery Hwy
Breaux Bridge, LA 70517

P.S. If anyone wants to discuss this over the phone I can be reached at 337 228 2464 or 337 277 2901

I-10: LA 347 -
ATCHAFALAYA FLOODWAY BRIDGE
OPEN HOUSE PUBLIC MEETING
May 21, 2015 - November 19, 2015

STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA

Please provide your comments below regarding the project, the alternative being considered, and the issues that the Project Team should evaluate for this study. When complete, please return this form to **Station 4 - Comment Table**. To mail, fold the form in half with the address showing on the outside and seal. Comments received tonight or post marked by **December 2, 2015** will become part of the transcript of this meeting.

Very concerned about these roundabouts. The concept is "new" to the area. This intersection has a diverse group of locals and a great deal of non-locals that may only come thru once. Between fisherman, sports fisherman, heavy equipment, transient, "guest workers", drug users & distributor, tourists and dancers passing in the basin, I am very concerned about them learning to navigate. Drainage is a big issue also. People headed west exit are often inattentive due to the long boring drive over the basin.

Please overlay Hwy 328 N. of Breaux Bridge I-10 exit before this project - because it will be my alternate route.

NAME: Patty Weiss
 ADDRESS: 1671 Grand Anse Hwy
BB LA 70517

T. Y.



I-10: LA 347 –

**ATCHAFALAYA FLOODWAY BRIDGE
OPEN HOUSE PUBLIC MEETING**



~~May 21, 2015~~ November 19, 2015

**STATE PROJECT NO. H.003014
FEDERAL AID PROJECT H003014
I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ST. MARTIN PARISH, LOUISIANA**

We appreciate your proposal to improve the structure of the I-10: LA 347-Atchafalaya Floodway Bridge with new lanes and roundabouts. Our hope is that your improvements will help solve impediments to traffic flow in our area. That said, there is one additional piece of this project that many of us locals hope you will consider: we feel that it is unsafe for bicyclists to travel in lanes with cars and 18-wheelers that are entering and exiting an interstate on-ramp. Those of us who bicycle regularly through the intersections slated for traffic circles are concerned they will propose a hazard for cyclists passing along Grand Point Highway (347) and ultimately deter bike travel on this road, forcing cyclists to go miles out of the way. Shouts of "Get off the road!" frequently remind us that there are motorists who do not want to look out for cyclists on the roads; they view it as a hazard and dangerous for the cyclists. A busy intersection makes it more complicated and it will likely lead to accidents.

Smooth passage for people on bicycles through the intersections in question is key in sustaining a bike route which connects Breaux Bridge, Henderson, Cecilia, Arnaudville, and Grand Coteau, via a scenic route that is frequented by local and touring cyclists. The road draws organized bike rides on a regular basis as well as daily bike travel to and from work and play. Bicycling, birding, and paddling are important to our fast-growing eco-tourism industry and outdoor enthusiasts should be encouraged to pass through these intersections to Henderson, a gateway to the Atchafalaya Basin. Tourists at the popular Cajun Palms RV Resort ride the route to the businesses in Nina/Henderson and to the Basin levy at Henderson. How we handle the construction of this important artery could be pivotal in drawing, or repelling, tourist dollars to one of the most beautiful and unique areas of the state.

We hope that rather than creating a problem that will force cyclists to take an alternate route away from the Atchafalaya Basin and from the businesses of Henderson and Cecilia, that you will ensure the safety of cyclists by routing them in a lane or bike path that is separate from the traffic in roundabout circles.

Thank you for your consideration of this important matter.

Elaine Taylor, Ph.D.
1028 Shady Oaks Lane
Breux Bridge, LA 70517

DOTD's Responses to Comments

DOTD's response to Mr. Sonnier's comment:

DOTD has selected the I-10 project based on priority and need.

DOTD's response to Ms. Weiss' comment:

Roundabouts along LA 347 were selected through analysis of priority and need. Traffic counts were compiled along LA 347 in order to adequately analyze the roundabouts for safety and capacity. The roundabouts will include traffic signage displaying to the roadway user how to properly navigate the site.

DOTD's response to Ms. Taylor's comment:

The Complete Streets Policy will be evaluated for this project. Bicyclists and pedestrian facilities will be considered while developing the final typical section for the project.

Appendix C

Additional Agency Coordination:

Cultural Resources

Levee District



Environmental Section

PO Box 94245 | Baton Rouge, LA 70804- 9245
Phone: 225-242-4502 | fax: 225.242.4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

May 27, 2015

STATE PROJECT NO.: H.003014
FAP NO.: H003014
NAME: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE
ROUTE: I-10
PARISH: ST. MARTIN

Ms. Pam Breaux
State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

SUBJECT: No Historic Properties Affected

Dear Ms. Breaux:

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux

4-19-15

Pam Breaux
State Historic Preservation Officer

Date

The Louisiana Department of Transportation and Development (LADOTD) in conjunction with the Federal Highway Administration (FHWA), proposes pavement rehabilitations and widening along Interstate 10 (I-10) from the LA 347 interchange to the western end of the Atchafalaya Floodway Bridge in St. Martin Parish (See figure 1). The proposed construction would begin at 30.314656, -91.836068 and proceed eastward, ending at 30.323675, -91.791379; a distance of approximately 2.4 miles.

The project would include full depth replacement of the pavement within the existing lanes and a widening of pavement surface in each direction within the existing built up median and a concrete median barrier would be installed. Drainage improvements would include cross drain extensions and median drains via catch basin where necessary. Two lanes in each direction would remain open to traffic during construction. Four (4) bridges (see Table 1) along the interstate would also be widened, with new pilings and footings in the median. A concrete median barrier would be installed in portions of the project corridor. Openings in the barrier would be located at the LA 247 interchange, the Bayou Portage Bridge crossing, in forested areas of the median and at approved median crossings. When completed, the eastbound I-10 will be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder, and up to 12-foot incident management lane. The westbound lanes will consist of three 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. No additional right-of-way is required. The Area of Potential Effects (APE) for the proposed undertaking is considered limits of construction within the existing right-of-way (ROW) which is approximately 60.8 acres (Figure 1).

RECEIVED

MAY 27 2015

ARCHAEOLOGY

LADOTD staff consulted the GIS database maintained by the Louisiana Divisions of Historic Preservation and Archaeology to determine if any historic properties, including archaeological sites or standing structures eligible for or listed on the National Register of Historic Places (NRHP) are located within or adjacent to the project APE. There were no previously recorded historic properties, historic districts or archaeological sites within the APE the proposed project corridor. Two (2) archaeological surveys have been conducted within the APE (Figure 2). No historic properties were identified within the APE as a result of these surveys. A Phase 1A archaeological survey (22-2327), conducted by Earth Search, Inc. in 2000 (Figure 2), for a proposed fiber optic route, extended the length of the APE. The survey consisted of a background/literature search, an inspection of the corridor, a site file check and a sensitivity assessment as well as site monitoring. As a result of this survey the Louisiana Division of Archaeology (LADOA) recommended no further field investigations since the proposed fiber optic route runs through existing Interstate right-of-way. A Phase I cultural resources survey (22-3760), conducted by URS Corporation in 2011 (Figure 2), is partially within the APE and did not identify any sites within or adjacent to the APE.

Eight previously identified archaeological sites are located within one mile of the proposed APE (see Table 1). None of the sites have been determined eligible for listing on the NRHP. Due to the location of these sites away from the proposed APE, none of them will be impacted.

Archaeological Sites	Distance from APE	Cultural Affiliation
16SM52	330 meters	Prehistoric: Coles Creek, Plaquemine
16SM83	980 meters	Post-Civil War boat wreck
16SM105	235 meters	Historic Scatter
16SM106	220 meters	Historic Scatter
16SM107	100 meters	Historic Scatter
16SM108	215 meters	Historic Scatter
16SM110	180 meters	Historic Scatter
16SM111	535 meters	Historic Scatter

The Interstate System is over 50 years of age, however the Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption regarding effects to the Interstate Highway System on March 10, 2005. Although the interstate is exempt, the proposed undertaking effect on other historic properties must be taken into consideration. All bridges and culverts within the APE (see Table 2) on the Interstate are considered exempt.

Table 1: Interstate Bridges.

Structure No.	Year Constructed	Bridge Type	Crossing
03284500607492 03284500607491	1970	Steel Plate Girder Continuous	LA 374
03284500609522 03284500609521	1970	Concrete Pre-stressed Girders	Bayou Portage

Given the results of our records search, the results and LADOA recommendations for survey 22-2327, and the built up nature of the interstate roadway and median; LADOTD in conjunction with FHWA, believes that no historic properties will be affected by the proposed project. We request

your concurrence. If you have any questions or comments, please contact Michelle Hanks at 225-242-4514 or michelle.hanks@la.gov.

Sincerely,

Carey Cox for

Digitally signed by Carey Cox
DN: cn=Carey Cox, o, ou=LADOTD,
email=carey.cox@la.gov, c=US
Date: 2015.05.27 09:07:27 -05'00'

Noel Ardoin

Environmental Engineer Administrator

NA/mwh
cc: FHWA
SHPO File



Figure 1: Project Area showing APE in blue (Map Reference: USGS 7.5' Celia), over LA Division of Archaeology Cultural Resources Map.

Maria Reid

From: Jeannette Williams
Sent: Monday, November 30, 2015 11:48 AM
To: Maria Reid
Subject: FW: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish)

Maria,

FYI! Please see email below.

Thank you,

Jeannette Williams
Department of Transportation and Development
Environmental Department, Section 28
1201 Capitol Access Road
Baton Rouge, La. 70802
Jeannette.Williams@LA.gov
(225)242-4502



From: Alina Shively [mailto:ashively@jenachoctaw.org]
Sent: Monday, November 30, 2015 11:45 AM
To: Jeannette Williams
Subject: RE: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish)

Dear Ms. Williams,

Regarding the above-mentioned project, the Jena Band of Choctaw Indians' THPO hereby concurs with the determination of No Properties. Should any inadvertent discoveries occur, please contact all Tribes with interest in this area. Thank you.

Sincerely,

Alina J. Shively
Jena Band of Choctaw Indians
Deputy Tribal Historic Preservation Officer
P.O. Box 14
Jena, LA 71342
(318) 992-1205
ashively@jenachoctaw.org

From: Jeannette Williams [<mailto:Jeannette.Williams@la.gov>]
Sent: Wednesday, October 7, 2015 11:48 AM
To: Maria Reid <Maria.Reid@la.gov>
Subject: FW: H.003014 I-10: LA 347 - Atchafalaya Floodway Bridge (St. Martin Parish

Please see attachment.

Thank you,

Jeannette Williams
Department of Transportation and Development
Environmental Department, Section 28
1201 Capitol Access Road
Baton Rouge, La. 70802
Jeannette.Williams@LA.gov
(225)242-4502

Maria Reid

From: Alina Shively <ashively@jenachoctaw.org>
Sent: Thursday, May 14, 2015 10:56 AM
To: Maria Reid
Subject: H.003014, I-10-LA 347 to Atchafalaya Floodway Bridge, St. Martin Parish

Dear Ms. Reid:

Thank you for providing us the Re-solicitation of Views for the above-mentioned project. Since the travel surface will be widened, the Jena Band of Choctaw Indians' THPO hereby requests a survey occur prior to ground disturbance and that any and all Cultural or Archaeological sites within one mile be examined and provided for review. Thank you.

Sincerely,

Alina J. Shively
Jena Band of Choctaw Indians
Deputy Tribal Historic Preservation Officer
P.O. Box 14
Jena, LA 71342
(318) 992-1205
ashively@jenachoctaw.org

Maria Reid

From: Michelle Hanks
Sent: Monday, June 22, 2015 3:26 PM
To: 'Alina Shively'
Cc: Maria Reid
Subject: SPN H.003014 I-10 Widening
Attachments: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE.pdf; H 003014_5-27-2015_SHPO signed.pdf

Good afternoon Alina,

Attached for your records is the Section 106 Cultural Resources Document submitted to SHPO on May 27, 2015, and concurred with on June 19, 2015. Should you need more information, please do not hesitate to contact me or Maria Reid.

Thank you,
Michelle

Michelle Whipp Hanks, B.A., M.A.
Environmental Impact Specialist
Louisiana Department of Transportation and Development
1201 Capitol Access Road, Room 502D
Baton Rouge, Louisiana 70802
Tel: (225) 242-4514
Fax: (225) 242-4500
Email: Michelle.Hanks@la.gov

Maria Reid

From: abldoff@aol.com
Sent: Wednesday, April 08, 2015 3:45 PM
To: Maria Reid
Subject: Re: H.003014 I-10: LA 347 to Atchafalaya Floodway Bridge
Attachments: PERMITPROCEDURES.pdf

The project will need a levee permit for any activity that falls within 1500 feet of the levee. Attached is a copy of the permit procedures. Please let us know if you have any questions.

-----Original Message-----

From: Maria Reid <Maria.Reid@la.gov>
To: abldoff <abldoff@aol.com>
Sent: Wed, Apr 8, 2015 11:04 am
Subject: H.003014 I-10: LA 347 to Atchafalaya Floodway Bridge

To whom it may concern,

DOTD would like to determine if the I-10 widening project from LA 347 (Henderson Cecilia Exit) to the Atchafalaya Floodway Bridge project would require a levee permit. I've attached the preliminary project description and a location map. The width of lanes and shoulders may change as the project progresses through the project delivery process.

If you require any additional information, please do not hesitate to call or email.

Thank you,
Maria

Maria Bernard Reid
Environmental Impact Manager 1

Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245
225-242-4506 (desk)
225-242-4500 (fax)
maria.reid@la.gov



Environmental Section

PO Box 94245 | Baton Rouge, LA 70804- 9245
Phone: 225-242-4502 | fax: 225.242.4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

January 25, 2016

STATE PROJECT NO.: H.003014

FAP NO.: H003014

NAME: I-10: LA 347 TO ATCHAFALAYA FLOODWAY BRIDGE

ROUTE: I-10

PARISH: ST. MARTIN

No known historic properties will be affected by this undertaking.
This effect determination could change should new information
come to our attention.

Mr. Phillip E. Boggan II
Deputy State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

Phil Boggan
Deputy State Historic Preservation Officer

Date

03/04/2016

VIA E-MAIL TO: Section 106@crt.state.la.us

SUBJECT: No Historic Properties Affected

The Louisiana Department of Transportation and Development (LADOTD) in conjunction with the Federal Highway Administration (FHWA), proposes pavement rehabilitation and widening along Interstate 10 (I-10) from the west side of the Louisiana Highway (LA) 347 interchange to the Atchafalaya Floodway Bridge in St. Martin Parish (See figure 1). The project area is located in Township 8 South, Range 6 East, Sections 25 and 26 and Township 8 South, Range 7 East, Section 30 or beginning at 30.314626, -91.836068 and ending at 30.323675, -91.791379; a distance of approximately 2.4 miles.

Currently, I-10 consists of two travel lanes in each direction. The project would include full depth replacement of the pavement within the existing lanes, widening the westbound pavement surface within the existing built up median, and installing concrete median protection. Pavement striping, raised markers, and rumble strips would also be installed. Post construction, eastbound I-10 would be striped with two 12-foot travel lanes, a 12-foot outside shoulder, and a 6-foot inside shoulder. The westbound pavement will be striped for three 12-foot travel lanes, a 12-foot outside shoulder, and a 16-foot inside shoulder.

A 54-inch tall concrete median barrier would also be installed in portions of the project corridor. Openings in the barrier would be located at the LA 347 interchange, the Bayou Portage bridge crossing, in forested areas of the median and at approved median crossings.

Intersection improvements include the construction of two roundabouts at the eastbound and westbound I-10 ramp termini and access changes at the LA 347 and LA 352 signalized intersection.

- The roundabouts would have a single circular roadway with an 18-foot wide lane and a 13-foot wide truck apron. The roundabouts will be approximately 150 feet in diameter. The roadways approaching the roundabout (north and southbound LA 347 and I-10 on/off ramps) would have 12-foot wide lanes with 3-inch mountable curbs.
- The LA 347 and LA 352 intersection would be reconfigured, allowing right turns out of LA 352 going northbound on LA 347 and the signal would be removed. Motorists desiring to travel south on LA 347 from LA 352 would proceed north on LA 347, travel around the roundabout, to continue south on LA 347.

Drainage improvements would include cross drain extensions and median drains via catch basin where necessary. As part of project development, DOTD will widen the westbound Bayou Portage and the LA 347 overpass bridges (see Table 2) with new pilings and footings in the median. No additional right-of-way is required. The Area of Potential Effects (APE) for the proposed undertaking is considered limits of construction within the existing right-of-way (ROW) which is approximately 119.6 acres (Figure 1).

LADOTD staff consulted the GIS database maintained by the Louisiana Divisions of Historic Preservation and Archaeology to determine if any historic properties, including archaeological sites or standing structures eligible for or listed on the National Register of Historic Places (NRHP) are located within or adjacent to the project APE. There were no previously recorded historic properties, historic districts or archaeological sites within the APE of the proposed project corridor. Two (2) archaeological surveys have been conducted within the APE (Figure 2). No historic properties were identified within the APE as a result of these surveys. A Phase I archaeological survey (22-2327), conducted by Earth Search, Inc. in 2000 (Figure 2), for a proposed fiber optic route, extended the length of the APE along I-10. The survey consisted of a background/literature search, an inspection of the corridor, a site file check and a sensitivity assessment as well as site monitoring. As a result of this survey the Louisiana Division of Archaeology (LADOA) recommended no further field investigations since the proposed fiber optic route runs through existing Interstate right-of-way. A Phase I cultural resources survey (22-3760), conducted by URS Corporation in 2011 (Figure 2), is partially within the APE and did not identify any sites within or adjacent to the APE.

Eight previously identified archaeological sites are located within one mile of the proposed APE (see Table 1). None of the sites have been determined eligible for listing on the NRHP. Due to the location of these sites away from the proposed APE, none of them will be impacted.

Table 1: Cultural Resources within 1000 meters of the APE.

Archaeological Sites	Distance from APE	Cultural Affiliation
16SM52	330 meters	Prehistoric: Coles Creek, Plaquemine
16SM83	980 meters	Post-Civil War boat wreck
16SM105	235 meters	Historic Scatter
16SM106	220 meters	Historic Scatter
16SM107	100 meters	Historic Scatter
16SM108	215 meters	Historic Scatter
16SM110	180 meters	Historic Scatter
16SM111	535 meters	Historic Scatter


The Interstate System is over 50 years of age, however the Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption regarding effects to the Interstate Highway System on March 10, 2005. Although the interstate is exempt, the proposed undertaking effect on other historic properties must be taken into consideration. All bridges and culverts within the APE (see Table 2) on the Interstate are considered exempt.

Table 1: Interstate Bridges.

Structure No.	Year Constructed	Bridge Type	Crossing
03284500607492	1970	Steel Plate Girder Continuous	LA 347
03284500609522	1970	Concrete Pre-stressed Girders	Bayou Portage

Given the results of our records search, the results and LADOA recommendations for survey 22-2327, and the built up nature of the interstate roadway, median, and approaches; LADOTD in conjunction with FHWA, believes that no historic properties will be affected by the proposed project. We request your concurrence. If you have any questions or comments, please contact Michelle Hanks at 225-242-4514 or michelle.hanks@la.gov.

Sincerely,

 Digitally signed by Carey Coxie
DN: cn=Carey Coxie, o, ou=LADOTD,
email=carey.coxie@la.gov, c=US
Date: 2016.02.02 11:36:32 -06'00'

Noel Ardoin
Environmental Engineer Administrator

NA/mwh
cc: FHWA
SHPO File

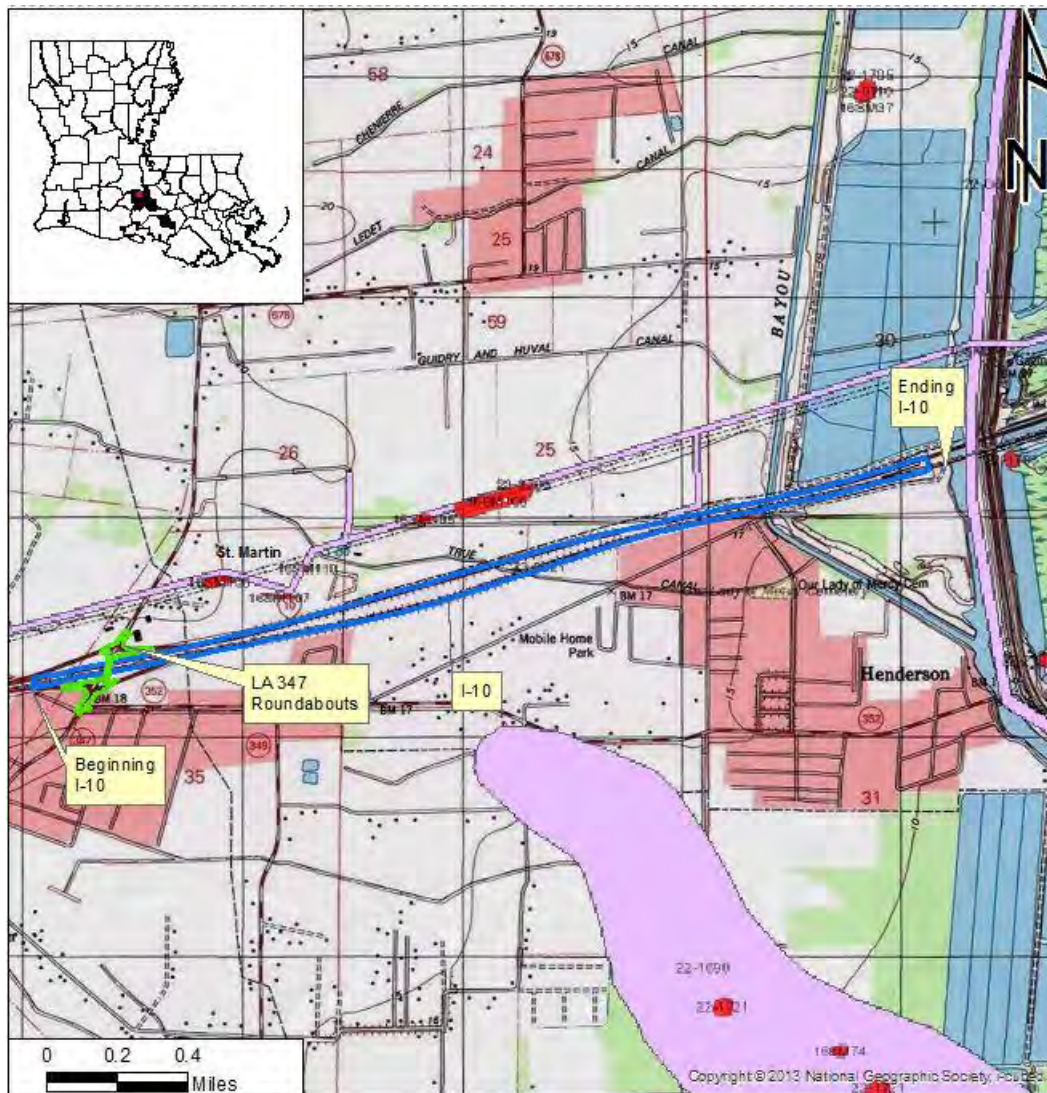


Figure 1: Project Area showing APE of I-10 in blue and the LA 347 roundabouts in green (Map Reference: USGS 7.5' Celia), over LA Division of Archaeology Cultural Resources Map.

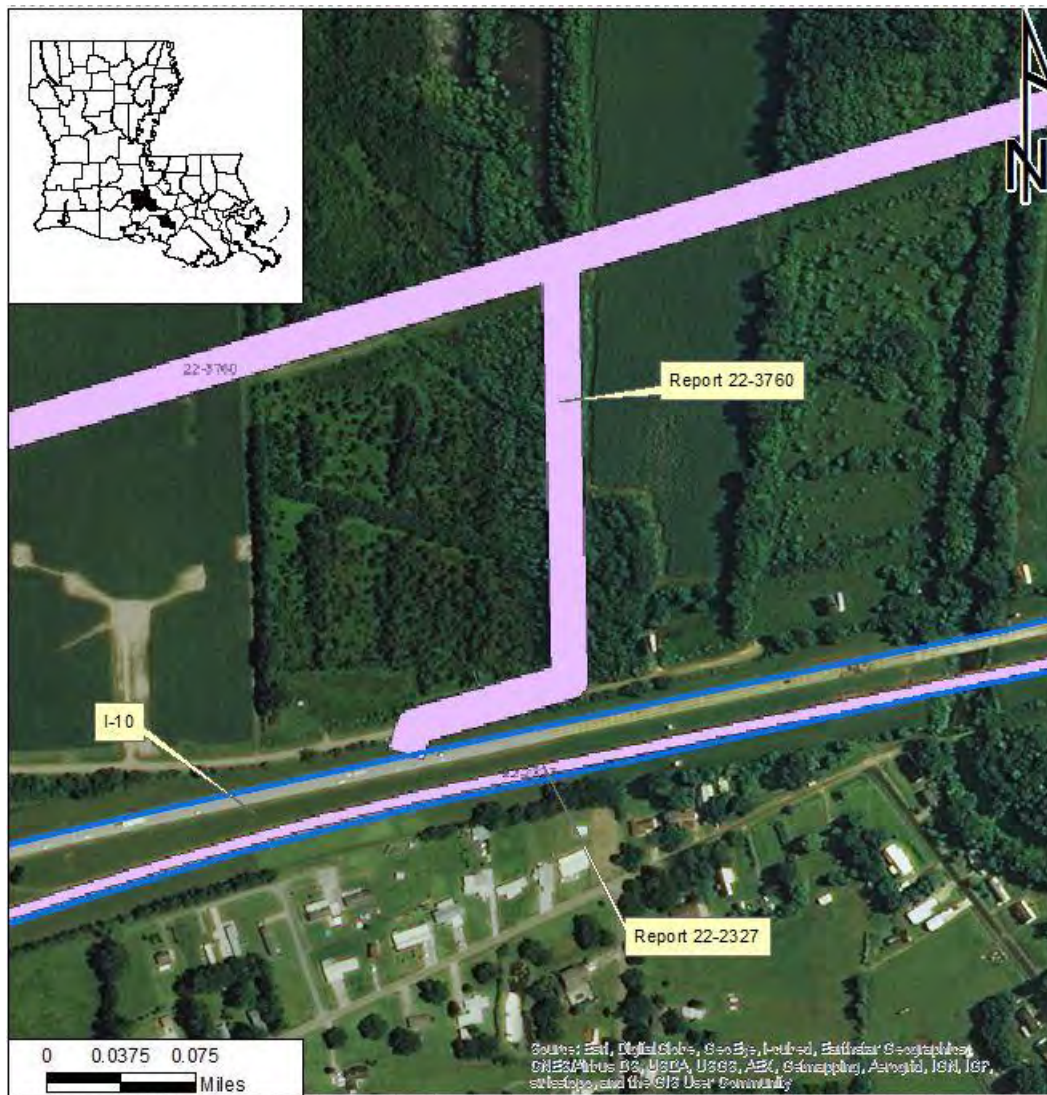


Figure 2: Aerial image of project area showing APE in blue, over LA Division of Archaeology Cultural Resources Map.

Appendix D

Wetland Delineation Report

FINAL:
WETLAND DELINEATION REPORT

State Project No. H.010601

State Project No. H.003014

Federal Project No. H. 010601

Federal Project No. H. 003014

Interstate 10: E. Jct LA HWY 328 to LA HWY 347

Interstate 10: E. Jct LA HWY 347 to Atchafalaya Floodway Bridge
St. Martin Parish, Louisiana

Prepared for:



Prepared by:

C. H. Fenstermaker & Associates, LLC
135 Regency Square
Lafayette, LA 70508

March 20, 2015

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1.0 INTRODUCTION

C.H. Fenstermaker & Associates, LLC (Fenstermaker) conducted a routine wetland delineation on January 26th, February 10th, 12th, and 13th of 2015. The delineation was conducted for the Louisiana Department of Transportation and Development (DOTD). The proposed project will require pavement rehabilitations and additional travel lanes along Interstate 10, from the east junction of LA HWY 328 continuing eastward to the Atchafalaya Floodway Bridge. This project is located in St. Martin Parish, Louisiana. The delineation was limited to the existing road right-of-way (ROW). Enclosed is a topographic map illustrating the approximate layout of the delineated ROW (**Figure 1**).

The Site is located in Section 64, T08S–R05E; Section 38, T09–R05E; Section 30, T08S–R07E and Sections 40, 43, 63, 35, 65, 36, 66, and 41; T08S–R06E in St. Martin Parish, Louisiana. The Site can be found on the Breaux Bridge, Cecilia NE, NW, & SW Louisiana quadrangle maps.

The approximate point-of-beginning (POB) is located in Breaux Bridge, Louisiana, Latitude 30.2951 and Longitude -91.9158 (I-10: E and LA HWY 328 junction) and traverses approximately 6.5 miles eastward to the point-of-ending (POE) located in Breaux Bridge, Louisiana, Latitude 30.3236 and Longitude -91.7911 (**Figure 1**).

2.0 METHODOLOGY

Fenstermaker conducted the delineation in accordance with the 1987 U.S. Army Corps of Engineers (COE) Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0, November 2010). The purpose of the wetland delineation was to determine the presence/absence of wetlands using the three technical criteria: vegetation, hydrology, and soils. It is necessary that all three criteria be present in order to be a jurisdictional wetland. The absence of any one of these criteria could exclude an area from being a wetland under the jurisdiction of the Corps of Engineers.

2.1 Vegetation

In order for the vegetation to be considered hydrophytic (wet), the prevalent vegetation must consist of macrophytes that are typically adapted to areas having hydrologic and soil conditions unique to wetlands. By definition, hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. Macrophytes are any plant material that can be seen without the aid of magnification.

As part of the vegetation criteria, species dominance was evaluated using the “50/20 rule” which ranks plant species that immediately exceed 50 percent of the total dominance measure for a vegetation stratum, plus any additional species comprising 20 percent or more of the total dominance measure for that stratum. If the recorded plant species did not exceed 50 percent of the total dominance, then the prevalence index was used. The prevalence index is a wetland indicator which takes into account all plant species and calculates a weighted average by assigning each indicator status category a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). Plant species are also weighted by their abundance. The prevalence index ranges from 1 to 5, and a prevalence index of 3.0 or less indicates that hydrophytic vegetation is present.

2.2 Hydrology

As defined by the 1987 COE Manual, the term “wetland hydrology” encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. While they may not provide an abundance of information about long-term wetness conditions on a given site, wetland hydrology indicators provide evidence that the Site currently has a wetland hydrologic regime. This information, coupled with the presence of hydrophytic vegetation and hydric soils, provides evidence of long-term as well as short-term wetland conditions.

In order to meet the hydrology criteria of a wetland, a sample location must meet one primary indicator or two secondary indicators (**Table 1**).

Table 1: Wetland Hydrology Indicators

Primary indicators		Secondary indicators
Surface water (A1)	Water-stained leaves (B9)	Surface soil cracks (B6)
High water table (A2)	Aquatic fauna (B13)	Sparsely vegetated concave surface (B8)
Saturation (A3)	Marl deposits (B15)	Drainage patterns (B10)
Water marks (B1)	Hydrogen sulfide odor (C1)	Moss trim lines (B16)
Sediment deposits (B2)	Oxidized rhizospheres along living roots (C3)	Dry season water table (C2)
Drift deposits (B3)	Presence of reduced iron (C4)	Crayfish burrows (C8)
Algal mat or crust (B4)	Recent iron reduction in tilled soils (C6)	Saturation visible on aerial imagery (C9)
Iron deposits	Thin muck surface (C7)	Geomorphic position (D2)
Inundation visible on aerial imagery (B7)		Shallow aquitard (D3)
		Fac-neutral test (D5)

Source: COE Wetland Delineation Manual, 1987.

2.3 Soils

Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, July 13, 1994). Almost all hydric soils exhibit characteristic morphologies that are a result of repeated periods of saturation and/or inundation for more than a few days at a time. When combined with anaerobic microbial activity in the soil, saturation and inundation causes a depletion of oxygen in the soil. This anaerobiosis process results in characteristic morphologies such as the reduction, translocation, and/or the accumulation of iron, which persists in the soil whether it is wet or dry. This process forms features in the soil that are called redoximorphic features. These characteristic morphologies are particularly useful for identifying hydric soils.

The soil investigation criterion requires the use of a soil probe or a pit excavated to a 20-inch depth in

order to investigate for hydric indicators. These indicators typically include, but are not limited to:

- gleyed or low-chroma colors (redox depletions)
- redox concentrations
- listed on the local hydric soils list
- listed on the national hydric soils list

3.0 RESULTS AND DISCUSSION

3.1 Site Description

The Site is located in Section 64, T08S–R05E; Section 38, T09–R05E; Section 30, T08S–R07E and Sections 40, 43, 63, 35, 65, 36, 66, and 41; T08S–R06E in St. Martin Parish, Louisiana. The Site can be found on the Breaux Bridge, Cecilia NE, NW, & SW Louisiana quadrangle maps.

The general conditions of the Site can be described as undulating, with 0 to 4 percent slopes. The majority of vegetation habitat can be characterized as maintained herbaceous ROW's for Interstate 10. However, a few forested areas are located in the median and along the ROW boundaries.

Thirty-three sample locations (Plots 1- 33) were taken within the Site. Plot locations were selected based on visual observations of changes in vegetation and topography. Recorded data forms and photographs are presented in **Appendix A**. The photographs illustrate typical conditions that were observed at each Plot, obvious jurisdictional wetlands, other waters, and at various points along the ROW.

3.2 Vegetation

The herbaceous communities can be characterized as maintained herbaceous ROW's for I-10. A few small forested areas are located within the median and along the ROW boundaries. Dominant and sub-dominant species of vegetation associated with the project area can be referenced in the corresponding data sheets in **Appendix A**.

Plots 3, 7, 15, 19, 22, 27, 28, 32, and 33 were dominated by hydrophytes and met the hydrophytic vegetation criteria of a wetland. A complete list of vegetation associated with each plot can be found in the corresponding data sheets located in **Appendix A**. The location of each plot, relative to the existing ROW, is illustrated in (**Figures 2, 3, and 4**).

3.3 Hydrology

The topography of the proposed ROW can be described as undulating with 0 to 4 percent slopes illustrated in the attached quadrangle map (**Figure 1**).

Figures 2 & 3 are 1998 and 2004 aerial with soil survey identification of the Site. The dark blue areas represent surface hydrology. The image was utilized to observe hydric soils along with numerous drainage features (Other Waters) within the Site. The aerial photos revealed Other Waters and hydric soils within the delineation boundary.

Plots 3, 7, 15, 19, 22, and 27 met the hydrology criteria of a wetland. Wetland hydrology indicators

associated with each plot can be referenced in the corresponding data sheets of **Appendix A**.

The Site intersects twenty-seven Other Waters and ten Wetland areas. All Other Waters and Wetlands will likely be jurisdictional due to their connection to Section 10 Waters. Tables illustrate the total acres and total linear feet of Other Waters and Wetlands located in the ROW and are presented in Section 4.0 Findings and Conclusions of this report.

3.4 Soils

According to St. Martin Parish Soil Survey, the site has four soil types: Te- Tensas silty clay loam, 0 to 1 percent slopes; Lo- Loreauville silt loam; Dd- Dundee silt loam; Sh- Sharkey clay. According to the Web Soil Survey, National Cooperative Survey, and the Natural Resources Conservation Service (NRCS) hydric soils list, only the Lo soil type is listed as a hydric (wetland) soil. Plot locations relative to the map unit can be referenced on **Figures 2 and 3** and in the corresponding data sheets in **Appendix A**.

The wetland delineation revealed that Plots 3, 4, 6, 7, 8, and 12-32 contained hydric soil indicators, thus meeting the hydric soils criteria of a wetland. Soil characteristics associated with the plots can be found in the corresponding data sheets located in **Appendix A**.

4.0 FINDINGS AND CONCLUSION

In conclusion, six data points (Plots 3, 7, 15, 19, 22, & 27) that were collected for the wetland delineation contained all three technical criteria of a wetland and could be considered jurisdictional by the U.S. Army Corps of Engineers. **Table 1** lists the plots and the wetland criteria determination. It is Fenstermaker's opinion that the delineation boundary along Interstate 10 from the east junction of LA HWY 328 continuing eastward to Atchafalaya Floodway Bridge contains ten herbaceous wetlands (Wetland #1- #10). The delineation boundary also contains twenty-seven Other Waters (Other Waters #1 through #27).

These Other Waters are illustrated in **Figure 4.1 through 4.11**. It is Fenstermaker's opinion that all other waters and wetlands have direct and indirect connectivity to Section 10 Waters and will likely be jurisdictional. See Wetland Details (**Figures 4.1 through 4.11**) for wetland and other water locations. **Table 2:** Other Waters list the linear feet, acreage, Lat/Long, hydrologic unit code (HUC), and the map location. **Table 3:** Wetlands list acreage, habitat type (forested and/or herbaceous), Lat/Long, hydrologic unit code (HUC), and the map location. It is Fenstermaker's opinion that a Department of the Army Permit will be required prior any mechanized land clearing activities or the deposition or redistribution of fill material in other waters and wetlands that are jurisdictional under Section 404 of the Clean Water Act.

Table 1: Wetland Criteria

Sample Plot	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland Determination
1	N	N	N	N
2	N	N	N	N
3	Y	Y	Y	Y
4	N	Y	N	N
5	N	N	N	N
6	N	Y	N	N
7	Y	Y	Y	Y
8	N	Y	N	N
9	N	N	N	N
10	N	N	N	N
11	N	N	N	N
12	N	Y	N	N
13	N	Y	N	N
14	N	Y	N	N
15	Y	Y	Y	Y
16	N	Y	N	N
17	N	Y	N	N
18	N	Y	N	N
19	Y	Y	Y	Y
20	N	Y	N	N
21	N	Y	N	N
22	Y	Y	Y	Y
23	N	Y	N	N
24	N	Y	N	N
25	N	Y	N	N
26	N	N	N	N
27	Y	Y	Y	Y
28	Y	Y	N	N
29	N	Y	N	N
30	N	Y	N	N
31	N	Y	N	N
32	Y	Y	N	N
33	Y	N	N	N

Table 2: Other Waters (Section 404)

Other Waters (Section 404)	Linear Feet	Acreage	Lat/ Long	HUC	Map Location
Other Waters #1	± 343	0.111	30°17'54.569"N 91°54'9.793"W	08080102	Figure 4.2
Other Waters #2	± 289	0.147	30°17'58.354"N 91°53'57.712"W	08080102	Figure 4.2
Other Waters #3	± 263	0.095	30°18'3.237"N 91°53'39.474"W	08080102	Figure 4.2
Other Waters #4	± 277	0.097	30°18'4.621"N 91°53'36.448"W	08080102	Figure 4.2
Other Waters #5	± 280	0.102	30°18'8.524"N 91°53'24.451"W	08080102	Figure 4.3
Other Waters #6	± 289	0.101	30°18'9.222"N 91°53'21.094"W	08080102	Figure 4.3
Other Waters #7	± 295	0.091	30°18'10.099"N 91°53'14.99"W	08080102	Figure 4.3
Other Waters #8	± 298	0.104	30°18'11.038"N 91°53'11.537"W	08080102	Figure 4.3
Other Waters #9	± 56	0.035	30°18'14.638"N 91°53'7.197"W	08080102	Figure 4.3
Other Waters #10	± 234	0.103	30°18'13.31"N 91°53'5.607"W	08080102	Figure 4.3
Other Waters #11	± 55	0.012	30°18'15.188"N 91°53'5.081"W	08080102	Figure 4.3
Other Waters #12	± 57	0.012	30°18'15.985"N 91°53'2.893"W	08080102	Figure 4.3
Other Waters #13	± 297	0.073	30°18'14.961"N 91°52'56.694"W	08080102	Figure 4.3
Other Waters #14	± 302	0.067	30°18'16.311"N 91°52'53.667"W	08080102	Figure 4.3
Other Waters #15	± 302	0.105	30°18'17.349"N 91°52'51.457"W	08080102	Figure 4.4
Other Waters #16	± 293	0.089	30°18'18.23"N 91°52'48.921"W	08080102	Figure 4.4
Other Waters #17	± 53	0.019	30°18'20.167"N 91°52'47.816"W	08080102	Figure 4.4
Other Waters #18	± 51	0.042	30°18'28.061"N 91°52'18.217"W	08080102	Figure 4.4
Other Waters #19	± 301	0.270	30°18'41.404"N 91°51'12.152"W	08080102	Figure 4.6
Other Waters #20	± 684	0.252	30°18'47.029"N 91°50'41.661"W	08080102	Figure 4.7
Other Waters #21	± 308	0.068	30°18'49.079"N 91°50'27.566"W	08080102	Figure 4.7
Other Waters #22	± 1129	0.278	30°18'52.936"N 91°49'52.474"W	08080102	Figure 4.8
Other Waters #23	± 295	0.240	30°18'59.195"N 91°49'30.255"W	08080102	Figure 4.8
Other Waters #24	± 550	0.333	30°19'3.679"N 91°49'7.228"W	08080102	Figure 4.9
Other Waters #25	± 679	0.937	30°19'9.325"N 91°48'44.363"W	08080102	Figure 4.10
Other Waters #26	± 296	1.148	30°19'18.658"N 91°47'58.723"W	08080102	Figure 4.11
Other Waters #27	± 2332	0.430	30°18'19.062"N 91°52'50.706"W	08080102	Figure 4.3

Table 3: Wetlands

Wetland	Acreage	Habitat Type	Lat/ Long	HUC	Map Location
Wetland # 1	0.542	Herbaceous	30°18'14.475"N 91°53'8.16"W	08080102	Figure 4.3
Wetland # 2	0.921	Herbaceous	30°18'13.021"N 91°53'4.016"W	08080102	Figure 4.3
Wetland # 3	0.246	Herbaceous	30°18'15.572"N 91°52'54.775"W	08080102	Figure 4.3
Wetland # 4	0.117	Forested	30°18'28.221"N 91°52'19.404"W	08080102	Figure 4.4
Wetland # 5	0.035	Forested	30°18'43.291"N 91°51'11.014"W	08080102	Figure 4.6
Wetland # 6	0.180	Herbaceous	30°18'47.537"N 91°50'35.772"W	08080102	Figure 4.7
Wetland # 7	0.810	Herbaceous	30°18'49.651"N 91°50'32.863"W	08080102	Figure 4.7
Wetland # 8	0.162	Herbaceous	30°18'55.846"N 91°49'48.392"W	08080102	Figure 4.8
Wetland # 9	1.468	Mixed Herbaceous & Forested	30°19'1.823"N 91°49'7.297"W	08080102	Figure 4.9
Wetland # 10	0.025	Forested	30°19'12.688"N 91°48'38.9"W	08080102	Figure 4.10

A jurisdictional wetland determination can only be made by the Corps of Engineers (COE). Consultants such as Fenstermaker can perform field investigations (delineations), collect data in a prescribed manner, and submit it to the COE along with recommendations; however, it is the COE that makes the final determination.

6.0 MITIGATION

The DOTD will mitigate the wetlands being impacted by construction activities for this project by minimizing impacts as listed in the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, and mitigate for lost wetland habitats by reseeding with the appropriate plants and seedlings. In addition, the Department will coordinate appropriate mitigation planned with the Corps of Engineers.

In an effort to minimize impacts resulting from the proposed action, the Department's Standard Specifications require that the contractor take certain measures toward reducing environmental (wetland) impacts. These measures are described in, but not limited to, the following sections:

1. Scope of Work - Section 104
2. Control of Work - Section 105
3. Legal Relations and Responsibility to Public - Section 107
4. Clearing and Grubbing -Section 201
5. Removal or Relocation of Structures and Obstructions - Section 202
6. Excavation and Embankment - Section 203
7. Temporary Erosion Control - Section 204

It has been determined that there is no practicable alternative to the proposed construction involving impacts to wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from this project.

7.0 REFERENCES

U.S. Army Corps of Engineers. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS.

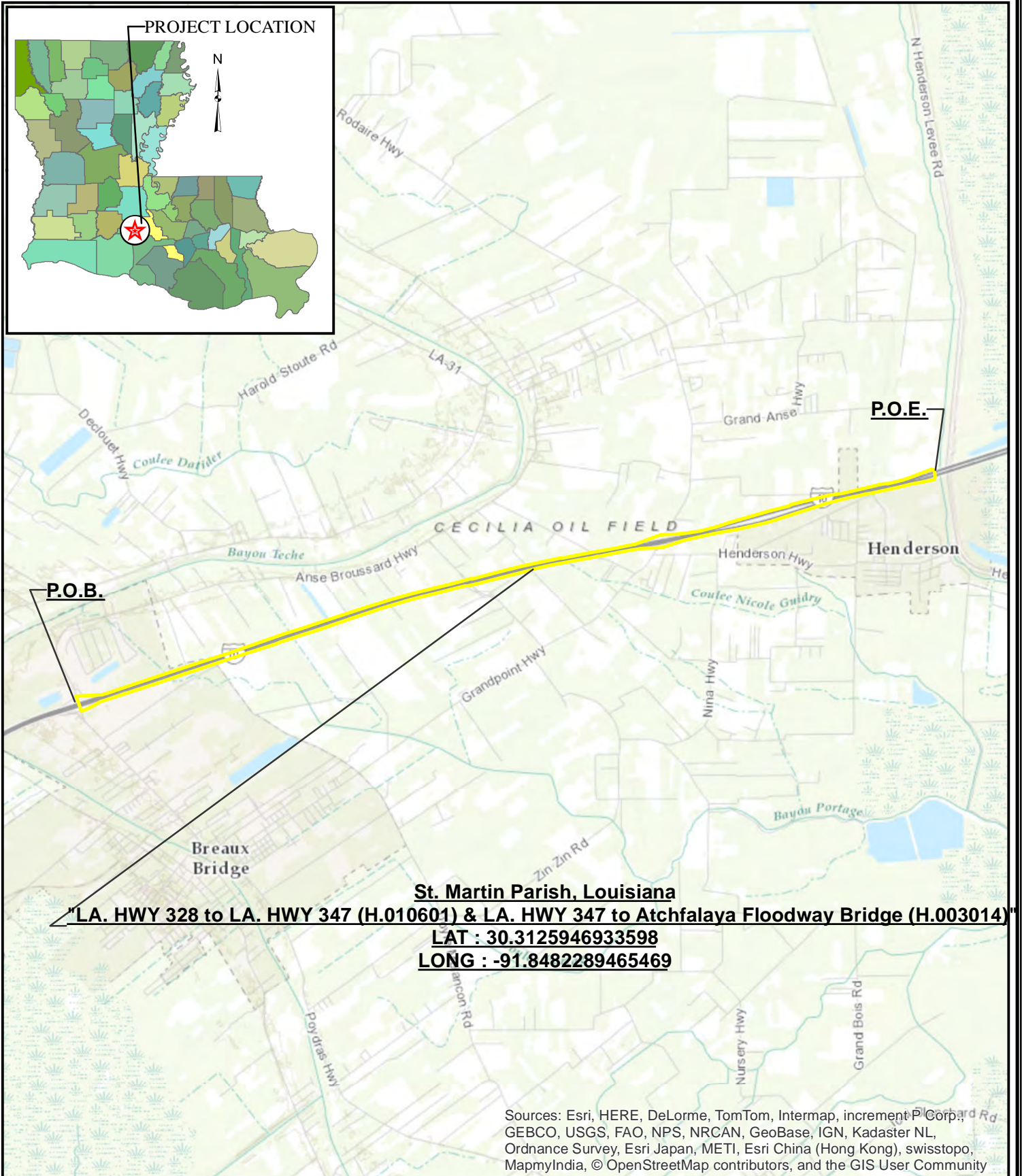
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U.S. Department of Agriculture, Natural Resources Conservation Service. 1995. *Soil Mapping Units and Hydric Soils Designations, Louisiana, Third Edition*. May 1995.

U.S. Department of Agriculture, Natural Resources Conservation Service. 1998. *Field Indicators of Hydric Soils in the United States, Version 6.0*. G.W. Hurt, Whited, P.M., and Pringle, R.F. (eds.). USDA, NRCS, Fort Worth, TX.

U.S. Army Corps of Engineers. 2012. *Atlantic and Gulf Coastal Plain Region-National Wetlands Plant List, Final Draft Ratings*. Prepared by U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory (CRREL), Hanover, NH, and BONAP, Chapel Hill, NC.

FIGURE 1: VICINITY MAP



6,000 3,000 0 6,000 12,000 Feet

FIGURE 1 : VICINITY MAP
(NGS USA TOPOGRAPHIC MAP)

LA Department of Transportation & Development
LA. 328 to LA. 347 (H.010601) & LA. 347 to Atchafalaya Bridge (H.003014)
SEC: 25, 35, 36, 40, 41, 44, 63, 64, 65, & 66: T 08S - R 06E; SEC: 113: T 08S - R 05E;
SEC: 41, 42, 43 & 143 T 09S - R 06E; SEC: 38: T 09S - R 05E; SEC 30 & 31 T 08S - R 07E
St. Martin Parish
3/11/2015



FIGURE 2: 1998 AERIAL AND SOIL SURVEY MAPS

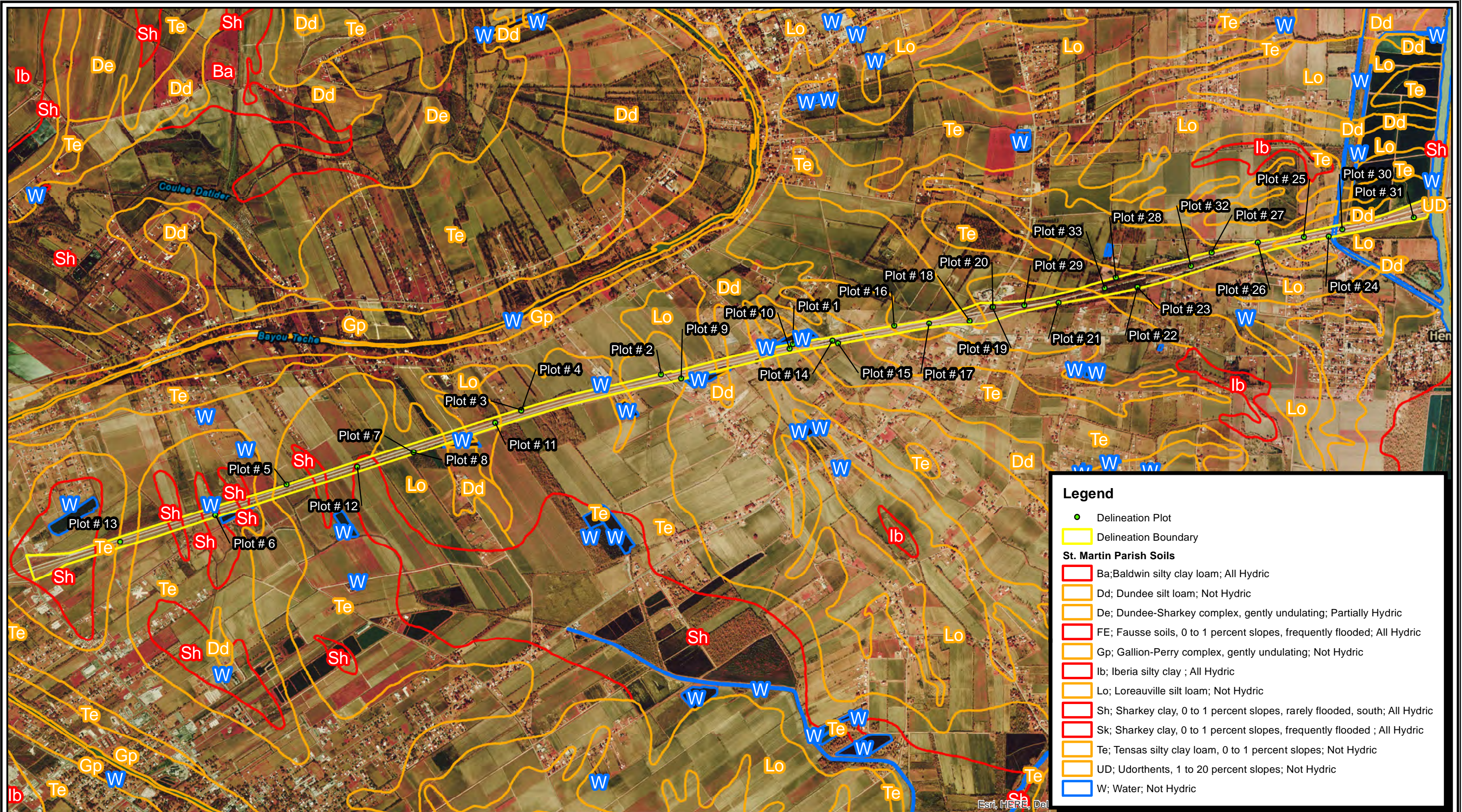
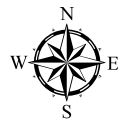


FIGURE 2 : AERIAL & SOILS MAP
(1998 DOQQ)

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2,500 1,250 0 2,500 5,000 7,500 10,000 Feet

FIGURE 3: 2004 AERIAL AND SOIL SURVEY MAPS

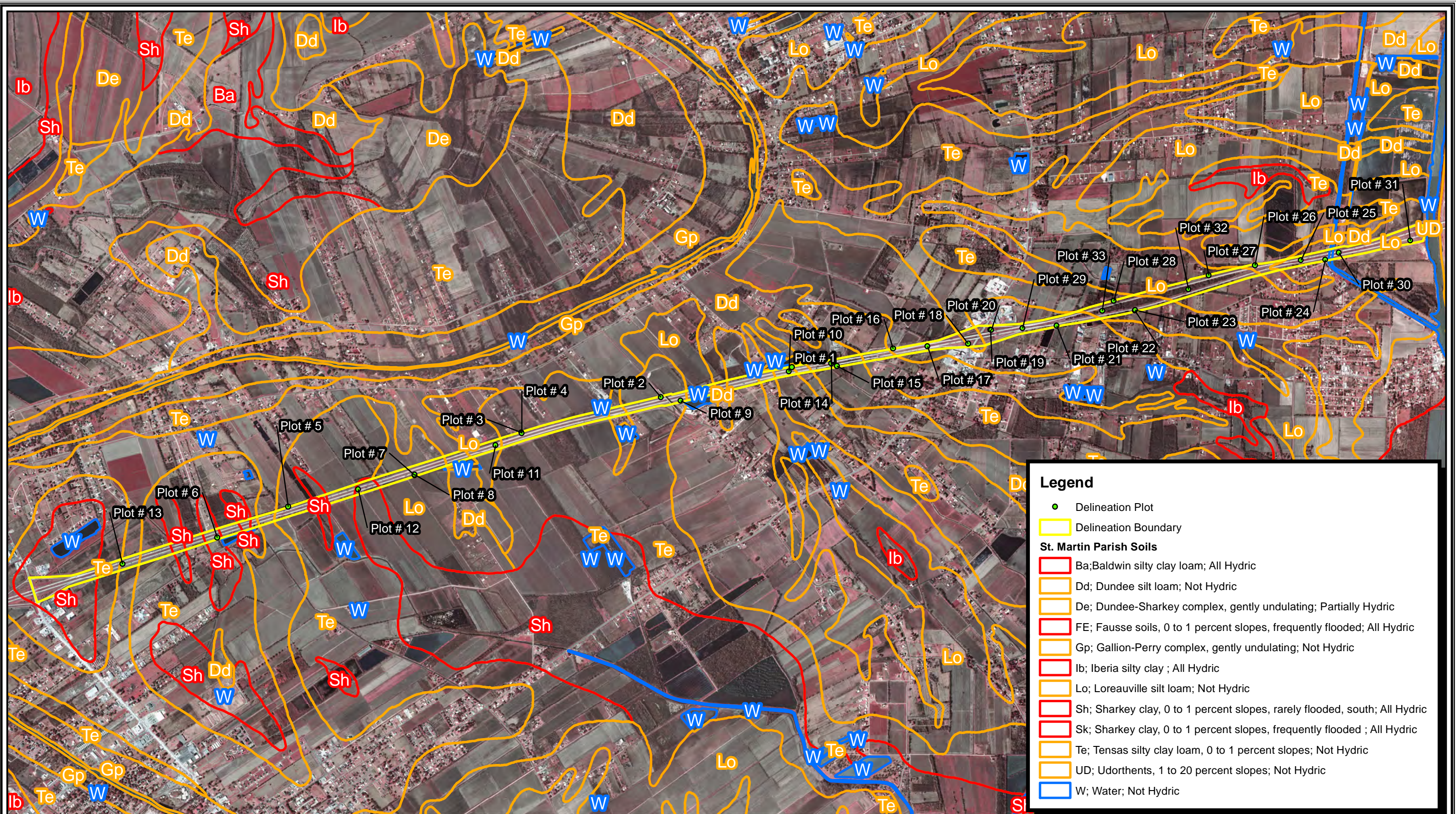


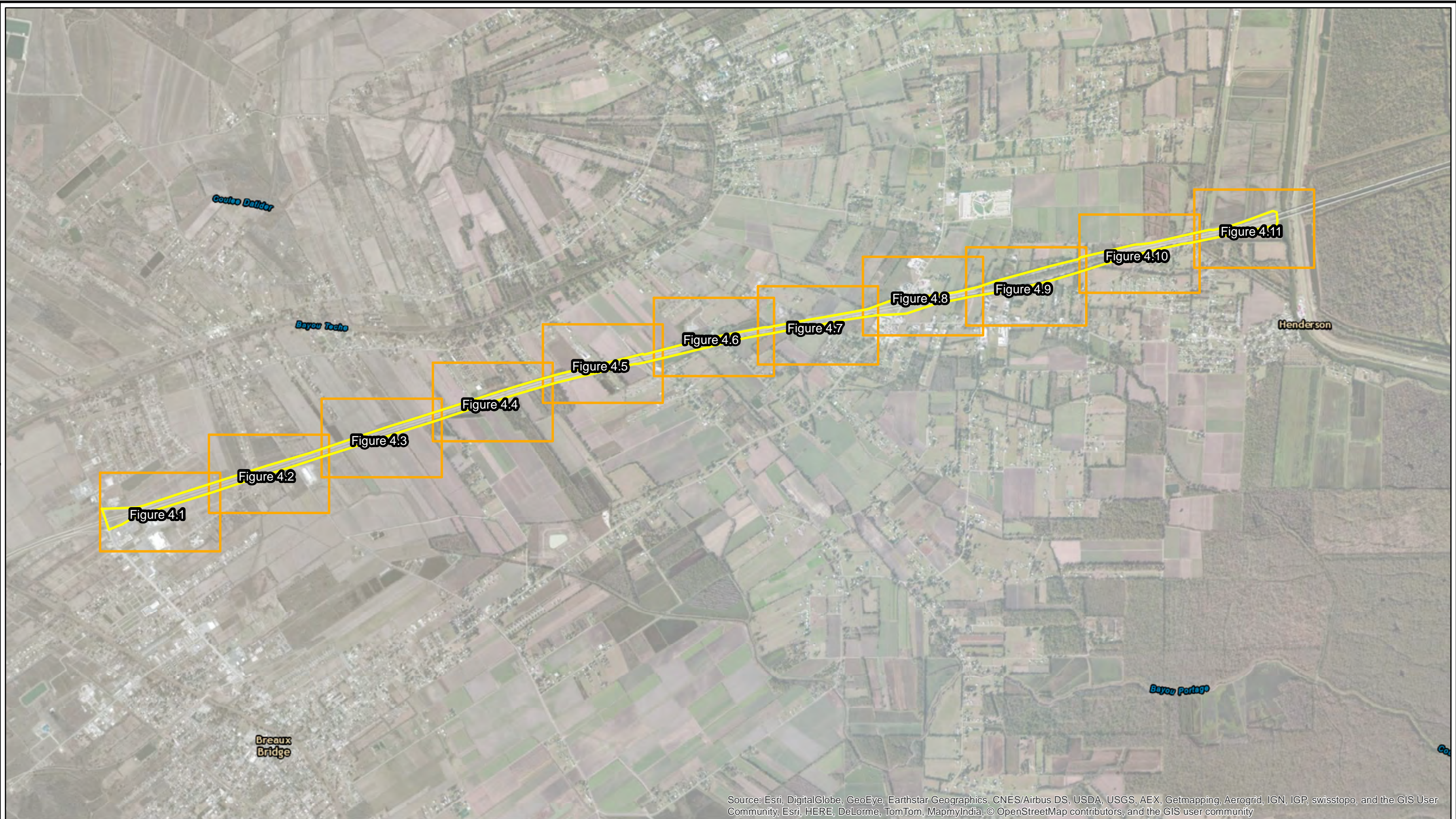
FIGURE 3 : AERIAL & SOILS MAP
(2004 DOQQ)

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SEC: 41, 42, 43 & 143 T 09S - R 06E; SEC: 38: T 09S - R 05E; SEC 30 & 31 T 08S - R 07E
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2,500 1,250 0 2,500 5,000 7,500 10,000 Feet

FIGURE 4: WETLAND DETAIL MAPS



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

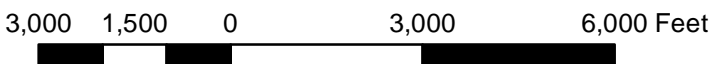


FIGURE 4 : Map
(BING HYBRID) **Index**

LA Department of Transportation & Development
 LA. 328 to LA. 347 (H.010601) & LA. 347 to Atchafalaya Bridge (H.003014)
 SEC: 25, 35, 36, 40, 41, 44, 63, 64, 65, & 66: T 08S - R 06E; SEC: 113: T 08S - R 05E;
 SEC: 41, 42, 43 & 143 T 09S - R 06E; SEC: 38: T 09S - R 05E; SEC 30 & 31 T 08S - R 07E
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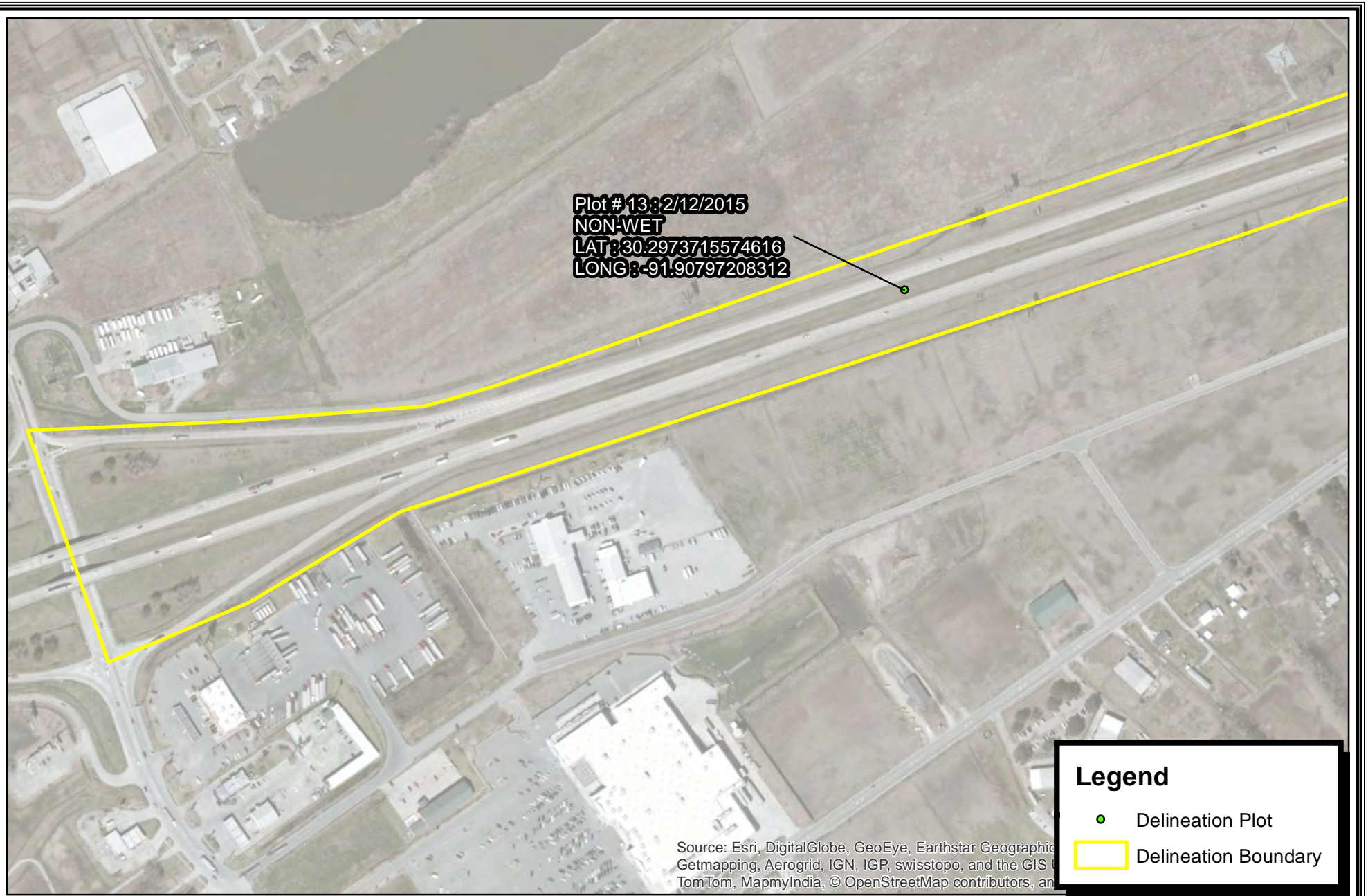
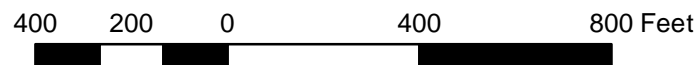


FIGURE 4.1 : Wetland
(BING HTBRID) **Detail**

LA Department of Transportation & Development
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LA. 347 to Atchafalaya Floodway Bridge (H.003014)
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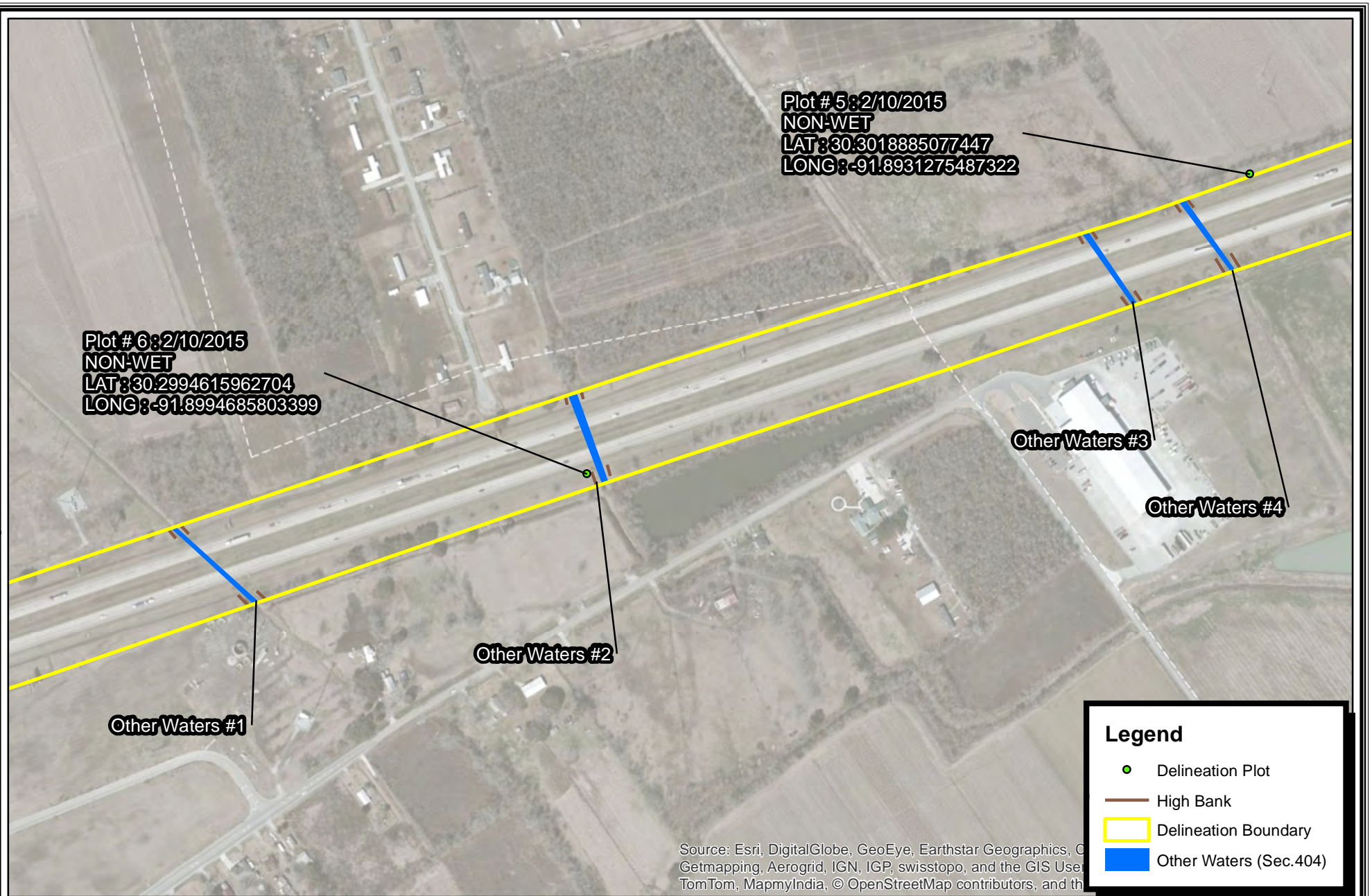
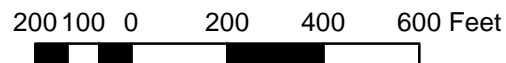
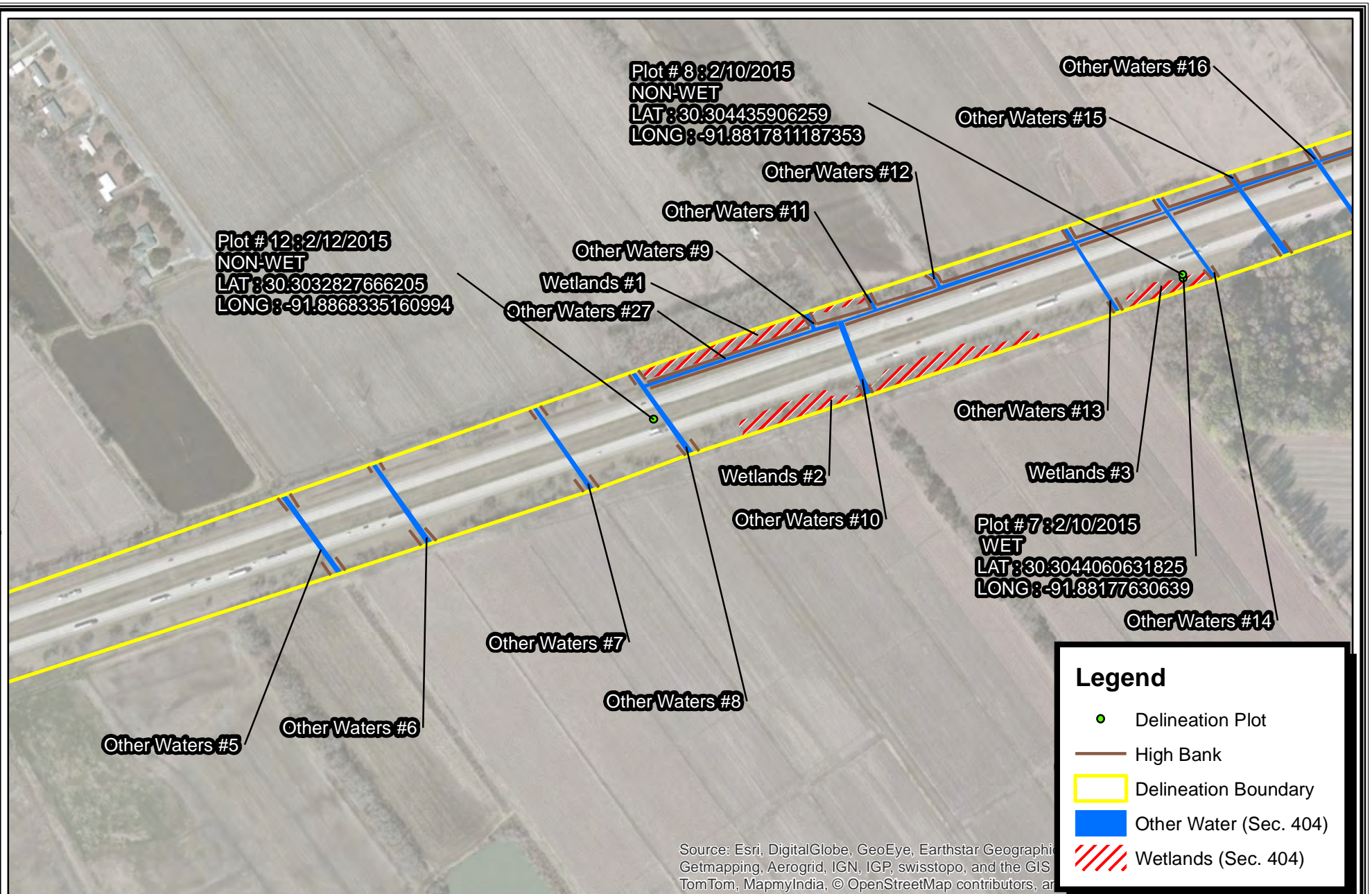


FIGURE 4.2 : Wetland
 (BING HTBRID) **Detail**

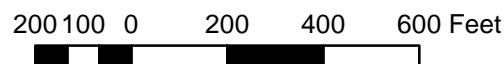
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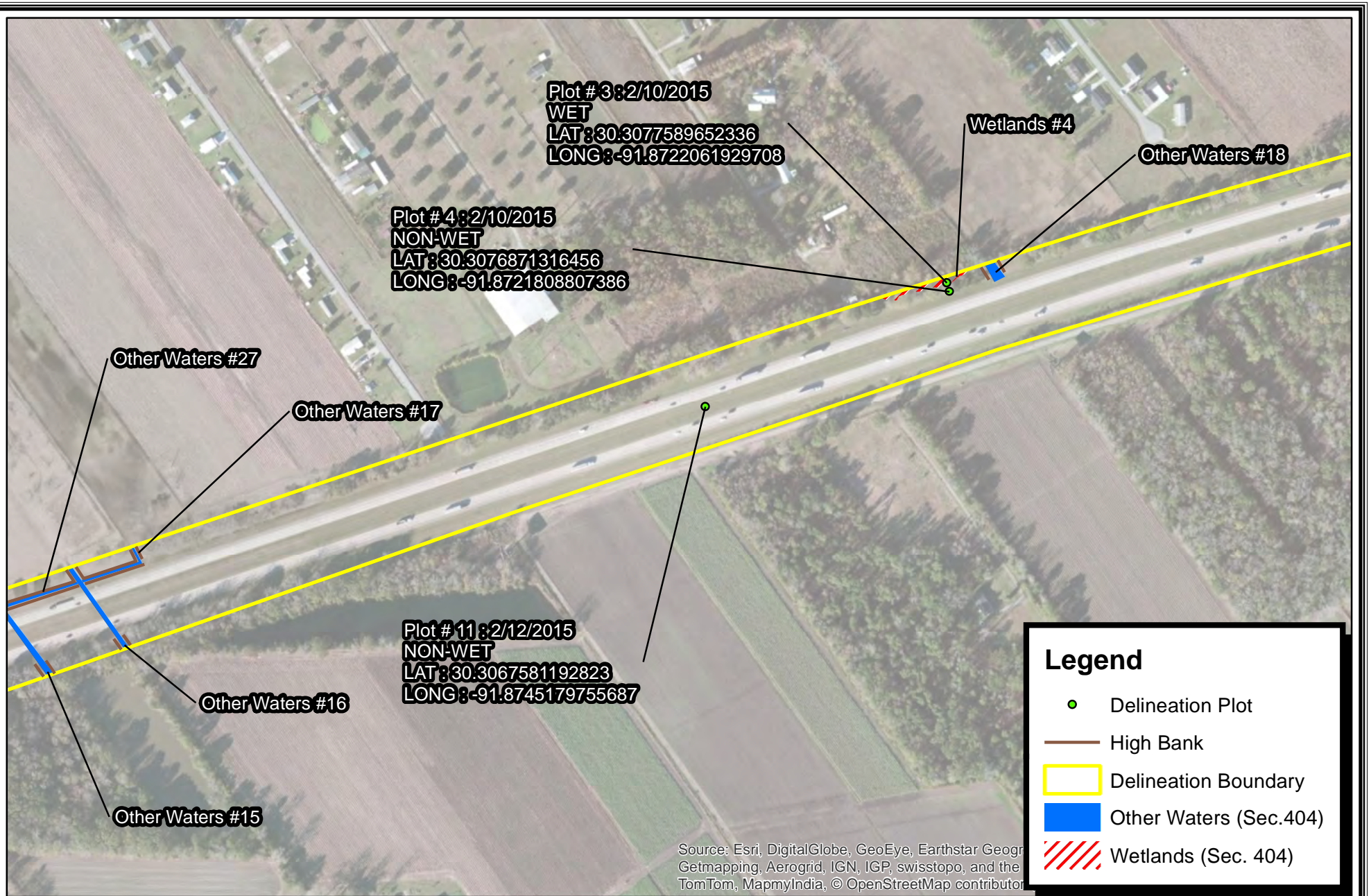




**FIGURE 4.3 : Wetland
 (BING HTBRID) Detail**

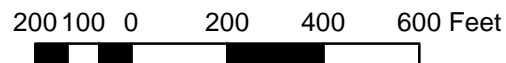
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**FIGURE 4.4 : Wetland
(BING HYBRID) Detail**

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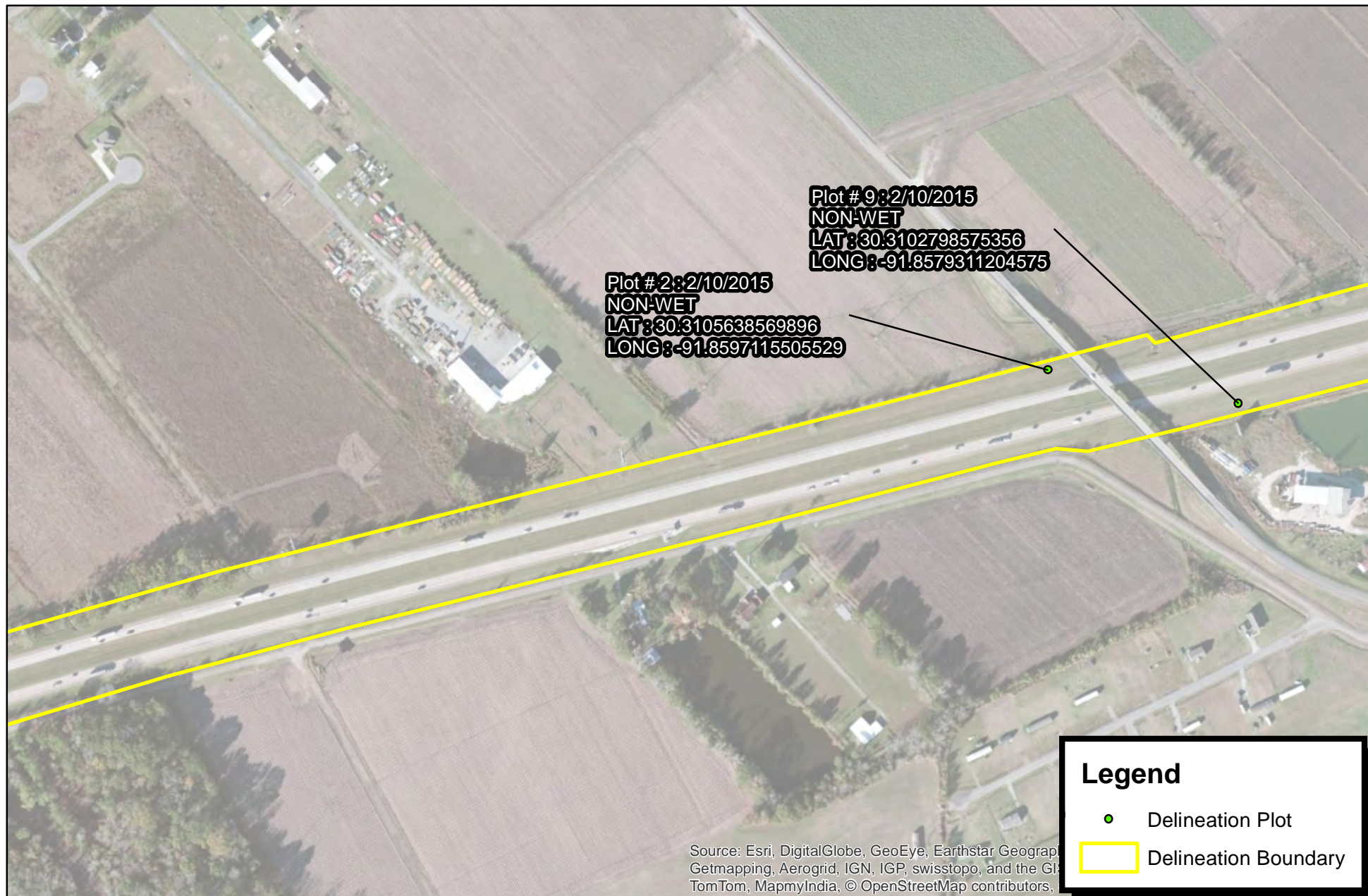


FIGURE 4.5 : Wetland
(BING HTBRID) Detail

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200 100 0 200 400 600 Feet

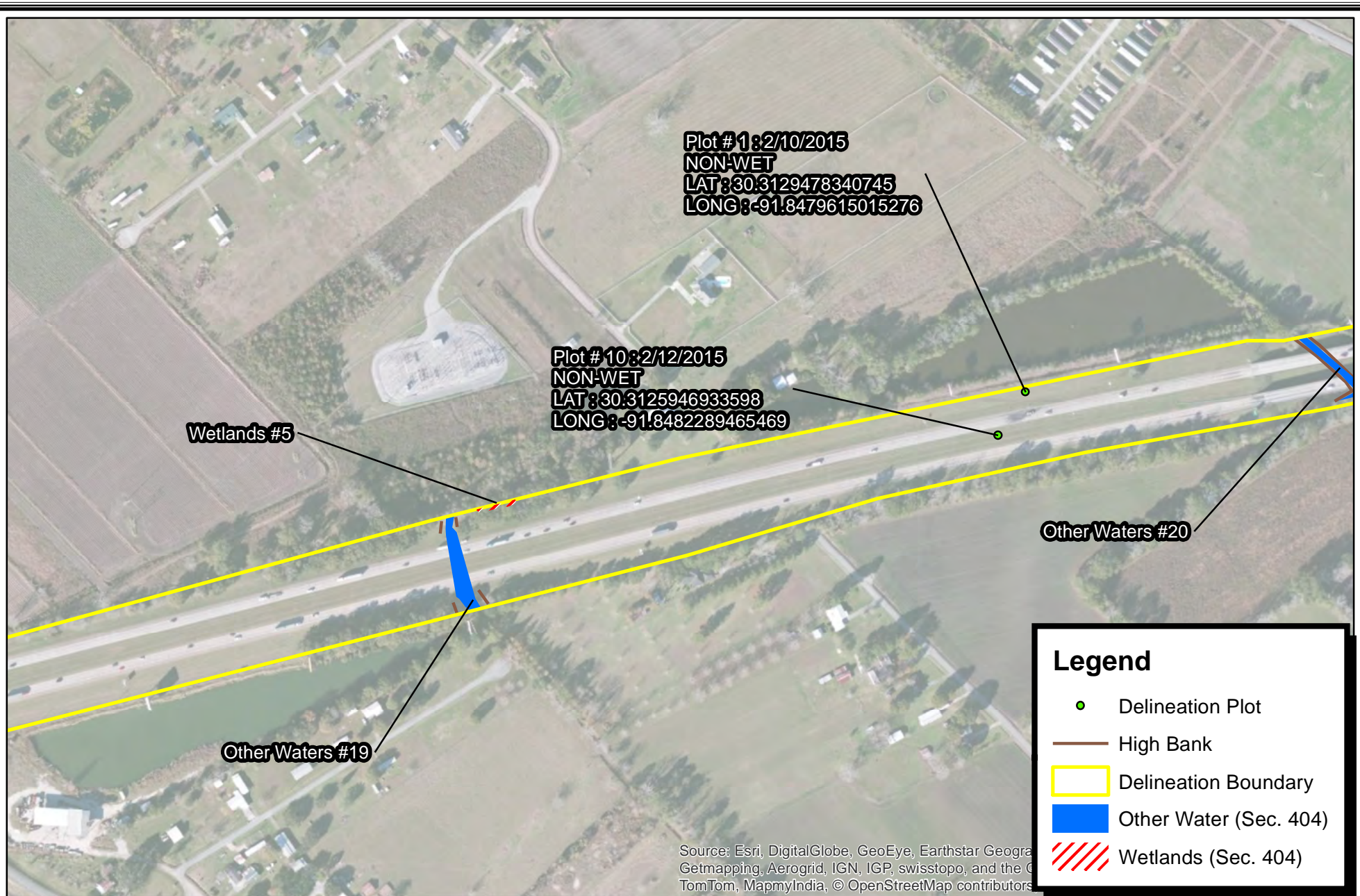
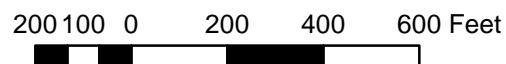
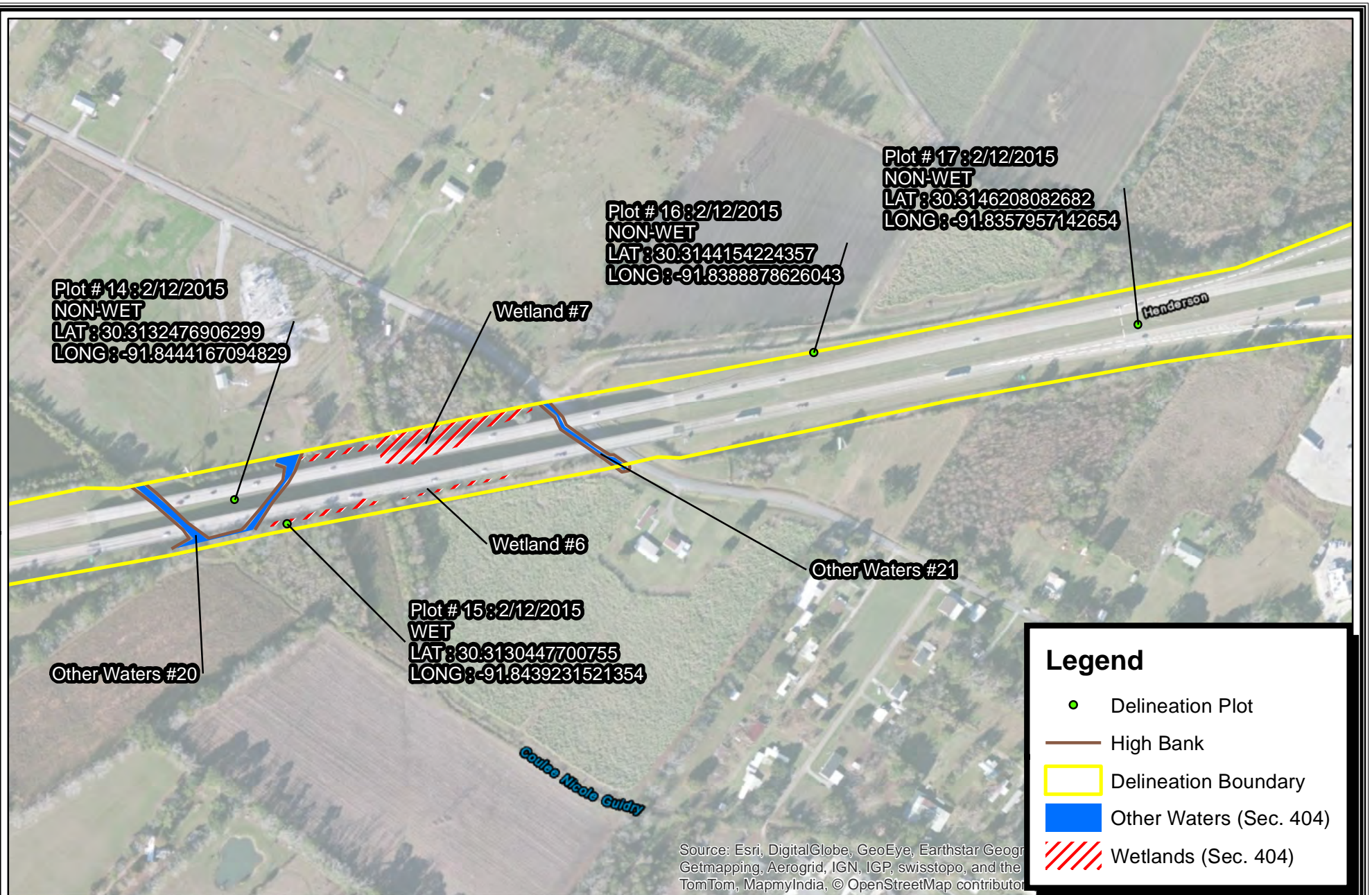


FIGURE 4.6 : Wetland
 (BING HTBRID) **Detail**

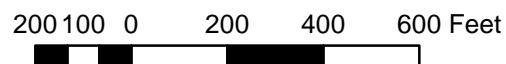
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**FIGURE 4.7 : Wetland
 (BING HTBRID) Detail**

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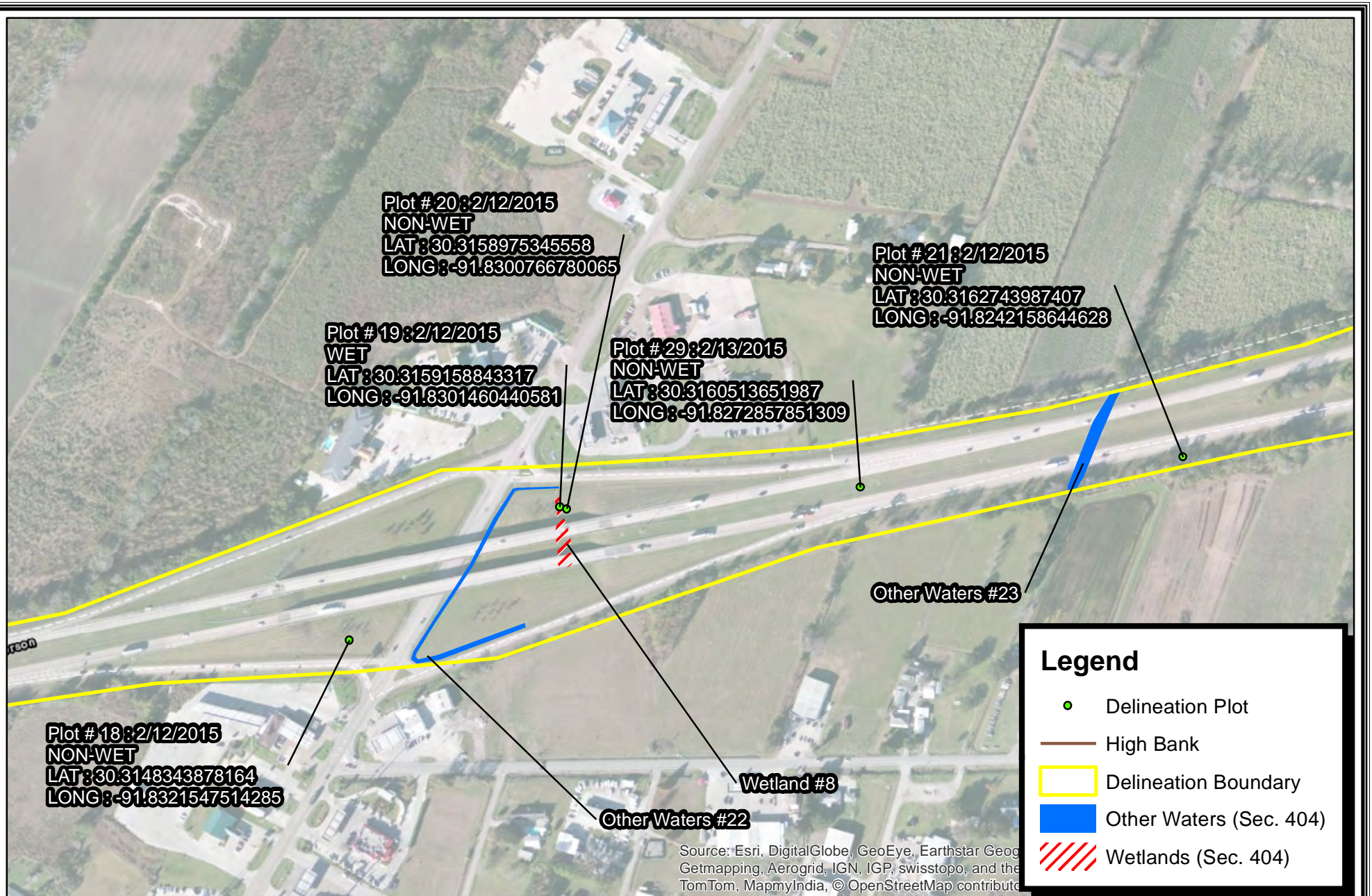
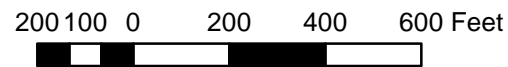


FIGURE 4.8 : Wetland
(BING HTBRID) **Detail**

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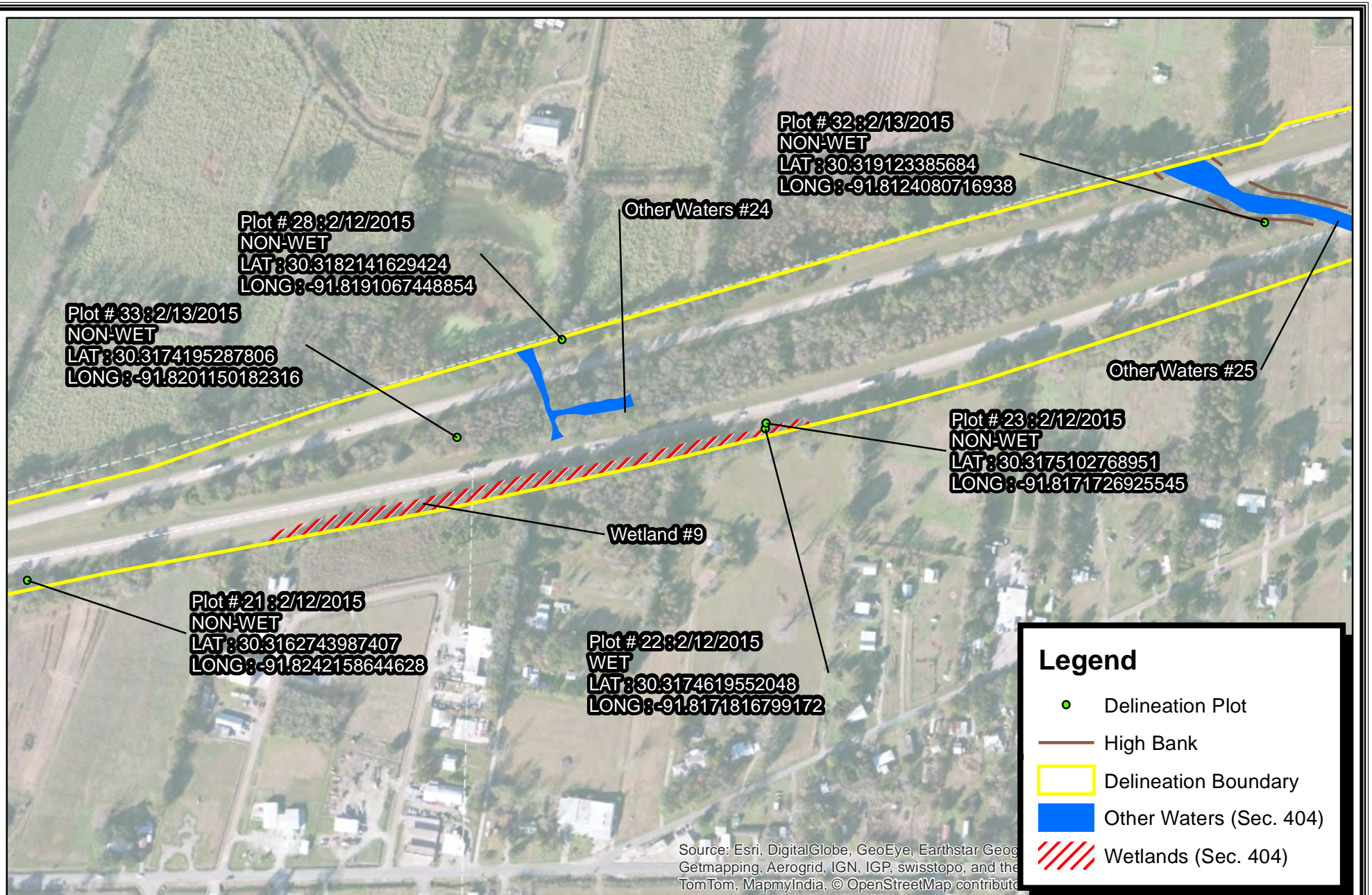
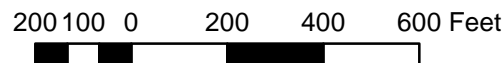
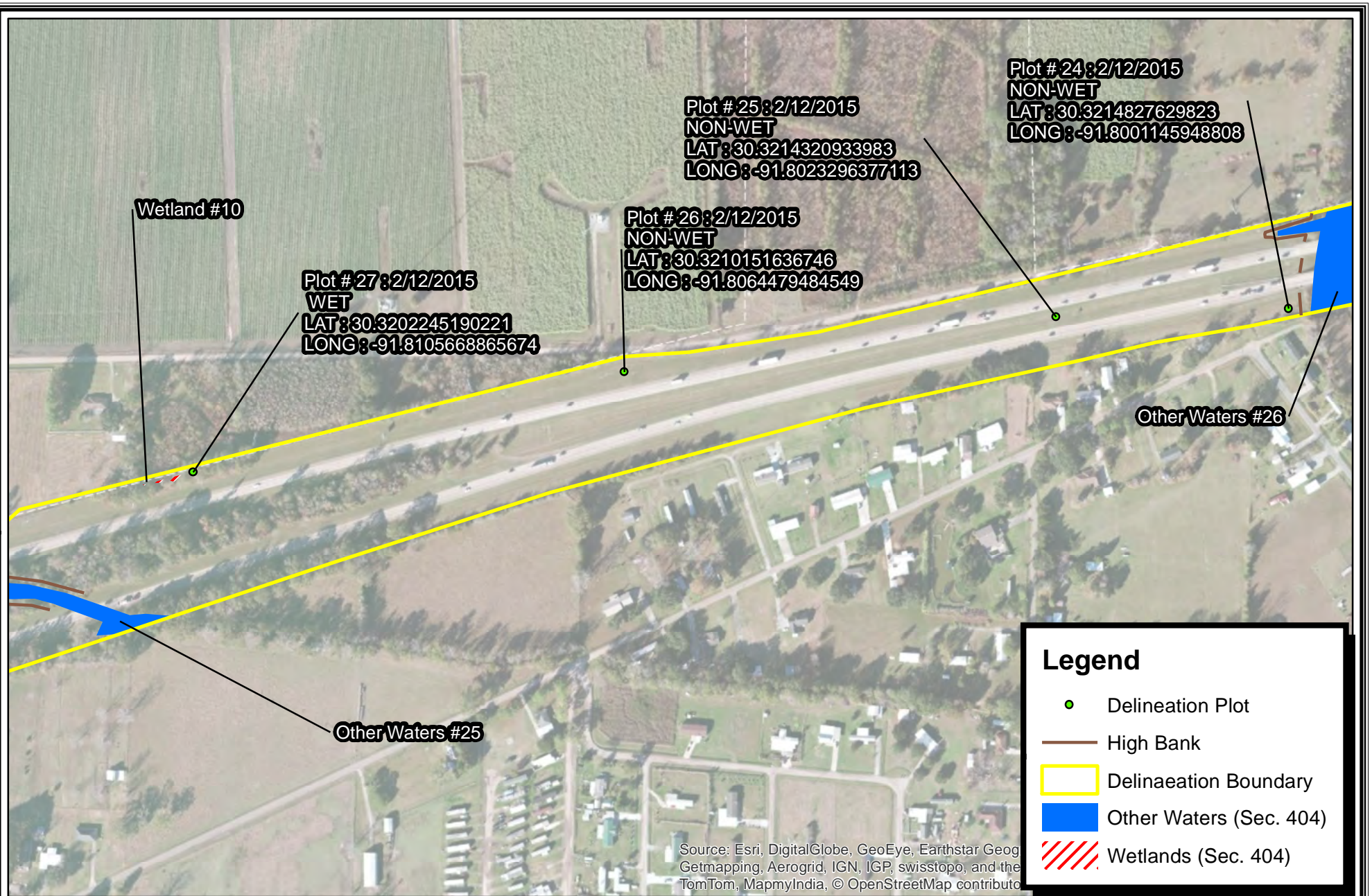


FIGURE 4.9 : Wetland
(BING HTBRID) **Detail**

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**FIGURE 4.10 : Wetland
 (BING HTBRID) Detail**

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200 100 0 200 400 600 Feet

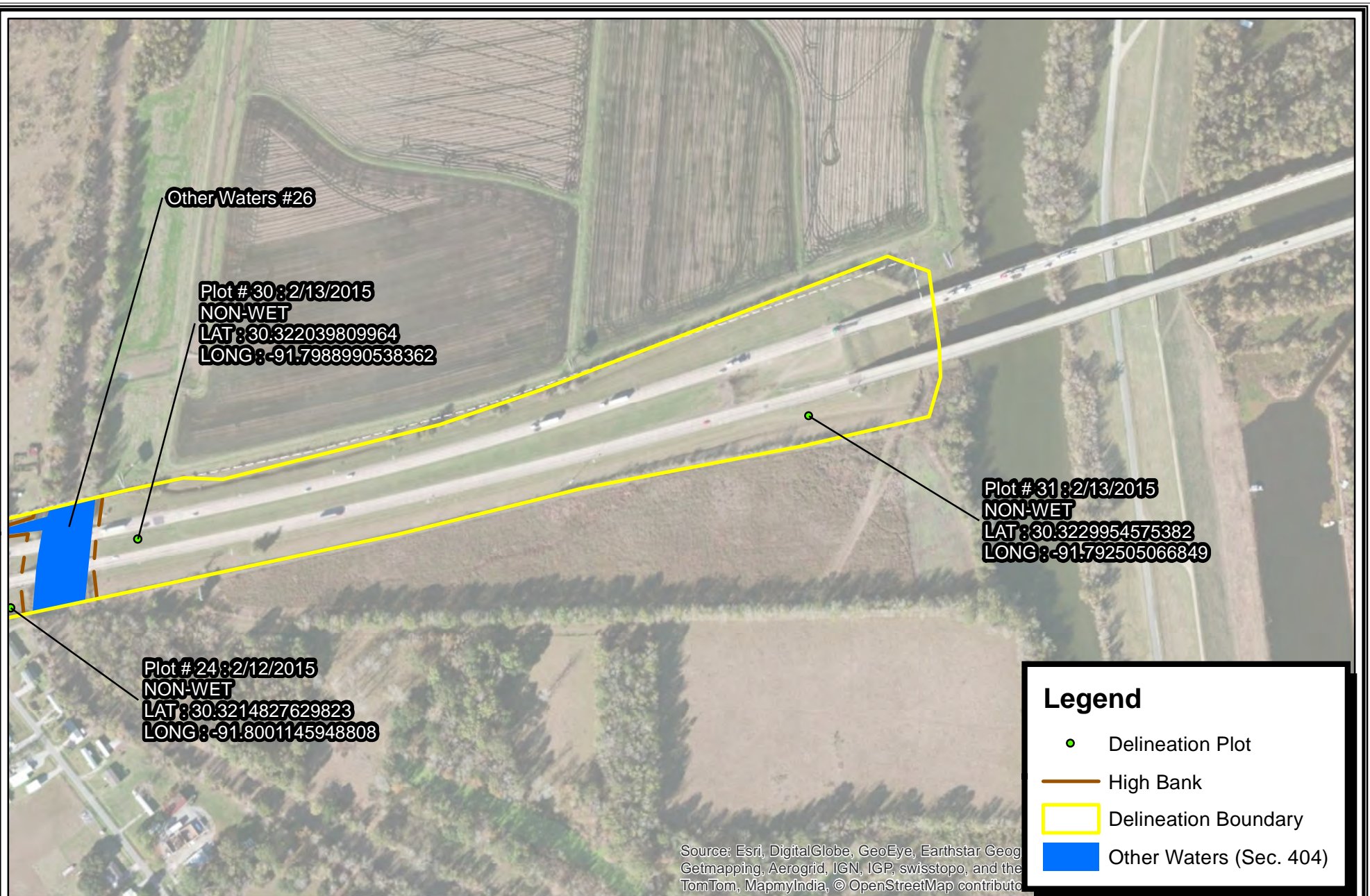
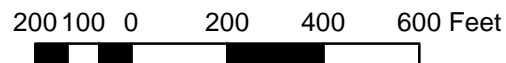


FIGURE 4.11 : Wetland
(BING HTBRID) Detail

LA Department of Transportation & Development
 LA. 328 to LA. 347 (H.010601) &
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 SEC: 30: T 08S - R 07E
 St. Martin Parish, Louisiana
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APPENDIX A: DATA FORMS & PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 10-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 1
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 64 T 08S R 05E
Landform (hillslope, terrace, etc.): Flat
Local relief (concave, convex, none): convcave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3129
Long.: -91.8479
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: 1

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		55	<input checked="" type="checkbox"/> 40.7%	FACU
2. <i>Digitaria ciliaris</i>		40	<input checked="" type="checkbox"/> 29.6%	FACU
3. <i>Cynodon dactylon</i>		20	<input type="checkbox"/> 14.8%	FACU
4. <i>Nothoscordum bivalve</i>		15	<input type="checkbox"/> 11.1%	FACU
5. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 3.7%	FACU
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>67.5</u> 20% of Total Cover: <u>27</u>		135	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 135 x 4 = 540

UPL species 0 x 5 = 0

Column Total s: 135 (A) 540 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)	%	Tvpe ¹	Loc ²			
0-9	10YR	2/1	100						Clay Loam	
9-20	10YR	2/1	60	10YR	5/3	40	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 1: Plot #1, Soil Sample



Photo 2: Plot #1, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 2
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 65 T 08S R 06E
Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** concave **Slope:** 3.0 % / 1.7 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3105 **Long.:** -91.8597 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 2

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		45	<input checked="" type="checkbox"/> 33.3%	FACU
2. <i>Cynodon dactylon</i>		40	<input checked="" type="checkbox"/> 29.6%	FACU
3. <i>Digitaria ciliaris</i>		30	<input checked="" type="checkbox"/> 22.2%	FACU
4. <i>Nothoscordum bivalve</i>		10	<input type="checkbox"/> 7.4%	FACU
5. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 7.4%	FACU
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>67.5</u> 20% of Total Cover: <u>27</u>		135	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 135 x 4 = 540

UPL species 0 x 5 = 0

Column Total s: 135 (A) 540 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-9	10YR	2/1	100						Clay Loam	
9-20	10YR	2/1	70	10YR	6/3	25	C	M	Clay Loam	
				10YR	6/8	5	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 3: Plot #2, Soil Sample



Photo 4: Plot #2, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 10-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 3
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 66 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3077
Long.: -91.8722
Datum: WGS84
Soil Map Unit Name: Tee- Tensas silty clay loam, 0-1 percent slopes
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Tree Stratum (Plot size: 30')					Dominant Species?	Sampling Point: 3
	Absolute % Cover	Rel.Strat. Cover	Indicator Status			
1. <i>Quercus virginiana</i>	40	<input checked="" type="checkbox"/> 47.1%	FACU	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)		
2. <i>Ulmus americana</i>	30	<input checked="" type="checkbox"/> 35.3%	FAC			
3. <i>Liquidambar styraciflua</i>	15	<input type="checkbox"/> 17.6%	FAC			
4.	0	<input type="checkbox"/> 0.0%				
5.	0	<input type="checkbox"/> 0.0%				
6.	0	<input type="checkbox"/> 0.0%				
7.	0	<input type="checkbox"/> 0.0%				
8.	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>42.5</u> 20% of Total Cover: <u>17</u> <u>85</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>140</u> x 3 = <u>420</u> FACU species <u>40</u> x 4 = <u>160</u> UPL species <u>0</u> x 5 = <u>0</u> Column Total s: <u>180</u> (A) <u>580</u> (B) Prevalence Index = B/A = <u>3.222</u>		
Sapling or Sapling/Shrub Stratum (Plot size: 30')						
1.	0	<input type="checkbox"/> 0.0%				
2.	0	<input type="checkbox"/> 0.0%				
3.	0	<input type="checkbox"/> 0.0%				
4.	0	<input type="checkbox"/> 0.0%				
5.	0	<input type="checkbox"/> 0.0%				
6.	0	<input type="checkbox"/> 0.0%				
7.	0	<input type="checkbox"/> 0.0%				
8.	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u> <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Shrub Stratum (Plot size: 30')						
1. <i>Ligustrum sinense</i>	5	<input checked="" type="checkbox"/> 100.0%	FAC			
2.	0	<input type="checkbox"/> 0.0%				
3.	0	<input type="checkbox"/> 0.0%				
4.	0	<input type="checkbox"/> 0.0%				
5.	0	<input type="checkbox"/> 0.0%				
6.	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>2.5</u> 20% of Total Cover: <u>1</u> <u>5</u> = Total Cover				Definition of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height.		
Herb Stratum (Plot size: 30')						
1. <i>Carex blanda</i>	35	<input checked="" type="checkbox"/> 46.7%	FAC			
2. <i>Ligustrum sinense</i>	15	<input checked="" type="checkbox"/> 20.0%	FAC			
3. <i>Gelsemium sempervirens</i>	15	<input checked="" type="checkbox"/> 20.0%	FAC			
4. <i>Quercus nigra</i>	10	<input type="checkbox"/> 13.3%	FAC			
5.	0	<input type="checkbox"/> 0.0%				
6.	0	<input type="checkbox"/> 0.0%				
7.	0	<input type="checkbox"/> 0.0%				
8.	0	<input type="checkbox"/> 0.0%				
9.	0	<input type="checkbox"/> 0.0%				
10.	0	<input type="checkbox"/> 0.0%				
11.	0	<input type="checkbox"/> 0.0%				
12.	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>37.5</u> 20% of Total Cover: <u>15</u> <u>75</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>		
Woody Vine Stratum (Plot size: 30')						
1. <i>Gelsemium sempervirens</i>	15	<input checked="" type="checkbox"/> 100.0%	FAC			
2.	0	<input type="checkbox"/> 0.0%				
3.	0	<input type="checkbox"/> 0.0%				
4.	0	<input type="checkbox"/> 0.0%				
5.	0	<input type="checkbox"/> 0.0%				
50% of Total Cover: <u>7.5</u> 20% of Total Cover: <u>3</u> <u>15</u> = Total Cover						

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 5: Plot #3, Soil Sample



Photo 6: Plot #3, Vegetation facing north

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 4
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 66 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3768 **Long.:** -91.8721 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <u>16</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Tree Stratum (Plot size: 30')					Dominant Species?	Indicator Status	Sampling Point: 4	
					Absolute % Cover	Rel.Strat. Cover		
1.	Ulmus americana	35	<input checked="" type="checkbox"/>	70.0%	FAC	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>37.5%</u> (A/B)		
2.	Quercus virginiana	15	<input checked="" type="checkbox"/>	30.0%	FACU			
3.		0	<input type="checkbox"/>	0.0%				
4.		0	<input type="checkbox"/>	0.0%				
5.		0	<input type="checkbox"/>	0.0%				
6.		0	<input type="checkbox"/>	0.0%				
7.		0	<input type="checkbox"/>	0.0%				
8.		0	<input type="checkbox"/>	0.0%				
50% of Total Cover: <u>25</u> 20% of Total Cover: <u>10</u>		50	= Total Cover					
Sapling or Sapling/Shrub Stratum (Plot size: 30')								
1.		0	<input type="checkbox"/>	0.0%		Prevalence Index worksheet: Total % Cover of: <u>0</u> Multiply by: <u>1</u> = <u>0</u> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>72</u> x 3 = <u>216</u> FACU species <u>130</u> x 4 = <u>520</u> UPL species <u>0</u> x 5 = <u>0</u> Column Total s: <u>202</u> (A) <u>736</u> (B) Prevalence Index = B/A = <u>3.644</u>		
2.		0	<input type="checkbox"/>	0.0%				
3.		0	<input type="checkbox"/>	0.0%				
4.		0	<input type="checkbox"/>	0.0%				
5.		0	<input type="checkbox"/>	0.0%				
6.		0	<input type="checkbox"/>	0.0%				
7.		0	<input type="checkbox"/>	0.0%				
8.		0	<input type="checkbox"/>	0.0%				
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover					
Shrub Stratum (Plot size: 30')								
1.	Quercus virginiana	15	<input checked="" type="checkbox"/>	50.0%	FACU	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
2.	Ligustrum sinense	15	<input checked="" type="checkbox"/>	50.0%	FAC			
3.		0	<input type="checkbox"/>	0.0%				
4.		0	<input type="checkbox"/>	0.0%				
5.		0	<input type="checkbox"/>	0.0%				
6.		0	<input type="checkbox"/>	0.0%				
7.		0	<input type="checkbox"/>	0.0%				
8.		0	<input type="checkbox"/>	0.0%				
50% of Total Cover: <u>15</u> 20% of Total Cover: <u>6</u>		30	= Total Cover					
Herb Stratum (Plot size: 30')								
1.	Digitaria ciliaris	40	<input checked="" type="checkbox"/>	35.7%	FACU	Definition of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall. Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine - All woody vines, regardless of height.		
2.	Sporobolus domingensis	35	<input checked="" type="checkbox"/>	31.3%	FACU			
3.	Cynodon dactylon	25	<input checked="" type="checkbox"/>	22.3%	FACU			
4.	Carex blanda	5	<input type="checkbox"/>	4.5%	FAC			
5.	Gelsemium sempervirens	5	<input type="checkbox"/>	4.5%	FAC			
6.	Cirsium horridulum	2	<input type="checkbox"/>	1.8%	FAC			
7.		0	<input type="checkbox"/>	0.0%				
8.		0	<input type="checkbox"/>	0.0%				
9.		0	<input type="checkbox"/>	0.0%				
10.		0	<input type="checkbox"/>	0.0%				
11.		0	<input type="checkbox"/>	0.0%				
12.		0	<input type="checkbox"/>	0.0%				
50% of Total Cover: <u>56</u> 20% of Total Cover: <u>22.4</u>		112	= Total Cover					
Woody Vine Stratum (Plot size: 30')								
1.	Gelsemium sempervirens	10	<input checked="" type="checkbox"/>	100.0%	FAC	Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>		
2.		0	<input type="checkbox"/>	0.0%				
3.		0	<input type="checkbox"/>	0.0%				
4.		0	<input type="checkbox"/>	0.0%				
5.		0	<input type="checkbox"/>	0.0%				
50% of Total Cover: <u>5</u> 20% of Total Cover: <u>2</u>		10	= Total Cover					

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-18	10YR	3/1	87	10YR	5/6	3	C	M	Clay Loam	
				10YR	6/3	10	C	M	Clay Loam	
18-20	10YR	2/1	80	10YR	6/3	20	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 7: Plot #4, Soil Sample



Photo 8: Plot #4, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 5
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 08S R 06E
Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** convex **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3018 **Long.:** -91.8931 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 5

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Vicia ludoviciana</i>		55	<input checked="" type="checkbox"/> 39.9%	FACU
2. <i>Lolium perenne</i>		35	<input checked="" type="checkbox"/> 25.4%	FACU
3. <i>Taraxacum officinale</i>		15	<input type="checkbox"/> 10.9%	FACU
4. <i>Geranium carolinianum</i>		15	<input type="checkbox"/> 10.9%	UPL
5. <i>Rubus trivialis</i>		10	<input type="checkbox"/> 7.2%	FACU
6. <i>Artemisia vulgaris</i>		5	<input type="checkbox"/> 3.6%	UPL
7. <i>Gelsemium sempervirens</i>		3	<input type="checkbox"/> 2.2%	FAC
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>69</u> 20% of Total Cover: <u>27.6</u>		138	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 3 x 3 = 9

FACU species 115 x 4 = 460

UPL species 20 x 5 = 100

Column Total s: 138 (A) 569 (B)

Prevalence Index = B/A = 4.123

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-10	10YR	3/2	100						Clay Loam	
10-20	10YR	3/2	65	10YR	2/1	25	D	M	Clay Loam	
				10YR	5/3	10	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 9: Plot #5, Soil Sample



Photo 10: Plot #5, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 6
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 43 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.2994 **Long.:** -91.8994 **Datum:** WGS84
Soil Map Unit Name: Sh- Sharkey clay **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **6**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		35	<input checked="" type="checkbox"/> 28.0%	FACU
2. <i>Stenotaphrum secundatum</i>		30	<input checked="" type="checkbox"/> 24.0%	FAC
3. <i>Cynodon dactylon</i>		30	<input checked="" type="checkbox"/> 24.0%	FACU
4. <i>Vicia ludoviciana</i>		15	<input type="checkbox"/> 12.0%	FACU
5. <i>Nothoscordum bivalve</i>		10	<input type="checkbox"/> 8.0%	FACU
6. <i>Geranium carolinianum</i>		5	<input type="checkbox"/> 4.0%	UPL
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 62.5 20% of Total Cover: 25		125	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 30 x 3 = 90

FACU species 90 x 4 = 360

UPL species 5 x 5 = 25

Column Total s: 125 (A) 475 (B)

Prevalence Index = B/A = 3.800

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-5	10YR	3/2	90	10YR	6/3	10	C	M	Clay Loam	
5-17	10YR	3/2	67	10YR	5/8	20	C	M	Clay Loam	
				10YR	2/1	3	D	M	Clay Loam	
				10YR	6/3	10	C	M	Clay Loam	
17-20	10YR	4/2	50	7.5YR	5/8	5	C	M	Clay Loam	
				10YR	6/3	40	C	M	Clay Loam	
				10YR	2/1	5	D	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 11: Plot #6, Soil Sample



Photo 12: Plot #6, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 7
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 41 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3044 **Long.:** -91.8817 **Datum:** WGS84
Soil Map Unit Name: Lo- Loreauville silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <u>0</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 7

				Dominant Species?		
Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:	
1.	<u>Quercus virginiana</u>	15	<input checked="" type="checkbox"/> 100.0%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)	
2.		0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
3.		0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)	
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
6.		0	<input type="checkbox"/> 0.0%			
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>7.5</u> 20% of Total Cover: <u>3</u>		15	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: <u>30'</u>)					Prevalence Index worksheet:	
1.		0	<input type="checkbox"/> 0.0%		Total % Cover of: <u>0</u> Multiply by: <u>1</u>	
2.		0	<input type="checkbox"/> 0.0%		OBL spec ies <u>0</u> x <u>1</u> = <u>0</u>	
3.		0	<input type="checkbox"/> 0.0%		FACW spec ies <u>0</u> x <u>2</u> = <u>0</u>	
4.		0	<input type="checkbox"/> 0.0%		FAC spec ies <u>65</u> x <u>3</u> = <u>195</u>	
5.		0	<input type="checkbox"/> 0.0%		FACU spec ies <u>15</u> x <u>4</u> = <u>60</u>	
6.		0	<input type="checkbox"/> 0.0%		UPL spec ies <u>0</u> x <u>5</u> = <u>0</u>	
7.		0	<input type="checkbox"/> 0.0%		Col umn Total s: <u>80</u> (A) <u>255</u> (B)	
8.		0	<input type="checkbox"/> 0.0%		Prevalence Index = B/A = <u>3.188</u>	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover			
Shrub Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Indicators:	
1.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2.		0	<input type="checkbox"/> 0.0%		<input checked="" type="checkbox"/> 2 - Dominance Test is > 50%	
3.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
4.		0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
5.		0	<input type="checkbox"/> 0.0%		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover			
Herb Stratum (Plot size: <u>30'</u>)					Definition of Vegetation Strata:	
1.	<u>Carex blanda</u>	45	<input checked="" type="checkbox"/> 69.2%	FAC	Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).	
2.	<u>Stenotaphrum secundatum</u>	20	<input checked="" type="checkbox"/> 30.8%	FAC	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.	
3.		0	<input type="checkbox"/> 0.0%		Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.	
4.		0	<input type="checkbox"/> 0.0%		Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
5.		0	<input type="checkbox"/> 0.0%		Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.	
6.		0	<input type="checkbox"/> 0.0%		Woody vine - All woody vines, regardless of height.	
7.		0	<input type="checkbox"/> 0.0%			
8.		0	<input type="checkbox"/> 0.0%			
9.		0	<input type="checkbox"/> 0.0%			
10.		0	<input type="checkbox"/> 0.0%			
11.		0	<input type="checkbox"/> 0.0%			
12.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>32.5</u> 20% of Total Cover: <u>13</u>		65	= Total Cover			
Woody Vine Stratum (Plot size: <u>30'</u>)					Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
1.		0	<input type="checkbox"/> 0.0%			
2.		0	<input type="checkbox"/> 0.0%			
3.		0	<input type="checkbox"/> 0.0%			
4.		0	<input type="checkbox"/> 0.0%			
5.		0	<input type="checkbox"/> 0.0%			
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover			

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-10	10YR	2/2	85	10YR	6/1	5	D	M	Clay Loam	
				7.5YR	5/8	10	C	M	Clay Loam	
10-15	10YR	2/1	100						Clay Loam	
15-20	10YR	2/1	95	10YR	6/1	5	D	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 13: Plot #7, Soil Sample



Photo 14: Plot #7, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 8
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 41 T 08S R 06E
Landform (hillslope, terrace, etc.): Hillside **Local relief (concave, convex, none):** convex **Slope:** 4.0 % / 2.3 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3044 **Long.:** -91.8817 **Datum:** WGS84
Soil Map Unit Name: Lo- Loreauville silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **8**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		55	<input checked="" type="checkbox"/> 39.3%	FACU
2. <i>Stenotaphrum secundatum</i>		35	<input checked="" type="checkbox"/> 25.0%	FAC
3. <i>Digitaria ciliaris</i>		25	<input type="checkbox"/> 17.9%	FACU
4. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 7.1%	FACU
5. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 7.1%	UPL
6. <i>Taraxacum officinale</i>		5	<input type="checkbox"/> 3.6%	FACU
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 70 20% of Total Cover: 28		140	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 35 x 3 = 105

FACU species 95 x 4 = 380

UPL species 10 x 5 = 50

Column Total s: 140 (A) 535 (B)

Prevalence Index = B/A = 3.821

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-6	10YR	3/2	100						Silt Loam	
6-10	10YR	3/1	70	10YR	6/2	25	D	M	Silt Loam	
				10YR	5/8	5	C	M	Silt Loam	
10-12	10YR	2/1	95	10YR	6/3	5	C	M	Silt Loam	
12-20	10YR	2/1	50						Silt Loam	
	10YR	6/2	50						Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☒ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 15: Plot #8, Soil Sample



Photo 16: Plot #8, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 10-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 9
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 65 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3102 **Long.:** -91.8579 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **9**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		75	<input checked="" type="checkbox"/> 68.2%	FACU
2. <i>Cynodon dactylon</i>		15	<input type="checkbox"/> 13.6%	FACU
3. <i>Nothoscordum bivalve</i>		10	<input type="checkbox"/> 9.1%	FACU
4. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 4.5%	FACU
5. <i>Digitaria ciliaris</i>		5	<input type="checkbox"/> 4.5%	FACU
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 55 20% of Total Cover: 22		110	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 0 x 3 = 0

FACU species 110 x 4 = 440

UPL species 0 x 5 = 0

Column Total s: 110 (A) 440 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR	2/2	100				Silt Loam	
5-20	10YR	2/1	100				Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 17: Plot #9, Soil Sample



Photo 18: Plot #9, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 10
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 64 T 08S R 05E
Landform (hillslope, terrace, etc.): Flat
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3125
Long.: -91.8482
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **10**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		50	<input checked="" type="checkbox"/> 32.3%	FACU
2. <i>Stenotaphrum secundatum</i>		35	<input checked="" type="checkbox"/> 22.6%	FAC
3. <i>Cynodon dactylon</i>		30	<input type="checkbox"/> 19.4%	FACU
4. <i>Vicia ludoviciana</i>		20	<input type="checkbox"/> 12.9%	FACU
5. <i>Nothoscordum bivalve</i>		10	<input type="checkbox"/> 6.5%	FACU
6. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 6.5%	UPL
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 77.5 20% of Total Cover: 31		155	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 35 x 3 = 105

FACU species 110 x 4 = 440

UPL species 10 x 5 = 50

Column Total s: 155 (A) 595 (B)

Prevalence Index = B/A = 3.839

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-3	10YR	2/2	100						Clay Loam	
3-7	10YR	4/2	100						Clay Loam	
7-12	10YR	4/2	75	10YR	2/2	25	D	M	Silt Loam	
12-20	10YR	5/3	60	10YR	2/1	30	D	M	Silt Loam	
				10YR	5/8	10	C	M	Silt Loam	-

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 19: Plot #10, Soil Sample



Photo 20: Plot #10, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 11
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 40 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.30767
Long.: -91.8745
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **11**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Lollum perenne		35	<input checked="" type="checkbox"/> 23.6%	FACU
2. Sporobolus domingensis		35	<input checked="" type="checkbox"/> 23.6%	FACU
3. Stenotaphrum secundatum		30	<input checked="" type="checkbox"/> 20.3%	FAC
4. Digitaria ciliaris		20	<input type="checkbox"/> 13.5%	FACU
5. Nothoscordum bivalve		10	<input type="checkbox"/> 6.8%	FACU
6. Vicia ludoviciana		10	<input type="checkbox"/> 6.8%	FACU
7. Geranium carolinianum		5	<input type="checkbox"/> 3.4%	UPL
8. Rumex crispus		3	<input type="checkbox"/> 2.0%	FAC
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 74 20% of Total Cover: 29.6		148	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 33 x 3 = 99

FACU species 110 x 4 = 440

UPL species 5 x 5 = 25

Column Total s: 148 (A) 564 (B)

Prevalence Index = B/A = 3.811

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-3	10YR	3/2	93	10YR	5/8	5	C	M	Silt Loam	
				10YR	5/1	2	D	M	Silt Loam	
3-7	10YR	4/3	90	10YR	5/8	10	C	M	Silt Loam	
7-20	10YR	5/3	85	10YR	2/2	10	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 21: Plot #11, Soil Sample



Photo 22: Plot #11, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 12
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 43 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3032
Long.: -91.8868
Datum: WGS84
Soil Map Unit Name: Sh- Sharkey clay
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **12**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		35	<input checked="" type="checkbox"/> 25.9%	FACU
2. <i>Stenotaphrum secundatum</i>		35	<input checked="" type="checkbox"/> 25.9%	FAC
3. <i>Carex blanda</i>		20	<input type="checkbox"/> 14.8%	FAC
4. <i>Lolium perenne</i>		15	<input type="checkbox"/> 11.1%	FACU
5. <i>Geranium carolinianum</i>		15	<input type="checkbox"/> 11.1%	UPL
6. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 3.7%	FACU
7. <i>Digitaria ciliaris</i>		5	<input type="checkbox"/> 3.7%	FACU
8. <i>Cirsium horridulum</i>		3	<input type="checkbox"/> 2.2%	FAC
9. <i>Rumex crispus</i>		2	<input type="checkbox"/> 1.5%	FAC
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 67.5 20% of Total Cover: 27		135	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 135 Multiply by: 5

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 60 x 3 = 180

FACU species 60 x 4 = 240

UPL species 15 x 5 = 75

Column Total s: 135 (A) 495 (B)

Prevalence Index = B/A = 3.667

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		Color (moist)		%		Tvpe ¹	Loc ²		
0-6	10YR	2/2	100						Clay Loam	
6-17	10YR	3/1	67	10YR	5/8	10	C	M	Clay Loam	
				10YR	6/3	3	C	M	Clay Loam	
				10YR	3/1	20	D	M	Clay Loam	
17-20	10YR	3/1	70	10YR	5/8	20	C	M	Clay Loam	
				10YR	6/3	10	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☒ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 23: Plot #12, Soil Sample



Photo 24: Plot #12, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 13
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 38 T 09 R 05E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.2973
Long.: -91.9079
Datum: WGS84
Soil Map Unit Name: Dd- Dundee silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **13**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		65	<input checked="" type="checkbox"/> 45.8%	FAC
2. <i>Digitaria ciliaris</i>		25	<input checked="" type="checkbox"/> 17.6%	FACU
3. <i>Sporobolus domingensis</i>		20	<input type="checkbox"/> 14.1%	FACU
4. <i>Lolium perenne</i>		10	<input type="checkbox"/> 7.0%	FACU
5. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 7.0%	FACU
6. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 7.0%	UPL
7. <i>Cirsium horridulum</i>		2	<input type="checkbox"/> 1.4%	FAC
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 71 20% of Total Cover: 28.4		142	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 67 x 3 = 201

FACU species 65 x 4 = 260

UPL species 10 x 5 = 50

Column Total s: 142 (A) 511 (B)

Prevalence Index = B/A = 3.599

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-3	10YR	2/2	100						Silt Loam	highly organic
3-15	10YR	5/2	90	10YR	6/8	10	C	M	Clay Loam	
15-20	10YR	4/1	65	10YR	4/3	30	C	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 25: Plot #13, Soil Sample



Photo 26: Plot #13, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 14
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 63 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3132 **Long.:** -91.8444 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **14**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		55	<input checked="" type="checkbox"/> 36.7%	FAC
2. <i>Medicago polymorpha</i>		35	<input checked="" type="checkbox"/> 23.3%	FACU
3. <i>Sporobolus domingensis</i>		30	<input checked="" type="checkbox"/> 20.0%	FACU
4. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 6.7%	UPL
5. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 6.7%	FACU
6. <i>Gelsemium sempervirens</i>		5	<input type="checkbox"/> 3.3%	FAC
7. <i>Plantago major</i>		3	<input type="checkbox"/> 2.0%	FAC
8. <i>Taraxacum officinale</i>		2	<input type="checkbox"/> 1.3%	FACU
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 75 20% of Total Cover: 30		150	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 63 x 3 = 189

FACU species 77 x 4 = 308

UPL species 10 x 5 = 50

Column Total s: 150 (A) 547 (B)

Prevalence Index = B/A = 3.647

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-5	10YR	2/2	97	5Y	7/1	3	D	M	Clay Loam	
5-13	10YR	2/2	70	10YR	6/8	5	D	M	Clay Loam	
				5Y	7/1	25	D	M	Clay Loam	
13-20	10YR	2/1	100						Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☒ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 27: Plot #14, Soil Sample



Photo 28: Plot #14, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 15
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 63 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3130
Long.: -91.8439
Datum: WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>15</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>4</u>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **15**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Carex blanda</i>		15	<input checked="" type="checkbox"/> 100.0%	FAC
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 7.5 20% of Total Cover: 3		15	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 15 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 15 x 3 = 45

FACU species 0 x 4 = 0

UPL species 0 x 5 = 0

Column Total s: 15 (A) 45 (B)

Prevalence Index = B/A = 3.000

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 29: Plot #15, Soil Sample



Photo 30: Plot #15, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 16
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 63 T 08S R 06E
Landform (hillslope, terrace, etc.): Toeslope
Local relief (concave, convex, none): concave
Slope: 4.0 % / 2.3 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3144
Long.: -91.8388
Datum: WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **16**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		65	<input checked="" type="checkbox"/> 40.9%	FACU
2. <i>Digitaria ciliaris</i>		40	<input checked="" type="checkbox"/> 25.2%	FACU
3. <i>Stenotaphrum secundatum</i>		25	<input type="checkbox"/> 15.7%	FAC
4. <i>Geranium carolinianum</i>		15	<input type="checkbox"/> 9.4%	UPL
5. <i>Nothoscordum bivalve</i>		5	<input type="checkbox"/> 3.1%	FACU
6. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 3.1%	FACU
7. <i>Medicago polymorpha</i>		2	<input type="checkbox"/> 1.3%	FACU
8. <i>Cirsium horridulum</i>		2	<input type="checkbox"/> 1.3%	FAC
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 79.5 20% of Total Cover: 31.8		159	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 27 x 3 = 81

FACU species 117 x 4 = 468

UPL species 15 x 5 = 75

Column Total s: 159 (A) 624 (B)

Prevalence Index = B/A = 3.925

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-4	10YR	3/3	100						Clay Loam	
4-11	10YR	4/2	90	10YR	6/8	10	C	M	Clay Loam	
11-20	10YR	5/2	85	10YR	2/2	10	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 31: Plot #16, Soil Sample



Photo 32: Plot #16, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.010601: I-10E. JCT LA328 to LA 347 **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 17
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 63 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3146 **Long.:** -91.8357 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 17

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		70	<input checked="" type="checkbox"/> 45.2%	FACU
2. <i>Digitaria ciliaris</i>		25	<input checked="" type="checkbox"/> 16.1%	FACU
3. <i>Lolium perenne</i>		20	<input type="checkbox"/> 12.9%	FACU
4. <i>Carex blanda</i>		10	<input type="checkbox"/> 6.5%	FAC
5. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 6.5%	UPL
6. <i>Galium aparine</i>		10	<input type="checkbox"/> 6.5%	FACU
7. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 3.2%	FACU
8. <i>Nothoscordum bivalve</i>		5	<input type="checkbox"/> 3.2%	FACU
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>77.5</u> 20% of Total Cover: <u>31</u>		155	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 10 x 3 = 30

FACU species 135 x 4 = 540

UPL species 10 x 5 = 50

Column Total s: 155 (A) 620 (B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-6	10YR	3/2	90	10YR	2/1	10	D	M	Clay Loam	
6-10	10YR	5/2	80	10YR	4/1	15	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	
10-20	10YR	5/1	65	10YR	3/1	25	D	M	Clay Loam	
				10YR	4/8	10	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☒ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 33: Plot #17, Soil Sample



Photo 34: Plot #17, Vegetation facing east

Project/Site: <u>No. H.010601: I-10E. JCT LA328 to LA 347</u>		City/County: <u>St. Martin Parish</u>		Sampling Date: <u>12-Feb-15</u>	
Applicant/Owner: <u>Department of Transportation and Development</u>		State: <u>LA</u>		Sampling Point: <u>18</u>	
Investigator(s): <u>Coy LeBlanc, Ryne Menard</u>		Section, Township, Range: <u>S 35</u>		T <u>08S</u>	R <u>06E</u>
Landform (hillslope, terrace, etc.): <u>Flat</u>		Local relief (concave, convex, none): <u>concave</u>		Slope: <u>1.0 % / 0.6 °</u>	
Subregion (LRR or MLRA): <u>LRR O</u>		Lat.: <u>30.3148</u>	Long.: <u>-91.8321</u>		Datum: <u>WGS84</u>
Soil Map Unit Name: <u>Dd- Dundee silt loam</u>			NWI classification: <u>None</u>		

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	
Wetland Hydrology Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	
Remarks:			

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)			Secondary Indicators (minimum of 2 required)		
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)			
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

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

 Sampling Point: **18**

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B) Prevalence Index worksheet: Total % Cover of: <u>0</u> Multiply by: <u>1</u> OBL spec es <u>0</u> x 1 = <u>0</u> FACW spec es <u>0</u> x 2 = <u>0</u> FAC spec es <u>50</u> x 3 = <u>150</u> FACU spec es <u>80</u> x 4 = <u>320</u> UPL spec es <u>10</u> x 5 = <u>50</u> Column Total s: <u>140</u> (A) <u>520</u> (B) Prevalence Index = B/A = <u>3.714</u>
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	= Total Cover			
Sapling or Sapling/Shrub Stratum (Plot size: 30')					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	= Total Cover			
Shrub Stratum (Plot size: 30')					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	= Total Cover			
Herb Stratum (Plot size: 30')					
1. <i>Sporobolus domingensis</i>	60	<input checked="" type="checkbox"/>	42.9%	FACU	
2. <i>Stenotaphrum secundatum</i>	50	<input checked="" type="checkbox"/>	35.7%	FAC	
3. <i>Vicia ludoviciana</i>	15	<input type="checkbox"/>	10.7%	FACU	
4. <i>Geranium carolinianum</i>	10	<input type="checkbox"/>	7.1%	UPL	
5. <i>Nothoscordum bivalve</i>	5	<input type="checkbox"/>	3.6%	FACU	
6. _____	0	<input type="checkbox"/>	0.0%	_____	
7. _____	0	<input type="checkbox"/>	0.0%	_____	
8. _____	0	<input type="checkbox"/>	0.0%	_____	
9. _____	0	<input type="checkbox"/>	0.0%	_____	
10. _____	0	<input type="checkbox"/>	0.0%	_____	
11. _____	0	<input type="checkbox"/>	0.0%	_____	
12. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>70</u> 20% of Total Cover: <u>28</u>	140	= Total Cover			
Woody Vine Stratum (Plot size: 30')					
1. _____	0	<input type="checkbox"/>	0.0%	_____	
2. _____	0	<input type="checkbox"/>	0.0%	_____	
3. _____	0	<input type="checkbox"/>	0.0%	_____	
4. _____	0	<input type="checkbox"/>	0.0%	_____	
5. _____	0	<input type="checkbox"/>	0.0%	_____	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>	0	= Total Cover			

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is > 50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:
 Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

 Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

 Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

 Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

 Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-5	10YR	2/1	88	5Y	6/1	10	D	M	Clay Loam	
				10YR	6/8	2	C	M	Clay Loam	
5-20	10YR	2/1	100						Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☒ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 35: Plot #18, Soil Sample



Photo 36: Plot #18, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 19
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3159 **Long.:** -91.8301 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <u>0</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **19**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Eleocharis parvula		90	<input checked="" type="checkbox"/> 81.8%	OBL
2. Hydrocotyle bonariensis		10	<input type="checkbox"/> 9.1%	FACW
3. Carex blanda		10	<input type="checkbox"/> 9.1%	FAC
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 55 20% of Total Cover: 22		110	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>90</u>	x 1 = <u>90</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Total s: <u>110</u> (A)	<u>140</u> (B)

Prevalence Index = B/A = 1.273

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-3	10YR	3/1	95	10YR	5/8	5	C	PL	Silt Loam	
3-6	10YR	4/1	80	10YR	2/1	15	D	M	Clay Loam	
				10YR	5/8	5	C	PL	Clay Loam	
6-10	10YR	4/1	90	10YR	2/1	10	D	M	Clay Loam	
10-20	10YR	6/2	70	10YR	4/1	15	D	M	Clay Loam	
				10YR	7/8	15	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 37: Plot #19, Soil Sample



Photo 38: Plot #19, Vegetation facing north

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 20
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3158 **Long.:** -91.8300 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: **20**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		70	<input checked="" type="checkbox"/> 46.1%	FACU
2. <i>Stenotaphrum secundatum</i>		45	<input checked="" type="checkbox"/> 29.6%	FAC
3. <i>Nothoscordum bivalve</i>		20	<input type="checkbox"/> 13.2%	FACU
4. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 6.6%	FACU
5. <i>Medicago polymorpha</i>		5	<input type="checkbox"/> 3.3%	FACU
6. <i>Geranium carolinianum</i>		2	<input type="checkbox"/> 1.3%	UPL
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 76 20% of Total Cover: 30.4		152	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 45 x 3 = 135

FACU species 105 x 4 = 420

UPL species 2 x 5 = 10

Column Total s: 152 (A) 565 (B)

Prevalence Index = B/A = 3.717

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1 |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 39: Plot #20, Soil Sample



Photo 40: Plot #20, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 21
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3162 **Long.:** -91.8242 **Datum:** WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 21

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		55	<input checked="" type="checkbox"/> 39.3%	FAC
2. <i>Sporobolus domingensis</i>		50	<input checked="" type="checkbox"/> 35.7%	FACU
3. <i>Nothoscordum bivalve</i>		15	<input type="checkbox"/> 10.7%	FACU
4. <i>Artemisia vulgaris</i>		10	<input type="checkbox"/> 7.1%	UPL
5. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 3.6%	FACU
6. <i>Cirsium horridulum</i>		5	<input type="checkbox"/> 3.6%	FAC
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>70</u> 20% of Total Cover: <u>28</u>		140	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 60 x 3 = 180

FACU species 70 x 4 = 280

UPL species 10 x 5 = 50

Column Total s: 140 (A) 510 (B)

Prevalence Index = B/A = 3.643

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 1 |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 41: Plot #21, Soil Sample



Photo 42: Plot #21, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 22
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 36 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3174
Long.: -91.8171
Datum: WGS84
Soil Map Unit Name: Dd- Dundee silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Saturated only in upper 3".		

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

Sampling Point: 22

Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Celtis laevigata</u>	<u>15</u>	<input checked="" type="checkbox"/> 100.0%	<u>FACW</u>
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>7.5</u> 20% of Total Cover: <u>3</u>		<u>15</u>	= Total Cover	
Sapling or Sapling/Shrub Stratum (Plot size: <u>30'</u>)				
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	
Shrub Stratum (Plot size: <u>30'</u>)				
1.	<u>Ligustrum sinense</u>	<u>5</u>	<input checked="" type="checkbox"/> 100.0%	<u>FAC</u>
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>2.5</u> 20% of Total Cover: <u>1</u>		<u>5</u>	= Total Cover	
Herb Stratum (Plot size: <u>30'</u>)				
1.	<u>Carex blanda</u>	<u>55</u>	<input checked="" type="checkbox"/> 59.8%	<u>FAC</u>
2.	<u>Eleocharis parvula</u>	<u>20</u>	<input checked="" type="checkbox"/> 21.7%	<u>OBL</u>
3.	<u>Hydrocotyle bonariensis</u>	<u>10</u>	<input type="checkbox"/> 10.9%	<u>FACW</u>
4.	<u>Plantago major</u>	<u>3</u>	<input type="checkbox"/> 3.3%	<u>FAC</u>
5.	<u>Quercus nigra</u>	<u>2</u>	<input type="checkbox"/> 2.2%	<u>FAC</u>
6.	<u>Cirsium horridulum</u>	<u>2</u>	<input type="checkbox"/> 2.2%	<u>FAC</u>
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
9.		<u>0</u>	<input type="checkbox"/> 0.0%	
10.		<u>0</u>	<input type="checkbox"/> 0.0%	
11.		<u>0</u>	<input type="checkbox"/> 0.0%	
12.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>46</u> 20% of Total Cover: <u>18.4</u>		<u>92</u>	= Total Cover	
Woody Vine Stratum (Plot size: <u>30'</u>)				
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 112 Multiply by: 2

OBL species 20 x 1 = 20

FACW species 25 x 2 = 50

FAC species 67 x 3 = 201

FACU species 0 x 4 = 0

UPL species 0 x 5 = 0

Column Total s: 112 (A) 271 (B)

Prevalence Index = B/A = 2.420

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-8	10YR	4/2	85	10YR	4/6	15	C	PL	Clay Loam	
8-15	10YR	5/4	65	10YR	2/1	35	D	M	Clay Loam	
15-20	10YR	5/3	60	10YR	6/8	15	C	M	Silt Loam	
				10YR	3/1	25	D	M	Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 43: Plot #22, Soil Sample



Photo 44: Plot #22, Vegetation facing south

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 23
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 36 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3175 **Long.:** -91.8171 **Datum:** WGS84
Soil Map Unit Name: Dd- Dundee silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 23

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Geranium carolinianum</i>		55	<input checked="" type="checkbox"/> 30.9%	UPL
2. <i>Stenotaphrum secundatum</i>		50	<input checked="" type="checkbox"/> 28.1%	FAC
3. <i>Sporobolus domingensis</i>		30	<input type="checkbox"/> 16.9%	FACU
4. <i>Artemisia vulgaris</i>		20	<input type="checkbox"/> 11.2%	UPL
5. <i>Gallium aparine</i>		15	<input type="checkbox"/> 8.4%	FACU
6. <i>Plantago major</i>		5	<input type="checkbox"/> 2.8%	FAC
7. <i>Vicia ludoviciana</i>		3	<input type="checkbox"/> 1.7%	FACU
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>89</u> 20% of Total Cover: <u>35.6</u>		178	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 55 x 3 = 165

FACU species 48 x 4 = 192

UPL species 75 x 5 = 375

Column Total s: 178 (A) 732 (B)

Prevalence Index = B/A = 4.112

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-2	10YR	3/2	95	7.5YR	5/8	5	C	M	Clay Loam	
2-8	10YR	4/2	85	10YR	2/1	5	D	M	Silt Loam	
				7.5YR	5/8	10	C	M	Silt Loam	
8-20	10YR	4/2	85	10YR	4/6	15	C	M	Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 45: Plot #23, Soil Sample



Photo 46: Plot #23, Vegetation facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 24
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 30 T 08S R 07E
Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** convex **Slope:** 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3214 **Long.:** -91.8001 **Datum:** WGS84
Soil Map Unit Name: Lo- Loreauville silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 24

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		50	<input checked="" type="checkbox"/> 49.0%	FAC
2. <i>Sporobolus domingensis</i>		35	<input checked="" type="checkbox"/> 34.3%	FACU
3. <i>Nothoscordum bivalve</i>		5	<input type="checkbox"/> 4.9%	FACU
4. <i>Geranium carolinianum</i>		5	<input type="checkbox"/> 4.9%	UPL
5. <i>Vicia ludoviciana</i>		5	<input type="checkbox"/> 4.9%	FACU
6. <i>Cirsium horridulum</i>		2	<input type="checkbox"/> 2.0%	FAC
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>51</u> 20% of Total Cover: <u>20.4</u>		102	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL spec ies 0 x 1 = 0

FACW spec ies 0 x 2 = 0

FAC spec ies 52 x 3 = 156

FACU spec ies 45 x 4 = 180

UPL spec ies 5 x 5 = 25

Col umn Total s: 102 (A) 361 (B)

Prevalence Index = B/A = 3.539

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²				
0-3	10YR	3/2	85	10YR	2/2	15	D	M	Clay Loam	
3-7	10YR	2/1	70	10YR	5/6	30	C	M	Clay Loam	
7-16	10YR	5/2	75	10YR	2/1	20	D	M	Clay Loam	
				10YR	5/6	5	C	M	Clay Loam	
16-20	10YR	5/1	72	10YR	5/4	25	C	M	Clay Loam	
				10YR	4/6	3	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 47: Plot #24, Soil Sample



Photo 48: Plot #24, Vegetation facing north

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin **City/County:** St. Martin Parish **Sampling Date:** 12-Feb-15
Applicant/Owner: Department of Transportation and Development **State:** LA **Sampling Point:** 25
Investigator(s): Coy LeBlanc, Ryne Menard **Section, Township, Range:** S 30 T 08S R 07E
Landform (hillslope, terrace, etc.): undulating **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O **Lat.:** 30.3214 **Long.:** -91.8023 **Datum:** WGS84
Soil Map Unit Name: Lo- Loreauville silt loam **NWI classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)	
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

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

Sampling Point: 25

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Lollum perenne</i>		60	<input checked="" type="checkbox"/> 41.4%	FACU
2. <i>Stenotaphrum secundatum</i>		45	<input checked="" type="checkbox"/> 31.0%	FAC
3. <i>Geranium carolinianum</i>		25	<input type="checkbox"/> 17.2%	UPL
4. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 6.9%	FACU
5. <i>Rumex crispus</i>		5	<input type="checkbox"/> 3.4%	FAC
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>72.5</u> 20% of Total Cover: <u>29</u>		145	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL spec ies 0 x 1 = 0

FACW spec ies 0 x 2 = 0

FAC spec ies 50 x 3 = 150

FACU spec ies 70 x 4 = 280

UPL spec ies 25 x 5 = 125

Col umn Total s: 145 (A) 555 (B)

Prevalence Index = B/A = 3.828

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²			
0-3	10YR	2/1	100					Silt Loam	highly organic
3-20	10YR	6/2	80	10YR	3/1	10	D	M	Clay Loam
				10YR	6/8	10	C	M	Clay Loam

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 49: Plot #25, Soil Sample



Photo 50: Plot #25, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 26
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 36 T 08S R 06E
Landform (hillslope, terrace, etc.): Hillside
Local relief (concave, convex, none): concave
Slope: 4.0 % / 2.3 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3210
Long.: -91.8064
Datum: WGS84
Soil Map Unit Name: Dd- Dundee silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: 26

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		65	<input checked="" type="checkbox"/> 43.3%	FACU
2. <i>Stenotaphrum secundatum</i>		45	<input checked="" type="checkbox"/> 30.0%	FAC
3. <i>Nothoscordum bivalve</i>		20	<input type="checkbox"/> 13.3%	FACU
4. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 6.7%	FACU
5. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 6.7%	UPL
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>75</u> 20% of Total Cover: <u>30</u>		150	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 45 x 3 = 135

FACU species 95 x 4 = 380

UPL species 10 x 5 = 50

Column Total s: 150 (A) 565 (B)

Prevalence Index = B/A = 3.767

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤ 3.0 ¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-3	10YR	3/2	100						Silt Loam	
3-7	10YR	4/2	96	10YR	7/2	2	D	M	Silt Loam	
				10YR	5/8	2	C	M	Silt Loam	
7-20	10YR	6/3	75	10YR	5/8	5	C	M	Silt Loam	
				10YR	4/1	20	D	M	Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 51: Plot #26, Soil Sample



Photo 52: Plot #26, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 27
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 36 T 08S R 06E
Landform (hillslope, terrace, etc.): Flat
Local relief (concave, convex, none): concave
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3202
Long.: -91.8105
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>19</u> Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <u>15</u>	Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Only saturated in upper 2". No saturation between 2" and 15".		

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

Sampling Point: 27

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Quercus nigra</u>		<u>45</u>	<input checked="" type="checkbox"/> 100.0%	<u>FAC</u>
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>22.5</u> 20% of Total Cover: <u>9</u>		<u>45</u>	= Total Cover	
Sapling or Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Ilex decidua</u>		<u>5</u>	<input checked="" type="checkbox"/> 100.0%	<u>FACW</u>
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>2.5</u> 20% of Total Cover: <u>1</u>		<u>5</u>	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Carex blanda</u>		<u>30</u>	<input checked="" type="checkbox"/> 93.8%	<u>FAC</u>
2. <u>Cirsium horridulum</u>		<u>2</u>	<input type="checkbox"/> 6.3%	<u>FAC</u>
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
9. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
10. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
11. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
12. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>16</u> 20% of Total Cover: <u>6.4</u>		<u>32</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 5 x 2 = 10

FAC species 77 x 3 = 231

FACU species 0 x 4 = 0

UPL species 0 x 5 = 0

Column Total s: 82 (A) 241 (B)

Prevalence Index = B/A = 2.939

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-8	10YR	2/1	95	7.5YR	5/8	5	C	M	Clay Loam	
8-20	10YR	6/3	80	10YR	2/1	20	D	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 53: Plot #27, Soil Sample



Photo 54: Plot #27, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 12-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 28
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3182
Long.: -91.8191
Datum: WGS84
Soil Map Unit Name: Dd- Dundee silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: 28

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Quercus nigra</u>		<u>25</u>	<input checked="" type="checkbox"/> 100.0%	<u>FAC</u>
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>12.5</u> 20% of Total Cover: <u>5</u>		<u>25</u>	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Ligustrum sinense</u>		<u>60</u>	<input checked="" type="checkbox"/> 85.7%	<u>FAC</u>
2. <u>Carya aquatica</u>		<u>10</u>	<input type="checkbox"/> 14.3%	<u>OBL</u>
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>35</u> 20% of Total Cover: <u>14</u>		<u>70</u>	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <u>Ligustrum sinense</u>		<u>20</u>	<input checked="" type="checkbox"/> 52.6%	<u>FAC</u>
2. <u>Quercus nigra</u>		<u>10</u>	<input checked="" type="checkbox"/> 26.3%	<u>FAC</u>
3. <u>Rubus trivialis</u>		<u>5</u>	<input type="checkbox"/> 13.2%	<u>FACU</u>
4. <u>Smilax bona-nox</u>		<u>3</u>	<input type="checkbox"/> 7.9%	<u>FAC</u>
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
6. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
7. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
8. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
9. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
10. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
11. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
12. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>19</u> 20% of Total Cover: <u>7.6</u>		<u>38</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
2. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
3. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
4. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
5. _____		<u>0</u>	<input type="checkbox"/> 0.0%	_____
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species 10 x 1 = 10

FACW species 0 x 2 = 0

FAC species 118 x 3 = 354

FACU species 5 x 4 = 20

UPL species 0 x 5 = 0

Column Total s: 133 (A) 384 (B)

Prevalence Index = B/A = 2.887

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-7	10YR	2/1	85	7.5YR	5/8	15	C	M	Silt Loam	
7-20	10YR	5/4	65	10YR	3/1	30	D	M	Silt Loam	
				7.5YR	5/8	5	C	M	Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 55: Plot #28, Soil Sample



Photo 56: Plot #28, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 13-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 29
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3160
Long.: -91.8272
Datum: WGS84
Soil Map Unit Name: Te- Tensas silty clay loam, 0 to 1 percent slopes
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , **Soil** ☐ , **or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ , **Soil** ☐ , **or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **29**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Sporobolus domingensis</i>		55	<input checked="" type="checkbox"/> 34.4%	FACU
2. <i>Stenotaphrum secundatum</i>		50	<input checked="" type="checkbox"/> 31.3%	FAC
3. <i>Vicia ludoviciana</i>		30	<input type="checkbox"/> 18.8%	FACU
4. <i>Medicago polymorpha</i>		10	<input type="checkbox"/> 6.3%	FACU
5. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 6.3%	UPL
6. <i>Nothoscordum bivalve</i>		5	<input type="checkbox"/> 3.1%	FACU
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 80 20% of Total Cover: 32		160	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 50 x 3 = 150

FACU species 100 x 4 = 400

UPL species 10 x 5 = 50

Column Total s: 160 (A) 600 (B)

Prevalence Index = B/A = 3.750

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-4	10YR	2/2	100						Clay Loam	
4-8	10YR	3/1	79	10YR	5/1	20	D	M	Clay Loam	
				7.5YR	5/8	1	C	M	Clay Loam	
8-20	10YR	4/2	82	10YR	2/1	15	D	M	Clay Loam	
				7.5YR	5/8	3	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input checked="" type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) |
| <input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 57: Plot #29, Soil Sample



Photo 57: Plot #29, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 13-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 30
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 30 T 08S R 07E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): concave
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3220
Long.: -91.7988
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?**
Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **30**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		65	<input checked="" type="checkbox"/> 34.2%	FAC
2. <i>Sporobolus domingensis</i>		45	<input checked="" type="checkbox"/> 23.7%	FACU
3. <i>Lolium perenne</i>		40	<input checked="" type="checkbox"/> 21.1%	FACU
4. <i>Nothoscordum bivalve</i>		15	<input type="checkbox"/> 7.9%	FACU
5. <i>Vicia ludoviciana</i>		10	<input type="checkbox"/> 5.3%	FACU
6. <i>Geranium carolinianum</i>		10	<input type="checkbox"/> 5.3%	UPL
7. <i>Rumex crispus</i>		5	<input type="checkbox"/> 2.6%	FAC
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 95 20% of Total Cover: 38		190	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of: 190 Multiply by: 3.684

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 70 x 3 = 210

FACU species 110 x 4 = 440

UPL species 10 x 5 = 50

Column Total s: 190 (A) 700 (B)

Prevalence Index = B/A = 3.684

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-3	10YR	2/1	100						Clay Loam	highly organic
3-8	10YR	3/2	100						Clay Loam	
8-20	10YR	4/2	75	10YR	3/1	15	D	M	Clay Loam	
				10YR	4/1	5	D	M	Clay Loam	
				10YR	5/8	5	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☒ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 59: Plot #30, Soil Sample



Photo 60: Plot #30, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 13-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 31
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 30 T 08S R 07E
Landform (hillslope, terrace, etc.): Hillside
Local relief (concave, convex, none): concave
Slope: 5.0 % / 2.9 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3229
Long.: -91.7925
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: **31**

Tree Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
7.		0	<input type="checkbox"/> 0.0%	
8.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Shrub Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
6.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	
Herb Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. <i>Stenotaphrum secundatum</i>		50	<input checked="" type="checkbox"/> 28.6%	FAC
2. <i>Sporobolus domingensis</i>		35	<input checked="" type="checkbox"/> 20.0%	FACU
3. <i>Lolium perenne</i>		30	<input checked="" type="checkbox"/> 17.1%	FACU
4. <i>Digitaria ciliaris</i>		20	<input type="checkbox"/> 11.4%	FACU
5. <i>Vicia ludoviciana</i>		20	<input type="checkbox"/> 11.4%	FACU
6. <i>Geranium carolinianum</i>		15	<input type="checkbox"/> 8.6%	UPL
7. <i>Nothoscordum bivalve</i>		5	<input type="checkbox"/> 2.9%	FACU
8.		0	<input type="checkbox"/> 0.0%	
9.		0	<input type="checkbox"/> 0.0%	
10.		0	<input type="checkbox"/> 0.0%	
11.		0	<input type="checkbox"/> 0.0%	
12.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 87.5 20% of Total Cover: 35		175	= Total Cover	
Woody Vine Stratum	(Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		0	<input type="checkbox"/> 0.0%	
2.		0	<input type="checkbox"/> 0.0%	
3.		0	<input type="checkbox"/> 0.0%	
4.		0	<input type="checkbox"/> 0.0%	
5.		0	<input type="checkbox"/> 0.0%	
50% of Total Cover: 0 20% of Total Cover: 0		0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of: 0 Multiply by: 1

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 50 x 3 = 150

FACU species 110 x 4 = 440

UPL species 15 x 5 = 75

Column Total s: 175 (A) 665 (B)

Prevalence Index = B/A = 3.800

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is > 50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²				
0-3	10YR	2/2	100						Silt Loam	
3-8	10YR	3/2	85	10YR	5/8	15	C	M	Silt Loam	
8-20	10YR	3/2	97	10YR	5/8	3	C	M	Silt Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Muck Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 61: Plot #31, Soil Sample



Photo 62: Plot #31, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 13-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 32
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 36 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): convex
Slope: 2.0 % / 1.1 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3191
Long.: -91.8124
Datum: WGS84
Soil Map Unit Name: Lo- Loreauville silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: 32

Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Celtis laevigata</u>	<u>60</u>	<input checked="" type="checkbox"/> 100.0%	<u>FACW</u>
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>30</u> 20% of Total Cover: <u>12</u>		<u>60</u>	= Total Cover	
Sapling or Sapling/Shrub Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Quercus nigra</u>	<u>25</u>	<input checked="" type="checkbox"/> 100.0%	<u>FAC</u>
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>12.5</u> 20% of Total Cover: <u>5</u>		<u>25</u>	= Total Cover	
Shrub Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Ilex vomitoria</u>	<u>15</u>	<input checked="" type="checkbox"/> 75.0%	<u>FAC</u>
2.	<u>Sambucus nigra</u>	<u>5</u>	<input checked="" type="checkbox"/> 25.0%	<u>FACW</u>
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>10</u> 20% of Total Cover: <u>4</u>		<u>20</u>	= Total Cover	
Herb Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Rubus trivialis</u>	<u>25</u>	<input checked="" type="checkbox"/> 71.4%	<u>FACU</u>
2.	<u>Gallium aparine</u>	<u>5</u>	<input type="checkbox"/> 14.3%	<u>FACU</u>
3.	<u>Artemisia vulgaris</u>	<u>5</u>	<input type="checkbox"/> 14.3%	<u>UPL</u>
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
9.		<u>0</u>	<input type="checkbox"/> 0.0%	
10.		<u>0</u>	<input type="checkbox"/> 0.0%	
11.		<u>0</u>	<input type="checkbox"/> 0.0%	
12.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>17.5</u> 20% of Total Cover: <u>7</u>		<u>35</u>	= Total Cover	
Woody Vine Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species 0 x 1 = 0

FACW species 65 x 2 = 130

FAC species 40 x 3 = 120

FACU species 30 x 4 = 120

UPL species 5 x 5 = 25

Column Total s: 140 (A) 395 (B)

Prevalence Index = B/A = 2.821

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features						Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-12	10YR	4/2	85	7.5YR	5/8	5	C	M	Clay Loam	
				10YR	2/1	10	C	M	Clay Loam	
12-20	10YR	4/1	55	10YR	2/1	35	D	M	Clay Loam	
				10YR	5/8	10	C	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Photo 63: Plot #32, Soil Sample



Photo 64: Plot #32, Vegetation facing east

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: No. H.003014: I-10E. JCT LA347 to Atchafalaya Basin
City/County: St. Martin Parish
Sampling Date: 13-Feb-15
Applicant/Owner: Department of Transportation and Development
State: LA
Sampling Point: 33
Investigator(s): Coy LeBlanc, Ryne Menard
Section, Township, Range: S 35 T 08S R 06E
Landform (hillslope, terrace, etc.): Undulating
Local relief (concave, convex, none): convex
Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR O
Lat.: 30.3174
Long.: -91.8201
Datum: WGS84
Soil Map Unit Name: Dd- Dundee silt loam
NWI classification: None

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ☒ No ☐
Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

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

Sampling Point: 33

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Ligustrum sinense</u>	<u>40</u>	<input checked="" type="checkbox"/> 57.1%	<u>FAC</u>
2.	<u>Liquidambar styraciflua</u>	<u>25</u>	<input checked="" type="checkbox"/> 35.7%	<u>FAC</u>
3.	<u>Ilex decidua</u>	<u>5</u>	<input type="checkbox"/> 7.1%	<u>FACW</u>
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>35</u> 20% of Total Cover: <u>14</u>		<u>70</u>	= Total Cover	
Sapling or Sapling/Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Quercus nigra</u>	<u>20</u>	<input checked="" type="checkbox"/> 100.0%	<u>FAC</u>
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>10</u> 20% of Total Cover: <u>4</u>		<u>20</u>	= Total Cover	
Shrub Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Ilex decidua</u>	<u>15</u>	<input checked="" type="checkbox"/> 75.0%	<u>FACW</u>
2.	<u>Ligustrum sinense</u>	<u>5</u>	<input checked="" type="checkbox"/> 25.0%	<u>FAC</u>
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>10</u> 20% of Total Cover: <u>4</u>		<u>20</u>	= Total Cover	
Herb Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.	<u>Quercus nigra</u>	<u>5</u>	<input checked="" type="checkbox"/> 41.7%	<u>FAC</u>
2.	<u>Rubus trivialis</u>	<u>5</u>	<input checked="" type="checkbox"/> 41.7%	<u>FACU</u>
3.	<u>Sambucus nigra</u>	<u>2</u>	<input type="checkbox"/> 16.7%	<u>FACW</u>
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
6.		<u>0</u>	<input type="checkbox"/> 0.0%	
7.		<u>0</u>	<input type="checkbox"/> 0.0%	
8.		<u>0</u>	<input type="checkbox"/> 0.0%	
9.		<u>0</u>	<input type="checkbox"/> 0.0%	
10.		<u>0</u>	<input type="checkbox"/> 0.0%	
11.		<u>0</u>	<input type="checkbox"/> 0.0%	
12.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>6</u> 20% of Total Cover: <u>2.4</u>		<u>12</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1.		<u>0</u>	<input type="checkbox"/> 0.0%	
2.		<u>0</u>	<input type="checkbox"/> 0.0%	
3.		<u>0</u>	<input type="checkbox"/> 0.0%	
4.		<u>0</u>	<input type="checkbox"/> 0.0%	
5.		<u>0</u>	<input type="checkbox"/> 0.0%	
50% of Total Cover: <u>0</u> 20% of Total Cover: <u>0</u>		<u>0</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of: 70 Multiply by: 1.23

OBL species 0 x 1 = 0

FACW species 22 x 2 = 44

FAC species 95 x 3 = 285

FACU species 5 x 4 = 20

UPL species 0 x 5 = 0

Column Total s: 122 (A) 349 (B)

Prevalence Index = B/A = 2.861

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is > 50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: 33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type ¹	Loc ²		
0-5	10YR	4/3	80	10YR	2/1	20	D	M	Silt Loam	
5-11	10YR	5/3	80	10YR	5/6	20	C	M	Silt Loam	
11-20	10YR	5/2	65	10YR	5/6	25	C	M	Clay Loam	
				10YR	3/1	10	D	M	Clay Loam	

¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:



Photo 65: Plot #33, Soil Sample



Photo 66: Plot #33, Vegetation facing east



Photo 67: Other Waters #1; facing north



Photo 68: Other Waters #2; facing south



Photo 69: Other Waters #3; facing north



Photo 70: Other Waters #4; facing north



Photo 71: Other Waters #5; facing north



Photo 72: Other Waters #6; facing south



Photo 73: Other Waters #7; facing south



Photo 74: Other Waters #8; facing south



Photo 75: Other Waters #9; facing north



Photo 76: Other Waters #10; facing south



Photo 77: Other Waters #11; facing north



Photo 78: Other Waters #12; facing north



Photo 79: Other Waters #13; facing south



Photo 80: Other Waters #14; facing south



Photo 81: Other Waters #15; facing south



Photo 82: Other Waters #16; facing south



Photo 83: Other Waters #17; facing south



Photo 84: Other Waters #18; facing south



Photo 85: Other Waters #19; facing north



Photo 86: Other Waters #20; facing north



Photo 87: Other Waters #21; facing north



Photo 88: Other Waters #22; facing south



Photo 89: Other Waters #23; facing south



Photo 90: Other Waters #24; facing south



Photo 91: Other Waters #25; facing south



Photo 92: Other Waters #26; facing south



Photo 93: Other Waters #27; facing south



Photo 94: Wetland #1; facing west



Photo 95: Wetland #2; facing west



Photo 96: Wetland #3; facing west



Photo 97: Wetland #4; facing east



Photo 98: Wetland #5; facing east



Photo 99: Wetland #6; facing east



Photo 100: Wetland #7; facing north



Photo 101: Wetland #8; facing south



Photo 102: Wetland #9; facing south



Photo 103: Wetland #10; facing north

Appendix E

Traffic Noise Impact and Abatement Study

Louisiana Department of Transportation and
Development

Traffic Noise Impact and Abatement Study

**I-10 Widening: LA-328 – LA 347;
I-10 Widening: LA 347 - Atchafalaya Basin Bridge**

SP# H.010601.2

SP# H.003014.2

Route: I-10

St. Martin Parish



June 2015

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TRAFFIC NOISE ANALYSIS
STATE PROJECT NO.:
H.003014 & H.010601
I-10 Widening: LA 328 – Atchafalaya Basin Bridge
ROUTE: I-10
PARISH: Lafayette and St. Martin

INTRODUCTION

The planned improvements to both directions of I-10 from LA 328 to LA 347 includes the addition of one 12ft travel lane in each direction to be added within existing right of way, within the median. Additions from LA 347 to the Atchafalaya Basin Bridge in the westbound direction include the addition of a 12ft travel lane to the, a 12ft outside shoulder, and a 6ft inside shoulder. The eastbound direction will receive a 12ft outside shoulder and a 6ft inside shoulder with the two original 12ft travel lanes remaining.

The proposed project is classified as a Type I Project since additional capacity will be added. Since it is anticipated that federal funding will be used for construction of this project, a traffic noise analysis is mandated by the regulations in the Federal Register under 23 CFR 772. This analysis will be provided to the Federal Highway Administration (FHWA) for approval prior to receiving funding.

This report analyzes noise impacts due to the implementation of the captioned project as well as the projected normal traffic growth. Topics discussed include field measurement, computer modeling and methodology, noise impacts, and abatement methods. Projected noise impacts, based on the data for the existing and proposed conditions, will be discussed. Noise abatement measures are evaluated for areas where impacts are anticipated. Traffic noise impacts are defined by Louisiana Department of Transportation and Development (LADOTD) as noise impacts which occur when the predicted traffic noise levels equal or exceed the LADOTD Noise Abatement Criteria (NAC), or when the predicted traffic noise levels exceed the existing noise levels by 10 dBA. The NAC are presented below in Table 1. If it is determined that there are noise impacts in the project area, then noise abatement methods will be analyzed for reasonability and feasibility. The LADOTD noise abatement policy is provided in Appendix C-1.



Figure 1: Overhead aerial of project area with labeled roadways.

PURPOSE & SCOPE

The purpose of the project is to improve traffic flow on I-10 within the project area. Work spans from LA 328 to LA 347, and LA 347 to the start of the Atchafalaya Basin Bridge. This is to be completed by widening I-10 from 4 to 6 lanes between LA 328 and LA 347, and adding a travel lane to the westbound direction of I-10 between LA 347 and the Atchafalaya Basin Bridge. These additions are expanded inward. Additional improvements include adding 12ft outside shoulders in each direction, a 6ft inside shoulder in each direction, and construction of a 54in concrete median barrier in portions of the corridor.

The purpose of this noise analysis is to examine the noise impacts associated with the addition of a lane to each direction of I-10 and to examine the reasonability and feasibility of noise abatement methods.



Figure 2: Receiver locations
● = Receiver locations

DESCRIPTION OF LAND USAGE

Current Use

Land usage along the project area consists of a mix of commercial, residential, and unused properties. There are housing communities on either side of the interstate in addition to stand alone dwellings, a variety of businesses, and unused plots. All units were included in the study. Activity categories for this project are B and E.

Future Use

Future use of the surrounding area will continue to be mixed commercial and residential establishments. All activity categories are expected to remain the same; B and E.

Table 1: FHWA's Noise Abatement Criteria

Activity Category	Activity Leq(H)	Evaluation Location	Activity Description	In LA, impact occurs when noise level is equal to or greater than the values below
A	57	Exterior	Lands where serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose	56
B	67	Exterior	Residential (includes undeveloped lands permitted for residential)	66
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings. (includes undeveloped lands permitted for these activities)	66
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	51
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (includes undeveloped lands permitted for these activities).	71
F	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	N/A
G	--	--	Undeveloped lands that are not permitted	N/A

The units for the noise levels are hourly A-weighted sound levels (dBA)

TRAFFIC NOISE MODEL

Modeling Procedures

FHWA Traffic Noise Model 2.5 (TNM) was used to analyze the noise impacts following the *FHWA Highway Traffic Noise: Analysis and Abatement Guide* (FHWA 2011) and the *FHWA Traffic Noise Model User's Guide (Version 2.5 Addendum)* (FHWA 2004). Traffic volume and axle distribution were obtained from the Traffic and Planning Section of LADOTD. Traffic was assumed to increase 2% annually. Traffic speed was modeled at 70 mph for automobiles, trucks, motorcycles, and buses along I-10 in both directions.

The TNM model combines traffic flow data with a digital representation of the project corridor to predict noise levels. The Average Daily Traffic counts were provided by the LADOTD's Planning and Programming Section. The data included a vehicle classification breakdown for 2015, and for the future year 2035. Peak traffic was predicted to be ten percent of the Average Daily Traffic. I-10 was modeled as four 12' roadways for the existing condition, and five to six 12' roadways for the build condition, respective of plan configuration.

There are multiple developments along the length of the project where the increased capacity may present a concern. Multiple barrier analyses were run to determine reasonability and feasibility.

For the TNM model to predict impacts at a certain location there must be a receiver in the area that is exposed to the noise. Thirty five receivers were modeled adjacent to the project area. A list of receivers, current noise levels, levels predicted by TNM, and a map of the receiver sites are provided in Appendix C-

Model Validation

The existing noise levels were measured using an Integrating Sound Level Meter (Model 820, by Larson*Davis). This is a Type I sound level meter. The sound level meter was calibrated at the beginning of the trip and rechecked before each measurement. Measurements were taken in fifteen minute intervals and the traffic was manually counted by LADOTD personnel during each interval. The noise measurements were used to represent the hourly Leq and the traffic that was counted during the fifteen minute interval was multiplied by a factor of four to represent hourly traffic volume.

The model was validated by measuring the noise at two locations along the project corridor and comparing the actual measured noise levels to the noise levels predicted by the TNM model. If the measured noise level was within three decibels of the predicted noise level, then the model results will be considered valid. Two measurement locations were used for validating the TNM model. The first being located at the end of Melrose Drive, directly adjacent to I-10, 150ft from the roadway. The second location was adjacent to Par Rd 36, 200ft from I-10,

These locations are shown in Figure 1 within Appendix C-3. Table 2 shows a summary of the validation results and the details of the model validation can be found in Appendix C-3

Table 2: TNM Validation Results.

Site	Time	Measured Leq (dBA)	Predicted Leq (dBA)	Difference (dBA)
Melrose Dr	11:00 am	73	75	2
Parish Rd 36	11:30 am	79	81	2

Existing Noise Levels

This simulation predicts which receivers are currently impacted based on the NAC. For a receiver to be impacted it must meet or exceed the NAC criteria. The TNM Model predicted that currently all 35 possible receptors are impacted. The noise levels range from 76 dBA to 84 dBA. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. Appendix C-4 contains the simulation results for the existing noise levels.

Future No-Build Noise Level

This simulation predicts which receivers will be impacted if the future predicted traffic is forced to travel on the existing road with no improvements. For this simulation, all of the 35 dwelling units are impacted for the no-build scenario. These noise levels range from 77 dBA to 85 dBA. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. The results of the future no-build simulation can be found in Appendix C-5.

Future Build Noise Level

This simulation predicts which receivers will be impacted if the future traffic is allowed to travel using the proposed improvements. Multiple barrier simulations were modeled in an effort to gage feasibility and reasonability in construction and abatement. None of the barriers met the minimum qualifications needed to be considered either reasonable or feasible. All of the receivers are impacted, with noise levels ranging from 77 dBA to 85 dBA with no barrier, and noise levels ranging from 72 dBA to 85 dBA with added barriers. It appears that I-10 is the main contributor to the noise environment for all of the receptors along the project site. The results of the future build simulation can be found in Appendix C-6.

Table 3: Impacted Receptors.

Design Scenario	# of Receivers	Receivers impacted	66 dB Contour from center of roadway	71 dB Contour from center of roadway
Existing Condition	35	35	440	285
Future No Build	35	35	450	270
Future Build	35	35	350	170

ANALYSIS OF THE NOISE ABATEMENT

METHODS Traffic Management Measures

Traffic management measures include using traffic control devices, reducing speed limit, restricting vehicle type or time, and assigning a lane for trucks. For a high-speed interstate environment, these measures are inappropriate for consideration.

Alteration of Horizontal and Vertical Alignments

The scope of the project is to widen the existing roadway. Altering the current alignments would most likely result in additional impacts to the surrounding properties. This measure is not considered to be feasible or reasonable.

Construction of Noise Barriers

According to the noise abatement criteria set in the LADOTD Highway Traffic Noise Policy, a noise barrier must be both feasible and reasonable before it can be proposed. The criteria for meeting each requirement is below:

Feasibility includes concerns such as engineering, maintenance, safety, drainage issues and 75% of the first row of receptors achieving at least a 5 dBA reduction in highway traffic noise.

Reasonableness includes achieving the noise reduction design goal, cost effectiveness, and concurrence of benefited receptors. In order to meet the noise reduction goal, at least one receptor must receive an 8 dBA reduction.

Multiple barrier simulations were modeled in order to determine effectiveness of installing a noise wall. Costs were generated using DOTD noise barrier cost estimates, located in Appendix C-2. None of the barriers met the criteria for both reasonableness and feasibility, therefore, none will be built for this project.

Table 4: Barrier Cost.

Barrier	Barrier Length (FT)	Barrier Height (FT)	Barrier Area (Sq. Ft.)	Cost/ Sq. Ft. (\$)	# of Benefitted Receptors (≥ 5 dBA)	# of Benefitted Receptors (≥ 8 dBA)	Total Estimated Cost (\$)	Cost Per Benefitted Receiver (\$)
1	1,645	8	13,160	24	0	0	315,840	N/A
2	1,070	8	8,560	26	0	0	222,560	N/A
3	3,015	8	24,120	20	1	0	482,400	482,400
4	800	8	6,400	26	0	0	166,400	N/A
5	1,275	8	10,200	24	0	0	244,800	N/A
6	2,300	8	18,400	21	6	0	386,400	64,400

Barrier	Barrier Length (FT)	Barrier Height (FT)	Barrier Area (Sq Ft)	Cost/ Sq. Ft. (\$)	# of Benefitted Receptors (≥ 5 dBA)	# of Benefitted Receptors (≥ 8 dBA)	Total Estimated Cost (\$)	Cost Per Benefitted Receiver (\$)
1	1,645	10	16,450	21	2	0	345,450	172,725
2	1,070	10	10,700	24	2	0	256,800	128,400
3	3,015	10	30,150	18	4	1	542,700	135,675
4	800	10	8,000	26	1	0	208,000	208,000
5	1,275	10	12,750	24	0	0	306,000	N/A
6	2,300	10	23,000	20	11	2	460,000	41,818

Barrier	Barrier Length (FT)	Barrier Height (FT)	Barrier Area (Sq Ft)	Cost/ Sq. Ft. (\$)	# of Benefitted Receptors (≥ 5 dBA)	# of Benefitted Receptors (≥ 8 dBA)	Total Estimated Cost (\$)	Cost Per Benefitted Receiver (\$)
1	1,645	12	19,740	44	4	0	868,560	217,140
2	1,070	12	12,840	49	2	0	629,160	314,580
3	3,015	12	36,180	36	6	1	1,302,480	217,080
4	800	12	9,600	53	3	0	508,800	169,600
5	1,275	12	15,300	44	2	0	673,200	336,600
6	2,300	12	27,600	39	11	10	1,076,400	97,855

Noise Insulation of Public Use or Nonprofit Institutional Structures

No public use or nonprofit institutional structures are located adjacent to the project area; therefore, none were modeled in this analysis.

ANALYSIS OF CONSTRUCTION NOISE

Construction noise is expected to have temporary impacts upon all of the receptors in the area. The particular receivers of concern are the ones located within 500' of the project centerline. It is recommended that all construction operations be restricted to working hours whenever possible.

Abatement measures should be employed whenever possible. All construction equipment such as pumps, compressors, generators, bulldozers, cranes, trucks, etc., should be properly muffled and all motor panels should be closed to reduce the noise impacts. Section 107.14 of the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, and the FHWA Highway Construction Noise Handbook (FHWA-HEP-06-015, August 2006) can be referenced for further details on the sources and abatement of construction noise.

CONCLUSIONS AND RECOMMENDATIONS

There are commercial and residential receivers located adjacent to the project area that will be impacted by noise due to this project. Barrier analysis were performed as part of this noise study and are located in Appendix C-7; none met the criteria for both feasibility and reasonableness.

Construction noise generated as a result of the proposed project will cause temporary impacts to the sensitive receivers. The construction contractor will minimize noise impacts by adhering to the abatement measures stated in Section 107.14 (Environmental Protection) of the Louisiana Standard Specification for Roads and Bridges, 2006 edition.

Appendix C-1

LADOTD Noise Abatement Policy

STATE OF LOUISIANA



DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT



HIGHWAY TRAFFIC NOISE POLICY

July 2011

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INTRODUCTION

This document contains the Louisiana Department of Transportation and Development's (DOTD) policy on highway traffic noise. This policy describes the implementation of the requirements of the Federal Highway Administration (FHWA) noise regulations for Federal-aid projects found in 23 Code of Federal Regulations Part 772 (23 CFR Part 772).¹ DOTD developed this policy in accordance with FHWA regulations and guidance, and FHWA reviewed and approved this policy for implementation.

In the 1972 Federal-aid Highway Act, Congress required FHWA to develop a noise standard for new Federal-aid highway projects. In accordance with 23 United States Code section 109(i) (23 USC 109(i)), FHWA promulgated noise regulations which applied to Federal-aid projects. In June 1995, FHWA mandated that state transportation agencies adopt a written Highway Traffic Noise Policy consistent with the regulations and their June 1995 guidance. DOTD complied, with its first written policy approved by FHWA in August 1996. Since its initial approval, the DOTD highway traffic noise policy has been revised three times, in 1997, 2004 and 2009. Each revision required FHWA review and approval prior to implementation. On July 13, 2010, FHWA published their new noise regulations in the Federal Register² and mandated that state transportation agencies rewrite their noise policies to be consistent with the new regulations. The states were given until January 2011 to submit proposed policies for FHWA review. To assist states in rewriting their policies, FHWA published guidance dated June 2010 and revised January 2011 which can be found on FHWA's web site.³ The effective date of the new regulations is July 13, 2011.

The policy herein contains information on how highway traffic noise impacts are defined, how noise abatement is evaluated, and how noise abatement decisions are made in Louisiana. **This policy as written assumes that the noise analyst is familiar with the provisions of the Federal regulation on which this policy is based.** If you need further information regarding the policy, contact the DOTD Environmental Section at (225) 242-4502.

PURPOSE

The purpose of this written policy is to outline DOTD's policy and procedures for compliance with the FHWA Noise regulations found at 23 CFR 772.

DEFINITIONS

Reference is made to the definitions contained in the regulations (23 CFR 772.5). Defined below are some of the terms specifically referenced in the policy or which require additional refinement.

Benefited Receptor - a recipient of an abatement measure, whether impacted or not, receiving 5 dBA or more reduction in the noise level as a result of the proposed abatement.

¹ Access CFR regulations from <http://www.gpoaccess.gov/cfr/retrieve.html>

² Access Federal Register, Vol. 75, page 39820 from FR Main page at <http://www.gpoaccess.gov/fr/index.html>

³ Access FHWA noise guidance, regulations, and related material from <http://www.fhwa.dot.gov/environment/noise/>

Common Noise Environment – a group of receptors within the same Activity Category in Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features.

Date of Public Knowledge - the date of approval of the Record of Decision, Finding of No Significant Impact, or Categorical Exclusion. The date of public knowledge is the date at which the DOTD will no longer be responsible for providing noise abatement for new development which occurs adjacent to the proposed project. Provision of such abatement measures becomes the responsibility of the local communities or private developers.

Design Year – the future year used to estimate the probable traffic volume for which a highway is designed. The design year will normally be 20 years from the projected start of project construction.

Existing Noise Levels – the worst noise hour, resulting from the natural and mechanical sources and human activity, usually present in a particular area.

Leq – the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period.

Leq(h) – the hourly value of Leq.

Multifamily Dwelling – A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted and benefited receptors.

Noise Reduction Design Goal – the optimum desired noise reduction determined from calculating the difference between future build noise levels with abatement to future build noise levels without abatement. The noise reduction design goal in Louisiana is 8 dBA.

Permitted – A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property Owner – an individual or group of individuals that hold a title, deed, or other legal documentation of ownership of a property or a residence.

Receptor – A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 1.

Residence – a dwelling unit. Either a single family residence or each dwelling unit in a multifamily dwelling.

Statement of Likelihood – A statement provided in an environmental document based on the feasibility and reasonableness analysis at the time the document is being approved.

Traffic Noise Impacts – design year build condition noise levels that *approach* or exceed the FHWA Noise Abatement Criteria for the future build condition, or design year build condition noise levels that exceed

the existing noise levels by 10 dBA. (*Approach* is defined as 1 dBA less than the FHWA Noise Abatement Criteria.)

Type I Project –

- (1) The construction of a highway on new location; or
- (2) The physical alteration of an existing highway where there is either:
 - (a) Substantial Horizontal Alteration (a project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition), or
 - (b) Substantial Vertical Alteration (a project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source by altering the vertical alignment of the highway or by altering the topography); or
- (3) The addition of a through-traffic lane. This includes the addition of a through-traffic lane that functions as a HOV, HOT, bus, or truck climbing lane; or
- (4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or
- (6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
- (7) The addition of a new or substantial alteration of a weight station, rest stop, ride-share lot or toll plaza.

*Note that if a project is determined to be a Type I project, then the entire project area as defined in the environmental document is a Type I project.

Type II Project – a proposed project to provide noise abatement on an existing highway. DOTD does not have a Type II program.

Type III Project – a proposed project that does not meet the classification of a Type I or Type II project. Type III projects do not require a noise analysis.

APPLICABILITY

This policy applies to all Federal highway projects in the State of Louisiana; that is, any projects that receive Federal-aid funds or are otherwise subject to FHWA approval.

This policy also applies to the construction of new control of access highways that are funded through DOTD with no FHWA involvement.

Type II programs to provide noise abatement along existing highways are voluntary. DOTD does not have a Type II program; therefore, DOTD will not consider Type II projects.

DOTD will consider and construct barriers when sufficient funds (Federal or State) are appropriated by either State or Federal legislature specific to the construction of a barrier. These legislative mandated barriers may or may not be part of a Type I project. These barriers will be designed in accordance with the legislation as to location, height, and other parameters. If the design parameters are not specified in the legislation, the barrier will be designed to achieve a reasonable noise reduction in accordance with this policy.

This policy shall not prohibit the application of visual screens or security fences. Visual screens and security fences are not eligible for Federal-aid funding as noise abatement.

TRAFFIC NOISE ANALYSIS

The traffic noise analysis will include the steps listed below for each alternative under detailed study. Note that if any segment or component of an alternative meets the definition of a Type I project, then the entire alternative is considered to be Type I and is subject to the noise analysis requirements below.

1. **Identification of Existing Land Uses Affected by Noise:** The following types of activities and land uses affected by noise from the highway will be identified for analysis:
 - a. Category A: Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose;
 - b. Category B: residential;
 - c. Category C: active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings;
 - d. Category D: auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios;
 - e. Category E: hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F;
 - f. Category F: agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing; and
 - g. Category G: undeveloped lands that are not permitted.

Justification for the designation of lands as Category A must be submitted to FHWA on a case-by-case basis for concurrence. Justifications will be submitted through the FHWA Division Office to FHWA Headquarters.

2. **Determination of Existing Noise Levels:** The determination of existing noise levels will be made utilizing field measurements of actual noise levels. A log will be kept noting the time of day, meteorological conditions, calibration results, and any unusual ambient noise sources experienced during each measurement.

Noise measurements will be taken utilizing ANSI Type 1 or Type 2 Sound Level meters used in accordance with the manufacturer's operations manual. Meters are to be calibrated before and after each measurement. Meters should have valid factory calibration certification. Measurements should be done in accordance with the FHWA publication entitled, "Measurement of Highway – Related Noise," dated May 1996.⁴

⁴ Located on web at <http://www.fhwa.dot.gov/environment/noise/measurement/measure.cfm>

Noise measurements will be taken in time intervals no shorter than 15 minutes and no longer than one hour unless alternate intervals are given prior approval by DOTD.

Actual traffic counts will be made during each field measurement. These traffic counts will be categorized according to the following vehicle classes:

Automobiles (A) – all vehicles with two axles and four wheels designed primarily for transportation of nine or less passengers or transportation of cargo.

Medium Trucks (MT) – all vehicles with two axles and six wheels designed for the transportation of cargo.

Heavy Trucks (HT) – all vehicles having three or more axles designed for the transportation of cargo.

Buses (B) – all vehicles designed to carry more than nine passengers.

Motorcycles (M) – all vehicles with two or three wheels and an open-air driver/passenger compartment.

Sites selected for field measurements will receive prior approval of DOTD. These sites will represent noise sensitive receptors in each Activity Category which are likely to be affected by the project. Sites outside of the immediate vicinity of the project may also be chosen to determine the ambient noise levels unaffected by the roadway. For proposed highways on new alignments where no highway currently exists, measurements must be taken at representative receptor locations. Unless specifically approved by DOTD, field measurements will be taken to represent exterior activities only.

Field measurements will be taken at approved sites at peak and off-peak times. Peak hour noise levels will be the hour with the highest noise levels, not necessarily the hour with the highest traffic volumes.

Upon the consent of the Environmental Engineer Administrator, existing noise levels may be determined by utilizing other methodology, including computer models consistent with the current FHWA highway traffic noise prediction model. Traffic characteristics, data, selection of receptor locations, and other input parameters utilized will be at the discretion of DOTD.

- 3. Prediction of Traffic Noise Levels:** Any traffic noise prediction methodology is approved for use in any traffic noise analysis required by this policy if the methodology used at the time the noise study is consistent with the requirements of 23 CFR 772.9.⁵

⁵ The approved model in effect on July 13, 2011, the effective date of the regulations, is FHWA TNM version 2.5. When running the TNM 2.5 model, average pavement type must be used for prediction of future noise levels unless FHWA approves use of another type.

Report predicted noise levels in the noise report and related documents in the same format as reported by the model used.⁶

To validate model results, it is necessary to compare the noise levels measured in the field to the noise levels predicted by the model using the roadway parameters and traffic data collected in the field. If the modeled results are within 3 dBA of the measured noise levels, no further action is required, and the model can be used to determine future noise levels. If the modeled results are not within 3 dBA of the measured noise levels, then further investigation is warranted into the reason(s) for the discrepancy prior to using the model to determine future noise levels.

In predicting noise levels and assessing noise impacts, traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the design year will be used. The period with the highest sound levels may not be at the peak traffic hour but instead, during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher.

Future noise levels will be based on modeling results utilizing data for the design year. This data, including traffic volumes, composition and speed, other reasonably foreseeable development, and the implementation of other transportation projects, will be based on accepted engineering practice and local planning assumptions.

4. **Determination of Traffic Noise Impacts:** Traffic noise impacts occur when the future (predicted, design year, build condition) noise levels *approach or exceed* the FHWA Noise Abatement Criteria, or when the future (predicted, design year, build condition) noise levels exceed the existing noise levels at any sensitive receptor by 10 dBA. FHWA requires that the States define *approach* as at least 1 dBA below their Noise Abatement Criteria.

The noise analysis must include analysis for each type of receptor present in the study area. Noise contour lines shall not be used to determine noise impacts, but noise contour lines can be used for project alternative screening or for land use planning purposes.

In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas of frequent human use. Examples of possible receptor locations for residential receivers are patios, courtyards, front or back yard, pool areas, etc. Generally, the receptor location which lies between the noise source and the receiver is chosen as the location to model. If the circumstances of a particular receiver are atypical, contact the DOTD Environmental Section Coordinator for guidance.

In determining the number of receptors impacted/benefited, the number will include all dwelling units (i.e., owner-occupied, rental units, mobile homes, etc.). Each unit in a multifamily building is counted as one receptor.

For hotels, motels, offices, and other developed lands, receptor locations will be sited at outdoor areas of frequent human use such as patios, courtyards, pool areas, locations of outdoor seating, etc.

⁶ The current approved model, TNM, reports results in tenths, a decimal format (##.#).

FHWA Noise Abatement Criteria
Hourly A-weighted Sound Level decibels (dBA)

ACTIVITY CATEGORY	ACTIVITY LEQ (H)	EVALUATION LOCATION	ACTIVITY DESCRIPTION	IN LOUISIANA, IMPACT OCCURS WHEN NOISE LEVEL <u>IS EQUAL TO OR GREATER THAN</u> THE VALUES BELOW*
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	56
B	67	Exterior	Residential (includes undeveloped lands permitted for residential).	66
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. (Includes undeveloped lands permitted for these activities).	66
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	51
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (Includes undeveloped lands permitted for these activities).	71
F	-----	-----	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	n/a
G	-----	-----	Undeveloped lands that are not permitted.	n/a

*These values are consistent with the FHWA's requirement for consideration of traffic noise impacts 1 dBA below their noise abatement criteria.

For parks and recreational areas, model each designated use area as a receptor location. For example, the park may have ball fields, basketball courts, playground equipment, tennis courts, picnic area, pool, etc. Each of these specific activity areas would be modeled to determine noise impact at each of these locations.

In those situations where there are no exterior activities to be affected by the traffic noise, or where exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion, Activity Category D, shall be used as the basis of determining noise impacts. An indoor analysis shall only be done after exhausting all outdoor analysis options. Interior noise level predictions may be estimated by using the information in Table 6 of FHWA's guidance document entitled, "Highway Traffic Noise: Analysis and Abatement Guidance," dated June 2010 and revised January 2011.⁷

When applying the interior criterion, consideration is given to the impact and abatement of interior rooms facing the roadway that are occupied frequently with a use that would benefit from a reduction in noise. For example, a classroom, prayer room, or meeting room would benefit from a reduction in noise, but a storage room or boiler room would not. When determining the cost for reasonableness, one building is one receptor, although multiple rooms may be insulated or provided noise reduction windows.

For Category F, no highway noise analysis is required under 23 CFR 772.

For Category G, if the undeveloped land is not permitted for development by the date of public knowledge, the noise levels are determined in accordance with 23 CFR 772.17(a) and results are documented in the environmental document.

5. **Evaluation of Noise Abatement:** When traffic noise impacts are identified, noise abatement shall be considered and evaluated for *feasibility* and *reasonableness*. Traffic noise impacts will be determined and alternative noise abatement measures analyzed by giving weight to the benefits and cost of abatement, and to the overall social, economic and environmental impacts.

In abating traffic noise impacts, primary consideration is given to exterior areas where frequent human use occurs and a lowered noise level would be of benefit.

The noise abatement measures listed below may be incorporated into Type I Federal or Federal-aid projects to reduce traffic noise impacts.

(1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise barrier;

(2) Traffic management measures (e.g., traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits and exclusive lane designations);

(3) Alteration of horizontal and vertical alignments;

⁷ On-line guidance available at FHWA website, http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/

(4) Acquisition of property rights (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise;

(5) Noise insulation of Activity Category D land use facilities listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

Feasibility:

For a noise barrier to be considered acoustically feasible, 75% of the first row of impacted receptors adjacent to the barrier must achieve at least a 5 dBA reduction in highway traffic noise.

Other feasibility factors that will be considered are safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, and access to adjacent properties.

DOTD will not build noise barriers that it considers unsafe to the traveling public or adjacent properties. Topography and drainage may impact the design of the barrier or make the barrier unfeasible to construct. Utilities may render a barrier unfeasible when a conflict between the utility and barrier exists and the utility cannot be moved or cannot be moved without creating other insurmountable problems. (Note that the cost to relocate a utility will be added to the cost of the barrier when the relocation is necessary for the construction of the barrier. If this relocation cost is large, the barrier, although feasible, may become unreasonable due to cost.) DOTD must be able to access the barrier for maintenance purposes. If access cannot be obtained, the barrier is unfeasible. When access to adjacent properties must be maintained, a barrier may be unfeasible if it cannot be designed to provide the needed access. Noise barriers that block existing driveways are considered unfeasible; however, there may be situations whereby the property owners agree in writing to forfeit their access eliminating this concern. Situations may arise whereby access is needed for seasonal activities such as maintenance or management of adjacent properties. These situations will be considered on case by case basis.

Noise barriers on bridges are limited to a maximum height of 14 feet, measured from top of noise barrier to bridge slab. Costs associated with mounting the barrier to the bridge, including the cost to modify the bridge structure to support the barrier, will be added to the cost of the barrier for determining reasonableness.

Reasonableness:

For abatement measure to be considered reasonable all of the following three criteria must be met: (a) achievement of the noise reduction design goal, (b) cost effectiveness, and (c) concurrence of benefited receptors.

(a) Noise Reduction Design Goal: When noise abatement measures are being considered, every effort will be made to obtain a substantial noise reduction of at least 8 dBA. At a minimum, at least one receptor must receive an 8 dBA reduction for the noise abatement system to be reasonable. For noise barriers meeting the abovementioned criteria, the height and length of the barrier will be optimized using the cost/benefited receptor ratio.

(b) Cost Effectiveness: The cost estimate of the noise abatement measure (including but not limited to the costs of real estate acquisition, construction servitude or utility relocation) should be equal to or less than \$35,000 per benefited receptor. The unit cost used to estimate the cost of likely barriers will be updated regularly (at least every five years) and published

on DOTD's web site. *The final analysis regarding cost effectiveness will occur during design when more detail information is available regarding the cost of the barrier system, and*

- (c) Consideration of Viewpoints: As part of the NEPA public involvement process, viewpoints from the community, including benefited receptors, will be solicited for all aspects of the project, including noise impacts and abatement. Public Involvement will be tailored to the project. If no relevant objections to the proposed noise abatement are made at this level of public involvement, this criterion is deemed met and abatement considered reasonable from the viewpoint of benefited receptors. If relevant objections are identified, a follow-up solicitation will occur with property owners and residents of the benefited receptors. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive. *Follow-up coordination with benefited receptors may occur during the design stage when more detail information is available regarding barrier design.*

Follow-up Coordination with Benefited Receptors during Final Design

For noise barriers, the most common type of abatement, the Department will contact benefited receptors when the barrier design changes substantially from what was presented in the NEPA document. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive.

To ascertain desires, property owners and residents may be invited to attend a meeting specifically to discuss the proposed barrier, or they may be asked to complete a survey (paper, electronic, phone, etc.). Contact may be made through a variety of means such as in person, letters, flyers left at the receptor site, public notices, web sites, phone calls, emails or other reliable means or combination of means. Names and/or addresses may be obtained from the tax assessor's roll, clerk of court records, neighborhood associations, local government databases, reliable internet sources, or other reliable sources or combination of sources. Those who do not respond as requested will be deemed as not interested in the barrier. DOTD will give more weight to the desire of the property owner than to the desire of the lessee. (When conflicting responses are received, DOTD will consider the property owner's response over that of the lessee's.)

The criteria above must be met collectively for a noise abatement measure to be deemed reasonable. Failure to achieve all criteria collectively will result in the noise abatement measure being deemed not reasonable. **During stage 1 of project development (NEPA stage), the analysis will identify noise abatement measures that are likely to be incorporated into the project's design. The final determination of any proposed noise abatement measure will be made during the design stage.** During the design stage, only abatement measures identified in stage 1 as likely will be reevaluated for reasonableness. If the decision to provide an abatement measure changes during final design, the Department will inform the public.

The following optional factors are considered when determining justification for additional cost allowances to an already determined reasonable barrier:

- Date of development (implementation requires public outreach), favorable consideration will be given to residential developments that existed prior to the initial construction of the highway. (This factor applies to projects along existing highways and not to new alignments.)

Residential development existed prior to the original construction of the highway	Added to Reasonableness Criteria (b)
No	\$0
Yes	\$2,000

- Changes between existing and future build-conditions, favorable consideration will be given to impacted receptors that experience future build noise levels that are 30 dBA more than future no-build noise levels.

Incremental Increase in Noise Level Between the Future No-build and the Future Build Noise Levels Before Noise Abatement	Added to Reasonableness Criteria (b)
Less than 30 dBA	\$0
30 dBA or greater	\$2,000

- Exposure to higher absolute highway traffic noise levels, favorable consideration will be given to impacted receptors that have predicted future noise levels above 76 dBA

Predicted Future Build Noise Level Before Noise Abatement	Added to Reasonableness Criteria (b)
66-75 dBA	\$0
76-79 dBA	\$1,000
80 dBA or greater	\$2,000

and

- Use of noise compatible planning concepts by the local government, favorable consideration will be given to areas that have noise compatible (relevant to highway noise) zoning requirements in place that include the project area.

Noise compatible zoning in place for study area	Added to Reasonableness Criteria (b)
No	\$0
Yes, in place for 1 to 2 years	\$1,000
Yes, in place for 2 or more years	\$1,500

DOCUMENTATION

The noise study report will document the results of the noise study. This report may be a standalone document incorporated into the NEPA document by reference, or it may be included in the appendix of the NEPA document.

Before adoption of a Final Environmental Impact Statement, Finding of No Significant Impact, or Categorical Exclusion, for Federal-aid projects, the DOTD will identify noise abatement measures which are both reasonable and feasible and likely to be incorporated in the project. The statement of likelihood included in the environmental document will give the locations and physical description of the noise abatement measures as well as explain that the final recommendation will be determined during final design with input from benefited receptors. The DOTD will also identify noise impacts for which no apparent solution is available.

MISCELLANEOUS PROVISIONS

Third party funding is not allowed if the funding is required to make the abatement measure feasible or reasonable. Third party funding is acceptable to make functional enhancements such as absorptive treatment, access doors, or aesthetic enhancements to a noise abatement measure already determined to be both reasonable and feasible.

DOTD allows the use of either absorptive or reflective barriers. DOTD generally assumes reflective barriers in its noise analyses. This does not preclude the use of absorptive barriers or absorptive treatments. For example, a contractor may be given the option of using any barrier system on the Qualified Products List (QPL)⁸ for construction. The QPL includes both reflective and absorptive systems. Therefore, the contract may choose either an absorptive or a reflective system as long as the system is on the QPL. Using an absorptive barrier when a reflective barrier was assumed for modeling purposes is not considered a substantial change in design for the purposes of soliciting viewpoints of benefited receptors. Note that decorative features often requested for visual enhancements may preclude use of absorptive treatments or some QPL barrier systems. If separate absorptive treatments are requested,

⁸ QPL 69, Noise Reduction Systems (Noise Barriers), can be found at <http://www.dotd.la.gov/highways/construction/lab/qpl/tableofcontents.shtml>

the cost for the treatment will be added to the cost of the barrier system to determine reasonableness. If the additional absorptive treatment increases the cost above the maximum cost/benefited receptor value, it will not be considered for implementation unless the optional reasonableness factors apply. Use of absorptive barriers or treatments on a project is discretionary.

Cost averaging is used when a common noise environment exists. Common noise environments occur when the traffic mix and speeds are the same. For instance, a common noise environment could occur along a road segment between interchanges on a controlled access highway if the traffic speed is constant. Application requires that no single common noise environment exceeds \$70,000/benefited receptor and that collectively all common noise environments being averaged do not exceed \$35,000/benefited receptor.

Information for Local Officials: In an effort to prevent future traffic noise impacts on currently undeveloped lands, DOTD will inform local officials, within whose jurisdiction the highway project is located, of the best estimation of future noise levels for both developed and undeveloped lands or properties in the immediate vicinity of the project and information that may be useful to local communities to limit future land development to that which will be compatible with anticipated highway noise levels.

A copy of the environmental document (with included noise study) and/or noise study report (if one is prepared) will be provided to local officials upon approval of the environmental document. Local officials or agencies, which may have jurisdiction, include the Mayor's office, city/town/parish council, parish police jury, and metropolitan planning organization, as applicable.

Construction Noise: The following general steps are to be performed for all Type I projects:

- a. Identify land uses or activities that may be affected by noise from the construction of the project. The identification is to be performed during the project development studies.
- b. Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community including alternate designs to keep noise levels to a minimum (e.g. the use of drilled shafts vs. driven piles in noise sensitive areas).⁹ This determination will include a weighing of benefits achieved and the overall adverse social, economic, and environmental effects and costs of abatement measures.
- c. Incorporate the needed abatement measures in the plans and specifications, as appropriate.

When practicable, DOTD will construct any permanent noise abatement measures as the first phase of a highway construction project to abate construction noise impacts of subsequent phases of the same project.

Revision: DOTD may revise this policy as necessary to keep current with the state-of-the-art technology, legislation, regulation, and guidance, as well as construction cost indices in the fields of highway traffic noise prediction, impact, and abatement.

⁹ The FHWA Roadway Construction Noise Model (FHWA RCNM) may be used to model construction noise at a sensitive receptor. For highly complex and controversial projects in urban areas, the "Highway Construction Noise: Measurement, Prediction and Mitigation" (HICNOM) method may be used, but requires specific input.

The unit cost used in the noise analysis for determining reasonableness of noise abatement measures will be updated regularly at least every five years. It is the responsibility of the analyst to ensure that they are using the correct unit cost. Contact the DOTD Environmental Coordinator for more information.

Revisions to this policy affecting Federal or Federal-aid projects must be concurred with by the FHWA prior to adoption.

DOTD and FHWA are not responsible for notification of revisions to this policy. Inquiries as to the latest revision that may be applicable should be made in writing to:

Environmental Engineer Administrator
Louisiana Department of Transportation and Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Implementation Plan: This policy will become effective July 13, 2011. It will apply to all projects started on or after the above effective date, and to all projects currently being evaluated pursuant to NEPA that do not have a completed noise study. A noise study is deemed completed if it was reviewed and commented on by DOTD and/or FHWA and considered final.

For noise studies performed under past policies: If, during later stages of project development, changes occur that affect only a portion of the project requiring a reevaluation of the noise study for that portion, the policy in effect at the time of the original study will be applicable. When these situations arise, DOTD will consult with FHWA Division office on the project specific issues to ensure that FHWA is in agreement.

Appendix C-2

TNM Inputs

Model Validation Traffic Information

6/19/2014	eastbound (hourly)	westbound (hourly)	Noise Meter Reading
MELROSE			72.7
passanger cars	904	740	
bus	12	8	
medium truck	36	60	
heavy truck	400	336	
motorcycles	0	0	
FIELD			78.8
passanger cars	772	1024	
bus	0	4	
medium truck	40	36	
heavy truck	300	332	
motorcycles	0	0	
design speed = 70 mph	Temperature	53	
	Weather	Sunny	
Receiver locations	Start Time	Distance from Roadway	
Melrose dr	11:00 AM	150 ft	
Parish Road 36	11:30 AM	200 ft	

H.010558 I-12 widening Satsuma - Livingston Parish

Year	ADT (vpd)	Peak Flow (10%) of ADT	Flow in Each Direction (Peak Flow / 2)	TNM Input Flow (vph)
2015	62446	6245	3122	3122
2035	92791	9279	4640	4640

Vehicles per Hour	
YEAR	2015
Automobiles	2025
Medium Trucks	277
Heavy Trucks	769
Buses	31
Motorcycles	21
TOTAL	3123
	4641

Wall Height (Feet)	Quantity Ranges (SQFT of Wall)											
	10,000 or less	10,001 to 15,000	15,001 to 20,000	20,001 to 25,000	25,001 to 30,000	30,001 to 35,000	35,001 to 40,000	40,001 to 50,000	50,001 to 60,000	60,001 to 70,000	70,001 to 80,000	Greater than 80,000
10 or less	\$26	\$24	\$21	\$20	\$19	\$18	\$17	\$16	\$16	\$15	\$14	\$12
11 to 14	\$53	\$49	\$44	\$41	\$39	\$37	\$36	\$34	\$32	\$31	\$29	\$26
15 to 20	\$113	\$103	\$94	\$87	\$83	\$79	\$76	\$72	\$68	\$65	\$62	\$54
21 to 25	\$172	\$157	\$143	\$133	\$126	\$120	\$115	\$110	\$104	\$99	\$95	\$83
26 or more	\$226	\$207	\$188	\$175	\$165	\$158	\$151	\$144	\$136	\$130	\$125	\$109

Appendix C-3

Model Validation Results

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM30 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

RUN:

H.010601 I-10 Widening

Model Validation

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver											
Name	No.	#DUs	Existing		No Barrier		Increase over existing		With Barrier		Calculated minus Goal dB
			LAeq1h	Crit'n	LAeq1h	Crit'n	Calculated	Sub'l Inc	Calculated LAeq1h	Noise Reduction Calculated Goal	
			dBA		dBA		dB		dBA		
Melrose	1	1	72.7		75.0		2.3	10	75.0	0.0	8
Near Par Rd	2	1	78.8		80.7		1.9	10	80.7	0.0	8
Dwelling Units											
		# DUs	Noise Reduction								
			Min dB	Avg dB	Max dB						
All Selected		2	0.0	0.0	0.0						-8.0
All Impacted		2	0.0	0.0	0.0						-8.0
All that meet NR Goal		0	0.0	0.0	0.0						

Appendix C-4

Existing Condition Model Results

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM30 April 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: H.010601 I-10 Widening

RUN: Existing Conditions

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier		Increase over existing		With Barrier		Noise Reduction		Calculated minus Goal dB
				LAeq1h Calculated	Crit'n	Calculated	Crit'n	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal dB	
			dBA	dBA	dBA	dB	dB	dBA	dB	dB	dB	
Receiver7		7	1	0.0	79.4	66	79.4	10	79.4	0.0	8	-8.0
Receiver8		8	1	0.0	75.5	66	75.5	10	75.5	0.0	8	-8.0
Receiver9		9	1	0.0	75.7	66	75.7	10	75.7	0.0	8	-8.0
Receiver10		10	1	0.0	76.5	66	76.5	10	76.5	0.0	8	-8.0
Receiver11		11	1	0.0	76.4	66	76.4	10	76.4	0.0	8	-8.0
Receiver12		12	1	0.0	81.3	66	81.3	10	81.3	0.0	8	-8.0
Receiver13		13	1	0.0	80.9	66	80.9	10	80.9	0.0	8	-8.0
Receiver14		14	1	0.0	77.2	66	77.2	10	77.2	0.0	8	-8.0
Receiver15		15	1	0.0	76.8	66	76.8	10	76.8	0.0	8	-8.0
Receiver17		17	1	0.0	78.2	66	78.2	10	78.2	0.0	8	-8.0
Receiver18		18	1	0.0	79.3	66	79.3	10	79.3	0.0	8	-8.0
Receiver19		19	1	0.0	77.3	66	77.3	10	77.3	0.0	8	-8.0
Receiver20		20	1	0.0	77.3	66	77.3	10	77.3	0.0	8	-8.0
Receiver21		21	1	0.0	78.9	66	78.9	10	78.9	0.0	8	-8.0
Receiver22		22	1	0.0	80.1	66	80.1	10	80.1	0.0	8	-8.0
Receiver23		23	1	0.0	82.6	66	82.6	10	82.6	0.0	8	-8.0
Receiver24		24	1	0.0	81.3	66	81.3	10	81.3	0.0	8	-8.0
Receiver25		25	1	0.0	82.0	66	82.0	10	82.0	0.0	8	-8.0
Receiver26		26	1	0.0	77.7	66	77.7	10	77.7	0.0	8	-8.0
Receiver27		27	1	0.0	79.1	66	79.1	10	79.1	0.0	8	-8.0
Receiver28		28	1	0.0	80.2	66	80.2	10	80.2	0.0	8	-8.0
Receiver29		29	1	0.0	83.9	66	83.9	10	83.9	0.0	8	-8.0
Receiver30		30	1	0.0	81.6	66	81.6	10	81.6	0.0	8	-8.0
Receiver31		31	1	0.0	80.5	66	80.5	10	80.5	0.0	8	-8.0

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

Receiver	33	1	0.0	80.8	66	80.8	10	Snd Lvl	80.8	0.0	8	-8.0
Receiver33	33	1	0.0	80.8	66	80.8	10	Snd Lvl	80.8	0.0	8	-8.0
Receiver34	34	1	0.0	80.9	66	80.9	10	Snd Lvl	80.9	0.0	8	-8.0
Receiver36	36	1	0.0	81.1	66	81.1	10	Snd Lvl	81.1	0.0	8	-8.0
Receiver37	37	1	0.0	81.7	66	81.7	10	Snd Lvl	81.7	0.0	8	-8.0
Receiver38	38	1	0.0	78.9	66	78.9	10	Snd Lvl	78.9	0.0	8	-8.0
Receiver39	39	1	0.0	79.8	66	79.8	10	Snd Lvl	79.8	0.0	8	-8.0
Receiver40	40	1	0.0	81.2	66	81.2	10	Snd Lvl	81.2	0.0	8	-8.0
Receiver41	41	1	0.0	80.6	66	80.6	10	Snd Lvl	80.6	0.0	8	-8.0
Receiver42	42	1	0.0	82.5	66	82.5	10	Snd Lvl	82.5	0.0	8	-8.0
Receiver43	43	1	0.0	83.1	66	83.1	10	Snd Lvl	83.1	0.0	8	-8.0
Receiver44	44	1	0.0	80.7	66	80.7	10	Snd Lvl	80.7	0.0	8	-8.0
Dwelling Units	# DUs	Noise Reduction										
		Min	Avg	Max								
		dB	dB	dB								
All Selected	35	0.0	0.0	0.0								
All Impacted	35	0.0	0.0	0.0								
All that meet NR Goal	0	0.0	0.0	0.0								

Appendix C-5

Future No Build Model Results

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM

30 April 2015

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

H.010601 I-10 Widening

No Build Conditions

RUN:

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver		No.	#DUs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction		Calculated minus Goal	
Name	LAeq1h			LAeq1h	Calculated	Crit'n	Calculated	Crit'n	Sub'l Inc		LAeq1h	Calculated	Goal	Calculated		Goal
				dB	dB	dB	dB	dB	dB		dB	dB	dB	dB		
Receiver7		7	1	0.0	81.2	66	81.2	66	81.2	10	Snd Lvl	81.2	0.0	8	-8.0	
Receiver8		8	1	0.0	77.3	66	77.3	66	77.3	10	Snd Lvl	77.3	0.0	8	-8.0	
Receiver9		9	1	0.0	77.4	66	77.4	66	77.4	10	Snd Lvl	77.4	0.0	8	-8.0	
Receiver10		10	1	0.0	78.2	66	78.2	66	78.2	10	Snd Lvl	78.2	0.0	8	-8.0	
Receiver11		11	1	0.0	78.1	66	78.1	66	78.1	10	Snd Lvl	78.1	0.0	8	-8.0	
Receiver12		12	1	0.0	83.0	66	83.0	66	83.0	10	Snd Lvl	83.0	0.0	8	-8.0	
Receiver13		13	1	0.0	82.6	66	82.6	66	82.6	10	Snd Lvl	82.6	0.0	8	-8.0	
Receiver14		14	1	0.0	78.9	66	78.9	66	78.9	10	Snd Lvl	78.9	0.0	8	-8.0	
Receiver15		15	1	0.0	78.5	66	78.5	66	78.5	10	Snd Lvl	78.5	0.0	8	-8.0	
Receiver17		17	1	0.0	79.9	66	79.9	66	79.9	10	Snd Lvl	79.9	0.0	8	-8.0	
Receiver18		18	1	0.0	81.1	66	81.1	66	81.1	10	Snd Lvl	81.1	0.0	8	-8.0	
Receiver19		19	1	0.0	79.0	66	79.0	66	79.0	10	Snd Lvl	79.0	0.0	8	-8.0	
Receiver20		20	1	0.0	79.0	66	79.0	66	79.0	10	Snd Lvl	79.0	0.0	8	-8.0	
Receiver21		21	1	0.0	80.6	66	80.6	66	80.6	10	Snd Lvl	80.6	0.0	8	-8.0	
Receiver22		22	1	0.0	81.9	66	81.9	66	81.9	10	Snd Lvl	81.9	0.0	8	-8.0	
Receiver23		23	1	0.0	84.3	66	84.3	66	84.3	10	Snd Lvl	84.3	0.0	8	-8.0	
Receiver24		24	1	0.0	83.0	66	83.0	66	83.0	10	Snd Lvl	83.0	0.0	8	-8.0	
Receiver25		25	1	0.0	83.7	66	83.7	66	83.7	10	Snd Lvl	83.7	0.0	8	-8.0	
Receiver26		26	1	0.0	79.5	66	79.5	66	79.5	10	Snd Lvl	79.5	0.0	8	-8.0	
Receiver27		27	1	0.0	80.8	66	80.8	66	80.8	10	Snd Lvl	80.8	0.0	8	-8.0	
Receiver28		28	1	0.0	81.9	66	81.9	66	81.9	10	Snd Lvl	81.9	0.0	8	-8.0	
Receiver29		29	1	0.0	85.6	66	85.6	66	85.6	10	Snd Lvl	85.6	0.0	8	-8.0	
Receiver30		30	1	0.0	83.3	66	83.3	66	83.3	10	Snd Lvl	83.3	0.0	8	-8.0	
Receiver31		31	1	0.0	82.3	66	82.3	66	82.3	10	Snd Lvl	82.3	0.0	8	-8.0	

H.010601 I-10 Widening

C:\TNM25\H.010601\no build condition

Appendix C-6

Future Build Model Results

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM4 May 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

H.010601 I-10 Widening

RUN:

Future Build Conditions

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier		Noise Reduction		Calculated minus Goal dB
			LAeq1h	dBA	LAeq1h	dBA	Calculated	Crit'n		Calculated	LAeq1h	Calculated	Goal	
Receiver7	7	1	0.0	82.4	66	82.4	66	82.4	10	Snd Lvl	82.4	0.0	8	-8.0
Receiver8	8	1	0.0	77.6	66	77.6	66	77.6	10	Snd Lvl	77.6	0.0	8	-8.0
Receiver9	9	1	0.0	77.9	66	77.9	66	77.9	10	Snd Lvl	77.9	0.0	8	-8.0
Receiver10	10	1	0.0	79.1	66	79.1	66	79.1	10	Snd Lvl	79.1	0.0	8	-8.0
Receiver11	11	1	0.0	78.9	66	78.9	66	78.9	10	Snd Lvl	78.9	0.0	8	-8.0
Receiver12	12	1	0.0	83.5	66	83.5	66	83.5	10	Snd Lvl	83.5	0.0	8	-8.0
Receiver13	13	1	0.0	83.2	66	83.2	66	83.2	10	Snd Lvl	83.2	0.0	8	-8.0
Receiver14	14	1	0.0	80.1	66	80.1	66	80.1	10	Snd Lvl	80.1	0.0	8	-8.0
Receiver15	15	1	0.0	79.5	66	79.5	66	79.5	10	Snd Lvl	79.5	0.0	8	-8.0
Receiver17	17	1	0.0	81.2	66	81.2	66	81.2	10	Snd Lvl	81.2	0.0	8	-8.0
Receiver18	18	1	0.0	82.2	66	82.2	66	82.2	10	Snd Lvl	82.2	0.0	8	-8.0
Receiver19	19	1	0.0	79.6	66	79.6	66	79.6	10	Snd Lvl	79.6	0.0	8	-8.0
Receiver20	20	1	0.0	79.5	66	79.5	66	79.5	10	Snd Lvl	79.5	0.0	8	-8.0
Receiver21	21	1	0.0	81.6	66	81.6	66	81.6	10	Snd Lvl	81.6	0.0	8	-8.0
Receiver22	22	1	0.0	82.6	66	82.6	66	82.6	10	Snd Lvl	82.6	0.0	8	-8.0
Receiver23	23	1	0.0	84.5	66	84.5	66	84.5	10	Snd Lvl	84.5	0.0	8	-8.0
Receiver24	24	1	0.0	83.5	66	83.5	66	83.5	10	Snd Lvl	83.5	0.0	8	-8.0
Receiver25	25	1	0.0	84.0	66	84.0	66	84.0	10	Snd Lvl	84.0	0.0	8	-8.0
Receiver26	26	1	0.0	80.7	66	80.7	66	80.7	10	Snd Lvl	80.7	0.0	8	-8.0
Receiver27	27	1	0.0	82.0	66	82.0	66	82.0	10	Snd Lvl	82.0	0.0	8	-8.0
Receiver28	28	1	0.0	82.8	66	82.8	66	82.8	10	Snd Lvl	82.8	0.0	8	-8.0
Receiver29	29	1	0.0	85.6	66	85.6	66	85.6	10	Snd Lvl	85.6	0.0	8	-8.0
Receiver30	30	1	0.0	83.7	66	83.7	66	83.7	10	Snd Lvl	83.7	0.0	8	-8.0
Receiver31	31	1	0.0	82.7	66	82.7	66	82.7	10	Snd Lvl	82.7	0.0	8	-8.0

H.010601 I-10 Widening

C:\TNM25\H.010601\Future Build

Appendix C-7

Barrier Analysis



RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM3 June 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

H.010601 I-10 Widening

RUN:

Future Build Conditions - 8ft Barrier

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver		#DUs		Existing		No Barrier		Increase over existing		Type		With Barrier		Noise Reduction		Calculated minus Goal	
Name	No.			LAeq1h	dBA	LAeq1h	dBA	Calculated	Crit'n	Impact		Calculated	dBA	Calculated	Goal		dB
Receiver7	7	1	0.0	82.5	66	82.5	66	82.5	10	Snd Lvl		78.0	4.5	8		-3.5	
Receiver8	8	1	0.0	77.6	66	77.6	66	77.6	10	Snd Lvl		75.1	2.5	8		-5.5	
Receiver9	9	1	0.0	77.9	66	77.9	66	77.9	10	Snd Lvl		75.2	2.7	8		-5.3	
Receiver10	10	1	0.0	79.2	66	79.2	66	79.2	10	Snd Lvl		75.9	3.3	8		-4.7	
Receiver11	11	1	0.0	78.9	66	78.9	66	78.9	10	Snd Lvl		76.5	2.4	8		-5.6	
Receiver12	12	1	0.0	83.6	66	83.6	66	83.6	10	Snd Lvl		79.2	4.4	8		-3.6	
Receiver13	13	1	0.0	83.3	66	83.3	66	83.3	10	Snd Lvl		79.4	3.9	8		-4.1	
Receiver14	14	1	0.0	80.2	66	80.2	66	80.2	10	Snd Lvl		77.8	2.4	8		-5.6	
Receiver15	15	1	0.0	79.6	66	79.6	66	79.6	10	Snd Lvl		77.5	2.1	8		-5.9	
Receiver17	17	1	0.0	81.2	66	81.2	66	81.2	10	Snd Lvl		77.2	4.0	8		-4.0	
Receiver18	18	1	0.0	82.3	66	82.3	66	82.3	10	Snd Lvl		77.0	5.3	8		-2.7	
Receiver19	19	1	0.0	79.7	66	79.7	66	79.7	10	Snd Lvl		76.0	3.7	8		-4.3	
Receiver20	20	1	0.0	79.6	66	79.6	66	79.6	10	Snd Lvl		76.1	3.5	8		-4.5	
Receiver21	21	1	0.0	81.7	66	81.7	66	81.7	10	Snd Lvl		77.4	4.3	8		-3.7	
Receiver22	22	1	0.0	82.7	66	82.7	66	82.7	10	Snd Lvl		78.2	4.5	8		-3.5	
Receiver23	23	1	0.0	84.6	66	84.6	66	84.6	10	Snd Lvl		80.7	3.9	8		-4.1	
Receiver24	24	1	0.0	83.6	66	83.6	66	83.6	10	Snd Lvl		79.6	4.0	8		-4.0	
Receiver25	25	1	0.0	84.1	66	84.1	66	84.1	10	Snd Lvl		80.1	4.0	8		-4.0	
Receiver26	26	1	0.0	80.7	66	80.7	66	80.7	10	Snd Lvl		77.9	2.8	8		-5.2	
Receiver27	27	1	0.0	82.1	66	82.1	66	82.1	10	Snd Lvl		78.6	3.5	8		-4.5	
Receiver28	28	1	0.0	82.9	66	82.9	66	82.9	10	Snd Lvl		79.4	3.5	8		-4.5	
Receiver29	29	1	0.0	85.7	66	85.7	66	85.7	10	Snd Lvl		85.6	0.1	8		-7.9	
Receiver30	30	1	0.0	83.7	66	83.7	66	83.7	10	Snd Lvl		83.7	0.0	8		-8.0	
Receiver31	31	1	0.0	82.7	66	82.7	66	82.7	10	Snd Lvl		82.7	0.0	8		-8.0	

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RESULTS: SOUND LEVELS

H.010601 I-10 Widening

Dwelling Units	# DUs	Noise Reduction			83.2	66	83.2	10	Snd Lvl	78.7	4.5	8	-3.5
		Min	Avg	Max									
		dB	dB	dB									
Receiver33	33	1	0.0		83.2	66		10	Snd Lvl	78.7	4.5	8	-3.5
Receiver34	34	1	0.0		83.3	66		10	Snd Lvl	78.6	4.7	8	-3.3
Receiver36	36	1	0.0		83.4	66		10	Snd Lvl	78.5	4.9	8	-3.1
Receiver37	37	1	0.0		83.9	66		10	Snd Lvl	78.6	5.3	8	-2.7
Receiver38	38	1	0.0		81.4	66		10	Snd Lvl	76.8	4.6	8	-3.4
Receiver39	39	1	0.0		82.3	66		10	Snd Lvl	77.2	5.1	8	-2.9
Receiver40	40	1	0.0		83.5	66		10	Snd Lvl	78.0	5.5	8	-2.5
Receiver41	41	1	0.0		83.0	66		10	Snd Lvl	77.6	5.4	8	-2.6
Receiver42	42	1	0.0		84.5	66		10	Snd Lvl	78.9	5.6	8	-2.4
Receiver43	43	1	0.0		85.0	66		10	Snd Lvl	79.2	5.8	8	-2.2
Receiver44	44	1	0.0		83.1	66		10	Snd Lvl	78.4	4.7	8	-3.3
All Selected	35	0.0	0.0	3.8	5.8								
All Impacted	35	0.0	0.0	3.8	5.8								
All that meet NR Goal	0	0.0	0.0	0.0	0.0								

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD
NCM3 June 2015
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

H.010601 I-10 Widening

RUN:

Future Build Conditions - 10ft Barrier

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver															
Name		No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing			Type	With Barrier		Noise Reduction		Calculated minus Goal dB
					Calculated	Crit'n	Calculated	Crit'n	Sub'l Inc	Impact	Calculated LAeq1h	Calculated	Goal		
				dBA	dBA		dB	dBA	dB		dBA	dB	dB		
Receiver7		7	1	0.0	82.5	66	66	82.5	10	Snd Lvl	76.3	6.2	8	-1.8	
Receiver8		8	1	0.0	77.6	66	66	77.6	10	Snd Lvl	74.2	3.4	8	-4.6	
Receiver9		9	1	0.0	77.9	66	66	77.9	10	Snd Lvl	74.2	3.7	8	-4.3	
Receiver10		10	1	0.0	79.2	66	66	79.2	10	Snd Lvl	73.7	5.5	8	-2.5	
Receiver11		11	1	0.0	78.9	66	66	78.9	10	Snd Lvl	75.1	3.8	8	-4.2	
Receiver12		12	1	0.0	83.6	66	66	83.6	10	Snd Lvl	77.7	5.9	8	-2.1	
Receiver13		13	1	0.0	83.3	66	66	83.3	10	Snd Lvl	77.2	6.1	8	-1.9	
Receiver14		14	1	0.0	80.2	66	66	80.2	10	Snd Lvl	77.3	2.9	8	-5.1	
Receiver15		15	1	0.0	79.6	66	66	79.6	10	Snd Lvl	77.0	2.6	8	-5.4	
Receiver17		17	1	0.0	81.2	66	66	81.2	10	Snd Lvl	76.1	5.1	8	-2.9	
Receiver18		18	1	0.0	82.3	66	66	82.3	10	Snd Lvl	73.3	9.0	8	1.0	
Receiver19		19	1	0.0	79.7	66	66	79.7	10	Snd Lvl	74.9	4.8	8	-3.2	
Receiver20		20	1	0.0	79.6	66	66	79.6	10	Snd Lvl	75.2	4.4	8	-3.6	
Receiver21		21	1	0.0	81.7	66	66	81.7	10	Snd Lvl	75.1	6.6	8	-1.4	
Receiver22		22	1	0.0	82.7	66	66	82.7	10	Snd Lvl	75.6	7.1	8	-0.9	
Receiver23		23	1	0.0	84.6	66	66	84.6	10	Snd Lvl	79.0	5.6	8	-2.4	
Receiver24		24	1	0.0	83.6	66	66	83.6	10	Snd Lvl	78.8	4.8	8	-3.2	
Receiver25		25	1	0.0	84.1	66	66	84.1	10	Snd Lvl	79.3	4.8	8	-3.2	
Receiver26		26	1	0.0	80.7	66	66	80.7	10	Snd Lvl	77.3	3.4	8	-4.6	
Receiver27		27	1	0.0	82.1	66	66	82.1	10	Snd Lvl	77.9	4.2	8	-3.8	
Receiver28		28	1	0.0	82.9	66	66	82.9	10	Snd Lvl	78.7	4.2	8	-3.8	
Receiver29		29	1	0.0	85.7	66	66	85.7	10	Snd Lvl	85.6	0.1	8	-7.9	
Receiver30		30	1	0.0	83.7	66	66	83.7	10	Snd Lvl	83.7	0.0	8	-8.0	
Receiver31		31	1	0.0	82.7	66	66	82.7	10	Snd Lvl	82.7	0.0	8	-8.0	

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3 June 2015

H.010601 I-10 Widening

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RESULTS: SOUND LEVELS

H.010601 I-10 Widening

LADOTD

3 June 2015

NCM

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:

H.010601 I-10 Widening

RUN:

Future Build Conditions - 12ft Barrier

BARRIER DESIGN:

INPUT HEIGHTS

ATMOSPHERICS:

53 deg F, 50% RH

Average pavement type shall be used unless
a State highway agency substantiates the use
of a different type with approval of FHWA.

Receiver													
Name	No.	#DUs	Existing LAeq1h	No Barrier		Increase over existing			With Barrier		Noise Reduction		Calculated minus Goal
			LAeq1h	Calculated	Crit'n	Calculated	Crit'n	Type Impact	Calculated LAeq1h	dB	dB	Calculated	Goal
			dB	dB	dB	dB	dB		dB		dB	dB	dB
Receiver7	7	1	0.0	82.5	66	82.5	10	Snd Lvl	75.8		6.7	8	-1.3
Receiver8	8	1	0.0	77.6	66	77.6	10	Snd Lvl	72.6		5.0	8	-3.0
Receiver9	9	1	0.0	77.9	66	77.9	10	Snd Lvl	72.5		5.4	8	-2.6
Receiver10	10	1	0.0	79.2	66	79.2	10	Snd Lvl	73.0		6.2	8	-1.8
Receiver11	11	1	0.0	78.9	66	78.9	10	Snd Lvl	74.6		4.3	8	-3.7
Receiver12	12	1	0.0	83.6	66	83.6	10	Snd Lvl	77.3		6.3	8	-1.7
Receiver13	13	1	0.0	83.3	66	83.3	10	Snd Lvl	76.8		6.5	8	-1.5
Receiver14	14	1	0.0	80.2	66	80.2	10	Snd Lvl	76.4		3.8	8	-4.2
Receiver15	15	1	0.0	79.6	66	79.6	10	Snd Lvl	76.2		3.4	8	-4.6
Receiver17	17	1	0.0	81.2	66	81.2	10	Snd Lvl	74.5		6.7	8	-1.3
Receiver18	18	1	0.0	82.3	66	82.3	10	Snd Lvl	71.9		10.4	8	2.4
Receiver19	19	1	0.0	79.7	66	79.7	10	Snd Lvl	72.9		6.8	8	-1.2
Receiver20	20	1	0.0	79.6	66	79.6	10	Snd Lvl	73.4		6.2	8	-1.8
Receiver21	21	1	0.0	81.7	66	81.7	10	Snd Lvl	74.3		7.4	8	-0.6
Receiver22	22	1	0.0	82.7	66	82.7	10	Snd Lvl	74.9		7.8	8	-0.2
Receiver23	23	1	0.0	84.6	66	84.6	10	Snd Lvl	78.5		6.1	8	-1.9
Receiver24	24	1	0.0	83.6	66	83.6	10	Snd Lvl	77.2		6.4	8	-1.6
Receiver25	25	1	0.0	84.1	66	84.1	10	Snd Lvl	77.7		6.4	8	-1.6
Receiver26	26	1	0.0	80.7	66	80.7	10	Snd Lvl	76.4		4.3	8	-3.7
Receiver27	27	1	0.0	82.1	66	82.1	10	Snd Lvl	76.7		5.4	8	-2.6
Receiver28	28	1	0.0	82.9	66	82.9	10	Snd Lvl	77.5		5.4	8	-2.6
Receiver29	29	1	0.0	85.7	66	85.7	10	Snd Lvl	85.6		0.1	8	-7.9
Receiver30	30	1	0.0	83.7	66	83.7	10	Snd Lvl	83.7		0.0	8	-8.0
Receiver31	31	1	0.0	82.7	66	82.7	10	Snd Lvl	82.7		0.0	8	-8.0

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3 June 2015

RESULTS: SOUND LEVELS

H.010601 I-10 Widening

Dwelling Units	# DUs	Noise Reduction			83.2	66	83.2	10	Snd Lvl	75.7	7.5	8	-0.5
		Min	Avg	Max									
		dB	dB	dB									
All Selected	35	0.0	0.0	6.6	83.2	66	83.2	10	Snd Lvl	75.7	7.5	8	-0.5
All Impacted	35	0.0	0.0	6.6	83.3	66	83.3	10	Snd Lvl	75.3	8.0	8	0.0
All that meet NR Goal	11	8.0	8.0	9.9	83.4	66	83.4	10	Snd Lvl	74.8	8.6	8	0.6
					83.9	66	83.9	10	Snd Lvl	73.8	10.1	8	2.1
					81.4	66	81.4	10	Snd Lvl	72.5	8.9	8	0.9
					82.3	66	82.3	10	Snd Lvl	72.6	9.7	8	1.7
					83.5	66	83.5	10	Snd Lvl	72.8	10.7	8	2.7
					83.0	66	83.0	10	Snd Lvl	72.5	10.5	8	2.5
					84.5	66	84.5	10	Snd Lvl	73.0	11.5	8	3.5
					85.0	66	85.0	10	Snd Lvl	73.1	11.9	8	3.9
					83.1	66	83.1	10	Snd Lvl	74.9	8.2	8	0.2

Appendix C-8

Feasibility and Reasonableness Worksheet

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	1	1,645	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
5	0		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	2	1,070	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
4	0		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	3	3,015	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:	% that achieve ≥ 5 dBA reduction:	
6	1	0	
Are there any additional feasibility issues to consider?	<i>Explain: No</i>		
Based on the above, is the barrier feasible?	Circle Yes or No		
	<i>Explain:</i>		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	4	800	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	0		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	5	1,275	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:	% that achieve ≥ 5 dBA reduction:	
3	0	0	
Are there any additional feasibility issues to consider?	<i>Explain: No</i>		
Based on the above, is the barrier feasible?	Circle Yes or No		
	<i>Explain:</i>		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	6	2,300	8
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:	% that achieve ≥ 5 dBA reduction:	
11	6	0	
Are there any additional feasibility issues to consider?	<i>Explain: No</i>		
Based on the above, is the barrier feasible?	Circle Yes or No		
	<i>Explain:</i>		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	1	1,645	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
5	2		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	2	1,070	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
4	2		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	3	3,015	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
6	4		1
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	4	800	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
	3	1	0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	5	1,275	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	0		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	6	2,300	10
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:	% that achieve ≥ 5 dBA reduction:	
11	11	2	
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	1	1,645	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
5	4		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or <u>No</u>		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	2	1,070	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
4	2		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	3	3,015	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
6	6		1
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	4	800	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	3		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	5	1,275	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first row</i> receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
3	2		0
Are there any additional feasibility issues to consider?	Explain: No		
Based on the above, is the barrier feasible?	Circle Yes or No		
	Explain:		

Feasibility Worksheet

Project	ID number	Route Location	
	H.010601	I-10	
Barrier	Location	Length (feet)	Height (feet)
	6	2,300	12
Number of first row receptors (receptors adjacent to barrier):	Number of <i>first</i> row receptors that achieve at least a 5dBA reduction in noise with barrier:		% that achieve ≥ 5 dBA reduction:
11	11		10
Are there any additional feasibility issues to consider?	<i>Explain: No</i>		
Based on the above, is the barrier feasible?	Circle Yes or No		
	<i>Explain:</i>		

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 1	Length	Height	Location	
	1,645	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
13,160	\$24	\$315,840	0	N/A
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 2	Length	Height	Location	
	1,070	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
8,650	\$26	\$222,560	0	N/A
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 3	Length	Height	Location	
	3,015	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
24,120	\$20	\$482,400	1	\$482,400
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 4	Length	Height	Location	
	800	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
6,400	\$26	\$166,400	0	N/A
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 5	Length	Height	Location	
	1,275	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
10,200	\$24	244,800	0	N/A
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 6	Length	Height	Location	
	2,300	8 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
18,400	\$21	\$386,400	6	\$64,400
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 1	Length	Height	Location	
	1,645	10 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
16,450	\$21	\$345,450	2	\$172,725
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 2	Length	Height	Location	
	1,070	10 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
10,700	\$24	\$256,800	2	\$128,400
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 3	Length	Height	Location	
	3,015	10 ft.	I-10	
<i>Criterion 1: Cost</i>				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
30,150	\$18	542,700	4	\$135,675
<i>Criterion 2: Design Goal</i>				
At least an 8dBA reduction at 1 Receptor?	Circle: <u>Yes</u> or No			
	Notes:			
<i>Criterion 3: Desires of Benefited Receptors</i>				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or <u>No</u>			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 YES	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 4	Length	Height	Location	
	800	10 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
8,000	\$26	208,000	1	\$208,000
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 1	Length	Height	Location	
	1,645	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
19,740	\$44	\$868,560	4	\$217,140
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 2	Length	Height	Location	
	1,070	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
12,840	\$49	\$629,160	2	\$314,580
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 3	Length	Height	Location	
	3,015	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
36,180	\$36	\$1,302,480	6	\$217,080
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle <u>Yes</u> or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or <u>No</u>			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 YES	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 4	Length	Height	Location	
	800	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
9,600	\$53	\$508,800	3	\$169,600
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 5	Length	Height	Location	
	1,275	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
15,300	\$44	\$673,200	2	\$336,600
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 6	Length	Height	Location	
	2,300	12 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
27,600	\$39	\$1,076,400	11	\$97,855
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: <u>Yes</u> or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or <u>No</u>			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/01/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 5	Length	Height	Location	
	1,275	10 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
12,750	\$24	\$306,000	0	N/A
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: Yes or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or No			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 NO	Criterion 3 NO	Date: 06/03/15

Reasonableness Worksheet DURING NEPA

Project	ID number	Route	Parish/City	
	H.010601	I-10	St. Martin Parish	
Barrier 6	Length	Height	Location	
	2,300	10 ft.	I-10	
Criterion 1: Cost				
Total Square Feet	Cost per Square Foot	Total Cost	Number of Benefited Receptors	Cost per Benefited Receptor
23,000	\$20	\$460,000	11	41,818
Criterion 2: Design Goal				
At least an 8dBA reduction at 1 Receptor?	Circle: <u>Yes</u> or No			
	Notes:			
Criterion 3: Desires of Benefited Receptors				
Public Involvement events showing <i>Likely</i> barrier	Event(s) and date(s):			
	Notes: N/A			
Benefitted Receptors' viewpoint of barrier	Circle: Positive or Negative			
	Notes: N/A			
Separate Query of Benefitted Receptors	Circle: Yes or <u>No</u>			
	If Yes, note type and results (% of responses for barrier):			
Reasonableness criteria met?	Criterion 1 NO	Criterion 2 YES	Criterion 3 NO	Date: 06/03/15

Appendix F

Preliminary Plans

CONSTRUCTION NOTES

1. THE CONTRACTOR WILL BE ALLOWED TO WORK ON BOTH SIDES OF THE ROADWAY AT THE SAME TIME. AT LEAST TWO TRAVEL LANES IN EACH DIRECTION SHALL BE OPEN DURING DAYLIGHT HOURS SPECIFIED IN THE CONTRACT AND WHEN NO WORK IS BEING PERFORMED.
2. IF APPROVED BY FHWA, THE CONTRACTOR WILL BE ALLOWED TO CONSTRUCT ADDITIONAL MEDIAN CROSSOVERS IN ACCORDANCE WITH EDSM V.11.1.14 TO FACILITATE CONSTRUCTION OPERATIONS. COST OF CONSTRUCTION, MAINTENANCE, SAFETY (ATTENUATORS), REMOVAL AND CONSTRUCTION RESTORATION OF THE AREA WHEN COMPLETE (INCLUDING APPROPRIATE EROSION CONTROL ITEMS) TO BE AT THE CONTRACTOR'S EXPENSE. A FLAGMAN IS REQUIRED WHEN CROSSOVER IS IN USE. ALL MEDIAN CROSSOVERS ARE FOR SHORT-DURATION USE ONLY. MEDIAN CROSSOVERS SHALL BE CONSTRUCTED TO MEET ALL STATE AND FEDERAL REQUIREMENTS. ALL CLOSURES SHALL CONFORM TO INTERSTATE STANDARDS AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR'S PLANT AND MATERIAL SHALL BE PROHIBITED WITHIN THE LIMITS OF THE RIGHT-OF-WAY. EXCESSIVE TRUCK TRAFFIC SHALL BE PROHIBITED WITHIN THE RIGHT-OF-WAY AREA 1/341 FROM THE TRAVEL LANES. EQUIPMENT MAY BE STORED BEHIND EXISTING GUARDRAIL AND BETWEEN TEMPORARY BARRIERS.
4. ANY EXISTING PAVEMENT STRIPING WHICH CONFLICTS WITH TEMPORARY MARKINGS SHALL BE REMOVED BY THE CONTRACTOR OR SANDBLASTING OR AS DIRECTED BY THE PROJECT ENGINEER.
5. THE CONTRACTOR WILL BE REQUIRED TO PERFORM ADDITIONAL COLD PLANNING OR ASPHALT PAVING TO OBTAIN A SUITABLE TIE-IN AT BUTT JOINT LOCATIONS (RAMPS AND BEGINNING OR END OF PROJECT, ETC.) TO BE MAINTAINED THROUGHOUT THE PROJECT. WHEN SUCH TIE-INS ARE REQUIRED, THE PLANS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER. TRANSITIONS ARE TYPICALLY 2% LONGITUDINALLY OR 500.0.
6. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL AREAS DISTURBED BEYOND THE LIMITS OF CONSTRUCTION TO THE SATISFACTION OF THE PROJECT ENGINEER, AT THE CONTRACTOR'S EXPENSE.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES. COST IS INCLUDED IN BID ITEM XXX-XX-XXXX.
8. UTILITY LOCATIONS SHOWN ON ANY SHEET ARE APPROXIMATE AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. CONTACT LOUISIANA ONE CALL IN ACCORDANCE WITH SUBSECTION 10.09 OF THE SPECIFICATIONS. THE CONTRACTOR SHALL CONTACT CITY, PARISH AND OTHER LOCAL AUTHORITIES FOR ASSISTANCE IN LOCATING ANY UTILITIES PRIOR TO PERFORMING ANY EXCAVATION. THE CONTRACTOR SHALL CONTACT THE LOCAL PUBLIC UTILITY COMPANY TO LOCATE BURIED TRAFFIC SIGNAL CABLES. IF THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING TRAFFIC SIGNAL CABLES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CABLES EXPOSED BY THE CONTRACTOR. THE COST OF EXPOSING UTILITY LINES IS INCLUDED IN PAY ITEM XXX-XX-XXXX.
9. PRIOR TO PERFORMING ANY EXCAVATIONS, THE CONTRACTOR IS REQUIRED TO CALL LOUISIANA ONE CALL. IF EXISTING LINE UNDERGROUND FACILITIES SUCH AS CABLE OR CONDUITS ARE LOCATED, THE CONTRACTOR MUST BE A MEMBER OF LA ONE CALL. IN ADDITION, THE CONTRACTOR MUST CONTACT DOTD AT 1-800-259-4929 OR DOTD-FIBERLOCATES@LA.GOV AT LEAST 24 HOURS PRIOR TO PERFORMING ANY EXCAVATION ON DOTD R/W (EITHER FOR INSTALLATION OR MAINTENANCE).
10. ALL EXISTING ROADWAY LIGHTING WITHIN EXISTING MEDIAN, IS TO BE REMOVED AND BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.





UTILITY CONTACTS

1. LEVEL 3 COMMUNICATIONS
CONTACT: AUTOMATED SERVICE
EMAIL: level3.net.worldrelations@level3.com
2. BOARDWALK LOUISIANA MIDSTREAM
CONTACT: BOBBY BAILEY
OFFICE: (337) 384-2740
3. ATMOS ENERGY
CONTACT: JODY ZIMMERMANN
EMAIL: Jody.Zimmermann@atmosenergy.com
ALT. CONTACT: KERRY MIGUES
OFFICE: (357) 268-4412
4. CECILIA WATER CORP.
CONTACT: DEBBIE GUIDRY
OFFICE: (337) 667-6358
EMAIL: em050572@centurylink.net
5. CENTURY LINK
CONTACT: DALE ATKINSON
OFFICE: (850) 433-4000
EMAIL: Dale.Atkinson@centurylink.com
6. EXXON PIPELINE
CONTACT: JUDY CUBRE
VIA MICHAEL BRECHERS
OFFICE: (225) 271-3914
CELL: (225) 715-9381
7. GULF SOUTH PIPELINE
CONTACT: JIMMY L. ANDRE
CELL: (337) 654-9940
8. ST. MARTIN UTILITY SYSTEMS
CONTACT: JIMMY L. ANDRE
CELL: (337) 654-9940
9. SW LOUISIANA ELECTRIC
CONTACT: BURT ARCEAUX
OFFICE: (337) 896-2503
10. COX COMMUNICATION
CONTACT: RANDY OUBEDIUEUX
OFFICE: (337) 456-4460
11. CROSSTEX ENERGY SVCS. LP
CONTACT: MIKE BROUSSARD
OFFICE: (337) 962-2091
12. HENDERSON - NINA WATER
CONTACT: RAY ROBIN
OFFICE: (337) 228-7458
13. DTD FIBER OPTICS
CONTACT: DTD@FIBERLOCATES@LA.GOV
OFFICE: 1-800-259-4929
14. AMERICAN NATURAL RESOURCES
CONTACT: PETER ALEXIS
OFFICE: (337) 738-6122
15. DETEL WIRELESS
CONTACT: BESHOTEL, SR.
OFFICE: (318) 597-0303
16. ST. MARTIN UTILITY SYSTEMS
CONTACT: JIMMY L. ANDRE
CELL: (337) 654-9940

UTILITY NOTES

1. UTILITY LOCATIONS SHOWN ON ANY SHEET ARE APPROXIMATE AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. OTHER UTILITIES MAY EXIST IN THE AREA. THE CONTRACTOR IS REQUIRED TO CONTACT LOUISIANA ONE CALL IN ACCORDANCE WITH SUBSECTION 105.06 OF THE SPECIFICATIONS. THE CONTRACTOR SHALL CONTACT CITY, PARISH AND OTHER LOCAL AUTHORITIES FOR ASSISTANCE IN LOCATING ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS TO EXCAVATE, BURY OR RELOCATE ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTENCE, BURIED LOCATION AND DEPTH OF ALL UTILITIES. IF NECESSARY, BURIED UTILITY LINES SHALL BE EXPOSED BY THE CONTRACTOR. THE COST OF EXPOSING UTILITY LINES IS INCLUDED IN PAY ITEM 740-01-00-00.
2. THE SUBSURFACE UTILITIES SHOWN ON THE MAP OF SURVEY WERE IDENTIFIED USING THE INDUSTRY STANDARD DETECTION METHODOLOGIES IN STRICT ACCORDANCE WITH THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE DATA. QUALITY LEVELS (QL) AND DEFINITIONS FOR CIVAS2 STANDARD NO. 38-02:
 - QL-D) DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.
 - QL-C) EXISTING ABOVE-GROUND UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN THE DEPICTING THE UTILITIES SHOWN ON THE RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.
 - QL-B) INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THE SURFACE DEPICTION.
 - QL-A) PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE OBTAINED BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NON-DESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO UTILITY LINE.
3. REFER TO THE UTILITY MAPPING PLAN SHEETS INCLUDED IN THE PLANS FOR QUALITY LEVELS FOR EACH UTILITY.

<p>PRELIMINARY NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.</p>	<p>SIGMA CONSULTING GROUP, INC.</p>
<p>ENGINEER: ROBERT J. LEAR, JR. LICENSE #: P.E. 29394 DATE: 11/24/2015</p>	

SHEET NUMBER	DESIGNED LEAR	DRAWN ST. MARTIN	CONTROL SECTION	CHECKED 450-06	STATUS I OF 1	PROJECT H.003014	NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY	NAME	 		I-10: LA 347 TO ATCHAFALAYA FLOWY BR CONSTRUCTION NOTES		



90% PRELIMINARY PLANS

ROADWAY CLASS	=	F-3
DESIGN SPEED	=	70 MPH
2015 CURRENT ADT	=	74,591
2035 DESIGN ADT	=	110,639
PERFORMANCE PERIOD (YEARS)	=	20
18 KIP ESALS	=	64,944.733
PCC MODULUS OF RUPTURE (PSI)	=	600
k VALUES (PSI/IN)	=	525
CALCULATED THICKNESS (INCHES)	=	12.99
THICKNESS PROVIDED (INCHES)	=	13.00

LEGEND

- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
- 2 13" PORTLAND CEMENT CONCRETE SHOULDER
- 3 LONGITUDINAL JOINT
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCOP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT
- 11 54" BARRIER ON FOOTING

RIGID STRUCTURAL DESIGN

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1726+00.00 TO STA. 1739+02.93

EASTBOUND

WESTBOUND



NOTE:

1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION



THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

2		PROJECT H.003014		DATE 1 OF 5		DESIGNED SEPEDA		CHECKED THYMES		CONTRACT NO. 450-06		SHEET NUMBER	
ST. MARTIN													
TYPICAL SECTION													
1-10: LA 347 TO ATCHAFALAYA FLOWY BR													
													



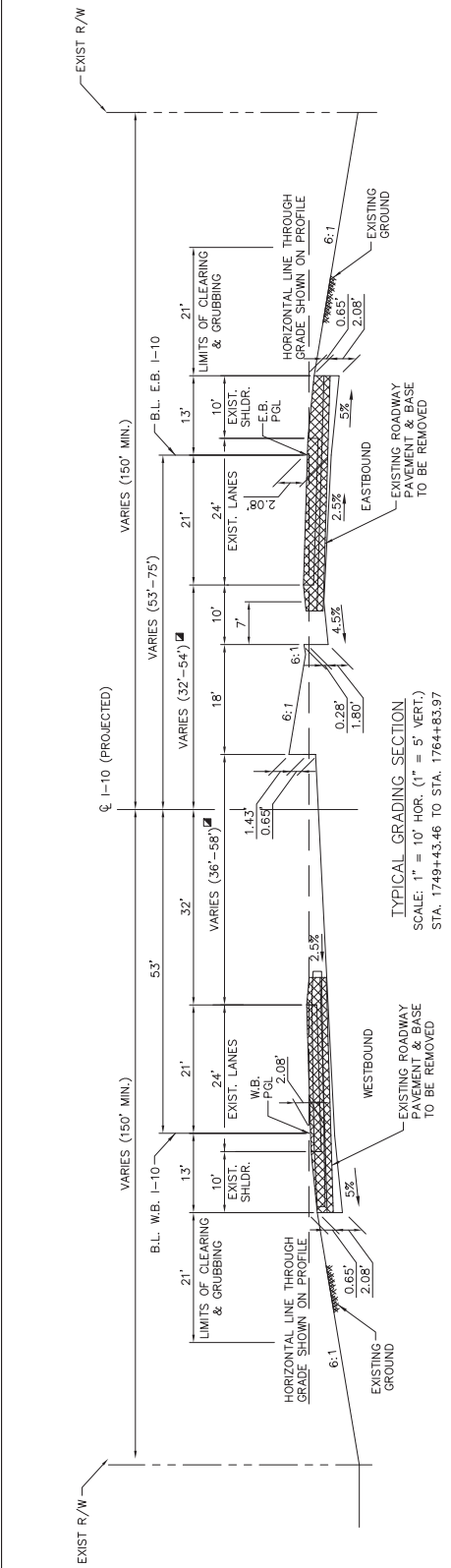
90% PRELIMINARY PLANS

RIGID STRUCTURAL DESIGN

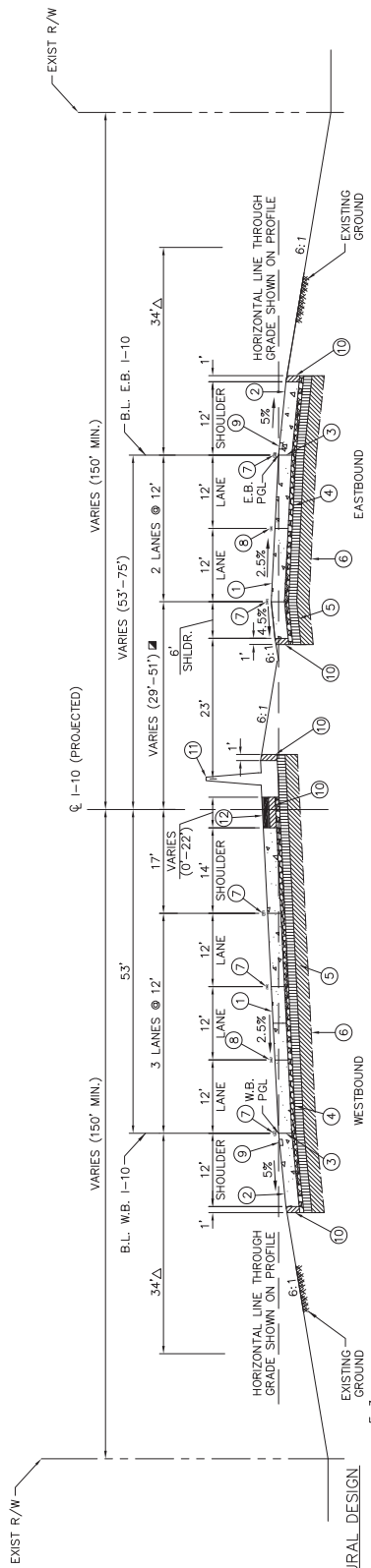
ROADWAY CLASS	=	F-3
DESIGN SPEED	=	70 MPH
2015 CURRENT ADT	=	4,551
2035 DESIGN ADT	=	92,791
PERFORMANCE PERIOD (YEARS)	=	110.839
18 KIP ESALS	=	20
PCC MODULUS OF RUPTURE (PSI)	=	64,944.733
k VALUES (PSI/IN)	=	600
CALCULATED THICKNESS (INCHES)	=	525
THICKNESS PROVIDED (INCHES)	=	13.00

LEGEND

- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
- 2 13" PORTLAND CEMENT CONCRETE SHOULDER
- 3 LONGITUDINAL JOINT
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCOP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT
- 11 54" BARRIER ON FOOTING
- 12 INCIDENTAL PAVING



TYPICAL GRADING SECTION
SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1749+43.46 TO STA. 1764+83.97



TYPICAL FINISHED SECTION
SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1749+43.46 TO STA. 1764+83.97

NOTE:
1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION
▣ VARIES FROM STA. 1755+26.79 TO STA. 1764+83.97



THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, SALES OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

DESIGNED	SEPEDA	PARISH	ST. MARTIN		
CHECKED	GIBBS	CONTROL SECTION	450-06		
DETAILED		STATE PROJECT	H.003014		
NUMBER	3 OF 5				2b
SHEET NUMBER					

DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

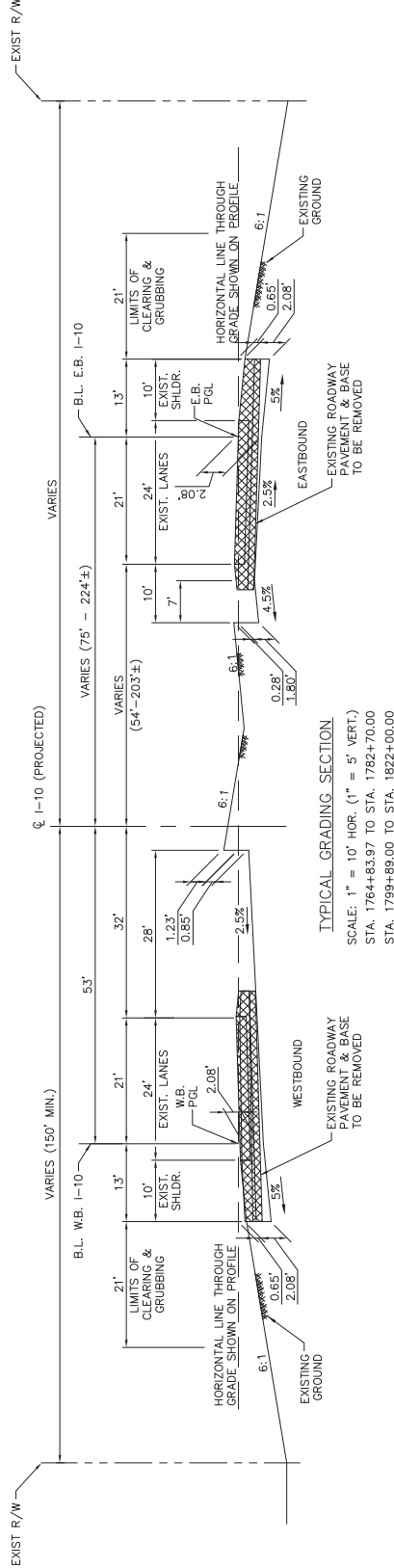


BR

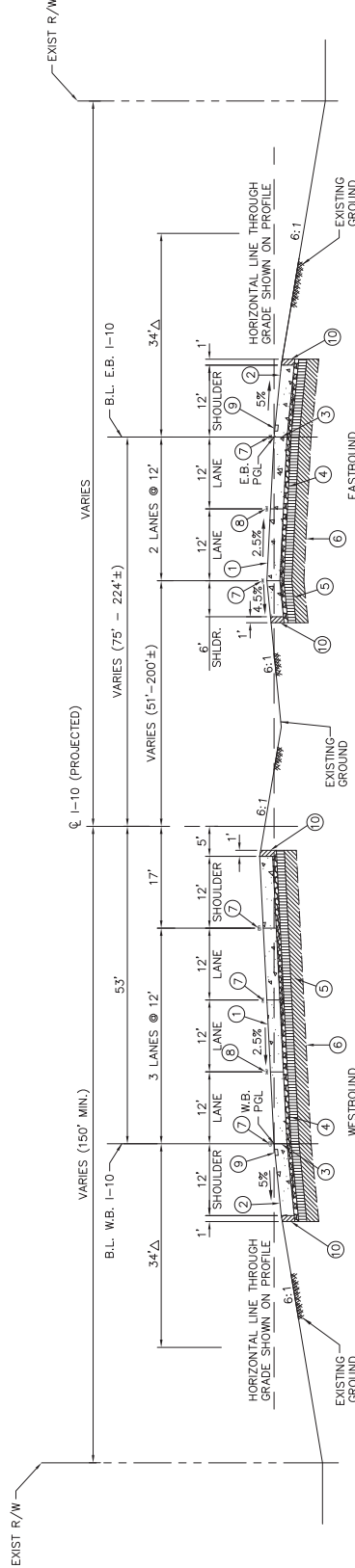
TYPICAL SECTION
CONCRETE ALTERNATE
A 347 TO ATCHAFALAYA FLOW



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CONSTRUCTION, BIDDING, RECORDATION,
CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT



TYPICAL GRADING SECTION



TYPICAL FINISHED SECTION

Δ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

LEGEND

- ① 13" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 13" PORTLAND CEMENT CONCRETE SHOULDER
- ③ LONGITUDINAL JOINT
- ④ 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- ⑤ 8" CLASS II BASE COURSE (SOIL CEMENT)
- ⑥ 12" SUBGRADE LAYER (TREATED)
- ⑦ PAVEMENT STRIPING
- ⑧ PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- ⑨ RUMBLE STRIPS
- ⑩ EMBANKMENT

NOTE:

1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.



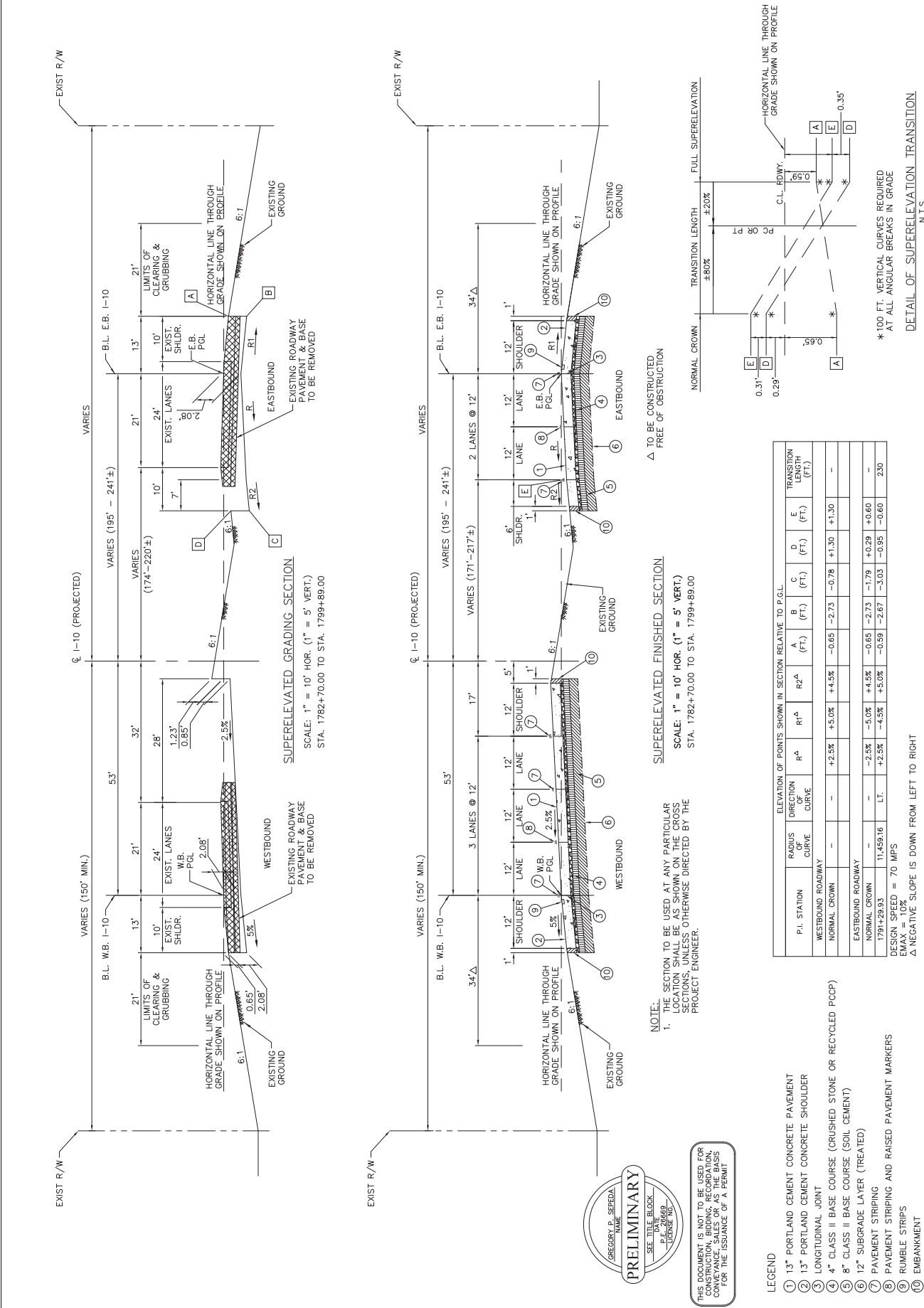


90% PRELIMINARY PLANS

PRELIMINARY
GREGORY P. SEPEDA
P.E. 26669
LICENSE NO.

THIS DOCUMENT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING, RECORDATION,
CONTRACT ADMINISTRATION OR AS BASIS
FOR THE ISSUANCE OF A PERMIT

- LEGEND
- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
 - 2 13" PORTLAND CEMENT CONCRETE SHOULDER
 - 3 LONGITUDINAL JOINT
 - 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCGP)
 - 5 8" CLASS II BASE COURSE (SOIL CEMENT)
 - 6 12" SUBGRADE LAYER (TREATED)
 - 7 PAVEMENT STRIPING
 - 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
 - 9 RUMBLE STRIPS
 - 10 EMBANKMENT



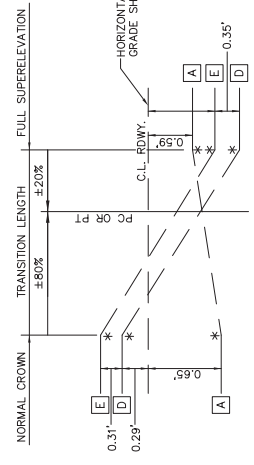
NOTE:
1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION

P.I. STATION	RADIUS OF CURVE	DIRECTION OF CURVE	ELEVATION OF POINTS SHOWN IN SECTION RELATIVE TO P.G.L.									
			R ^A	R ² A	A (ft.)	B (ft.)	C (ft.)	D (ft.)	E (ft.)	TRANSITION LENGTH (FT.)		
WESTBOUND ROADWAY												
NORMAL CROWN	-	-	+2.5%	+5.0%	+4.5%	-0.65	-2.73	-0.78	+1.30	+1.30	-	
EASTBOUND ROADWAY												
NORMAL CROWN	-	-	-2.5%	-5.0%	+4.5%	-0.65	-2.73	-1.79	+0.29	+0.60	-	
1791+29.83	11,459.16	Lt.	+2.5%	-4.5%	+5.0%	-0.59	-2.67	-3.03	-0.95	-0.60	230	

DESIGN SPEED = 70 MPH
EMAX = 10%
Δ NEGATIVE SLOPE IS DOWN FROM LEFT TO RIGHT



*100 FT. VERTICAL CURVES REQUIRED AT ALL ANGULAR BREAKS IN GRADE
DETAIL OF SUPERELEVATION TRANSITION
N.T.S.



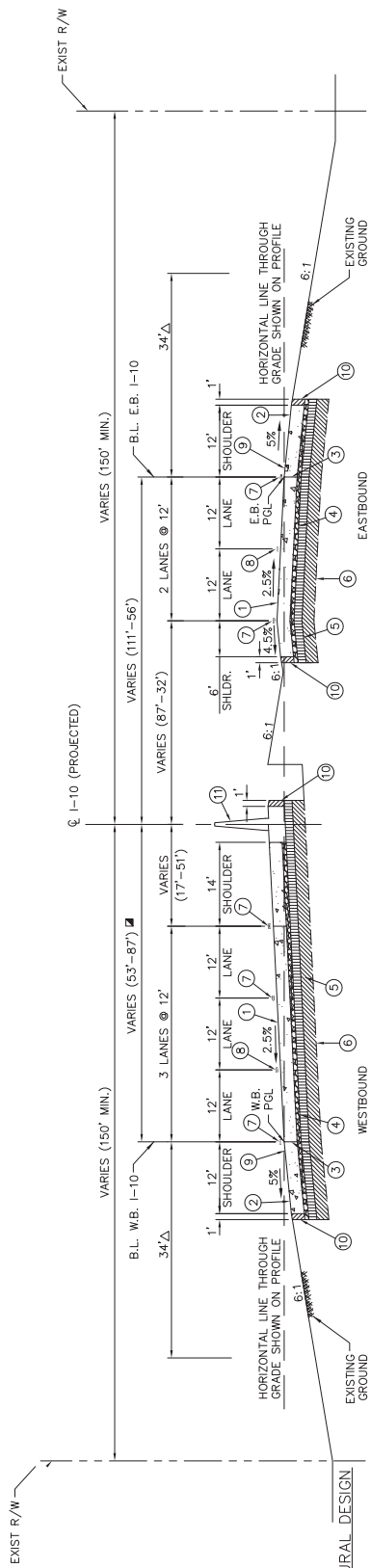
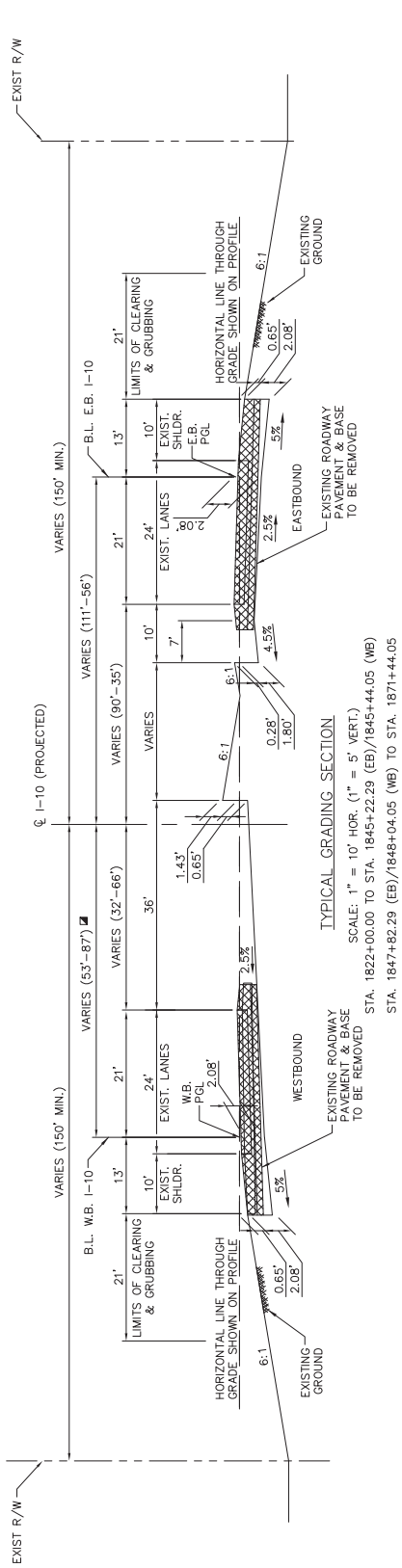
90% PRELIMINARY PLANS

RIGID STRUCTURAL DESIGN

ROADWAY CLASS	F-3
DESIGN SPEED	70 MPH
2015 CURRENT ADT	74,591
2035 DESIGN ADT	110,639
PERFORMANCE PERIOD (YEARS)	20
18 KIP ESALS	64,944.733
PCC MODULUS OF RUPTURE (PSI)	525
k VALUES (PSI/IN)	12.99
CALCULATED THICKNESS (INCHES)	13.00
THICKNESS PROVIDED (INCHES)	

LEGEND

- 1 13" PORTLAND CEMENT CONCRETE PAVEMENT
- 2 13" PORTLAND CEMENT CONCRETE SHOULDER
- 3 LONGITUDINAL JOINT
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCOP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT
- 11 54" BARRIER ON FOOTING



NOTE.

- 1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION

▣ VARIES FROM STA. 1852+06 TO STA. 1871+29

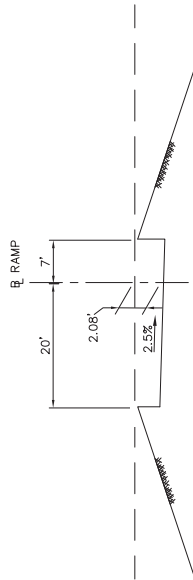


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SHEET NUMBER		2d	
PROJECT		H.03031-4	
DATE		5 OF 5	
DRAWN BY		GIBBS	
CHECKED BY		SEPEDA	
DESIGNED BY		ST. MARTIN	
REVISION OR CHANGE ORDER DESCRIPTION			
DATE			
BY			
PROJECT		P.C. CONCRETE ALTERNATE	
TYPICAL SECTION		1-10: LA 347 TO ATCHAFALAYA FLOW BY	

LEGEND

- ① 1" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 1.3" PORTLAND CEMENT CONCRETE SHOULDER
- ③ LONGITUDINAL JOINT
- ④ 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- ⑤ 8" CLASS II BASE COURSE (SOIL CEMENT)
- ⑥ 12" SUBGRADE LAYER (TREATED)
- ⑦ PAVEMENT STRIPING
- ⑧ RUMBLE STRIPS
- ⑨ EMBANKMENT



RAMP "U" & "V" GRADING SECTION

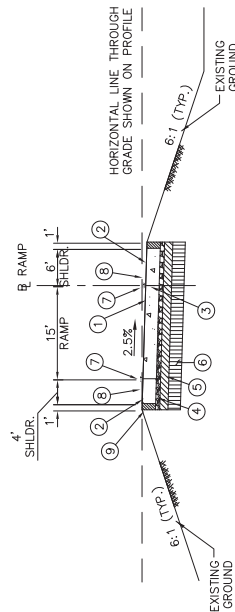
SCALE: 1" = 10'

SCALE: 1" = 10'
RAMP "W" & "X" OPPOSITE HAND

STA: 402+07.93 TO STA: 402+25.32 (B.L. RAMP "U")

SIA: +0Z+07:33 TO SIA: +0Z+23:32 (B.L. KAMP "U")
CTA 10C : OE 80 TC CTA 10C : EO 40 (D) D.M.C "M"

STA. 211+48.07 TO STA. 212+36.67 (B.I. RAMP "X")



RAMP "U" & "V" FINISHED SECTION





SCALE: 1" = 10'

RAMP "W" & "X" OPPOSITE HAND

STA: 402+07.93 TO STA: 402+25.32 (B.L. RAMP "U")

STA. 106+05.82 TO STA. 106+69.42 (B.L. RAMP "W")

STA. 211+48.07 TO STA. 212+36.67 (B.L. RAMP "X")

	ST. MARTIN CONTROL SECTION 450-06	PARISH LEAR CONTROL SECTION 450-06	STATE OF 2 PROJECT H.003014	NO. _____ DATE _____			1-10, LA 347 TO ATCHAFALAYA FLOW BR P.C. CONCRETE ALTERNATE		
				REVISION ON CHANGE ORDER DESCRIPTION BY _____ NAME _____ SERIES _____					



90% PRELIMINARY PLANS

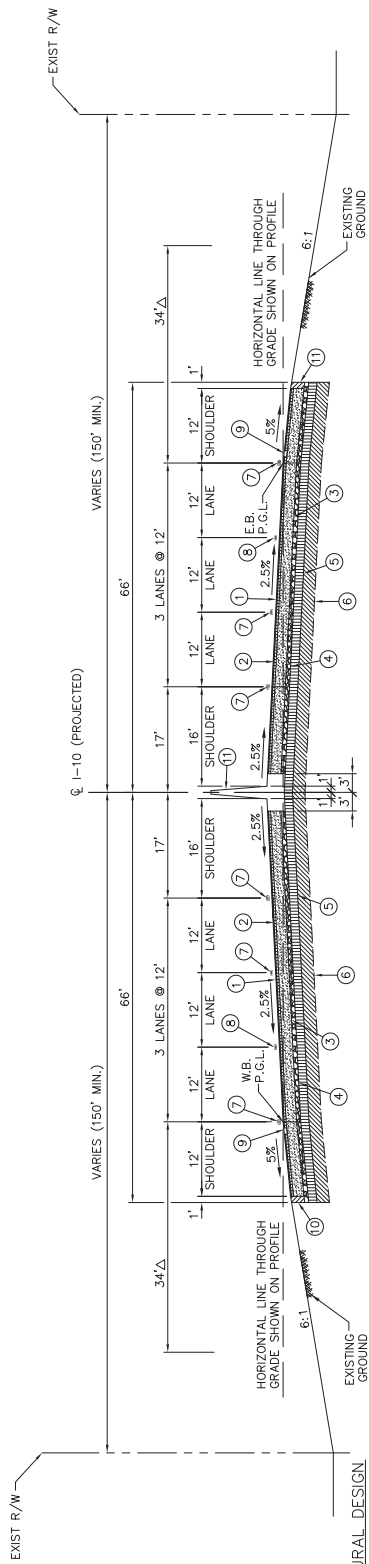
ROADWAY CLASS	= F-3
DESIGN SPEED	= 70 MPH
2015 CURRENT ADT	= 74,591
2035 DESIGN ADT	= 110,639
PERFORMANCE PERIOD (YEARS)	= 20
18 KIP ESALS	= 64,944.733
PCC MODULUS OF RUPTURE (PSI)	= 600
k VALUES (PSI/IN)	= 525
CALCULATED THICKNESS (INCHES)	= 12.99
THICKNESS PROVIDED (INCHES)	= 13.00

LEGEND

- 1" THIN ASPHALTIC CONCRETE (OGFC)
- 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
- 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCOP)
- 8" CLASS II BASE COURSE (SOIL CEMENT)
- 12" SUBGRADE LAYER (TREATED)
- PAVEMENT STRIPING
- PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- RUMBLE STRIPS
- EMBANKMENT
- 54" BARRIER ON FOOTING

RIGID STRUCTURAL DESIGN

WESTBOUND

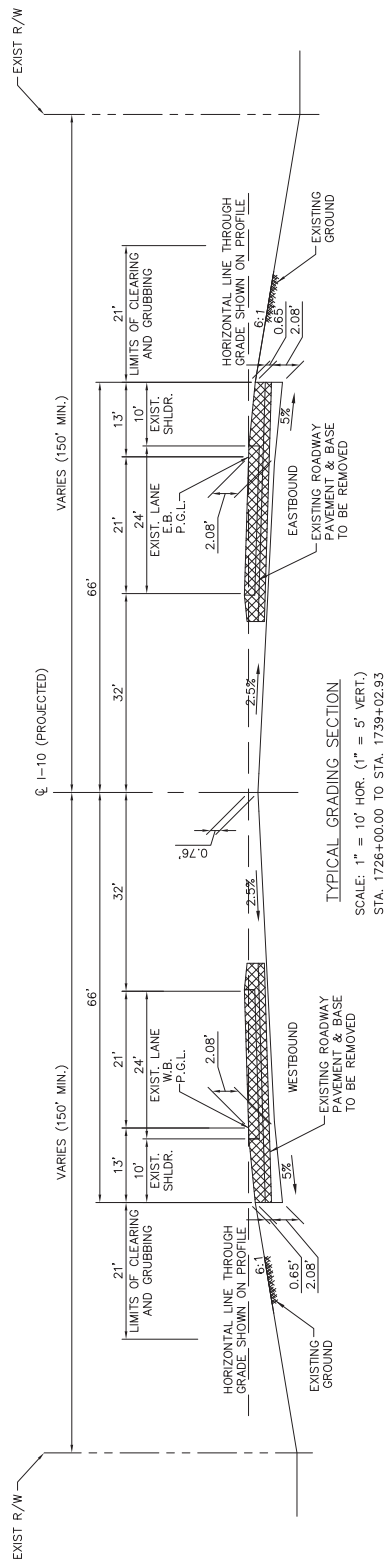


TYPICAL FINISHED SECTION

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1726+00.00 TO STA. 1739+02.93

NOTE:
1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

EASTBOUND



TYPICAL GRADING SECTION

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1726+00.00 TO STA. 1739+02.93



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TYPICAL SECTION
ASPHALT CONCRETE ALTERNATE
1-10: LA 347 TO ATCHAFALAYA FLOW BR



SHEET NUMBER	29
DESIGNED	SEPEDA
CHECKED	THYMES
DATE	1 OF 5
PROJECT	H.003014
STATE	LA
SECTION	450-06
PARISH	ST. MARTIN

SHEET NUMBER	2h	STATE	H.003014
		PROJECT	
		CONTRACT	450-06
DESIGNED	SEPEDA	PARTIAL	ST. MARTIN
CHECKED			
DETAILED	THYMES		
SERIES		SECTION	
NUMBER	2 OF 5	PROJECT	

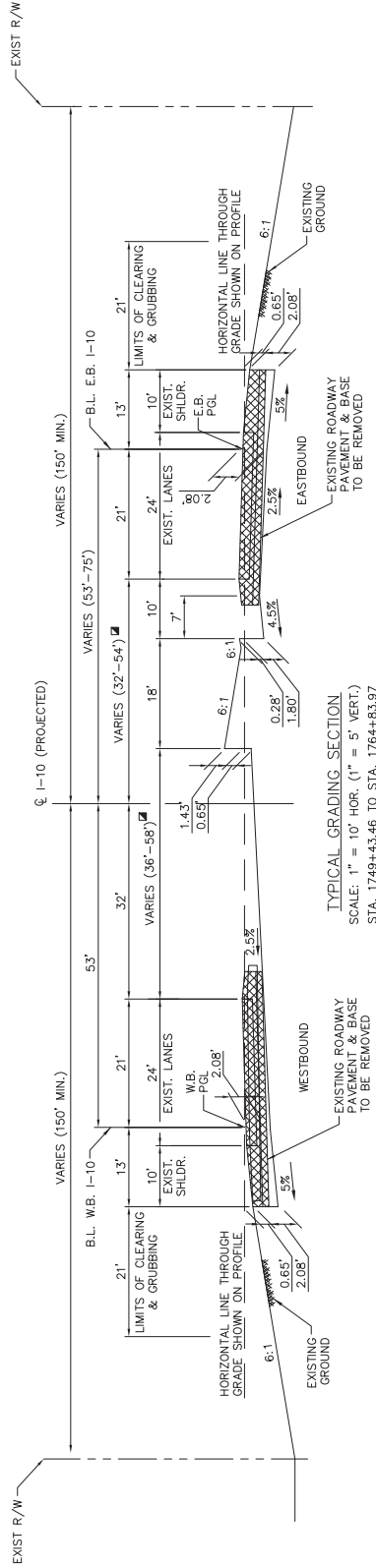
DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY



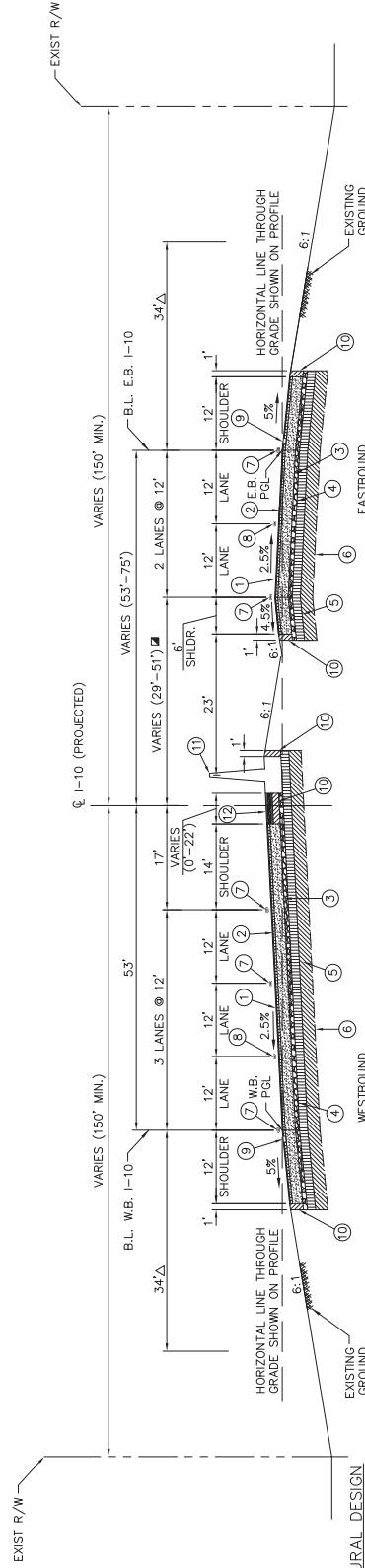
TYPICAL SECTION
LT CONCRETE ALTERNATE



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CONSTRUCTION, BIDDING, RECORDATION,
CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT



TYPICAL GRADING SECTION
SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1749+43.46 TO STA. 1764+83.97



TYPICAL FINISHED SECTION
SCALE: 1" = 10' HOR. (1" = 5' VERT.).
STA. 1749+43.46 TO STA. 1764+83.97

Δ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

☑ VARIES FROM STA. 1755+26.79
TO STA 1764+83.97

NOTE:

NOTE:
1. THE SECTION TO BE USED AT ANY PARTICULAR LOCATION SHALL BE AS SHOWN ON THE CROSS SECTIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.

- ① 3" ASPHALTIC CONCRETE (OGFC)
- ② 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- ③ 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
- ④ 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED POOP)
- ⑤ 8" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED POOP)
- ⑥ 12" SUBGRADE LAYER (TREATED)
- ⑦ PAVEMENT STRIPING
- ⑧ PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- ⑨ RUMBLE STRIPS
- ⑩ EMBANKMENT
- ⑪ 54" BARRIER ON FOOTING
- ⑫ INCIDENTAL PAVING

GREGORY P. SEPEDA
NAME
PRELIMINARY

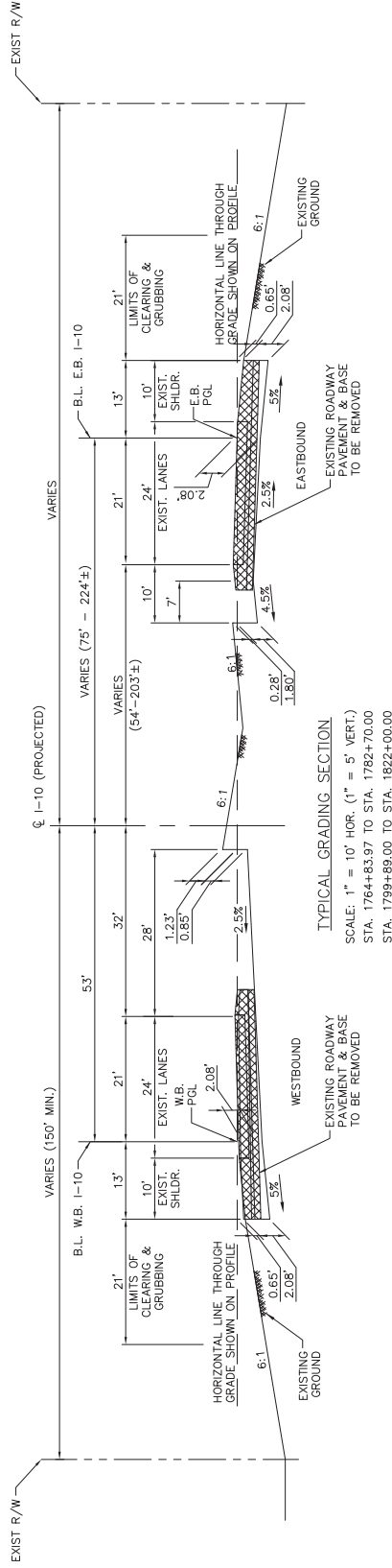
VARIES FROM STA. 1733+26.79
TO STA. 1764+83.97

DESIGNED	CHECKED	SEPEDA	PARISH	ST. MARTIN	SHEET NUMBER	21
DETAILED	THYMES	CONTROL	SECTION	450-06		
SERIES	NUMBER	PROJECT	STATE	H.003014		

DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

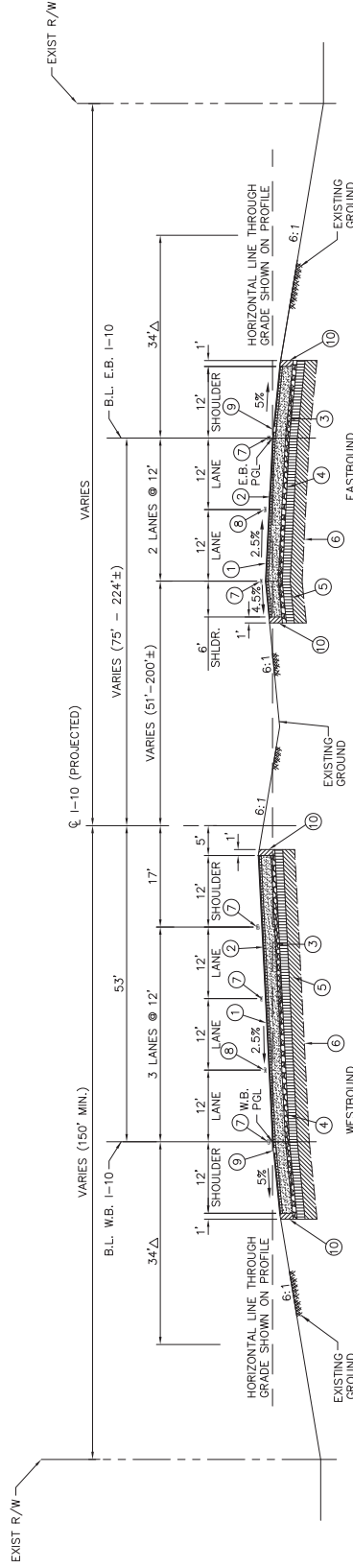
TYPICAL SECTION
 LT CONCRETE ALTERNATE
 347 TO ATCHAFALAYA FLDWY BR

THIS DOCUMENT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING, RECORDATION,
CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT



TYPICAL GRADING SECTION

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1764+83.97 TO STA. 1782+70.00
STA. 1799+89.00 TO STA. 1822+00.00



TYPICAL FINISHED SECTION

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1764+83.97 TO STA. 1782+70.00
STA. 1799+89.00 TO STA. 1822+00.00

Δ TO BE CONSTRUCTED
FREE OF OBSTRUCTION

LEGEND

- (1) 1" THIN ASPHALTIC CONCRETE (OGFC)
- (2) 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- (3) 3" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
- (4) 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- (5) 8" CLASS II BASE COURSE (SOIL CEMENT)
- (6) 12" SUBGRADE LAYER (TREATED)
- (7) PAVEMENT STRIPING
- (8) PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- (9) RUMBLE STRIPS
- (10) EMBANKMENT

NOTE:

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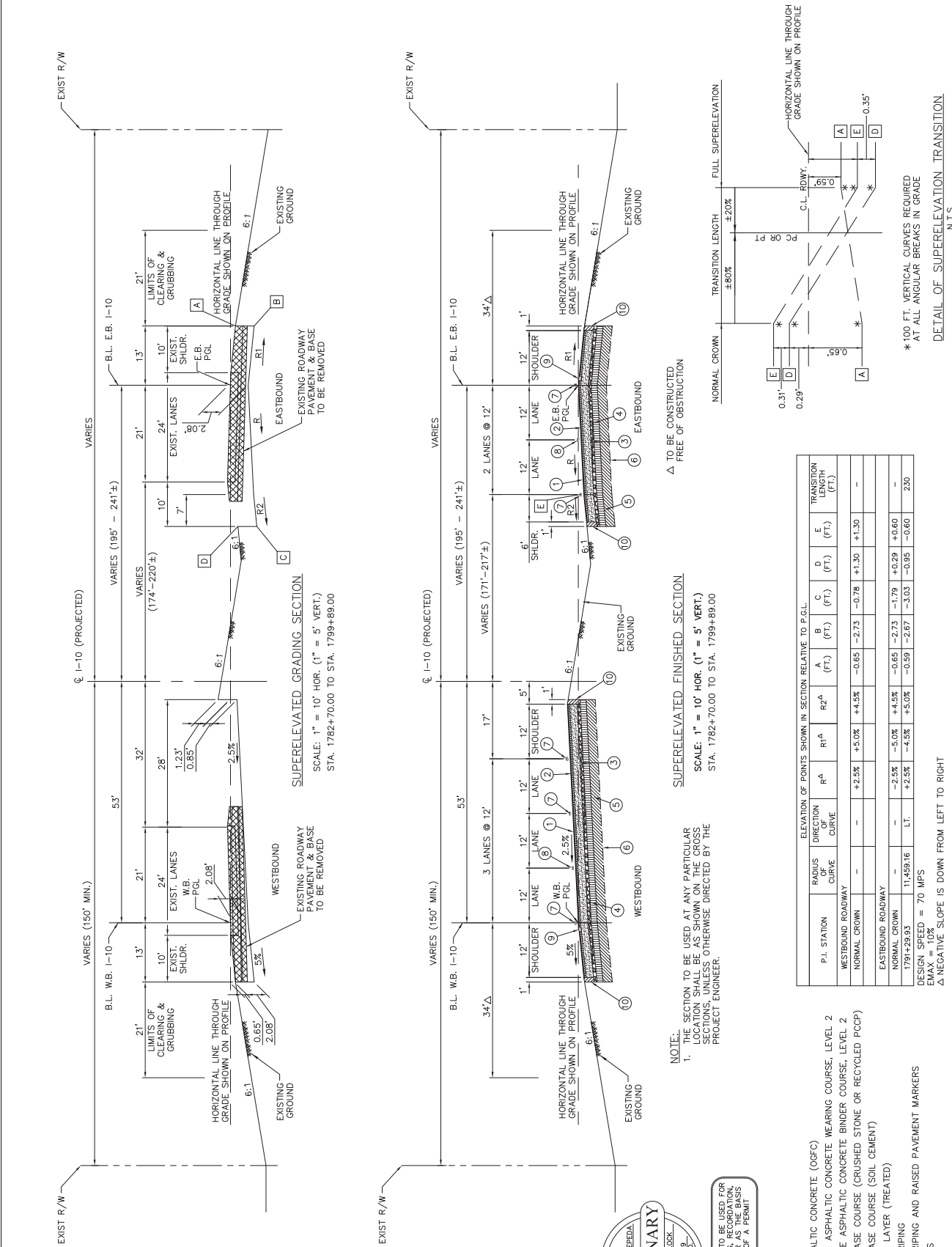
90% PRELIMINARY PLANS



THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, OR FOR ANY OTHER PURPOSE WITHOUT THE ANALYSIS FOR THE ISSUANCE OF A PERMIT

LEGEND

- 1 1" THIN ASPHALTIC CONCRETE (OGFC)
- 2 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- 3 10" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PGFC)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIPING
- 8 PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- 9 RUMBLE STRIPS
- 10 EMBANKMENT



SUPERELEVATED FINISHED SECTION

SCALE: 1" = 10' HOR. (1" = 5' VERT.)
STA. 1782+70.00 TO STA. 1799+89.00

P.I. STATION	RADIUS OF CURVE	DIRECTION OF CURVE	ELEVATION OF POINTS SHOWN IN SECTION RELATIVE TO P.G.L.									
			R ⁴	R ² A	A	B	C	D	E	TRANSITION LENGTH (FT.)		
WESTBOUND ROADWAY												
NORMAL CROWN	-	-	+2.5%	+5.0%	+4.5%	-0.65	-2.73	-0.78	+1.30	+1.30	-	-
EASTBOUND ROADWAY												
NORMAL CROWN	-	-	-2.5%	-5.0%	+4.5%	-0.65	-2.73	-1.79	+0.29	+0.60	-	-
1791+29.83	11,459.16	L.T.	+2.5%	-4.5%	+5.0%	-0.59	-2.67	-3.03	-0.95	-0.60	230	230

DESIGN SPEED = 70 MPH

EMAX = 10%

Δ NEGATIVE SLOPE IS DOWN FROM LEFT TO RIGHT

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION

Δ TO BE CONSTRUCTED FREE OF OBSTRUCTION

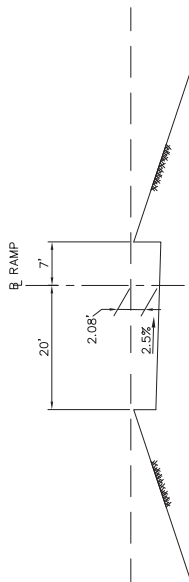
*100 FT. VERTICAL CURVES REQUIRED AT ALL ANGULAR BREAKS IN GRADE

DETAIL OF SUPERELEVATION TRANSITION

N.T.S.

LEGEND

- ① 1" THIN ASPHALTIC CONCRETE (OGFC)
- ② 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- ③ 10" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- ④ 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP)
- ⑤ 8" CLASS II BASE COURSE (SOIL CEMENT)
- ⑥ 12" SUBGRADE LAYER (TREATED)
- ⑦ PAVEMENT STRIPING
- ⑧ RUMBLE STRIPS
- ⑨ EMBANKMENT



RAMP "U" & "V" GRADING SECTION

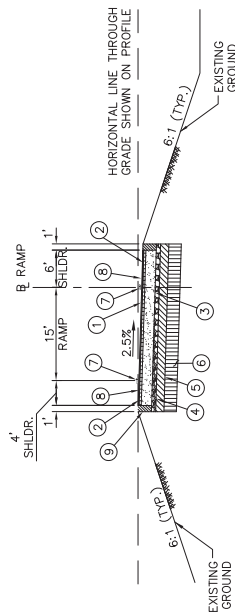
SCALE: 1" = 10'

SCALE: 1" = 10'
RAMP "W" & "X" OPPOSITE HAND

STA. 402+07.93 TO STA. 402+25.32 (B.L. RAMP "U")

STA. 106+05.82 TO STA. 106+69.42 (B.L. RAMP "W")

STA. 211+48.07 TO STA. 212+36.67 (B.L. RAMP X)



RAMP "U" & "V" GRADING SECTION

SCALE: 1" = 10'

RAMP "W" & "X" OPPOSITE HAND

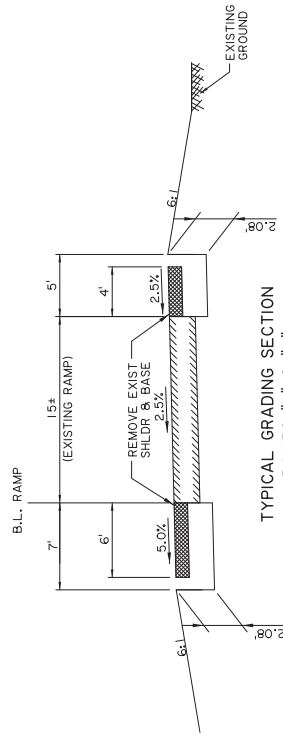
STA. 402+07.93 TO STA. 402+25.32 (B.L. RAMP "U")

STA. 106+05.82 TO STA. 106+69.42 (B.L. RAMP "W")

[illegible]

LEGEND

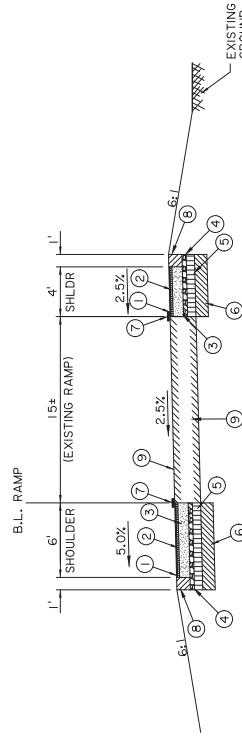
- 1 1" THIN ASPHALTIC CONCRETE (OGFC)
- 2 2" SUPERPAVE ASPHALTIC CONCRETE WEARING COURSE, LEVEL 2
- 3 3" SUPERPAVE ASPHALTIC CONCRETE BINDER COURSE, LEVEL 2
- 4 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCGP)
- 5 8" CLASS II BASE COURSE (SOIL CEMENT)
- 6 12" SUBGRADE LAYER (TREATED)
- 7 PAVEMENT STRIP
- 8 EMBANKMENT
- 9 EXISTING PAVEMENT (TO REMAIN)



TYPICAL GRADING SECTION
RAMPS "U" & "V"
RAMPS "W" & "X" OPPOSITE HAND




RAMPS	W	8	X	OPPOSITE	HAND
STA. 402+25.32	TO STA.	413+28.97	(B.L. RAMP	"U")	
STA. 505+07.89	TO STA.	509+32.30	(B.L. RAMP	"V")	
STA. 106+69.41	TO STA.	108+36.47	(B.L. RAMP	"W")	
STA. 201+92.97	TO STA.	211+48.07	(B.L. RAMP	"X")	







SCALE: 1" = 5'

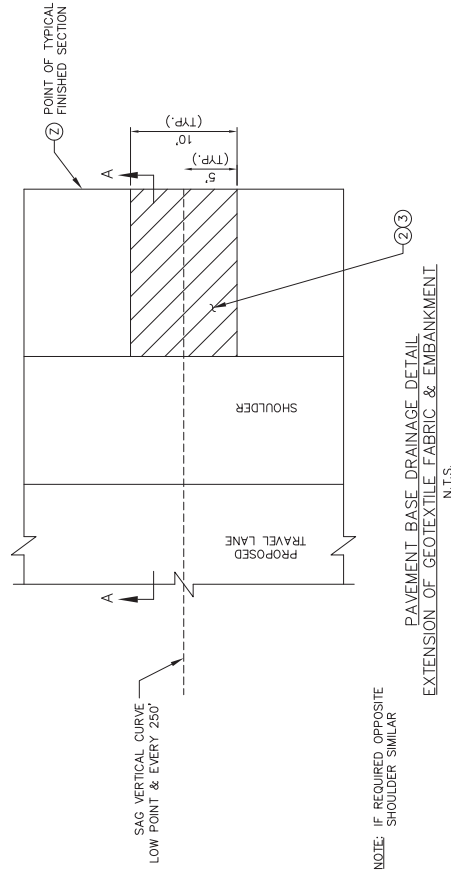


TYPICAL FINISHED SECTION
RAMPS "Q" & "R"
RAMPS "S" & "T" OPPOSITE HAND
SCALE: 1" = 5'

STA.	402+25.32	TO STA.	413+28.97	(B.L. RAMP "U")
STA.	505+07.89	TO STA.	509+32.30	(B.L. RAMP "V")
STA.	106+69.41	TO STA.	108+96.47	(B.L. RAMP "W")
STA.	201+92.97	TO STA.	211+48.07	(B.L. RAMP "X")

SHEET NUMBER	27	ST. MARTIN	DESIGNED CHECKED LEAR	PARISH	CONTROL CHECKED GIBBS	450-06	STATE PROJECT H.003014	1-10, LA 347 TO HIGHWAY 1 FLOWY BR			TYPICAL SECTION RAMP SHOULDER REBUILD ASPHALT CONCRETE ALTERNATE			NO. DATE REVISION OR CHANGE ORDER DESCRIPTION BY	SERIES NUMBER OF 1	450-06 H.003014

SHEET NUMBER	2A	PARISH	ST. MARTIN	CONTROL	CHECKED	THYMES	SECTION	450-06	PROJECT	H.003014	SERIES	NUMBERS	OF	1	STATE	BR	REVISION OR CHANGE ORDER DESCRIPTION	DATE	NO.																																																																																																		
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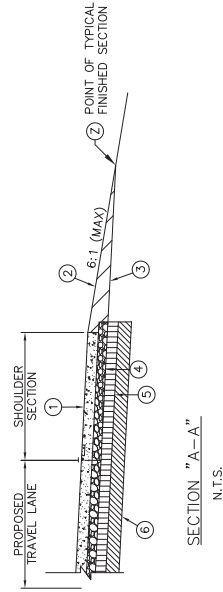
NOTE: IF REQUIRED OPPOSITE
SHOULDER SIMILAR

PAVEMENT BASE DRAINAGE DETAIL
EXTENSION OF GEOTEXTILE FABRIC & EMBANKMENT
N.T.S.

NTS

NOTES:

1. THE CLASS I BASE COURSE SHALL BE PLACED IN THE SHOULDER, EXTENDED TO THE BOTTOM OF THE CLASS I BASE COURSE (STONE), AND DAYLIGHTED TO THE FORESLOPE.
2. SHALL BE APPLIED IN SAG VERTICAL CURVES AND EVERY 250' FOR A DISTANCE OF APPROXIMATELY 10' ALONG THE LENGTH OF THE JOB AT EACH SITE (GENERALLY, THE OUTSIDE SHOULDER BUT POSSIBLY THE INSIDE SHOULDER IN AREAS OF SUPER ELEVATION).
3. ITEMS CONSIDERED INCIDENTAL TO AND INCLUDED IN THE PAYMENT OF THE CLASS I BASE COURSE.



SECTION "A-A"
N.T.S.

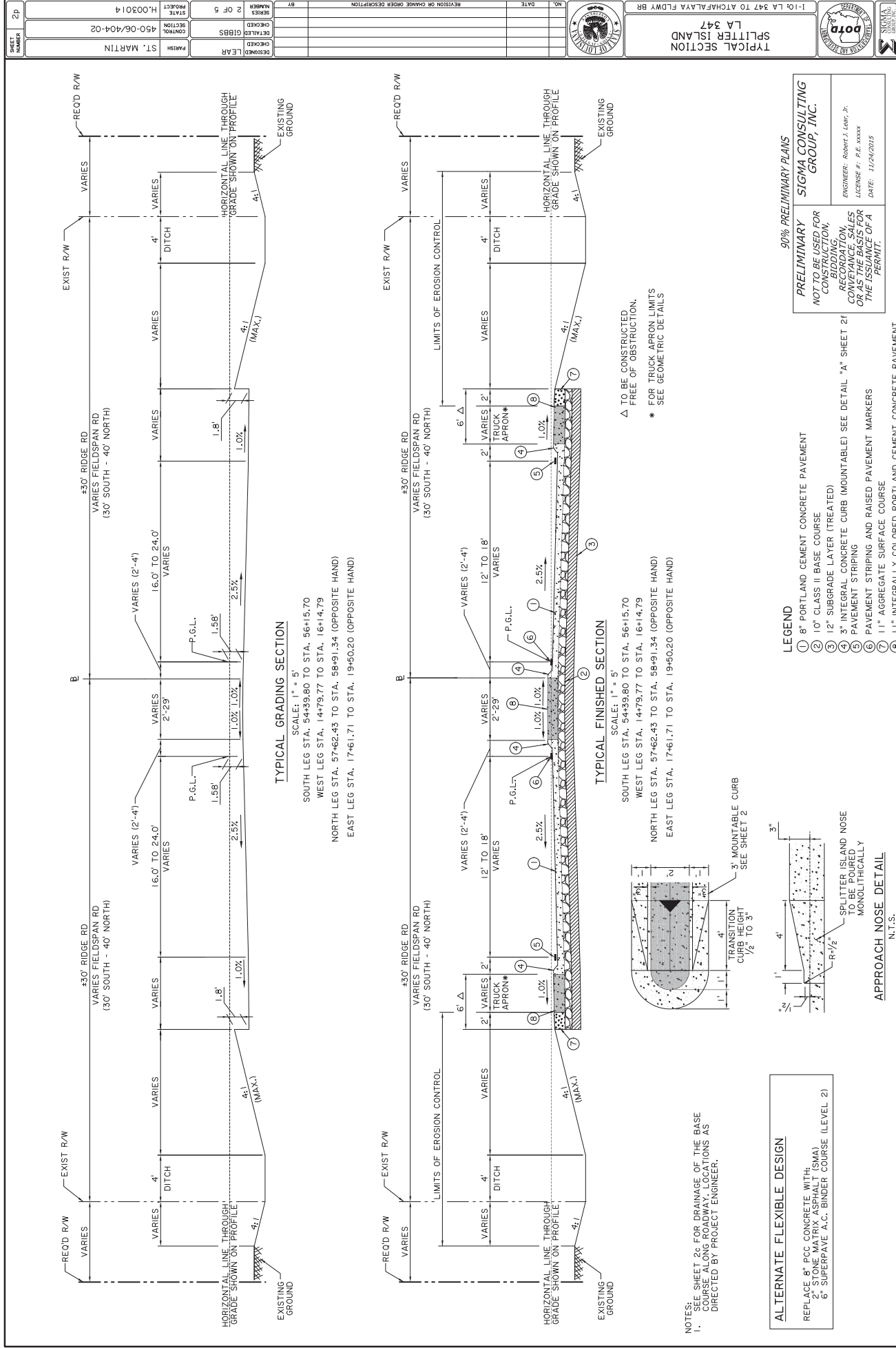
LEGEND

- | | NOTE: IF REQUIRED OPPOSITE SHOULD BE SIMILAR |
|--|--|
| ① 13" PORTLAND CEMENT CONCRETE OR ASPHALTIC CONCRETE | SHOULDER |
| ② NON-PLASTIC EMBANKMENT (STONE), THICKNESS VARIES | |
| ③ CLASS D GEOTEXTILE FABRIC | |
| ④ 4" CLASS II BASE COURSE (CRUSHED STONE OR RECYCLED PCCP) | |
| ⑤ 8" CLASS II BASE COURSE (SOIL CEMENT) | |
| ⑥ 12" SUBGRADE LAYER (TREATED) | |

NOTE: IF REQUIRED OPPOS
SHOULDER SIMILAR

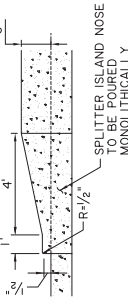


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CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT



ALTERNATE FLEXIBLE DESIGN

REPLACE 8" PCC CONCRETE WITH:
2" STONE MATRIX ASPHALT (SMA)
6" SUPERPAVE A.C. BINDER COURSE (LEVEL 2)



LEGEND

- ① 8" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 10" CLASS II BASE COURSE
- ③ 12" SUBGRADE LAYER (TREATED)
- ④ 3" INTEGRAL CONCRETE CURB (MOUNTABLE) SEE DETAIL "A" SHEET 21
- ⑤ PAVEMENT STRIPING
- ⑥ PAVEMENT STRIPING AND RAISED PAVEMENT MARKERS
- ⑦ 11" AGGREGATE SURFACE COURSE
- ⑧ 11" INTEGRALLY COLORED PORTLAND CEMENT CONCRETE PAVEMENT

90% PRELIMINARY PLANS

PRELIMINARY
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BIDDING,
RECORDATION,
OR AS THE BASIS FOR
THE ISSUANCE OF A
PERMIT.

ENGINEER: Robert J. Lewis, Jr.
LICENSE # : P.E. xxxxxx
DATE: 11/24/2015

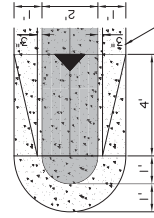
N.T.S.

NOTES:
1. SEE SHEET 20 FOR DRAINAGE OF THE BASE COURSE ALONG ROADWAY LOCATIONS AS DIRECTED BY PROJECT ENGINEER.

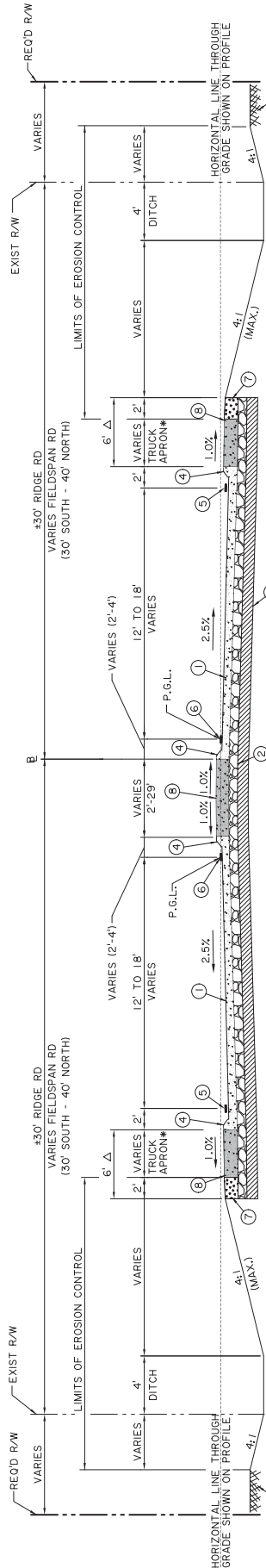
SCALE: 1" = 5'
SOUTH LEG STA. 54+39.80 TO STA. 56+15.70
WEST LEG STA. 14+79.77 TO STA. 16+14.79
NORTH LEG STA. 57+62.43 TO STA. 58+91.34 (OPPOSITE HAND)
EAST LEG STA. 17+61.71 TO STA. 19+60.20 (OPPOSITE HAND)

Δ TO BE CONSTRUCTED
FREE OF OBSTRUCTION.
* FOR TRUCK APRON LIMITS
SEE GEOMETRIC DETAILS

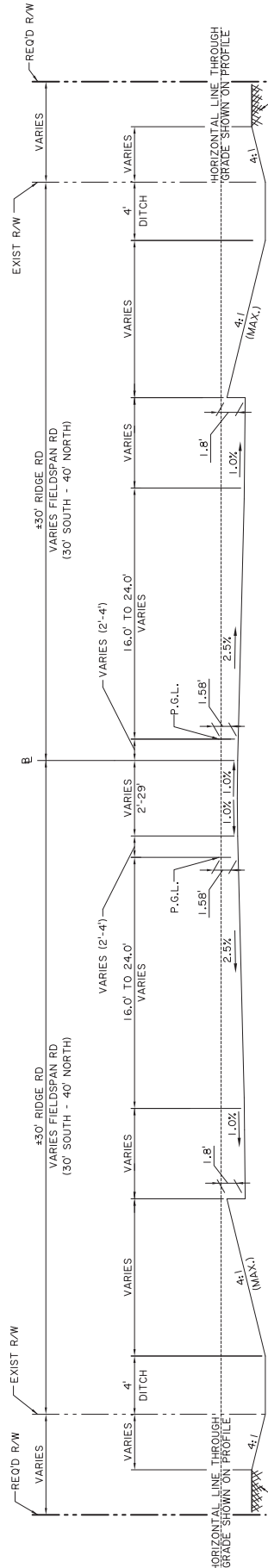
TRANSITION CURB HEIGHT 1/2 TO 3/4



TYPICAL FINISHED SECTION



TYPICAL GRADING SECTION

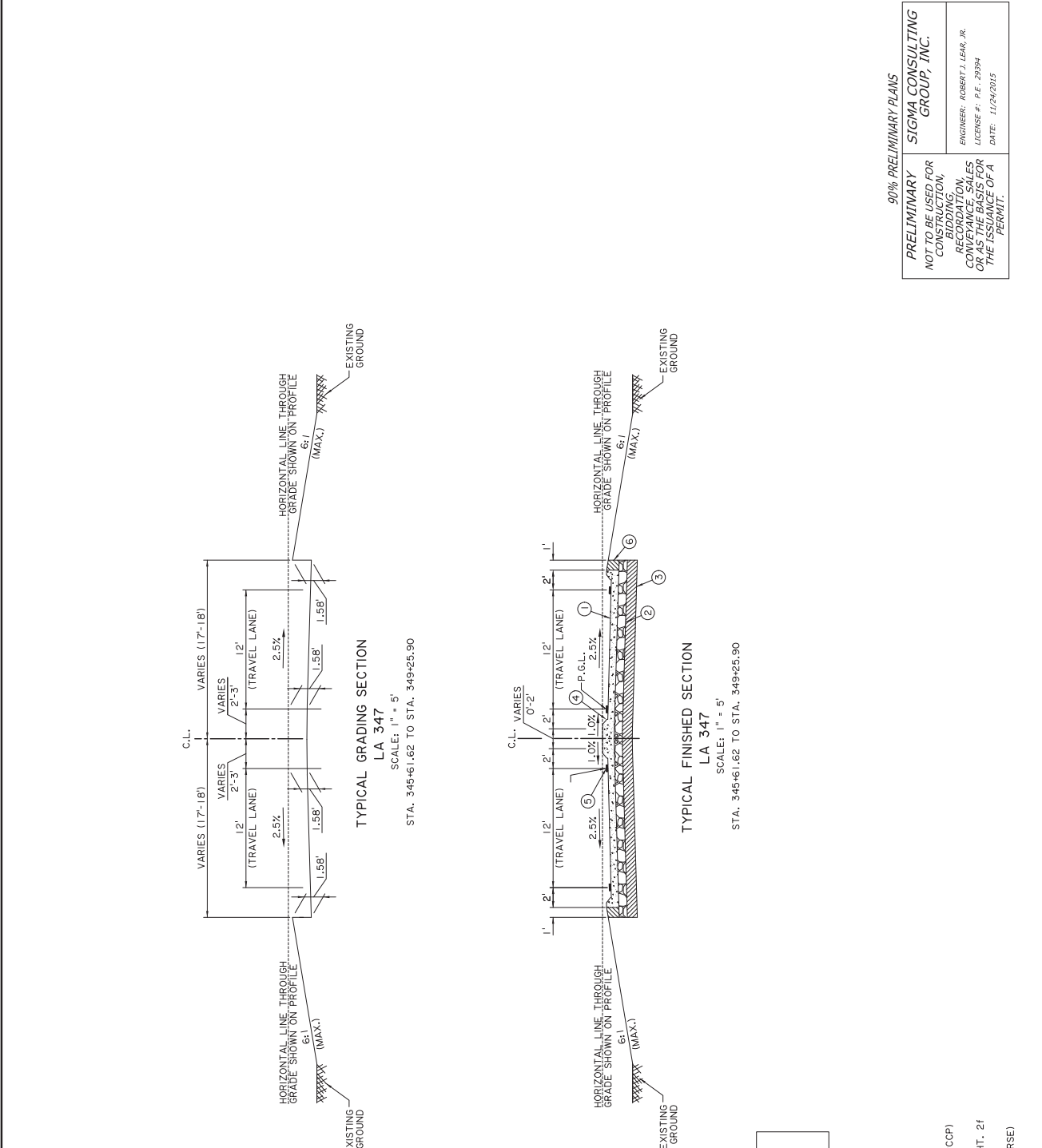


1-10: LA 347 TO ATCHAFALAYA FLOWY BR
TYPICAL SECTION
SPLITTER ISLAND
LA 347





NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY	SHEET NUMBER	29
1				DESIGNED	LEAH
2				CHECKED	GIBBS
3				DESIGNED	ST. MARTIN
4				CHECKED	
5				DESIGNED	
6				CHECKED	
7				DESIGNED	
8				CHECKED	
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99				DESIGNED	
100				CHECKED	



ALTERNATE FLEXIBLE DESIGN

REPLACE 8" PCC CONCRETE WITH:
2" STONE MATRIX ASPHALT (SMA)
6" SUPERPAVE A.C. BINDER COURSE (LEVEL 2)

- LEGEND**
- 1 8" PORTLAND CEMENT CONCRETE PAVEMENT
 - 2 10" CLASS II BASE COURSE (STONE OR RECYCLED PCCP)
 - 3 12" SUBGRADE LAYER (TREATED)
 - 4 3" INTEGRAL CURB (MOUNTABLE) SEE DETAIL "A" SHT. 21
 - 5 PAVEMENT STRIPING
 - 6 EMBANKMENT (INCLUDED IN PAYMENT OF BASE COURSE)

90% PRELIMINARY PLANS

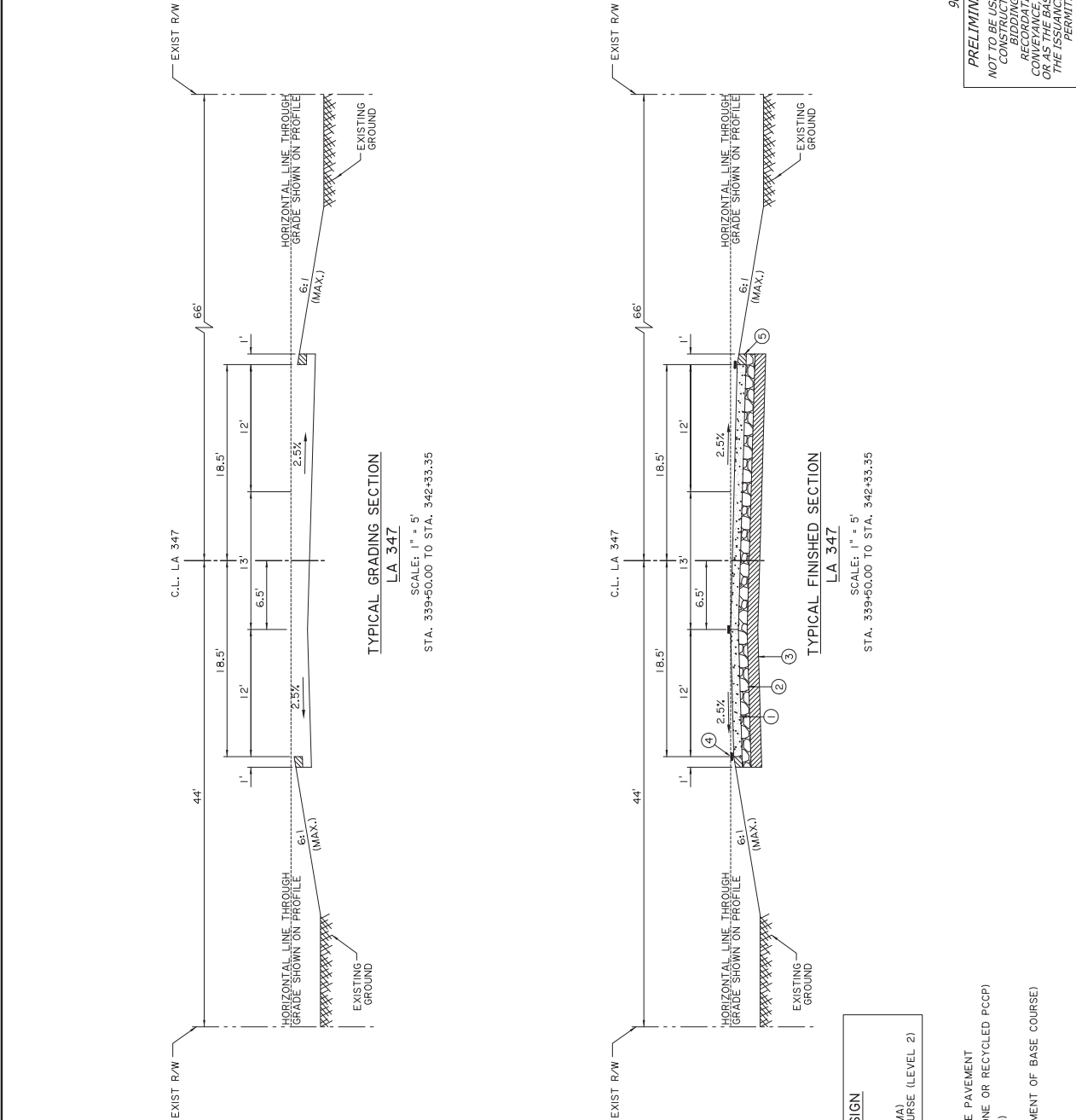
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OR AS THE BASIS FOR
THE ISSUANCE OF A
PERMIT.

**SIGMA CONSULTING
GROUP, INC.**

ENGINEER: ROBERT J. LEAH, JR.
LICENSE #: P.E. 29394
DATE: 11/24/2015



NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY	DESIGNED	CHECKED	IN CHARGE	SHEET NUMBER
1							21
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90% PRELIMINARY PLANS

PRELIMINARY

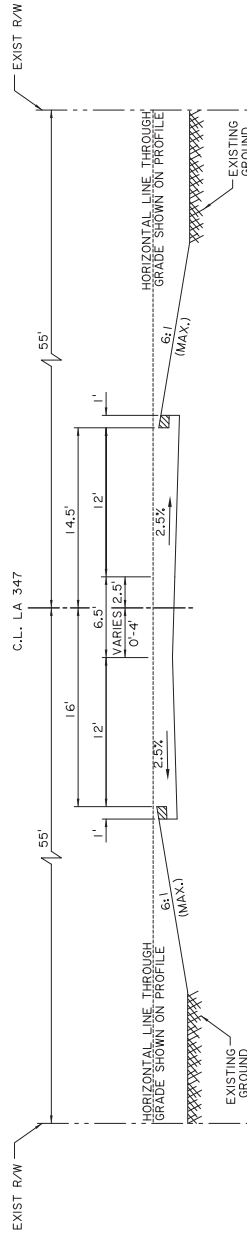
NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, LESS COMPANY SEAL OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.

SIGMA CONSULTING GROUP, INC.

ENGINEER: ROBERT J. LEAR, JR.
LICENSE #: P.E. 29394
DATE: 11/24/2015

TYPICAL SECTION

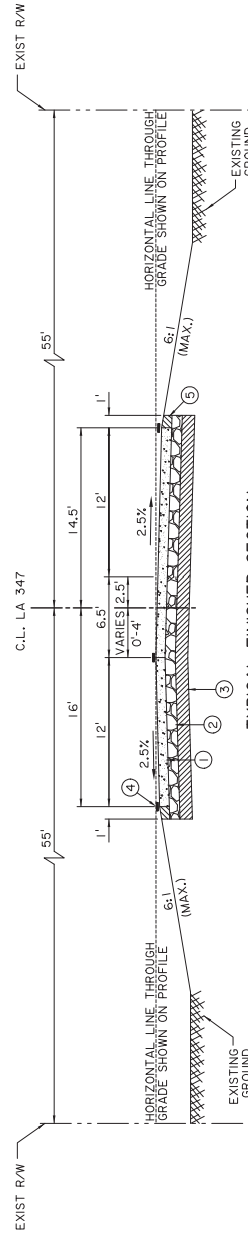




TYPICAL GRADING SECTION
LA 347

SCALE: 1" = 5'

SCALE: 1" = 5'
STA. 351+79.96 TO STA. 353+59.96



TYPICAL FINISHED SECTION
I A 347

SCALE: 1" = 5'

SCALE: 1" = 5'
STA. 351+79.96 TO STA. 353+59.96

ALTERNATE FLEXIBLE DESIGN

REPLACE 8" PCC CONCRETE WITH:
2" STONE MATRIX ASPHALT (SMA)
6" SUPERPAVE A.C. BINDER COURSE (LEVEL 2)

LEGEND

- ① 8" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 10" CLASS II BASE COURSE (STONE OR RECYCLED PCCP)
- ③ 12" SUBGRADE LAYER (TREATED)
- ④ PAVEMENT STRIPING
- ⑤ EMBANKMENT (INCLUDED IN PAYMENT OF BASE COURSE)

90% PRELIMINARY PLANS

PRELIMINARY	SIGMA CONSULTING GROUP, INC.
-------------	------------------------------

ENGINEER: ROBERT J. LEAR, JR.
LICENSE #: P.E. 29394
DATE: 11/24/2015



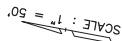
TYPICAL SECTION
LA 347

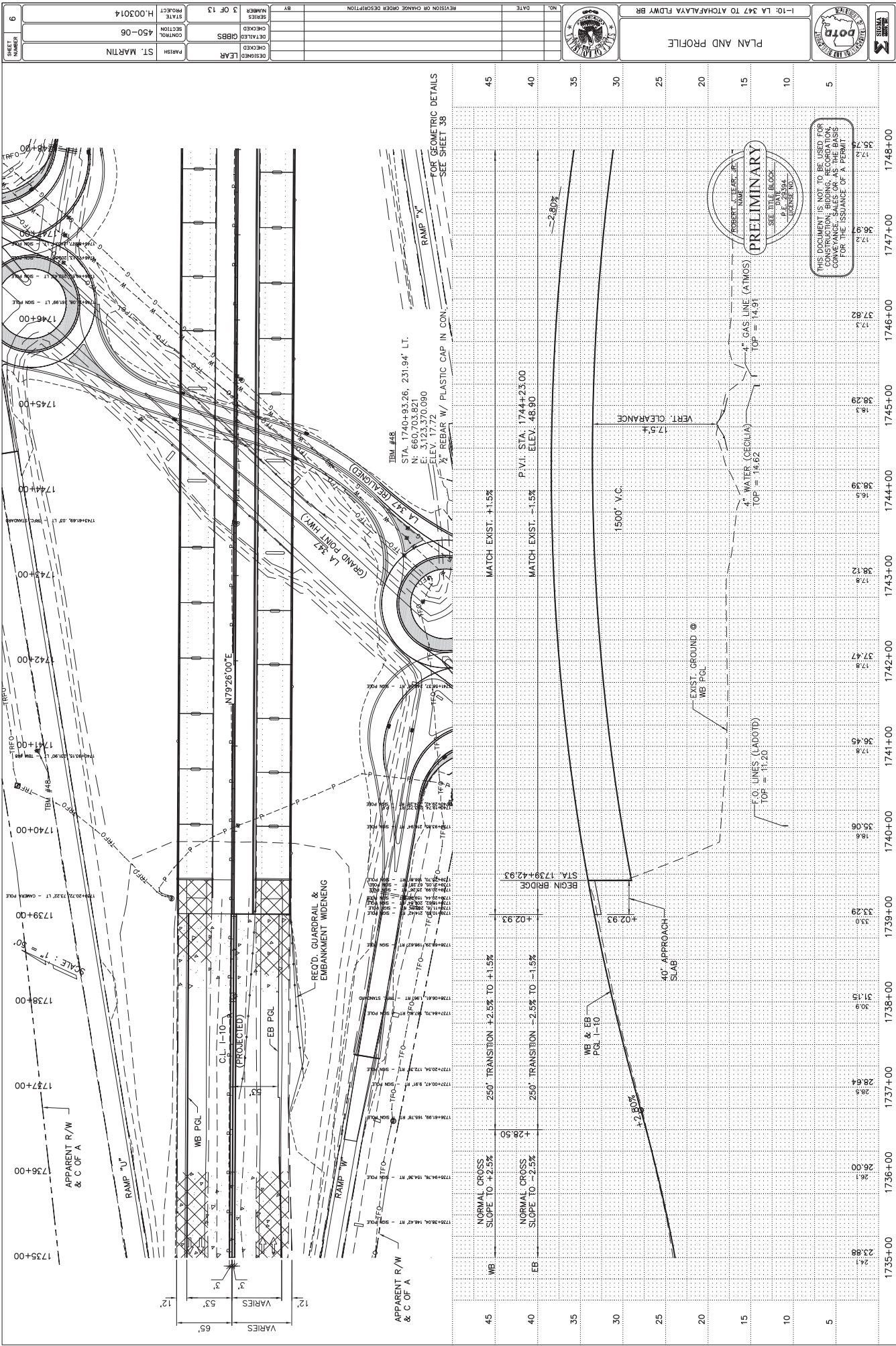
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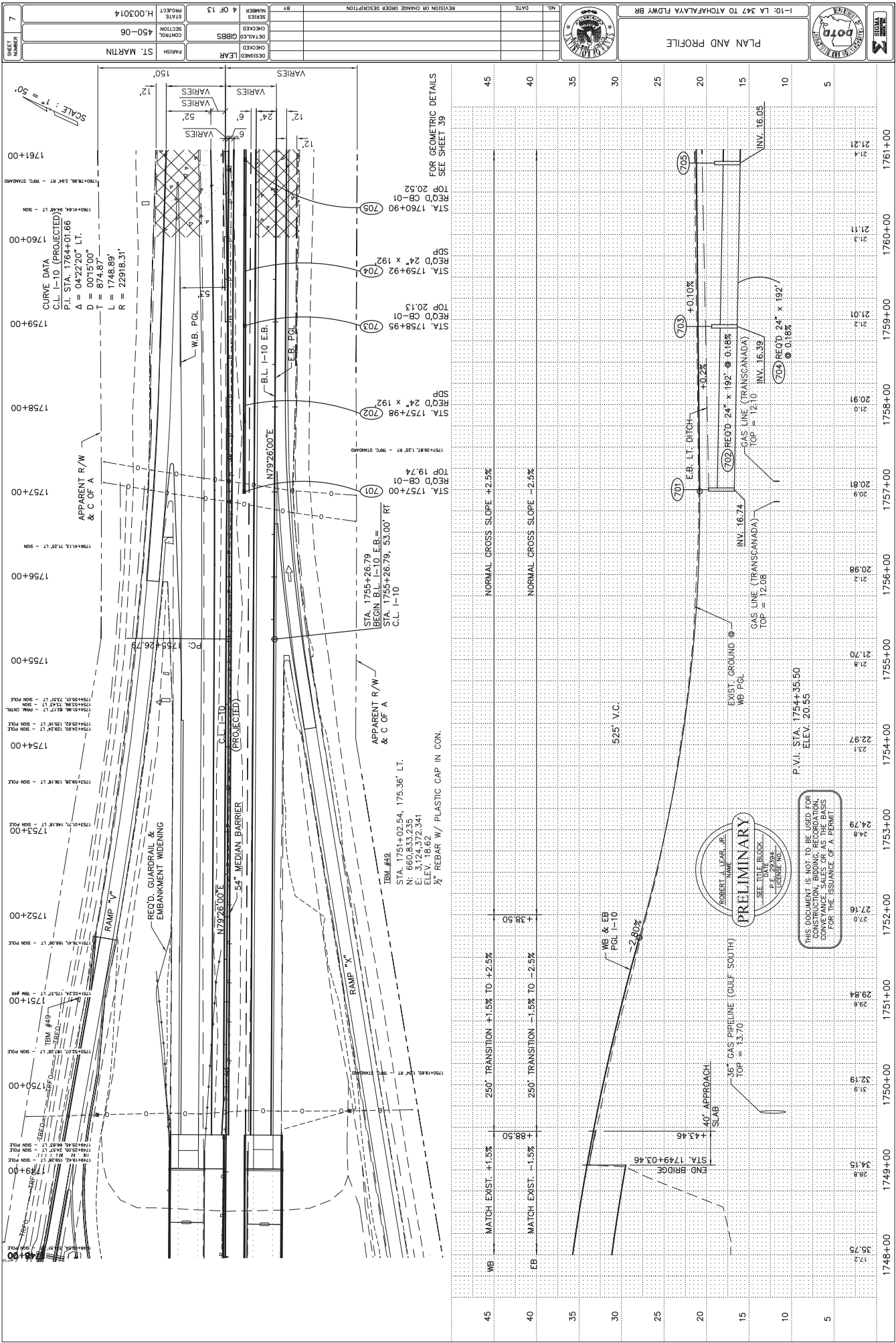
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GENERAL NOTES:

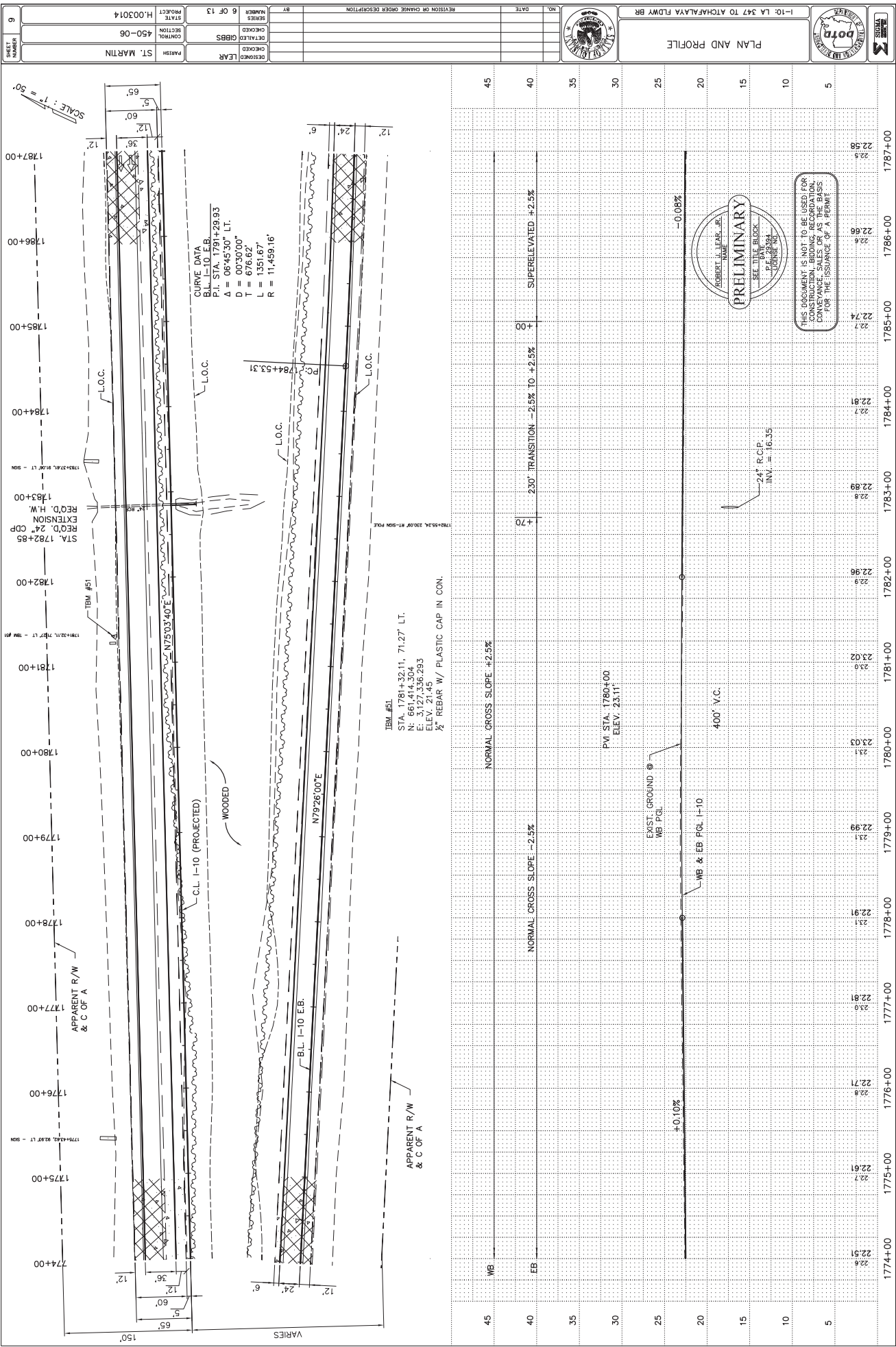


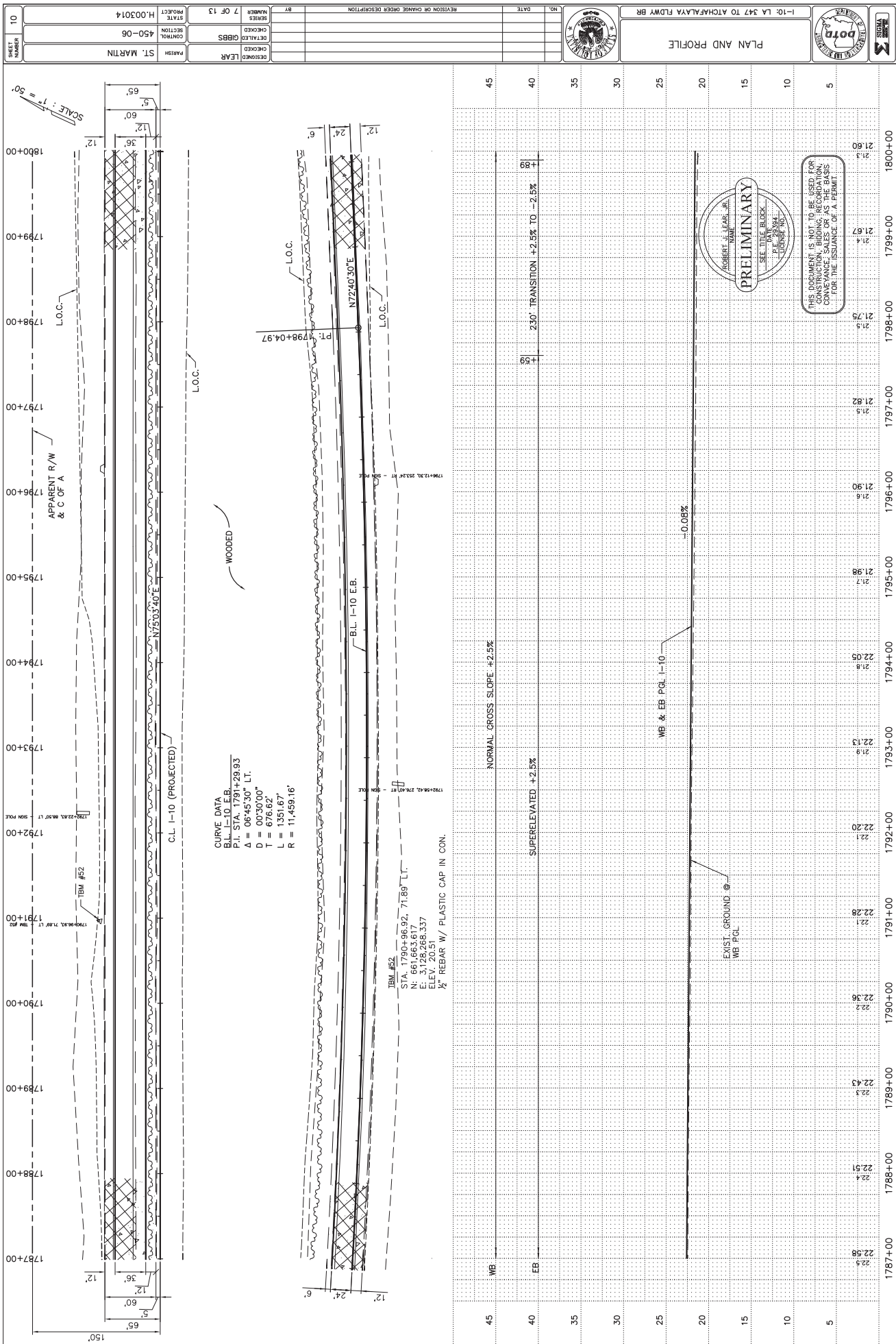


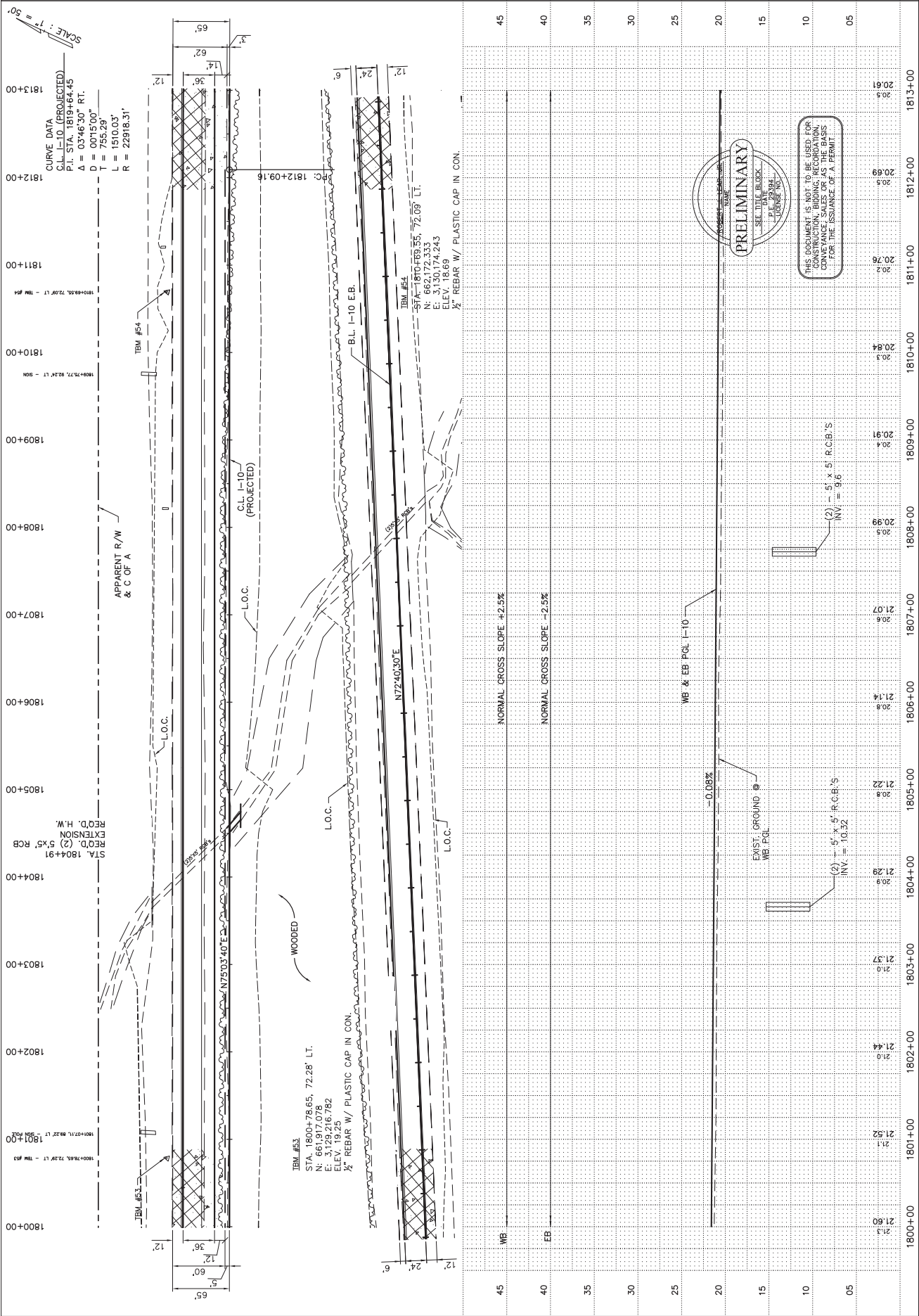




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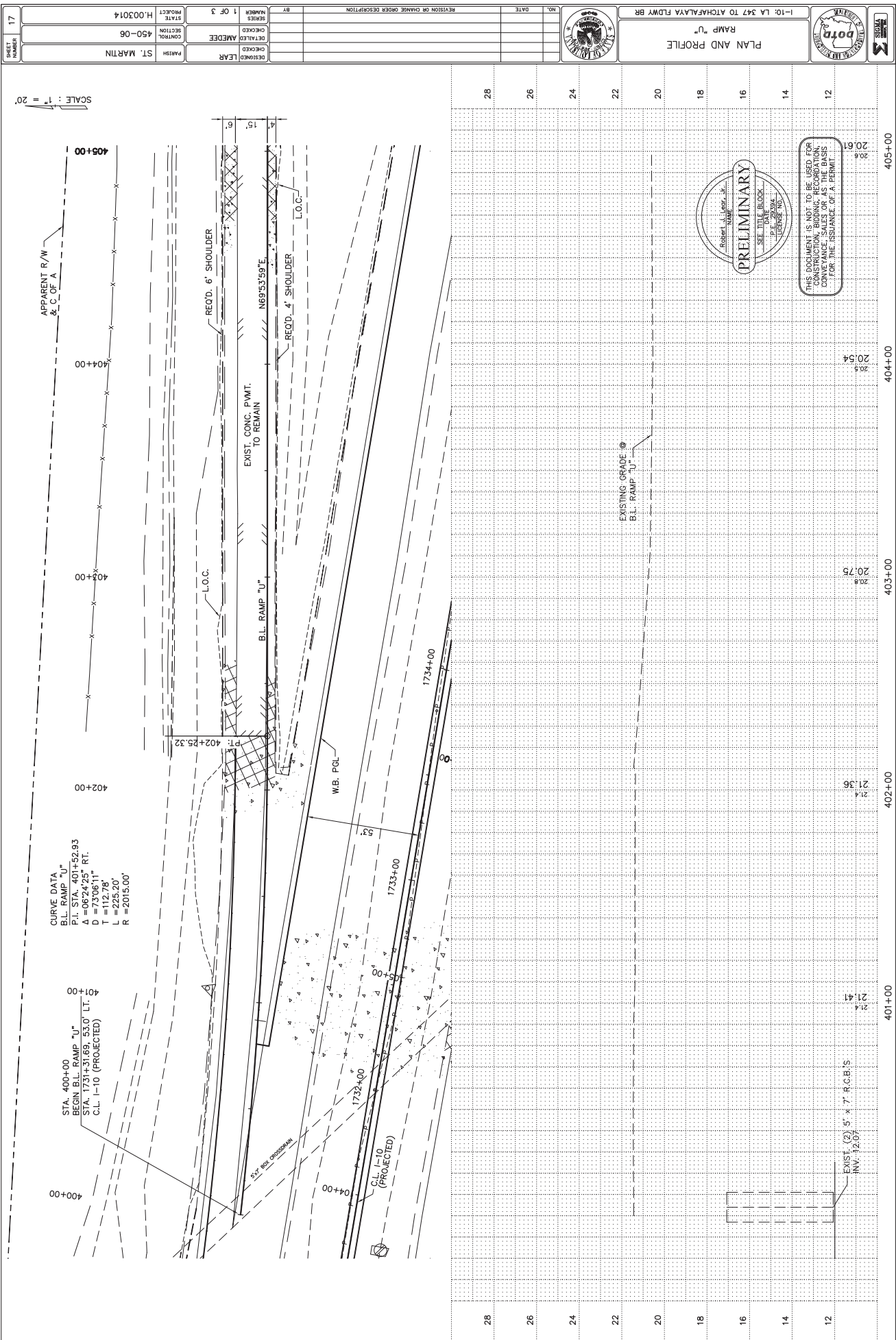


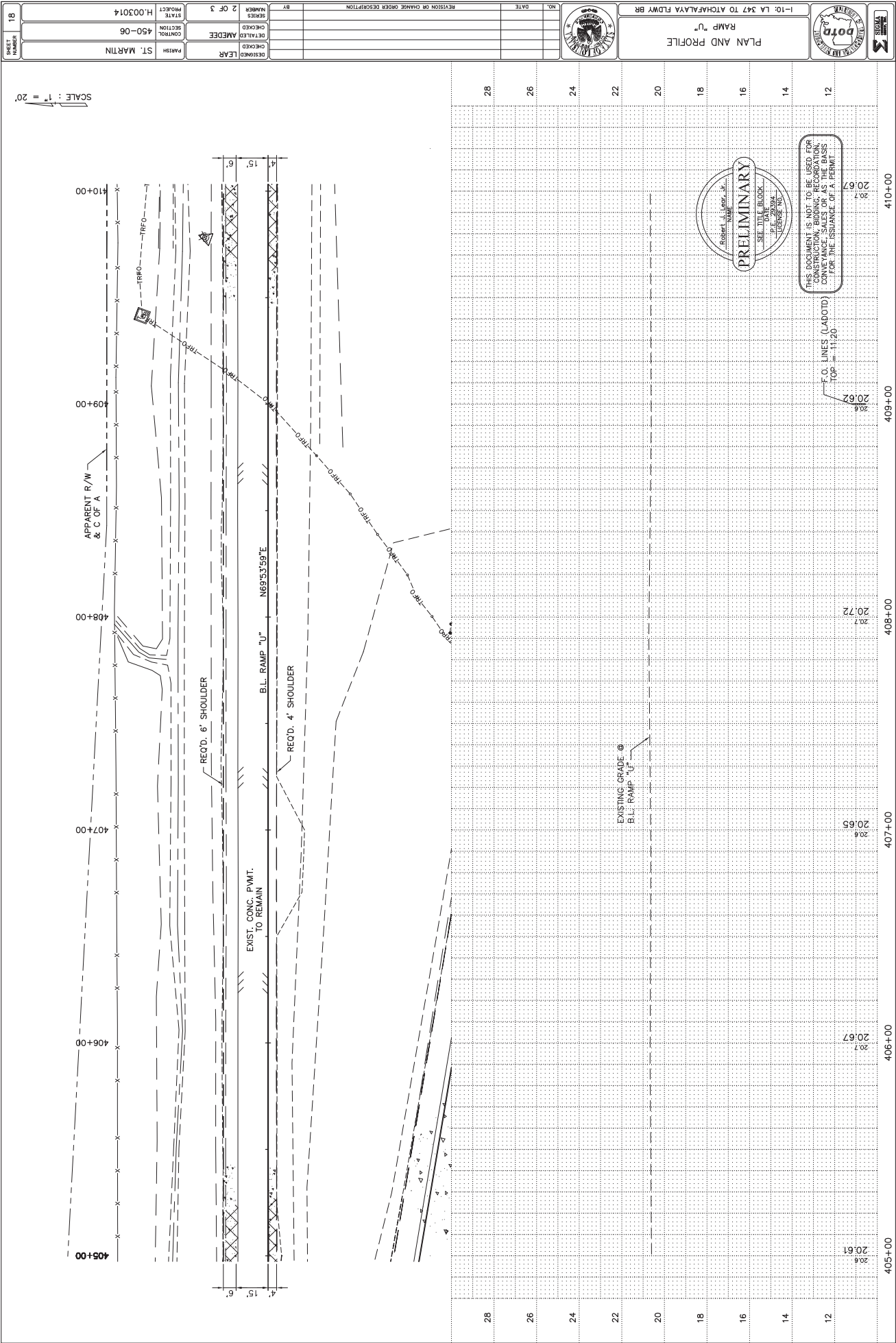


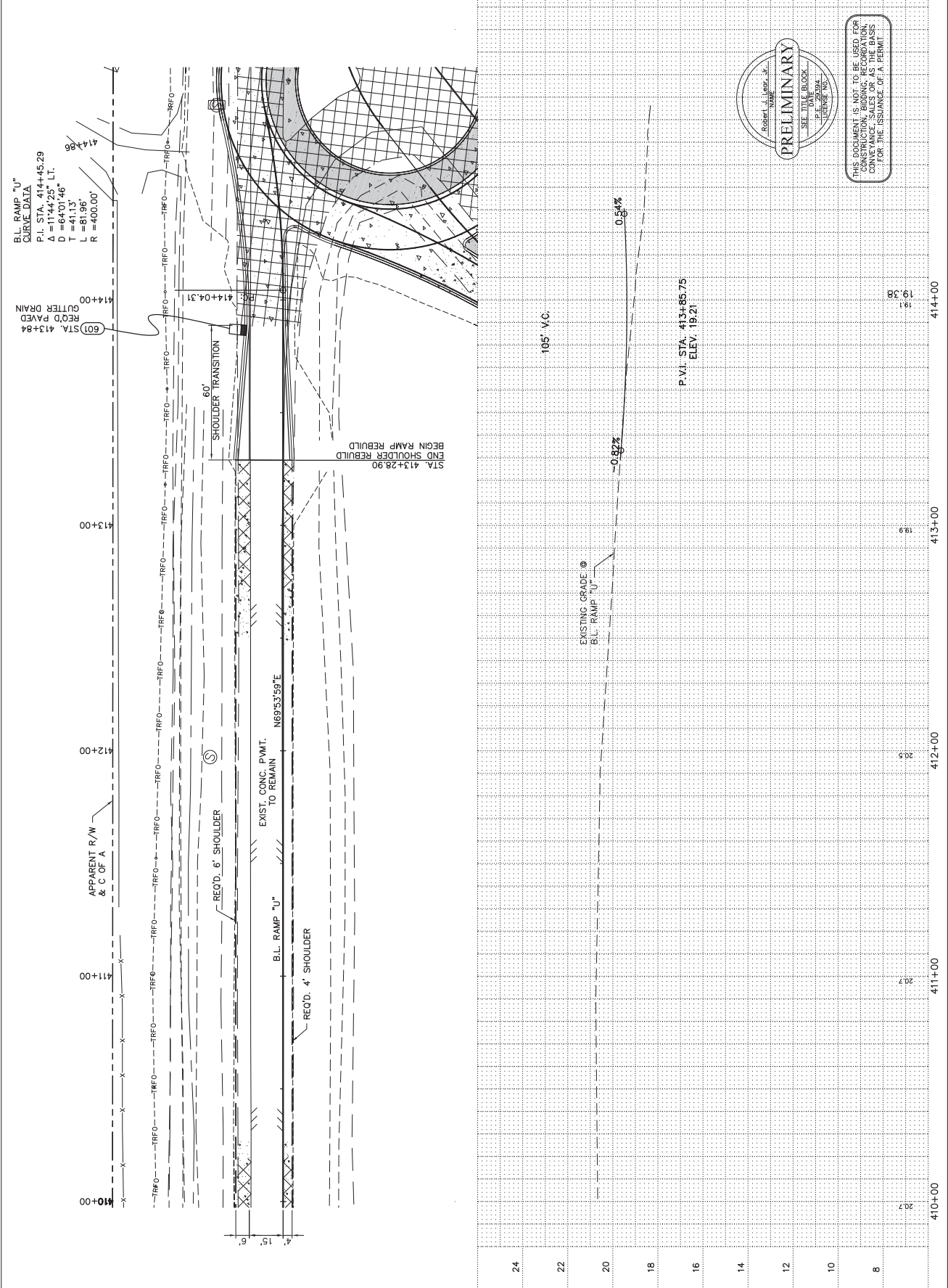


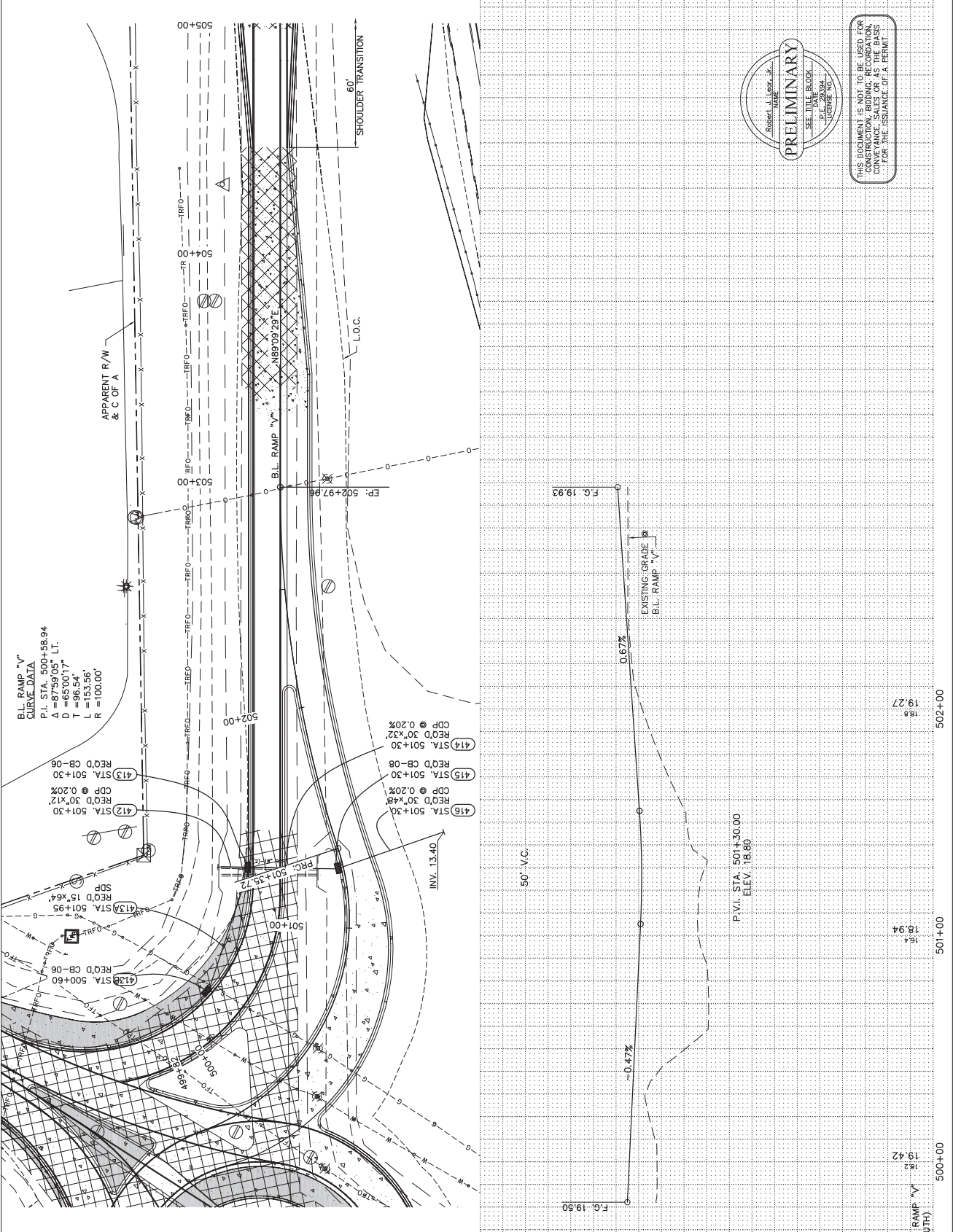




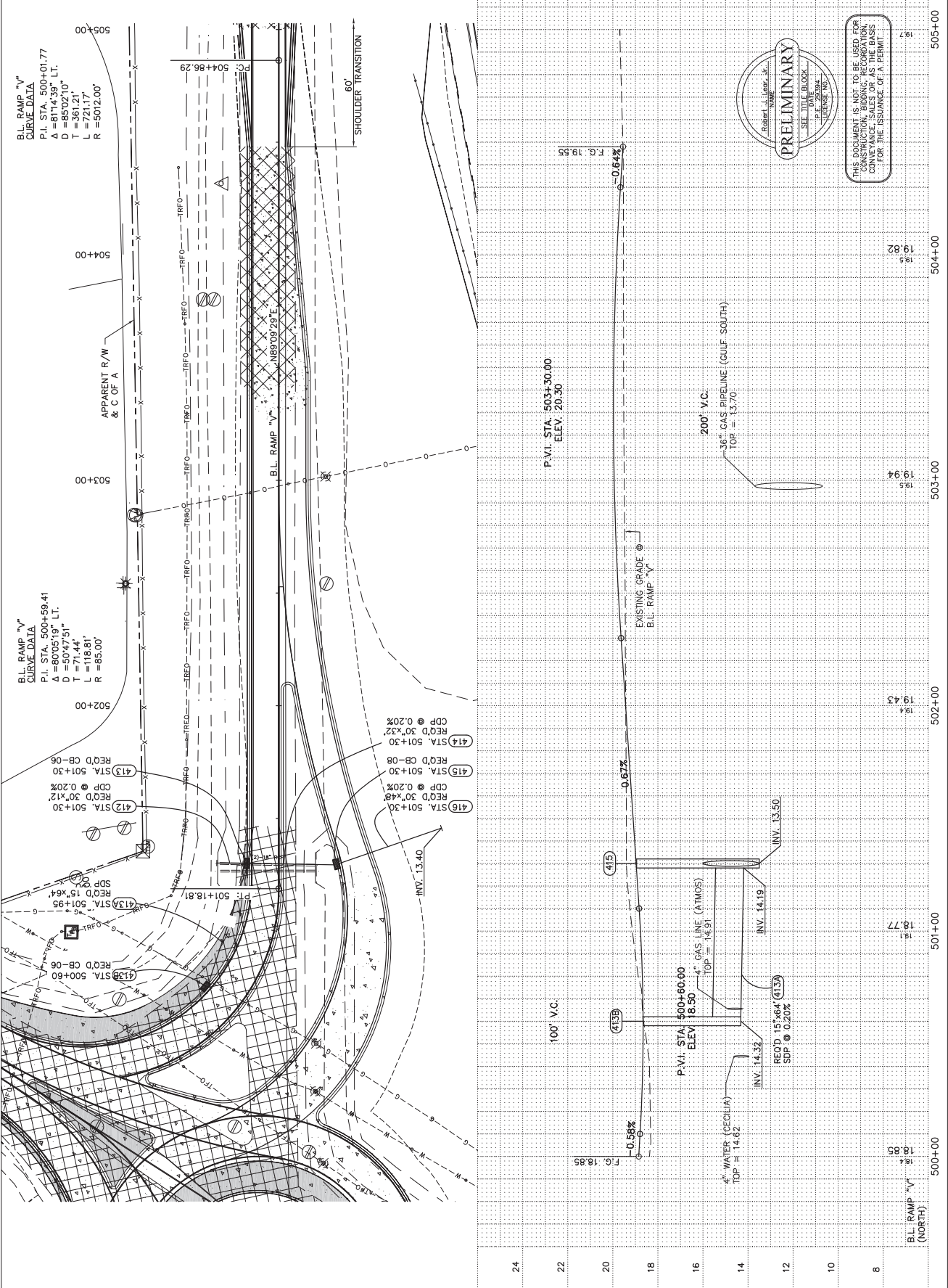






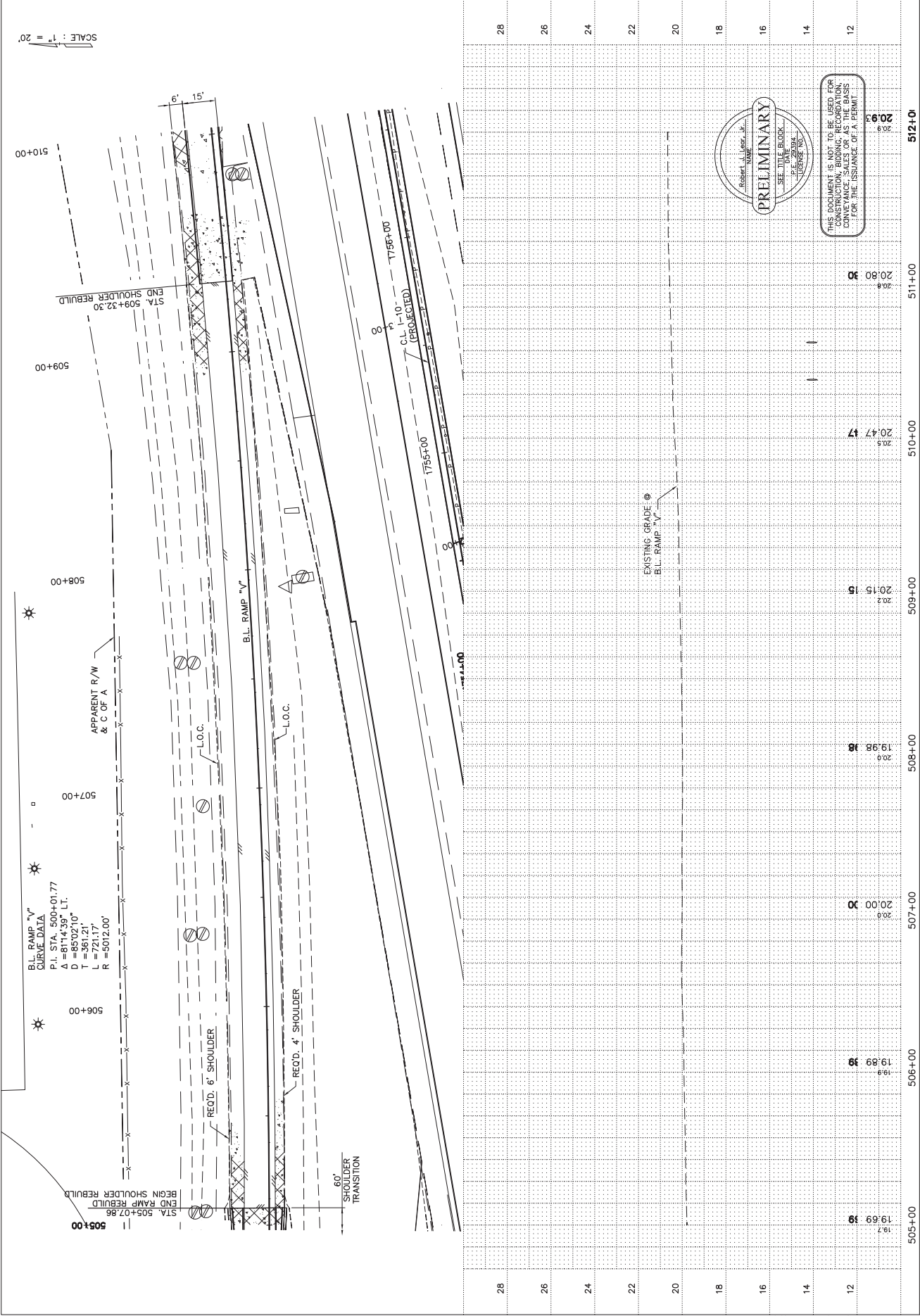


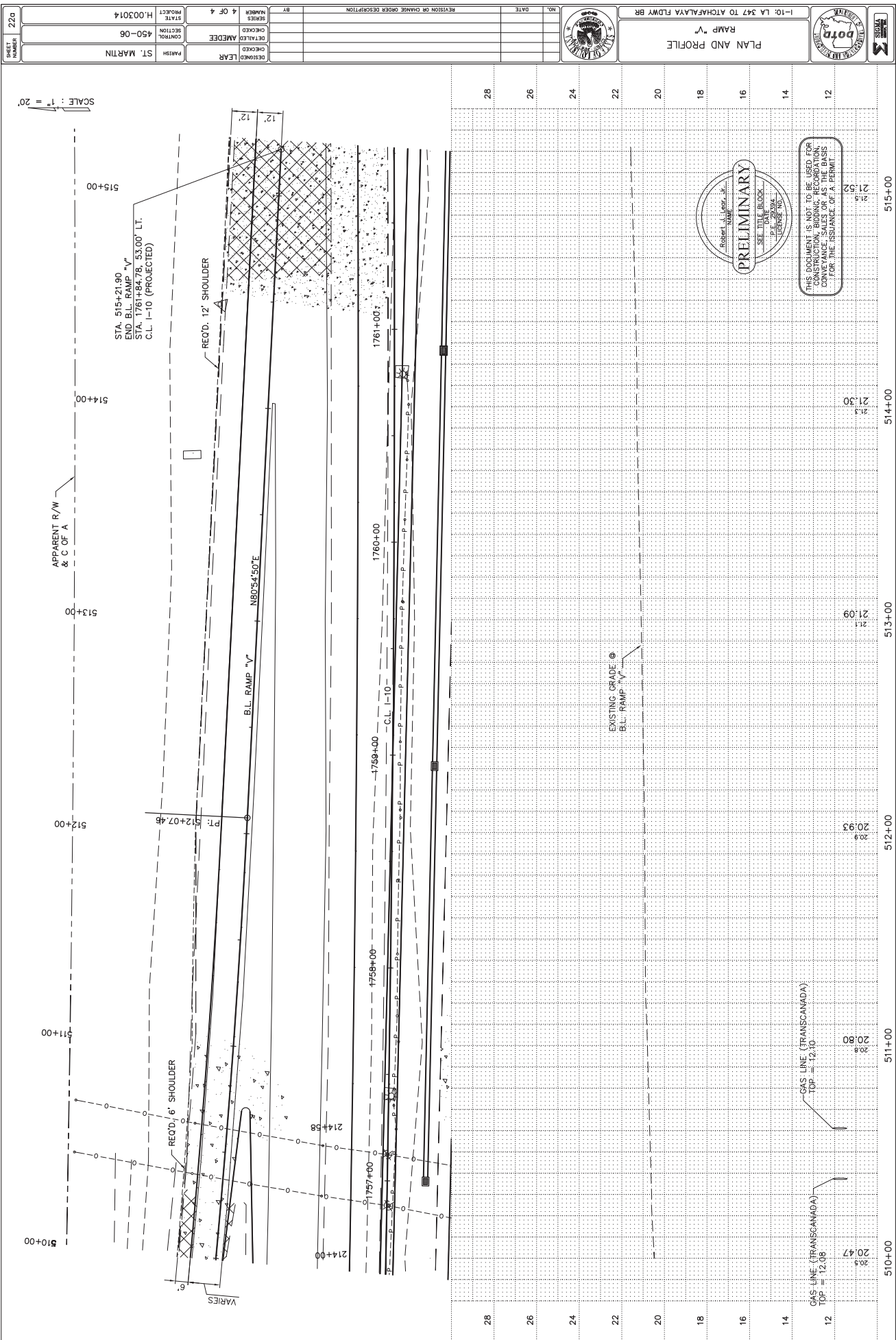
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					DESIGNED LEAR	CHECKED ST. MARTIN						

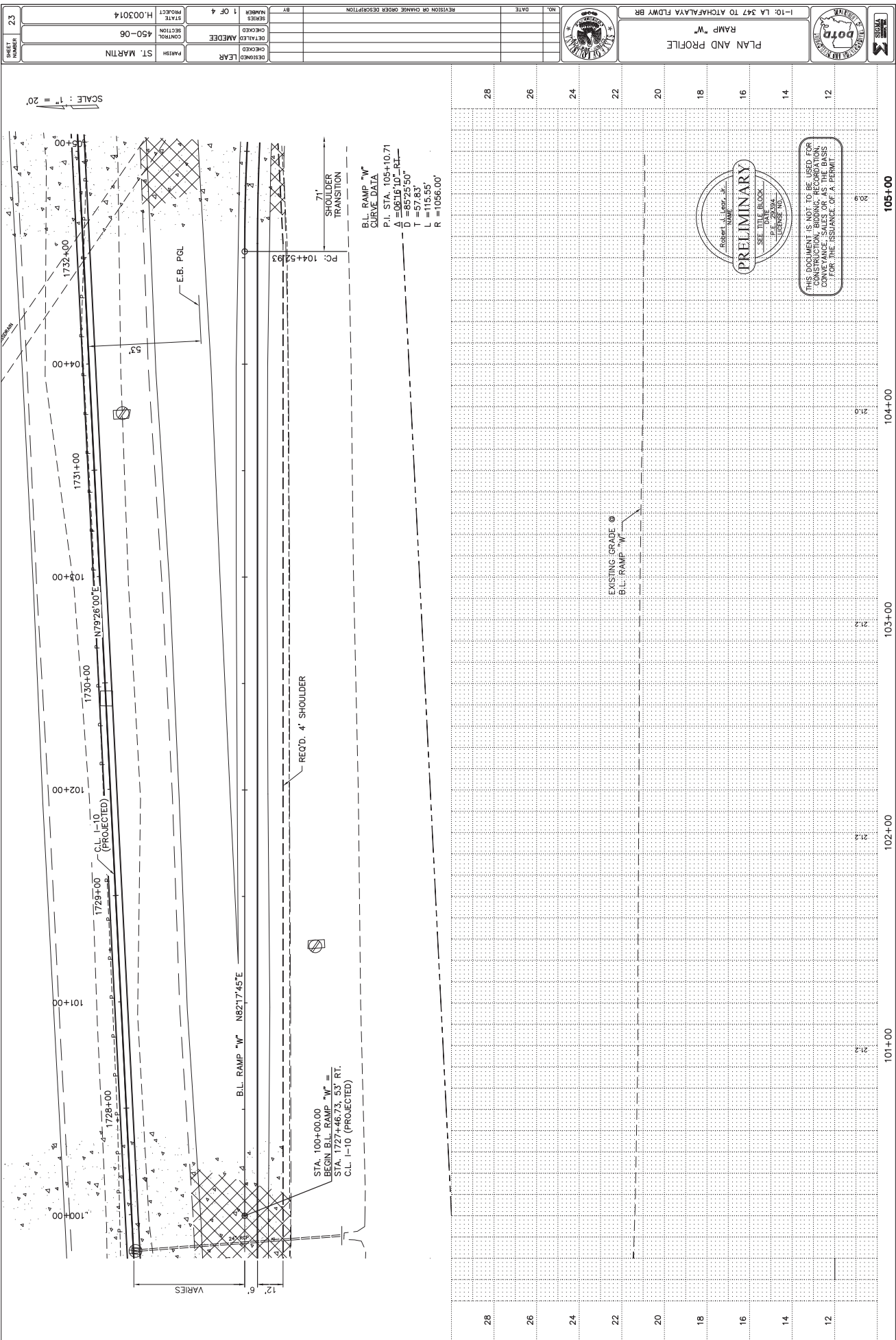


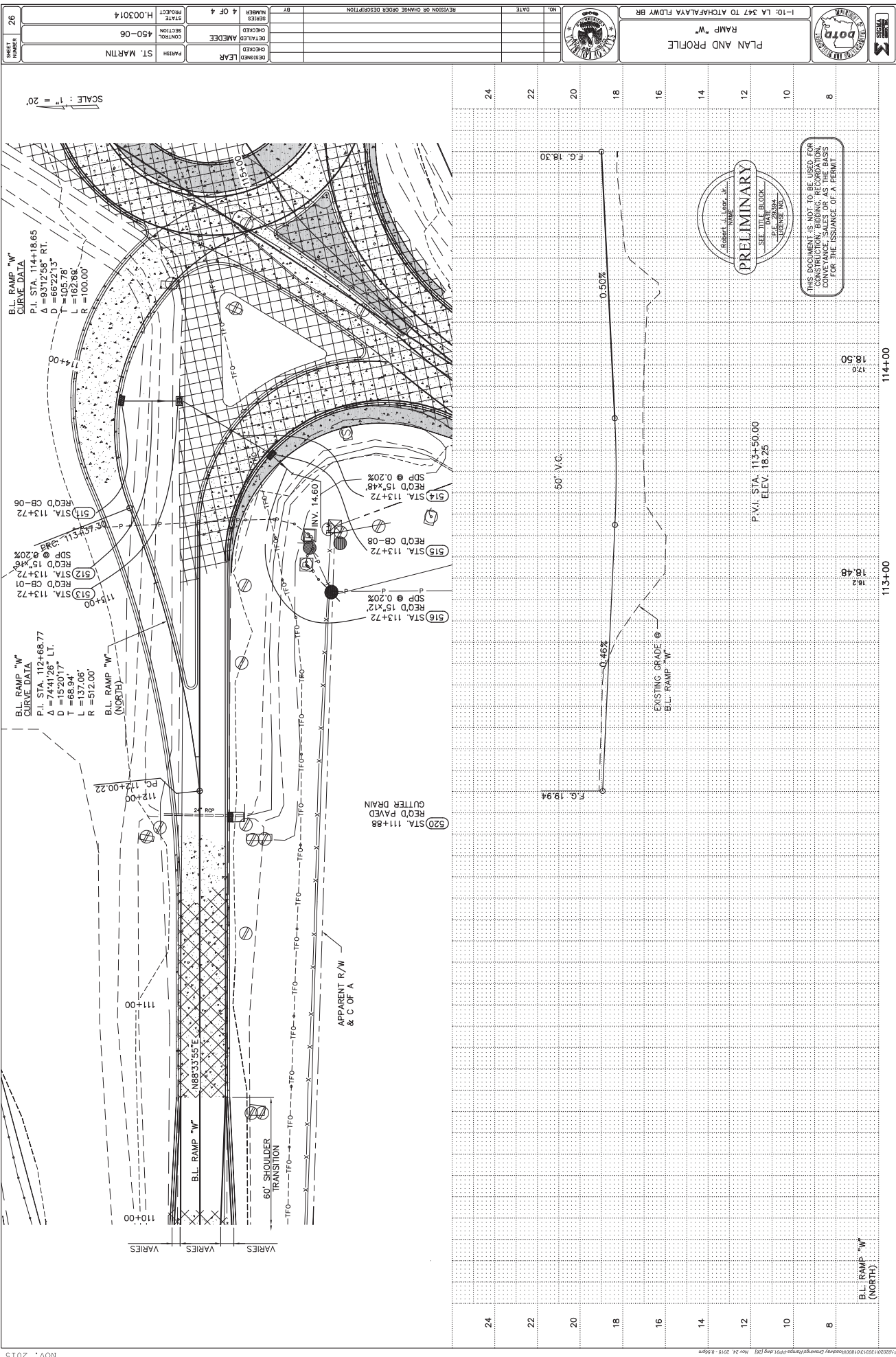
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CHECKED				CONTROL	SECTION			
DATE				BY				
NO.								
REVISION OR CHANGE ORDER DESCRIPTION								
SERIES	2 OF 4							
STATE	LA							
SHEET NUMBER	21							

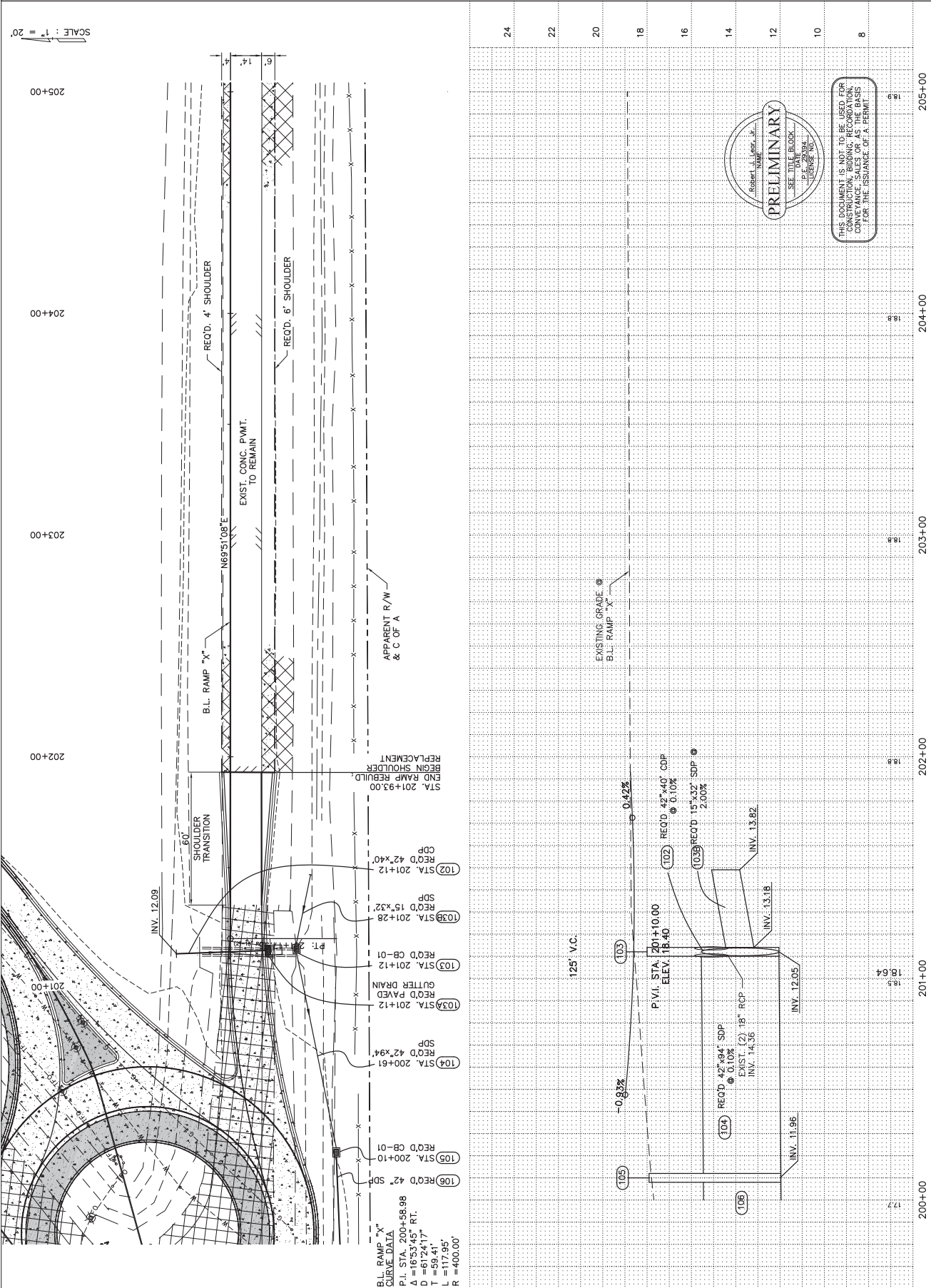
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	22		3 OF 4						
	22		3 OF 4						

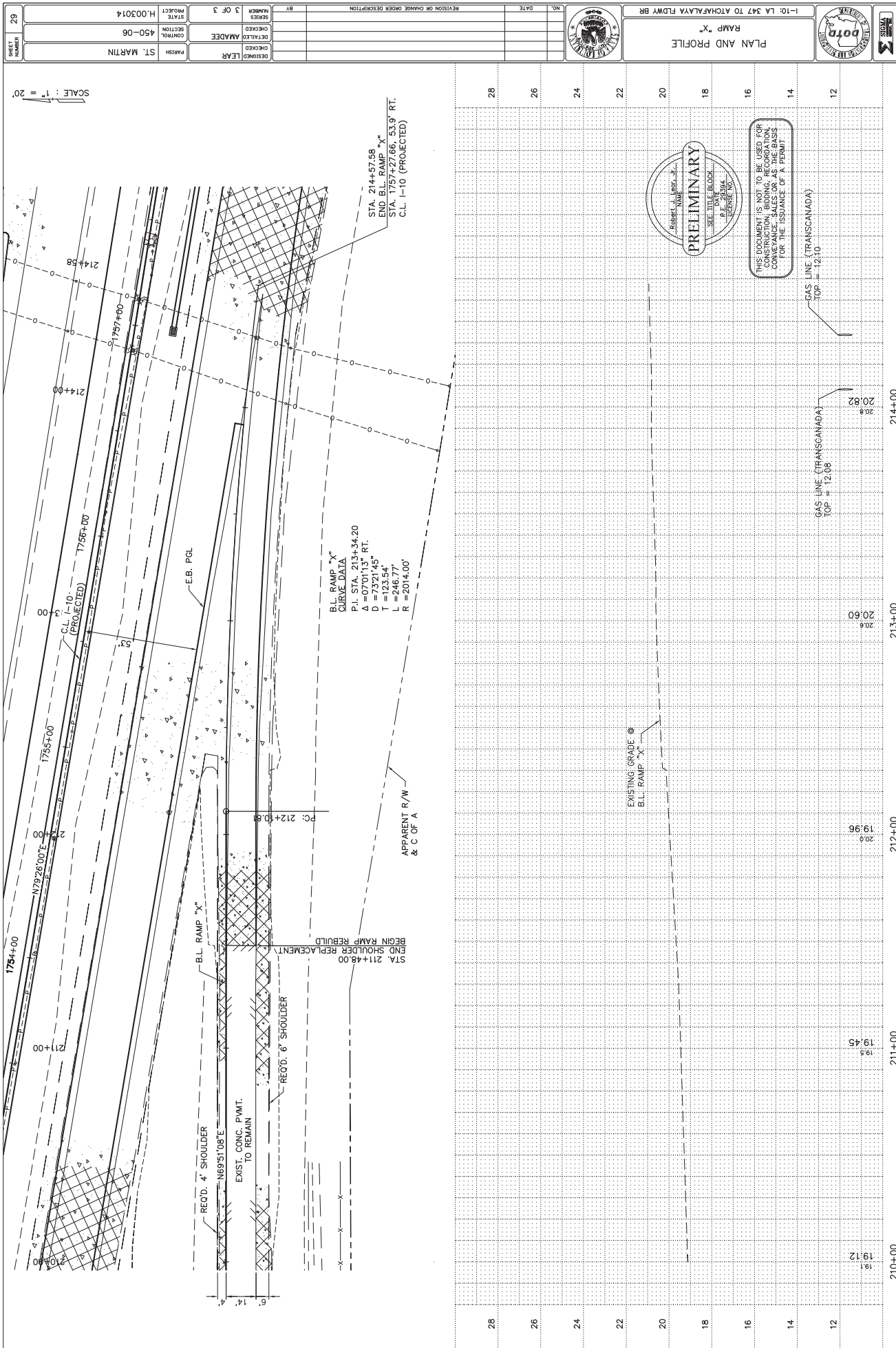


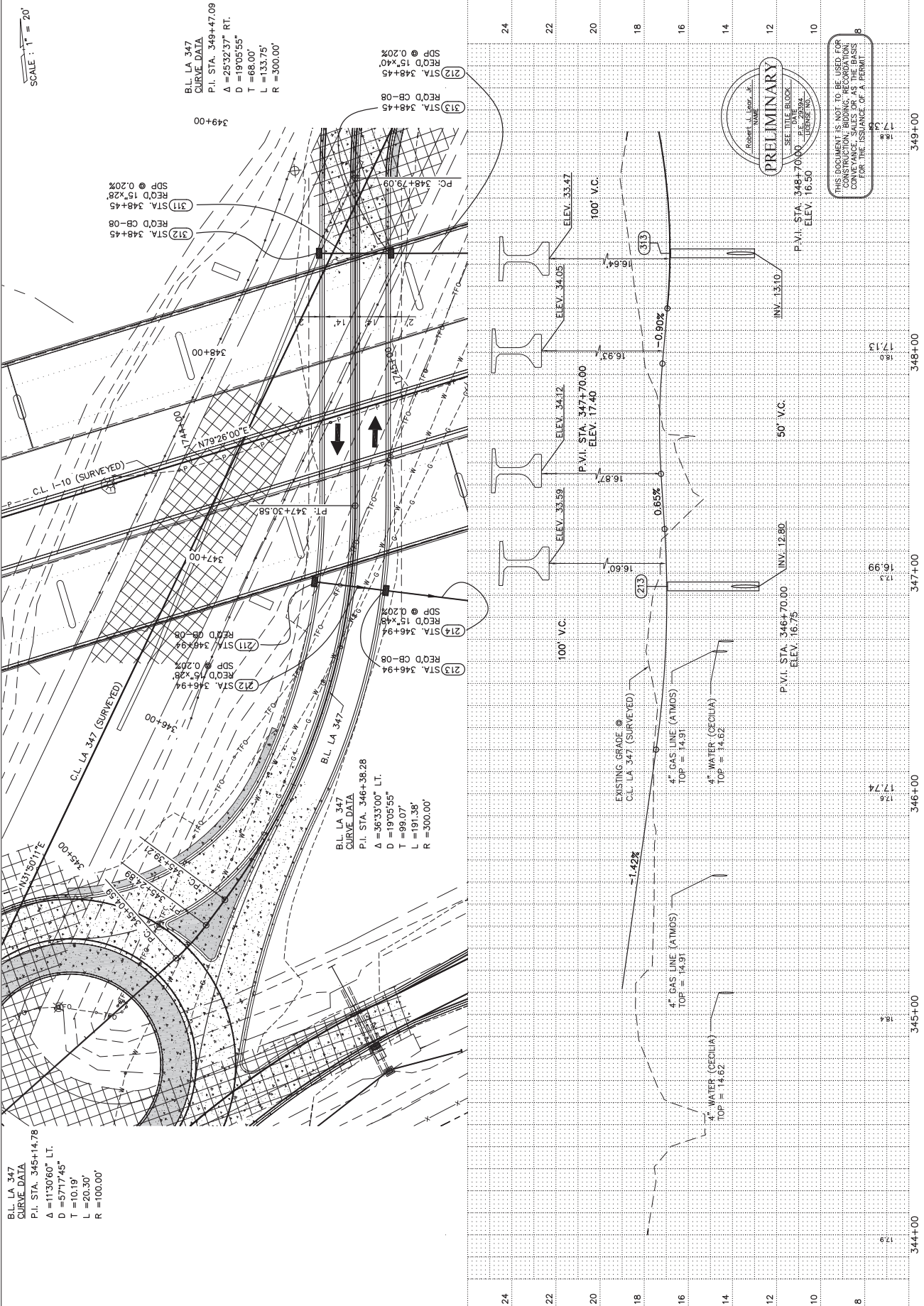


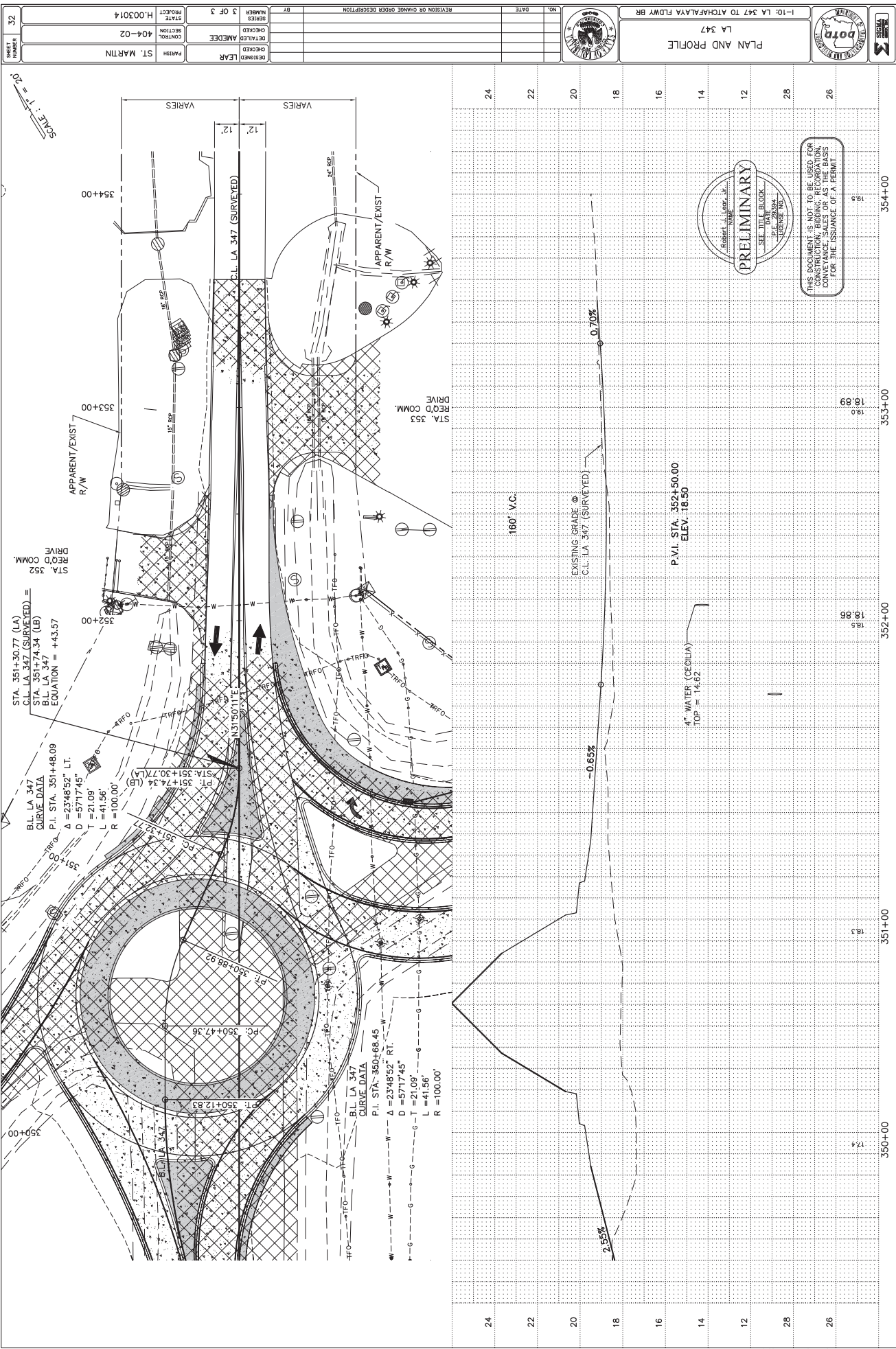




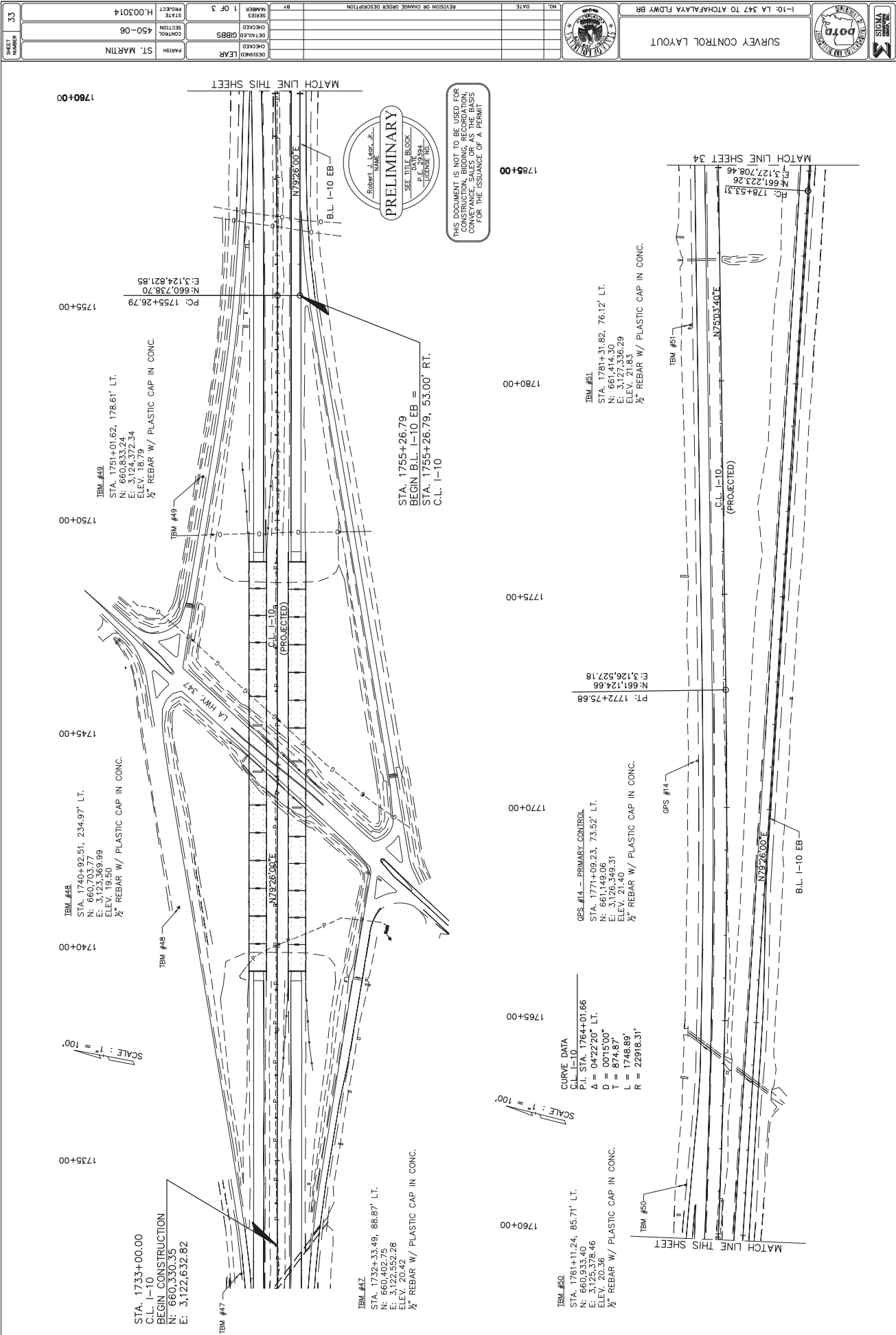


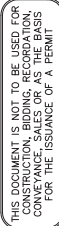


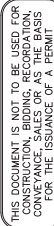


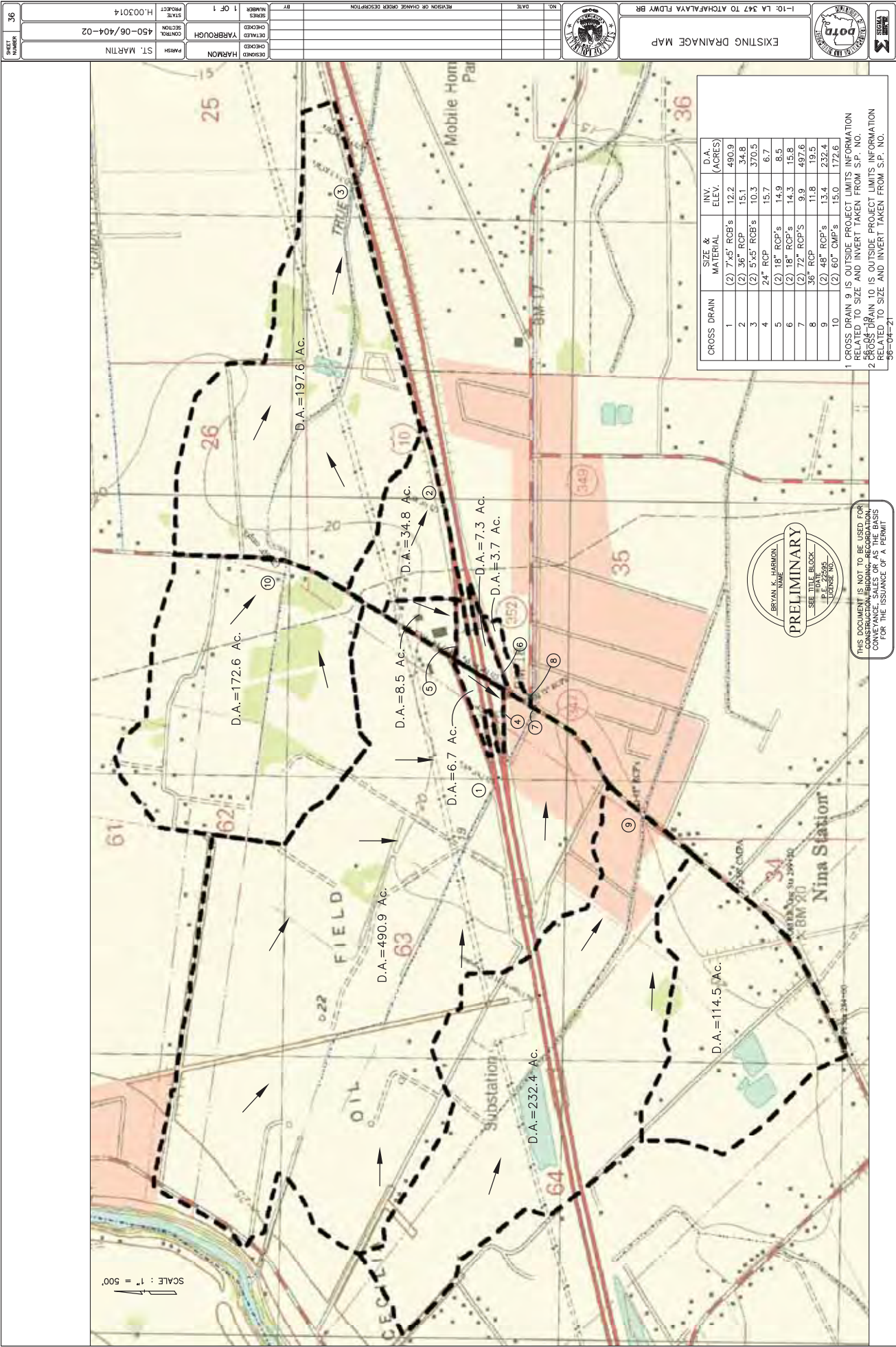


90% PRELIMINARY PLANS



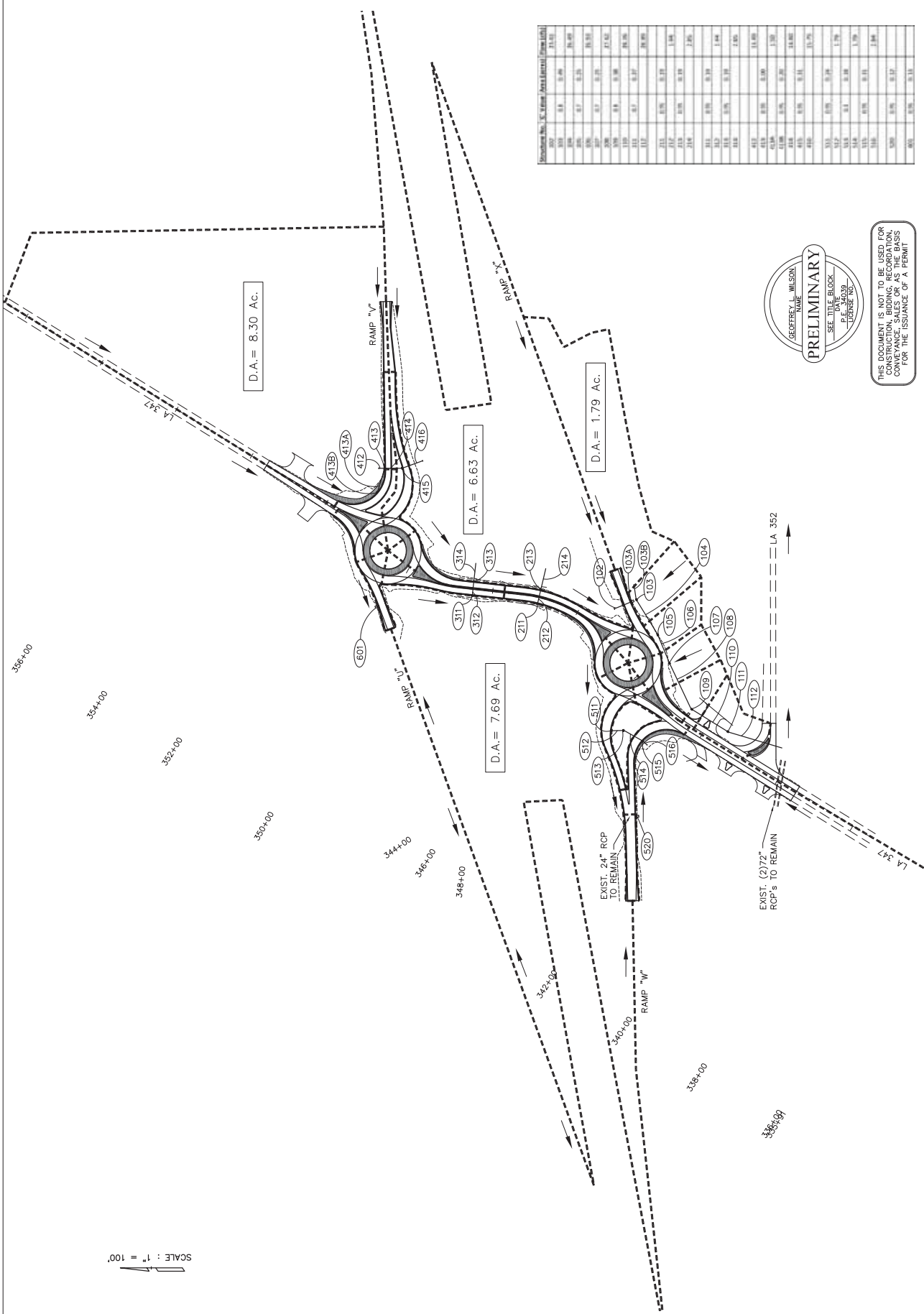




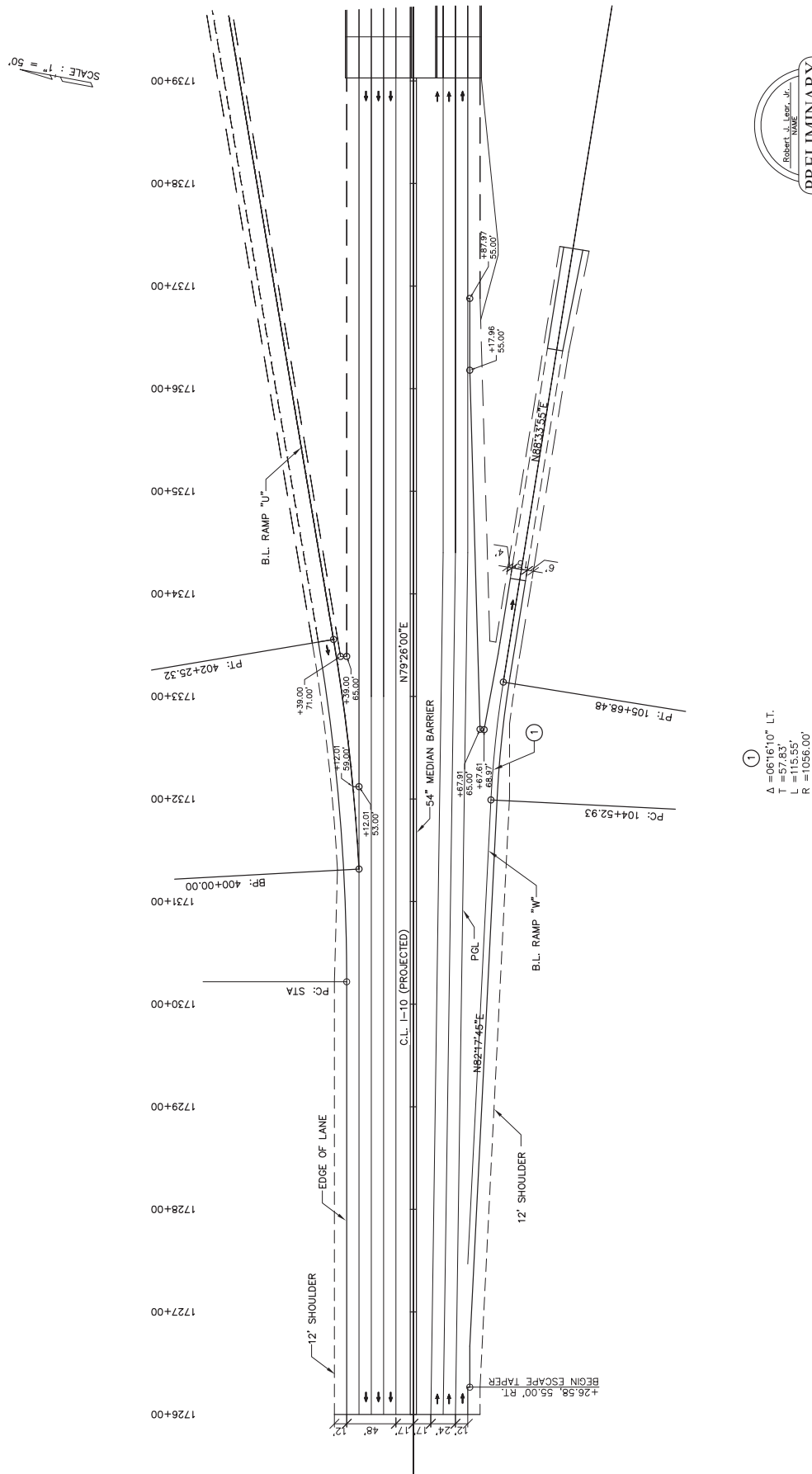




37	SHEET NUMBER	DESIGNED		DRAWN		BY		REVISION OR CHANGE DESCRIPTION
		MILSON		YARBROUGH				
		CHECKED		CHECKED				
		DATE		DATE				
		PARISH	CONTRACT	STATE PROJECT	1 OF 1			
		S.T. MARTIN	450-06/404-02	03/03/14				

[illegible]A circular stamp with a double-lined border. The word "PRELIMINARY" is written vertically in a large, bold, serif font across the center. To the left of the word, the name "GEOFFREY L. WILSON" is printed, followed by a horizontal line and the word "NAME". To the right of the word, the text "SEE TITLE BLOCK" is printed, followed by a horizontal line and the word "DATE". Below "DATE", the text "P.E. 34039" is printed, followed by a horizontal line and the words "LICENSE NO.".

THIS DOCUMENT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING, RECORDATION,
CONVEYANCE, SALES OR AS THE BASIS
FOR THE ISSUANCE OF A PERMIT



①
Δ = 06°16'10" LT.
T = 57.83'
L = 115.55'
R = 1056.00'

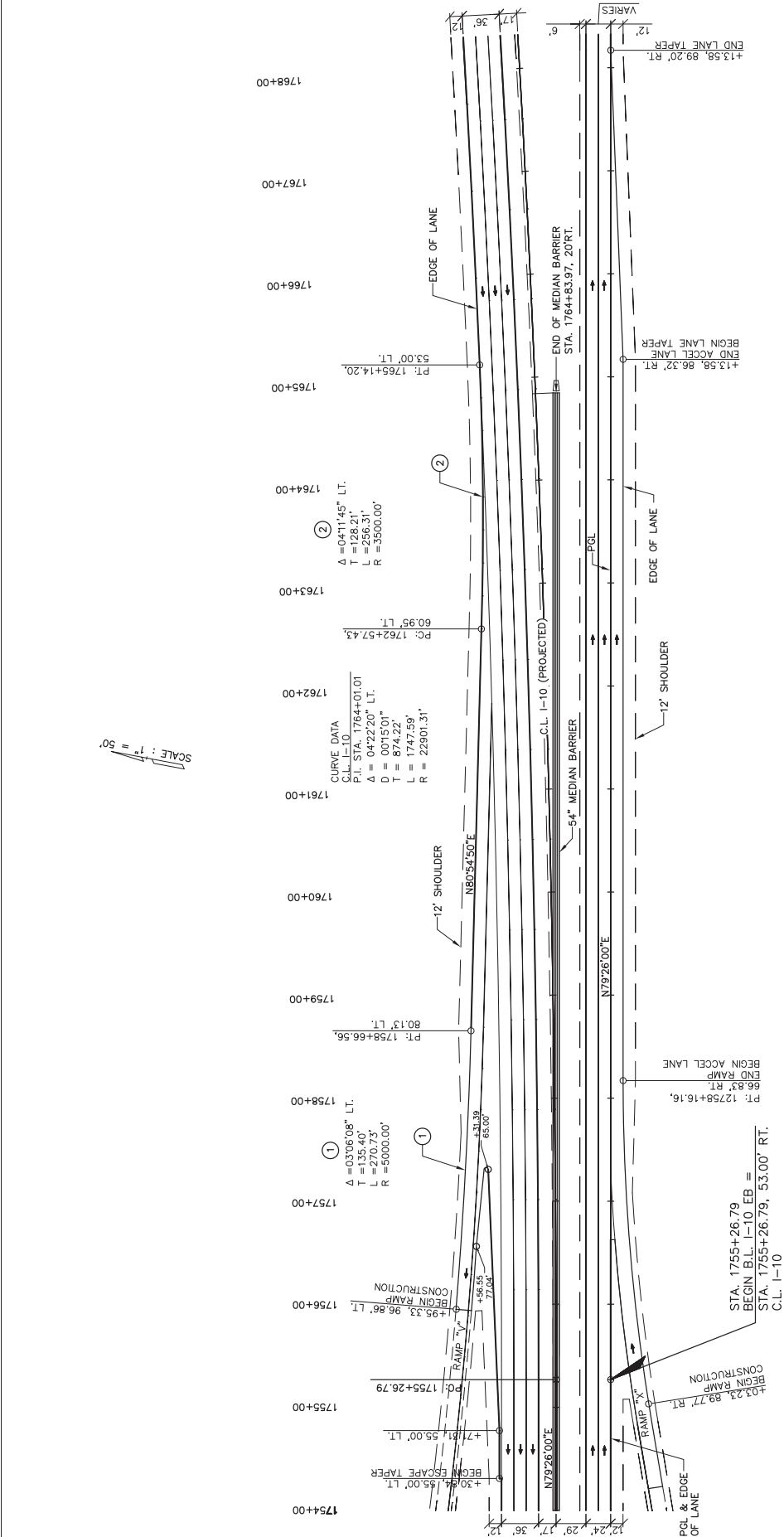
THIS DOCUMENT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING, RECORDATION,
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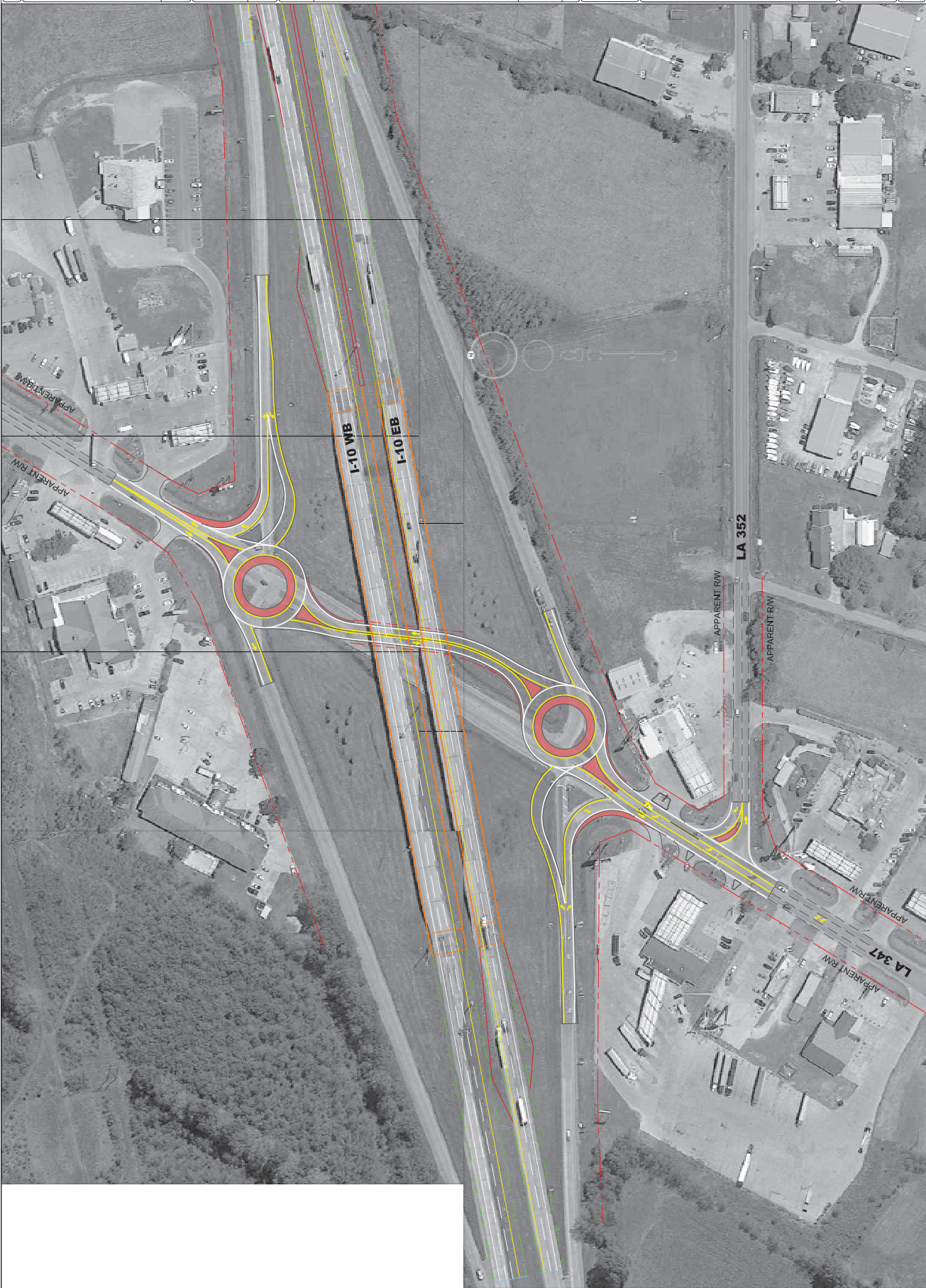


GEOMETRIC LAYOUT
BEGINNING OF PROJECT

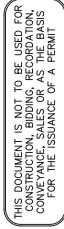
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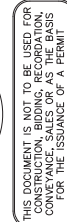
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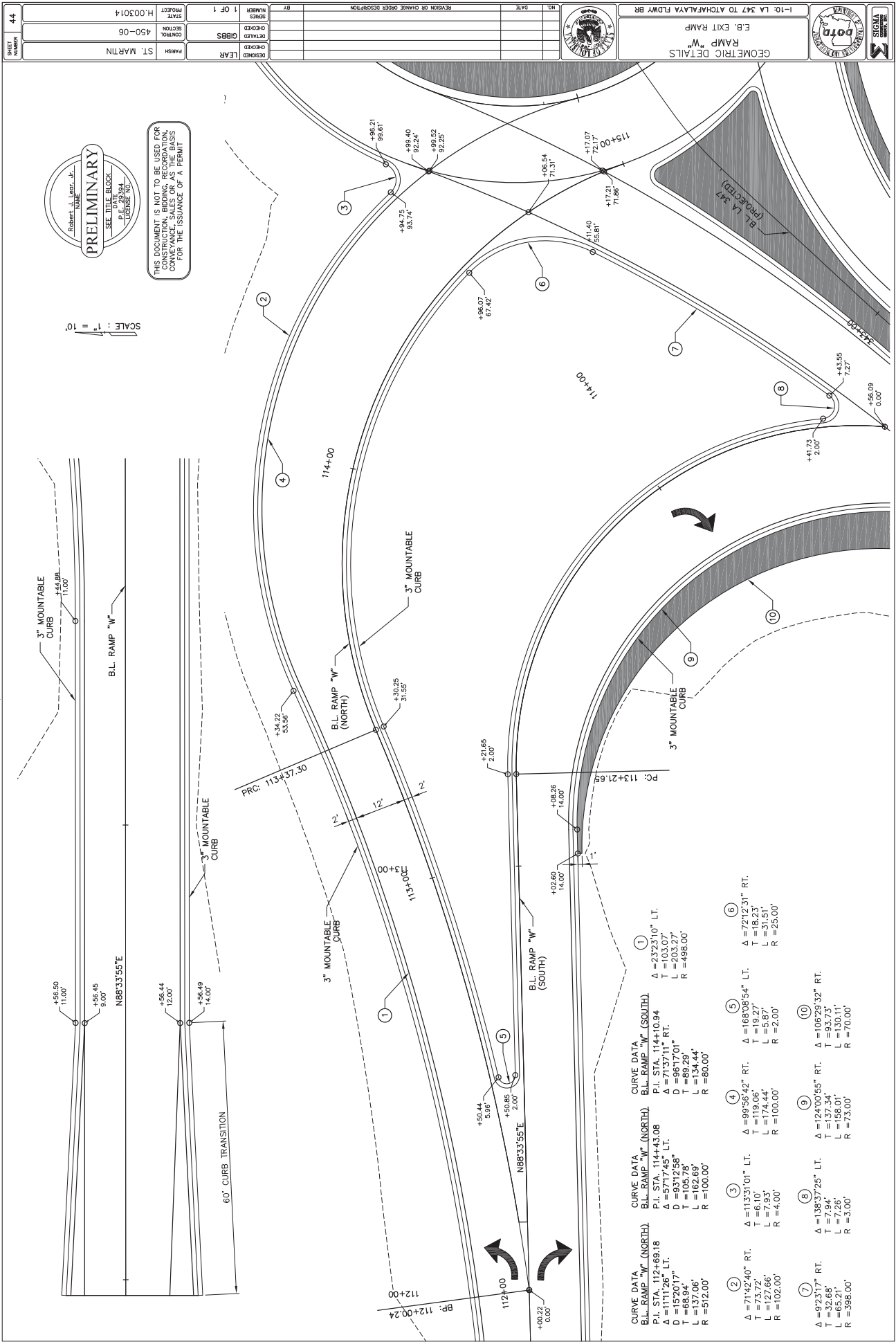


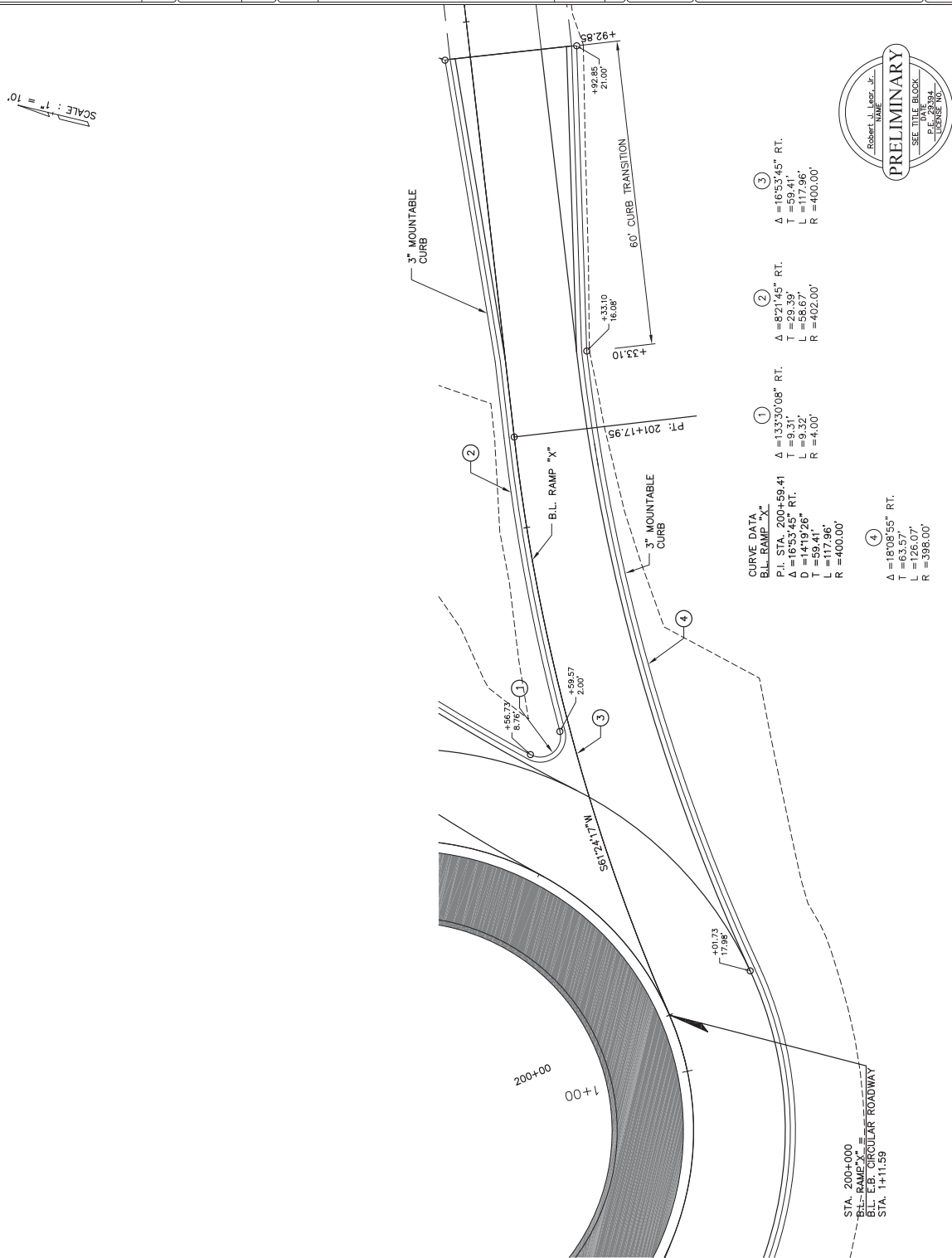
SHEET NUMBER		41
DESIGNED	LEAR	ST. MARTIN
CHECKED	LEAR	ST. MARTIN
DATE		
NO.		
BY		
REVISION OR CHANGE ORDER DESCRIPTION		
NUMBER	1 OF 1	
PROJECT	H.003014	
STATE		
COUNTY	404-02\450-06	
PARISH	ST. MARTIN	
<div> <div>LA 347 TO ATCHAFALAYA FLOWWAY BR</div> <div>LA 347 INTERCHANGE</div> <div>LAYOUT MAP</div> </div>		
<div> <div>LA 347 TO ATCHAFALAYA FLOWWAY BR</div> <div>LA 347 INTERCHANGE</div> <div>LAYOUT MAP</div> </div>		





90% PRELIMINARY PLANS



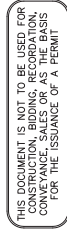
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Robert J. Lear, Jr.
NAME

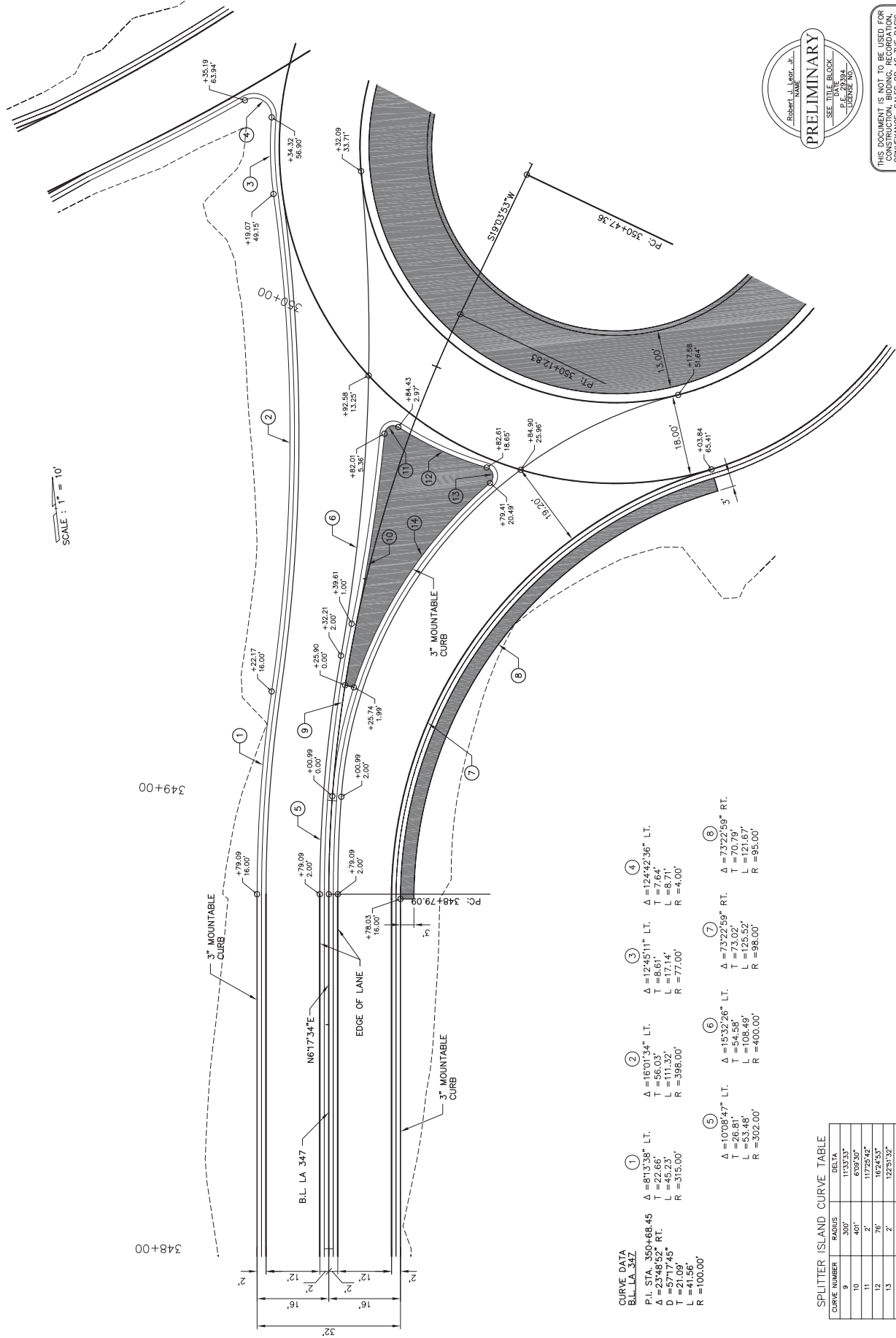
PRELIMINARY

SEE TITLE BLOCK
DATE
P.E. 29,594
LICENSE NO.









CURVE NUMBER	RADIUS	DELTA
9	300'	11°33'33"
10	401'	6°09'30"
11	2'	117°25'42"
12	76'	16°24'53"
13	2'	122°51'32"
14	102'	45°05'30"



GENERAL SEQUENCE OF CONSTRUCTION NOTES

1. THIS IS A SUGGESTED SEQUENCE OF CONSTRUCTION. CONTRACTOR MAY SUBMIT ALTERNATIVE SEQUENCE OF CONSTRUCTION PLANS TO PROJECT ENGINEER FOR APPROVAL.
2. THE CONTRACTOR WILL BE ALLOWED TO WORK ON BOTH SIDES OF THE ROADWAY AT THE SAME TIME. AT LEAST ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN DURING DAYLIGHT HOURS SPECIFIED IN THE CONTRACT AND WHEN NO WORK IS BEING PERFORMED.
3. DURING INSTALLATION OF TEMPORARY PRECAST BARRIERS, CONTRACTOR MUST TEMPORARILY CLOSE THE ADJACENT LANE OF TRAFFIC. SPECIAL PROVISIONS FOR LANE CLOSURES, WORK HOUR RESTRICTIONS AND CORRESPONDING PENALTIES.
4. DOTD FURNISHED PRECAST BARRIERS SHALL BE PICKED UP AND RETURNED TO THE PROJECT ENGINEER'S OFFICE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY SIGN UNLOADING AND STACKING. ALL BARRIERS AS DIRECTED BY THE PROJECT ENGINEER. COST OF TRANSPORTING BARRIER AS WELL AS UNLOADING AND STACKING ARE INCLUDED IN BID ITEM 713-08-00100. ALL CONTRACTOR FURNISHED TEMPORARY PRECAST BARRIER SHALL BECOME PROPERTY OF THE CONTRACTOR ONCE THE PROJECT IS COMPLETED.
5. THE CONTRACTOR SHALL HAVE ALL UTILITY LINES LOCATED WITHIN THE RIGHT-OF-WAY OF THE PROJECT LIMITS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL MAKE PROVISIONS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND SHALL BE RESPONSIBLE FOR ANY COST INCURRED REPAIRING DAMAGE LINES.
6. THERE MAY BE DOTD FIBER OPTIC CABLES WITHIN THE LIMITS OF THE PROJECT. THESE CABLES ARE NOT LOCATED AS PART OF LA ONE CALL. PRIOR TO COMMENCING WORK, THE CONTRACTOR IS REQUIRED TO E-MAIL DOTD AT "DOTDfiber-Locates.LA.gov" TO HAVE THE CABLE LOCATED. FOUR DAYS ADVANCE NOTIFICATION IS REQUIRED.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES. COST IS INCLUDED IN BID ITEM 740-01-00100.
8. ANY EXISTING PAVEMENT STRIPING WHICH CONFLICTS WITH TEMPORARY MARKING SHALL BE REMOVED BY ABRASION OR SANDBLASTING OR AS DIRECTED BY THE PROJECT ENGINEER.
9. TEMPORARY STRIPING ON ALL FINAL WEARING SURFACES SHALL BE TYPE I REMOVABLE TYPE. TEMPORARY STRIPING ON ALL EXISTING PAVED SURFACES SHALL BE TYPE II REMOVABLE WEARING SURFACES TO BE REMOVED. EDGE LINE AND CENTERLINE STRIPING SHALL BE REQUIRED DURING ALL PHASES.
10. MINIMUM CONSTRUCTION SIGNING SHOWN. ANY ADDITIONAL SIGNS SHOWN IN THE LATEST MINIMUM CONSTRUCTION SIGNING SCHEDULE SHALL BE REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED. COST IS INCLUDED IN BID ITEM 713-01-00100.
11. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
12. IN ADDITION TO THE REQUIRED FLASHING ARROW PANELS, THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR. SIGNS SHALL BE USED TO MAINTAIN ADEQUATE TRAFFIC FLOW DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REMAIN IN WORKING ORDER FOR THE DURATION OF THE PROJECT CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY REPLACE MALFUNCTIONING PORTABLE MESSAGE SIGNS AND FLASHING ARROW PANELS. COST OF PANELS IS INCLUDED IN BID ITEMS 713-01-00100 AND NS-713-00008.
13. WESTBOUND "END ROAD WORK" SIGN (G20-2) SHALL BE COORDINATED ACCORDINGLY IF PHASE 1 AND 2 ARE CONSTRUCTED CONCURRENTLY.

LA 347 SEQUENCE OF CONSTRUCTION NOTES

1. LA 347 ROUNDABOUTS SHALL BE CONSTRUCTED PRIOR TO BEGINNING PHASE 3 CONSTRUCTION OF I-10 MAINLINE.
2. A MINIMUM OF (6) STRIPPED LANE WIDTHS ARE REQUIRED AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.
3. NO ROAD CLOSURES ARE ALLOWED DURING CONSTRUCTION. SINGLE LANE CLOSURES SHALL BE FLAGGED AS PER TTC-005 AT ALL TIMES.
4. NIGHT WORK WILL BE ALLOWED TO EXPEDITE CONSTRUCTION
5. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED A MINIMUM OF 2 WEEKS BEFORE CONSTRUCTION BEGINS. SEE TTC STANDARDS. PCMS SHALL BE PAID UNDER ITEM 713-01-00100 TEMPORARY SIGNS AND BARRICADES.
6. MULTIPLE PHASES MAY BE DONE CONCURRENTLY IF ALL REQUIREMENTS/RESTRICTIONS ARE MET AS DIRECTED BY THE P.E.
7. ANY OTHER PROPOSED SEQUENCES NOT SHOWN IN THE PLANS SHALL BE APPROVED BY THE P.E., AT A MINIMUM OF 10 DAYS BEFORE THE PROPOSED SEQUENCE IS TO BEGIN CONSTRUCTION.
8. ALL PERMANENT SIGNING LOCATIONS TO BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER.

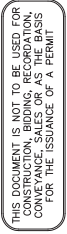
90% PRELIMINARY PLANS

PRELIMINARY
NOT TO BE USED FOR
CONSTRUCTION,
BIDDING,
RECORDATION,
CONVEYANCE, SALES
OR AS THE BASIS FOR
THE ISSUANCE OF A
PERMIT.

SIGMA CONSULTING
GROUP, INC.

ENGINEER: GREGORY P. SEPEDA
LICENSE #: P.E. 26669
DATE: 11/25/2015

SHEET NUMBER 51		PROJECT H.003014		STATE LA		SECTION 450-06		PARISH ST. MARTIN		DESIGNED SEPEDA		CHECKED AMCEEE		DRAWN BY BY		REVISION OR CHANGE ORDER DESCRIPTION		DATE		NO.				SUGGESTED SEQUENCE CONSTRUCTION GENERAL NOTES		I-10 LA 347 TO ATCHAFALAYA BR.					
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A circular preliminary seal for the Professional Engineer (P.E.) registration of Miles B. Williams. The seal is divided into three horizontal sections. The top section contains the name "MILES B. WILLIAMS" and the word "NAME". The middle section contains the word "PRELIMINARY" in large, bold, capital letters. The bottom section contains the text "SEE TITLE BLOCK", "DATE", "P.E. 25669", and "LICENSE NO.".

SUGGESTED
SEQUENCE OF CONSTRUCTION
LA 347 PHASE 1
I-10: LA 347 TO ATCHAFALAYA BR



SIGMA
CONSULTING
GROUP, INC.



NO.	DATE

9

STATION OR CHANGE OF

OR DESCRIPTION

By	

DESIGNED	CHECKED
WILL	
DETAILED	CHECKED
YAR	
SERIES	NUMBER
1	0







AMS	ROUGH	8	STAT
PARTS	CONT	SECT	PROJ

ST. MARTIN	450-06	H.003014
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SHEET NUMBER	52
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1. PLACE CHANNELIZATION DEVICES AND SIGNING.
2. EXISTING ROADWAY TO REMAIN OPEN TO 2-WAY TRAFFIC AND FUNCTION AS A 4-WAY STOP. EXISTING SPEED LIMIT TO BE REDUCED BY 10 MPH. POMS MESSAGE AS PER DTOE.
3. INSTALL TEMPORARY STRIPING TO DIVERT PATH OF TRAFFIC.
4. CONSTRUCTION ON LA 352 IS STAGED SO AS TO PROVIDE 2-WAY TRAFFIC AT ALL TIMES.






- | | |
|---|--|
| • • • • • | CHANNELIZATION DEVICES |
|  | EXISTING PAVEMENT REMOVAL |
|  | PERMANENT PAVEMENT CONSTRUCTED UNDER THIS PHASE |
|  | PERMANENT PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES |
|  | TEMPORARY PAVEMENT CONSTRUCTED UNDER THIS PHASE |
|  | STAGED CONSTRUCTION |
|  | TEMPORARY PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES |
| I | TYPE III BARRICADE |

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FOR THE ISSUANCE OF A PERMIT

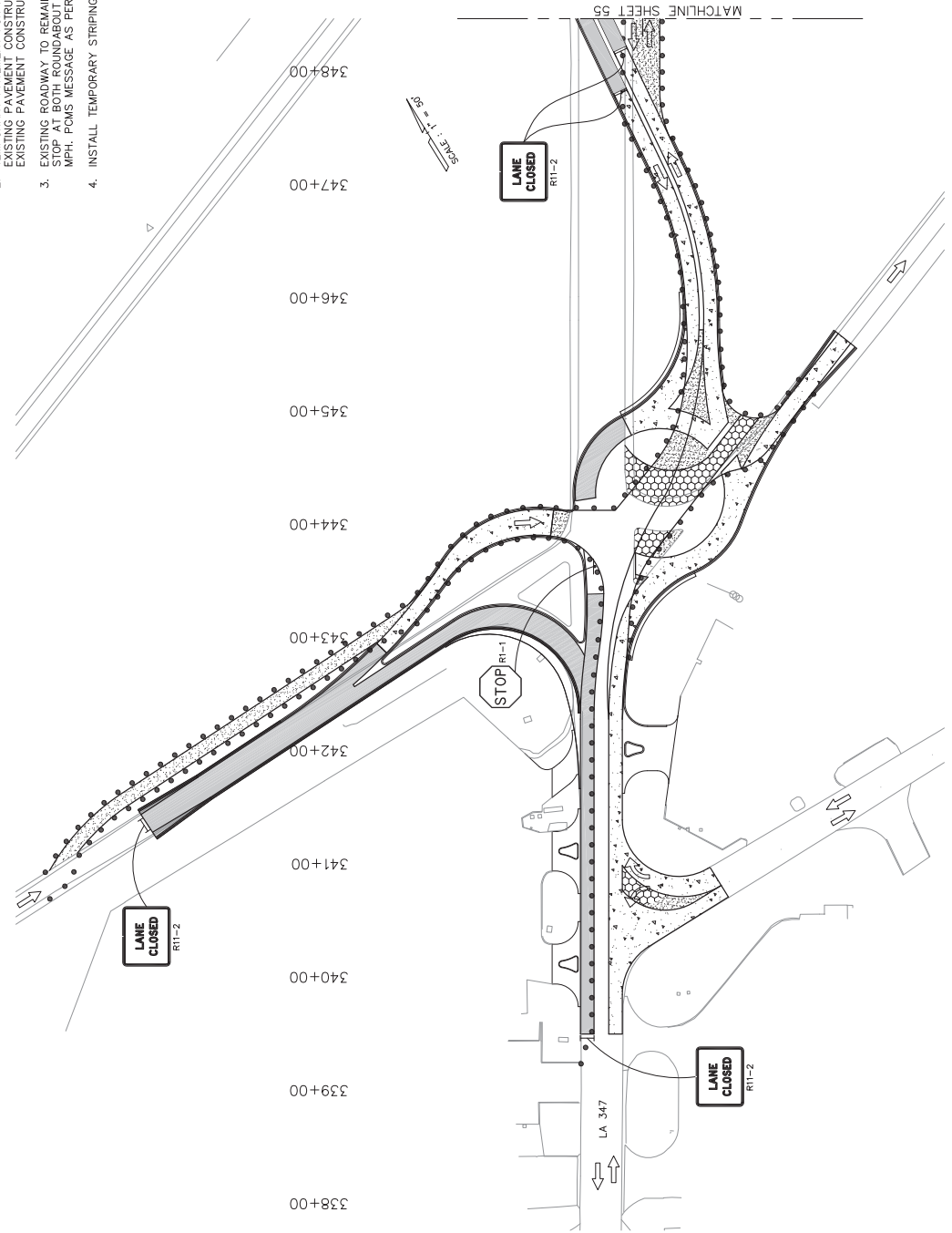
REFERENCE:
TTC-00 (A-D)
TTC-01
TTC-02

DESIGN SPEED = XX MPH



53	SHEET NUMBER	ST. MARTIN	PARISH	WILLIAMS	DESIGNED CHECKED	CONTROL SECTION	450-06	PROJECT H 003014
				OTTAWAVE	2 OF 8	STATE		
								REVISION OR CHANGE ORDER DESCRIPTION
								DATE
								NO.
								1-10: LA 347 TO ATCHAFALAYA BR
								 SUGGESTED SEQUENCE OF CONSTRUCTION LA 347 PHASE 2
								 SUGGESTED SEQUENCE OF CONSTRUCTION LA 347 PHASE 2
								 SUGGESTED SEQUENCE OF CONSTRUCTION LA 347 PHASE 2

- PHASE 3 CONSTRUCTION NOTES:
1. PLACE CHANNELIZATION DEVICES AND SIGNING.
 2. TEMPORARY PAVEMENT FOR ALL DIVERSION ROADS SHALL BE CONSTRUCTED PRIOR TO EXISTING PAVEMENT CONSTRUCTION. TRAFFIC TO BE SHIFTED TO DIVERSION ROAD DURING EXISTING PAVEMENT CONSTRUCTION.
 3. EXISTING ROADWAY TO REMAIN OPEN TO 2-WAY TRAFFIC AND FUNCTION AS A 3-WAY STOP AT BOTH ROUNDABOUT LOCATIONS. EXISTING SPEED LIMIT TO BE REDUCED BY 10 MPH. POMS MESSAGE AS PER DOTE
 4. INSTALL TEMPORARY STRIPING TO DIVERT PATH OF TRAFFIC.



- LEGEND
- • • • •
 - CHANNELIZATION DEVICES
 - EXISTING PAVEMENT REMOVAL
 - PERMANENT PAVEMENT CONSTRUCTED UNDER THIS PHASE
 - PERMANENT PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES
 - TEMPORARY PAVEMENT CONSTRUCTED UNDER THIS PHASE
 - TEMPORARY PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES
 - TYPE III BARRIERS



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REFERENCE:
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TTC-01
TTC-02

DESIGN SPEED = XX MPH




SHEET NUMBER	54	DESIGNED	WILLIAMS	PARISH	ST. MARTIN	CONTROL SECTION	450-06	STATE PROJECT	H.003014	SERIES	J OF 8	BY	DATE	NO.	REVISION OR CHANGE ORDER DESCRIPTION	SUGGESTED SEQUENCE OF CONSTRUCTION	LA 347 PHASE 3	I-10: LA 347 TO ATCHAFALAYA BR	SUGGESTED SEQUENCE OF CONSTRUCTION	LA 347 PHASE 3	I-10: LA 347 TO ATCHAFALAYA BR

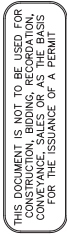


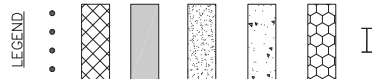
MILES B. WILLIAMS
 NAME
 PRELIMINARY
 SEE TITLE BLOCK
 DATE
 P.E. 26669
 LICENSE NO.

LEGEND



55	SHEET NUMBER	ST. MARTIN	PARISH	DESIGNED WILLIAMS	CHECKED	CONTROL SECTION	450-06	STATE PROJECT	H 003014			NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY	NUMBER	SERIES	4 OF 8	I-10: LA 347 TO ATCHAFALAYA BR		
										SUGGESTED SEQUENCE OF CONSTRUCTION LA 347 PHASE 3											








TYPE III BARRICADE

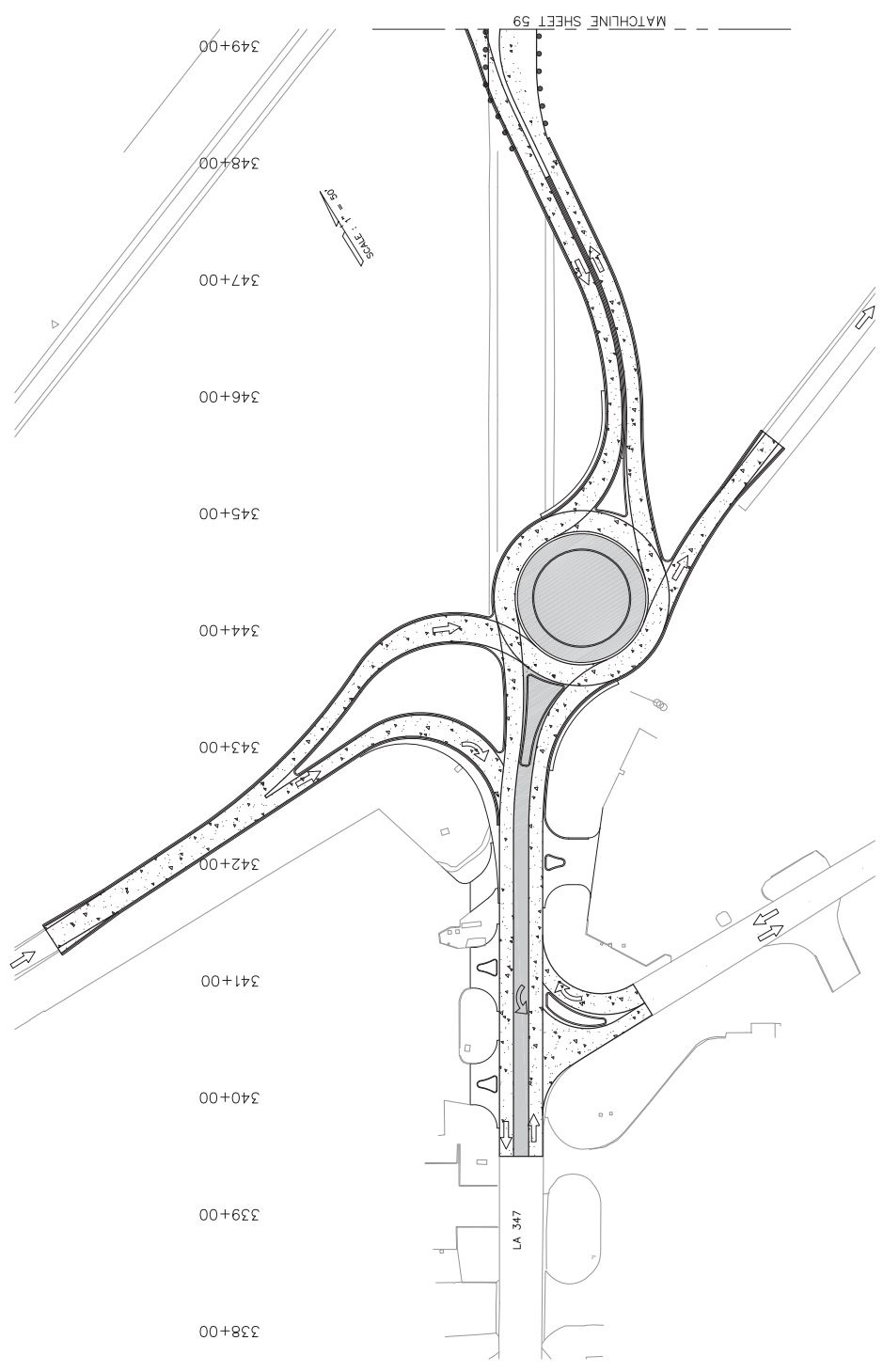


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DESIGN SPEED = XX MPH

57	SHEET NUMBER	ST. MARTIN	PARISH	DESIGNED WILLIAMS	CHECKED	DETAILS YARBROUGH	CONTROL SECTION	450-06	PROJECT H.003014	STATE 6 OF 8	SERIES NUMBER	DATE	NO.	REASON OR CHANGE ORDER DESCRIPTION	BY				SUGGESTED SEQUENCE OF CONSTRUCTION LA 347 PHASE 4 I-10: LA 347 TO ATOCHAFALAYA BR

- PHASE 5 CONSTRUCTION NOTES.
1. PLACE CHANNELIZATION DEVICES AND SIGNING.
 2. OPEN INTERSECTIONS TO FUNCTION AS ROUNDABOUTS. MINIMUM CONSTRUCTION IS TO BE IN PLACE PRIOR TO OPENING ROUNDABOUT PER DT0E AND PAID FOR UNDER TEMPORARY SIGNING.
 3. CONSTRUCT CIRCULAR ROADWAY TRUCK APRON AND CENTER ISLAND AT BOTH LOCATIONS.
 4. INSTALL TEMPORARY STRIPING TO DIRECT TRAFFIC.



LEGEND

- CHANNELIZATION DEVICES
- EXISTING PAVEMENT REMOVAL
- PERMANENT PAVEMENT CONSTRUCTED UNDER THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES
- TYPE III BARRICADE

PRELIMINARY

MILES B. WILLIAMS
REGISTERED PROFESSIONAL ENGINEER
SEE TITLE BLOCK
P.E. NO. 44689
LICENSE NO.

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REFERENCE:
TTC-00 (A-D)
TTC-01
TTC-02

DESIGN SPEED = XX MPH

SHEET NUMBER 58	DESIGNED WILLIAMS	DATE	NO.	REVISION OR CHANGE ORDER DESCRIPTION	BY	SERIES NUMBER 7 OF 8	STATE PROJECT H.003014	CONTRACT SECTION 450-06	PARISH ST. MARTIN
	DEFINITIONS YARBROUGH	DATE	NO.	REVISION OR CHANGE ORDER DESCRIPTION			STATE PROJECT H.003014		

LA 347 TO ATCHAFALAYA BR

SEQUENCE OF CONSTRUCTION

LA 347 PHASE 5

SUGGESTED

LA 347 TO ATCHAFALAYA BR

SEQUENCE OF CONSTRUCTION

LA 347 PHASE 5

SUGGESTED

PHASE 1A CONSTRUCTION NOTES:

1. PLACE CHANNELIZATION DEVICES AS SHOWN TO CLOSE OUTSIDE TRAVEL LANE AND SHOULDER.
2. NIGHTTIME SINGLE LANE CLOSURES REQUIRED. SEE CONTRACT DOCUMENTS FOR ALLOWABLE TIMES.
3. RECONSTRUCT OUTSIDE SHOULDER WITH TEMPORARY PAVING.

LEGEND

TEMPORARY CONCRETE BARRIER

CHANNELIZATION DEVICES

EXISTING PAVEMENT REMOVAL

TEMPORARY PAVEMENT CONSTRUCTED UNDER THIS PHASE

FLASHING ARROW PANEL

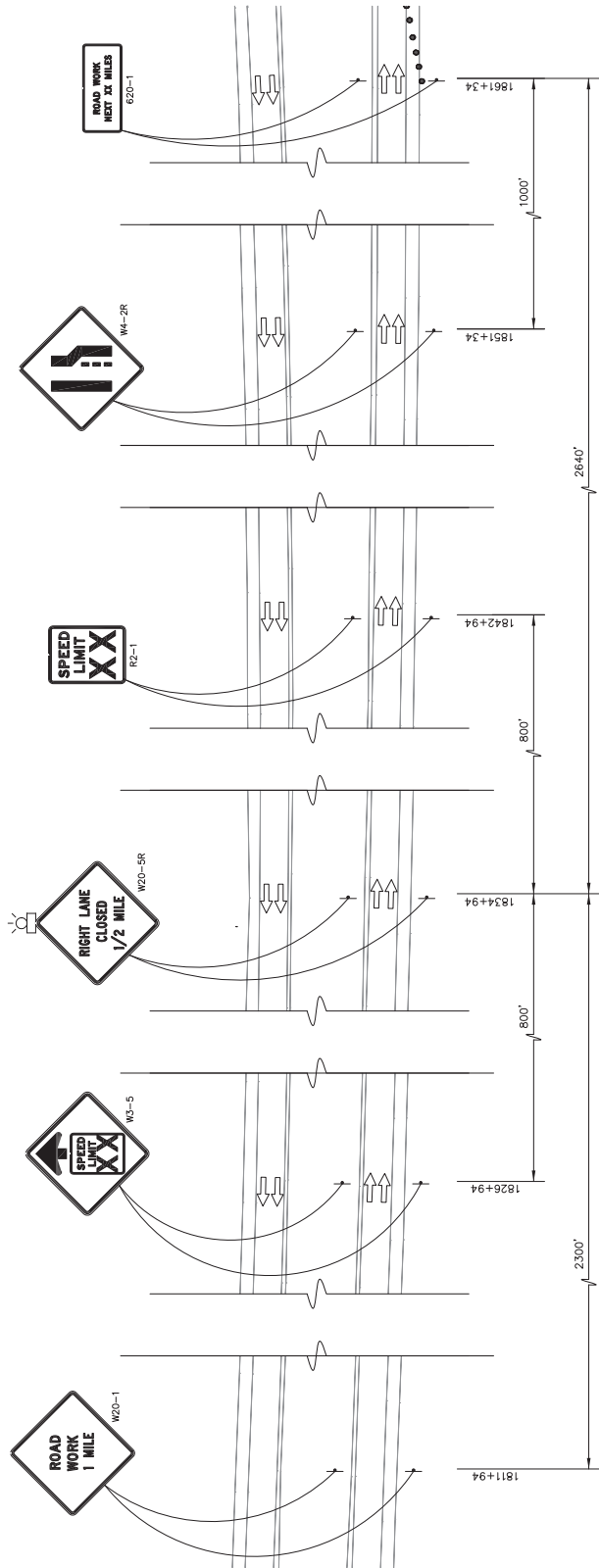
TRUCK WITH AMBER LIGHT AND TMA

REFERENCE:

- TTC-00 (A-D)
- TTC-01
- TTC-02
- TTC-03




DESIGN SPEED = 70 MPH

SCALE: 1" = 50'



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SHEET NUMBER 60	ST. MARTIN		FARR		DESIGNED		NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
	CONTRACT 450-06		GIBBS		CHECKED					
STATE H.003014		PROJECT		1 OF 3		SERIES				

	SUGGESTED SEQUENCE OF CONSTRUCTION			
	PHASE 1A			
I-10: LB 347 TO ATOCHAFALAYA BR				

SUGGESTED
SEQUENCE OF CONSTRUCTION
PHASE 1A
I-10: LA 347 TO ATCHAFALAYA BR

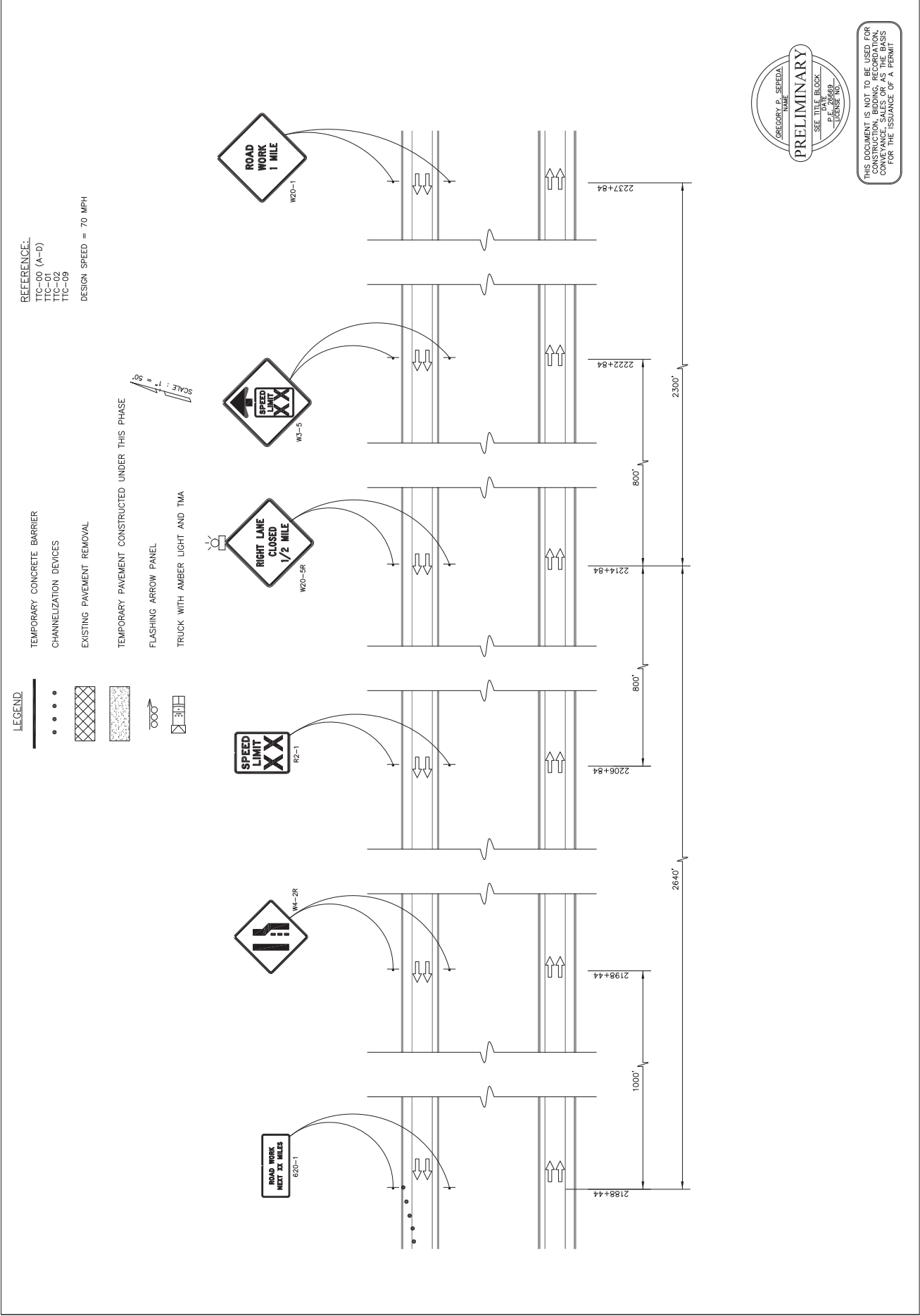


Diagram illustrating the Phase 1A Construction layout for a two-lane highway project, showing the Westbound and Eastbound directions.

Key Dimensions and Features:

- EXIST R/W:** Existing Right-of-Way line.
- VARIES (150' MIN.):** Dimension for the existing right-of-way.
- VARIES (66' MIN. EXISTING):** Dimension for the existing travel lane width.
- VARIES (32' MIN.):** Dimension for the existing shoulder width.
- VARIES (12' MIN.):** Dimension for the new shoulder width.
- EXIST SHOULDER:** Existing shoulder.
- NEW SHOULDER:** New shoulder.
- EXIST LANE:** Existing travel lane.
- NEW LANE:** New travel lane.
- RECONSTRUCTION OF OUTSIDE SHOULDER:** Area for reconstructing the outside shoulder.
- NIGHTTIME LANE CLOSURE:** Area for nighttime lane closure.
- WESTBOUND:** Direction of travel.
- EASTBOUND:** Direction of travel.
- PHASE 1A CONSTRUCTION:** Construction phase.
- ROAD WORK:** Construction area.
- G20-2:** Project identifier.

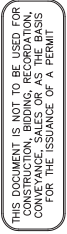
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SHEET NUMBER 62		DESIGNED FARR		DESIGNED CHECKED	DATE	NO.	REVISION OR CHANGE CHECK DESCRIPTION	BY		NUMBER		SPECIES	STATE	PROJECT	H.003014	
SHEET NUMBER 62		DESIGNED FARR		DESIGNED CHECKED	DATE	NO.	REVISION OR CHANGE CHECK DESCRIPTION	BY		NUMBER		SPECIES	STATE	PROJECT	H.003014	






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99	SHEET NUMBER	ST. MARTIN	FARR	GIBBS	450-06	H.003014			1-10: LA 347 TO ATOCHA/LA 34 PHASE 1C SUGGESTED SEQUENCE OF CONSTRUCTION			
							NO. _____ DATE _____ BY _____ REASON OR CHANGE ORDER DESCRIPTION _____ SERIES NUMBER _____ 1 OF 3 STATE PROJECT _____					



14-21

20-1

2237+84

2222+84

2214+84

2206+84

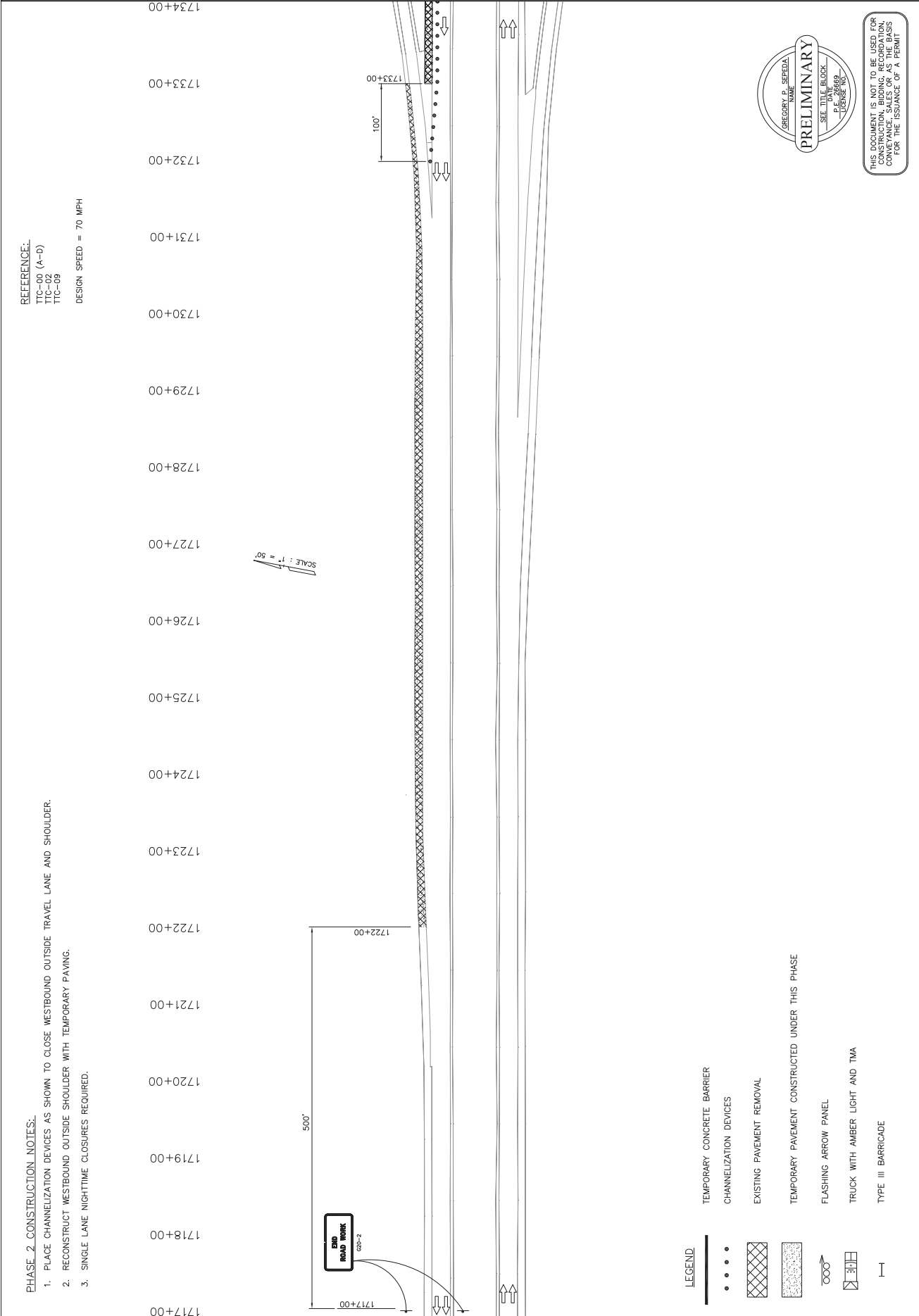
2198+44

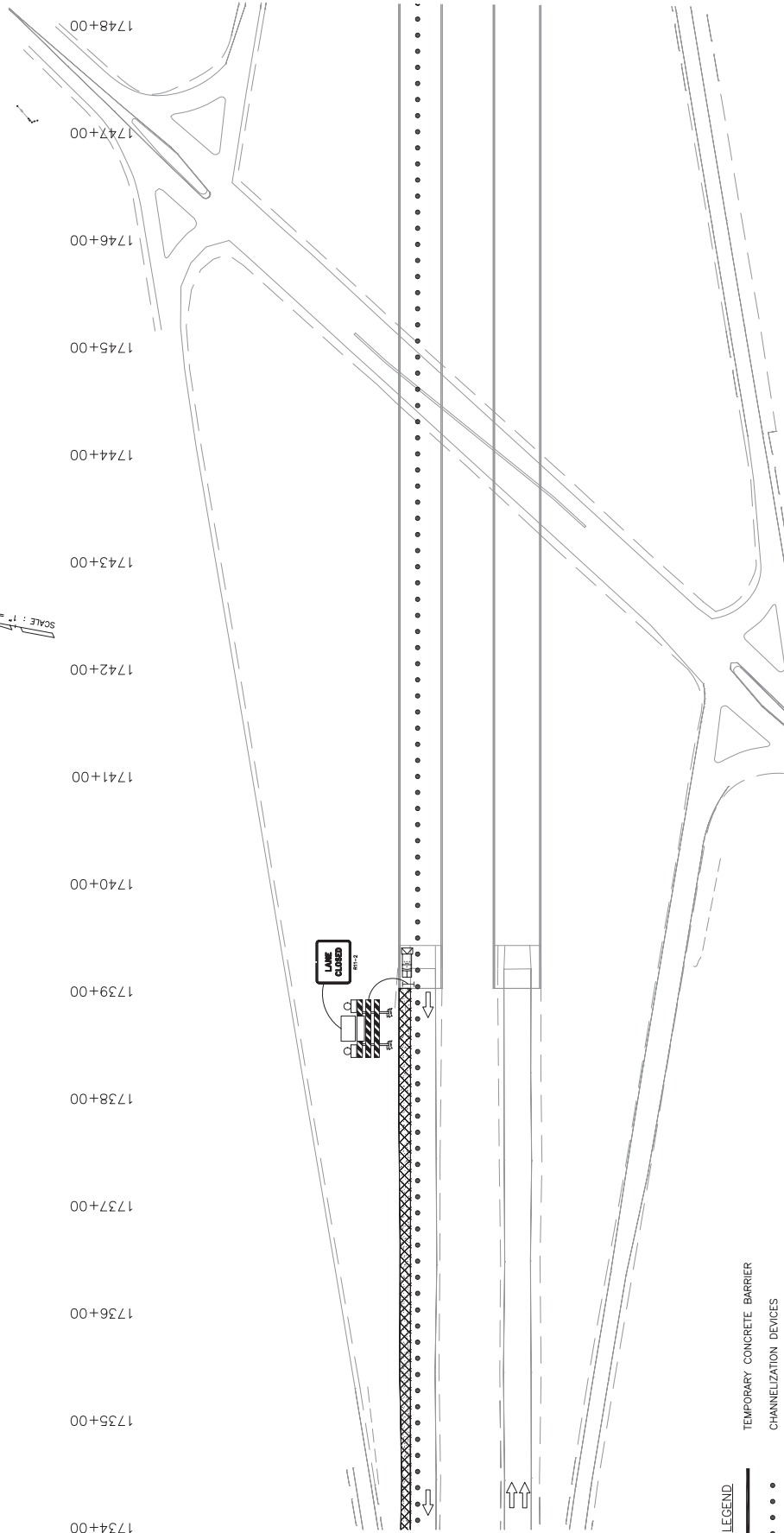
2188+44

1-10: LA 347 TO ATCHAFALAYA BR
PHASE 1C
SUGGESTED
SEQUENCE OF CONSTRUCTION

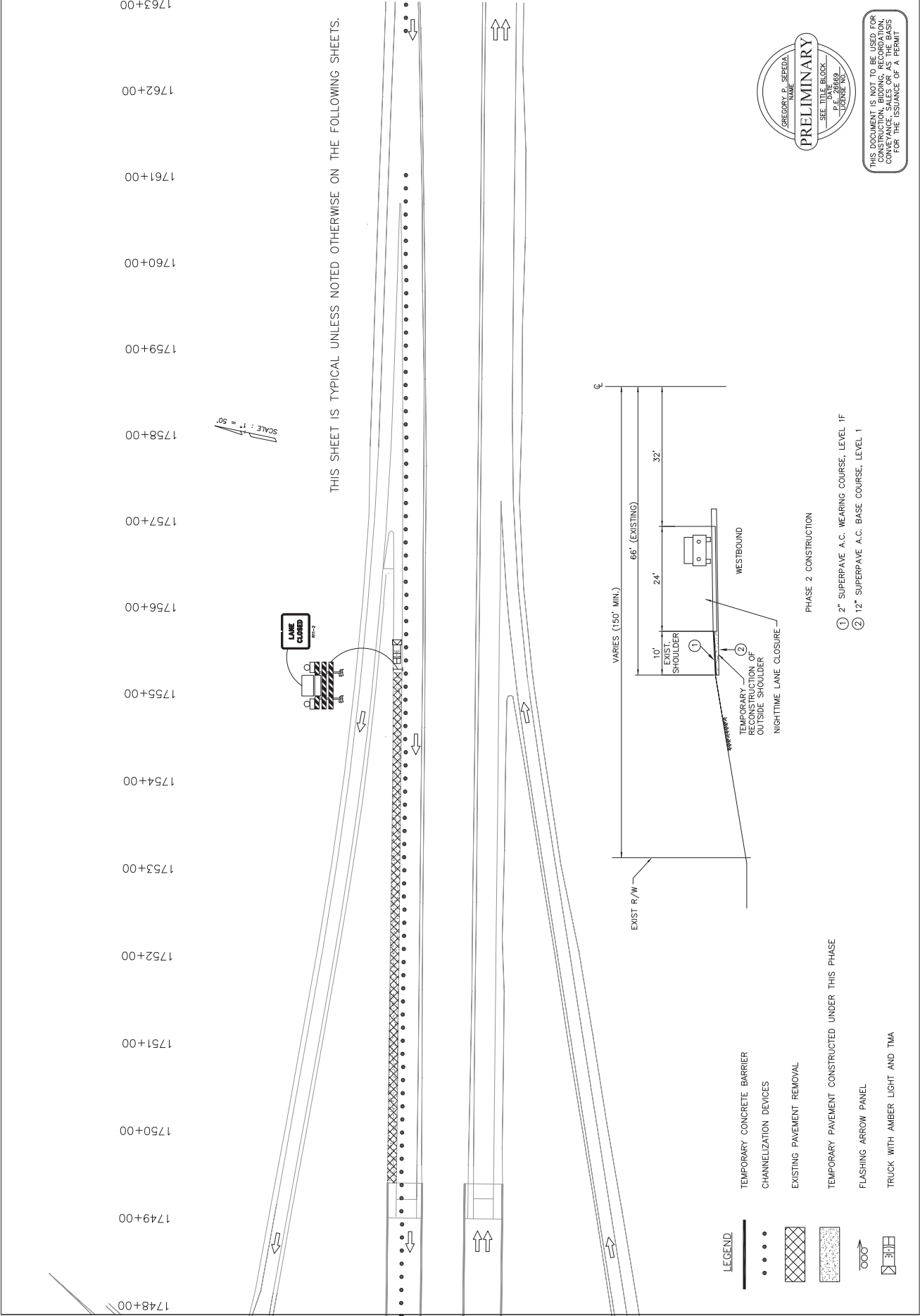
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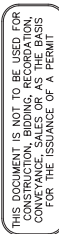
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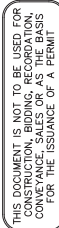


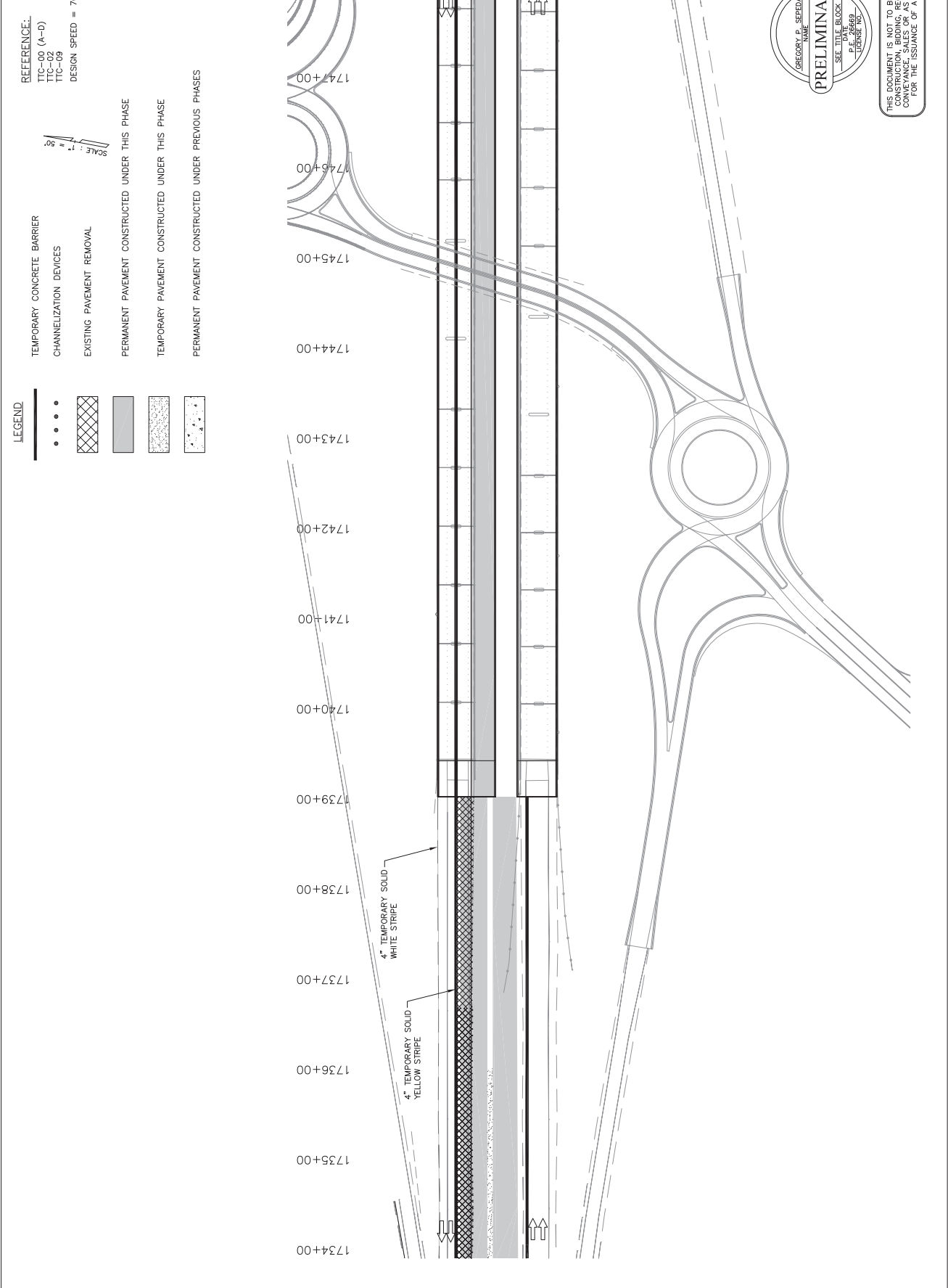


SHEET NUMBER 71		PROJECT H.003014		SHEET 3 OF 4		DESIGNED SEPEDA		PARISH ST. MARTIN		CONTRACT 450-06		SECTION YARBROUGH		DETAILS CHECKED		BY		REVISION OR CHANGE ORDER DESCRIPTION		DATE		NO.		1-10: LA 347 TO ATCHAFALAYA BR		SUGGESTED SEQUENCE OF CONSTRUCTION PHASE 2		LA 347 TO ATCHAFALAYA BR	
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- LEGEND**
- TEMPORARY CONCRETE BARRIER
 - CHANNELIZATION DEVICES
 - EXISTING PAVEMENT REMOVAL
 - PERMANENT PAVEMENT CONSTRUCTED UNDER THIS PHASE
 - TEMPORARY PAVEMENT CONSTRUCTED UNDER THIS PHASE
 - PERMANENT PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES

REFERENCE:
TTC-00 (A-D)
TTC-02
TTC-09
DESIGN SPEED = 70 MPH

SCALE: 1" = 50'

ST. MARTIN

450-06

2 OF 4

H.003014

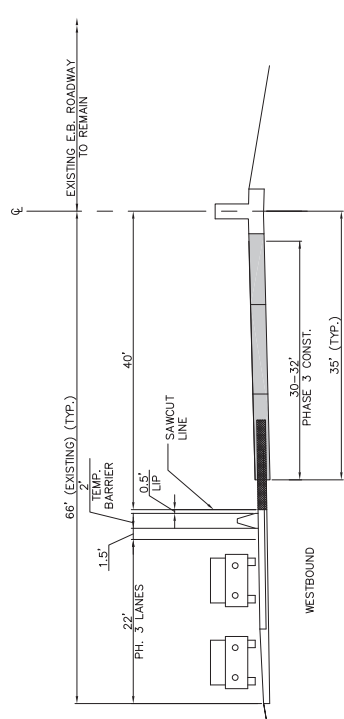
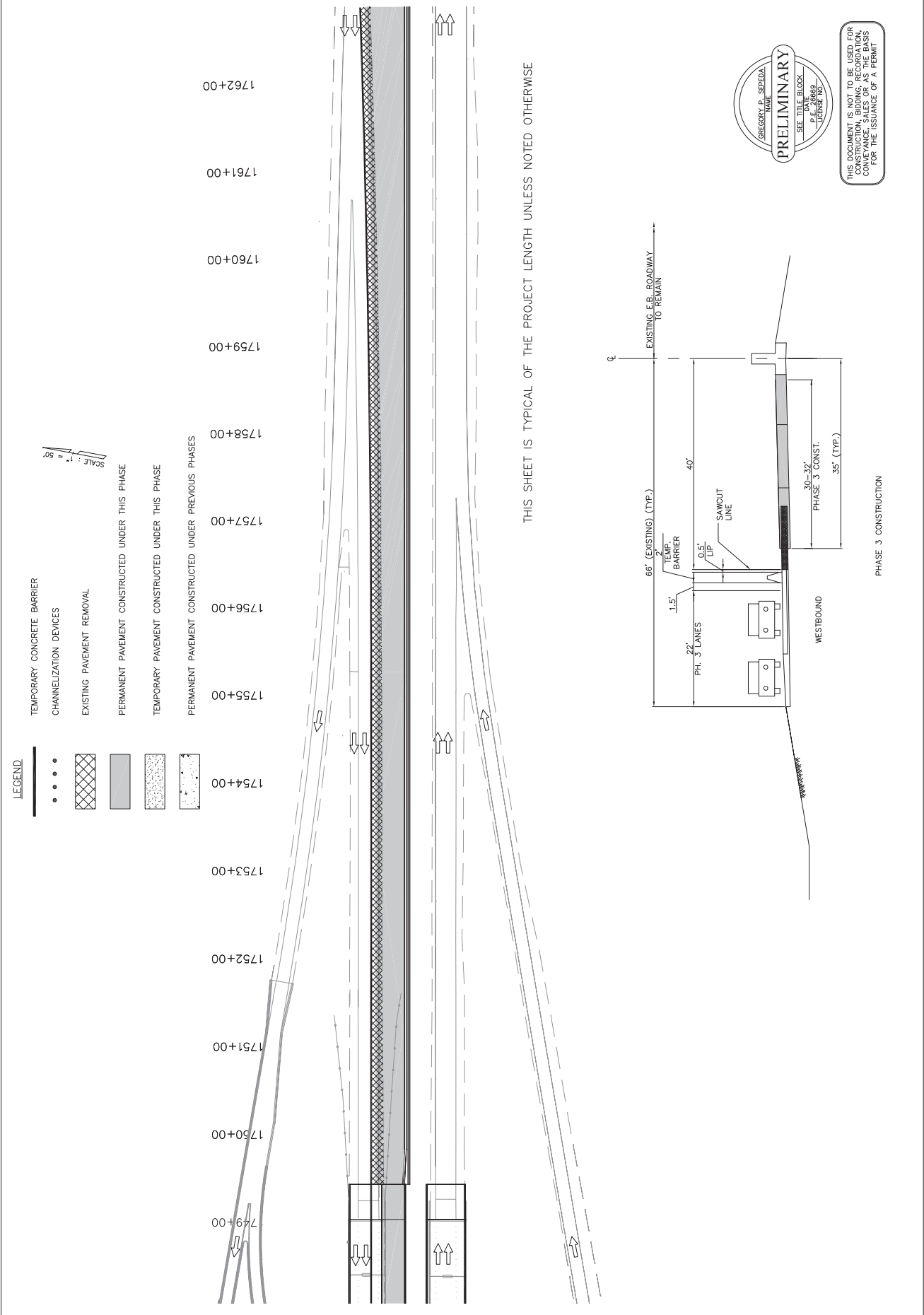
SEQUENCE OF CONSTRUCTION
PHASE 3

LA 347 TO ATCHAFALAYA BR

PRELIMINARY

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SHEET NUMBER	75	DESIGNED	SEPEDA	PANISH	ST. MARTIN
		CHECKED			
		DATE			
		BY			
REVISION OR CHANGE ORDER DESCRIPTION		NO.	DATE	BY	
1-10: LA 347 TO ATCHAFALAYA BR					
SEQUENCE OF CONSTRUCTION		SUGGESTED			
PHASE 3		1-10: LA 347 TO ATCHAFALAYA BR			
STATE PROJECT		H.003014			
CONTRACT		450-06			
SHEET		75			

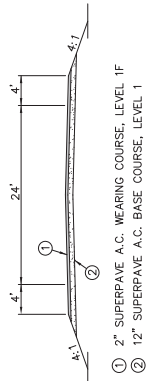
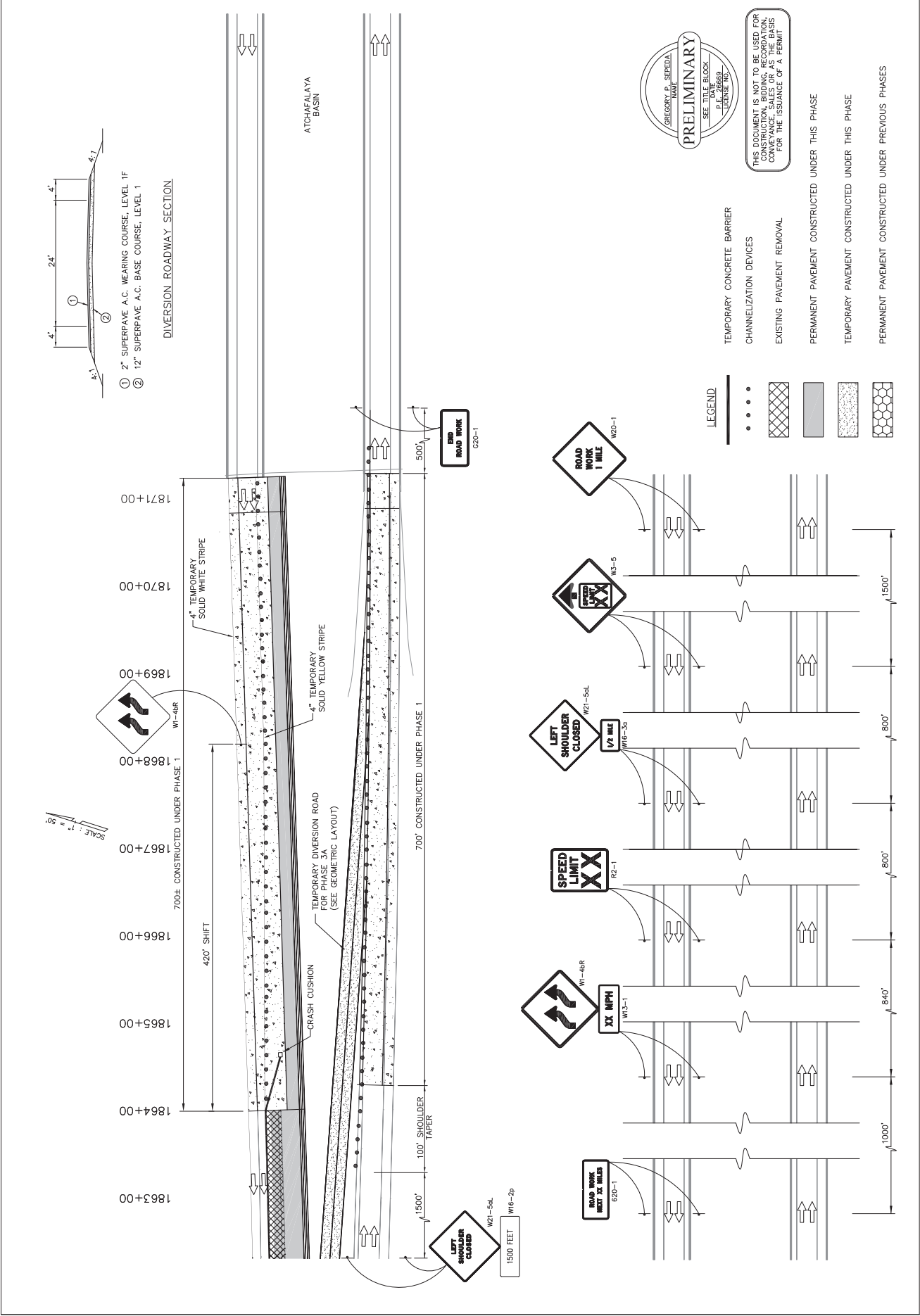


PHASE 3 CONSTRUCTION



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SHEET NUMBER 76		DATE 10/20/2015		BY [Signature]		REVISION OR CHANGE DESCRIPTION [Blank]		PROJECT NUMBER 4 OF 4		STATE PROJECT H.003014		SHEET NUMBER 76	
SHEET NUMBER 76		DATE 10/20/2015		BY [Signature]		REVISION OR CHANGE DESCRIPTION [Blank]		PROJECT NUMBER 4 OF 4		STATE PROJECT H.003014		SHEET NUMBER 76	
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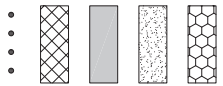
① 2" SUPERPAVE A.C. WEARING COURSE, LEVEL 1F
② 12" SUPERPAVE A.C. BASE COURSE, LEVEL 1

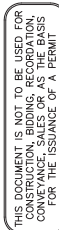


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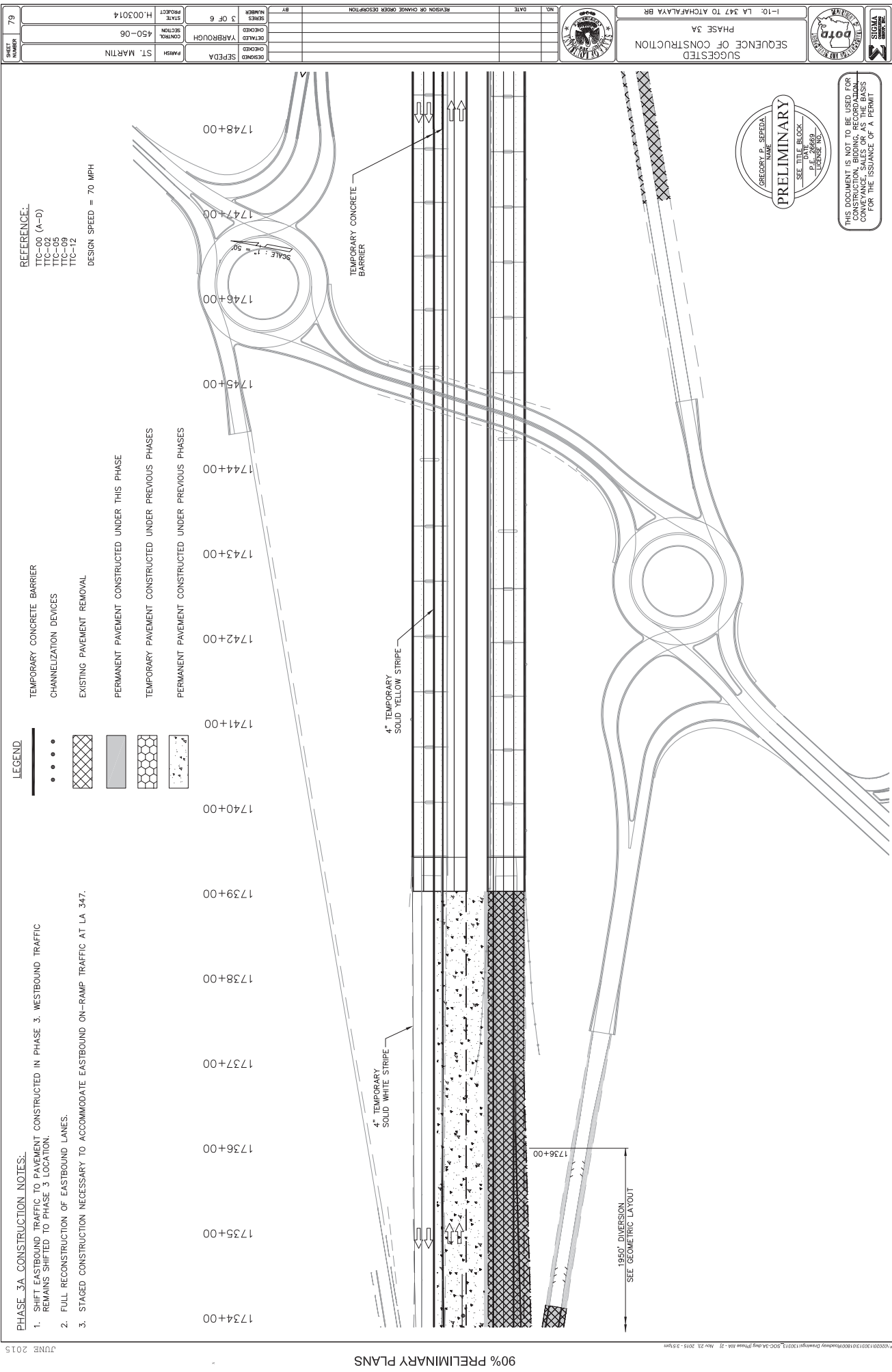
- TEMPORARY CONCRETE BARRIER
- CHANNELIZATION DEVICES
- EXISTING PAVEMENT REMOVAL
- PERMANENT PAVEMENT CONSTRUCTED UNDER THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTED UNDER THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTED UNDER PREVIOUS PHASES

LEGEND









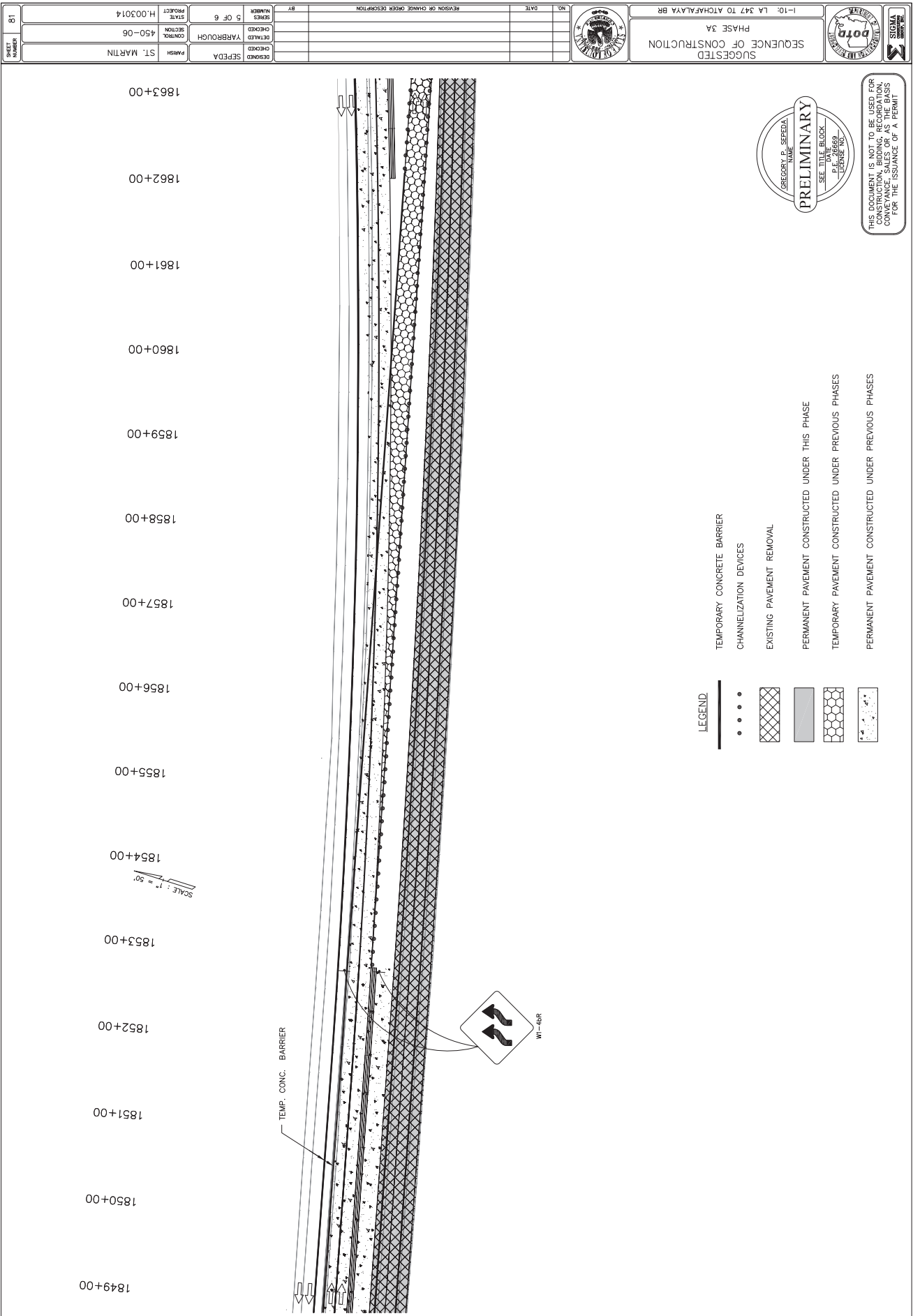


GREGORY P. SEPEDA
 NAME
 PRELIMINARY
 SEE TITLE BLOCK
 DATE
 P.E. 26669
 LICENSE NO.



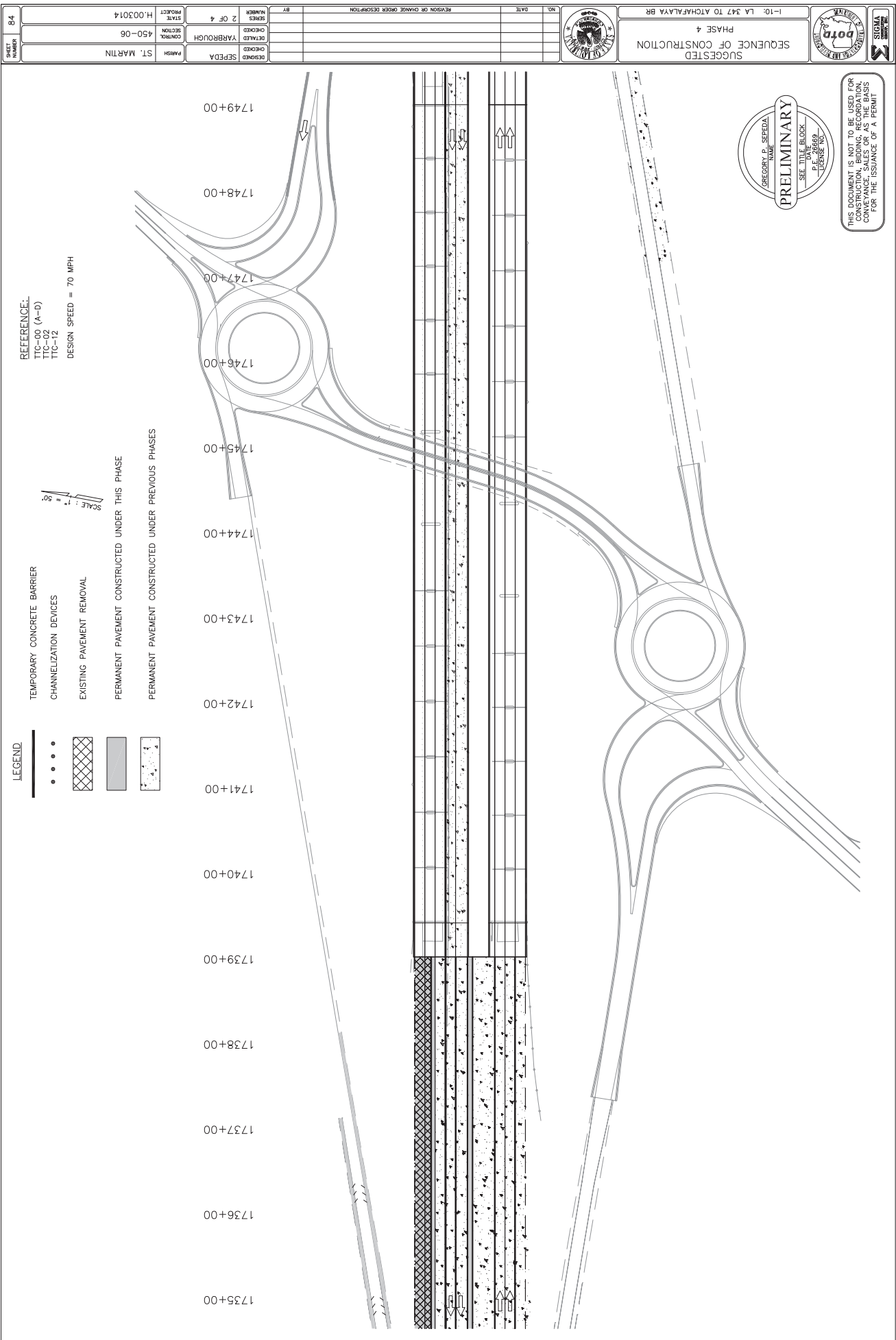
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		CHECKED			
		DETAILED	YARBROUGH	CONTROL	450-06
		SERIES	4 OF 6	STATE	H.003014

90% PRELIMINARY PLANS



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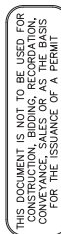


REFERENCE:
TTC-00 (A-D)
TTC-02
TTC-12
DESIGN SPEED = 70 MPH

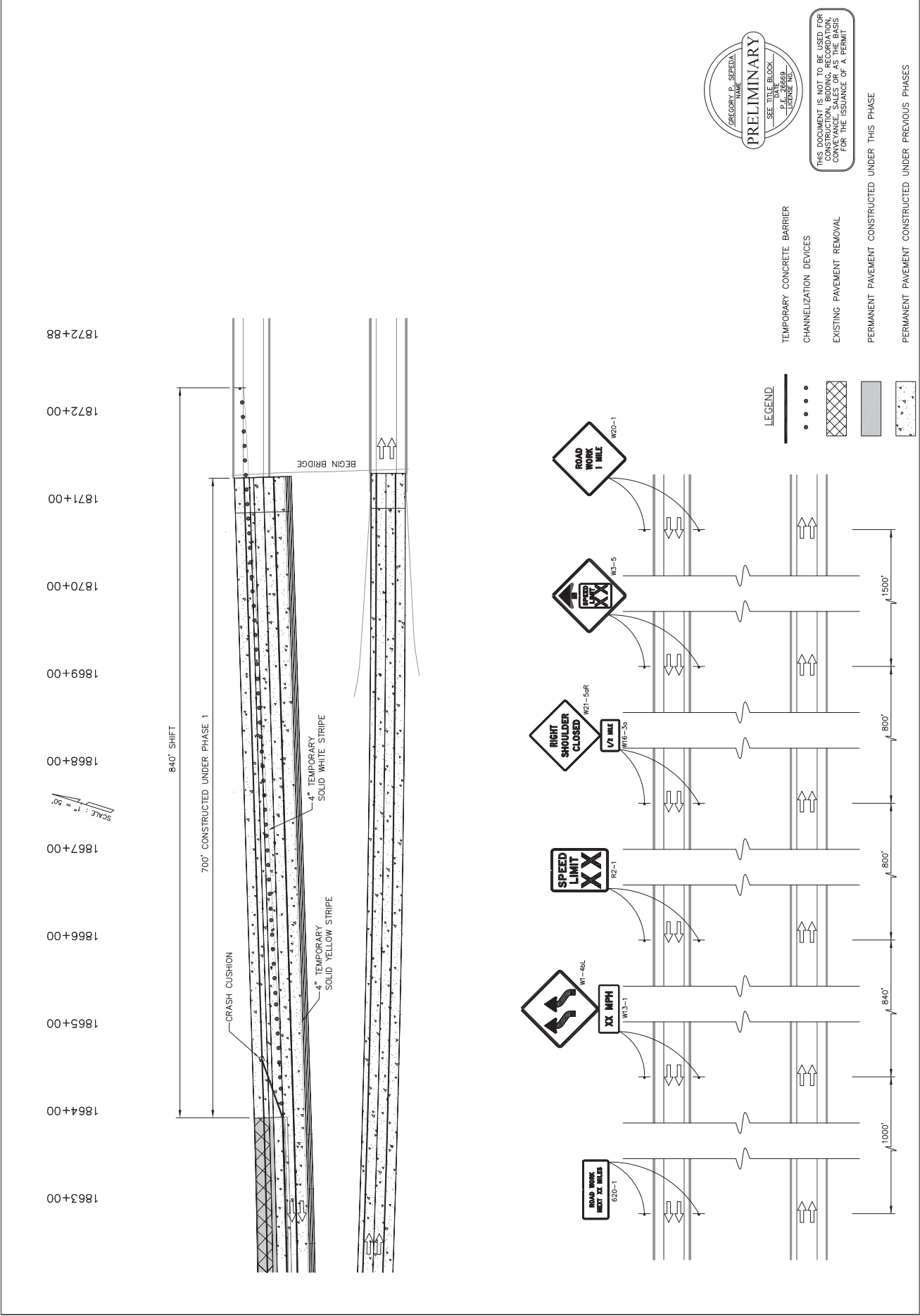
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				SERIES 2 OF 4	BY	DATE	NO.	I-10: LA 347 TO ATCHAFALAYA BR			



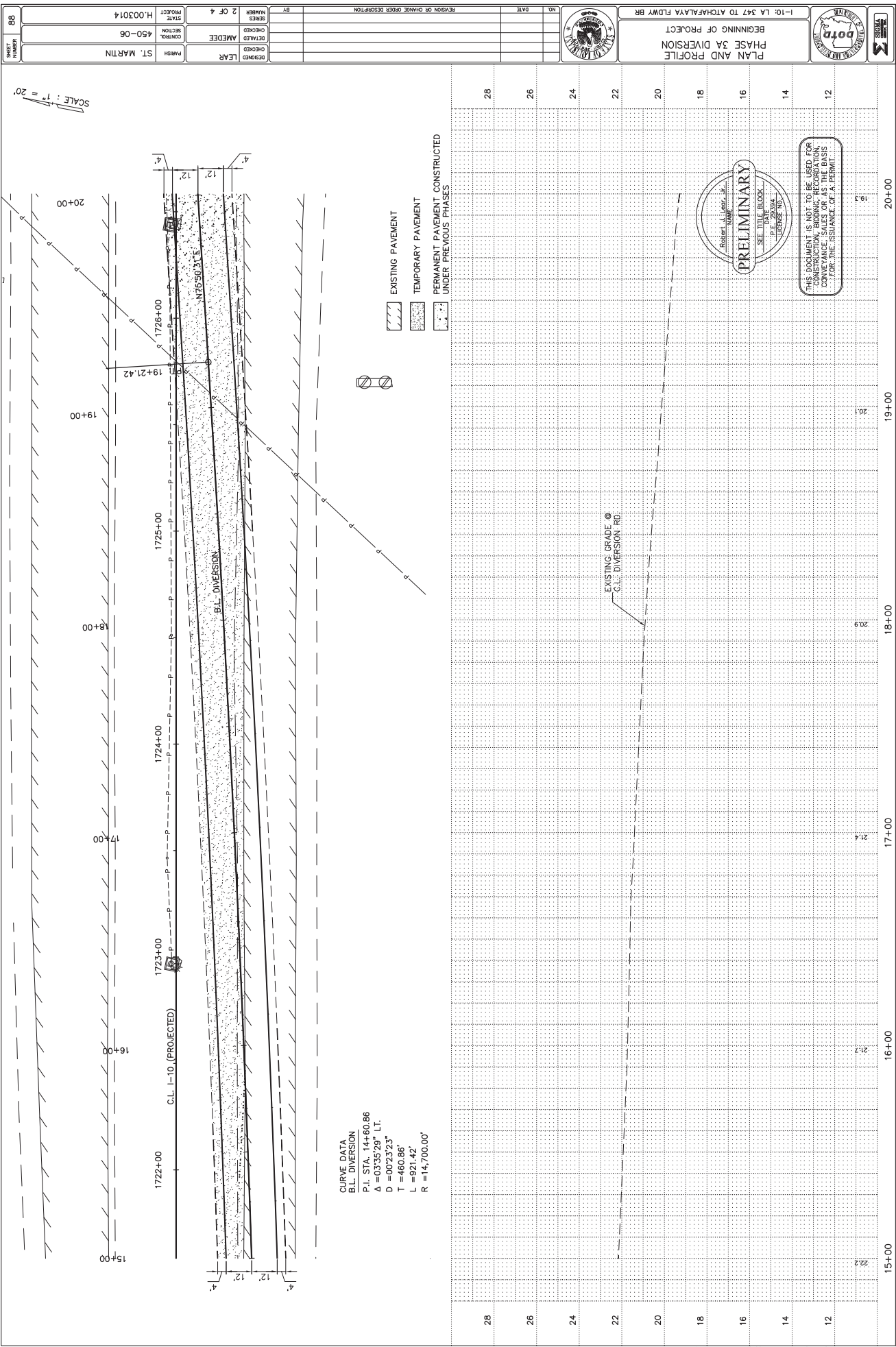
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FOR THE ISSUANCE OF A PERMIT

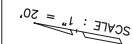
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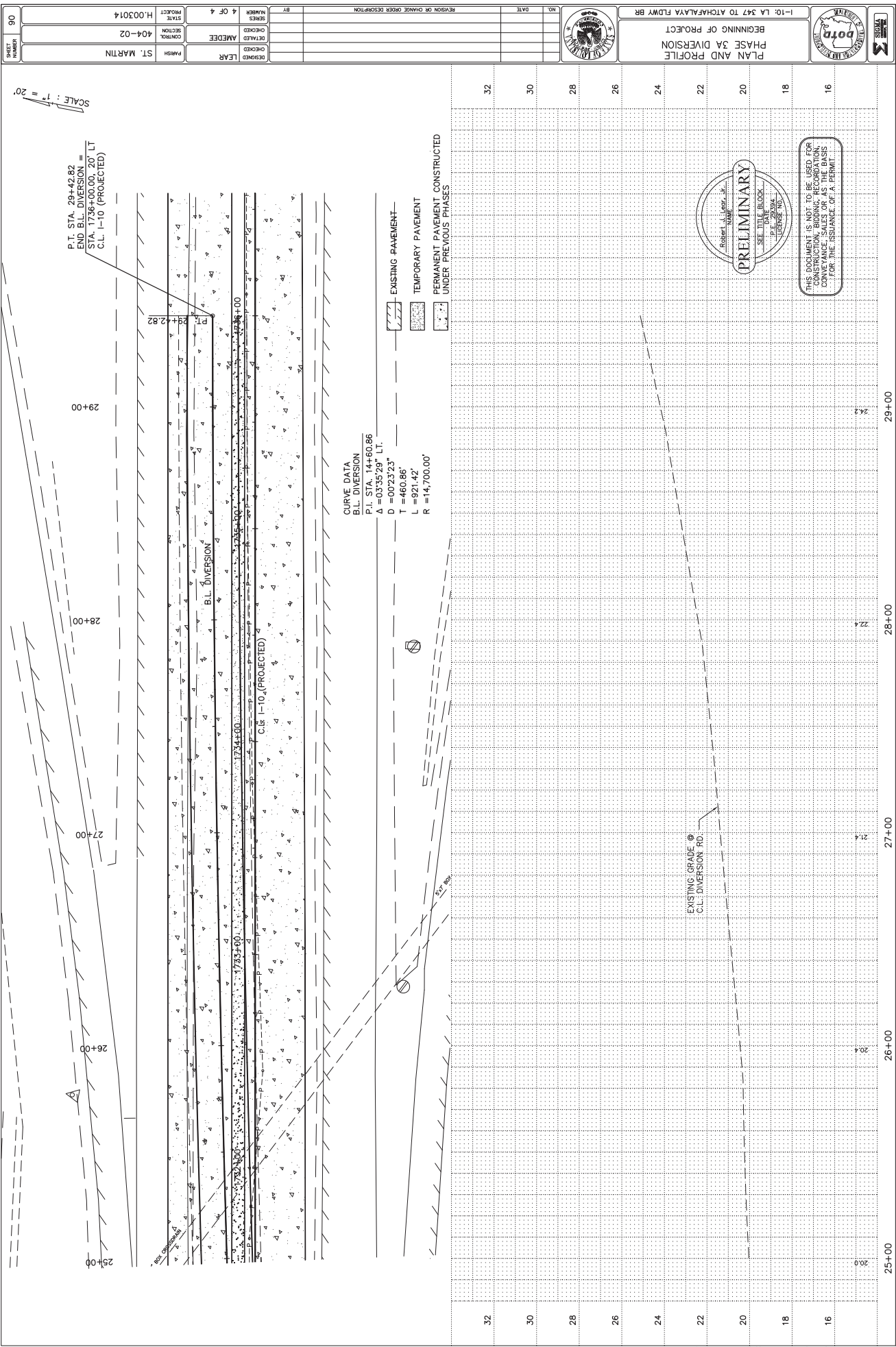
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PROJECT H.003014		STATE 4 OF 4		PARISH ST. MARTIN		CONTROL 450-06		DESIGNED SEPEDA		CHECKED		CHECKED		CHECKED	
CONTROL 450-06		CONTROL 450-06		CONTROL 450-06		CONTROL 450-06		CONTROL 450-06		CONTROL 450-06		CONTROL 450-06		CONTROL 450-06	











SHEET NUMBER 90	DESIGNED LEARN	PAVING ST. MARTIN	CONTROL SECTION 404-02	PROJECT H.003014
	DATE BY	REVISION BY	REVISION BY	REVISION BY
REGION OR CHANGE ORDER DESCRIPTION				
NO. DATE				
I-10: LA 347 TO ATCHAFALAYA FLDWY BR				
BEGINNING OF PROJECT				
PLAN AND PROFILE				
PHASE 3A DIVERSION				
I-10: LA 347 TO ATCHAFALAYA FLDWY BR				

