ENVIRONMENTAL ASSESSMENT
WITH
FINDING OF NO SIGNIFICANT IMPACT

FOR

US HIGHWAY 11 WIDENING

ST. TAMMANY PARISH
STATE PROJECT NO. H.004983

July 2016

REGIONAL PLANNING COMMISSION

AND

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ENVIRONMENTAL ASSESSMENT
WITH
FINDING OF NO SIGNIFICANT IMPACT

FOR

US Highway 11 Widening

St. Tammany Parish
State Project No. H.004983

July 2016

Regional Planning Commission

and

Louisiana Department of Transportation and Development

FEDERAL HIGHWAY ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACTS (FONSI)

FOR

STATE PROJECT NO. H.004983
F.A.P. NO. H004983
NAME: US HIGHWAY 11 WIDENING
ROUTE: US 11
PARISH: ST. TAMMANY

The FHWA has determined that this project will not have any significant impact on the human environment. This Finding of No Significant Impacts (FONSI) is based on the Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

APPROVED
CARL M. HIGHSMITH
PROJECT DELIVERY TEAM LEADER
FEDERAL HIGHWAY ADMINISTRATION
DATE 7/26/2016

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ENVIRONMENTAL CHECK LIST

ENVIRONMENTAL CHECKLIST

WBS No. H.004983
Name: US Highway 11 Widening
Route: US 11
Parish: St. Tammany

1. General Information

□Conceptual Layout	☒Line and Grade	□Preliminary Plans
□Survey	□Plan-in-Hand	□Advance Check Prints

2. Class of Action

□ Environmental Impact Statement (E.I.S.)
□ State Funded Only (EE/EF/ER)
☒ Environmental Assessment (E.A.)
□ Categorical Exclusion (C.E.)
□ Programmatic C.E. (as defined in FHWA letter of agreement dated 03/15/95)

3. Project Description

Please refer to the project description provided on Page 1 of the EA.

4. Public Involvement

☒ Views were solicited.
□ Views were not solicited.
☒ Public Involvement events held. (List events and dates in Section 11.)
☒ 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?	☒	□	□
Is right of way required from a **burial/cemetery** site? ……..	☒	□	□
Is right-of-way required from a Wetland Reserve Program (**WRP**) property?	☒	□	□
Is required right-of-way prime **farmland**? (Use form AD 1006, if needed) ...	☒	□	□
b. Will any **relocation** of residences or businesses occur?	☒	□	□
c. Are construction or drainage **servitudes** required?	□	☒	□

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? ……	☒	□	□
b. Are properties acquired or improved with **L&WC** funds affected? …….....	☒	□	□

7. Cultural Section 106

		NO	YES	N/A
a.	Are any **known historic properties** adjacent or impacted by the project? (If so, list below)……..	☒	☐	☐
b.	Are any k**nown archaeological sites** adjacent or impacted by the project? (If so, list site # below) ……..	☒	☐	☐
c.	Would the project affect property owned by or held in trust for a federally recognized **tribal government**?	☒	☐	☐

8. Natural & Physical Environment

		NO	YES	N/A
a.	Are **wetlands** affected? …….....	☐	☒	☐
b.	Are **other waters** of the U.S. affected? …….....	☐	☒	☐
c.	Are **Endangered/Threatened Species**/Habitat affected? ……	☒	☐	☐
d.	Is project within 100 Year **Floodplain**?	☐	☒	☐
e.	Is project in **Coastal Zone** Management Area?	☐	☒	☐
f.	Is project in a **Coastal Barrier Resources** area? ……..	☒	☐	☐
g.	Is project on a **Sole Source Aquifer**? ……..……..	☐	☒	☐
h.	Is project impacting a **navigable waterway**?	☒	☐	☐
i.	Are any State or Federal **Scenic Rivers/Streams** impacted? ……	☒	☐	☐
j.	Is a **noise** analysis warranted (Type I project) ……..……	☒	☐	☐
k.	Is an **air** quality study warranted?	☒	☐	☐
l.	Is project in a **non-attainment** area? …….....	☒	☐	☐
m.	Is project in an approved Transportation Plan, Transportation Improvement Program (TIP) and State Transportation Improvement Program (**STIP**)?	☐	☒	☐
n.	Are **construction** air, noise, & water impacts major? ……..	☒	☐	☐
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?	☒	☐	☐

9. Social Impacts

		NO	YES	N/A
a.	Will project change **land use** in the area? ……	☒	☐	☐
b.	Are any c**hurches and schools** impacted by or adjacent to the project? …... (If so, list below)	☒	☐	☐
c.	Has **Title VI** been considered? ……	☐	☒	☐
d.	Will any **specific groups** be adversely affected? (i.e., *minorities, low-income, elderly, disabled,* etc.) ……	☒	☐	☐
e.	Are any **hospitals, medical facilities, fire police** facilities impacted by or adjacent to the project? (If so, list below)……	☒	☐	☐
f.	Will **Transportation patterns** change? ……	☒	☐	☐
g.	Is **Community cohesion** affected by the project? ……	☒	☐	☐
h.	Are **short-term social/economic** impacts due to construction considered major?	☒	☐	☐

		NO	YES	N/A
i.	Do conditions warrant **special construction times?** (i.e., *school in session, congestion, tourist season, harvest*) ……	☒	□	□
j.	Were **Context Sensitive Solutions** considered? (If so explain below)…….	☒	□	□
k.	Were **bike and pedestrian** accommodations considered? (explain below)…..	□	☒	□
l.	Will the **roadway/bridge be closed?** (If yes, answer questions below)…….	☒	□	□
	Will a **detour bridge** be provided?	□	□	☒
	Will a **detour road** be provided?	□	□	☒
	Will a **detour route** be signed?	□	□	☒

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

□Corps Nationwide	☒CUP/Consistency Determination	□LA Scenic Stream
☒Corps Section 404/10	□USCG Bridge	☒DEQ WQC
□Levee	☒USCG Navigational Lights	☒LPDES Stormwater
□Other (explain below)		

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

Question 4: Public meetings were conducted at Salmen High School in Slidell on October 29, 2009 and May 20, 2010. Please refer to EA Section 5.2 - Public Meetings.
Question 8a: Please refer to EA Section 4.1.11 - Wetlands and Other Waters.
Question 8d: Please refer to EA Section 4.1.12 - Floodplains.
Question 8g: Please refer to EA Section 4.1.14 - Subsurface Water.
Question 8j: Please refer to EA Section 4.1.18 - Noise.
Question 8k: Please refer to EA Section 4.1.19 - Air Quality.
Questions 8j/k: Noise and air analyses were prepared for the project because initial build alternatives included four-lane alternatives (EA Section 3.2.1 – Preliminary Alternatives Eliminated from Further Consideration). With evolution of the project to two-lane (only) alternatives, noise and air analyses are not currently warranted; however, they have been retained in the EA for reference and informational purposes.
Question 9k: Please refer to EA Section 3.2 (Build Alternatives)

Preparer: Jeff Robinson, P.E.
Title: Project Manager
Date: July 23, 2014

Attachments

☒ S.O.V. and Responses (Appendix B)
☒ Wetlands Finding (Appendix D)
☒ Project Description Sheet (Appendix B)
□ Conceptual Stage Relocation Plan
☒ Noise Analysis (Appendix E)
☒ Air Analysis (Appendix E)
☒ Exhibits and/or Maps (Appendix A)
□ 4(f) Evaluation
□ Form AD 1006 (Farmlands)
☒ 106 Documentation (Appendix C)
☒ Other: Recognized Environmental Conditions Survey (Appendix F)

LIST OF ACRONYMS

LIST OF ACRONYMS

ADT	Average Daily Traffic
AADT	Annual Average Daily Traffic
ADA	Americans with Disabilities Act
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
CZMA	Coastal Zone Management Act
dBA	A-weighted Decibels
DOTD	Louisiana Department of Transportation and Development
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDWF	Louisiana Department of Wildlife and Fisheries
LNHP	LDWF Natural Heritage Program
LOS	Level of Service
MSAT	Mobile Source Air Toxics
MSFCA	Magnuson-Stevenson Fishery Conservation Act
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
RCW	Red-cockaded Woodpecker
REC	Recognized Environmental Condition
ROW	Right-of-Way
RPC	Regional Planning Commission
SHPO	State Historic Preservation Officer
STAA	Surface Transportation Authorization Act
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank

SUMMARY OF PERMITS, MITIGATION, AND COMMITMENTS

SUMMARY OF PERMITS, MITIGATION, AND COMMITMENTS

The following permits would be obtained and mitigation measures implemented to avoid or minimize potential adverse environmental impacts associated with the US Highway 11 Widening Project. Further details are provided in Section 4.5 of this report.

PERMITS

- Approximately 0.95 acres of potentially jurisdictional wetlands and 0.09 acres of potentially jurisdictional other waters of the U.S. were identified in the project area. A preliminary wetland finding would be provided to the U.S. Army Corps of Engineers (USACE) for a Jurisdictional Determination. Depending on final designs and plans for the project, it might impact wetlands. If so, a USACE Section 404 permit would be required prior to placing fill and/or starting construction.

- If a wetland permit is required, a Water Quality Certification would also be required from the Louisiana Department of Environmental Quality (LDEQ). The certification would be obtained in conjunction with the USACE Section 404 permit process.

- A Coastal Use Permit would be required from the Louisiana Department of Natural Resources (LDNR), Office of Coastal Management because the project is located in the Louisiana Coastal Zone. The Coastal Use Permit would be obtained jointly through the USACE Section 404 permit and LDEQ Water Quality Certification process.

- A Louisiana Pollutant Discharge Elimination System (LPDES) Permit and Storm Water Pollution Prevention Plan would be required.

MITIGATION

- To ensure no net loss of wetlands, any project impacts to wetlands would be compensated in accordance with an approved mitigation plan developed during the permitting process.

- To mitigate potential water quality impacts to surface waters, the proposed project would comply with standard Louisiana Department of Transportation and Development (DOTD) best management practices (BMPs) and applicable LDEQ permit provisions to prevent erosion and nonpoint source pollution that might result from construction-related activities.

- Required drainage structures would be designed, installed, and maintained to ensure an appropriate flow of water through the project area and to ensure no adverse impacts to the natural function of local floodplains.

- In order to protect future development from becoming incompatible with anticipated highway traffic noise levels, projections of future noise levels for undeveloped lands would be provided to local planning and building officials. As desired, these officials

might review project-related noise data during their consideration of future land use decisions.

- Short-term construction impacts would be mitigated through adherence to applicable local, state, and federal regulations including, but not limited to, Section 107.14 (Environmental Protection) of the Louisiana Specifications for Roads and Bridges and appropriate LDEQ Air Quality Regulations governing fugitive emissions of particulate matter during road construction activities (LAC 33:III.1305). Standard specification 107.27 (Archaeological and Historical Findings) dictates procedures necessary in the event archeological or historical material is discovered during the course of construction-related activities.

COMMITMENTS

- A construction sequencing plan would be implemented to minimize traffic disruption on US 11. Lane closures would be minimized to the extent practicable, and evacuation needs during hurricane season would be addressed.

- The project would not relocate any businesses or residences. However, areas within existing US 11 right-of-way (ROW) currently used by businesses for parking would be incorporated into the project to accommodate additional width. Encroachments that fall within the clear zone of the widened project and/or within the footprint of project needs (i.e., utility locations, drainage, etc.) will be removed during project construction. Any remaining encroachments that fall outside the area of project need will be dealt with according to DOTD policy by removal of the encroachment, by disposal of the excess ROW, or by entering a Joint Use Agreement granting a servitude to St. Tammany Parish over the excess area that would be maintained by the parish.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Regional Planning Commission (RPC) for the parishes of Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa and DOTD have prepared an Environmental Assessment (EA) to examine alternatives and environmental impacts for the US Highway 11 (US 11) Widening Project from Spartan Drive to Lake Pontchartrain in St. Tammany Parish (Figures 1 and 2). The total length of the project is approximately 2.8 miles.

The current roadway consists of two 12-foot paved lanes (one southbound lane and one northbound lane) with 10-foot-wide shoulders and a continuous left turn lane between Oak Harbor Boulevard and Spartan Drive. The road transitions to a four-lane configuration (one southbound lane and two northbound lanes divided by a turn lane) north of Schneider Canal, and then into a five-lane configuration (two southbound lanes and two northbound lanes divided by a turn lane) as it approaches Spartan Drive. There is currently no area designated along the roadway for bicyclists, nor is there an area for pedestrians.

Purpose

The primary purpose of the project is to increase capacity and decrease congestion along US 11 between Spartan Drive and Lake Pontchartrain.

Need

The project corridor is an important link for motorists travelling to and from the Greater New Orleans area and Slidell. The roadway provides access to the subdivisions along Carr Drive and to the community of Eden Isle. Commercial and residential properties are located along the roadway and accessed via numerous driveways. This section of US 11 currently experiences considerable daily congestion, and delays are expected to increase with anticipated future growth in traffic volume.

Level of Service (LOS) evaluations, which measure operational conditions for roadways using six letter grades (LOS A represents free-flow traffic; LOS F represents operational failure due to excess traffic), of US 11 from Spartan Drive to Lake Pontchartrain confirm portions of the project corridor currently experience poor operational conditions and that with no improvement operational conditions will worsen. Under the No Build Alternative, 2017 north- and south-bound peak traffic on US 11 should experience LOS B or better, with many reaches travelling at free flow, and LOS for 2037 peak traffic is anticipated to be little changed. However, poor LOS is anticipated for:

- Left turn movements from westbound Oak Harbor Boulevard onto US 11 – from LOS E in 2017 to LOS F;

- Right Turn movements from westbound Oak Harbor Boulevard onto US 11 – from LOS C to LOS E; and

- Left turn movements from westbound Eden Isles Drive onto US 11 – which are anticipated to be LOS E in 2017 and in 2037.

Build Alternatives

Initial build alternatives considered for the project included four-lane variations not favored by the public because of adverse impacts to the frontage and parking areas of properties along the east side of the roadway. A subsequent, combined two- and four-lane alternative was also considered. However, and after updating traffic counts and annual traffic growth rates, it was determined construction of a four-lane roadway was no longer necessary to improve capacity; construction of access management improvements would improve capacity. As such, the initial four-lane alternatives and subsequent, combined two- and four-lane alternative were dismissed from further consideration.

Two Build Alternatives are currently being evaluated to improve capacity. Both alternatives include two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and bicycle facilities. The travel lanes would be separated by a combination of raised medians with U-turns, and new access management features would be constructed at intersections to facilitate traffic flow (Appendix A). At the Oak Harbor Boulevard intersection, a two-way, stop controlled, J-turn intersection would be constructed with a dedicated left turn lane in the southbound direction and right turn lane for northtbound traffic. At the Eden Isles Drive intersection, either: 1) the southbound lane would include a dedicated left turn lane, and the traffic signal would remain; or, preferred, 2) the intersection would be converted to a three-legged roundabout. The intersection at Carr Drive would be converted to a three-legged roundabout. The intersection at Northshore Circle would be converted to a two-way, stop controlled, J-turn intersection with a U-turn sized for passenger vehicles. The intersection of US 11 and Lakeview Drive would allow right-in and right-out turns. Left turns into and out of Lakeview Drive will be made using U-turns on both sides of the intersection. All modifications would be located within existing right-of-way (ROW), and no additional ROW would be acquired.

The difference between the two alternatives is the type and location of bicycle facilities. Under Alternative 1, five-foot-wide continuous bicycle lanes would be striped and marked within the north- and southbound shoulders throughout the length of the project. Under Alternative 2, an eight- to 10-foot-wide bikeway would be constructed east of the road, approximately four feet behind the back of the curb, and would cross driveways and frontage areas of the properties located along the east side of the road. The bikeway would serve only that portion of the project corridor south of Oak Harbor Boulevard.

The Build Alternatives will maintain good LOS for north- and southbound peak traffic on US 11 in 2017 and 2037; they will eliminate left turn movements from westbound Oak Harbor Boulevard onto US 11; they will improve LOS for right turn movements from westbound Oak Harbor Boulevard onto US 11; and they will improve LOS for left turn movements from westbound Eden Isles Drive onto US 11.

Assessment

In compliance with the National Environmental Policy Act (NEPA) of 1969, the alternatives were evaluated for their impacts to the environment. A wetland delineation conducted for the project indicates approximately 0.95 acres of potentially jurisdictional wetlands and 0.09 acres of potentially jurisdictional other waters of the U.S. are located in the project area. Depending on final plans and designs for the project, wetlands might be impacted. If so, a wetland permit would be required. The project is located within the Louisiana Coastal Zone. Although no impacts to the coastal zone are anticipated, a Coastal Use Permit from LDNR would be required.

Although no additional ROW would be acquired, the Build Alternatives might impact areas within the ROW that have been used for parking by businesses and residences located on the east side of the roadway. These impacts might be greater for Alternative 2 because of its offset bikeway. The relocation of residential structures or businesses would not be required. However, areas within existing US 11 ROW currently used by businesses for parking would be incorporated into the project to accommodate additional width. Encroachments that fall within the clear zone of the widened project and/or within the footprint of project needs (i.e. utility locations, drainage, etc.) will be removed during project construction. Any remaining encroachments that fall outside the area of project need will be dealt with according to DOTD policy by removal of the encroachment, by disposal of the excess ROW, or by entering a Joint Use Agreement granting a servitude to St. Tammany Parish over the excess area that would be maintained by the parish.

Project impacts to minority and low-income populations would not be disproportionately high or adverse. No threatened or endangered species would be impacted. No violations of carbon monoxide thresholds for air quality are anticipated as a result of the proposed project. The Recognized Environmental Conditions Assessment conducted for the project revealed no evidence of hazardous, toxic, or radioactive waste concerns in the ROW.

The project area does not contain wetland reserve program properties or scenic streams. The Southern Hills Aquifer underlies the project area; however, the U.S. Environmental Protection Agency (EPA) has confirmed the project would have no adverse effects on the aquifer's water quality. No adverse impacts to floodplains are anticipated as a result of the proposed Build Alternatives, and no prime farmland or agricultural use would be impacted.

The estimated cost for Alternative 1 is approximately $15.04 Million. The estimated cost for Alternative 2 is approximately $16.32 Million.

Under the No Build Alternative, the widening of US 11 and incorporation of new access management features would not occur. Congestion and traffic delays would continue to worsen along the corridor, particularly at busy intersections, and there would be no bicycle facility or pedestrian area.

Preferred Alternative

Alternative 1, with the roundabout at the Eden Isles intersection, is recommended as the preferred alternative. It would entail environmental impacts equal to those anticipated with Alternative 2; however, its bicycle lanes, located on the north- and southbound shoulders and within the curbs, are preferred over the offset bikeway (Alternative 2) because of the large number of driveways on the east side of the roadway. Co-locating bicycle lanes with the roadway shoulders provides a uniform grade for cyclists and reduces potential conflict points between cyclists and traffic entering/exiting driveways on the east side of the roadway. Alternative 1 also provides areas for pedestrians, on the outside five feet of both shoulders, to walk the entire length of the project without having to negotiate the numerous driveways located on the east side of US 11.

ENVIRONMENTAL ASSESSMENT

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

The RPC and DOTD have prepared this Environmental Assessment (EA) to examine alternatives and environmental impacts for the US Highway 11 (US 11) Widening Project from Spartan Drive in Slidell to the US 11 Bridge at Lake Pontchartrain, a distance of approximately 2.8 miles, in St. Tammany Parish (figures 1 and 2). US 11 is classified as an Urban Arterial 2 (UA-2) roadway and currently consists of two 12-foot paved travel lanes (one southbound lane and one northbound lane) with 10-foot-wide partially paved shoulders and a continuous left turn lane between Oak Harbor Boulevard and Spartan Drive. The road transitions to a four-lane configuration (one southbound lane and two northbound lanes divided by a turn lane) north of Schneider Canal, and then into a five-lane configuration (two southbound lanes and two northbound lanes divided by a turn lane) as it approaches Spartan Drive. There is currently no area designated along the roadway for bicyclists, nor is there an area for pedestrians.

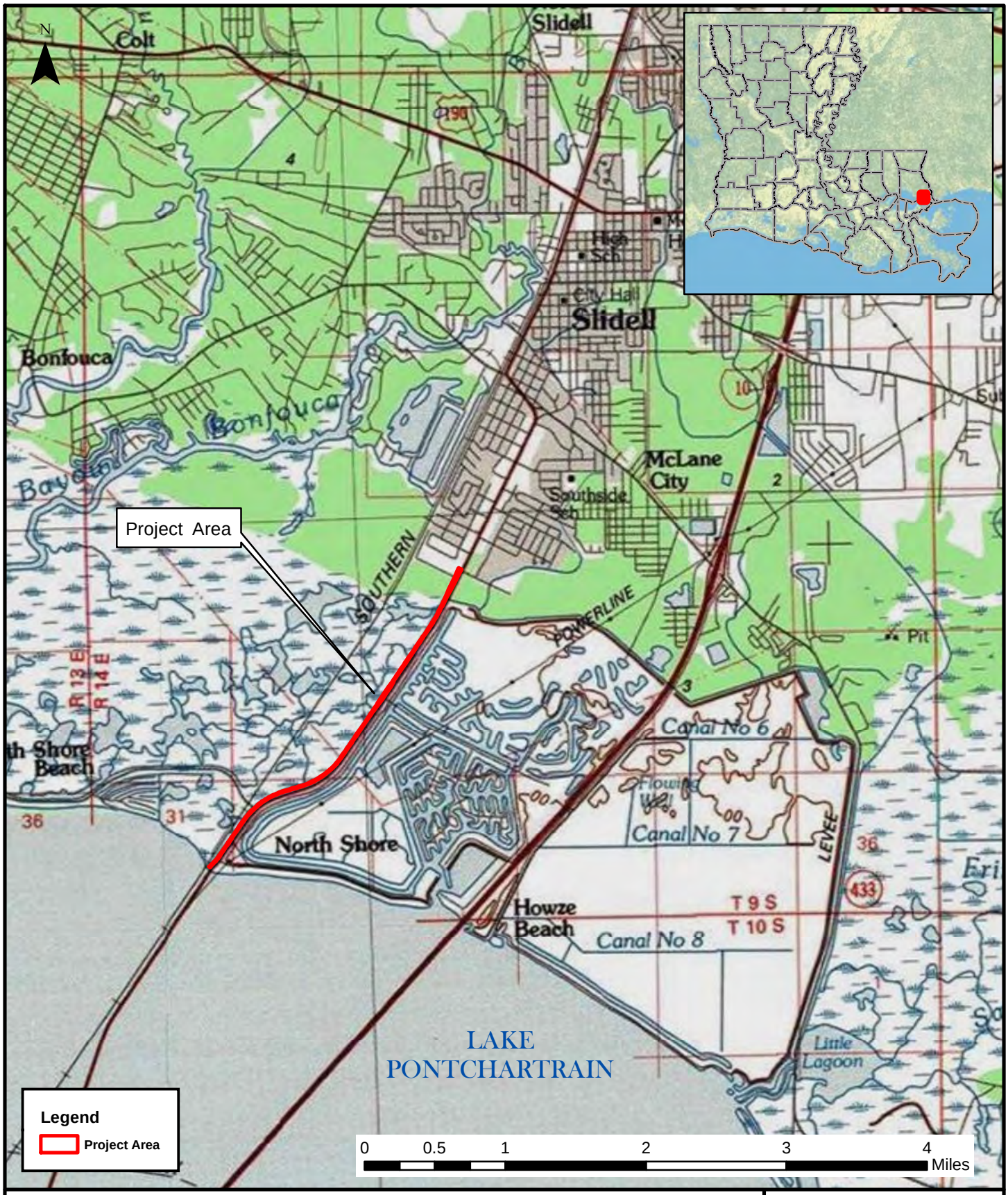
Two Build Alternatives are currently being evaluated. Both alternatives include two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and bicycle facilities (Appendix A). The travel lanes would be separated by a combination of raised medians with U-turns, and new access management features would be constructed at the intersections to facilitate traffic flow. This EA was prepared to evaluate the effects of the proposed alternatives on the natural and human environment.

1.2 WHAT IS AN ENVIRONMENTAL ASSESSMENT?

NEPA directs federal agencies to evaluate alternatives and impacts to the natural and human environment for proposed federal actions. The NEPA process requires coordination with local, state, and federal agencies and the public throughout the planning process. Communities and stakeholders are provided the opportunity to ask questions and provide comments about the proposed project alternatives. Public input is documented in the EA and considered by the project team in developing alternatives. Unlike an Environmental Impact Statement (EIS) prepared when significant impacts are known, an EA is a concise public document that presents sufficient evidence and analysis for determining whether the impacts from the proposed action warrant further analysis in an EIS or whether a Finding Of No Significant Impact (FONSI) is appropriate.

1.3 WHERE IS THE PROPOSED PROJECT IN THE DEVELOPMENT PROCESS?

The NEPA process for this project began in 2009 when project information and a request for comments letter was sent to resource agencies, elected officials, and other stakeholders (Appendix B). Public meetings were held for the project on October 29, 2009 and on May 20, 2010 to provide the public information about the project and to record comments. Two different sets of alternatives were presented at the meetings, both of which included at least one alternative for widening the roadway to four travel lanes.



SITE LOCATION

US 11 Widening Project
St. Tammany Parish, Louisiana
State Project No. H.004983, Federal Project No. H004983

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

Figure: 1
Date: November 2014
Scale:1:60,000
Source: ESRI/GEC
Map ID: kl521830409061-3127

PROJECT VICINITY

US 11 Widening Project
St. Tammany Parish, Louisiana
State Project No. H.004983, Federal Project No. H004983

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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GEC

Figure: 2
Date: November 2014
Scale:1:40,000
Source: ESRI/GEC
Map ID: kl521830409061-3127

In 2014 DOTD recorded new traffic data for the project corridor and applied new growth forecasts to update traffic volume estimates for the roadway. The new traffic volume estimates no longer warrant the roadway to be widened to four lanes. It was determined that congestion and delays would be sufficiently relieved by separating the existing lane configuration with raised medians and J-turns and adding access management features. Upon approval by FHWA, this EA will be distributed to regulatory agencies and other stakeholders to solicit comments for the project. A public hearing will be held following the distribution of the EA to provide interested parties an opportunity to learn more about the proposed project and to submit comments.

2.0 PROJECT PURPOSE AND NEED

2.1 PURPOSE OF THE PROJECT

The primary purpose of the project is to increase capacity and decrease congestion along US 11 between Spartan Drive and Lake Pontchartrain (Figure 1).

2.2 NEED FOR THE PROJECT

US 11 is an important link for motorists travelling to and from the Greater New Orleans area and Slidell. The roadway provides access to the subdivisions along Carr Drive to the west of the road and to the Eden Isle community to the east (Figure 2). Commercial and residential properties and private camps also access this section of the road via numerous driveways. As the following traffic data show, this section of US 11 currently experiences considerable daily congestion which is expected to worsen with anticipated future increases in traffic volume.

2.2.1 Capacity

Traffic data were initially collected in June 2009. Because considerable time had passed since the initial counts, DOTD collected traffic data at selected locations along the project in April 2014 to verify whether the initial counts were still appropriate. The 2014 counts indicated 28-percent less traffic than 2009. As such, the 2009 counts were reduced by 28-percent. Future average daily traffic (ADT) was determined using a 1.5-percent annual growth rate. The highest ADT counts were observed at the US 11 intersection with Oak Harbor Boulevard, where 2017 and 2037 ADT projections were calculated to be 12,403 and 16,706, respectively.

2.2.2 Congestion

LOS is a measure describing operational conditions within a traffic stream. The measure is based on factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Depending on these operational conditions, the roadway is assigned a grade of A through F. An A represents free-flow traffic, and an F represents operational failure, with ease of traffic movement becoming increasingly difficult. LOS D describes decreasing free-flow levels, with reduced speeds and more limited maneuverability within the traffic stream.

Existing, 2017, and 2037 LOS were determined using data collected by DOTD in April 2014. To estimate future volumes a 1.5-percent annual growth rate was applied to 2014 volumes. Existing and future (with- and without-project) LOS are presented in Table 1.

Table 1. Project Corridor Existing and Future Level of Service (LOS), With- and Without-Project

US 11 Intersection	Roadway / Direction	Turn / Movement	2014		2017				2037			
			Existing		No-Build		Build		No-Build		Build	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Spartan Dr.	US 11 Northbound	Left Turn	A	A	A	A	A	A	B	B	A	A
		Through	A	B	A	B	A	B	B	B	A	C
		Right Turn	A	B	A	B	A	A	B	B	A	A
	US 11 Southbound	Left Turn	A	A	A	A	A	A	A	B	A	B
		Through	A	A	A	A	A	A	A	B	A	A
		Right Turn	A	A	A	A	A	A	A	B	A	A
	Spartan Dr. Eastbound	Left Turn	C	C	C	C	C	C	C	C	C	C
		Through	C	C	C	C	C	C	C	C	C	C
		Right Turn	C	C	C	C	C	C	C	C	C	C
	Spartan Dr. Westbound	Left Turn	C	C	C	C	D	C	C	C	C	C
		Through	C	C	C	C	D	C	C	C	C	C
		Right Turn	C	C	C	C	D	C	C	C	C	C
Oak Harbor Blvd.	US 11 Northbound	Left Turn										
		Through	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow
		Right Turn	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow
	US 11 Southbound	Left Turn	A	A	A	B	A	B	A	B	A	B
		Through	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	Free Flow	A	Free Flow
		Right Turn										
	Oak Harbor Blvd. Westbound	Left Turn	D	E	E	E	N/A	N/A	F	F	N/A	N/A
		Through										
		Right Turn	B	C	B	C	B	C	B	E	B	C
Eden Isles Dr.	US 11 Northbound	Left Turn										
		Through	A	A	A	A	C	C	A	A	C	D
		Right Turn	A	A	A	A	C	B	A	A	C	B
	US 11 Southbound	Left Turn	A	A	A	A	C	C	A	C	C	C
		Through	A	A	A	A	A	B	A	A	A	B
		Right Turn										
	Eden Isles Dr. Westbound	Left Turn	E	D	E	E	B	C	E	E	B	C
		Through										
		Right Turn	D	D	D	D	B	C	D	D	B	C
Carr Dr.	US 11 Northbound	Left Turn	A	A	A	A	A	A	A	A	C	A
		Through	A	A	A	A	A	A	A	A	C	A
		Right Turn										
	US 11 Southbound	Left Turn	Free Flow	Free Flow	Free Flow	Free Flow	A	A	Free Flow	Free Flow	A	C
		Through	Free Flow	Free Flow	Free Flow	Free Flow	A	A	Free Flow	Free Flow	A	C
		Right Turn										
	Carr Dr. Eastbound	Left Turn	B	B	B	C	A	A	C	C	A	A
		Through										
		Right Turn	B	B	B	C	A	A	C	C	A	A

Source: GEC, 2014.

As shown in Table 1, the Build Alternatives would:

- Maintain good LOS for north- and southbound peak traffic on US 11 in 2017;
- Eliminate left turn movements from westbound Oak Harbor Boulevard onto US 11, which without the project would worsen from LOS E to LOS F;
- Improve LOS for right turn movements from westbound Oak Harbor Boulevard onto US 11, which without the project would worsen from LOS C to LOS E; and

- Improve LOS for left turn movements from westbound Eden Isles Drive onto US 11, which is currently LOS E and, without the project, will be so in 2037.

3.0 ALTERNATIVES CONSIDERED

As the project progressed, alternatives to increase capacity for the roadway were developed and evaluated. As explained below, the alternatives covered a range of measures, including construction of additional lanes, widening existing lanes, and construction/incorporation of access management features.

3.1 NO BUILD ALTERNATIVE

NEPA regulations require evaluation of the No Build Alternative. The No Build Alternative assumes that no actions would be taken to improve US 11 capacity from Spartan Drive to Lake Pontchartrain. Under this alternative, existing, degraded LOS would persist.

3.2 BUILD ALTERNATIVES

3.2.1 Preliminary Alternatives Eliminated from Further Consideration

The first set of Build Alternatives developed for the project included variations of a four-lane road configuration with a median, bicycle facility, and sidewalk. Operationally there was little difference between any of the three alternatives. The Build Alternatives were either asymmetrical or symmetrical to the ROW centerline. Under the asymmetrical alternative, the existing two-lane roadway would remain in place to be used for southbound traffic with a median and additional lanes constructed to the east. Businesses using the eastern portion of the ROW for parking would be adversely impacted. Under the symmetrical alternatives, the existing roadway would be removed and the new, widened roadway would be built on the ROW centerline, mitigating impacts to parking and frontage areas of the businesses and residences on the east side of the road. The first set of alternatives included:

- Alternative 1: No Build;
- Alternative 2: Roadway asymmetrical to ROW centerline with four lanes, a 30-foot-wide median, and separate bike path and sidewalk offset to the east of the roadway;
- Alternative 3: Roadway symmetrical to ROW centerline with four lanes, a 30-foot-wide median, and a separate bike path and sidewalk offset to the east of the roadway; and
- Alternative 4: Roadway symmetrical on ROW centerline with four lanes, a 20-foot-wide-median, eight-foot paved shoulders, and a sidewalk offset to the east of the roadway.

These alternatives were presented at a public meeting held on October 29, 2009 at Salmen High School in Slidell. Based on input from the attendees regarding adverse impacts to the frontage and parking areas of properties along the east side of the road, all three Build Alternatives were dismissed from further consideration, although elements of each were used in the development of new alternatives.

Feedback from the first public meeting included recommendations for considering a two-lane alternative with an added center turn lane. This and other feedback was incorporated into the development of a second set of alternatives which were presented at a second public meeting on May 20, 2010. The second set of alternatives included:

- Alternative 1: No Build;

- Alternative 2: Four lanes asymmetrical to the ROW centerline with eight-foot paved shoulders, and a sidewalk offset to the east of the roadway; and

- Alternative 3: Combination Two and Four Lanes
    - From Lake Pontchartrain to Eden Isles Drive – Two lanes asymmetrical to the ROW centerline with eight-foot paved shoulders, a 20-foot median, and a sidewalk offset to the east of the roadway; and
    - From Eden Isles Drive to Spartan Drive – Four lanes symmetrical to the ROW centerline with eight-foot paved shoulders, a 20-foot median, and a sidewalk offset to the east of the roadway.

Based on stakeholders input, Alternative 3 was chosen as the preferred alternative because of reduced costs and fewer impacts to businesses' parking areas. Alternative 3 was carried forward for further analysis. However, after updating 2009 traffic counts and annual traffic growth rates in 2014 it was determined construction of a four-lane roadway was no longer necessary to improve capacity; construction of access management improvements would improve capacity. Consequently, Alternative 3 (Combination Two and Four Lanes) was dismissed from further consideration.

3.2.2 Build Alternatives Evaluated in this EA

Two Build Alternatives are currently being considered, both of which would improve traffic flow with access management features and provide bicycle facilities. Impacts to frontage and parking areas within the ROW have been minimized by adjusting the alternatives to two travel lanes divided by a combination of raised medians and J-turns.

Alternative 1: From Lake Pontchartrain to Schneider Canal Alternative 1 consists of one northbound lane and one southbound lane divided by a combination of raised medians and U-turns. This combination requires that vehicles turning left onto US 11 first make a right turn then U-turn at the next available median opening. The J-turn does not require through traffic to stop or yield. Both travel lanes would be 12-feet wide with 10-foot-wide paved shoulders and a curb and gutter.

Over Schneider Canal the roadway would rise to match the existing grade of the existing flood protection levee east of US 11. This section of the road over the canal would generally be maintained in its current configuration (two travel lanes divided by a turn lane), but the turn lane would be widened slightly, and 10-foot paved shoulders would be added.

From Schneider Canal to Spartan Drive the current lane configuration would be retained.

Bicycle lanes would be located on the north- and southbound shoulders throughout the entire length of the project. Figure 3 presents a typical section of Alternative 1.

Alternative 2: Alternative 2 is identical to Alternative 1 with one exception. A bikeway, which would be 8–10 feet wide, would be offset to the east of the roadway, approximately four feet beyond the back of the curb. The bikeway would not continue throughout the entire length of the project; it would serve only that portion of the project corridor south of Oak Harbor Boulevard. Figure 3 presents a typical section of Alternative 2.

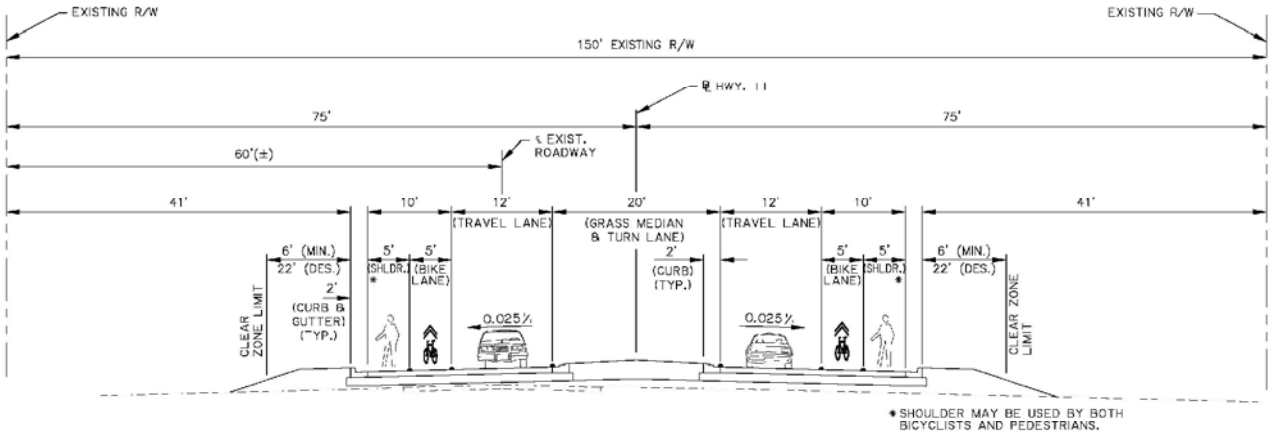
Both Build Alternatives would include the following access management features:

- Northbound and southbound U-turns with bulb-outs at various locations;
- A stop-controlled J-turn with dedicated left turn lane in the southbound direction and right turn lane for northbound traffic at the Oak Harbor Boulevard intersection;
- Either a dedicated left turn lane (the existing traffic signal would remain), or, preferred, a three-legged roundabout at the Eden Isles Drive intersection;
- A three-legged roundabout at the Carr Drive intersection;
- Improvements that provide left-in and right-out turns, and a U-turn sized for passenger vehicles at Northshore Circle; and
- Improvements that provide right-in and right-out turns at Lakeview Drive. Left turns will be made using U-turns on both sides of the intersection.

All improvements would be constructed/located within the existing ROW, and no additional ROW would be acquired. Appendix A presents preliminary plans for both Build Alternatives.

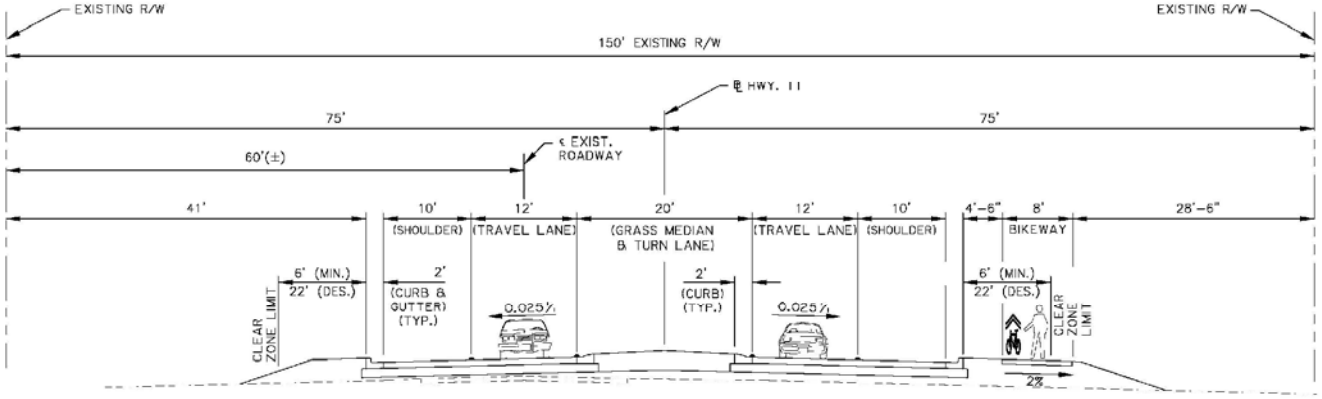
3.3 PREFERRED ALTERNATIVE

The selection of a preferred alternative takes into consideration the environmental effects of each alternative, cost, public opinion, and other factors. Alternative 1, with the roundabout at the Eden Isles intersection, is recommended as the preferred alternative. As detailed in Section 4.0 and as summarized in Table 9, Alternative 1 would entail environmental impacts equal to those anticipated with Alterative 2; however, the location of bicycle lanes on the north- and southbound shoulders and within the curbs (Alternative 1) is preferred over the offset bikeway (Alternative 2) because of the large number of driveways on the east side of the roadway. Co-locating the bicycle lanes with the roadway shoulders provides a uniform grade for bicyclists and reduces potential conflict points between cyclists and traffic entering/exiting driveways east of the roadway. Alternative 1 also provides areas for pedestrians, on the outside five feet of both shoulders, to walk the entire length of the project without having to negotiate the numerous driveways located on the east side of US 11.



TYPICAL SECTION
N.T.S.

ALTERNATE 1
(ROADWAY CLASSIFICATION – UA–2)
(DESIGN SPEED – 45 MPH)



TYPICAL SECTION
N.T.S.

ALTERNATE 2
(ROADWAY CLASSIFICATION – UA–2)
(DESIGN SPEED – 45 MPH)

TYPICAL SECTIONS

US 11 Widening Project
St. Tammany Parish, Louisiana
State Project No. H.004983, Federal Project No. H004983

GEC

Figure: 3
Date: March 2015
Scale: NTS
Source: GEC
Map ID: kl521830409061-3137

4.0 ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

4.1 ENVIRONMENTAL CONDITIONS AND POTENTIAL EFFECTS

4.1.1 Land Use and Community Character

The project extends approximately 2.8 miles from Lake Pontchartrain to the southern limits of Slidell. The majority of the west side of the roadway is zoned single family residential. These homes have waterfront access to Schneider Canal. The properties along the east side of the road are a mix of multiple-family residences and commercial properties (St. Tammany Parish Government, 2014a).

Field surveys pursuant to the noise analysis observed residences on both sides of US 11 between Lake Pontchartrain and Oak Harbor Boulevard. A total of 169 single family homes, duplexes or triplexes, 478 apartments or condominiums, and three mobile homes are present within 500 feet of the proposed roadway edge. According to the St. Tammany New Directions 2025 Land Use Plan (St. Tammany Parish Government, 2014b), land use in the project area in 2025 will continue to be zoned a mix of residential and commercial. Currently, property within the existing ROW is used for parking by some of the businesses located along the road.

Landscape west of the project area is comprised mainly of undeveloped land that extends to the Big Branch Marsh National Wildlife Refuge (Figure 2). The Eden Isle community occupies a large area to the east of the road corridor and is zoned as a planned unit development (St. Tammany Parish Government, 2014a). The northern portion of the roadway, from Schneider Canal to Spartan Drive, is located within Slidell city limits. There are no bicycle facilities within the project corridor.

No Build Alternative: The No Build Alternative is not anticipated to change existing and future land use and community character. Residents and businesses would continue to experience delays on US 11, and conditions are expected to worsen in the future (Table 1).

Build Alternatives: The Build Alternatives would not alter existing or future land use and community character. The project area would continue to include a mix of residential and commercial land uses. However, congestion and traffic delays would be ameliorated, providing benefits to roadway users.

Both Build Alternatives would accommodate bicyclists. The bicycle facility, together with the proposed raised median, could create a more aesthetically pleasing and bicycling friendly environment for users of the road which, in turn, could enhance community character. Bicycling access to businesses along the corridor would be improved.

With both Build Alternatives, areas within existing US 11 ROW currently used by businesses for parking would be incorporated into the project to accommodate additional width. Encroachments that fall within the clear zone of the widened project and/or within the footprint of project needs (i.e., utility locations, drainage, etc.) will be removed during project construction. Any remaining encroachments that fall outside the area of project need will be dealt with according to DOTD

policy by removal of the encroachment, by disposal of the excess ROW, or by entering a Joint Use Agreement granting a servitude to St. Tammany Parish over the excess area that would be maintained by the parish.

4.1.2 Economic Activities

The largest employment sectors in St. Tammany Parish are healthcare and social assistance, retail trade, and accommodation and food services (U.S. Census Bureau, 2011). Slidell is the headquarters of Vesco Tennis Courts, a privately held firm specializing in construction of hard surfaces for outdoor sports facilities, and Textron, an automotive manufacturer and defense contractor. The US 11 project corridor includes a mix of restaurants, retail stores, and other light commercial businesses.

No Build Alternative: The No Build Alternative would have no impacts on economic activities in the project area.

Build Alternatives: The Build Alternatives would not relocate any businesses or residences. However, areas within the existing ROW currently used by some businesses for parking would be incorporated into the project to accommodate additional width. This was a primary concern expressed during the two public meetings held for the project in 2009 and 2010. With both Build Alternatives, areas within existing US 11 ROW currently used by businesses for parking would be incorporated into the project to accommodate additional width. Encroachments that fall within the clear zone of the widened project and/or within the footprint of project needs (i.e., utility locations, drainage, etc.) will be removed during project construction. Any remaining encroachments that fall outside the area of project need will be dealt with according to DOTD policy by removal of the encroachment, by disposal of the excess ROW, or by entering a Joint Use Agreement granting a servitude to St. Tammany Parish over the excess area that would be maintained by the parish.

The bicycle lanes in Alternative 1 would be located on the roadway shoulders, and impacts to areas within the existing ROW used for parking would be minimized. Under Alternative 2 the offset bikeway would cross existing driveways and parking lots located within the ROW and would present potential conflict points between pedestrians/cyclists and traffic entering/exiting driveways.

The proposed project would enhance economic activities in the project area by improving traffic operations and making the area more attractive for retail and light commercial development. Although the proposed project would affect access patterns by limiting left turns to only those points where turn lanes cross the median, thereby changing the way businesses and residential properties are accessed, the overall improvement in traffic flow resulting from the Build Alternatives would be expected to offset any impacts from the left turn limitations.

Those travelling the project corridor might be temporarily inconvenienced during construction; however, the roadway would remain open during construction and any project-related adverse effects on economic activities would be minor and temporary.

4.1.3 Relocations of Homes and Businesses

Some residences and businesses are located in close proximity to the existing ROW.

No Build Alternative: This alternative would not relocate businesses or residential properties.

Build Alternatives: The proposed project would be limited to the existing ROW. The proposed project would not require the relocation of any business or residential properties.

4.1.4 Demographics and Environmental Justice

Title VI of the Civil Rights Act (42 United States Code [USC] 2000) and Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* mandate that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income communities. Socioeconomic and demographic data for the project area were reviewed to determine if the proposed action would have a disproportionately high and adverse impact on minority or low-income communities. For this analysis, low-income is defined as household income at or below the poverty line based on statistics updated annually by the U.S. Department of Health and Human Services and the U.S. Census Bureau's American Community Survey.

Demographic data were collected from the 2010 U.S. Census Bureau for populated Census Blocks located within 2,000 feet of the project corridor (Table 2). The average percentage of minorities (all races/ethnicities except non-Hispanic white persons) of all Census Blocks within this buffer was estimated to be approximately 23.4 percent of the population, which is approximately four-percent more than St. Tammany Parish as a whole (19.4 percent).

Table 2. Minority Populations by Census Block

Census Tract/Block	Total Population	Minorities	Minorities (%)
408.01/1027	624	112	17.9
408.01/1037	57	1	1.8
408.01/1042	2	2	100.0
408.01/1051	76	16	21.1
408.01/1054	48	3	6.3
408.01/1055	43	6	14.0
408.01/1056	55	19	34.5
408.01/1071	469	239	51.0
408.01/1072	95	21	22.1
408.01/1078	123	104	84.6
408.02/1000	730	215	29.5
408.02/1011	291	62	21.3
408.02/1012	11	0	0.0

Census Tract/Block	Total Population	Minorities	Minorities (%)
408.02/1017	12	0	0.0
408.02/1020	6	0	0.0
408.02/1021	830	136	16.4
408.02/1029	2	0	0.0
408.02/3001	36	2	5.6
408.02/3003	385	97	25.2
408.02/3006	1,326	130	9.8
408.02/3016	107	3	2.8
411.04/1024	6	0	0.0
411.04/1040	21	2	9.5
411.04/2031	34	18	52.9
411.04/2032	44	29	65.9
411.04/2033	62	28	45.2
411.04/2034	58	18	31.0
411.04/2036	60	16	26.7
411.04/2037	53	22	41.5
411.04/2041	79	9	11.4
411.04/2042	122	45	36.9
411.04/2043	44	1	2.3
411.04/2044	113	27	23.9
411.04/2045	2	0	0.0
411.04/2046	14	1	7.1
	Total Population 6,040	**Total Minorities 1,384**	**Average Percentage 23.4**

Source: U.S. Census Bureau's Population and Housing Summary File 1, 2010.

Approximately 13.6 percent of the population living in the three project area census tracts (the smallest geographic unit of analysis available) lives below the poverty line (Table 3), which is slightly greater than St. Tammany Parish on the whole (11.5 percent).

Table 3. Poverty by Census Tract

Census Tract	% Below Poverty Line
408.01	22.7
408.02	4.4
411.04	13.5
Average Percentage = 13.6%	

Source: U.S. Census Bureau 5-Year Estimates, American Community Survey, 2006-2010.

No Build Alternative: The No Build Alternative would not have disproportionate effects on minority or low-income communities.

Build Alternatives: Minority and low-income communities would not be adversely impacted by the project. The project would benefit the public through reduced congestion and improved traffic flow.

4.1.5 Cultural Resources

Consideration of impacts to cultural resources is mandated under Section 106 of the National Historic Preservation Act as implemented by 36 CFR Part 800. Requirements include the identification of significant historic properties that might be impacted by the proposed action or alternatives within the project's area of potential effect. Historic properties are defined as archaeological sites, standing structures or other historic resources listed, or determined eligible for listing, in the National Register of Historic Places (NRHP). If adverse effects on historic, archaeological, or cultural properties are identified, agencies must attempt to avoid, minimize, or mitigate the impacts to these resources.

According to DOTD correspondence with the State Historic Preservation Office (SHPO) (Appendix C), one archaeological site is located within one mile of the project area. This site, the Guzman Site, has been deemed ineligible for the NRHP. Seven standing structures are also located within one mile of the project area. Six have been deemed ineligible for the NRHP; Kronos contains no information regarding the seventh.

The US 11 Bridge over Lake Pontchartrain was constructed in 1928 and is 4.7 miles long. It was determined eligible for the NRHP on August 18, 2000.

No Build Alternative: The No Build Alternative would not impact cultural resources.

Build Alternatives: The project is not anticipated to affect the US 11 Bridge over Lake Pontchartrain because all work would be performed within the existing ROW and entail no work on the bridge. FHWA, in conjunction with DOTD, has determined that no historic properties would be adversely affected by the proposed project. In correspondence dated October 28, 2010, SHPO concurred with this determination (Appendix C).

4.1.6 Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966 stipulates that FHWA cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless: (1) there is no feasible and prudent avoidance alternative; or (2) use of the land would have only a *de minimis* impact, or no adverse effect, to key features of such properties.

The Big Branch Marsh National Wildlife Refuge, which is located approximately 0.25-mile west of the project area (Figure 2), could be considered a Section 4(f) resource. Established in 1994,

lands for the refuge were acquired by the U.S Fish and Wildlife Service (USFWS) to protect, enhance, and manage this wetland ecosystem. Originally 12,000 acres, the refuge has grown to almost 19,000 acres. It comprises the largest undeveloped natural area along Lake Pontchartrain's northern shore.

No Build Alternative: The No Build Alternative would have no impacts on Section 4(f) resources.

Build Alternatives: As documented in Section 4.1.5 (Cultural Resources), no historic properties or features would be affected by the proposed project. In correspondence dated October 28, 2010, SHPO concurred with the determination that no historic properties would be adversely affected by the proposed project (Appendix C).

Although the Big Branch Marsh National Wildlife Refuge could be considered a Section 4(f) resource, the Build Alternatives would not involve the acquisition of ROW from the refuge and no impacts to the refuge are anticipated. According to the Solicitation of Views response from the Louisiana Department of Wildlife and Fisheries (LDWF), "No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries" (Appendix B).

4.1.7 Section 6(f) Resources

Section 6(f) of the Land and Water Conservation Act requires that unavoidable conversion of lands or facilities acquired or developed with Land and Water Conservation Act funds be replaced in kind or coordinated with the Department of the Interior (DOI).

No Build Alternative: The No Build Alternative would not affect Section 6(f) resources.

Build Alternatives: The LDWF has identified no state or federal parks, wildlife refuges, scenic streams, or wildlife management areas within the project limits (Appendix B). The proposed project would not result in the conversion of a designated 6(f) resource.

4.1.8 Community Facilities, Services, and Social Resources

Properties that front US 11 within the project limits are primarily residences or businesses, which include restaurants, automotive service centers, convenience stores, and retail stores. Most nearby community institutions, such as schools and churches, are located north of the project area in Slidell. The First Baptist Church and a school are located on Spartan Drive just west of the project corridor, and several schools are located near Spartan Drive northeast of the project corridor. Additionally, a church is located on Carr Drive west of US 11. The project corridor is a commonly used route to these institutions.

No Build Alternative: Congestion and traffic delays currently affecting access to project area businesses and community facilities would persist under the No Build Alternative. Bicyclist access to these facilities would remain difficult due to the lack of bicycle facilities.

Build Alternatives: The project would be restricted to the existing ROW; no properties along the corridor would be acquired, and no structures would be relocated. Community facilities located near the project corridor would not be adversely affected, although short-term traffic delays might occur during construction. Over the long term, the project would provide more efficient access to the facilities.

4.1.9 Wildlife and Protected Species

Section 7 of the Endangered Species Act (ESA) of 1973 requires federal actions to be implemented in a manner that does not jeopardize protected species or their habitat. The USFWS is charged with implementing the ESA and maintains a list of protected plants and animals and their protection status. The Louisiana Natural Heritage Program (LNHP) of the LDWF lists threatened and endangered species for each parish in Louisiana. Table 4 presents species listed as threatened or endangered in St. Tammany Parish.

Table 4. State and Federal Threatened and Endangered Species in St. Tammany Parish

Scientific Name	Common Name	State Status	Federal Status
Acipenser oxyrinchus desotoi	Gulf sturgeon	Threatened	Threatened
Gopherus polyphemus	Gopher tortoise	Threatened	Threatened
Graptemys oculifera	Ringed map turtle	Threatened	Threatened
Haliaeetus leucocephalus	Bald eagle	Endangered	Delisted
Picoides borealis	Red-cockaded woodpecker	Endangered	Endangered
Potamilus inflatus	Inflated heelsplitter	Threatened	Threatened
Rana sevosa	Dusky gopher frog	Not listed	Endangered
Trichechus manatus	Manatee	Endangered	Endangered
Ursus americanus luteolus	Louisiana black bear	Threatened	Threatened

Source: LNHP, April 2014.

The USFWS Critical Habitat Mapper indicates critical habitat for the Gulf sturgeon is located in Lake Pontchartrain just south of the project area (USFWS, 2014).

In correspondence dated September 28, 2009, USFWS stated, “the northern portion of the project (Oak Harbor Boulevard to Spartan Drive) is located within an area that may be inhabited by the red-cockaded woodpecker (RCW), federally listed as an endangered species. RCWs nest in open, park-like stands of mature (i.e., greater than 60 years of age) pine trees containing little hardwood understory or midstory.” USFWS recommended that a survey be undertaken to identify any suitable RCW nesting and/or foraging habitat in the project area.

On January 7, 2010, a survey was conducted and determined that no suitable RCW habitat was located within the project area. It was determined that the project would have no effects on RCW nesting or foraging habitat or to RCW individuals (Appendix C). USFWS concurred with this finding in a letter dated October 22, 2010, stating, "According to the provided information, no mature pine trees (i.e., 10 inches or greater in diameter at breast height) exist within the project area or would be removed by the construction activity. Because the potential project area is located primarily in a residential, semi-urban area, no potential foraging or nesting habitat is present. Based on the above information, the Service concurs with your determination that no impacts to RCWs would occur as a result of the proposed action. No further endangered species consultation will be required for this project unless there are changes in the scope or location of the work" (Appendix C). In November 2014 coordination with the USFWS' Louisiana Ecological Services Office (Appendix C), USFWS states 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 within St. Tammany Parish. Therefore a "no effect" conclusion is appropriate. In a letter dated September 24, 2009, LDWF stated, "no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project" (Appendix B).

4.1.10 Wetland Reserve Program

The project corridor does not contain any properties enrolled in the Natural Resources Conservation Service (NRCS) Wetland Reserve Program (WRP); therefore, none of the alternatives would impact WRP properties.

4.1.11 Wetlands and Other Waters

Executive Order No. 11990, Protection of Wetlands, issued May 24, 1977, directs federal agencies "to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative." Wetlands are semiaquatic lands flooded or saturated by water for varying periods of time. For an area to be delineated as a wetland, it must exhibit appropriate hydrology, contain hydric soils, and support hydrophytic vegetation (Environmental Laboratory, 1987).

Wetlands restore and maintain water quality by removing and retaining nutrients contained in storm water runoff that would otherwise flow directly into the water column. These ecosystems provide critical habitat for a diversity of plants and animals, including fish, shellfish, waterfowl, shorebirds, wading birds, songbirds, and mammals. Wetlands provide flood control by retaining water that would otherwise flood nearby residential and agricultural areas.

The USFWS National Wetlands Inventory identified the presence of estuarine emergent and estuarine subtidal wetlands to the west and east of the project area. However, no wetlands were identified in the project area. GEC conducted a preliminary wetland delineation on April 23, 2014 in the project area. Ten herbaceous wetland communities comprising a total of approximately 0.95 acres and approximately 0.09 acres of other waters of the U.S. (in Schneider Canal) were identified in the ROW. The wetland report is provided in Appendix D. The USACE will make the final determination as to whether these areas are to be considered jurisdictional wetlands.

4.1.12 Floodplains

Executive Order 11988 (Floodplain Management) and U.S. DOT Order 5650.2 require federal agencies to avoid to the greatest extent possible long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. The 100-year floodplain is defined as an area that would be inundated by a precipitation event that has a 1-in-100 chance of occurring every year. Regulations require that encroachment within the 100-year floodplain be minimized and that land development inconsistent with floodplain values be avoided.

According to the effective Flood Insurance Rate Map (FIRM, revised in 1991), the project is located within Federal Emergency Management Agency (FEMA) Flood Zones V15, A10, and AE, all of which are within the 100-year floodplain (Appendix B). Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

No Build Alternative: The No Action Alternative would have no impacts on floodplain management in the area.

Build Alternatives: Because the project would be constructed within existing ROW within a developed commercial area, it would not impact natural or beneficial floodplain values. No significant encroachment of the floodplain would result from the proposed project. No flood hazard would result from development of the proposed project. Further, the proposed project would not interrupt or terminate an emergency access or evacuation route. Correspondence from the DOTD Floodplain Management Program Coordinator stated, "During construction there must be allowance for the adequate flow of water and assurance that there would 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" (Appendix B). The St. Tammany Parish Floodplain Administrator offered no objections to the project (telephone communication, June 10, 2014).

4.1.13 Coastal Resources and Essential Fish Habitat

The Coastal Zone Management Act (CZMA) of 1972 authorizes the Coastal Zone Management Program, a federal-state partnership dedicated to comprehensive management of the nation's coastal resources. By making federal funds available, the law encourages states to preserve, protect, and, where possible, restore or enhance valuable natural coastal resources, such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. Any federal or state agency whose activities directly affect the coastal zone must, to the maximum extent practicable, be consistent with approved state management programs. The proposed project lies within the Louisiana Coastal Zone and would be subject to the rules and regulations of the CZMA.

The Magnuson-Stevens Fishery Conservation Act (MSFCA) (50 CFR 600) states that essential fish habitat (EFH) is "those waters and substrate necessary for fish for spawning, breeding or growth to maturity." The 2005 amendments to the MSFCA set forth a mandate for the National

Marine Fisheries Service (NMFS), regional Fishery Management Councils, and other federal agencies to identify and protect EFH of economically important marine and estuarine fish. A review of NMFS data identified no EFH in the project area (National Oceanic and Atmospheric Administration (NOAA), Habitat Conservation, 2014).

No Build Alternative: The No Action Alternative would not affect coastal resources or EFH.

Build Alternatives: According to correspondence from the LDNR Office of Coastal Management dated October 28, 2009, the proposed activity is a use of state concern in accordance with Louisiana Revised Statue 49:214.5 and requires a Coastal Use Permit (Appendix B).

Correspondence from NMFS stated, "Based on the information provided and our knowledge of the project area, none of the proposed alternatives would adversely impact NOAA trust resources" (Appendix B). Neither Build Alternative would affect EFH.

4.1.14 Subsurface Water

The EPA defines a sole source aquifer as an underground water source that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas have no alternative drinking water sources that could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. The project is located on the Southern Hills Aquifer System, which has been designated a sole source aquifer by the EPA.

No Build Alternative: The No Build Alternative would have no effect on subsurface water.

Build Alternatives: In a letter dated September 15, 2009, the EPA's Sole Source Aquifer Program coordinator stated, "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 groundwater underlying the project site" (Appendix B).

4.1.15 Wild, Scenic, and Natural Rivers

The National Wild and Scenic Rivers System was created by Congress to preserve rivers possessing outstanding natural, cultural, and recreational values. In 1970, the Louisiana Legislature created the Louisiana Natural and Scenic Rivers System. The system was developed for the purpose of preserving, protecting, developing, reclaiming, and enhancing the wilderness qualities, scenic beauty, and ecological regimes of selected free-flowing streams in Louisiana. According to LDWF's LNHP, no scenic streams are located in or near the project area. None of the alternatives would have an impact on wild, scenic, or natural rivers.

4.1.16 Navigable Waterways

In compliance with the Surface Transportation Assistance Act (STAA) of 1982, the FHWA determined by letter to the U.S. Coast Guard (USCG), dated November 19, 2012, that the proposed improvements across Schneider Canal, including replacement the existing culverts with larger culverts, is exempt from USCG permitting. In correspondence dated November 27, 2012, the USCG,

8th Coast Guard District concurred with these findings, stating, "…the Coast Guard accepts your determination that this bridge project meets the criteria for the STAA and is exempt from 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" (Appendix B).

The USCG further stated that the improvements are not exempt from the statute requiring the establishment, maintenance, and operation of Coast Guard required lights and signals on fixed structures. To comply with the statute, DOTD must request an exemption to the statute or install navigational markers on the new culverts. A copy of the USCG concurrence letter is provided in Appendix B.

4.1.17 Farmland

Through the NRCS, the U.S. Department of Agriculture (USDA) administers the Farmland Protection Policy Act to minimize the extent to which federal actions contribute to the unnecessary conversion of farmland to non-agricultural uses. Of particular concern are prime or unique farmland soils. The USDA defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses but is not urban, built-up land, or water. Unique farmland is land, other than prime farmland, that is used for production of specific high-value food and fiber crops.

No Build Alternative: The No Build Alternative would not affect the geology or soils of the project area.

Build Alternatives: In its correspondence (Appendix B) **t**he NRCS advised, "A portion of the soils on the proposed project site are Prime Farmland, however, the project is located in a developed area and therefore, it is considered "built-up", thus there would be no impact to prime farmland and it appears the project would not impact any NRCS work in the immediate area. Also, this project would not impact any farmland protection efforts in the area." Therefore, the Build Alternatives are not anticipated to affect farmland.

4.1.18 Noise

The two current Build Alternatives do not increase the number of travel lanes, and a noise analysis would not normally be conducted. However, previous build alternatives considered for the project included four-lane and combined two- and four-lane variations, and a noise analysis was prepared in accordance with DOTD policy. Although alternatives requiring additional travel lanes have been eliminated from consideration, the noise analysis (Appendix E) has been retained for reference and informational purposes. Because future ADT determined in 2009 was reduced in 2014 based on updated traffic counts and a reduced annual growth rate (Section 2.2.1), and because neither of the two current Build Alternatives increase the number of travel lanes, actual impacts will be less than those discussed in the following.

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels (dBA). A sound level represents the level of the rapid air pressure fluctuations caused

by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the human ear can detect. The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear hears these frequencies. Generally, when the sound level exceeds the mid-60 dBA range, outdoor conversation in normal tones at a distance of three feet becomes difficult.

Noise abatement procedures are considered for DOTD projects if (1) future sound levels are 66 dBA or greater, or (2) a substantial increase in existing sound levels (10 dBA or more) is predicted. A total of 169 single family homes, duplexes or triplexes, 478 apartments or condominiums, and three mobile homes are located within 500 feet of the proposed edge of roadway. Other noise-sensitive land uses that might be affected by the project include the First Baptist Church just south of Spartan Drive on the west side of US 11. The Noise Abatement Criteria (NAC) of 66 Leq (dBA) would apply to these noise-sensitive land uses.

To determine existing sound levels, measurements were conducted at noise-sensitive land uses on September 24, 2009. A sound level of 65 dBA was the greatest sound level recorded. This sound level occurred at the noise sensitive sites closest to US 11. The lowest measured sound levels of 46 dBA were recorded along Moonraker Drive (Figure 2). US 11 was the dominant noise source at all of the measured sites.

No Build Alternative: Sound levels for the No Build Alternative were estimated by evaluating existing and future traffic volumes on US 11. Doubling the traffic on a roadway would result in a 3 dBA increase in the sound level at a given receptor assuming all other conditions remained the same. By 2029, traffic volumes on US 11 were predicted to be approximately 80 percent greater than existing volumes. The resulting 2 dBA increase in sound levels at nearby noise-sensitive land uses was anticipated to impact 23 residences.

Build Alternatives: Noise analysis of the previous build alternatives requiring additional travel lanes was completed using the FHWA Traffic Noise Model computer program, which calculated design-year equivalent sound levels at noise-sensitive land uses in the project area, including the measurement locations. Projected noise levels ranged from 51 dBA for the residences along Moonraker Drive to 70 dBA at the residences closest to US 11. In total, 68 residences were predicted to be impacted under the previous build alternatives requiring additional travel lanes by noise levels exceeding the 66 dBA threshold. None of the receivers were impacted based on the 10 dBA criteria.

DOTD policy requires the consideration of abatement measures when traffic noise impacts occur as a result of a project. Most of the impacted sites adjacent to US 11 have driveways that connect to the road. Maintaining access to the highway would require that the noise barrier have gaps at each driveway, which would render the barrier ineffective at reducing sound levels. Discontinuous noise barriers generally cannot achieve the eight-decibel insertion loss required by the DOTD noise policy; therefore, a detailed analysis of a noise barrier was not performed.

In order to protect future development from becoming incompatible with anticipated highway traffic noise levels, projections of future noise levels for undeveloped lands would be provided to

local planning and building officials. As desired, these officials might review project-related noise data during their consideration of future land use decisions.

4.1.19 Air Quality

Analysis of potential air quality effects was conducted with respect to previous build alternatives that have since been eliminated from consideration and based on future ADT determined in 2009 but reduced in 2014 (Section 2.2.1). As with noise analysis, air quality analysis (Appendix E) has been retained for reference and informational purposes, and actual impacts will be less than those discussed in the following.

Analysis assessed the potential for the project to affect air quality standards, including transportation conformity requirements and any potential Mobile Source Air Toxics (MSATs) effects. The EPA has established allowable concentrations and exposure limits called National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants:

- Carbon monoxide;
- Nitrogen dioxide;
- Ozone;
- Sulfur oxides (commonly measured as sulfur dioxide);
- Lead; and
- Particulate matter no greater than 2.5 micrometers (µm) in diameter; and particulate matter no greater than 10 µm in diameter.

In accordance with the Clean Air Act Amendments of 1990 (CAAA of 1990), EPA identified those areas that did not meet NAAQS for the criteria pollutants and designated them as nonattainment areas. St. Tammany Parish is currently in attainment for all criteria pollutants.

No Build Alternative: The No Build Alternative would have no impacts on air quality.

Build Alternatives: The greatest expected design year annual average daily traffic (AADT) in the project corridor was substantially less than the FHWA criterion. Therefore, the previous build alternatives would have low potential MSAT effects.

Substantial construction-related MSAT emissions were not anticipated as construction is not planned to occur over an extended period. However, construction activity might generate temporary increases in MSAT emissions in the project area.

4.1.20 Hazardous Materials

An investigation for recognized environmental conditions (REC) was undertaken for the project area (Appendix F). As defined by American Society for Testing and Materials (ASTM) E1527-13, REC are, “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.”

Two active underground storage tanks (USTs) are located adjacent to the project area at the former Busy "B" Tackle and at Cracker Barrel #43. No permit violations or major spills, releases, or other concerns were noted in LDEQ files. Various commercial and residential businesses adjacent to the project area could potentially present RECs (for example, iron works, construction yards, mechanic and equipment shops, boat and RV storage areas, and residences). However, site investigation and database research provided no evidence of any releases, spills, or permit violations. In conclusion, the assessment revealed no evidence of REC within or adjacent to the project area.

No Build Alternative: The No Build Alternative would have no effect on hazardous materials.

Build Alternatives: Project construction would not disturb hazardous materials or create potential hazards to human health. If hazardous constituents are unexpectedly encountered in the project area during construction operations, DOTD would be immediately notified and appropriate measures for the proper assessment, remediation, and management of contamination would be initiated in accordance with applicable federal, state, and local regulations. Liquid materials and chemicals such as fuels, lubricants, and paints would be stored on site during construction in accordance with all applicable regulations and requirements, and the contractor would be required to take appropriate measures to prevent, minimize, and control any release of hazardous materials in construction areas.

4.1.21 Travel Patterns

Both Build Alternatives would include two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and bicycle facilities. The travel lanes would be separated by a combination of raised medians with J-turns, and the following access management features would be constructed at the intersections to facilitate traffic flow:

- Northbound and southbound U-turns with bulb-outs at various locations;
- A yield-controlled J-turn with dedicated left turn lane in the southbound direction and right turn lane for westbound traffic at the Oak Harbor Boulevard intersection;
- Either a dedicated left turn lane (the existing traffic signal would remain), or, preferred, a three-legged roundabout at the Eden Isles Drive intersection;
- A three-legged roundabout at the Carr Drive intersection;
- Improvements that provide left-in and right-out turns, a J-turn from the north, and a U-turn sized for passenger vehicles at Northshore Circle; and
- Improvements that provide right-in and right-out turns (only, with no access from the north) at Lakeview Drive.

The medians and J-turns would alter the way properties and side streets are accessed; however, current access points to properties would be maintained. No significant changes to existing travel patterns are anticipated.

4.2 CONSTRUCTABILITY

4.2.1 Construction Sequence

Both Build Alternatives were analyzed to determine the most appropriate construction sequencing to minimize traffic impacts. Construction sequencing is essentially identical for both alternatives because the only variation between the two is the location of the bicycle facility.

Because the roadway centerline would be relocated approximately 15 feet to the east (to the center of the existing right-of-way), the project would be constructed in two main phases. Full passage through the project corridor would be maintained during each phase. Driveway access might experience intermittent disruptions but would be almost constantly maintained.

The first phase would entail pavement construction for the northbound lane and shoulder (a paved width of 22 feet). This improvement would be readied with temporary striping, signage, and east side driveway access for the placement of all traffic during the second construction phase.

The second phase would entail demolition of the existing road, construction of the median and southbound lane and shoulder, and construction of the roundabout at Carr Drive.

Additional staging at the southern extent of the project would be necessary for re-connection of the new roadway to the US 11 Lake Pontchartrain Bridge. This might require single lane closures and flagging operations at the bridge for short durations. It is likely that single lane closures would also be required at the US 11 intersection with Carr Dr. during roundabout construction.

Standard DOTD advance warning signage, flashing lights, and retro-reflective markings would be used. Where possible, and when it would not create excessive noise impacts, nighttime and weekend construction activities might be authorized to mitigate traffic impacts. The anticipated construction duration would be approximately 12 – 15 months.

4.2.2 Complete Streets Policy

DOTD implemented the Complete Streets Policy on July 18, 2010. It aims to create a "comprehensive, integrated, connected transportation network for Louisiana that balances access, mobility, health, and safety needs of motorists, transit users, bicyclists, and pedestrians for all ages and abilities, which includes users of wheelchairs and mobility aids."

Taking into account such factors as the surrounding residential and commercial development, potential property impacts, costs for construction and ROW acquisition, project scope, and other factors, it was determined reasonable and feasible to include a bicycle facility with the project. Two variations were considered in the Build Alternatives, and neither would require the acquisition of additional ROW. In Build Alternative 1, continuous bicycle lanes would be striped and marked within the north- and southbound shoulders throughout the length of the project. In Build Alternative 2, for that portion of the corridor south of Oak Harbor Boulevard, a bikeway, 8-10 feet wide, would be offset to the east of the roadway, approximately four feet beyond the

back of the curb. Alternative 1 is preferred over Alternative 2 because it is continuous in two directions throughout the length of the project, it provides a uniform grade for bicyclists, and because it presents less potential for conflict points between bicyclists and traffic entering/exiting the large number of driveways (97 in total) on the east side of the roadway. Alternative 1 also offers the potential for future bicycle connectivity from the north shore of Lake Pontchartrain to and throughout Slidell. Additionally, Alternative 1 provides areas for pedestrians, on the outside five feet of both shoulders, to walk the entire length of the project without having to negotiate the numerous driveways located on the east side of US 11.

Consideration shall be given during final plan development for such supplemental features as roadside "Share the Road" signage to facilitate this mixing of motorized and non-motorized travel modes.

4.2.3 Access Management Policy

DOTD has adopted an Access Management Policy for the construction of new roadways. Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, and street connections of roadways in order to improve safety. Both Build Alternatives would incorporate access management through the use of raised medians with intermittent openings.

4.3 INDIRECT IMPACTS

The purpose of the project is to increase the capacity of US 11 and decrease congestion along the route. This would be accomplished by adding a median with J-turns, adding paved shoulders, and constructing access management features. The potential for increased urbanization and land use change along the project corridor as a result of this project is limited due to the current level of residential and commercial development and the location of Schneider Canal. Furthermore, the undeveloped land west of Schneider Canal is zoned as conservation land, the majority of which will remain part of the Big Branch Marsh National Wildlife Refuge.

4.4 CUMULATIVE IMPACTS

Cumulative impacts are defined in 40 CFR 1508.7 as those effects that result from:

> *...the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

The analysis of cumulative impacts focuses on those resources expected to be directly or indirectly affected by the proposed project. Although the project is located in the Louisiana Coastal Zone and in the 100-year floodplain, no effects to these resources are anticipated. However, this EA has identified potential project impacts to noise and wetlands/other waters. Therefore, these resources are the focus of the cumulative impacts assessment.

4.4.1 Noise

Build alternatives requiring additional travel lanes, although eliminated from consideration, were at one time considered for the project, and a noise evaluation was prepared to determine existing and future sound levels at noise-sensitive land uses in the project area for the previous build alternatives and for the no build alternative. The highest measured existing peak hour equivalent sound level of 65 dBA was recorded at those noise-sensitive sites located closest to US 11. The lowest measured existing sound levels of 46 dBA were recorded at residences along Moonraker Drive (Figure 2). US 11 was the dominant noise source at all of the measured sites.

Summary of Project Impacts on Noise: For previous build alternatives requiring additional lanes, noise levels for sites along US 11 were expected to exceed the 66 dBA noise threshold (Appendix E), and 68 residences were expected to be impacted by the alternatives. Because neither of the two current Build Alternatives increase the number of travel lanes, and because future ADT determined in 2009 was reduced in 2014 based on updated traffic counts and a reduced annual growth rate, fewer residences will actually be impacted.

Other Reasonably Foreseeable Effects: According to parish land use projections through 2025, land use in the area is not expected to change (St. Tammany Parish Government, 2014b). The project corridor would continue to be zoned a mix of residential and commercial. Land to the west of the project area would continue to be conservation lands, and the area to the east of the project would continue to be residential. No new sources of noise are expected to add cumulative effects to noise levels in the project area.

4.4.2 Wetlands/Other Waters

The project is located in the Deltaic Coastal Marshes and Barrier Islands ecoregion, which was historically dominated by wetland habitat (EPA, 2014a). Wetland habitat in the project area has been significantly reduced as a result of development and ongoing trends affecting coastal Louisiana such as sea level rise, lack of sediment input, delta erosion, and land subsidence. Ten herbaceous wetland communities comprising a total of approximately 0.95 acres and approximately 0.09 acres of waters of the U.S. (in Schneider Canal) were identified within the ROW. The wetland report is provided in Appendix D. The USACE will make the final determination as to whether these areas are to be considered jurisdictional wetlands.

Summary of Project Impacts on Wetlands/Other Waters: Depending on final plans and specifications for the proposed project, it might impact wetlands identified in the project area. If so, compensatory mitigation would be completed in the region to offset these impacts.

Other Reasonably Foreseeable Effects: Other present and reasonably foreseeable future actions and their effects on wetlands in the area include:

- Within the project limits, St. Tammany Parish is developing plans to re-construct that segment of US 11 at Schneider Canal near Oak Harbor Boulevard. The project requires re-construction of this segment of the highway because it traverses the site of a proposed flood protection levee improvement. The levee improvement would require raising the

road approximately nine feet. The interim project would also require replacement of the existing culverts beneath US 11 at Schneider Canal with larger, longer culverts. Construction work might impact wetland habitat and other waters of the U.S. near the canal. Any impacts would be compensated through mitigation coordinated with regulatory agencies.

- Other construction projects implemented for flood protection or traffic might similarly impact wetlands. These impacts would be offset through compensatory mitigation coordinated with regulatory agencies.
- Ongoing trends of sea level rise, delta erosion, and land subsidence would continue to convert wetland habitat to open water habitat. Coastal restoration projects planned for coastal Louisiana would minimally offset these effects.

Cumulative effects on wetlands in the area as a result of this and other construction projects combined with delta erosion and sea level rise could cause an overall net loss of wetland habitat in the future. Any adverse impacts to wetlands as a result of the proposed project could incrementally add to such losses. However, by providing compensatory mitigation for wetland impacts, any contribution to overall wetland loss by this project would be minimal.

4.5 MITIGATION FOR ADVERSE IMPACTS

The proposed project is expected to have minimal effects on the environment. For those impacts that cannot be avoided, the following mitigation measures would be implemented.

4.5.1 Wetlands and Other Waters

To ensure no net loss of wetlands, any impacts to wetlands as a result of the project would be compensated in accordance with an approved mitigation plan developed during the permit process. To mitigate potential water quality impacts to surface waters, the proposed project would adhere to standard DOTD BMPs and applicable LDEQ permit provisions to prevent erosion and nonpoint source pollution that might result from construction-related activities.

4.5.2 Floodplains

Required drainage structures would be designed, installed, and maintained to ensure adequate water flow through the project area and to ensure no adverse impacts to the natural function of local floodplains.

4.5.3 Noise

DOTD Highway Traffic Noise Policy requires that if a noise impact is identified, abatement measures must be considered. Only noise abatement measures deemed reasonable and feasible would be proposed for the project. When noise abatement measures are considered, every effort would be made to obtain a noise reduction of at least 8 dBA, and at least one receptor must receive an 8 dBA reduction for the abatement measure to be feasible. Receivers anticipated to be impacted from construction of previous build alternatives were evaluated with respect to noise barrier feasibility. The impacted residential and commercial sites have individual driveways

connecting them to US 11. To maintain access, a noise barrier would have to incorporate openings, which would prevent it from achieving an 8-dBA noise reduction. Therefore, it was determined that noise barriers would not be feasible for the project corridor.

Because the project is relatively land-locked, non-barrier measures such as alterations to the horizontal and/or vertical alignments or the acquisition of property rights of the lands adjacent to the project area would not be viable options for noise abatement. In order to protect future development from becoming incompatible with anticipated highway traffic noise levels, projections of future noise levels for undeveloped lands would be provided to local planning and building officials. As desired, these officials might review project-related noise data during their consideration of future land use decisions.

4.5.4 Coastal Zone

The project is located within the Louisiana Coastal Zone and will be subject to the rules and regulations of the Coastal Zone Management Act. A coastal use permit will be required. All applicable permit conditions would be followed.

4.5.5 Construction Impacts

Short-term construction impacts (e.g., noise, air quality) would be mitigated through adherence to applicable local, state, and federal regulations, including (but not limited to) Section 107.14 (Environmental Protection) of the Louisiana Specifications for Roads and Bridges and appropriate LDEQ Air Quality Regulations governing fugitive emissions of particulate matter during road construction activities (LAC 33:III.1305). Standard specification 107.27 (Archaeological and Historical Findings) dictates procedures necessary in the event that archeological or historical material is discovered during the course of construction-related activities.

5.0 PUBLIC COMMENTS AND AGENCY COORDINATION

5.1 AGENCY COORDINATION

Information regarding the proposed project was sent to federal, state, and local agencies and officials on September 8, 2009. The Solicitation of Views information and the associated responses are included in Appendix B. A list of agencies consulted and a summary of their comments are provided in tables 5 and 6.

Table 5. Summary of Responses to the Solicitation of Views

Date of Comment	Agency/Tribe	Comment Summary
November 27, 2012	USCG	Accepts FHWA STAA determination; bridge not exempt from Coast Guard lighting requirements
February 23, 2010	USACE	No adverse impacts to USACE projects; indicated the possibility of jurisdictional wetlands in the area and the need for a Coastal Use Permit.
November 3, 2009	LDWF	No impacts to rare, threatened or endangered species or critical habitats are anticipated from the proposed project. No state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known at the specified site or within ¼ mile of the proposed project.
September 23, 2009	SHPO	The U.S. Highway 11 Bridge has been determined eligible for listing in the National Register of Historic Places. As such, will need to review the proposed widening project design plans for the U.S. Highway 11 Bridge approach area before commenting.
October 7, 2009	LDNR Resources-Office of Conservation	No active oil, gas, or injection wells in the project area; possibility of registered/unregistered water wells in the project vicinity.
October 20, 2009	LDOTD – Floodplain Management	Project is located in the 100-year floodplain. The local floodplain administrator should be contacted to ensure compliance with the National Flood Insurance Program.
October 5, 2009	LDEQ	No objections. Take necessary steps to obtain and/or update all necessary approvals and environmental permits.
October 9, 2009	NRCS	A portion of the soils on the proposed project site are Prime Farmland, however, the project is located in a developed area and therefore, it is considered "built-up", thus there would be no impact to prime farmland, and it appears the project would not impact any NRCS work or any farmland protection efforts in the area.
September 15, 2009	EPA	No adverse effect on the Southern Hills aquifer system.
October 22, 2009	NOAA	None of the proposed alternatives would adversely impact NOAA trust resources. As such, the National Marine Fisheries Service has no comments to provide.

Date of Comment	Agency/Tribe	Comment Summary
September 24, 2009	USFWS	Northern portion of the project (Oak Harbor Boulevard to Spartan Drive) is located within an area that may be inhabited by the RCW. All suitable nesting habitat within a one-half mile radius from the project boundary should be carefully surveyed for the presence of RCW clusters.

Table 6. Summary of Follow-Up Coordination (Appendix C)

Date of Comment	Agency/Tribe	Comment Summary
November 18, 2014	USFWS	The proposed project would not affect threatened or endangered species and no critical habitat is present. A "no effect" conclusion is appropriate.
October 15, 2010	USFWS	The Service concurs with the determination that no impacts to RCWs would occur as a result of the proposed action.
October 6, 2010	SHPO	The proposed undertaking would have no adverse effects on historic properties.

5.2 PUBLIC MEETINGS

Two public meetings were held at Salmen High School in Slidell, on October 29, 2009 and May 20, 2010. Meeting notices were published in *The Times Picayune* on October 8 and 22, 2009 and in the *St. Tammany News* on October 9 and 23, 2009. Notices of the public meetings were also distributed to the agencies and stakeholders that were sent Solicitation of Views letters and to local officials.

The public meetings provided an opportunity to learn more about the proposed project and provide written and verbal comments for consideration by the project team. Project overview handouts, maps, and comment cards were provided for all attendees. A PowerPoint presentation describing project alternatives was provided for viewing. A transcriber recorded all presentations and comments.

Approximately 138 people attended the first meeting and 132 attended the second. The handouts, PowerPoint presentation, and comment cards specified that written comments would be accepted until November 8, 2009 for the first meeting and May 30, 2010 for the second. Attendee comments recorded at the meeting along with the DOTD responses are summarized in Table 7.

Table 7. Public Meeting Comments and Responses

No.	Comment	Response	Type
October 29, 2009 Meeting			
1	The bridge over Schneider Canal should be widened to prevent a bottle neck at the bridge.	Comment taken into consideration. The center turn lane would be widened but the travel lanes would not be.	Verbal
2	Opposed to four lanes; only a turn lane should be added. Adding two lanes would have too much of an impact on parking for businesses.	Impacts to parking areas within the ROW have been minimized by adjusting the alternatives to two lanes divided by a median/J-turns with paved shoulders.	Verbal
3	Four lanes are not needed for alleviating traffic delays. Two lanes with more turn lanes would solve congestion problems.	The alternatives have been modified to two lanes divided by a median/J-turns with paved shoulders.	Verbal
4	Recommend paved shoulders that also may be used as a bike path.	These features are included in the current Build Alternatives.	Verbal
5	The roadway needs to be level to avoid flooding in certain low areas.	The roadway would be designed so that high water drains off the road to the curb and gutters. A minimum of 0.4% road profile grade is planned for the entire corridor to carry water along the gutter line to the catch basins.	Verbal
6	The existing culverts under US 11 at Schneider Canal need to be larger to convey water away from the road.	St. Tammany Parish is constructing a flood protection project at Schneider Canal that would include replacing existing culverts with larger ones.	Verbal
7	Drainage on the road needs to be improved.	The project would improve drainage by installing sub-surface drainage features with pipe outfalls into the canal on the west side of the road. A minimum of 0.4% road profile grade is planned for the entire corridor to carry water along the gutter line to the catch basins.	Verbal
8	The traffic congestion in the project corridor is dangerous, especially when the interstate is blocked or closed and traffic re-routes to US 11.	Forecasts show that traffic congestion and delays would be significantly reduced as a result of the proposed project.	Verbal

No.	Comment	Response	Type
9	The impact statement for this project should include an analysis of impacts to wetlands near the roadway.	A preliminary wetland delineation was conducted for the project area. The USACE will make a final determination of the presence of jurisdiction wetlands and other waters. Mitigation requirements for wetland loss may require creation of wetlands off-site in an approved wetland mitigation area.	Verbal
10	What this road needs is a turn lane, a sidewalk, a bike path, and improved drainage.	The current proposed alternatives incorporate all of these features, except that the sidewalk and bike path would be combined into a shared-use path. The project would improve drainage by installing sub-surface drainage features with pipe outfalls into the canal on the west side of the road. A minimum of 0.4% road profile grade is planned for the entire corridor to carry water along the gutter line to the catch basins.	Verbal
11	Opposed to widening the road to four lanes if the road over Schneider Canal is only two lanes.	The road would no longer be widened to four lanes, and the turning lane over Schneider Canal would be widened.	Verbal
12	In favor of landscaping.	Comment taken into consideration.	Verbal
13	Widening the road to four lanes with a bike path and landscaping is more than what is needed.	The current alternatives no longer consider a four-lane option.	Verbal
14	It is very difficult to bike down the project corridor. In favor of a bike lane or path.	Both Build Alternatives feature a shared-use pedestrian/bicycle path.	Verbal
May 20, 2010 Meeting			
15	The grade of the road is steep near the bridge. The road elevation should be leveled.	The road profile will be adjusted over the entire project length, including the bridge approach.	Verbal
16	A two-lane configuration to the lake would cause traffic delays if an accident were to take place, not allowing for emergency response.	The alternatives include paved shoulders on both sides of the roadway, enabling the movement of vehicles involved in accidents off the roadway.	Verbal
17	Drainage ditches need to be maintained.	Drainage ditches would be maintained as a function of water quality certification parameters.	Verbal
18	Sidewalks would put people close to the road, which is dangerous.	Comment taken into consideration	Verbal

No.	Comment	Response	Type
19	An asphalt turning lane should be constructed between the travel lanes.	The two travel lanes would be separated by a median with J-turns. This feature has been found to be safer than a continuous turn lane.	Verbal
20	In favor of the bike lane and pedestrian lane.	The current Build Alternatives include these features.	Verbal
21	Two lanes with a median and turning lanes would be sufficient. Four lanes are not needed.	The current Build Alternatives include these features. Alternatives with four lanes have been dismissed.	Verbal
22	In favor of the US 11 widening project.	Comment taken into consideration.	Verbal
23	In favor of the four-lane configuration with a bike lane. Drainage needs to be improved for properties along the roadway.	Comments taken into consideration. New traffic estimates based on expected growth in the area no longer warrant the four-lane alternative. It is anticipated that congestion and delays would be relieved with the current alternatives of widened two lanes separated by a median/J-turn center lane.	Written
24	In favor of four lanes from Spartan Drive to the Schneider Canal bridge.	Please see response to Comment 23 above.	Written
25	A traffic light is needed at US 11 and Oak Harbor for safety.	At the Oak Harbor Boulevard intersection, a southbound J-turn would be created with a dedicated left turn lane, and a signalized J-turn at westbound Oak Harbor Boulevard.	Written
26	Traffic lights will be needed at Oak Harbor Boulevard and Eden Isles Drive	At the Eden Isles intersection, the southbound lanes would include a dedicated left turn lane. The traffic signal would remain. At the Oak Harbor Boulevard intersection, a southbound J-turn would be created with a dedicated left turn lane, and a signalized J-turn at westbound Oak Harbor Boulevard.	Written
27	Trash and debris along the roadway needs to be cleaned up.	Comment taken into consideration.	Written

Numerous comments on the project were mailed to the project team after the meetings. Table 8 presents those comments. The most frequent comments included those expressing support for a two-lane alternative with a center turn lane (285 comments), improved drainage (274 comments), paved shoulders (270 comments), street lights (268 comments), and four lanes (145 comments). Other comments from stakeholders are shown in the Table 8, along with responses from the project team.

Table 8. Comments Mailed in After the Public Meetings

No.	Comment	Number of People Who Made this Comment	Response
1	In favor of two lanes with a center turn lane—opposed to four lanes because of either (1) bottle neck issues at the Schneider Canal Bridge, (2) not needed, (3) adverse impacts and safety hazards for properties abutting the ROW.	285	The current Build Alternatives include two lanes with a center median/J-turns
2	In favor of improving drainage.	274	The project would improve drainage by installing sub-surface drainage features with pipe outfalls into the canal on the west side of the road. A minimum of 0.4% road profile grade is planned for the entire corridor to carry water along the gutter line to the catch basins.
3	In favor of paved shoulders.	270	The current Build Alternatives include paved shoulders.
4	In favor of street lights.	268	Comment taken into consideration.
5	In favor of four lanes.	145	New traffic estimates based on expected growth in the area no longer warrant the four-lane alternative. It is anticipated that congestion and delays would be relieved with the current alternatives of widened two lanes separated by a median/J-turn center lane.
6	Expressed general support for the widening project.	21	Comment taken into consideration.
7	In favor of a 30-foot wide median to enable larger vehicles to U-turn safely.	21	Comment taken into consideration.
8	Businesses should not be entitled to dictate how the public ROW of the road is used. The use of the ROW should benefit the general public, not just business owners.	15	Comment taken into consideration.

No.	Comment	Number of People Who Made this Comment	Response
9	In favor of a bike path, shared-use path and/or sidewalk	12	The current Build Alternatives include a shared-use path.
10	In favor of landscaping/beautification	10	Comment taken into consideration.
11	The trash and debris along the roadway needs to be cleaned up.	6	That action is outside the scope of this widening project.
12	In favor of a four-lane/two-lane alternative	6	Please see the response to Comment 5 above.
13	In favor of Alternative 4 presented in Oct. 29, 2009 public meeting.	5	Please see the response to Comment 5 above.
14	Opposed to bike path, shared-use path and/or sidewalk for safety reasons.	5	Comment taken into consideration.
15	Opposed to a median.	5	Comment taken into consideration.
16	In favor of underground utilities.	4	Comment taken into consideration.
17	Opposed to landscaping/beautification.	3	Comment taken into consideration.
18	The shared-use path should be on the west side of the road to avoid having to cross through business parking lots and to avoid the high volume of traffic turning into and out of businesses on the east side.	3	Comment taken into consideration.
19	The traffic light at Eden Isles Drive should either be eliminated or the timing of the light should be adjusted when congestion peaks (when the I-10 bridge is closed).	3	In the current Build Alternatives, at the Eden Isles intersection the southbound lanes would include a dedicated left turn lane. The traffic signal would remain.
20	The U-turns (breaks in the median) should be located in front of businesses.	2	Comment taken into consideration.
21	Safety would be enhanced on the roadway by reducing the speed limit and/or ticketing people who speed.	2	Comment taken into consideration, however, that action is outside the scope of this widening project.
22	The road ROW should not be used for businesses' garbage dumpsters.	2	Comment taken into consideration, however, that action is outside the scope of this widening project.

No.	Comment	Number of People Who Made this Comment	Response
23	In favor of a traffic light at Oak Harbor Boulevard	2	At the Oak Harbor Boulevard intersection, a southbound J-turn would be created with a dedicated left turn lane and a signalized J-turn at westbound Oak Harbor Boulevard.
24	The camps on the west side of the street should be removed.	2	That action is outside the scope of this widening project.
25	People will park on the shared-use path if it is constructed on the east side of the road.	1	Comment taken into consideration.
26	The parish should provide a parking lot so that people don't park in the grass along the ROW.	1	Comment taken into consideration.
27	Recommend two northbound lanes and one southbound lane	1	Please see the response to Comment 5 above.
28	The existing geometry of the roadway is a safety hazard, especially at curves.	1	The road alignment will be improved with the proposed Build Alternatives.
29	In favor of Alternative 2 presented in Oct. 29, 2009 public meeting.	1	Comment taken into consideration.
30	Four lanes would put my business out of business because of reduced parking.	1	The current Build Alternatives propose two travel lanes.
31	In favor of four lanes between Spartan and Eden Isles Drive, three lanes between Eden Isles Drive and Carr Drive, and two lanes from Carr Drive to the bridge.	1	Comment taken into consideration.
32	The traffic light at Carr Drive should be eliminated.	1	The current Build Alternatives propose replacing the traffic light at Carr Drive with a round-about.

5.3 PUBLIC HEARING

RPC and DOTD hosted an open house public hearing at Salmen High School in Slidell on June 23, 2016. The hearing was advertised in *The New Orleans Advocate* on May 26, 2016, and in *The St. Tammany Farmer* on May 26 and June 16, 2016. RPC, DOTD, and St. Tammany Parish also advertised the hearing on their websites beginning on or about May 20, 2016, and notices were mailed to officials, agencies, and stakeholders on the Solicitation of Views distribution list.

The hearing provided an opportunity for the public to learn about the proposed project and preferred alternative and to provide comments. Hearing exhibits included project information brochures, a narrated PowerPoint presentation running on continuous loop on four monitors, and large, static displays of preferred alternative plan sheets and the project's typical section.

Approximately 40 people attended the hearing. Public notices, the information brochure, the PowerPoint presentation, and comment cards highlighted the date, July 5, 2016, until which comments would be accepted. Seven different commenters, either during the hearing or afterwards, via mail, provided the 18 comments paraphrased in Table 9. Appendix G presents hearing notices, and the information brochure, PowerPoint presentation, and comment cards used at the hearing.

Table 9. Public Hearing Comments

No.	Comment	Frequency	Response
1	US-11 should be constructed at a higher elevation so that it's compatible with future flood protection projects.	2	The purpose of the project is to increase capacity along US-11. However, that portion of the road between Carr Drive and Oak Harbor Boulevard, current average elevation of 6.5 feet, will be raised to an average elevation of approximately 8.5 feet with project construction. Additionally, project construction will raise US-11 to approximately 15.5 feet in order to cross the Schneider Canal Flood Protection Levee, which is being improved/raised under a separate project.
2	Slidell plans to construct a shared use path from intersection of US-11 and Spartan Drive along Spartan Drive to Fritchie Park where it will connect to city-wide bike routes.	1	The preferred alternative provides for bicycle lanes within the north- and southbound shoulders from Lake Pontchartrain to Spartan Drive, where they would meet the city's new shared

No.	Comment	Frequency	Response
	The bicycle facilities for this project should connect to this new shared use path, and the US-11/Spartan Drive intersection should include bicycle and pedestrian signals and striping.		use path. Signals and striping at the US-11/Spartan Drive intersection will comply with DOTD requirements. The bikeway included in Alternative 2 ends at Oak Harbor Boulevard. To continue it Spartan Drive would require acquisition of additional rights-of-way, which is not necessary to meet the project's purpose of increasing capacity.
3	If southbound on US-11, it looks like a U-turn is required to access Lakeview Drive, which is not a good plan for anyone towing a boat.	1	A Bulb-Out constructed for this U-turn will provide a turning radius of approximately 85 feet, which should be sufficient for vehicles towing trailers.
4	Road elevation should be higher so road does not flood.	1	Please refer to the response to Comment #1.
5	Will the EIS associated with making US-11 part of the south Slidell levee system include modeling and studies of flood risk to the residents living south of the levee?	1	The US-11 Widening Project does not make US-11 part of the south Slidell levee system. For most of the project US-11 improvements will be constructed at, or near, existing US-11 roadway elevations. Exceptions include most of the section between Carr Drive and Oak Harbor Boulevard, current average elevation 6.5 feet, which will be raised to an average elevation of approximately 8.5 feet, and at the Schneider Canal Flood Protection Levee, where US-11 will rise to approximately 15.5 feet in order to cross the levee, which is being improved/raised under a separate project. As such, the project is not anticipated to adversely impact flooding and requires no modeling.

No.	Comment	Frequency	Response
6	Once US-11 is transformed into a levee it will create a box trapping and elevating storm surge between US-11 and I-10.	1	The project does not transform US-11 into a levee. Also, please refer to the response to Comment #5.
7	The US-11 elevation project is the final component of the south Slidell Schneider levee system. The environmental impact of using a state highway to build a levee needs to be addressed.	1	The project is not an elevation project, nor is it a component of the south Slidell Schneider levee system. Also, please refer to the responses to Comments #5 and #6.
8	I request the EIS model and study the storm surge flood risk of using US-11 as a levee before any further action is taken on this project.	1	The US-11 Widening Project is anticipated to have no adverse impact to storm surge flood risk in the project area, and requires no modeling.
9	The parish did not perform an EIA as required to obtain a permit for the project.	1	The US-11 Widening Project EA has been prepared by RPC and DOTD. Pages ix and x of the document present the permits that will be obtained and mitigation measures that will be implemented prior to construction of the project.
10	I request the US-11 widening project be placed on hold until the parish's surge protection study is completed and approved by CPRA.	1	The US-11 Widening Project will be constructed after improvements to the Schneider Canal Flood Protection Levee, a separate project, are constructed. Furthermore, the US-11 Widening Project is not currently funded; no timeframe for construction has been established.
11	I request US-11 elevation needs be included in the EIA.	1	Roadway elevations are included in Appendix A of the EA.
12	US-11 is a hurricane evacuation route and needs to be built to ensure a safe exit during storm surge events.	1	The purpose of the project is to increase capacity along US-11. However, that portion of the road between Carr Drive and Oak Harbor

No.	Comment	Frequency	Response
			Boulevard, current average elevation of 6.5 feet, will be raised to an average elevation of approximately 8.5 feet with project construction. This elevation is greater than that of most of the residential areas accessed via US-11. As such US-11 would be above water when adjacent streets/properties begin to flood.
13	No proposed elevation information was provided at the presentation.	1	The commenter was provided elevation information at the meeting. He was also informed where he could obtain a bound copy of the EA and where he could access the document online. Plans with elevation information were also mailed to him after the meeting.
14	I request a 12-foot travel lane, a 10-foot paved shoulder, curb and then the bike and pedestrian walking lanes.	1	The request describes Alternative 2. The Preferred Alternative (Alternative 1) has been recommended because its bicycle lanes, located on the shoulders: 1) provide a uniform grade for cyclists; and 2) reduce potential conflict points between cyclists and traffic entering/exiting the numerous driveways on the east side of US-11. Additionally, unlike the bikeway in Alternative 2, the bicycle lanes will transit the entire length of the project and will be located on both sides of US-11.
15	Distracted drivers traveling at 45 mph or more could easily swerve into bikers and pedestrians under the current preferred option.	1	Please refer to the response to Comment #14.
16	Request better community notification of the meeting. The	1	The hearing was advertised in the New Orleans Advocate and the St.

No.	Comment	Frequency	Response
	public notice of the meeting may have met the minimum legal notification requirements, but it did not adequately notify stakeholders. Most people no longer subscribe to newspapers. St. Tammany Government has an electronic community notification system that should be used, also radio and TV announcements along with signage a week before the meeting are needed.		Tammany Farmer on May 26th, and again on June 16th in the St. Tammany Farmer. The hearing was also advertised on DOTD, RPC, and St. Tammany Parish websites for one month prior to the hearing.
17	Request all public comment card comments receive written responses that address the comment along with justification for the DOTD response.	1	Comments and responses will be included in the EA.
18	We live in the 21st century – Request public comments via email be accepted.	1	Noted.

6.0 COMPARISON OF THE BUILD AND NO BUILD ALTERNATIVES

A comparison of quantifiable project impacts is provided in Table 10 to offer a basis for discussion of the No Build and Build Alternatives.

Table 10. Comparison of Impacts of Alternatives

Evaluation Measure	Units	No Build	Alt. 1	Alt. 2
Relocation Impacts				
Residential Relocations	Each	0	0	0
Commercial Relocations	Each	0	0	0
Community Relocations	Each	0	0	0
Vacant/Unused Structures	Each	0	0	0
Other Relocations	Each	0	0	0
Natural Environment				
Wetlands	Acres	0	0.95	0.95
Other Waters of the U.S.	Acres	0	0.09	0.09
Scenic Streams	Each	0	0	0

Evaluation Measure	Units	No Build	Alt. 1	Alt. 2
Stream Crossings	Each	1	1	1
Sole Source Aquifer Impacts	Acres	0	0	0
Protected Species	Each	0	0	0
Prime and Unique Farmland	Acres	0	0	0
Coastal Resources and Essential Fish Habitat	Each	0	0*	0*
Cultural Resources				
Properties Eligible for or Listed on NRHP	Each	0	0	0
Properties Not Eligible for NRHP	Each	0	0	0
Section 4(f) and 6(f) Properties	Each	0	0	0
Noise				
Impacted Receivers	Each	< 23	< 68	< 68
Bicycle Facilities				
Type	N/A	None	Bicycle Lanes	Bikeway
Potential Bicyclist/Traffic Conflict Locations	Number of Driveways Crossed	N/A	0	97
Pedestrian Accommodation				
Present	N/A	No	Yes	Yes
Proximity to Bicycle Facility	N/A	N/A	Adjacent	Co-Located
Potential Pedestrian/Traffic Conflict Locations	Number of Driveways Crossed	N/A	0	97

*Note: Although the project is located in the Louisiana Coastal Zone and will require a Coastal Use Permit, no impacts to the coastal zone or essential fish habitat are expected.

7.0 REFERENCES

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

EPA. 2014a. *Ecoregions of Louisiana.* Online resources accessed April 28, 2014. http://www.epa.gov/wed/pages/ecoregions/la_eco.htm.

NOAA, Habitat Conservation. 2014. National Marine Fisheries EFH Mapper. Online resource accessed May 20, 2014: http://www.habitat.noaa.gov/protection/efh/habitatmapper.html.

St. Tammany Parish Government. 2014a. Ward 9 Zoning – May 2014. Online resource accessed May, 2014: http://www2.stpgov.org/pdf/zoning_ward9.pdf.

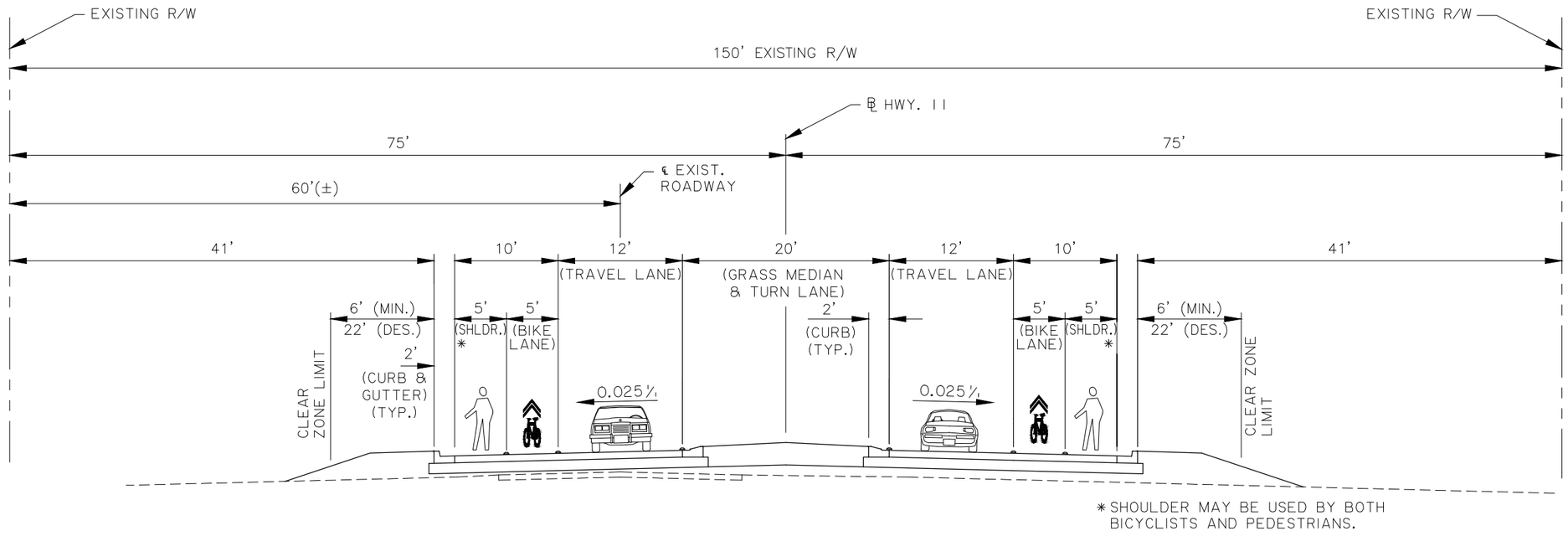
St. Tammany Parish Government. 2014b. New Directions 2025 Land Use Plan Council. Southeast Quadrant, Future Land Use Maps. Online resource accessed May, 2014: http://staging.stpgov.org/public_html/index.php/new-directions-2025/13-parish-departments/180-future-land-use.

U.S. Census Bureau. 2011. County Business Patterns (NAICS): St. Tammany Parish, Louisiana. Online resource: http://censtats.census.gov. Accessed May 14, 2014.

USFWS. 2014. *Critical Habitat Mapper*. Online resource: http://ecos.fws.gov/crithab/flex/crithabMapper.jsp Accessed May 4, 2014.

Appendix A

PLANS



TYPICAL SECTION

N.T.S.

ALTERNATE 1
(ROADWAY CLASSIFICATION – UA–2)
(DESIGN SPEED – 45 MPH)

ALTERNATE 1
TYPICAL SECTION

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
SAINT TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA
KLL PROJECT NO. 409-0061

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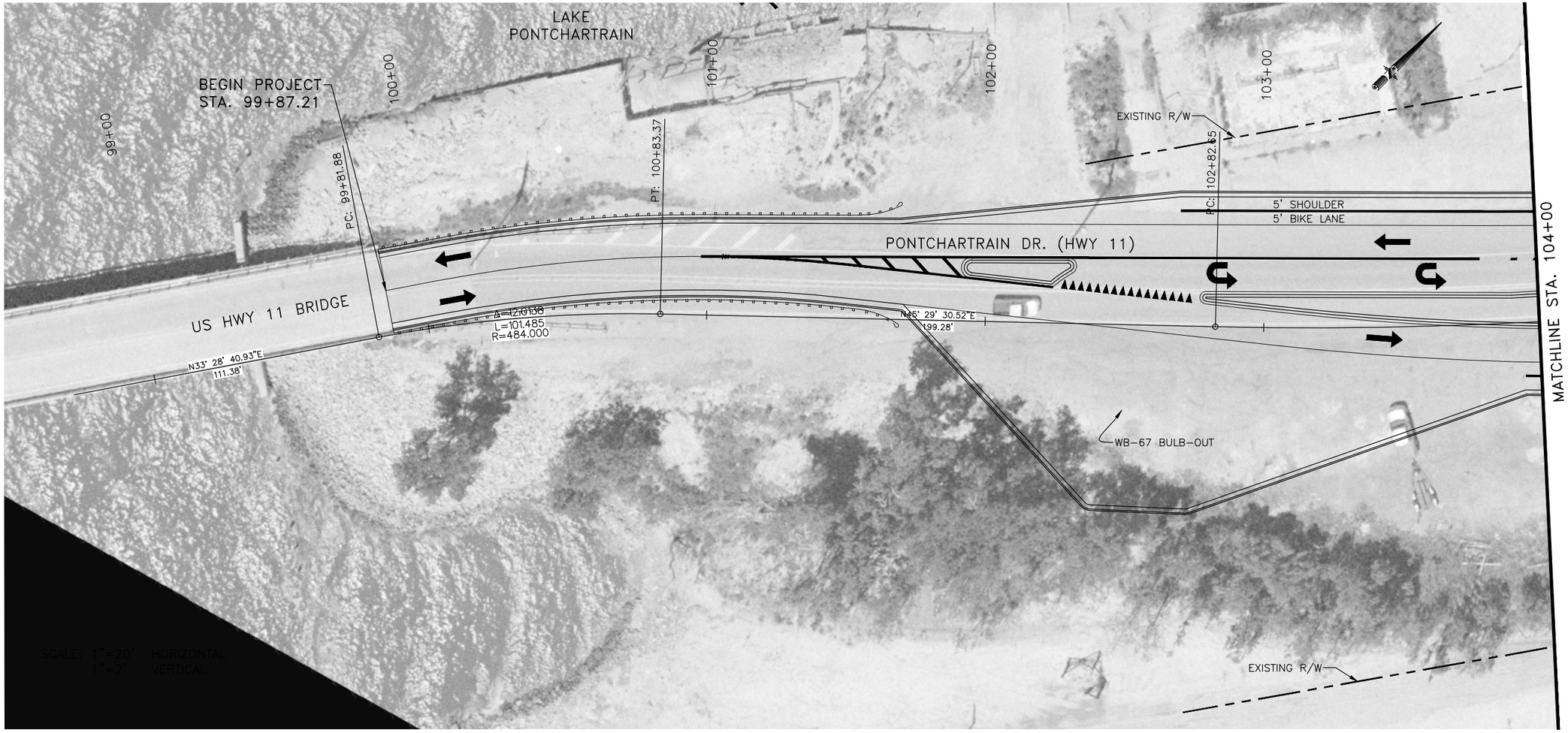

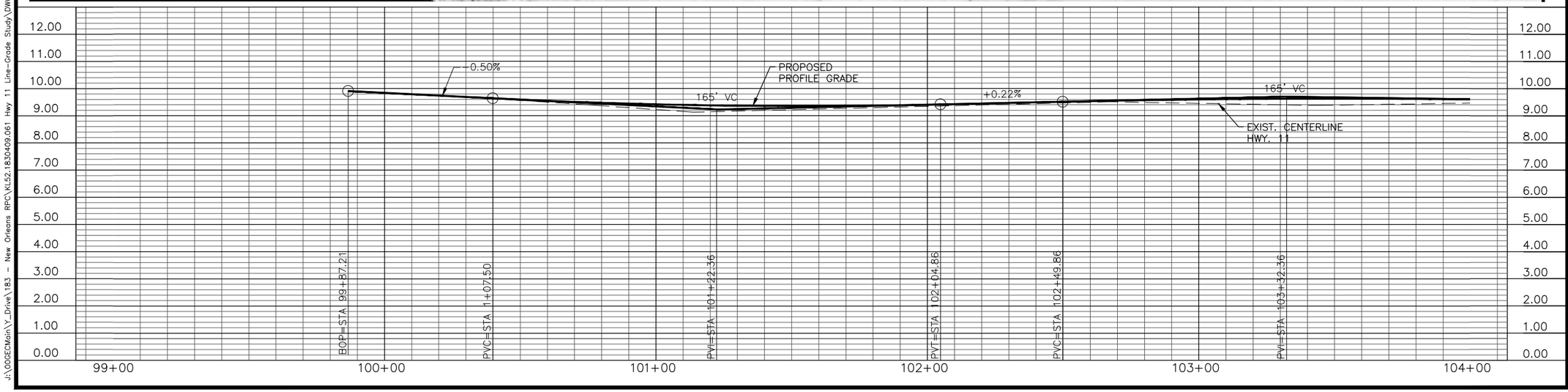

ALTERNATE 1

PLAN AND PROFILE

B.O.P. TO STA. 104+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-1

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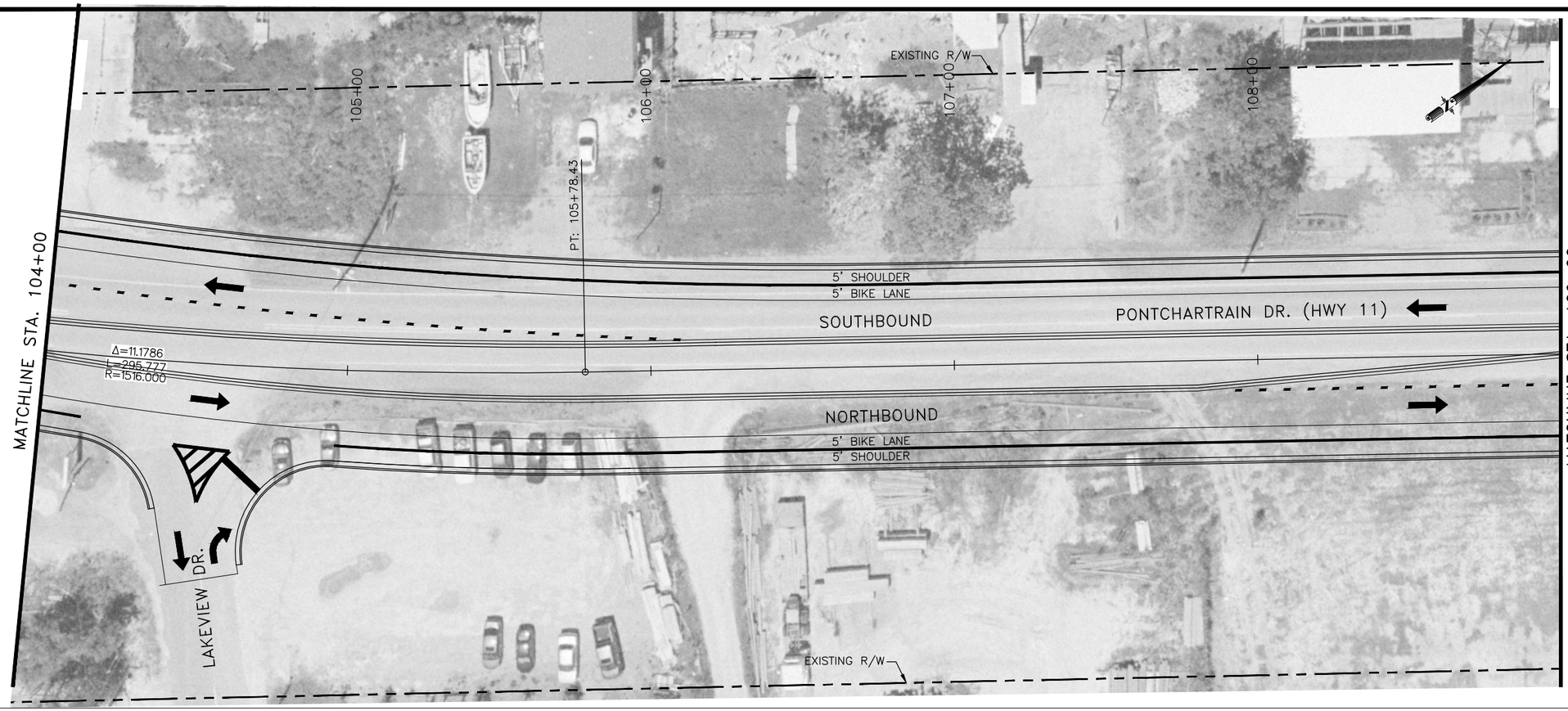

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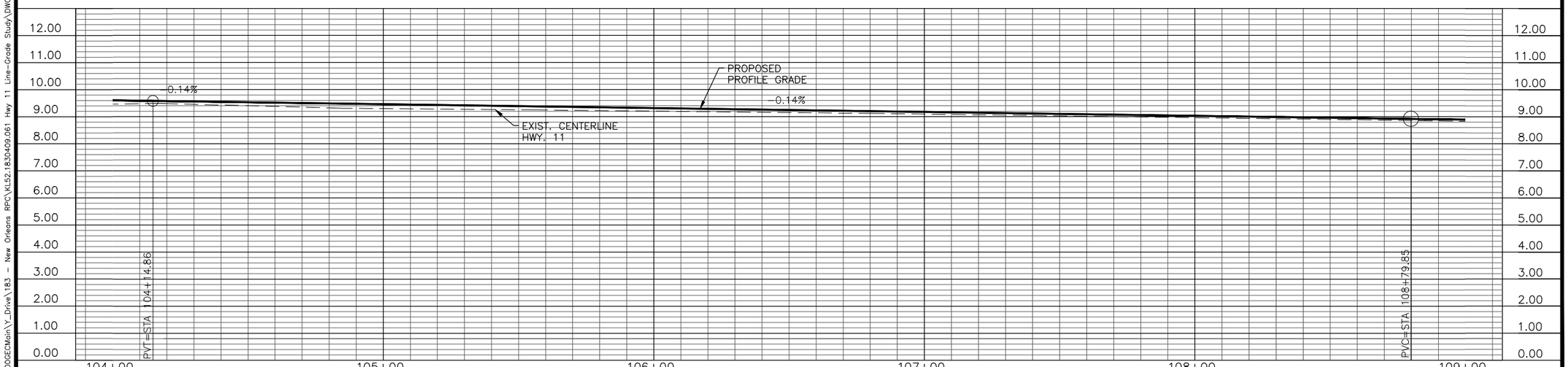

ALTERNATE 1

PLAN AND PROFILE

STA. 104+00 TO 109+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-2

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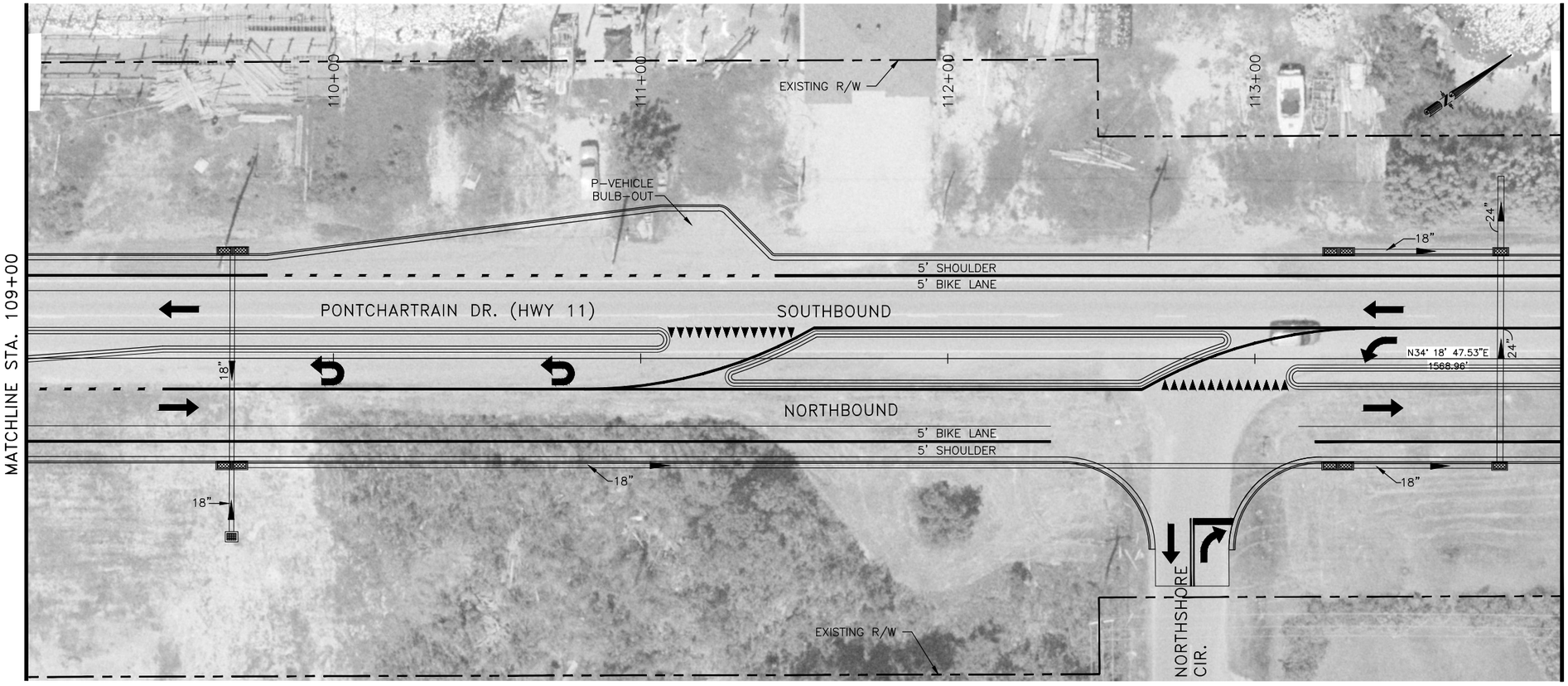

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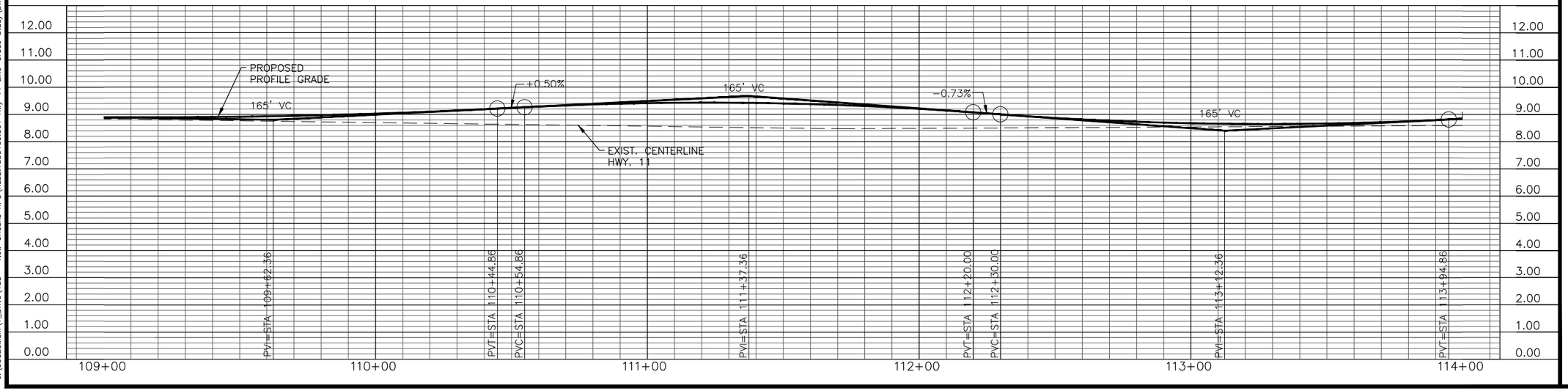


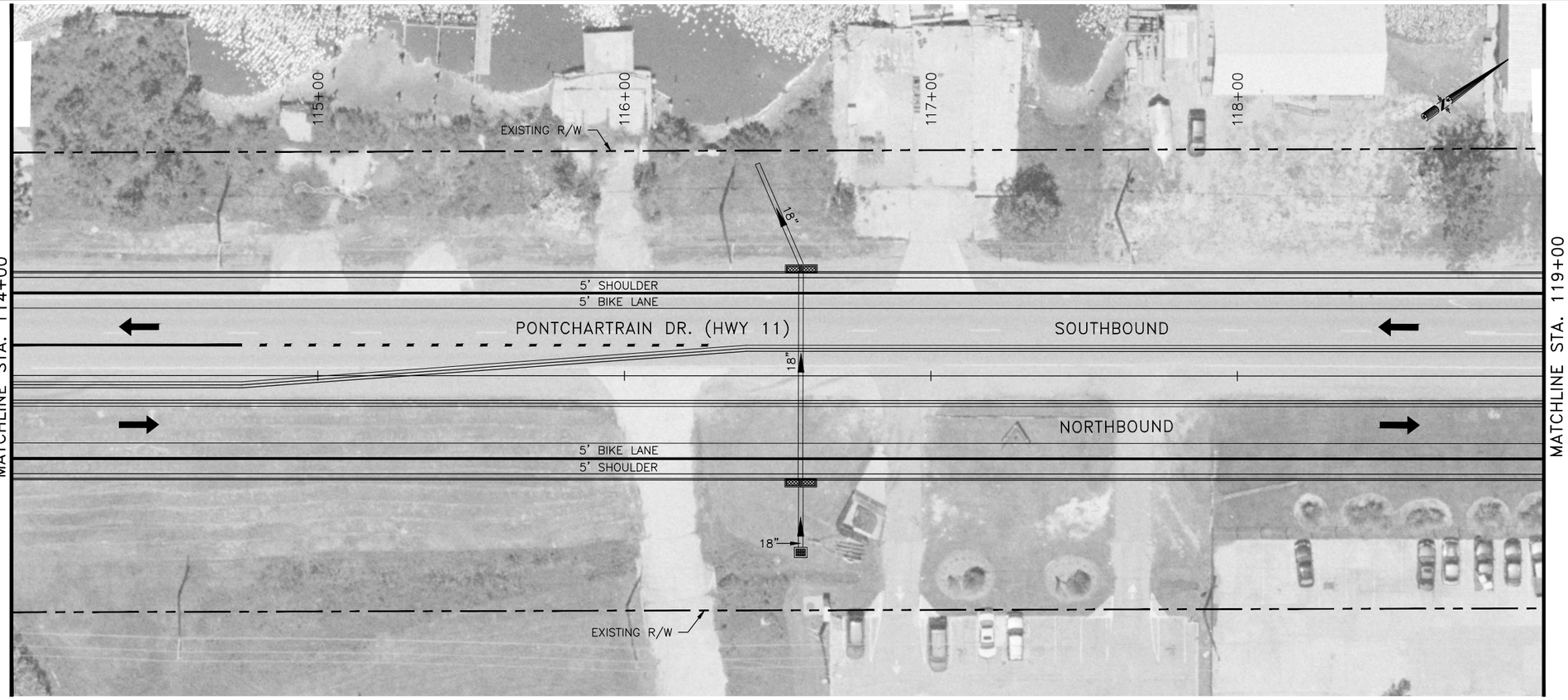
ALTERNATE 1

PLAN AND PROFILE

STA. 109+00 TO 114+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-3



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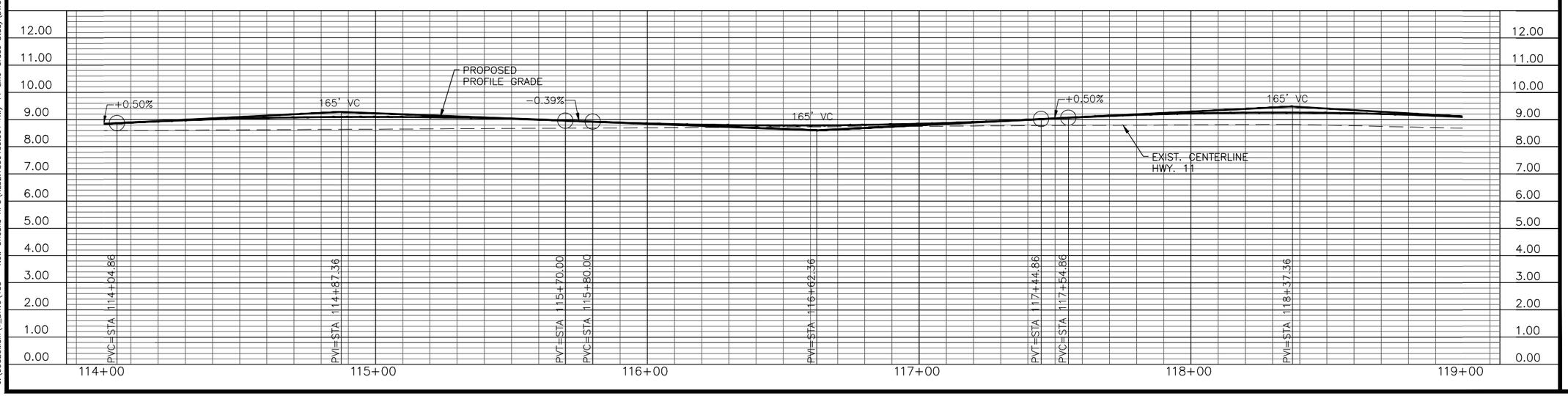

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

ALTERNATE 1

PLAN AND PROFILE

STA. 114+00 TO 119+00

FIGURE 1-4

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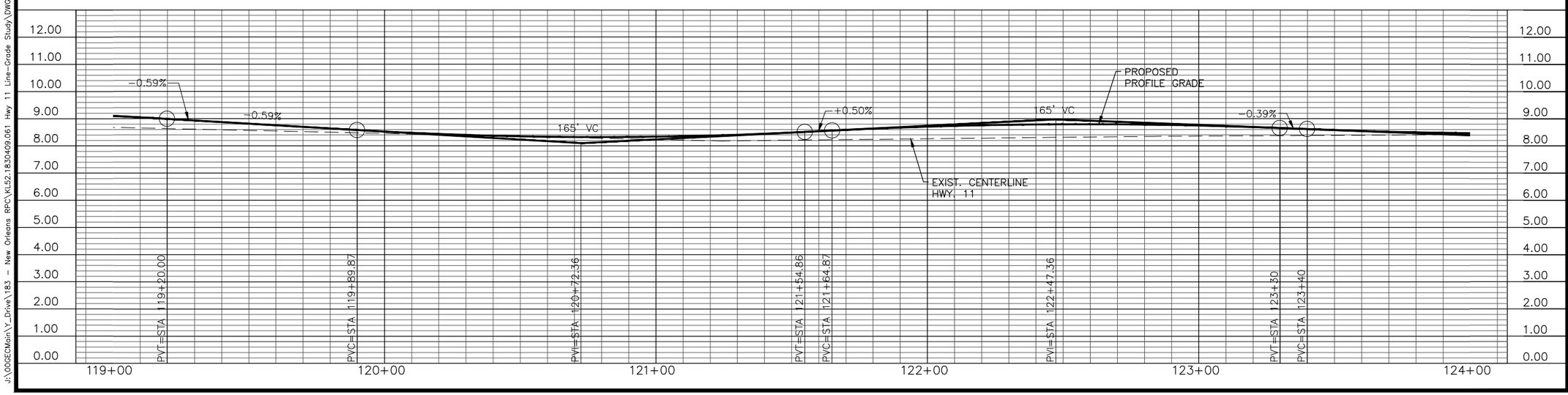

ALTERNATE 1

PLAN AND PROFILE

STA. 119+00 TO 124+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-5

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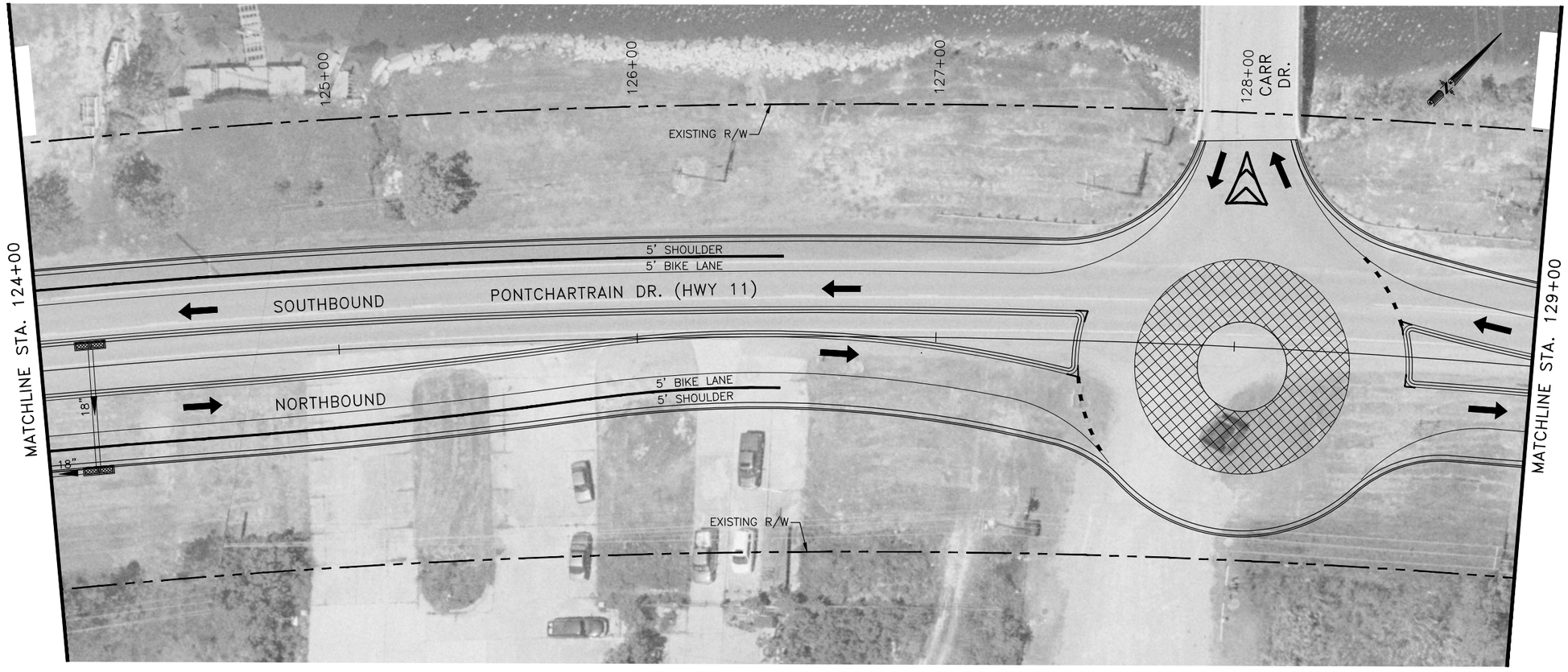

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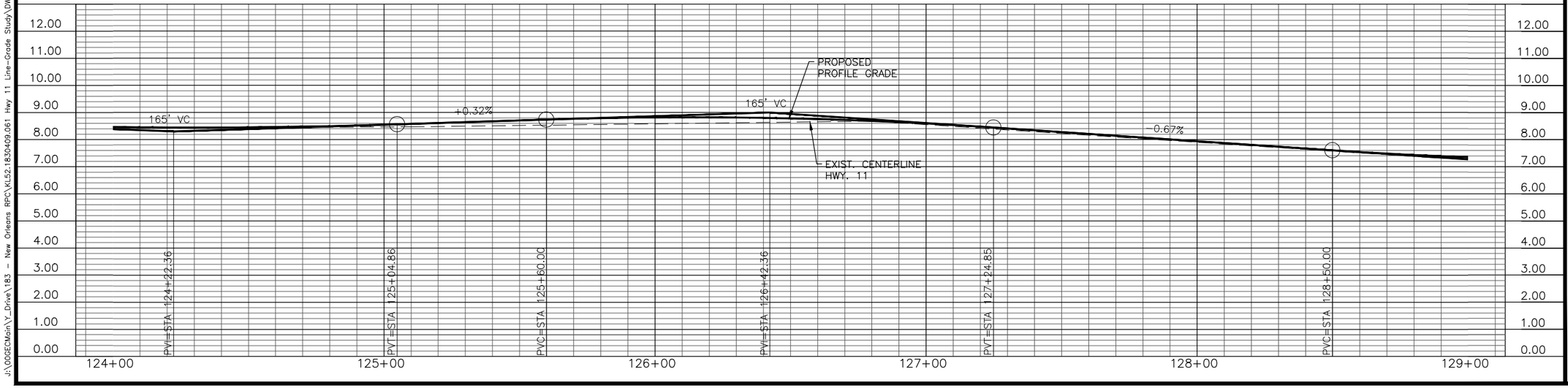

ALTERNATE 1

PLAN AND PROFILE

STA. 124+00 TO 129+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-6

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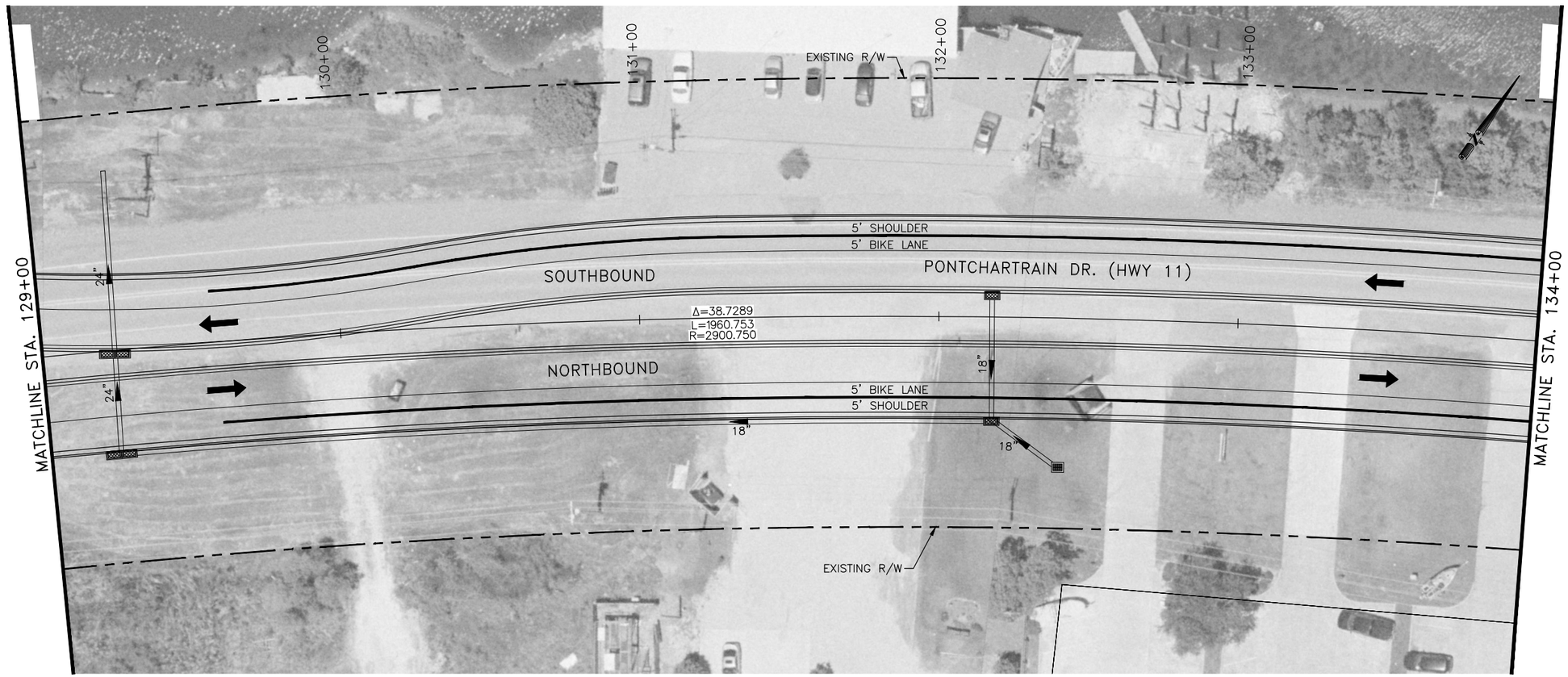

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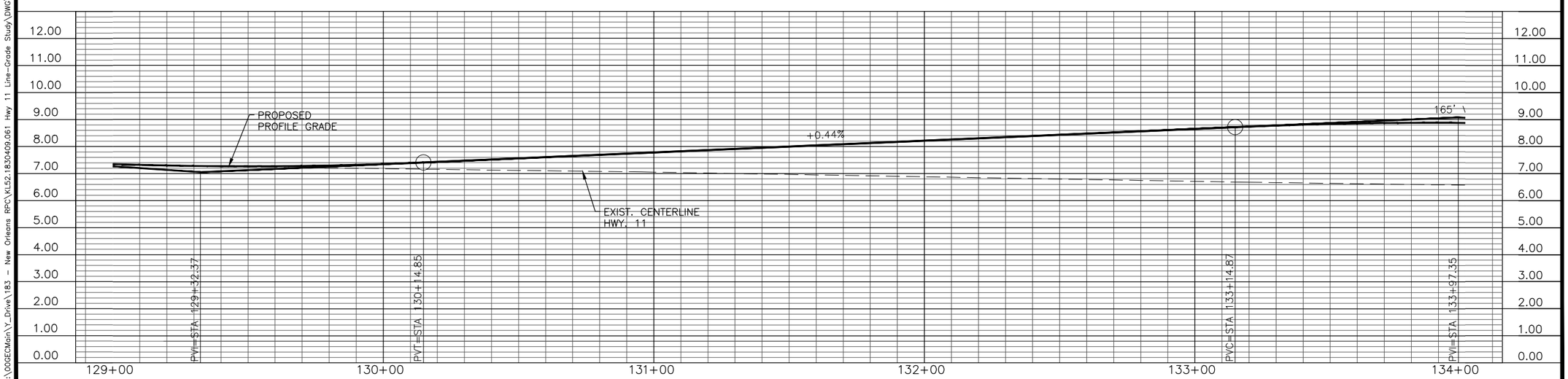


ALTERNATE 1

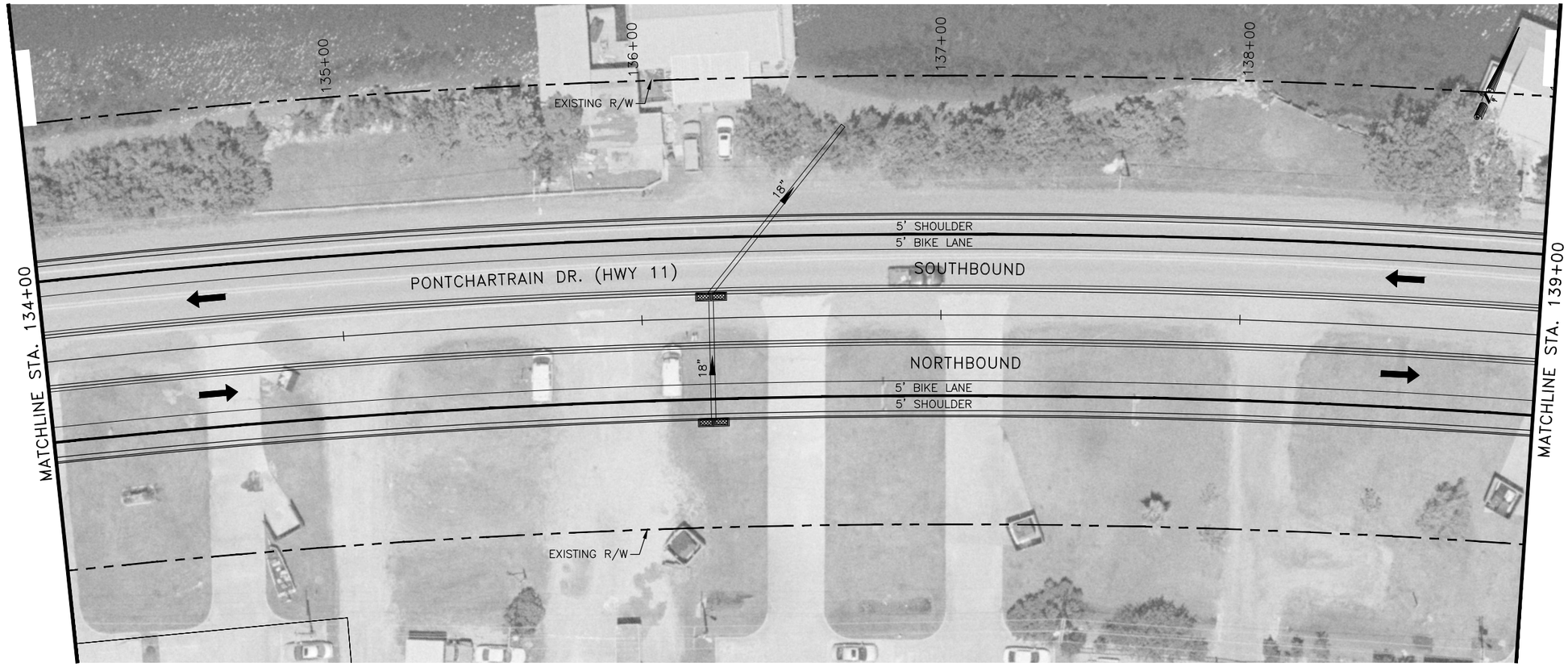
PLAN AND PROFILE

STA. 129+00 TO 134+00

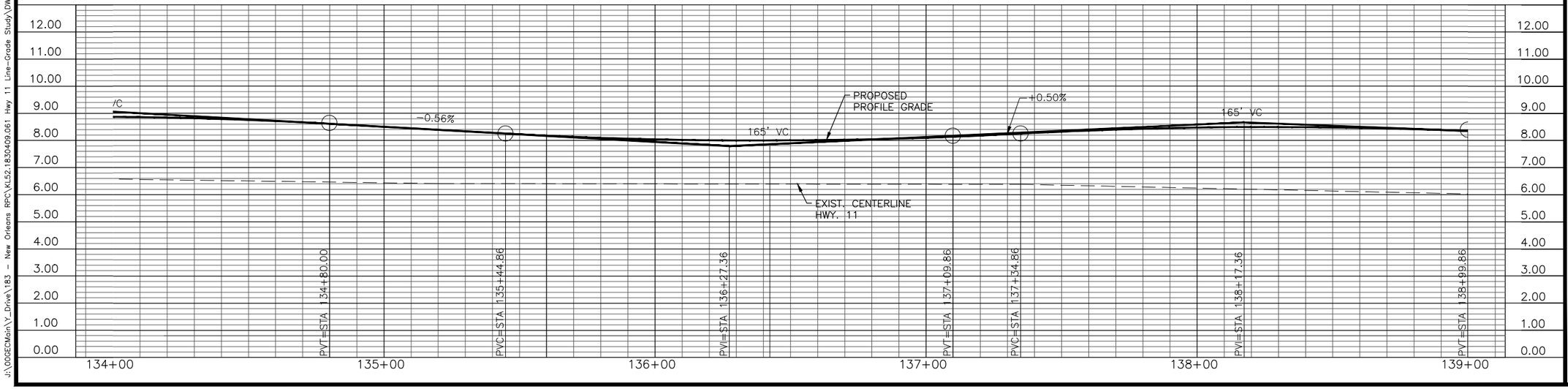
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-7

J:\GGECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:10am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

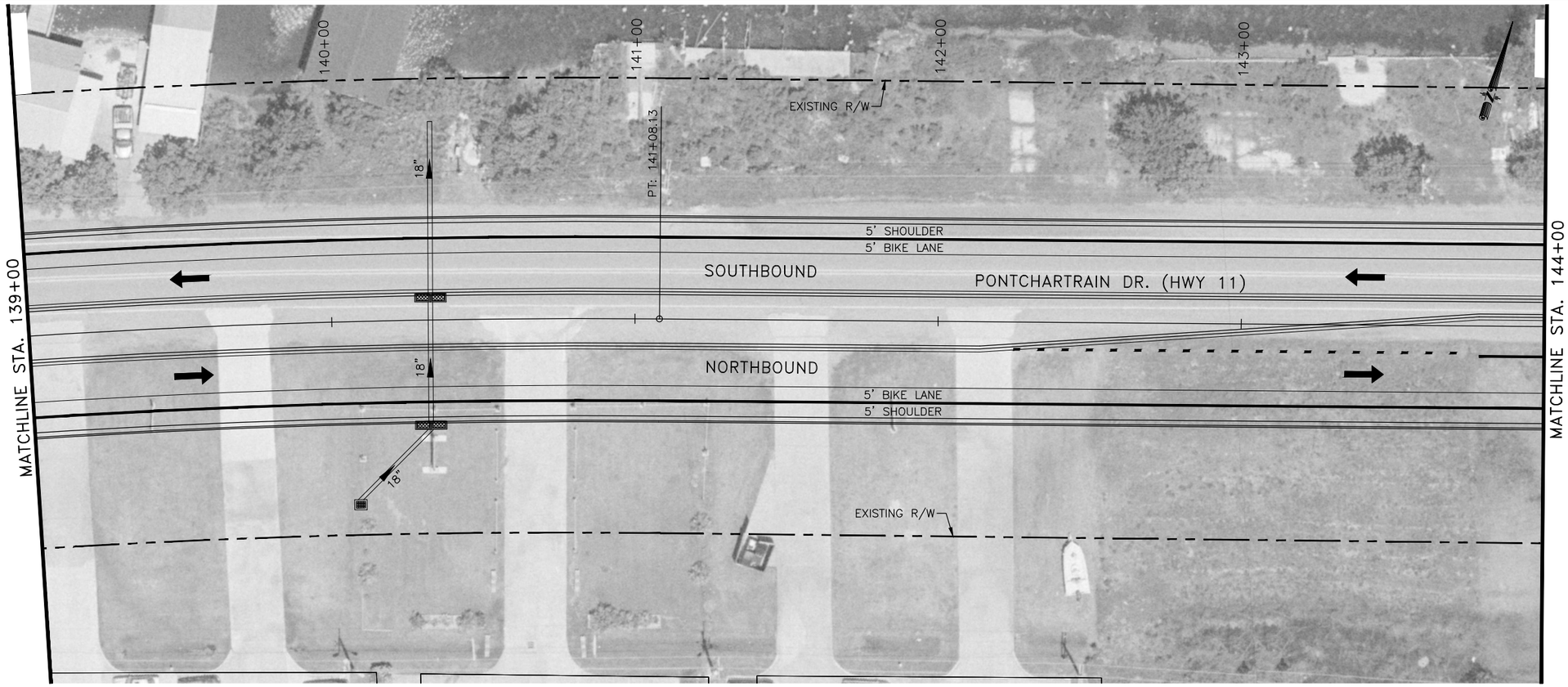
PLAN AND PROFILE

STA. 134+00 TO 139+00

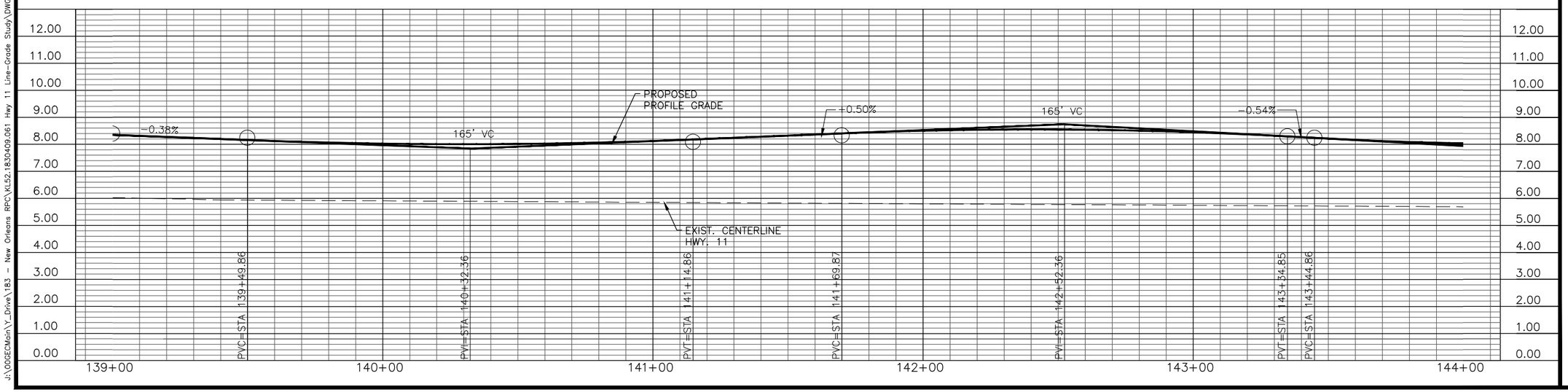
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-8

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18330409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:11am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

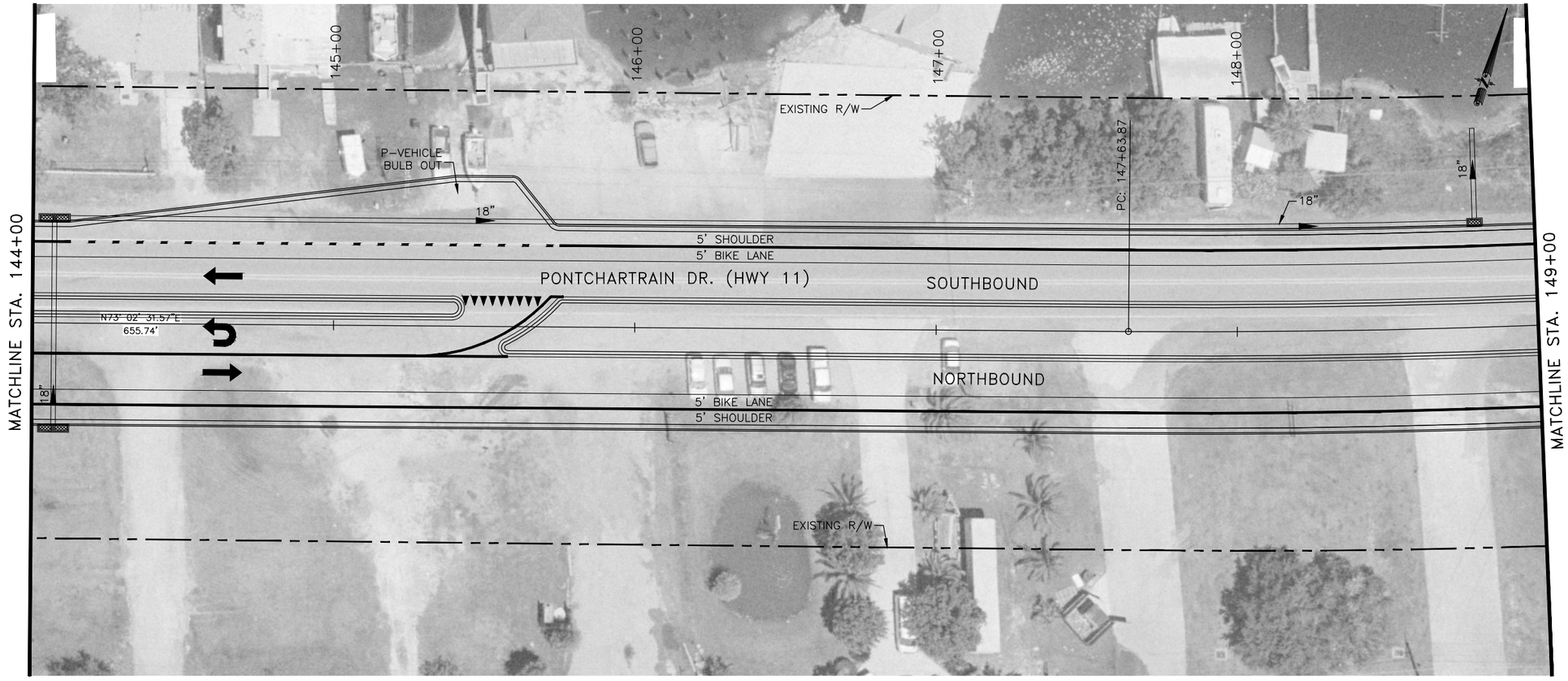
PLAN AND PROFILE

STA. 139+00 TO 144+00

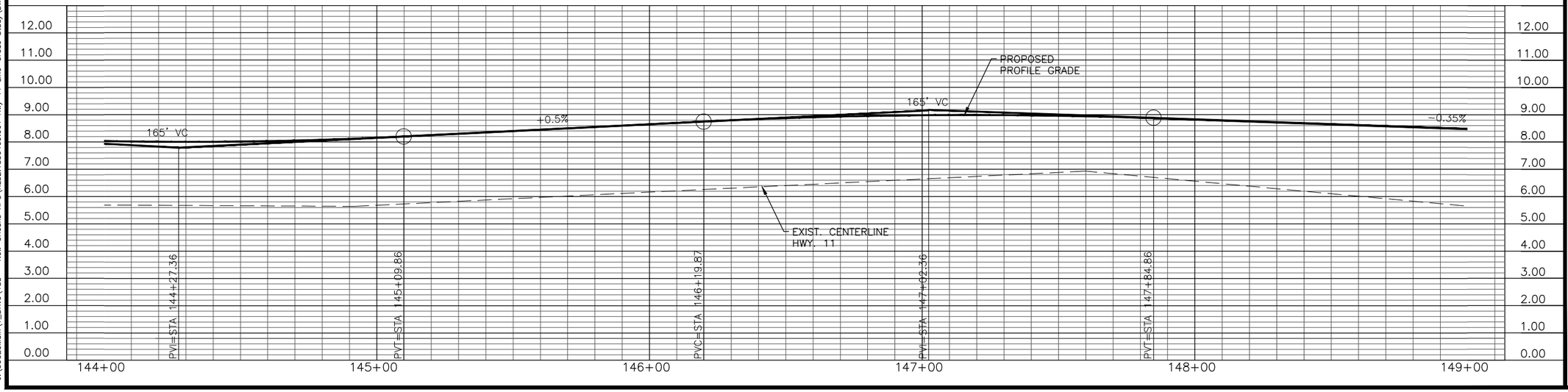
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-9

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18330409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:11am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

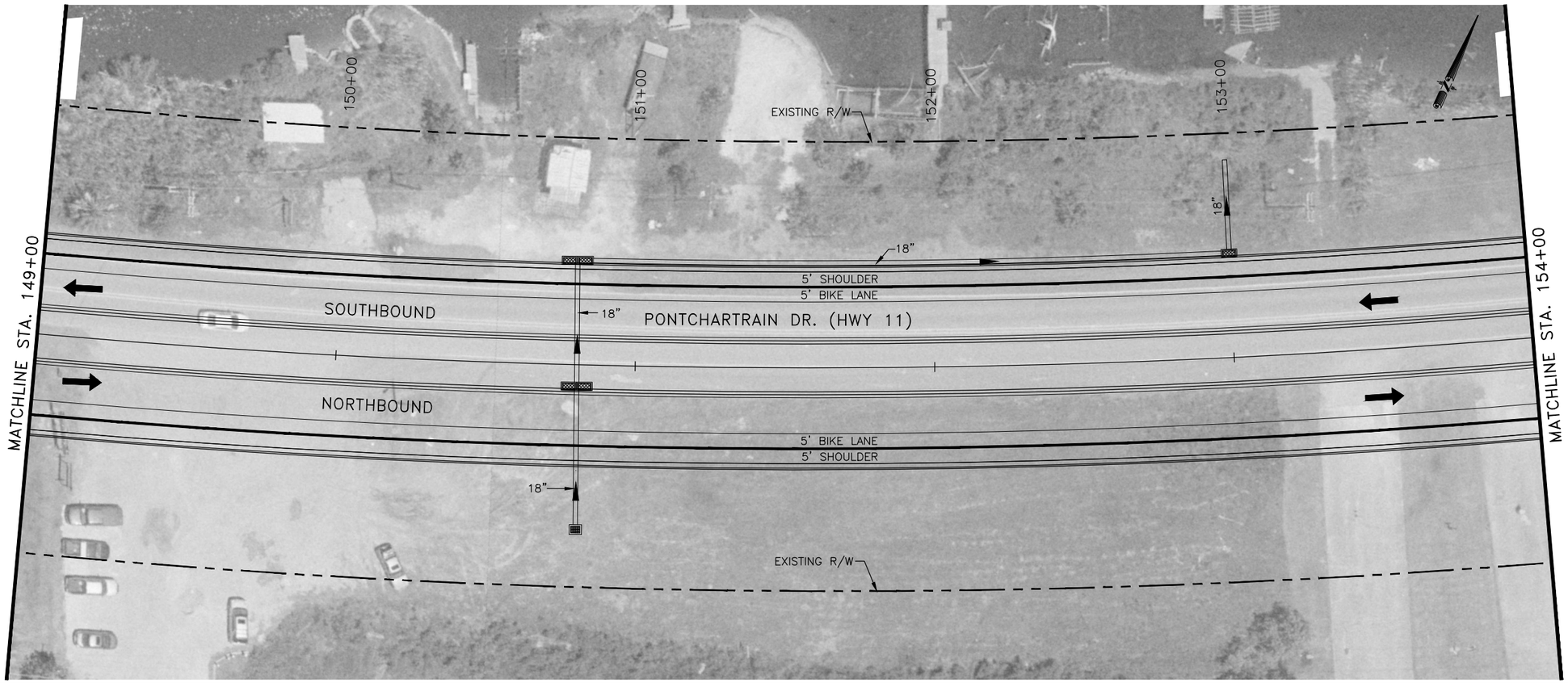
PLAN AND PROFILE

STA. 144+00 TO 149+00

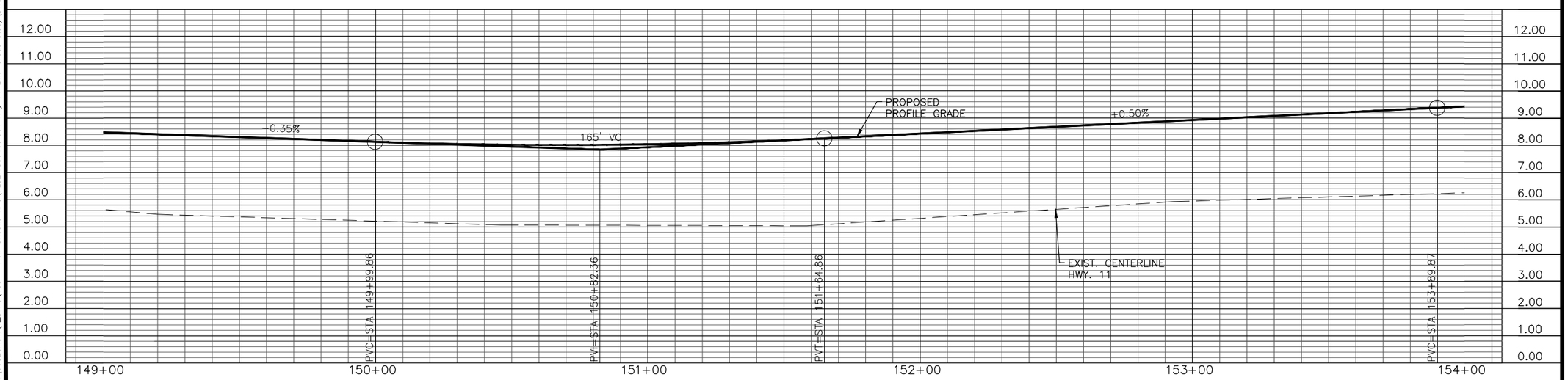
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-10

J:\OGECMain\V_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\ALL_1_pp-1.dwg Jan 21, 2016 - 10:12am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

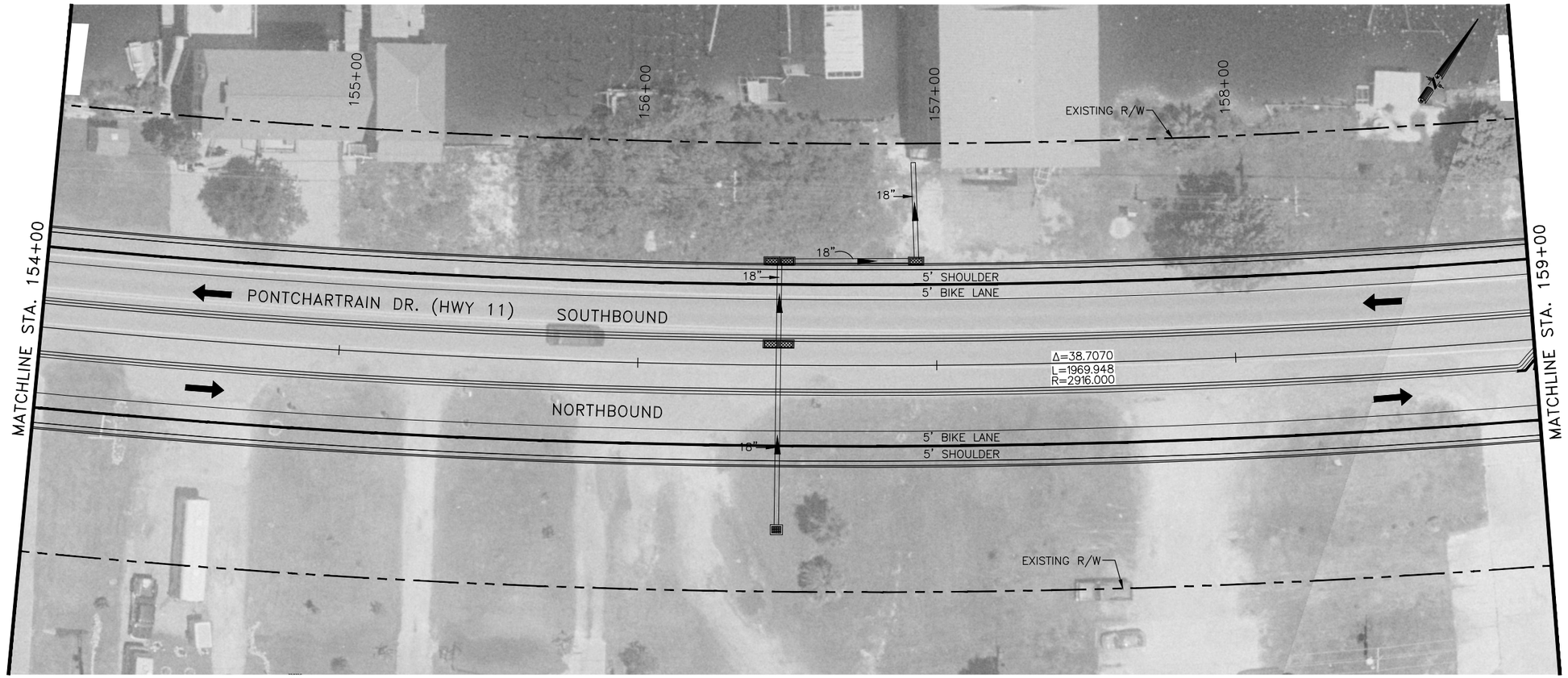
PLAN AND PROFILE

STA. 149+00 TO 154+00

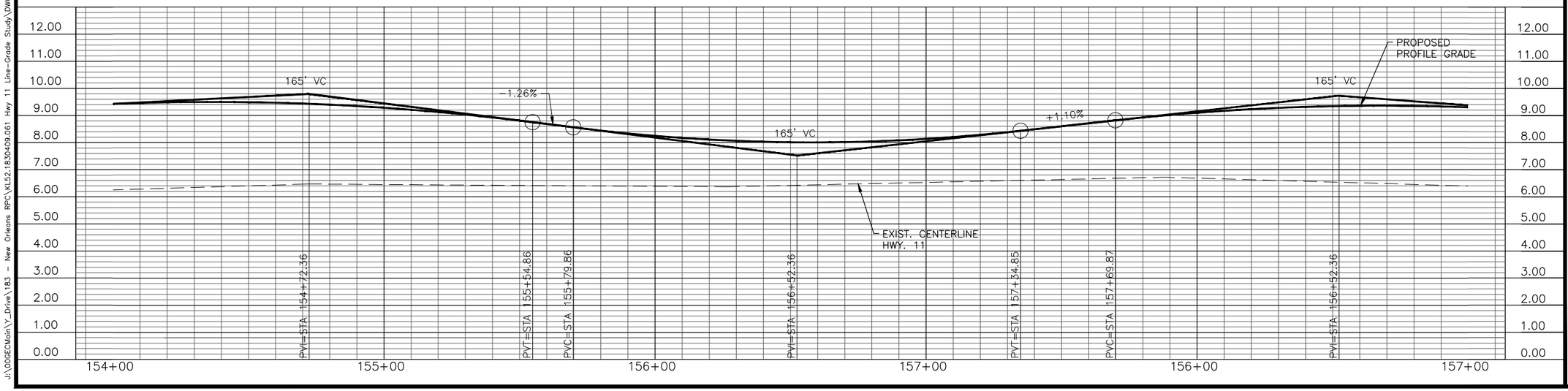
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-11

J:\OGECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:12am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

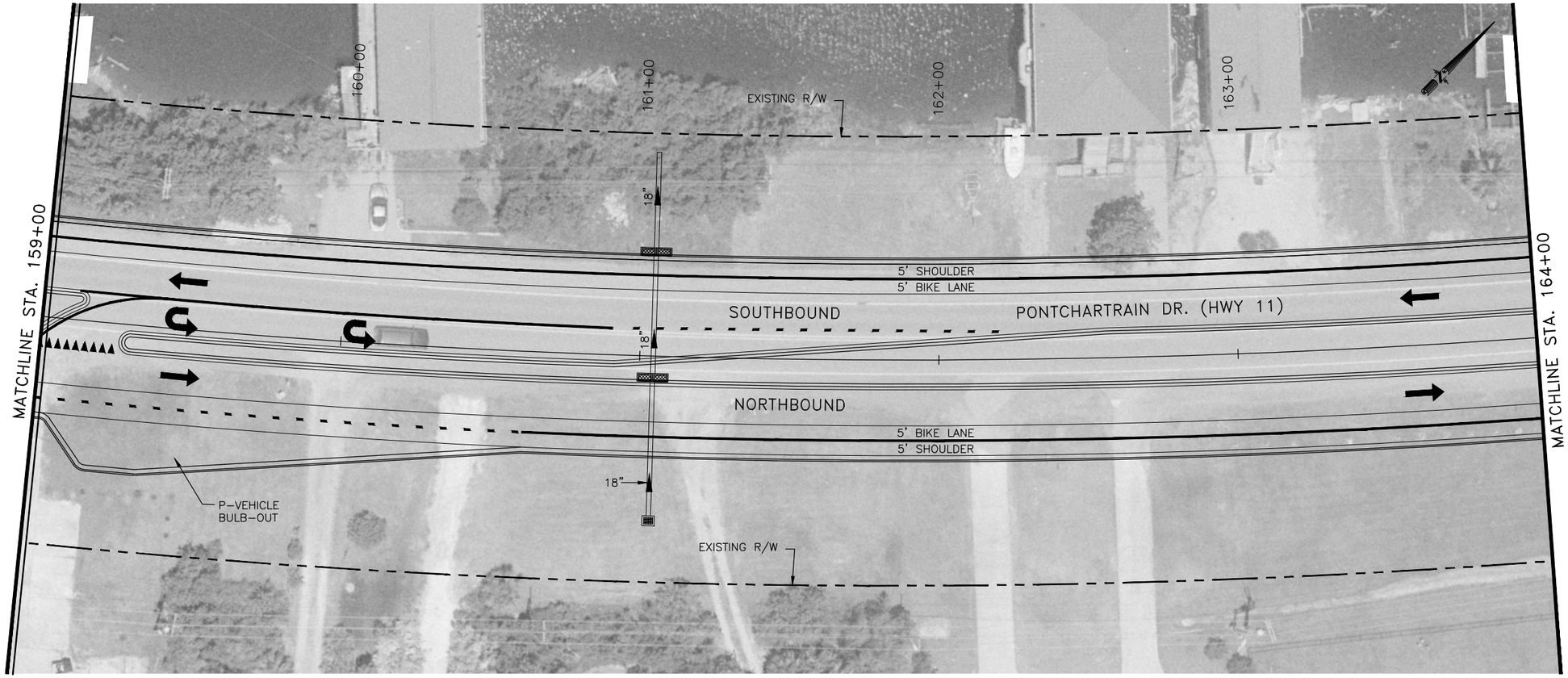
PLAN AND PROFILE

STA. 154+00 TO 159+00

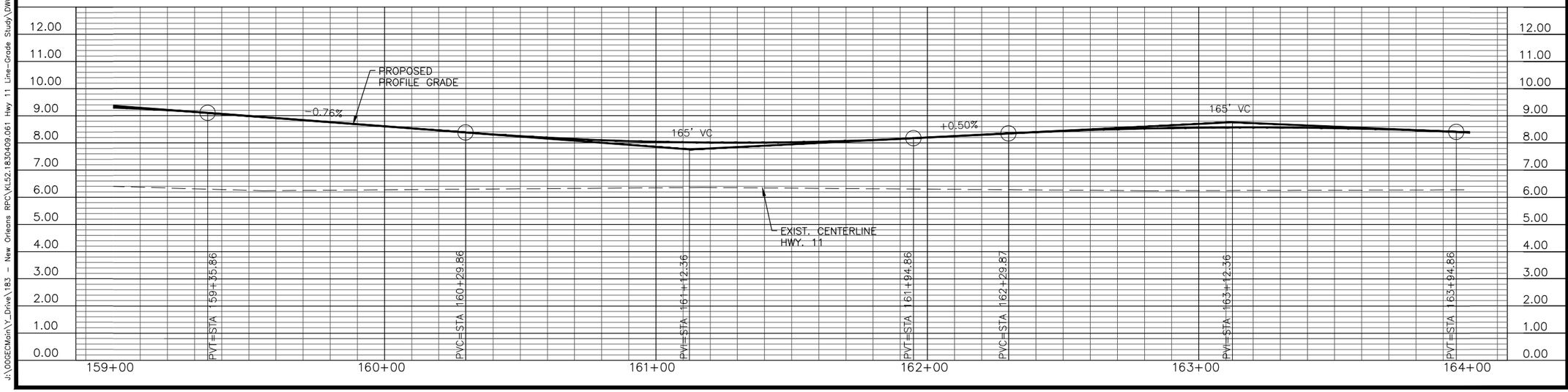
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-12

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:13am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

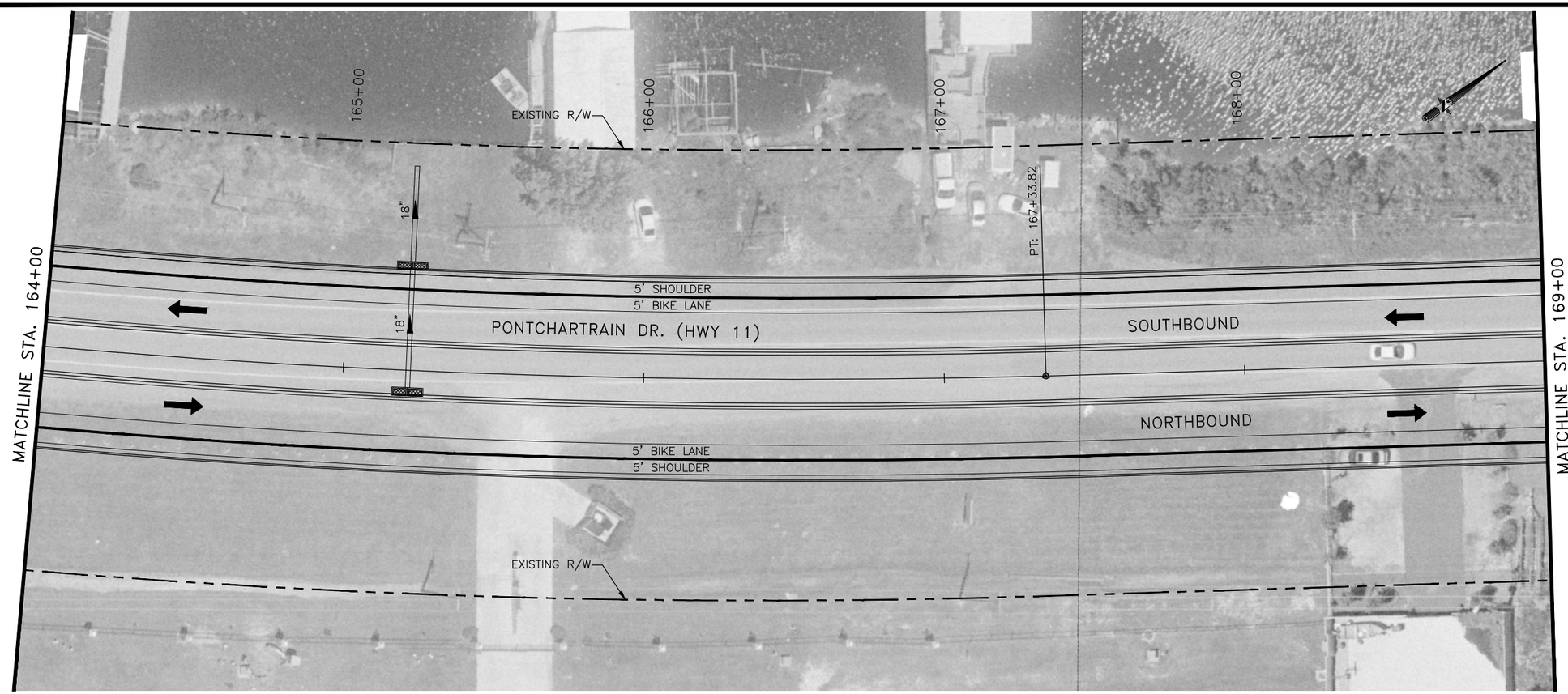
PLAN AND PROFILE

STA. 159+00 TO 164+00

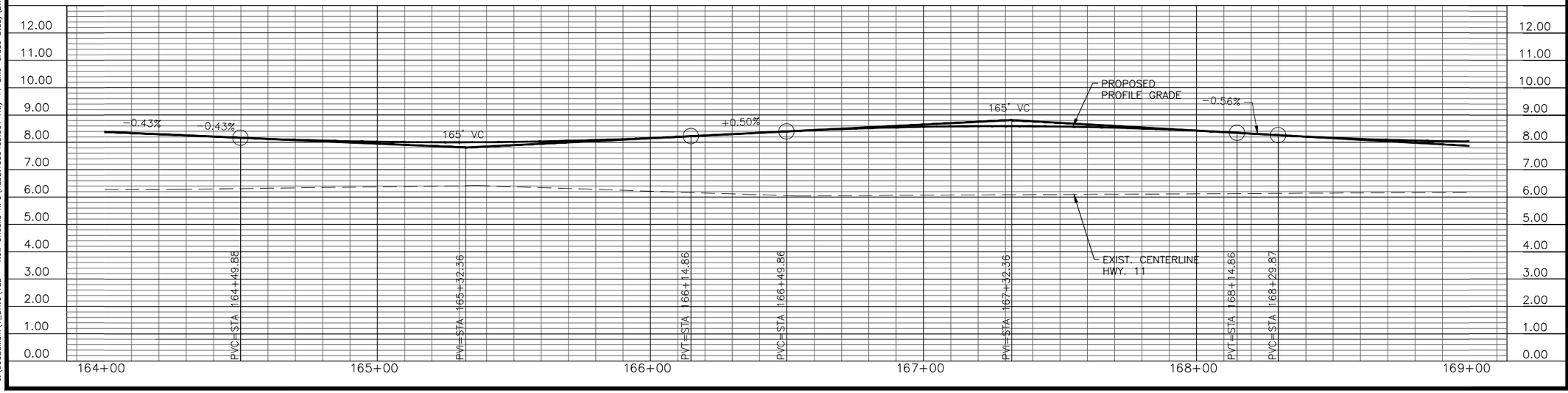
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-13

J:\OOGEEMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:14am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

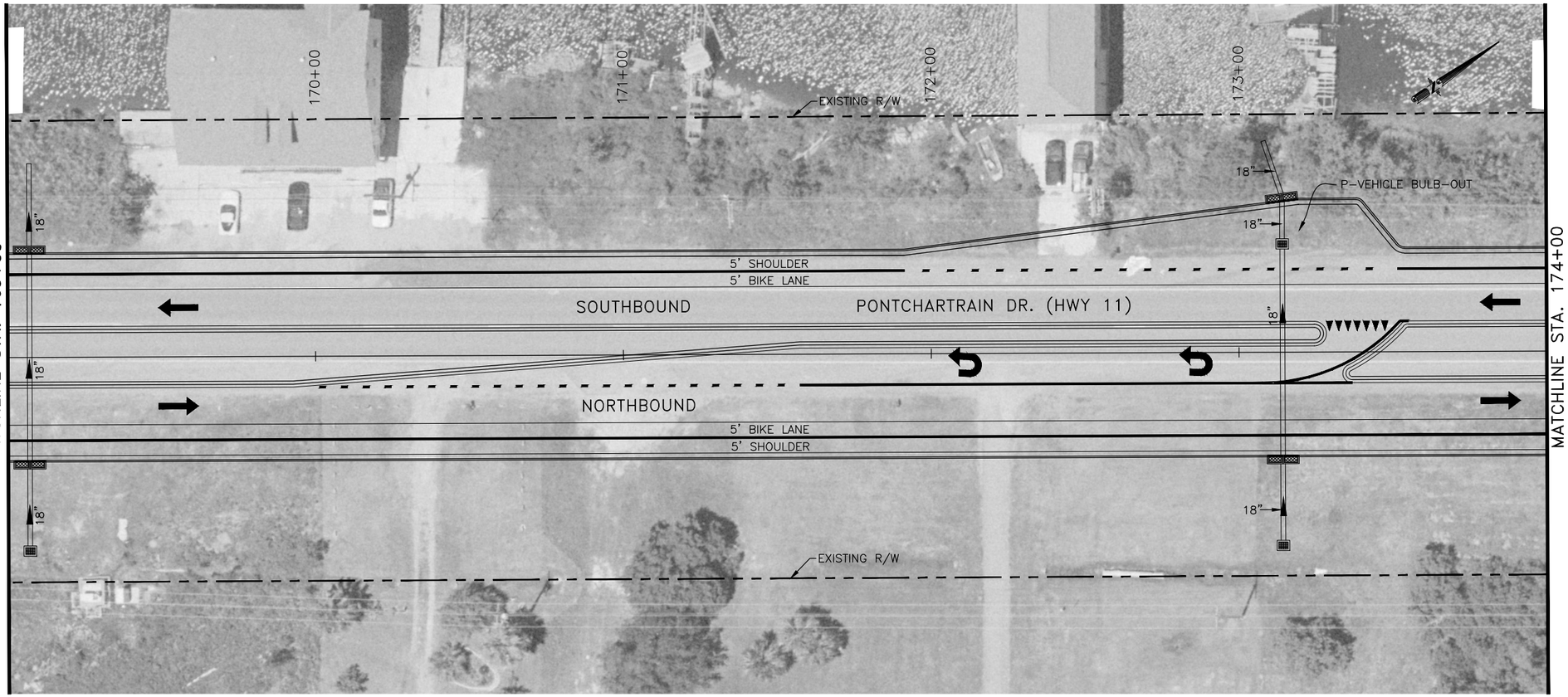
PLAN AND PROFILE

STA. 164+00 TO 169+00

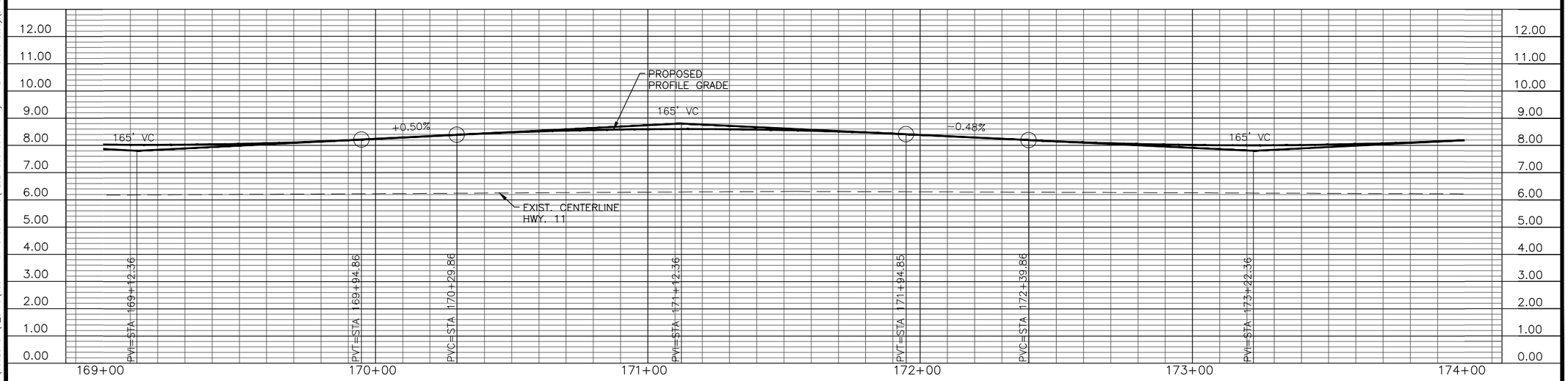
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-14

J:\OOGECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:15am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

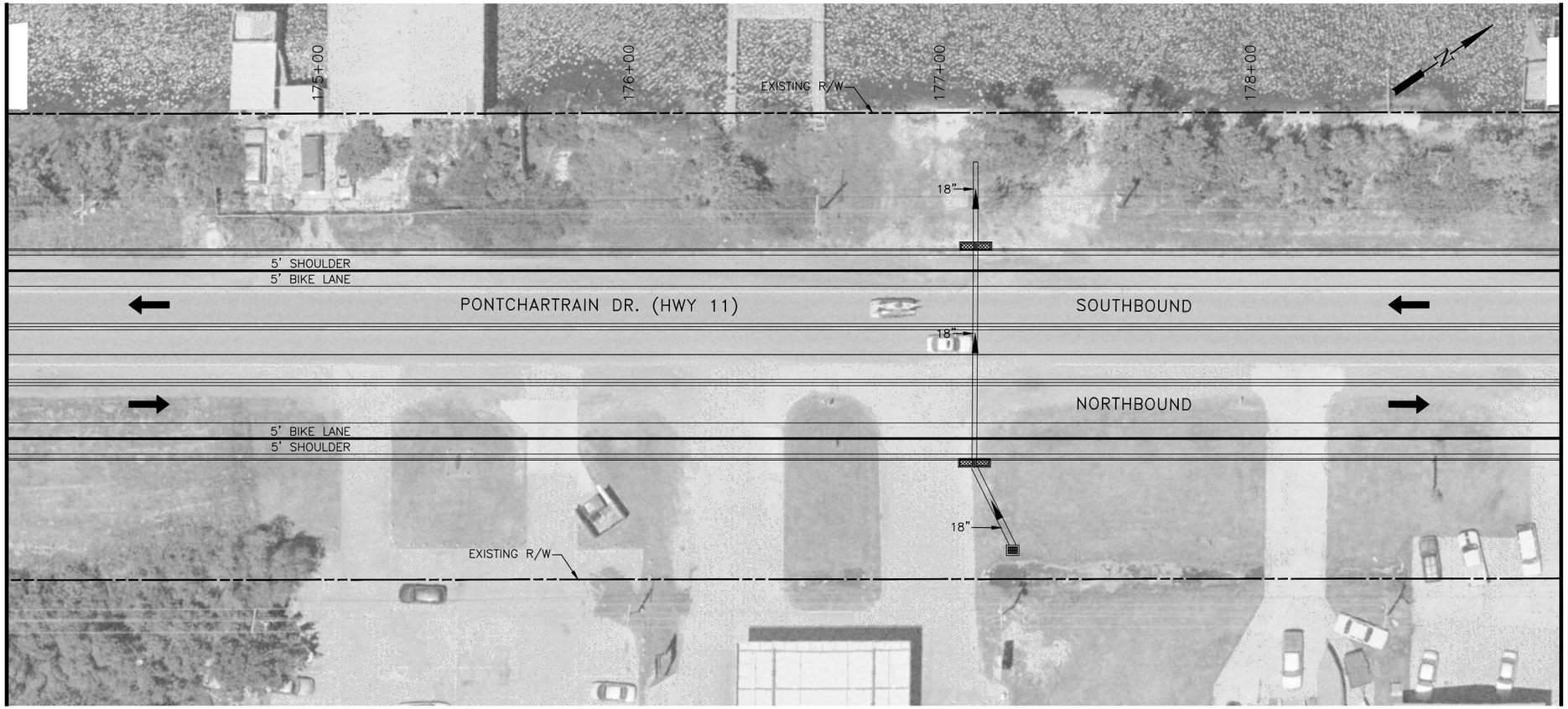
PLAN AND PROFILE

STA. 169+00 TO 174+00

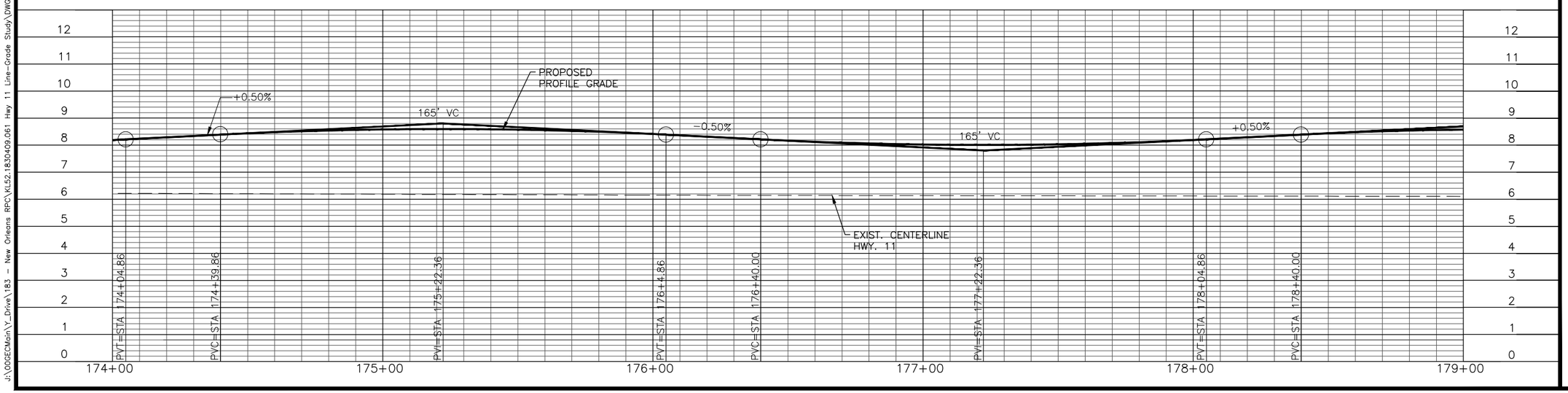
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-15

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-1.dwg Jan 21, 2016 - 10:15am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

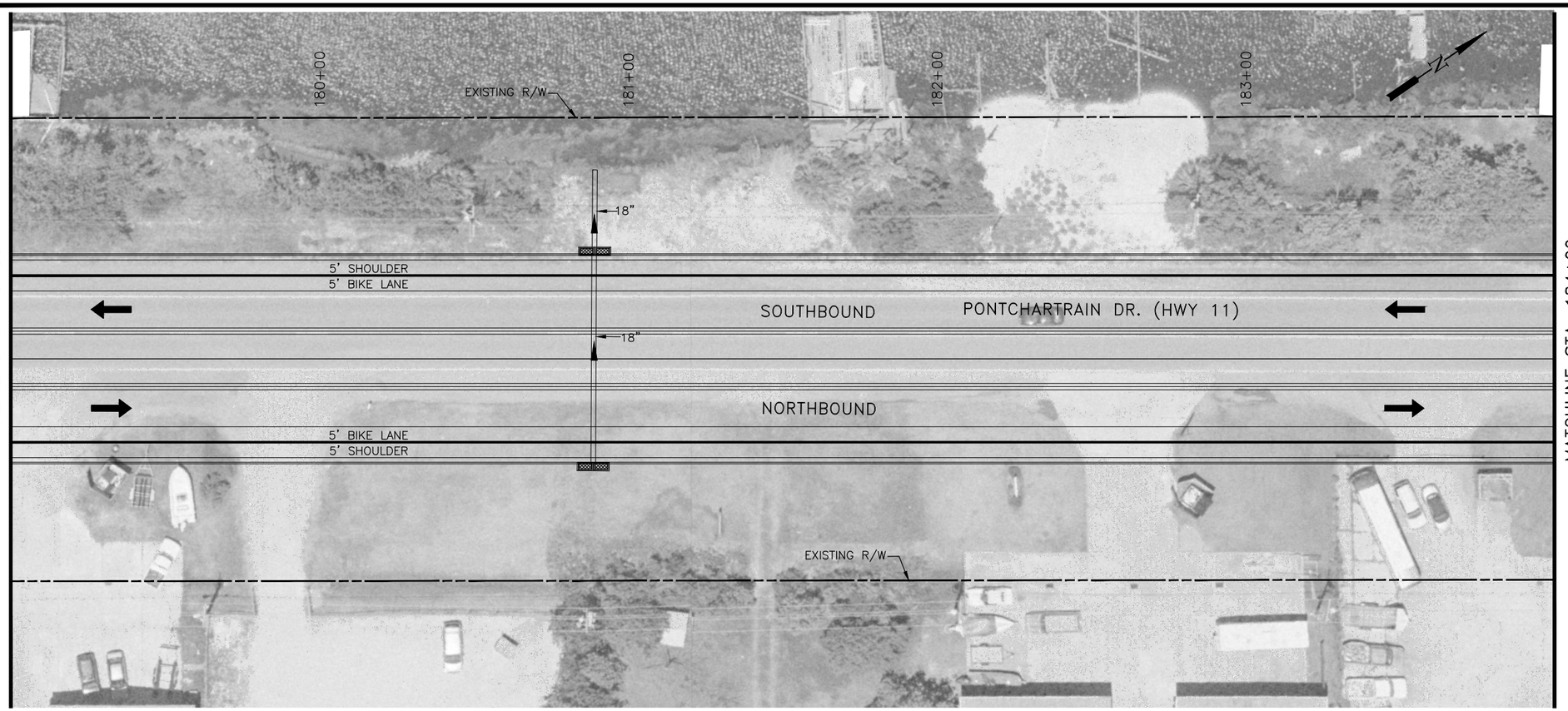
PLAN AND PROFILE

STA. 174+00 TO 179+00

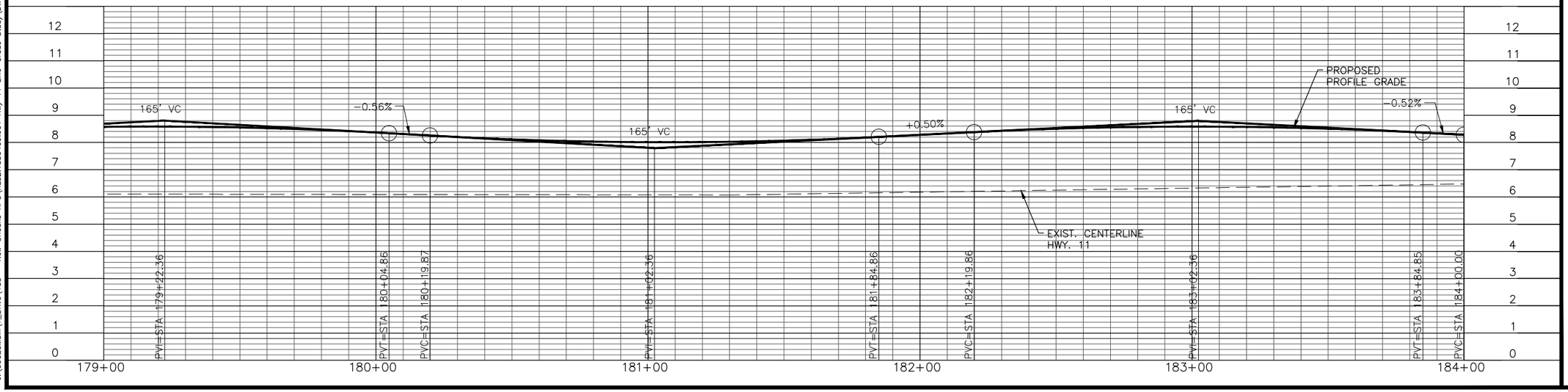
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-16

J:\OGECMain\Y_Drive\183 - New Orleans RPC\KL52.18304090.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:29am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL

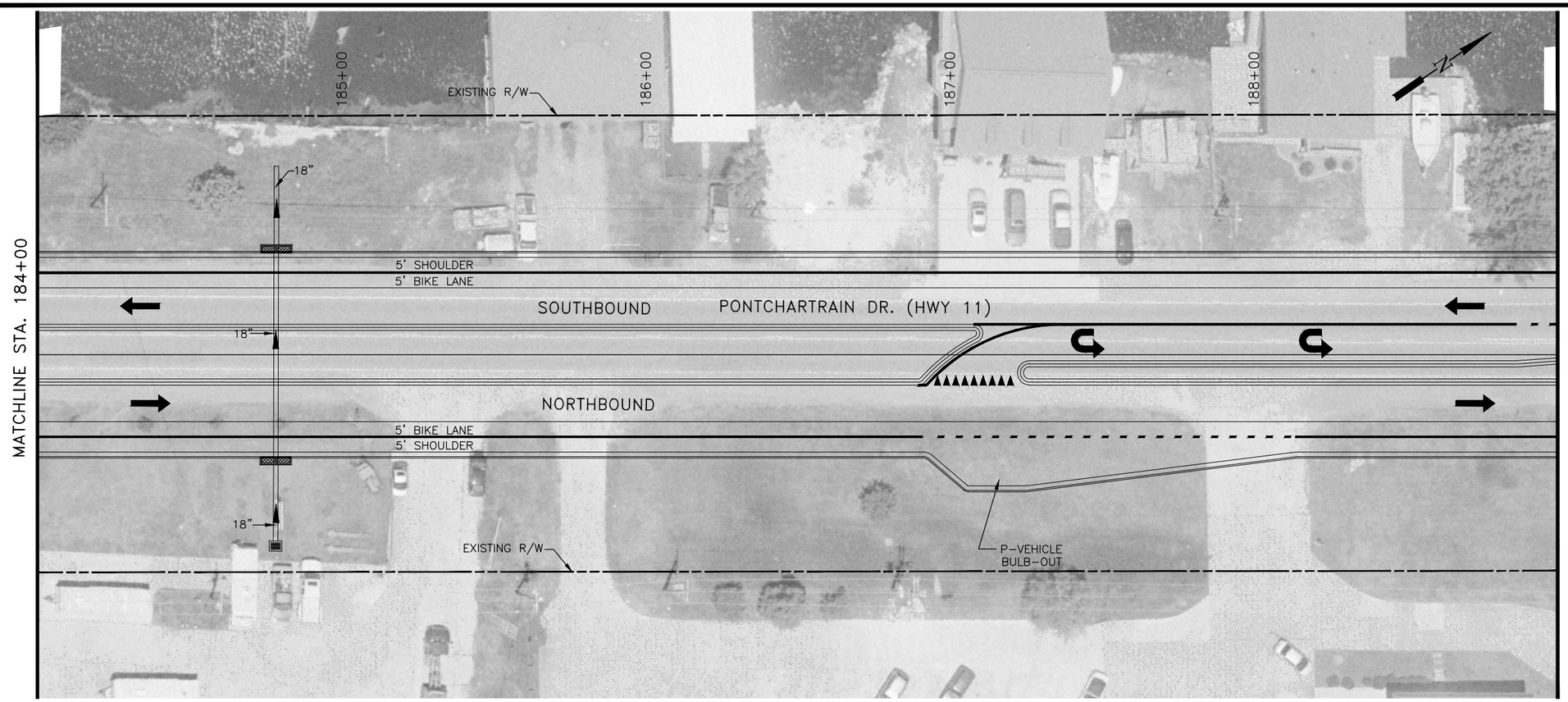


ALTERNATE 1
PLAN AND PROFILE
STA. 179+00 TO 184+00

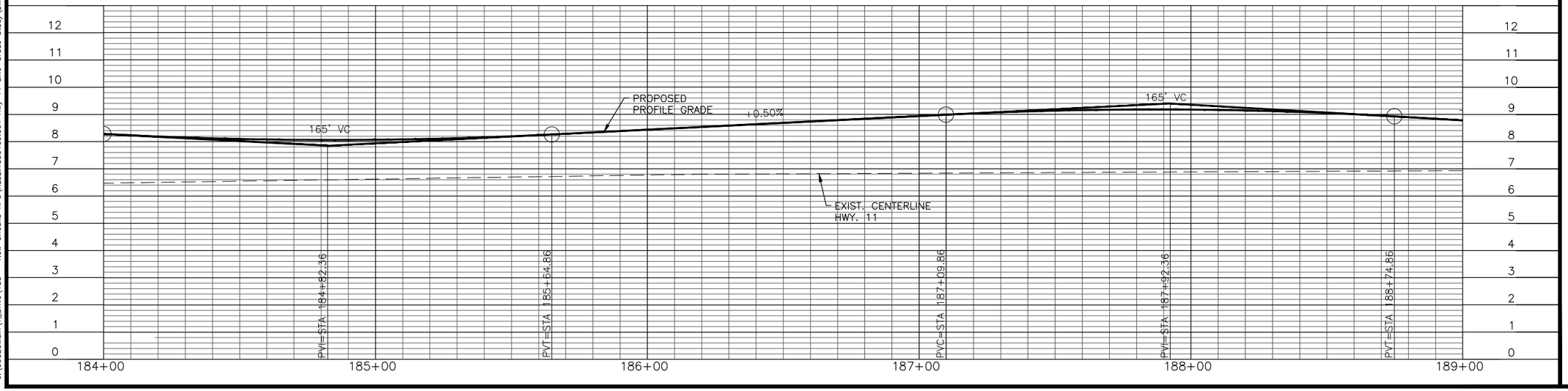
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-17

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18304090.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:30am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

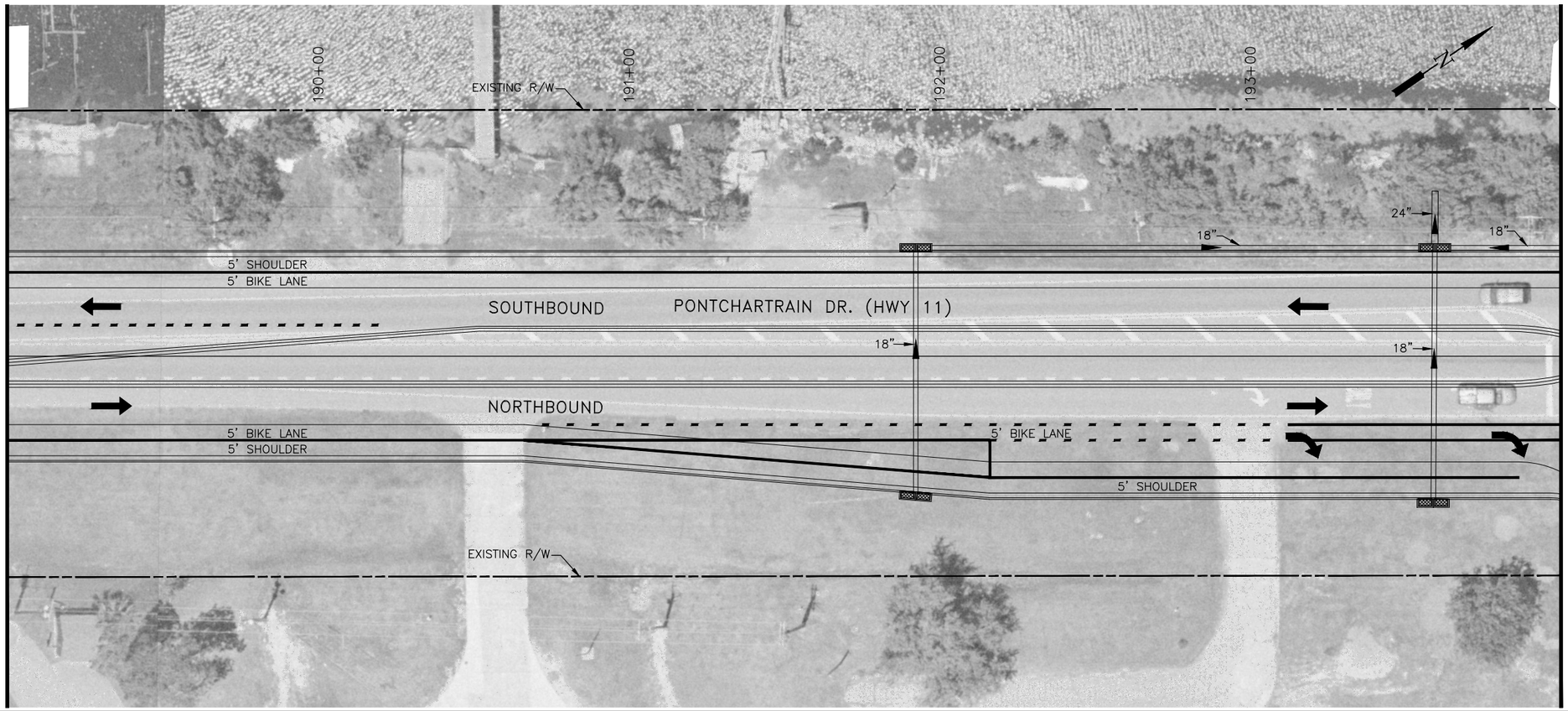
PLAN AND PROFILE

STA. 184+00 TO 189+00

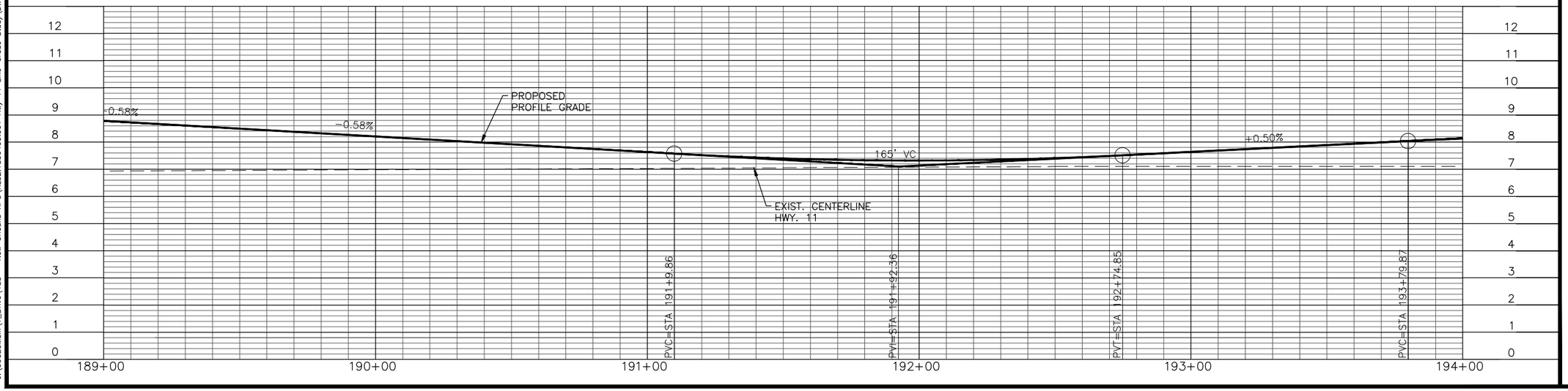
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-18

J:\GOGECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:30am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

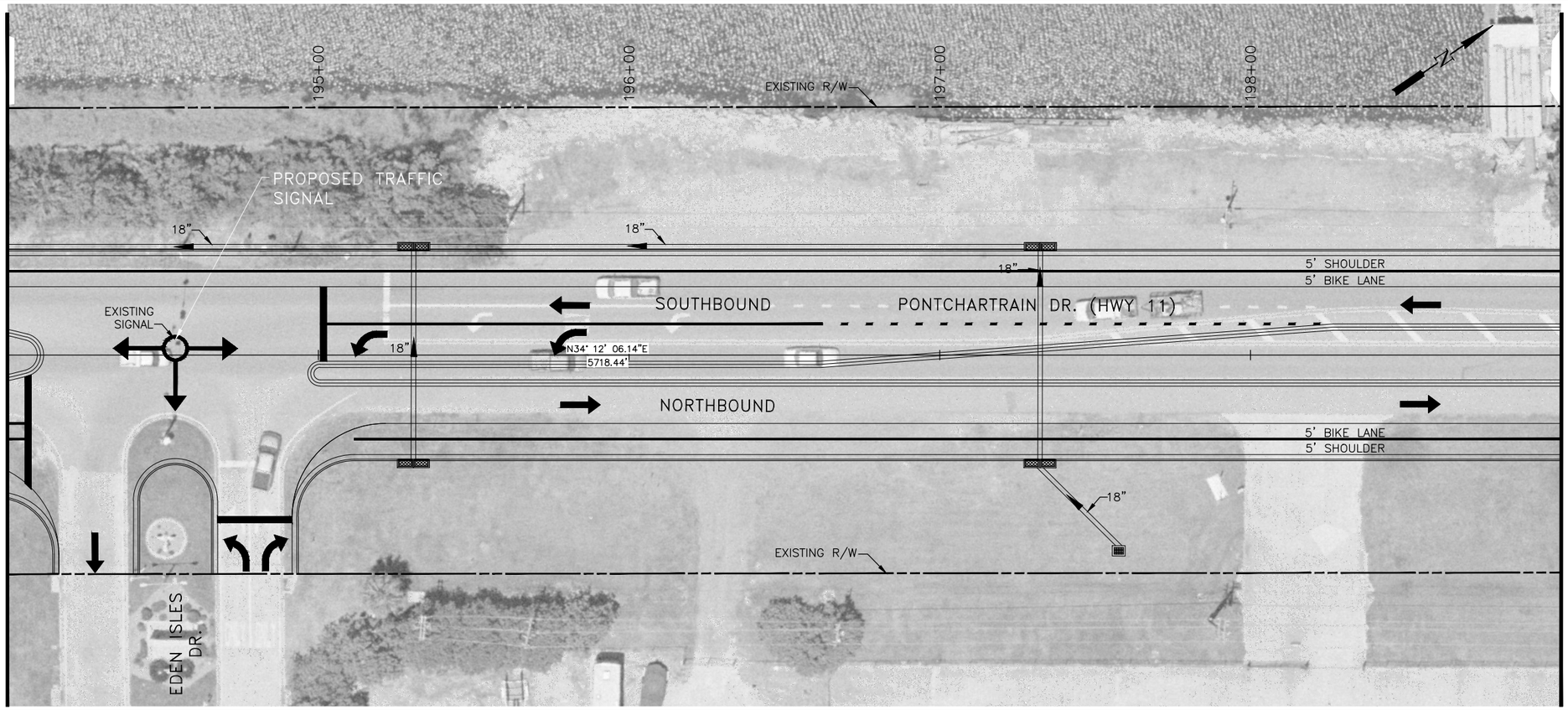
PLAN AND PROFILE

STA. 189+00 TO 194+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-19

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18330409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:31am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL

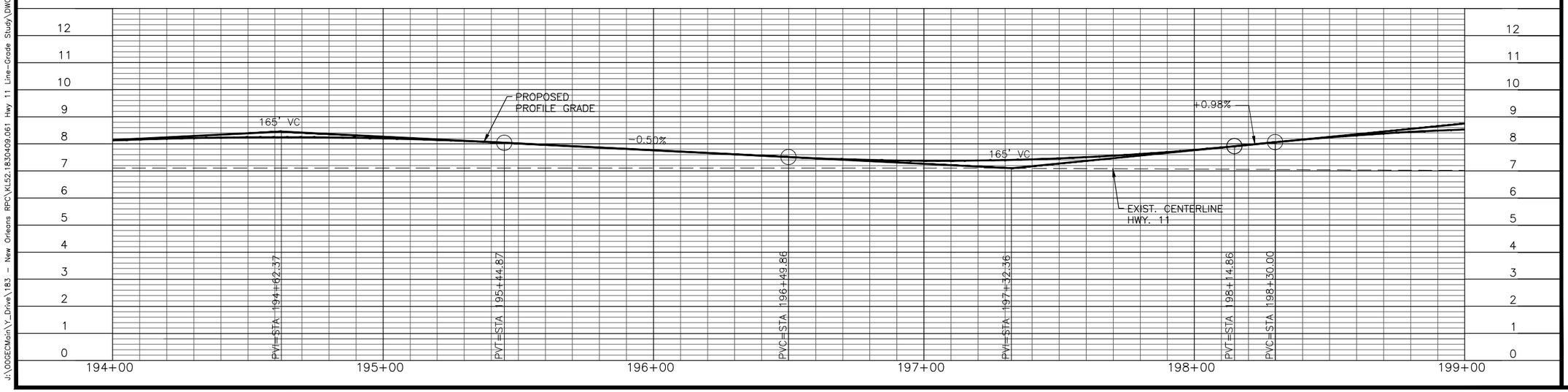


FIGURE 1-20
EDEN ISLES DRIVE
SIGNALIZED
INTERSECTION
ALTERNATIVE

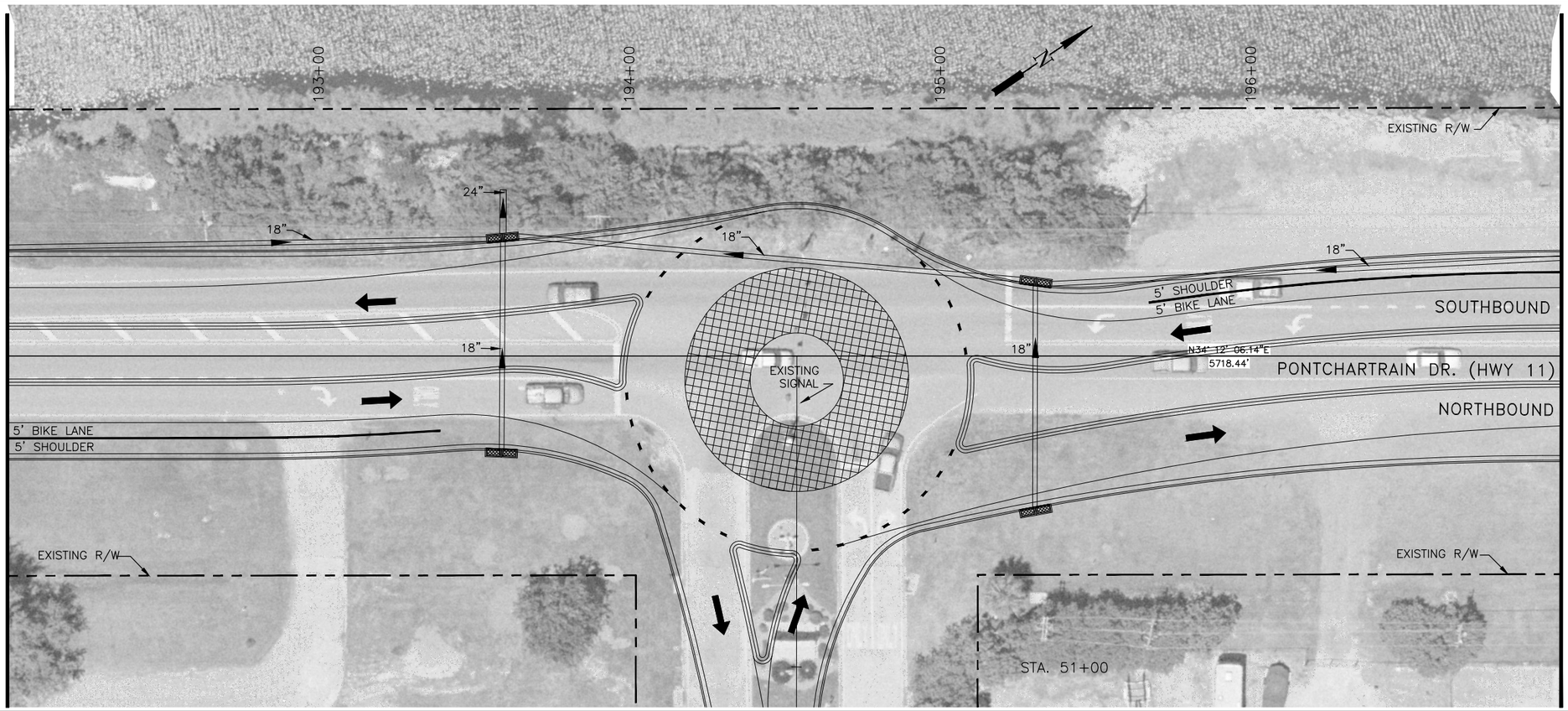
ALTERNATE 1

PLAN AND PROFILE

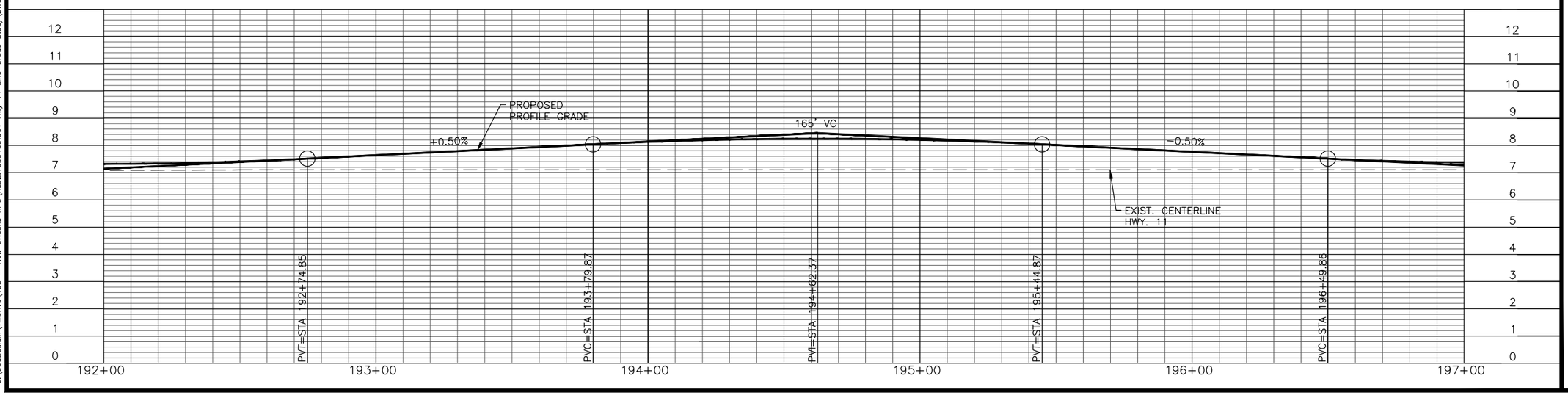
STA. 184+00 TO 199+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

J:\DOGECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Feb 16, 2016 - 3:42pm



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

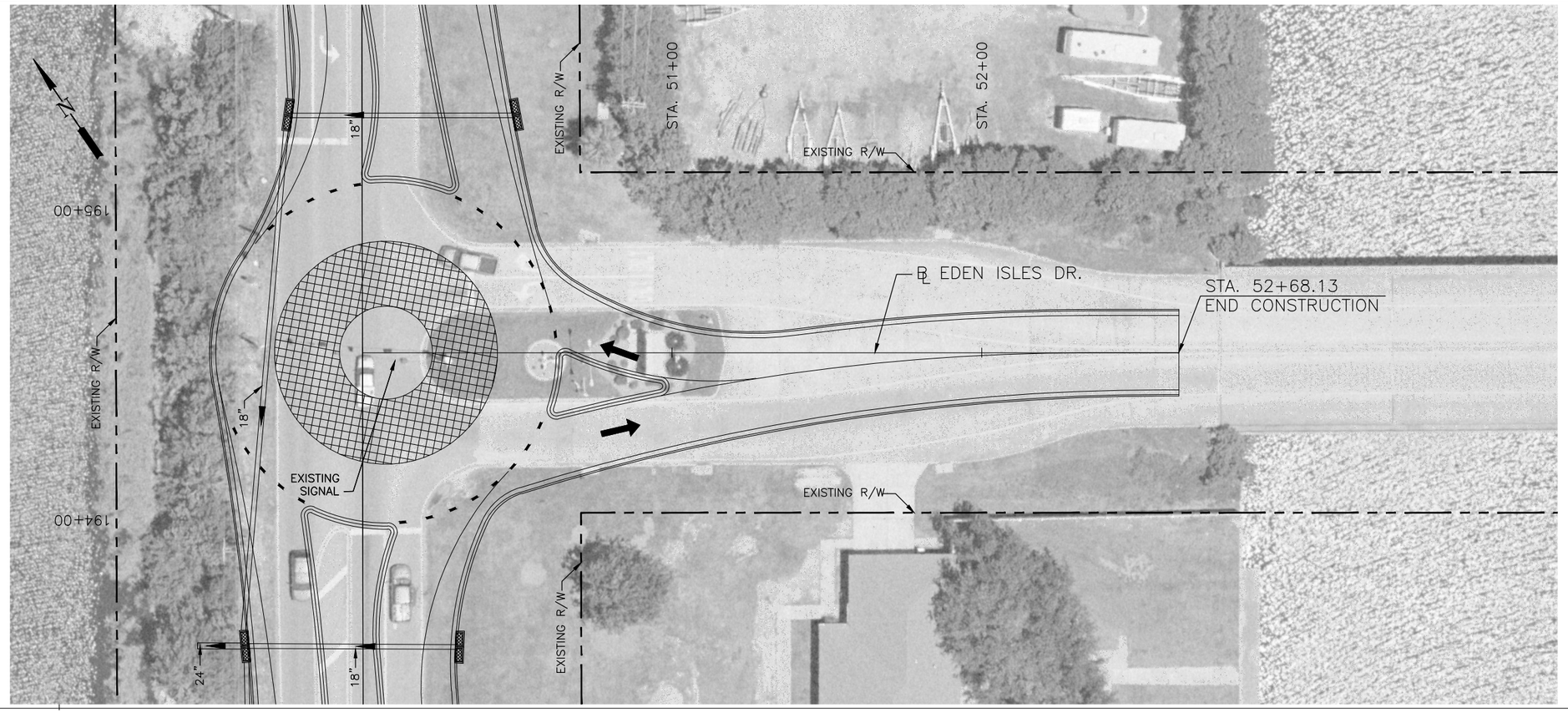
PLAN AND PROFILE

STA. 192+00 TO 197+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-20a
EDEN ISLES DRIVE
PREFERRED (ROUNDABOUT)
ALTERNATIVE

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_20a.dwg Feb 19, 2016 - 11:01am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL

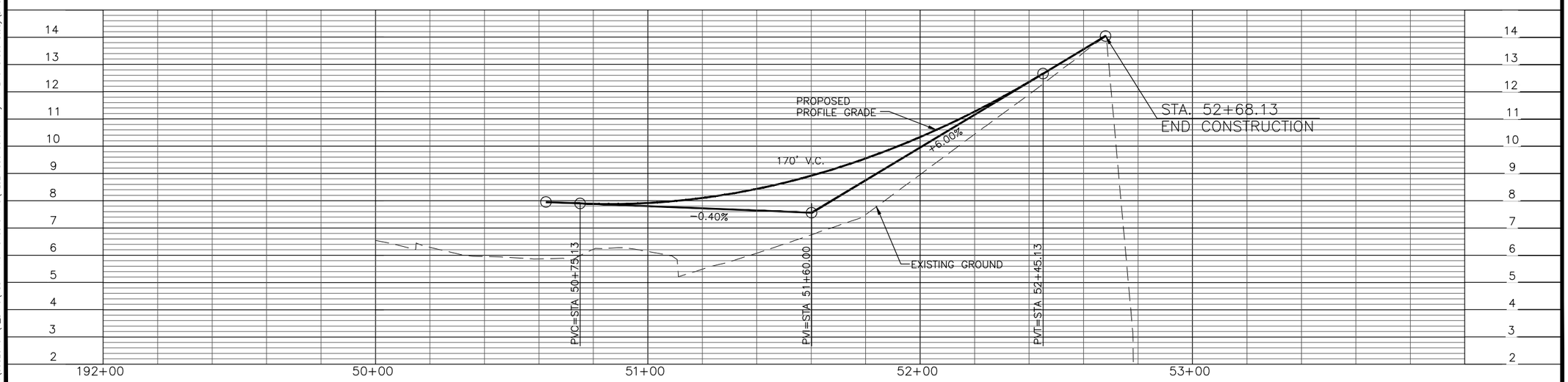


FIGURE 1-20b
EDEN ISLES DRIVE
PREFERRED (ROUNDABOUT)
ALTERNATIVE

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

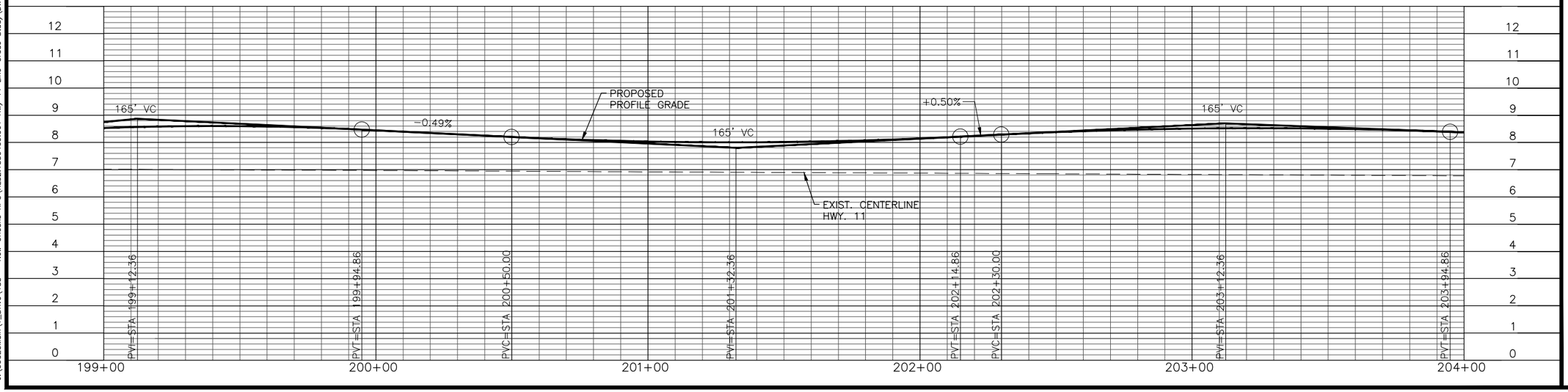
ALTERNATE 1

PLAN AND PROFILE

STA. 50+00 TO 52+68.13

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18330409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_20a.dwg Feb 19, 2016 - 11:00am

SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

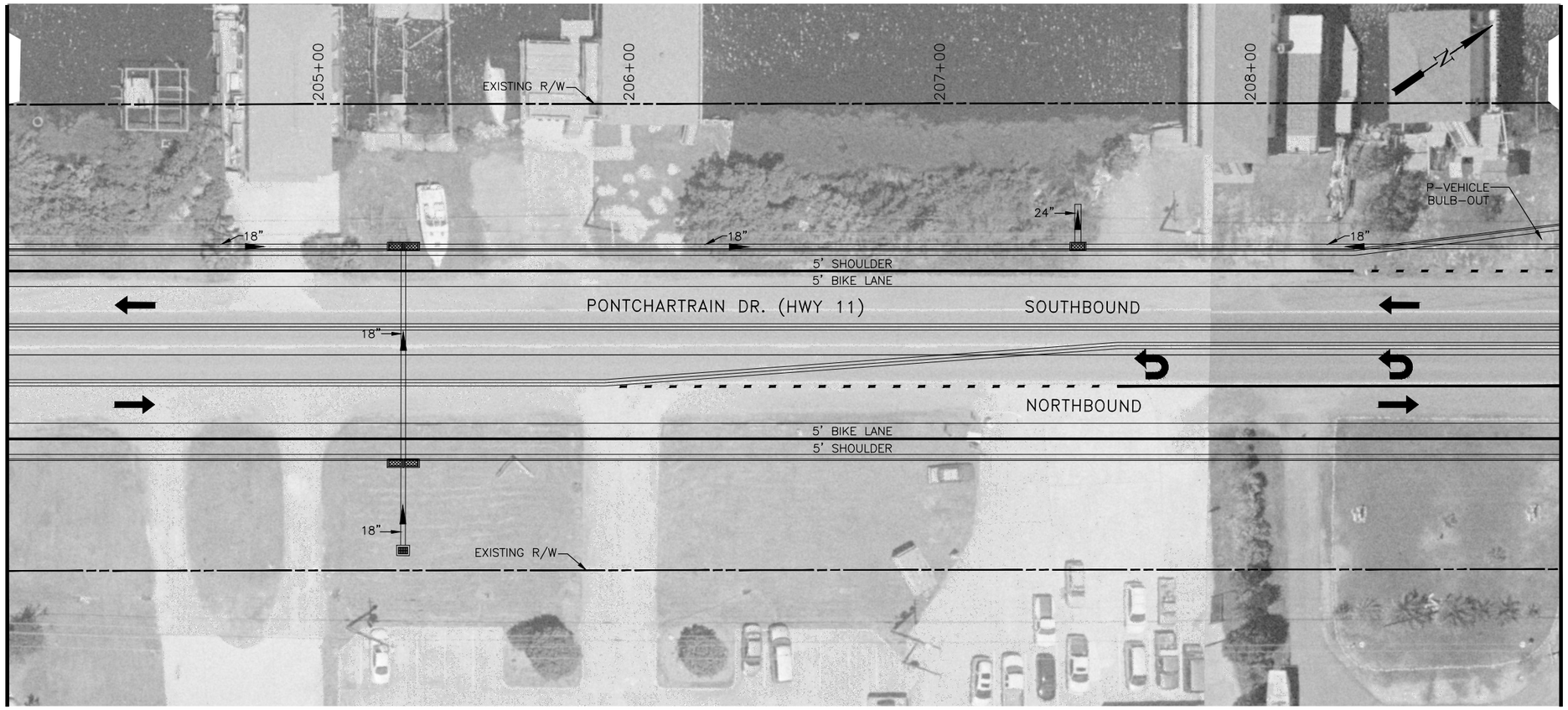
PLAN AND PROFILE

STA. 199+00 TO 204+00

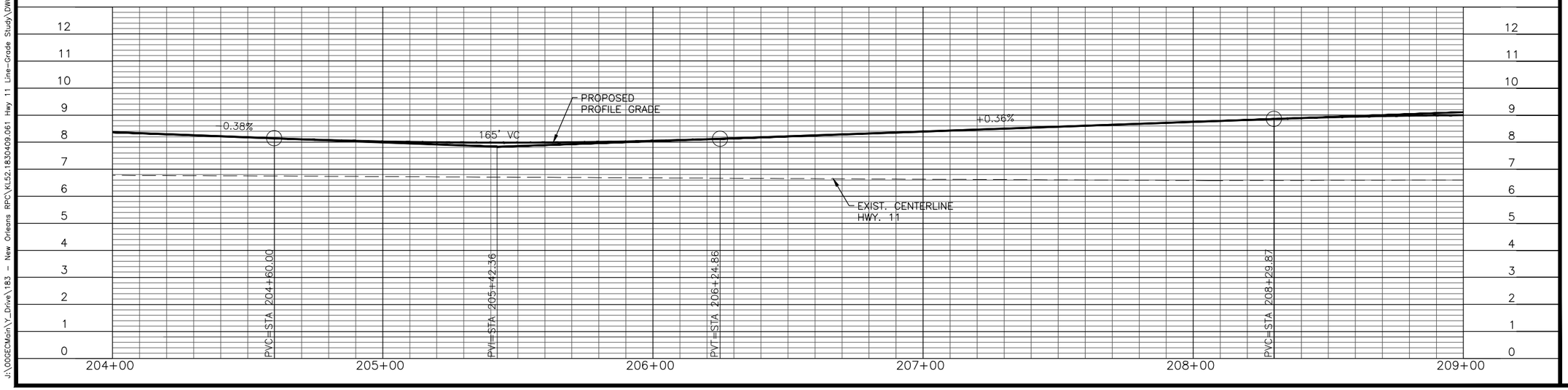
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-21

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:33am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

PLAN AND PROFILE

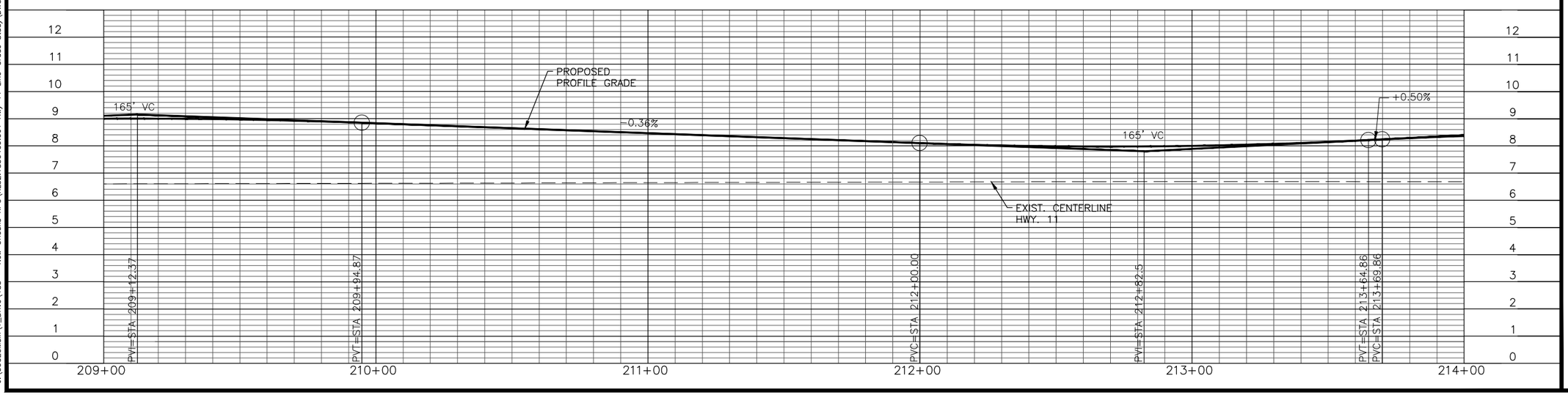
STA. 204+00 TO 209+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-22

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:33am

SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

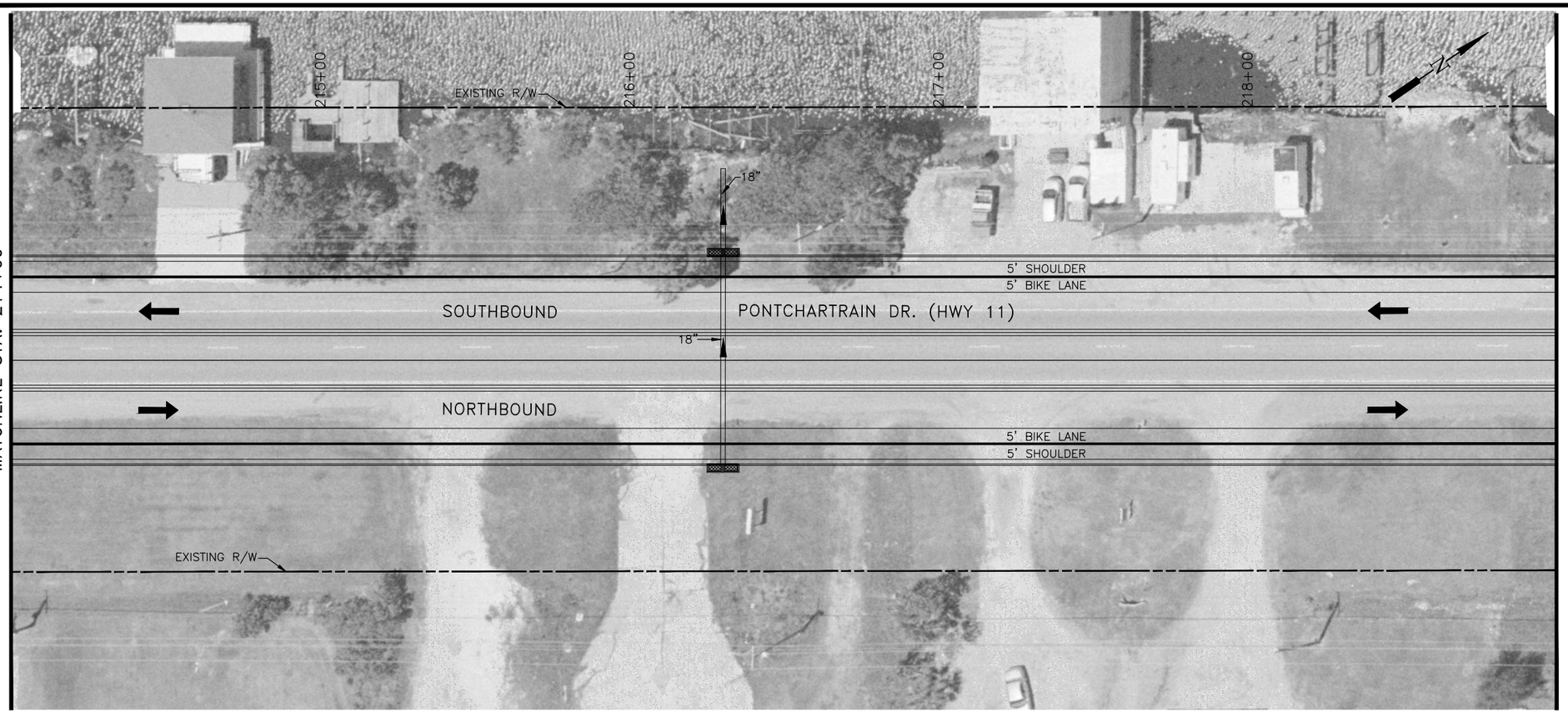
PLAN AND PROFILE

STA. 209+00 TO 214+00

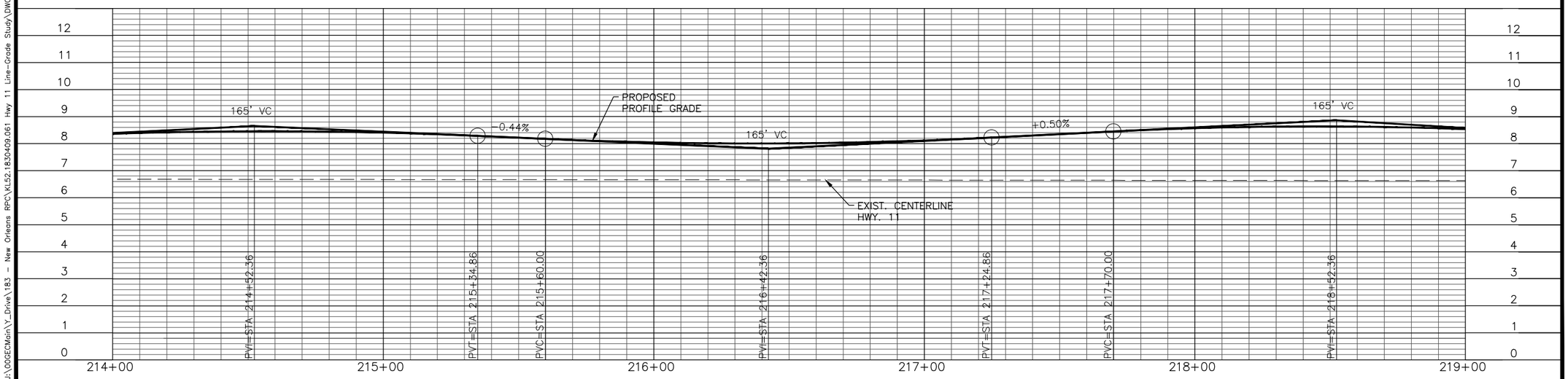
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-23

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:35am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

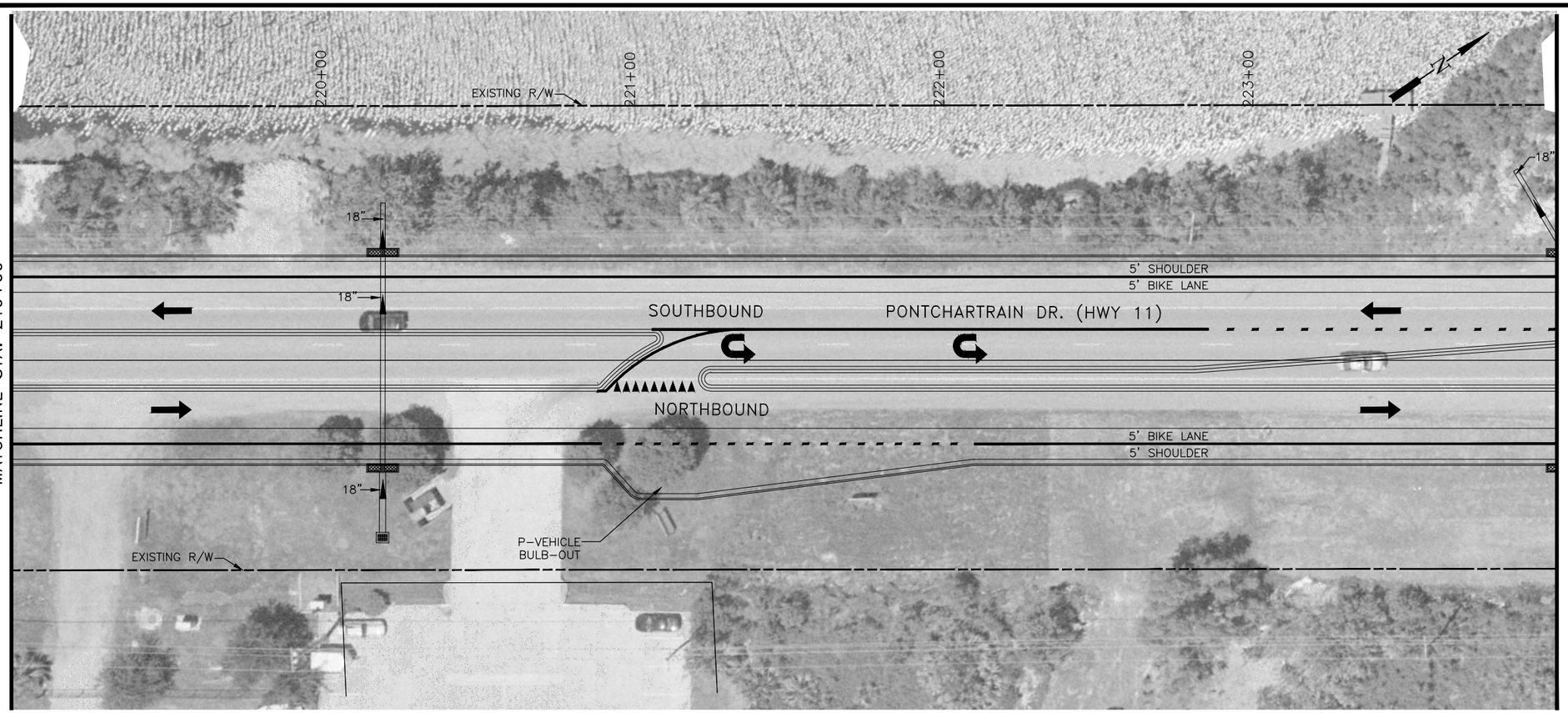
PLAN AND PROFILE

STA. 214+00 TO 219+00

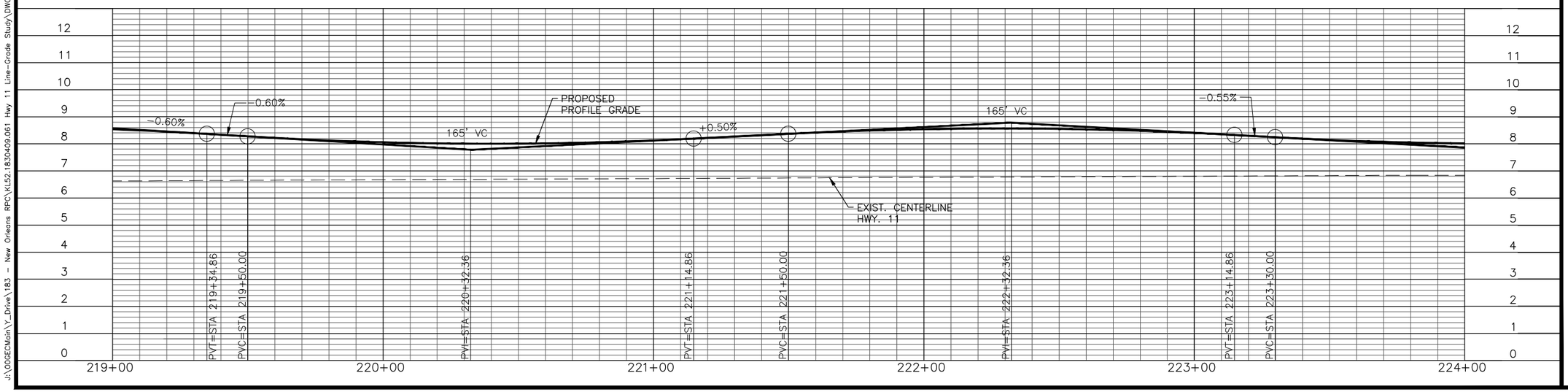
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-24

J:\DOGECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:36am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

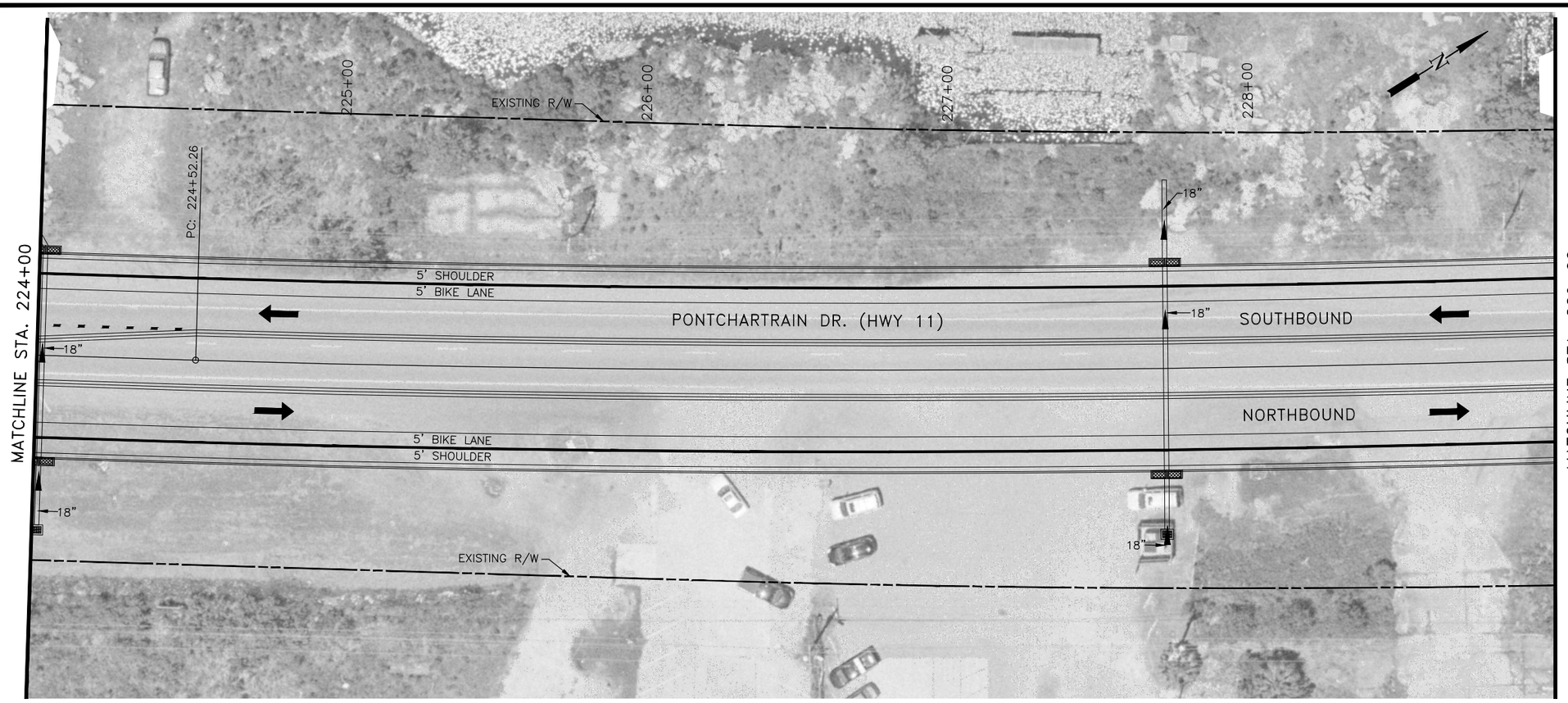
PLAN AND PROFILE

STA. 219+00 TO 224+00

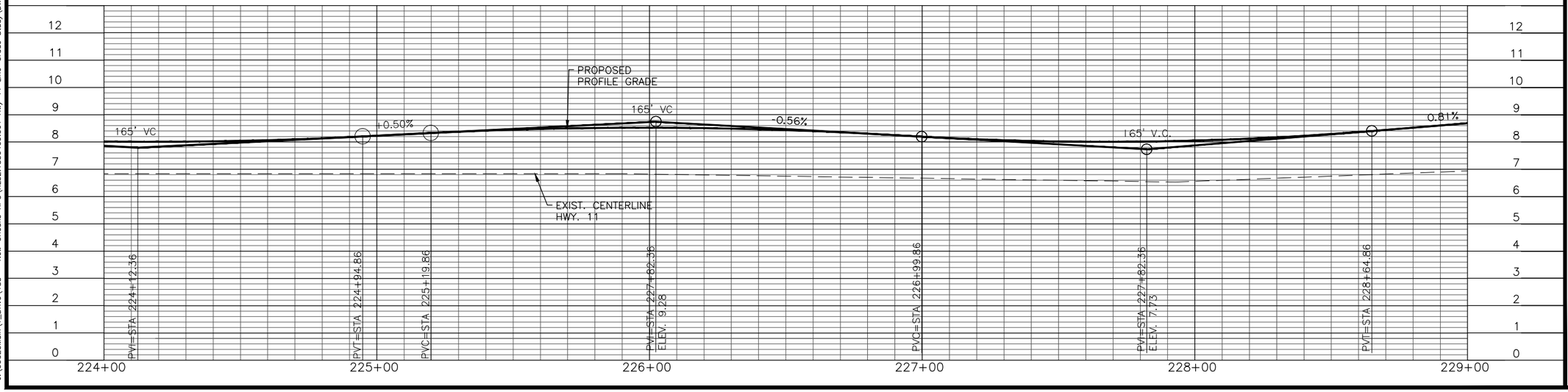
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-25

J:\.00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18304409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:39am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

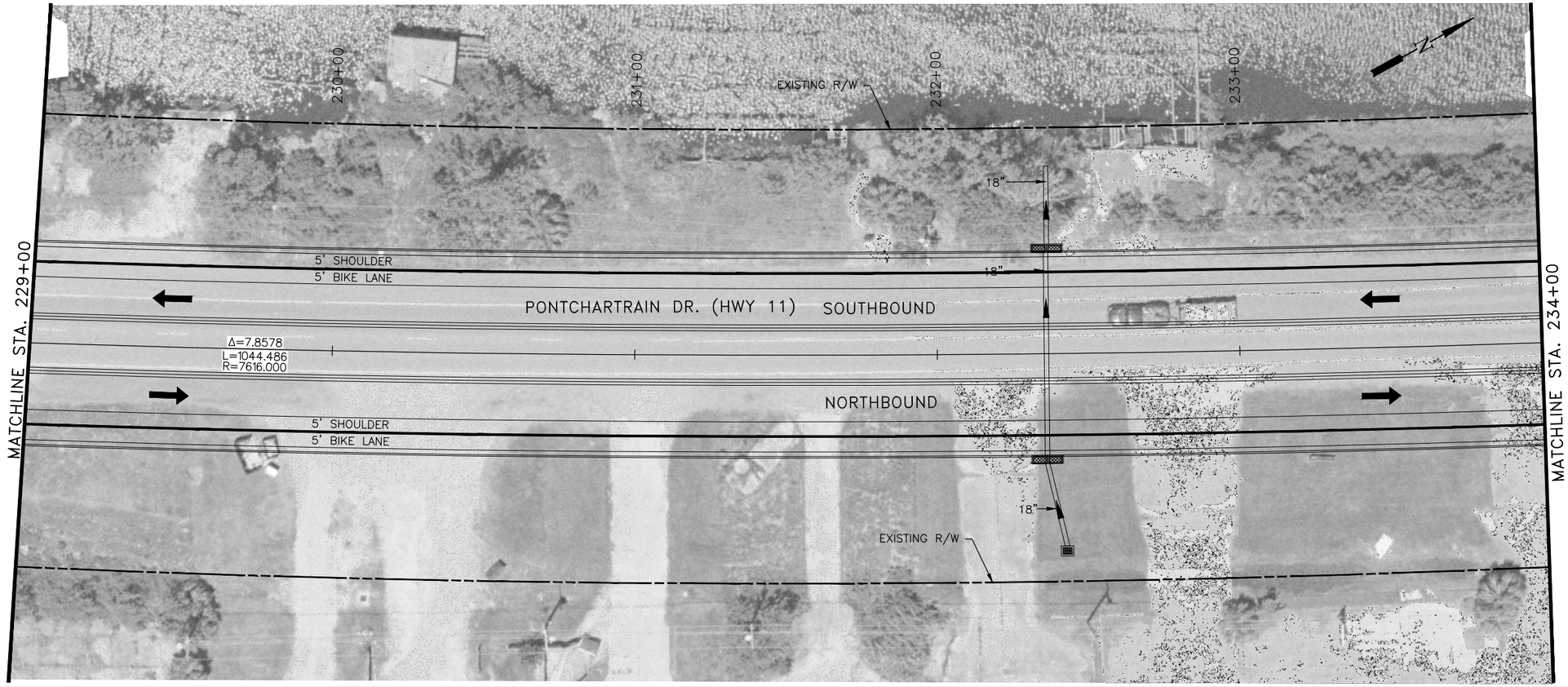
PLAN AND PROFILE

STA. 224+00 TO 229+00

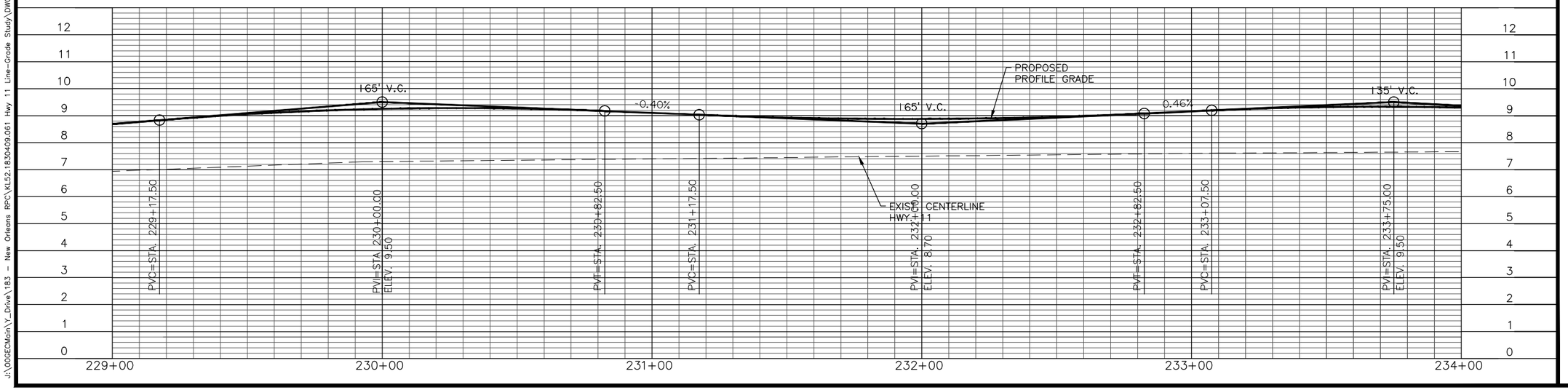
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-26

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18304O9.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:42am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

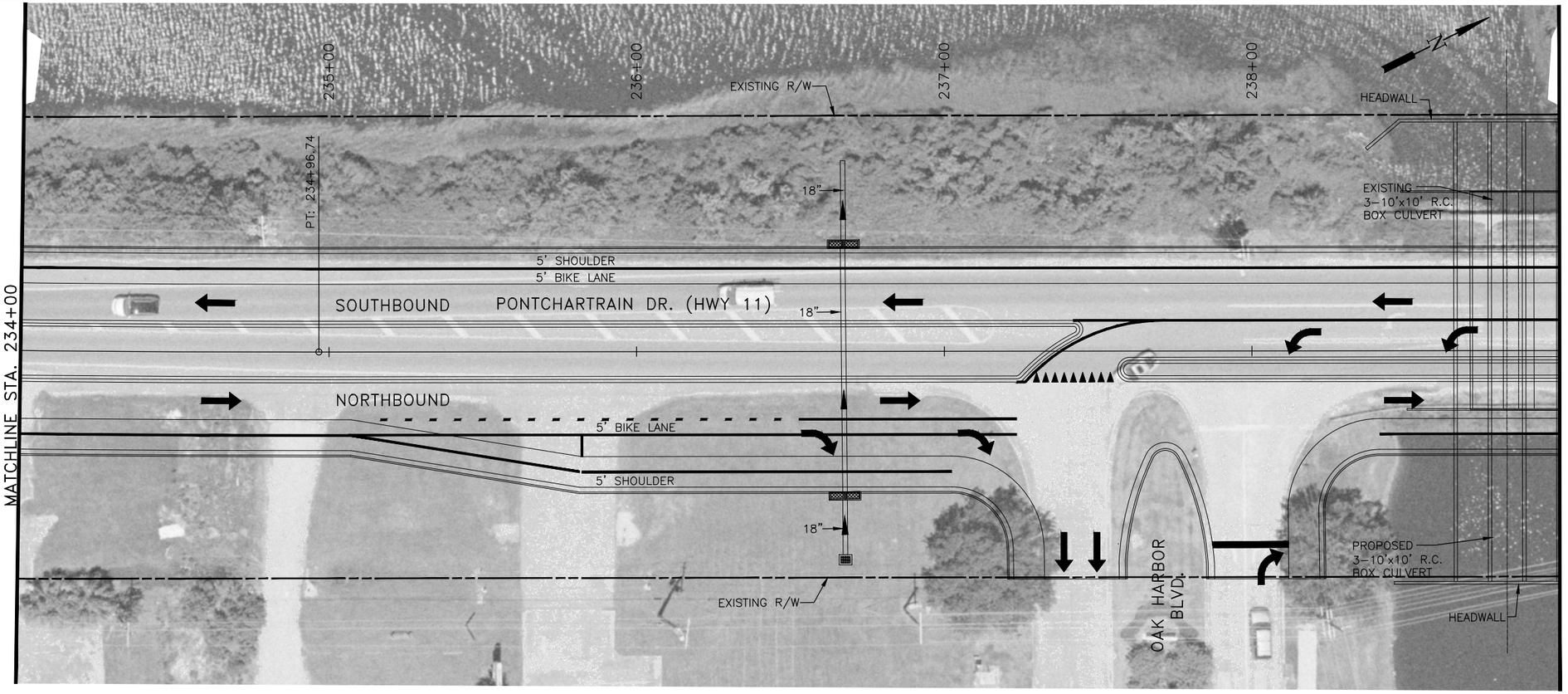
ALTERNATE 1

PLAN AND PROFILE

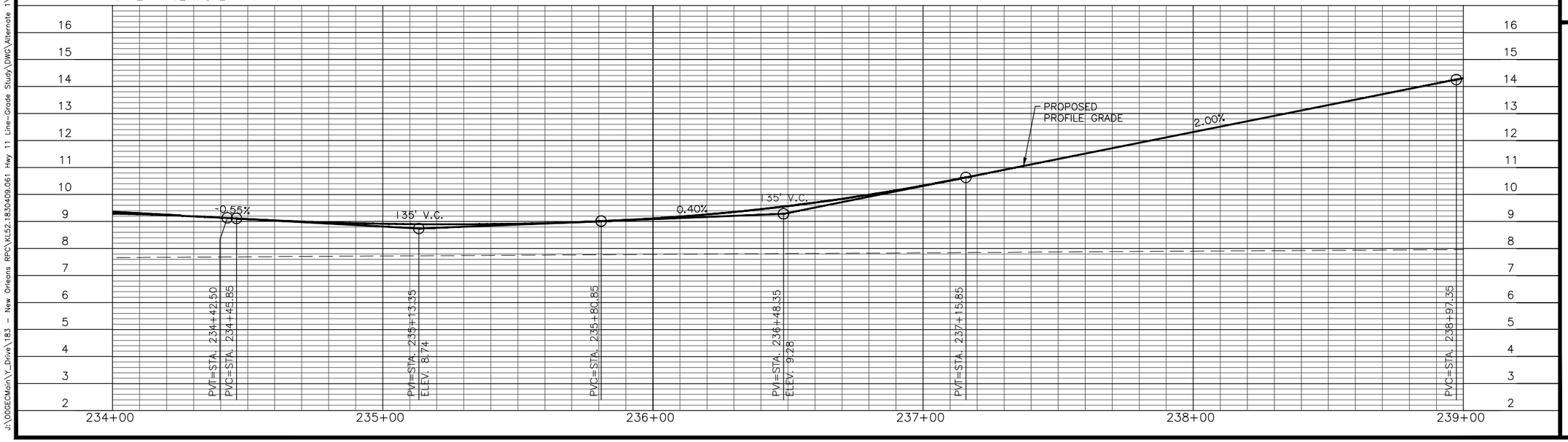
STA. 229+00 TO 234+00

FIGURE 1-27

J:\000ECMain\Y_Drive\183 - New Orleans RPC\KL52.18304093.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 2:33pm



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

PLAN AND PROFILE

STA. 234+00 TO 239+00

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-28

J:\OGECMain\Y_Drive\183 - New Orleans RPC\KL52.18304409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 2:57pm

ALTERNATE 1

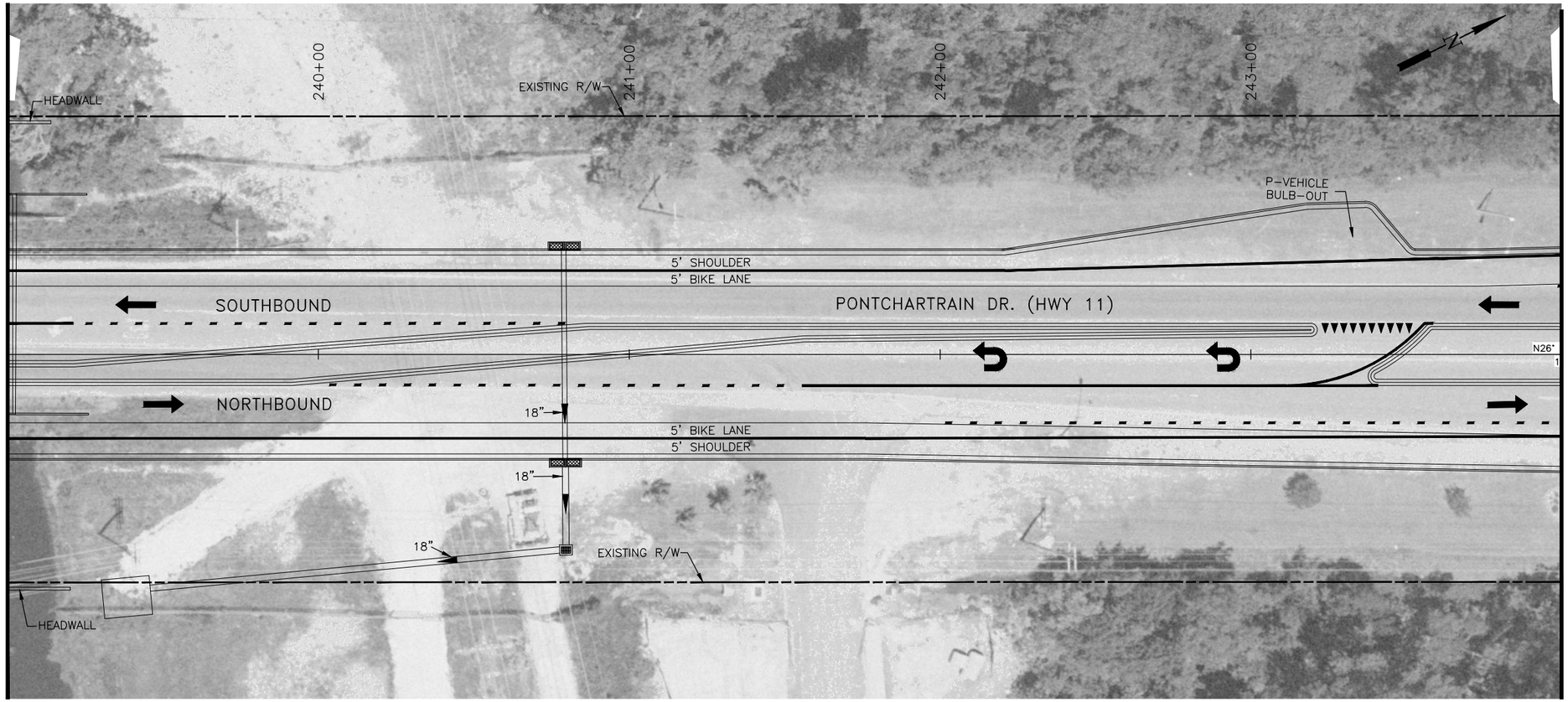
PROFILE
(WITH BOX CULVERT)

STA. 235+00 TO 240+00

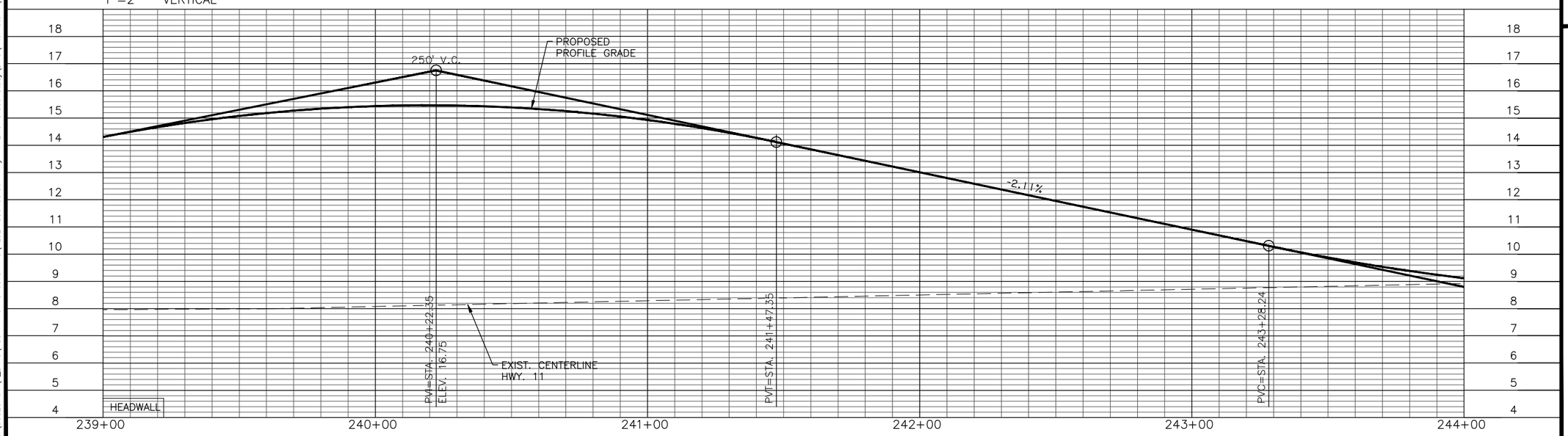
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-28a

J:\00GEC\Main\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\p-p-2.dwg Jan 21, 2016 - 10:55am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

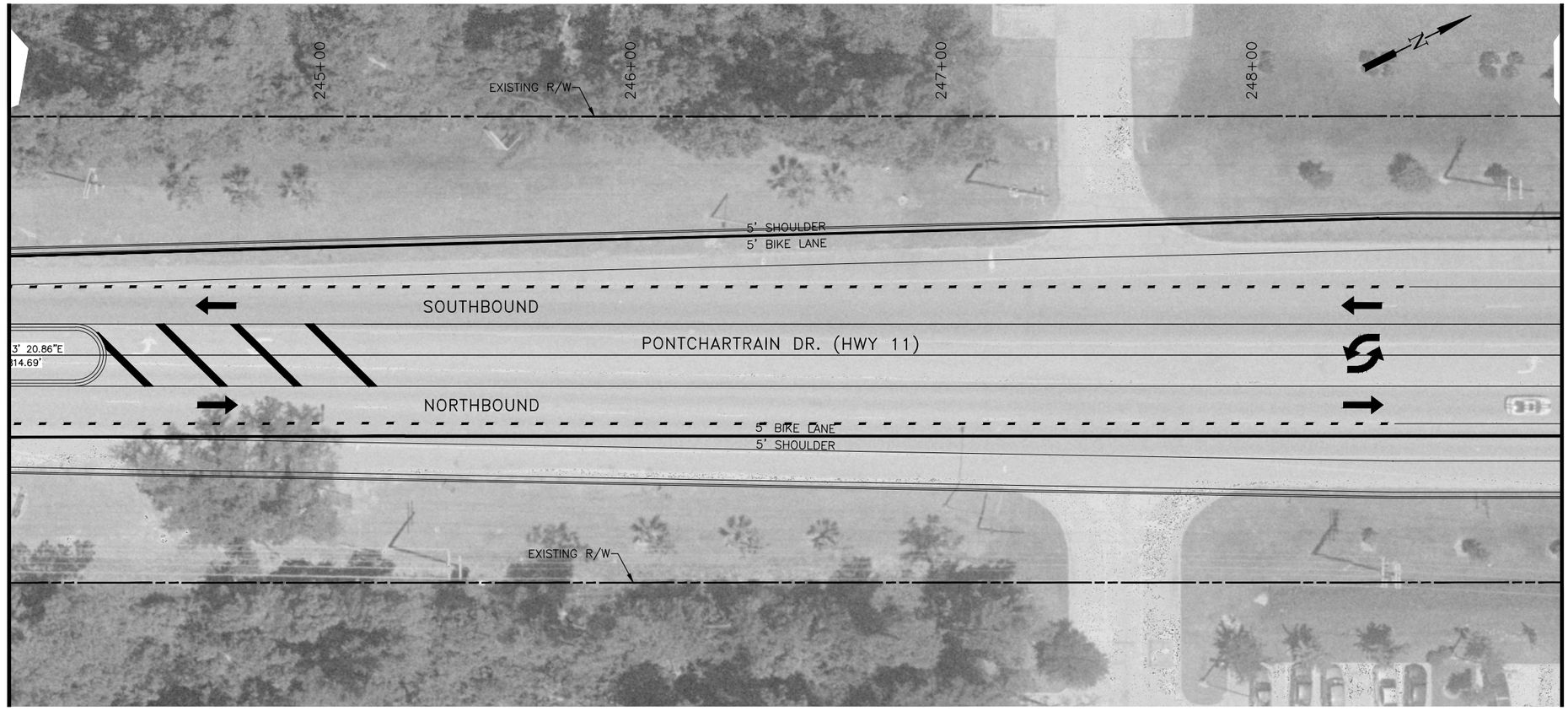
PLAN AND PROFILE

STA. 239+00 TO 244+00

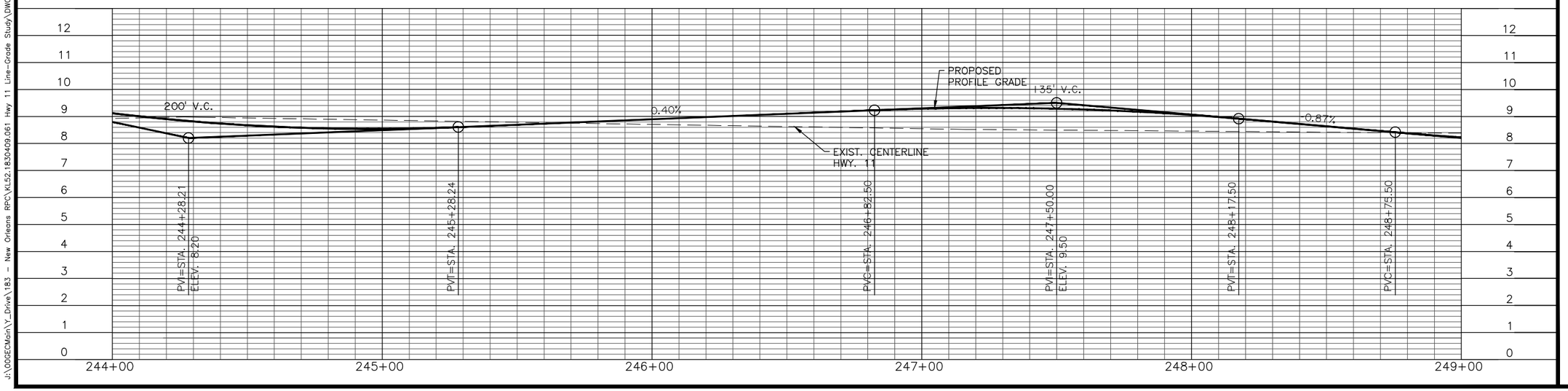
US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE 1-29

J:\GGECMain\Y_Drive\183 - New Orleans RPC\KLS2.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 2:59pm



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

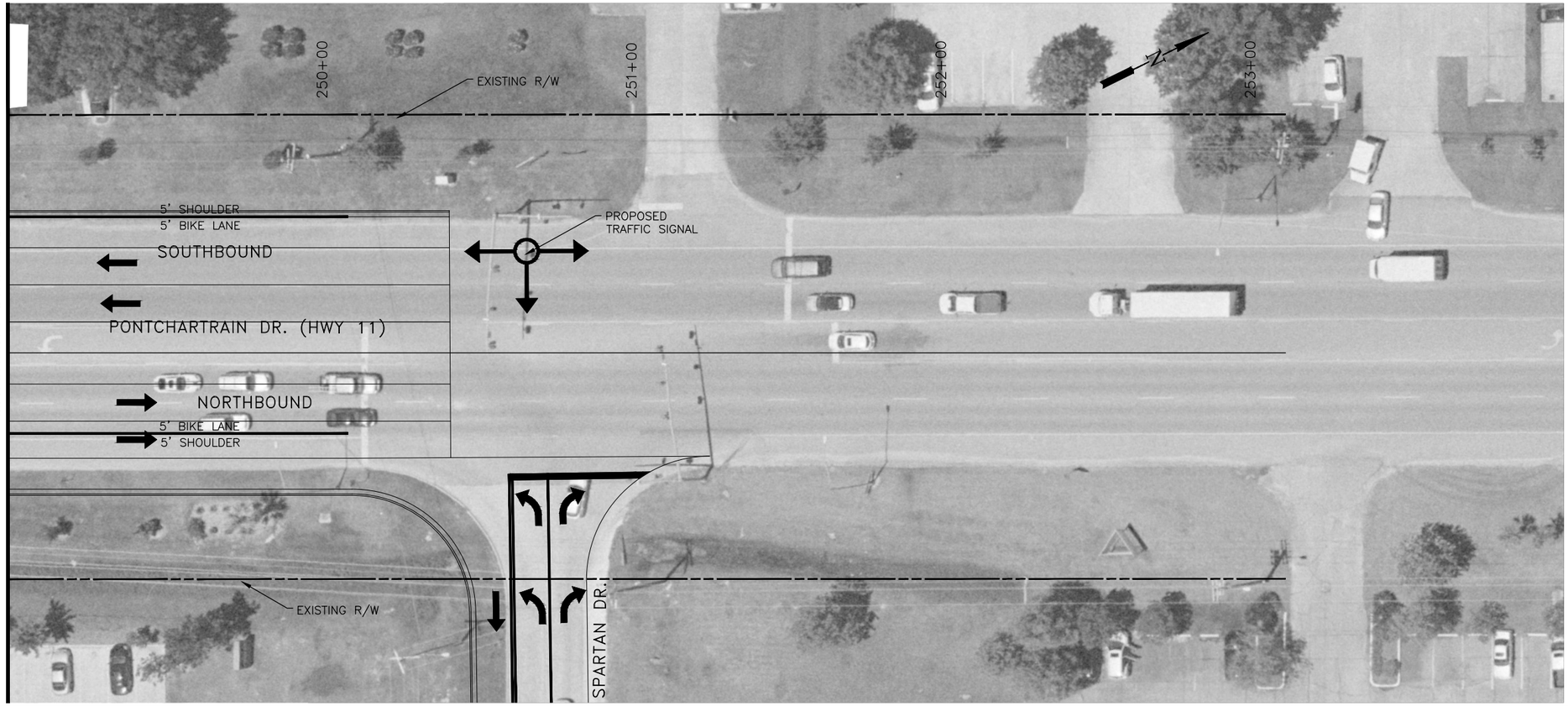
ALTERNATE 1

PLAN AND PROFILE

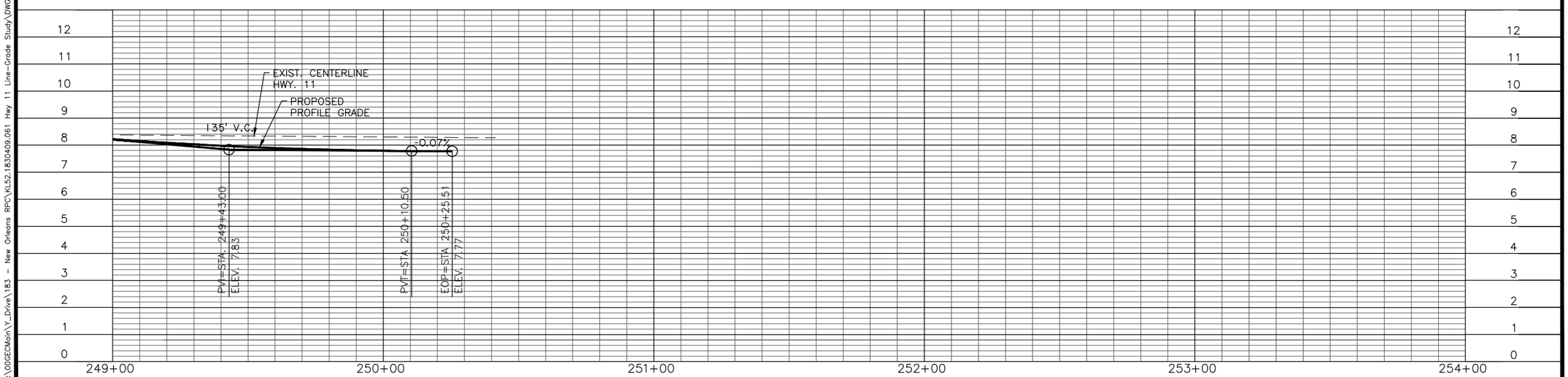
STA. 244+00 TO 249+00

FIGURE 1-30

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.18330409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 10:56am



SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



ALTERNATE 1

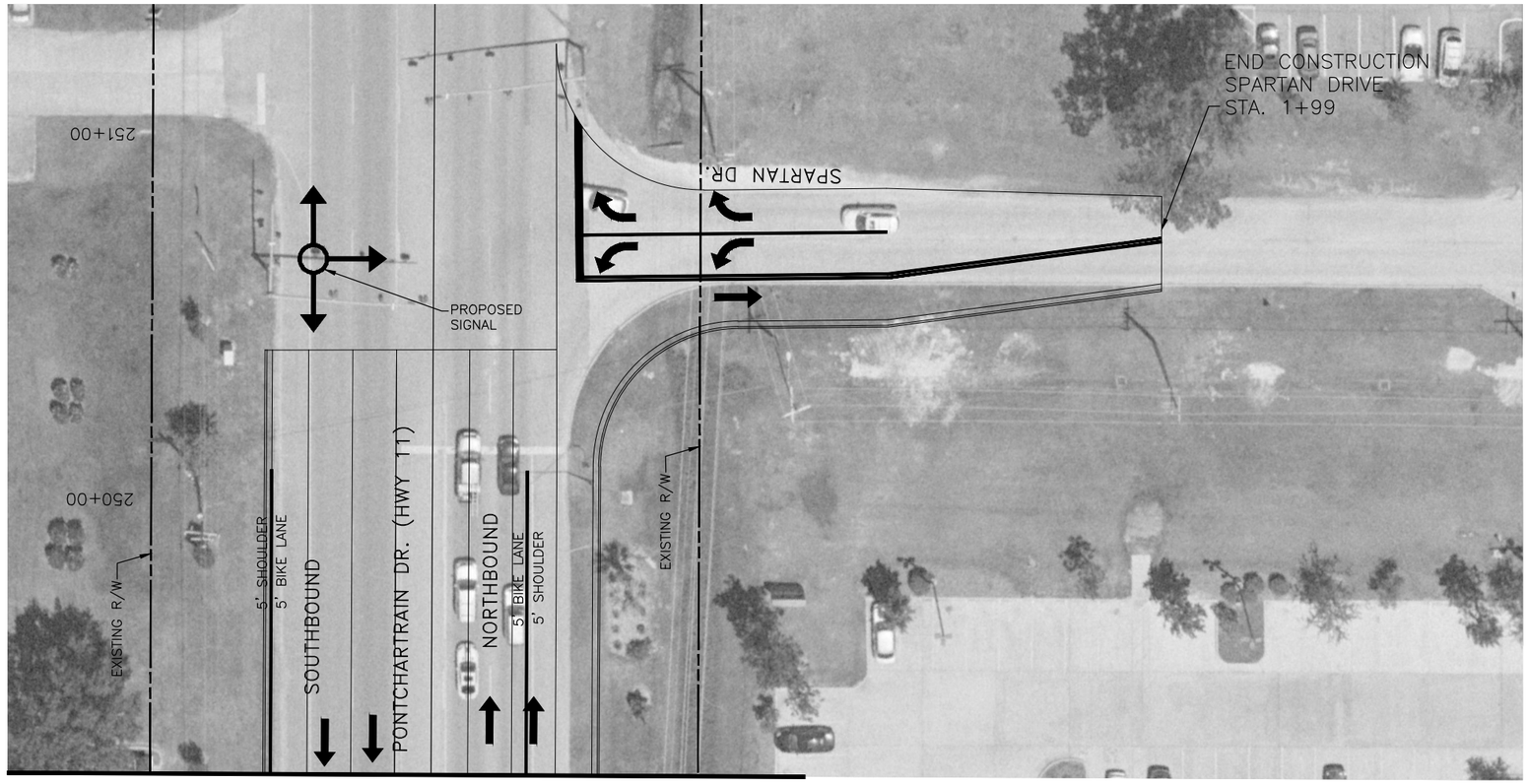
PLAN AND PROFILE

STA. 249+00 TO 253+11

US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

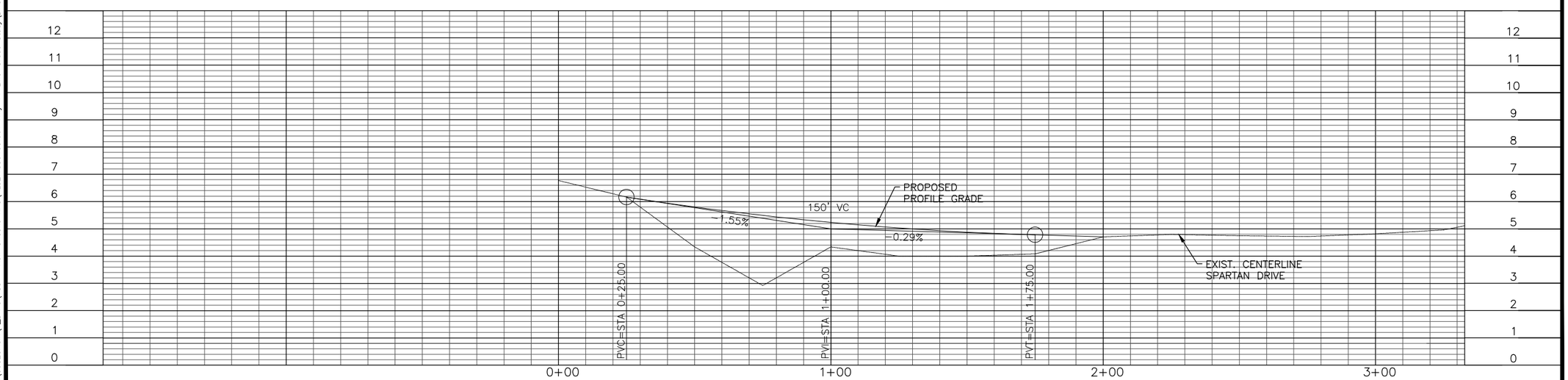
FIGURE 1-31

J:\OGECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 11:01am



MATCHLINE STA. 249+25

SCALE: 1"=20' HORIZONTAL
1"=2' VERTICAL



US HWY. 11 WIDENING
ENVIRONMENTAL ASSESSMENT
WITH LINE AND GRADE
ST. TAMMANY PARISH
STATE PROJECT NO. 700-52-0196
FEDERAL AID PROJECT NO. DE-5208(508)
RPC CONTRACT NO. US11-EA

FIGURE A32

PLAN AND PROFILE

STA. 0+00 TO 1+99
SPARTAN DRIVE

FIGURE 1-32

J:\00GECMain\Y_Drive\183 - New Orleans RPC\KL52.1830409.061 Hwy 11 Line-Grade Study\DWG\Alternate 1\Alt_1_pp-2.dwg Jan 21, 2016 - 11:03am

Appendix B

SOLICITATION OF VIEWS AND RESPONSES

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Chairman
BILLY NUNGESSER
1st Vice Chairman
KEVIN DAVIS
2nd Vice Chairman
CRAIG P. TAFFARO, JR.
Secretary
THOMAS J. CAPELLA
Treasurer

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AARON F. BROUSSARD
Parish President
THOMAS J. CAPELLA
Councilmember at Large
RONNIE HARRIS
Mayor, City of Gretna
LEE GIORGIO
PHILLIP TRUXILLO

ORLEANS PARISH
C. RAY NAGIN
Mayor, City of New Orleans
JACQUELYN BRECHTEL CLARKSON
Councilmember at Large
ARNIE FIELKOW
Councilmember at Large
E. EEAN McNAUGHTON
SANDRA DIGGS-MILLER

PLAQUEMINES PARISH
BILLY NUNGESSER
President
Plaquemines Parish Gov't.
JAY FRIEDMAN
Councilmember
LYNDA BANTA
Chairman, Parish Council
BILL BUBRIG
JAMES HUFFT

ST. BERNARD PARISH
CRAIG P. TAFFARO, JR.
Parish President
FRANK AUDERER, JR.
Councilman at Large
RAY LAUGA
Councilmember
CHARLES H. PONSTEIN
DAVID MUNN

ST. TAMMANY PARISH
KEVIN DAVIS
Parish President
STEVE STEFANCIK
Councilmember
MARTY GOULD
Councilmember
RICHARD P. KELLEY
FRANCIS X. GOMILA

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
WILLIAM ANKNER
Secretary

WALTER R. BROOKS
Executive Director, RPC

September 8, 2009

State Project No. 700-52-0196
F.A.P. No. DE-5208(508)
U.S. Highway 11 Widening - Environmental Assessment
St. Tammany Parish
RPC Contract US11-EA

RE: Solicitation of Views

Early in the planning stages of a transportation project, the Regional Planning Commission (RPC), the Louisiana Department of Transportation and Development (LADOTD) and the Federal Highway Administration (FHWA) solicit the views of federal, state and local agencies, organizations and individuals. The special expertise of these groups can assist us with the early identification of possible adverse economic, social or environmental effects or concerns. Your assistance in this regard will be appreciated.

This is fairly early in the process, so limited data for the project exists. We have, however, attached a study area map along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by October 23, 2009. Replies should be addressed to:

Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metairie, LA 70002
Attn: Carmelo Gutierrez, P.E., PTOE, Senior Vice President

Please refer to State Project No. 700-52-0196 in your reply.

TRANSPORTATION POLICY COMMITTEE (MPO) Full RPC Membership
RAD A. ADAMS, *Commissioner, Louisiana Airport Authority*
MES BRIDGER, *General Manager, New Orleans Public Belt Railroad*
AN BROWN, *Director, Transit Administration, Jefferson Parish*
ESAR R. BURGOS, *Chairman, Regional Transit Authority*
PAT GALLWEY, Chief Operating Officer, *Port of New Orleans*
CATHY F. GAUTREAUX, *Ex. Dir. Louisiana Motor Transport Association*
SEAN HUNTER, *Director, Louis Armstrong N. O. International Airport*
ROBERT J. LAMBERT, *Gen. Mgr., Greater N. O. Expwy. Comm.*
V.J. ST. PIERRE, JR., *Parish President, St. Charles Parish*
WILLIAM HUBBARD, *Parish President, St. John the Baptist Parish*
BEN O. MORRIS, *Mayor, City of Slidell*
EDDIE PRICE, *Mayor, City of Mandeville*

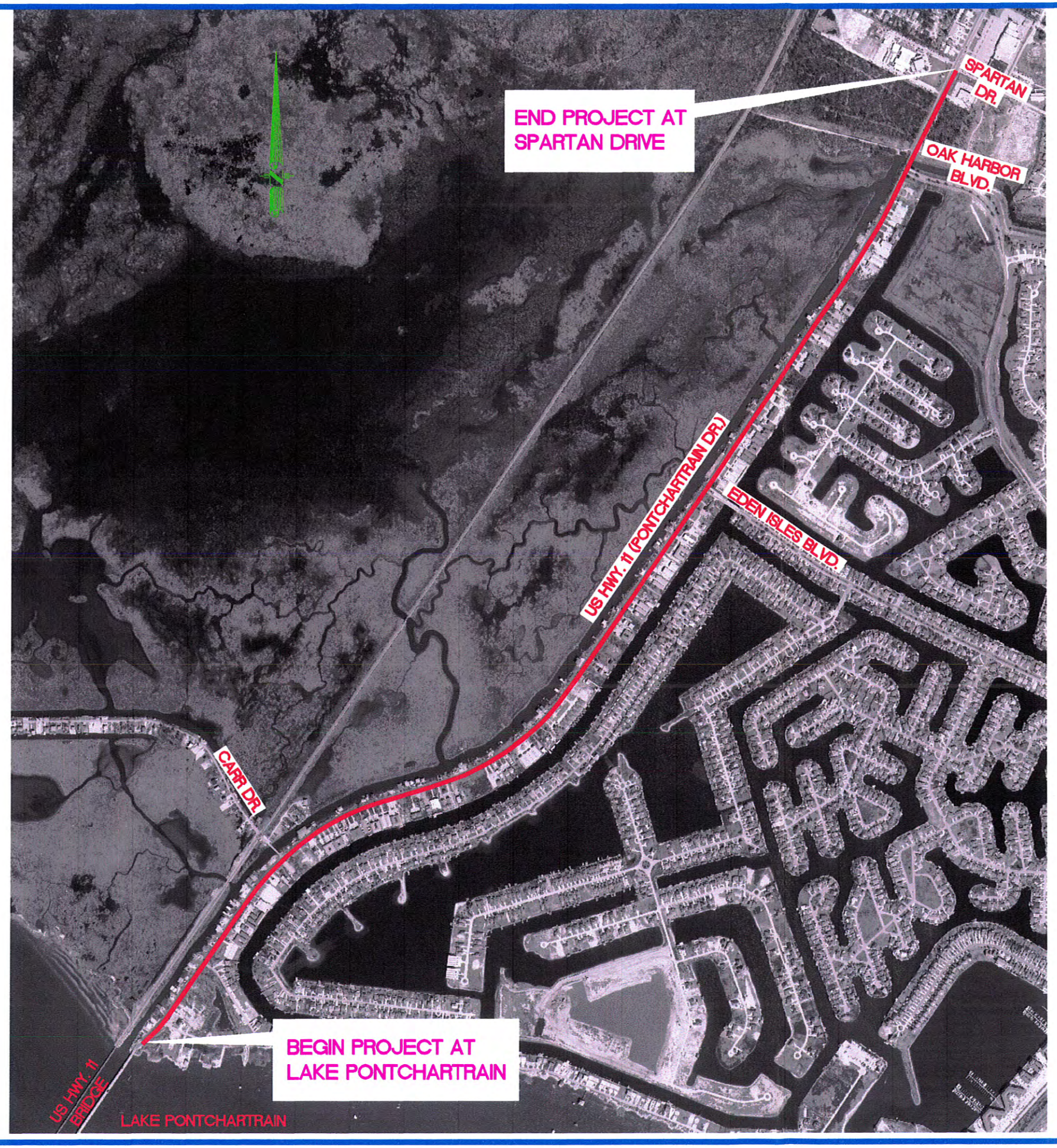
Telephone (504) 568-6611
Fax (504) 568-6643
Email: rpc@norpc.org; Web Site: http://www.norpc.org

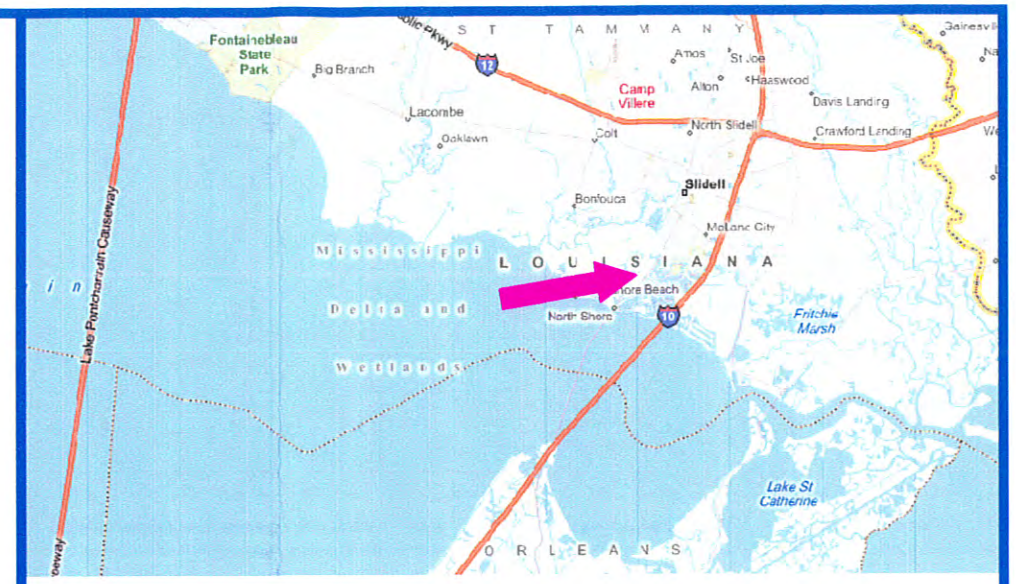
Project Description

The Regional Planning Commission (RPC) and the Louisiana Department of Transportation and Development (LADOTD) are sponsoring an Environmental Assessment that will examine alternatives for widening US 11 from Lake Pontchartrain to the City limit of Slidell (Spartan Drive). This project will include widening the road from two lanes to four, and providing some modification to included intersections as well as some enhancements of the roadway. Total length of the project is to be about 2.85 miles.

Definition of Project Study Area

The project area is along the US 11 corridor south of Slidell area between Lake Pontchartrain and Spartan Drive. This stretch of roadway is an important link for motorists traveling to and from the Greater New Orleans area. There are residential subdivisions along the east side of the highway, and traditional recreational fishing camps to the west along Carr Drive. There are also a number of commercial properties along the eastern boundaries of the highway. The west border of the highway has quite a number of private camps, many of which were damaged in Hurricane Katrina. Quite a few of them remain in disrepair.





Regional Planning Commission

for Jefferson, Orleans, Plaquemines, St. Bernard and St. Tammany Parishes

LA HIGHWAY 11 WIDENING

STAGE 1: ENVIRONMENTAL ASSESSMENT WITH LINE AND GRADE

ST. TAMMANY PARISH, LOUISIANA
RPC PROJECT NO. US11-EA
KREBS, LASALLE PROJECT NO. 409-0061

Krebs, LaSalle, LeMieux Consultants, Inc.

ENGINEERING, TRAFFIC, PLANNING, SURVEYING, ENVIRONMENTAL.
3013 27th STREET METAIRIE, LOUISIANA
(504) 837-9470

Director - Louisiana Department of Natural Resources
Coastal Management Division
P Box 44487
P Rouge, LA 70804

Director - Louisiana Department of Environmental Quality - Permits Division
PO Box 82135
Baton Rouge, LA 70884

Louisiana Dept. of Wildlife & Fisheries
P.O. Box 98000
Baton Rouge, LA 70898

Mr. Dwight Landreneau
Louisiana Dept. of Wildlife & Fisheries
Ecological Studies Section
2000 Quail Drive
Baton Rouge, LA 70808

Mr. Troy Hill
U. S. Environmental Protection Agency
Marine & Wetlands Section, 6WQ-EM
1445 Ross Avenue
Dallas, TX 75202

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U.S. Environmental Protection Agency
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U.S. Department of the Army Tech
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New Orleans, LA 70535

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Vicksburg, MS 39183

U,S. Army Corps of Engineers -
New Orleans District
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New Orleans, LA 70160

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New Orleans & the River Region
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New Orleans, LA 70130

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St. Tammany Parish Hospital
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Robeline. LA 71469

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Chairman, Caddo Tribe of Oklahoma
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Mr. Lovelin Poncho
Chairman, Coushatta Tribe of Louisiana
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Elton, LA 70532

Col. Thomas F, Julich
Chairman, Quapaw Tribe of Oklahoma
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Quapaw, OK 74363

Mr. Roy 1. Tyler
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1312 Clifton Road
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Chairman, Quapaw Tribe of Oklahoma
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Marksville, LA 71351

Mr. Alton Leblanc
Chitimacha Tribe of Louisiana
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Charenton, LA 70523

Director
Louisiana State Planning Office
2nd Floor
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Baton Rouge, LA 70804

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Baton Rouge, LA 70804

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St. Tammany Parish President
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St. . ammany Parish Council Chairman
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Pearl River, LA 70452

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Mayor of Covington
609 N. Columbia Street
Covington, LA 70434

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Councilperson at-large, City of Covington
609 N. Columbia Street
Covington, LA 70434

Mr. Matthew Faust
Council President, City of Covington
6 l. Columbia Street
C gton, LA 70434

Mr. Martin J. Benoit
Councilperson, District D, City of Covington
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Covington, LA 70434

Councilman Marty Dean
St. Tammany Parish Council - District 1
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LA House of Representatives - District 74
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Covington, LA 70434

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Advisory Council on Historic Preservation
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Washington, DC 20001

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Department of Transportation
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Mrs. Nelwyn McInnis
The Nature Conservancy of Louisiana
P.O., Box 19469
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Ms. Nicole Forsyth
Louisiana DOTD - Environmental Div.
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Baton Rouge, LA 70804

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Hammond, LA 70401

Mr. James Yates
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Mr. Curt Boniol
Louisiana DOTD
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Baton Rouge, LA 70804

Mr. William D. Anker
Louisiana DOTD - Office of the Secretary
P.O. Box 94245 - Room 3020
Baton Rouge, LA 70804

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Baton Rouge, LA 70804

Ms. Connie Standige
Acting Assistant Secretary
Louisiana Dept. of Transportation & Dev.
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Covington, LA 70434

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Washington, DC 20515

Honorable Bill Cassidy
US House of Representatives - District 06
506 Cannon House Office Bldg.
Washington, DC 20515

Mr. Joe Shoemaker, Director Capital Projects
St. Tammany Parish
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Covington, LA 70434

Robert Lott
LDOTD

ST. TAMMANY PARISH MAILING LIST
UPDATED September 9, 2009

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& WATER CONS DISTRICT OF LA
1111 WASHINGTON STREET
FRANKLINTON LA 70438

NATIONAL MARINE FISH SERVICE
HABITAT CONSERVATION DIVISION
LSU CENTER FOR WETLAND RES
BATON ROUGE LA 70803-7535

SLIDELL CITY COUNCIL
MR THOMAS P. REEVES
COUNCIL ADMINISTRATOR
PO BOX 828
SLIDELL LA 70459-0828

MR BRYAN GIDDINGS
OFFICE OF EMERGENCY MANAGEMENT
1300 PERDIDO ST. STE 9E06
NEW ORLEANS LA 70112

ST TAMMANY HISTORICAL SOCIETY INC
310 WEST 21ST AVENUE
COVINGTON LA 70433-3154

HONORABLE MICHAEL STRAIN
LA HOUSE OF REPRESENTATIVES
(DISTRICT 74)
19607 HWY 36
COVINGTON, LA 70433

ST TAMMANY PARISH POLICE JURY
PO BOX 628
COVINGTON LA 70434

HON GEORGE CROMBER
LA HOUSE OF REPRESENTATIVES
(DISTRICT 90)
PO BOX 669
SLIDELL, LA 70459

GAYLE SLOAN
ST TAMMANY PARISH SCHOOL BOARD
PO BOX 940
COVINGTON LA 70434

SHERIFF JACK STRAIN, JR
ST TAMMANY PARISH SHERIFF
ST TAMMANY PARISH COURTHOUSE
701 COLUMBIA STREET ROOM B1010-B
COVINGTON LA 70433

DAWN SHARPE
CHAMBER OF COMMERCE
118 WEST HALL AVENUE
SLIDELL LA 70460-2633

MR. WALTER BROOKS
REGIONAL PLANNING COMMISSION
1340 POYDRAS ST, SUITE 2100
NEW ORLEANS LA 70112

FLOODPLAIN ADMINISTRATOR
ST TAMMANY PARISH POLICE JURY
PO BOX 628
COVINGTON LA 70434

CARL REBOUCHE, DIRECTOR
DEPT OF PUBLIC WORKS
PO BOX 628
COVINGTON LA 70434

MR DOUGLAS J KAMIEN, PE
DEPUTY FOR PROGRAMS AND
PROJECT MANAGEMENT
VICKSBURG DIST COPRS OF ENGRS
4155 CLAY STREET
VICKSBURG MS 39183-3435

HONORABLE JACK DONAHUE
THE SENATE OF LOUISIANA
(DISTRICT 11)
3840 HWY WW., STE 200
MANDEVILLE, LA 70471

HONORABLE JERRY BINDER
THE SENATE OF LOUISIANA
(DISTRICT 12)
470 HICKORY DRIVE
SLIDELL, LA 70458

HONORABLE J. KEVIN PEARSON
LA HOUSE OF REPRESENTATIVES
(DISTRICT 76)
195 STRAWBERRY ST.
SLIDELL, LA 70460

HONORABLE JOHN SCHRODER
LA HOUSE OF REPRESENTATIVES
(DISTRICT 77)
222 N. VERMONT, SUITE K
COVINGTON, LA 70433

ST TAMMANY PARISH COUNCIL
P O BOX 628
COVINGTON LA 70434

LOUISIANA STATE POLICE
TROOP L
2600 NORTH CAUSEWAY
MANDEVILLE LA 70471

HON TIMOTHY G "TIM" BURNS
LA HOUSE OF REPRESENTATIVES
(DISTRICT 89)
1 SANCTUARY BLVD., SUITE 306
MANDEVILLE LA 70471

HON HAROLD L RITCKIE
LA HOUSE OF REPRESENTATIVES
(DISTRICT 75)
302 LOUISIANA AVENUS
BOGALUSA LA 70427

MISSISSIPPI BAND OF CHOCTAW INDIAN
PHILLIP MARTIN, CHAIRMAN
P O BOX 6257
PHILADELPHIA MS 39350

JENA BAND OF CHOCTAWS
MS CHRISTINE NORRIS
P O BOX 14
JENA LA 71342

HONORABLE A.G. CROWE
THE SENATE OF LOUISIANA
195 STRAWBERRY ST.
SLIDELL, LA 70460

SOLICIT VIEWS ON-LINE

LA DEPT OF NATURAL RESOURCES
COASTAL MANAGEMENT DIVISON

STATE MAILING LIST
UPDATED September 9, 2009

DEPT OF TRANSPORTATION
FEDERAL AVIATION
ATTN: ASW-472
FT WORTH, TX 76193

HONORABLE CHARLIE MELANCON
US HOUSE OF REPRESENTATIVE
(DISTRICT) 3
423 LAFAYETTE STREET, SUITE 107
HOUMA LA 70360

DEPT ECONOMIC DEVELOPMENT
OFFICE OF BUSINESS DEVELOPMENT
PO BOX 94185
BATON ROUGE, LA 70804-9185

EXECUTIVE DIRECTOR
LA FORESTRY ASSOC
PO DRAWER 5067
ALEXANDRIA, LA 71301

HONORABLE PATRICK WILLIAMS
LA HOUSE OF REPRESENTATIVES
(DISTRICT) 4
609 TEXAS ST., 1ST FLOOR
SHREVEPORT, LA 71101

DEPT OF AGRI & FORESTRY
OFFICE OF FORESTRY
PO BOX 1628
BATON ROUGE, LA 70821

HON.CHARLES W BOUSTANY, JR
US HOUSE OF REPRESNTATIVES
(DISTRICT) 7
700 RYAN STREET
LAKE CHARLES LA 70601

FEDERAL ACTIVITIES BR (6E-F)
US ENVIRONMAL PROTECTION AGENCY
1445 ROSS AVE, STE 1200
DALLAS, TX 75202-2733

DEPT OF AGRICULTURE & FORESTRY
OFFICE OF SOIL/WATER CONSERV
PO BOX 3554
BATONROUGE, LA 70821-3554

HONORABLE RODNEY ALEXANDER
US HOUSE OF REPRESENTATIVES
(DISTRICT) 5
1900 STUBBS AVENUE, SUITE B
MONROE LA 71201

HONORABLE STEVE SCALISE
US HOUSE OF REPRESENTATIVES
21454 KOOP DRIVE
SUITE 1E **(DISTRICT) 1**
MANDEVILLE, LA 70471

DEPT OF CULTURE RECREATION &
TOURISM
DIVISION OF ARCHAEOLOGY
P O BOX 44247
CAPITOL ANNEX 3RD
BATON ROUGE LA 70804

DEPT OF PUBLIC SAFETY
HIGHWAY SAFETY COMMISSION
PO BOX 66336
BATON ROUGE, LA 70896

HONORABLE BILL CASSIDY
US HOUSE OF RERPESENTATIVES
(DISTRICT) 6
5555 HILTON AVENUE, SUITE 100
BATON ROUGE LA 70808

MR. CHARLES CASTILLE
OFFICE OF MANAGEMENT & FINANCE
P O BOX 629
BATON ROUGE LA 70821

HONORABLE JOSEPH CAO
US HOUSE OF REPRESENTATIVES
400 POYDRAS STREET 30TH FLOOR
(DISTRICT) 2
NEW ORLEANS LA 70130

LA DEPT OF NATURAL RESOURCES
OFFICE OF CONSERVATION
PO BOX 94275
BATON ROUGE, LA 70804-9275

LA GOOD ROADS ASSOCIATION
ATTN: PRESTON EGGERS
646 NORTH ST
BATON ROUGE, LA 70802

DONALD GOHMERT
NATURAL RESOURCES CONS SERVICE
3737 GOVERNMENT ST
ALEXANDRIA, LA 71302

REGION ENVIRONMENTAL OFFICER
US DEPT OF HOUSING/URBAN DEV
P O BOX 901013
FORT WORTH TX 76101-2013

LA NATURAL HERITAGE PROGRAM
LA DEPT OF WILDLIFE & FISHERIES
P O BOX 98000
BATON ROUGE, LA 70898

MR MICHAEL BECHDOL
SOURCE WATER PROTECTION (6WQ-S)
ENVIRONMENTAL PROTECTION AGCY
1445 ROSS AVE
DALLAS, TX 75202-2733

US DEPT OF INTERIOR
NATIONAL PARK SERVICE
100 ALABAMA STREET, SW
NPS/ATLANTA FEDERAL CENTER
ATLANTA GA 30303

LA STATE MINERAL BOARD
P O BOX 2827
BATON ROUGE LA 70821-2827

DIVISION OF ADMINISTRATION
STATE LAND OFFICE
P O BOX 44124
BATON ROUGE LA 70804

US DEPT OF THE INTERIOR
OFFICE OF ENVIRONMENTAL
POLICY& COMPLIANCE
P O BOX 26567 (MC-9)
ALBUQUERQUE NM 87125-6567

DEPT OF THE INTERIOR
GEOLOGICAL SURVEY
3535 SOUTH SHERWOOD FOREST, SUITE 120
BATON ROUGE, LA 70806

LA STATE ATTORNEY GENERAL
PO BOX 94095
BATON ROUGE, LA 70804-9095

SENATOR MARY LANDRIEU
(CLASS) II
UNITED STATES SENATE
707 FLORIDA BLVD
BATON ROUGE LA 70801

US FISH & WILDLIFE SERVICE
646 CAJUNDOME BLVD, SUITE 400
LAFAYETTE, LA 70506

MR GREG SOLVEY
FEMA REGION VI
800 NORTH LOOP 288
DENTON, TX 76201

SENATOR DAVID VITTER
UNITED STATES SENATE
2800 VETERANS MEMORIAL BLVD
SUITE 201 **(CLASS) III**
METAIRIE, LA 70002

ENVIRONMENTAL ASSESSMENT
SIERRA CLUB / DELTA CLUB
PO BOX 19469
NEW ORLEANS, LA 70179-0469

OFFICE OF STATE PARKS
DEPT OF CULTURE REC & TOURISM
PO BOX 44426
BATON ROUGE, LA 70804

US DEPT OF COMMERCE
ECONOMIC DEVELOPMENT ADMN
504 LAVACA STREET, SUITE 1100
AUSTIN, TX 78701-2858

TENNEY SIBLEY
DHH / OPH/ SANITARIAN
PO BOX 4489
BATON ROUGE LA 70821

DISTRICT COMMANDER
8TH COAST GUARD DISTRICT
HALE BOGGS FEDERAL BUILDING
500 POYDRAS
NEW ORLEANS, LA 70130

LOUISIANA STATE UNIVERSITY
SEA GRANT LEGAL PROGRAM
170 LAW CENTER, LSU
BATON ROUGE LA 70803

DEPT OF HEALTH & HOSPITALS
DIVISON OF ENVIRONMENTAL HEALTH
ATTN: DOUG VINCENT, CHIEF ENGINEER
P O BOX 4489
BATON ROUGE, LA 70821

DR MARK FORD
COALITION TO RESTORE COASTAL LA
P O BOX 1827
BATON ROUGE LA 70821

MS JOANNA GARDNER
OFFICE OF THE SECRETARY
LA DEPT OF ENVIRONMENTAL QUALITY
P O BOX 4301
BATON ROUGE LA 70821

GREGG GOTHREAUX /LAF ECON
211 DEVALCOURT ST
LAFAYETTE, LA 70506-4121

A CYNTHIA LEON
US DEPT OF HOUSING / URBAN DEV
801 CHERRY STREET
FORT WORTH, TX 76102

GUS C RODEMACHER
LA STATE MINERAL BOARD
PO BOX 2827
BATON ROUGE, LA 70804

CHARLES ST ROMAIN
DIVISION OF ADMINISTRATION
STATE LAND OFFICE
PO BOX 44124
BATON ROUGE, LA 70804

JAMES G WILKINS
ADVISORY SERVICE
LOUISIANA STATE UNIVERSITY
227B SEA GRANT BUILDING
BATON ROUGE, LA 70803

FLOODPLAIN MANAGEMENT PGM
DOTD – SANDRA BATTEN
8900 JIMMY WEDELL
BATON ROUGE, LA 70807

MR MARK S DAVIS
EXECUTIVE DIRECTOR
6160 PERKINS ROAD
SUITE 225
BATON ROUGE, LA 70808

OFFICE OF INDIAN AFFAIRS
MARK FORD, DIRECTOR
PO BOX 94004
BATON ROUGE, LA 70804-9004

INTER-TRIBAL COUNCIL OF LA, INC
KEVIN BILLIOT, DIRECTOR
8281 GOODWOOD BLVD. SUITE I-2
BATON ROUGE, LA 70808

MR RANDY THIGPEN
3247 EMILY DRIVE
PORT ALLEN LA 70767

FEDERAL TRANSIT ADM
819 TAYLOR STREET
ARLINGTON, TX 76102-6114

STATE PLANNING OFFICE
CAPITOL ANNEX BLGD. 2ND FLOOR
PO BOX 94095
BATON ROUGE, LA 70804

Jack Donahue

U.S. Department of Homeland Security
United States Coast Guard

Commandant
United States Coast Guard
Hale Boggs Federal Building

500 Poydras Street, Room 1313
New Orleans, LA 70130-3310
Staff Symbol: dpb
Phone: (504) 671-2128
Fax: (504) 671-2133
D8DPBALL@uscg.mil

16591C
November 27, 2012

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 November 19, 2012 the proposed replacement of the US Highway 11 Bridge crossing Schneider Canal in St. Tammany Parish, Louisiana is exempt under the STAA from Coast Guard Permitting. We concur with your findings (F.A.P. # DE-5208(508), S.P. # 700-52-0196).

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 this bridge project meets the criteria for the STAA and is exempt 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, this bridge is 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 these exemptions must fulfill the requirements of this section. Specifically, if it is determined that no significant nighttime navigation occurs at this bridge site 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 could be of further assistance, please contact this office.

#

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

C. H

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

FEB 23 2010

REPLY TO
ATTENTION OF

Operations Division
Operations Manager,
Completed Works

RECEIVED
OFFICE
FEB 24 2010
409-0061
LeMieux
Consultants, Inc.
New Orleans, LA 70179

Ms. Carmelo Gutierrez, P.E., PTOE
Senior Vice President
Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metairie, LA 70002

Dear Ms. Gutierrez:

This is in response to the Solicitation of Views request dated September 8, 2009, from the Regional Planning Commission, concerning the US Highway 11 Widening Project in St. Tammany Parish, Louisiana (State Project Number 700-52-0196).

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, 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.

This preliminary determination is advisory in nature. 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.

Please be advised that this property is in the Louisiana Coastal Zone. For additional information regarding coastal use permit requirements, contact Ms. Christine Charrier, Coastal Management Division, Louisiana Department of Natural Resources at (225) 342-7953.

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. Michael Farabee by telephone at (504) 862-2292 or by e-mail at Michael.V.Farabee@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2009-03047-SZ. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

We apologize for missing the target date of October 23, 2009, listed in your request. Thank you for your patience in this matter.

Sincerely,

Karen L. Oberlies

Karen L. Oberlies
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 & FISHERIES

ROBERT J. BARHAM
SECRETARY

November 3, 2009

Karl Morgan, Administrator
Louisiana Department of Natural Resources
Coastal Management Division
P.O. Box 44487
Baton Rouge, LA 70804-4487

RE: *Application Number: P20091222*
Applicant: Regional Planning Commission
Notice Date: October 28, 2009

Dear Mr. Morgan:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the public notice referenced above. The following recommendations have been provided by the appropriate biologist(s):

Ecological Studies:
It is anticipated that the proposed activity will have minimal or no long-term adverse impacts to wetland functions and, therefore, we have no objection.

Louisiana Natural Heritage Program:
No impacts to rare, threatened or endangered species or critical habitats are anticipated from the proposed project. No state or federal parks, wildlife refuges, wildlife management areas or scenic rivers are known at the specified site or within ¼ mile of the proposed project.

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. LNHP reports summarize the existing information known at the time of the request regarding the location in question. LNHP 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. If at any time LNHP tracked species are encountered within the project area, please contact our biologist at 225-765-2643.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. Please do not hesitate to contact LDWF Permits Coordinator Dave Butler at 225-763-3595 should you need further assistance.

Sincerely,

Kyle F. Balkum
Biologist Program Manager

cd/cm

c: Chris Davis, Biologist
Carolyn Michon, Biologist

MITCHELL J. LANDRIEU
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT
DIVISION OF HISTORIC PRESERVATION

PAM BREAUX
SECRETARY

SCOTT HUTCHESON
ASSISTANT SECRETARY

September 23, 2009

Mr. Carmelo Guiterrez
Senior Vice President
Regional Planning Commission
3013 27th Street
Metairie, LA 70002

Re: State Project No. 700-52-0196
F.A.P. No. DE-5208(508)
RPC Contract US 11 - EA
U.S. Highway 11 Widening – Environmental Assessment
St. Tammany Parish, LA

Dear Mr. Guiterrez:

Thank you for your letter of September 8, 2009, concerning the above-referenced project. In consultation between the Federal Highway Administration, DOTD, and our office, the U.S. Highway 11 Bridge has been determined eligible for listing in the National Register of Historic Places. As such, we would need to review the proposed widening project design plans for the U.S. Highway 11Bridge approach area before we could review and comment.

If you have any questions, please contact Mike Varnado in the Office of Cultural Development at (225) 219-4596.

Sincerely,

Scott Hutcheson
State Historic Preservation Officer

SH:MV:s

Ь ɔBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

SCOTT A. ANGELLE
SECRETARY
JAMES H. WELSH
COMMISSIONER OF CONSERVATION

October 7, 2009

TO: Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street, Metairie, LA 70002
Attention: Carmelo Gutierrez, P.E., PTOE, Senior Vice President

RE: State Project No. 700-52-0196
F. A. P. No. DE-5208(508)
US Highway 11 Widening - Environmental Assessment
St. Tammany Parish
RPC Contract US11-EA

Dear Mr. Gutierrez:

In response to your letter dated September 8, 2009, 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.state.la.us/CONS/Conserv.ssi

A review of our computer records for the referenced project area indicates no oil, gas or injection wells located within and adjacent to the project area. However, the LADOTD water well database indicates the existence of several registered water wells in the vicinity of the area. Due care should be taken to locate any other water wells installed in the area before registration was required.

The Office of Conservation maintains records of all activities within its jurisdiction

in either 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:

Division	Contact	Phone No.	E-mail Address
Engineering	Jeff Wells	225-342-5638	JeffW@dnr.state.la.us
Pipeline	Steven Giambrone	225-342-2989	StevenG@dnr.state.la.us
Injection & Mining	Laurence Bland	225-342-5515	LaurenceB@dnr.state.la.us
Geological	Mike Kline	225-342-3335	MikeKl@dnr.state.la.us
Ground Water	Tony Duplechin	225-342-5528	TonyD@dnr.state.la.us

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:MBK

BOBBY JINDAL
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL RESTORATION AND MANAGEMENT

October 6, 2009

Carmelo Gutierrez
Krebs LaSalle
3013 27th St.
Metairie, LA 70002

RE: **C20090544,** Coastal Zone Consistency
St. Tammany Parish
FHWA - Federal Assistance
U. S. Highway 11 Widening: State Project 700-52-0196
St. Tammany Parish, Louisiana

Dear Mr. Gutierrez:

The above referenced project has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. Receiving financial assistance for this project, as proposed in the application, is consistent with the LCRP.

However, this authorization for assistance does not eliminate the need to obtain other Federal, state, or local approvals which may be required by law. **This project may require a Coastal Use Permit from this Department** and/or a Corps of Engineers Section 404/Section 10 Permit. Determination of Coastal Use Permit requirements can be obtained through the submission of a completed Coastal Use Permit Application to this Department. If you have any questions concerning this determination please contact Jeff Harris, of the Consistency Section at (225) 342-7591 or 1-800-267-4019.

Sincerely,

Gregory J. DuCote
Administrator
Interagency Affairs/Field Services Division

GJD/JDH/paw

cc: David Butler, LDWF
Brian Fortson, St. Tammany Parish

pc d
re SPL

JONES FUSSELL, L.L.P.

ATTORNEYS AT LAW

WILLIAM J. JONES, JR.
A. WAYNE BURAS
JEFFREY D. SCHOEN
SAM J. COLLETT, JR.
MARGARET H. KERN
CALVIN P. BRASSEAUX
LELAND R. GALLASPY
PAUL J. MAYRONNE

BAILEY DIRMANN MORSE

NORTHLAKE CORPORATE PARK, SUITE 103
1001 SERVICE ROAD EAST, HIGHWAY 190
P.O. BOX 1810
COVINGTON, LOUISIANA 70434-1810

TELEPHONE (985) 892-4801
FAX (985) 892-4925

September 21, 2009

RECEIVED
METAIRIE OFFICE
SEP 22 2009
Krebs, LaSalle, LeMieux
Consultants, Inc.
New Orleans, LA

Mr. Carmelo Gutierrez
Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metairie, LA 70002

RE: State Project No. 700-52-0196
F.A.P. No. DE-5208(508)
U.S. Highway 11 Widening - Environmental Assessment
St. Tammany Parish
RPC Contract US11-EA
Our File S-17,543

Dear Mr. Gutierrez:

Please be advised that our Firm represents the St. Tammany Parish School Board and we are in receipt of your September 8, 2009 letter (copy enclosed) in connection with the above referenced project.

We greatly appreciate your request (Solicitation of Views) and in response thereto, our preliminary thoughts include, but are not necessarily limited to, the following:

1. We believe the widening from two to four lanes is much needed.

2. To the extent that this portion of Hwy. 11 (2.85 miles) affects ingress/egress to public schools and/or commonly used routes to public schools, the number and location of driveway curb cubs, as well as median cuts, is absolutely critical to promote the efficient and safe flow of vehicles to and from the public schools in the area.

3. Of particular concern are the arrangements made during the widening process, including such factors as construction conflicts with start and close of school days, temporary lanes, ingress/egress, need for signage and traffic guards, etc.

If and when you would like the School Board to participate in a meeting on this project, please let me know.

With best regards,

Very truly yours,

JONES FUSSELL, L.L.P.

BY: _____
JEFFREY D. SCHOEN

JDS:swg
Enclosure
cc: St. Tammany Parish School Board

CY
XC: WB #
XC: SPL

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
Floodplain Management

BOBBY JINDAL
GOVERNOR

WILLIAM D. ANKNER, Ph.D.
SECRETARY

October 20, 2009

STATE PROJECT NO.: 700-52-0196
F.A.P. NO.: DE-5208(508)
NAME: US HIGHWAY 11 WIDENING- ENVIRONMENTAL ASSESSMENT
PARISH: ST. TAMMANY
RPC CONTRACT US11-EA

Carmelo Gutierrez, P.E.
Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metairie, LA 70002

Subject: Solicitation of Views

Dear Ms. Gutierrez:

Enclosed is a copy of the Flood Insurance Rate Maps (FIRM) for St. Tammany Parish indicating the proposed project.

During the 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. Tammany Parish requirements for the National Flood Insurance Program (NFIP), and ensure that appropriate permits are obtained, please contact the floodplain administrator for St. Tammany Parish. The contact person is: Mr. Alan Pelegrin, 21490 Koop Drive, Mandeville, LA, 70448, and telephone no. 985-898-2574.

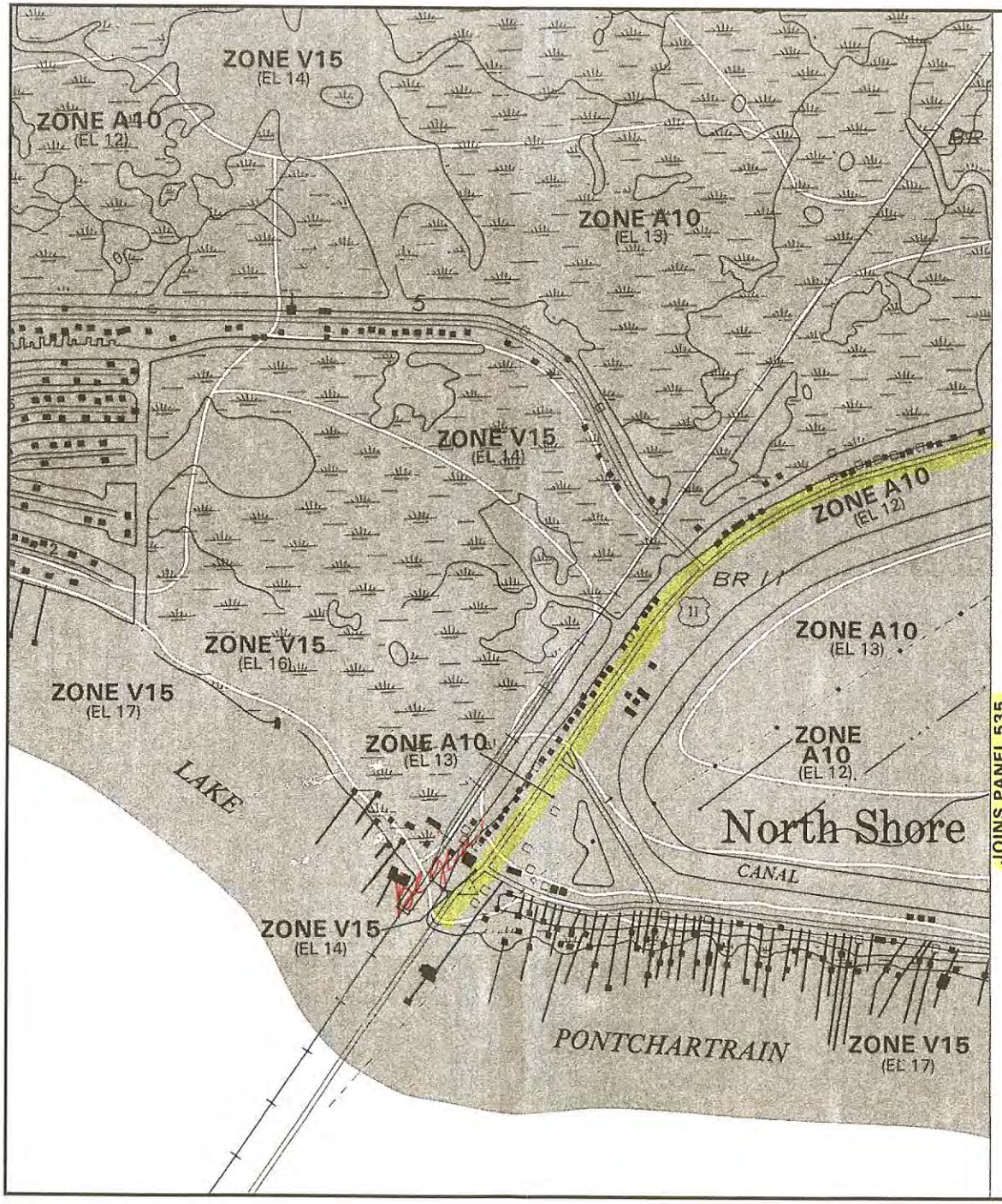
We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225) 274-4354.

Sincerely,

Susan Veillon

Susan Veillon, CFM
Floodplain Management Program Coordinator

pc: Mr. Alan Pelegrin



N

APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

ST. TAMMANY PARISH, LOUISIANA

(UNINCORPORATED AREAS)

PANEL 530 OF 600

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
225205 0530 C

MAP REVISED:
APRIL 2, 1991

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

MAP 1 of 2 S.P. NO. 700-52-0196

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

ST. TAMMANY PARISH, LOUISIANA
(UNINCORPORATED AREAS)

PANEL 535 OF 600

(SEE MAP INDEX FOR PANELS NOT PRINTED)

REVISED TO REFLECT LOMR EFFECTIVE NOV 22, 2006

MAP NUMBER
225205 0535 D

MAP REVISED:
APRIL 2, 1991

Federal Emergency Management Agency


MAP 2 of 2
S.P.NO 700-52-0194
Slidell
Joins Panel 530
ZONE AE
(EL 10)
ZONE AE
(EL 9)
ZONE VE
(EL 12)
ZONE AE
(EL 11)
ZONE VE
(EL 13)
SOUTHERN RAILWAY
ZONE AE
(EL 13)
BR 6
EDEN ISLE ROAD
NO 3
CANAL NO 2
ZONE AE
(EL 11)
ZONE AE
(EL 12)
CANAL
CANAL NO 4
1
2
3

Carmelo Gutierrez

From: Diane Hewitt [Diane.Hewitt@LA.GOV]
Sent: Monday, October 05, 2009 4:17 PM
To: Carmelo Gutierrez
Subject: DEQ SOV: 700-52-0196/2225 Widening US Hwy 11

October 5, 2009

Carmelo Gutierrez, P.E.
Krebs, LaSalle, LeMieux Consult.
3013 27th St.
Metairie, LA 70002
cgutierrez@kllconsultants.com

RE:
700-52-0196/2225 Widening US Hwy 11
La. DOTD
St. Tammany Parish

Dear Mr. Gutierrez:

The Department of Environmental Quality (LDEQ), Offices of Environmental Assessment and Environmental Services have received your request for comments on the above referenced project. Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.

There were no objections based on the information in the document submitted to us. However, the following comments have been included below. Should you encounter a problem during the implementation of this project, please notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

The Office of Environmental Services/Permits Division recommends that you investigate the following requirements that may influence your 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.
- LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permit Division at (225) 219-3181 to determine if your proposed improvements require one of these permits.
- All precautions should be observed to control nonpoint source pollution from construction activities.
- 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 to inquire about the possible necessity for permits. 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. Tammany Parish is classified as an attainment parish with the National Ambient Air Quality Standards for all criteria air pollutants.

Please forward all future requests to Ms. Diane Hewitt, LDEQ/Performance Management/ P.O. Box 4301, Baton Rouge, LA 70821-4301, and your request will be processed as quickly as possible.

If you have any questions, please feel free to contact me at (225) 219-4079 or by email at diane.hewitt@la.gov. Permitting questions should be directed to the Office of Environmental Services at (225) 219-3181.

Sincerely,

Diane Hewitt
Performance Management
LDEQ/Community and Industry Relations
Business and Community Outreach Division
Office of the Secretary
P.O. Box 4301 (602 N. 5th Street)
Baton Rouge, LA 70821-4301
Phone: 225-219-4079
Fx: 225-325-8208
E-mail: **diane.hewitt@la.gov**

C.G

XC. T.S faxed 10/14/09

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7795
Fax: (318) 473-7750

October 9, 2009

RECEIVED
METAIRIE OFFICE
OCT 16 2009
Krebs, LaSalle, LeMieux
Consultants, Inc
New Orleans, LA 70179

Krebs, LaSalle, LeMieux Consultants, Inc.
ATTN: Carmelo Gutierrez, P.E., PTOE, Senior Vice President
3013 27th Street
Metairie, Louisiana 70002

Dear Mr. Gutierrez:

RE: **SPN # 700-52-0196**
F.A.P. # DE-5208(508)
U.S. HIGHWAY 11 WIDENING – EA
RPC CONTRACT US11-EA
ST. TAMMANY PARISH, LOUISIANA

In response to your request for NRCS review of the referenced project site location to identify natural resource constraints, if any, that may impact design and permitting, I have reviewed the Farmland and Hydric Soil Classifications.

Farmland Classification

The Farmland Protection Policy Act (FPPA)-Subtitle I of Title XV, Section 1539-1549 of PL 97-98, final rules and regulations were published in the Federal Register on June 17, 1994. These rules state that 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 does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.

NRCS policy clarifies the Rule by stating that activities not subject to FPPA include:

1. Federal permitting and licensing
2. Projects planned and completed without assistance of a federal agency
3. Projects on land already in urban development or used for water storage
4. Construction within an existing right-of-way purchased on or before August 4, 1984.
5. Construction for national defense purposes
6. Construction of on-farm structures needed for farm operations
7. Surface mining, where restoration to agricultural use is planned
8. Construction of new minor secondary structures, such as a garage or storage shed.

A portion of the soils on the proposed project site are Prime Farmland, however, the project is located in a developed area and therefore, it is considered "built-up", thus there will be no impact to prime farmland and it appears the project will not impact any NRCS work in the immediate area. Also, this project will not impact any farmland protection efforts in the area.

Hydric Soil Classification

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) 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 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Some of the soils within the proposed project area are classified as "Hydric Soil". Although hydric soil is only one of the three parameters required for an area to be classified as a wetland, there is high probability that the project area would be classified as wetland, and may be subject to the wetland regulations cited by Section 404 of the National Clean Water Act. There may be a slight alteration to wetlands during construction. Mitigation maybe required. NRCS recommends that the Project Sponsor contact the Corps of Engineers for determination of any requirements.

I have attached the Farmland Classification and Hydric Soil Classification maps with this response for your convenience and use.

Furthermore, NRCS does not believe that the proposed project will impact any NRCS work in the vicinity. However, NRCS does recommend that appropriate erosion control measures are employed during the construction of the project to minimize any adverse effect on the surrounding environment.

Should you have any questions regarding the above comments, feel free to contact Kevin Stilley, District Conservationist, in our Franklinton Field Office at (985) 839-5688, Ext. 3.

Sincerely,

E.J. "Ed" Giering III, P.E.
State Conservation Engineer

Attachments

cc: Kevin Stilley, District Conservationist, NRCS, Franklinton, Louisiana

Farmland Classification—St. Tammany Parish, Louisiana
(U.S. HWY 11 Widening-St. Tammamy Parish)

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:24,500 if printed on A size (8.5" × 11") sheet.

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 16N NAD83

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

Soil Survey Area: St. Tammany Parish, Louisiana
Survey Area Data: Version 6, Sep 8, 2009

Date(s) aerial images were photographed: 9/18/2007; 9/20/2007

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

Farmland Classification

Farmland Classification— Summary by Map Unit — St. Tammany Parish, Louisiana				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ag	Aquents, dredged	Not prime farmland	95.8	41.8%
CV	Clovelly muck	Not prime farmland	2.5	1.1%
Gy	Guyton silt loam, occasionally flooded	Not prime farmland	8.9	3.9%
LF	Lafitte muck	Not prime farmland	61.8	27.0%
Pr	Prentiss fine sandy loam, 0 to 1 percent slopes	All areas are prime farmland	22.1	9.6%
St	Stough fine sandy loam	Not prime farmland	1.9	0.8%
W	Water	Not prime farmland	36.2	15.8%
Totals for Area of Interest			**229.2**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — St. Tammany Parish, Louisiana				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Ag	Aquents, dredged	All Hydric	95.8	41.8%
CV	Clovelly muck	All Hydric	2.5	1.1%
Gy	Guyton silt loam, occasionally flooded	All Hydric	8.9	3.9%
LF	Lafitte muck	All Hydric	61.8	27.0%
Pr	Prentiss fine sandy loam, 0 to 1 percent slopes	Not Hydric	22.1	9.6%
St	Stough fine sandy loam	Not Hydric	1.9	0.8%
W	Water	Not Hydric	36.2	15.8%
Totals for Area of Interest			**229.2**	**100.0%**

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "all hydric," "partially hydric," "not hydric," or "unknown hydric," depending on the rating of its respective components.

"All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hydric, and at least one component is rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) 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, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

September 15, 2009

RECEIVED
METAIRIE OFFICE
SEP 17 2009
Krebs, LaSalle, LeMieux
Consultants, Inc.
New Orleans, LA

Mr. Camelo Gutierrez, P.E., PTOE
Senior Vice President
Krebs, LaSalle, LeMieux
Consultants, Inc.
3107 27th St.
Metairie, LA 70002

Dear Mr. Gutierrez:

We have received your September 8, 2009, letter requesting our evaluation of the potential environmental impacts which might result from the following project:

STP No. 700-52-0196
FAP No. DE-5208(508)
RPC No. US11-EA
Widening of US 11
Lake Pontchartrain to
Spartan Drive
St. Tammany Parish, Louisiana

The project, proposed for financial assistance through the Louisiana Department of Transportation and Development is located on the Southern Hills aquifer system which has been designated a sole source aquifer 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/County; a legal description; project location and the latitude and longitude if available, please do so in future Sole Source Aquifer correspondence. To view a map of the Sole Source Aquifer delineation(s) for your state go to the following website. http://www.epa.gov/region6/water/swp/ssa/maps.htm

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-7133.

Sincerely yours,

Michael Bechdol, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Howard Fielding, LDEQ
Noel Ardoin, LDoTD
Cathy Gilmore, 6EN-XP

CG
xc-T.R.S.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

September 24, 2009

RECEIVED
METAIRIE OFFICE
SEP 28 2009
Krebs, LaSalle, LeMieux
Consultants, Inc.
New Orleans, LA 70179

Ms. Carmelo Gutierrez
Senior Vice President
Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metarie, Louisiana 70002

Dear Ms. Gutierrez:

Please reference your September 8, 2009, letter, received by this office on September 11, 2009, regarding the Regional Planning Commission and the Louisiana Department of Transportation and Development's proposed U.S. Highway 11 widening project [State Project No. 700-52-0196, Federal Aid Project No. DE-5208(508)] from Lake Pontchartrain to the City limit of Slidell, St. Tammany Parish, Louisiana. The U.S. Fish and Wildlife Service has reviewed the information provided, and offers the following comments in accordance with provisions of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

According to our records, the northern portion of the project (Oak Harbor Boulevard to Spartan Drive) is located within an area that may be inhabited by the red-cockaded woodpecker (RCW, *Picoides borealis*), federally listed as an endangered species. RCWs nest in open, park-like stands of mature (i.e., greater than 60 years of age) pine trees containing little hardwood understory or midstory. RCWs can tolerate small numbers of overstory hardwoods or large midstory hardwoods at low densities found naturally in many southern pine forests, but they are not tolerant of dense hardwood midstories resulting from fire suppression. RCWs excavate roost and nest cavities in large living pines (i.e., 10 inches or greater in diameter at breast height). The cavity trees and the foraging area within 200 feet of those trees are known as a cluster. Foraging habitat is defined as pine and pine-hardwood (i.e., 50 percent or more of the dominant trees are pines) stands over 30 years of age that are located contiguous to and within one-half mile of the cluster.

If the proposed project area does not contain suitable nesting and/or foraging habitat as defined above, further consultation with the Service for these bridge replacement projects will not be necessary. If suitable nesting and/or foraging habitat does exist, however, all suitable nesting habitat within a one-half mile radius from the project boundary should be carefully surveyed by a qualified biologist for the presence of RCW clusters in accordance with the RCW Recovery Plan (2003) survey protocol. We recommend that you provide this office with a copy of the survey report, which should include the following details:

1. survey methodology including dates, qualifications of survey personnel, size of survey area, and transect density;

2. pine stand characteristics including number of acres of suitable nesting and/or foraging habitat, tree species, basal area and number of pine stems 10 inches or greater per acre, percent cover of pine trees greater than 60 years of age, species of dominant vegetation within each canopy layer, understory conditions and species composition (several representative photographs should be included);

3. number of active and inactive RCW cavity trees observed and the condition of the cavities (e.g., resin flow, shape of cavity, start-holes);

4. presence or absence of RCWs; and

5. topographic quadrangle maps which illustrate areas of adequate RCW nesting and/or foraging habitat, cluster sites, and cavity tree locations relative to proposed construction activities.

If RCW clusters are found in the surveyed areas, further consultation with this office is recommended.

The proposed project may also impact wetlands. For a complete jurisdictional wetland delineation of the proposed project, please contact Mr. Robert Heffner (504/862-2274) at the New Orleans District, U.S. Army Corps of Engineers (Corps). If the Corps determines that the proposed project is within their regulatory jurisdiction, official U.S. Fish and Wildlife Service comments will be provided in response to the corresponding Public Notice.

We appreciate the opportunity to provide comments in the planning stages of this proposed project. If you need further assistance, please contact Joshua Marceaux (337/291-3110) of this office.

Sincerely,

Brad S. Rieck
Deputy Supervisor
Lafayette Field Office

cc: Corps of Engineers, New Orleans, LA
LADOTD, Louisiana Department of Transportation and Development, Baton Rouge, LA
LDWF, Natural Heritage Program, Baton Rouge, LA

Literature Cited

U.S. Fish and Wildlife Service. 2003. Recovery plan for the red-cockaded woodpecker (*Picoides borealis*): second revision. U.S. Fish and Wildlife Service, Atlanta, GA. 296 pp.

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

RECEIVED
METAIRIE OFFICE
SEP 28 2009
Krebs, LaSalle, LeMieux
Consultants, Inc.
New Orleans, LA 70179

Date	September 24, 2009
Name	Carmelo Gutierrez
Company	Krebs, LaSalle, LeMieux Consultants, Inc.
Street Address	3013 27th Street
City, State, Zip	Metarie, LA 70002
Project	State Project No. 700-52-0196 U.S. Highway 11 Widening St. Tammay Parish, LA
Project ID	3552009
Invoice Number	09092417

Personnel of the Habitat Section of the Coastal & Non-Game 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 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,

Carmen Michel

for Gary Lester, Coordinator
Natural Heritage Program

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue, South
St. Petersburg, Florida 33701

October 22, 2009 F/SER46/PW:jk
225/389-0508

Mr. Carmelo Gutierrez, Senior Vice President
Krebs, LaSalle, LeMieux Consultants, Inc.
3013 27th Street
Metairie, Louisiana 70002

Dear Mr. Gutierrez:

NOAA's National Marine Fisheries Service (NMFS) has received a letter from the New Orleans Regional Planning Commission dated September 8, 2009, pertaining to State Project No. 700-52-0196. The New Orleans Regional Planning Commission is soliciting views on the Highway 11 corridor widening Environmental Assessment from Lake Pontchartrain to the City limit of Slidell (Spartan Drive).

NMFS has reviewed the details transmitted with the letter. Based on the information provided and our knowledge of the project area, none of the proposed alternatives would adversely impact NOAA trust resources. As such, NMFS has no comments to provide.

We appreciate the opportunity to comment on the proposed project.

Sincerely,

for Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

c:
F/SER46 – Swafford
Files

Appendix C

FOLLOW-UP AGENCY COORDINATION (Section 106 and Threatened and Endangered Species)

Louisiana Ecological Services Office

ESA Technical Assistance Form

General Information

Name: Louisiana DOTD

Point of Contact: Robert Lott

Address: 1201 Capitol Access Road

City: Baton Rouge **State:** Louisiana **Zip Code:** 70802

Phone Number 1: 1-877-452-3683 **Phone Number 2:** _____

Email Address: _____

Proposed Project Information

Project Reference ID: 3950

Project Latitude: 30° 13' 3.3" North **Project Longitude:** 89° 49' 25.9" West

Project Parish(es): Saint Tammany

Project Description: The Regional Planning Commission (RPC) for the parishes of Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Tangipahoa and DOTD have prepared an Environmental Assessment (EA) to examine alternatives and environmental impacts for the US 11 Widening Project from Spartan Drive to Lake Pontchartrain in St. Tammany Parish. The total length of the project is approximately 2.8 miles.

The project corridor is an important link for motorists travelling to and from the Greater New Orleans area and Slidell. The roadway provides access to the subdivisions along Carr Drive and to the community of Eden Isle. Commercial and residential properties are located along the roadway and accessed via numerous driveways. This section of US 11 currently experiences considerable daily congestion, which is expected to worsen with anticipated future increases in traffic volume.

Two Build Alternatives are currently being evaluated to increase capacity and decrease congestion along the roadway. Both alternatives include two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and a shared-use path for pedestrians and cyclists. The travel lanes would be separated by a combination of raised medians

with J-turns, and new access management features would be constructed at intersections to facilitate traffic flow. At the Oak Harbor Boulevard intersection, a signalized J-turn would be constructed with a dedicated left turn lane in the southbound direction and dual right turn lanes for westbound traffic. At the Eden Isles Drive intersection, the southbound lane would include a dedicated left turn lane. The traffic signal would remain. The intersection at Carr Drive would be converted to a three-legged roundabout. The intersection at Northshore Circle would allow left-in and right-out turns, a J-turn from the north, and a U-turn sized for passenger vehicles. The intersection of US 11 and Lakeview Drive would allow right-in and right-out turns, with no access from the north. All modifications would occur within the existing right-of-way (ROW). No additional ROW would be acquired.

In compliance with the National Environmental Policy Act (NEPA) of 1969, the alternatives were evaluated for their impacts to the environment. A wetland delineation conducted for the project indicates approximately 0.95 acres of potentially jurisdictional wetlands and 0.09 acres of potentially jurisdictional other waters of the U.S. are located in the project area. Depending on final plans and designs for the project, wetlands might be impacted. If so, a wetland permit would be required. The project is located within the Louisiana Coastal Zone. Although no impacts to the coastal zone are anticipated, a Coastal Use Permit from LDNR would be required.

Project impacts to minority and low-income populations would not be disproportionately high or adverse. No threatened or endangered species would be impacted. No violations of the carbon monoxide thresholds for air quality are anticipated as a result of the proposed project. The Recognized Environmental Conditions Assessment conducted for the project revealed no evidence of hazardous, toxic, or radioactive waste concerns in the ROW.

The project area does not contain wetland reserve program properties or scenic streams.

Louisiana Ecological Services Office

ESA Technical Assistance Form

The Southern Hills Aquifer underlies the project area; however, the U.S. Environmental Protection Agency (EPA) has confirmed that the project would have no adverse effects on the aquifer's water quality. No adverse impacts to floodplains are anticipated as a result of the proposed Build Alternatives, and no prime farmland or agricultural use would be impacted.

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

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? **Yes**

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
(225) 242-4502

BOBBY JINDAL
GOVERNOR

SHERRI LEBAS
SECRETARY

October 6, 2010

STATE PROJECT NO. 700-52-0196
F.A.P. NO. DE-5208 (508)
NAME: US 11 WIDENING
ROUTE: US 11
PARISH: ST. TAMMANY

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

The proposed undertaking will have no adverse effect on historic properties. This effect determination could change should new information come to our attention.

Phil Boggan 10-28-10
Phil Boggan Date
Deputy State Historic Preservation Officer

SUBJECT: No Adverse Affect

Dear Mr. Boggan:

Please reference the letter from your office dated September 23, 2009 with a request to review the proposed widening project design plans for the US 11 Bridge approach area for the above-captioned project.

The Regional Planning Commission (RPC) and the Louisiana Department of Transportation and Development (DOTD) are preparing an Environmental Assessment (EA) that will examine alternatives for widening a portion of US 11 in St. Tammany Parish (see attached map). This project would widen US 11 approximately 2.44 miles from Spartan Drive to the US 11 Bridge. From Spartan Drive to Eden Isles Drive, there will be two lanes in each direction separated by a median. From Eden Isles Drive to the bridge will be one lane in each direction with a median.

Although this EA is currently being developed and the alternatives analyzed, the project, as currently proposed, will not require any additional right-of-way (ROW). Figure 2 is a schematic design from the line and grade study for the current preferred alignment of the proposed project at the north approach of the US 11 Bridge.

A cultural resources survey was not performed for this project due to all work being done within the existing ROW. One archaeological site is located within one mile of the project area – 16ST153. This site, the Guzman Site, has been deemed ineligible for the National Register of Historic Places (NRHP). Seven standing structures, 55-00528, 55-00529, 55-00530, 55-00531, 55-00532, 55-00533, and 55-00534 are also located within one mile of the project area. All of these, with the exception of 55-00529 for which Kronos has no information regarding status of eligibility, have been deemed ineligible for the NRHP. The US 11 Bridge over Lake Pontchartrain (standing structure # 52-00527) was constructed in 1928 and is 4.72 miles long (see Figure 1); it was determined eligible for the NRHP on August 18, 2000.

Under a separate project, S.P. 018-02-0057, the US 11 Bridge (Structure No. 0180200001) is scheduled for replacement of its barrier railing on the reinforced concrete deck girder spans due to damage from Hurricane Katrina. The concrete portion of the existing rail will be replaced with an Illinois Curb Mounted Bridge Rail. A Memorandum of Agreement (MOA) was developed between FHWA, DOTD, and SHPO to mitigate the adverse affect to the bridge. In accordance with a stipulation in this MOA, LADOTD is in the process of having a recordation treatment measure implemented to document the original US 11 Bridge barrier. Furthermore, LADOTD will erect a Louisiana Historical Marker interpreting the history of the bridge.

Since all work for the proposed US 11 Widening, including the approach area to the bridge, is expected to be performed within the existing right-of-way and will not include work on the bridge, FHWA, in conjunction with DOTD, has determined that no historic properties will be adversely affected by the proposed project. We request your concurrence. If you have any questions or comments, please call Nikki Leon at (225) 242-4514.

Sincerely,

for Noel Ardoin
Environmental Engineer Administrator

Attachments
NA/nl

Cc: Robert Lott
SHPO File
FHWA

Krebs, LaSalle, LeMieux
Consultants, Inc.
Post Office Box 19088 • New Orleans, Louisiana 70179

January 26, 2010

Mr. Joshua Marceaux
U.S. Fish and Wildlife Service
Lafayette Field Office
646 Cajundome Blvd., Suite 400
Lafayette, Louisiana 70506

RE: State Project No. 700-52-0196
F.A.P. No. DE-5208(508)
U.S. Highway 11 Widening
St. Tammany Parish
RPC Contract US11-EA

Dear Mr. Marceaux:

In your letter dated September 24, 2009, you suggested that the northern portion of the project site between Oak Harbor Boulevard and Spartan Drive might be inhabited by the red-cockaded woodpecker (RCW). Additional insight was provided by a USFWS biologist in emails of December 31, 2009 and January 7, 2010. As we appreciate the RCW information provided to us, critical habitat issues for the RCW include:

- Nesting habitat of open, park-like stands of mature pine trees containing little hardwood understory or midstory and that provide large (≥ 10" dbh) living pine trees for roost and nest cavities;
    - There are no mature pine trees (trees ≥ 10" dbh) on the site proper. Following our discussions with a USFWS biologist, a follow-up field inspection on January 7, 2010 found only one pine tree that might need to be removed for the proposed highway widening. That tree has a dbh of approximately 8.5". Limbs on several other pine trees adjacent to the powerlines, but off of the right-of-way, may have to be trimmed, but it appears that they are already being routinely trimmed as part of the powerline maintenance program. The habitat within the project reach in the area of concern consists almost exclusively of mowed grass (there are also a couple of oak trees and some ornamental palms present). Our investigation also found significant mid- and understory vegetation on the property adjacent to the existing cleared right of way, i.e., the surrounding area cannot be considered to be "open" or "park-like". It is, therefore, our opinion that neither the proposed project area nor the immediately adjacent property provide suitable nesting habitat as defined in your letter. Photos of the area are attached for your review.
- "Cluster" habitat consisting of cavity trees and the foraging area within 200 feet of those trees; and,

- As appropriate nesting habitat was not observed, we do not believe cluster habitat will be affected by the proposed project.

- Foraging habitat comprised of pine and pine-hardwood (≥ 50% of dominant trees are pine) stands over 30 years of age that are located contiguous to and within one-half mile of the cluster.
    - As only one pine tree might be removed and as we do not believe it is over 30 years of age, we do not believe RCW foraging habitat will be impacted.

Determination

Based on the lack of suitable habitat and/or nesting conditions for the RCW and as the project will not require the removal of any mature (≥ 10" dbh) pine trees, it is our belief that the proposed upgrade of Highway 11 will have "no effect" on RCW nesting or foraging habitat or to RCW individuals.

Should you find that you have any questions or comments concerning the above material, feel free to contact me at the office by phone at (504) 837-9470, by fax at (504) 837-9477, or by email at rventola@kllconsultants.com

Sincerely,
Krebs, LaSalle, LeMieux Consultants, Inc.

Ronald J. Ventola
Regulatory Compliance Director

Photo 1. Eastern side of road near northern end of project.

Photo 2. Eastern side of road.

Photo 3. Western side of road.

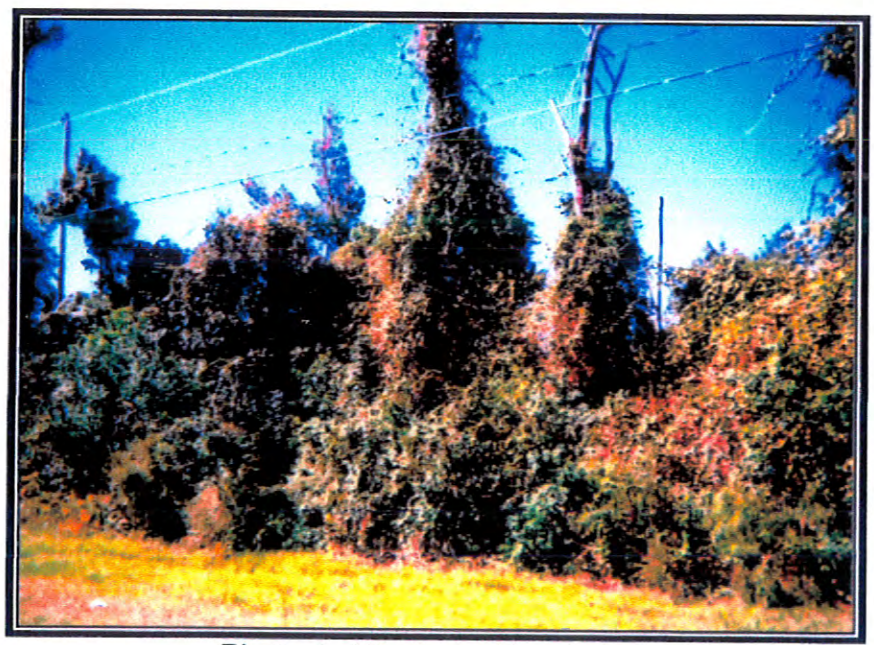


Photo 4. Western side of road.

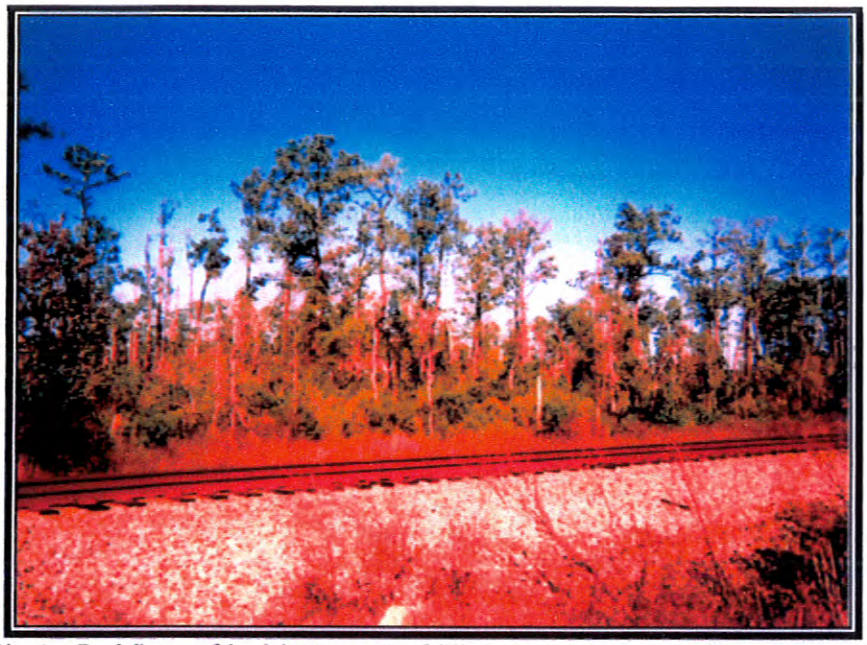


Photo 5. View of habitat west of Highway 11 near railroad tracks.

Photo 6. View of habitat west of Highway 11 near railroad tracks.

Photo 7. View of tree that might be removed. Note that it appears the limbs of the tree have been previously trimmed on the powerline side.

Photo 8. Photo of pine tree just off of right-of-way. Note apparent limb trimming on powerline side.

RJV
PCG

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

October 15, 2010

RECEIVED
METAIRIE OFFICE
OCT 22 2010
Krebs, LaSalle, LeMieux
Consultants, Inc.
New Orleans, LA 70179

Mr. Ronald J. Ventola
Regulatory Compliance Director
Krebs, LaSalle, LeMieux Consultants, Inc.
P.O. Box 19688
New Orleans, Louisiana 70179

Dear Mr. Ventola:

Please reference your letter dated January 26, 2010, received by this office through electronic mail (email) on October 15, 2010 and the attached red-cockaded woodpecker (RCW, *Picoides borealis*) survey report, regarding the proposed widening of U.S. Highway 11 [State Project No. 700-52-0196, F.A.P No. DE-5208(508)] near Slidell in St. Tammany Parish, Louisiana. That correspondence requested our concurrence with your determination that the proposed project would not affect the federally endangered RCW. The U.S. Fish and Wildlife Service (Service) has reviewed the provided information, and offers the following comments in accordance with provisions of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The proposed project would be located in the vicinity of habitat that may be inhabited by RCWs. RCWs inhabit open, park-like stands of mature (i.e., greater than 60 years of age) pine trees containing little hardwood understory or midstory. RCWs excavate roost and nest cavities in large living pines (i.e., 10 inches or greater in diameter at breast height). The cavity trees and the foraging area within 200 feet of those trees are known as a cluster. Foraging habitat is defined as pine and pine-hardwood stands over 30 years of age that are located contiguous to and within one-half mile of the cluster.

According to the provided information, no mature pine trees (i.e., 10 inches or greater in diameter at breast height) exist within the project area or would be removed by the construction activity. Because the potential project area is located primarily in a residential, semi-urban area, no potential foraging or nesting habitat is present.

Based on the above information, the Service concurs with your determination that no impacts to RCWs will occur as a result of the proposed action. No further endangered species consultation will be required for this project unless there are changes in the scope or location of the work.

We appreciate the opportunity to provide comments regarding the proposed project. Should you

TAKE PRIDE® IN AMERICA

have further questions, please contact Michael Sealy (337/291-3123) of this office.

Sincerely,

Brad S. Rieck
Deputy Supervisor
Louisiana Ecological Services Office

cc: LDWF, Natural Heritage Program, Baton Rouge, LA

Appendix D

WETLAND FINDINGS

WETLAND DELINEATION REPORT
U.S. HIGHWAY 11 WIDENING
S.P. NO. 700-52-0196
ST. TAMMANY PARISH, LOUISIANA

Prepared for

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

Prepared by

Gulf Engineers & Consultants
Baton Rouge, Louisiana 70806

June 2, 2014

WETLAND DELINEATION REPORT
U.S. HIGHWAY 11 WIDENING
S.P. NO. 700-52-0196
ST. TAMMANY PARISH, LOUISIANA

Prepared for

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
1201 Capitol Access Road
Baton Rouge, LA, 70802
(225) 379-1232

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA
10 Veterans Memorial Blvd.
New Orleans, LA 70124
(504) 483-8526

Prepared by

GEC Gulf Engineers & Consultants
8282 Goodwood Boulevard
Baton Rouge, Louisiana 70806
225/612-3000

June 2, 2014

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WETLAND DELINEATION

WETLAND DELINEATION REPORT
U.S. HIGHWAY 11 WIDENING
ST. TAMMANY PARISH, LOUISIANA

1.0 INTRODUCTION

A wetland delineation was conducted within the proposed right of way (ROW) in preparation for a proposed widening project along the eastern side of a 2.85 mile stretch of US Highway 11 (US 11). This planning effort is sponsored by the Regional Planning Commission (RPC) of Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany Parishes and the Louisiana Department of Transportation and Development (LADOTD) to examine alternatives for widening the 2.85 mile stretch of US 11 between Spartan Drive and Lake Pontchartrain (Figure 1 in Appendix A).

The project site is a portion of the existing US 11 right-of-way (ROW) adjacent to the two-lane road. It is approximately 2.85 miles long; the southern terminus is at Lake Pontchartrain and the northern terminus is the intersection of US 11 and Spartan Drive. The northernmost approximately 1,000 linear feet of the project is located in the City of Slidell and the remainder is in an unincorporated area of St. Tammany Parish. The site is located in Township 9 South, Range 14 East, Sections 28, 29, 31, 32, and 44. The northern terminus is located at approximately 30° 14’ 53.0”N, 89° 47’ 36.8”W and the southern terminus is at approximately 30° 13’ 03.0”N, 89° 49’ 26.2”W.

The site is currently an actively used highway and associated ROW, connecting the New Orleans area on the south shore of Lake Pontchartrain with the Slidell area on the north shore of Lake Pontchartrain. Most of the ROW is cleared of nonherbaceous vegetation; however, in a few areas, trees and shrubs have encroached into the ROW. Residential and commercial developments with only a few undeveloped lots are present immediately east and west of the highway and ROW. Extensive areas of undeveloped marsh are across an adjacent canal west of US 11 in the southern portion of the project

The proposed project is located within the Liberty Bayou-Tchefuncta Watershed (HUC Code 08090201). The canals adjacent to the US 11 project area drain into Lake Pontchartrain, an estuary which connects to Lake Borgne (and the Gulf of Mexico) via the Rigolets and Chef Menteur Pass.

2.0 METHODOLOGY

The wetland delineation was conducted in accordance with Section D, Subsection 2 of Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual as well as the Atlantic and Gulf Coastal Plains Regional Supplement. Aerial photography, Natural Resources Conservation Service (NRCS) St. Tammany Parish soil survey maps, and U.S. Geological Survey (USGS) topographic quadrangle maps were reviewed prior to the initiation of field work to identify the potential extent of wetlands present on the subject property.

Routine Wetland Delineation Data Forms (Appendix B), as approved by Headquarters, U.S. Army Corps of Engineers (USACE) 10/08, were completed for each vegetation community encountered throughout the property. These data forms contain sufficient information regarding the presence or absence of hydric soils, hydrophytic vegetation, and wetland hydrology, to support the demarcation of a wetland boundary. Locations of each sample plot, mapped wetlands, and other waters are presented on Figures 2–4 in Appendix A.

Dominant vegetation was recorded on the data forms along with the indicator status as listed in the *National List of Plant Species Occurring in Wetlands (Region 2)* published by the U.S. Fish and Wildlife Service. Once dominant vegetation was recorded and evaluated, if more than 50 percent of the dominant vegetation had an indicator status of FAC, FACW, or OBL the hydrophytic vegetation criterion was met.

A soil pit was excavated to a depth of approximately 18 inches at each sample plot. The pit remained open for at least 15 minutes to allow the pit to fill with water, if present. Soils were sampled along the exposed stratum. Information recorded on the data forms included soil colors (hue, value, and chroma as per the 1992 revised edition of the Munsell Color Chart), size, color, abundance, and depth of mottles, as well as soil texture. Soil texture was determined using the *texture by feel* analysis. The soils mapped by the NRCS within the project area are depicted in Figure 5 (Appendix A).

Wetland hydrology indicators were also recorded at each sample plot as per the USACE requirements. If at least one primary or two secondary hydrology indicators were present, the sample plot was classified as having wetland hydrology.

Photographs were taken at each sample plot where a data form was completed. These photographs show a representative soil profile, as well as overviews of the sample plot (Appendix C). Additional photographs were taken of various water features in the project area.

A wetland delineation of the ROW was conducted by KLL on June 16, 2009. On May 7, 2014, GEC re-evaluated the wetlands in the ROW. The results of data collected during both surveys are presented below.

3.0 RESULTS

The following subsections describe the different soil conditions, plant communities, and hydrological conditions observed during the investigations in 2009 and 2014.

3.1 Non-Wetland Area

Sample Plot 1 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 1 and 2). This herbaceous habitat is dominated by common reed (*Phragmites australis*) and southern dewberry (*Rubus trivialis*). The shrub stratum is dominated by Cory poisonbean (*Sesbania drumondii*) and the sapling strata is dominated by small Chinese tallow (*Triadica sebifera*). The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile at the sample plot did not identify any hydric soil indicators. Therefore, the soils are not considered to be hydric at this location.

The only primary hydrology indicator recorded at the sample plot was drift deposits (B3). It is GEC's opinion that this sample plot is not within a wetland, based on the fact that only two of the three wetland parameters, hydrophitic vegetation and wetland hydrology were met at this sample plot (see Data Form Plot - 1).

3.2 Wetland Area A

Sample Plot 2 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 3 and 4). This herbaceous habitat is dominated by common reed (*Phragmites australis*). The shrub stratum is dominated by Eastern baccharis *(Baccharis halimifolia)* and Cory poisonbean (*Sesbania drummondii*). The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile at the sample plot did not identify any hydric soil indicators. Therefore, the soils are not considered to be hydric at this location.

The only primary hydrology indicator recorded at the sample plot was depleted below dark surface (A11). It is GEC's opinion that this sample plot is within a wetland, based on the fact that all three wetland parameters, hydrophitic vegetation, hydric soils, and wetland hydrology were met (see Data Form Plot - 2).

Sample Plot 6 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 11 and 12). This herbaceous habitat is dominated by common reed (*Phragmites australis*). The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile at the sample plot did not identify any hydric soil indicators. Therefore, the soils are not considered to be hydric at this location.

No hydrology indicators were recorded at the sample plot. It is GEC's opinion that this sample plot is not within a wetland, based on the fact that only one of the three wetland parameters, hydrophitic vegetation was met at this sample plot (see Data Form Plot - 6).

3.3 Wetland Areas B-E

Sample Plot 3 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 5 and 6). This herbaceous habitat is dominated by redroot flatsedge *(Cyperus erythrorhizos)* and common reed (*Phragmites australis*). The tree stratum is dominated by Chinese tallow (*Triadica sebifera*). The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile from the sample plot identified a depleted matrix, a hydric soil indicator. Therefore, soils within this sample plot met the hydric soil criteria.

No primary hydrology indicators were recorded at the sample plot; however, the secondary indicators surface soil cracks (B6) and geomorphic position (D2) were recorded. It is GEC's opinion that this sample plot is within a wetland, based on the fact that all three wetland parameters, hydrophitic vegetation, hydric soils, and wetland hydrology were met (see Data Form Plot - 3). Wetland Areas B–E contained surface water during the 2014 site visit and are connected to each other through culverts under driveways.

3.4 Wetland Area F

Sample Plot 7 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 13 and 14). This herbaceous habitat is dominated by common rush (*Juncus effusus*). The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile from the sample plot identified a depleted matrix, a hydric soil indicator. Therefore, soils within this sample plot met the hydric soil criteria.

The primary hydrology indicator surface water was observed at the sample plot during the 2014 site visit. It is GEC's opinion that this sample plot is within a wetland, based on the fact that all three wetland parameters, hydrophitic vegetation, hydric soils, and wetland hydrology were met (see Data Form Plot - 7).

3.5 Wetland Area G

Sample Plot 5 is located within the maintained right-of-way (ROW) of US 11 in the southern portion of the proposed project boundary (Figure 2; Photographs 11 and 12). This herbaceous habitat is dominated by bermudagrass *(Cynodon dactylon)*. The hydrophytic vegetation criterion was not met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile from the sample plot

identified a depleted matrix, a hydric soil indicator. Therefore, soils within this sample plot met the hydric soil criteria.

No hydrology indicators were recorded at the sample plot. It is GEC's opinion that this sample plot is not within a wetland, based on the fact that only one of the wetland parameters, hydric soils was met (see Data Form Plot - 5).

3.6 Wetland Areas H-I

Sample Plot 8 is located within the maintained right-of-way (ROW) of US 11 in the central portion of the proposed project boundary (Figure 3; Photographs 15 and 16). This herbaceous habitat is dominated by perennial ryegrass *(Lolium perenne)*. The hydrophytic vegetation criterion was not met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile at the sample plot did not identify any hydric soil indicators. Therefore, the soils are not considered to be hydric at this location.

No hydrology indicators were recorded at the sample plot. It is GEC's opinion that this sample plot is not within a wetland, based on the fact that no wetland parameters were met (see Data Form Plot - 8).

3.7 Wetland Area J

Sample Plot 4 is located within the maintained right-of-way (ROW) of US 11 in the northern portion of the proposed project boundary (Figure 3; Photographs 13 and 14). This herbaceous habitat is dominated by dallisgrass (*Paspalum dilatatum*). The tree stratum is dominated by black williow (*Salix nigra*); the sapling strata is dominated by small Chinese tallowtree *(Triadica sebifera)*, and the vine stratum is dominated by southern dewberry *(Rubus trivialis)*. The hydrophytic vegetation criterion is met within this sample plot.

The soils are mapped as Aquents (dredged). This series is listed as a hydric soil on the National or the Louisiana Hydric Soils lists. Field observations of the soil profile from the sample plot identified a depleted matrix, a hydric soil indicator. Therefore, soils within this sample plot met the hydric soil criteria.

The primary hydrology indicator saturation was observed at the sample plot during the 2009 site visit. It is GEC's opinion that this sample plot is within a wetland, based on the fact that all three wetland parameters, hydrophitic vegetation, hydric soils, and wetland hydrology were met (see Data Form Plot - 4).

4.0 CONCLUSION

Investigators identified 10 herbaceous wetland areas, a small manmade pond, a canal, and roadside ditches within the project ROW. The 10 herbaceous wetlands encompass a total of 0.95 acre within the existing US 11 ROW (Figures 2–4).

A total of 879.3 linear feet of roadside ditches were identified during the investigation encompassing approximately 0.18 acre (Figure 4; Photograph 18). These ditches were about 4 feet wide and were located north of Schneider Canal. Portions of the ditches drain fairly quickly after a rainfall event; however, most of the ditches hold water and are supporting hydrophytic vegetation.

A small (0.03 acre) manmade pond was present in the area (Figure 2; Photograph 16). A portion of Schneider Canal (0.09 acre) is within the ROW (Figure 4; Photograph 17).

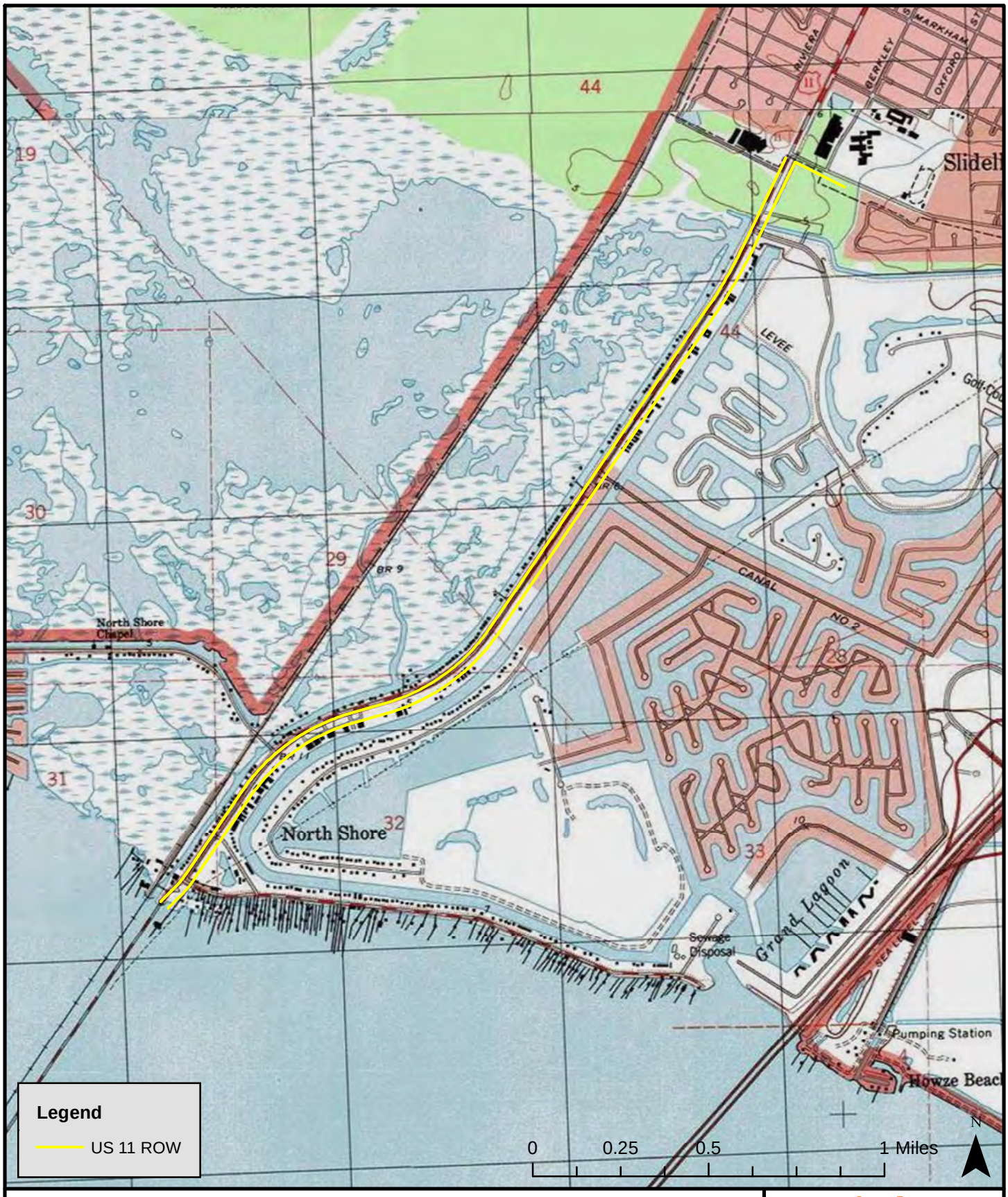
Wetlands and Other Waters Within ROW	**Acreage**
Wetland A	0.10
Wetland B	0.01
Wetland C	0.02
Wetland D	0.05
Wetland E	0.22
Wetland F	0.12
Wetland G	0.21
Wetland H	0.06
Wetland I	0.03
Wetland J	0.13
Total All Wetlands	*0.95*
Manmade Pond	0.03
Waters of the U.S. (Schneider Canal)	0.09
Roadside Ditches	0.18

Although the investigators used the same criteria and methodology as that of the U.S. Army Corps of Engineers (USACE), due to the degree of subjectivity associated with studies of this type, there may be some degree of variance in the demarcation of the wetland boundary. Consequently, the opinions presented in this report may not necessarily reflect that of the USACE, nor does it relieve our client of any legal obligations to verify the wetland findings, consult with the USACE, and possibly obtain a Department of the Army permit prior to performing any dredging, filling and/or construction operations in Waters of the United States, including wetlands.

It is our conclusion that the proposed project will impact a total of approximately 0.95 acre of wetlands, 0.09 acre of Waters of the U.S. (Schneider Canal), 0.03 acre of manmade pond, and 0.18 acre of roadside ditches.

APPENDIX A

FIGURES



Site Location Map

US 11 Widening S.P. No 700-52-0196
Slidell, Louisiana

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

Figure: 1
Date: May 2014
Scale:1:24,000
Source: ESRI/GEC
Map ID:

Wetland Delineation Map 1

US 11 Widening S.P. No 700-52-0196
Slidell, Louisiana

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure: 2
Date: May 2014
Scale:1:7,000
Source: ESRI/GEC
Map ID: 521830409061-3130

Wetland Delineation Map 2

US 11 Widening S.P. No 700-52-0196
Slidell, Louisiana

Figure: 3
Date: May 2014
Scale:1:7,000
Source: ESRI/GEC
Map ID: 521830409061-3130

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Wetland Delineation Map 3

US 11 Widening S.P. No 700-52-0196
Slidell, Louisiana

Figure: 4
Date: May 2014
Scale:1:7,000
Source: ESRI/GEC
Map ID: 521830409061-3130

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Soils Map

US 11 Widening S.P. No 700-52-0196
Slidell, Louisiana

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure: 5
Date: May 2014
Scale:1:20,000
Source: ESRI/GEC
Map ID: 521830409061-3130

APPENDIX B

DATA FORMS

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 **City/County:** Slidell/St. Tammany Parish **Sampling Date:** 16-Jun-09

Applicant/Owner: RPC **State:** LA **Sampling Point:** 1

Investigator(s): Ryan Munchausen, Rocky Hinds **Section, Township, Range:** S 31 T 9-S R 14-E

Landform (hillslope, terrace, etc.): Footslope of bridge ramp **Local relief (concave, convex, none):** concave **Slope:** 5.0% / 2.9

Subregion (LRR or MLRA): MLRA 152A in LRR T **Lat.:** 30 13 03.154 **Long.:** 89 49 24.573 **Datum:** NAD83

Soil Map Unit Name: Aquents (dredged) **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 ◉ No ○

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

Region currently given a "D0" ("Abnormally Dry") classification on U.S. Drought Monitor website (http://drought.unl.edu/DM/DM_south.htm). (see below for continued discussion)

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☑ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Fac-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Weather records (http://www.accuweather.com) for Slidell show 0.8 inches of rain for the month of June to date vs. a normal of 3.97 inches; this follows a deficit of 3.92 inches in May. Sampling point 1 is at the bottom of the side slope of the ramp to the Hwy 11 bridge. Major drift deposits from Lake Pontchartrain at SE perimeter of site. There is a small ditch, about 4' wide at this location (see photos), that runs most of the length of the Hwy 11 right-of-way. Maintenance of the ditch is spotty; in places it is culverted.

VEGETATION - Use scientific names of plants

Sampling Point: 1

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0		**= Total Cover**	
Sapling Stratum (Plot size: 30' radius)				
1. Triadica sebifera	5	☑	100.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	5		**= Total Cover**	
Shrub Stratum (Plot size: 30' radius)				
1. Sesbania drummondii	10	☑	100.0%	FACW
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	10		**= Total Cover**	
Herb Stratum (Plot size: 30' radius)				
1. Phragmites australis	60	☑	60.0%	FACW
2. Rubus trivialis	40	☑	40.0%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
	100		**= Total Cover**	
Woody Vine Stratum (Plot size: 30' radius)				
1. Campsis radicans	5	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	5		**= 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	70	**x 2 =**	140	
FAC species	45	**x 3 =**	135	
FACU species	0	**x 4 =**	0	
UPL species	0	**x 5 =**	0	
Column Totals:	115	**(A)**	275	**(B)**

Prevalence Index = B/A = 2.391

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(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.

Shrub - Woody plants, excludeing 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. Includes 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 Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type [1]	Redox Features Loc²	Texture	Remarks
0-16	10YR 6/1	100%					Sand	gravel, Rangia cuneata shells, asphalt

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ 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)
- ☐ 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 Soils[3]:

- ☐ 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) (LRR T, U)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks:

Sample hole difficult to dig because of amount of river gravel (generally <1" diameter), Rangia shells, broken pieces of asphalt, etc. Appears to be highly influenced by, if not comprised entirely of, exogenous fill material used to create the bridge ramp.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 **City/County:** Slidell/St. Tammany Parish **Sampling Date:** 16-Jun-09

Applicant/Owner: RPC **State:** LA **Sampling Point:** 2

Investigator(s): Ryan Munchausen, Rocky Hinds **Section, Township, Range:** S 31 T 9-S R 14-E

Landform (hillslope, terrace, etc.): Footslope **Local relief (concave, convex, none):** undulating **Slope:** 0.0% / 0.0

Subregion (LRR or MLRA): MLRA 152A in LRR T **Lat.:** 30 13 10.682 **Long.:** 89 49 17.849 **Datum:** NAD83

Soil Map Unit Name: Aquents (dredged) **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 ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

See discussion for Sampling Point 1.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Fac-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Depressional area at the foot of the Hwy 11 shoulder.

VEGETATION - Use scientific names of plants

Sampling Point: 2

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Sapling Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Shrub Stratum (Plot size: 30' radius)				
1. Baccharis halimifolia	5	☑	62.5%	FAC
2. Sesbania drummondii	3	☑	37.5%	FACW
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	8	**= Total Cover**		
Herb Stratum (Plot size: 30' radius)				
1. Phragmites australis	90	☑	69.8%	FACW
2. Sesbania drummondii	5	☐	3.9%	FACW
3. Juncus effusus	3	☐	2.3%	FACW+
4. setaria sp.	5	☐	3.9%	
5. Verbena brasiliensis	3	☐	2.3%	FAC-
6. Cynodon dactylon	5	☐	3.9%	FACU
7. Ambrosia artemisiifolia	3	☐	2.3%	FACU
8. Solidago altissima	15	☐	11.6%	FACU+
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
	129	**= Total Cover**		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	**= 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:		Multiply by:		
OBL species	0	x 1 =	0	
FACW species	101	x 2 =	202	
FAC species	8	x 3 =	24	
FACU species	23	x 4 =	92	
UPL species	0	x 5 =	0	
Column Totals:	132	(A)	318	(B)

Prevalence Index = B/A = 2.409

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(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.

Shrub - Woody plants, excludeing 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. Includes 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 Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc²	Texture	Remarks
0-5	10YR	3/2	95%	10YR	5/6	5%	C	M	Clay Loam	
5-16	10YR	2/2	75%	10YR	5/6	25%	C	M	Clay	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ 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)
- ☐ 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 Soils[3]:

- ☐ 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) (LRR T, U)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

Photos a bit misleading as soil is extremely dry. Darkens when wet. Note that the area is part of a storage yard for creosote treated poles - some treated wood was encountered within the upper 6" while trying to dig sampling pit; may have affected soil color.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 **City/County:** Slidell/St. Tammany Parish **Sampling Date:** 16-Jun-09

Applicant/Owner: RPC **State:** LA **Sampling Point:** 3

Investigator(s): Ryan Munchausen, Rocky Hinds **Section, Township, Range:** S 32 T 9-S R 14-E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** flat **Slope:** 0.0% / 0.0

Subregion (LRR or MLRA): MLRA 152A in LRR T **Lat.:** 30 13 24.811 **Long.:** 89 49 05.258 **Datum:** NAD83

Soil Map Unit Name: Aquents (dredged) **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 ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

See discussion for Sampling Point 1.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☑ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Fac-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Slight depressional area between Hwy. 11 and drainage ditch at edge of R.O.W. Tire ruts through area made when area was wet.

VEGETATION - Use scientific names of plants

Sampling Point: 3

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Sapling Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Herb Stratum (Plot size: 40' x 150')				
1. Triadica sebifera	1	☐	1.8%	FAC
2. Phragmites australis	15	☑	26.8%	FACW
3. Sesbania drummondii	2	☐	3.6%	FACW
4. Cyperus erythrorhizos	25	☑	44.6%	OBL
5. Vigna luteola	2	☐	3.6%	FACW
6. Campsis radicans	1	☐	1.8%	FAC
7. Cyperus virens	10	☐	17.9%	FACW
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
	56	**= Total Cover**		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	0	**= Total Cover**		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (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	25	**x 1 =**	25	
FACW species	29	**x 2 =**	58	
FAC species	2	**x 3 =**	6	
FACU species	0	**x 4 =**	0	
UPL species	0	**x 5 =**	0	
Column Totals:	56	**(A)**	89	**(B)**

Prevalence Index = B/A = 1.589

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(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.

Shrub - Woody plants, excludeing 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. Includes 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).

Tallow and trumpet creeper added to herb statum as total shrub and vine stratums <5%

*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.)

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc²	Texture	Remarks
0-2	10YR	4/1	100%						Sandy Clay	
2-16	10YR	5/2	60%	10YR	5/8	25%	C	M	Clay	
				10YR	2/1	15%	C	M		

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ 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)
- ☐ 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 Soils[3]:

- ☐ 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) (LRR T, U)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 **City/County:** Slidell/St. Tammany Parish **Sampling Date:** 16-Jun-09

Applicant/Owner: RPC **State:** LA **Sampling Point:** 4

Investigator(s): Ryan Munchausen, Rocky Hinds **Section, Township, Range:** S 44 T 9-S R 14-E

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** flat **Slope:** 0.0% / 0.0

Subregion (LRR or MLRA): MLRA 152A in LRR T **Lat.:** 30 14 19.13 **Long.:** 89 47 59.216 **Datum:** NAD83

Soil Map Unit Name: Aquents (dredged) **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 ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

Remarks:

See discussion for Sampling Point 1.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Fac-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 3

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adjacent to ditch at edge of R.O.W. Only sample site with moist soil.

VEGETATION - Use scientific names of plants

Sampling Point: 4

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 10' x 55')				
1. Salix nigra	5	☑	100.0%	OBL
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	5		**= Total Cover**	
Sapling Stratum (Plot size: 10' x 55')				
1. Triadica sebifera	5	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	5		**= Total Cover**	
Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0		**= Total Cover**	
Herb Stratum (Plot size: 10' x 55')				
1. Juncus effusus	5	☐	6.8%	FACW+
2. Plantago virginica	2	☐	2.7%	FACU-
3. Paspalum notatum	5	☐	6.8%	FACU+
4. Cynodon dactylon	5	☐	6.8%	FACU
5. Verbena brasiliensis	5	☐	6.8%	FAC-
6. Paspalum dilatatum	50	☑	67.6%	FAC+
7. Ambrosia trifida	2	☐	2.7%	FAC
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
	74		**= Total Cover**	
Woody Vine Stratum (Plot size: 10' x 55')				
1. Rubus trivialis	5	☑	100.0%	FAC
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	5		**= 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	5	**x 1 =**	5	
FACW species	5	**x 2 =**	10	
FAC species	67	**x 3 =**	201	
FACU species	12	**x 4 =**	48	
UPL species	0	**x 5 =**	0	
Column Totals:	89	**(A)**	264	**(B)**

Prevalence Index = B/A = 2.966

Hydrophytic Vegetation Indicators:

- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(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.

Shrub - Woody plants, excludeing 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. Includes 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: 4

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc²	Texture	Remarks
0-1	10YR	2/2	100%						Clay Loam	
1-5	10YR	4/2	95%	10YR	5/6	5%	C	M	Clay	
5-16	10YR	4/1	85%	10YR	5/6	15%	C	M	Clay	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ 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)
- ☐ 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 Soils[3]:

- ☐ 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) (LRR T, U)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 **City/County:** Slidell/St. Tammany Parish **Sampling Date:** 24-Jul-09

Applicant/Owner: RPC **State:** LA **Sampling Point:** 5

Investigator(s): Lucas Watkins, Jay Prather **Section, Township, Range:** S 31 T 9-S R 14-E

Landform (hillslope, terrace, etc.): **Local relief (concave, convex, none):** **Slope:** 0.0% / 0.0

Subregion (LRR or MLRA): MLRA 152A in LRR T **Lat.:** 30 13.556 **Long.:** 89 48.713 **Datum:** NAD83

Soil Map Unit Name: Aquents (dredged) **NWI classification:**

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 ○ No ◉

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

Remarks:

Area mowed and maintained; previously filled. Just off west of wet area.

Hydrology

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Fac-neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

(no indicators noted)

VEGETATION - Use scientific names of plants

Sampling Point: 5

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Sapling Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Shrub Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
	0	**= Total Cover**		
Herb Stratum (Plot size:)				
1. Cynodon dactylon	75	☑	83.3%	FACU
2. Stenotaphrum secundatum	15	☐	16.7%	FAC
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
6.	0	☐	0.0%	
7.	0	☐	0.0%	
8.	0	☐	0.0%	
9.	0	☐	0.0%	
10.	0	☐	0.0%	
11.	0	☐	0.0%	
12.	0	☐	0.0%	
	90	**= Total Cover**		
Woody Vine Stratum (Plot size:)				
1.	0	☐	0.0%	
2.	0	☐	0.0%	
3.	0	☐	0.0%	
4.	0	☐	0.0%	
5.	0	☐	0.0%	
	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:		Multiply by:		
OBL species	0	**x 1 =**	0	
FACW species	0	**x 2 =**	0	
FAC species	15	**x 3 =**	45	
FACU species	75	**x 4 =**	300	
UPL species	0	**x 5 =**	0	
Column Totals:	90	**(A)**	345	**(B)**

Prevalence Index = B/A = 3.833

Hydrophytic Vegetation Indicators:

- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Problematic Hydrophytic Vegetation** [1] **(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.

Shrub - Woody plants, excludeing 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. Includes 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 Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc [2]	Texture	Remarks
0-3	10YR	3/1	100%						Clay Loam	
3-8	10YR	6/6	70%	7.5YR	7/1	30%	RM	M	Clay	
8-22	10YR	6/1	50%	10YR	6/8	50	RM	M	Clay Loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ 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)
- ☐ 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 Soils[3]:

- ☐ 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) (LRR T, U)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ◉ No ○

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 Lake Pontchartrain to Spartan Drive City/County: St. Tammany Sampling Date: 7-May-14

Applicant/Owner: RPC State: LA Sampling Point: 6

Investigator(s): Donna Rogers, Quinton Daigre Section, Township, Range: S 31, T 9S, R 14E

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): undulating Slope (%): _____

Subregion (LRR or MLRA): MLRA 152A in LRR T Lat: 30° 13' 11.65" N Long: 89° 49' 17.39" W Datum: NAD 83

Soil Map Unit Name: Aquents (dredged) 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 ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Region currently given a DO (Abnormally Dry) on the U.S. Drought Monitor Website (http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?LA)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: 6

Tree Stratum (Plot size: 30 ft rad.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Triadica sebifera	5	no	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Sapling/Shrub Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Herb Stratum (Plot size: 30 ft rad.)			
1. Phragmites australis	85	yes	FACW
2. Verbena brasiliensis*	5	no	FAC
3. Rubus trivialis	5	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		
50% of total cover: 47.5	20% of total cover: 19		

Woody Vine Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

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% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

*Not present in 2014 list, used indicator status from1988 list.

SOIL

Sampling Point: 6

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	6/1	100					SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ 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 Mucky 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 Soils[3]:

___ 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)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 Lake Pontchartrain to Spartan Drive City/County: St. Tammany Sampling Date: 7-May-14

Applicant/Owner: RPC State: LA Sampling Point: 7

Investigator(s): Donna Rogers, Quinton Daigre Section, Township, Range: S 32, T 9S, R 14E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): MLRA 152A in LRR T Lat: 30° 13' 30.80" N Long: 89° 48' 50.85" W Datum: NAD 83

Soil Map Unit Name: Aquents (dredged) 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 ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Region currently given a DO (Abnormally Dry) on the U.S. Drought Monitor Website (http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?LA)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): _____
Water Table Present?	Yes _____	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: 7

Tree Stratum (Plot size: 30 ft rad.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling/Shrub Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft rad.)			
1. Juncus effusus	75	yes	OBL
2. Oenothera speciosa*	5	no	
3. Juncus coriaceus	10	no	FACW
4. Briza minor	5	no	FAC
5. Alopecurus carolinianus	5	no	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		
Woody Vine Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

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% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 75	x 1 = 75
FACW species 15	x 2 = 30
FAC species 5	x 3 = 15
FACU species	x 4 =
UPL species	x 5 =
Column Totals: 95 (A)	130 (B)

Prevalence Index = B/A = 1.368421052

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

*Not present on 1988, 2012, or 2014 lists.

SOIL

Sampling Point: 7

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 4/1	100					SL	organic
8-16	10 YR 4/1	80	10YR 6/1	5	D	M	SL	
			10YR 6/6	15	C	M	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Mucky 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 Soils[3]:

- ___ 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)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 11 Lake Pontchartrain to Spartan Drive City/County: St. Tammany Sampling Date: 7-May-14

Applicant/Owner: RPC State: LA Sampling Point: 8

Investigator(s): Donna Rogers, Quinton Daigre Section, Township, Range: S 44, T 9S, R 14E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): MLRA 152A in LRR T Lat: 30° 13' 45.66" N Long: 89° 48' 26.27" W Datum: NAD 83

Soil Map Unit Name: Aquents (dredged) 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 _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Region currently given a DO (Abnormally Dry) on the U.S. Drought Monitor Website (http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?LA)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____	
Water Table Present?	Yes _____	No ✓	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____	**Wetland Hydrology Present?** Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: 8

Tree Stratum (Plot size: 30 ft rad.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Sapling/Shrub Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		
Herb Stratum (Plot size: 30 ft rad.)			
1. Lolium perenne	50	yes	FACU
2. Phragmites australis	5	no	FACW
3. Solidago altissima	5	no	FACU
4. Rubus trivialis	5	no	FACU
5. Briza minor	5	no	FAC
6. Hydrocotyl umbellata	5	no	OBL
7.			
8.			
9.			
10.			
11.			
12.			
	75 = Total Cover		
50% of total cover: 37.5	20% of total cover: 15		
Woody Vine Stratum (Plot size: 30 ft rad.)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

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% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	5	x 2 =	10
FAC species	5	x 3 =	15
FACU species	60	x 4 =	240
UPL species		x 5 =	
Column Totals:	75 (A)		270 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ✓

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

SOIL

Sampling Point: 8

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10 YR 4/2	100					SL	
2-16	10YR 6/2	40	10 YR 4/2	20			CL	
2-16	10 YR 6/4	40					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

___ 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 Mucky 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 Soils[3]:

___ 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)

[3]Indicators 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:

Appendix C

PHOTOGRAPHS

Photo 1: Sample plot 1 soil sample.

Photo 2: Sample plot 1 vegetation sample.

Photo 3: Sample plot 2 soil sample.

Photo 4: Sample plot 2 vegetation sample.

Photo 5: Sample plot 3 soil sample.

Photo 6: Sample plot 3 vegetation sample.

Photo 7: Sample plot 4 soil sample.

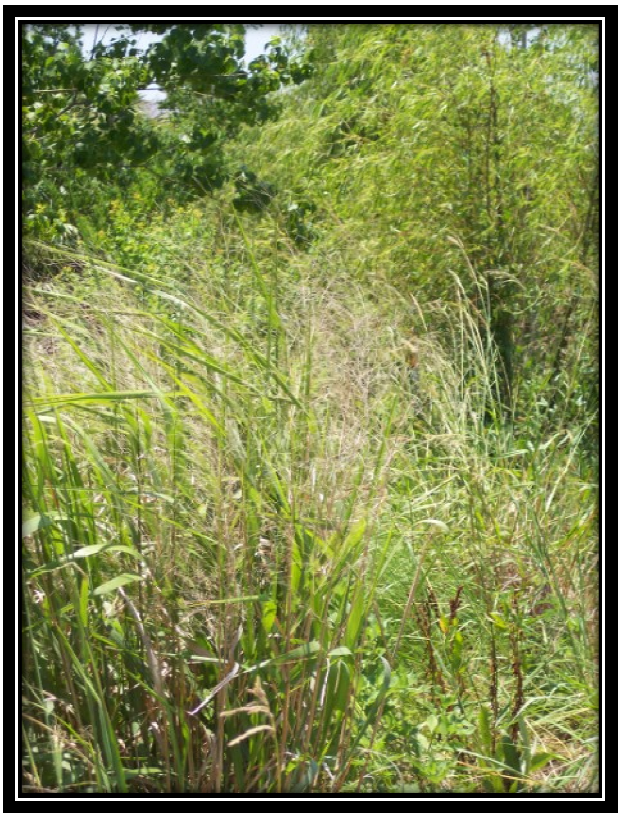


Photo 8: Sample plot 4 vegetation sample.

Photo 9: Sample plot 5 soil sample.

Photo 10: Sample plot 5 vegetation sample.

Photograph 11. Soil Profile Observed at Plot 6

Photograph 12. Overview of Habitat Observed at Sample Plot 6

Photograph 13. Soil Profile Observed at Plot 7

Photograph 14. Overview of Habitat Observed at Sample Plot 7

Photograph 15. Soil Profile Observed at Plot 8

Photograph 16. Overview of Habitat Observed at Sample Plot 8

Photograph 17. Very small manmade pond

Photograph 18. Schneider Canal at US Hwy 11.

Photograph 19. Roadside Ditch along US Hwy 11

Appendix E

AIR QUALITY AND NOISE EVALUATION (Without Appendices)

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1.0 INTRODUCTION

This report documents the results of an analysis of the air quality and noise impacts of the widening and improvement of US11, between Lake Pontchartrain and Spartan Road in Slidell, Louisiana located within St. Tammany Parish. The current two lane roadway will be widened to a four lane boulevard design with a 150 foot right-of-way. Figure 1 shows the general project area. The proposed new alignment is shown in Figure 2.

2.0 AIR QUALITY EVALUATION

This report section summarizes the results of an analysis of the potential air quality effects of the project. The purpose of this analysis is, first, to address the potential for the project to affect air quality standards including transportation conformity requirements; and second, to address the potential Mobile Source Air Toxics (MSATs) effects of the project.

2.1 National Ambient Air Quality Standards (NAAQS)

The United States Environmental Protection Agency (EPA) has established allowable concentrations and exposure limits called the National Ambient Air Quality Standards (NAAQS) for various "criteria" pollutants. These pollutants include carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur oxides (SO_x), and lead (Pb).

In accordance with the Clean Air Act Amendments of 1990 (CAAA of 1990), EPA identified those areas that did not meet the NAAQS for the criteria pollutants and designated them as "nonattainment" areas. Once a nonattainment area meets the NAAQS, it is redesignated as a "maintenance" area.

St. Tammany Parish including Slidell is currently not a nonattainment or maintenance area for any criteria pollutant.

2.2 Transportation Conformity

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 Federal Highway Administration (FHWA) be in conformity with the State Implementation Plan (SIP), which represents the State's plan to either achieve or maintain the 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.

2.3 Carbon Monoxide (CO)

Transportation projects have the potential to affect air quality by changing the number of vehicles at specific locations. Tailpipe emissions from vehicles could result in increases in ambient concentrations of carbon monoxide (CO) near the project.

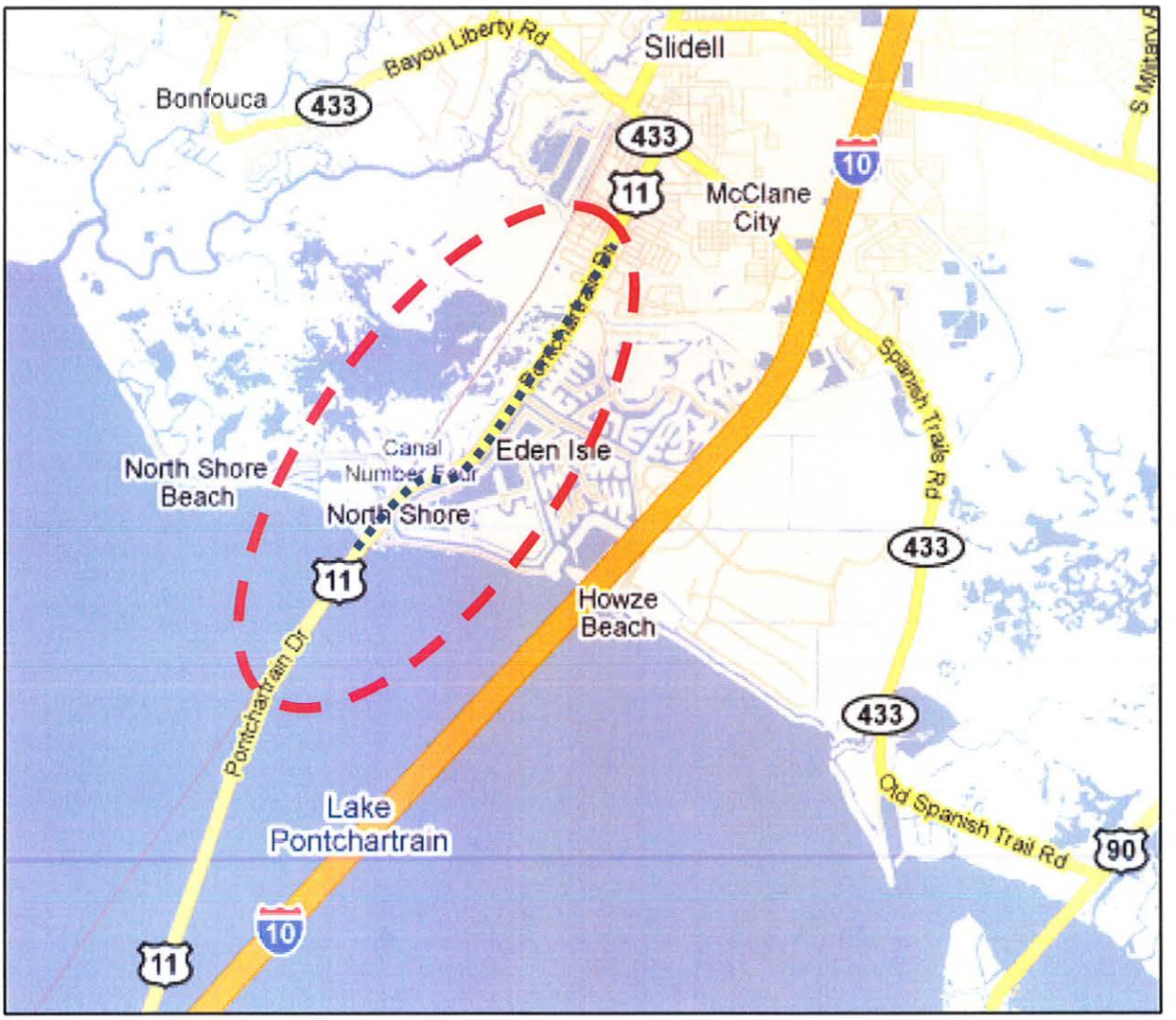

Figure 1: Project Location

Carbon monoxide (CO) is a colorless, odorless gas that interferes with the delivery of oxygen to a person's organs and tissues. The health effects of CO exposure depend on the duration and intensity of exposure as well as a person's health. CO concentrations are usually higher during the winter months because vehicles emit higher CO emissions in cold weather due to the characteristics of internal combustion engines. The National Ambient Air Quality Standard (NAAQS) for CO include a one-hour standard of 35 parts per million (ppm) and an eight-hour standard of 9 ppm.

The state of Louisiana is in attainment statewide for CO. Past project-level CO "hot spot" analyses on similar projects have revealed no violations of the NAAQS. Carbon monoxide (CO) concentrations are not anticipated to cause or contribute to an exceedance of the CO NAAQS.

2.4 Mobile Source Air Toxics (MSATs)

On February 3, 2006, FHWA released "*Interim Guidance on Air Toxic Analysis in NEPA Documents.*"[1] The purpose of this guidance is to advise on when and how to analyze Mobile Source Air Toxics (MSATs) in the NEPA process for highways. This guidance is interim because MSAT science is still evolving. As the science progresses, FHWA will update the guidance.

A basic analysis of the potential MSAT emissions impacts of this project was completed in accordance with this Interim Guidance. Additional background information regarding MSATs is provided in Appendix A.

Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions of this project. However, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions. The qualitative assessment presented below has been prepared in accordance with FHWA's Interim Guidance derived in part from a study conducted by the FHWA entitled *"A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives."* [2]

FHWA's Interim Guidance groups projects into the following categories:

- Exempt Projects or Projects with no Meaningful Potential MSAT Effects;
- Projects with Low Potential MSAT Effects; and,
- Projects with Higher Potential MSAT Effects.

Examples of projects with low potential MSAT emissions include minor widening projects and new interchanges, such as those that replace a signalized intersection on a surface street, or where design year traffic projections are less than 140,000 to 150,000 annual average daily traffic (AADT).

The Build Alternative includes the widening of US11 and meets the definition of a project with low potential MSAT effects as the highest design year AADT on US11 is substantially lower than the FHWA criterion.

For the No-Build and Build Alternatives, the amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The estimated VMT for the Build Alternative is essentially the same as the VMT for the No-Build

Alternative. Therefore, it is expected that there would be no appreciable difference in overall MSAT emissions between the No-Build and Build Alternatives.

Additionally, travel speeds for the Build Alternative will be higher than for the No-Build Alternative. According to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent from 2000 to 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated for the Build Alternative will have the effect of moving some traffic closer to nearby homes and churches; therefore, under the Build Alternative there may be localized areas where ambient concentrations of MSATs could be higher than under the No-Build Alternative. However, as discussed above, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be accurately quantified due to the inherent deficiencies of current models.

In sum, when a highway is widened and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No-Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Substantial construction-related MSAT emissions are not anticipated for this project as construction is not planned to occur over an extended building period. However, construction activity may generate temporary increases in MSAT emissions in the project area.

3.0 NOISE EVALUATION

This study has been prepared in accordance with Federal Highway Administration noise standards, *Procedures for Abatement of Highway Traffic and Construction Noise, 23 CFR 772* [3], and the Louisiana Department of Transportation and Development's (DOTD) *Highway Traffic Noise Policy.* [4]. The noise analysis included the following tasks:

- Identification of noise-sensitive land uses: Identification of existing land uses in the project area that are sensitive to highway traffic noise;
- Determination of existing sound levels: Measurement of existing sound levels at sensitive land uses to characterize the existing noise environment in the project area;
- Determination of future sound levels: Prediction of future, design year, worst-hour sound levels for the No-Build and Build Alternatives;

- Determination of traffic noise impacts: Determination of noise impacts based on the increase in existing sound levels, as well as the future sound levels;
- Noise abatement evaluation: Evaluation of noise abatement for noise-sensitive land uses determined to be impacted by the project;
- Discussion of construction noise; and,
- Coordination with local officials.

Each of these analysis steps is discussed in detail following a discussion of DOTD's criteria for determining noise impacts.

3.1 Criteria for Determining Impacts

3.1.1 Traffic Noise Terminology

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels (dBA). A sound level represents the level of the rapid air pressure fluctuations caused by sources such as traffic that are heard as noise. A decibel is a unit that relates the sound pressure of a noise to the faintest sound the young human ear can hear. The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear "hears" these frequencies. Generally, when the sound level exceeds the mid-60 dBA range, outdoor conversation in normal tones at a distance of three feet becomes difficult. A 9-10 dB increase in sound level is typically judged by the listener to be twice as loud as the original sound while a 9-10 dB reduction is judged to be half as loud. Doubling the number of sources (i.e., vehicles) will increase the hourly equivalent sound level by approximately 3 dB, which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level (L_{eq}). The L_{eq} is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same time-period. The L_{eq} averages the louder and quieter moments, but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes, L_{eq} is typically evaluated over the worst one-hour period and is defined as $L_{eq}(1h)$.

The term insertion loss (IL) is generally used to describe the reduction in $L_{eq}(1h)$ at a location after a noise barrier is constructed. For example, if the $L_{eq}(1h)$ at a residence before a barrier is constructed is 75 dBA and the $L_{eq}(1h)$ after a barrier constructed is 65 dBA, then the insertion loss would be 10 dB.

3.1.2 Noise Abatement Criteria (NAC)

Noise impact is determined by comparing future project sound levels: (1) to a set of Noise Abatement Criteria (NAC) for a particular land use category, and (2) to existing sound levels.

The FHWA noise standards (contained in 23 CFR 772) and DOTD's noise policy state that traffic noise impacts that require consideration of abatement occur when worst-hour equivalent sound levels exceed the NAC listed in Table 1.

Table 1: DOTD Noise Abatement Criteria

Activity Category	*L_{eq}(1h) (dBA)*	*Description of Activity*
A	56 (Exterior)	Land 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	66 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches,libraries, and hospitals.
C	71 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	---	Undeveloped lands.
E	51 (Interior)	Residences, motels, hotels,public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

As shown in Table 1, Category A land uses refer to parks or other areas where low noise levels are essential for the proper use of the area, such as nature areas. Activity Category B land uses include picnic and recreation areas, playgrounds, active sports areas, parks, and the exterior areas of residences, motels, hotels, schools, churches, libraries, and hospitals. Activity Category C includes all developed lands not included in Categories A and B, while Category D includes undeveloped lands. Activity Category E land uses are those Activity Category B areas where there is no outdoor use of the property, so interior noise levels are considered.

DOTD noise policy also defines impacts to occur if there is an increase of 10 dB or more in design year equivalent sound levels above the existing equivalent sound levels. The primary areas of concern for this project are the residential properties located along or adjacent to US11, so the NAC for Activity Category B apply. Therefore, impacts would occur and noise abatement would be considered if future equivalent sound levels for an analysis location were 66 dBA or higher, or if an increase of 10 dB or more in existing equivalent sound levels was predicted.

3.2 Identification of Noise-Sensitive Land Uses

A review of available electronic mapping as well as field reconnaissance revealed residences on both sides of US11 between Lake Pontchartrain and Oak Harbor Drive. Residences were also identified further back from US11 along Lakeview Drive, Northshore Circle, Moonraker Drive, Carr Drive, Eden Isle Drive and Cape Breton Drive. A total of 169 single family homes, duplexes or triplexes, 478 apartments or condominiums and 3 mobile homes were found within 500 feet of the proposed edge of roadway.

Other noise-sensitive land uses that might be affected by the project include the First Baptist Church just south of Spartan Road, on the west side of US11.

The NAC for Activity Category B will apply to these noise-sensitive uses. Noise impacts will be identified and noise abatement will be considered if future sound levels are 66 dBA or higher, or if a substantial increase in existing sound levels (10 dB or more) is predicted.

There are several tracts of Category D undeveloped lands exist along the project. These undeveloped lands are not noise-sensitive and have not been included in the noise analysis. However, noise impacts could occur in the future if noise-sensitive land uses are constructed near US11. A discussion of future sound levels and the need for noise-compatible land use planning is provided later in this report.

3.3 Determination of Existing Sound Levels

Measurements were conducted at DOTD-approved, sensitive land uses on September 24, 2009 between 7:00 am and 6:00 pm. Two RION NL-32 noise meters, which meet ANSI Type 1 standards, were deployed at six different locations for both peak and offpeak noise measurements.

Measurement procedures at a site included:

1. Record measurement and site information on data sheets: equipment parameters, calibration, time, date, distance to key sources or other landmarks and weather parameters (temperature, wind speed and direction).

2. Set the microphone of the analyzer on a tripod at height of approximately 1.5 meters above the ground; place a windscreen on the microphone which was oriented 70 degrees from the horizontal per manufacturer's recommendations.

3. Calibrate before and after each set of measurements.

4. Measure for desired number of periods.

5. Record notes for the individual one minute periods onto field data sheets.

6. Count and record traffic volumes in fiveminute increments during noise measurements.

7. Check data sheets for completeness.

Table 2 summarizes the measured equivalent sound levels at each of the measurement sites. The measurement locations are shown in Figure 2. The noise measurement data, data sheets, and site photographs are provided in Appendix B.

Noise measurements of at least 15 minute duration were recorded at all sites in one minute interval periods. Background noise was noted, and any one-minute measurement intervals with intrusive, non-representative noise (dogs barking near microphone, sirens, loud car stereos) were eliminated from the averaging of the measurement data.

Four of the measurement sites were selected as representative of the first row noise-sensitive land uses along US11. The site along Moonraker Drive was chosen to be representative of the second row noise sensitive land uses along US11. The final site along the fence-line of the Pelican Harbor Condominiums was not representative of any residence but instead was used as a reference site to gauge the variation of traffic noise levels throughout the day.

Table 2: Existing Sound Levels at Measurement Locations

Site	*Distance to US11 (ft)*	*Peak Start Time*	*Duration (min)*	*Peak Leq (dBA)*	*Off Peak Start Time*	*Duration (min)*	*Off Peak Leq (dBA)*
4848 Pontchartrain Drive (Sea Oats Apartments)	130	7:36	20	59	14:01	20	57
4777 Pontchartrain Drive	45	8:13	20	65	14:40	20	64
234/238 Moonraker Drive	400	-	-	*	13:02	15	46
Pelican Harbor Condos (fenceline)	90	7:00	60	63	13:00	60	60
4629A/B Pontchartrain Drive	50	7:00	20	65	12:10	20	62
4518 Pontchartrain Drive	110	-	-	*	10:35	20	59

* Local, noise intrusive conditions prevented a peak hour sound level measurement for these measurement locations.

As indicated in Table 2, the highest measured peak hour equivalent sound level of 65 dBA was recorded at the closest sites to US11, 4777 Pontchartrain Drive and 4629A/B Pontchartrain Drive, for the AM peak. The lowest measured sound levels of 46 dBA were recorded at the second row residences along Moonraker Drive. Typically the peak our equivalent sound level was 2-3 dB higher than the off-peak. US11was the dominant noise source at all of the measurement sites.

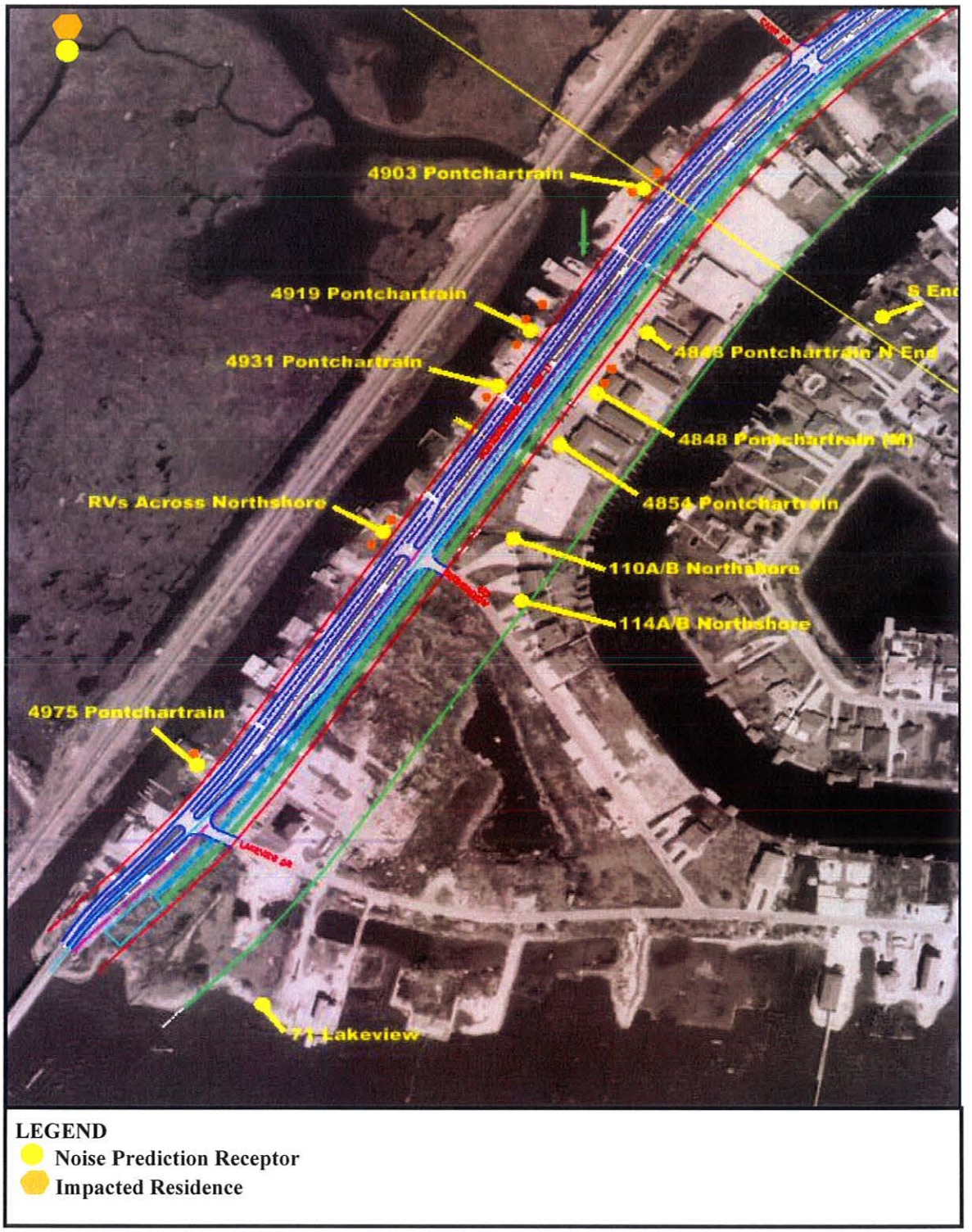

Figure 2: Noise Prediction Receptors and Impacts

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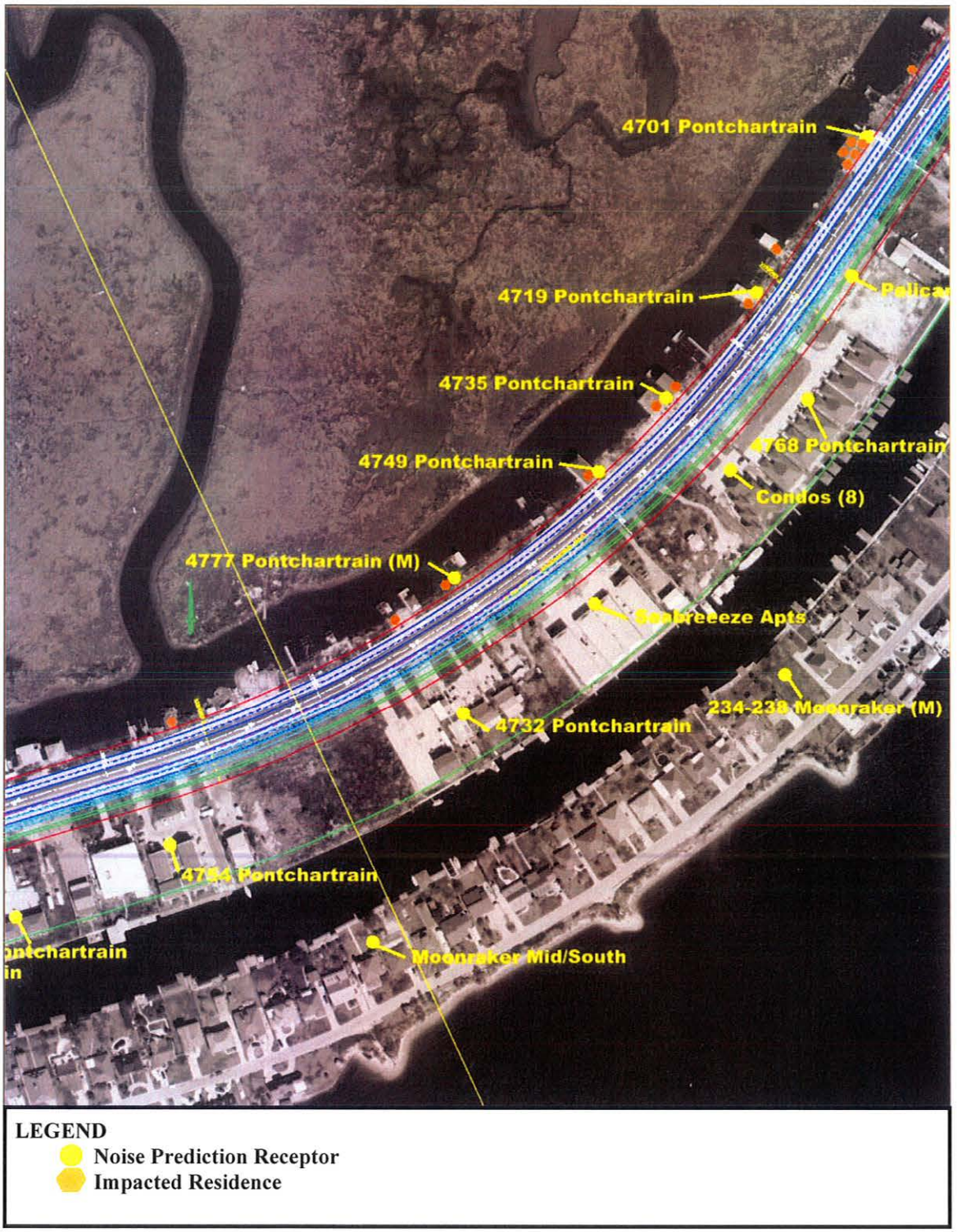

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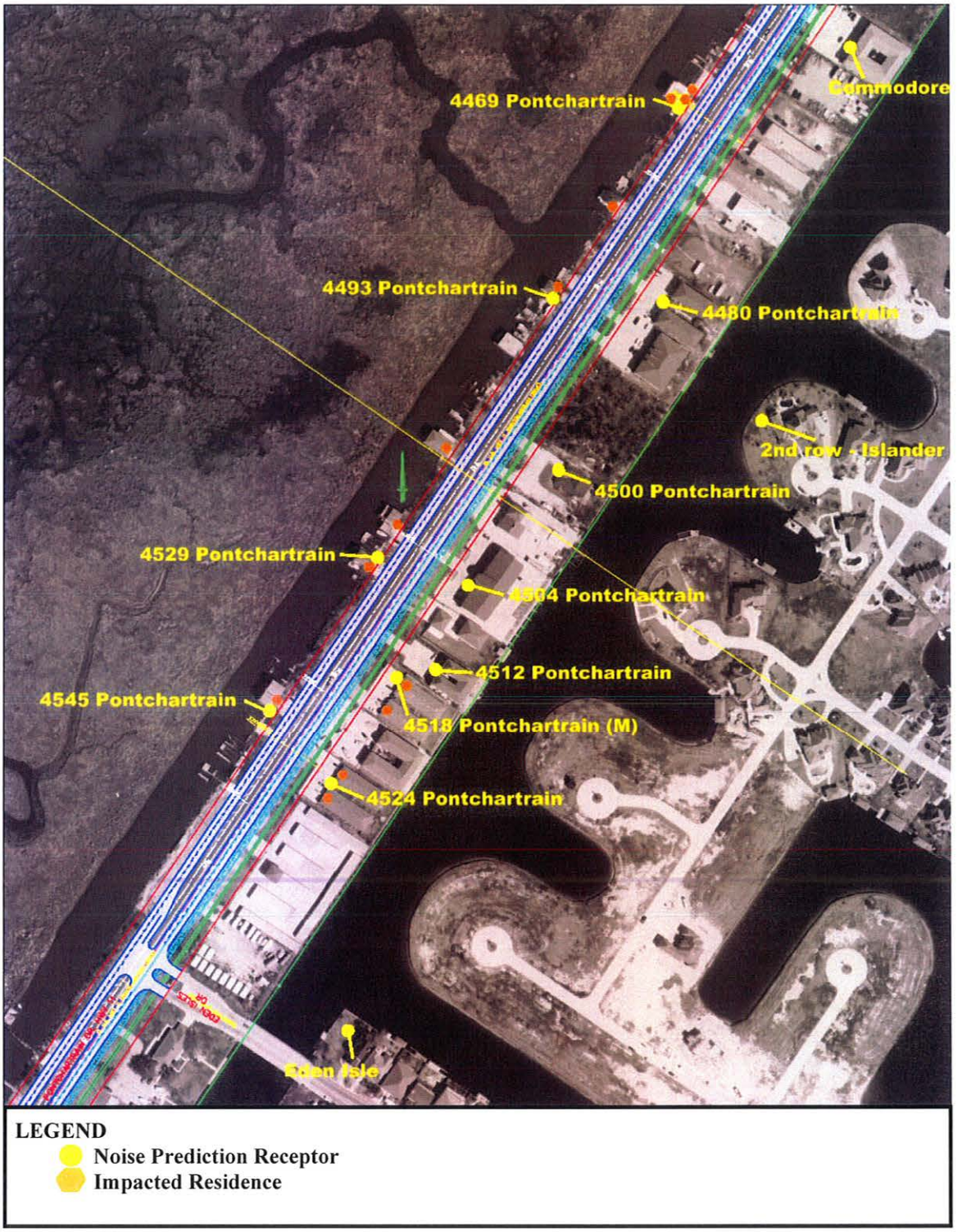

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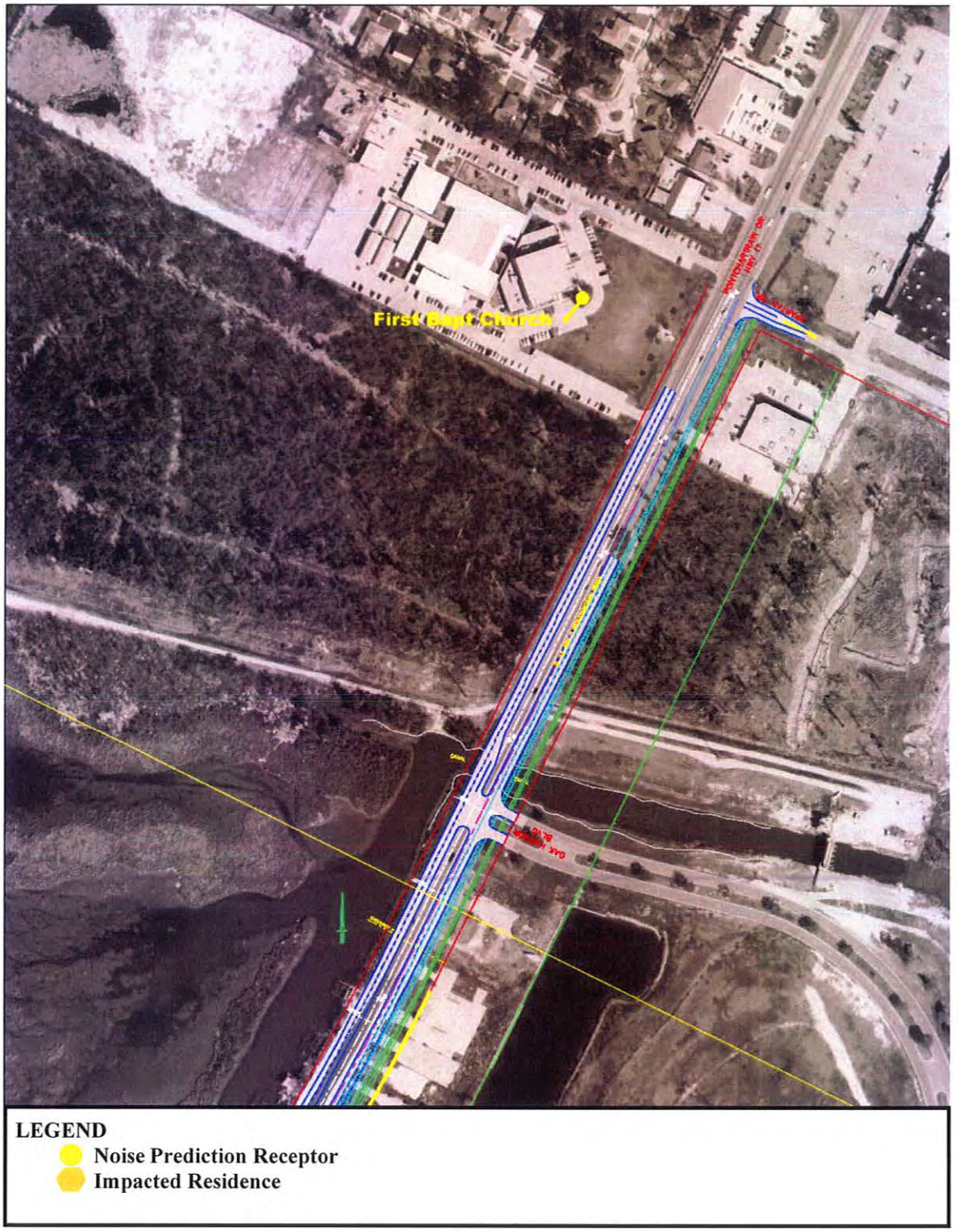

Figure 2: Noise Prediction Receptors and Impacts

3.4 Model Validation

As a check to make sure that TNM was accurately predicting traffic noise levels for the geometry of the project area, model validation was necessary. The traffic count from each first row representative noise measurement session was factored to an hourly volume. That hourly volume was plugged into TNM and the resulting L_{eq} prediction was compared to the measured L_{eq}. The results of this validation process are shown below in Table 3.

Table 3: TNM Model Validation Results

Site	*Distance from US11 (feet)*	*Peak Measured L_{eq} (dB)*	*Peak Predicted L_{eq} (dB)*	*Pred-Meas*	*Off Peak Measured L_{eq} (dB)*	*Off Peak Predicted L_{eq} (dB)*	*Pred-Meas*
4848 Pontchartrain Drive (Sea Oats Apartments)	130	59	59	0	57	57	0
4777 Pontchartrain Drive	45	65	63	-2	64	63	-1
4629A/B Pontchartrain Drive	50	65	64	-1	62	63	1
4518 Pontchartrain Drive	110	*	*	*	59	60	1

In general, the modeled results showed good agreement with the measured L_{eq}. All of the individual predictions were within 3 dB of the measured L_{eq}.

The Pelican Harbor Condominiums measurement site was used as a reference site and did not have traffic counts associated with its measurement data. Given the distance from US11 and the lack of a clear line of sight to the roadway no traffic counts were taken for the second row site along Moonraker Drive either. Because of that lack of traffic counts both of those sites were not included in the validation process.

3.5 Prediction of Traffic Noise Equivalent Sound Levels

Krebbs, LaSalle, LeMieux Consultants, Inc.developed provided traffic counts and traffic projections for the project for the existing year 2009 and the design year 2029. These projections include traffic volumes on US11 for the AM and PM peak hours. The design year traffic projections areshown in Appendix C.

TNM traffic noise predictions were made at sixty two representative receptors along the length of the project. Six of these receptors are noise measurement locations discussed in Section 3.3. The other receptors were chosen to represent the noise-sensitive land uses that are within 500 feet of the proposed roadway widening. Each receptor may represent more than one single family home, condominium or apartment. The noise prediction receptors are shown in Figure 2.

Noise predictions were made for both the AM and PM peak hour traffic conditions. The highest predicted level from those two traffic cases was used for each receptor in the Existing Year 2009 and Design Year 2029 cases.

3.5.1 Existing Year 2009

Existing noise levels are determined by modeling the existing US11 geometry and traffic within TNM and then calculating the $L_{eq}(h)$ for each representative noise receptor. Predicted $L_{eq}(h)$ for the Existing Year 2009 case ranged from 45 dBA for the residences along Moonraker Drive up to 66 dBA at the closest residences along Pontchartrain Drive. A total of 8 residences are impacted in the Existing Year by noise levels from US11.

3.5.2 No-Build Alternative 2029

Sound levels for the No-Build Alternative can be reasonably estimated by evaluating existing and future traffic volumes on US11.

As noted previously, doubling the traffic on a roadway would result in a 3 dB increase in the sound level at a given receptor assuming all other conditions remain the same. Year 2029 traffic volumes on US11 are predicted to be approximately 80% higher than existing volumes. This increase in traffic would increase sound levels at nearby land uses by approximately 2 dB.

As a result, existing sound levels have been increased by 2 dB to arrive at design year 2029 sound levels for the No-Build Alternative at all noise prediction sites. A total of 23 residences are impacted by noise levels for the No-Build Alternative.

3.5.3 Build Alternative 2029

Noise modeling of the Build Alternative was completed using the FHWA Traffic Noise Model (TNM 2.5) computer program. The program calculated design year 2029 equivalent sound levels at the noise-sensitive land uses in the project area, including the measurement loations.

Conceptual design plans and aerial photography data were used to develop the TNM runs.

In developing the TNM files, the points of TNM objects including roadways, receptors, barriers, terrain lines, and building rows were first digitized from the conceptual plans. Then a DXF file was exported out of MicroStation and read into TNM. Those DXF objects were then converted to TNM objects and elevation data was entered

The posted speed of 45 mph on US11 was modeled for all traffic.

The predicted design year sound levels for the modeled receptors are summarized in Table 4 and are discussed in the following section. TNM plan views showing the locations of the modeled roadways and receptors are provided in Appendix D.

Predicted $L_{eq}(h)$ for the Build Design Year 2029 case ranged from 51 dBA for the residences along Moonraker Drive up to 70 dBA at the closest residences to the project along Pontchartrain Drive.

Table 4: Predicted Sound Levels and Impact Determination

Receptor	*# of Res*	*2009 $L_{eq}(1h)$ dBA*	*2029 No Build $L_{eq}(1h)$ dBA*	*2029 Build $L_{eq}(1h)$ dBA*	*Exceed NAC?*	*Increase >10?*	*Impact?*	*Number of Impacts*
4848 Pontchartrain (M)	2	61	63	66	Y	N	Impact	2
4777 Pontchartrain (M)	1	65	67	70	Y	N	Impact	1
234 Moonraker (M)	16	45	47	51	N	N		
Pelican Harbor (M)	0	63	65	69	Y	N	Impact	0
4629 Pontchartrain (M)	3	65	67	70	Y	N	Impact	3
4518 Pontchartrain (M)	12	62	64	67	Y	N	Impact	2*
71 Lakeview	2	49	51	52	N	N		
4975 Pontchartrain	1	62	64	67	Y	N	Impact	1
110A/B Northshore	4	58	60	62	N	N		
114A/B Northshore	8	53	55	56	N	N		
RVs - Northshore	2	63	65	69	Y	N	Impact	2
4854 Pontchartrain	12	61	63	65	N	N		
4931 Pontchartrain	1	65	67	70	Y	N	Impact	1
4919 Pontchartrain	3	63	65	68	Y	N	Impact	3
4848 Pontch - N end	38	61	63	65	N	N		
4903 Pontchartrain	2	63	65	68	Y	N	Impact	2
S End Moonraker	16	46	48	52	N	N		
4875 Pontchartrain	7	64	66	69	Y	N	Impact	7
100A Carr	4	57	59	61	N	N		
4800 Pontchartrain	36	55	57	61	N	N		
4790 Pontchartrain	4	56	58	63	N	N		
4833 Pontchartrain	2	64	66	69	Y	N	Impact	2
4782 Pontchartrain	36	54	56	60	N	N		
4774 Pontchartrain	38	56	58	63	N	N		
4766 Pontchartrain	6	52	54	58	N	N		
4813 Pontchartrain	2	63	65	69	Y	N	Impact	2
4754 Pontchartrain	18	54	56	61	N	N		
Moonraker Mid/South	30	45	47	51	N	N		

Receptor	*# of Res*	*2009 L_{eq}(1h) dBA*	*2029 No Build L_{eq}(1h) dBA*	*2029 Build L_{eq}(1h) dBA*	*Exceed NAC?*	*Increase >10?*	*Impact?*	*Number of Impacts*
4732 Pontchartrain	4	55	57	61	N	N		
4761 Pontchartrain	1	63	65	69	Y	N	Impact	1
Seabreeze Apts	41	59	61	63	N	N		
4749 Pontchartrain	1	65	67	70	Y	N	Impact	1
Condos (8)	8	60	62	65	N	N		
4735 Pontchartrain	2	64	66	69	Y	N	Impact	2
4768 Pontchartrain	12	59	61	63	N	N		
4719 Pontchartrain	2	65	67	70	Y	N	Impact	2
4701 Pontchartrain	6	65	67	70	Y	N	Impact	6
4678 Pontchartrain	2	59	61	62	N	N		
4660 Pontchartrain	18	60	62	63	N	N		
4663 Pontchartrain	1	64	66	69	Y	N	Impact	1
4648 Pontchartrain	22	61	63	66	Y	N	Impact	2*
MidNorth Moonraker	30	47	49	52	N	N		
Chez Cherie	20	62	64	67	Y	N	Impact	2*
4620 Pontchartrain	22	61	63	66	Y	N	Impact	10*
N End Moonraker	10	47	49	52	N	N		
4619(?) Pontchartrain	2	64	66	70	Y	N	Impact	2
4610 Pontchartrain	1	56	58	59	N	N		
Eden Isle	6	47	49	52	N	N		
4524 Pontchartrain	12	61	63	66	Y	N	Impact	2*
4545 Pontchartrain	1	65	67	69	Y	N	Impact	1
4512 Pontchartrain	27	58	60	62	N	N		
4504 Pontchartrain	24	60	62	65	N	N		
4529 Pontchartrain	2	66	68	70	Y	N	Impact	2
4500 (?) Pontchartrain	1	59	61	63	N	N		
Second row- Islander	5	48	50	52	N	N		
4480 Pontchartrain	28	60	62	65	N	N		
4493(?) Pontchartrain	2	66	68	70	Y	N	Impact	2
4469 Pontchartrain	4	66	68	69	Y	N	Impact	4
Commodore	10	58	60	63	N	N		

Receptor	*# of Res*	*2009 $L_{eq}(1h)$ dBA*	*2029 No Build $L_{eq}(1h)$ dBA*	*2029 Build $L_{eq}(1h)$ dBA*	*Exceed NAC?*	*Increase >10?*	*Impact?*	*Number of Impacts*
N End Cul-de-sac	5	47	49	51	N	N		
4424 Pontchartrain	12	56	58	60	N	N		
First Bapt Ch	-	53	55	56	N	N		
							Total	68

* For these receptors the closest residences to the project are impacted while the remainder of residences are shielded from the roadway noise by the building structure and are not impacted

3.6 Noise Impact Determination Analysis

As noted previously, a Category B land use is impacted if 1) the predicted worst hour L_{eq} (1h) approaches or exceeds the NAC (defined by DOTD as 66 dBA), or 2) a substantial increase (defined by DOTD as an increase of 10 dB or more) in L_{eq} (1h).

Design year sound levels at the receptors located along the widened section of US11 are predicted to be 3 to 7 dB higher than existing sound levels. These increases are not substantial increases according to DOD policy. Therefore, none of these receptors are predicted to be impacted by a substantial increase in sound level.

As shown in Table 4, design year sound levels at the first row receptors along US 11 are predicted to be between 60 and 70 dBA. A total of 68 residences represented by those receptors are predicted to be impacted by the project with design year sound levels of 66 dBA or higher.

In total, 68 residences are predicted to be impacted under the Build Alternative. Those impacted residences are indicated in Figure 2.

The predicted exterior sound level at the First Baptist Church is 56 dBA. Therefore, the church is not predicted to be impacted.

Table 5: Impact Summary

Case	*Impacts*
2009 Existing	8
2029 No Build	23
2029 Build	68

3.7 Noise Abatement Evaluation

DOTD policy requires the consideration of abatement when traffic noise impacts occur as a result of a project. Noise abatement measures may include alteration of horizontal and vertical alignment and traffic

management measures (such as reducing speed limits, prohibition of heavy trucks, etc.). These forms of mitigation have already been taken into consideration in the design and development of the project. Noise barriers would be the best available abatement measures to reduce sound levels for impacted areas.

DOTD requires that a determination of feasibility and reasonableness be made for an abatement measure. For an abatement measure to be feasible, at least one of the impacted receivers must receive a minimum of an 8 dB insertion loss.

DOTD also requires that the cost of any proposed abatement measure be at or below $25,000 per benefited residence. A benefited residence receives at least 5 dB of insertion loss from the abatement measure.

Though there are impacted residences, achieving an 8 dB insertion loss to meet DOTD's feasibility requirement is not possible because of the numerous access points and driveways that connect to US11. Those access points and driveways would create large gaps in any noise barrier along the edge of shoulder and would drastically reduce the effectiveness of the barrier

3.8 Construction Noise

The construction of the project would result in temporary noise increases for the residences and noise sensitive land uses along US11. Other noise-sensitive land uses are located at a distance far enough from the project area that noise levels would not increase. The noise would be generated primarily from heavy equipment used in hauling materials and building the roadway.

The construction contractor has the responsibility for protection of the general public in all aspects of construction throughout the life of the project. All construction equipment will be required to comply with OSHA Regulations as they apply to the employees' safety, and in accordance with the DOTD Standard Specifications. All construction equipment used in the construction phase of the project should be properly muffled and all motor panels should be shut during operation. In order to minimize the potential for impacts of construction noise on the local residents, the contractor should operate, whenever possible, between the hours of 7:00 a.m. and 5:00 p.m.

3.9 Future Noise Levels on Undeveloped Lands

In order to protect future development from becoming incompatible with anticipated highway traffic noise levels, the best estimation of future noise levels for undeveloped lands will be provided to local officials and planners.

Table 5 presents predicted design year 2029 sound levels for areas near the project where vacant and possibly developable lands exist. Noise predictions were made at distances between 50 and 200 feet from US11. These values do not represent predicted levels at every location at a particular distance away from the roadway. Sound levels will vary by location and will be affected by the shielding of terrain features such as hills and tops of cuts, and the shielding by objects such as buildings.

Table 6: Design Year 2029 Sound Levels – Undeveloped Lands

Distance[1]	L_{eq} *(1h) (dBA)*[2]
50 ft	69
75 ft	67
90 ft	66
100 ft	65
125 ft	63
150 ft	61
175 ft	59
200 ft	58

(1) Perpendicular distance to the center of near lane.
(2) At-grade situation.

This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

4.0 REFERENCES

[1] *Interim Guidance on Air Toxic Analysis in NEPA Documents*, FHWA, February 3, 2006. http://www.fhwa.dot.gov/environment/airtoxic/020306guidmem.htm

[2] Claggett, M., et. al., "A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives,"Federal Highway Administration, Resource Center.

[3] Procedures for Abatement of Highway Traffic and Construction Noise, 23 CFR 772, Federal Highway Administration.

[4] *Highway Traffic Noise Policy*, Louisiana Department of Transportation and Development, March, 2004 (Amended for Type II, August 2009).

Appendix F

RECOGNIZED ENVIRONMENTAL CONDITIONS SURVEY (Without Appendices)

RECOGNIZED ENVIRONMENTAL CONDITIONS SURVEY
U.S. HIGHWAY 11 WIDENING
S.P. NO. 700-52-0196
ST. TAMMANY PARISH, LOUISIANA

Prepared for

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

Prepared by

GEC Gulf Engineers & Consultants

Baton Rouge, Louisiana 70806

May 22, 2014

RECOGNIZED ENVIRONMENTAL CONDITIONS SURVEY
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S.P. NO. 700-52-0196
ST. TAMMANY PARISH, LOUISIANA

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May 22, 2014

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RECOGNIZED ENVIRONMENTAL CONDITIONS SURVEY

RECOGNIZED ENVIRONMENTAL CONDITIONS SURVEY U.S. HIGHWAY 11 WIDENING ST. TAMMANY PARISH, LOUISIANA

1.0 SUMMARY

This Recognized Environmental Condition (REC) Survey was performed as a supplement to the U.S. Highway 11 (US 11) Widening Environmental Assessment (EA). The US 11 EA is a planning effort sponsored by the Regional Planning Commission (RPC) of Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany Parishes and the Louisiana Department of Transportation and Development (LADOTD) to examine alternatives for widening the 2.85 mile stretch of US 11 between Spartan Drive and Lake Pontchartrain in St. Tammany Parish, Louisiana. US 11 is an important link for motorists travelling to and from the Greater New Orleans area.

Pursuant to acquisition of the required right-of-way for the project, a REC Survey was conducted to identify potential sites of recognized environmental conditions located in or near the project right of way (ROW). KLL reviewed federal, state, and local environmental databases; conducted historical research; and performed a site investigation to characterize environmental conditions for the project. GEC reviewed the results from KLL and conducted an additional site investigation in May 2014.

Based on the reviews and site investigations, no REC sites were observed that warranted additional investigation.

2.0 INTRODUCTION

2.1 Purpose

The purpose of the survey was to identify potential REC sites in the vicinity of the US 11 Widening project that have, or may have in the past, adversely impacted environmental conditions within the required ROW for the project.

2.2 Scope of Services

GEC was responsible for investigating the project in order to identify REC sites within and adjacent to the required ROW of the project. Investigation procedures included:

- Research of available federal, state, and local environmental databases for potential REC sites on, or within a specified distance of, the project area;
- Reviews of historical aerial photographs, United States Geologic Survey (USGS) topographic maps, and published soils and geologic information;

- Visual observations of accessible portions of the project area to identify current and historic REC sites. Visual observations of accessible portions of properties adjacent to the project's required ROW were also conducted;

- Preparation of a written report identifying potential REC sites that warrant additional investigation.

A REC Survey typically does not include sampling and analysis of soil and/or groundwater. In addition, a REC Survey typically does not include wetland, asbestos, or radon surveys.

2.3 Limitations and Exceptions

GEC's review of the record information and environmental databases queried by KLL included information that was reasonably ascertainable from standard sources. *Reasonably ascertainable* denotes: (1) information that is publicly available; (2) information that is obtainable within reasonable time and cost constraints; and (3) information that is practically reviewable. The review included information gathered from governmental and regulatory agencies as well as an electronic database search performed by GeoSearch. Much of this information was gathered from public records and sources maintained by third parties. Although reasonable care was taken to verify this information, GEC does not accept responsibility for errors, omissions or inaccurate information.

Observations made during the GEC and KLL reconnaissance of the project were limited to: (1) sites or portions of sites that were accessible to investigators; and (2) evidence visible to the investigators. Observations were based on evidence visible to inspectors while walking the ROW. No ground excavation, vegetation clearing, or physical relocation of obstacles was conducted during site investigations. Accordingly, no guarantee is made or intended that all site conditions were observed.

Finally, any changes in project actions, including, but not limited to, changes to required ROW and corridor realignment from those provided to GEC may render the recommendations and conclusions presented in this report invalid and void.

2.4 User Reliance

GEC is not required to verify independently the information provided by various sources but may rely on the information unless there is actual knowledge that certain information is incorrect or unless it is obvious that certain information is incorrect based on other information obtained during the course of the investigation or otherwise actually known to the investigators conducting the assessment. However, GEC has no indication that the information provided by outside sources is incorrect.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The project area is along the US 11 corridor south of Slidell, Louisiana between Lake Pontchartrain and Spartan Drive. Logical Termini are the rational endpoints for the review of environmental impacts of a proposed action. The defined logical termini for this project are Spartan Drive to the north and Lake Pontchartrain to the south.

GEC's investigation of the project was conducted with respect to specific project boundaries and required ROW limits provided by LADOTD.

3.2 Site Vicinity

US 11 is an important link for motorists travelling to and from the Greater New Orleans area. Marine-oriented housing units (apartments and condominiums) line the eastern side of the highway. A number of commercial properties are present along the eastern boundary of the highway and along both sides of the highway in south Slidell. The western border of the highway has a number of private camps.

3.3 Geologic, Hydrogeologic, Topographic, and Soil Conditions

3.3.1 Geology

The Prairie Terrace is in southeastern St. Tammany Parish, continuing outside the parish to the east and the west, and extending along streams and rivers such as the Pearl and the Bogue Chitto. Elevations in the Prairie Terrace range from near sea level in the south to approximately 70 feet msl in the north. The Prairie Terrace was likely deposited during the Sangamon interglacial stage approximately 75,000 to 125,000 years ago. However, recent evidence suggests that the Prairie Terrace formation was composed of two major interglacial stages, the Sangamon and the Middle Wisconsin or Farmdalian. As a result, the Prairie Terrace is formed by two discrete alluvial sequences of notably different ages.

3.3.2 Hydrogeology

The Chicot equivalent aquifer system in St. Tammany Parish consists of two adjacent, near-surface aquifers: the upland terrace aquifer in the northern half of the parish and the upper Ponchatoula aquifer in the southern half. The base of the Chicot equivalent aquifer system ranges from about 0 ft below NGVD 29 in northern St. Tammany Parish to 500 ft below NGVD 29 in the southern portion. Aquifers in the Chicot equivalent aquifer system typically consist of 50- to 300-ft-thick units of sand and gravel.

The Evangeline equivalent aquifer system underlies the Chicot equivalent aquifer system and in St. Tammany Parish consists of, from near surface to deepest, the lower Ponchatoula, Big Branch, Abita, Covington, and Slidell aquifers.

The Jasper equivalent aquifer system underlies the Evangeline equivalent aquifer system and in St. Tammany Parish consists of, from shallowest to deepest, the Tchefuncte, Hammond, Amite, and Ramsay aquifers.

3.3.3 Topography

Elevations in the project area vary between 3 to 7 ft (NAVD88). According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, with the exception of inside the city limits and at the Lake Pontchartrain shore, the project study area is almost entirely within Zone A-10, the 100-year flood inundation zone. The zone at the Lake Pontchartrain shore is V-15, which includes hazards by wave action. The area inside the city limit has been zoned AE, or inundated by flood with an established Base Flood Elevation (BFE).

3.2.4 Soils

The soils observed during the site visit appear to have been impacted from construction of the existing roadway as well as the construction of commercial and residential developments along the roadway. Listed soils for the project site include Aquents (dredged) and Prentiss fine sandy loam. The Aquents (dredged) soils are considered to be hydric and are present in the southernmost 2.6 miles of the project. The Prentiss fine sandy loam soils are non-hydric soils present in the northernmost 0.2 mile of the project area.

4.0 REASON FOR PERFORMING REC SURVEY

GEC conducted this investigation to identify potential REC sites in the vicinity of the project area that have, or may have in the past, adversely impacted environmental conditions within the required ROW for the project.

5.0 RECORDS REVIEW

KLL conducted a thorough search of federal, state, and local government environmental databases to obtain and review records and/or documents that would aid in the identification of known or potential REC sites on or near the project area. In 2014, GEC reviewed the results of the KLL search.

5.1 Standard Environmental Record Sources

ASTM E 1527-00 Section 7.2.1.1 *Standard Environmental Record Sources: Federal and State* requires a review of the following databases and proscribes various search radii:

Federal NPL Site List	1.0 mi
Federal RCRA CORRACTS List	1.0 mi
Federal RCRA Non-CORRACTS TSD Site List	0.5 mi
Federal CERCLIS List	0.5 mi
Federal CERCLIS/NFRAP Site List	0.5 mi

Federal TRIS Database	0.5 mi
Federal RCRA Generators List	property/adjoining
Federal ERNS List	project only
State-Equivalent NPL List	1.0 mi
State-Equivalent CERCLIS List	0.5 mi
State Landfill and/or Solid Waste Disposal Site Lists	0.5 mi
State Leaking UST Lists	0.5 mi
State-Registered UST Lists	property/adjoining

A summary of plottable sites listed in federal and state environmental databases identified during the environmental records review are provided in Table 1. A one-mile search radius was used for all databases. In addition to plottable sites, GeoSearch generated a list of orphan sites (Table 2). Orphan sites contain insufficient location information and can only be identified as being within the same zip code(s) as the project.

Table 1. Plottable Sites Identified in Federal and State Databases (GeoSearch)

ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	City, Zip Code
1	UST	70114	0.020 SE	Bryan T. Ledet	4838 Pontchartrain Dr	Slidell, 70458
2	UST	70921	0.030 S	Help You Go	4826 Pontchartrain Dr	Slidell, 70458
3	ERNS	30407344953	0.020 SE		4480 Pontchartrain Dr	Slidell
4	RCRAG	LAD981596802	0.020 S	Master Tech Inc	4618 Pontchartrain Dr	Slidell, 70458
5	FRS	110003298805	0.020 S	Master Tech Inc	4618 Pontchartrain Dr	Slidell, 70458
6	RCRAG	LAD98190453	0.20 W	Imagine That Printing	4543 Pontchartrain Dr	Slidell, 70458
7	FRS	110003303764	0.20 W	Imagine That Printing	4543 Pontchartrain Dr	Slidell, 70458
8	RCRAG	LAR000014365	0.020 S	Redline Performance Marine	4726 Pontchartrain Dr	Slidell, 70458
9	FRS	110003354192	0.020 S	Redline Performance Marine	4726 Pontchartrain Dr	Slidell, 70458
10	RCRAG	LAD985191139	0.020 S	Redline Performance Marine	4726 Pontchartrain Dr	Slidell, 70458
11	UST	70522	0.020 NW	Alabama Great Southern Railway	4981 Pontchartrain Dr	Slidell, 70458
12	UST	74904	0.030 S	Cracker Barrel Stores Inc #43	4856 Pontchartrain Dr	Slidell, 70458
13	RCRAG	LAD98151285	0.040 W	S Slidell Medical Center	4031 Pontchartrain Dr	Slidell, 70458
14	NLRRCRAG	LAR000059014	0.080 NE	West Marine	4036 Pontchartrain Dr	Slidell, 70458
15	DCR	4250653111	0.120 NE	Corporate Clnr	4000 Pontchartrain Dr	Slidell, 70458
16	HLUST	52-006682	0.290 NE	Spur Station #1953	3898 Pontchartrain Dr	Slidell, 70458

Table 2. Orphan Sites

ID#	Database Type	Site ID#	Site Name	Address	City
1	ERNS	118556377		Pontchartrain Dr	Slidell
2	ERNS	54013147	Site Specific	US 11	Slidell
3	PCS	LAR10D933	Paris Properties, LLC	Business on US 11	Slidell

The GeoSearch research of the databases identified 16 plottable and 3 orphan (unlocatable) sites. Of the UST sites identified, two (ID #1 and 12) were still active, two have been removed (ID #2 and 11), and one (ID #16) is still active but is located 0.28 miles north of Spartan Drive. Several

of the businesses are now closed or have relocated (ID #6–11), and the rest of the plottable and orphan sites were determined to not have any apparent REC issues at the time of the site investigation.

5.2 Physical Setting Sources

GEC and KLL researched historical quadrangles and aerial photographs for structures, mines, quarries, clearings, wells, and land use in order to: (1) ascertain development of the project area since the 1940s; and (2) identify indications of possible REC sites. A current USGS 7.5-Minute Topographic Map was utilized as the primary physical setting source. Additional sources were utilized to ascertain the geologic, hydrogeologic, hydrologic, and topographic conditions of the project. The sources researched included:

U.S. Geological Survey 7.5-Minute and 15-Minute Topographic Quadrangle Maps
Louisiana Geological Survey Bedrock Geology Maps
Louisiana Geological Survey Surficial Geology Maps
Aerial Photographs

5.3 Historical Use Information on Property and Adjoining Properties

Development in the vicinity of the project is consistent with the general trend of development throughout southern areas of St. Tammany Parish. The northern border of the project area includes south Slidell. The project area consists of primarily marine-oriented residences (apartments and condominiums) and camps and a few businesses.

6.0 SITE RECONNAISSANCE

Field investigations were conducted by GEC and KLL in order to inspect the project and surrounding areas for structures, oil and gas exploration and production, land use, runoff patterns, and indications of environmental impacts. The investigation consisted of windshield and pedestrian surveys conducted in May, 2014.

6.1 Methodology and Limiting Conditions

The project area was investigated to identify potential REC sites, current and historical, that have, or may have in the past, adversely impacted environmental conditions within the required ROW for the project.

Observations made during the GEC and KLL reconnaissance of the project were limited to: (1) sites or portions of sites that were accessible to investigators; and (2) evidence that was visible to the investigators. Several sites adjacent to the project area had access limitations, including private property restrictions, locked gates, impenetrable vegetation, solid waste debris, locked buildings, concrete pavement, and unsafe conditions that impeded inspection of the entire area or specific portions or features of a site. Observations were based on evidence visible while walking the sites. No ground excavation, vegetation clearing, or physical relocation of obstacles

was conducted during inspections. Accordingly, no guarantee is made or intended that all site conditions were observed.

6.2 General Site Setting

The project vicinity is generally rural grading into suburban. Residential and commercial properties are located along US 11. Several improved and unimproved local roadways intersect the project area, as well as numerous private roads and driveways.

6.3 Observations

Two active USTs are adjacent to the project area (formerly Busy "B" Tackle and Cracker Barrel #43); however, there are no records regarding any current leaking USTs (LUSTs) at these locations. In addition, various commercial and residential businesses adjacent to the project area could potentially create RECs (for example, iron works, construction yards, mechanic and equipment shops, boat and RV storage areas, and residences). However, during the field investigation, no RECs were observed in the ROW or adjacent to the ROW and no current violations within or adjacent to the project area are listed on the LDEQ website.

6.3.1 CERCLIS

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), maintained by the Environmental Protection Agency (EPA) did not list any active or archived sites along the project area.

6.3.2 ERNS

The Emergency Response Notification System (ERNS) is maintained by the National Response Center (NRC). NRC's primary function is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. One incident occurred at 4480 Pontchartrain Drive on 6/30/2004. The caller reported a sheen in the water of Eaton Isles Canal. The material and amount released was unknown. Two other reports were unlocatable.

6.3.3 Enforcement and Compliance History

A review of the EPA database revealed no enforcement or compliance violations in the study site.

6.3.4 Underground storage tanks (USTs)

Owners of Underground Storage Tanks (USTs) are required to register these structures along with construction information concerning the UST systems with the Louisiana Department of Environmental Quality. The project area does not appear on the LDEQ UST List. Two active UST sites are located adjacent to the corridor:

Bryan T. Ledet, 4838 Pontchartrain Dr.
Cracker Barrel Stores, Inc. #43 4656 Pontchartrain Dr.

6.3.5 Groundwater Resources

In its solicitation of views response letter dated September 15, 2009, the EPA advised that the project site is over the Southern Hills sole-source aquifer. EPA further *determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site.*

6.3.6 Oil & Gas

Information on Oil and Gas wells was obtained from the LADOTD and the Louisiana Department of Natural Resources (LDNR). No oil or gas wells are located in the project area.

7.0 FINDINGS

There are two active USTs adjacent to the project area (formerly Busy "B" Tackle and Cracker Barrel #43); however, there are no records regarding any current LUSTs at these locations. In addition, various commercial and residential businesses adjacent to the project area could potentially create RECs (for example, iron works, construction yards, mechanic and equipment shops, boat and RV storage areas, and residences). However, during field investigation, no RECs were observed in the ROW or adjacent to the ROW and no current violations adjacent to the project area are listed on the LDEQ website.

8.0 OPINION

GEC considers the likelihood of RECs in the ROW to be minimal and does not recommend any additional investigations at this time.

9.0 CONCLUSIONS

GEC performed this REC Survey in conformance with the scope and limitations of ASTM E 1527-00, as applicable and appropriate. Any exceptions to, or departures from, this practice are described in the report. Based on the site reconnaissance, records review, and best engineering judgment, this assessment has revealed no evidence of recognized environmental conditions in connection with the project, and GEC considers the likelihood of RECs in the ROW to be minimal and does not recommend any additional investigations at this time.

10.0 DEVIATIONS

Based on the scope of the project, GEC believes an *appropriate inquiry* level was utilized for the assessment. GEC did not perform an exhaustive assessment of observably clean properties.

11.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I certify that I am familiar with the provisions of ASTM E 1527-00 and attest that this REC Survey has been conducted in accordance with the proscribed standards, as applicable and appropriate.

Signature	
Name	Jeffrey H. Robinson
Organization	GEC, Inc.
Date	6/5/14

12.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

Mr. Robinson is a professional civil engineer, Louisiana No. 29322, and has project management experience in civil engineering for environmental, hydrologic, and geotechnical projects throughout the United States. He provides planning, coordination, and consulting services on federal and state regulatory compliance issues for numerous governmental and private clients. Environmental projects completed since 1995 include:

Hazardous, Toxic, and Radioactive Waste (HTRW) Investigations – Risk liability studies addressing approximately 800,000 acres in Arkansas and 325,000 acres in Louisiana. Investigations conducted in accordance with U.S. Army Corps of Engineers Regulation ER 1165-2-132, *Water Resources Policies* and *Authorities for Hazardous, Toxic, and Radioactive Waste for Civil Works Projects*, which requires identification and evaluation of potential environmental risks in federal project areas.

Environmental Site Assessments – Numerous assessments for commercial and industrial clients to evaluate the presence of hazardous substances and petroleum products in accordance with American Society for Testing and Materials Standard E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.*

Certified Industrial Hygienist Investigations – Investigations of 10 industrial sites involving soil, water, and groundwater sampling and analyses with respect to the Louisiana Department of Environmental Quality's *Risk Evaluation/Corrective Action Program* (RECAP), recommendations regarding project feasibility, and development of site safety and health plans.

Environmental Baseline Studies – Characterizations of 15 Army Reserve Centers and U.S. Army Corps of Engineers properties with respect to potential environmental contamination liabilities in accordance with the Department of the Army's *Preliminary Assessment Manual*

200-1. Characterizations required assessments of radon, lead, petroleum products, hazardous materials, unexploded ordnance, PCBs, and asbestos and whether or not hazards were posed to human health and the environment.

Appendix G

PUBLIC HEARING DOCUMENTS

CAPITAL CITY PRESS

Publisher of
THE ADVOCATE

PROOF OF PUBLICATION

The hereto attached notice was published in THE ADVOCATE, a daily newspaper of general circulation published in Baton Rouge, Louisiana, and the Official Journal of the State of Louisiana, City of Baton Rouge, and Parish of East Baton Rouge or published daily in THE NEW ORLEANS ADVOCATE, in New Orleans Louisiana, or published daily in THE ACADIANA ADVOCATE in Lafayette, Louisiana, in the following issues:

05/26/2016

Shelley Calloni, Public Notices Representative

Sworn and subscribed before me by the person whose signature appears above

5/26/2016

M. Monic McChristian,
Notary Public ID# 88293
State of Louisiana
My Commission Expires: Indefinite

M. MONIC McCHRISTIAN NOTARY PUBLIC NOTARY NO. 88293 STATE OF LOUISIANA

PUBLIC NOTICE

OPEN HOUSE
PUBLIC HEARING

US Highway 11
Spartan Drive to
Lake Pontchartrain
State Project No. H.004983
Federal Aid Project No.
H004983
St. Tammany Parish

The Regional Planning Commission (RPC) for the parishes of Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany, and Tangipahoa and the Louisiana Department of Transportation and Development (DOTD) will hold an open house public hearing to discuss the US Highway 11 (US 11) Widening Environmental Assessment (EA). Those interested may review detailed information contained in the EA, copies of which have been made available at: St. Tammany Parish Public Library (555 Robert Blvd., Slidell); RPC (10 Veterans Blvd., New Orleans); and DOTD District 62 (685 N. Morrison Blvd., Hammond). The EA is also available at the RPC, DOTD, and St. Tammany Parish (STP) websites:

http://www.norpc.org

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/default.aspx

http://www.stpgov.org/departments/planning

Interested parties are invited to review the EA and are encouraged to attend the public hearing scheduled for:

Thursday, June 23, 2016
5:00 pm - 7:00 pm
Salmen High School
Cafeteria
300 Spartan Drive
Slidell, LA 70458

The public hearing will use an open house format. A prerecorded presentation describing project location, design features, impacts, schedule, and right-of-way requirements will run continuously, and project team representatives from RPC, DOTD, STP, and the engineering consultant (GEC) will be present to answer questions. Written statements may be submitted at the hearing or mailed prior to July 5, 2016, to Mr. Jeff Robinson at 8282 Goodwood Blvd., Baton Rouge, LA 70806.

In the event a member of the public desires to participate in the public hearing and requires special assistance due to disability, please contact Mr. Jeff Robinson by mail at 8282 Goodwood Blvd., Baton Rouge, LA 70806 at least five workdays prior to the meeting.

76706-may 26-1t

GEC INC 076706-01
JEFF ROBINSON
8282 GOODWOOD BLVD
BATON ROUGE, LA 70806

AFFIDAVIT OF PUBLICATION

STATE OF LOUISIANA
PARISH OF ST. TAMMANY

Before me, Notary, personally came and appeared Maureen T. McCrossen who, being duly sworn, did depose and say that she is administrative assistant of

THE ST. TAMMANY FARMER

a newspaper of general circulation published within the Parish of St. Tammany, and that the legal notice

Louisiana Department of Transportation and Development,
Open House Public Hearing,
Re: US Highway 11, Spartan Drive to Lake Pontchartrain

as per copy attached hereto, was published in the issue (s) of

May 26 and June 16, 2016

Maureen T. McCrossen

Subscribed and sworn to before me this 16 day of June 2016

(A Correct Copy of Publication Here)

William V Courtney

William V. Courtney
Notary Public
LA Notary Public #46714
LA Bar #4445

OPEN HOUSE PUBLIC HEARING

US Highway 11
Spartan Drive to
Lake Pontchartrain
State Project No. H.004983
Federal Aid Project No. H004983
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5/26 & 6/16/16

US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN

The Louisiana Department of Transportation (DOTD) and the Regional Planning Commission (RPC) propose increasing capacity and decreasing congestion along US 11 (Pontchartrain Drive), from Lake Pontchartrain to Spartan Drive, in Slidell, Louisiana. When completed, US 11 would consist of two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and bicycle facilities. The travel lanes would be separated by a combination of raised medians with J-turns, and new access management features would be constructed at intersections to facilitate traffic flow.

At the Oak Harbor Boulevard intersection a yield-controlled J-turn would be constructed with a dedicated left turn lane in the southbound direction and right turn lane for westbound traffic. At Eden Isles Drive and Carr Drive, existing intersections would be converted to three-legged roundabouts. The Northshore Circle intersection would allow left-in and right-out turns, a J-turn from the north, and a U-turn sized for passenger vehicles. The intersection at Lakeview Drive would allow right-in and right-out turns, with no access from the north.

All modifications would be located within existing right-of-way (ROW), and no additional ROW would be acquired.

WE'RE GLAD YOU'RE HERE

This open house public hearing is designed to provide you the opportunity to learn more about the US 11 Project and to provide input to our project team. From our experience with events like tonight's, we have learned the open house format is the most conducive to meaningful interaction between the public and project team. We hope you agree.

WE WANT TO KNOW WHAT YOU THINK

Be sure to view the narrated presentation and other exhibits tonight. Project team members look forward to discussing the project with you and answering your questions. Have a comment regarding the project? Comment cards are located throughout the cafeteria. Please complete a card and place it at any of the information or welcome tables. You can also comment by mail (**G.E.C., Inc., Attn: Jeff Robinson, P.E., 8282 Goodwood Blvd., Baton Rouge, LA 70806**). Comments should be postmarked no later than **July 5, 2016**.

YOUR PROJECT TEAM

G.E.C., Inc., is a Louisiana engineering and planning firm with offices in Mandeville, Metairie, and Baton Rouge. We are proud to have been selected for this project and greatly appreciate the opportunity to contribute to our local community.

US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN

PROJECT PURPOSE

The primary purpose of the project is to increase capacity and decrease congestion along US 11 between Spartan Drive and Lake Pontchartrain.

PROJECT NEED

The project corridor is an important link for motorists travelling to and from the Greater New Orleans area and Slidell. The roadway provides access to the subdivisions along Carr Drive and to the community of Eden Isle. Commercial and residential properties are located along the roadway and accessed via numerous driveways. This section of US 11 currently experiences considerable daily congestion, which is expected to worsen with anticipated future increases in traffic volume.

WHAT IS AN ENVIRONMENTAL ASSESSMENT?

The National Environmental Policy Act (NEPA) directs federal agencies to evaluate alternatives and impacts to the natural and human environments for proposed federal actions. The process requires coordination with local, state, and federal agencies, and local communities and stakeholders are provided opportunities to ask questions and provide comments about proposed projects. Public input is considered when developing alternatives and documented in an Environmental Assessment (EA), a public document that presents sufficient evidence and analysis for determining whether impacts from the proposed action warrant a Finding of No Significant Impact (FONSI) or further analysis document in an Environmental Impact Statement (EIS).

PROJECT MILESTONES

The project has progressed in accordance with the following schedule:

September 8, 2009	Solicitation of Views
October 29, 2009	Public Meeting
May 20, 2010	Public Meeting
June 23, 2016	**Public Hearing**
July 5, 2016	**Public Comment**
September 9, 2016	**Environmental Assessment – Finding of No Significant Impact**

WHERE IS THIS PROJECT IN THE DEVELOPMENT PROCESS?

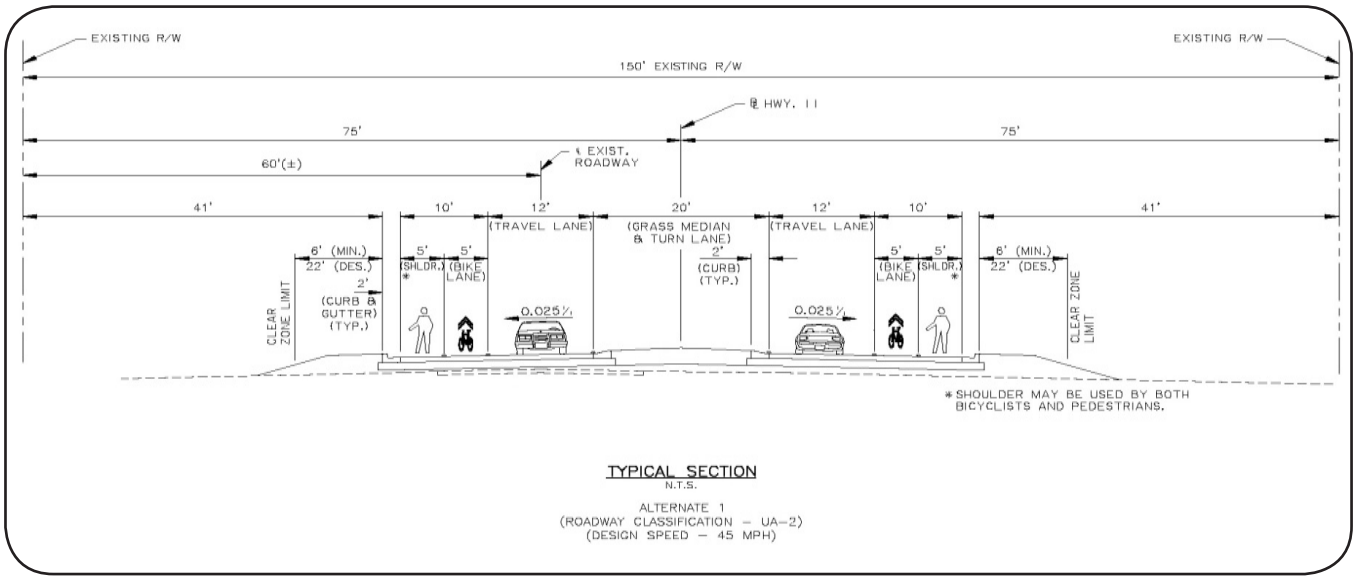
The NEPA process for this project began in 2009 when information and a request for comment was forwarded to resource agencies, elected officials, and other stakeholders. Public meetings were held on October 29, 2009, and May 20, 2010. Once the public comment period concludes on July 5, 2016, and depending on the comments received, the Federal Highway Administration (FHWA) will decide whether or not prepare a FONSI.

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

US HIGHWAY 11

SPARTAN DRIVE TO LAKE PONTCHARTRAIN



TYPICAL SECTION
N.T.S.

ALTERNATE 1
(ROADWAY CLASSIFICATION – UA–2)
(DESIGN SPEED – 45 MPH)

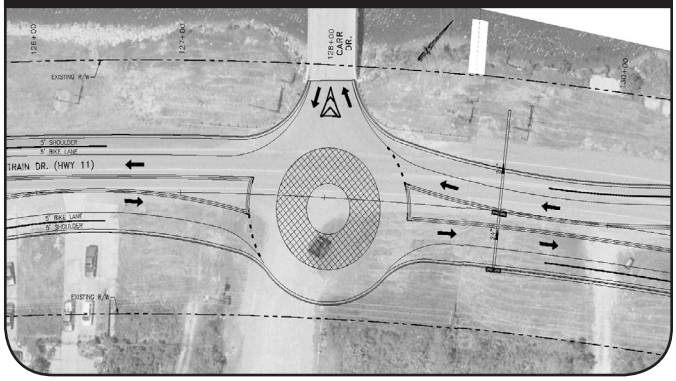
US HIGHWAY 11

SPARTAN DRIVE TO LAKE PONTCHARTRAIN

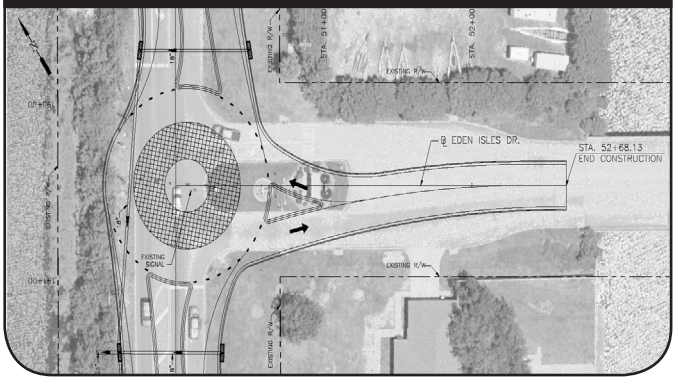
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION
FOR THE PARISHES OF
LOUISIANA

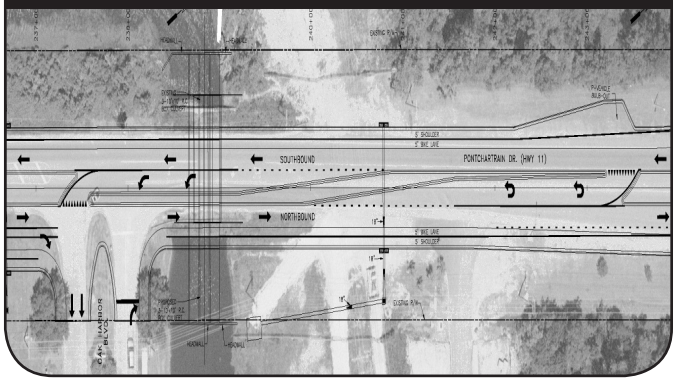
CARR DRIVE INTERSECTION



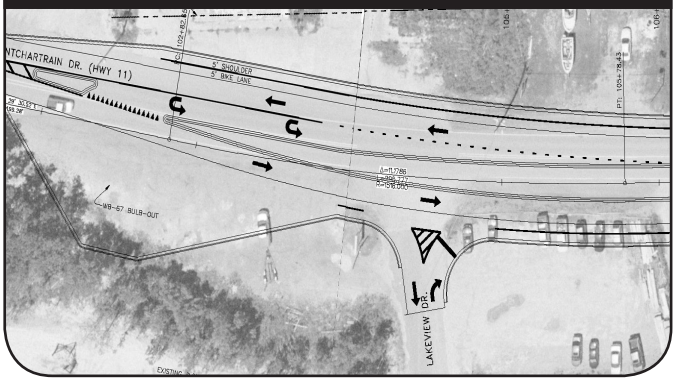
EDEN ISLES DRIVE INTERSECTION



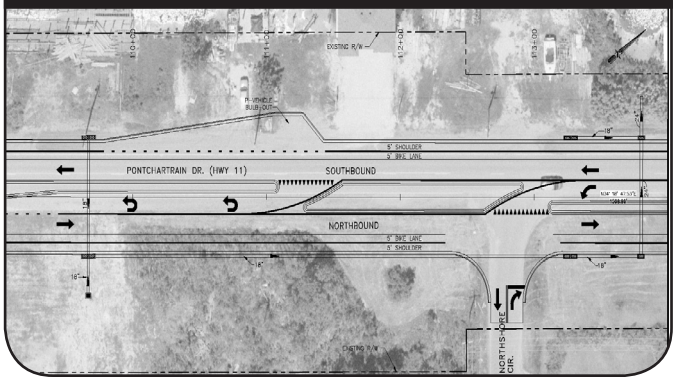
OAK HARBOR BLVD INTERSECTION



LAKEVIEW DRIVE INTERSECTION



NORTHSHORE CIRCLE INTERSECTION

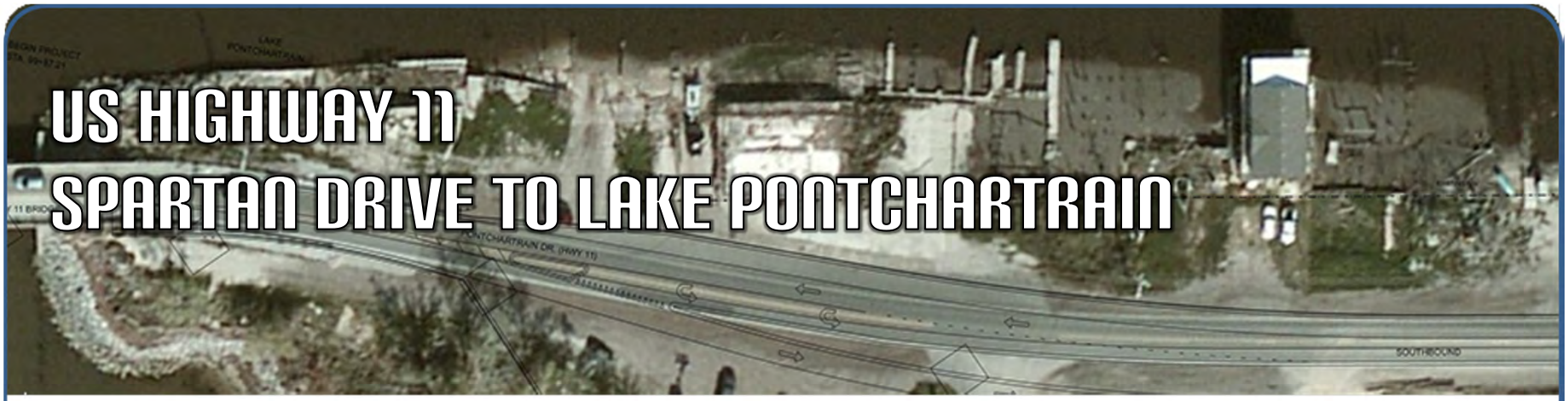


OPEN HOUSE PUBLIC HEARING

US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN
ST. TAMMANY PARISH
STATE PROJECT NO. H.004983
FEDERAL AID PROJECT NO. H004983

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION
FOR THE PARISHES OF
LOUISIANA



OPEN HOUSE FORMAT

We're glad you're here.

- Please sign in at the guest registry and pick up a project brochure.
- Have a comment? Comment cards are located throughout the cafeteria. Please complete a card and place it at any of the information or welcome tables.

Project Team members look forward to discussing the project with you and can answer your questions.

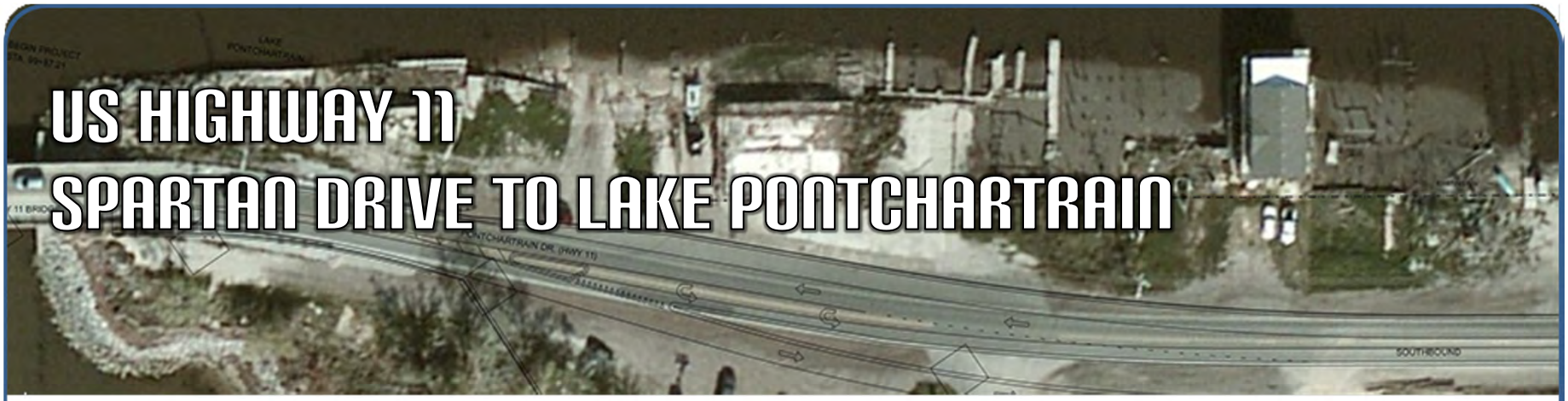
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION

PROJECT LOCATION

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION
LOUISIANA

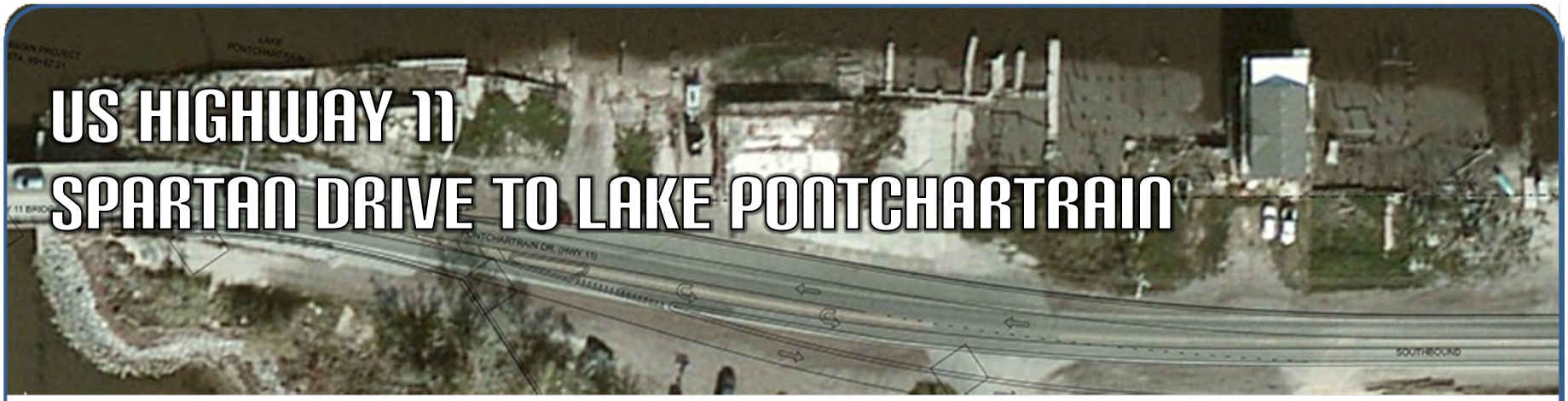


PROJECT PURPOSE

The primary purpose of the project is to increase capacity and decrease congestion along US 11 between Spartan Drive and Lake Pontchartrain.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION



US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN

PROJECT NEED

The project corridor is an important link for motorists travelling to and from the Greater New Orleans area and Slidell. The roadway provides access to the subdivisions along Carr Drive and to the community of Eden Isle. Commercial and residential properties are located along the roadway and accessed via numerous driveways. This section of US 11 currently experiences considerable daily congestion and delays are expected to increase with anticipated future growth in traffic volume.

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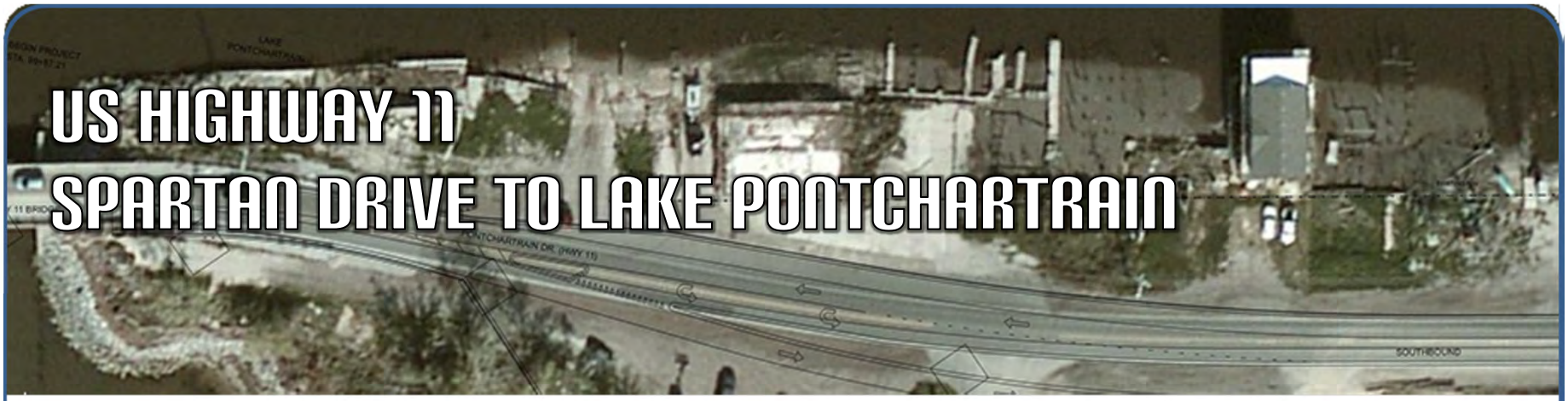
RPC
REGIONAL PLANNING COMMISSION



US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN

PROJECT DESCRIPTION

DOTD and RPC propose widening US 11 from Lake Pontchartrain to Spartan Drive to increase capacity and decrease congestion. When completed, US 11 would consist of two 12-foot-wide travel lanes, 10-foot-wide paved shoulders, curbs and gutters, and bicycle lanes. The travel lanes would be separated by a combination of raised medians with U-turns, and new access management features would be constructed at intersections to facilitate traffic flow.

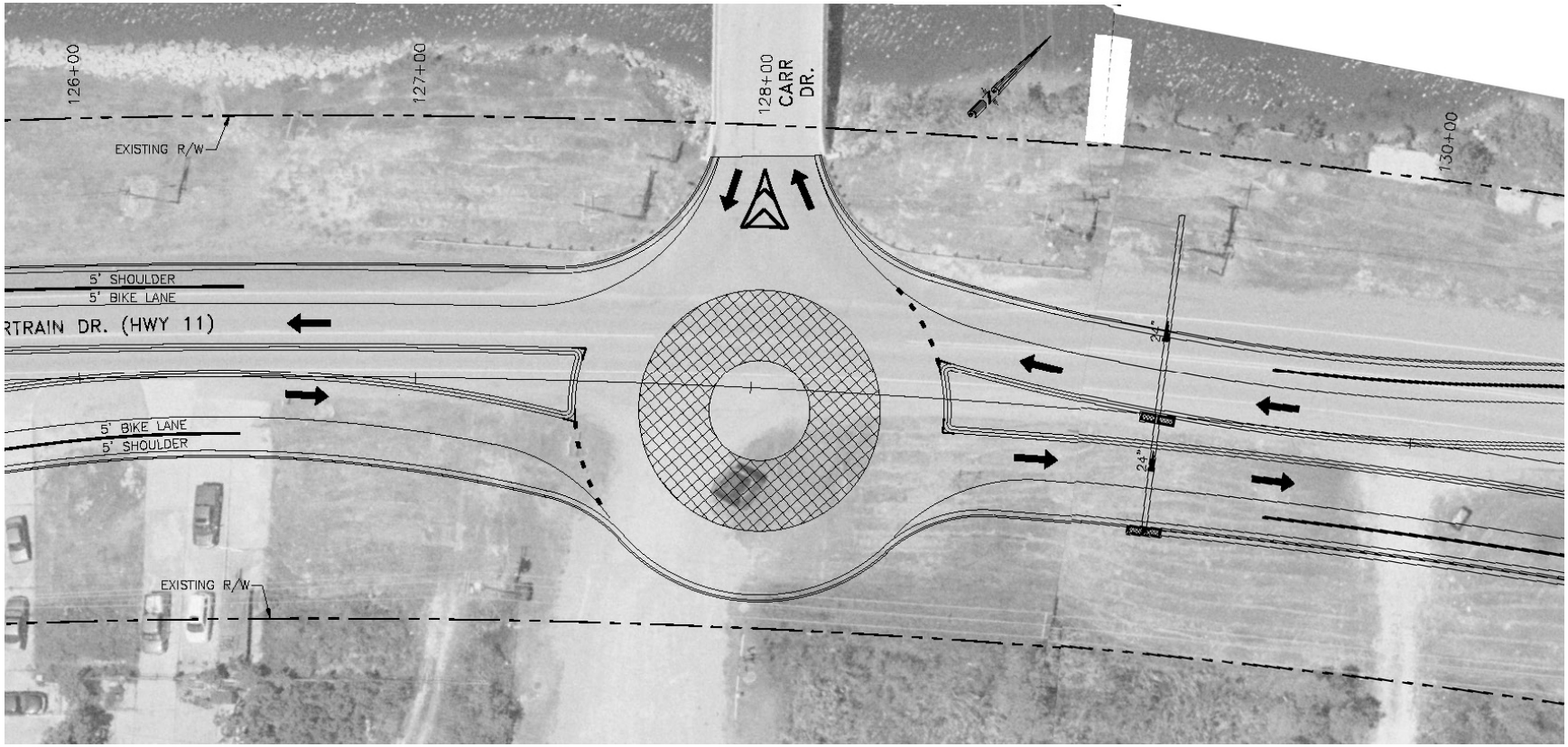
All modifications would be located within existing right-of-way (ROW), and no additional ROW would be acquired.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION

CARR DRIVE

The existing intersection at Carr Drive would be converted to a three-legged roundabout.



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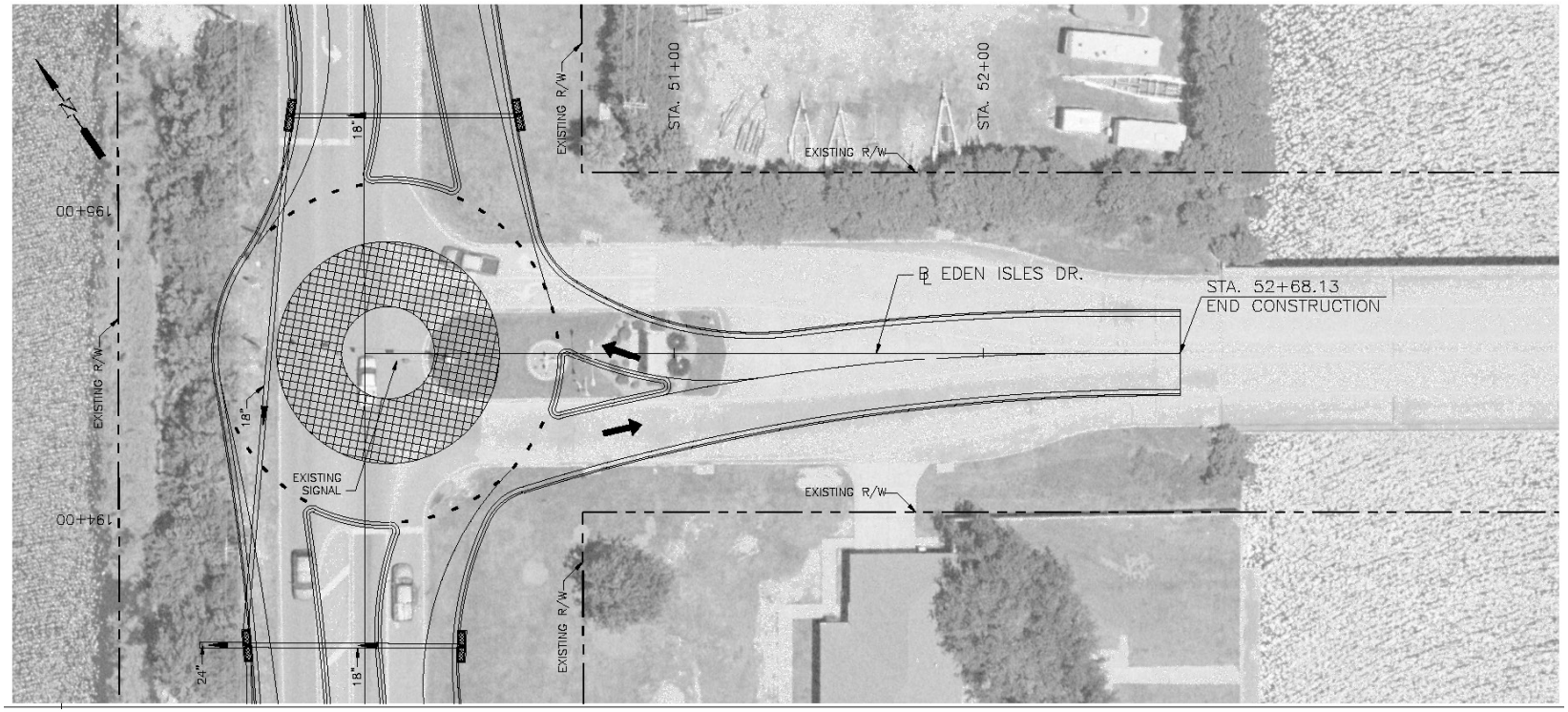
EDEN ISLES DRIVE

The existing intersection at Eden Isles Drive would also be converted to three-legged roundabout.

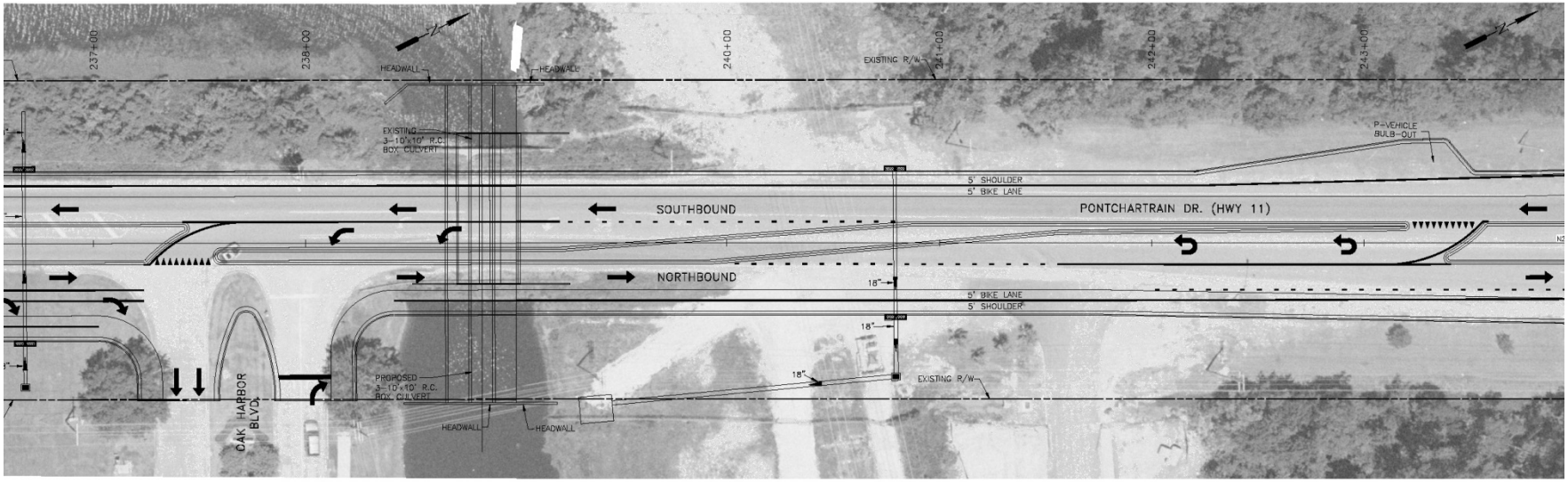


DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION

OAK HARBOR BLVD

A two-way stop controlled J-turn intersection would be constructed at the Oak Harbor Boulevard intersection with a dedicated left turn lane in the southbound direction and right turn lane for northbound traffic.



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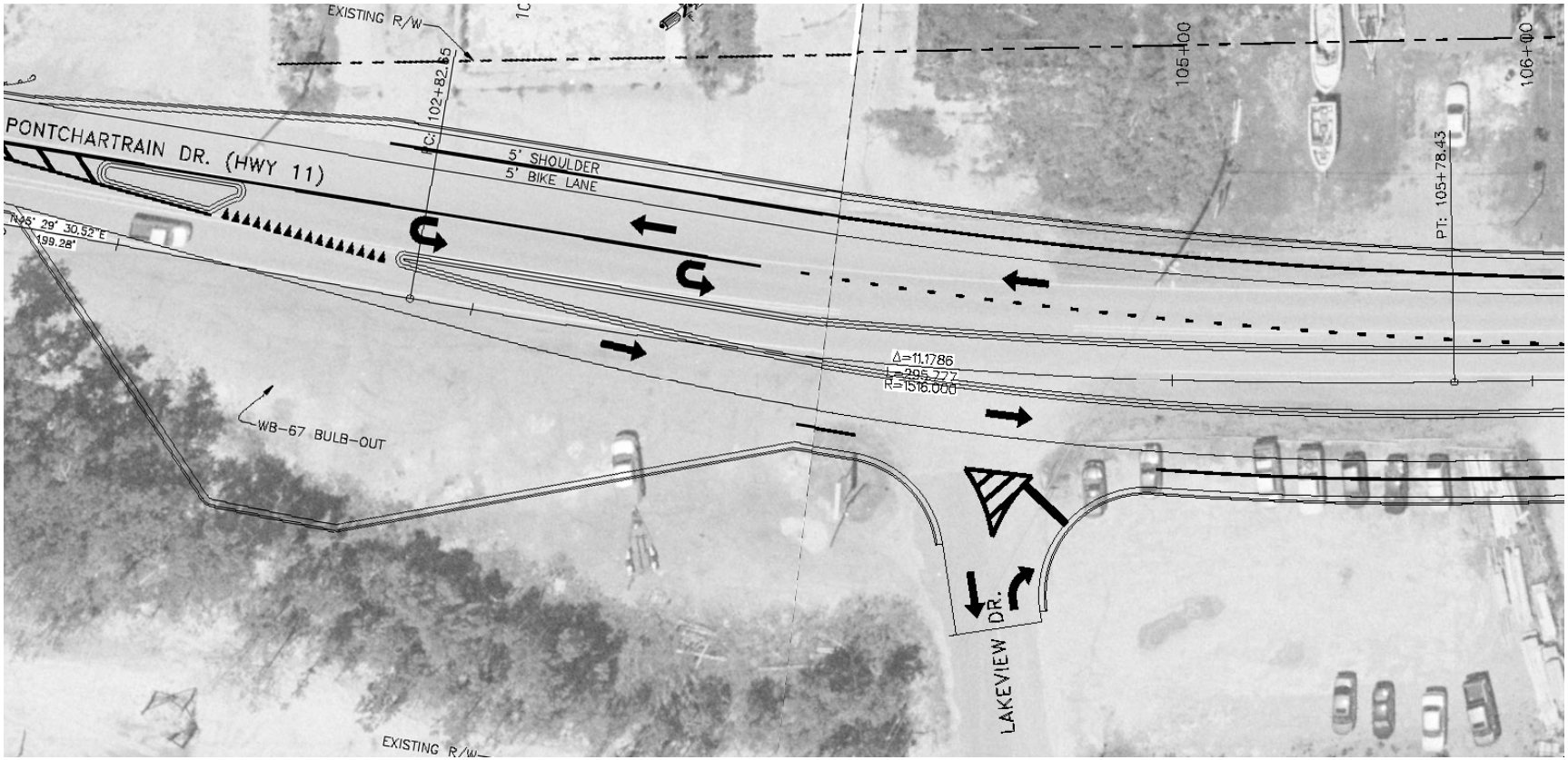
REGIONAL PLANNING COMMISSION
LOUISIANA

LAKEVIEW DRIVE

The intersection at Lakeview Drive would allow right-in and right-out turns. Left turns into and out of Lakeview Drive will be made using U-turns on both sides of the intersection.



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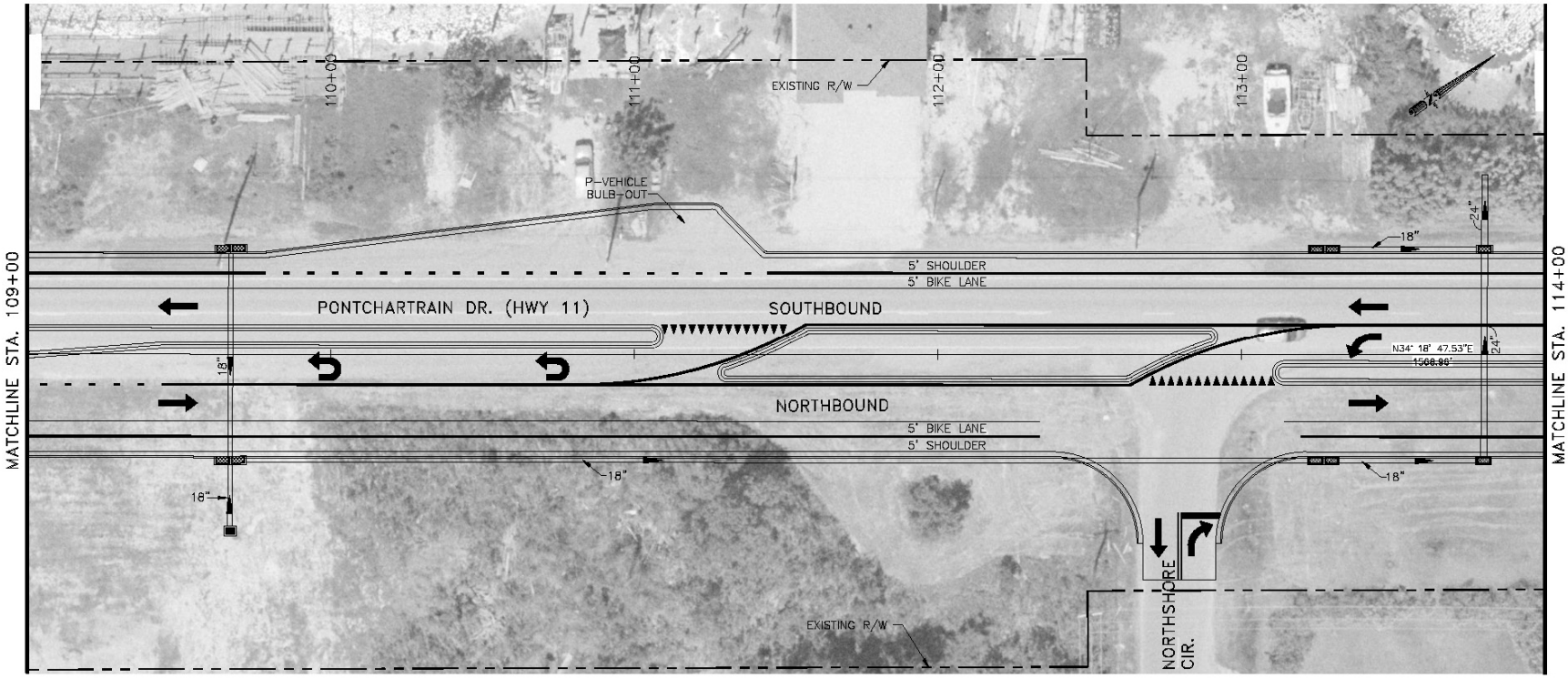
RPC
REGIONAL PLANNING COMMISSION

NORTHSHORE CIRCLE

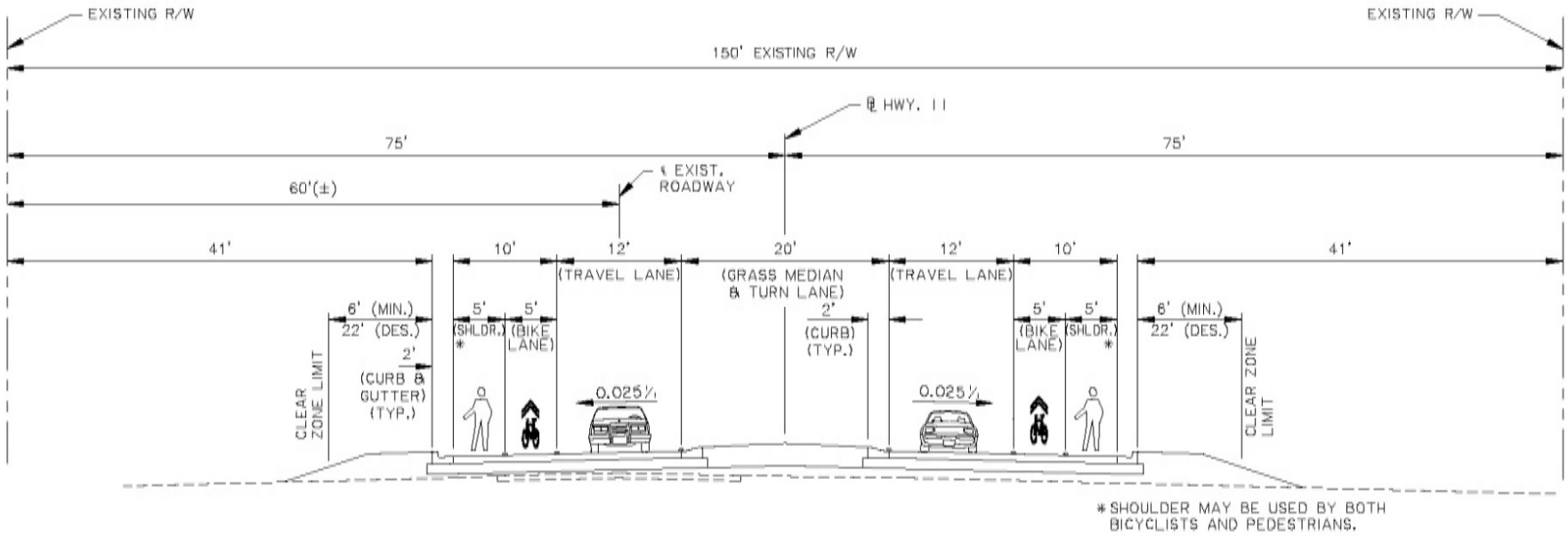
The Northshore Circle intersection would be converted to a two-way stop controlled J-turn intersection with a U-turn sized for passenger vehicles.



DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC REGIONAL PLANNING COMMISSION

US HIGHWAY 11 SPARTAN DRIVE TO LAKE PONTCHARTRAIN PROPOSED CROSS SECTION



TYPICAL SECTION
N.T.S.

ALTERNATE 1
(ROADWAY CLASSIFICATION – UA-2)
(DESIGN SPEED – 45 MPH)

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION

COMPARISON OF IMPACTS OF ALTERNATIVES

Evaluation Measure	Units	No Build	Alt. 1	Alt. 2
Relocation Impacts				
Residential Relocations	Each	0	0	0
Commercial Relocations	Each	0	0	0
Community Relocations	Each	0	0	0
Vacant/Unused Structures	Each	0	0	0
Other Relocations	Each	0	0	0
Natural Environment				
Wetlands	Acres	0	0.95	0.95
Other Waters of the U.S.	Acres	0	0.09	0.09
Scenic Streams	Each	0	0	0
Stream Crossings	Each	1	1	1
Sole Source Aquifer Impacts	Acres	0	0	0
Protected Species	Each	0	0	0
Prime and Unique Farmland	Acres	0	0	0
Coastal Resources and Essential Fish Habitat	Each	0	0*	0*
Cultural Resources				
Properties Eligible for or Listed on NRHP	Each	0	0	0
Properties Not Eligible for NRHP	Each	0	0	0
Section 4(f) and 6(f) Properties	Each	0	0	0
Noise				
Impacted Receivers	Each	< 23	< 68	< 68
Bicycle Facilities				
Type	N/A	None	Bicycle Lanes	Bikeway
Potential Bicyclist/Traffic Conflict Locations	Number of Driveways Crossed	N/A	0	97
Pedestrian Accommodation				
Present	N/A	No	Yes	Yes
Proximity to Bicycle Facility	N/A	N/A	Adjacent	Co-Located
Potential Pedestrian/Traffic Conflict Locations	Number of Driveways Crossed	N/A	0	97

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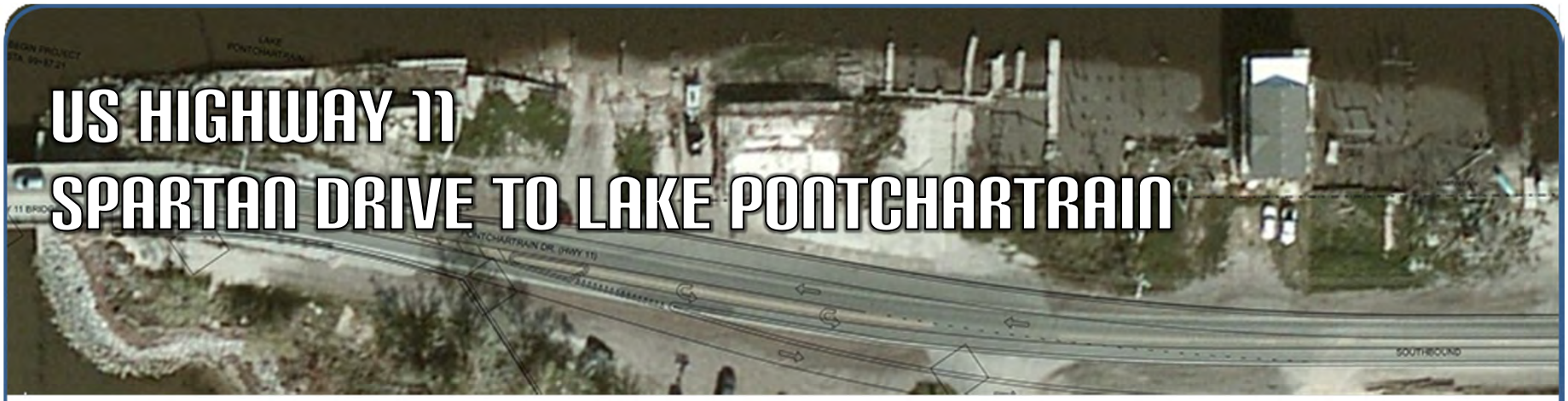
LOUISIANA



RIGHT-OF-WAY

All modifications would be located within existing right-of-way (ROW), and no additional ROW would be acquired.

Although no additional ROW would be acquired, the project might impact areas within the ROW that have been used for parking by businesses and residences located on the (primarily) east side of the roadway. The relocation of residential structures or businesses would not be required.

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LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

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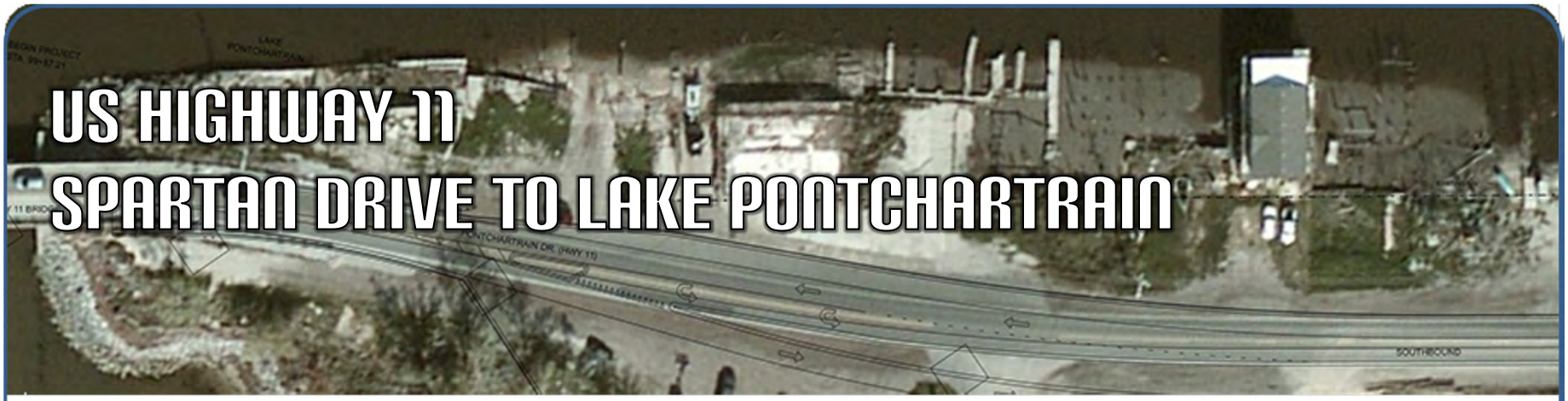
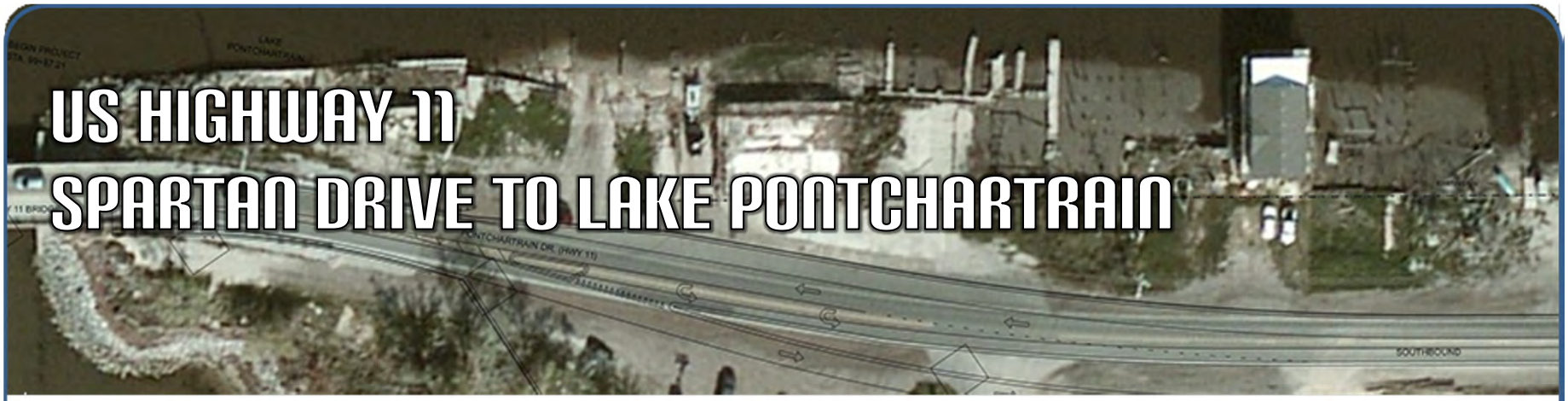


RIGHT-OF-WAY

Areas within existing US 11 ROW currently used by businesses for parking would be incorporated into the clear zone of the widened project and/or within the footprint of the project (i.e. utility locations, drainage, etc.). These areas will be removed during project construction. Any remaining encroachments that fall outside the area of the project will be dealt with according to DOTD policy by removal, disposal of excess ROW, or by entering a Joint Use Agreement granting a servitude to St. Tammany Parish over the excess area that would be maintained by the parish.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION



CONSTRUCTION ACCESS

Full passage through the project corridor would be maintained during construction.

DOTD
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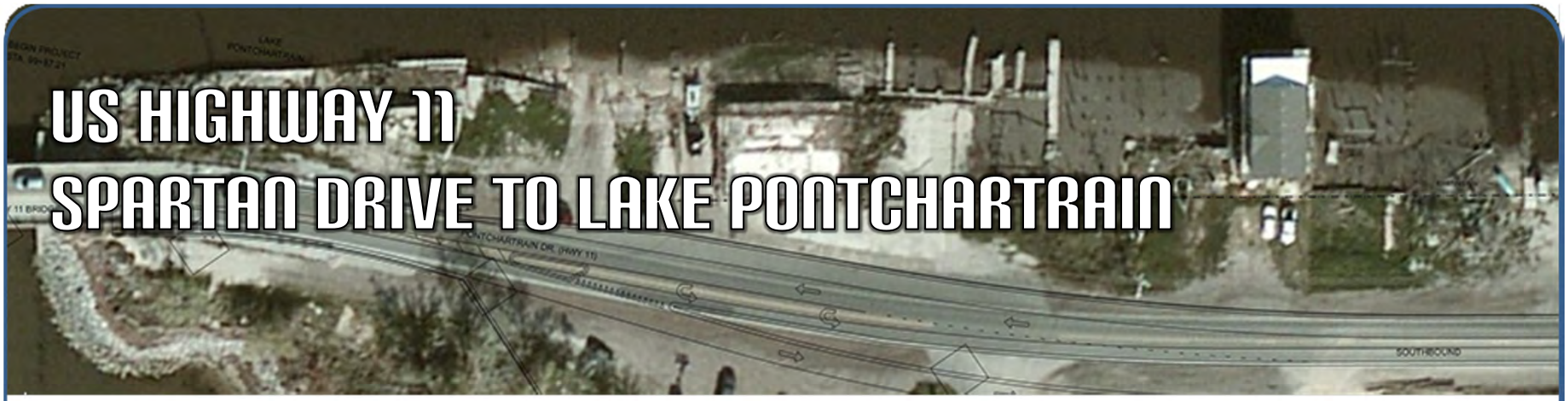
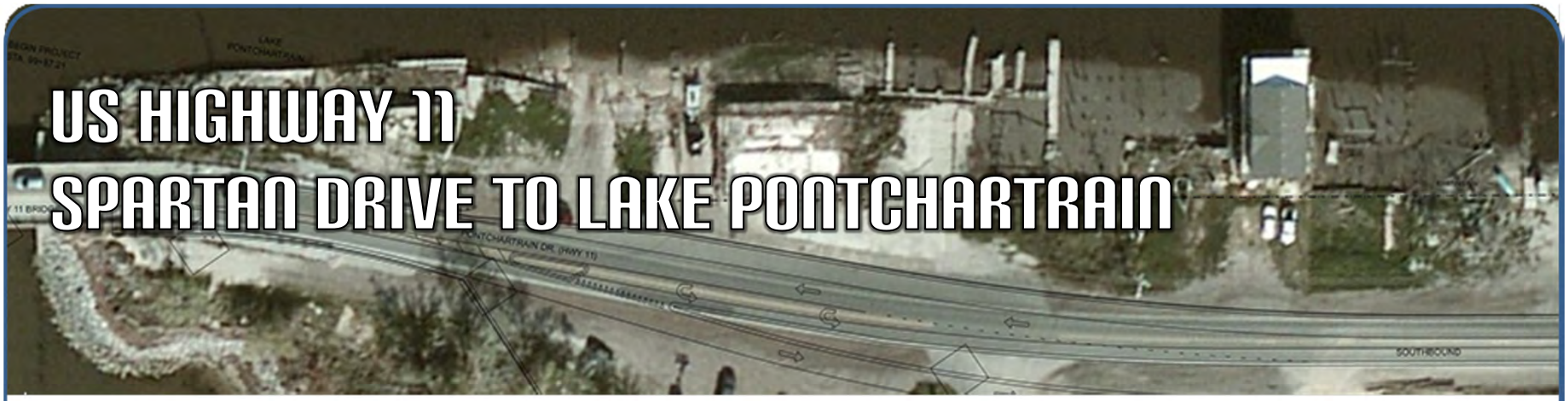


HOW YOU CAN HELP

- Sign the guest register and take a project brochure.
- Speak with a member of the project team.
- Submit a comment.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION



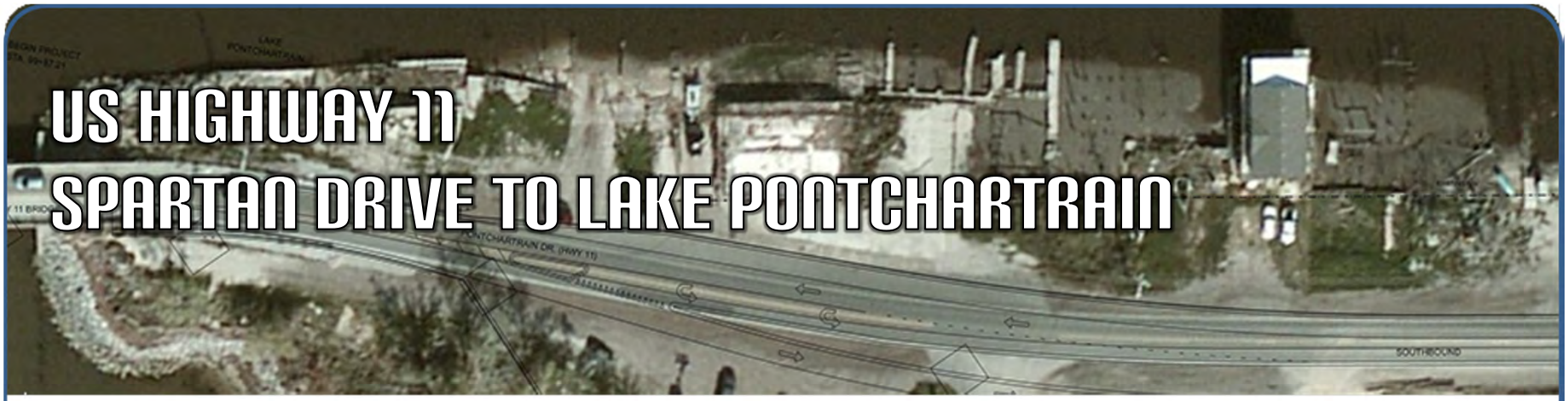
THIS IS THE END OF THE PRESENTATION.

Thank you for your time. Please take time to:

- Sign the guest register.
- View other exhibits.
- Speak with a project team member
- Submit a comment.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION



THIS PRESENTATION WILL BEGIN AGAIN IN TWO MINUTES.

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Public Comment Card

Comments: _____

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_____

Name _____ Affiliation _____
Street _____ Phone _____
City, St Zip _____ Fax _____
e-mail _____

We encourage you to provide comments regarding the project. Comments must be postmarked by July 5, 2016:

<u>by mail</u>:
G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Public Comment Card

Comments: _____

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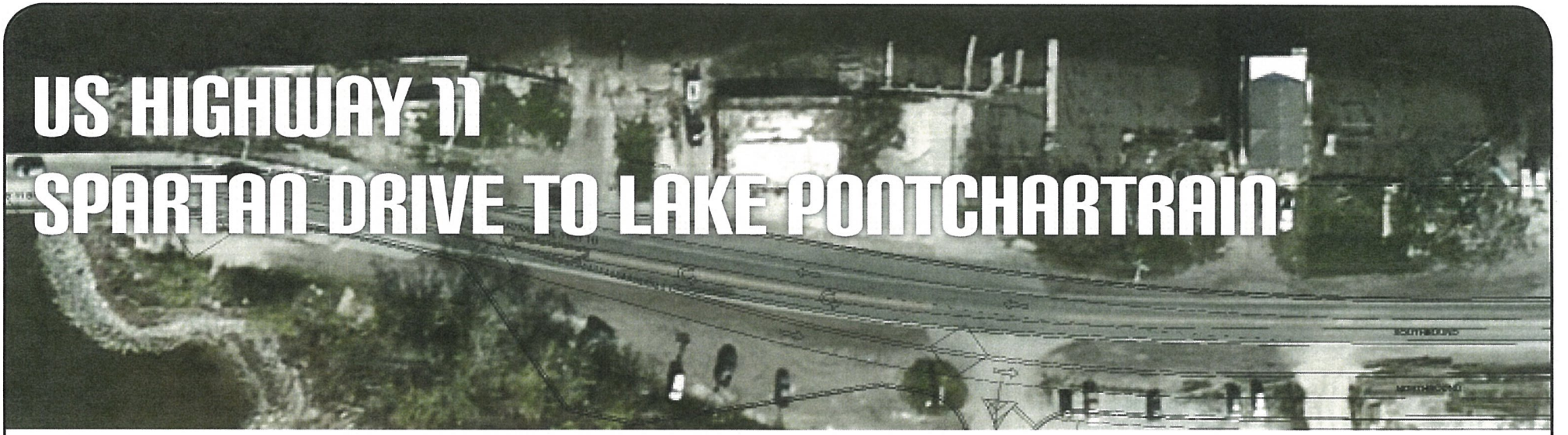

US HIGHWAY 11
SPARTAN DRIVE TO LAKE PONTCHARTRAIN

GUEST SIGN IN

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

OPEN HOUSE PUBLIC HEARING

Thursday, June 23rd, 5:00 pm – 7:00 pm
Salmen High School Cafeteria
300 Spartan Drive
Slidell, LA
70458

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

RPC
REGIONAL PLANNING COMMISSION
LOUISIANA

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
			70461		
		Slidell	70459		
		Hammond	70403		
		S	70498		
		Slidell	70458		
		"	70458		
		Slidell	70458		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		Slidell LA	70458		
		Slidell LA	70458		
		Mandeville	70471		
		Slidell	70458		
		Mandeville			
		Slidell, LA.	70458		
		Baton Rouge	70802		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		Baton Rouge	70806		
		Baton Rouge	70806		
		Baton Rouge	70806		
		Baton Rouge	70806		
		Baton Rouge	70806		
		Baton Rouge	70806		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		Hammond			
		Slidell	70458		
		Slidell	70458		
		Slidell	70458		
		Slidell	70458		
		Slidell	70458		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		Hammond	70401		
	.5	NOLA	70124		
		~~Alter~~ Covington	70433		
		Hammond	70401		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		Baton Rouge	70802		
		Baton Rouge	70802		
		Baton Rouge	70802		
		Baton Rouge	70806		
		Baton Rouge	70806		
		Baton Rouge	70806		

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

Location: Salmen High Cafeteria, Slidell ,La **Date:** Thursday, June 23, 2016 **Time:** 5pm-7pm

Guest Sign In

Please print. The below information is voluntary and may be used to coordinate future information on the US Highway 11 Spartan Drive To Lake Pontchartrain Project.

NAME	STREET ADDRESS	CITY	ZIP CODE	EMAIL ADDRESS	AFFILIATION
		slidell	70458		
		Eden Isles	70458		
		Northshore Beach	70458		
		Northshore Beach	70458	" "	" "

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION

Public Comment Card

Comments: Hwy 11 Road needs to factor in a higher Road bed to allow for joining it into flood protection projects down the road.

Name [redacted]
Street
City, St Zip
e-mail

Affiliation
Phone [redacted]
Fax

We encourage you to provide comments regarding the project. Comments must be postmarked by July 5, 2016:

by mail:
G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

Place
Postage
here

G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION

Public Comment Card

Comments: City of Slidell has FHWA funding through TAP for Shared use path from intersection of Hwy 11 and Pontchartrain Dr down Spartan Dr to Fritchie Park where it connects to City-wide bike routes. The bike lane/ shared use path for this project should connect to city's bike path
Alternate 1: Signal and crossing at Pontchartrain Dr should include bicycle + pedestrian signals and striping.
Alternate 2: Shared Use path ends at Oak Harbor Dr. Path should continue →

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax [redacted]

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Baton Rouge, La 70806

Place Postage here

G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

to Spartan Dr. and connect ~~it~~ to City Spartan Dr. bikepath.

City of Slidell strongly supports 15' elevation for road surface where road crosses levee at Schneider Canal to allow this route to remain open for evacuation and emergency services during a 100 yr Storm event

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION

Public Comment Card

Comments: 1. coming From Slidell, it looks like a U-turn to Lakeview Drive. That is NOT a good plan For anyone taking a boat to Launch at the Dock

2. Road elevation should be Hight so road does not Flood

Name [redacted]
Street
City, St Zip
e-mail

Affiliation
Phone [redacted]
Fax

We encourage you to provide comments regarding the project. Comments must be postmarked by July 5, 2016:

by mail:
G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

Place
Postage
here

G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

US Highway 11 Widening (Spartan Drive to Lake Pontchartrain) Public Hearing
June 23, 2016
The Regional Planning Commission (RPC)
Louisiana Department of Transportation and Development (DOTD)

Question:

Will the environmental impact assessment associated with making Highway 11 part of the south Slidell levee system include modeling and studies of flood risk to the 7,000 residents living south of the levee with property values of over $800 million?

Once Highway 11 is transformed into a levee it will create a box trapping and elevating storm surge between Highway 11 and I-10. This increased flood risk needs to be address before making Highway 11 part of the south Slidell levee system.

The Highway 11 elevation project is the final component of the south Slidell Schneider levee system and therefore, the environmental impact of using a State Highway to build a levee needs to address in the environmental impact of the levee system.

I request the environmental impact assessment model and study the storm surge flood risk of using Highway 11 as a levee before any further action is taken on this project.

Sincerely,

Thomas Nolan Thompson
217 Windward Passage
Eden Isles, La. 70458
thomasthompson@yahoo.com
985-285-1767

From: Jeff Robinson
To: Susan Leger
Subject: FW: State Project No. H.004983 Public Comments
Date: Monday, June 27, 2016 8:05:13 AM

Jeff Robinson, P.E.
G.E.C., Inc.
[redacted]

PRIVILEGED AND CONFIDENTIAL COMMUNICATION: DO NOT read, copy or disseminate this communication unless you are the intended recipient. This entire e-mail transmission contains information that belongs to the sender, and which may be privileged, confidential and exempt from disclosure under applicable state and federal privacy and/or disclosure laws. The information is intended solely for the addressee(s) named above. If you are not the named addressee, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this transmission is strictly prohibited. If you have received this transmission in error, please notify us immediately in order to arrange for the return of the document. While G.E.C., Inc. believes this transmittal to be free of virus or other defect, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by G.E.C., Inc. (or its subsidiaries and affiliates) for any loss or damage arising therefrom.

From: [redacted]
Sent: [redacted]
To: [redacted]
Subject: [redacted]

See below

Sent from my iPhone

Begin forwarded message:

From: [redacted]
Date: [redacted]
To: [redacted];
Subject: [redacted]
Reply-To: [redacted]

US Highway 11
Spartan Drive to Lake Pontchartrain
State Project No. H.004983
Federal Aid Project No. H004983
St. Tammany Parish
Public Hearing June 23, 2016

FYI

The following Public Comments have been mailed on "official comment cards" as per requirements to:

G.E.C, Inc.
Attn: Jeff Robinson
8282 Goodwood Blvd.
Baton rouge, La. 70806

1 of 7

Request an Environmental Impact Assessment (EIA) address flood concerns associated with making Hwy. 11 part of a levee system.

The DOTD EIA failed to address the most significant issue – increased flooding as a result of making Hwy. 11 part of a levee system.

The parish did not perform an EIA as required to obtain a permit for the project.

There has not been an assessment of flood impact as a result making Hwy. 11 part of a levee system.

---

2 of 7

Request the Hwy. 11 widening project be placed on hold until the Parish's surge protection study is completed and approved by the CPRA.

Hwy. 11 will be an integral component of any surge protection plan for the community south of Slidell, therefore any further plan development should be stopped until the surge study is completed and approved by the CPRA.

---

3 of 7

Request Hwy. 11, (from Lake Pontchartrain to the South Slidell Levee), elevation needs be included in the EIA.

Hwy. 11 is a hurricane evacuation route and need to be built to ensure a safe exit during storm surge events.

No proposed Hwy. elevation information was provided at the presentation.

---

4 of 7

Request a 12' travel lane, a 10' paved shoulder, curb and then the bike and pedestrian walking lanes.

The bike and pedestrian walking lanes need to be separated from the vehicular travel lane.

Distracted drivers traveling at 45 mph + could easily swerve into bikers and pedestrians under the current preferred option.

---

5 of 7

Request better community notification of meeting.

The public notice of the meeting may have met the minimum legal notification requirements, but it did not adequately notify to stake holders. Most people no longer subscribe to news papers.

St. Tammany Government has an electronic community notification system that should be used, also radio and TV announcements along with signage a week before the meeting is needed.

---

6 of 7

Request all public comment card comments receive written responses that address the comment along with justification for the DOTD response.

---

7 of 7

We live in the 21st century – Request public comments via email be accepted

Sincerely,

[redacted]

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION

Public Comment Card

Comments: Request the EIA address flood concerns associated with making Hwy. 11 part of a levee system. The DOTD EIA failed to address the most significant issue - increased flooding as a result of making Hwy. 11, part of a levee system.

The Parish did not perform an EIA as required to obtain a permit to make Hwy. 11 part of the levee system.

There has not been an assessment of flood impact as a result of making Hwy. 11 part of a levee system

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

We encourage you to provide comments regarding the project. Comments must be postmarked by July 5, 2016:

by mail:
G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

1 of 7

Place
Postage
here

G.E.C., Inc.
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8282 Goodwood Blvd.
Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

Public Comment Card

Comments: Request project be placed on hold until the Parish's surge protection study is completed + approved by the CPRA.

Hwy. 11, will be an integral compenent of any surge protection plan for the community south of Slidell, therefore any plan development should be stopped until the surge study is completed + approved by the CPRA.

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

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Baton Rouge, La 70806

2 of 7

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Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION FOR THE FLOOD PROTECTION AUTHORITY LOUISIANA

Public Comment Card

Comments: Request Hwy. 11, (From Lake Pontchartrain to south Slidell levee), elevation needs be included in the EIA.

Hwy. 11, is a hurricane evacuation route and needs to be built to ensure a safe exit during storm surge events.

No proposed Hwy. elevation information was provided at the presentation.

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

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Baton Rouge, La 70806

3 of 7.

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Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

Public Comment Card

Comments: Request a 12' travel lane, a 10' paved shoulder, curb & then the bike + walking lanes. The bike + pedestrian walking lanes need to be separated from the vehicular travel lane. Distracted drivers, traveling at 45 mph could easily swerve into the back of bikers and pedestrians under the current preferred option.

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

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Baton Rouge, La 70806

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LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION FOR THE PARISHES OF LOUISIANA

Public Comment Card

Comments: Request better community notification of meeting. The meeting notice may have met the legal requirements, but it did not adequately notify stake holders.

St. Tammany Government has an electronic community notification system that should have used, also radio + TV announcements along with signage a week before the meeting is needed.

Most people no longer subscribe to news papers

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

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LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION LOUISIANA

Public Comment Card

Comments: Request all public comment card comments receive written responses that address the comment along with justification for the DOTD responce.

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

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Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

6 of 7

Place
Postage
here

G.E.C., Inc.
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8282 Goodwood Blvd.
Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION FOR THE GREATER NEW ORLEANS AREA LOUISIANA

Public Comment Card

Comments: We live in the 21st century - Request public comments via email be accepted

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax

We encourage you to provide comments regarding the project. Comments must be postmarked by July 5, 2016:

by mail:
G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

Place
Postage
here

G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

State Project No. H.004983
F. A. P. No. H004983
US Highway 11
Spartan Drive To Lake Pontchartrain
St. Tammany Parish

RPC REGIONAL PLANNING COMMISSION

Hwy 11 present roadbed is low and floods quickly when there is a hurricane in the Gulf. Any major improvement to HWY 11 should include raising the road bed by at least 2 to 3 feet for several reasons.

Comments:

1. Hwy 11 is outside any levee system and serves as an evacuation route for North Shore Beach Subdivision, Lakeshore Dr. and parts of Hwy 11 outside the levee system. It provides the only access to these areas by road.
2. Hwy 11 is a secondary evacuation route in and out of New Orleans. Hwy 11 is an alternate route whenever there is an accident on the twin spans.
3. The Hwy 11 bridge is substantially higher than the roadway.
4. Sea level rise will increase the frequency of flooding. Presently coastal flooding pushing water to within 1 to 2 feet of the present road bed.
5. Federal funds may be available for road improvement if it is part of hurricane evacuation route improvement.

Name [redacted]
Street [redacted]
City, St Zip [redacted]
e-mail [redacted]

Affiliation [redacted]
Phone [redacted]
Fax [redacted]

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G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

Cynthia Strecker
283 Carr Dr.
Slidell, LA 70458

NEW ORLEANS LA 700
25 JUN 2015 PM 1

G.E.C., Inc.
Attn: Jeff Robinson, P.E.
8282 Goodwood Blvd.
Baton Rouge, La 70806

70806-777199