PRE-SOLICITATION MEMORANDUM
FOR

BAYOU CANE MARSH CREATION PROJECT
PROJECT NO. PO-0181

ST. TAMMANY PARISH, LOUISIANA

STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY

NOT FOR CONSTRUCTION

FEBRUARY 2025

1. INTRODUCTION

The Bayou Cane Marsh Creation Project (PO-0181) project area spans approximately six (6) miles along the north shore of Lake Pontchartrain and east of the Causeway Bridge, in areas primarily owned by either the State of Louisiana (Fontainebleau State Park) or the Big Branch National Wildlife Refuge. The scenic waterway, Bayou Cane, serves as a natural boundary between these areas. Several bayous and streams also meander throughout the area, primarily in the eastern portion of the project area. The project area is bordered to the east-southeast by Goose Point, and to the west by the facilities of Fontainebleau State Park. A vicinity map is shown in Figure 1 below. The goals of the project are to restore approximately 558 acres of intermediate marsh by hydraulically dredging material from a Lake Pontchartrain borrow source. The project consists of seven (7) marsh creation areas spanning approximately six (6) miles along the north shore of Lake Pontchartrain. The marsh creation areas range in size from approximately thirty-two (32) acres to one hundred sixty (160) acres.

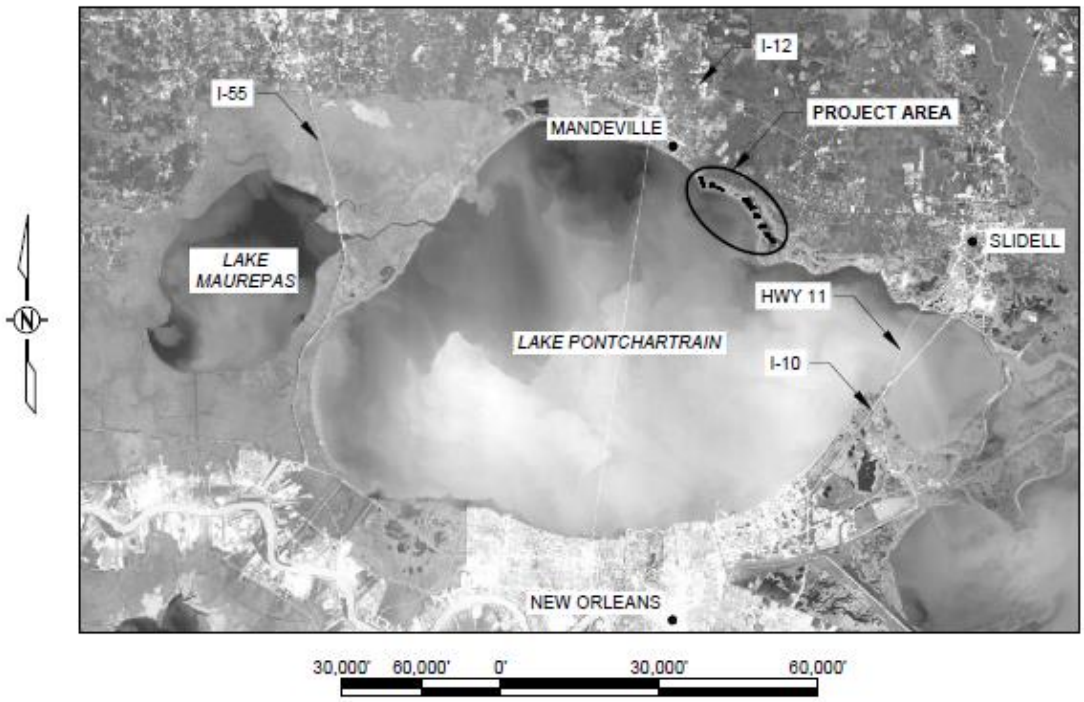

Figure 1 – Project Vicinity Map

2. MEETING PURPOSE

The purpose of this meeting is to outline the overall project features of the PO-0181 project and gather Contractor feedback on potential construction challenges and proposed project features that have been identified by the design team. The intent is to review feedback received with the project team to consider incorporating into Final Design. Supporting documentation provided for this meeting includes maps, draft plan set excerpts, geotechnical information, and survey data, which can be found online at the links provided in the respective appendix. **All supporting documentation is being provided for informational purposes and is not intended for bidding or construction.**

3. SPECIFIC ITEMS FOR CONTRACTOR AWARENESS / FEEDBACK

3.1. Marsh Creation Borrow Area

3.1.1. Geotechnical analysis of the Marsh Creation Borrow Areas indicates the presence of shallow Pleistocene materials. These heavy, highly-plastic borrow materials can increase dredging and pumping difficulty, and may prohibit the use of smaller dredges. The "alternate" borrow area (as denoted in the geotechnical and survey appendices) was selected and is permitted for use for the PO-0181 project.

3.1.2. Survey data for the Marsh Creation Borrow Area can be found in Appendix B2.

3.1.3. Marsh Creation Borrow Area geotechnical information can be found in Appendix C2.

3.2. Scenic Waterways and Sensitive Areas

3.2.1. All construction activities (including site access) within Bayou Cane, which is designated as a scenic river by the Louisiana Department of Wildlife and Fisheries (LDWF), is prohibited.

3.2.2. Equipment access is limited to the corridors shown on the provided plan sheets. Access within interior waterways is prohibited. Any alternative or additional Equipment Access Corridors shall be provided in the Work Plan for Approval by the Engineer. The Contractor shall be responsible for acquiring the appropriate permits and access agreements for all proposed Equipment Access Corridors outside of the permitted areas.

3.2.3. The Contractor is required to install a turbidity curtain near the western boundary of the No Work Zone located north of MCA-2 prior to commencement of dredging operations to prevent impacts to sensitive areas.

3.2.4. A Restricted Work Area is located adjacent to MCA-7, where no equipment or disturbance outside of the area will be allowed.

3.3. Gulf Sturgeon Critical Habitat Restrictions

3.3.1. Dredging within Lake Pontchartrain shall occur only during the months of April through October (7 months) due to the presence of Gulf sturgeon.

3.3.1.1. The total contract quantity for hydraulic dredging and marsh creation (pay on the cut) is anticipated to be between 2-2.5 million cubic yards. **Do you foresee any challenges with completing dredging operations during the afforded window, given the likelihood of encountered Pleistocene materials within the Marsh Creation Borrow Area?**

3.3.2. The Contractor will be required to implement NMFS Southeast Region's *Protected Species Construction Conditions* (NMFS 2021).

3.4. Equipment Access Considerations

3.4.1. Dredge pipeline and equipment shall be floated from the shoreline of Lake Pontchartrain to a minimum distance of five hundred feet (500') from the shoreline to avoid impacts to existing submerged aquatic vegetation (SAV) / grass beds. This distance may be increased based on field conditions. The Contractor may submit an alternate proposed location of crossing the existing SAV to avoid impacts.

3.4.2. A majority of the marsh creation areas will need to be accessed via open water areas of inland marsh due to access restrictions across the shoreline and within internal waterways. Plan view drawings (Appendix A) and survey data (Appendix B1) are included for review. **Do you foresee any challenges associated with shallow inland access between marsh creation areas?**

3.5. Earthen Containment Dikes

3.5.1. The Earthen Containment Dike template consists of a crown elevation up to elevation +4.5 to +5.5 feet (NAVD88, Geoid 12B) with an optional 2nd lift to an elevation of +5.5 to +6.5 feet, depending on the marsh creation area. The side slopes are 3H:1V and the crown width is five (5) feet. The existing mudline elevation is approximately -1.0 feet for four of the MCAs, -1.5 feet for one of the marsh creation areas, and -2.0 feet for two of the marsh creation areas. **Do you foresee any challenges constructing this template given the geometry?**

3.6. Dredging Operations

3.6.1. The construction of the marsh creation areas is proposed in multiple lifts to achieve the desired cut volume.

3.6.1.1. A slurry lift shall consist of placement of dredge slurry into each Marsh Creation Area up to a maximum elevation of one foot (1.0') below the crest elevation (+4.5' to +6.5') of the Earthen Containment Dikes. Multiple slurry lifts may be placed in each Marsh Creation Area in order to attain the Contract Quantity for marsh fill.

3.6.1.2. The Contractor shall propose the methodology and equipment for determining the actual delineations of changes in cut during dredging operations (i.e. when dredged material placement changes from one Marsh Creation Area to another). Horizontal and vertical coordinates, as well as the time when fill placement changes from one Marsh Creation Area to another, shall be denoted on the Daily Report.

3.6.1.3. Process surveys of the borrow area will be required after placement of a lift and prior to dredging resuming.

3.6.2. Additionally, weirs are proposed in order to maintain effluent quality, prevent the infilling of adjacent waterways, minimize impacts to grass beds, and retain soil solids.

3.6.2.1. During the placement of the first lift, only existing water in each Marsh Creation Area shall be discharged until slurry head wave approaches the dewatering weirs at which

time the weirs shall be closed. During the placement of all subsequent lifts, no slurry or water shall be discharged from the Marsh Creation Area through the dewatering weirs.

3.6.2.2. The slurry in each Marsh Creation Area shall remain in retention for a minimum of fourteen (14) days before adding subsequent slurry lifts. Additional slurry shall not be placed into the Marsh Creation Area during this retention time. No water or slurry shall be discharged through the dewatering weirs for the first seven (7) days of the lift retention time. After a minimum of seven (7) days from the start of the retention time, water decanted from the slurry may be discharged through the dewatering weirs.

3.6.2.3. Secondary weirs are proposed, which shall consist of steel pipe having a maximum diameter of thirty inches (30") and sufficient length to penetrate through the ECD. The pipe shall be slotted twelve inches (12") deep within 6 inches (6") of the end of the pipe. The slot shall be sufficient width to allow for two-inch (2") thick lumber slats to be installed to adjust the invert elevation in increments of six inches (6"). The Contractor may submit proposed alternative Secondary Weirs in the Work Plan for Approval by the Engineer.

3.7. Contractor-Identified Challenges

Are there any specific construction constraints, limitations, or difficulties that you have identified for any of the aforementioned (or otherwise) project features?

4. MEETING DETAILS

This meeting will be a held virtually via Microsoft Teams on **February 4, 2025 at 9:00 A.M.** A registration link is provided below. This meeting is expected to last up to two (2) hours.

https://events.gcc.teams.microsoft.com/event/4ba0ad79-5ecd-42bc-8940-d39954c893f1@89b0b16b-677c-4e6f-a254-61311d5b4a86

5. APPENDICES

The provided appendices are as follows:

- Appendix A – Draft Plan Set Excerpts
    1. *Project Layout* (Sheet 4)
    2. *Marsh Creation Borrow Area Plan View* (Sheet 5)
    3. *Marsh Creation Area Plan View* (Sheet 6-7)
    4. *Dredge Pipeline & Equipment Access Corridor Crossing* (Sheet 8)
    5. *Marsh Creation Area Typical Sections* (Sheet 12-13)

6. *Earthen Containment Dike Details & Dredge Pipeline Corridor Typical Sections* (Sheet 14)

- Appendix B – Survey Reports

    1. *Bayou Cane Marsh Creation Project (PO-0181) Near Mandeville St. Tammany Parish, Louisiana, Final Report*, Morris P. Herbert, Inc., July 2020.

    2. *Bayou Cane Marsh Creation Project (PO-0181) Alternate Borrow Area Near Mandeville St. Tammany Parish,* Louisiana, Morris P. Herbert, Inc., August 2021.

- Appendix C – Geotechnical Data

    1. *Geotechnical Engineering Services Data Report Bayou Cane Marsh Creation Project (PO-0181) St. Tammany Parish, LA*, Professional Service Industries, Inc., December 2020.

    2. *Geotechnical Engineering Services Data Report Bayou Cane Marsh Creation Project (PO-0181) St. Tammany Parish, LA Addendum #1*, Professional Service Industries, Inc., November 2021.