

#### 2024 CPRA Coastal Industry Week

#### Coastal Industry Briefing and Construction Project Forecast – Partner Led

March 26<sup>th</sup>, 2024 2:00pm – 3:30pm CST

#### Virtual Meeting

 Zoom URL:
 https://us06web.zoom.us/j/82284982515

 Meeting ID:
 822 8498 2515

 Phone Audio:
 (215) 861-0674

 Phone Audio Passcode:
 5918836

#### I. Opening Remarks

#### II. Upcoming Risk Reduction Projects to be Bid for Construction (2:00 pm – 2:45 pm)

- a. Upcoming TLCD Projects: Reggie Dupre, TLCD; David Boudreaux, Delta Coast Consultants, LLC
- b. Upcoming NLLD Projects: Arthur Ostheimer Jr., North Lafourche Levee District
- c. Upcoming SLLD Projects: Joe Picciola, Picciola & Associates, Inc.; Neil Angelette, Angelette Design, LLC; John Plaisance, GIS Engineering, LLC
- d. Upcoming LAILD Tidal Flood Risk Reduction Projects: Miles Garriott, Evans-Graves Eng., Inc.

#### III. Upcoming Restoration Projects to be Bid for Construction (2:45 pm – 3:20 pm)

- a. ME-0032 South Grand Chenier Baker Tract Marsh Creation Project: Breese Barnes, NRCS
- b. Cameron Gulf Shoreline Protection Project: Daniel Dehon, C. H. Fenstermaker & Associates
- c. Mermentau Basin Inundation Relief Project: Daniel Dehon, C. H. Fenstermaker & Associates
- d. Upcoming Vermilion Parish Projects: Nick Sonnier, Sellers & Associates, Inc.
- e. Grand Bayou Freshwater Reintroduction: Kevin Dezarn, GIS Engineering, LLC
- f. Catfish Lake Living Shoreline Lafourche Parish: Tyler Ortego, Natrx; Nick LeBlanc, Danos
- g. Upper Barataria Terracing: Matt Salmon, Freese & Nichols, Inc.

#### IV. Other Project Presentations (3:20 pm – 3:30 pm)

- a. Upcoming Ducks Unlimited Projects: Brad Lambert, Ducks Unlimited
- b. Sunset Park Restoration Project: Andrew Woodroof, Digital Engineering
- c. Fourchon Beach Maintenance Restoration and Protection Project: Bryce Autin, Greater Lafourche Port Commission

#### V. Questions and Discussion

#### VI. Adjourn



# CPRA Coastal Protection and Restoration Authority of Louisiana

# Morganza to the Gulf Reach 3B & Morganza to the Gulf Reach 1 Project Update

North Lafourche Conservation, Levee & Drainage District

Arthur Ostheimer,
NLLD Program/Project Manager
Dwayne Bourgeois,
CPRA Board Member & NLLD Executive Director
March 26, 2024



committed to our coast

#### **Presentation Overview**

**General Project Information** 

**Project Layout** 

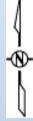
**Typical Sections** 

**Notable Quantities** 

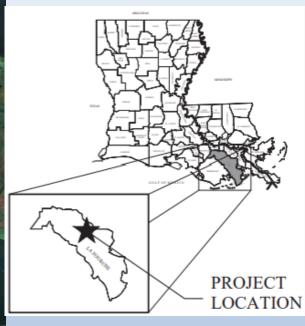
**Schedule** 





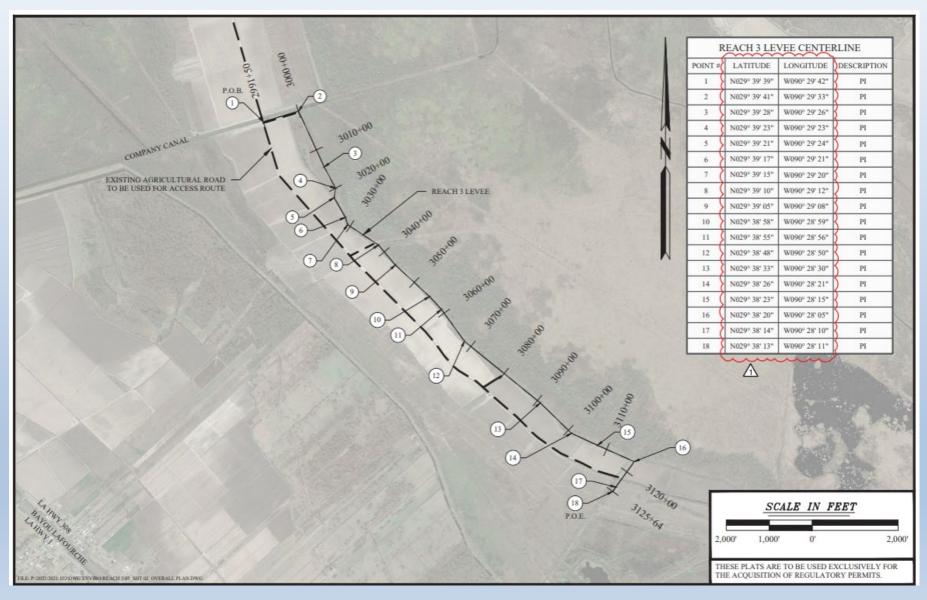




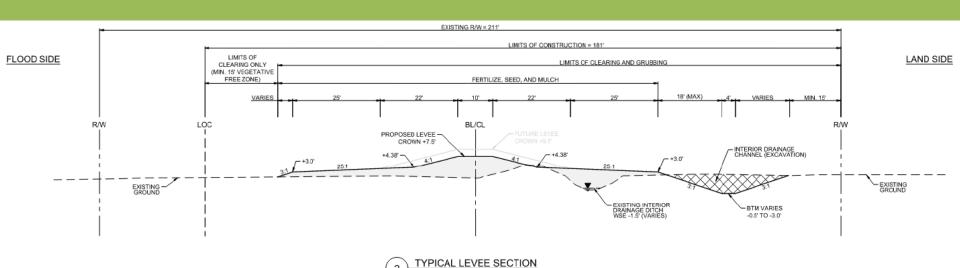


INFO	DESCRIPTION
LOCATION	Lockport - Lafourche Parish
FUNDING	CPRA/GOMESA
PROJECT TYPE	Levee construction and improvements

### Reach 3B Project Layout



### **Reach 3B Typical Section**



B/L STA 3020+82 TO STA 3027+57

#### **Reach 3B Construction Cost Estimate**

Item No.	Item Description	Unit	Quantity	Unit Cost	3B Total
1	Mobilization & Demobilization	LS	1	\$350,000.00	\$350,000
2	Surveying	LS	1	\$125,000.00	\$125,000
3	Temporary Silt Fencing	LF	24,500	\$4.00	\$98,000
4	Clearing and Grubbing	AC	50	\$7,500	\$375,000
5	Removal of Structures and Obstructions	LS	1	\$10,000.00	\$10,000
6	Levee Embankment (Compacted Fill, Contractor-Furnished)	СУ	161,800	\$35.00	\$5,663,000
7	Excavation	CY	25,500	\$12.00	\$306,000
8	Corrugated Metal Pipe (24")	LF	787	\$225.00	\$177,075
9	Corrugated Metal Pipe (36")	LF	149	\$300.00	\$44,700
10	Turf Establishment and Maintenance	AC	32	\$8,500.00	\$272,000
11	Aggregate Surfacing (New)	TN	8,150	\$75.00	\$611,250
12	Aggregate Sufacing (Maintenance)	TN	2,760	\$75.00	\$207,000
13	Geotextile Separator Fabric	SY	21,200	\$4.00	\$84,800

TOTAL ESTIMATE	\$9,156,208
Construction Subtotal	\$8,323,825
Contingency	\$832,383

#### Reach 3B Anticipated Schedule

Design Phase Completion: August 2024

Landrights/ Servitude Agreements: Finalized

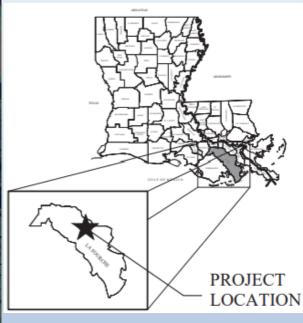
Advertisement: Fall 2024

Construction Duration: 270 days



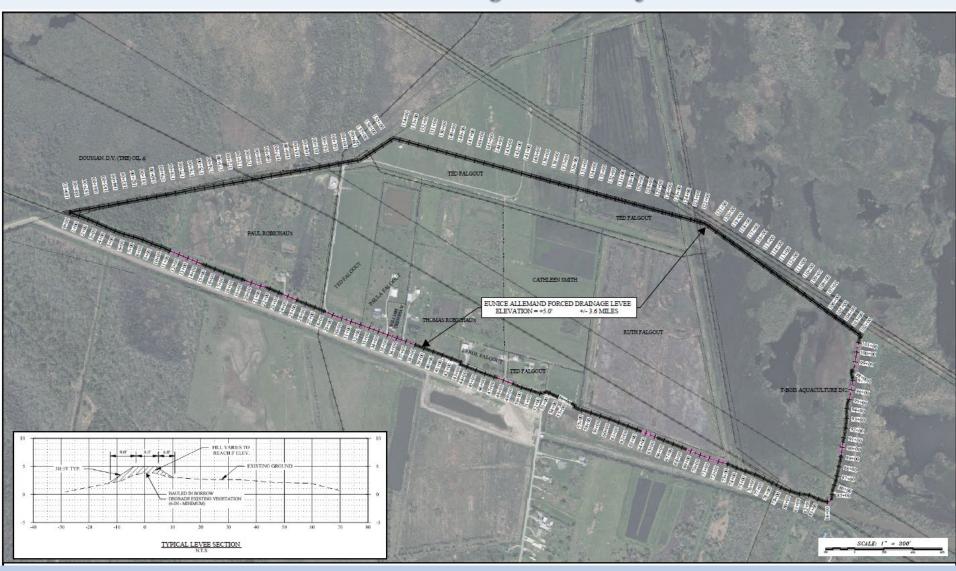
#### **Reach 1 General Project Information**



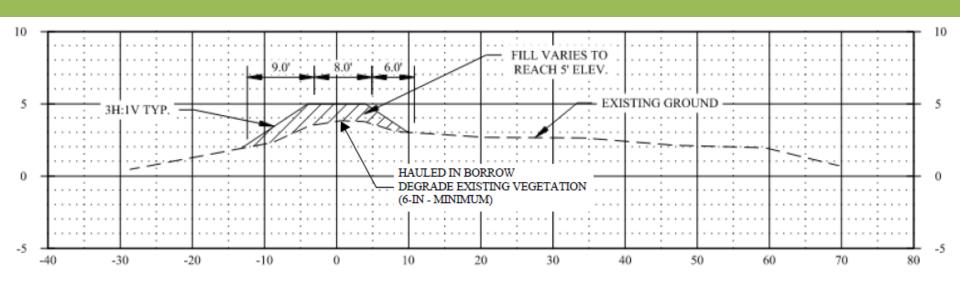


INFO	DESCRIPTION
LOCATION	Larose - Lafourche Parish
FUNDING	CPRA/GOMESA
PROJECT TYPE	Levee construction and improvements

### Reach 1 Project Layout



### **Reach 1 Typical Section**



TYPICAL LEVEE SECTION N.T.S

#### **Reach 1 Construction Cost Estimate**

Description	Quantity	Unit		Unit Price		Total
Mobilization and Demobilization	1	Lump Sum	\$	150,000.00	\$	150,000.00
Construction Layout	1	Lump Sum	\$	50,000.00	\$	50,000.00
Blackwater Canal Segment 10+00 to 73+	00					
Clearing and Grubbing	1	Lump Sum	\$	5,000.00	\$	5,000.00
Excavation and Embankment	7800	Cubic Yards	\$	20.00	\$	156,000.00
Aggregate Surface Course	160	Cubic Yards	\$	75.00	\$	12,000.00
Remove Asphalt Roadway Surface	1000	Square Yards	\$	10.00	\$	10,000.00
Remove & Replace Chainlink Fence	80	Linear Feet	\$	20.00	\$	1,600.00
Seeding	100	Pound	\$	10.00	\$	1,000.00
Fertilizer	2500	Pound	\$	2.00	\$	5,000.00
Haul Road Segment 73+00 to 102+00						
Clearing and Grubbing	1	Lump Sum	\$	5,000.00	\$	5,000.00
Excavation and Embankment	5265	Cubic Yards	\$	35.00	\$	184,275.00
Culverts	1	Lump Sum	\$	20,000.00	\$	20,000.00
Seeding	45	Pound	\$	10.00	\$	450.00
Fertilizer	1500	Pound	\$	2.00	\$	3,000.00
Remaining Segment 102+00 to 189+03, 0+00 to 10+00						
Clearing and Grubbing	1	Lump Sum	\$	87,500.00	\$	87,500.00
Excavation and Embankment	109305	Cubic Yards	\$	35.00	\$	3,825,675.00
Culverts	1	Lump Sum	\$	50,000.00	\$	50,000.00
Seeding	1050	Pound	\$	10.00	\$	10,500.00
Fertilizer	35000	Pound	\$	2.00	\$	70,000.00
Address Pipeline Conflicts	1	Lump Sum	\$	100,000.00	\$	100,000.00
Mitigation	1	Lump Sum	\$	250,000.00	\$	250,000.00

TOTAL ESTIMATE	\$5,926,400
Construction & Mitigation Subtotal	\$4,997,000
Contingency	\$929,400

#### Reach 1 Anticipated Schedule

Design Phase Completion: September 2024

Landrights/ Servitude Agreements: July 2024

Advertisement: November 2024

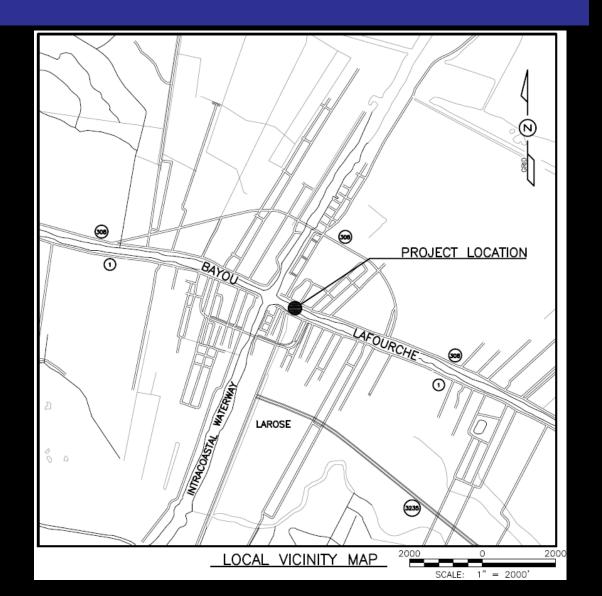
Construction Duration: 180 days





#### **Ted Gisclair Lock**

• Installation of a Steel Barge Floating Gate Structure to form a Lock on Bayou Lafourche in Larose, LA





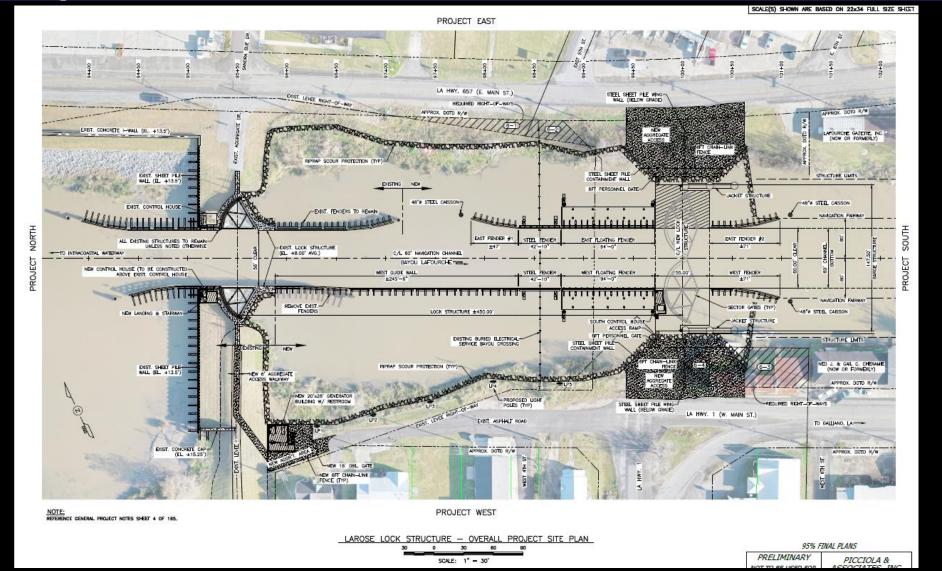
## Ted Gisclair Lock

**Existing Site Plan** 



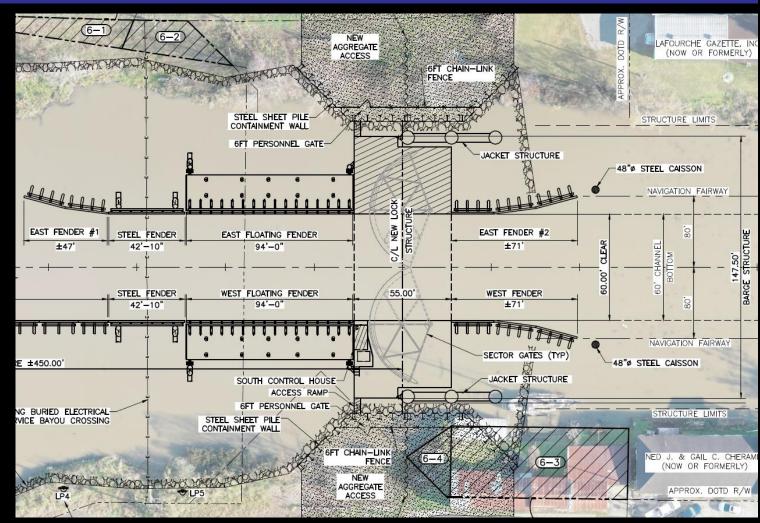


### Ted Gisclair Lock Proposed Site Plan





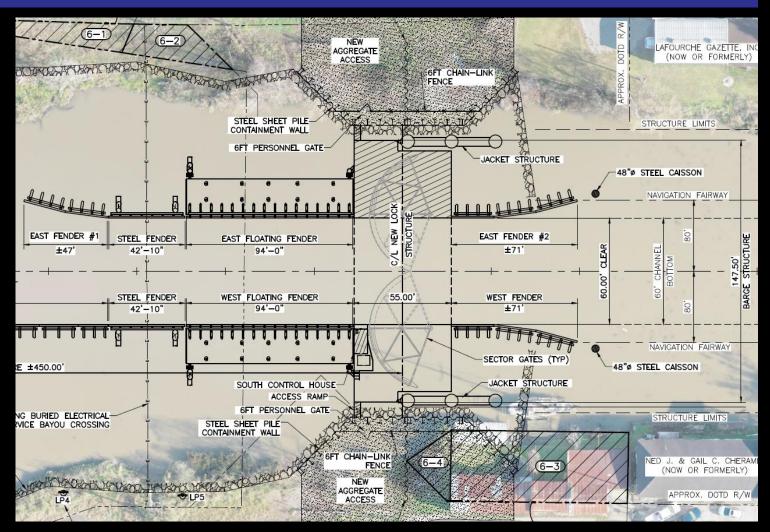
- Sector Gate w/60' Clear
   Opening to +5' EL
   (sill at -13')
- 245' Guide wall from existing gate
- Channel Dredging & Riprap Placement
- Control House, Electrical, Access, and Security Fencing





## Ted Gisclair Lock Status & Cost Estimate

- Design: Complete
- Permitting: Complete
- Land Rights: In Progress
- Construction Duration:365 Days
- Cost Estimate \$30 million
- Advertisement: Fall 2024



# Ted Gisclair Lock Contacts



Picciola & Associates, Inc.

- Nicholas Matherne, nmatherne@slld.org (985) 632-7554
- Picciola & Associates: (985) 632-5786
- Joseph C. Picciola, II, P.E., P.L.S., joep@picciola.com
- Ben Hodson, General Manager, ben@picciola.com
- Marco J. Picciola, III, P.E., marc@picciola.com



## **Section A-East Levee Improvements**

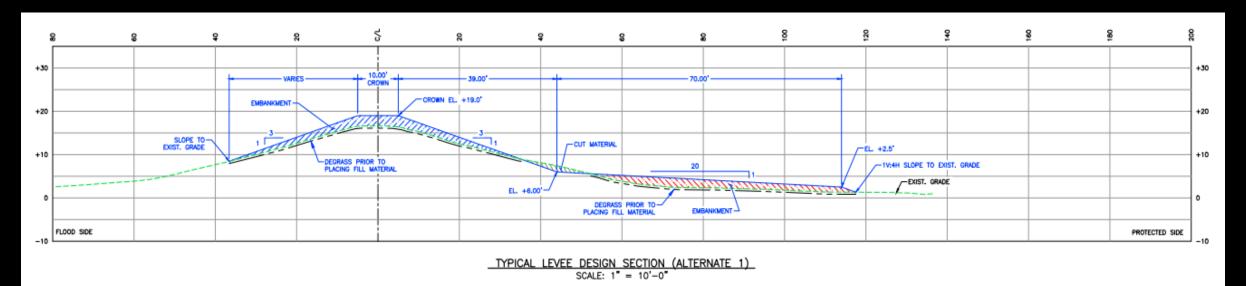
 Placement of earthen embankment to raise levee 3'







## Section A-East Levee Improvements Specifications



#### **Project Features:**

- Existing Crown Elevation: +16.0 Ft NGVD
- Proposed Crown Elevation: +19.0 Ft NGVD
- Total Yards of Material: 209,277

- Proposed Crown Width: 10.0 Ft
- Protected Side Berm Improvements
- 4.73 miles of Levee Improvements



## Section A-East Levee Improvements Status & Cost Estimate

- Design: 90% Complete
- Permitting: Complete
- Land Rights: In Progress
- Construction Duration: 365 Days
- Cost Estimate \$7 million
- Advertisement: Fall 2024





## Section A-East Levee Improvements Contacts



Picciola & Associates, Inc.

- Nicholas Matherne, nmatherne@slld.org (985) 632-7554
- Picciola & Associates: (985) 632-5786
- Joseph C. Picciola, II, P.E., P.L.S., joep@picciola.com
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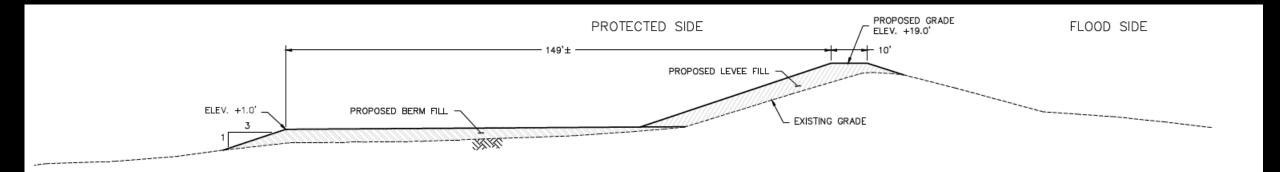
## Section A-West Levee Improvements

 Placement of earthen embankment to raise levee 3'



# Str Lafource District

## Section A-West Levee Improvements Specifications



#### TYPICAL SECTION

#### **Project Features:**

- Existing Crown Elevation: +16.0 Ft NGVD
- Proposed Crown Elevation: +19.0 Ft NGVD
- Total Yards of Material: 180,000

- Proposed Crown Width: 10.0 Ft
- Protected Side Berm Improvements
- 2.42 miles of Levee Improvements



## Section A-West Levee Improvements Status & Cost Estimate

- Design: 60% Complete
- Permitting: In Progress
- Construction Duration: 365 Days
- Cost Estimate \$4.3 million
- Advertisement: Fall 2024





## Section A-West Levee Improvements Contacts



 Nicholas Matherne, nmatherne@slld.org
 (985) 632-7554

Angelette Design (985) 798-7700

 Neil Angelette, P.E., P.L.S., neil@angelette.com



- Construction of approximately 19,200 LF of retention levee alignment to EL +3.0 ft
- Installation of two tidal exchange structures
- Construction of 2,300 LF of aggregate roadway to EL +2.0 ft
- Anticipated Bid Advertisement:
   Q2 FY24







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No.	Description	Date
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-		_
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FINAL DESIGN
THE DOLLMENT IS NOT TO BE USED FOR COMMUNICATION,
BOOKER, RECORDANIZE, COMMENTANCE, SALES OR AS THE
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JOHN J. PLANTANCE, 8, P. E.
LEUDING NO. 1400

THIS DRAWING HAS BEEN REDUCED TO ONE HALF SIZE

THIS DOCUMENT IS THE PROPERTY OF GRAND IS SHEP YARD CHIS'NY. IT IS TO BE USED ONLY. COMBECTION WHO WORK REMO PER FORMED BY SHEP YOUR COMBECTION. SHE WAS A S

SOUTH LAFOURCHE LEVEE DISTRICT

A-EAST BAYOU WATER RETENTION

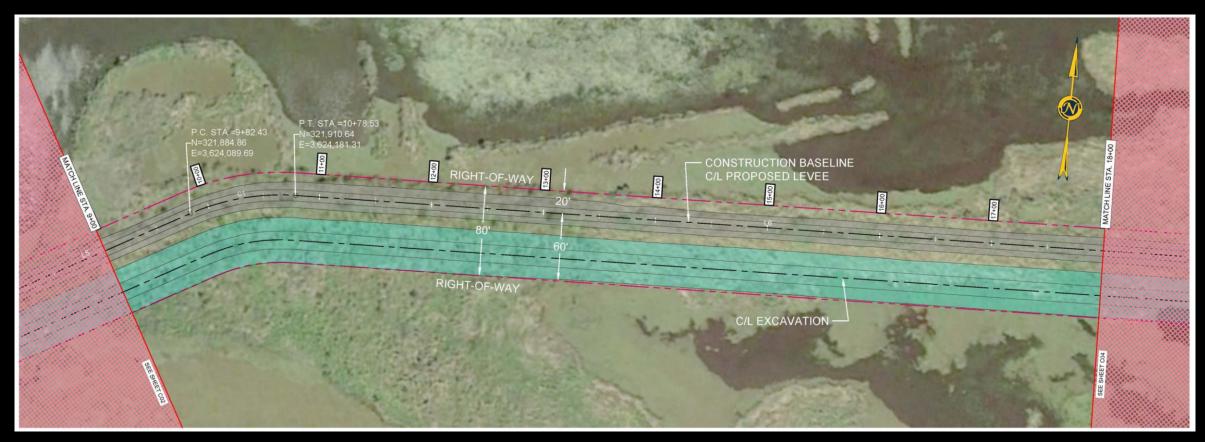
**ACCESS ROUTES** 

Project number	39130-1251/125
Date	JANUARY 202
Designed by	JJ
Drawnby	TP
Checked by	LL
Checked by	SD
Plot Date	January 26, 202

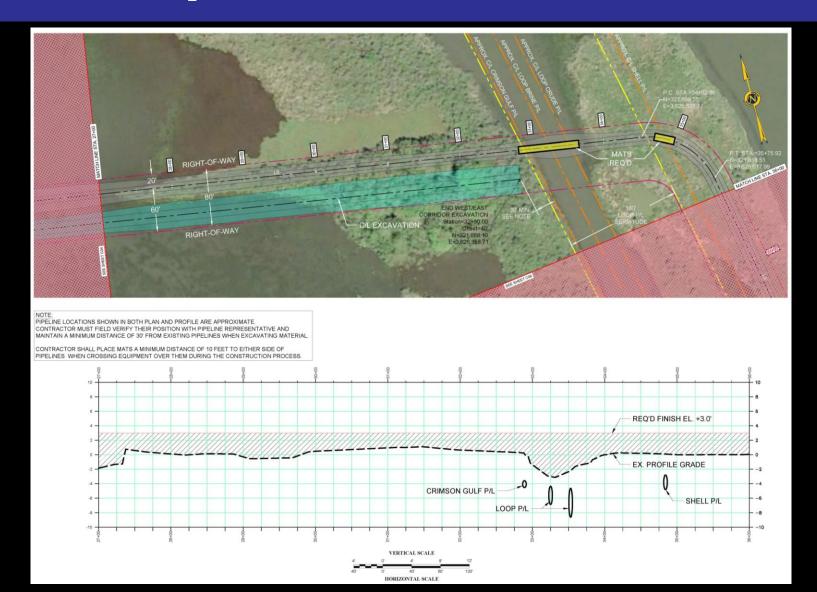
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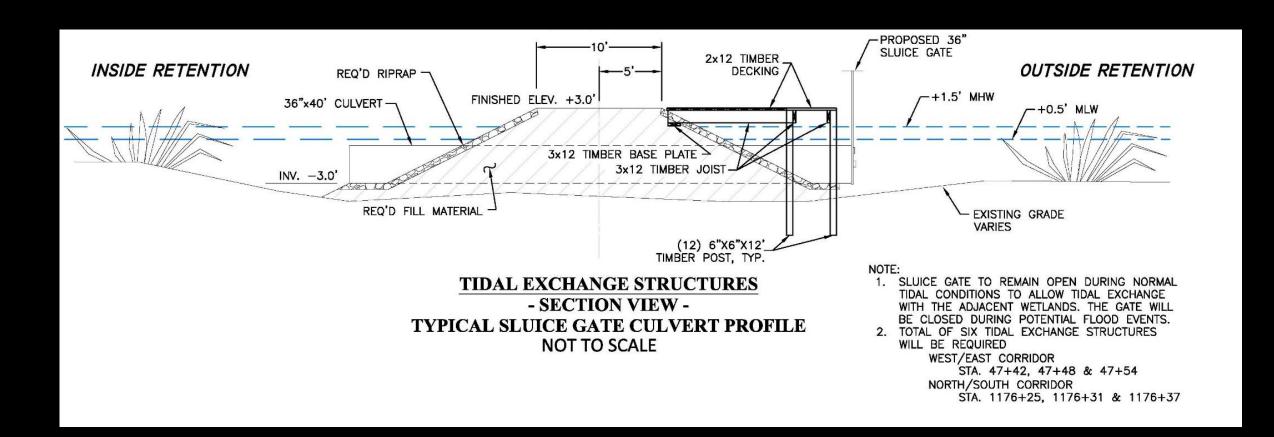




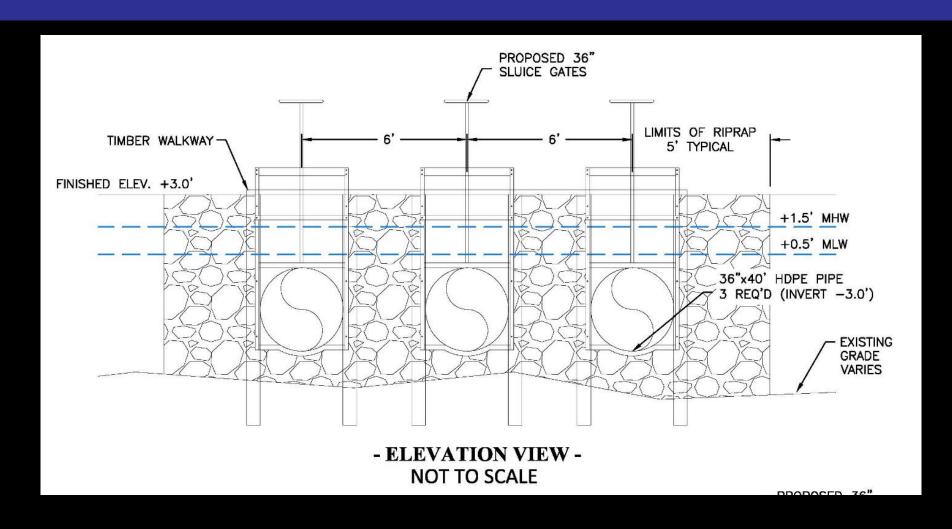














## A-East Bayou Water Retention

- Design: Complete
- Permitting: Complete
- Pipeline Coordination: In Progress
- Land Rights: In Progress
- Cost Estimate \$1.4 million
- Advertisement: Fall 2024





## A-East Bayou Water Retention Contacts



 Nicholas Matherne, nmatherne@slld.org
 (985) 632-7554

• GIS Engineering, LLC (985) 632-5596

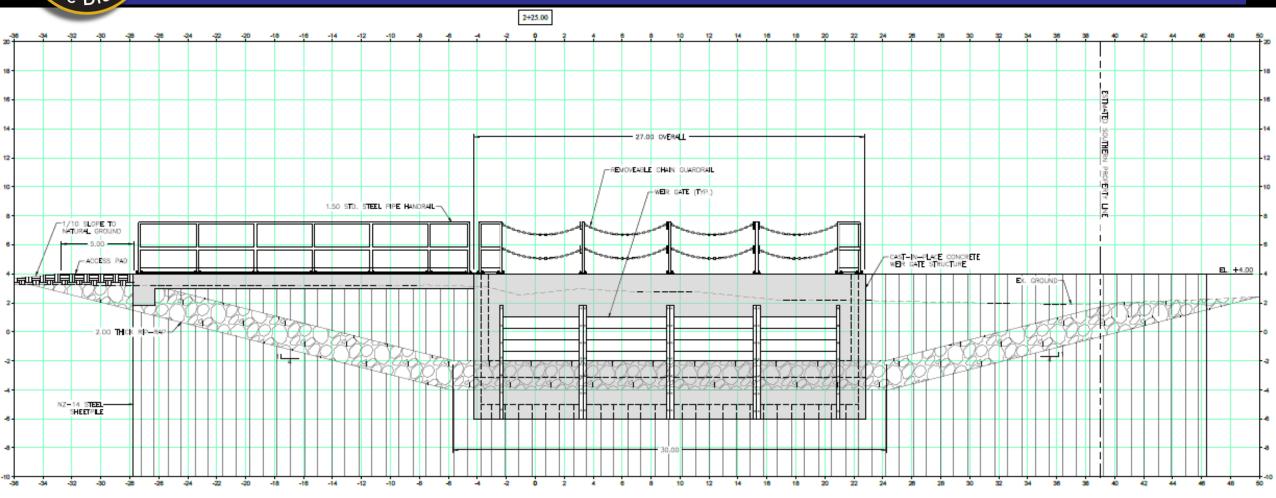
• John Plaisance, P.E., L.S. jplaisance@gisy.com



- Construction of 4-Bay Variable Crest
   Weir structure on Breton Canal in Galliano, LA
- Some Dredging work involved

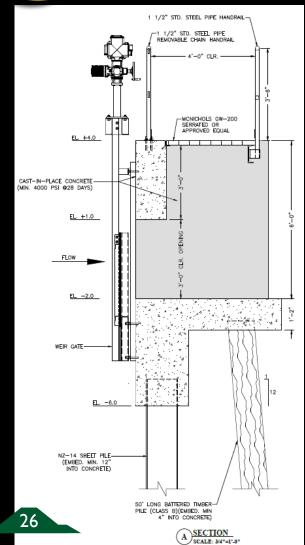


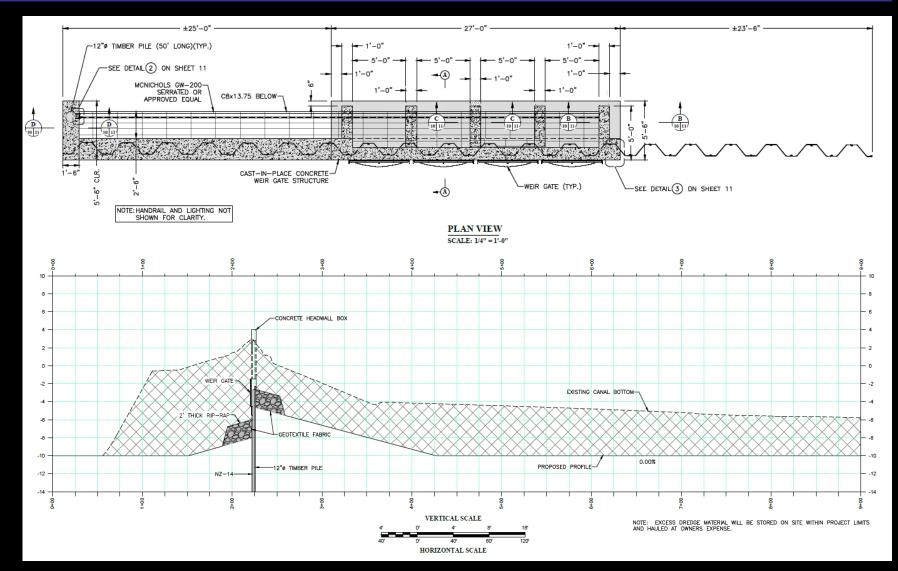




CENTERLINE CROSS SECTION

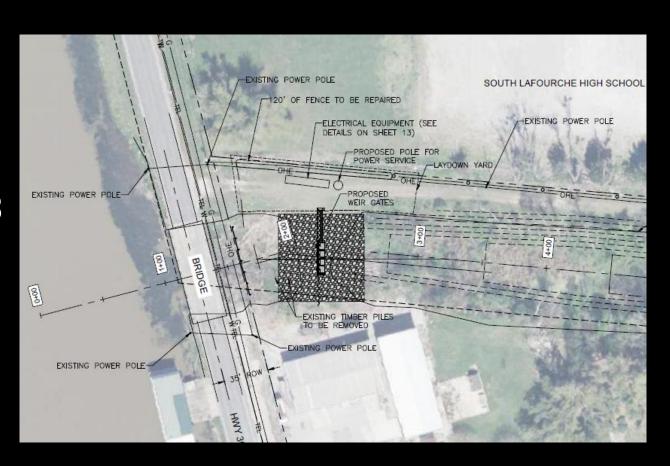








- Design: Complete
- Permitting: Complete
- Cost Estimate \$950,000
- Advertisement: Ends April 18



## Breton Canal Weir Contacts



 Nicholas Matherne, nmatherne@slld.org
 (985) 632-7554

• GIS Engineering, LLC (985) 632-5596

• John Plaisance, P.E., L.S. jplaisance@gisy.com



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#### V. Questions and Discussion

#### VI. Adjourn



People

Help the

Land

## South Grand Chenier – Baker Tract Marsh Creation Project ME-32

Breese Barnes
Design Engineer
March 2024







#### Outline

- Project Location
- Schedule
- Layout of Marsh Creation Areas
- Layout of Borrow Area
- Layout of Earthen Containment Dikes
- Dredge Pipeline Corridor
- Summary of Bid Quantities

# Water Air Plants Animals People Soil Water Air Plants Helping People Help the Land

### **Project Location**





INFO	DESCRIPTION
LOCATION	Mermentau Basin, Cameron Parish
FUNDING	CWPPRA – Natural Resources Conservation Service (NRCS) Sponsored
PROJECT TYPE	Marsh Creation

Helping

People

Help the

Land

## **Project Location**





People

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### Schedule

Phase 2 Approval: January 2024

Permitting: Submitted January 2024

Anticipated Advertisement: Winter 2024 – Spring 2025 sam.gov

Construction Duration: 261 days (includes 34 weather days)



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Land

### Layout of Marsh Creation Areas

Marsh Creation Area	Total Area (acres)		
Base MCA	389		
Unconfined MCA	12		
Alternative MCA	66		
Total	466		

- Base MCA: Fully confined
- Unconfined MCA: Filling in of Price Lake Levee borrow ditch
- Alternative MCA: Semi-confined dewatering area, no direct placement of material within cell



# Helping People Help the

Land

## Layout of MCA Borrow Area

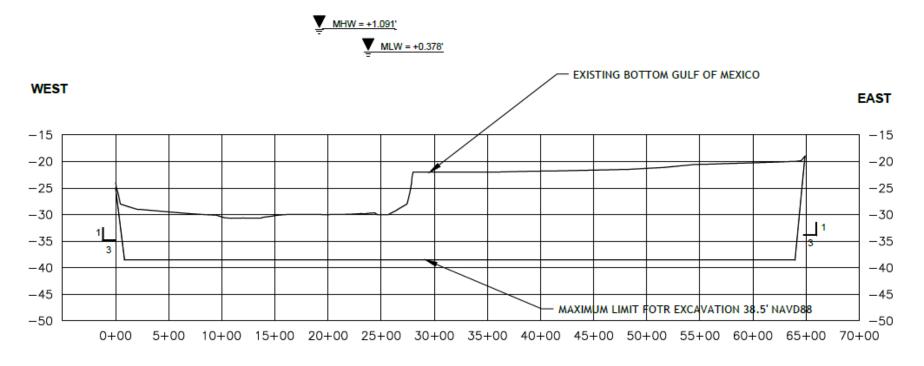




Help the

Land

#### Profile of Borrow Area



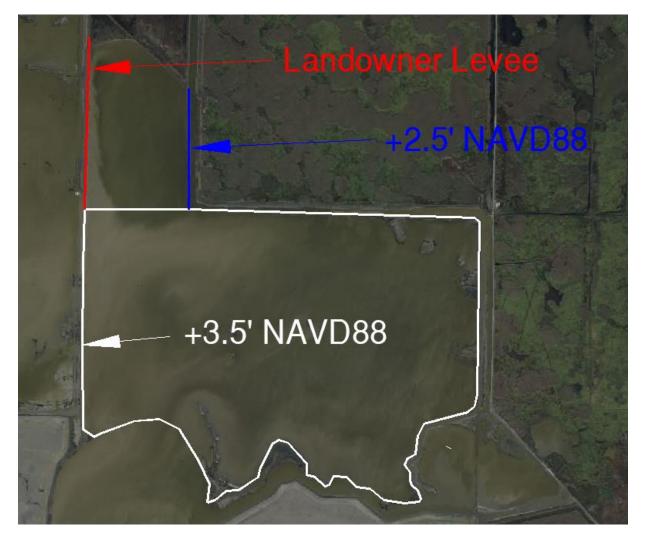
- Very soft clays up to ~10 feet below mudline, stiff clays below
- Maximum Limits for Dredge Excavation 38.5' NAVD88 (Allowable Over Depth 3.0')



# Water Air Plants Animals People So Water Air Plants Helping People Help the Land

### Layout of Earthen Containment Dikes

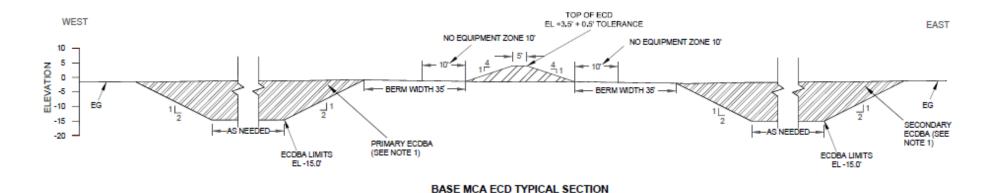
- All ECDs to be constructed as part of Base bid
- No dewatering directly into drainage canal/Hog Bayou
- Additional volume to fill Alternative MCA to be placed in Base MCA, will then be dewatered into desired location

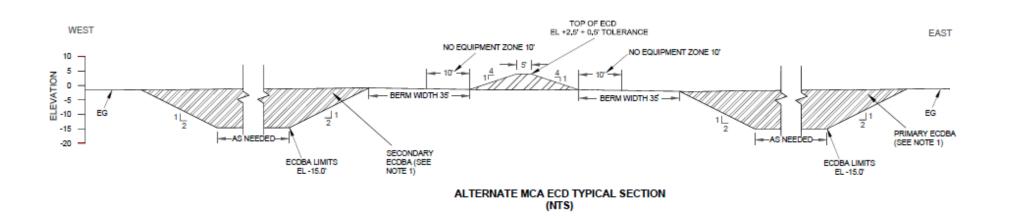




# Animals People Son Water Air Plants Animals People Son Water Air Plants A Helping People Help the Land

### Typical Section of Earthen Containment Dike







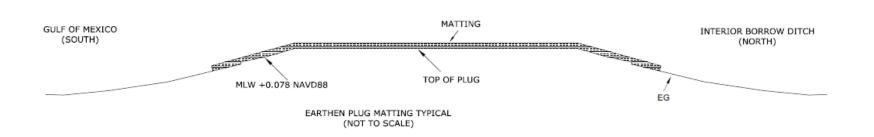
# Animals People Soil Water Air Plants Animals People Soil Water Air Plants AHelping People Help the Land

## Dredge Pipeline Corridor

- Mostly open water from borrow area to marsh creation area
- Matting must be deployed over earthen plug at shoreline for protection



Matting Area

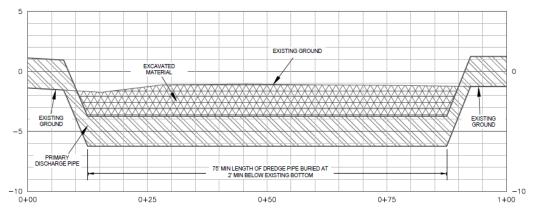




# Soil Water Air Plants Animals People Soil Water Air Plants Animals People Soil Water Air Plants A Helping People Help the Land

## Dredge Pipeline Corridor

- 75' Pipe segment must be buried to allow for landowner boat access
- Crossing must be clearly marked for access





**USDA Natural Resources Conservation Service** 



# Water Air Plants Animals People Soi Water Air Plants A Helping People Help the Land

## **Bid Quantities**

Item No.	Work	Spec No.	Quantity	Unit	
1	Mobilization/Demobilization	8	1	LS	
2	Construction Surveys	7	1	LS	
3*	Marsh Creation Fill	421	1,621,822	CY	
4*	Earthen Containment Dikes	423	20,375	LF	
5	Staff Gauges	93	27	EA	
6*	Marsh Creation Fill - Alternative MCA	421	202,272	CY	
7	Staff Gauges - Alternative MCA	93	8	EA	
Bid Item numbers with * are estimated quantities					



Helping People Help the Land



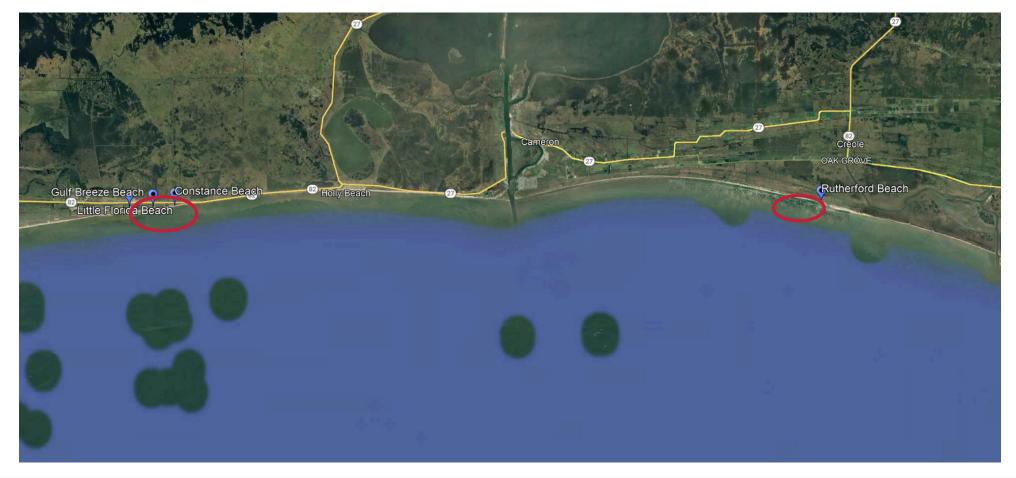
## **Department of Agriculture**

#### Natural Resources Conservation Service

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#### PROJECT LOCATION



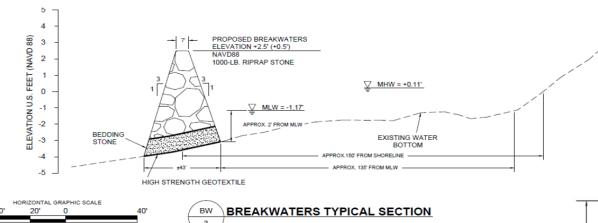
#### PROJECT OVERVIEW

- Extension of previous breakwater project at Little Florida Beach and Rutherford Beach
- ~10,500 LF of shoreline protection for Gulf Breeze Beach and Constance Beach
  - 26 segmented breakwaters
  - Plan to source material from existing breakwaters further offshore
- ~ 4,000 LF of shoreline protection for Rutherford Beach
  - 2 segmented breakwaters
  - Positioned on eastern terminus and western terminus of first project
- Armor Stone and bedding stone construction, no encapsulated LWA core
- +2.5 ft Minimum Elevation
- Estimated for Bid: Summer/Fall 2024
- Estimated for Construction: Late 2024 to Early 2025 Cameron Parish Gulf Shoreline Stabilization Project (ME-38)

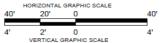


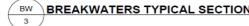


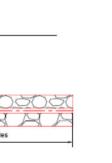




#### TYPICAL SECTIONS





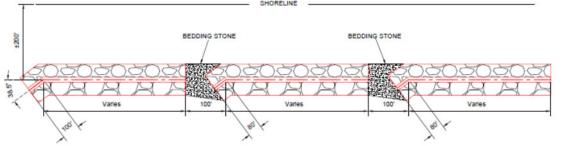


±150

GULF BREEZE AND CONSTANCE **BEACHES** 

SHORELINE = 0.0'

NAVD88



#### RUTHERFORD **BEACH**

#### UNIQUE ASPECTS

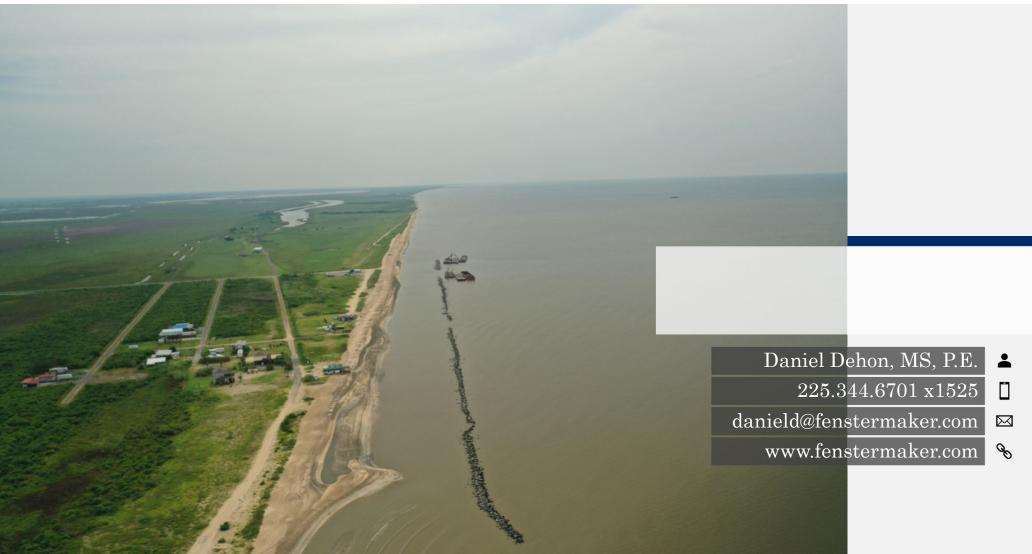
- Utilizing armor stone from existing breakwaters
- Sustainable to repurpose material from breakwaters beyond design life
- This does come with challenges to maneuver the armor stone in the Gulf



#### Mermentau Inundation Relief Project No. 65MTRR7701

- Two Projects currently advertising for bid
  - Water Control Structures
  - Rehabilitation of East End Locks
- Both are located at Rockefeller Wildlife Refuge in Cameron Parish
- Bidding closes on April  $11^{th}$  at 2:00 PM









## GRAND BAYOU FRESHWATER REINTRODUCTION

March 26, 2024









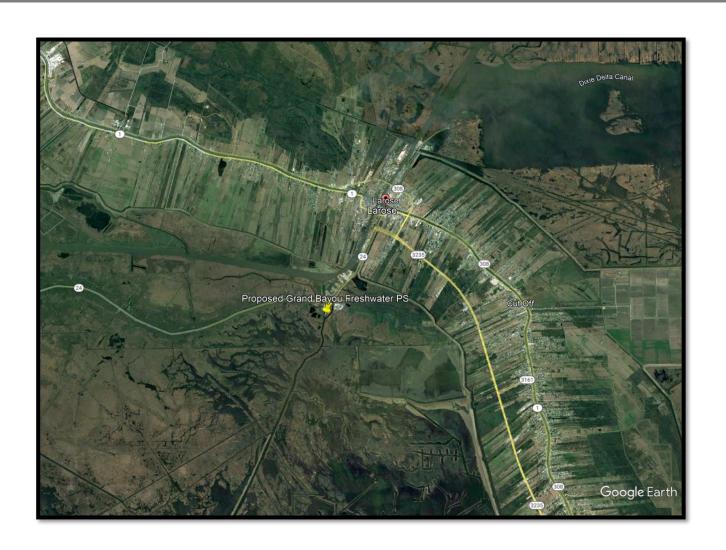






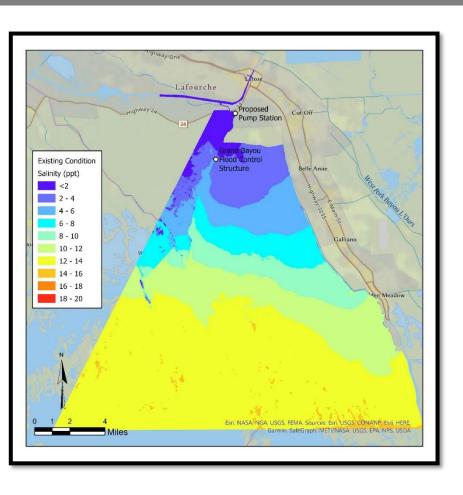
#### Project History /Location

- 1996 Original project initiated which included water control structures in the levee system on the west bank of Grand Bayou.
- 2002 the project was downsized and later deauthorized due to cost and benefits.
- 2014 the project was picked up again as the Parish developed its Multi-Year Implementation Plan for the Treasury Department as part of the RESTORE Act funding.
- 2019 LPG bonded out its GOMESA revenue.
- 2020 LPG authorized GIS Engineering to begin the design work on the project and move it to construction.

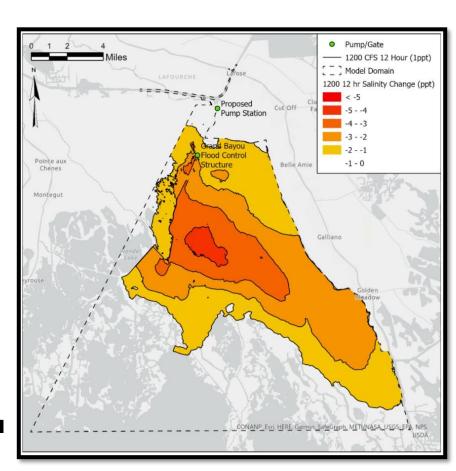




## Project Benefits Hydraulic Modeling – Salinity Reduction



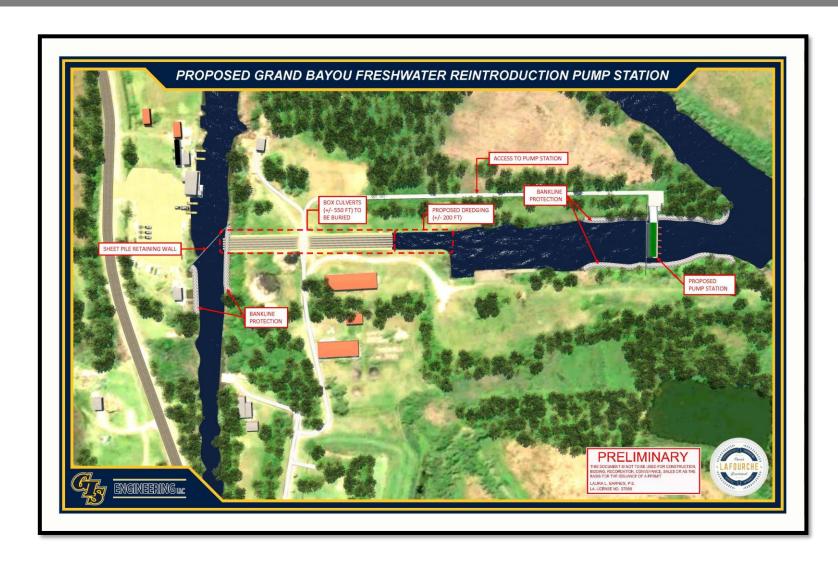
- Lafourche Parish & the Terrebonne Basin
- Approximately 73,000
   acres of anticipated
   marsh nourishment to
   see minimum 1 part per
   thousand of salinity
   reduction.
- 1,200 cfs Freshwater
  Diversion Pump Station
  from the Atchafalaya
  River, down Grand Bayou
  via the GIWW.





#### Project Overview

- Demolition
- Boat Launch
- Sheet Pile Cutoff Wall
- Excavation
- Bridge & Access Road
- Bankline & Scour Protection
- Pump Station





## Project Features Demolition

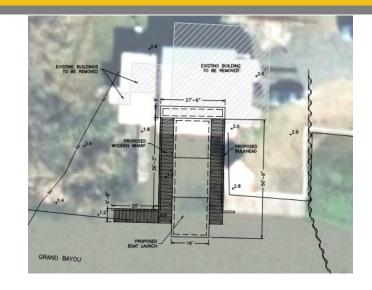
- Concrete Tank Foundations
- Buildings
- Boat Sheds
- Docks

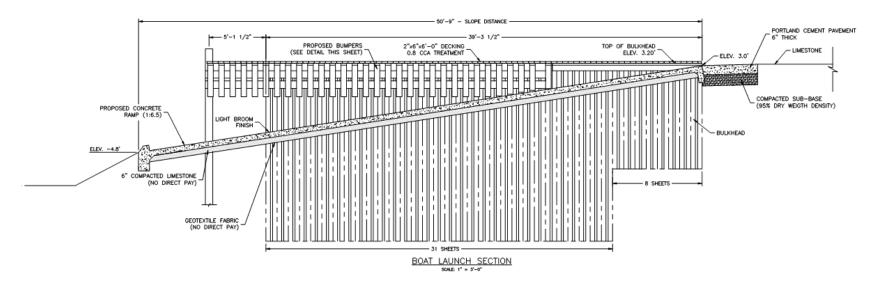




## Project Features Boat Launch

- Bulkhead
- Wooden wharf
- Class B timber piles
- 6" compacted limestone
- Reinforced concrete ramp
  - #4 rebar
  - 4000 psi concrete

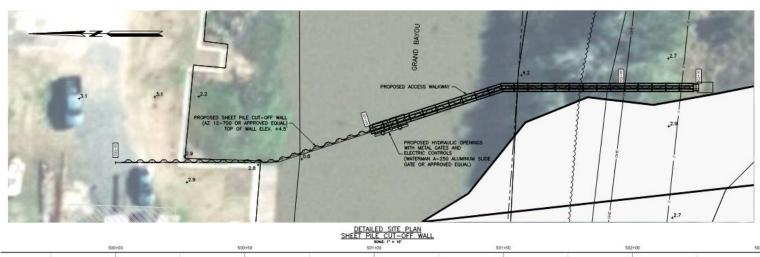


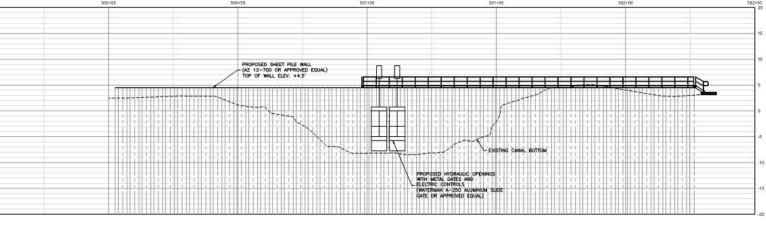




## Project Features Sheet Pile Cutoff Wall

- AZ 12-700 steel sheet pile cutoff wall will be installed to mitigate water recirculation during pump station operations.
- Cutoff wall includes (2) sluice gates that can be operated to allow natural flow of freshwater from the GIWW as the tide allows.
- TOW EL = +4.5'
- TIP EL ~ -20'
- Length ~ 230 LF



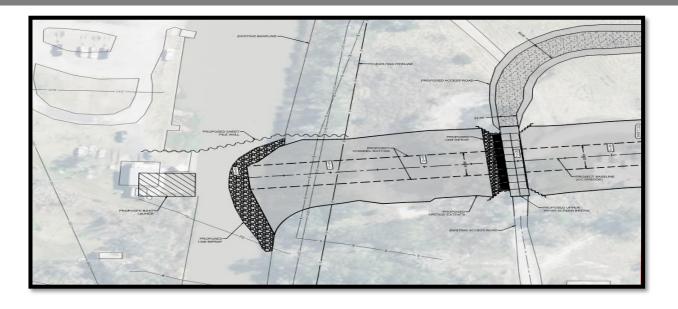


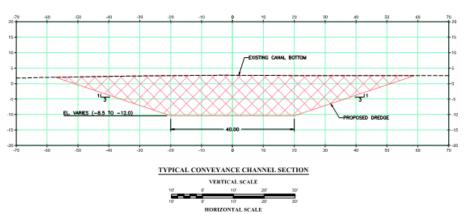


# Project Features Excavation



- Conveyance channel
  - EL -8' to -10'
  - 3:1 side slopes
  - 40' wide base



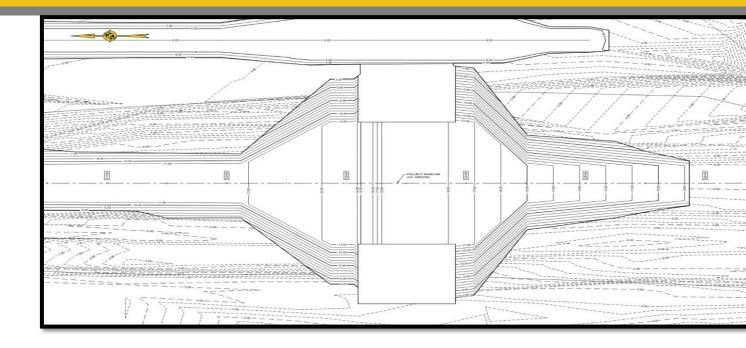


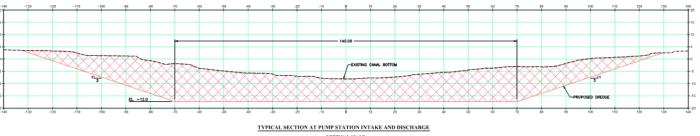


# Project Features Excavation

- Pump Station
  - EL -16.25'
  - 3:1 side slopes
  - 140' wide sump

- Estimated Excavation
  - 150,000 200,000 CY



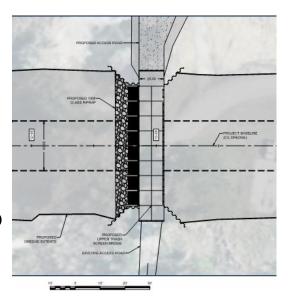


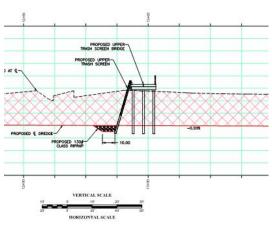




# Project Features Bridge and Access Road

- Access consists of a conveyance channel bridge crossing and an aggregate road.
- 20' wide x 60 LF precast concrete bridge constructed to support HS-20 load vehicles.
- Access road = 1,350 LF of aggregate roadway capable of supporting HS-20 loading.
- Width varies from 20'-45'.
- Aggregate = 1000 CY







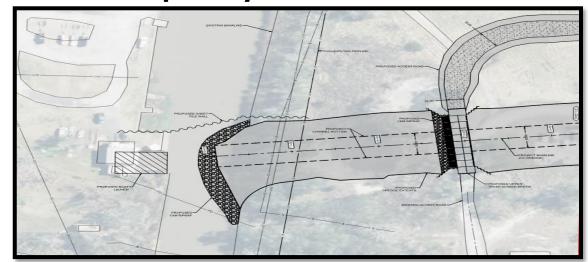


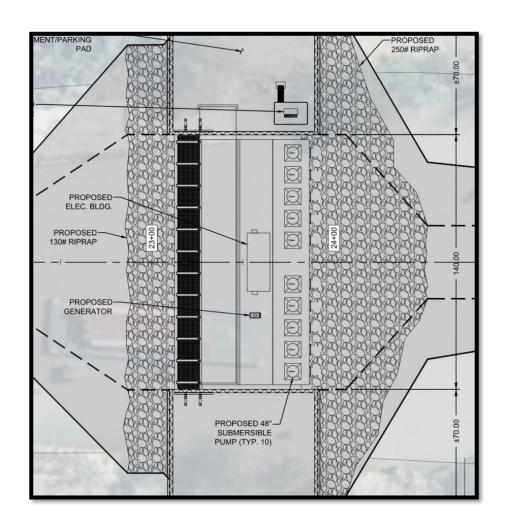
# Project Features Bankline Stabilization and Scour Protection



- 130 lb. and 250 lb. Riprap
- Placed at key scour points
  - Hwy. 24 Bridge
  - Mouth of the conveyance channel
  - Sump intake and discharge

Estimated quantity = 3500 TNS







# Project Features 1200 cfs Pump Station

## Operation

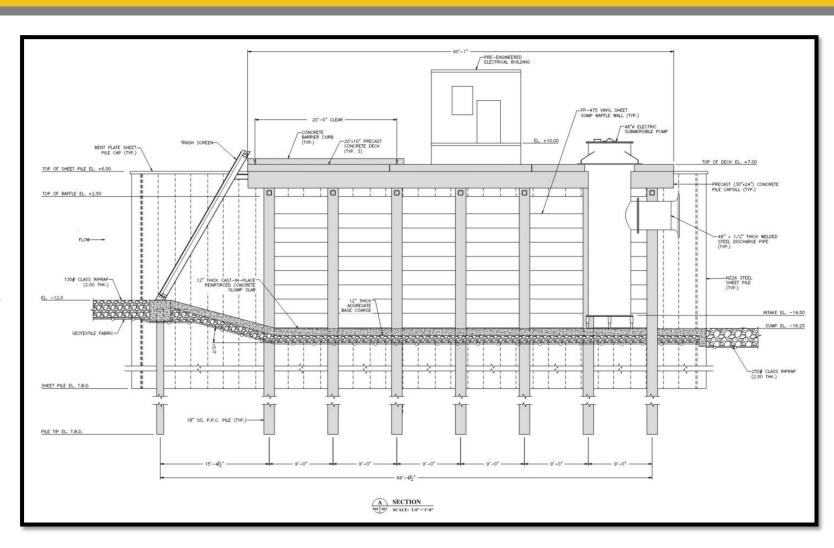
- Pump on and off times will be dependent on salinity readings at the GIWW, the pump station, and the flood control structure to the south
- The pump station will ultimately be pumping, on average, 12 hours per day





# Project Features Pump Station

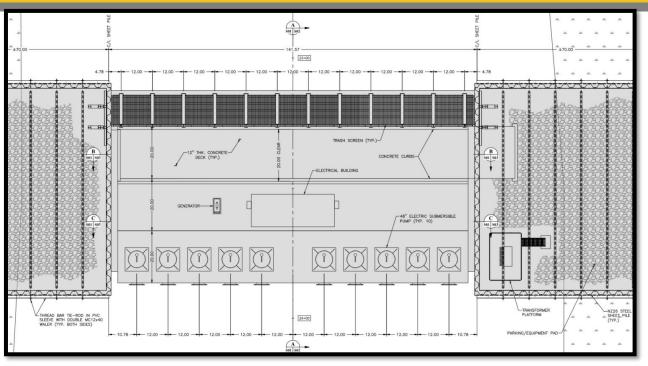
- Automated trash screen
  - 140 LF
  - EL -12' to +7'
- 18" square concrete piles
  - Sump and deck
  - · 10,000 LF
- 12" thick reinforced concrete sump slab
- FP-475 Vinyl sheet baffle walls
  - TOW = EL + 2.5'
  - TIP ~ EL -20'
- HSS 8x8x1/2" beams

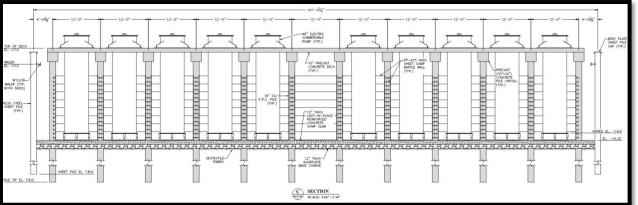




# Project Features Pump Station

- 12" thick concrete deck
  - TOW = EL +7'
- (10) 48" electric submersible pumps
  - 120 cfs ea.
  - 200 HP
- Electrical building
- 80KW generator







# Summary of Preliminary Quantities



Item	Description	Unit	Estimated Quantity	Item	Description	Unit	Estimated Quantity
1	Mobilization & Demobilization	1	LS	10	Geotextile Fabric	10,500	SY
2	Demolition and Removal of Obstructions	1	LS	11	Steel H-Piles	2,100	LF
3	Boat Launch	1	LS	12	18" Precast Concrete Piles	10,000	LF
4	Utility Relocations	1	LS	13	Trash Screens (Automated and non-Automated)	2	EA
5	Electric Submersible Pumps	10	EA	14	Structural Concrete	1,000	CY
6	Channel Dredging	220,000	CY	15	Structural Steel	36	TNS
7	Rip Rap	3,500	TNS	16	Steel Sheet Pile Wall	45,000	SF
8	Embankment	6,600	CY	17	Vinyl Baffle Walls	10,600	SF
9	Aggregate	1,000	CY	18	Chain Link Fencing	1,000	LF



# Project Schedule

- Preliminary Package Submittal: May 2023
- Anticipated Final Design Package Submittal: November 2024
- Anticipated Permit: December 2024
- Anticipated Bid Advertisement: January 2025
- Construction Duration: 18-24 months





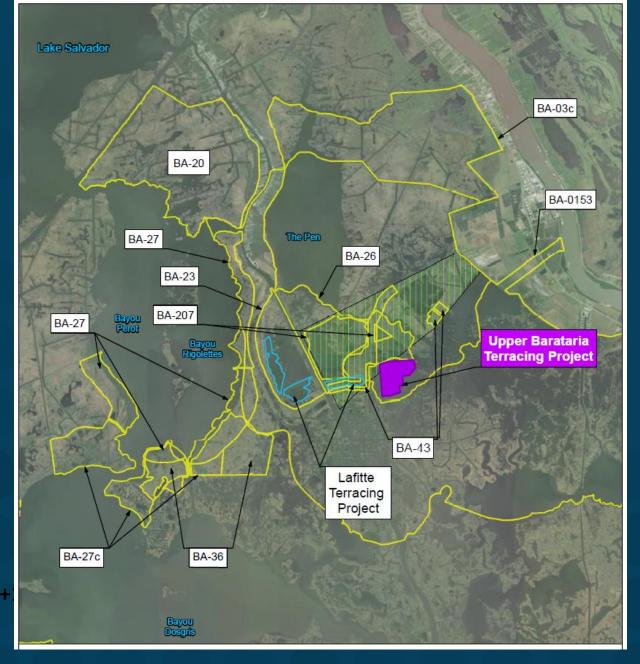


UPPER BARATARIA TERRACING

CPRA Coastal Industry Week March 26, 2024

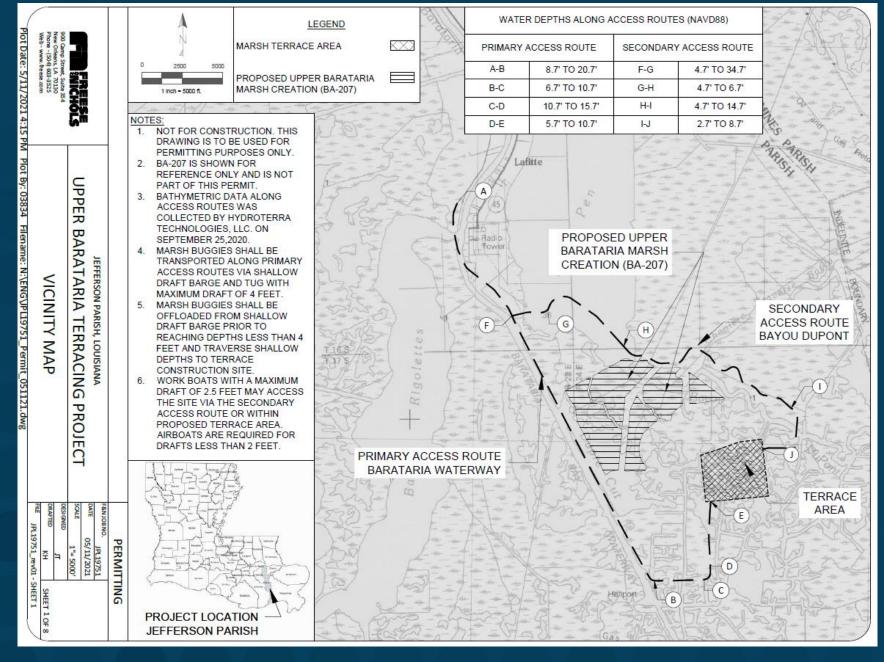
# Project Overview

- Upper Barataria Terracing Project
- Lead: Jefferson Parish Government
- Engineer: Freese and Nichols, Inc.
- Landowner: Parish School Board
- Funding Sponsor: NFWF (2022 NCRF)
- 450 Acres of Marsh Restoration
- 33,000 Linear Feet of Earthen Terraces
- Stabilized with Native Vegetation
- Joint Permit Received (DNR/USACE)



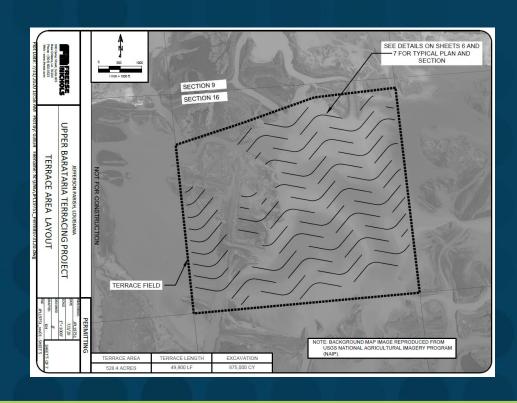
# **Access Routes**

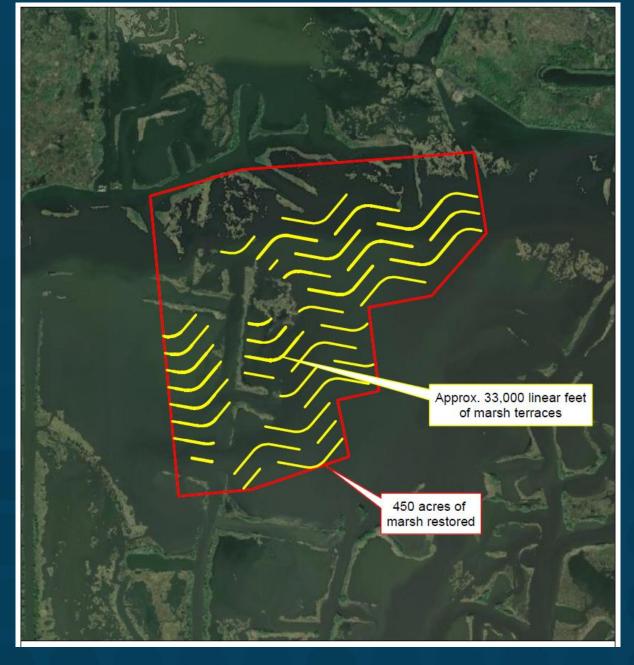
- Lafitte: 28 miles
- Primary:
  - Barataria Waterway
- Secondary:
  - Bayou Dupont

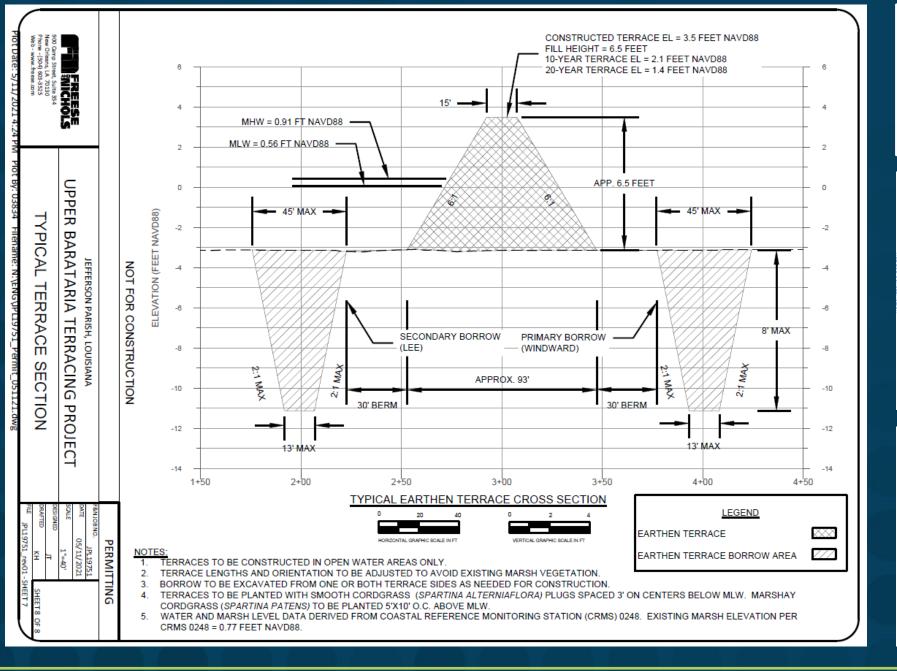


# Terrace Design

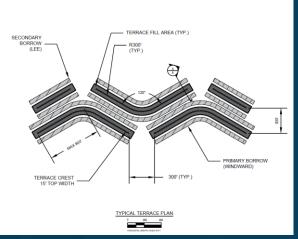
- Design to Maximize Footprint on School Board Property
  - o 49,900 LF Terraces
  - 528.4 Acres Marsh Habitat

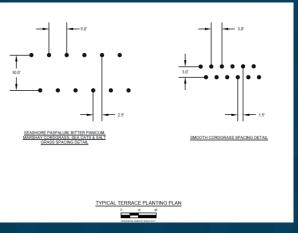






Terrace Side Slopes 6:1
Crown Width of 15 FT
Top Elevation of 3.5 FT





# Estimated Quantities (Key Features)

Item No.	Description	Unit	Quantity
1	Survey	LS	1
2	Geotechnical Analysis	LS	1
3	Cultural Resource Analysis	LS	1
4	Earthen Terraces	LF	33,000
5	Dredge Volume	CY	875,000
6	Dredge Placement Area	AC	70
7	Vegetative Plantings	AC	12

# Project Schedule

Consistency Determination Received (DNR)

June 28, 2021

Construction Permit Received (USACE)

May 23, 2022

NFWF Project Period Start

March 1, 2023

Final Engineering & Design

May / June 2024

Anticipated Bid Advertisement

August / September 2024

**Construction Duration** 

120 Days

**Monitoring Duration** 

1 Year

# QUESTIONS?









## LOCAL POC's:

Nina Reins: (504) 478-1065, nina.reins@freese.com

Matt Salmon: (504) 291-3496, matthew.salmon@freese.com

Kiara Horton: (504) 300-8267, kiara.horton@freese.com

Ryan Fikes: (512) 617-3141, ryan.fikes@freese.com



## 2024 CPRA Coastal Industry Week

## Coastal Industry Briefing and Construction Project Forecast – Partner Led

March 26<sup>th</sup>, 2024 2:00pm – 3:30pm CST

#### Virtual Meeting

 Zoom URL:
 https://us06web.zoom.us/j/82284982515

 Meeting ID:
 822 8498 2515

 Phone Audio:
 (215) 861-0674

 Phone Audio Passcode:
 5918836

#### I. Opening Remarks

#### II. Upcoming Risk Reduction Projects to be Bid for Construction (2:00 pm – 2:45 pm)

- a. Upcoming TLCD Projects: Reggie Dupre, TLCD; David Boudreaux, Delta Coast Consultants, LLC
- b. Upcoming NLLD Projects: Arthur Ostheimer Jr., North Lafourche Levee District
- c. Upcoming SLLD Projects: Joe Picciola, Picciola & Associates, Inc.; Neil Angelette, Angelette Design, LLC; John Plaisance, GIS Engineering, LLC
- d. Upcoming LAILD Tidal Flood Risk Reduction Projects: Miles Garriott, Evans-Graves Eng., Inc.

#### III. Upcoming Restoration Projects to be Bid for Construction (2:45 pm – 3:20 pm)

- a. ME-0032 South Grand Chenier Baker Tract Marsh Creation Project: Breese Barnes, NRCS
- b. Cameron Gulf Shoreline Protection Project: Daniel Dehon, C. H. Fenstermaker & Associates
- c. Mermentau Basin Inundation Relief Project: Daniel Dehon, C. H. Fenstermaker & Associates
- d. Upcoming Vermilion Parish Projects: Nick Sonnier, Sellers & Associates, Inc.
- e. Grand Bayou Freshwater Reintroduction: Kevin Dezarn, GIS Engineering, LLC
- f. Catfish Lake Living Shoreline Lafourche Parish: Tyler Ortego, Natrx; Nick LeBlanc, Danos
- g. Upper Barataria Terracing: Matt Salmon, Freese & Nichols, Inc.

#### IV. Other Project Presentations (3:20 pm – 3:30 pm)

- a. Upcoming Ducks Unlimited Projects: Brad Lambert, Ducks Unlimited
- b. Sunset Park Restoration Project: Andrew Woodroof, Digital Engineering
- c. Fourchon Beach Maintenance Restoration and Protection Project: Bryce Autin, Greater Lafourche Port Commission

#### V. Questions and Discussion

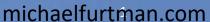
#### VI. Adjourn



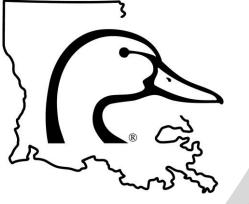
Upcoming South LA DU Projects
CPRA Industry Day

Brad Lambert, PE

Regional Engineer - South Louisiana

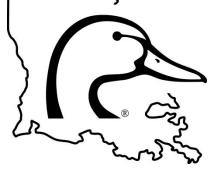


# Notes/ Overview



- Thanks to CPRA for allowing us to participate and being a partner on some of these projects.
- Presentation includes:
  - 7 of our larger projects coming up within the next few months
  - Relatively smaller projects vs. one large project
  - All located within south LA
  - Most are marine type construction
  - Ongoing with design and/or permitting currently for most of these projects

# Types of Projects



Goal = Substantial Completion by June 30, 2025, with exception of HWY 1 terracing

- Structures/Embankment
  - Marsh Island WCS & Breach Repairs
  - Lake Hackberry Shoreline Restoration
  - Boyd Allen WCS

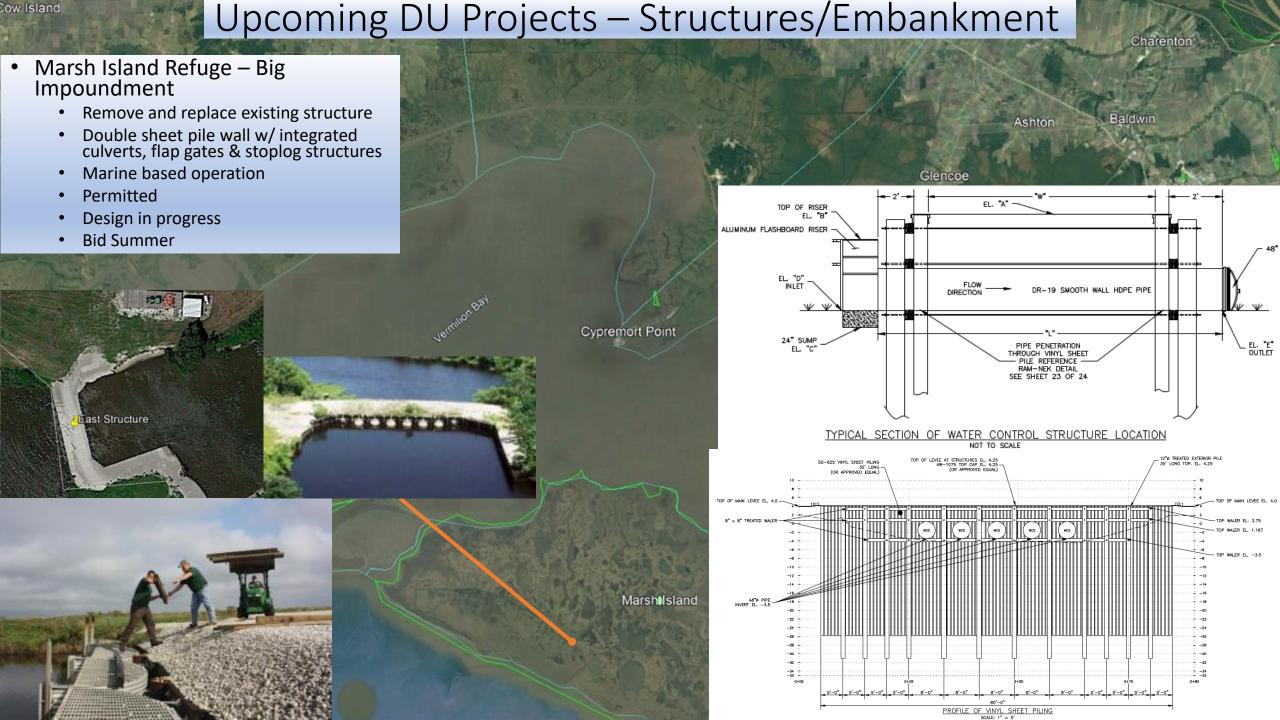


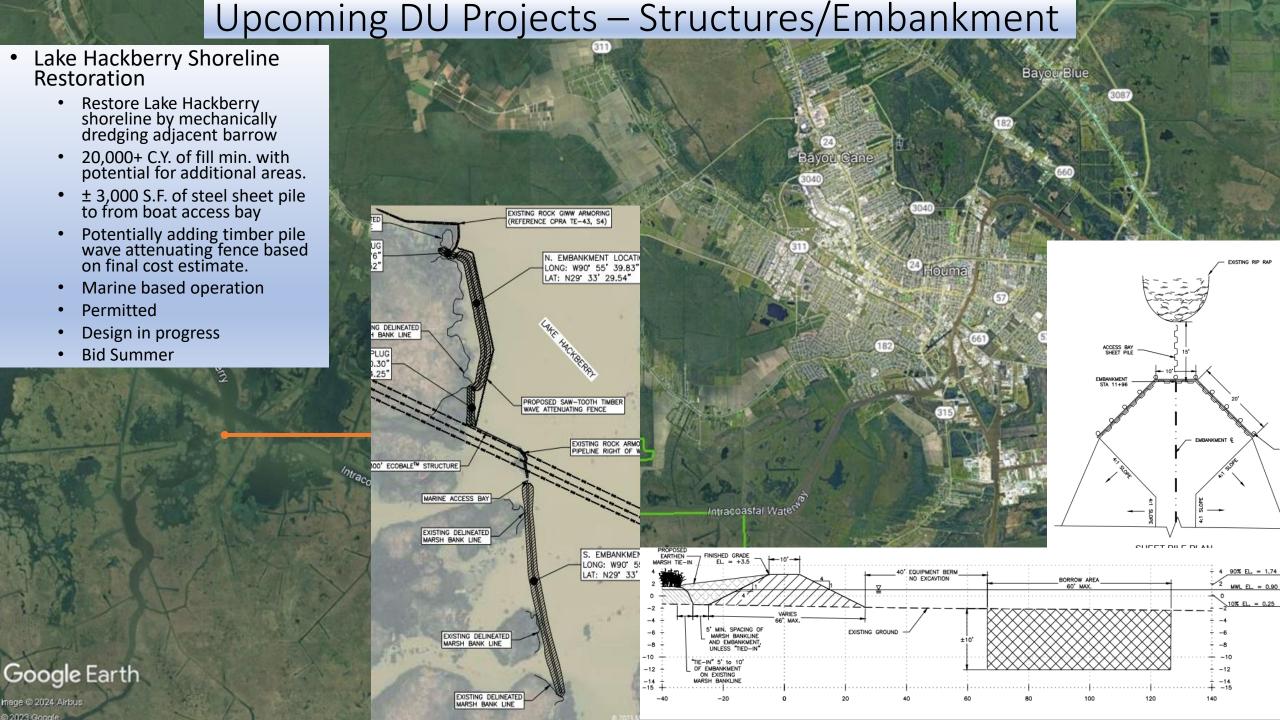
- Earthen Terraces
  - Bayou L'Ours PH V
  - Meraux Foundation
     PH II
  - HWY 1 Terraces & Living Shoreline

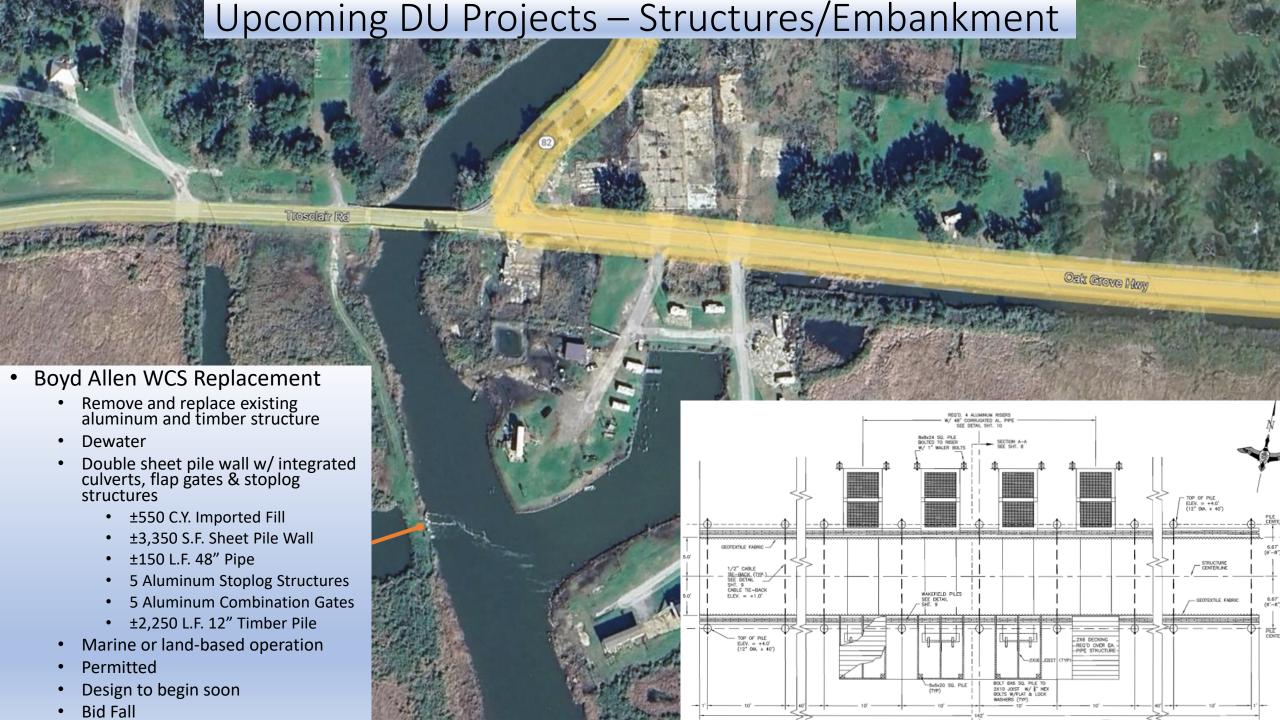


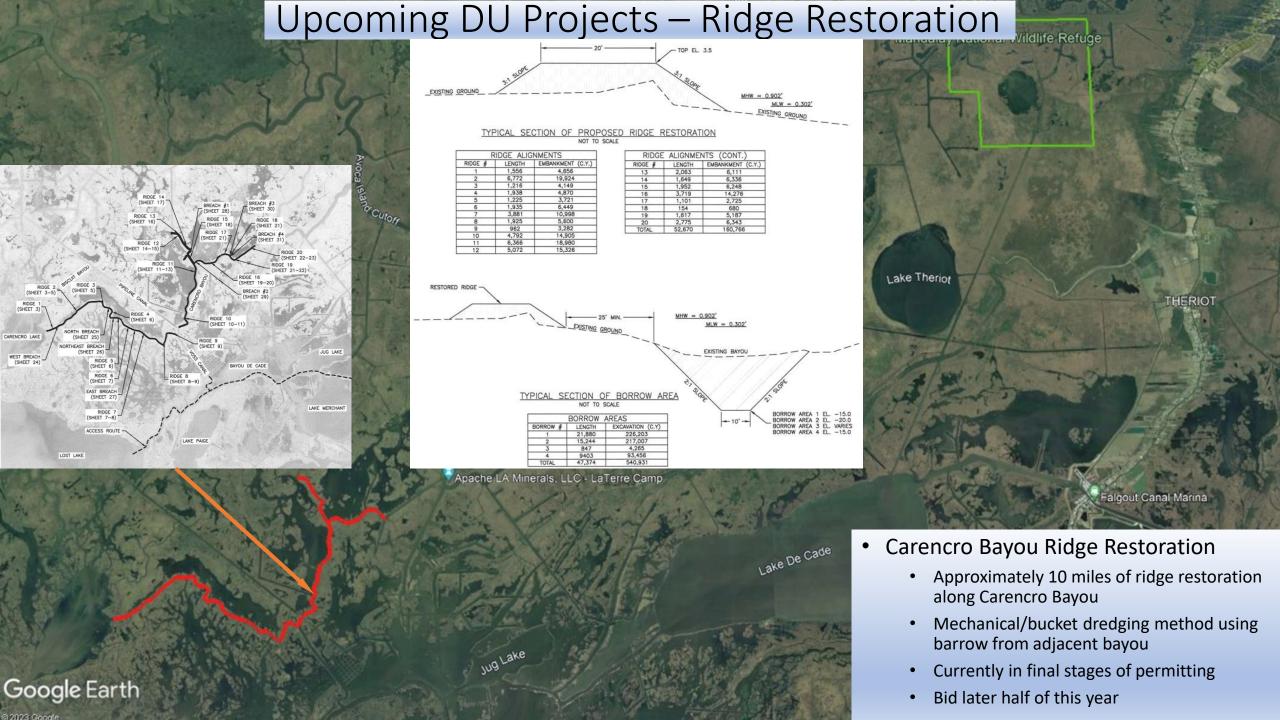
- Ridge Restoration
  - Carencro Bayou

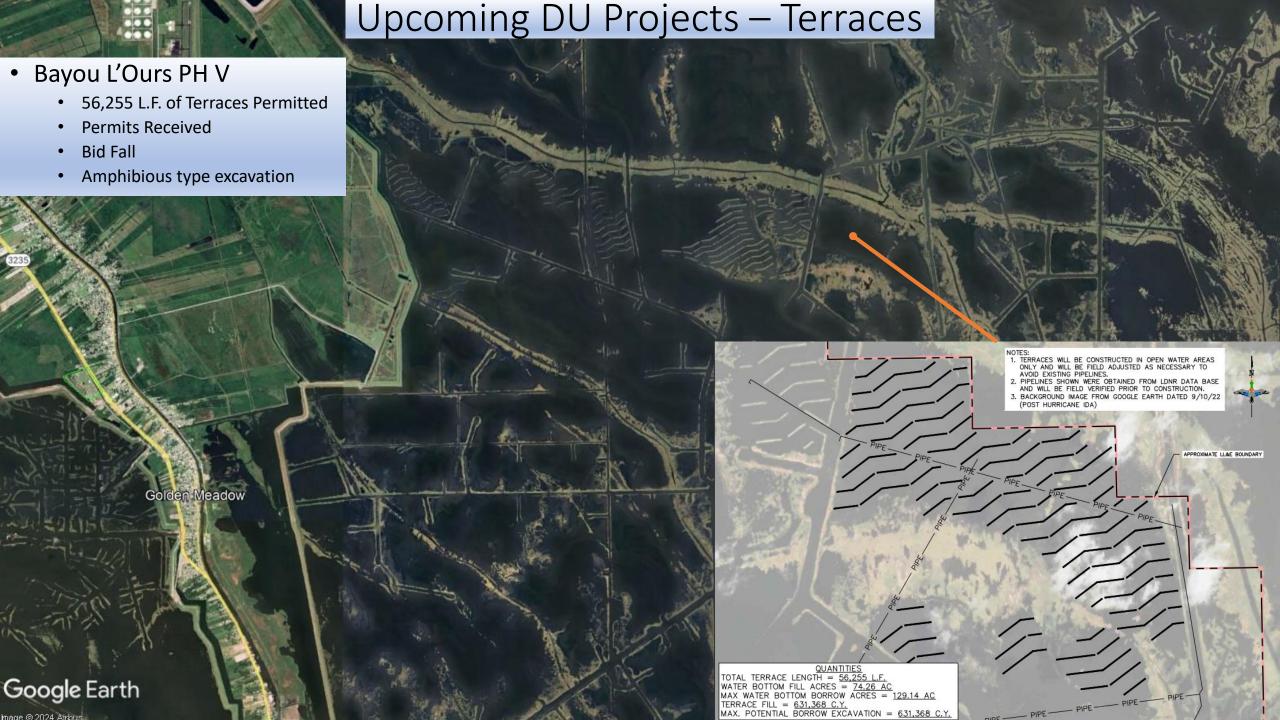




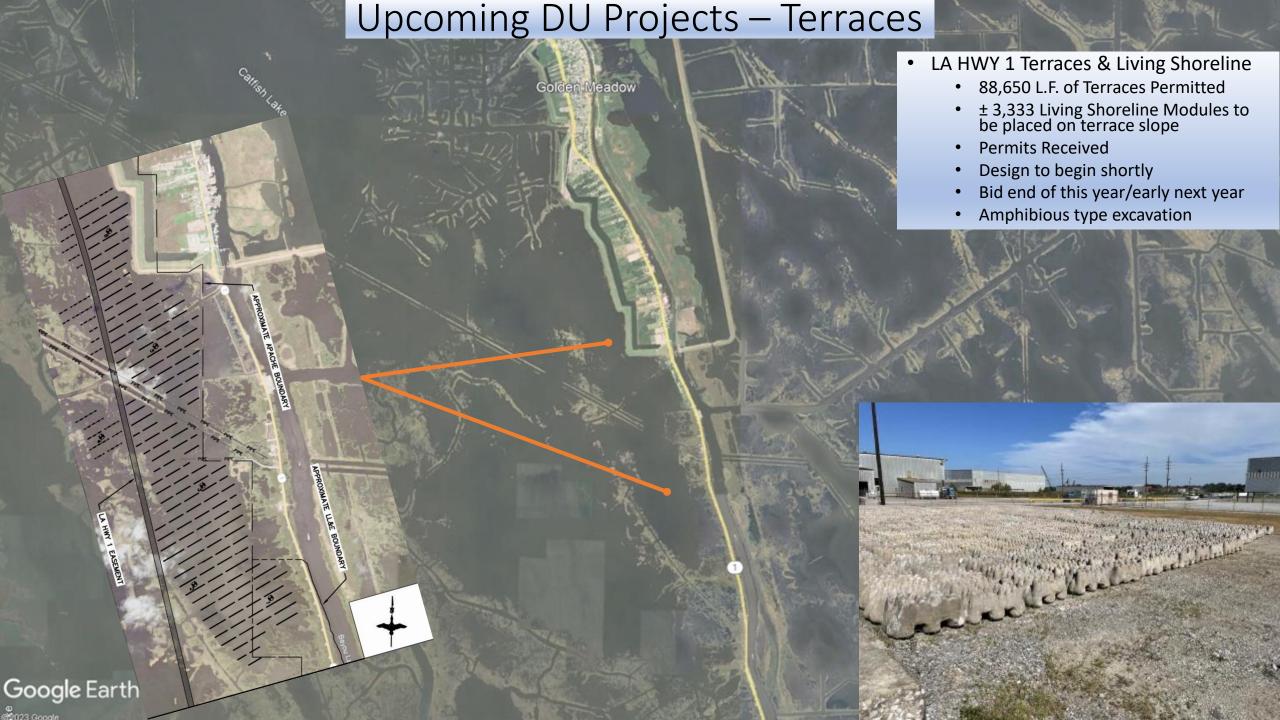












### **DU** Mission

"Ducks Unlimited Conserves, Restores, and Manages Wetlands and Associated habitats for North America's Waterfowl. These Habitats also Benefit other Wildlife and People."



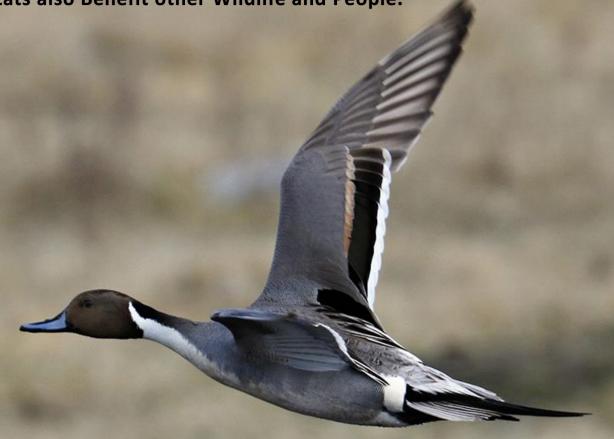
# **Brad Lambert**

**Ducks Unlimited** 

Regional Engineer

Lafayette, LA

blambert@ducks.org



# Questions?

michaelfurtman.com



LAKE MAUREPAS

**Coastal Industry Briefing & Construction Project Forecast – Partner Led** 

March 26th, 2024









# Project Goal

St. John the Baptist
Parish will design, plan,
and restore 1.5 acres of
Sunset Park utilizing the
CPRA Partnership Fund.





# Project Objectives

01



# Restore

• Restore 1.5 acres on western side of Pass Manchac.

02



# **Plant**

• Plant native vegetation

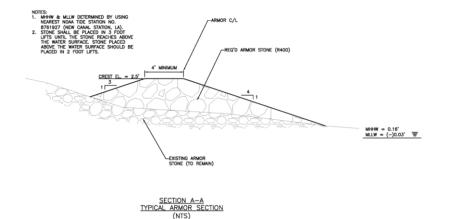
# Project Scope

#### GENERAL NOTES:

- ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM ON 1988 (NAVD 88). ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
- CONTRACTOR IS RESPONSIBLE FOR VERRIPHING EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK, ANY OBSERVED DISCREPANCIES BETWEEN PRE-CONSTRUCTION SURVEY AND PROJECT PLANS NEED TO BE DOCUMENTED AND PROVIDED TO ENGINEER FOR ACCEPTANCE.
- TOLERANCES IN SHORELINE PROTECTION THICKNESS AND ELEVATION SHALL NOT BE GREATER THAN +0.5 AND -0.5.
- 4. TOPOGRAPHIC/BATHYMETRIC SURVEY WAS NOT AVAILABLE FOR SITE DESIGN, CONTRACTOR SHALL PERFORM PRE-CONSTRUCTION SURVEY AND OVERLAY SERVICE THAT AND OVERLAY SERVICE THAT AND THE TOP THE PRAPER OF TOP THAT THE TOP THE PRAPER.
- 5. VOLUMES SHOWN ARE FOR BIDDING PURPOSES ONLY AND WERE ASSUMED BASED ON EXISTING SHORELINE SLOPES OBSERVED AT THE SITE. RIP RAP CROSS SECTIONS WILL BE SURVEYED BY THE CONTRACTOR BEFORE AND AFTER FOR VERIFICATION. ALL SURVEYING AND MEASUREMENTS BY THE CONTRACTOR FOR MEASUREMENTS BY THE CONTRACTOR FOR MEASUREMENT AND PAYMENT WILL BE MONITORED AND REVIEWED BY THE PROJECT ENGINEER.

#### LIST OF ABBREVIATIONS:

C/L CENTERLINE
EL ELEVATION
E EASTING
N ORTHING
L LUISIANA
LS LLUIP SUM
HUHW MEAN HIGHER HIGH WATER
HULW MEAN LOWER LOW WATER
ON LUIBERS
TAL STATION
FS SOLUBRE FEET



SUMMARY OF ESTIMATED QUANTITIES							
ITEM NO.	UNIT	QUANTITY					
1	MOBILIZATION AND DEMOBILIZATION	LS	1				
2	FURNISH AND INSTALL ARMOR STONE (R400)*	TON	400				
3	SURVEYING	LS	1				
4	TEMPORARY SIGNS AND BARRICADES	LS	1				

TONS IN ARMOR STONE (R400) FOR THIS CONCEPTUAL COST ESTIMATE IS ASSUMED TO 1.4 TIMES THE CUBIC YARDS OF ARMOR STON

## Installation

• Rip rap for the first layer of shoreline protection.

### Plant

• Native vegetation for stabilization and ecosystem restoration.

## **Construction Budget**

• \$75,000.00

# Project Timeline

March 2024

April 2024

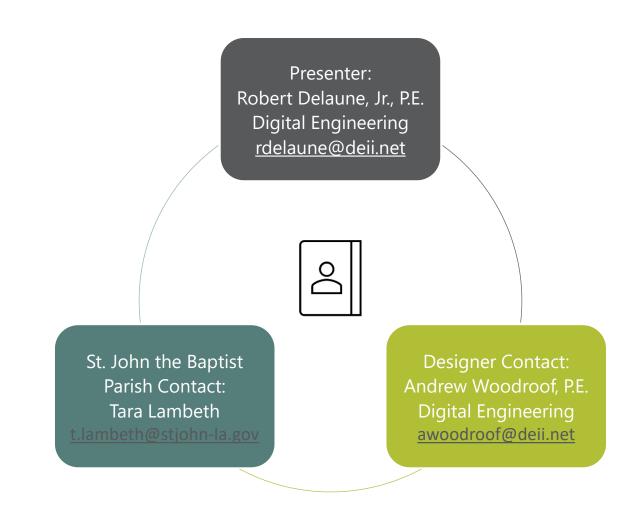
Fall 2024

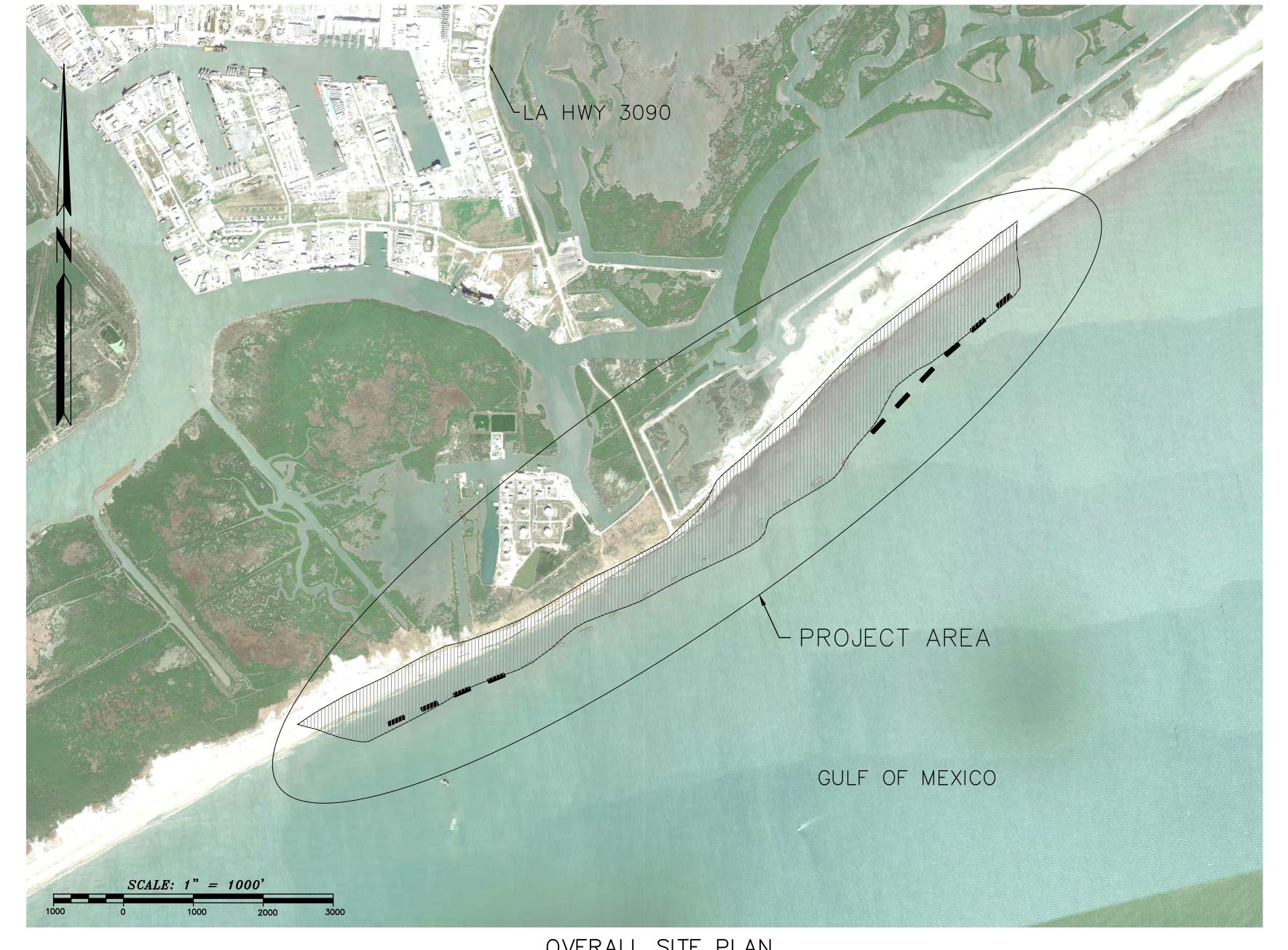
Design completion.

Apply for permits.

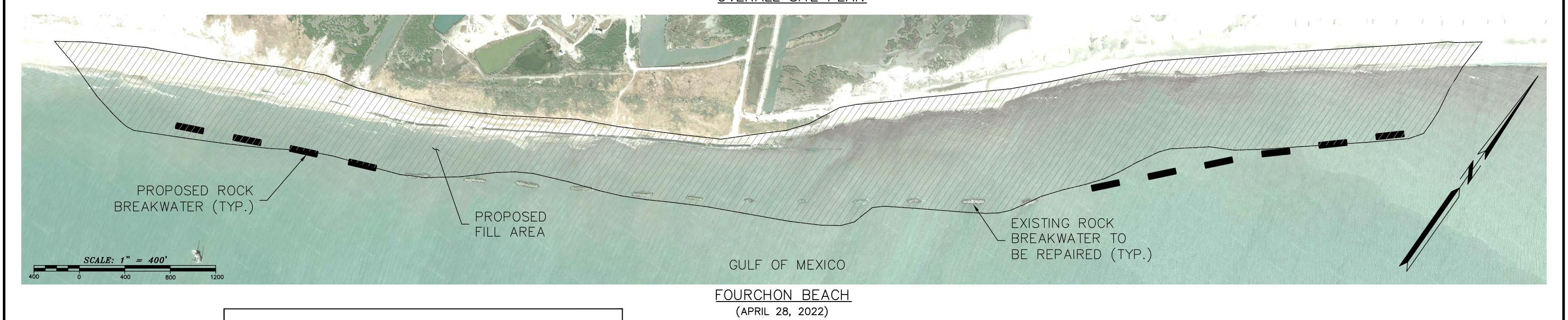
Request quotes for construction.

# Project Contacts





OVERALL SITE PLAN



GREATER LAFOURCHE

PORT COMMISSION

FOURCHON BEACH RENOURISHMENT PROJECT

FOURCHON, LOUISIANA

PRELIMINARY

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

ANGELETTE DESIGN

DRAWN BY

CHECKED BY

DESIGNED BY

SHOWN

3-18-24

160025

PROJECT

SHEET NO.

LAFOURCHE PARISH

NO. REVISION

READY TODAY.
READY FOR TOMORROW.

FOURCHON

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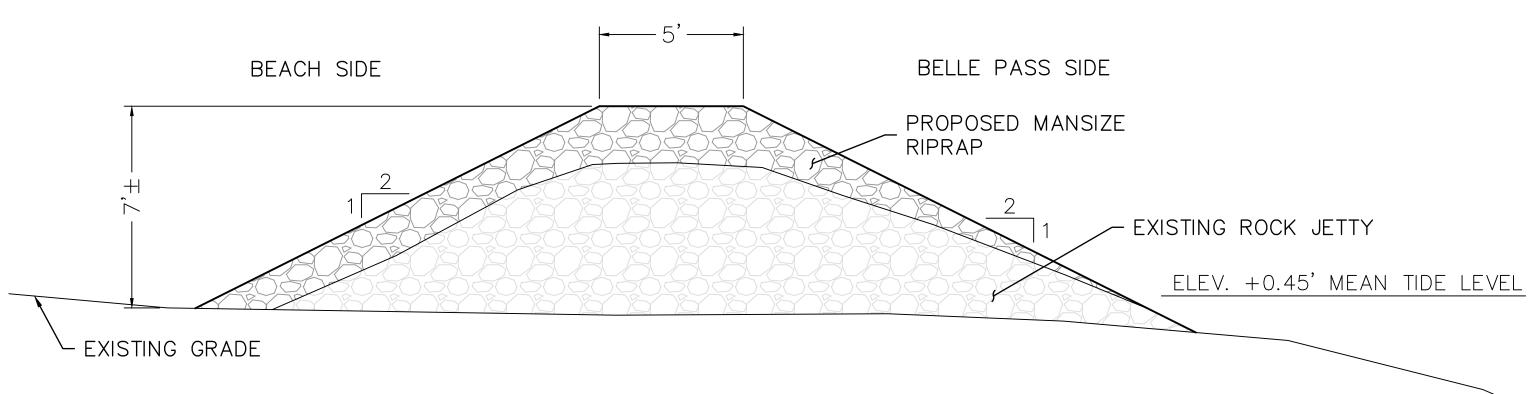


SSEA STITES

WEST JETTY REPAIR (760°±)

SCALE: 1" = 100'
100 0 100 200 300

WEST JETTY REPAIR DETAILED SITE PLAN



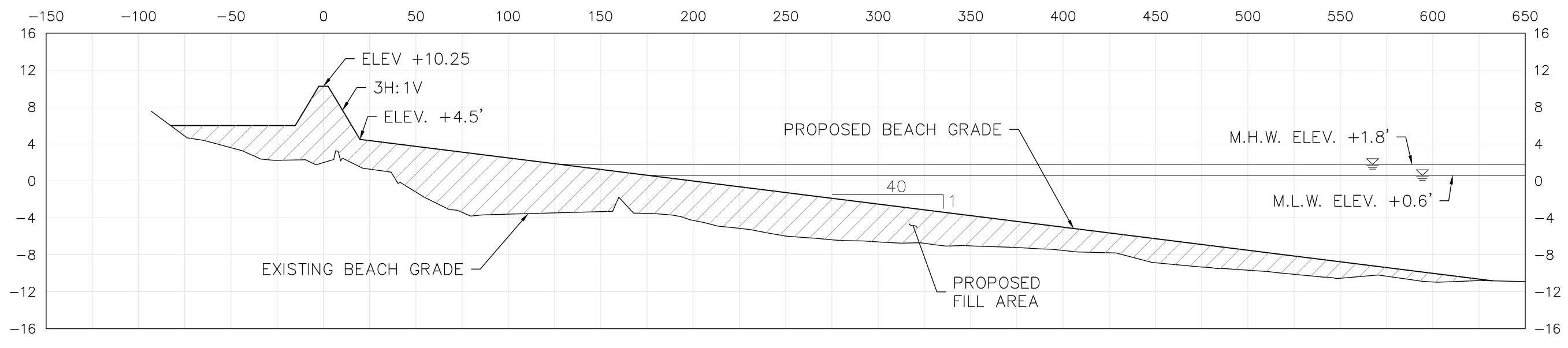
TYPICAL JETTY REPAIR
SECTION

FOURCHON READY TODAY.
READY FOR TOMORROW.

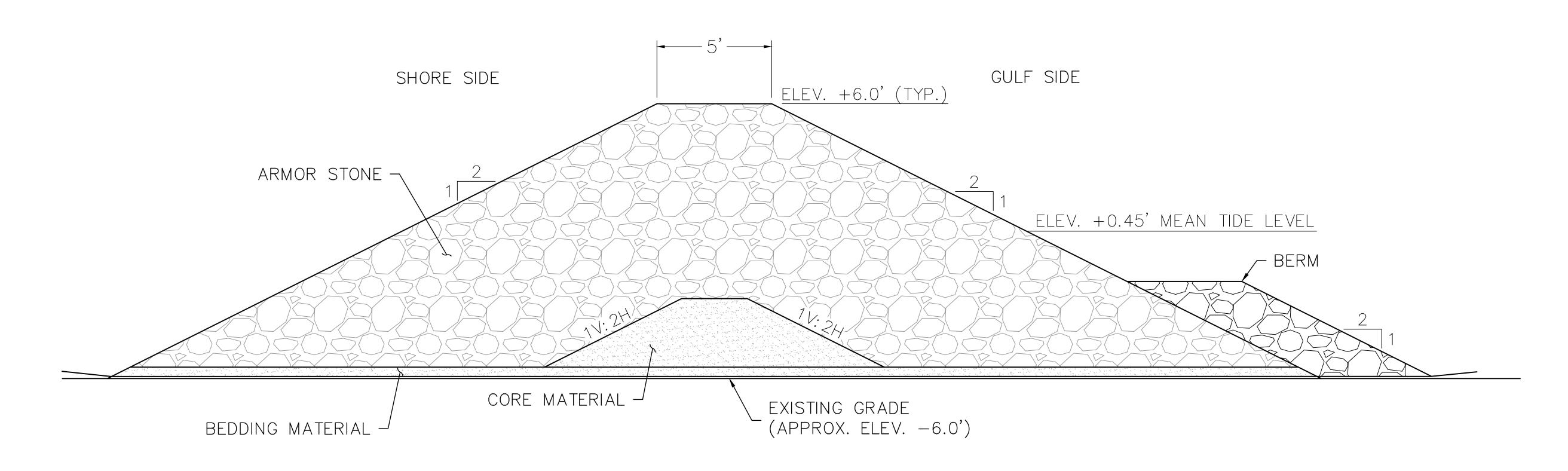
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				NGELETTE	DESIGN
			Con	sulting Engineers	s & Surveyors
			DHONE: 095 709 7700	12270 HMV 2225 I ADOSE I A 70	373 www.angelette.com
			PHONE: 985-798-7700	13379 HWY 3235 - LAROSE, LA 70	373 www.angel
			DESIGNED BY	DRAWN BY	CHECKED BY

AMP	GREATER LAF	OURCHE	SCALE N.T.S.
PRELIMINARY	PORT COMM		
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CONVEYANCE, SALES, OR AS THE BASIS FOR THE ISSUANCE OF A PERMIT.			PROJECT
NEIL B. ANGELETTE, P.E.			160025
LA. REG. NO. 28236 CIVIL ENGINEER			SHEET NO.
	FOURCHON, LOUISIANA	LAFOURCHE PARISH	3 OF 3

FILE: 160025\SKETCHES\2024-03-18\A-SHT-03.dwg



# TYPICAL BEACH RESTORATION SECTION



TYPICAL BEACH ROCK BREAKWATER SECTION



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			1			THE BASI
			PHONE: 985-798-7700	13379 HWY 3235 - LAROSE, LA 70	ı	NEIL B. A LA. REG. CIVIL ENG
			DESIGNED BY	DRAWN BY	CHECKED BY	CIVIL ENG
			N.B.A.	S.M.G.	N.B.A.	

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	FOURCHON,	LOUISIANA	LAFOURCHE PAR	ISH	2 OF 3



## 2024 CPRA Coastal Industry Week

## Coastal Industry Briefing and Construction Project Forecast – Partner Led

March 26<sup>th</sup>, 2024 2:00pm – 3:30pm CST

#### Virtual Meeting

 Zoom URL:
 https://us06web.zoom.us/j/82284982515

 Meeting ID:
 822 8498 2515

 Phone Audio:
 (215) 861-0674

 Phone Audio Passcode:
 5918836

#### I. Opening Remarks

#### II. Upcoming Risk Reduction Projects to be Bid for Construction (2:00 pm – 2:45 pm)

- a. Upcoming TLCD Projects: Reggie Dupre, TLCD; David Boudreaux, Delta Coast Consultants, LLC
- b. Upcoming NLLD Projects: Arthur Ostheimer Jr., North Lafourche Levee District
- c. Upcoming SLLD Projects: Joe Picciola, Picciola & Associates, Inc.; Neil Angelette, Angelette Design, LLC; John Plaisance, GIS Engineering, LLC
- d. Upcoming LAILD Tidal Flood Risk Reduction Projects: Miles Garriott, Evans-Graves Eng., Inc.

#### III. Upcoming Restoration Projects to be Bid for Construction (2:45 pm – 3:20 pm)

- a. ME-0032 South Grand Chenier Baker Tract Marsh Creation Project: Breese Barnes, NRCS
- b. Cameron Gulf Shoreline Protection Project: Daniel Dehon, C. H. Fenstermaker & Associates
- c. Mermentau Basin Inundation Relief Project: Daniel Dehon, C. H. Fenstermaker & Associates
- d. Upcoming Vermilion Parish Projects: Nick Sonnier, Sellers & Associates, Inc.
- e. Grand Bayou Freshwater Reintroduction: Kevin Dezarn, GIS Engineering, LLC
- f. Catfish Lake Living Shoreline Lafourche Parish: Tyler Ortego, Natrx; Nick LeBlanc, Danos
- g. Upper Barataria Terracing: Matt Salmon, Freese & Nichols, Inc.

#### IV. Other Project Presentations (3:20 pm – 3:30 pm)

- a. Upcoming Ducks Unlimited Projects: Brad Lambert, Ducks Unlimited
- b. Sunset Park Restoration Project: Andrew Woodroof, Digital Engineering
- c. Fourchon Beach Maintenance Restoration and Protection Project: Bryce Autin, Greater Lafourche Port Commission

#### V. Questions and Discussion

#### VI. Adjourn