



STATE OF MISSISSIPPI

Tate Reeves

Governor

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Joe Spraggins, Executive Director

**AMENDMENT # 1 OF MEMORANDUM OF UNDERSTANDING
BETWEEN
MISSISSIPPI DEPARTMENT OF MARINE RESOURCES
AND
THE CITY OF DIAMONDHEAD**

The Memorandum of Understanding (MOU) between the Mississippi Department of Marine Resources (MDMR) and the City of Diamondhead (CODH) for GOMESA funding which was fully executed on September 27, 2021 is hereby mutually amended to change the name of the Project from "Restoration of Marsh Erosion Prevent (Basis "C" Watershed Hydrologic/Hydraulic Analysis" to "Diamondhead Flood Prevention and Detention Pond Restoration". The MOU is further mutually amended as follows:

...

RECITALS

WHEREAS, GOMESA authorizes the disbursement of funds for projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, infrastructure directly affected by coastal wetland losses, as well as mitigation of damage to fish, wildlife, or natural resources; and,

WHEREAS, funding for GOMESA is directed to the State of Mississippi through the Bureau of Ocean Energy Management within the Department of Interior; and,

WHEREAS, the Governor of the State of Mississippi has directed that MDMR will administer GOMESA funding for the State; and,

WHEREAS, MDMR is authorized to allocate and disburse GOMESA funds in accordance with GOMESA in a manner as determined by the MDMR; and,

WHEREAS, GOMESA funds are federal funds and cannot be used to match any other federal funds unless those programs specifically state that such funds can be used for matching; and,

WHEREAS, the primary goal of the Project is for drainage infrastructure improvement which will include the restoration of two existing stormwater retention ponds, the Miller Pond (located just north of Interstate 10) and the Lily Pond; and,

WHEREAS, CODH proposes that the Project will reduce stream bank and wetland erosion along the major drainage ways within Diamondhead and will reduce sedimentation which will improve water quality in receiving streams and estuaries; and,

...

SECTION 6. CODH agrees to comply with all applicable provisions of 2 C.F.R. § 200, *et seq.*, including § 200.501 which states that a non-Federal entity that expends Seven Hundred Fifty Thousand Dollars and No/100 (\$750,000.00) or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year.

SECTION 18. CODH agrees to comply with all applicable provisions of Section 70914 of the Infrastructure Investment and Jobs Act (Pub. L. 117-58), also know as the Build America, Buy America Act.

SECTION 19. Attached hereto as [Attachment D](#) and incorporated herein by reference is a letter GOMESA application, with a revised Scope of Work and [Attachment E](#) Amended Budget.

SECTION 20. Attached hereto as [Attachment F](#) and incorporated herein by reference is the revised Project Selection Form approved and executed by the GOMESA Committee. In the event of a discrepancy between Attachment D and Attachment F, Attachment F will govern.

All other terms and conditions set forth in the original MOU executed September 27, 2021, remain in full effect.

MS Department of Marine Resources

City of Diamondhead

Joe Spraggins, Executive Director

Jon McGraw, City Manager

Date: _____

Date: _____

Attachment D



GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

Official Use Only

Project Number: _____

Requesting Agency: _____

PROJECT SUMMARY

1. Title of Project:

Diamondhead Flood Prevention & Detention Pond Restoration

red outlines indicate required fields

2. Location of Project:

Lily Pond Project coordinates: 30°38'82"N, 89°38'52"W

I-10 Pond Project coordinates: 30°37'98"N, 89°35'77"W

3. Requesting Organization:

City of Diamondhead

4. Requesting Organization Representative:

a. Name: Jon McCraw

e. Address: 5000 Diamondhead Circle
Diamondhead, MS 39525

b. Position: City Manager

c. Phone: 228-222-4626

f. Email: jmccraw@diamondhead.ms.gov

d. Fax:

5. Funding Requested:

\$495,000.00

6. Have any other State or Federal funding sources been identified for the project?

☐ Yes

☒ No

7. If yes, enter amount and source of additional funds:

Amount: \$361,115.00

Source of Additional Funds: Local General Funds

8. Total Project Funds

\$856,115.00



GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

PROJECT SUMMARY

9. Provide Brief Project Description/Overview:

The City of Diamondhead is seeking GOMESA funding from the Mississippi Department of Marine Resources for the Diamondhead Flood Prevention & Detention Pond Restoration. Diamondhead's drainage and water quality program specific to Watershed A (the largest watershed in the City of Diamondhead) and Watershed C (the second largest watershed). The project consists of two sub-projects that will provide drainage infrastructure improvements and improve detention facilities to reduce flooding, improve water quality and preserve downstream wetland and estuarine habitats. The sub-projects that are associated will improve water flow characteristics, reduce the future possibility of flooding of roadways and homes in the area, improve water quality downstream and extend runoff times.

As part of a county-wide effort, Waggoner Engineering produced the Hancock County Watershed-Based Stormwater Assessment and Management Plan in December 2019 that included a step-by-step plan for implementation. The plan created by Waggoner Engineering provided Hancock County a storm management plan for the long-term future of the County that was realistic and manageable. The county-wide effort by Waggoner Engineering resulted in a detailed project description for these two sub-projects of the Diamondhead Flood Prevention & Detention Pond Restoration. The following pages contain the full project descriptions from the Waggoner Engineering produced plan for the I-10 Pond (Miller Pond) and Lily Pond (Anela Pond).

10. LIST Project Goals/Objectives:

- I-10 Pond: Goals and objectives of this sub-project are to improve flow characteristics, reduce possibility of flooding of roadway and homes in the area, increase runoff times, and increase water quality downstream. This detention pond's capacity has been reduced over the years due to sediment build up. The removal of this sediment and cleaning of the pond banks will allow the pond to hold more water and to allow for a slower runoff of stormwater.
- Lily Pond: Goals and objectives of this sub-project are to improve flow characteristics, reduce possibility of flooding of roadway and homes in the area, increase runoff times, and increase water quality downstream. This detention pond is primary for the retention of stormwater before it travels into Montjoy Creek and eventually Rotten Bayou. This detention pond's capacity has been reduced over the years due to sediment build up. The removal of this sediment and cleaning of the pond banks will allow the pond to hold more water and to allow for a slower runoff of stormwater.



GOMESA PHASE II PROJECT FUNDING

Request for Funding FY2024

PROJECT SUMMARY

11. Which of the following authorized uses set forth in the GOMESA Act does this project fall under? Check all that apply. Explain SPECIFICALLY and in detail how the project meets the required criteria.

- ☒ (A) *Projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses*

The proposed drainage improvements identified in this project will have a direct positive impact on coastal wetland losses by reducing stream bank and wetland erosion along the major drainage ways within Diamondhead. Additionally, the reduction in sedimentation will improve water quality in receiving streams and estuaries.

- ☒ (B) *Mitigation of damage to fish, wildlife, or natural resources.*

The City of Diamondhead drains into Rotton Bayou, the Jordan River, and tributaries to St. Louis Bay. These drainage projects will reduce erosion and improve water quality downstream which directly impacts natural resources in our bays and estuaries.

- ☒ (C) *Implementation of a federally-approved marine, coastal, or conservation management plan.*

The proposed project is implementing recommendations made from the Hancock County Watershed-Based Stormwater Assessment and Management Plan, a comprehensive conservation management plan for Hancock County.

- ☒ (D) *Mitigation of the impact of Outer Continental Shelf activities through funding of onshore infrastructure projects.*

The City of Diamondhead drains into Rotton Bayou, the Jordan River, and tributaries to St. Louis Bay. These drainage projects will reduce erosion and improve water quality downstream which directly impacts natural resources in our bays and estuaries.



GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

PROJECT SUMMARY

12. Project Timetable/Milestones:

I-10 Pond Restoration

Implementation Period: Six Months

Study: Completed

Design and Permitting: Three Months

Construction: Four Months

Estimated Schedule: March 1, 2023 – June 30, 2023

Lily Pond Restoration

Implementation Period: Six Months

Study: Completed

Design and Permitting: Three Months

Construction: Four Months

Estimated Schedule: March 1, 2023 – June 30, 2023

13. Project Timing



Short-term (3 year or less)



Deferred/long-term (3-5 years)



GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

APPLICATION SUMMARY

14. Current status of architectural/engineering plans & specifications for this project (if applicable): *Check one from each group.*

- Group 1:** ☒ **Completed**
☐ **In Progress**
☐ **Ready to Bid**
☐ **Other (identify)**

- Group 2:** ☒ **Paid for**
☐ **Funds budgeted**
☐ **Funds not budgeted**

15. In what way does this project meet the goals and objectives of the Department of Marine Resources, which includes enhancing, protecting and conserving the marine interest of Mississippi for present and future generations.?

Diamondhead Flood Prevention & Detention Pond Restoration in Hancock County is primarily a drainage infrastructure improvement project that meets the following Mississippi Department of Marine Resources criteria: activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection and infrastructure directly affected by coastal wetland losses; and implementation of a federally-approved marine, coastal or comprehensive conservation management plan.

The Diamondhead Flood Prevention & Detention Pond Restoration will provide significant drainage infrastructure improvements that will provide future hurricane protection and infrastructure directly affected by coastal wetland losses. The project consists of two sub-projects that will provide drainage infrastructure improvements, wetland restoration and improve detention facilities for future watershed events. The proposed project is also implementing recommendations made from the Hancock County Watershed-Based Stormwater Assessment and Management Plan, a comprehensive conservation management plan for Hancock County.



GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

APPLICATION SUMMARY

16. Estimated number of years to completion:

1

17. Estimated Completion Date:

June 2023

18. Prioritize if your agency has submitted multiple projects:

1

SIGNATURES

Requesting Agency Representative:

Signature

Date

Attach a detailed project description, project schematics, drawings, or any regulatory permits as appropriate.

***Progress notes must be submitted quarterly on all projects funded by GOMESA.**

****Before submitting application, please make sure to complete the Budget form on page 7.**




ENHANCE • PROTECT • CONSERVE

GOMESA PHASE II PROJECT FUNDING Request for Funding FY2024

BUDGET

Category	Total
Salaries, wages, Fringe	\$ 0.00
Travel	\$ 0.00
Architecture & Engineering	\$ 0.00
Legal	\$ 0.00
Consulting	\$ 0.00
Construction	\$ 495,000.00
Site Work	\$ 0.00
Equipment	\$ 0.00
Indirects	\$ 0.00
Other	\$ 0.00
Total	\$ 495,000.00

Project Number	3.24
Project Name	Miller Pond
Location Description	Site is a wet detention pond for approximately 200 acres of development in the Southeastern portion of Diamondhead. The pond received water from 5 different conveyances within the Watershed. A comprehensive report on these conveyances and the hydrologic calculations for the Miller Pond Watershed was delivered in July of 2017 by Pickering Firm, Inc.
Project Coordinates	30°22'47"N, 89°21'30"W
HUC12	031700091306 –Saint Louis Bay
Project Type	Improve Hydrologic sections, Clearing/armoring drainage ditches, Repair drainage structures, Dredging,
Number of residences or businesses benefitted	>100
Anticipated Project Benefits	Improve Flow Characteristics Improve Runoff Times Reduced possibility of flooding of roadways and homes in the area Improve Runoff Water Quality downstream Reduced erosion and pollution
Implementation Period	Study: 6 Months Design: 6 months Permits: Wetland 404< SWPPP, MDOT Land Acquisition: Probable Implementation: 2 Yr
Flood Zone	Yes
Estimated Project Cost	\$1,659,723
Location Problems	 <p>Pond has not been maintained and has filled with silt and vegetation. Near complete loss of wet storage capacity has compromised health of wetland environment. Loss of storage capacity raises possibility of localized flooding and downstream pollution. Refer to Pickering Study mentioned above for additional information.</p>
Recommended Solution	Dredging and clearing of sediment to return to original footprint. Channel routing on East end of pond. Some infrastructure repair within the 5 conveyance channels as necessary. Convert the area to an outdoor recreation area. Institute regular maintenance.





Hancock Co. Conceptual Drainage and Dredging Assessment

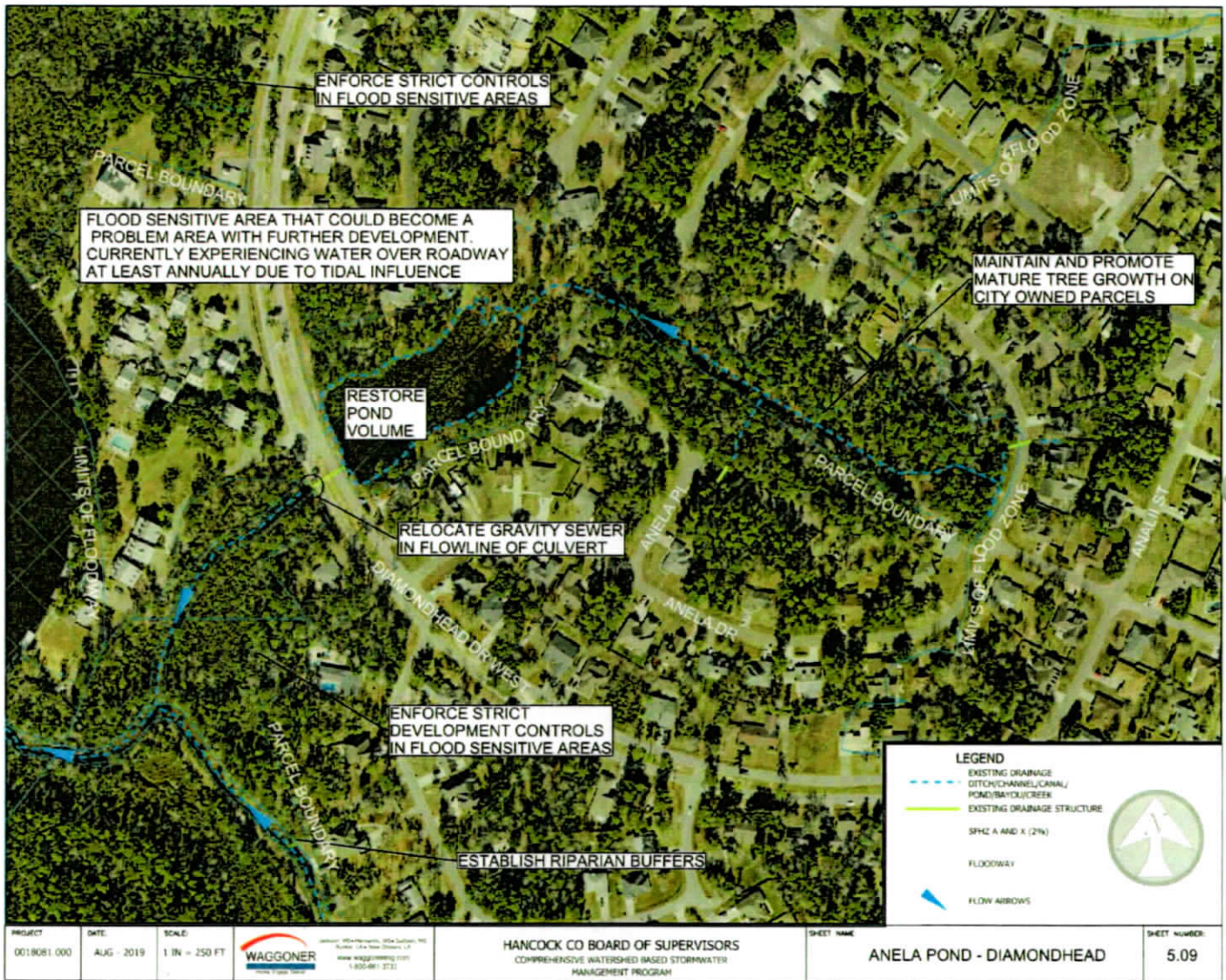
Opinion of Probable Cost

Oct 2019

3.24 Miller Pond

Pay Item	Unit	Quantity	Unit Cost	Total Cost
Mobilization	LS	1	\$ 125,000.00	\$ 125,000.00
Clearing and Grubbing	LS	1	\$ 15,000.00	\$ 15,000.00
Removal of Drainage Structure	EA	1	\$ 2,500.00	\$ 2,500.00
Unclassified Excavation	CY	500	\$ 15.00	\$ 7,500.00
Excess Excavation	CY	40,000	\$ 25.00	\$ 1,000,000.00
Crushed Limestone	CY	75	\$ 200.00	\$ 15,000.00
Select Fill	CY	50	\$ 30.00	\$ 1,500.00
Roadway Repair	EA	2	\$ 2,500.00	\$ 5,000.00
Headwalls	EA	2	\$ 1,500.00	\$ 3,000.00
Gabion	Tons	80	\$ 75.00	\$ 6,000.00
Filter Fabric	SY	150	\$ 5.00	\$ 750.00
Silt Fencing	LF	500	\$ 5.00	\$ 2,500.00
Wattles	EA	5	\$ 200.00	\$ 1,000.00
Excelsior Blankets	SY	100	\$ 20.00	\$ 2,000.00
Seeding and Mulch	LS	1	\$ 5,000.00	\$ 5,000.00
Solid Sodding	SY	150	\$ 10.00	\$ 1,500.00
Traffic Control (includes Temp. Signage)	LS	1	\$ 10,000.00	\$ 10,000.00
Topographic Survey	LS	1	\$ 30,000.00	\$ 30,000.00
<i>Estimated Construction Costs</i>				\$ 1,233,250.00
<i>Engineering Costs (Design, Inspection, Construction Testing, etc.)</i>				\$ 184,987.50
<i>Right-of-Way/Easement Acquisition</i>				\$ 15,000.00
<i>Permitting</i>				\$ 10,000.00
<i>15% Contingency</i>				\$ 216,485.63
Total Estimated Project Cost				\$ 1,659,723.13

Project Number	5.09
Project Name	Diamondhead Drive North @ Anela Pond
Location Description	Site is a detention pond that drains a small basin that is bounded by Analii Street on the East and Diamondhead Drive on the remaining 3 sides. The pond outfalls to a small canal that empties into the Devil's Elbow portion of the Jourdan River. Basin is approximately 90% developed with a few vacant lots near the center of the basin that drains directly to the detention pond.
Project Coordinates	30°23'17"N, 89°23'9"W
HUC12	03170009130 – Rotten Bayou
Project Type	Drainage Infrastructure Improvements, Utility Relocation
Number of residences or businesses benefitted	>100
Anticipated Project Benefits	Improve Flow Characteristics Reduced Flooding
Implementation Period	Study: 6 months Design: 12 months Permits: Wetlands 404, SWPPP Land Acquisition: Probable Implementation: 1 Yr
Flood Plain	Yes
Estimated Project Cost	\$325,850
Location Problems	 <p>Residents report water over the roadway a couple of times per year when heavy rains and high tides coincided. Sewer main installed across the pond outfall. This basin flows to the Devil's Elbow area, it is suspected that the sedimentation problem there may be a cause of flow backing up here.</p>
Recommended Solution	Relocate utilities that are in conflict, restore hydrologic sections that are compromised. Install ordinances that promote maintaining mature vegetation growth and Riparian buffers. Remaining lots for development potential should be scrutinized carefully before any land disturbance.





Hancock Co. Conceptual Drainage and Dredging Assessment

Opinion of Probable Cost

Oct 2019

5.09 - Anela Pond

Pay Item	Unit	Quantity	Unit Cost	Total Cost
Mobilization	LS	1	\$ 25,000.00	\$ 25,000.00
Clearing and Grubbing	LS	1	\$ 5,000.00	\$ 5,000.00
Remove Excess Sediment From Road Ditch	LF	1,200	\$ 15.00	\$ 18,000.00
Removal of Debris & Vegetation from Ditch	LF	500	\$ 20.00	\$ 10,000.00
Removal of sediment from culverts	EA	5	\$ 100.00	\$ 500.00
Excess Excavation	CY	500	\$ 15.00	\$ 7,500.00
Gabion Stone	TONS	50	\$ 45.00	\$ 2,250.00
Filter Fabric	SY	100	\$ 4.00	\$ 400.00
Asphalt Repair (Culvert Replacement)	EA	1	\$ 2,500.00	\$ 2,500.00
Headwalls	EA	4	\$ 1,500.00	\$ 6,000.00
Utility Relocation	LS	1	\$ 50,000.00	\$ 50,000.00
Silt Fencing	LF	100	\$ 5.00	\$ 500.00
Wattles	EA	5	\$ 200.00	\$ 1,000.00
Excelsior Blankets	SY	50	\$ 20.00	\$ 1,000.00
Seeding and Mulch	LS	1	\$ 5,000.00	\$ 5,000.00
Traffic Control (includes Temp. Signage)	LS	1	\$ 10,000.00	\$ 10,000.00
Dredging	LS	1	\$ 30,000.00	\$ 30,000.00
Detention Pond Rehabilitation	LS	1	\$ 10,000.00	\$ 10,000.00
Survey	LS	1	\$ 40,000.00	\$ 40,000.00

Estimated Construction Costs \$ 224,650.00

Engineering Costs (Design, Inspection, Construction Testing, etc.) \$ 33,697.50

Right-of-Way/Easement Acquisition \$ 15,000.00

Permitting \$ 10,000.00

15% Contingency \$ 42,502.13

Total Estimated Project Cost \$ 325,849.63

Attachment D

GOMESA Project No. 3000030945

Amended Budget

		TOTAL PROJECT COST	GRANT FUNDS	LOCAL FUNDS
7.1	Engineering (design, permitting, bid, CEI)	\$52,875.00	\$30,000.00	\$22,875.00
	Construction Costs			
7.2	Mobilization X2	\$180,000.00	\$65,678.00	\$114,322.00
7.3	Site prep/maintenance (construction entrance, erosion/sediment control, etc.)	\$82,250.00	\$82,250.00	
7.4	Clearing, Grubbing, Excavation Debris Haul Off	\$300,042.00	\$300,042.00	
7.5	Rip Rap, Seeding Sprigging, Mulching	\$17,030.00	\$17,030.00	
		\$632,197.00	\$495,000.00	\$137,197.00



Attachment F

GOMESA Phase II Funding Project Selection Form

Applicant:	Jeannie Klein - City Clerk	
	First Name	Last Name
Business/Agency:	City of Diamondhead	
Address:	5000 Diamondhead Circle - Diamondhead, MS 39525-3260	
Phone:	2282224626	Email: Jklein@diamondhead.ms.gov
Project Name:	Marsh Erosion Prevention (Basin "C" Watershed Hydrologic/Hydraulic Analysis) - REVISION	
Anticipated Budget:	\$495,000.00	Anticipated Timeline: 7/1/2021 to 6/30/2024

Projects must meet at least one of the GOMESA criteria listed below. Please check all that apply. Additional justification may be requested.

Column A

- ☒ Coastal protection of natural resources
- ☒ Mitigation of natural or marine resources
- ☐ Conservation management
- ☐ Onshore infrastructure projects resulting from coastal damage

Column B

- ☒ Coastal restoration and resiliency efforts
- ☐ Ecological restoration

PROPOSED PROJECT NARRATIVE

This City of Diamondhead is requesting to modify the scope of work for the above referenced project to exclude the work specified for restoring the shoreline. The area where the marsh restoration project that the City planned on performing has been purchased by the State and is potentially part of a larger marsh restoration project. As such, the City felt that dredging a large retention pond within the city limits would provide a greater benefit for the residents to help prevent storm water issues. The City would like to include the restoration work for the existing storm water retention pond located on Diamondhead Drive North further known as the Lily Pond. This modified scope of work will allow for improved drainage, better water quality and will help reduce erosion.

ORIGINAL SCOPE: This project will help stop marsh erosion while improving the ecosystem in the Bay of St. Louis. This area is located on the southern marsh of our city and northern part of the Bay. A large part of the city drains directly into the Bay of St. Louis, Rotten Bayou and the Jourdan River impacting the water quality in this area of Coastal Mississippi. The city engaged Seymour Engineering to create a plan for improving water quality as part of a larger watershed-based approach to storm water management. Part of the review included (1) the hardening of the bottom of the Bay of Saint Louis with an oyster ridge or bar and range, clam beds; (2) reintroducing sea grasses among the clams compatible with tidal hydrology and salinity; and (3) monitoring both the restoration of coastal marshlands in Diamondhead. The project restores the shoreline, restores water quality and enables monitoring for both conservation and restoration progress. In order to further improve the water quality in this area, as part of this project is the restoration of an existing stormwater retention pond located just north of I-10. This is a major drainage discharge area, which leads directly into the northern portion of the Bay of St. Louis. The City would focus on restoring the existing retention pond to its original state. After dredging the pond and adding sediment pants to the area, this area could be improved to allow for periodic maintenance, public access for fishing and other recreation activities for residents to enjoy. This project improves the storm water drainage and water quality, reduces erosion and increases public access.

REQUIRED SIGNATURES

GOMESA Committee:

MDMR Committee Representative


Joe Spraggins (03/31/2023 15:36 CDT)
Signature

MDA Committee Representative

Laura Hipp
Laura Hipp (Aug 1, 2023 09:14 CDT)
Signature

MDEQ Committee Representative

Chris Wells
Chris Wells (Aug 1, 2023 09:37 CDT)
Signature

Executive Director

_____ *Title* _____ *Date*

Deputy Executive Director

Title
Date

Executive Director

_____ *Title* _____ *Date*