

U.S. ARMY CORPS OF ENGINEERS

JUL 08 2021

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY/OFFICE OF POLICUTION CONTROLLE Resources TANDS PERMITTING

ns, as indicated, ap kson Counties.	month day year								
Applicant name, mailing address, phone umber and email address: ke Fitzpatrick 44 Harbor Drive Unit 209 dell, La 70458 4 452 7117 MFitzb22@Gmail.com		and email addres		3. Official use only COE					
		Lamulle Construction, LLC Attn:James 4978 Pontchartrain Drive Slidell, La 70458 985 646 2028 James@Lamulle.com		DMR DEQ A95 DATE RECEIVED					
					Project location	O det Avo	011 10	Page Christian	
					Street Address 439 1st Ave		City/Community Pass Christian		
							Latitude 30.311670 Longitude (if known) 89.29 Township Range County Harrison		e (if known) 69.291346
Geographic location	n: Section	Township	Range (Jounty Harrison					
Project description	n	. Y							
	New	workX Mainter	nance work						
Dredging	1	طفاه الداد	ovieting death	proposed depth					
Channel	length	wiath	existing depth	proposed depth					
_Canal			existing depth						
Boat Slip			existing depth						
Marina			existing depth existing depth						
Other-ividening E	asın lengul	widtii	existing depth	proposed depth					
Cubic yards of mat	erial to be removed		Type of material						
Location of spoil di	sposal area								
Dimensions of spo	il area		Method of excavation						
How will excavated	I material be contained	?							
Construction of s									
Bulkhead	Total length	He	ight above water	and the second s					
Pier	length	wic	lth	height					
Boat Ramp	length	wic	lth						
Boat House	length	wic	lth	height					
attachment	designed sites for wat	-	try (Coastal area only). Explai	n in item 11 or include as					
) so selly bordering s	outrierri side di Maii	IIII Dayou						
Filling	20.0								
•									
Dimensions of fill									

6.	Additional information relating to the proposed activity				
	Does project area contain any marsh vegetation? Yes No _X				
	(If yes, explain)				
	Is any portion of the activity for which authorization is sought now complete? YesNoX				
	(If yes, explain)				
	Month and year activity took place				
If project is for maintenance work on existing structures or existing channels, describe legal authorization for the exwork. Provide permit number, dates or other form(s) of authorization.					
	Has any agency denied approval for the activity described herein or for any activity that is directly related to the activity described herein?				
	YesNo_X_(If yes, explain)				
7.	Project schedule				
٠.	Proposed start date Oct 1, 2021 Proposed completion date Oct 31, 2021				
	Expected completion date (or development timetable) for any projects dependent on the activity described herein.				
	Expedited completion date (or development amounts), for any projection of				
8.	Estimated cost of the project_\$19K				
٠.					
9.	Describe the purpose of this project. Describe the relationship between this project and any secondary or future development the project is designed to support. Prevent siltation of Mallini Bayou. SAM-2014-00998-TMZ authorized				
	the Harrison County Board of Supervisors to build a jetty. However, the project was not completed. With this application				
	the applicant proposes to build a jetty on his property to accomplish what the county did not. The proposed jetty height				
	should be sufficient to prevent further siltation of Mallini Bayou.				
	Intended use: PrivateXCommercialPublicOther (Explain)				
40	Describe the public benefits of the proposed activity and of the projects dependent on the proposed activity.				
10.					
	Also describe the extent of public use of the proposed project. Although no public use of the project is anticipated, the county will benefit SIGNIFICANTLYAT ZERO COST!!				
11	Narrative Project Description:				

Build 90'± jetty.

Driving instructions:
Start US 90 in Bay St Louis.
Cross St Louis Bay.
Turn right onto W Bayview Drive.
Turn left onto 3rd Ave. Turn right onto Railroad Ave.
Turn right onto 1st Ave.
Proceed to site at end of street on the left.

12. Provide the names and addresses of view of the drawing described in At	of the adjacent property owners. Also identi tachment "A". (Attach additional sheets if neo	ify the property owners on the plan cessary.)
1. Guy Perrier & Holly McKenzie	e ^{2.} -none-	
construction, discharges, deposits	received or applied for from Federal, State and or other activities described in this applicate made to or that permits are not required fin the space for Type Approval.	ion. Note that the signature in Item
	Approval Application Date	Approval Date
Dept. of Environmental Quality		
Dept. of Marine Resources		
Army Corps of Engineers		
City/County		
Other		

14. Certification and signatures

Application is hereby made for authorization to conduct the activities described herein. I agree to provide any additional information/data that may be necessary to provide reasonable assurance or evidence to show that the proposed project will comply with the applicable state water quality standards or other environmental protection standards both during construction and after the project is completed. I also agree to provide entry to the project site for inspectors from the environmental protection agencies for the purpose of making preliminary analyses of the site and monitoring permitted works. I certify that I am familiar with and responsible for the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I am the owner of the property where the proposed project is located or that I have a legal interest in the property and that I have full legal authority to seek this permit.

U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willingly falsifies, conceals, or covers up by any trick, scheme or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

Mississippi Coastal Program (Coastal area only)

I certify that the proposed project for which authorization is sought complies with the approved Mississippi Coastal Program and will be conducted in a manner consistent with the program.

Signature of Applicant or Agent SERVE FOR FITZ PATRICK

15. Fees

Payable to MS Dept. of Marine Resources \$50.00 Single-family residential application fee \$500.00 Commercial application fee Public notice fee may be required Please include appropriate fees for all projects proposed in coastal areas of Hancock, Harrison and Jackson Counties.

16. If project is in Hancock, Harrison or Jackson Counties, send one completed copy of this application form and appropriate fees listed in Item 15 to:

Department of Marine Resources Bureau of Wetlands Permitting 1141 Bayview Avenue Biloxi, MS 39530 (228) 374-5000

If project <u>IS NOT</u> in Hancock, Harrison or Jackson Counties, send one completed copy of this application form to each agency listed below:

Director

Jackson, MS 39289

District Engineer District Engineer Mississippi Dept. of Environmental Quality

Mobile District

Vicksburg District

Office of Pollution Control

Attn: CESAM-RD

Regulatory Branch

P.O. Box 10385

Attn: CESAM-RD Regulatory Branch
P.O. Box 2288 Attn: CEMVK-OD-F

Mobile, AL 36628-0001 4155 Clay Street

Vicksburg, MS 39183-3435

17. In addition to the completed application form, the following attachments are required:

Attachment "A" Drawings

Provide a vicinity map showing the location of the proposed site along with a written description of how to reach the site from major highways or landmarks. Provide accurate drawings of the project site with proposed activities shown in detail. All drawings must be to scale or with dimensions noted on drawings and must show a plan view and cross section or elevation. Use 8 1/2 x 11" white paper or drawing sheet attached.

Attachment "B" Authorized Agent

If applicant desires to have an agent or consultant act in his behalf for permit coordination, a signed authorization designating said agent must be provided with the application forms. The authorized agent named may sign the application forms and the consistency statement.

Attachment "C" Environmental Assessment (Coastal Area Only)

Provide an appropriate report or statement assessing environmental impacts of the proposed activity and the final project dependent on it. The project's effects on the wetlands and the effects on the life dependent on them should be addressed. Also provide a complete description of any measures to be taken to reduce detrimental offsite effects to the coastal wetlands during and after the proposed activity. Alternative analysis, minimization and mitigation information may be required to complete project evaluation.

Attachment "D" Variance or Revisions to Mississippi Coastal Program (Coastal area only)

If the applicant is requesting a variance to the guidelines in Section 2, Part III or a revision to the Coastal Wetlands Use Plan in Section 2, Part IV of the Rules, Regulations, Guidelines and Procedures of the Mississippi Coastal Program, a request and justification must be provided.

MIKE FITEPATRICK JETTY VICINITY MAP

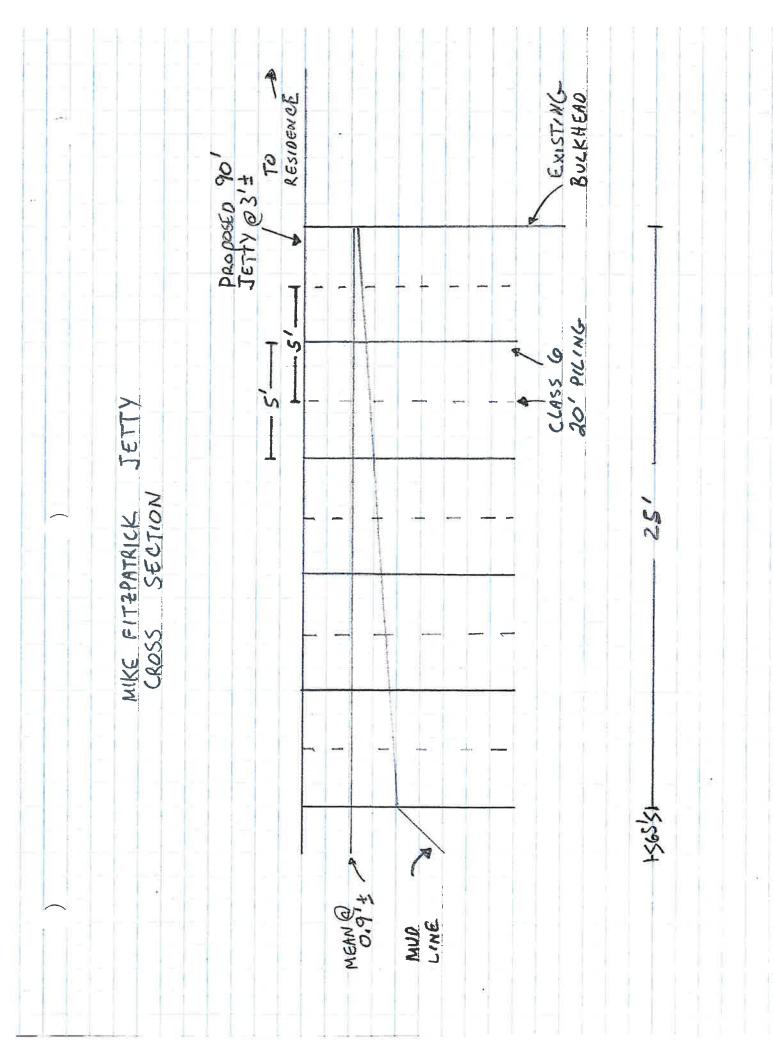
Map deta @2021 500 ft

MIKE FITZPATRICK JETTY

PLAN VIEW

Louis BAY

>70'Across MACLINI BAYOU MALLINI トローサ EXISTING BANKLINE RAP RESIDENCE PERRIER & MCKENZIE EXISTING RIP 2-1-N -1341 EXISTING BUCKHEAD MICE ACROSS PROPOSED 90' JETTY 75/ K CLASS 6 20 PILLING 5'Spacing on Either Side of PROPOSED JETTY OWNED JETTY 151 EXISTING





MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Agent Authorization

I authorize the person(s) and/or company listed below to act as my agent regarding the proposed project as described in the Joint Application and Notification at the location listed below:

LAMULLE CONSTRUCTION, LLC ATTN: (name of agent) JAMES	439 151 Av∈ (location of project)
4978 PONTCHARTRAIN DR. (address)	PASS CHRISTIAN
SLIDELL, LA 70458 (city, state, zip code)	
(city, state, zip code) (985) 646-2028 (agent phone number)	
MIKE FITZPATRICK (print applicant name)	
Mike Fitzgatrick (applicant signature)	4//3/2/ (date)
Do you want the permit mailed to the agent? $ gray \ge$	

MS DMR Environmental Assessment Report Prepared July 19, 2022

RE: DMR21-000502: Proposed Construction of a Jetty at 439 1st Ave, Pass Christian, by Mike Fitzpatrick (for the Fitzpatrick family)

This report is complied with 50 years of observations at the location, a present-day on-site assessment and inventory of the topography, vegetation, and wildlife utilization and referencing the written documents of two (2) engineers.

1. Project Description:

The plan is to engage a pile driving, marine construction company to install a wood jetty structure extending 90 feet to the west from the northwest corner of the bayfront lot located at 439 1st Ave where the previous jetty once existed and served to prevent erosion of the land for over 50 years. This jetty will extend out into Bay St Louis, perpendicular to the shoreline and parallel to the existing rock jetty placed by Harrison County.

2. Purpose and Need for the Project:

The primary purpose is to provide stability to our land and reduce the erosion occurring at the northwest corner adjacent to the bay. The intent is to restore the land to its former condition before the jetty failed and significant erosion began.

Ms. Jacklyn Turner, County Engineer for Harrison County, wrote a letter expressing support and noting the public benefit "would enhance the County's rock jetty structure and help to reduce dredging needs in the bayou". In addition, a proper functioning jetty in this location would offer a public benefit of enhancing nesting opportunities for aquatic turtles, extend the habitat for birds, and people walking in the shallow water, gigging for flounders during the dark hours would have a sandy surface to retreat to if the need arose.

3. Description and Comparison of Alternatives: (advised this section is not applicable)

4. Description of the Affected Environment:

439 1st Ave is also known as tax parcel 0213-01-007.000; located at 30 degrees 18'43"N + 89 degrees 17'29"W . The lot has a home on it built post H Katrina at 21'8" in elevation. It is bordered to the west by Bay St Louis, to the south by the Perrier property, to the east by the county road known as 1st Ave. and beyond that is the Koerner property on the other side of the road, and to the north by Mallini Bayou. The south opening of Mallini Bayou is located on the northwest side of the property where a line of rip rap and vegetation exists.

-Existing Conditions-

Topography features include rip rap to the north with a line of plant life that includes vetiver, dwarf pampas grass, blackberry sticker bushes, roseau canes, and a beat up, scruffy tallow tree that has managed to survive many storms. Two large pine trees (out of what used to be 7 pines) that survived H Camille are within 25 feet of the bulkhead in the NW corner of the lot.

A functioning jetty was in place for over 50 years, dating back to just after Hurricane Camille, and it supported the existence of a stretch of sandy beach on the west side of the bay which provided a barrier to the land eroding. Currently there is no beach, however one can walk on a few inches of wet sand at extreme low tide. The constant waves and wind affect the land by eroding what dirt and grass was in place at the edge of the bulkhead. There were many decades where I could step over the bulkhead onto a sand surface nearly level to the land on the east side of the bulkhead. My iphone registers 10 feet elevation while standing at the corner location. It is mostly flat land with centipede grass until you walk within 25 feet of the bay in the NW corner where the ground has been washing away, and there you will see yellow/red dirt, small to medium size rocks, and sand where the land and grass have washed away.

Hydrology – the water rises above the bulkhead when storms pass, eroding the land to the west at the edge of the bay. Even small storms at mid tides will create waves breaking over the bulkhead. Tides rise and fall frequently covering the rock jetty at high tide. The shallow, sandy bottom of Mallini Bayou is visible at peak low tide, especially in the winter months when you can literally walk across the southern mouth of the bayou (photo available upon request). This is likely a result of what would be sandy beach in front of our bulkhead washing over the rock jetty into the bayou. We have observed that phenomena many times.

Vegetation on the lot in question has 6 beat up live oaks that survived H Camille and H Katrina, 3 small palmettos, 2 palms that look like palmettos but much larger (date palms?), 2 tallow or 'chicken' trees that are a favorite with the woodpeckers, 4 mimosa trees (only one is mature, the other 3 have been beaten up by H Zeta and H Ida and are growing back), wild agave plants that no one intentionally planted (they appeared after H Zeta), a very old wisteria near the street, several native red berry bushes that the birds like to feed off of, a Leland cypress planted by my mother over 36 years ago (she also planted the cypress tree located on Second street in Pass Christian, two lots east of Main St on the north side at the same time – it remains as well), 2 large pine trees that serve as a frequent perch for osprey to eat their catch from the bay, multiple coreopsis and Indian blanket wild flowers are growing now, roseau cane is growing along the bayou side in recent years; althea, 1 vitex tree, a very old beat up magnolia tree, elephant ears, multiple liriope that are coming back post H Zeta, and cats claw vines are on the south border of the lot.

Wildlife utilization includes rabbits, squirrels, snakes, turtles, aquatic terrapins, many water birds (great blue herons of which we see the young every spring, pelicans, gulls, cormorants), bald eagles, ospreys, red winged black birds, woodpeckers, hummingbirds, cardinals, blue jays have all been observed over the decades on site. In the water and at the shoreline I see people gigging for flounders and crabbing. People fishing pull in croaker, catfish, drum, sheepshead, small sharks, speckled and white trout, and redfish. Stinging nettles and jelly fish can be seen in the water in the summer months and on frequent occasions we see bottle nose dolphins swimming in pods often focused at the southern outlet of Mallini Bayou at falling tide to catch fish. A family of otters were present in recent years, observed entering the bayou from the east side of our property at the end of the street, to swim and feed in the bay (very entertaining). Gnats, mosquitoes, termites swarming, wasps and yellow jackets are also a reality at this location. Also, in recent years there has been several sightings of a lone alligator, estimated to be 5-6 feet in length.

-Quality and quantity of wetlands on site- -Submerged vegetation-

Wetlands are defined by the US Environmental Protection Agency as "areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season."

"https://www.epa.gov > wetlands > what-wetland

The wetlands near us to the east were identified by the county team putting in the rock jetty. This is adjacent to the Koerner property, up Mallini Bayou and measures were taken to protect the grasses by building a bulkhead on the southside of Mallini Bayou (about 100-150 yards up the bayou to the east). A "no wake" sign is posted on that bulkhead at present. As for the location where the proposed jetty will go, I see no vegetation. There is green algae visible on the rock jetty. One can observe little crabs, bait fish, fiddler crabs in the shallow water at this location. After 50 years of occupying this property, I have never seen anything grow out of or near the surface of the soil in this location. It is primarily an underwater, sandy bottom, if you walk out a little further it gets mushy. When the intact jetty was there, a good-sized beach allowed us to pull small watercraft directly into the bay with ease. My children (now in their 20's & 30's) were able to play on this beach in the shade of the 7 mature pine trees (now gone) up until noon in the summertime.

5. Project Impacts:

There are no know adverse impacts on adjacent shorelines as a result of this proposed project. Two engineers have offered opinions regarding a jetty at this both location and one located 3 lots to the south of ours (Trapolin property). I will reference their words in this section of the report.

Harrison County Engineer, Ms. Jacklyn Turner has addressed how this project would "actually enhance the County's rock jetty and help to reduce dredging needs in the bayou" in a letter of support dated October 15, 2021. She also wrote, "It does not appear that this plan would hinder the County in any way regarding the existing jetty."

Regarding the biological integrity and productivity of coastal wetlands communities and ecosystems, I will quote Mr. Scott Douglass of South Coast Engineers. His letter of advocacy for our neighbor Peter Trapolin indicated how a jetty would conserve and protect the biological integrity. This is a direct quote from Mr. Scott Douglass's letter:

"The bottom line: it is my professional opinion that your proposed groin/jetty replacement should be permitted because it is consistent with both the spirit of the state regulations (it will conserve and protect the biological integrity of the Coastal Wetlands) and the letter of those regulations (see the logic for a variance request as outlined below). Your proposed project will have no adverse impact on the adjacent shorelines and the nearby boat entrance channel. It is my hope that DMR staff will recommend a variance for your proposed structure. The DMR staff has concerns that your existing structure is so far dilapidated as to have ceased functioning (which is why you want to replace it). Any new groin/jetty, under their regulations, can only be allowed as a means to reduce shoaling of navigable channels and boat basins. While your proposed structure is updrift of a navigable channel to a boat basin, there are several other coastal structures between you and the channel. So, a variance request may be the most appropriate path forward."

In terms of the biological productivity and the ecosystem, Mr. Scott Douglass wrote favorably about the intertidal sandy shoreline supporting the ecosystem: "The intertidal, sandy shoreline serves several functions including providing habitat for polychaetes (small worms in the sand) and shallow and dry wading/feeding/foraging areas for birds (herons, egrets, shorebirds, etc)." He reports on the anecdotal evidence of turtles nesting on the sandy beach in question. I have 3 videos dated May 29, 2021 of a

diamond back terrapin depositing a clutch of eggs in a nest on the southern border of our property after a storm had deposited a large amount of sand in the southeast corner of our bulkhead such that it met up with the land, allowing the terrapin to walk ashore and dig a nest (we notified wildlife authorities, sent photos and roped off the site). The proposed project would directly affect the environment by allowing the sandy beach to return and extend access to nesting opportunities year long and not just brief moments after storms.

A professional engineer, Mr. Robert Douglass has been engaged to interpret the South Coast Engineers report to Harrison County, "Sand Transport Evaluation for the Proposed Henderson Point North Jetty Extension" (June 8, 2012) and provide a professional opinion regarding this sediment study as directly applicable to this project. This report will be forthcoming where the project impacts regarding salinity regimes, sediment transport processes, water flow and natural circulation and the long-term biological productivity of the coastal wetlands' ecosystem will be addressed. Meanwhile I can reference Mr. Scott Douglass' letter again where he wrote about the Trapolin project which is similar in nature to ours, "The proposed project will not adversely alter the natural supply of nutrients to the coastal wetlands" and "will not adversely alter long-term biological productivity of the coastal wetlands ecosystem".

Mr. Scott Douglass points out that: "there are at least eight (8) similar structures within a 600-foot stretch of shoreline" and that the "sandy intertidal habitat is much better for the ecology of the state's coastal waters, their biological integrity than a vertical wall".

There are no known detrimental off-site effects to coastal wetlands during and after the proposed activity. This plan is anticipated to enhance the ecosystem and reflects a nature-based solution to the problem of erosion, primarily because of the improved habitat that will result in a living shoreline.

This report was prepared with the MS DMR Environmental Assessment Preparation Guidelines - by Jill Fitzpatrick Laroussini. July 19, 2022.