



# CDBG-MIT

## Harvey Competition Application

### Public Comment Package

#### **Project: Fulton Beach Road Elevation and Beach Nourishment**

##### **Disaster Conditions**

Several major storms have hit the Fulton Beach area in the last 20 years. In 1980, North Fulton Beach Road, an access road and evacuation route along the shoreline, was completely washed out. August 2017's Hurricane Harvey passed almost directly over this area causing major shoreline and roadway damage. On July 25, 2020, Hurricane Hanna made landfall resulting in significant water levels and wave heights that further eroded the shoreline, roadway and private structures.

The shoreline along North Fulton Beach Road is largely unprotected. When it is overtopped during storm events, the roadway floods. Large storm events can create scarps (very steep banks). In the past, so much of the shoreline eroded that the road and utilities had to be moved further inward. At risk are 70 acres of waterfront property, residents and small coastal businesses in a Census Tract containing Low to Moderate Income (LMI) residents.

This road is the only evacuation route for the businesses and properties that line the road. Approximately 14,630 cars travel down this road every day. Approximately 38,000 visitors visit the area annually. All residents, business owners, and tourists in this area are at risk if the road fails or floods during storm events. Power, water, and communication utilities along the road are also at risk from the impacts of overtopping and flooding.

The shoreline along the project site currently consists of a combination of concrete riprap, bulkheads, and sections of sandy beach. These mitigation measures are insufficient for long-term shoreline stabilization or for protection from wave overtopping. Simply performing roadway repairs will not alleviate the risk to the road. Constructing offshore structures that will inhibit the wave energy affecting the shoreline will protect the roadway from being undermined and flooded in the future. The North Fulton Beach Road elevation and beach nourishment will protect homes along the area and will increase the roadway's resiliency against storm surge.

##### **Project Description**

This Project proposes to construct a "Living Breakwater Reef" system along a one-mile stretch of shoreline from Beachwood Road to the boundary between Aransas County and Fulton. This reef will be built of partially emergent rock structures that will prevent the road from being undermined by wave action in Aransas Bay and prevent further scarping along the roadway. In addition, in the same area the roadway will be raised one foot and drainage improvements implemented to help alleviate pooling behind the road.



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The primary objective of the breakwaters is to protect the roadway and adjacent infrastructure by dampening and dissipating wave energy affecting the shoreline, thereby increasing public safety and creating a shoreline along the road that is more resilient against future storm surge events and rising sea levels. These improvement measures represent an independent solution to water surge and will not need other projects to support it.

Also under this project, the area located from the shoreline to the proposed breakwaters will be planted with a mix of smooth cordgrass at lower elevations and marsh-hay cordgrass and shoregrass at higher elevations. Cabled articulated-block mats may be used as earthen fill if necessary for stability. The breakwater and planted marsh shoreline will help protect the roadway from shoreline erosion by dampening and dissipating wave energy hitting the shoreline, thus allowing for the marsh grasses to grow and stabilize the shorelines. This project will help to dissipate wave energy, filter runoff, stabilize the shoreline, improve public safety and protect public access for neighborhoods.

#### Local Plan Inclusion

This project is a Tier I recommended project in the list of coastal strategies for Region 3 (Aransas, Kleberg, Nueces, Refugio, and San Patricio counties) in the "Texas Coastal Resiliency Master Plan" developed by the Texas General Land Office, as referenced in the "Aransas County Texas Multi-Jurisdictional Hazard Mitigation Action Plan." It is also included in the Aransas County Coastal Resiliency Initiative.

#### Project Construction

It is anticipated that this project will involve the construction of overlapping angled breakwaters measuring feet in width (at the base). The crest will measure approximately 4 feet in width and 4.5 feet in height with a 2:1 slope, for an approximate total of 5,280 linear feet. The breakwaters will be constructed with concrete rip-rap, combined with a mix of limestone and crushed concrete, oyster shell and spat when feasible. The structures will be approximately 500 feet offshore, with openings between each section. A US Army Corps of Engineers permit application for this project is currently being developed.

An approximate 5,280 linear-feet of the road will be raised one foot in elevation as an additional mitigation measure. A cement sidewalk will be built along the raised portion of the roadway to provide further protection for the road. Utilities will be adjusted as needed.



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#### National Objective & Mitigation Risk

##### **National Objective - LMI – Area Benefit**

This community lies within a single Census Block Group that is 54.04% LMI, protecting homes, properties and ensuring the evacuation route for residents is made more resilient.

**Mitigation Risk** - This project addresses two of the Mitigation Risks under the Hurricane Harvey Competition: hurricanes/tropical/storms/tropical depressions; and severe coastal flooding.

#### Budget

The anticipated cost of the project is **\$5,432,934.00** with **1% match of \$54,329.34 to be provided from the Aransas County General Budget. CDBG-MIT funding in the amount of \$5,378,604.66** is being requested. A detailed Cost Estimate is attached.

#### Project Administration

This project will be managed by Aransas County personnel and the County's procured grant administrator. The County Attorney will review and approve all legal documents. The County Auditor will maintain a project financial account, process all vendor payments and prepare timely reimbursement requests for submittal to the Texas General Land Office (GLO). The County Commissioners Court will approve all legal documents. The County will conduct Federally-compliant procurement processes to administer all professional and construction services contracts associated with the design and construction of the project. The grant administrator and engineering firm have already been procured according to Federal requirements. The County Commissioners Court will approve all selection of project contractors.

Under the direction of the County's project manager, the County's grant administrator will oversee all aspects of the project on behalf of the County. The County's grant administrator will provide technical assistance to the project, assist with preparation of bid documents, qualifications review, and selection of contractors to manage construction and build the project. The grant administrator will work closely with the engineer to ensure that the project stays on time and budget. The grant administrator will monitor the design and construction of the project to ensure that all procurement, Davis Bacon labor, Section 3, environmental, Fair Housing, Equal Opportunity, and other Federal requirements are met, and that measures are taken to prevent waste, fraud and abuse.

The grant administrator will review all invoices for payment, change orders if needed, and work through GLO's system of record to request reimbursement. The grants manager will visit the project site periodically to verify invoices for work certified as complete by the construction manager. The grant manager will prepare for submittal to GLO all required performance and financial reports, excluding preparation audited financial statements. If needed, the grant



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administrator will assist with procurement of auditing services and will support Federally-compliant preparation of audited financial statements. The grant manager will close out the sub-award as required.



## CDBG-MIT: Budget Justification of Retail Costs (Former Table 2)

Cost Verification Controls must be in place to assure that construction costs are reasonable and consistent with market costs at the time and place of construction.

<b>Applicant/Subrecipient:</b>		Aransas County					
<b>Site/Activity Title:</b>		Fulton Beach Road Elevation					
<b>Eligible Activity:</b>		Infrastructure - Street Improvements; Natural or Green Infrastructure					
Materials/Facilities/Services	\$/Unit	Unit	Quantity	Construction	Acquisition	Total	
Mobilization and Demobilization	\$ 250,000.00	LS	1	\$ 250,000.00	\$ -	\$ 250,000.00	
Construction Surveying	\$ 75,000.00	LS	1	\$ 75,000.00	\$ -	\$ 75,000.00	
Environmental Protection (BMP)	\$ 24,000.00	LS	1	\$ 24,000.00	\$ -	\$ 24,000.00	
Shoreline Excavation and Grading	\$ 110,000.00	LS	1	\$ 110,000.00	\$ -	\$ 110,000.00	
Geotextile Fabric	\$ 8.00	SY	21000	\$ 168,000.00	\$ -	\$ 168,000.00	
Bedding Material (used concrete)	\$ 20.00	CY	2100	\$ 42,000.00	\$ -	\$ 42,000.00	
Bedding Material (new stone)	\$ 180.00	CY	3200	\$ 576,000.00	\$ -	\$ 576,000.00	
Armoring	\$ 230.00	CY	9100	\$ 2,093,000.00	\$ -	\$ 2,093,000.00	
Smooth Cordgrass Planting	\$ 11.00	SY	1500	\$ 16,500.00	\$ -	\$ 16,500.00	
Marshay/Sea Ox-Eye Planting	\$ 6.00	SY	1800	\$ 10,800.00	\$ -	\$ 10,800.00	
Shoreline Fill	\$ 40.00	LF	2500	\$ 100,000.00	\$ -	\$ 100,000.00	
Roadway work	\$ 365.00	LF	4200	\$ 1,533,000.00	\$ -	\$ 1,533,000.00	
Grant Management	\$ 434,634.00		0	\$ -	\$ -	\$ 434,634.00	
	\$ -		0	\$ -	\$ -	\$ -	
	\$ -		0	\$ -	\$ -	\$ -	
	\$ -		0	\$ -	\$ -	\$ -	
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	\$ -		0	\$ -	\$ -	\$ -	
<b>TOTAL</b>	<b>\$ 894,494.00</b>			<b>\$ 4,998,300.00</b>	<b>\$ -</b>	<b>\$ 5,432,934.00</b>	

**1. Identify and explain the annual projected operation and maintenance costs associated with the proposed activities.**

Customary road maintenance to be assumed by the County.

**2. Identify and explain any special engineering activities.**

NA



Seal

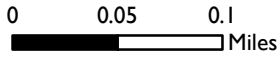
<b>Date:</b>	9/30/2020
<b>Phone Number:</b>	361-661-3061

Signature of Registered Engineer/Architect  
Responsible For Budget Justification:

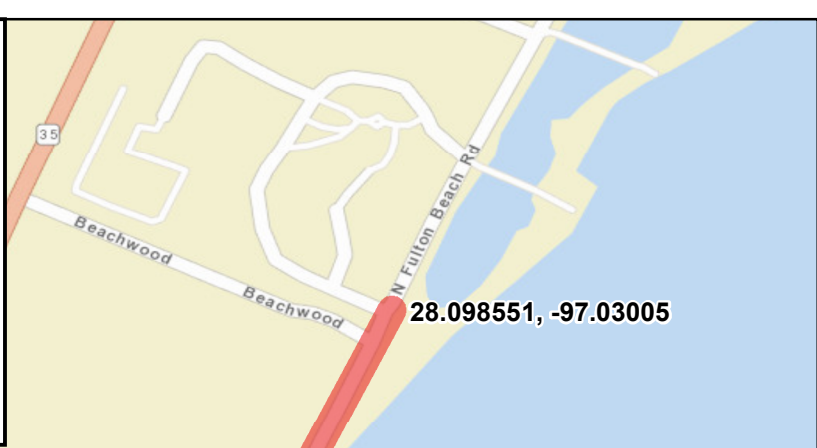
# Aransas County

## North Fulton Beach Road

North Fulton Beach Road  
Project Location






Esri - 2020; Aransas County - 2020



# Aransas County

## North Fulton Beach Road

-  North Fulton Beach Road
-  Project Location
-  Beneficiary Block Group



0 0.75 1.5 Miles



Esri - 2020; Aransas County - 2020; ACS - 2015

**CT 950100 BG 3**  
**LMI Percent: 54.04%**

