



# CDBG-MIT

## Harvey Competition Application

### Public Comment Package

#### **Project: Ruby Allen Drainage Project**

#### **Disaster Conditions**

The City of Rockport's Ruby Allen Street and surrounding area in the south section of the city are highly prone to flooding. In fact, the entire city is susceptible to hurricanes and flooding due to low elevation and exposure to Gulf Coast hurricanes. After a large 1970 flood impacted most of Rockport, an emergency drainage ditch was constructed along Ruby Allen Street. Over time the capacity of that ditch has been enlarged to create a major stormwater conveyance facility that drains 1,724 acres. During significant rain events, the ditch is overcome constraining making access to some properties along the ditch and making it difficult and unsafe for residents, evacuees and emergency responders to travel locally during flood events.

In August 2017, Hurricane Harvey made landfall directly in Aransas County as a Category 4 storm with winds exceeding 130 mph and unprecedented rainfall. The storm caused extensive damage to more than 1,500 structures in the city. Flooding extended beyond recognized Special Flood Hazard Areas and cut off some evacuation routes, stranding residents who were unable to evacuate. With significant flood damage, water and sewer systems overflowed and septic systems failed, and the residents experienced acutely the described conditions in the area surrounding Ruby Allen Street.

Three years after Hurricane Harvey, Rockport is still recovering, and may never return to pre-Harvey conditions. Some businesses still remain closed and the City's population is approximately 20% less than before Harvey struck.

#### **Project Description**

This project will be Phase 2 of a comprehensive water management effort that benefits residents throughout south Rockport and is a successful collaboration between Aransas County and the City of Rockport. In Phase 1, a majority of the Ruby Allen ditch flow was redirected to a larger, improved channel including upgraded drainage structures at road crossings. To fully realize the benefits of Phase 1 investments, the Phase 2 project must be completed.

Phase 2 improvements will decrease flooding during extreme rain events and facilitate faster emergency response. Evacuation routes are more likely to remain open and homes protected. Access to the Texas evacuation Route 35 is particularly significant. Sanitary system improvements will protect against unhealthy sewage overflows and system failures during extreme storm events. Upgrades to the downstream wastewater treatment plant capacity will facilitate removal of private septic systems which are susceptible to inundation and failure. Improved access for emergency response will also be an important Phase 2 outcome.



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#### Local Plan Inclusion

The proposed Project will mitigate the impacts of Hurricanes, Tropical Storms and Flooding, the primary hazards identified in Aransas County's Multi-Jurisdictional Hazard Mitigation Action Plan (October 2017; <https://www.aransaspasstx.gov/DocumentCenter/View/646/Aransas-County-Texas-Multi-Jurisdictional-Hazard-Mitigation-Action-Plan?bidId=>)

The City of Rockport's Master Drainage Plan (2001) describes the Ruby Allen project as a "high-impact project will be a data-informed investment that will reduce the risks to property and infrastructure from coastal flooding."

#### Project Construction

Phase 2 of the Project consists largely of improvements to the sanitary system that protect against overflows and system failures during extreme storm events. The project engineer will investigate design options, confirm sizing of various system components, estimate construction costs and prepare construction drawings and specifications. The Phase 2 Project will design and construct drainage infrastructure improvements as follows:

- 1) Install one lift station each at;
  - Monkey Road & Corpus Christi Street
  - Monkey Road & 6<sup>th</sup> Street
- 2) Install force mains:
  - 6" line along Corpus Christi Street (Monkey Street to Fuqua Street)
  - 6" line along 6<sup>th</sup> Street (Monkey Street to Doughty Street)
  - 8" line along 3<sup>rd</sup> Street (Taylor Street to Fuqua Street)
  - 10" line along 1<sup>st</sup> Street (Fuqua Street to South Ann Street)
  - 8" line along Fuqua Street (Taylor Street to Corpus Christi Street)
  - 12" line along Ann Street/Mathis Street and Gagnon Street north to Wastewater Treatment Plant
- 3) Pave Ruby Allen Street from Corpus Christi Street to 12<sup>th</sup> Street.
- 4) Improve the wastewater treatment plant to handle increased storm/wastewater flows.
- 5) Options for remote monitoring of lift stations during a system failure.



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#### National Objective & Mitigation Risk

##### **National Objective - Low to Moderate Income (LMI) - Area Benefit**

The proposed Project qualifies for the LMI - Area Benefit. The Project area lies within three Census Block Groups, each of which exceeds 51% LMI population;

- Census Tract 950400 Block Group 1 = LMI 88.7%
- Census Tract 950400 Block Group 2 = LMI 61.6%
- Census Tract 950500 Block Group 1 = LMI 54.2%

Note: Census Block 950500 BG 1 extends south beyond the project area directly benefitting from the drainage improvements. The entire block group is included due to its population concentration near the drainage improvements, and the access to goods and services in Rockport that more southern, rural residents are be provided when project improvements allow access roads near Ruby Allen Street to remain open. As well, the improvements will improve access to evacuation Route 35.

**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 **\$21,576,712** with **1% match of \$215,767.12** to be provided by the **Aransas County General Budget and the Drainage Fund**. **CDBG-MIT funding in the amount of \$21,360,944.88** 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 has 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



## **CDBG-MIT Harvey Competition Application Public Comment Package**

technical assistance to the project, assist with preparation of bid documents, qualifications review, and selection of contractors to design, manage construction, build and place into operation the drainage improvements.

The County plans to procure according to Federal standards a qualified engineering firm to prepare design alternatives and estimate costs, create construction-ready drawings/specifications and assist the County with construction bidding and construction management. The grant administrator will advise on these procurements to ensure that all Federal standards are adhered to.

The grant administrator will work closely with the project 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 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.

Applicant/Subrecipient:	Aransas County					
Site/Activity Title:	Ruby Allen Street Drainage					
Eligible Activity:	Infrastructure Improvement					
Materials/Facilities/Services	\$/Unit	Unit	Quantity	Construction	Acquisition	Total
<b>SITE PREPARATION</b>						
1. Mobilization; Demobilization; Bonds; Insurance (5%)	\$ 800,000.00	LS	1	\$ 800,000.00	\$ -	\$ 800,000.00
2. Site Preparation: to remove trees, stumps, logs, vegetation, fences, rubbish, debris, organic matter and other objectionable material per the specifications (includes stripping existing topsoil; stockpiling topsoil; replacing topsoil over all disturbed areas unless otherwise instructed; and positive drainage for the entire site)	\$ 4,000.00	AC	18	\$ 70,400.00	\$ -	\$ 70,400.00
<b>WATER DISTRIBUTION SYSTEM</b>						
1. 10" C900-DR18 (class 235) P.V.C. Water Line (all depths) (including bends, wyes, crosses, plugs and clamps, reducers and tees)	\$ 40.00	LF	15100	\$ 604,000.00	\$ -	\$ 604,000.00
2. 10" Gate Valve and Box	\$ 3,500.00	EA	15	\$ 52,500.00	\$ -	\$ 52,500.00
3. Fire Hydrants (including leads; all depths)	\$ 6,000.00	EA	25	\$ 150,000.00	\$ -	\$ 150,000.00
4. Trench Dewatering: (\$20.00 per LF minimum)	\$ 20.00	LF	7550	\$ 151,000.00	\$ -	\$ 151,000.00
<b>SANITARY COLLECTION SYSTEM</b>						
1. Standard 5' Fiberglass Manhole	\$ 15,000.00	EA	44	\$ 660,000.00	\$ -	\$ 660,000.00
2. SDR 26 P.V.C. Sewer (all depths):						
a. 8" Pipe	\$ 75.00	LF	5800	\$ 435,000.00	\$ -	\$ 435,000.00
b. 10" Pipe	\$ 90.00	LF	11900	\$ 1,071,000.00	\$ -	\$ 1,071,000.00
3. C900 - DR18 P.V.C. (235 psi) Force Main (all depths):						
a. 6" Pipe	\$ 28.00	LF	10770	\$ 301,560.00	\$ -	\$ 301,560.00
b. 8" Pipe	\$ 32.00	LF	3750	\$ 120,000.00	\$ -	\$ 120,000.00
c. 10" Pipe	\$ 40.00	LF	1580	\$ 63,200.00	\$ -	\$ 63,200.00
d. 12" Pipe	\$ 50.00	LF	7870	\$ 393,500.00	\$ -	\$ 393,500.00
4. Plug Valve and Box:						
a. 6" Pipe	\$ 1,500.00	EA	3	\$ 4,500.00	\$ -	\$ 4,500.00
b. 8" Pipe	\$ 2,500.00	EA	1	\$ 2,500.00	\$ -	\$ 2,500.00
c. 10" Pipe	\$ 3,500.00	EA	1	\$ 3,500.00	\$ -	\$ 3,500.00
d. 12" Pipe	\$ 5,000.00	EA	2	\$ 10,000.00	\$ -	\$ 10,000.00
5. Existing Lift Station Improvements						
a. Gagon Lift Station	\$ 150,000.00	LS	1	\$ 150,000.00	\$ -	\$ 150,000.00
b. First Street Lift Station	\$ 150,000.00	LS	1	\$ 150,000.00	\$ -	\$ 150,000.00
6. Proposed Duplex Lift Station (plus electrical)						
a. Corpus Christi Lift Station	\$ 495,000.00	LS	1	\$ 495,000.00	\$ -	\$ 495,000.00
b. 6th Street Lift Station	\$ 495,000.00	LS	1	\$ 495,000.00	\$ -	\$ 495,000.00
7. Trench Dewatering: (\$20.00 per LF minimum)	\$ 20.00	LF	20835	\$ 416,700.00	\$ -	\$ 416,700.00
<b>STORM SEWER SYSTEM</b>						
1. Standard Type "C" Manhole:	\$ 5,000.00	EA	16	\$ 80,000.00	\$ -	\$ 80,000.00
2. 5' Curb Inlet	\$ 5,000.00	EA	26	\$ 130,000.00	\$ -	\$ 130,000.00
3. R.C.P. Sewer (C-76, Cl. III, with rubber gasket joints) (all depths):						
a. 24" Pipe	\$ 140.00	LF	2400	\$ 336,000.00	\$ -	\$ 336,000.00
b. 60" Pipe	\$ 450.00	LF	4000	\$ 1,800,000.00	\$ -	\$ 1,800,000.00
4. Plug for 60" Pipe	\$ 500.00	EA	4	\$ 2,000.00	\$ -	\$ 2,000.00
5. 4" Concrete Slope Paving	\$ 80.00	SY	24300	\$ 1,944,000.00	\$ -	\$ 1,944,000.00
6. Trench Dewatering: (\$20.00 per LF minimum)	\$ 20.00	LF	3200	\$ 64,000.00	\$ -	\$ 64,000.00



## 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.

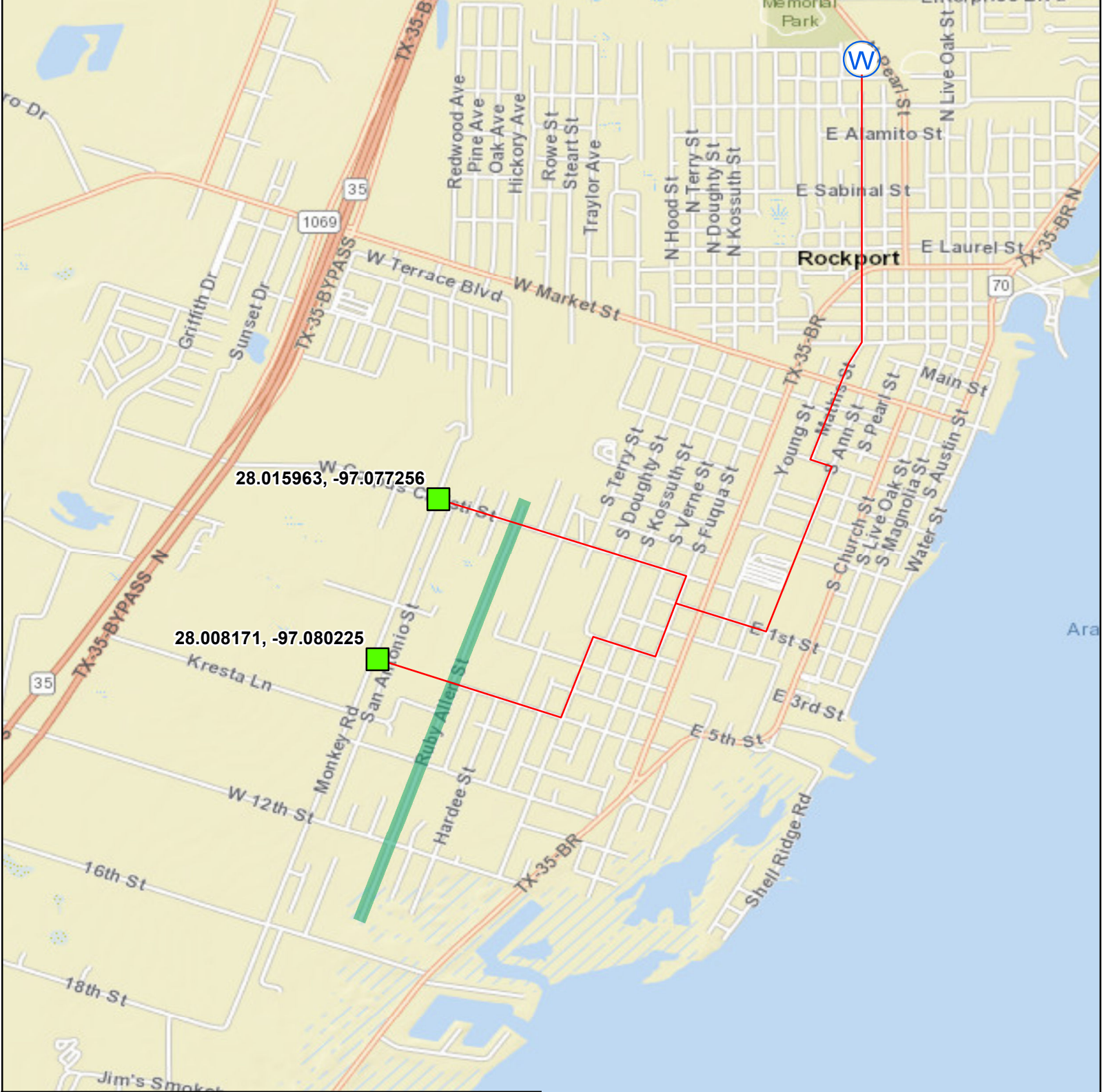
<b>Applicant/Subrecipient:</b>		Aransas County					
<b>Site/Activity Title:</b>		Ruby Allen Street Drainage					
<b>Eligible Activity:</b>		Infrastructure Improvement					
Materials/Facilities/Services	\$/Unit	Unit	Quantity	Construction	Acquisition	Total	
<b>PAVING</b>							
1. 12" Compacted Subgrade Preparation (1' BOC)	\$ 5.00	SY	34133	\$ 170,665.00	\$ -	\$ 170,665.00	
2. Geogrid	\$ 6.00	SY	34133	\$ 204,798.00	\$ -	\$ 204,798.00	
3. 10" Crushed Limestone Base	\$ 32.00	SY	34133	\$ 1,092,256.0	\$ -	\$ 1,092,256.00	
4. Prime Coat (0.20 Gallons/ SY)	\$ 45,520.00	LS	1	\$ 45,520.00	\$ -	\$ 45,520.00	
5. 2" Type "D" HMAC	\$ 22.00	SY	28444	\$ 625,777.78	\$ -	\$ 625,777.78	
6. Reinforced Concrete Curb	\$ 6.00	LF	25600	\$ 153,600.00	\$ -	\$ 153,600.00	
7. Signage							
a. Street/Stop Signs	\$ 1,000.00	EA	22	\$ 22,000.00	\$ -	\$ 22,000.00	
b. Other Signs	\$ 800.00	EA	10	\$ 8,000.00	\$ -	\$ 8,000.00	
<b>SUBTOTAL</b>						<b>\$ 13,277,976.78</b>	
Contingency (30%)						\$ 3,983,393.03	
Engineering Services (15%)						\$ 2,589,205.47	
Environmental						\$ 25,000.00	
Grant Management (8%)						\$ 1,701,136.72	
<b>TOTAL</b>						<b>\$ 21,576,712.00</b>	

**1. Identify and explain the annual projected operation and maintenance costs associated with the proposed activities.**  
 Annual maintenance costs estimated at \$18,300 for water and \$43,000 for sewer will be assumed by the City of Rockport. Annual maintenance costs estimated at \$2,000 for paving and \$1,000 for storm drains will be assumed by the County.

**2. Identify and explain any special engineering activities.**  
 None.

<div style="text-align: center;">  <p><b>EJES, Inc.</b>  <b>FIRM REGISTRATION NO. 2488</b></p> <p style="text-align: right;"><b>DATE: 09/29/2020</b></p> <p style="text-align: center;"><small>Seal</small></p> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Date:</td> <td style="padding: 2px;">9/29/2020</td> </tr> <tr> <td style="padding: 2px;">Phone Number:</td> <td style="padding: 2px;">281-272-1612</td> </tr> </table> <div style="text-align: center; margin-top: 20px;">  <p><b>Signature of Registered Engineer/Architect        Responsible For Budget Justification:</b></p> </div>	Date:	9/29/2020	Phone Number:	281-272-1612
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Phone Number:	281-272-1612				

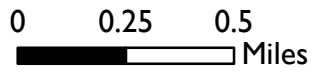




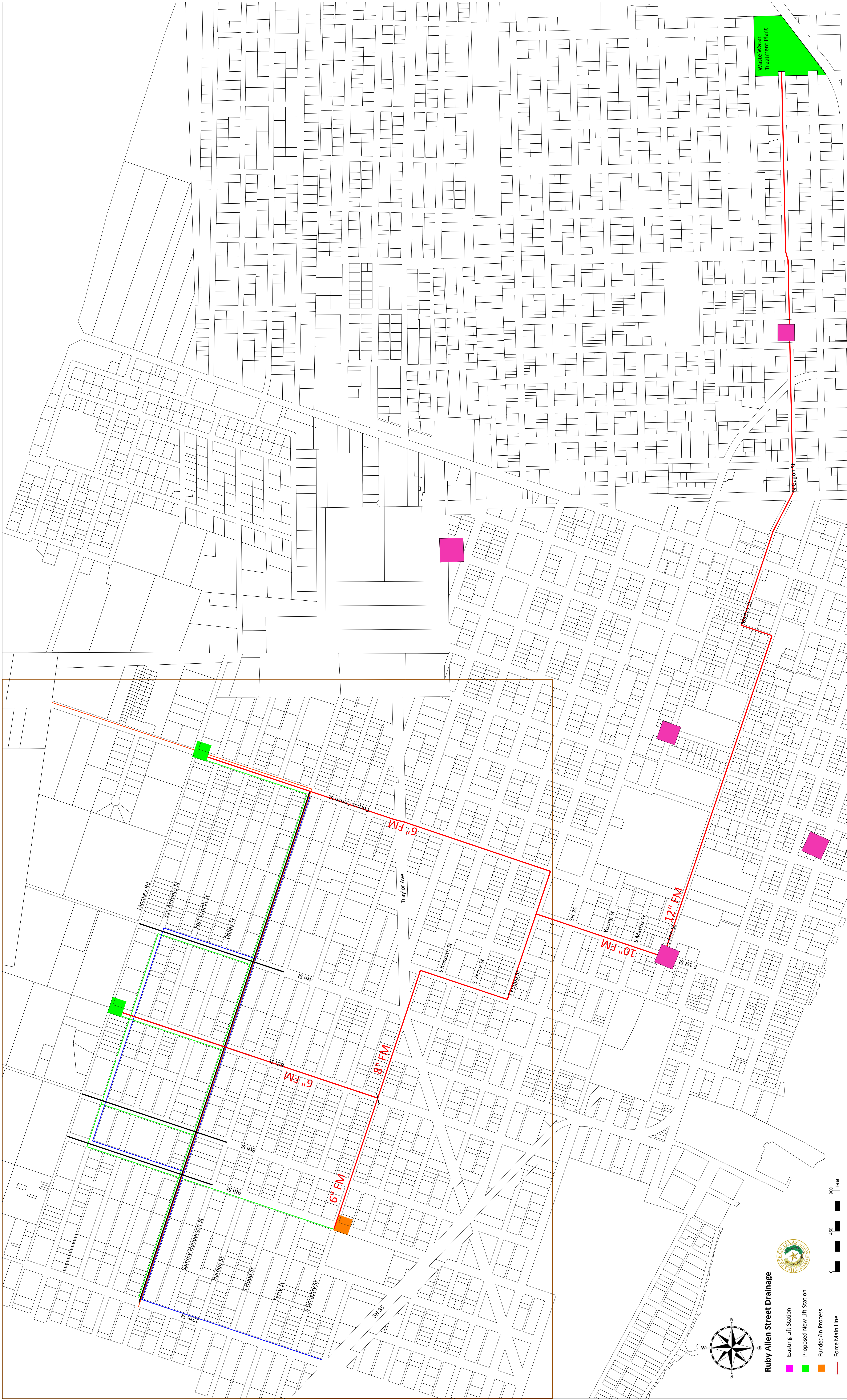
# Aransas County

## Ruby Allen Street Drainage

- Lift Stations
- Force Main Lines
- W WWTP
- Ruby Allen Street





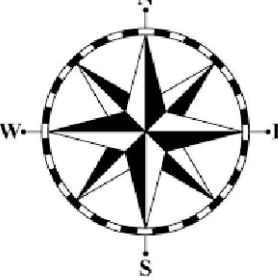


Waste Water Treatment Plant

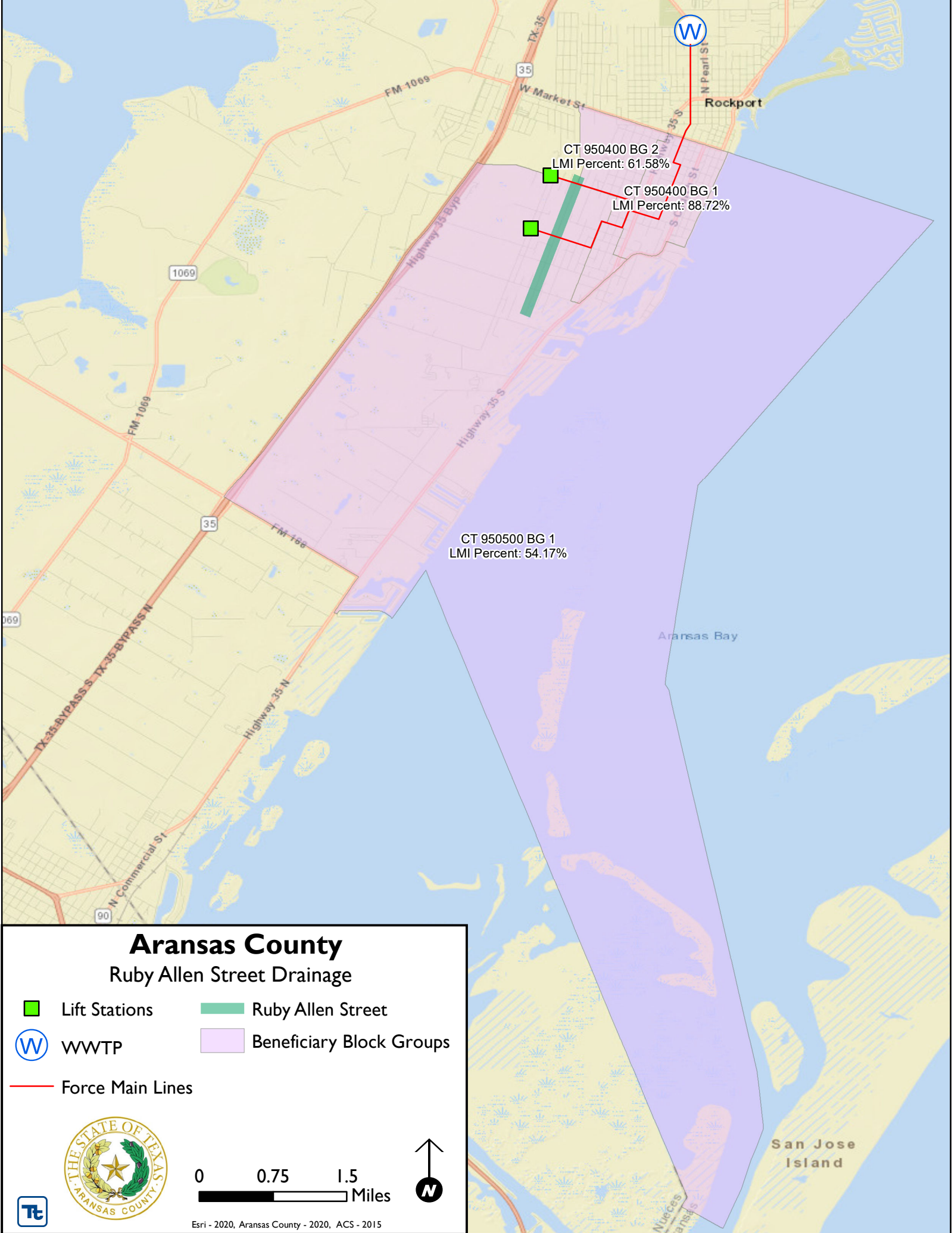


**Ruby Allen Street Drainage**

- Existing Lift Station
- Proposed New Lift Station
- Funded/In Process
- Force Main Line







# Aransas County

## Ruby Allen Street Drainage

- Lift Stations
- ▬ Ruby Allen Street
- W WWTP
- Beneficiary Block Groups
- Force Main Lines

