



TWDB FIF – Category 2 Projects



1. La Sara Gates
2. Simo Pump Station
3. San Perlita Linear Detention
4. Lyford Trunkline
5. Raymondville Railroad Spur Detention Pond
6. Mulberry Detention Pond
7. Sebastian Drainage Improvements

La Sara Gates

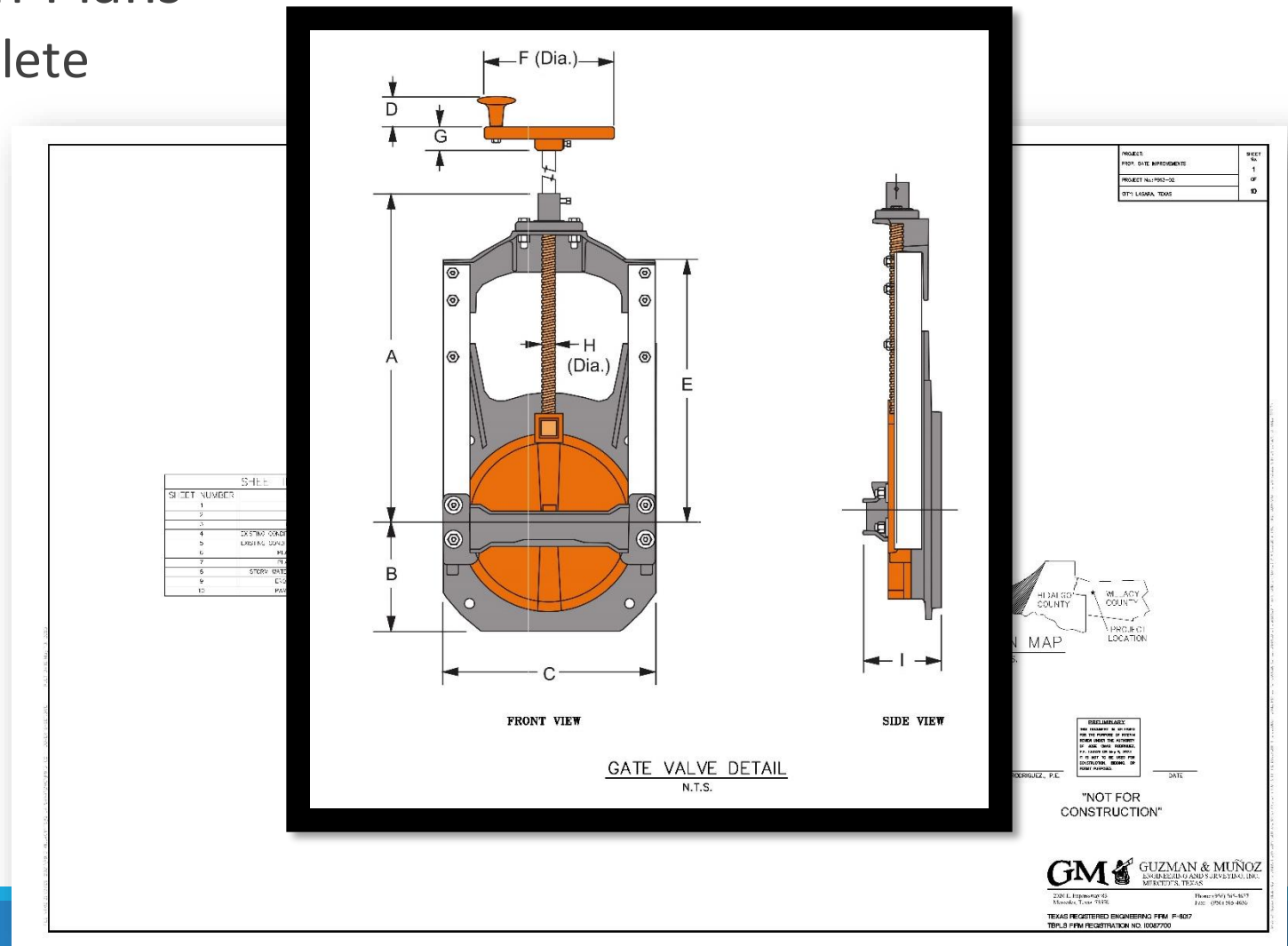




TWDB FIF: La Sara Gates



- ✓ Construction Plans
 - 90% Complete
- ✓ Budget
 - \$87,238



Simo Pump Station





TWDB FIF: Simo Pump Station



- ✓ Construction Plans
 - 30% Complete

- ✓ Budget
 - \$564,498

CONSTRUCTION PLANS FOR PROPOSED DRAINAGE IMPROVEMENTS FOR CITY OF LYFORD WILLACY COUNTY, TEXAS

Sheet No.	Description
1	COW-4 SHEET 1
2	SIMO ROAD
3	COUNTY ROAD 1805 (SHEET 1 OF 2)
4	COUNTY ROAD 1805 (SHEET 2 OF 2)
5	TG POND (SHEET 1 OF 2)
6	TG POND (SHEET 2 OF 2)

VICINITY MAP
1"=600'

LOCATION MAP
N.T.S.

PRELIMINARY
THIS DRAWING IS PRELIMINARY AND SHOULD NOT BE USED FOR CONSTRUCTION. THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

JOSE LUIS MUÑOZ, P.E. _____ DATE _____

"NOT FOR CONSTRUCTION"

GM GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, INC.
MEXICO, TEXAS

2024, Registered EIT
Member, State of Texas
TXS&S-056-584-047
1947-090-290-000

TEXAS REGISTERED ENGINEERING FIRM F-807
TSPS.B FIRM REGISTRATION NO. 10087200

San Perlita Linear Detention





TWDB FF: San Perlita Linear Detention



- ✓ Construction Plans
 - 30% Complete

- ✓ Budget
 - \$268,777

CONSTRUCTION PLANS FOR PROPOSED STREET AND DRAINAGE IMPROVEMENTS FOR CITY OF SAN PERLITA WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40095

SHEET NUMBER	SHEET INDEX	SHEET TITLE	STATION DESCRIPTION
1	COVER SHEET		
2	DRAINAGE IMPROVEMENTS		
3	CONCRETE PLAN		
4	STREET PLAN		
5	MANHOLE AND MDP		
6	TEXT STREET		
7	TEXT STREET AND BAY AVENUE		
8	FM 2259 NORTH		
9	FM 2259 NORTH		
10	FM 2259 NORTH		
11	FM 2259 NORTH		
12	FM 2259 NORTH		
13	FM 2259 NORTH		

VICINITY MAP:
1" = 100'

LOCATION MAP
N.T.S.

EXPLANATION:
This drawing is prepared for the purpose of setting forth and showing the location of all work to be done, the extent of the work, the location of construction, and the location of other features.

JOSE U. S. MUÑOZ, P.E. _____ DATE _____

"NOT FOR CONSTRUCTION"

GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, INC.
M. RICHIE, TEXAS

5029 F. Freeway #211
McAllen, Texas 78501
Phone: (361) 345-4477
Fax: (361) 345-4476

TEXAS REGISTERED ENGINEERING FIRM E-807
TBP#S FIRM REGISTRATION NO. 10087700

Lyford Trunkline





TWDB FIF: Lyford Trunkline



- ✓ Construction Plans
 - 90% Complete

- ✓ Budget
 - \$889,350

CONSTRUCTION PLANS FOR LYFORD TRUNK LINE IMPROVEMENTS FOR CITY OF LYFORD WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40096

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES
3	PLAN AND PROFILE - STATION 0+00 TO 0+00
4	PLAN AND PROFILE - STATION 5+00 TO 10+00
5	PLAN AND PROFILE - STATION 10+00 TO 15+00
6	PLAN AND PROFILE - STATION 15+00 TO 20+00
7	PLAN AND PROFILE - STATION 20+00 TO 25+00
8	PLAN AND PROFILE - STATION 25+00 TO 30+00
9	PLAN AND PROFILE - STATION 30+00 TO 35+00
10	PLAN AND PROFILE - STATION 35+00 TO 40+00
11	PLAN AND PROFILE - STATION 40+00 TO 47+48
12	EROSION CONTROL
13	EROSION CONTROL DETAILS
14	TRAFFIC CONTROL PLAN
15	STORM WATER DETAILS

LOCATION MAP
N.T.S.

CONSULTANTS:
GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, P.C.
1000 N. FARMER RD.
LYFORD, TEXAS 79605
TEL: 361-564-8600
WWW.GM-AND-MUNOZ.COM

DESIGNED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____

JOSE LIS MUÑOZ, P.E.

APRIL 2023

**"NOT FOR
CONSTRUCTION"**

GM GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, P.C.
1000 N. FARMER RD.
LYFORD, TEXAS 79605
TEL: 361-564-8600
WWW.GM-AND-MUNOZ.COM

TEXAS REGISTERED ENGINEERING FIRM # 407
TERRA FIRM REGISTRATION NO. 10387700

Railroad Spur Detention Pond





TWDB FIF: Railroad Spur Detention Pond



- ✓ Construction Plans
 - 100% Complete
- ✓ Budget
 - \$1,690,300
- ✓ Bid Opening
 - June 8, 2023

CONSTRUCTION PLANS FOR PROPOSED DRAINAGE RAILROAD SPUR POND IMPROVEMENTS FOR CITY OF RAYMONDVILLE WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40048

PROJECT: PROPOSED DRAINAGE IMPROVEMENTS	SHEET NO.
PROJECT NO: P403-08 RAILROAD SPUR POND	1
CITY: RAYMONDVILLE, TEXAS	OF
	10

Texas Water Development Board
Approved: **Sam Kiger** Digitally signed by Sam Kiger
Date: 2023.04.14 11:55:56 -0700

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	EXISTING SITE CONDITIONS
4	DEMOLITION PLAN
5	PROP. DRAINAGE IMPROVEMENTS
6	PLAN AND PROFILE - SECTION POND
7	PLAN AND PROFILE - SMALL STA. 218+99 TO 223+00
8	PLAN AND PROFILE - SMALL STA. 223+00 TO 227+00
9	PLAN AND PROFILE - SMALL STA. 227+00 TO 233+41
10	CROSS SECTION VIEWS, STA. 217+31.30 TO 220+31.30
11	CROSS SECTION VIEWS, STA. 221+76.04 TO 230+65.78
12	EROSION CONTROL PLAN
13	EROSION CONTROL DETAILS
14	EROSION CONTROL DETAILS
15	DRAINAGE DETAILS
16	HAUL ROUTE MAP

VICINITY MAP - 1" = 250'

CITY OFFICIALS

GILBERT GONZALES MAYOR
JOEL GARCIA COMMISSIONER PLACE #1
CHRIS TAMEZ COMMISSIONER PLACE #2
CLIFTON SMITH COMMISSIONER PLACE #3
EDWARD GONZALES COMMISSIONER PLACE #4
TONY CHAVEZ CITY MANAGER

THE WILLACY COUNTY JUDGE HAS REVIEWED AND APPROVED THE TWDB FIF RAILROAD SPUR DETENTION POND CONSTRUCTION PLANS AND SPECIFICATIONS

WILLACY COUNTY JUDGE
DATE: 2/15/23

JOSE LUIS MUÑOZ, P.E.
DATE: 2/15/23

MARCH, 2023

2020 E. Espinosa #3
Mercedes, Texas 78757
Phone: (512) 563-4837
Fax: (512) 563-4836
 TEXAS REGISTERED ENGINEERING FIRM #1-807
TSPS FIRM REGISTRATION NO. 10067700

Mulberry Detention Pond






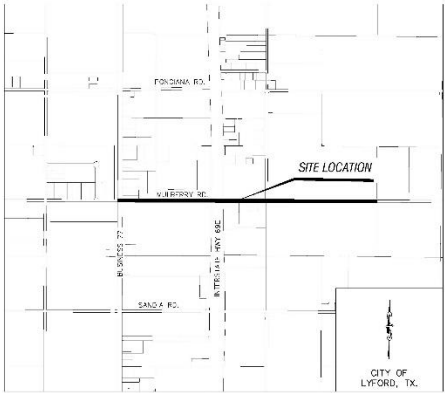
TWDB FIF: Mulberry Detention Pond



- ✓ Construction Plans
 - 10% Complete
- ✓ Budget
 - \$1,468,578

CONSTRUCTION PLANS FOR PROPOSED DRAINAGE MULBERRY DETENTION POND IMPROVEMENTS FOR CITY OF LYFORD WILLACY COUNTY, TEXAS TWDB FIF #40100

Sheet Number	Sheet Title	Stations
1	GENERAL SHEET	
2	GENERAL NOTES	
3	OVERALL	
4	PLAN AND PROFILE	STATION 3+00 TO 34+50
5	PLAN AND PROFILE	STATION 31+50 TO 39+50
6	PLAN AND PROFILE	STATION 19+50 TO 29+53
7	PLAN AND PROFILE	STATION 29+53 TO 38+53
8	PLAN AND PROFILE	STATION 39+53 TO 48+53
9	PLAN AND PROFILE	STATION 49+53 TO 58+53
10	PLAN AND PROFILE	STATION 59+53 TO 68+53
11	PLAN AND PROFILE	STATION 69+53 TO 78+53
12	CROSS SECTIONS	



LOCATION MAP
N.T.S.

REVISIONS

NO.	DATE	DESCRIPTION

DATE: _____

"NOT FOR
CONSTRUCTION"

GM GUZMAN & MUÑOZ
REGISTERED ENGINEERING FIRM
MEXICO, TEXAS

2045, Thompson St. Houston, Texas 77057 Phone: 281-941-8000
FAX: 281-941-8001
TEXAS REGISTERED ENGINEERING FIRM #4017
TEPLS FIRM REGISTRATION NO. 10067700

Sebastian Drainage Improvements





TWDB FIF: Sebastian East Drainage Improvements (1 of 2)



- ✓ Construction Plans
 - 100% Complete

- ✓ Budget
 - \$4,910,760

CONSTRUCTION PLANS FOR PROPOSED STREET AND DRAINAGE IMPROVEMENTS FOR COLONIA SEBASTIAN (EAST) WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40101 JANUARY, 2023

PROJECT PROPOSED STREET IMPROVEMENTS	SHEET
PROJECT NO./PDS-08	1
CITY/SEBASTIAN, TEXAS	OF
	23

SHEET INDEX		
SHEET NUMBER	SHEET TITLE	STATION DESCRIPTION
1	COVER SHEET	
2	GENERAL NOTES	
3	SITE PLAN	
4	EXISTING AND PROPOSED ROADWAY CROSS SECTIONS	
5	EXISTING WATER AND SANITARY SEWER SYSTEM LAYOUT	
6	PAVING AND DRAINAGE OVERALL LAYOUT	
7	BRANCHED AREA MAP	
8	WATER MAIN AND HYDRANT ROADWAY CROSS SECTIONS	
9	WATER SERVICE PIPE	STATION 0+00 TO 0+33-97
10	WATER SERVICE PIPE	STATION 0+00 TO 0+33-97
11	WATER SERVICE PIPE	STATION 0+00 TO 0+14-51
12	LATERAL 2 - PLAN AND PROFILE	STATION 0+00 TO 0+15-00
13	LATERAL 2 - PLAN AND PROFILE	STATION 0+00 TO 0+15-00
14	LATERAL 2 - PLAN AND PROFILE	STATION 0+00 TO 0+24-00
15	LATERAL 2 - CROSS SECTIONS	STATION 0+00 TO 0+24-00
16	LATERAL 2 - CROSS SECTIONS	STATION 0+00 TO 0+24-00
17	LATERAL 2 - CROSS SECTIONS	STATION 0+00 TO 0+24-00
18	WATER MAIN - DETAILS	
19	PAVING - MARKING - DETAILS	
20	DRAINAGE DETAILS (SHEET 2 OF 2)	
21	DRAINAGE DETAILS (SHEET 2 OF 2)	
22	DRAINAGE DETAILS (SHEET 2 OF 2)	
23	DRAINAGE DETAILS (SHEET 2 OF 2)	

VICINITY MAP
1" = 1000'

LOCATION MAP
N.T.S.

JOSE LUIS MUÑOZ, P.E. _____ DATE _____

THE WILLACY COUNTY DRAINAGE DISTRICT #1 HAS REVIEWED AND APPROVED THE "TWO-D" SUBMITTAL FOR LATERAL 2 DRAINAGE IMPROVEMENT CONSTRUCTION PLANS AND SPECIFICATIONS WITHIN THEIR JURISDICTION.

WILLACY COUNTY DRAINAGE DISTRICT #1 REPRESENTATIVE _____ DATE _____

THE WILLACY COUNTY JUDGE HAS REVIEWED AND APPROVED THE "TWO-D" SUBMITTAL FOR LATERAL 2 DRAINAGE IMPROVEMENT CONSTRUCTION PLANS AND SPECIFICATIONS.

WILLACY COUNTY JUDGE _____ DATE _____

GM GUZMAN & MUÑOZ
INCORPORATED
REGISTERED ENGINEERING FIRM P-1007
TECHNICAL REGISTRATION NO. 1006700

2008 S. Espinosa St. Phone: 361-564-8332
McAllen, TX 78501 Fax: 361-564-8336



TWDB FIF:

Sebastian West Drainage Improvements (2 of 2)



- ✓ Construction Plans
 - 100% Complete
- ✓ Budget
 - \$4,910,760
- ✓ Bid Opening
 - June 15, 2023

CONSTRUCTION PLANS FOR PROPOSED STREET AND DRAINAGE IMPROVEMENTS FOR COLONIA SEBASTIAN (WEST) WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40101

MAY, 2023

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	PLAN
4	BOUNDARY CROSS SECTIONS (1 OF 4)
5	BOUNDARY CROSS SECTIONS (2 OF 4)
6	BOUNDARY CROSS SECTIONS (3 OF 4)
7	BOUNDARY CROSS SECTIONS (4 OF 4)
8	PAVING AND CURB AND GUTTER DETAILS
9	PAVING DETAILS
10	DRAINAGE AREA MAP
11	COLONIA SEBASTIAN MAP STATION 16+00 TO 20+00
12	COLONIA SEBASTIAN MAP STATION 20+00 TO 24+00
13	COLONIA SEBASTIAN MAP STATION 24+00 TO 28+00
14	COLONIA SEBASTIAN MAP STATION 28+00 TO 32+00
15	COLONIA SEBASTIAN MAP STATION 32+00 TO 36+00
16	SEWER SYSTEM MAP STATION 16+00 TO 20+00
17	SEWER SYSTEM MAP STATION 20+00 TO 24+00
18	SEWER SYSTEM MAP STATION 24+00 TO 28+00
19	SEWER SYSTEM MAP STATION 28+00 TO 32+00
20	SEWER SYSTEM MAP STATION 32+00 TO 36+00
21	WATER SERVICES HOME MAP STATION 16+00 TO 20+00
22	WATER SERVICES HOME MAP STATION 20+00 TO 24+00
23	WATER SERVICES HOME MAP STATION 24+00 TO 28+00
24	WATER SERVICES HOME MAP STATION 28+00 TO 32+00
25	WATER SERVICES HOME MAP STATION 32+00 TO 36+00
26	SEWER SYSTEM MAP STATION 16+00 TO 20+00
27	SEWER SYSTEM MAP STATION 20+00 TO 24+00
28	SEWER SYSTEM MAP STATION 24+00 TO 28+00
29	SEWER SYSTEM MAP STATION 28+00 TO 32+00
30	SEWER SYSTEM MAP STATION 32+00 TO 36+00
31	SEWER SYSTEM MAP STATION 16+00 TO 20+00
32	SEWER SYSTEM MAP STATION 20+00 TO 24+00
33	SEWER SYSTEM MAP STATION 24+00 TO 28+00
34	SEWER SYSTEM MAP STATION 28+00 TO 32+00
35	SEWER SYSTEM MAP STATION 32+00 TO 36+00
36	SEWER SYSTEM MAP STATION 16+00 TO 20+00
37	SEWER SYSTEM MAP STATION 20+00 TO 24+00
38	SEWER SYSTEM MAP STATION 24+00 TO 28+00
39	SEWER SYSTEM MAP STATION 28+00 TO 32+00
40	SEWER SYSTEM MAP STATION 32+00 TO 36+00
41	SEWER SYSTEM MAP STATION 16+00 TO 20+00
42	SEWER SYSTEM MAP STATION 20+00 TO 24+00
43	SEWER SYSTEM MAP STATION 24+00 TO 28+00
44	SEWER SYSTEM MAP STATION 28+00 TO 32+00
45	SEWER SYSTEM MAP STATION 32+00 TO 36+00
46	SEWER SYSTEM MAP

VICINITY MAP:
1" = 1000'

LOCATION MAP
N.T.S.

PREPARED BY: JOSE OMAR RODRIGUEZ, P.E.

DATE: _____

PROJECT NO. 40101-000

CITY: SEBASTIAN, TEXAS

SHEET NO. 1 OF 46

GM GUZMAN & MUÑOZ
INCORPORATED
REGISTERED PROFESSIONAL ENGINEERS
ARCHITECTS, PLANNERS
1800 S. Greenway Dr.
McAllen, Texas 78501
Phone: (361) 266-4617
Fax: (361) 266-8245
TEXAS REGISTERED ENGINEERING FIRM F-802
TULSA FIRM REGISTRATION NO. 10087700

County of Willacy Flood Protection Planning Study

MAY 25, 2023



Texas Water
Development Board





PROJECT TEAM



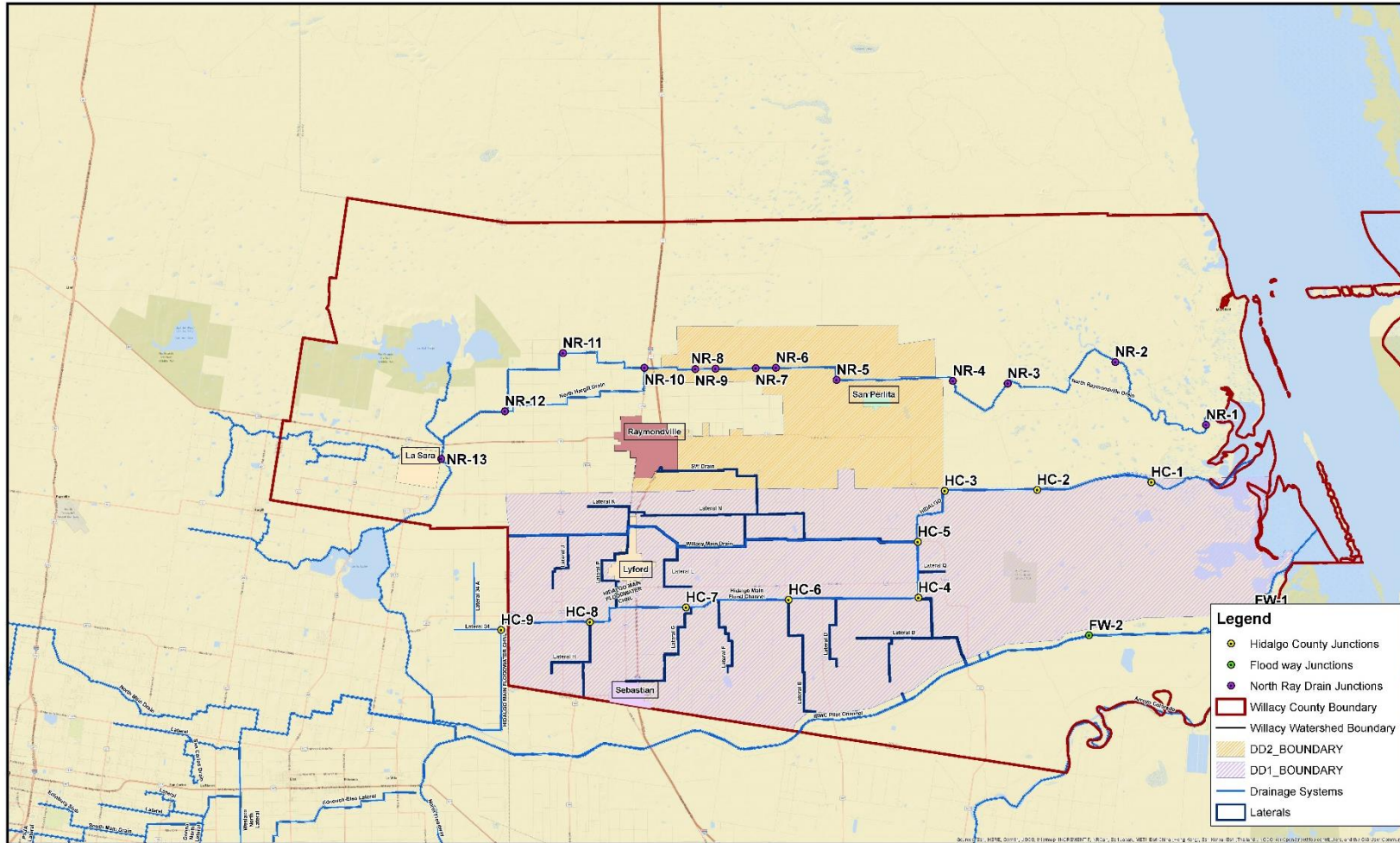
GM  **GUZMAN & MUÑOZ**
ENGINEERING AND SURVEYING, INC.
Texas Registered Engineering Firm F-8017
TBPLS Firm Registration No. 10087700

2020 E. EXPRESSWAY 83 MERCEDES, TEXAS 78570 PHONE: (956) 565-4637 FAX: (956) 565-4636

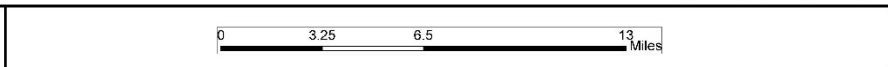
 **RESEARCH, APPLIED
TECHNOLOGY**
EDUCATION AND SERVICE
Rio Grande Valley



STUDY AREA

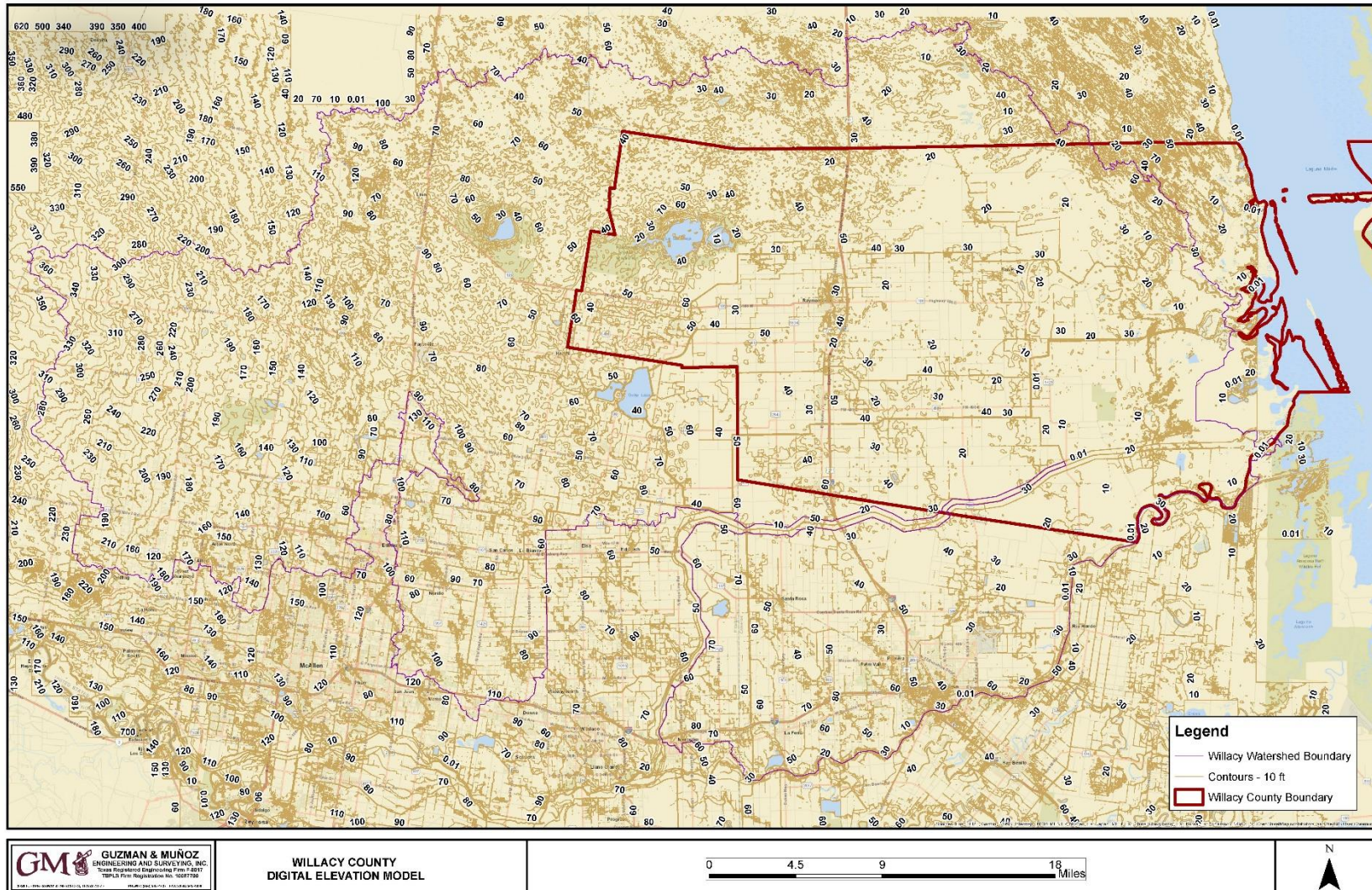


**WILLACY COUNTY
WATERSHED STUDY**



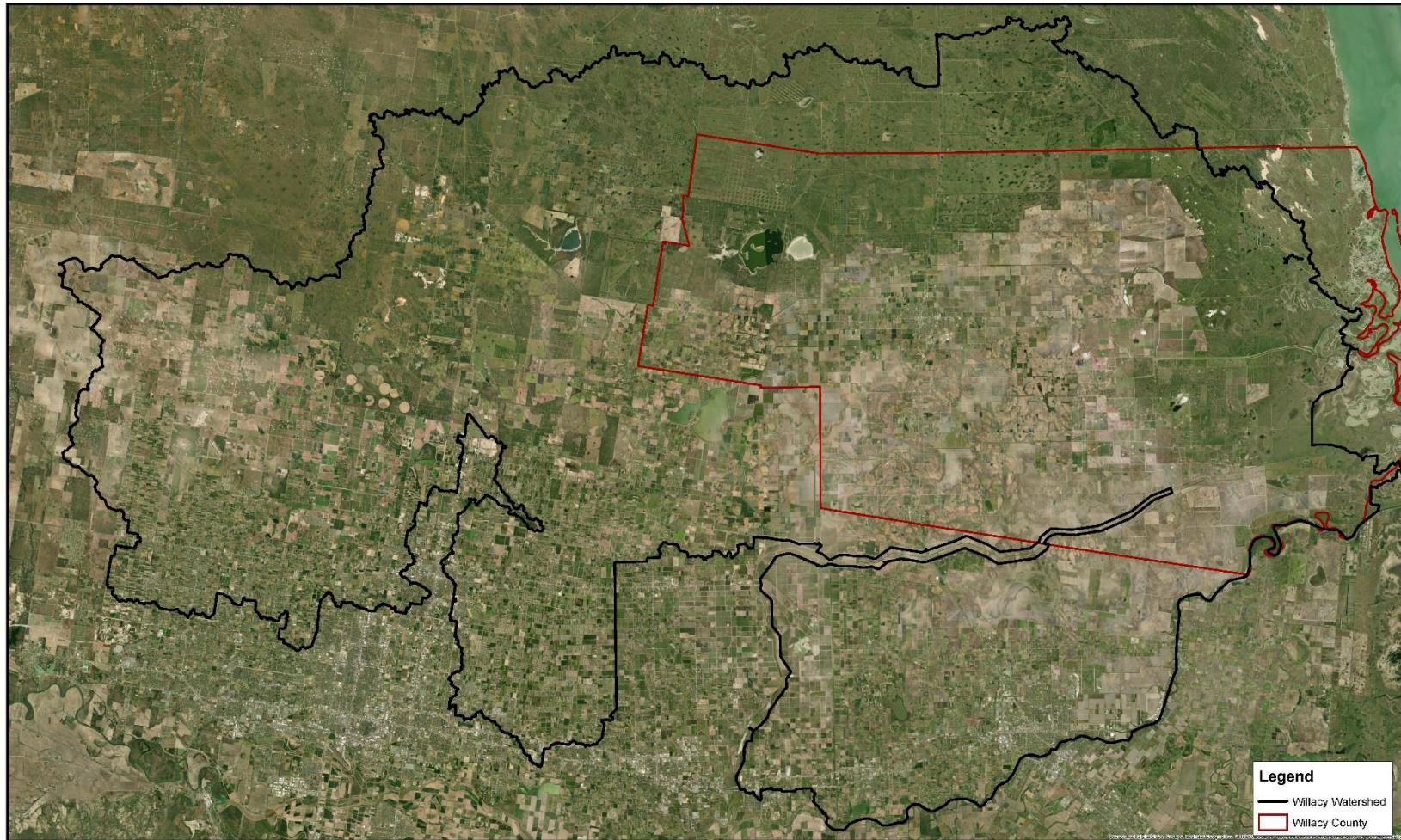


Willacy County Watershed & Elevation Characteristics

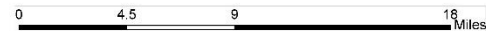




Willacy County Watershed & Hydrologic Network



WILLACY COUNTY
WATERSHED DELINEATION

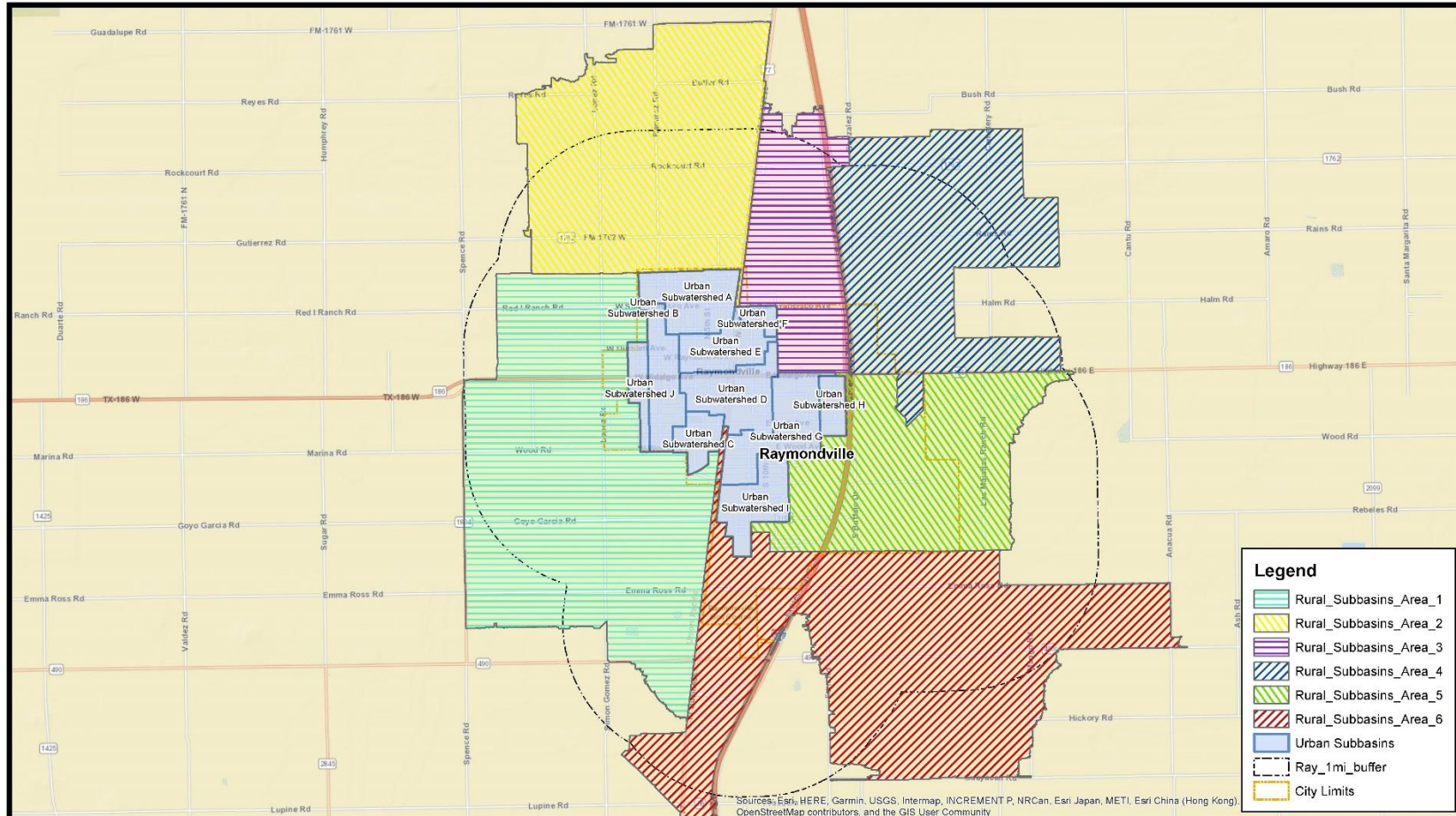


Raymondville Flood Protection Planning Study





City of Raymondville Watershed Study: Cat 1

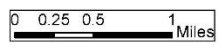


Legend

- Rural_Subbasins_Area_1
- Rural_Subbasins_Area_2
- Rural_Subbasins_Area_3
- Rural_Subbasins_Area_4
- Rural_Subbasins_Area_5
- Rural_Subbasins_Area_6
- Urban Subbasins
- Ray_1mi_buffer
- City Limits

GM GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, INC.
Texas Registered Engineering Firm F-8017
TBPLS Firm Registration No. 10087700
3030 E. EXPRESSWAY 83 MERCEDES, TEXAS 78679
PHONE: (956) 665-4637 FAX: (956) 668-4638

**RAYMONDVILLE
WATERSHED PLANNING
STUDY AREA**





TWDB FIF: Cat 2 Raymondville Ditch



- ✓ Construction Plans
 - 90% Complete

- ✓ Budget
 - \$885,551

CONSTRUCTION PLANS FOR PROPOSED DRAINAGE DITCH IMPROVEMENTS FOR CITY OF RAYMONDVILLE WILLACY COUNTY, TEXAS TWDB PROJECT NO. 40089 JANUARY, 2023

PROJECT: PROPOSED DRAINAGE IMPROVEMENTS	SHEET
PROJECT NO: 40089	1
CITY: RAYMONDVILLE, TEXAS	OF
	12

INDEX OF SHEET	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	DESIGN # AN
4	PLAN AND PROF - STATION 199+00 TO 204+00
5	PLAN AND PROF - STATION 205+00 TO 217+00
6	ENLARGED PLANS
7	CROSS SECTION STATION 194+28 TO 217+00
8	EROSION CONTROL PLAN
9	FOUNDATION DETAILS
10	DRAINAGE DETAILS
11	IRRIGATION DETAILS
12	WALL, WALKWAY

VICINITY MAP:
1" = 2000'

CITY OFFICIALS	
GILBERT GONZALES	MAYOR
JOEL GARCA	COMMISSIONER PLACE #1
CHRIS TAMEZ	COMMISSIONER PLACE #2
CLIFTON SMITH	COMMISSIONER PLACE #3
EDWARD GONZALES	COMMISSIONER PLACE #4
TONY CHAVEZ	CITY MANAGER

LOCATION MAP
N.T.S.

THE DELTA LAND IRRIGATION DISTRICT HAS REVIEWED AND APPROVED THIS PROJECT CONSTRUCTION PLANS AND SPECIFICATIONS.

DATE: _____ DATE: _____

THE CITY OF RAYMONDVILLE HAS REVIEWED AND APPROVED THIS PROJECT CONSTRUCTION PLANS AND SPECIFICATIONS.

DATE: _____ DATE: _____

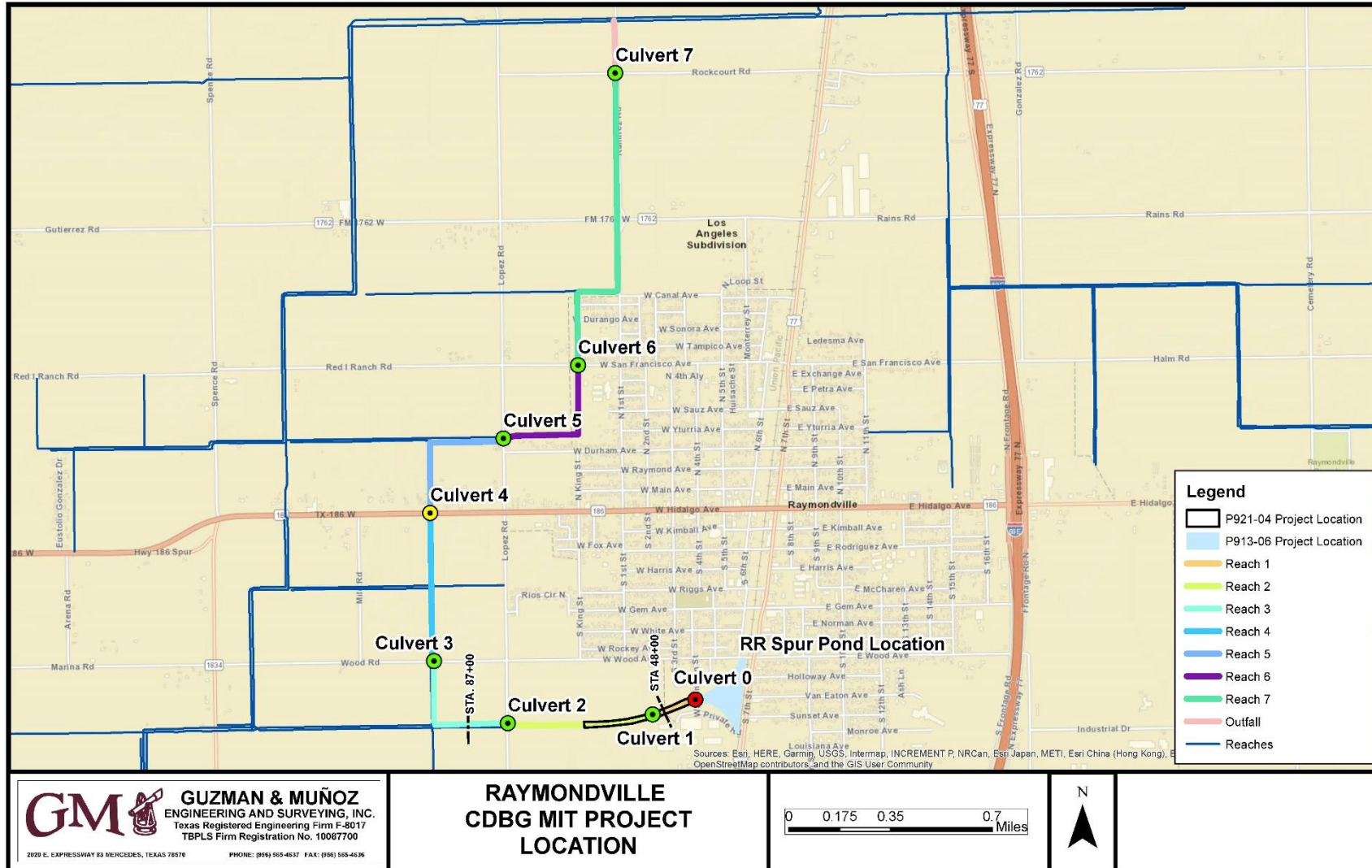
GM GUZMAN & MUÑOZ
ENGINEERING AND SURVEYING, INC.
MERCEDER, TEXAS

2023 P. Registration #1
SINCE 1988, TEXAS
TEXAS REGISTERED ENGINEERING FIRM #1-4017
TRPLS FIRM REGISTRATION NO. 1006700

Phone: (361) 461-4617
Fax: (361) 461-4618



TX GLO: CDGB – MIT



GM **GUZMAN & MUÑOZ**
ENGINEERING AND SURVEYING, INC.
Texas Registered Engineering Firm F-8017
TBPLS Firm Registration No. 10067700

QUESTIONS?

jmunoz@gmes.biz

