

City of Weslaco

"The City on the Grow"



David Suarez, Mayor
Leo Muñoz, Mayor Pro-Tem, District 1
Greg Kerr, Commissioner, District 2
Jose "J.P." Rodriguez, Commissioner, District 3
Adrian Farias, Commissioner, District 4
Letty Lopez, Commissioner, District 5
Josh Pedraza, Commissioner, District 6

Mike R. Perez, City Manager

DATE: September 20, 2021

TO: Mayor David Suarez and the City Commission

FROM: Mike R. Perez, City Manager *MRP*

SUBJECT: Update on Implementation of Drainage Plan by Halff

If you will recall the study prepared by Halff and Associates had a total of \$88,745,000 on January 17, 2019. See attached sheet outlining 8 projects. (See attachment A.)

As a result of us receiving that report, I prepared a memo to you on how to fund \$84,745,000 based preliminary numbers dated January 15, 2019. (See attachment B.)

This was presented to you and it was agreed that we would see how we could leverage \$4,000,000 Certificates of Obligation we borrowed and the proposed \$10,000,000 that was going before the voters on May 4, 2019.

On March 5, 2019 I prepared a Proposed Drainage Project Schedule in anticipation of a Bond Election on May 2019 for \$10,000,000. The Bond issued passed and we received the monies on September 20, 2019. It has been two years as of today. Below is a report on each of the projects outlined in my March 20, 2019 Project Schedule. (See attachment C.)

- | | |
|---------------------------------|--|
| 1. Layed pipes at Merida/Austin | Done |
| 2. Flap gates installed | 50% have been completed |
| 3. Project 7 | Not done – irrigation Detention #9 needs to repair leaking pipes. |
| 4. Project 8 | RDF by Dollar Store S. 88 – Done |
| 5. Project 2 | RDF at School by Westgate/Sugarcane – closed
On Grant last month/under design "0" dollars used from Bond money. |

- | | |
|----------------|--|
| 6. Project 6 | Pleasantview S. Bus. 83 – 80% complete |
| 7. Match Grant | Has not been used |

In addition, we have done a few other small projects. Below are the ones that had a greater impact to their neighbors.

1. Installed a ditch off Border Ave., say east just south of Paisano.
2. Installed a 30" pipe for Sugarcane and Lincoln that drains to the larger RDF to the south.
3. Worked with County in installing larger RDF at Las Brisas area.

Projects as they relate to Half's Project Study. (See attached maps – attachment D.)

1. **Project #1**- No progress
2. **Project #2**- Grant/Loan to construct larger RDF at Cleckler Heald School under design. No Bond money used.
3. **Project #3** – Grant/Loan to start the construction of RDF at City Park and extend drainage lines about 2 blocks west. We have 4.3 million for the project. City is picking up loan part of the project. In addition, we have 3.5 million Grant from FEMA.
4. **Project #4** – Digging RDF at Harlon Park. Have not started design. We will do this inhouse.
5. **Project #5** – Installed RDF south of City Cemetery, this project is completed.
6. **Project #7** – Ditch has been widened however pipes haven not been replaced due to Irrigation District. Pipes leaking.
7. **Project #8** – RDF by Dollar Store south of FM 88. Completed.

As it relates to where we stand with the \$14,000,000, we borrowed, see attached report. We still have \$5,790,298 remaining. The report does not include \$10.8 million we have received in grants/loans. This is a total of \$24,300,000 we have for drainage. Today we have spent \$8,536,744 a from the \$14,000,000 and next month we will have the grant projects under way which is \$10.8 million.

In conclusion, in two years we have made great progress in addressing our drainage issues. We have other grant opportunities we are perusing. By doing some of these projects in house has saved the Weslaco tax-payers millions of dollars.

Weslaco Master Drainage Plan
Total Project Preliminary Ranking Sheet

" A "

Total Projects Ranked By 50-Year BC Ratio					
Project Number	Total Cost Post (Includes 30% Contingency and Short Term Inflation Estimates)	Total Structures Removed- 10 Year	Total Structures Removed- 50 Year	BC Ratio 10-Year	BC Ratio 50- Year
Project 7	\$ 82,000	41	81	34.5	13.6
Project 8	\$ 1,386,000	59	134	5.3	2.4
Project 3*	\$ 21,077,000	667	823	3.9	1.0
Project 2*	\$ 9,702,000	532	216	6.8	0.6
Project 6	\$ 4,775,000	119	92	3.1	0.5
Project 1	\$ 3,882,000	58	71	1.9	0.5
Project 4*	\$ 32,610,000	337	544	1.3	0.4
Project 5*	\$ 15,231,000	101	113	0.5	0.1

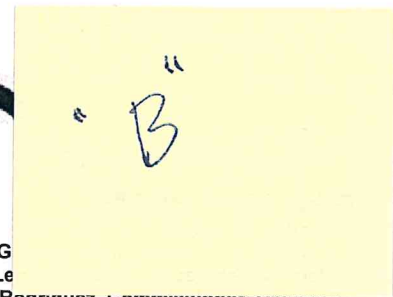
**Preliminary phasing strategies have been assessed and evaluated for long term planning*

85,745,000

Total Master Drainage Plan Projects												
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages					
2%	50-YR	2115	\$105,750,000	\$2,115,000	0	\$0	\$0	\$29,188,481	\$88,745,000	0.3	2115	\$42,000
10%	10-YR	1954	\$97,700,000	\$9,770,000	0	\$0	\$0	\$134,832,839		1.5	1954	\$46,000

City of Weslaco

"The City on the Grow"



G
Le
Jose "J.P." Rodriguez, Commissioner, District 3
Gerardo "Jerry" Tafolla, District 4
Letty Lopez, Commissioner, District 5
Josh Pedraza, Commissioner, District 6

Mike R. Perez, City Manager

Date: January 15, 2019
 To: Ms. Anne Burger Entekin
 CC: Mayor & City Commission
 From: Mike R. Perez, City Manager
 Re: Bond Capacity Analysis

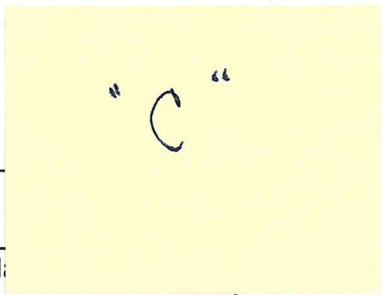
Dear Ms. Entekin,

The City of Weslaco is looking into obtaining a proposed Debt Service and Tax Rate Impact Amortization. In order to improve the City's drainage system, the City would need to borrow \$84 million over the course of the years. The information below is estimated should the City move forward with the proposed funding.

Year	Description	Amount Funded	Carrying Balance
2019	Increase property tax rate by \$0.03 cents	\$14,000,000	\$14,000,000
2021	Increase property tax rate by \$0.03 cents	\$7,000,000	\$21,000,000
2021	Pay-off economic incentives	\$6,500,000	\$27,500,000
2024	Property tax rate to remain at \$0.18 cent (8¢ from paid off Debt)	\$18,400,000	\$45,900,000
2025	Increase Utility fees -(\$620,000) Residential \$3.00/Commercial \$10.00	\$8,200,000	\$54,100,000
2028	Property tax rate to remain at \$0.18 cent (3¢ from paid off Debt)	\$7,000,000	\$61,100,000
2028	Water & Sewer transfer	\$6,500,000	\$67,600,000
2033	Water & Sewer transfer	\$9,400,000	\$77,000,000
2034	Property tax rate to remain at \$0.18 cent (3¢ from paid off Debt)	\$7,000,000	\$84,000,000

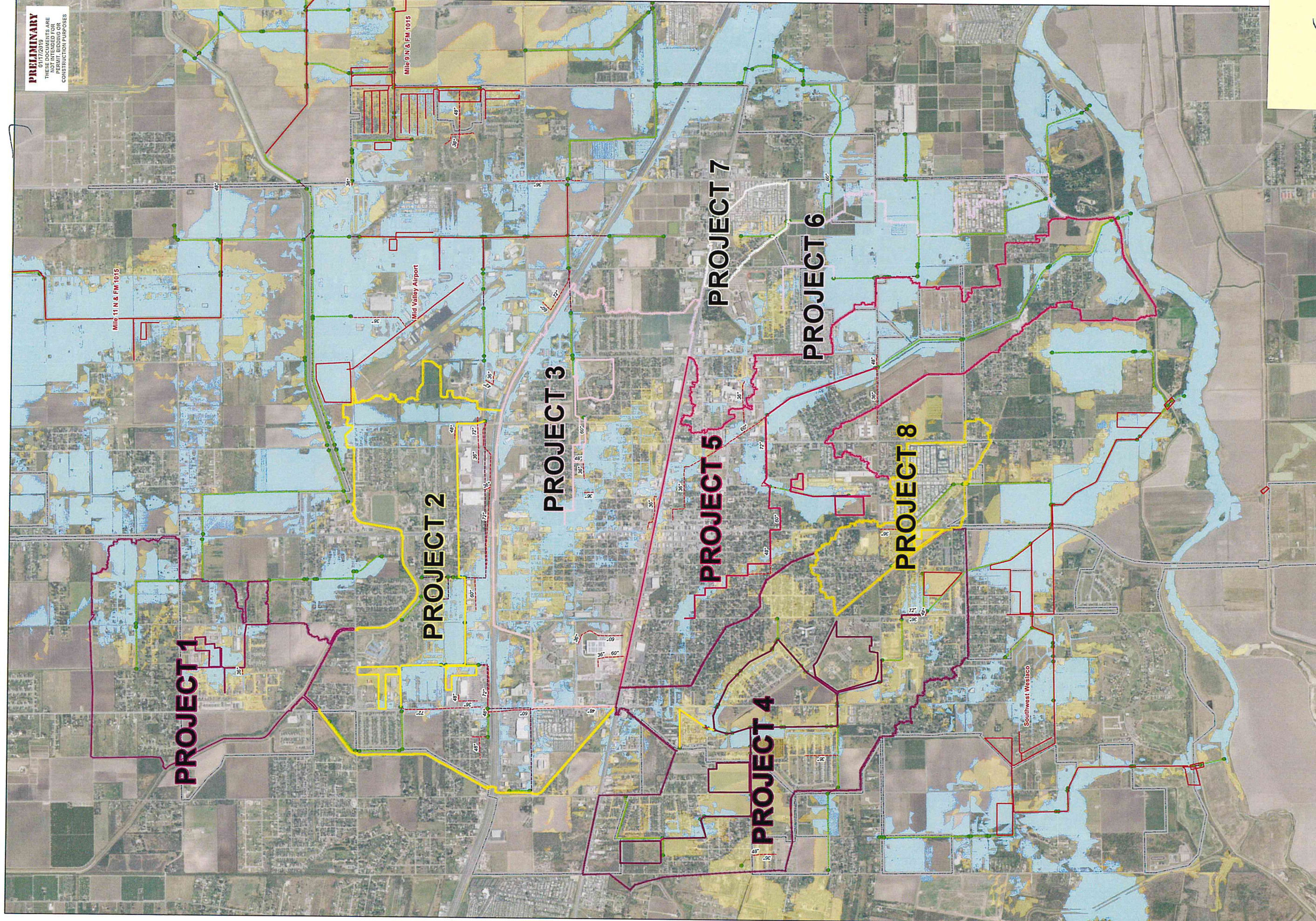
Sincerely,
 Mike R. Perez, City Manager, City of Weslaco

Proposed Drainage Project Schedule

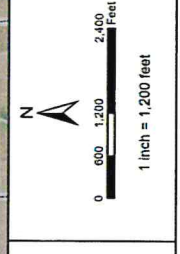


Available Funds	\$13,500,000
Expenses	(\$500,000) estimate to install larger pipes at Merid:
	(\$1,000,000) install Flap gates in inlets
by October 1, 2019	(\$82,000) Project 7
	(\$1,386,000) Project 8 RDF south of 88 by Dollar Store
	(\$2,422,000) Project 2 RDF at School by Westgate/Sugar Cane
	(\$4,775,000) Project 6 drainage pipes on Pleasantview south of Bus. 83
	(\$3,500,000) Match money for Army Corps. of Engineer Grant
By October 1, 2020 if Bond passes	(\$165,000) Shortfall

PRELIMINARY
 THESE DOCUMENTS ARE
 NOT INTENDED FOR
 CONSTRUCTION PURPOSES



- KEY TO FEATURES**
- MODEL NODES
 - HIDALGO BOND PROJECTS
 - EXISTING STORM DRAINS
 - CULVERTS/CROSSINGS
 - OPEN CHANNEL
 - CITY LIMITS
 - 50-YEAR EXISTING FLOOD PLAIN BOUNDARY
 - 50-YEAR PROPOSED FLOOD PLAIN BOUNDARY



50-YR Storm = 9.45 inches
 of rainfall within 24-hours
 Precipitation estimate for
 Westlaco from NOAA Atlas 14,
 Volume 11, Version 2

**City of Westlaco
 Improver**
 50-Year Floodplain: E1
 January 1

Proposed 10 - Year Mapping Comparison
10-YR Storm = 6.22 inches

Project #1													
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	126	\$11,340,000	\$226,800	55	\$4,950,000	\$99,000	\$1,763,729	\$3,882,000	\$3,882,000	0.5	71	\$55,000
10%	10-YR	75	\$6,750,000	\$675,000	17	\$1,530,000	\$153,000	\$7,203,965			1.9	58	\$67,000



City of Weslaco Storm Water Improvement Plan

- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

PROJECT 1

January 17, 2019



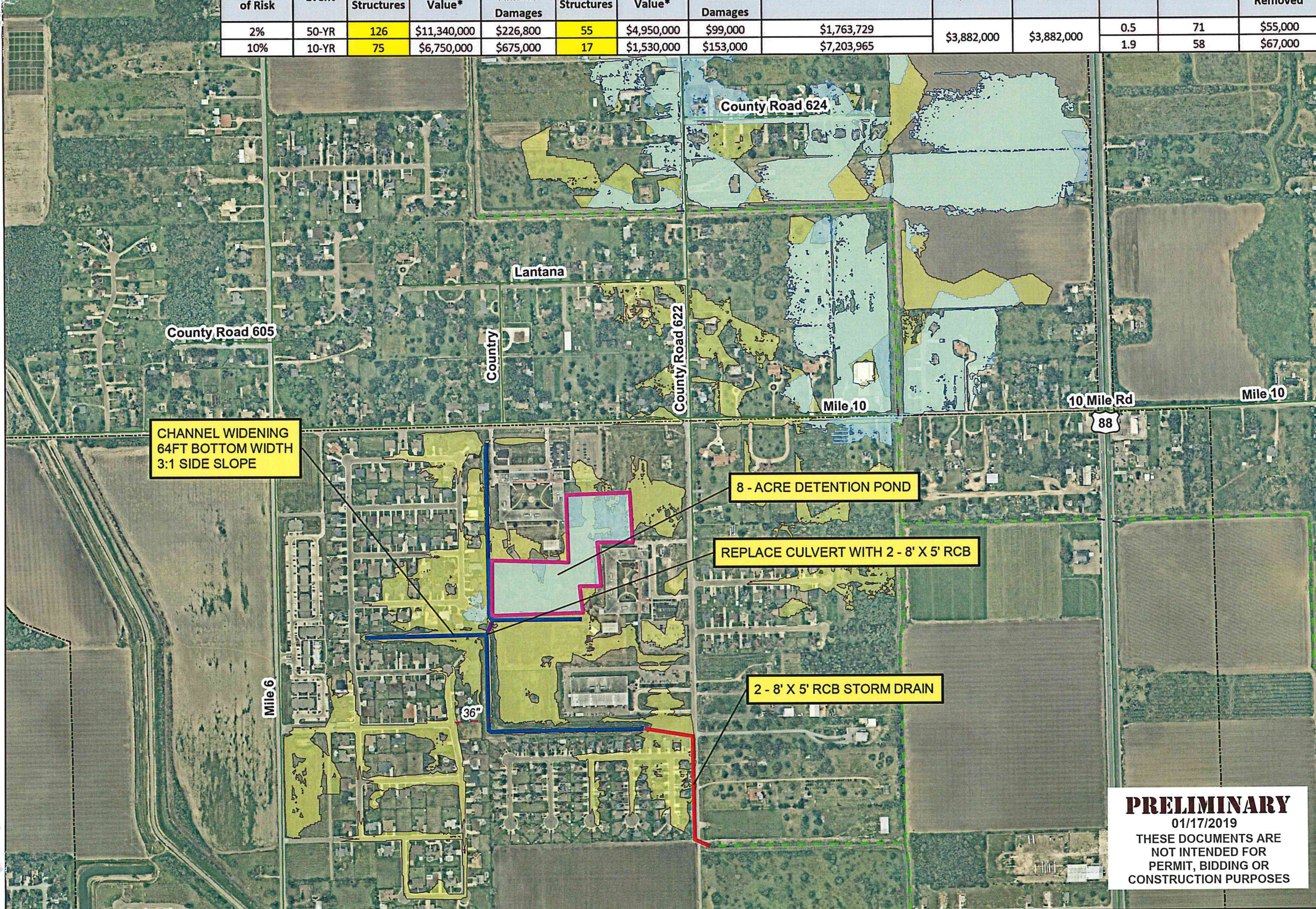
0 300 600 Feet

1 inch = 600 feet

PRELIMINARY

01/17/2019

THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



CHANNEL WIDENING
64FT BOTTOM WIDTH
3:1 SIDE SLOPE

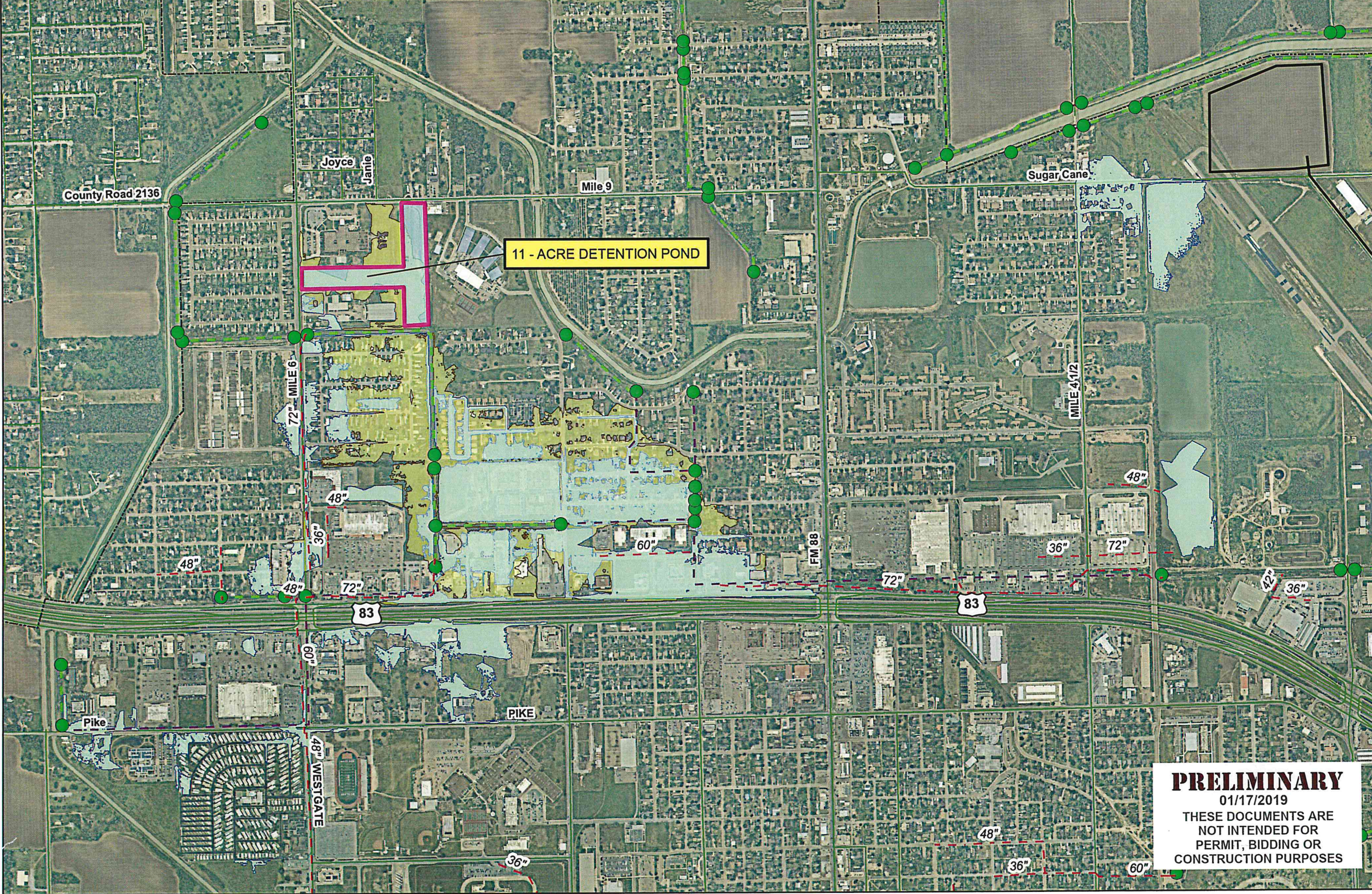
8 - ACRE DETENTION POND

REPLACE CULVERT WITH 2 - 8' X 5' RCB

2 - 8' X 5' RCB STORM DRAIN

Proposed 10 - Year Mapping Comparison
10-YR Storm = 6.22 inches

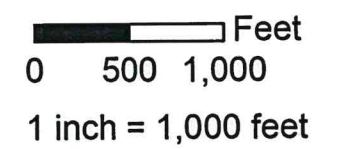
Project #2 Phase 1B													
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	1159	\$104,310,000	\$2,086,200	1155	\$103,950,000	\$2,079,000	\$99,365	\$2,422,000	\$2,422,000	0.0	4	\$606,000
10%	10-YR	1079	\$97,110,000	\$9,711,000	636	\$57,240,000	\$5,724,000	\$55,023,391			22.7	443	\$6,000



City of Weslaco Storm Water Improvement Plan

- - - Open Channel
 - - - Existing Storm Drains
 - - - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System
- Note: Cost and structures removed reflects Phase 1B Improvements only.*

**PROJECT 2
PHASE 1B
JAN 17, 2019**



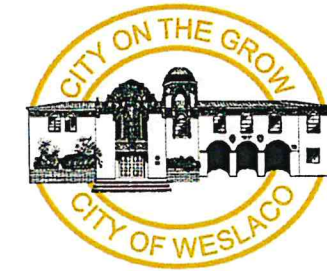
PRELIMINARY
01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Proposed 10 - Year Mapping Comparison

10-YR Storm = 6.22 inches

Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	1418	\$127,620,000	\$2,552,400	595	\$53,550,000	\$1,071,000	\$20,444,357	\$11,910,000	\$21,077,000	1.0	823	\$26,000
10%	10-YR	849	\$76,410,000	\$7,641,000	182	\$16,380,000	\$1,638,000	\$82,845,602			3.9	667	\$32,000



City of Weslaco Storm Water Improvement Plan

- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- ### PROPOSED IMPROVEMENTS
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

Note: Cost and structures removed reflects Phase 1, and Phase 2 Improvements only.

PROJECT 3 Phase 2

January 17, 2019



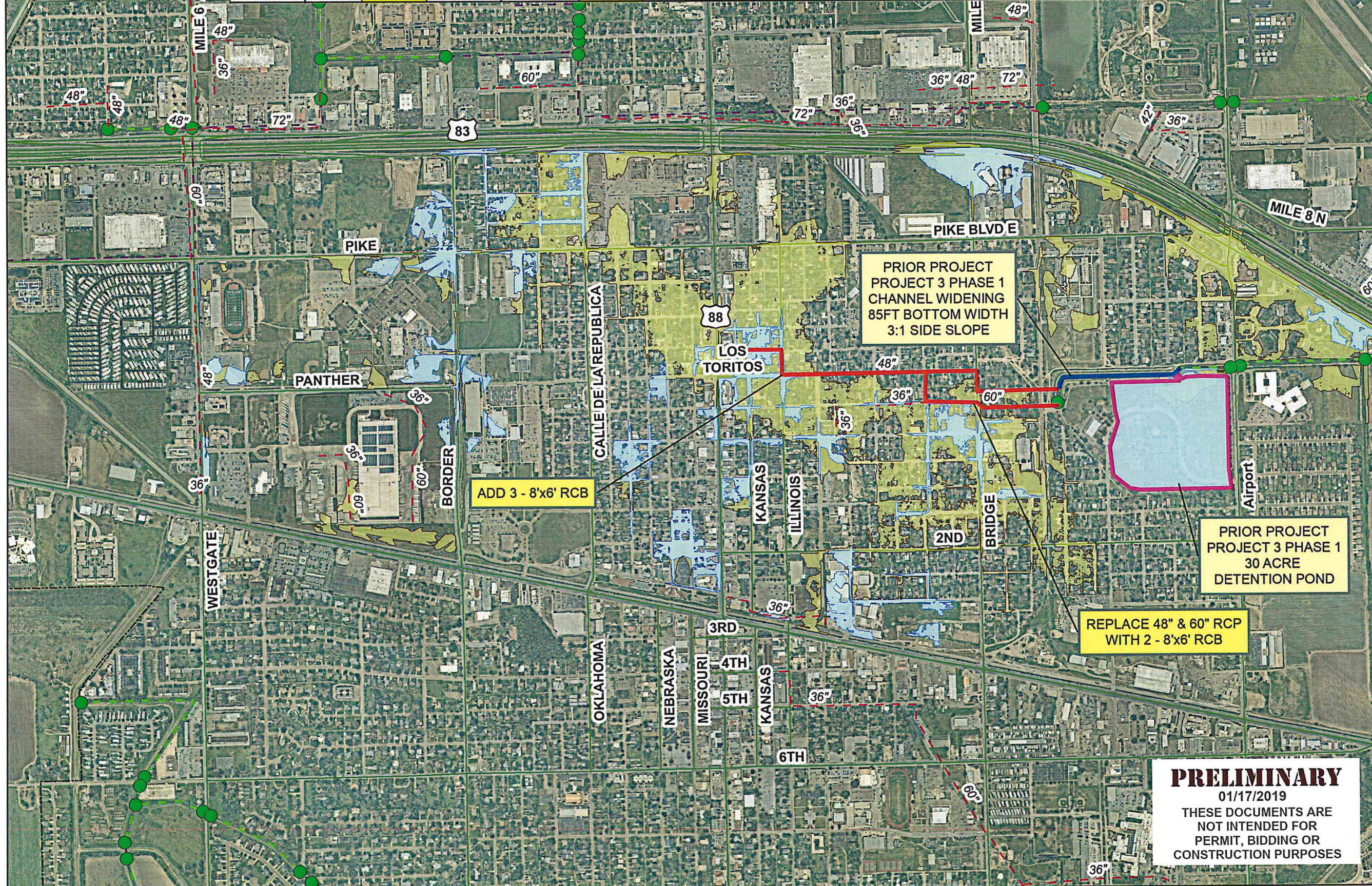
0 500 1,000 Feet

1 inch = 1,000 feet

PRELIMINARY

01/17/2019

THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Project #4 Phase 4

Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	788	\$70,920,000	\$1,418,400	244	\$21,960,000	\$13,513,645	\$4,602,000	\$32,610,000	0.4	544	\$60,000	
10%	10-YR	426	\$38,340,000	\$3,834,000	89	\$8,010,000	\$41,857,523						1.3

Proposed 10 - Year Mapping Comparison
10-YR Storm = 6.22 inches



City of Weslaco Storm Water Improvement Plan

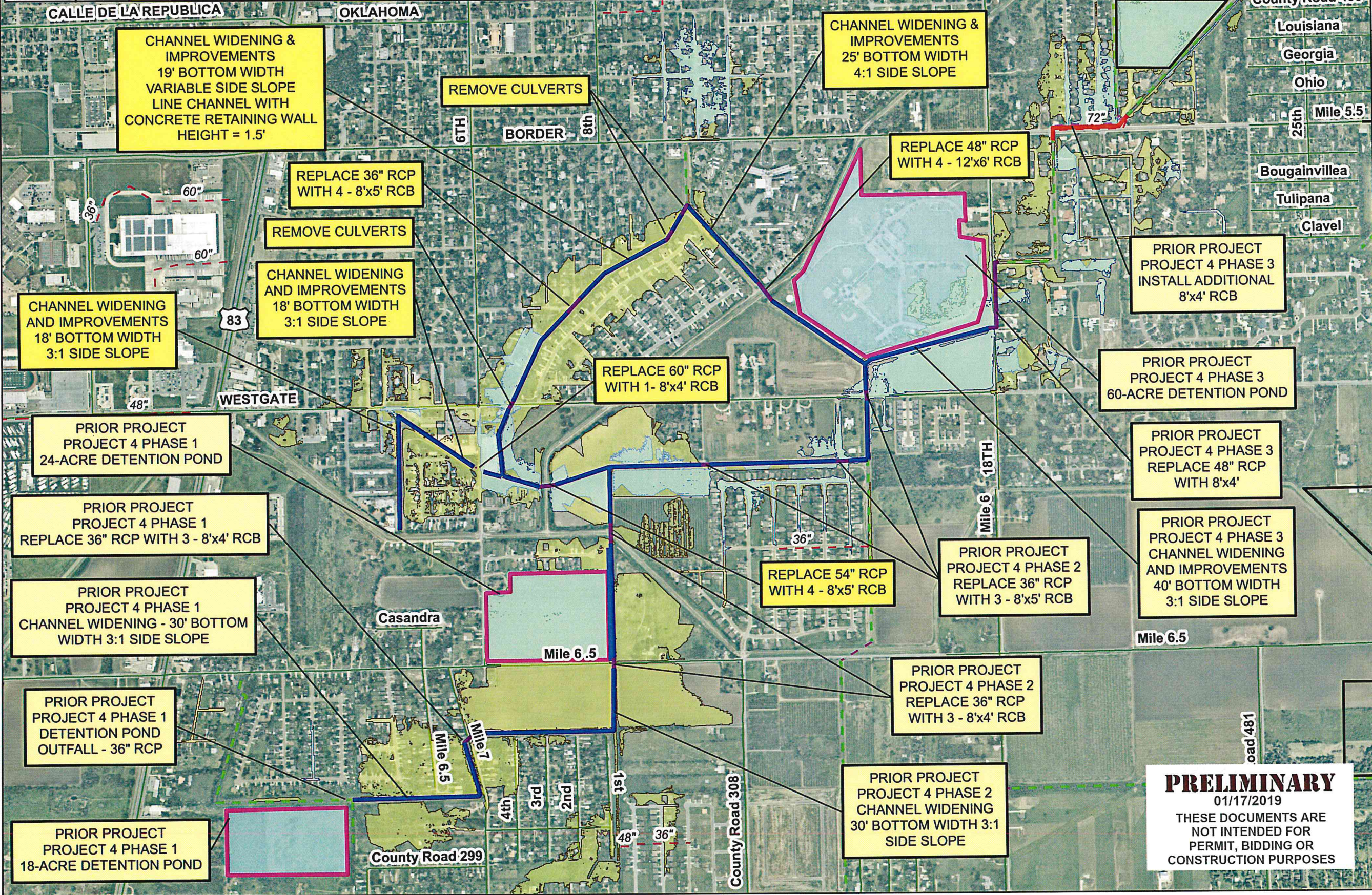
- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

PROJECT 4 PHASE 4
JAN 17, 2019



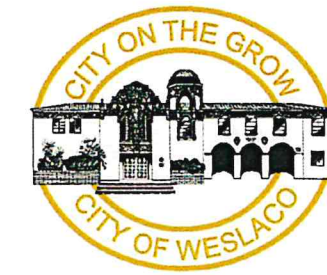
0 500 1,000 Feet
1 inch = 1,000 feet

PRELIMINARY
01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Proposed 50 - Year Mapping Comparison
50-YR Storm = 9.45 inches

		Project #5 Phase 3											
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	744	\$37,200,000	\$744,000	532	\$26,600,000	\$532,000	\$2,925,748	\$23,217,000	\$32,181,000	0.1	212	\$152,000
10%	10-YR	484	\$24,200,000	\$2,420,000	232	\$11,600,000	\$1,160,000	\$17,388,882			0.5	252	\$128,000



City of Weslaco Storm Water Improvement Plan

- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 50-Yr Proposed FP
 - 50-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Berm
 - Channel Widening
 - Culvert Replacement
 - Detention Pond

Note: Cost and structures removed reflects full built-out conditions including Phase 1, Phase 2 and Phase 3 Improvements.

**PROJECT 5
PHASE 3
JAN 17, 2019**

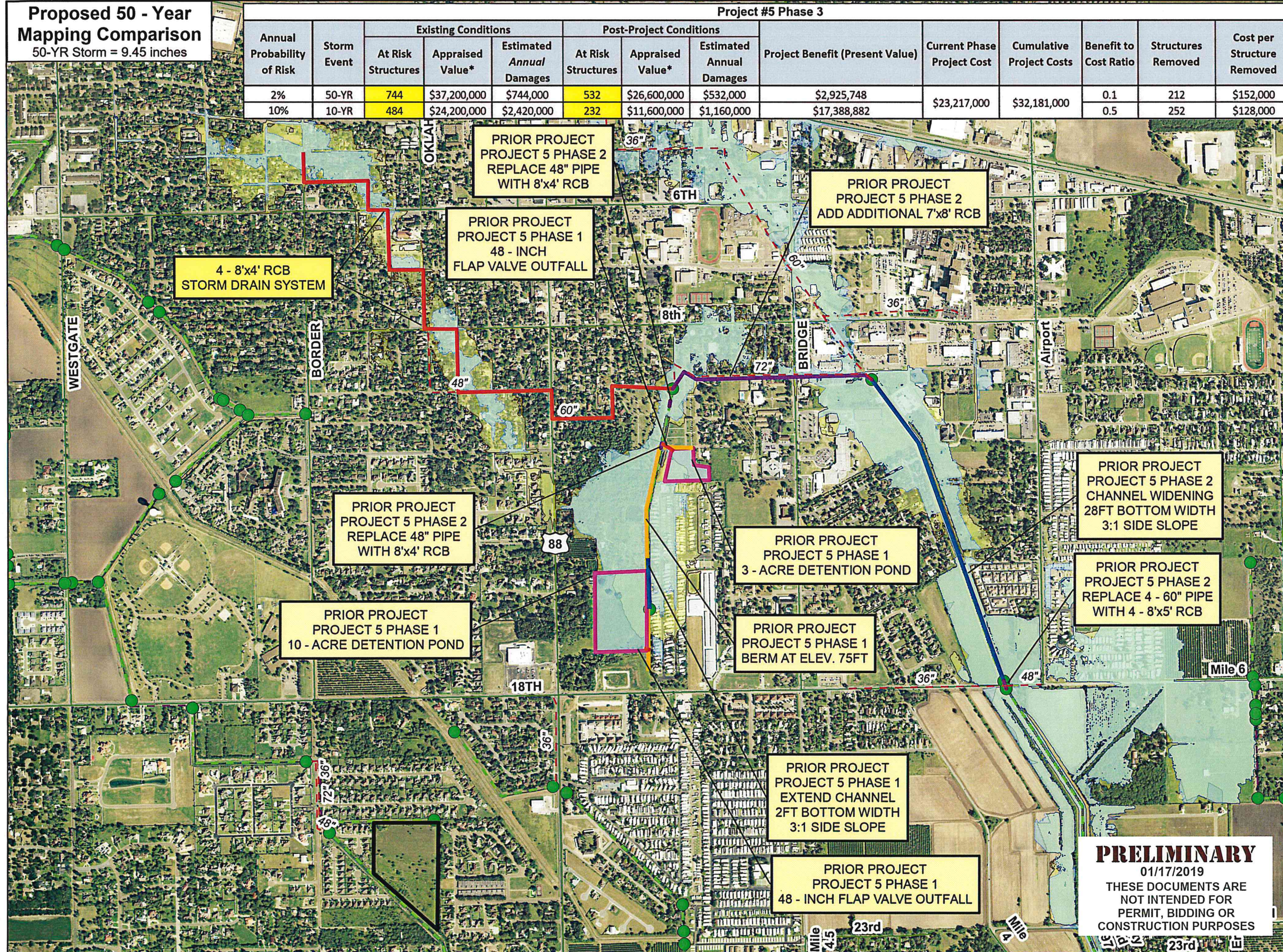


0 500 1,000 Feet

1 inch = 1,000 feet

PRELIMINARY

01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Proposed 10 - Year Mapping Comparison
10-YR Storm = 6.22 inches

Project #6													
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	208	\$18,720,000	\$374,400	116	\$10,440,000	\$208,800	\$2,285,396	\$4,775,000	\$4,775,000	0.5	92	\$52,000
10%	10-YR	157	\$14,130,000	\$1,413,000	38	\$3,420,000	\$342,000	\$14,780,550			3.1	119	\$41,000

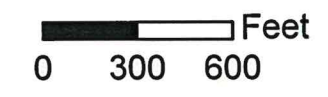


City of Weslaco Storm Water Improvement Plan

- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

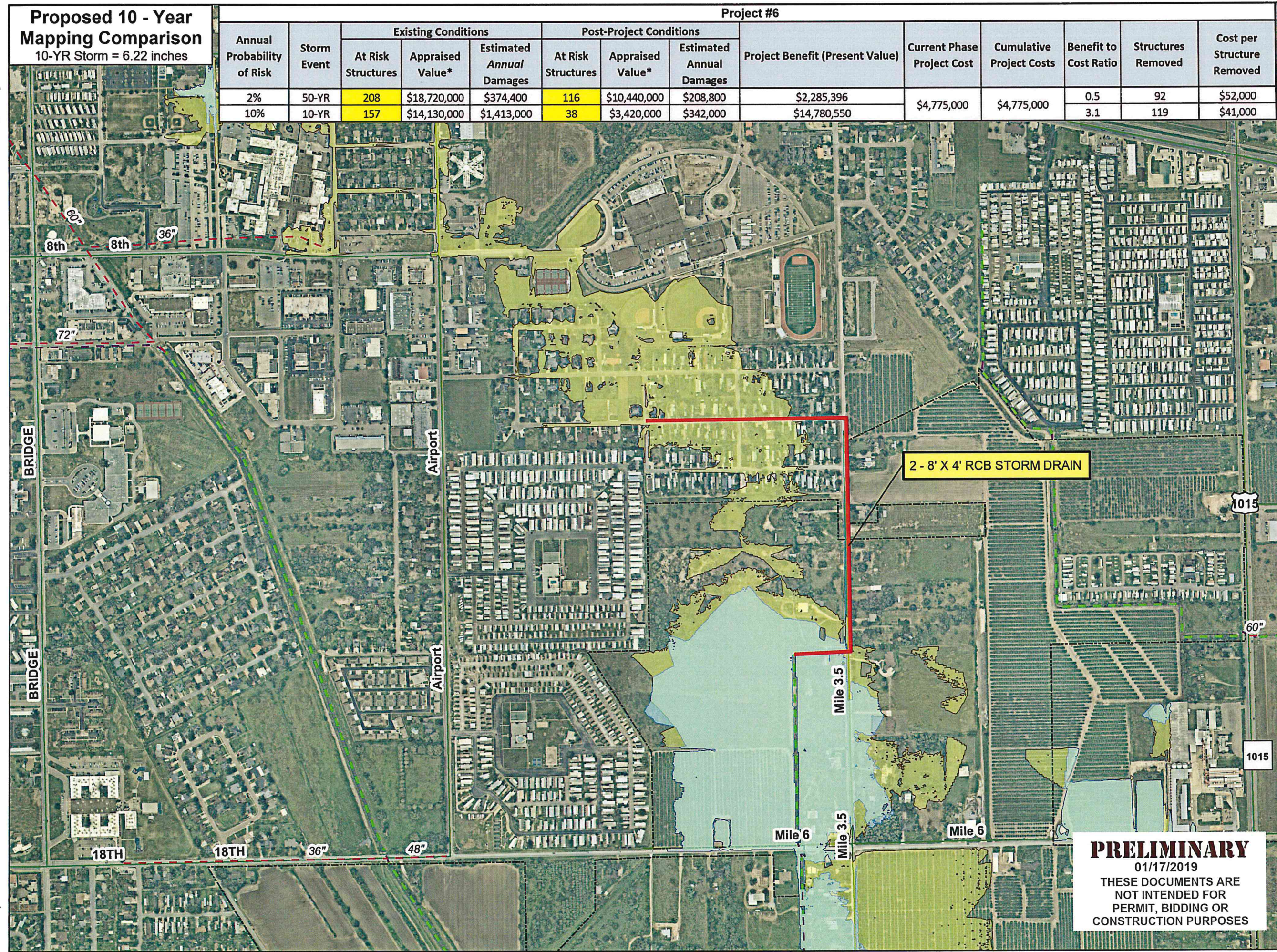
PROJECT 6

January 17, 2019



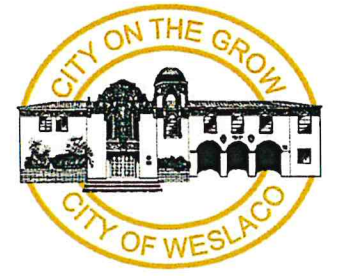
1 inch = 600 feet

PRELIMINARY
01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Proposed 50 - Year Mapping Comparison
50-YR Storm = 9.45 inches

Project #7													
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	117	\$5,850,000	\$117,000	36	\$1,800,000	\$36,000	\$1,117,857	\$82,000	\$82,000	13.6	81	\$2,000
10%	10-YR	41	\$2,050,000	\$205,000	0	\$0	\$0	\$2,829,144			34.5	41	\$2,000



City of Weslaco Storm Water Improvement Plan

- - - Open Channel
 - - - Existing Storm Drains
 - - - Culverts/Crossings
 - County Projects
 - 50-Yr Proposed FP
 - 50-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

PROJECT 7

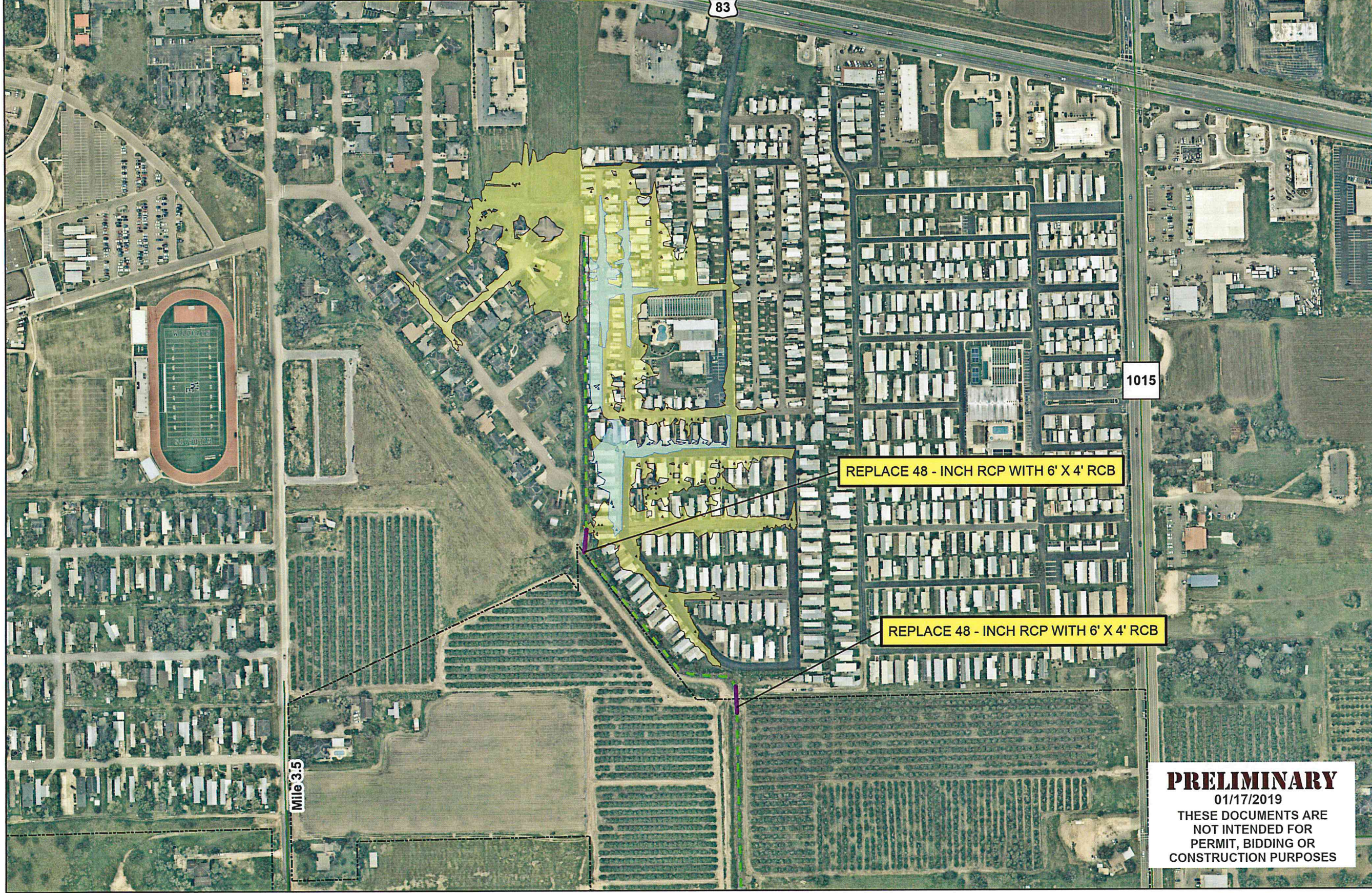
January 17, 2019



0 150 300 Feet

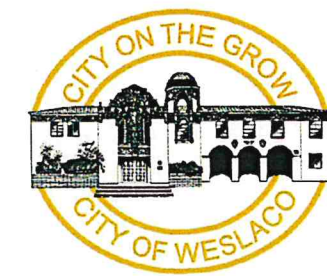
1 inch = 300 feet

PRELIMINARY
01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Proposed 10 - Year Mapping Comparison
10-YR Storm = 6.22 inches

Project #8													
Annual Probability of Risk	Storm Event	Existing Conditions			Post-Project Conditions			Project Benefit (Present Value)	Current Phase Project Cost	Cumulative Project Costs	Benefit to Cost Ratio	Structures Removed	Cost per Structure Removed
		At Risk Structures	Appraised Value*	Estimated Annual Damages	At Risk Structures	Appraised Value*	Estimated Annual Damages						
2%	50-YR	139	\$12,510,000	\$250,200	5	\$450,000	\$9,000	\$3,328,729	\$1,386,000	\$1,386,000	2.4	134	\$11,000
10%	10-YR	59	\$5,310,000	\$531,000	0	\$0	\$0	\$7,328,172			5.3	59	\$24,000

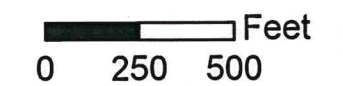


City of Weslaco Storm Water Improvement Plan

- Open Channel
 - Existing Storm Drains
 - Culverts/Crossings
 - County Projects
 - 10-Yr Proposed FP
 - 10-Yr Existing FP
- PROPOSED IMPROVEMENTS**
- Channel Widening
 - Culvert Replacement
 - Detention Pond
 - Storm Drain System

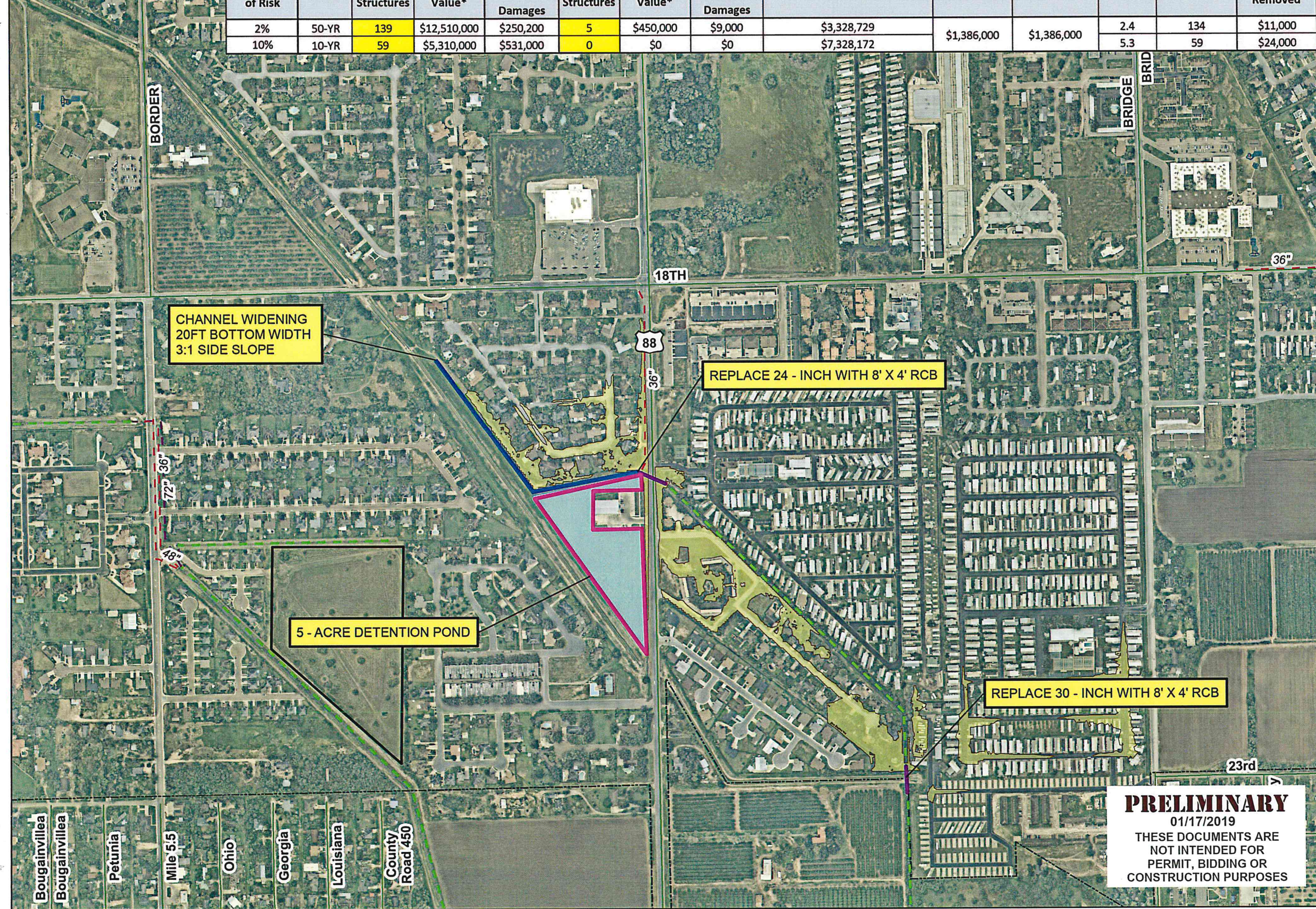
PROJECT 8

January 17, 2019



1 inch = 500 feet

PRELIMINARY
01/17/2019
THESE DOCUMENTS ARE NOT INTENDED FOR PERMIT, BIDDING OR CONSTRUCTION PURPOSES



Bougainvillea
Bougainvillea
Petunia
Mile 5.5
Ohio
Georgia
Louisiana
County Road 450

SERIES 2018 & 2019 - DRAINAGE PROJECTS

" E "

AVAILABLE FUNDS	BUDGET	ACTUAL, ESTIMAT	
Bond Proceeds	13,500,000	14,186,204	
General Fund Transfers	-	200,000	
Total Resources/Revenues	13,500,000	14,386,204	886,204

PROJECT/DESCRIPTION	BUDGET	ACTUAL/ ESTIMATE	REMAINING BALANCE
Austin & Merida	500,000	84,452	415,548
Flap gates	1,000,000	1,034,900	(34,900)
Project #7-S. International Blvd & BUS 83	82,000	-	82,000
Project #8- RDF for S. 88	1,386,000		248,453
Land South FM 88		261,810	
Land by cemetery		257,048	
Tractor/Scraper		425,968	
Excavator		192,721	
Project #2 RDF N. Westgate/Sugarcane	2,422,000	-	2,422,000
Project RDF - Pena Park			
Sports Lighting demo and advertising		185,624	(185,624)
Project #6 Pleasantview	4,775,000		(589,679)
Engineering-SWG		402,799	
Advertising for Design Services		2,006	
Advertising for Eng. Services		1,003	
Land purchase		758,871	
Construction		4,200,000	
Matching Grants for Army Corps of Eng.	3,500,000	-	3,432,500
H2O to prepare hazard mitigation grant		67,500	
Drainage Study by Halff	-	370,074	-
Bond Issuance-Series 2018	-	70,712	-
Bond Issuance-Series 2019	-	107,256	-
Westgate Excavation-S. Westgate	-	114,000	-
Total Expenses	13,665,000	8,536,744	5,790,298

Plus: Additional Revenue	721,204	
Total Estimated Revenues over/under expenses	14,386,204	14,327,042

59,162