			R		1 1		9	1	ř. (*	Total			
Project Title:		Total Benes	LMI Benes	LMI %	CDBG-DR Construction	CDBG-DR Engineering	CDBG-DR Acquisition	CDBG-DR Environmental	CDBG-DR Admin	CDBG-DR Request	Other Funds	Activity Total	+
# 03i Gills Branch Drainage		3,905	2,495	63.89%	\$5,675,211.3 +	\$1,244,344.7 +	\$2,620,420.0	\$30,000.00	\$733,198.08	10,303,174.1	\$103,032.00	10,406,206.1	x
5	SUMMARY TOTALS	: 3,905	2,495	63.89%	\$5,675,211.3	\$1,244,344.7	\$2,620,420.0	\$30,000.00	\$733,198.08	10,303,174.1	\$103,032.00	10,406,206.1	
Beneficiary Identification Method(s) Per Project:													
# 03i Project Title: Gills branch Drainage													
HUD National Objective Benefiting low- and moderate- (L/M) income persons													•
Select One Benefit Type:	City-w	ide Bene	fit		County-v	wide Benefit		3	Area Benefit		Di	rect Benefit	
Select Beneficiary Identification	Method:												
SURVEY: An approved TxC	DBG survey was used	to identif	y the ben	eficiarie	s for this activit	y.							
HUD LMISD information wa	as used to identify the	beneficiar	ries for th	is activi	ty.								
The required Census or Texas	State Data Center ma												
		p nas beer	n provide	d.									
Provide the number of beneficiaries	identified through eac				s for this activity	r							
Provide the number of beneficiaries TxCDBG Survey: 0	identified through eac HUD LMISD:			methods	s for this activity Area Benefit:	/: 0	Ног	using Activity:	0	Limite	d Clientele:	0	
TxCDBG Survey: 0	Constraint Constraint States	h of the fo	ollowing 3,905	methods		0	Ног	using Activity:	0	Limite	d Clientele:	0	
	HUD LMISD:	h of the fo	ollowing 3,905 # His	methods A	Area Benefit:	0 vity +	Ног	using Activity:	0	Limite	d Clientele:	0	
TxCDBG Survey: 0	HUD LMISD: # Non-H	h of the fo ispanic ciaries	3,905 # His Benef	methods A spanic	Area Benefit: Total Acti	0 vity +	Ног	using Activity:	0	Limite	d Clientele:	0	
TxCDBG Survey: 0 Race	HUD LMISD: # Non-H Benefic	h of the fo ispanic ciaries 36	ollowing 3,905 # Hie Benef	methods A spanic iciaries	Area Benefit: Total Acti Beneficiar	0 vity + ries	Ηοι	using Activity:	0	Limited	d Clientele:	0	
TxCDBG Survey: 0 Race White	HUD LMISD: # Non-H Benefit	h of the fo ispanic ciaries 36	allowing 3,905 # Hie Benef	methods A spanic iciaries 68	Area Benefit: Total Acti Benefician 3,254	0 vity + ries X	Нот	using Activity:	0	Limite	d Clientele:	0	
TxCDBG Survey: 0 Race White Black African American	HUD LMISD: # Non-H Benefic 2,5 37 24 37 24 37 37 37 37 37 37 37 37 37 37	h of the fo	3,905 # His Benef	methods A spanic iciaries 68 34	Area Benefit: Total Acti Beneficiau 3,254 405	0 vity + ries X X X	Ηοι	ising Activity:	0	Limited	d Clientele:	0	
TxCDBG Survey: 0 Race White Black African American American Indian/Alaskan native Asian Native Hawaiian / Other Pacific Islandee	HUD LMISD: # Non-H Benefic 2,5 37 37 20 37 37 37 37 37 37 37 37 37 37	h of the fo	3,905 # Hit Benef 6	methods A spanic iciaries 68 34 0	Area Benefit: Total Acti Beneficia 3,254 405 28	vity + ries X X X X	Ηοι	ising Activity:	0	Limite	d Clientele:	0	
TxCDBG Survey: 0 Race White Black African American American Indian/Alaskan native Asian	HUD LMISD: # Non-H Benefic 2,5 37 24 37 24 37 37 37 37 37 37 37 37 37 37	h of the fo	allowing 3,905 # Hit Benef 6	methods A spanic iciaries i68 34 0 0	Area Benefit: Total Acti Benefician 3,254 405 28 76	vity + ries X X X X X X	Ηοι	ising Activity:	0	Limite	d Clientele:	0	

Asian/White	•	3	4	7	x	REQUIRED - Census Geographic Area Data County Code Identify the census tract and block group(s) in which the project will take 021							+				
Other Multi-Racial	•	8	110	118	x												
		3,079	826	3,905		Census Tract (6-digit)	01	02	03	04	05	06	07	08	09	10	x
Gender		Total Males	Total Females	Total Benes		9504.00	\boxtimes	\boxtimes	\square								I.
		17910	17580	35490													
C	lick here to Al	DD ANOTHER 1	Cable 1			Click	c here	to RF	MOV	'E the	last	Table	1				

TXGLO

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:	City	of Bastrop						
Site/Activity Title:								
ligible Activity:							 	
Materials/Facilities/Services		\$/Unit	Unit	Quantity	(Construction	Acquisition	Total
PREPARING ROW	\$	3.00	SY	99,220	\$	297,660.00	\$ -	\$ 297,660.00
PREPARING ROW(TREE)(12" TO 24" DIA)	\$	650.00	EA	231	\$	150,150.00	\$ -	\$ 150,150.00
TREE PROTECTION	\$	845.00	EA	15	\$	12,675.00	\$ -	\$ 12,675.00
REMOVING CONC (CURB OR CURB & GUTTER)	\$	32.00	LF	2,600	\$	83,200.00	\$ -	\$ 83,200.00
REMOVING CONC (RIPRAP)	\$	26.00	SY	201	\$	5,226.00	\$ -	\$ 5,226.00
REMOV STR (BOX CULVERT)	\$	78.00	LF	360	\$	28,080.00	\$ -	\$ 28,080.00
REMOV STR (HEADWALL)	\$	2,600.00	EA	7	\$	18,200.00	\$ -	\$ 18,200.00
REMOV STR (WINGWALL)	\$	1,950.00	EA	8	\$	15,600.00	\$ -	\$ 15,600.00
REMOVE STR (RAIL)	\$	260.00	LF	176	\$	45,760.00	\$ -	\$ 45,760.00
REMOV STR (PIPE)	\$	26.00	LF	189	\$	4,914.00	\$ -	\$ 4,914.00
REMOV STR (SMALL FENCE)	\$	7.00	LF	1,147	\$	8,029.00	\$ -	\$ 8,029.00
REMOVING STAB BASE & ASPH PAV (8"-10")	\$	20.00	SY	9,875	\$	197,500.00	\$ -	\$ 197,500.00
EXCAVATION (CHANNEL)	\$	19.00	CY	90,000	\$	1,710,000.00	\$ -	\$ 1,710,000.00
EMBANKMENT (FINAL)(ORD COMP)(TY B)	\$	13.00	CY	1,441	\$	18,733.00	\$ -	\$ 18,733.00
HEADWALL	\$	9,100.00	EA	3	\$	27,300.00	\$ -	\$ 27,300.00
WINGWALL	\$	9,100.00	EA	3	\$	27,300.00	\$ -	\$ 27,300.00
RETAINING WALL (FACE)	\$	585.00	SY	300	\$	175,500.00	\$ -	\$ 175,500.00
BRIDGE CONSTRUCTION	\$	1,521.00	SY	970	\$	1,475,370.00	\$ -	\$ 1,475,370.00
ROADWAY RECONSTRUCTION	\$	143.00	SY	460	\$	65,780.00	\$ -	\$ 65,780.00
PARKING LOT REPAIR	\$	52.00	SY	2,600	\$	135,200.00	\$ -	\$ 135,200.00
FURNISHING AND PLACING TOPSOIL (4")	\$	2.00	SY	50,514	\$	101,028.00	\$ -	\$ 101,028.00
SOIL RETENTION BLANKETS (CL 1) (TY B)	\$	3.00	SY	50,514	\$	151,542.00	\$ -	\$ 151,542.00
BROADCAST SEED (PERM) (RURAL) (SANDY)	\$	2.00	SY	50,514	\$	101,028.00	\$ -	\$ 101,028.00
VEGETATIVE WATERING	\$	2.00	SY	50,514	\$	101,028.00	\$ -	\$ 101,028.00
PLANT MAINTENANCE	\$	78,000.00	LS	1	\$	78,000.00	\$ -	\$ 78,000.00
TEMPORARY EROSION CONTROL (3%)	\$	-	LS	1	\$	153,384.09	\$ -	\$ 153,384.09
MOBILIZATION (8%)	\$	-	LS	1	\$	409,024.24	\$ -	\$ 409,024.24
BARRICADES, SIGNS AND TRAFFIC HANDLING	\$	78,000.00	LS	1	\$	78,000.00	\$ -	\$ 78,000.00
LAND ACQUISITION	\$	43.00	SY	60,940	\$	-	\$ 2,620,420.00	\$ 2,620,420.00
TOTAL	\$	183,039.00			\$	5,675,211.33	\$ 2,620,420.00	\$ 8,295,631.33

From 30% Cost Estimate Unit Conversions conversion SY Unit cost Cost Unit Price Item Unit Quantity ac sy 99220 \$ 1.94 \$ 192,700.00 9400 192700 Removal PREPARING ROW 20.5 1 4840 500 PREPARING ROW(TREE)(12" TO 24" DIA) 231 EA TREE PROTECTION 650 EA 15 REMOVING CONC (CURB OR CURB & GUTTER) LF 2600 24 REMOVING CONC (RIPRAP) SY 201 20 REMOV STR (BOX CULVERT) LF 360 60 REMOV STR (HEADWALL) EA 7 2000 REMOV STR (WINGWALL) EA 1500 8 REMOVE STR (RAIL) 176 200 LF REMOV STR (PIPE) LF 189 20 REMOV STR (SMALL FENCE) LF 1147 5 REMOVING STAB BASE & ASPH PAV (8"-10") 9875 SY 15 CY Channel Imp EXCAVATION (CHANNEL) 89988.15 14 EMBANKMENT (FINAL)(ORD COMP)(TY B) CY 1441 10 EA 3 7000 HEADWALL WINGWALL EA 3 7000 sf SY sy SF SF 300 \$ 450.00 \$ 135,000.00 2700 50 RETAINING WALL (FACE) 9 1 130 STR BRIDGE CONSTRUCTION 8675 **1** 963.8889 \$ 1,170.00 \$ 1,127,750.00 9 ROADWAY RECONSTRUCTION 110 455.5555556 SY PARKING LOT REPAIR SY 2518.518519 40 EC FURNISHING AND PLACING TOPSOIL (4") SY 50514 1.5 SOIL RETENTION BLANKETS (CL 1) (TY B) SY 50514 2 BROADCAST SEED (PERM) (RURAL) (SANDY) SY 50514 1 VEGETATIVE WATERING 50514 MO SY 1 LS MO 5000 12 12 60000 \$ 60,000.00 PLANT MAINTENANCE 1 TEMPORARY EROSION CONTROL (3%) 1 MOBILIZATION (8%) LS 1 60000 \$ 60,000.00 BARRICADES, SIGNS AND TRAFFIC HANDLING MO 24 2500 24 1

AC

SY

1 4840 60935.6

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

Annual operations and maintenance of the creek includes mowing, debris and trash clean up. Additional maintenance would also include erosion or slope failures that may occur within the channel benching and at creek crossings. Annual projected O&M costs are \$20,000.

2. Identify and explain any special engineering activities.

N/A

		LAND ACQUISITION		AC	AC	AC	AC	AC
	Date: 9/22/2020 Phone Number: 91082							
	Signature of Registered Engineer/Architect Responsible							
Seal	Signature of Registered Engineer/Architect Responsible For Budget Justification:							

UNIT PRICE

1.94

500.00

650.00

24.00

20.00

60.00

2,000.00

1,500.00

200.00

20.00

5.00

15.00

14.00

10.00

450.00

1,170.00

110.00

40.00 1.50

2.00

1.00

1.00

60,000.00

-

-60,000.00

7,000.00

7,000.00

*
TXGLO

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:							
Site/Activity Title:							
Eligible Activity:							
Materials/Facilities/Services	\$/Unit	Unit	Quantity	Construction	Ace	quisition	Total
PREPARING ROW	\$ 1.94	SY	99,220	\$ 192,700.00	\$	-	\$ 192,700.00
PREPARING ROW(TREE)(12" TO 24" DIA)	\$ 500.00	EA	231	\$ 115,500.00	\$	-	\$ 115,500.00
TREE PROTECTION	\$ 650.00	EA	15	\$ 9,750.00	\$	-	\$ 9,750.00
REMOVING CONC (CURB OR CURB & GUTTER)	\$ 24.00	LF	2,600	\$ 62,400.00	\$	-	\$ 62,400.00
REMOVING CONC (RIPRAP)	\$ 20.00	SY	201	\$ 4,020.00	\$	-	\$ 4,020.00
REMOV STR (BOX CULVERT)	\$ 60.00	LF	360	\$ 21,600.00	\$	-	\$ 21,600.00
REMOV STR (HEADWALL)	\$ 2,000.00	EA	7	\$ 14,000.00	\$	-	\$ 14,000.00
REMOV STR (WINGWALL)	\$ 1,500.00	EA	8	\$ 12,000.00	\$	-	\$ 12,000.00
REMOVE STR (RAIL)	\$ 200.00	LF	176	\$ 35,200.00	\$	-	\$ 35,200.00
REMOV STR (PIPE)	\$ 20.00	LF	189	\$ 3,780.00	\$	-	\$ 3,780.00
REMOV STR (SMALL FENCE)	\$ 5.00	LF	1,147	\$ 5,735.00	\$	-	\$ 5,735.00
REMOVING STAB BASE & ASPH PAV (8"-10")	\$ 15.00	SY	9,875	\$ 148,125.00	\$	-	\$ 148,125.00
EXCAVATION (CHANNEL)	\$ 14.00	CY	89,988	\$ 1,259,834.10	\$	-	\$ 1,259,834.10
EMBANKMENT (FINAL)(ORD COMP)(TY B)	\$ 10.00	CY	1,441	\$ 14,410.00	\$	-	\$ 14,410.00
HEADWALL	\$ 7,000.00	EA	3	\$ 21,000.00	\$	-	\$ 21,000.00
WINGWALL	\$ 7,000.00	EA	3	\$ 21,000.00	\$	-	\$ 21,000.00
RETAINING WALL (FACE)	\$ 450.00	SY	300	\$ 135,000.00	\$	-	\$ 135,000.00
BRIDGE CONSTRUCTION	\$ 1,170.00	SY	964	\$ 1,127,751.30	\$	-	\$ 1,127,751.30
ROADWAY RECONSTRUCTION	\$ 110.00	SY	456	\$ 50,111.11	\$	-	\$ 50,111.11
PARKING LOT REPAIR	\$ 40.00	SY	2,519	\$ 100,740.74	\$	-	\$ 100,740.74
FURNISHING AND PLACING TOPSOIL (4")	\$ 1.50	SY	50,514	\$ 75,771.00	\$	-	\$ 75,771.00
SOIL RETENTION BLANKETS (CL 1) (TY B)	\$ 2.00	SY	50,514	\$ 101,028.00	\$	-	\$ 101,028.00
BROADCAST SEED (PERM) (RURAL) (SANDY)	\$ 1.00	SY	50,514	\$ 50,514.00	\$	-	\$ 50,514.00
VEGETATIVE WATERING	\$ 1.00	SY	50,514	\$ 50,514.00	\$	-	\$ 50,514.00
PLANT MAINTENANCE	\$ 60,000.00	LS	1	\$ 60,000.00	\$	-	\$ 60,000.00
TEMPORARY EROSION CONTROL (3%)	\$ -	LS	1	\$ 112,574.53	\$	-	\$ 112,574.53
MOBILIZATION	\$ -	LS	1	\$ 300,198.74	\$	-	\$ 300,198.74
BARRICADES, SIGNS AND TRAFFIC HANDLING	\$ 60,000.00	LS	1	\$ 60,000.00	\$	-	\$ 60,000.00
LAND ACQUISITION							
TOTAL	\$ 140,795.44			\$ 4,165,257.52	\$	-	\$ 4,165,257.52

From 30% Cost Estimate

					conversion					
	Item	Unit	Quantity	Unit Price	ас	sy	SY Uni	t cost	Cost	
Removal	PREPARING ROW	AC	20.5	9400	1	4840	99220 \$	1.94	\$ 192,700.00	192700
	PREPARING ROW(TREE)(12" TO 24" DIA)	EA	231	500						
	TREE PROTECTION	EA	15	650						
	REMOVING CONC (CURB OR CURB & GUTTER)	LF	2600	24						
	REMOVING CONC (RIPRAP)	SY	201	20						
	REMOV STR (BOX CULVERT)	LF	360	60						
	REMOV STR (HEADWALL)	EA	7	2000						
	REMOV STR (WINGWALL)	EA	8	1500						
	REMOVE STR (RAIL)	LF	176	200						
	REMOV STR (PIPE)	LF	189	20						
	REMOV STR (SMALL FENCE)	LF	1147	5						
	REMOVING STAB BASE & ASPH PAV (8"-10")	SY	9875	15						
Channel Imp	EXCAVATION (CHANNEL)	CY	89988.15	14						
	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	1441	10						
	HEADWALL	EA	3	7000						
	WINGWALL	EA	3	7000	sf	sy	SY			
	RETAINING WALL (FACE)	SF	2700	50	9	1	300 \$	450.00	\$ 135,000.00	
STR	BRIDGE CONSTRUCTION	SF	8675	130	9	1	963.8889 \$	1,170.00	\$ 1,127,750.00	
	ROADWAY RECONSTRUCTION	SY	455.5555556	110						
	PARKING LOT REPAIR	SY	2518.518519	40						
EC	FURNISHING AND PLACING TOPSOIL (4")	SY	50514	1.5						
	SOIL RETENTION BLANKETS (CL 1) (TY B)	SY	50514	2						
	BROADCAST SEED (PERM) (RURAL) (SANDY)	SY	50514	1						
	VEGETATIVE WATERING	SY	50514	1	MO	LS				
	PLANT MAINTENANCE	MO	12	5000	12	1	60000 \$	60,000.00		
	TEMPORARY EROSION CONTROL (3%)		1							
	MOBILIZATION (8%)	LS	1							
	BARRICADES, SIGNS AND TRAFFIC HANDLING	МО	24	2500	24	1	60000 \$	60,000.00		
ot include contine	zency.									

conversio

Unit Conversions

4,165,257.52 Does not include contingency.

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

2. Identify and explain any special engineering activities.

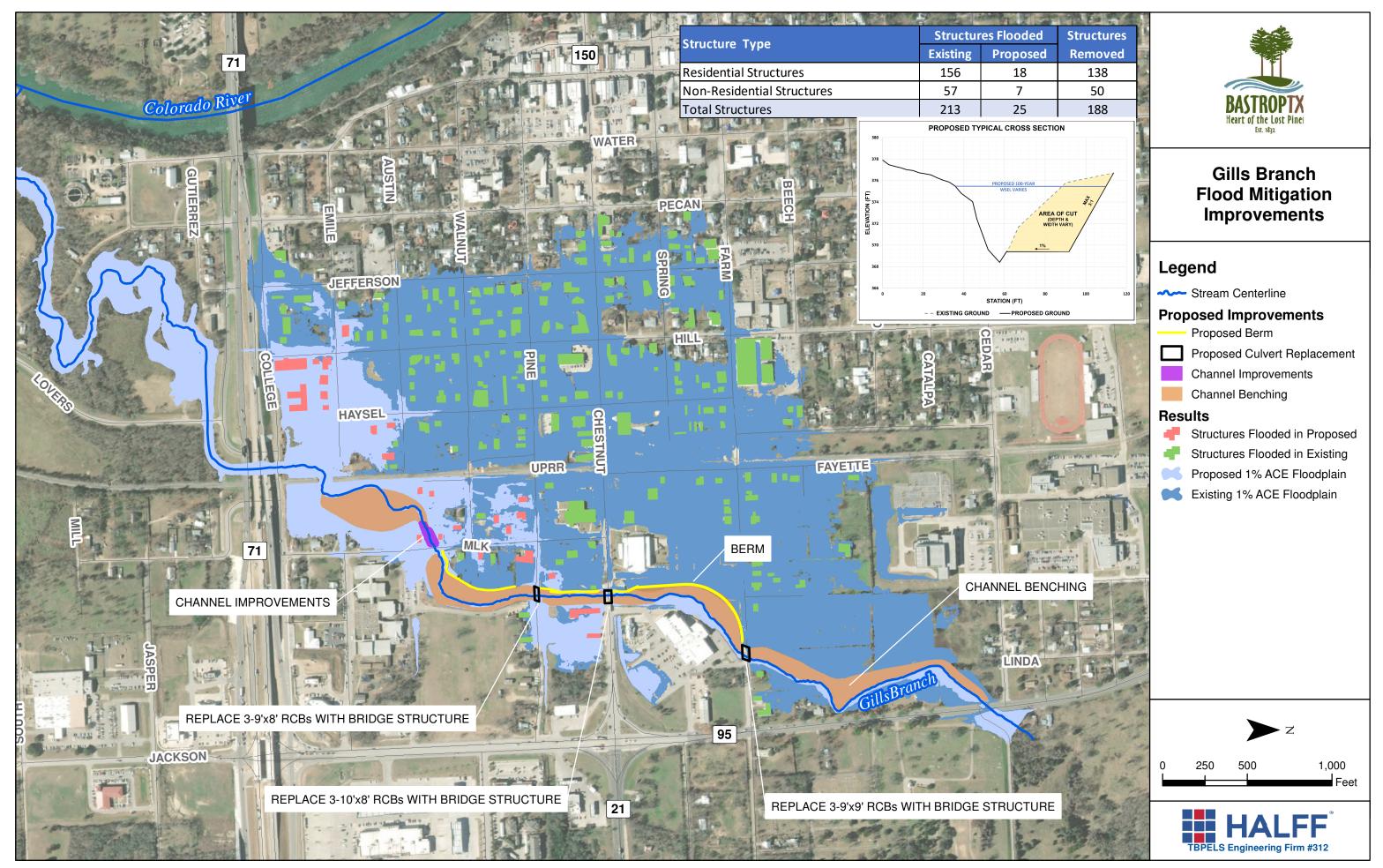
*MOWING/DEBRY/TRASH CLEAN UP

MAINTENANCE OF EROSION

LAND ACQUISITION

SY

	Date: Phone Number:
Seal	Signature of Registered Engineer/Architect Responsible For Budget Justification:



09/17/2020

CITY OF BASTROP - GILLS BRANCH FLOOD MITIGATION IMPROVEMENTS PROJECT DESCRIPTION

The City of Bastrop is home to the Colorado Tributary of Gills Branch. Gills Branch has a contributing drainage area of 2.8 square miles that encompasses the downtown area with the headwaters extending approximately a half mile northeast of the City limits. Gills Branch meanders through the historic downtown flowing southwest through the City until it confluences with the Colorado River, just downstream of Texas State Highway (SH) 71.

The City of Bastrop has historically experienced flooding along Gills Branch during heavy rainfall storm events. The City observed significant flooding during the most recent flood event in 2015 Memorial Day weekend. Since 2016, Gills Branch has been extensively studied in order to fully understand the hydrologic and hydraulic characteristics of the watershed. Initially the City of Bastrop participated in the Bastrop County Flood Protection Planning (FFP) study resulting in a detailed hydrologic and 1-dimensional (1D) hydraulic analysis of the Gills Branch watershed. The FFP hydraulic analysis of Gills Branch extended 2.0 miles from SH 95 to the confluence at the Colorado River.

The 1D study established the existing channel is substantially undersized, with approximately 1,850 CFS overflowing along the western bank along Gills Branch during a 1% annual chance of exceedance (ACE) (100-year storm event). Majority of the overflow occurs between SH 95 and the Union Pacific Railroad (UPRR) crossing. Although the model indicated that overflow from Gills Branch occurred, the overland drainage patterns through the downtown neighborhoods were not well defined. This led to the development of a 2-Dimensional (2D) Analysis to properly evaluate the true nature of the overflow. The analysis indicated that the overflow from the western bank of Gills Branch continues westward until it overtops the UPRR and continues to flow through the residential and commercial downtown area until the flood waters are conveyed through a cross culvert under SH 71 and returned to the downstream reach of Gills Branch just upstream of the confluence. The results of the 2D analysis properly represented the flooding that the City witnessed during the 2015 Memorial Day Flood event. Conceptual flood mitigation solutions were evaluated in order to explore solutions to minimize the channel overflow along Gills Branch. An exhibit is included with this project description defining the extents of the existing floodplain and the anticipated results of the proposed design discussed in the following paragraph.

The City of Bastrop is currently in the design phase of the Gills Branch Flood Mitigation Improvement project and has contracted Halff Associates, Inc. to prepare final plans, specifications, and construction costs estimates. The design objective is to minimize the overflow that is impacting 213 structures in the downtown area of Bastrop, 156 of which are residential structures. The proposed design is supported with a 2D model, demonstrating the impacts of the design solutions along Gills Branch. The mitigation improvements include 1,050 linear feet of channel benching between SH 95 and the UPRR to increase the capacity along the channel to convey the anticipated NOAA Atlas 14 1% fully developed flows to the extent possible. In addition to the channel benching, three roadway culverts at Farm Street, Chestnut Street, and Pine Street will be replaced with three slab bridges. The proposed design results in removing a total of 188 structures from the floodplain, mitigating 138 residential homes. All of the proposed flood mitigation improvements are completely located within the City of Bastrop jurisdiction.

The design phase deliverables will include design plans, specifications, and probable construction cost estimate. Other supporting data and documentation include design ground survey, subsurface utility engineering, refined detailed hydrology and hydraulic analysis, environmental permitting, cultural resources investigation, attendance of public workshops, and preparation of an Engineering Design Report. The City of Bastrop is requesting \$5.7 million in funding for the construction phase of the Gills Branch Flood Mitigation Improvement project.

Operation and maintenance funding will be allocated from the City of Bastrop general fund to maintain the flood mitigation improvements. Anticipated O&M include debris removal, mowing, and repair of areas that experience creek erosion to ensure efficient channel conveyance during heavy rainfall events.