COMMUNITY FLOOD PLAIN MAP REVISION

The City of Katy, Texas, is in receipt of a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA) that provides the determination that a revision is warranted to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map. The effective date of the LOMR is August 31, 2007.

The portion of Cane Island Branch that lies within the Fort Bend County area of the City of Katy has not been revised by this LOMR. As a result, the Base Flood Elevations (BFEs) for Cane Island Branch do not match at the county boundaries. This discrepancy will be resolved at the time the Fort Bend County Flood Insurance Rate Map (FIRM) is adopted. A packet containing the LOMR, small-scale maps, and accompanying literature is available at no cost at Katy City Hall, 910 Avenue C, Katy, Texas 77493.

This LOMR may be helpful for residents who currently pay for flood insurance because of lender requirements. Residents should contact their lender if they have questions about those conditions. If you have any questions regarding this LOMR, please contact Elaine Lutringer, City of Katy Director of Public Works, at 281-391-4830, or the FEMA Map Assistance Center toll-free at 1-877-336-2627. Additional information is available on the City of Katy website at www.cityofkaty.com.



Washington, D.C. 20472

AUG 3 1 2007

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Don Elder, Jr. Mayor, City of Katy P.O. Box 617 Katy, TX 77492

IN REPLY REFER TO:

Case No.: 07-06-2087P Community Name: City of Katy, TX

Community No.: 480301

Effective Date of This Revision:

AUG 3 1 2007

Dear Mayor Elder:

The Flood Insurance Study report and Flood Insurance Rate Map for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel(s) revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Federal Insurance and Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Denton, Texas, at (940) 898-5127, or the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Sincerely,

Emily Hirsch, CFM, Project Engineer Engineering Management Section

Mitigation Division

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For: William R. Blanton Jr., CFM, Chief Engineering Management Section

Mitigation Division

List of Enclosures:

Letter of Map Revision Determination Document Annotated Flood Insurance Rate Map Annotated Flood Insurance Study Report

cc: The Honorable Owen Ralston Waller County Judge

> Mr. Raymond J. Anderson P.E. Manager, Permits Public Infrastructure Department Harris County

Mr. Gary E Jones Deputy Regional Director FEMA Region VI

Mr. Jack Quarles, P.E. FEMA Region VI

Mr. Jack Graham, CFM, Natural Hazards Program Specialist Community Mitigation Branch FEMA Region VI



Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

	COMMUNITY AND REVISION	INFORMATION	PROJECT DESCRIPTION	BASIS OF REQUEST		
COMMUNITY	Fort Bend, Harris	of Katy , and Waller Counties Texas	NO PROJECT	BASE MAP CHANGES UPDATE FLOODWAY HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS		
	COMMUNITY NO.: 480301					
IDENTIFIER	City of Katy Flood Hazard update		APPROXIMATE LATITUDE & LONGITUDE: 29.778, -95.827 SOURCE: USGS QUADRANGLE DATUM: NAD 83			
ANNOTATED MAPPING ENCLOSURES			ANNOTATED STUDY ENCLOSURES			
TYPE: FIRM*	NO.: 4803010005 D	DATE: February 8, 1983	DATE OF EFFECTIVE FLOOD INSURANCE STUDY REPORT: February 8, 198 PROFILE(S): 02P, 03P AND 04P FLOODWAY DATA TABLE: 2 SUMMARY OF DISCHARGES TABLE: 1			

Enclosures reflect changes to flooding sources affected by this revision.

FLOODING SOURCE(S) & REVISED REACH(ES)

Cane Island Branch – from approximately 8,250 feet upstream of its confluence with Willow Fork Buffalo Bayou to approximately 27,380 feet upstream of the confluence

SUMMARY OF REVISIONS						
Effective Flooding	Revised Flooding	Increases	Decreases			
Zone A1- A30	Zone AE	NONE	YES			
BFEs	BFEs	NONE	YES			
No Floodway	Floodway	YES	NONE			
Zone B	Zone X (shaded)	YES	YES			
	Effective Flooding Zone A1- A30 BFEs No Floodway	Effective Flooding Zone A1- A30 BFEs No Floodway Revised Flooding Zone AE BFEs Floodway	Effective Flooding Revised Flooding Increases Zone A1- A30 Zone AE NONE BFES BFES NONE No Floodway Floodway YES			

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Emily Hirsch, CFM, Project Engineer

^{*} FIRM - Flood Insurance Rate Map; ** FBFM - Flood Boundary and Floodway Map; *** FHBM - Flood Hazard Boundary Map



Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the effective Harris County, TX and Incorporated Areas FIS study without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Emily Hirsch, CFM, Project Engineer

Engineering Management Section
Mitigation Division



Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Frank Pagano
Director, Federal Insurance and Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, TX 76209
(940) 898-5127

STATUS OF THE COMMUNITY NFIP MAPS

We are processing a revised FIRM and FIS report for Waller County in our countywide format; therefore, we will not physically revise and republish the FIRM and FIS report for your community to incorporate the modifications made by this LOMR at this time. Preliminary copies of the countywide FIRM and FIS report, which present information from the effective FIRMs and FIS reports for your community and other incorporated communities in Waller County, were submitted to your community for review on March 30, 2007. We will incorporate the modifications made by this LOMR into the countywide FIRM and FIS report before they become effective.

The portion of Cane Island Branch that lies within the Fort Bend County area of the City of Katy has not been revised by this LOMR. As a result, the BFEs for Cane Island Branch do not match at the county boundaries. This discrepancy will be resolved at the time that the Fort Bend County FIRM is adopted.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Emily Hirsch, CFM, Project Engineer

Engineering Management Section
Mitigation Division



Washington, D.C. 20472

LETTER OF MAP REVISION **DETERMINATION DOCUMENT (CONTINUED)**

PUBLIC NOTIFICATION OF REVISION

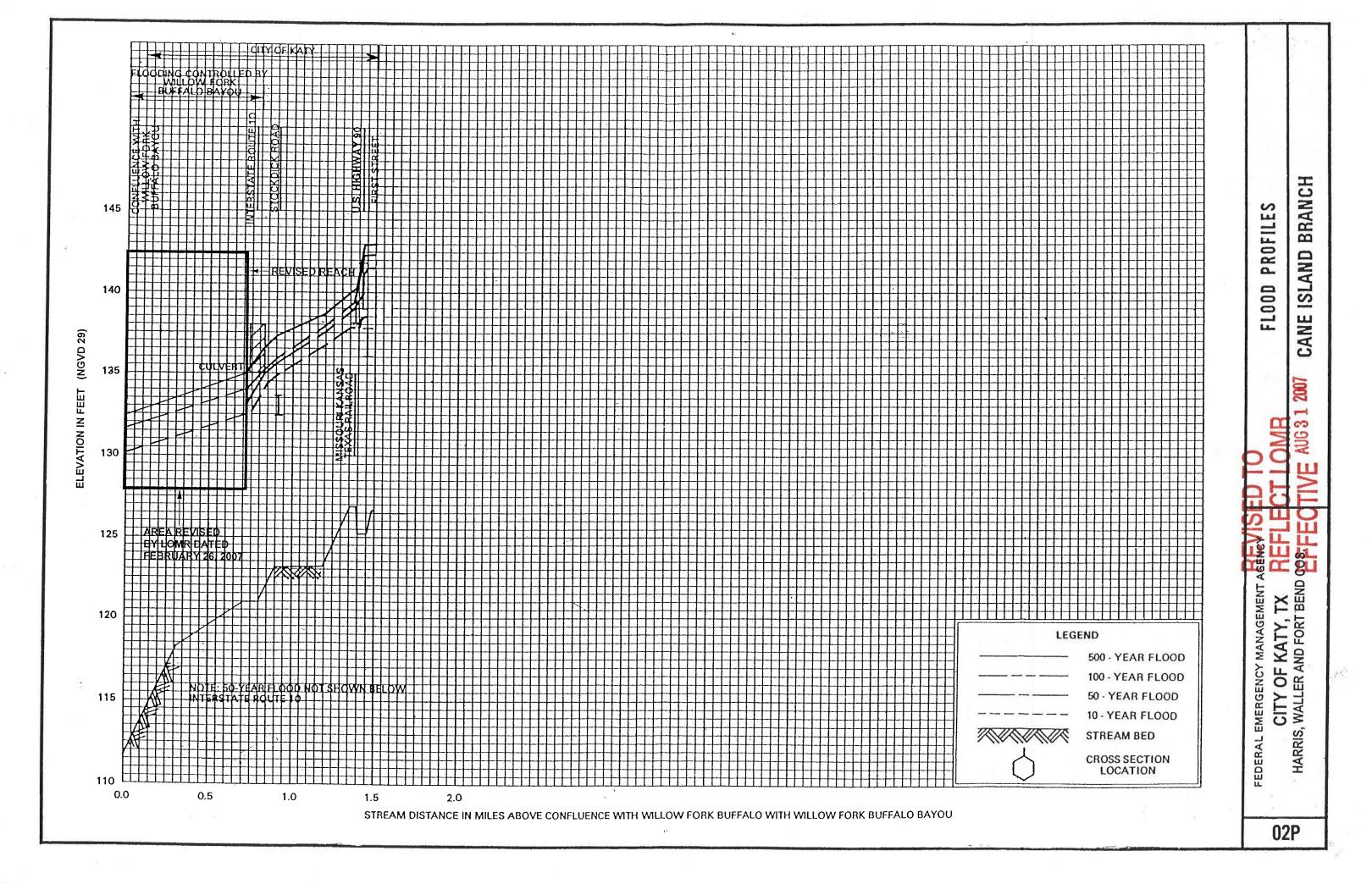
PUBLIC NOTIFICATION

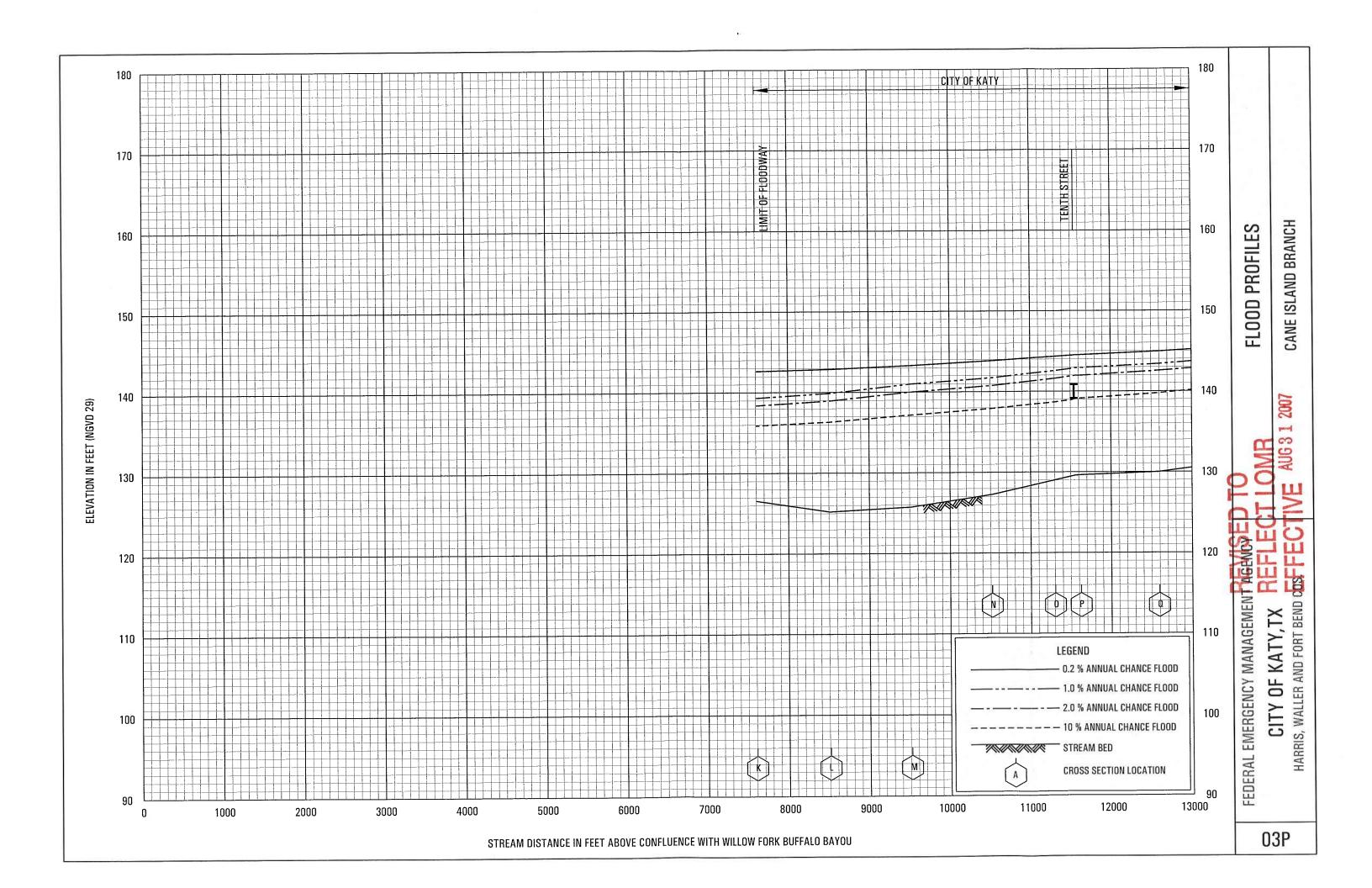
The modified BFEs for Cane Island Branch have already been published in *The Katy Times* as part of the Waller County restudy, following the issuance of preliminary copies of the FIRM and FIS report to your community on March 30, 2007. Therefore, no additional publication of the BFEs will occur at this time. The appeal period that began on July 5, 2007, ends on October 3, 2007. A citizen may request that we reconsider this determination until that date. Any request for reconsideration must be based on scientific or technical data.

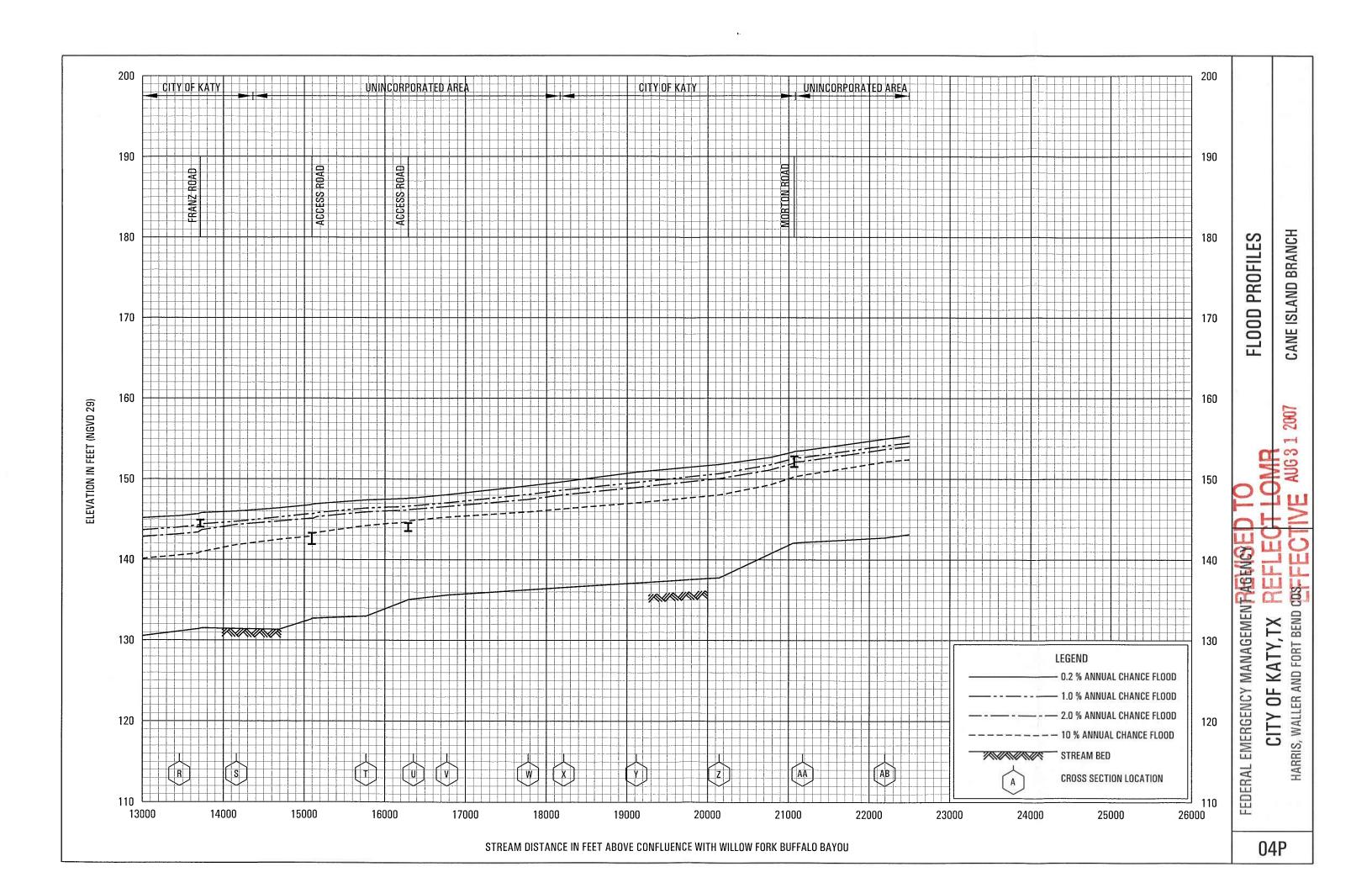
This revision is effective as the date of this letter. However, until the appeal period elapses, the revised BFEs presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

> Crisily Hr Emily Hirsch, CFM, Project Engineer







FLOODING SOURCE		FLOODWAY		BASE FLOOD WATER SURFACE ELEVATION				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NGVD)	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY (FEET NGVD)	INCREASE
Cane Island Branch								
K	7,600	260²	1,385	2.4	139.3	139.3	140.2	0.9
L	8,507	67	631	5.3	139.8	139.8	140.7	0.9
М	9,516	182	1,182	2.8	141.0	141.0	141.9	0.9
N	10,517	130	878	3.8	141.7	141.7	142.6	0.9
0	11,304	330	1,302	2.5	142.5	142.5	143.4	0.9
P	11,622	430	1,853	1.8	142.9	142.9	143.9	1.0
Q	12,591	470	1,991	1.7	143.4	143.4	144.4	1.0
R	13,458	445	1,765	1.9	144.0	144.0	144.8	8.0
s	14,162	300/200³	1,303	2.5	144.7	144.7	145.7	1.0
Т	15,767	420²	1,762	1.8	146.4	146.4	147.3	0.9
υ	16,358	460²	1,773	1.8	146.7	146.7	147.7	1.0
V	16,772	200²	1,086	2.9	147.1	147.1	148.0	0.9
W	17,776	180²	1,007	3.2	148.1	148.1	149.0	0.9
X	18,218	245/100³	1,078	3.0	148.6	148.6	149.5	0.9
Υ	19,118	235/130³	1,160	2.7	149.6	149.6	150.5	0.9
Z	20,143	200/150³	1,125	2.8	150.7	150.7	151.7	1.0
AA	21,176	480²	1,635	1.9	152.7	152.7	153.6	0.9
AB	22,196	500²	1,896	1.7	154.1	154.1	155.1	1.0
				1				
		REVIS	ED TO					
REFLECT LOMR								

¹ Feet above confluence with Willow Fork Buffalo Bayou

² Outside of City of Katy Boundary

EFFECTIVE AUG 3 1 2007

³ Total width/width within City of Katy Boundary

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF KATY, TX (FORT BEND, HARRIS AND WALLER COS.)

FLOODWAY DATA

CANE ISLAND BRANCH

Developed using manning's "n" equation for each stream segment including both left and right banks. As the flood hydrograph was routed downstream, floodwaters exceeding the watershed bank elevations were discharged to the adjacent watershed. The remaining flow was used in the hydraulic computations.

A summary of drainage area-peak discharge relationship for the streams studied by detailed methods is shown in Table 1. The discharge values shown in the table reflect the effects of overflows out of the watershed. Thus, some discharges in the Summary of Discharge table decrease with increasing drainage area.

TABLE 1- SUMMARY OF DISCHARGES

FLOODING SOURCE	DRAINAGE AREA		PEAK DISCHARGE (CFS)					
AND LOCATION	(Sq. Miles)	10-YEAR	50-YEAR	100-YEAR	500-YEAR			
Willow Fork, Buffalo Ba								
River Mile 11.77	18.37	2,600	*	4,500	6,750			
River Mile 10.73	32.40	4,000	*	7,000	10,000			
River Mile 10.39	53.29	5,600	*	10,200	13,950			
						1		
Cane Island Branch								
Upstream of U.S. High	way 90 23 71	1,088	2,455	3,380	6,414			
Upstream of Tenth Str		1,015	2,380	3,285	6,279			
Upstream of Franz Roa	d 20 ₊ 88	999	2,364	3,265	6,250			
Upstream of Morton Ro	10 71	947	2,271	3,154	6,017			
					VISED TO	1		

* Not Computed

3.2 Hydraulic Analysis

Analyses of the hydraulic characteristics of the flooding sources studied in detail in the community were carried out to provide estimates of the elevations of floods of the selected recurrence intervals along each of these flooding sources.

Data Revised

Cross Sections for stream were either filed surveyed or determined from detailed topographic maps. All bridges and culverts were surveyed to obtain elevation data and structural geometry. These data were supplemented with information form the U.S. Geological survey 7.5-Minute Quadrangular Map for City of Katy, Texas dated 1971 (Reference 10).

Locations of selected cross sections used in the hydraulic analyses are shown on the flood profiles.

Since there are no stream gauges with in the study area, calibration of manning's "n" values was not possible. The "n" values used for this study were selected based on field observations of ground cover

