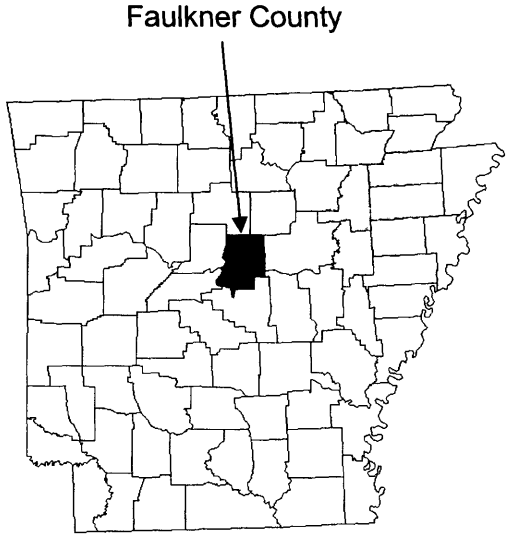
FLOOD INSURANCE STUDY

FAULKNER COUNTY, ARKANSAS

AND INCORPORATED AREAS

Community Name	*Community Number*
CONWAY, CITY OF	050078
*ENOLA, CITY OF	050589
FAULKNER COUNTY (UNINCORPORATED AREAS)	050431
GREENBRIER, CITY OF	050328
*GUY, TOWN OF	050588
HOLLAND, CITY OF	050606
MAYFLOWER, CITY OF	050079
MOUNT VERNON, TOWN OF	050570
TWIN GROVES, TOWN OF	050141
VILONIA, CITY OF	050417
WOOSTER, TOWN OF	050302

*No Special Flood Hazard Areas Identified



Revised: December 19, 2006

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

05045CV000B

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) report may not contain all data available within the Community Map Repository. Please contact the Community Map Repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this FIS report at any time. In addition, FEMA may revise part of this FIS report by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS report. Therefore, users should consult with community officials and check the Community Map Repository to obtain the most current FIS report components.

Initial Countywide FIS Effective Date:	September 27, 1991
Revised Countywide FIS Effective Dates:	June 2, 1994 February 4, 1998 February 5, 2003 December 19, 2006

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FLOOD INSURANCE STUDY
FAULKNER COUNTY, ARKANSAS AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and updates information on the existence and severity of flood hazards in the geographic area of Faulkner County, Arkansas, including the Cities of Conway, Enola, Greenbrier, Holland, Mayflower, and Vilonia; the Towns of Guy, Mount Vernon, Twin Groves, and Wooster; and the unincorporated areas of Faulkner County (referred to collectively herein as Faulkner County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood-risk data for various areas of the community that will be used to establish actuarial flood insurance rates and to assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

Please note that the Town of Damascus is geographically located in Faulkner and Van Buren Counties. The flood-hazard information for the Town of Damascus is for informational purposes only. In addition, the Town of Quitman is geographically located in Faulkner and Cleburne Counties. The flood-hazard information for the Town of Quitman is shown in its entirety in the Cleburne County and Incorporated Areas FIS report. See the separately published FIS report and Flood Insurance Rate Map (FIRM) for information regarding those communities.

Please note that the City of Enola and the Town of Guy have no mapped flood hazard areas.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgments

The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

For the City of Conway, the hydrologic and hydraulic analyses for the study dated March 18, 1980, were prepared by the U.S. Soil Conservation Service (SCS) for the Federal Emergency Management Agency (FEMA), under Interagency Agreement No IAA-H-8-77, Project Order No. 1. The work was completed in October 1977. In the revised study effective June 15, 1988, updated hydrologic and hydraulic analyses for Little Creek Tributary No. 1 were prepared by FTN Associates, LTD., for Cromwell Engineers, Inc. The work was completed in July 1986.

For the September 27, 1991, countywide study, the hydrologic and hydraulic analyses for flooding sources within the unincorporated areas of Faulkner County and the City of Mayflower were prepared by the Little Rock District of the U.S. Army Corps of Engineers (USACE) for FEMA under Interagency Agreement No. EMW-87-E-2509, Project Order No. 1. The work was completed in July 1988. The September 27, 1991, countywide study also included updated hydrologic and hydraulic analyses for flooding sources within the Cities of Conway and Greenbrier, and the unincorporated areas of Faulkner County, prepared by the USACE, Little Rock District, for FEMA, under Interagency No. EMW-89-E-2978, Project Order No. 3. The work was completed in May 1990.

For the June 2, 1994, restudy, revised hydrologic and hydraulic analyses were incorporated for Little Creek and Gold Creek (East), affecting the City of Conway and the unincorporated areas of Faulkner County. The hydrologic and hydraulic analyses for this revised study were performed by the USACE, Little Rock District, under Interagency Agreement No. EMW-91-E-3529, Project Order No. 5. The work was completed in September 1992.

For the February 4, 1998, restudy, revised hydraulic analyses were incorporated for the Arkansas River, affecting the unincorporated areas of Faulkner County. In addition, revised hydraulic analyses of approximately 2.8 miles of East Fork Cadron Creek were incorporated between U.S. Highways 25 and 65. The hydraulic analyses for the revised study along the Arkansas River were performed by the USACE, Little Rock District, under Interagency Agreement No. EMW-94-E-4432, Project Order No. 5. The work was completed in October 1995.

For the February 5, 2003, restudy, the FIS was revised to incorporate the results of revised hydrologic and hydraulic analyses of Greenbrier Creek, Greenbrier Creek Tributaries No. 2 and No. 3, and Skyline Creek in the Town of Wooster. The hydrologic and hydraulic analyses for this revision were obtained from reports prepared by the USACE, Little Rock District, under Interagency Agreement No. EMW-99-IA-0235, Project Order No. 3. The work was completed in August 2000.

For this restudy, the hydrologic and hydraulic analyses were performed by FTN Associates, LTD, for FEMA, under Contract No. EMT-2001-CO-0028, Task 2. The work was completed in September 2002.

1.3 Coordination

For the September 27, 1991, study, the Initial Consultation Coordination Officer (CCO) meetings were held for the City of Greenbrier on August 29, 1988, and for the City of Conway on August 30, 1988. For the unincorporated areas of Faulkner County, an initial CCO meeting was held on August 12, 1986. The initial CCO meetings were held with representatives of FEMA, the communities, and the study contractors to explain the nature and purpose of flood insurance studies, and to identify the streams to be studied by detailed methods. On August 30, 1988, an intermediate CCO meeting was held for the county. A final CCO meeting was held on August 16, 1990, with representatives of FEMA, the study contractor, and the county to review the results of the countywide study. This final CCO meeting was open to representatives of the unincorporated areas of Faulkner County and the following communities within the county: the Cities of Mayflower and Vilonia, and the Towns of Mount Vernon and Wooster. The preparation of this countywide FIS was coordinated with the Faulkner County Highway and Transportation Department, the SCS, and the U.S. Geological Survey (USGS).

For the June 2, 1994, restudy, the final CCO meeting was held on May 5, 1993, and attended by representatives of the unincorporated areas of Faulkner County, the City of Conway, the USACE, Little Rock District, and FEMA.

For the February 4, 1998, restudy, the final CCO meeting was held on March 20, 1997, and attended by representatives of FEMA, the USACE, and the unincorporated areas of Faulkner County.

For this countywide restudy, the initial CCO meeting was held on August 20, 2001, and attended by representatives of FEMA, the City of Conway, Faulkner County, FTN Associates, LTD, the Arkansas Soil and Water Conservation Commission, and PBS&J.

For this countywide restudy, the final CCO meeting was held on March 23, 2005, with representatives from FEMA and officials from the incorporated communities within Faulkner County. All comments brought to attention during the meeting were addressed.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Faulkner County, Arkansas, including the incorporated communities listed in Section 1.1. The areas studied by detailed methods were selected with priority given to all known flood hazards and areas of projected development or proposed construction through 2002. Gold Creek (South), Middle Fork Cypress Bayou, North Fork Cypress Bayou, Palarm Creek,

and Warren Creek were all restudied by detailed methods in the September 27, 1991, FIS.

For the June 2, 1994, restudy, Little Creek and Gold Creek (East) were restudied by detailed methods.

For the February 4, 1998, restudy, the Arkansas River and East Fork Cadron Creek were restudied by detailed methods.

For the February 5, 2003, restudy, Greenbrier Creek, Greenbrier Creek Tributaries No. 2 and No. 3, and Skyline Creek were restudied by detailed methods.

For this countywide restudy, Gold Creek South, Middle Fork Cypress Bayou, North Fork Cypress Bayou, South Fork Cypress Bayou, and Warren Creek were studied by detailed methods.

Approximate analyses were used to study those areas having low development potential or minimal flood hazards. The scope and methods of study were proposed to and agreed upon by FEMA and the representatives of Faulkner County.

Streams studied by detailed methods and the respective study limits are shown in the following tabulation:

Arkansas River	From approximately 2.86 miles downstream of the confluence with Mill Bayou to the confluence with Cadron Creek
Buffalo Branch	From the confluence with Spring Creek to approximately 120 feet upstream of West Tyler Street
Centennial Creek	From the confluence with Spring Creek to approximately 730 feet upstream of Prince Street
East Fork Cadron Creeek	From U.S. Highway 25 to approximately 170 feet upstream of U.S. Highway 65
Gold Creek (East)	From the confluence with Little Creek to approximately 860 feet upstream of Runker Road
Gold Creek (South)	From approximately 2,550 feet downstream of Sturges Road to approximately 2,700 feet upstream of Wasson Road

Gold Creek (South) Tributary	From the Confluence with Gold Creek (South) to approximately 830 feet upstream of County Route 14 (Wasson Road)
Greenbrier Creek (Lower Reach)	From approximately 1.41 miles downstream of Patton Road to approximately 2.38 miles upstream of Patton Road
Greenbrier Creek (Upper Reach)	From approximately 1,700 feet downstream of State Route 25 to approximately 480 feet upstream of State Route 225
Greenbrier Creek Tributary No. 2	From the confluence with Greenbrier Creek to approximately 1,350 feet upstream of Green Valley Road
Greenbrier Creek Tributary No. 3	From the confluence of Greenbrier Creek to approximately 1,650 feet upstream of Reed Road
Hendrix Branch	From the confluence with Little Creek to approximately 930 feet upstream of Siebenmorgan Road
Little Creek	From approximately 4,100 feet downstream of U.S. Highway 286 to approximately 220 feet upstream of Siebenmorgan Road
Middle Fork Cypress Bayou	From the confluence with Cypress Bayou to approximately 440 feet upstream of Marshall Road
North Fork Cypress Bayou	From the confluence with Cypress Bayou to approximately 730 feet upstream of North Marshall Street
Palarm Creek	From the confluence with the Arkansas River to approximately 4,180 feet upstream of State Highway 36
Railroad Creek	From the confluence with Stone Dam Creek to approximately 1,180 feet upstream of Robins Street
Sally Cone Creek	From the confluence with Stone Dam Creek to approximately 190 feet upstream of Hardy Street

Simon Branch	From the confluence with Little Creek to approximately 70 feet upstream of Bridgestone Drive
Skyline Creek	From the confluence with Greenbrier Creek Tributary No. 3 to approximately 730 feet upstream of Green Valley Road
South Fork Cypress Bayou	From the confluence with Cypress Bayou to approximately 115 feet upstream of Church Street
Spring Creek	From the confluence with Tucker Creek to approximately 210 feet upstream West Tyler Street
St. John's Branch	From confluence with Spring Creek to approximately 120 feet upstream of West Tyler Street
Stone Dam Creek	From approximately 1,400 feet downstream of State Route 365 to approximately 2,641 feet upstream State Route 286
Tributary 1	From approximately 1,120 feet downstream of U.S. Route 65 to approximately 700 feet upstream of Linder Road
Tributary A	From the confluence with Tributary 1 to approximately 1,300 feet upstream of U.S. Route 65
Tucker Creek	From the confluence with Tupelo Bayou to approximately 3,000 feet upstream of State Highway 60 (Prince Street)
Tupelo Creek	From approximately 100 feet downstream of County Road 3 to approximately to the confluence of Tucker Creek
Warren Creek	From the confluence with Palarm Creek to approximately 530 feet upstream of Lower Ridge Road

The Letters of Map Revision (LOMRs) were incorporated into this revised countywide study:

Case Number	Project Identification	Flooding Source	Effective Date
99-06-1938P	Tucker Creek Levee Project	Tucker Creek, Spring Creek, Centennial Creek, and Tupelo Creek	3/13/2001
01-06-1902P	Unnamed Tributary to Tucker Creek Tributary Channel Modifications	Centennial Creek	11/25/02

2.2 Community Description

Faulkner County is located in central Arkansas, approximately 30 miles northwest of Little Rock. The county is bordered by the Arkansas River, Conway and Perry Counties to the west; by White and Lonoke Counties to the east; by Van Buren and Cleburne Counties to the north; and by Pulaski County to the south. The county seat is the City of Conway.

The climate in Faulkner County is humid with average temperatures ranging from 40 degrees Fahrenheit (°F) in January to 82°F in July. Summers are moderately long and hot, and daily maximum temperatures occasionally exceed 100°F. Winters are moderately short and cold. The average annual precipitation for the area is approximately 50 inches (Reference 1). Precipitation is distributed throughout the year, with heavier amounts occurring in the spring and lesser amounts in the summer. Intense thunderstorms occur in the summer and may release large amounts of rain over a small area in a short period of time. Snowfall averages approximately 4 inches per year and ordinarily remains on the ground for only a short time.

Faulkner County is composed primarily of upland and floodplain areas. The upland areas are gently rolling hills covered with woodlands, and the floodplain areas are generally flat to rolling terrain with some residential development.

The Arkansas River, which bounds the county on the west, has large floodplain areas and creates backwater areas in its tributaries.

The Palarm Creek watershed, in which the remaining streams studied by detailed methods are located, is approximately 169 square miles in size, with approximately 34 square miles being located below the dam at Lake Conway. The surface area of Lake Conway is approximately 10 square miles at a pool

elevation of 263.18 feet North American Vertical Datum of 1988 (NAVD), which is the height of the spillway crest.

Ground elevations along the floodplain in the county generally range from approximately 500 feet NAVD to the north, to approximately 250 feet NAVD at the confluence of Palarm Creek with the Arkansas River. Stream banks are generally covered with trees, brush, and other vegetation except in the vicinity of the City of Conway, where some stream channelization has been performed. The floodplains away from the stream banks are generally comprised of cultivated fields and pastureland in the southern and central areas with a larger proportion of wooded areas in the steeper sections to the north and west. Considerable residential development has occurred along Lake Conway and in the City of Mayflower.

The Parlarm Creek channel below Lake Conway Dam meanders a great deal and varies in width from 100 to 200 feet, with a nearly flat slope. The streams that flow into Lake Conway are generally small with well-defined channels and widths typically between 10 and 20 feet. Slopes on these streams vary from nearly flat to greater than 50 feet per mile.

2.3 Principal Flood Problems

River stage has been recorded on the Arkansas River at Little rock since 1927. In this study, it was assumed that the Arkansas River flow in the Faulkner County reach of the river does not vary appreciably from the flow at Little Rock. The discharge computed for the stage at Little Rock provides a good estimate of the discharge in the study area. Stage readings from the headwater and tailwater gages at Toad Suck Ferry Lock and Dam are also available on the Arkansas River.

No stream gages are located on the remaining streams in the study area, although the pool elevation at Lake Conway has been recorded sporadically since 1979 by the dam tender.

The National Weather Service (NWS) maintains a recording rain gage in the City of Conway.

2.4 Flood Protection Measures

LOMR Case No. 99-06-1938P, effective on March 13, 2001, includes revisions to the Tupelo Bayou and Tucker Creek stream networks on the basis of the Arkansas River levee project in the unincorporated areas of Faulkner County. The levee system was certified by the Engineering and Technical Division of the USACE, Little Rock District, as providing protection from a 1-percent-annual-chance flood in areas of the City of Conway and the unincorporated areas of Faulkner County. The certification removed the application of a regulatory backwater elevation of

285.0 feet NAVD being projected up the Tupelo Creek and Tucker Creek stream networks.

No other major structural flood protection measures exist which would affect the results of this FIS. The primary purpose of the Toad Suck Ferry Lock and Dam on the Arkansas River is navigation. Lake Conway is used primarily for recreation purposes.

3.0 ENGINEERING METHODS

For the flooding sources studied by detailed methods in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 1-percent-annual-chance (100-year) flood in any 50-year period is approximately 40 percent (4 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied by detailed methods affecting the community.

The hydrologic analyses for the Arkansas River were obtained from the detailed and extensive engineering studies, which have been made previously in connection with the design, construction, and maintenance of the McClellan-Kerr Arkansas River Navigation System. Continuous records of river stages on the Arkansas River at the gage in Little Rock are available from 1927 to the present. These flood data were investigated to determine the discharge frequency used in the study. These data were adjusted as required for the effects of the appropriate upstream storage reservoirs.

For the September 27, 1991, countywide study, Railroad Creek (upstream of Cross Section B), and Little Creek Tributaries Nos. 1 and 2, the method outlined in USGS Water Resources Circular No. 11 (Reference 2) was used for computing

peak discharges based on slopes computed from the USGS quadrangle for Conway dated 1961, with a scale of 1:24,000 and a contour interval of 10 feet (Reference 3). Adjustments for urbanization were made on Railroad Creek in accordance with USGS Water Resources Investigations 23-74 (Reference 4).

For the June 2, 1994, restudy, the discharges used for Little Creek and Gold Creek (East) were taken from the previous FIS dated September 27, 1991 (Reference 5), with some adjustments to better define the hydrology in areas of new residential development. These adjustments were made by delineating additional sub-basins and applying a discharge/drainage area ratio to the HEC-1 discharge results from the limited map maintenance study prepared by the USACE (Reference 6).

For the February 5, 2003, restudy, peak discharges were estimated and synthesized based on basin characteristics. From this data, the hydrologic computer model HEC-HMS (Reference 7) and rainfall data from the NWS publications Hydro-35 and TP-40 (References 8 and 9) were used to compute discharges for the study stream reaches. HEC-RAS (Reference 10) was used for computation of the water surface profiles and floodway limits. Discharges at designated points along the study reaches were obtained from the results of the HEC-HMS models.

For this countywide restudy, hydrologic analyses were carried out to establish peak discharges for the following streams: Gold Creek (South), Middle Fork Cypress Bayou, North Fork Cypress Bayou, Palarm Creek, and Warren Creek. The hydrologic analyses for this restudy were computed using established regression analyses for Arkansas, published in USGS Water-Resources Investigations Report 95-4224 (Reference 11).

For this restudy, for all other streams and the remaining portions of Railroad Creek studied by detailed methods, the HEC-1 Flood Hydrograph Package and NWS Publications TP-40 and Hydro-35 were used to develop the discharges (References 8, 9, and 12).

Because of the impact of the Arkansas River elevations on the elevations of Palarm Creek, and hence Lake Conway, a simplified coincident peak analyses between the Arkansas River and Palarm Creek (Lake Conway) was performed based on combination of the 1-percent-annual-chance Arkansas River flow and the 10-percent-annual-chance precipitation on the Palarm Creek basin. The results of the analysis indicated that the 1-percent-annual-chance flow on the Arkansas River had a much larger impact on Lake Conway flood elevations than did the 10-percent-annual-chance flow, while the amount of precipitation on the Palarm Creek basin was much less important in determining Lake Conway's 1-percent-annual-chance pool elevation.

Peak discharge-drainage area relationships for all the streams studied in detail are shown in Table 1.

Table 1 - Summary of Discharges

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
Arkansas River					
At Main Street in Little Rock (Pulaski County)	158,090	330,000	430,000	480,000	625,000
At Toad Suck Ferry Lock and Dam	156,403	*	*	485,000	*
Buffalo Branch					
At confluence with Tucker Creek Tributary	0.5	*	*	1,108	*
Centennial Creek					
At confluence with Tucker Creek Tributary	2.1	*	*	2,538	*
East Fork Cadron Creek					
At confluence with Cadron Creek	315	*	*	47,200	*
Gold Creek (East)					
At confluence with Little Creek	4.7	*	*	5,270	*
Upstream of Tributary No. 1	0.6	*	*	5,040	*
Upstream of Tributary No. 2	1.6	*	*	1,940	*
Gold Creek (South)					
At confluence with Lake Conway	10.4	*	*	14,800	*
Gold Creek South Tributary					
Approximately 110 feet upstream of confluence with Gold Creek South	0.7	*	*	1,800	*
Greenbrier Creek					
Approximately 1,100 feet upstream of confluence with Greenbrier Creek Tributary No. 2	10.20	3,955	5,460	6,065	6,715
Just downstream of Greenbrier Creek Tributary No. 2	11.90	4,095	5,720	6,355	7.035
At Patton Road	13.52	4,360	6,090	6,765	7,485
Approximately 3.45 miles upstream of confluence of Cadron Creek	14.84	4,150	5,815	6,400	7,050
Greenbrier Creek Tributary No. 2					
At Green Valley Road	0.12	150	205	225	250

Table 1 - Summary of Discharges (*continued*)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
Greenbrier Creek Tributary No. 2 (continued)					
At confluence with Greenbrier Creek	0.32	255	350	395	435
Greenbrier Creek Tributary No. 3					
Approximately 1,530 feet upstream of Reed Road	0.08	100	135	560	625
Approximately 100 feet downstream of the confluence of Skyline Creek	0.33	365	500	560	625
Approximately 1,100 feet Upstream of the confluence with Greenbrier Creek	0.93	885	1,225	1,375	1,530
At confluence with Greenbrier Creek	1.02	890	1,250	1,405	1,565
Hendrix Branch					
Approximately 950 feet upstream of Pamela Lane	1.5	741	1,208	1,379	1,700
Approximately 930 feet upstream of Siebenmorgan Road	1.0	515	840	959	1,150
Little Creek					
At confluence with Lake Conway	13.38	*	*	13,170	*
Downstream of Gold Creek (East)	1.3	*	*	11,240	*
Upstream of Gold Creek (East)	1.3	*	*	6,050	*
Upstream of Tributary No. 1	2.0	*	*	4,540	*
Upstream of Tributary No. 2	3.3	*	*	1,790	*
Middle Fork Cypress Bayou					
Approximately 1,980 feet downstream of confluence with Cypress Bayou	5.3	1,980	3,110	3,610	4,800
Approximately 1,890 feet downstream of Church Street	4.27	1,710	2,680	3,110	4,130
Approximately 2,200 feet Downstream of Church Street	1.89	982	1,530	1,770	2,350
Approximately 440 feet upstream of Marshall Road	1.18	713	1,110	1,280	1,690
North Fork Cypress Bayou					
At confluence with Cypress Bayou	3.66	1,540	2,410	2,790	3,710
At U.S. Highway 64	3.07	1,370	2,140	2,470	3,280
At North College Street	1.90	986	1,540	1,780	2,350
At North Marshall Road	1.18	713	1,110	1,280	1,690

Table 1 - Summary of Discharges (*continued*)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
Palarm Creek					
At confluence with Arkansas River	169.7	*	*	10,300	*
At U.S. Highway 286	55.91	9,310	15,200	17,900	24,500
Approximately 1.42 miles downstream of U.S. Highway 64	24.89	5,190	8,560	10,100	14,000
At Highway 36	11.92	3,060	5,110	6,060	8,450
Approximately 4,180 feet downstream of State Highway 64	8.00	2,270	3,800	4,520	6,320
Railroad Creek					
At confluence with Stone Dam Creek	2.4	*	*	3,090	*
Approximately 1580 feet downstream of Robins Street	1.4	982		1,730	2,260
Approximately 630 feet upstream of South Boulevard	1.0	805		1,398	1,680
Sally Cone Creek					
At confluence with Stone Dam Creek	0.7	*	*	1,325	*
Simon Branch					
Approximately 320 feet upstream of confluence with Little Creek	1.4	394	644	745	1,283
Skyline Creek					
At Green Valley Road	0.18	220	300	330	365
At confluence with Greenbrier	0.60	550	735	860	960
South Fork Cypress Bayou					
At confluence with Cypress Creek	3.24	1,420	2,220	2,570	3,410
Approximately 1,440 feet upstream of State Highway 107	2.63	1,230	1,920	2,220	2,950
At South Fork Road	0.96	620	961	1,110	1,470
Spring Creek					
At confluence with Tucker Creek	5.4	*	*	7,368	*
St. Johns Branch					
At confluence with Tucker Creek Tributary	0.5	*	*	1,120	*
Stone Dam Creek					
At confluence with Lake Conway	8.6	*	*	7,000	*

Table 1 - Summary of Discharges (*continued*)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
Tributary A					
At confluence with Tributary 1	0.3	*	*	562	*
Tributary 1					
At confluence with Tucker Creek Tributary	0.8	*	*	1,720	*
Tucker Creek					
At confluence with Tucker Creek	29.2	*	*	13,928	*
Approximately 1,270 feet downstream of Salem Road	2.8	*	*	4,334	*
Approximately 3,020 feet upstream of Prince Street	1.1	*	*	1,914	*
Tupelo Creek					
Just upstream of outlet structures	41.8	*	*	4,011	*
Warren Creek					
At confluence with Palarm Creek	7.93	2,130	3,520	4,170	5,790
Approximately 3,740 feet upstream of confluence with Palarm Creek	5.26	1,600	2,680	3,180	4,440
Approximately 140 feet upstream of Middle Road	3.24	1,130	1,900	2,270	3,180
Approximately 530 feet upstream of Lower Ridge Road	1.38	649	1,120	1,340	1,910

The stillwater elevations for the 1-percent-annual-chance-flood have been determined for Lake Conway and are summarized in Table 2, "Summary of Stillwater Elevations."

Table 2 – Summary of Stillwater Elevations

Flooding Source and Location	1-Percent-Annual-Chance Flood Elevation (feet NAVD)
Lake Conway	
From Lake Conway Dam to State Highway 89	271.7
From State Highway 89 to State Highway 286	272.0

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied by detailed methods were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data Table in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS report in conjunction with the data shown on the FIRM.

September 27, 1991, study

Water-surface elevations for Stone Dam Creek (upstream of State Route 286), Railroad Creek (downstream of Robins Street), and Little Creek Tributaries No. 1 and 2, were determined using the SCS WSP-2 computer program (Reference 13). Cross sections used in the backwater analyses for these streams were field surveyed. Bridge data were obtained by field surveys and measurements.

June 2, 1994, restudy

Water-surface elevations for Little Creek and Gold Creek (East) were computed using the USACE HEC-2 backwater computer program (Reference 14). The starting water-surface elevation for Little Creek was determined using the slope-area method, assuming no coincident flooding with Lake Conway. The starting water-surface elevation for Gold Creek (East) was based on the coincident event of the 1-percent-annual-chance-flood elevation on Little Creek at the confluence. Cross-sections used in the backwater analyses were field surveyed, and extended where necessary using USGS 7.5-minute series topographic maps (Reference 3).

February 4, 1998, restudy

The floodways for the Arkansas River were determined using the USACE, Little Rock District, LRD-1 computer program (Reference 15). A maximum 1-foot rise in the natural 1-percent-annual-chance-flood elevations served as the upper limit of increase for floodway-encroachment determinations.

Coincident flooding at the confluence of East Fork Cadron Creek and Cadron Creek was evaluated using the methodology presented in the USACE publication Statistical Methods in Hydrology (Reference 16) for the USACE Treasure Hills Studies (References 17 and 18). A discharge-frequency relationship was produced for Cadron Creek at Reference Mark 8.2 using the USACE HEC-2 computer program (Reference 14). Cadron Creek was modeled using nine discharges determined by drainage area ratio at the confluence with the Arkansas River, and nine existing Arkansas River starting water-surface elevations from a 1991 study (Reference 19). The existing Arkansas River

starting water-surface elevations were developed using the USACE SUPER computer program (Reference 20). The resultant coincident frequency was used as the starting water-surface elevation for the HEC-2 step-backwater model for East Fork Cadron Creek.

Channel cross sections for the detailed analyses were obtained from the USACE Treasure Hills Studies, field surveys, and USGS 7.5-minute series topographic mapping at a scale of 1:24,000, with a contour interval of 10 feet (References 17, 18, 21, and 22). The data used to define the hydraulic structures were obtained from field surveys and as-built construction plans. Vertical control and benchmark information was provided by survey data (Reference 23).

Floodway Encroachment Option 4 was initially used in HEC-2 to determine approximate floodway boundaries. Method 1 was used to establish the final floodway determinations. A maximum 1-foot rise in the natural 1-percent-annual-chance-flood elevation served as the upper limit of increase for floodway-encroachment determinations.

February 5, 2003, restudy

Analyses of the hydraulic characteristics of streams studied in detail were carried out to provide estimates of the elevations of floods of selected recurrence intervals. Existing conditions hydraulic models were developed for each of the study reaches and used to compute water surface profiles for the 10-, 2-, 1-, and 0.2-percent-annual-chance flood events. Normal depth computations were utilized to determine starting conditions for all profiles. Based on the existing conditions hydraulic models, HEC-RAS was utilized to define a floodway capable of carrying the 1-percent flow with a maximum allowable increase in water surface elevation, or surcharge, of one foot.

Channel cross sections and bridge sections for the detailed analyses were obtained from field surveys and USGS 7.5-minute series topographic maps at a scale of 1:24,000, with a contour interval of 10 feet. Vertical control and benchmark information were obtained from the USACE, Little Rock Field Book 99FP-10.

This Countywide Restudy

The hydraulic analyses for the streams studied in detail were conducted using HEC-RAS Version 3.0 (Reference 24). Analyses of the hydraulic characteristics of streams studied in detail were carried out to provide estimates of the elevations of floods of selected recurrence intervals. Existing condition hydraulic models were developed for each of the study reaches and used to compute water surface profiles for the 10-, 2-, 1-, and 0.2-percent-annual-chance flow events. Normal depth computations were utilized to determine starting conditions for all profiles.

Based on the existing condition hydraulic models, HEC-RAS was utilized to define a floodway capable of carrying the 1-percent-annual-chance flood with a maximum allowable increase in water surface elevation, or surcharge, of 1 foot.

The Gold Creek (South) hydraulic study was extended for this restudy. In addition to extending the model approximately 0.3 miles upstream, the hydraulic model was converted to HEC-RAS Version 3.0. The existing hydrology was maintained for Gold Creek (South) hydraulic analysis. The mapping was revised inside the limits of detailed topography, and a revised profile was produced. Gold Creek (South) was studied with limited detail; only the 1-perecent-annual-chance floodplain was included in the analysis.

For all other streams and the remaining portions of Stone Dam Creek and Railroad Creek studied by detailed methods, water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 14). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals. Starting water-surface elevations for the remaining streams were obtained using the slope-area method.

Channel roughness factors (Manning's "n") used in the hydraulic analyses were obtained by engineering judgment, along with field investigations of the streams and overbank areas. Ranges of the channel and overbank roughness factors are shown in Table 3.

Table 3 – Manning's "n" Values

Stream	Channel "n"	Overbank "n"
Arkansas River	0.025 – 0.035	0.045 – 0.060
Buffalo Branch	0.035 – 0.055	0.055 – 0.080
Centennial Creek	0.025 – 0.050	0.040 – 0.100
East Fork Cadron Creek	0.025 – 0.035	0.045 – 0.060
Gold Creek (East)	0.060 – 0.150	0.030 – 0.050
Gold Creek (South)	0.035 – 0.120	0.030 – 0.070
Gold Creek South Tributary	0.045 – 0.050	0.040 – 0.100
Greenbrier Creek	0.050 – 0.100	0.035 – 0.040
Greenbrier Creek Tributary No. 2	0.050 – 0.100	0.035 – 0.045
Greenbrier Creek Tributary No. 3	0.060 – 0.100	0.035 – 0.040
Hendrix Branch	0.030 – 0.090	0.045 – 0.070
Little Creek	0.060 – 0.150	0.030 – 0.050
Middle Fork Cypress Bayou	0.060 – 0.080	0.039 – 0.045
North Fork Cypress Bayou	0.050 – 0.080	0.030 – 0.055
Palarm Creek	0.050 – 0.085	0.035 – 0.055
Railroad Creek	0.015 – 0.080	0.040 – 0.080
Sally Cone Creek	0.025 – 0.050	0.030 – 0.200

Table 3 – Manning's "n" Values (*continued*)

Simon Branch	0.025 – 0.085	0.060
Skyline Creek	0.060 – 0.070	0.040 – 0.040
South Fork Cypress Bayou	0.053 – 0.076	0.040 – 0.045
Spring Creek	0.015 – 0.050	0.100 – 0.180
St. Johns Branch	0.035 – 0.050	0.045 – 0.070
Stone Dam Creek	0.020 – 0.080	0.050 – 0.150
Tributary 1	0.035 – 0.055	0.050 – 0.055
Tributary A	0.035	0.040
Tucker Creek	0.050 – 0.080	0.055 – 0.100
Warren Creek	0.050 – 0.080	0.030 – 0.055

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the FIRM (Exhibit 2).

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the Flood Profiles (Exhibit 1) are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

3.3 Vertical Datum

All FIS reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD). With the finalization of the North American Vertical Datum of 1988 (NAVD), many FIS reports and FIRMs are being prepared using NAVD as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD. Structure and ground elevations in the community must, therefore, be referenced to NAVD. It is important to note that adjacent communities may be referenced to NGVD. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between the communities. The datum conversion for this FIS report is +0.007 feet to convert from NGVD to NAVD. The conversion factor is so minimal that it does not affect the vertical elevations.

For more information on NAVD, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988* (FEMA, June 1992), or contact the Vertical Network Branch, National

Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Silver Spring, Maryland 20910 (Internet address http://www.ngs.noaa.gov).

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the Technical Support Data Notebook associated with the FIS report and FIRM for this community. Interested individuals may contact FEMA to access these data.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance (100-year) flood elevations and delineations of the 1- and 0.2-percent-annual-chance (500-year) floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Table, and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community. For each stream studied by detailed methods, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:24,000, with a contour interval of 10 feet (Reference 3).

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A and AE), and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but

cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For this study, the City of Conway developed 2-foot topography and accompanying photography in 1996. This new and improved topographic data was used to revise the current flooding limits along the following detailed streams: Little Creek, Simon Branch, Hendrix Branch, Tucker Creek, Spring Creek, Centennial Creek, Buffalo Branch, St. Johns Branch, Stone Dam Creek, Sally Cone Creek, and Railroad Creek. The remapping portion of the study did not include any hydraulic analyses. The existing floodplain and floodway data were extracted from current FIRM panels and profiles and projected onto the improved topographic data making revisions as dictated by contours and stream location.

For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2).

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS report and on the FIRM were computed for certain stream segments on the basis of equal-conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations have been tabulated for selected cross sections (Table 3). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown.

The area between the floodway and 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the 1-percent-annual-chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 1.

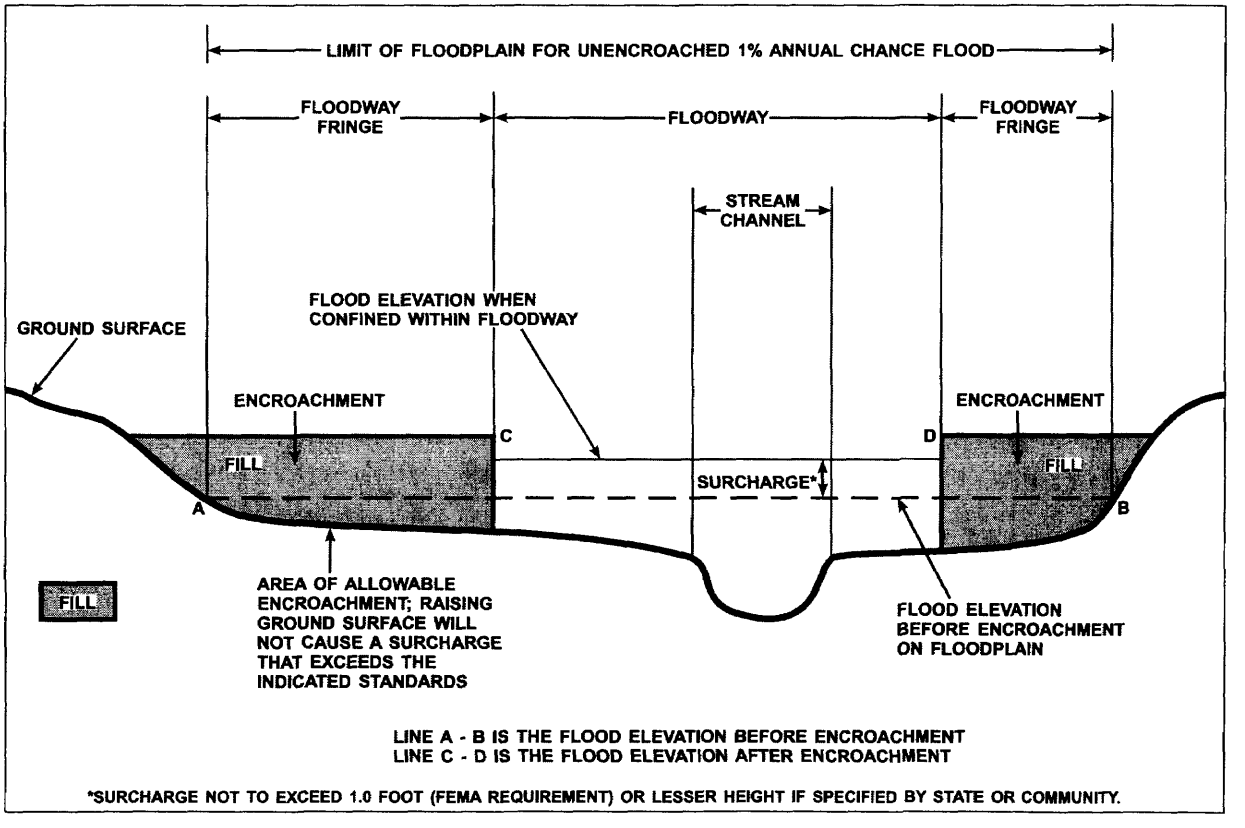

Figure 1 – Floodway Schematic

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
ARKANSAS RIVER								
A	135.750[1]	6,500/2,020[2]	79,508	6.1	268.3	268.3	269.2	0.9
B	138.500[1]	3,500/760[2]	63,816	7.6	270.1	270.1	270.9	0.8
C	141.830[1]	4,150/710[2]	64,667	7.5	272.5	272.5	273.4	0.9
D	143.520[1]	1,492/850[2]	54,494	8.9	273.8	273.8	274.6	0.8
E	145.000[1]	1,879/1,240[2]	--[3]	--[3]	275.3	275.3	276.2	0.9
F	146.710[1]	3,355/2,030[2]	--[3]	--[3]	277.9	277.9	278.6	0.7
G	148.530[1]	2,023/1,590[2]	--[3]	--[3]	278.8	278.8	279.8	1.0
H	150.550[1]	4,200/3,320[2]	--[3]	--[3]	282.2	282.2	283.2	1.0
I	153.590[1]	4,000/2,540[2]	--[3]	--[3]	284.7	284.7	285.5	0.8
J	154.870[1]	2,000/1,690[2]	--[3]	--[3]	285.3	285.3	286.2	0.9
K	156.980[1]	5,450/1,620[2]	--[3]	--[3]	287.5	287.5	288.5	1.0
BUFFALO BRANCH								
A	1,901[4]	150	898	1.2	308.3	308.3	309.3	1.0
CENTENNIAL BRANCH								
A	704[5]	550	1,237	3.2	279.0	276.0[6]	276.6	0.6
B	3,683[5]	200	788	7.3	285.2	285.2	285.4	0.2

[1]Miles above confluence with Mississippi River
[2]Total width/width within county
[3]Data not computed
[4]Feet above confluence with Spring Creek
[5]Feet above confluence with Spring Creek
[6]Elevation computed without consideration of backwater effects from Spring Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

ARKANSAS RIVER – BUFFALO BRANCH – CENTENNIAL BRANCH

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
EAST FORK CADRON CREEK								
A	29,084[1]	4,528	96,824	0.4	293.7	293.7	294.7	1.0
B	33,755[1]	4,712	105,317	0.4	293.8	293.8	294.8	1.0
C	38,265[1]	3,644	85,317	0.5	293.8	293.8	294.8	1.0
D	40,270[1]	3,456	76,448	0.6	293.8	293.8	294.8	1.0
E	42,300[1]	3,393	76,252	0.6	293.8	293.8	294.8	1.0
F	44,176[1]	2,705	24,285	1.8	294.0	294.0	295.0	1.0
GOLD CREEK (EAST)								
A	1,864[2]	350	1,881	2.8	276.9	276.9	277.8	0.9
B	2,455[2]	220	1,249	4.2	278.1	278.1	278.8	0.7
C	3,738[2]	180	767	6.6	279.9	279.9	280.3	0.4
D	4,583[2]	150	814	6.2	282.3	282.3	283.0	0.7
E	7,408[2]	150	772	6.4	289.5	289.5	289.9	0.4
F	8,020[2]	180	1,108	4.5	293.1	293.1	293.1	0.0
G	9,699[2]	160	434	4.5	294.7	294.7	295.4	0.7
H	10,243[2]	150	549	3.5	296.6	296.6	297.6	1.0

[1]Feet above confluence with Cadron Creek
[2]Feet above confluence with Little Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

EAST FORK CADRON CREEK – GOLD CREEK (EAST)

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
GREENBRIER CREEK (LOWER REACH)								
A	22,500	400	1,538	4.2	288.4	276.7[2]	277.6	0.9
B	24,610	450	2,046	3.1	288.4	278.8[2]	279.8	1.0
C	26,500	825	4,772	1.4	288.4	282.8[2]	283.4	0.6
D	31,630	510	2,966	2.1	288.4	287.7[2]	288.6	0.9
E	35,100	500	2,345	2.6	292.5	292.5	293.4	0.9
GREENBRIER CREEK (UPPER REACH)								
A	52,536	309	1,737	3.1	324.0	324.0	325.0	1.0
B	54,278	86	826	6.7	330.1	330.1	330.3	0.2
C	55,546	188	1,180	4.7	333.0	333.0	333.2	0.2
D	59,136	214	1,337	3.8	345.1	345.1	346.0	0.9
E	61,459	342	2,249	2.1	354.8	354.8	355.7	0.9

[1]Feet above confluence with Cadron Creek
[2]Elevation computed without consideration of backwater effects from Arkansas River

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

GREENBRIER CREEK (LOWER REACH) – GREENBRIER CREEK (UPPER REACH)

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
GREENBRIER CREEK TRIBUTARY NO. 2								
A	1,840[1]	40	109	3.6	293.9	293.9	294.9	1.0
B	2,985[1]	50	133	2.9	304.8	304.8	305.4	0.6
C	3,870[1]	50	75	5.2	312.1	312.1	312.3	0.2
GREENBRIER CREEK TRIBUTARY NO. 3								
A	2,170[1]	164	597	2.3	291.4	291.4	292.4	1.0
B	3,245[1]	115	133	4.2	299.5	299.5	299.5	0.0
HENDRIX BRANCH								
A	1,584[2]	106	493	2.8	302.0	302.0	303.0	1.0
B	4,382[2]	101	405	2.8	311.5	311.5	312.5	1.0
C	5,280[2]	73	361	3.0	313.6	313.6	314.6	1.0
D	5,491[2]	94	560	1.9	315.5	315.5	316.5	1.0
E	6,283[2]	345	776	1.2	318.4	318.4	319.4	1.0

[1]Feet above confluence with Greenbrier Creek
[2]Feet above confluence with Little Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

GREENBRIER CREEK TRIBUTARY NO. 2 - GREENBRIER CREEK TRIBUTARY NO. 3 – HENDRIX BRANCH

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
LITTLE CREEK								
A	5,597	800	6,881	1.7	275.7	275.7	276.5	0.8
B	8,385	600	3,134	1.9	276.6	276.6	277.5	0.9
C	8,807	600	2,541	2.4	276.9	276.9	277.7	0.8
D	12,413	270	997	4.6	284.0	284.0	284.4	0.4
E	13,538	220	1,107	4.1	287.5	287.5	287.9	0.4
F	14,990	220	792	5.9	289.2	289.2	290.2	1.0
G	15,888	200	1,017	4.6	292.2	292.2	292.6	0.4
H	17,097	193	977	4.9	296.1	296.1	296.5	0.4
I	18,924	150	257	7.0	301.4	301.4	301.4	0.0
J	19,240	150	439	4.1	303.9	303.9	304.4	0.5

[1]Feet above confluence with Lake Conway

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

LITTLE CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
MIDDLE FORK CYPRESS BAYOU								
A	1,975	600	2,637	1.4	292.9	292.9	293.0	0.1
B	4,429	400	765	4.1	295.4	295.4	295.4	0.0
C	6,404	350	1,289	1.4	302.7	302.7	303.5	0.8
D	8,519	250	421	4.2	305.6	305.6	305.9	0.3
E	10,258	100	411	3.1	310.5	310.5	311.3	0.8
F	12,570	75	237	5.4	315.3	315.3	315.9	0.6
G	13,074	120	340	3.8	318.8	318.8	319.7	0.9

[1]Feet above confluence with Cypress Bayou

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

MIDDLE FORK CYPRESS BAYOU

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
NORTH FORK CYPRESS BAYOU								
A	1,966	590	1,738	1.6	293.0	293.0	293.0	0.0
B	2,432	379	1,268	2.2	294.2	294.2	294.5	0.3
C	3,931	228	573	4.9	296.7	296.7	296.8	0.1
D	5,657	300	954	2.9	301.2	301.2	302.0	0.8
E	8,347	82	362	6.8	307.0	307.0	307.6	0.6
F	9,478	225	1,122	2.2	313.1	313.1	313.6	0.5
G	9,932	200	974	1.8	313.3	313.3	314.0	0.7
H	10,146	200	996	1.8	313.4	313.4	314.1	0.7
I	11,207	350	640	2.8	315.8	315.8	316.3	0.5
J	11,774	190	733	2.4	318.7	318.7	319.5	0.8
K	13,226	300	777	2.3	320.4	320.4	321.3	0.9
L	13,795	350	697	1.8	322.0	322.0	322.9	0.9
M	15,230	200	490	2.6	326.1	326.1	327.1	1.0
N	16,007	100	295	4.3	328.6	328.6	329.4	0.8

[1]Feet above confluence with Cypress Bayou

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

NORTH FORK CYPRESS BAYOU

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
PALARM CREEK								
A	91,286	1,500	13,791	1.3	275.8	275.8	276.1	0.3
B	95,684	1,770	15,092	1.2	275.9	275.9	276.6	0.7
C	98,548	1,850	13,413	1.3	276.1	276.1	277.1	1.0
D	100,447	2,125	14,878	1.2	276.4	276.4	277.3	0.9
E	101,565	1,060	8,386	2.1	277.9	277.9	278.9	1.0
F	103,108	1,645	10,172	1.0	278.5	278.5	279.4	0.9
G	107,478	2,100	13,340	0.8	278.9	278.9	279.6	0.7
H	111,963	1,300	3,855	2.6	279.9	279.9	280.7	0.8
I	115,188	495	3,524	1.7	286.2	286.2	286.8	0.6
J	117,184	840	2,957	2.1	286.7	286.7	287.3	0.6
K	118,593	342	1,645	3.7	288.1	288.1	288.6	0.5
L	120,124	350	2,018	3.0	289.4	289.4	290.3	0.9
M	124,345	305	1,566	3.9	293.6	293.6	294.6	1.0
N	127,224	238	1,174	5.2	298.3	298.3	298.6	0.3
O	127,733	110	847	7.2	300.4	300.4	300.9	0.5
P	128,212	120	940	6.4	302.8	302.8	303.2	0.4
Q	128,738	220	1,128	5.4	303.7	303.7	304.7	1.0
R	129,780	200	1,164	5.2	307.4	307.4	307.9	0.5
S	130,586	300	1,275	4.8	311.1	311.1	311.2	0.1

[1]Feet above confluence with Arkansas River

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

PALARM CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
RAILROAD CREEK								
A	3,115[1]	173	1,195	2.6	278.3	278.3	279.1	0.8
B	7,392[1]	173	766	2.3	291.8	291.8	292.8	1.0
C	8,976[1]	170	759	2.0	297.1	297.1	298.1	1.0
D	10,190[1]	113	488	2.9	300.5	300.5	301.5	1.0
SALLY CONE CREEK								
A	3,115[1]	120	462	2.9	288.1	288.1	288.9	0.8
B	4,330[1]	90	296	4.5	293.1	293.1	294.0	0.9
C	6,072[1]	200	646	0.8	299.3	299.3	300.3	1.0
SIMON BRANCH								
A	317[2]	89	253	2.9	281.4	281.4	282.4	1.0
B	1,531[2]	32	82	9.1	286.1	286.1	286.1	0.0

[1]Feet above confluence with Stone Dam Creek
[2]Feet above confluence with Little Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

RAILROAD CREEK – SALLY CONE CREEK – SIMON BRANCH

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKYLINE CREEK								
A	1,960[1]	37	94	9.1	301.0	301.0	301.0	0.0
B	2,580[1]	60	260	3.3	305.3	305.3	306.0	0.7
C	3,400[1]	31	55	6.0	312.4	312.4	313.4	1.0
SOUTH FORK CYPRESS BAYOU								
A	2,182[2]	200	637	4.0	292.7	292.7	293.3	0.6
B	2,963[2]	240	707	3.6	295.2	295.2	295.9	0.7
C	3,897[2]	240	888	2.9	299.5	299.5	299.6	0.1
D	4,042[2]	175	419	6.1	299.7	299.7	299.8	0.1
E	8,208[2]	250	625	1.8	312.6	312.6	312.8	0.2
F	9,987[2]	190	687	1.6	317.8	317.8	318.5	0.7
G	10,420[2]	150	420	2.6	318.2	318.2	318.8	0.6
H	10,863[2]	100	260	4.3	320.1	320.1	320.6	0.5

[1]Feet above confluence with Greenbrier Creek Tributary No. 3
[2]Feet above confluence with Cypress Bayou

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

SKYLINE CREEK – SOUTH FORK CYPRESS BAYOU

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SPRING CREEK								
A	4,310[1]	300	1,990	2.5	282.3	282.3	282.9	0.6
B	6,500[1]	305	1,602	2.7	284.4	284.4	285.4	1.0
C	8,448[1]	322	2,058	2.2	291.4	291.4	292.4	1.0
D	11,299[1]	65	377	6.4	301.3	301.3	301.6	0.3
E	13,886[1]	296	1,508	1.6	313.9	313.9	314.9	1.0
ST. JOHN'S BRANCH								
A	317[2]	235	1,130	1.0	301.1	301.1	302.1	1.0
B	1,531[2]	146	616	1.8	308.1	308.1	309.1	1.0
STONE DAM CREEK								
A	634[3]	935	7,369	0.9	272.2	272.2	273.1	1.0
B	4,066[3]	550	5,180	1.7	276.4	276.4	277.4	1.0
C	8,659[3]	425	3,020	1.8	280.7	280.7	281.5	0.8
D	10,349[3]	325	1,459	3.1	281.0	281.0	282.0	1.0
E	16,157[3]	400	2,484	1.3	295.7	295.7	296.7	1.0
F	17,424[3]	193	679	1.9	295.7	295.7	296.7	1.0
G	18,691[3]	82	475	2.6	299.4	299.4	300.4	1.0

[1]Feet above confluence with Tucker Creek
[2]Feet above confluence with Spring Creek
[3]Feet above confluence with Lake Conway

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK – ST. JOHN'S BRANCH – STONE DAM CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
TRIBUTARY 1								
A	3,062[1]	150	466	3.7	321.7	321.7	322.7	1.0
B	4,594[1]	150	642	1.9	331.0	331.0	331.7	0.7
C	5,914[1]	100	205	5.6	336.2	336.2	336.9	0.7
TRIBUTARY A								
A	908[2]	70	254	2.4	330.9	330.9	331.7	0.8
B	1,795[2]	70	147	4.1	331.8	331.8	332.8	1.0
TUCKER CREEK								
A	2,159[3]	360	2,335	3.8	277.7	277.7	278.5	0.8
B	8,299[3]	2,875	28,781	0.3	278.6	278.6	279.4	0.8
C	16,684[3]	578	2,543	1.6	279.3	279.3	280.3	1.0
D	20,916[3]	300	1,322	3.3	284.8	284.8	285.5	0.7
E	23,179[3]	224	1,036	2.3	289.7	289.7	290.7	1.0
F	24,446[3]	174	830	2.6	292.1	292.1	293.1	1.0
G	25,714[3]	157	666	3.1	295.3	295.3	296.3	1.0
H	26,030[3]	175	684	2.7	296.5	296.5	297.5	1.0
I	26,506[3]	121	567	3.3	297.8	297.8	298.8	1.0
J	28,301[3]	84	435	3.2	303.6	303.6	304.6	1.0
K	29,198[3]	147	692	1.9	308.8	308.8	309.8	1.0
L	30,677[3]	108	394	3.1	314.6	314.6	315.6	1.0
M	32,155[3]	56	290	3.9	321.0	321.0	322.0	1.0

[1]Feet above confluence with Greenbrier Creek
[2]Feet above confluence with Tributary 1
[3]Feet above confluence with Tupelo Bayou

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

TRIBUTARY 1 – TRIBUTARY A – TUCKER CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
TUPELO BAYOU								
A	3,883[1]	1,296	7,327	0.5	271.7	271.7	272.7	1.0
B	23,797[1]	2,219	24,656	0.4	272.2	272.2	273.1	0.9
C	26,303[1]	1,759	17,396	0.6	272.3	272.3	273.2	0.9
WARREN CREEK								
A	5,093[2]	650	2,496	1.3	276.3	274.6[3]	275.5	0.9
B	7,050[2]	76	428	7.4	276.8	276.8	277.2	0.4
C	8,448[2]	440	1,161	2.0	280.1	280.1	281.0	0.9
D	9,637[2]	200	837	2.7	283.5	283.5	284.2	0.7
E	11,041[2]	250	621	3.7	286.1	286.1	286.8	0.7
F	12,525[2]	115	403	5.6	291.9	291.9	292.7	0.8
G	13,489[2]	100	533	4.3	295.1	295.1	296.0	0.9
H	14,464[2]	310	1,079	1.2	297.9	297.9	298.9	1.0
I	15,204[2]	325	807	1.7	300.3	300.3	300.7	0.4
J	15,813[2]	175	300	4.5	301.3	301.3	301.5	0.2
K	17,091[2]	200	342	3.9	307.1	307.1	307.3	0.2
L	18,123[2]	200	589	2.3	311.6	311.6	312.2	0.6

[1]Feet above outfall to Arkansas River
[2]Feet above confluence of Palarm Creek
[3]Elevation computed without consideration of backwater effects from Palarm Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

FLOODWAY DATA

TUPELO BAYOU - WARREN CREEK

5.0 INSURANCE APPLICATIONS

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or base flood depths are shown within this zone.

Zone AE

Zone AE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance risk zone that corresponds to areas outside the 0.2-percent-annual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by levees. No BFEs or base flood depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance risk zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use the zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The countywide FIRM presents flooding information for the entire geographic area of Faulkner County. Previously, FIRMs were prepared for each incorporated community

and the unincorporated areas of the county identified as flood-prone. Historical data relating to the maps prepared for each community are presented in Table 4, "Community Map History".

7.0 OTHER STUDIES

A FIS has been prepared for the unincorporated areas of Pulaski County, Arkansas (Reference 25). The results of that study are in agreement with the results of this study.

FIS reports have been prepared for the Town of Damascus (Reference 26), the unincorporated areas of Conway County, and Cleburne County, Arkansas and Incorporated Areas (References 27 and 28). The results of this study are in agreement with the results of those studies.

A FIS has been prepared for the unincorporated areas of Van Buren County, Arkansas (Reference 29). Because of differences in methodologies used to delineate approximate floodplain boundaries, discrepancies may exist between this study and the Van Buren County study.

This report either supersedes or is compatible with all previous studies on streams studied in this report and should be considered authoritative for purposes of the NFIP.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, Federal Regional Center, 800 North Loop 288, Denton, Texas 76209.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDAY MAP REVISION DATE	FIRM EFFECTIVE DATE	FIRM REVISION DATE
Conway, City of	May 17, 1974	November 28, 1975	March 18, 1980	December 28, 1982 June 15, 1988 September 27, 1991 June 2, 1994 February 5, 2003 December 19, 2006
Enola, City of[1]	September 27, 1991	None	September 27, 1991	December 19, 2006
Faulkner County (Unincorporated Areas)	June 7, 1977	None	September 27, 1991	June 2, 1994 February 4, 1988 February 5, 2003 December 19, 2006
Greenbrier, City of	July 25, 1975	None	July 13, 1982	September 27, 1991 February 5, 2003 December 19, 2006
Guy, Town of[1]	September 27, 1991	None	September 27, 1991	December 19, 2006
Holland, City of	December 19, 2006	None	December 19, 2006	None

[1]No flood hazard areas identified

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDAY MAP REVISION DATE	FIRM EFFECTIVE DATE	FIRM REVISION DATE
Mayflower, City of	November 23, 1973	November 7, 1975	March 15, 1983	September 27, 1991 December 19, 2006
Mount Vernon, Town of	January 8, 1980	None	September 27, 1991	December 19, 2006
Twin Groves, Town of	December 19, 2006	None	December 19, 2006	None
Vilonia, City of	April 11, 1975	None	June 1, 1988	September 27, 1991 December 19, 2006
Wooster, Town of	August 22, 1975	None	September 27, 1991	February 4, 1998 February 5, 2003 December 19, 2006

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

9.0 BIBLIOGRAPHY AND REFERENCES

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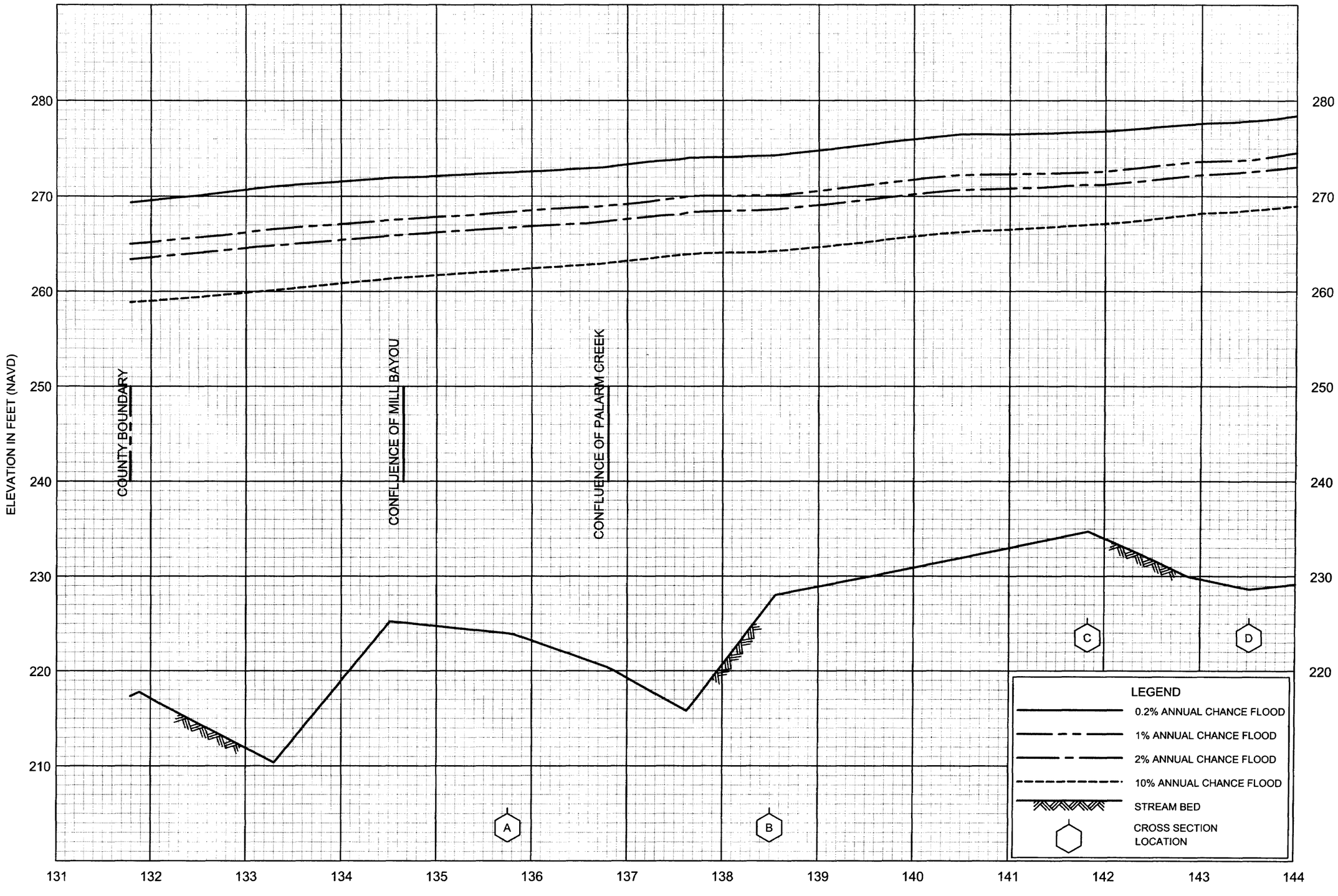


FLOOD PROFILES

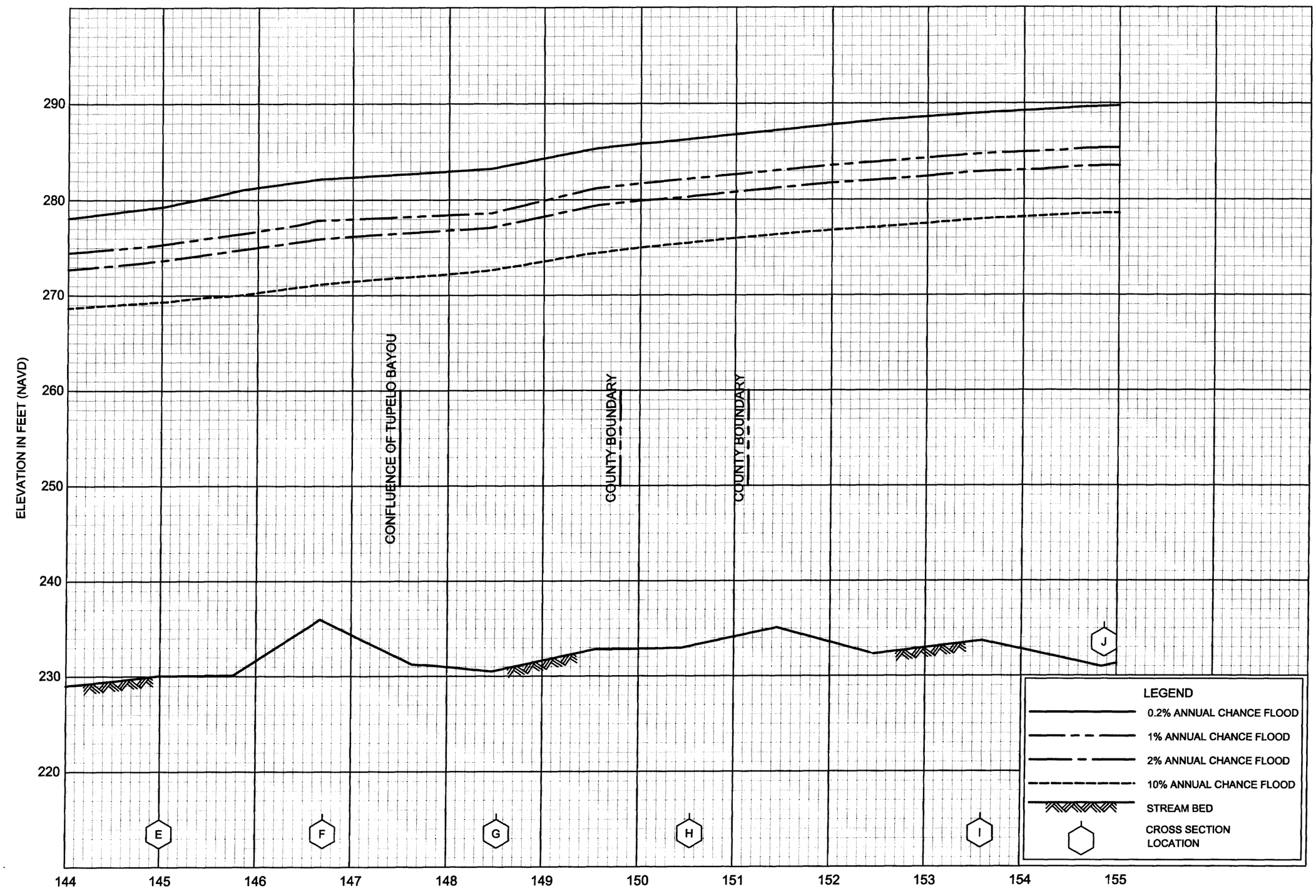
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

01P



FLOOD PROFILES

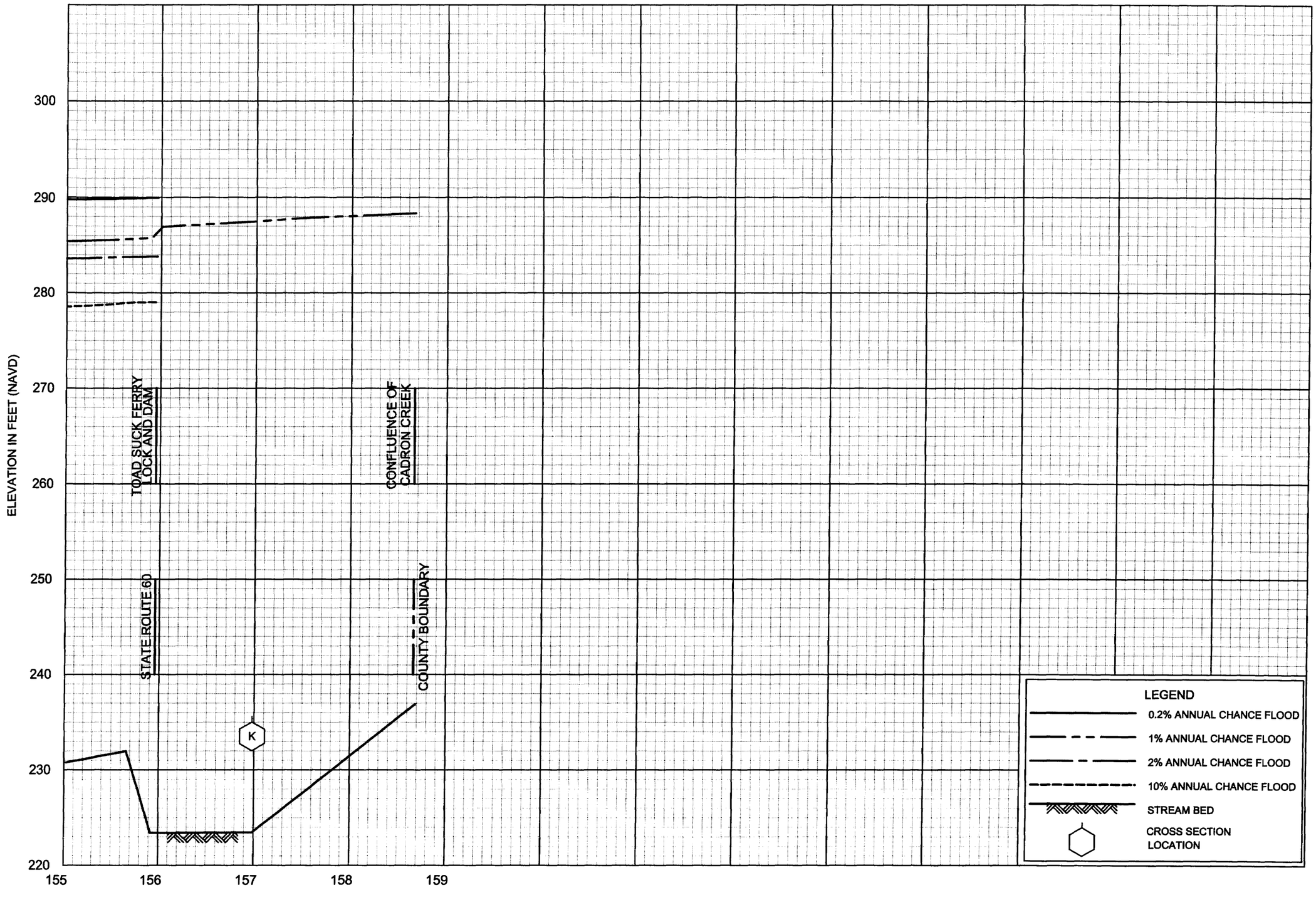
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

02P



FLOOD PROFILES

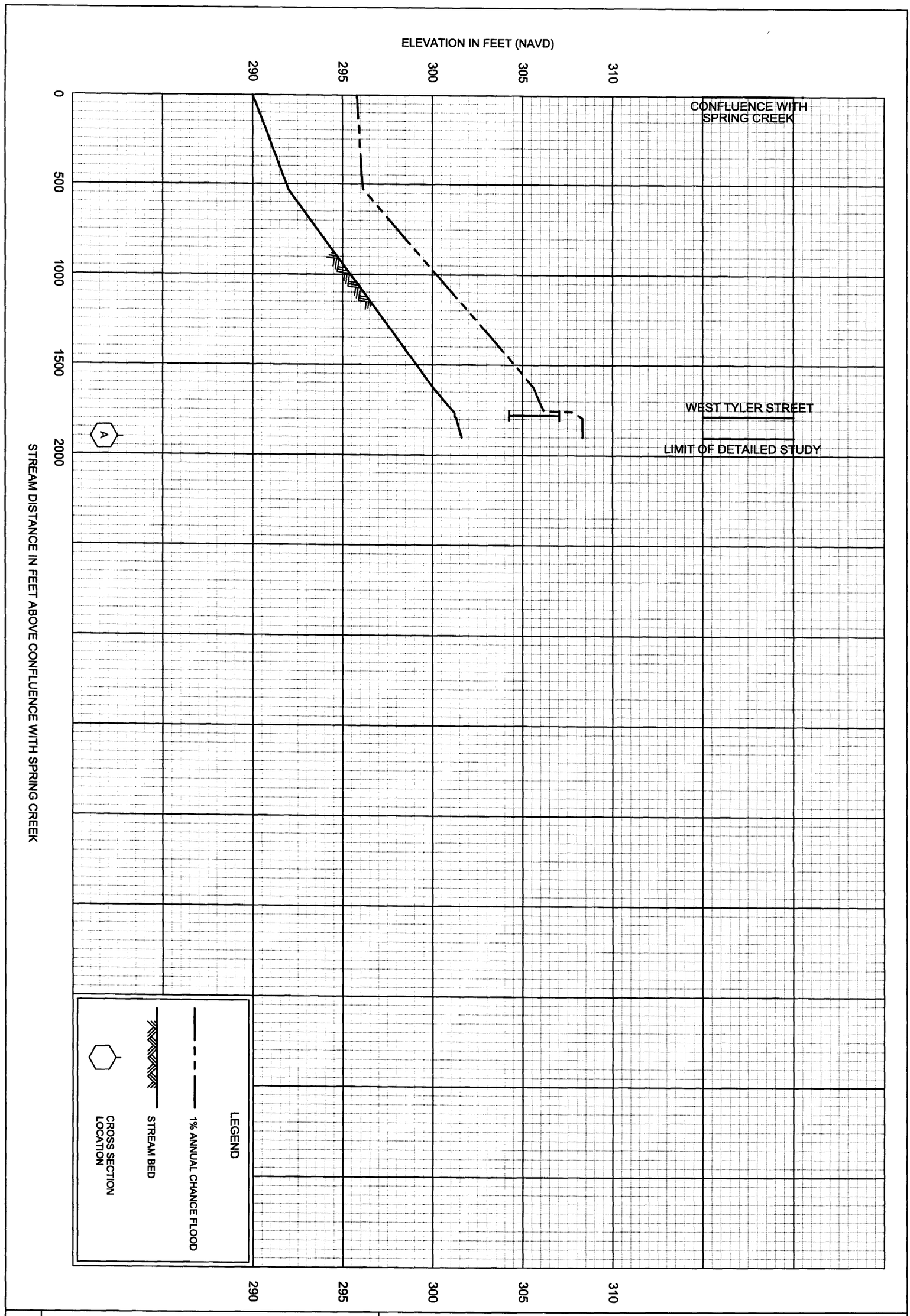
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

03P



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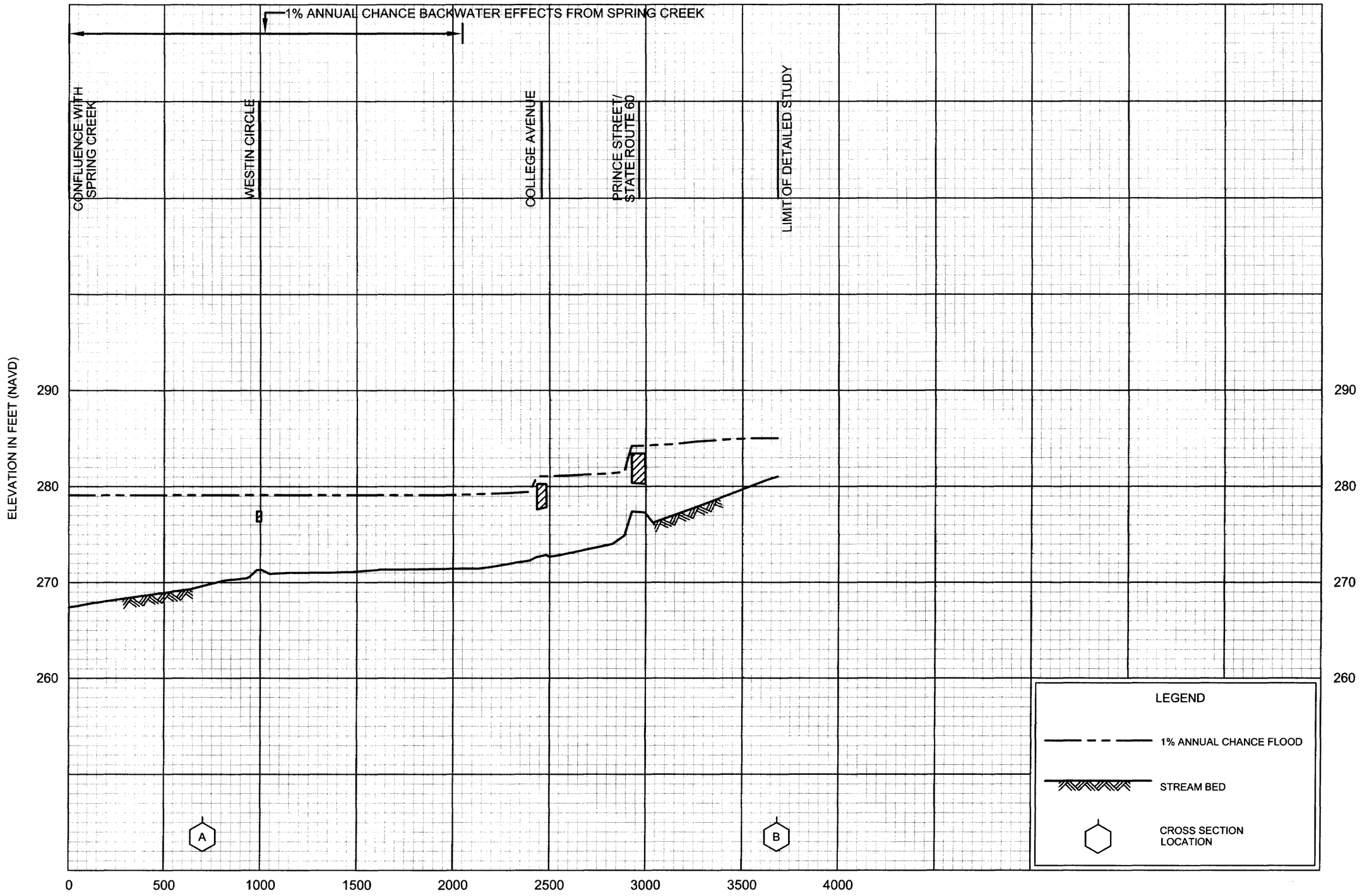
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

BUFFALO BRANCH



FLOOD PROFILES

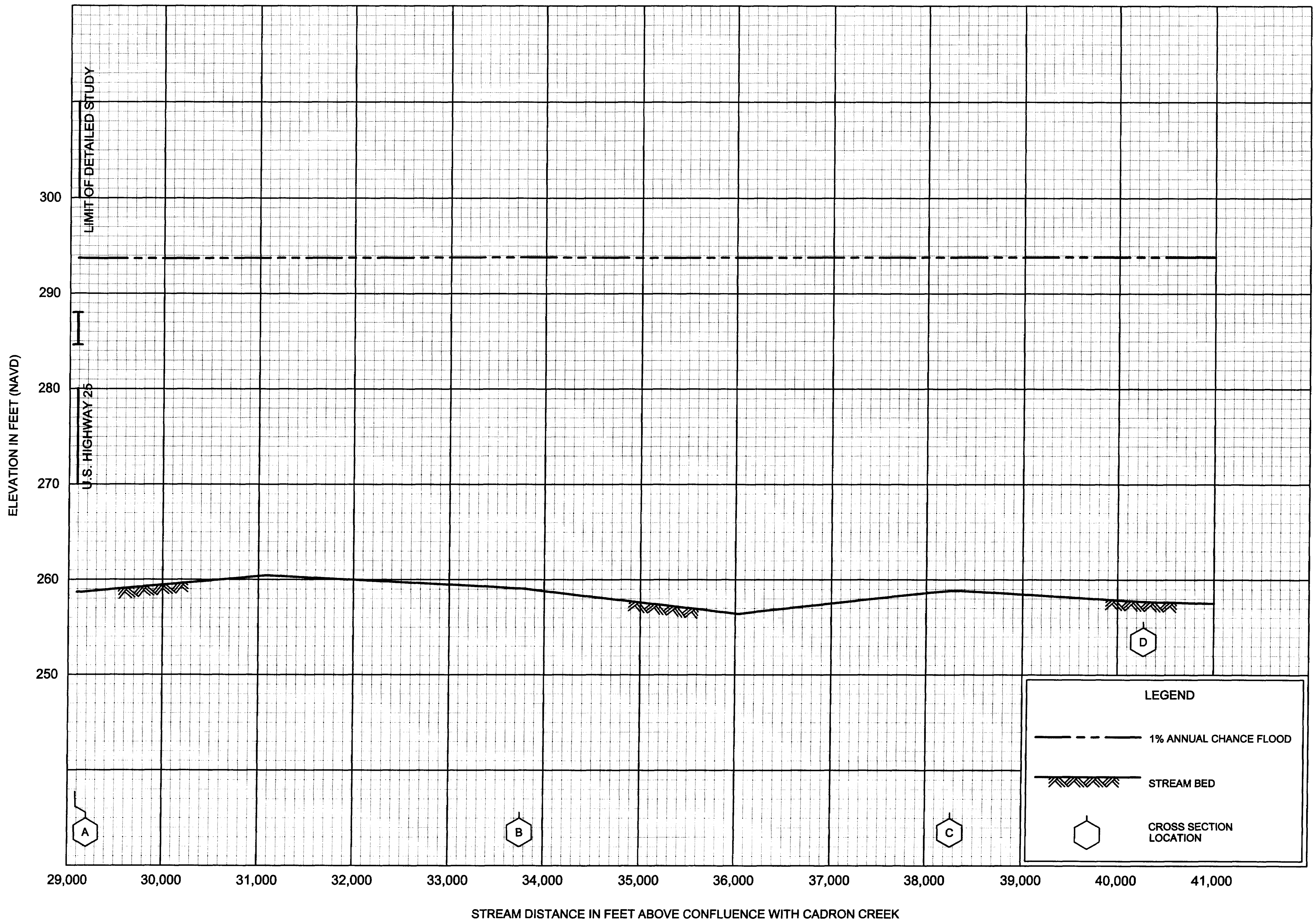
CENTENNIAL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

05P



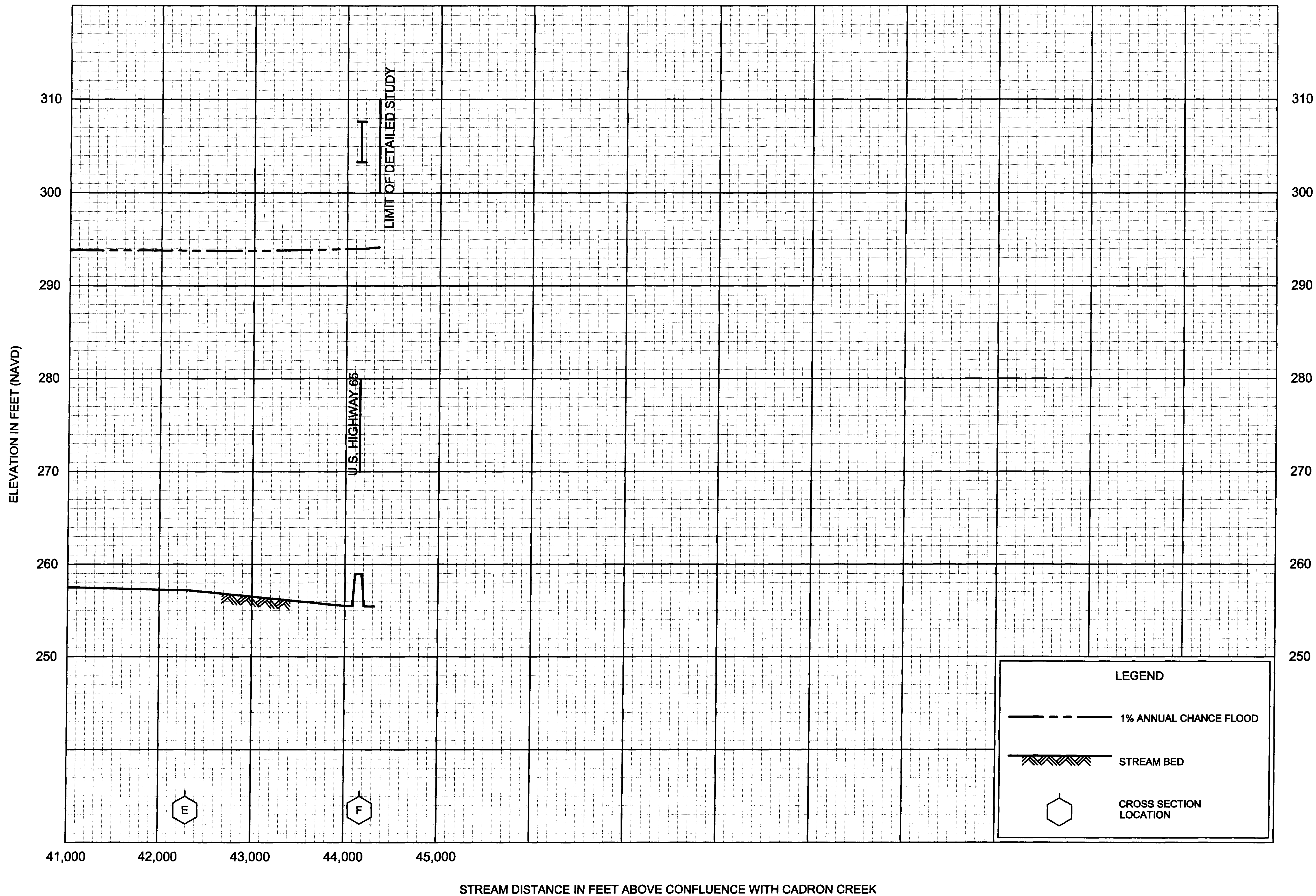
FLOOD PROFILES

EAST FORK CADRON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

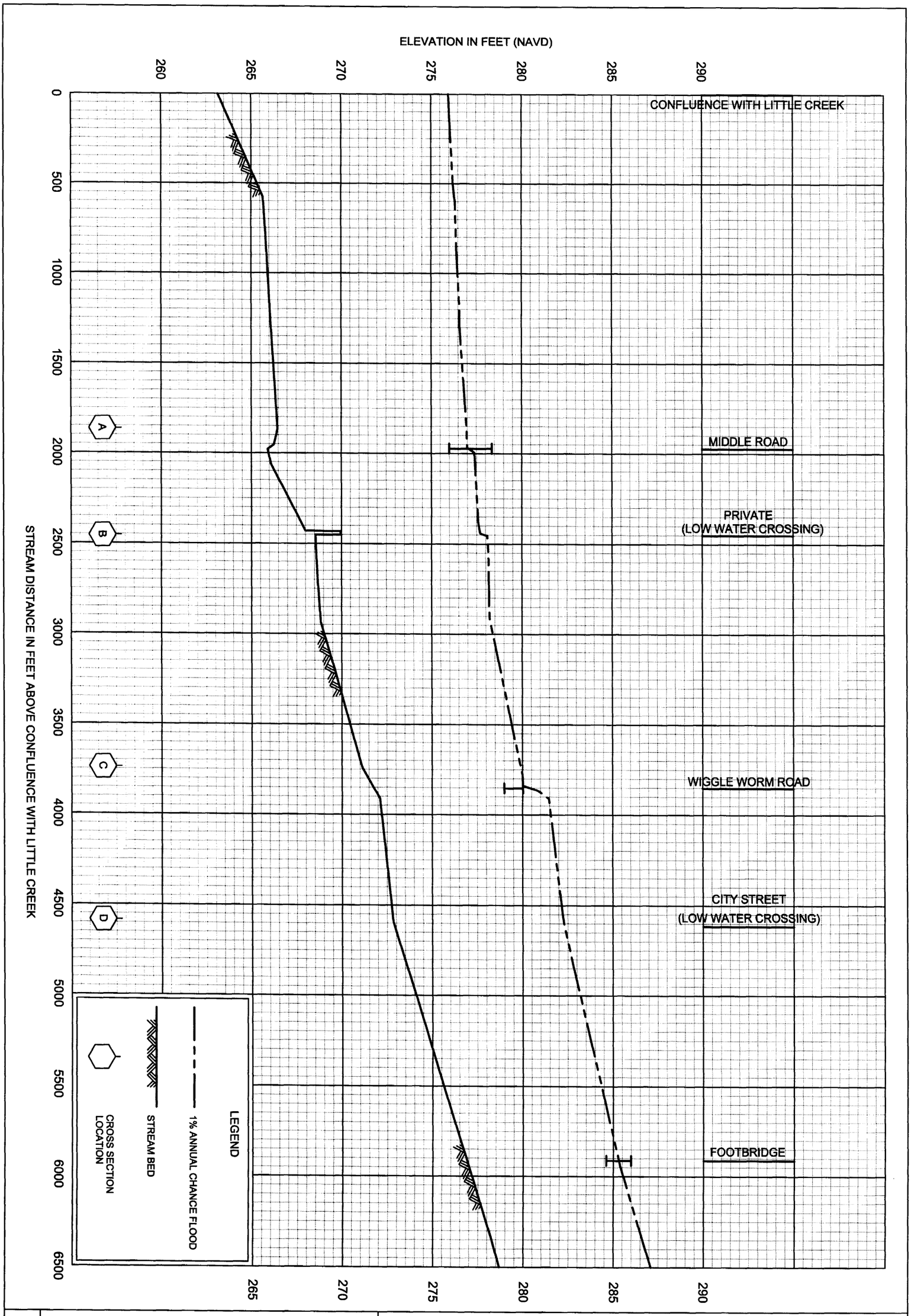
EAST FORK CADRON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

07P



08P

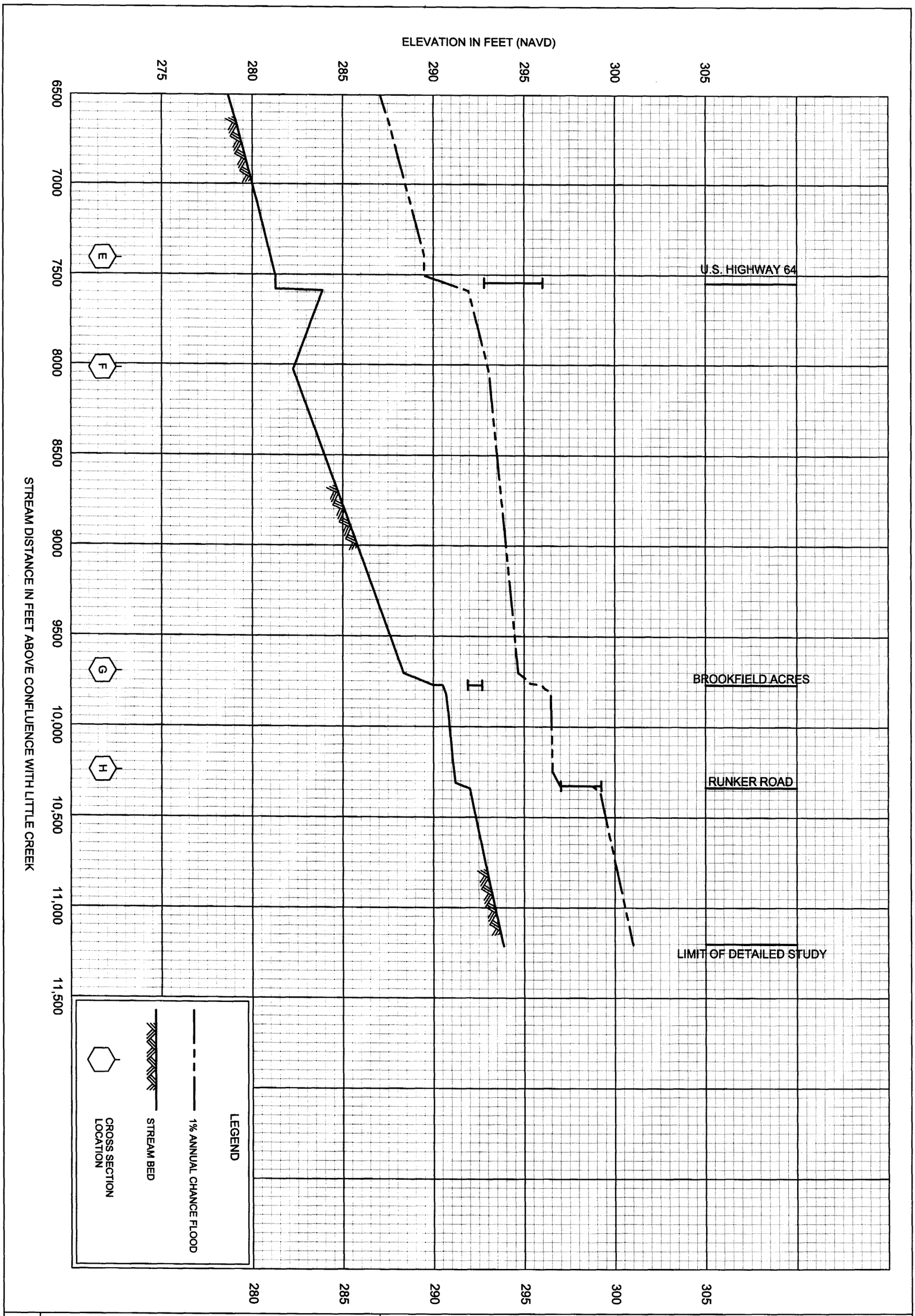
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

GOLD CREEK (EAST)



09P

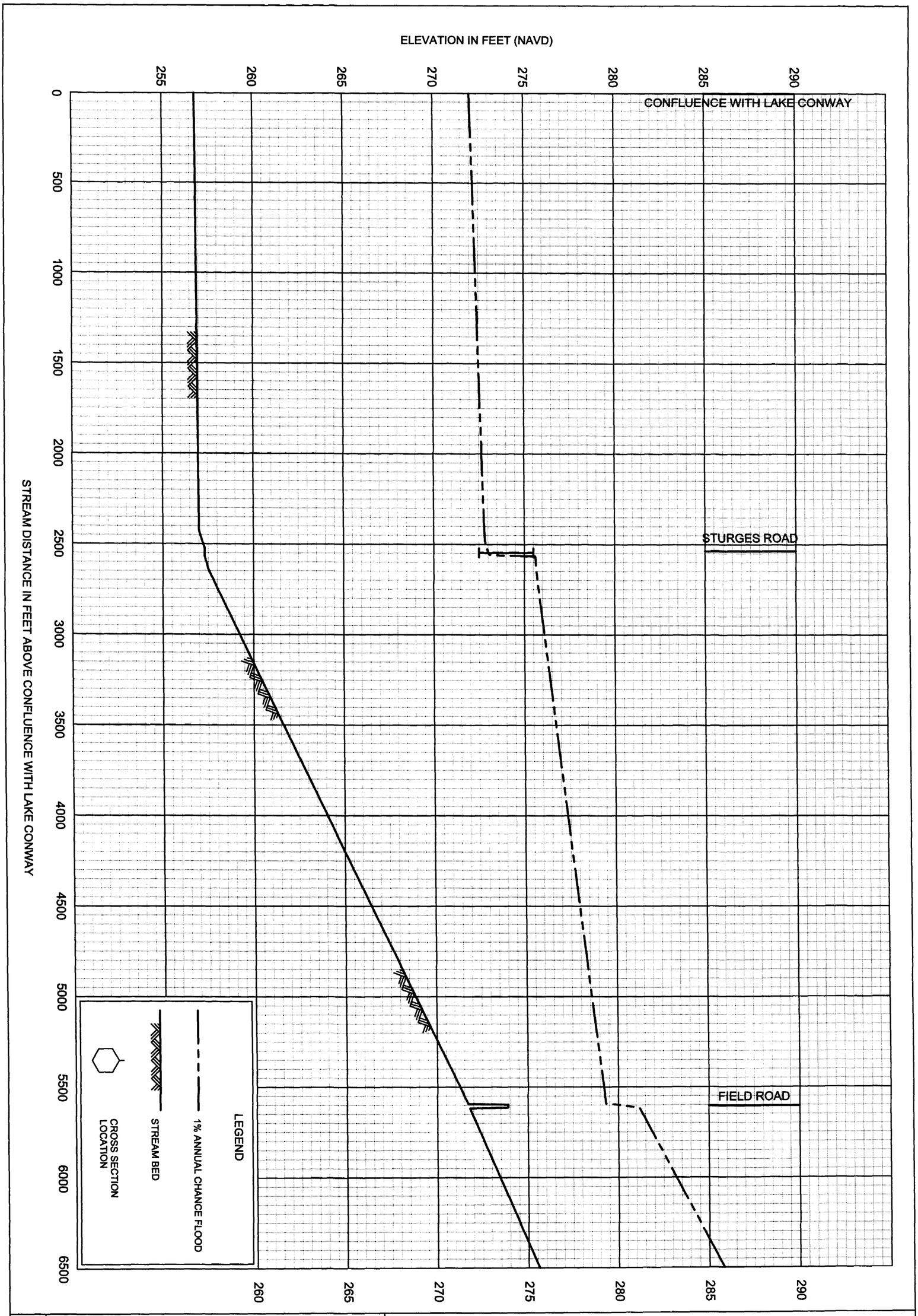
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

GOLD CREEK (EAST)



10P

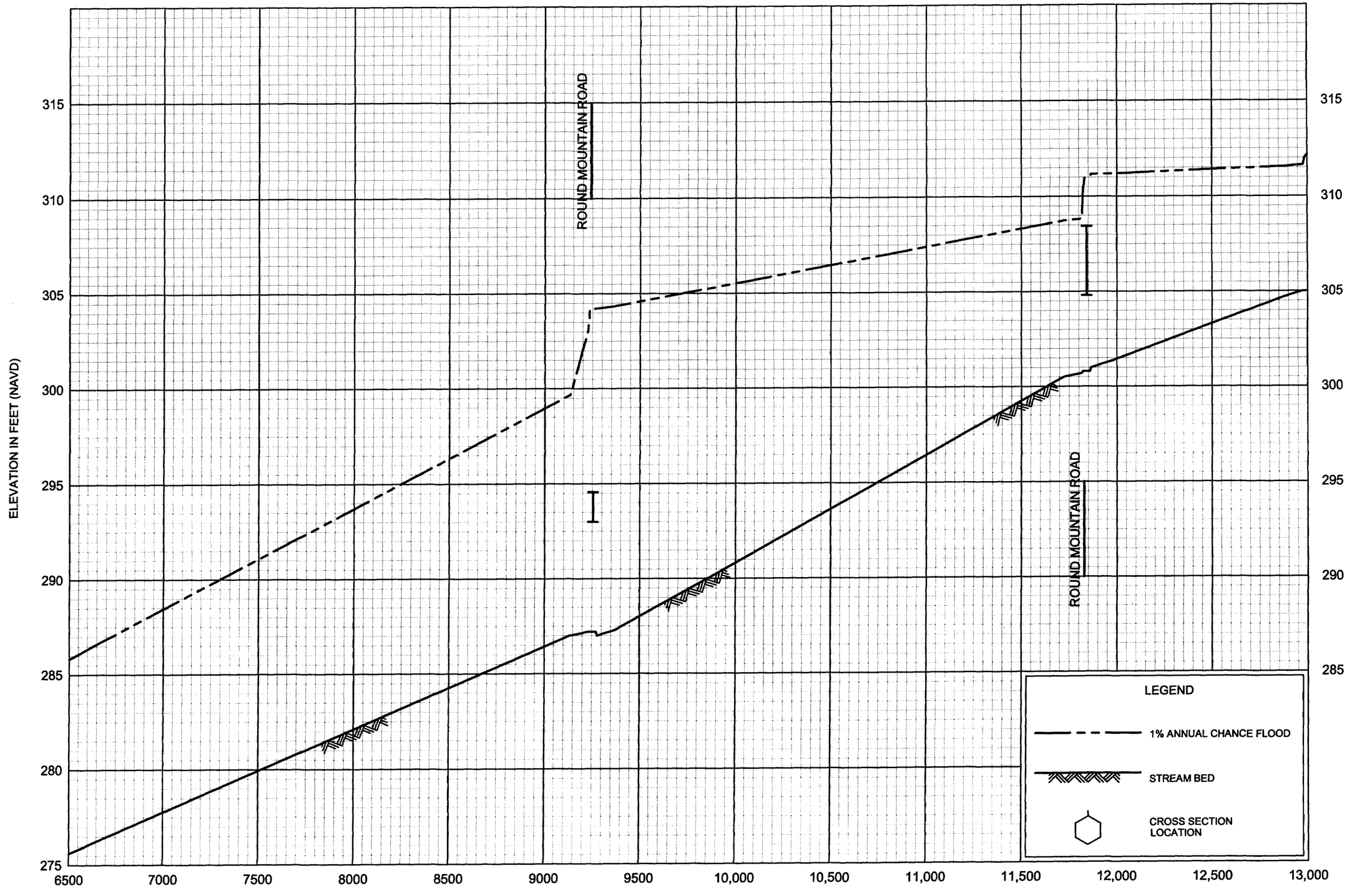
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

GOLD CREEK (SOUTH)



FLOOD PROFILES

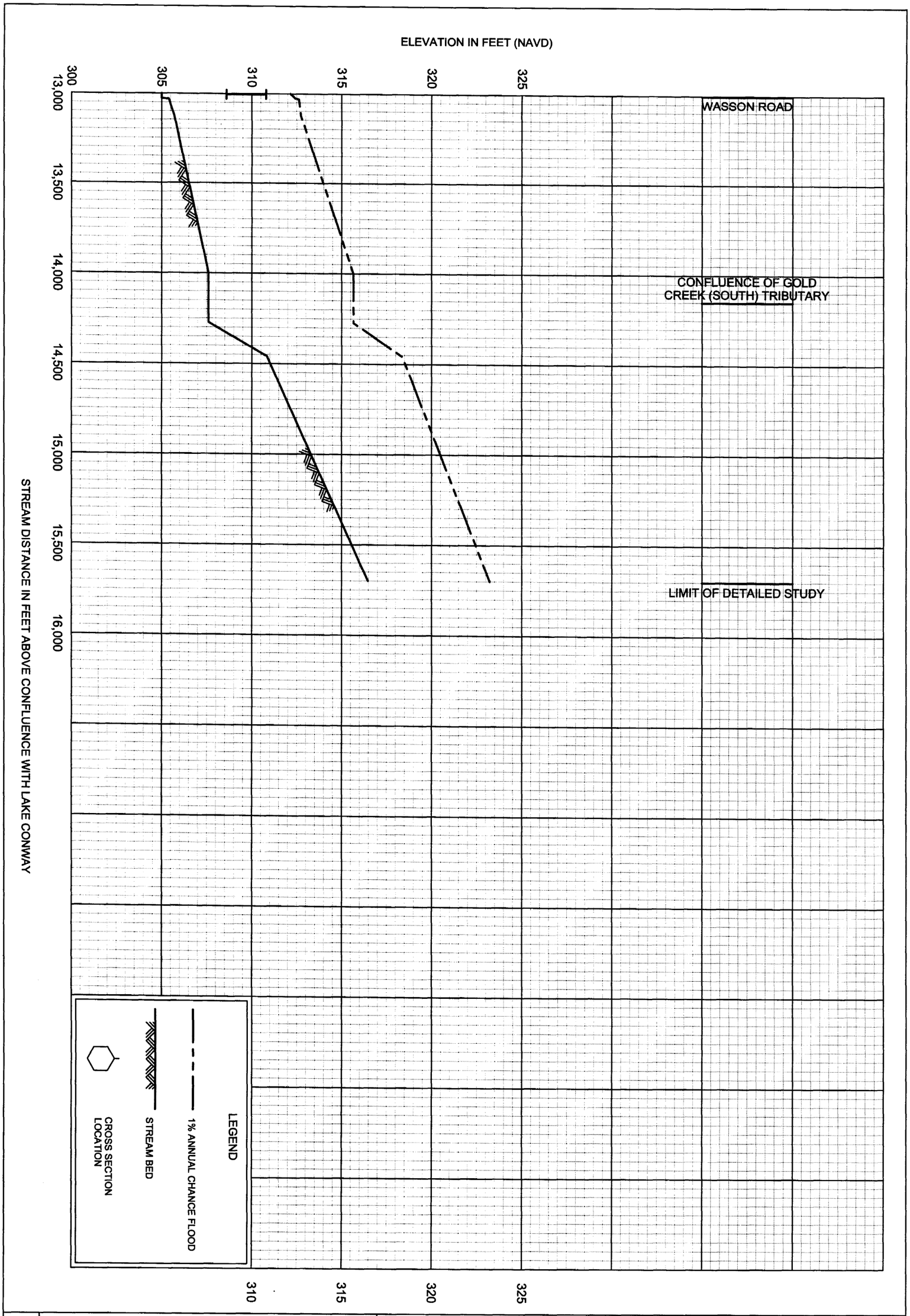
GOLD CREEK (SOUTH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

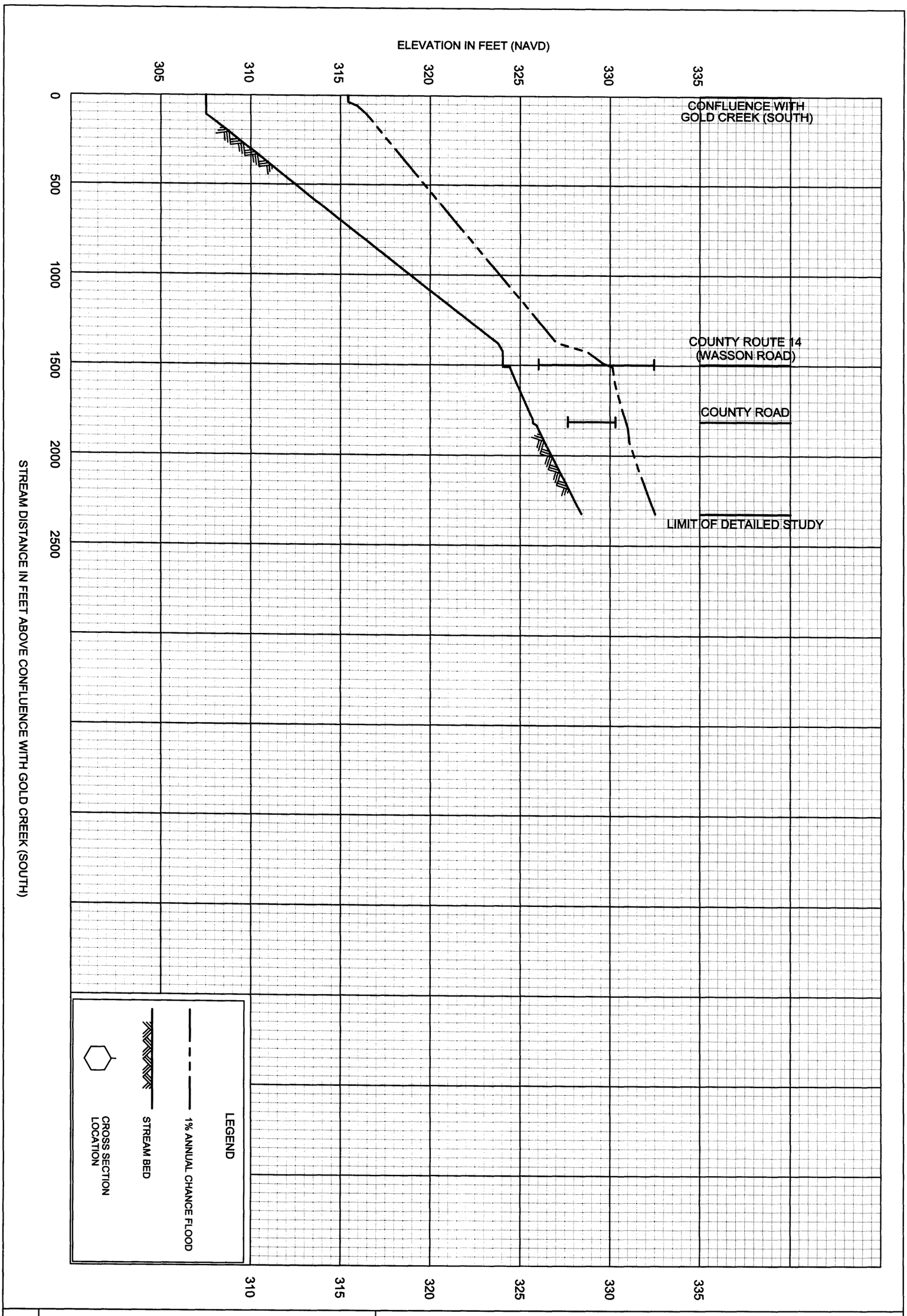
FAULKNER COUNTY, AR

AND INCORPORATED AREAS

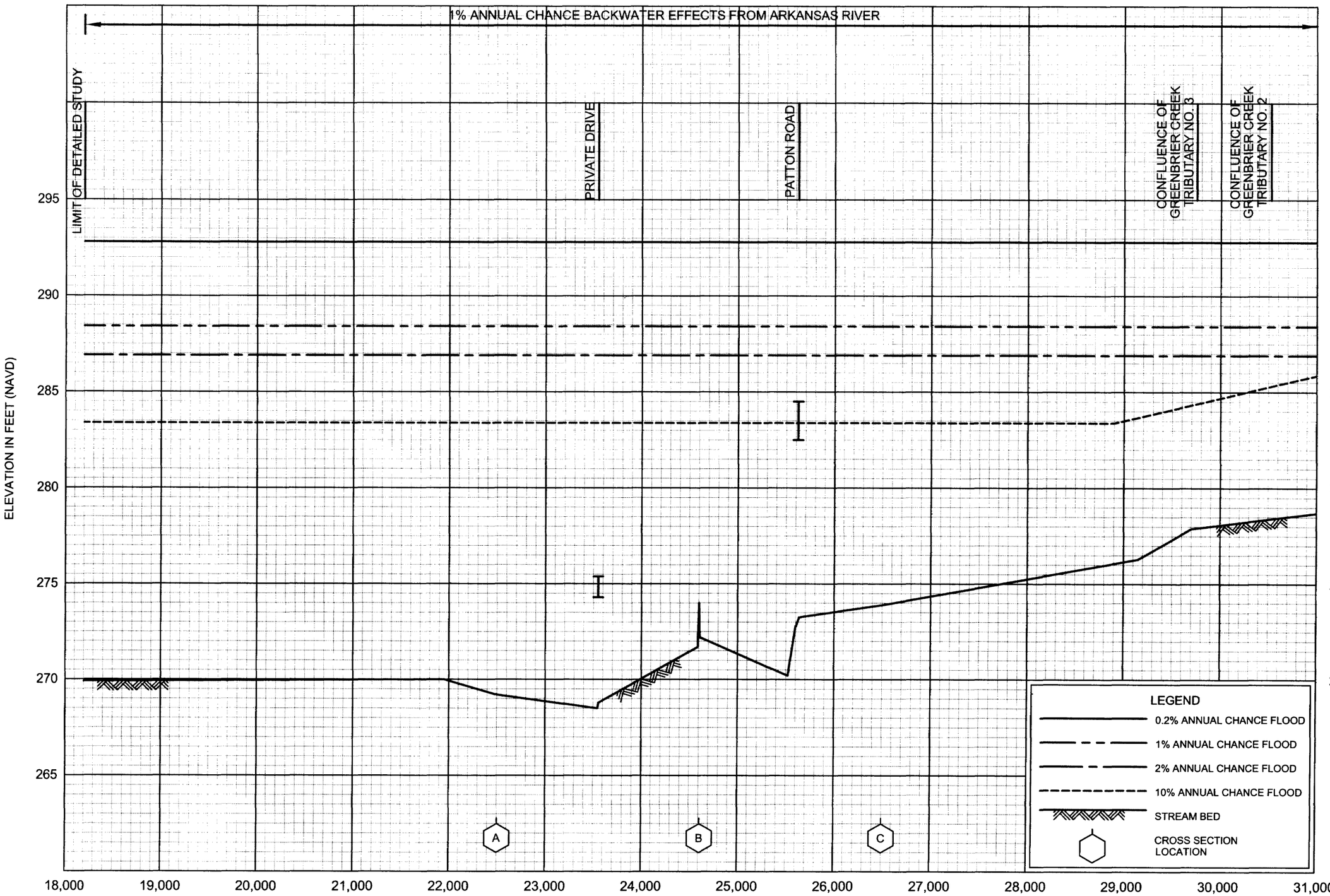
11P



12P	FEDERAL EMERGENCY MANAGEMENT AGENCY FAULKNER COUNTY, AR AND INCORPORATED AREAS	FLOOD PROFILES GOLD CREEK (SOUTH)



13P	FEDERAL EMERGENCY MANAGEMENT AGENCY FAULKNER COUNTY, AR AND INCORPORATED AREAS	FLOOD PROFILES GOLD CREEK (SOUTH) TRIBUTARY



FLOOD PROFILES

GREENBRIER CREEK (LOWER REACH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

1% ANNUAL CHANCE BACKWATER EFFECTS FROM ARKANSAS RIVER

LIMIT OF DETAILED STUDY

ELEVATION IN FEET (NAVD)

300
295
290
285
280
275

D
E

31,000 32,000 33,000 34,000 35,000 36,000 37,000 38,000 39,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH CADRON CREEK

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

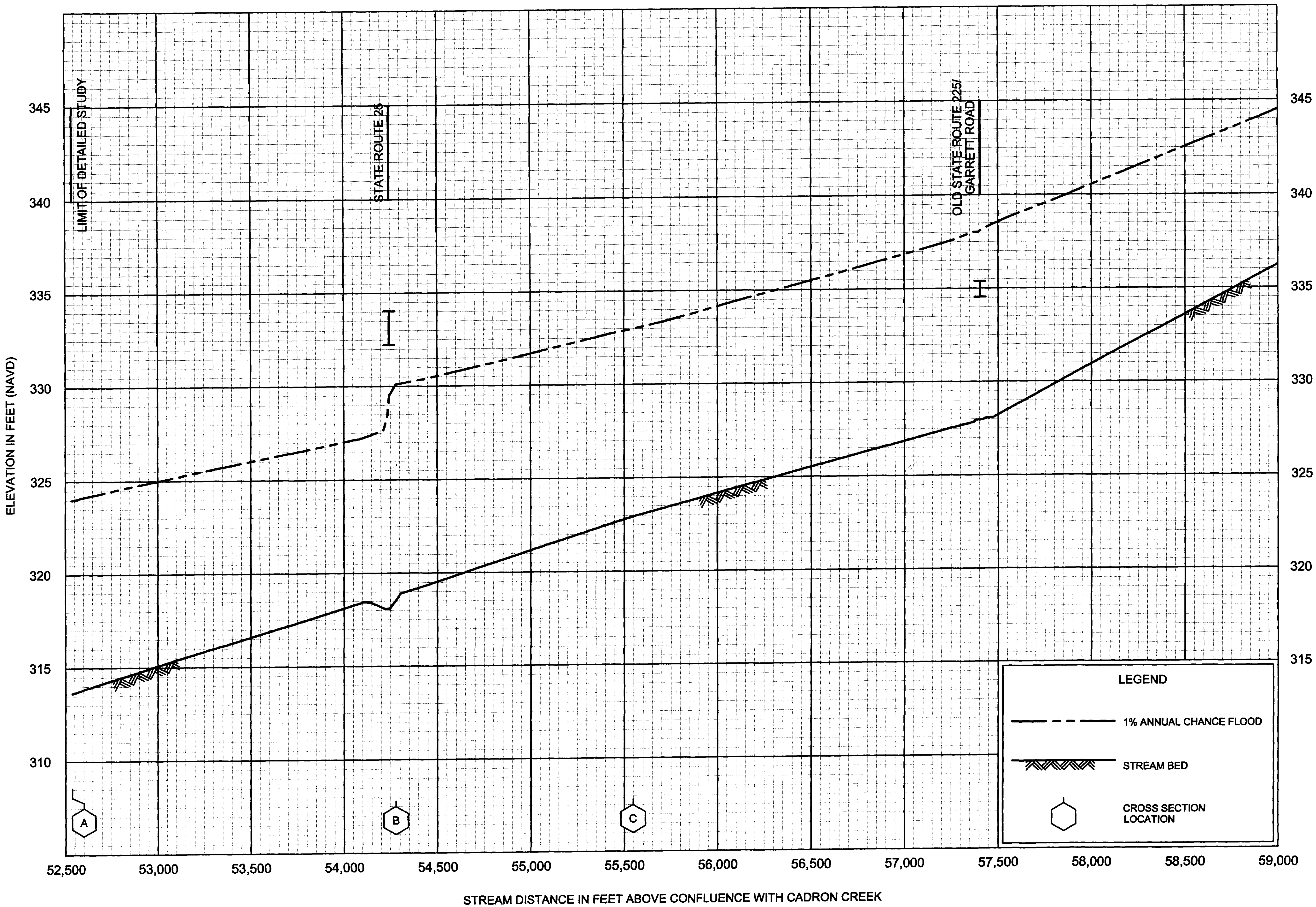
GREENBRIER CREEK (LOWER REACH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

15P



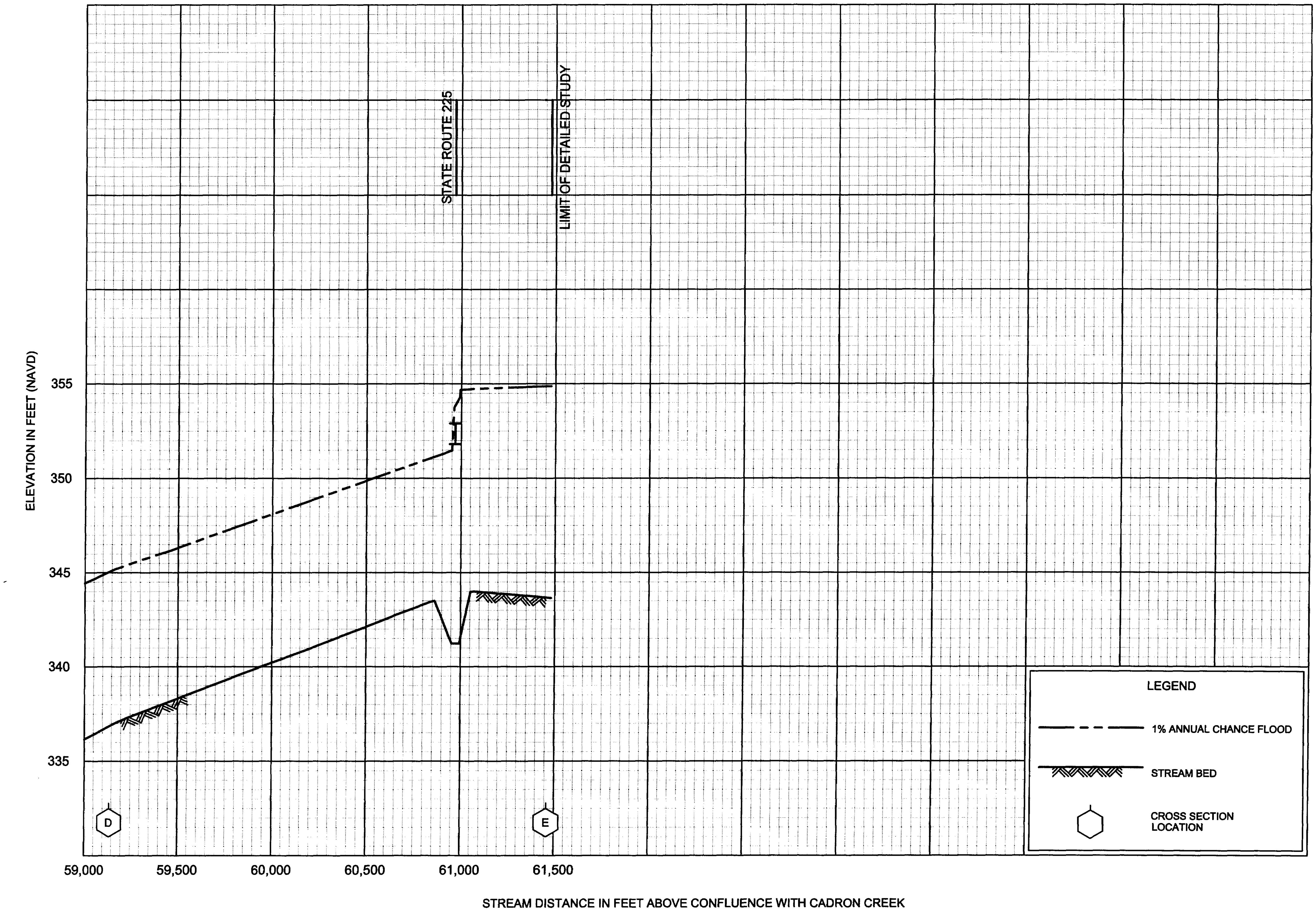
FLOOD PROFILES

GREENBRIER CREEK (UPPER REACH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



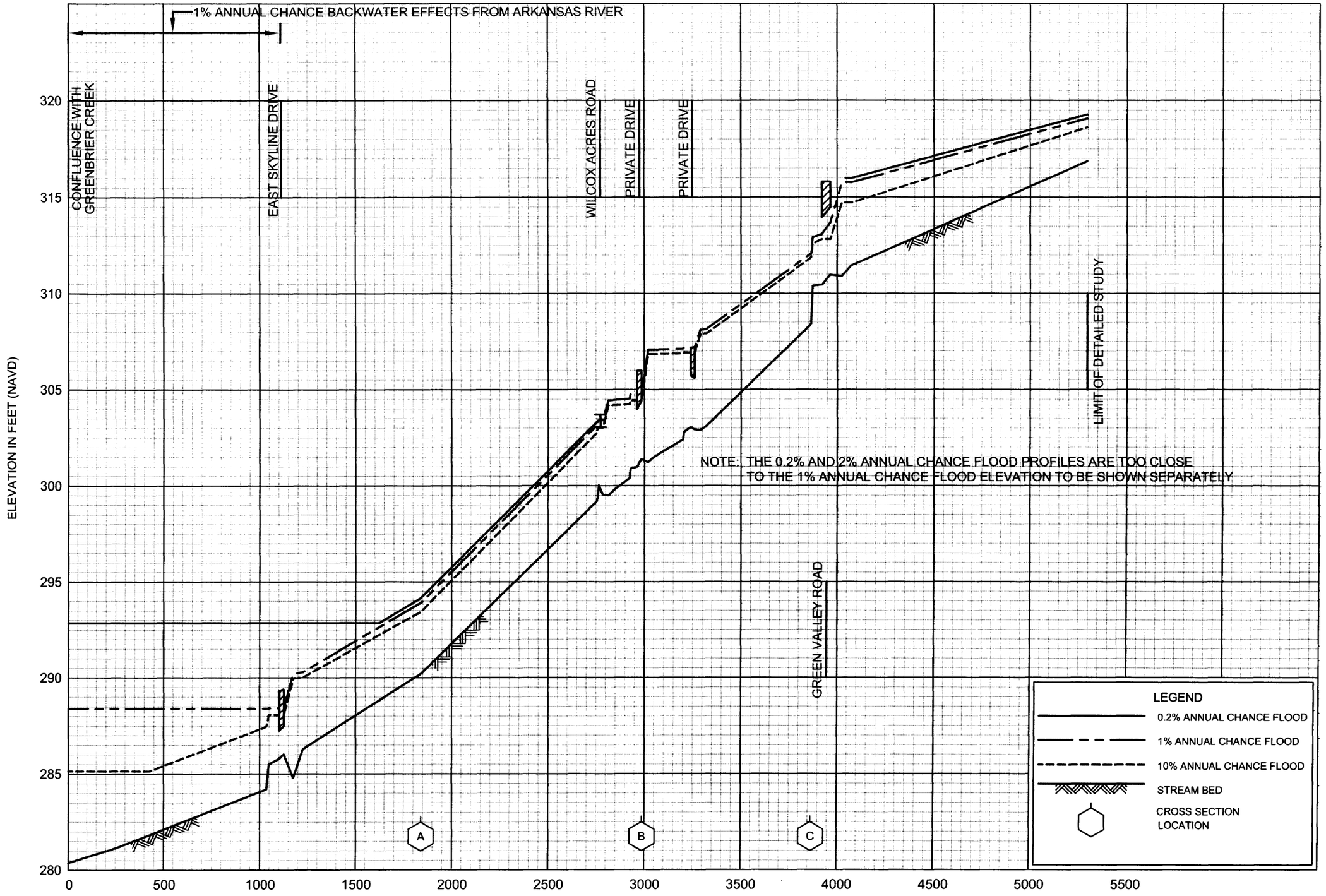
FLOOD PROFILES

GREENBRIER CREEK (UPPER REACH)

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



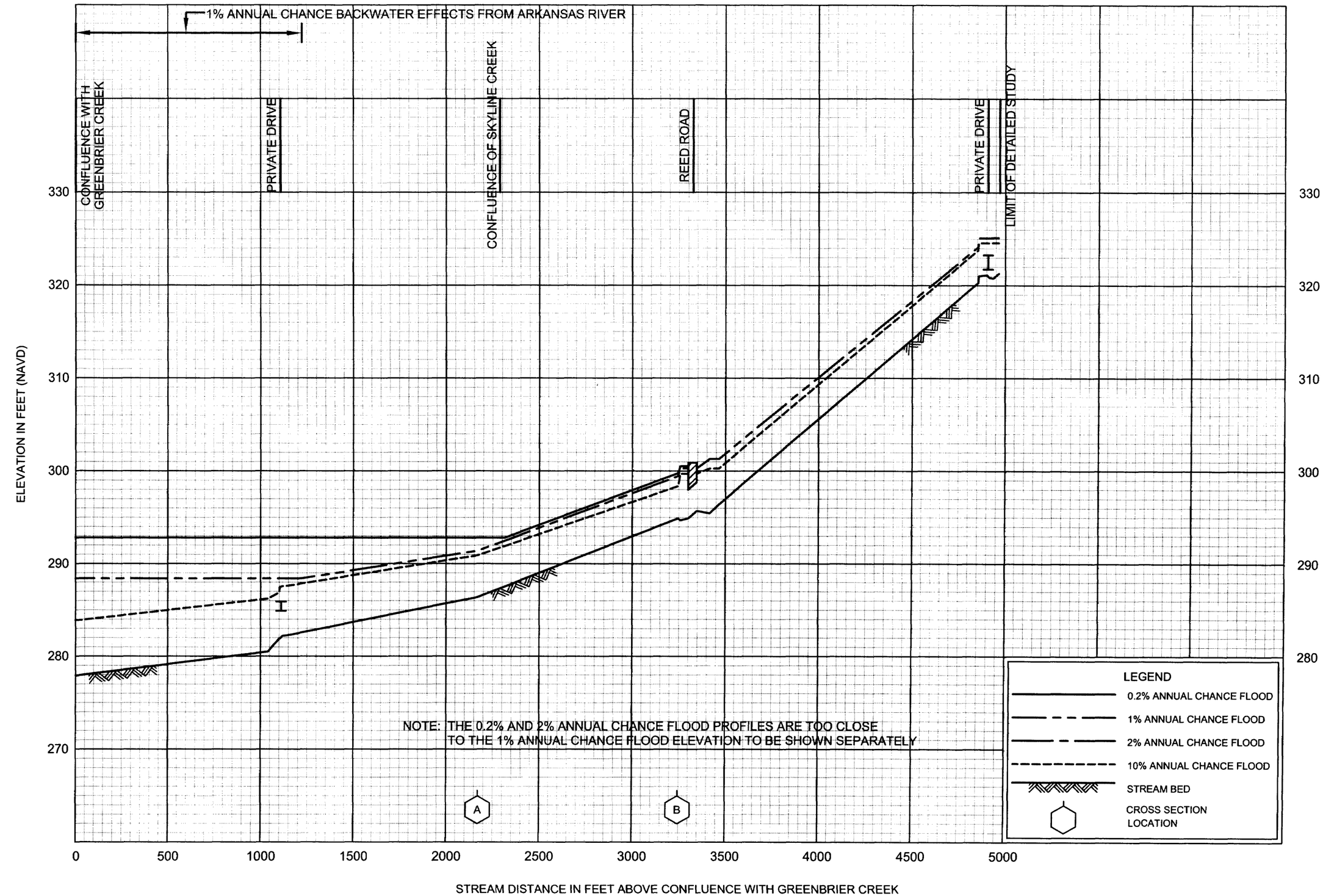
FLOOD PROFILES

GREENBRIER CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



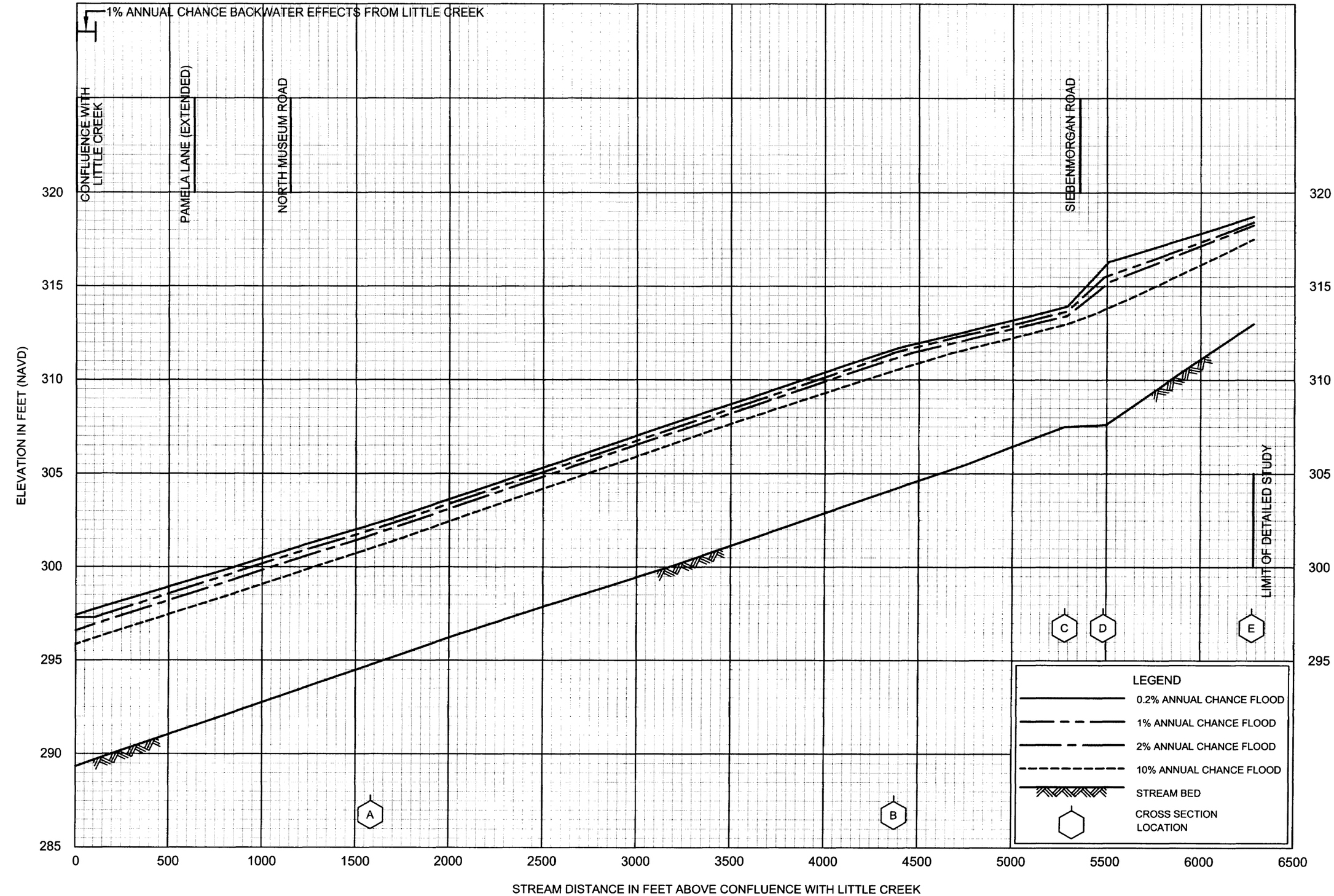
FLOOD PROFILES

GREENBRIER CREEK TRIBUTARY NO. 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



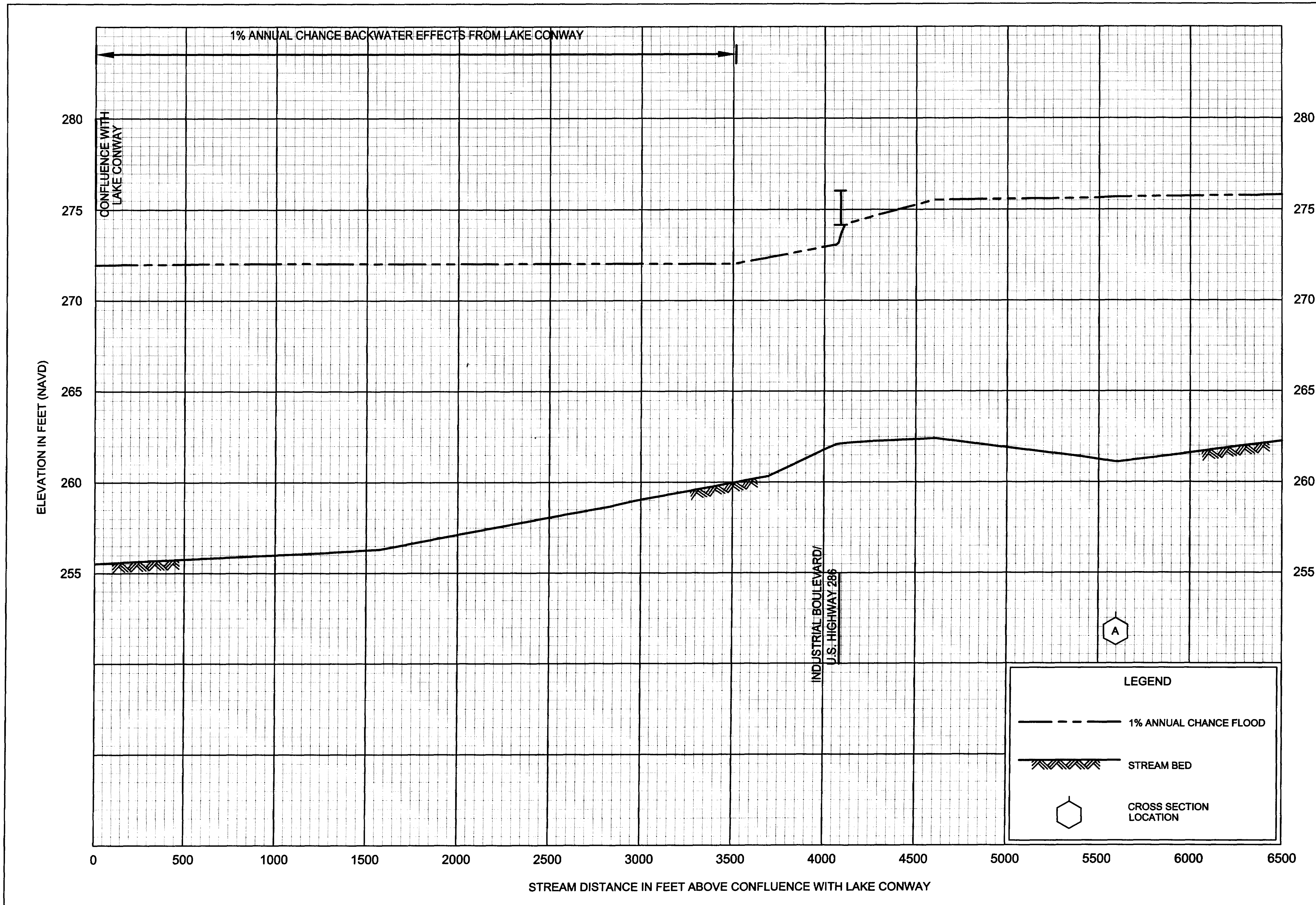
FLOOD PROFILES

HENDRIX BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



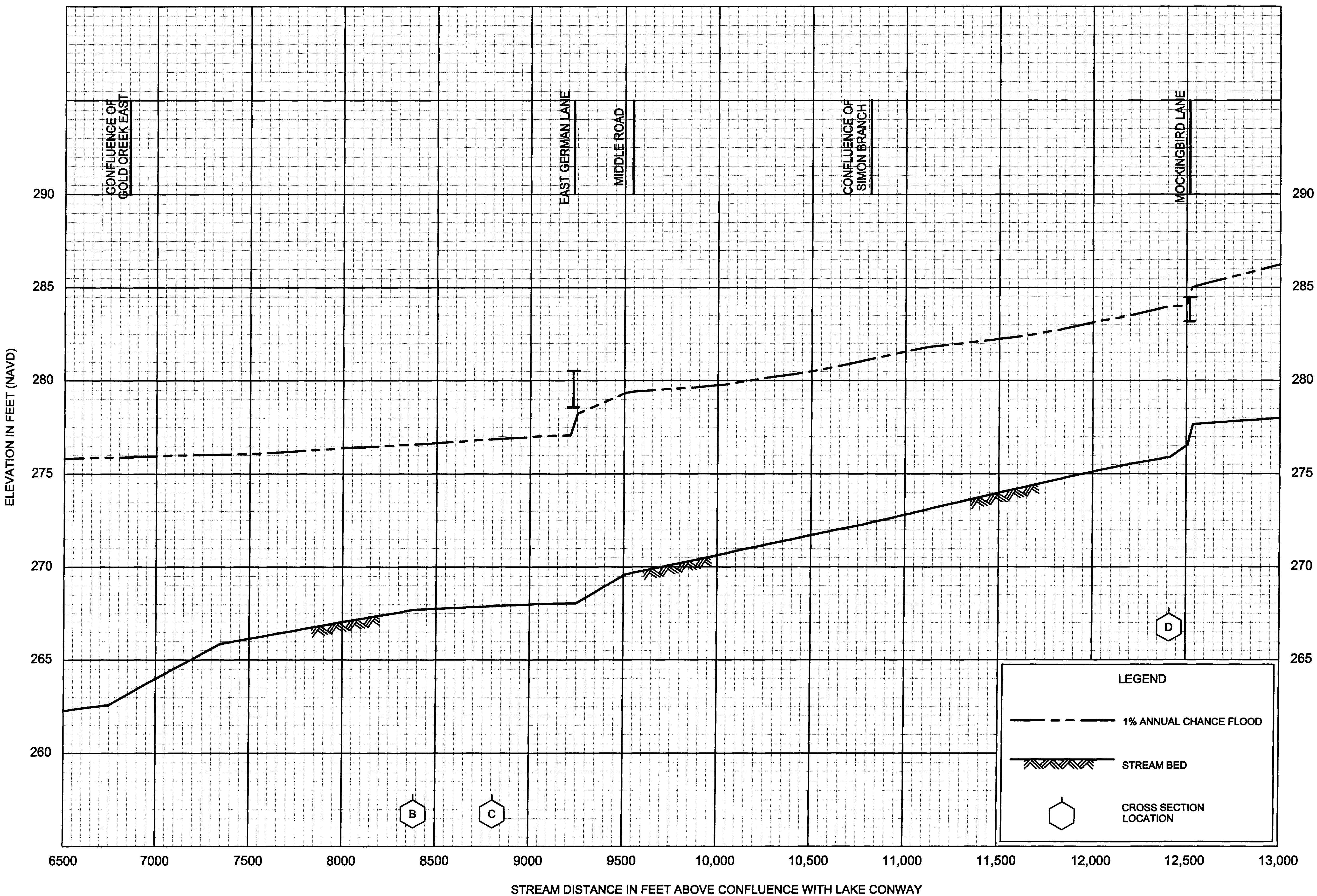
FLOOD PROFILES

LITTLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



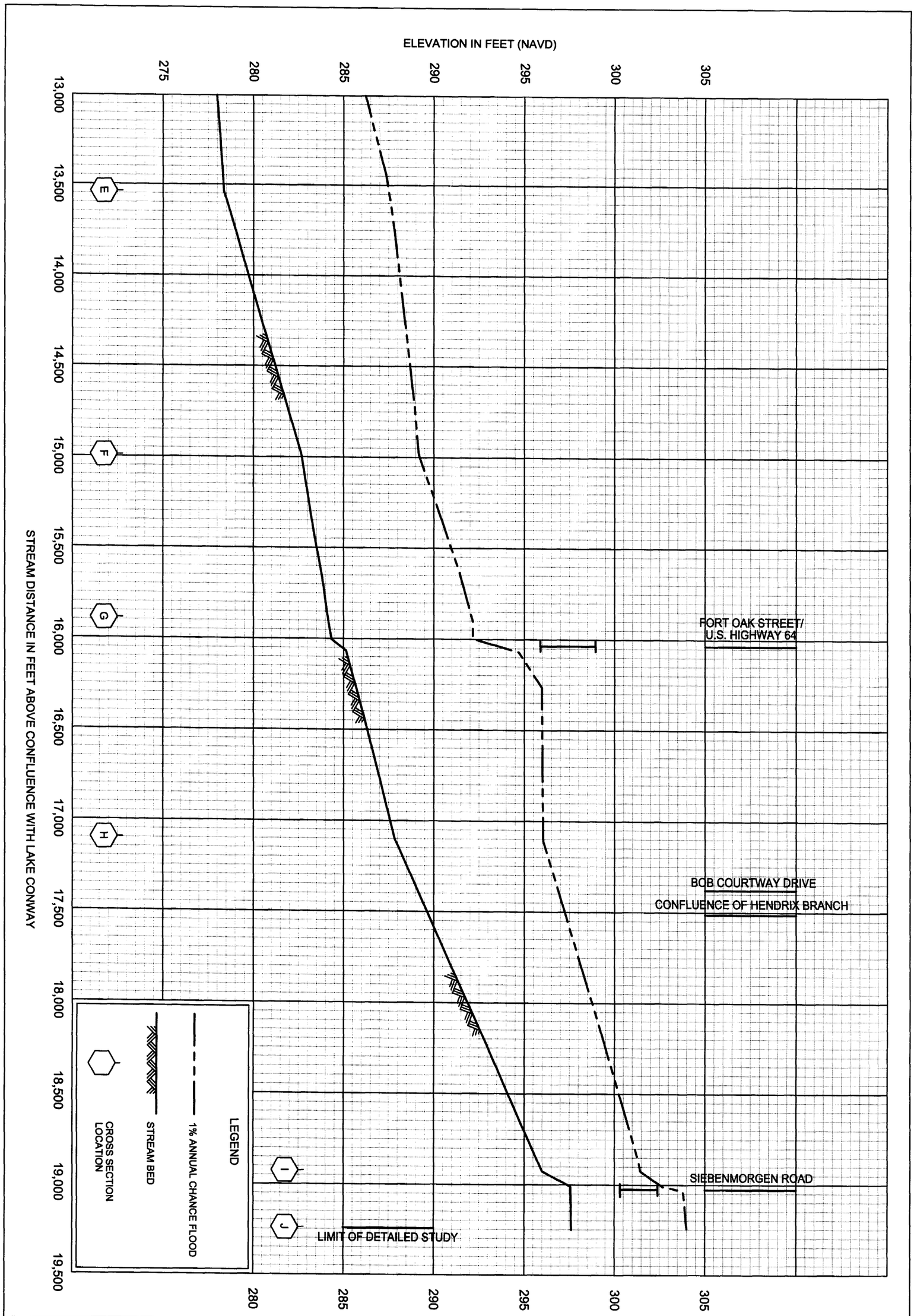
FLOOD PROFILES

LITTLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



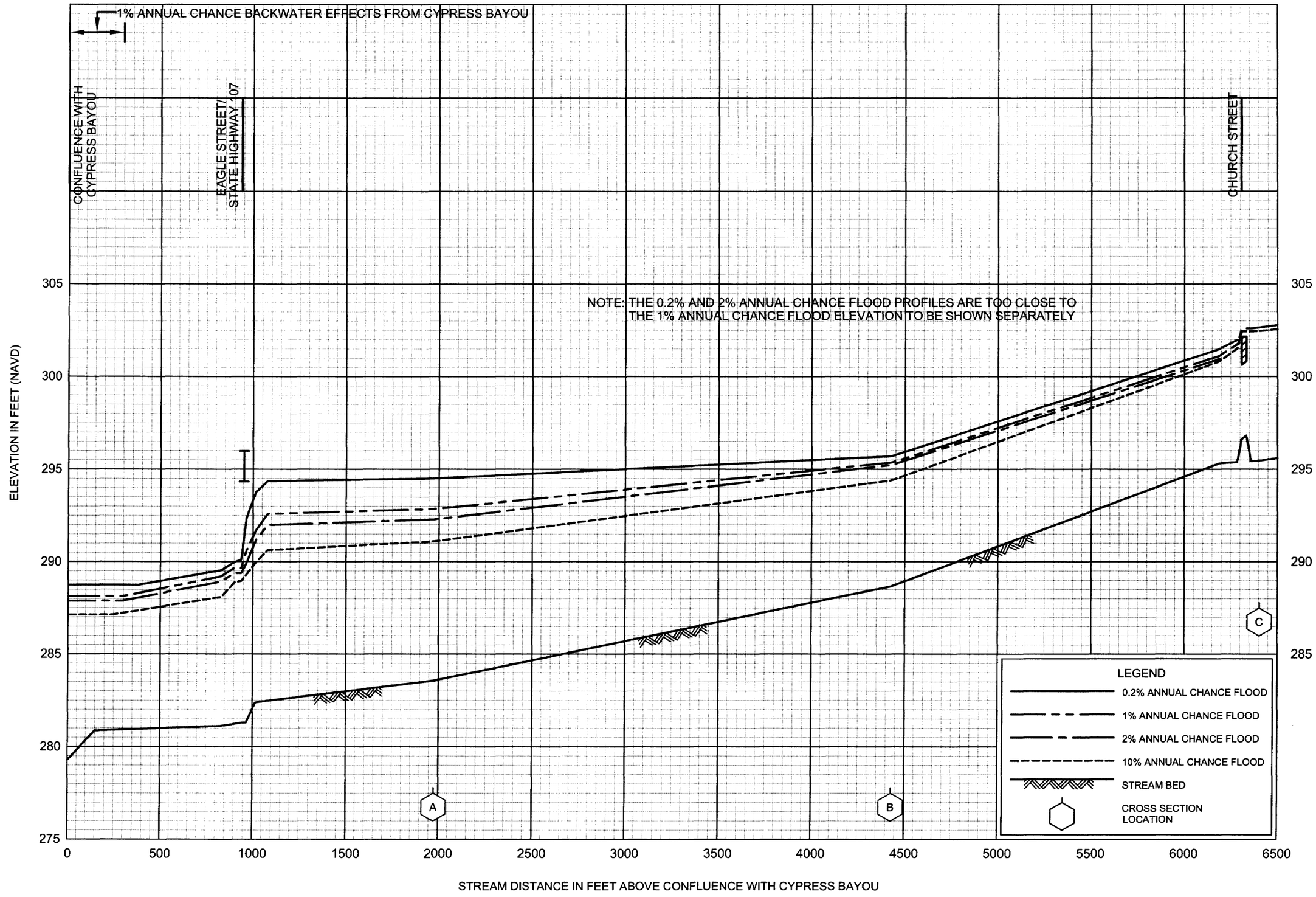
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

LITTLE CREEK



FLOOD PROFILES

MIDDLE FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

24P

ELEVATION IN FEET (NAVD)

315
310
305
300
295

NOTE: THE 2% ANNUAL CHANCE FLOOD PROFILE IS TOO CLOSE TO THE 1% ANNUAL CHANCE FLOOD ELEVATION TO BE SHOWN SEPARATELY

D
E

LEGEND
- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

6500 7000 7500 8000 8500 9000 9500 10,000 10,500 11,000 11,500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH CYPRESS BAYOU

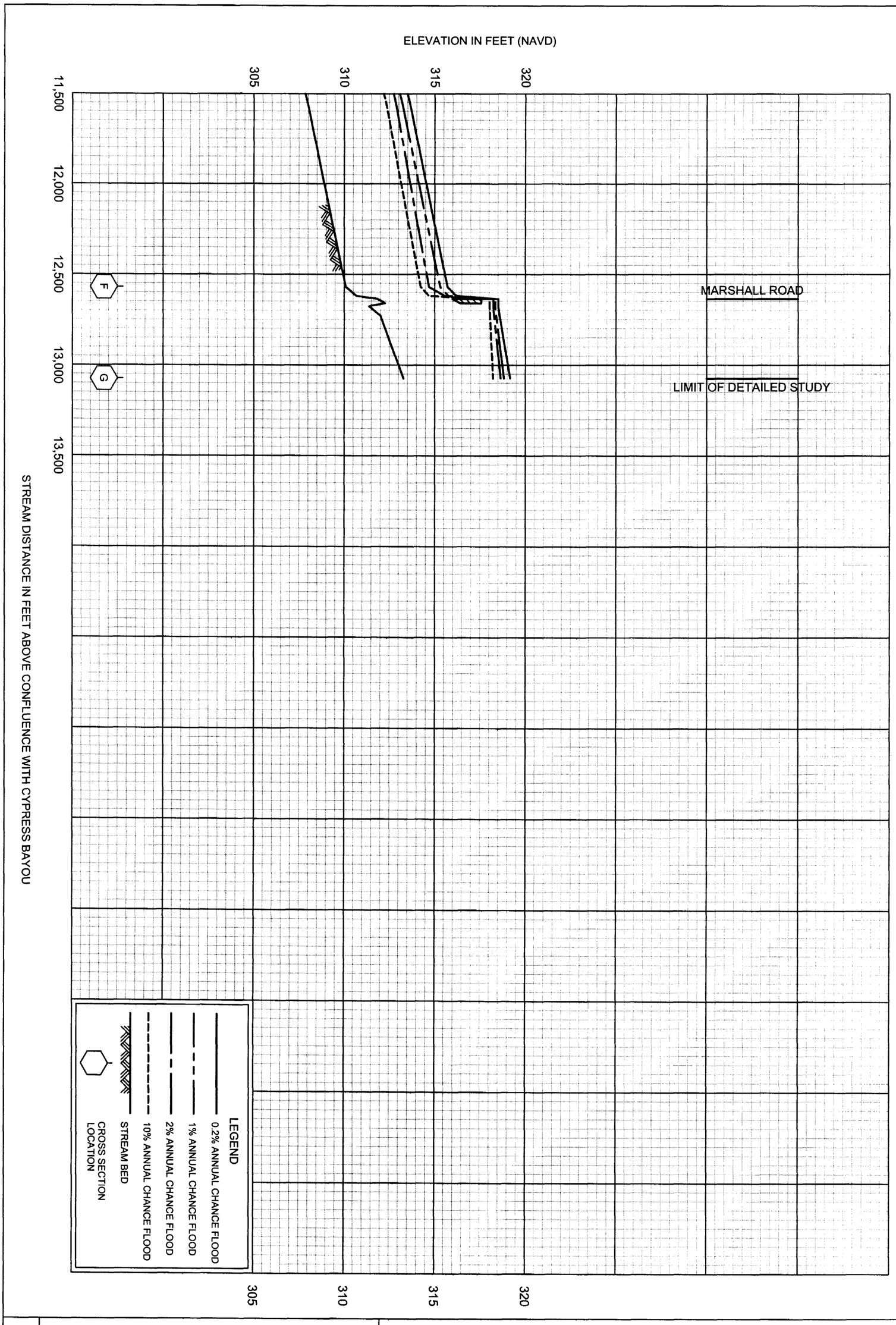
FLOOD PROFILES

MIDDLE FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



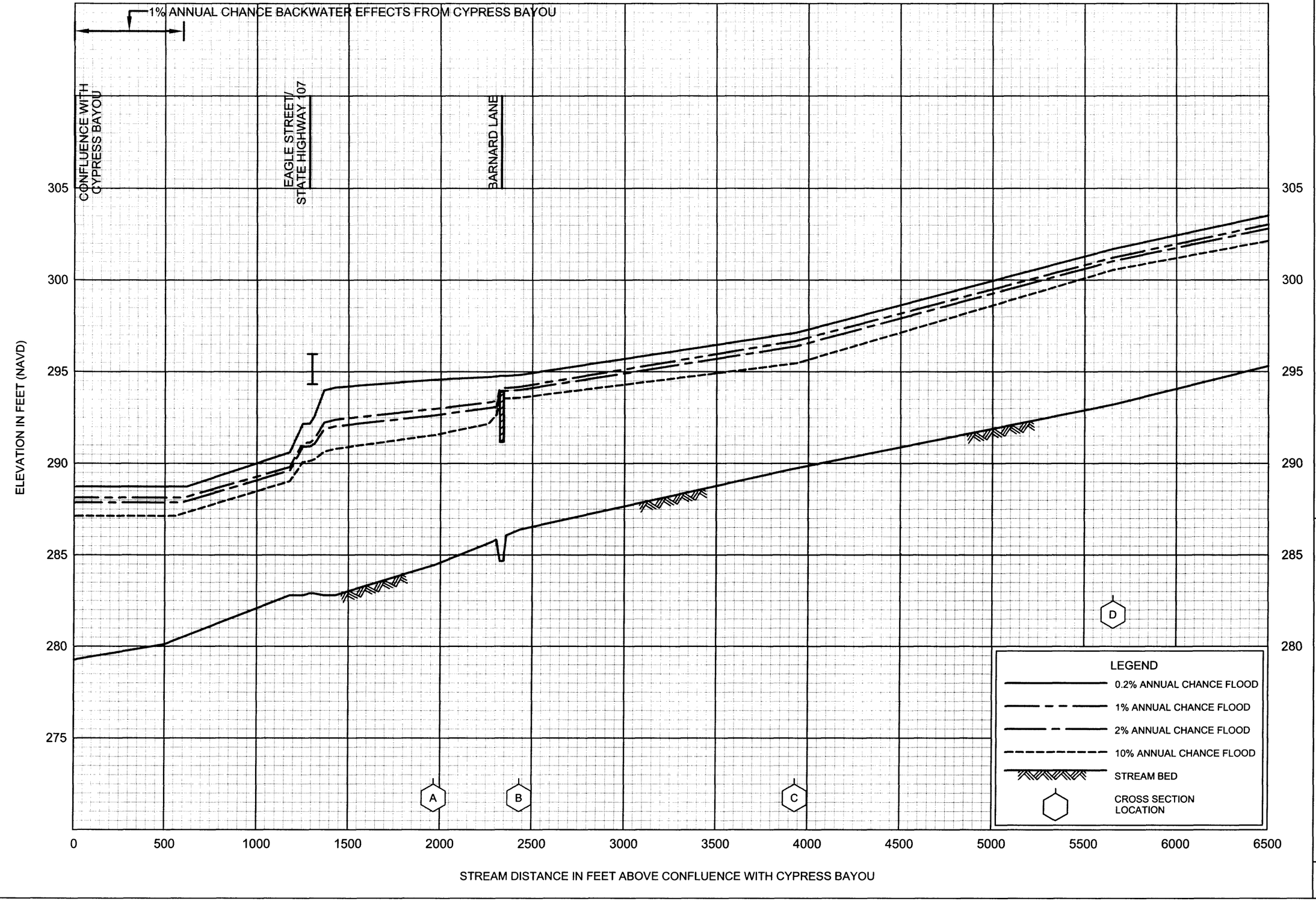
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

MIDDLE FORK CYPRESS BAYOU



FLOOD PROFILES

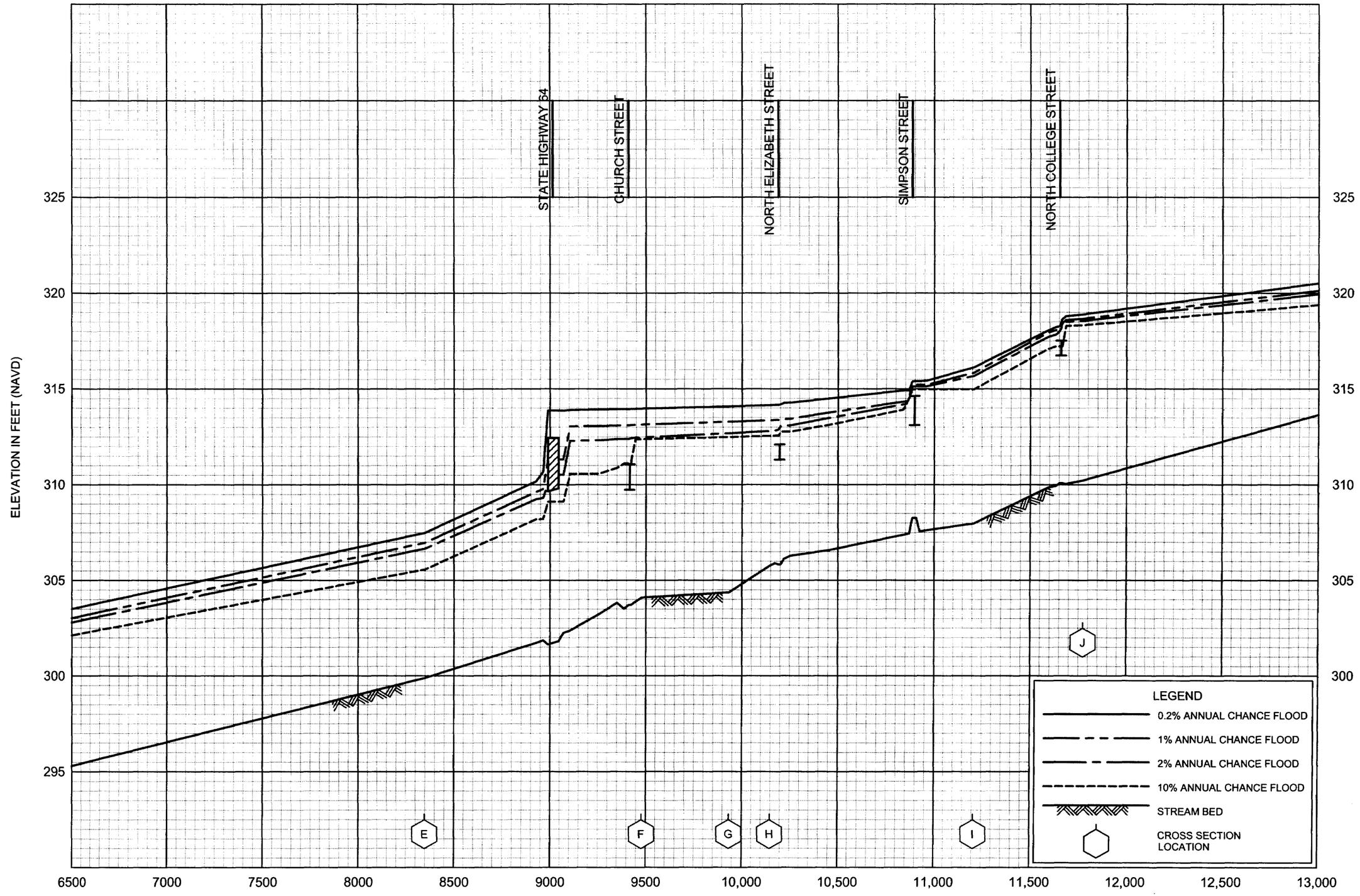
NORTH FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

27P



FLOOD PROFILES

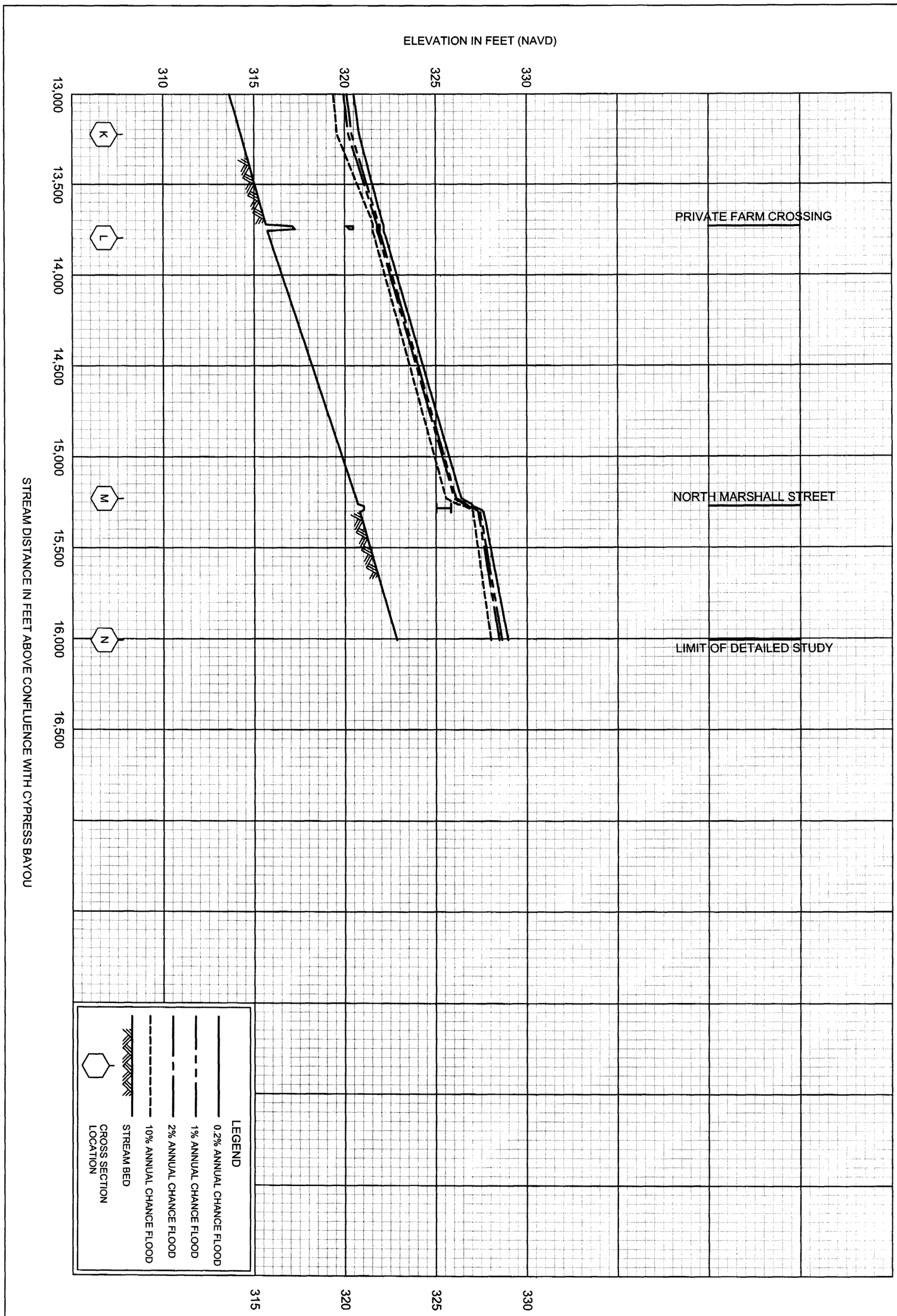
NORTH FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

28P



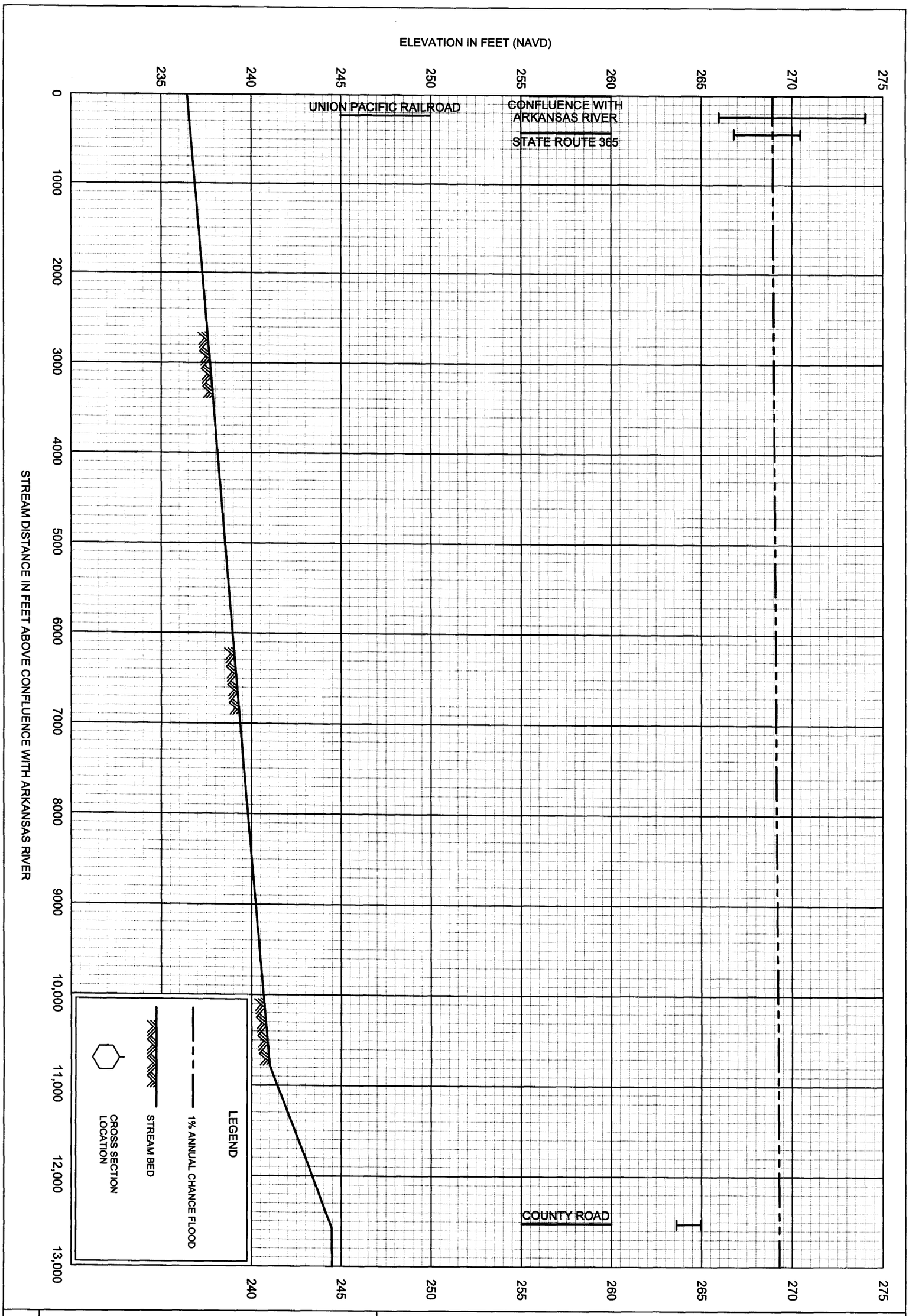
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

NORTH FORK CYPRESS BAYOU



30P

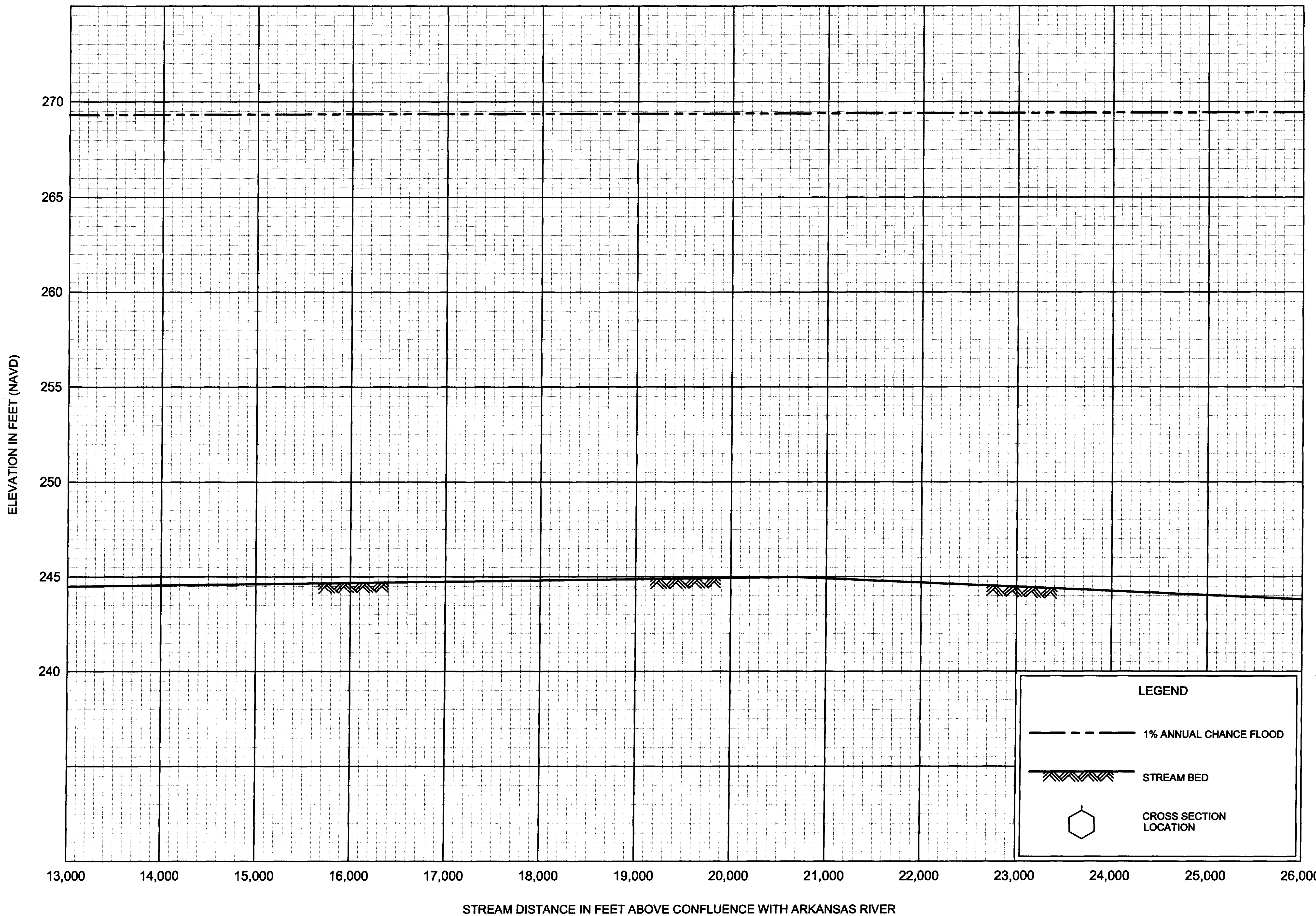
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

PALARM CREEK



FLOOD PROFILES

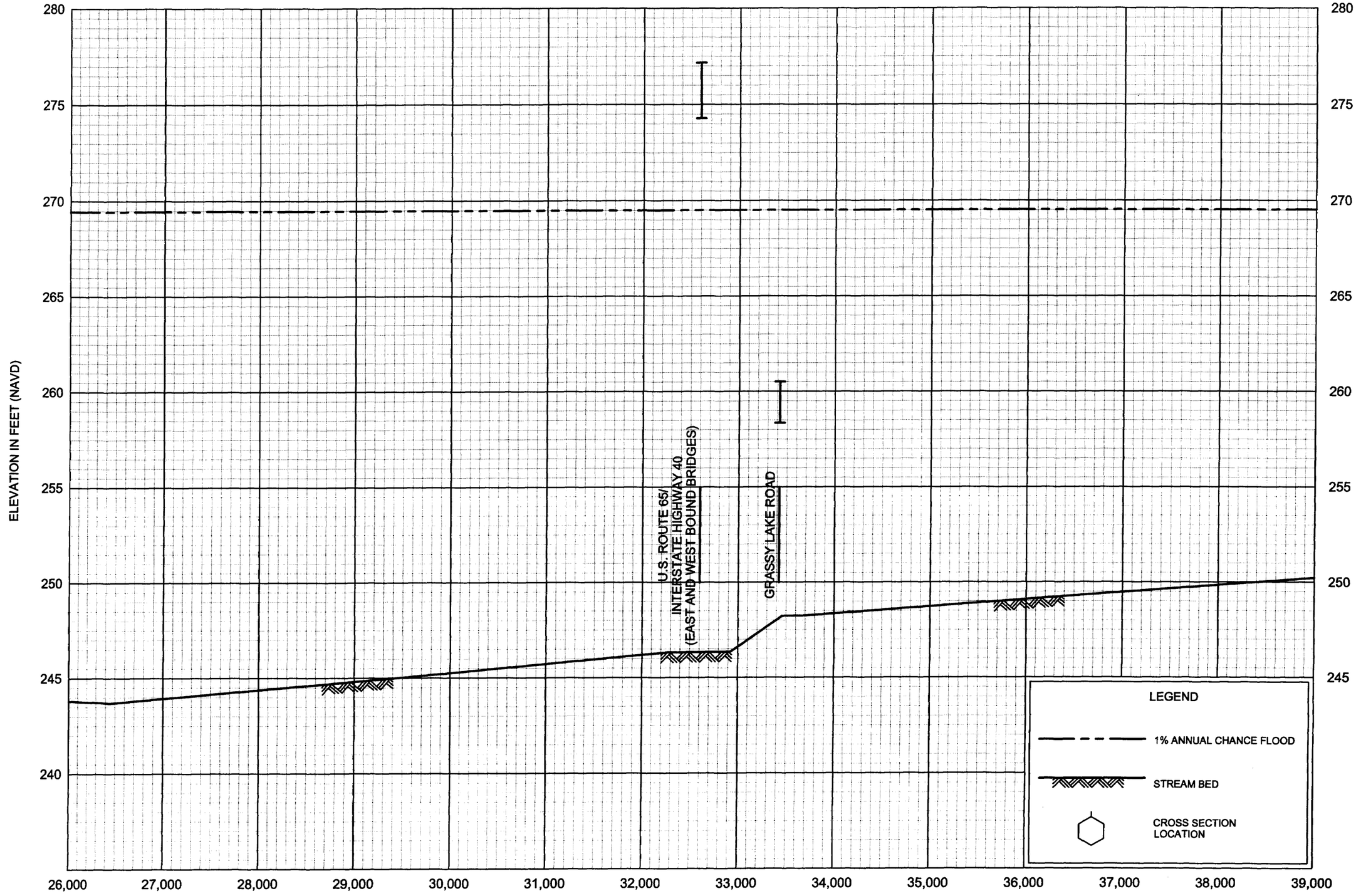
PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

31P



FLOOD PROFILES

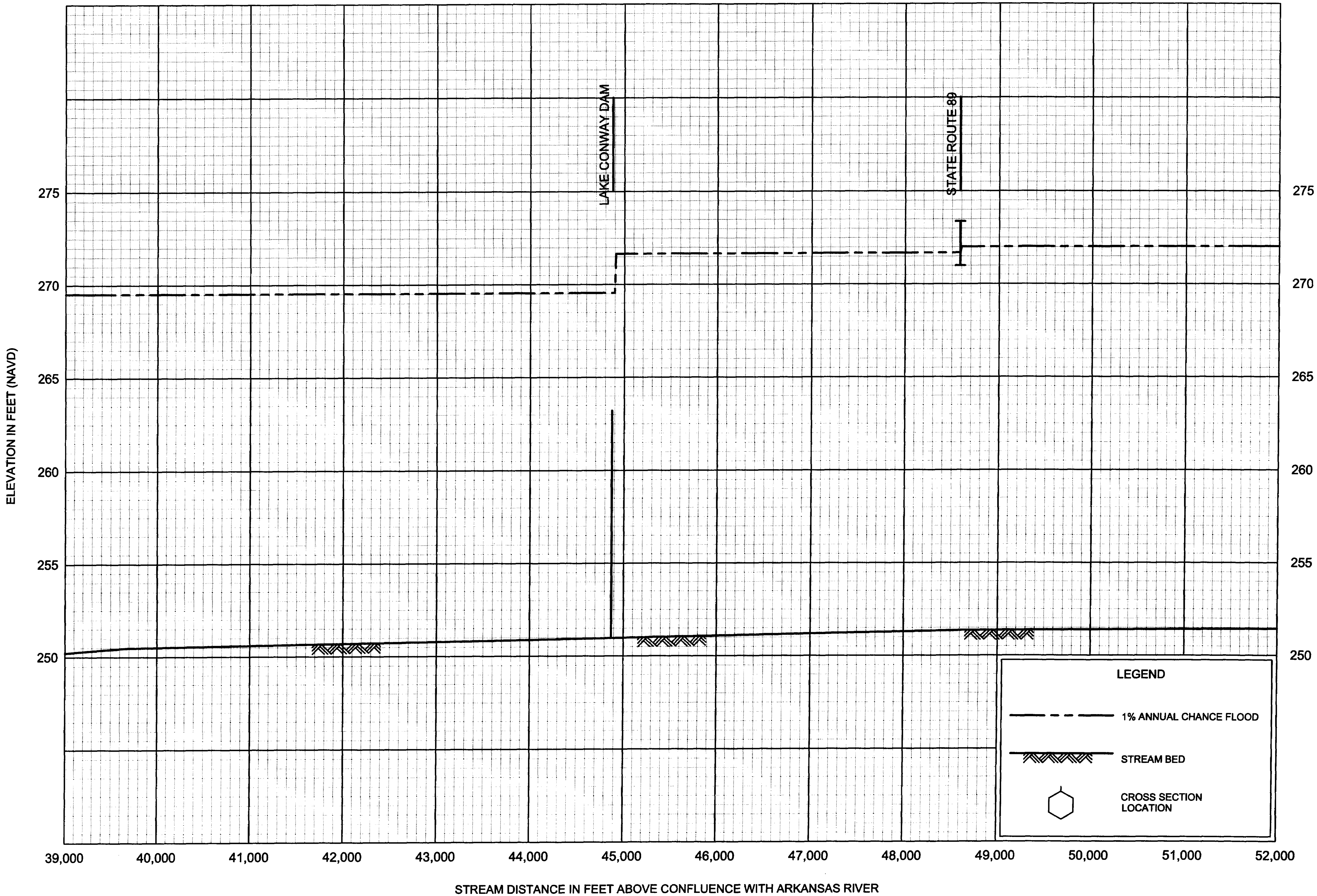
PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

32P



FLOOD PROFILES

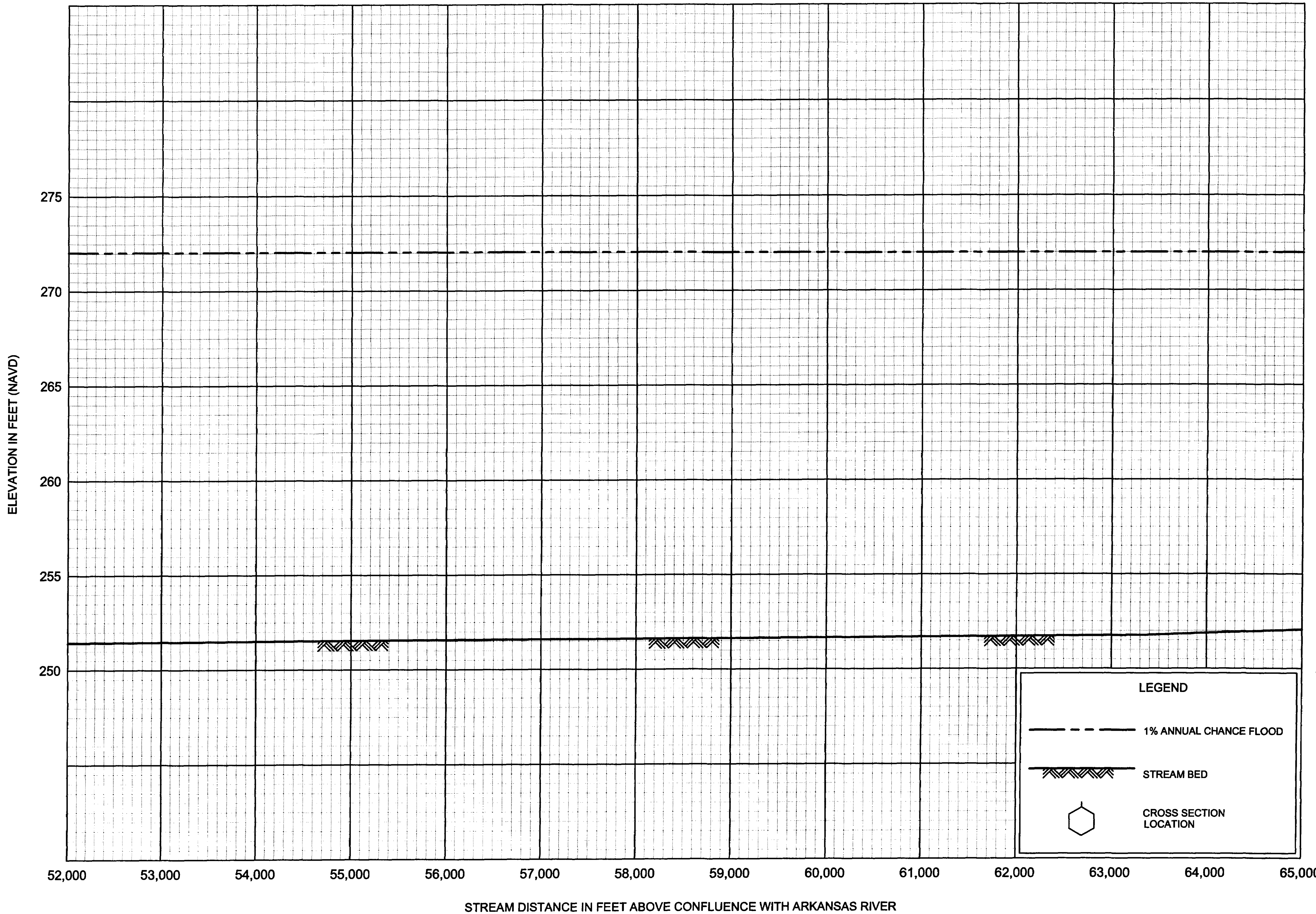
PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

33P



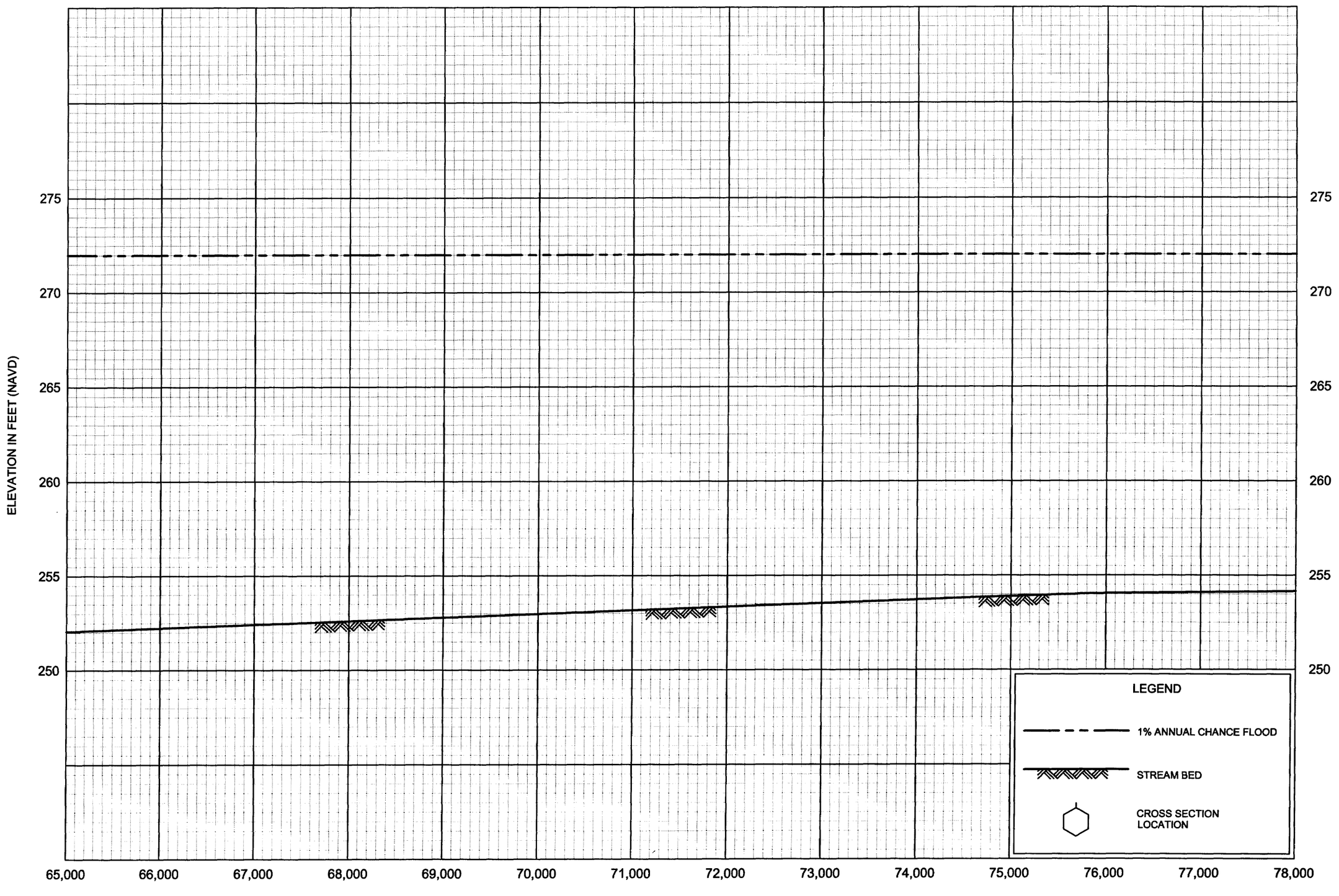
FLOOD PROFILES

PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



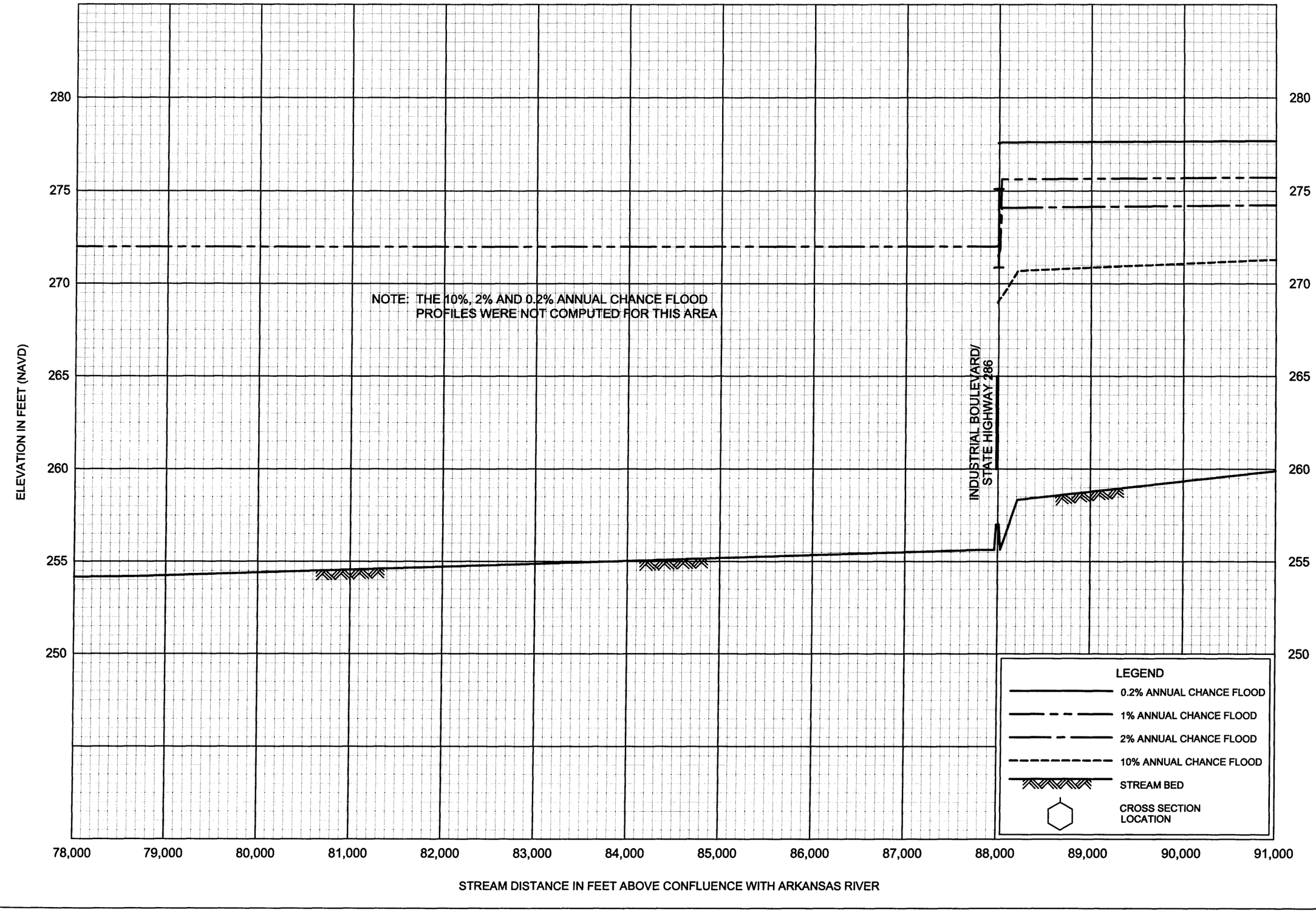
FLOOD PROFILES

PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



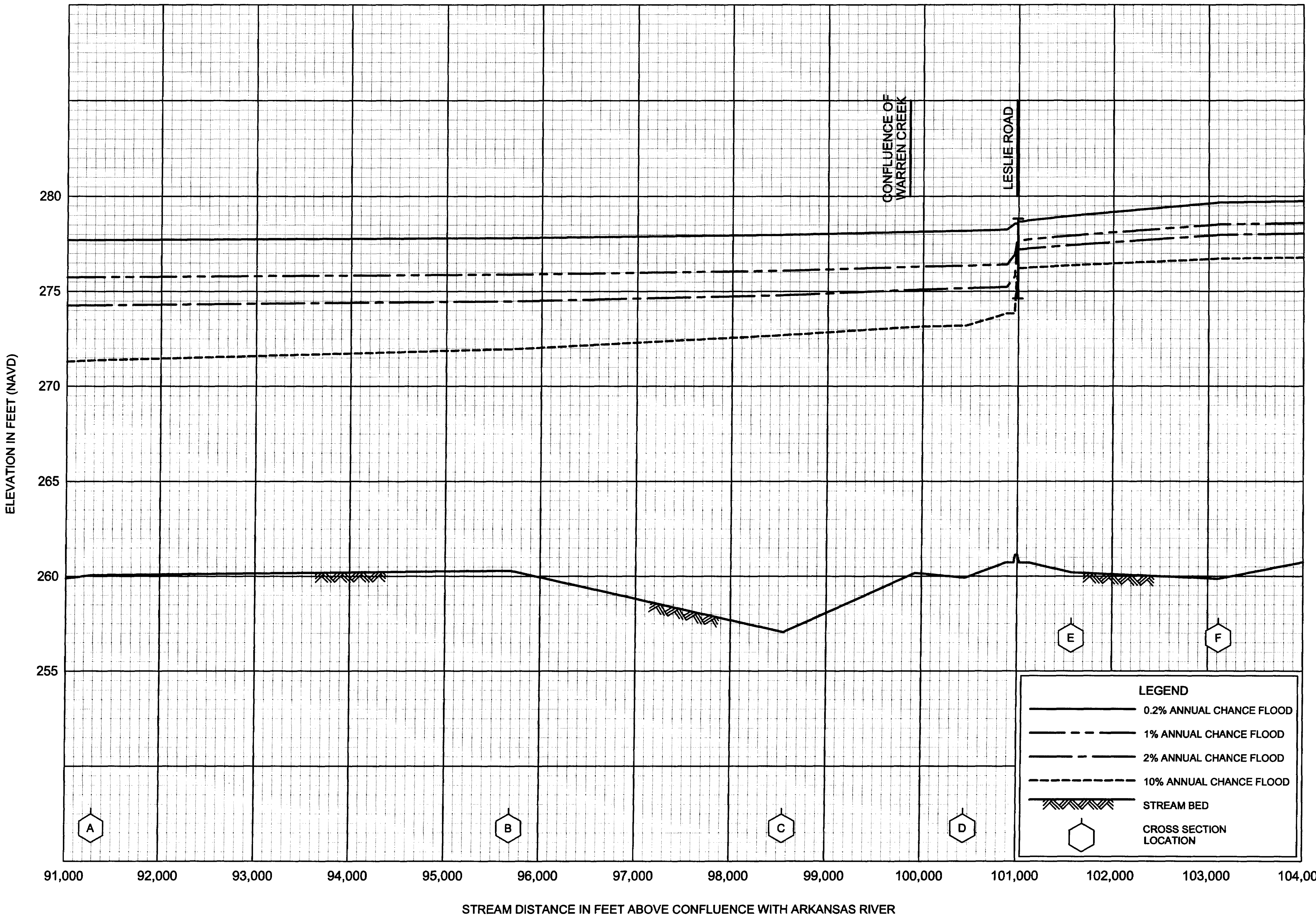
FLOOD PROFILES

PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



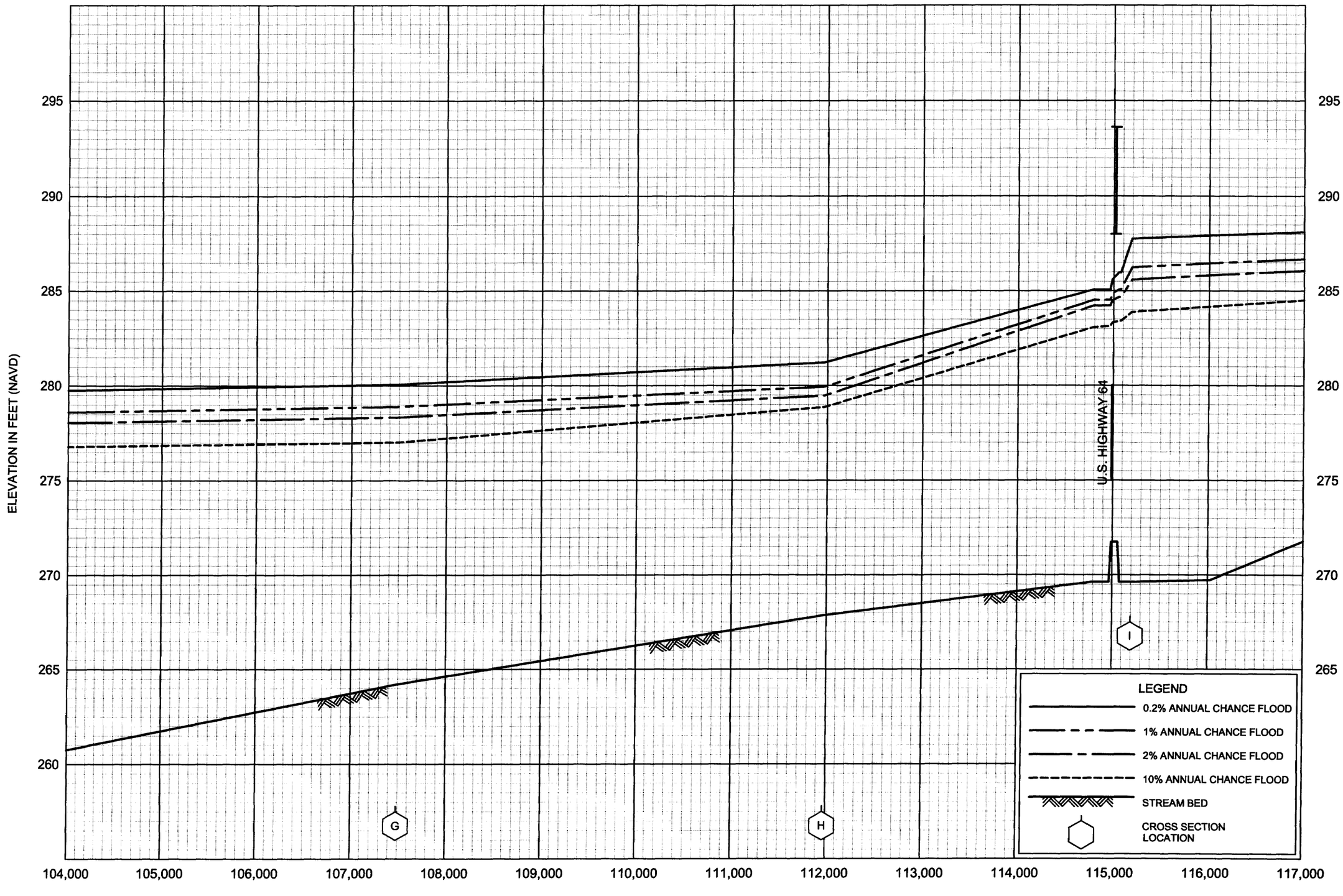
FLOOD PROFILES

PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

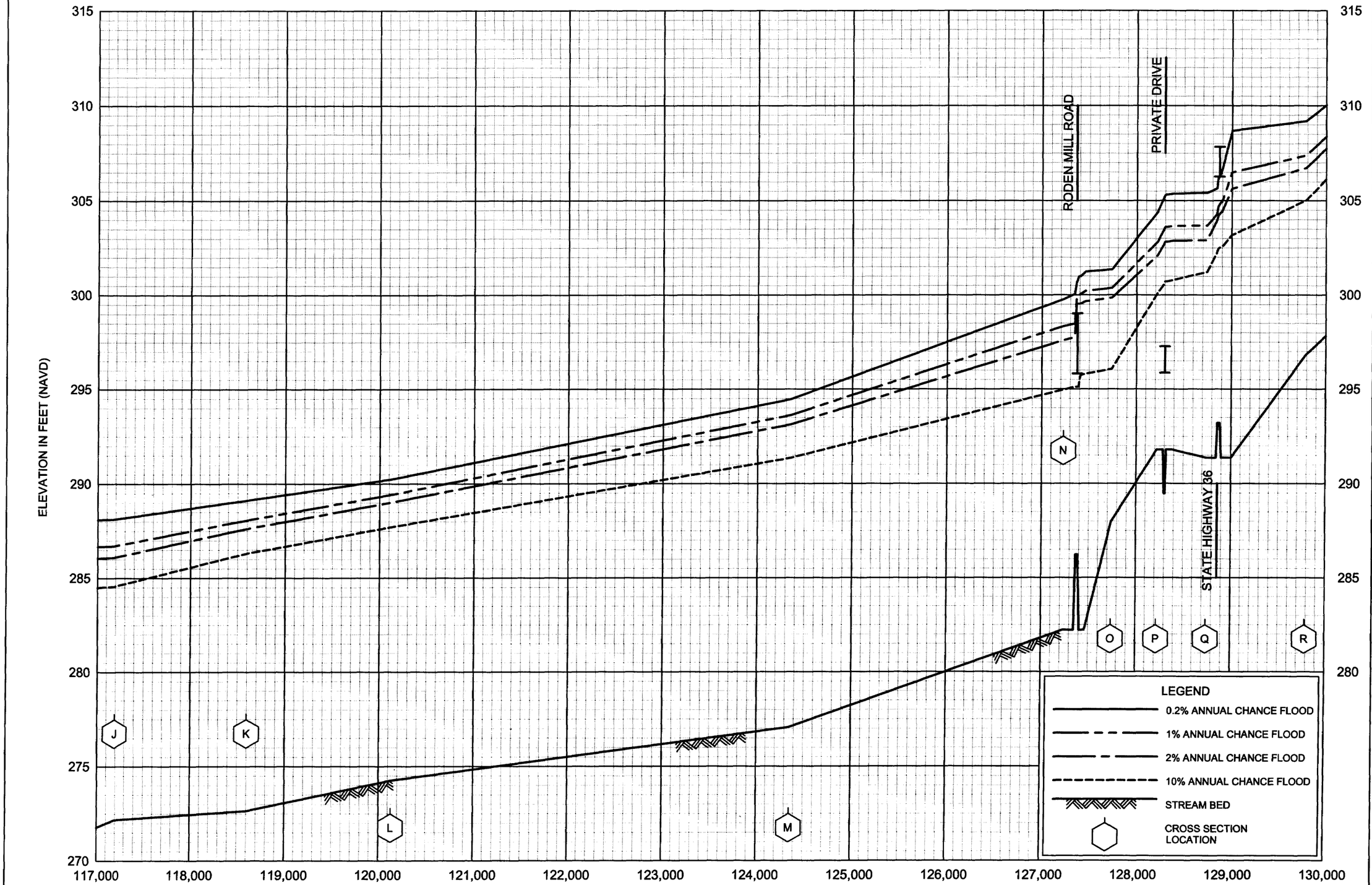
PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

38P



FLOOD PROFILES

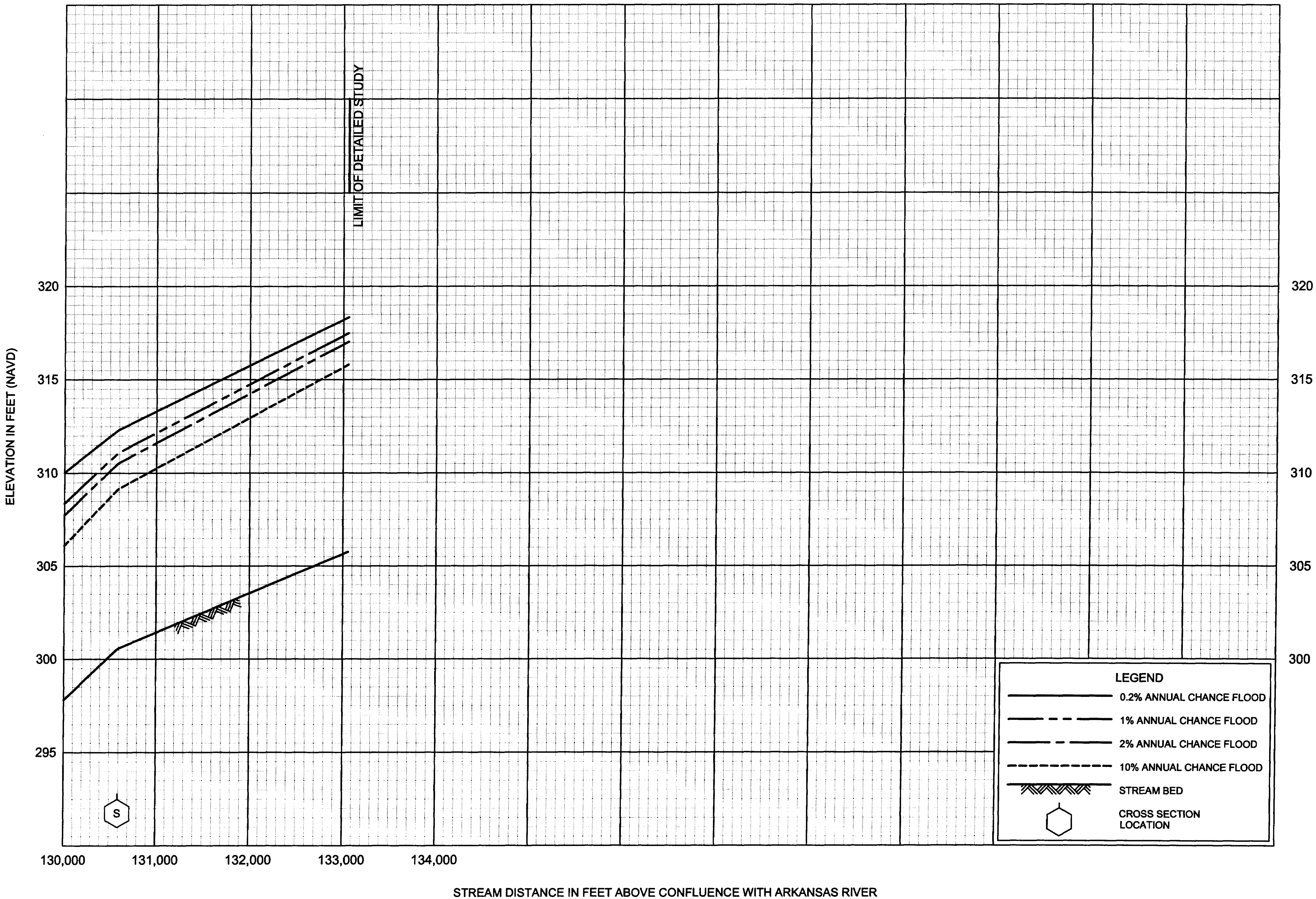
PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

39P



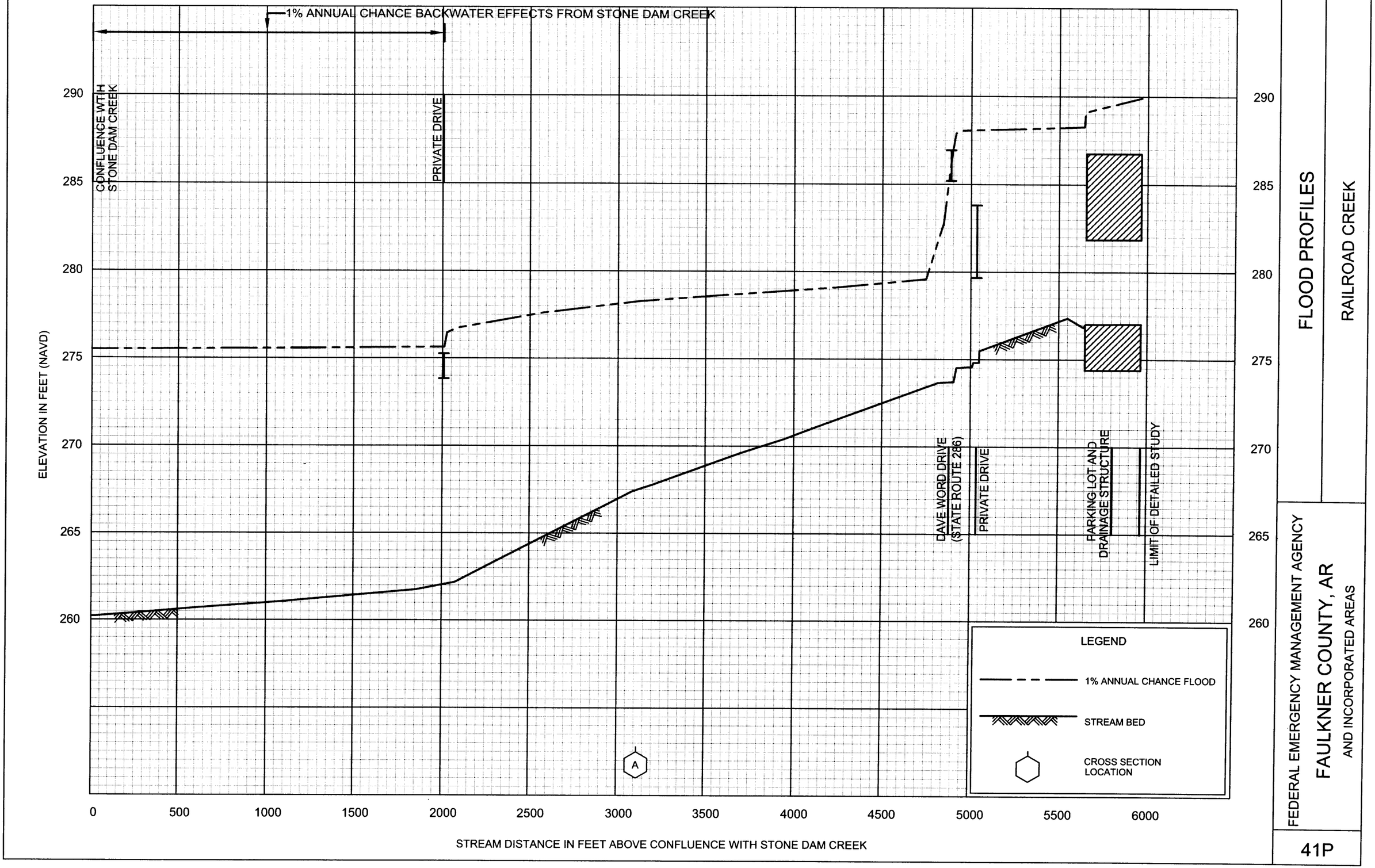
FLOOD PROFILES

PALARM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

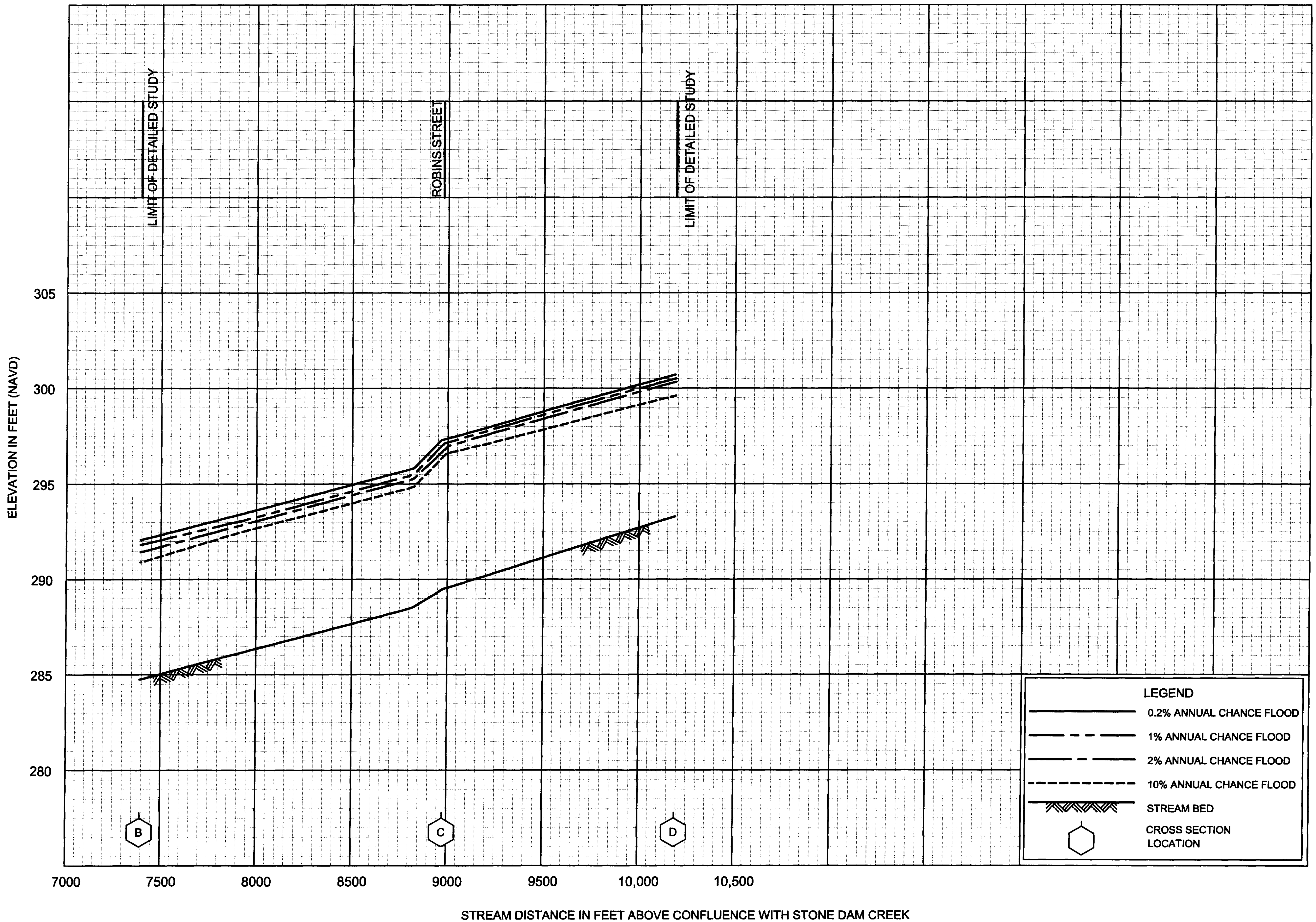
RAILROAD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

41P



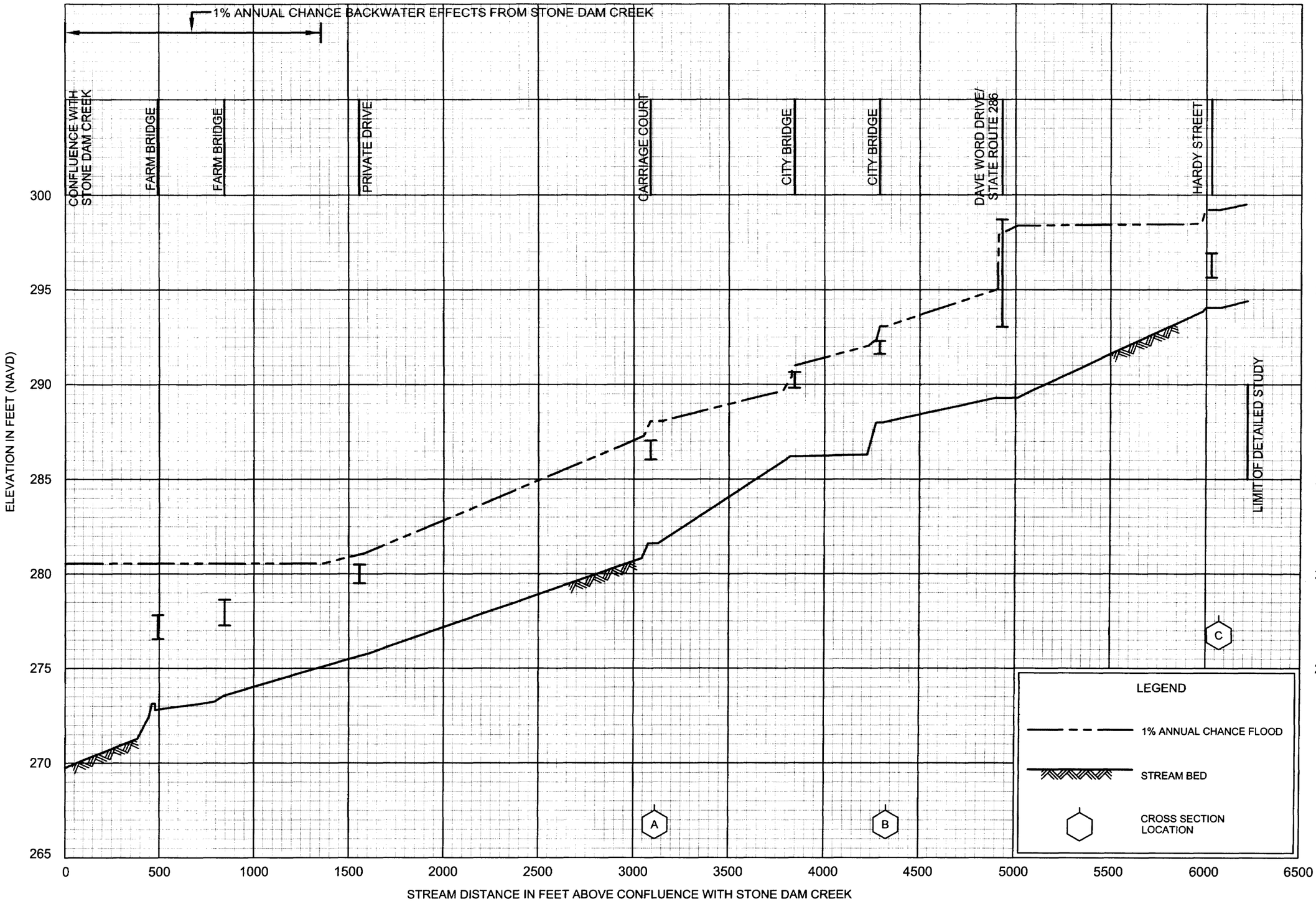
FLOOD PROFILES

RAILROAD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

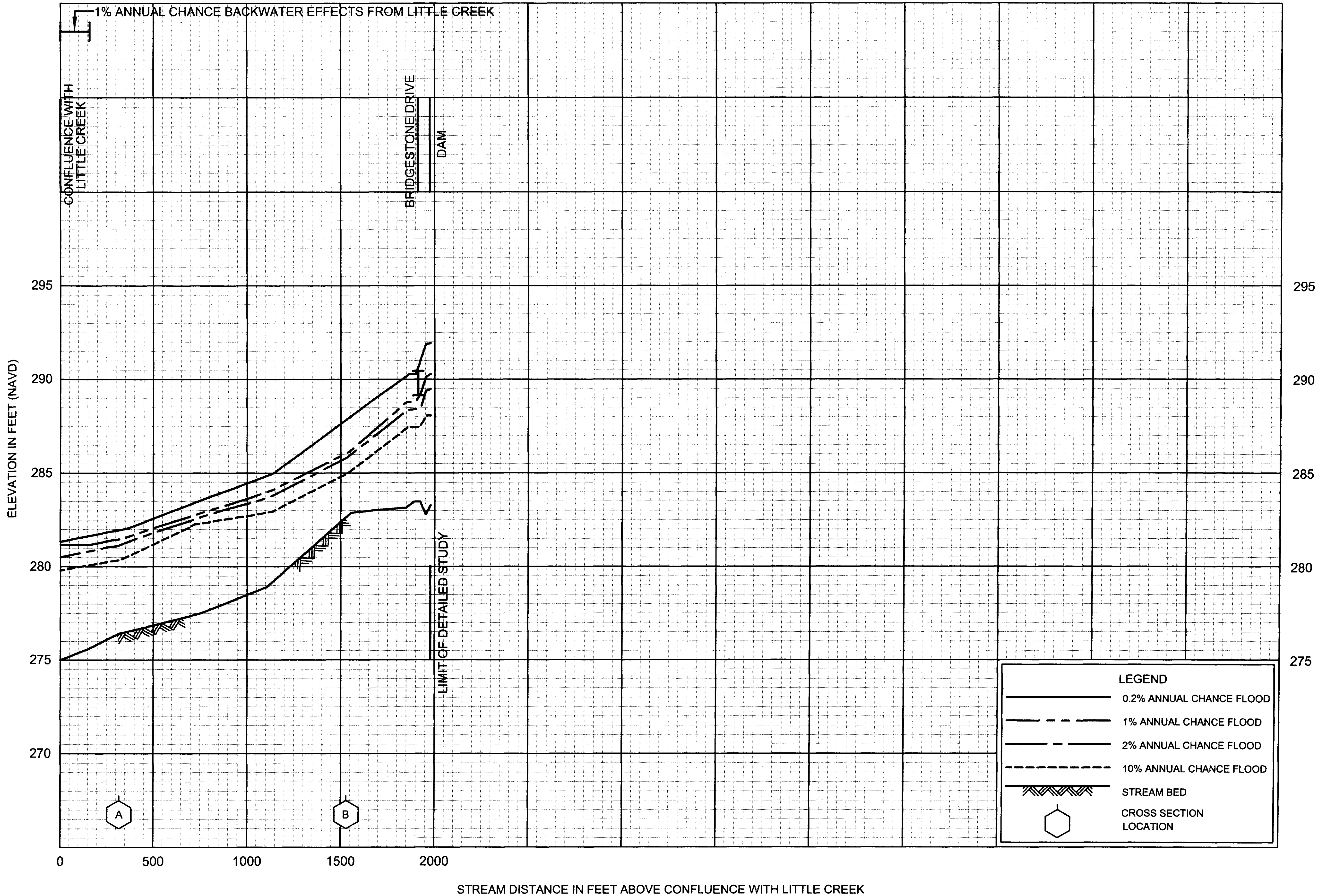
SALLY CONE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

43P



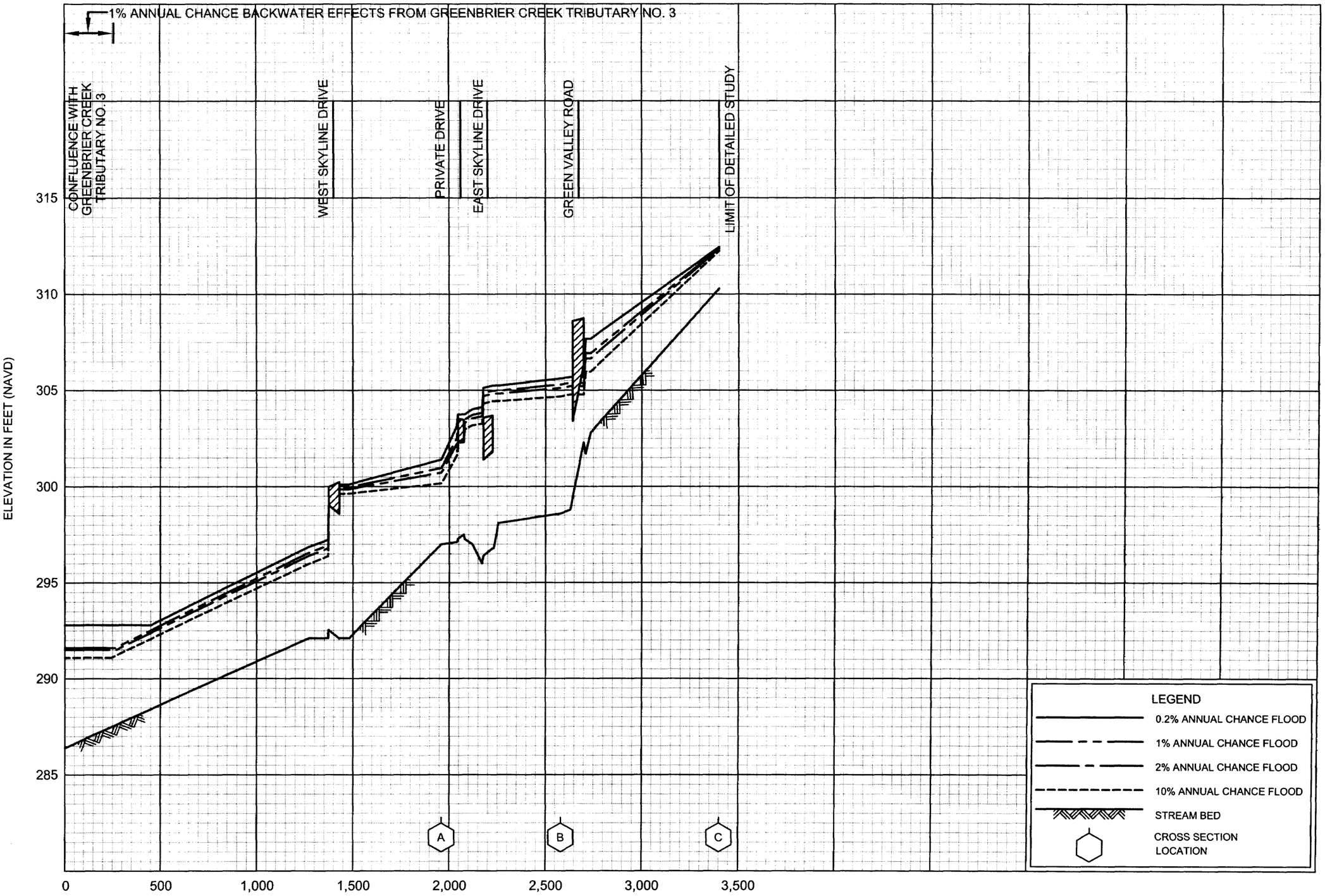
FLOOD PROFILES

SIMON BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

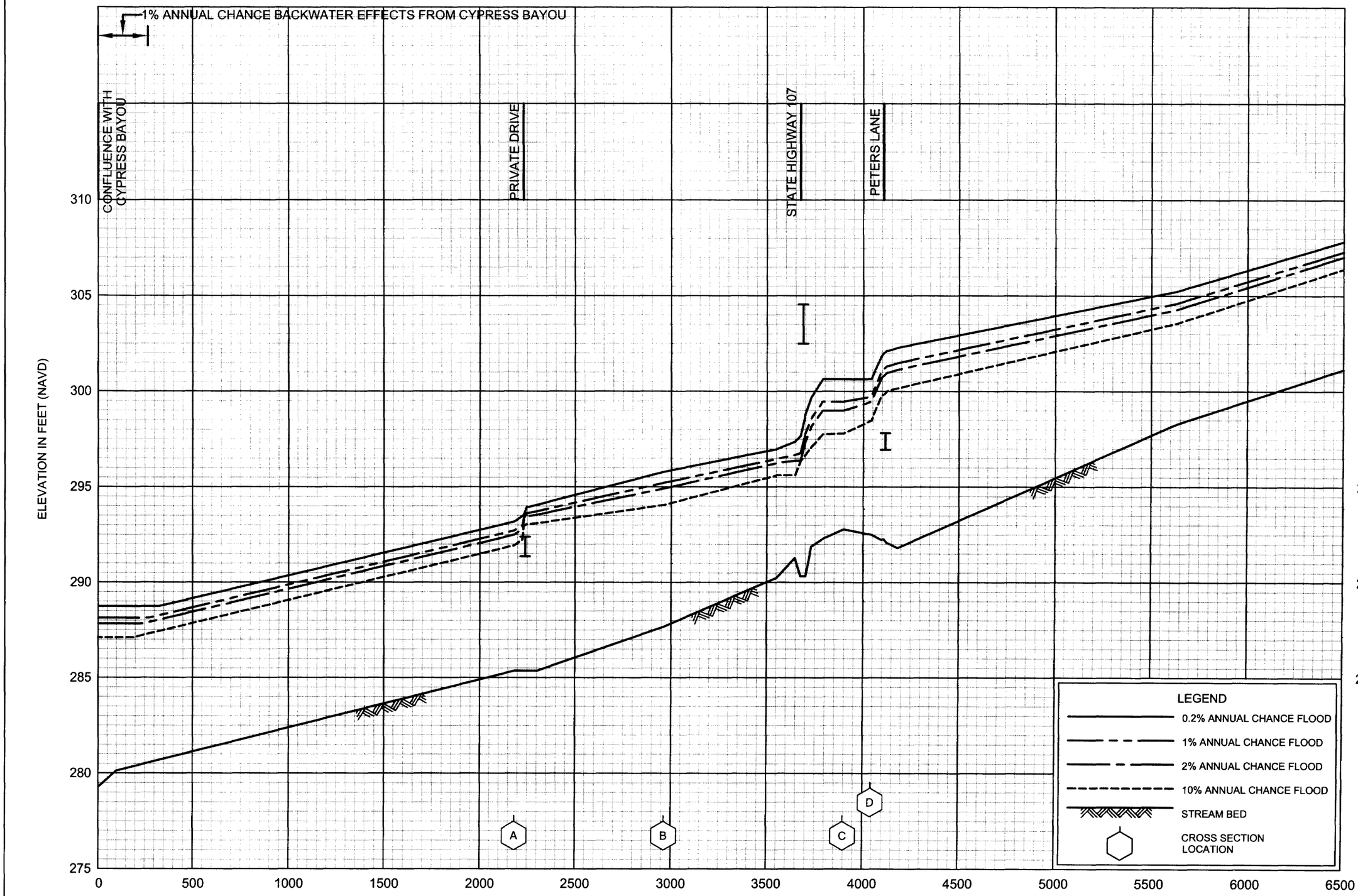
SKYLINE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

45P



FLOOD PROFILES

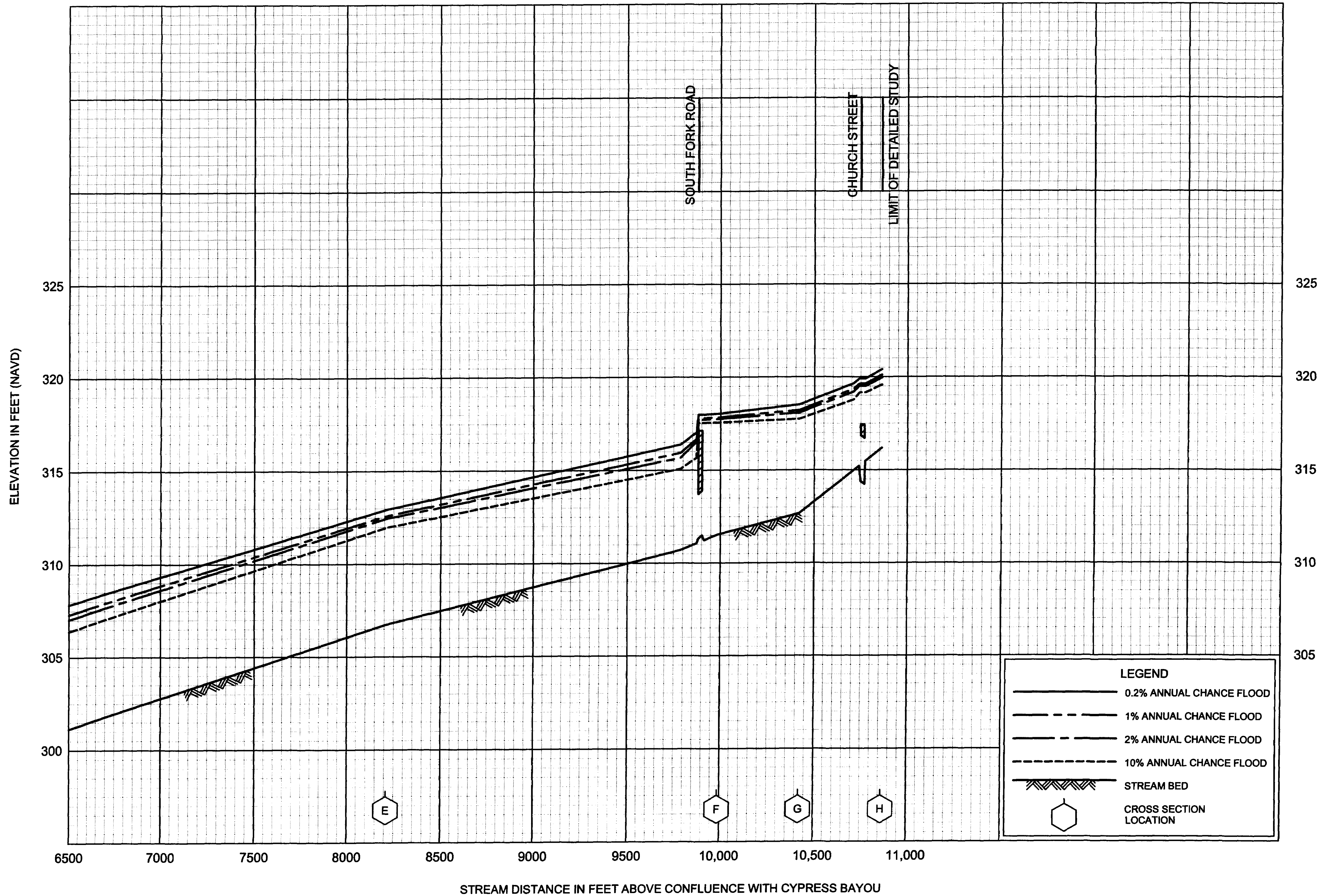
SOUTH FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

46P



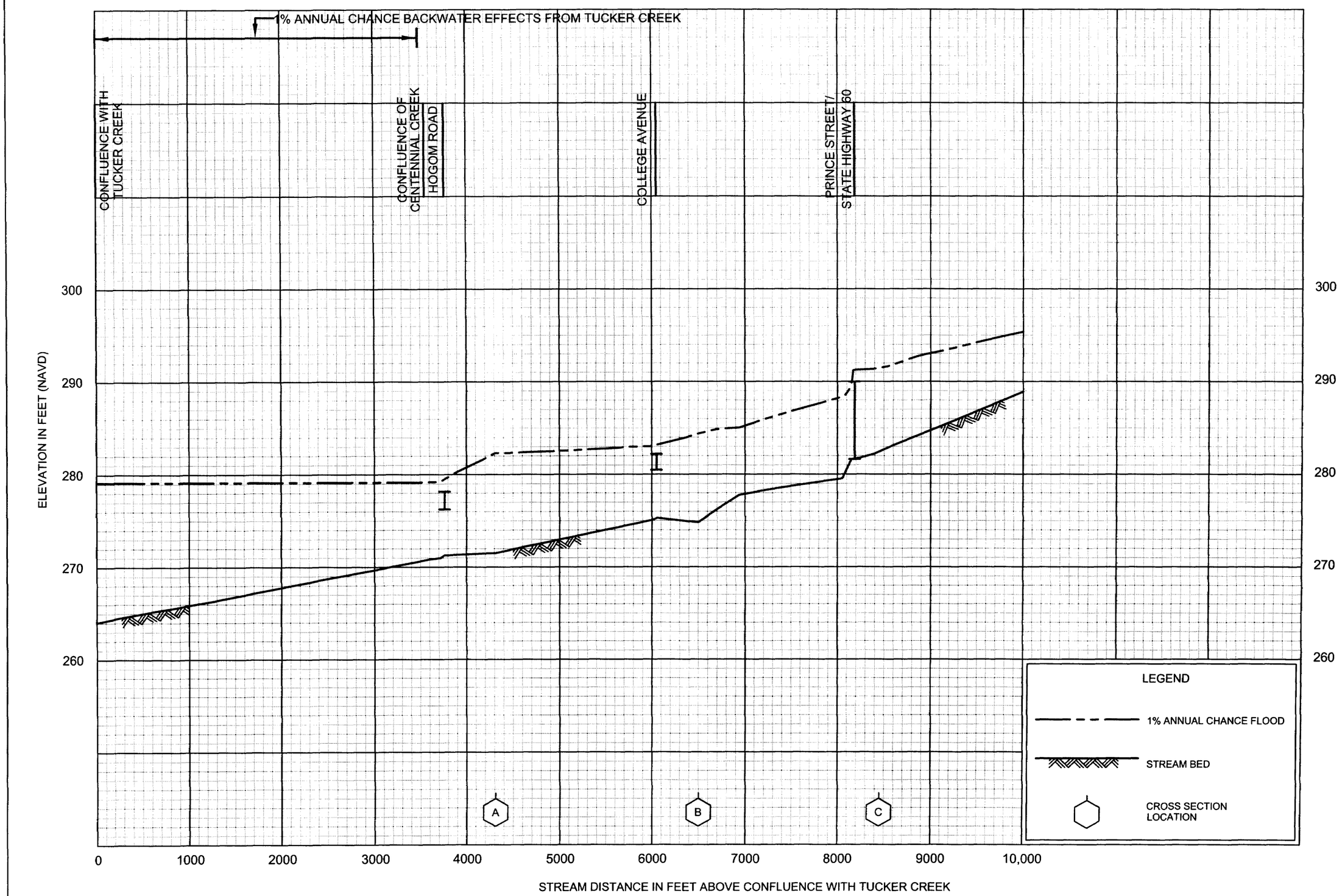
FLOOD PROFILES

SOUTH FORK CYPRESS BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

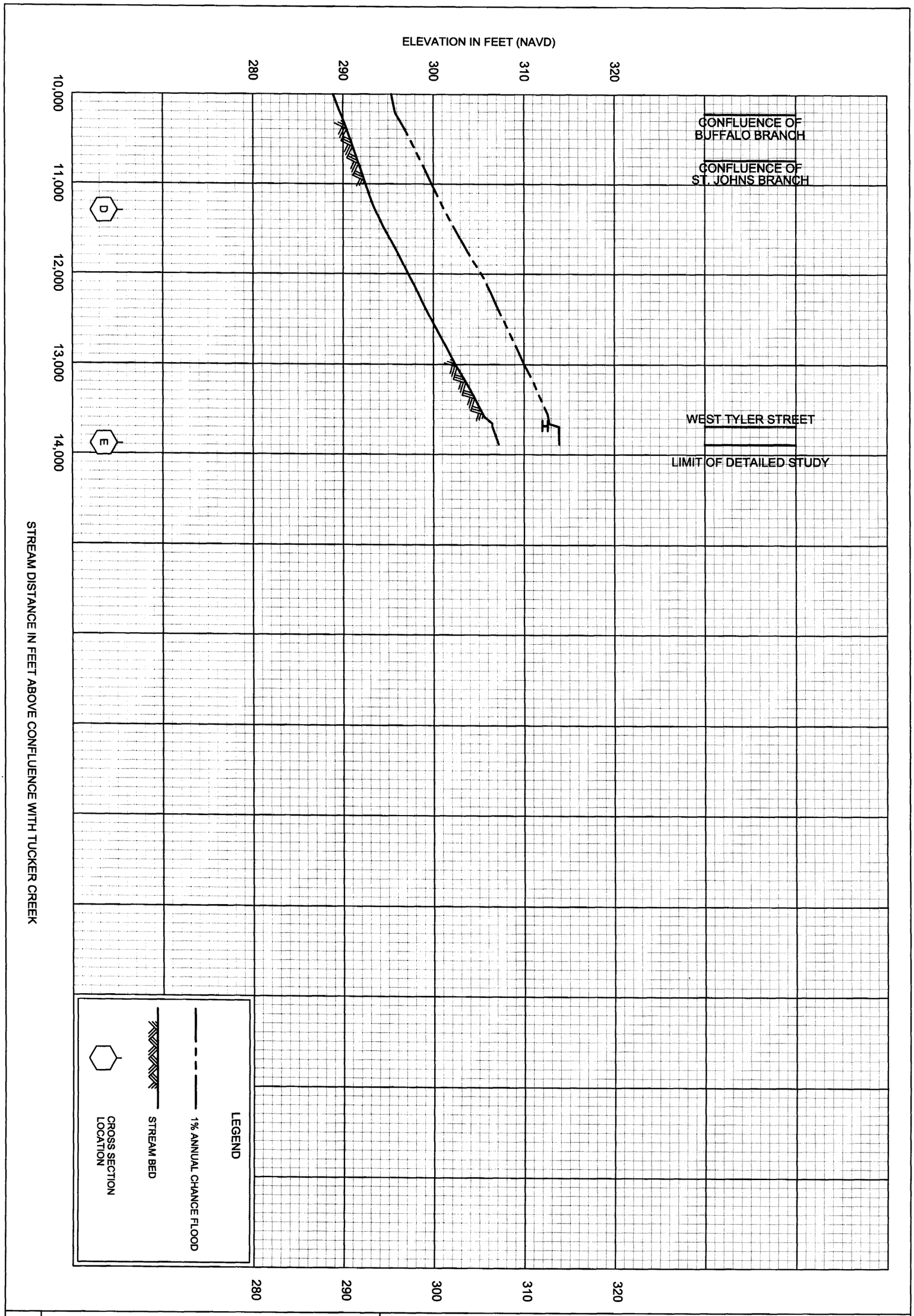
SPRING CREEK

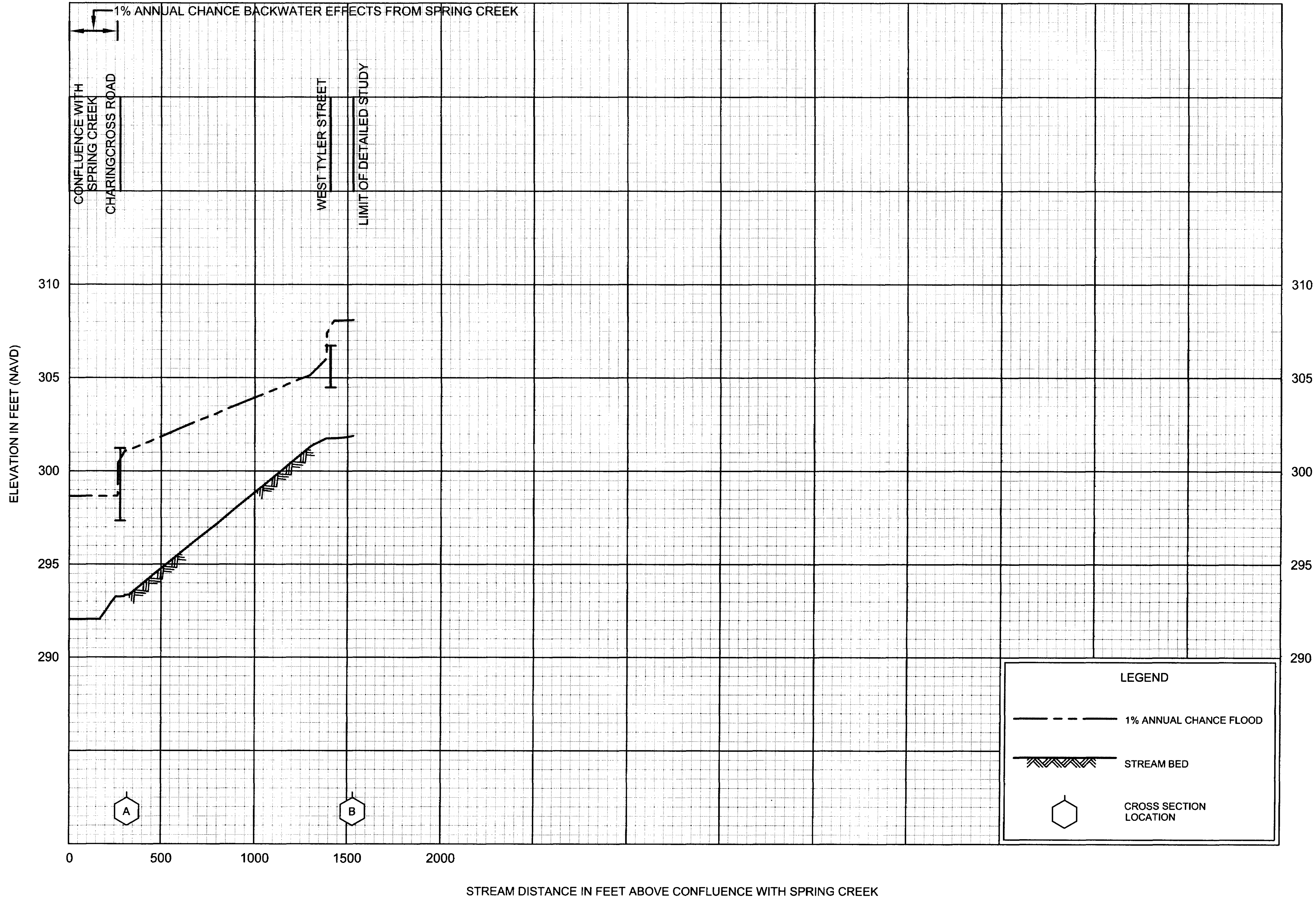
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

48P


ELEVATION IN FEET (NAVD)
280
290
300
310
320
10,000
11,000
12,000
13,000
14,000
D
E
H
CONFLUENCE OF BUFFALO BRANCH
CONFLUENCE OF ST. JOHNS BRANCH
WEST TYLER STREET
LIMIT OF DETAILED STUDY
LEGEND
1% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TUCKER CREEK



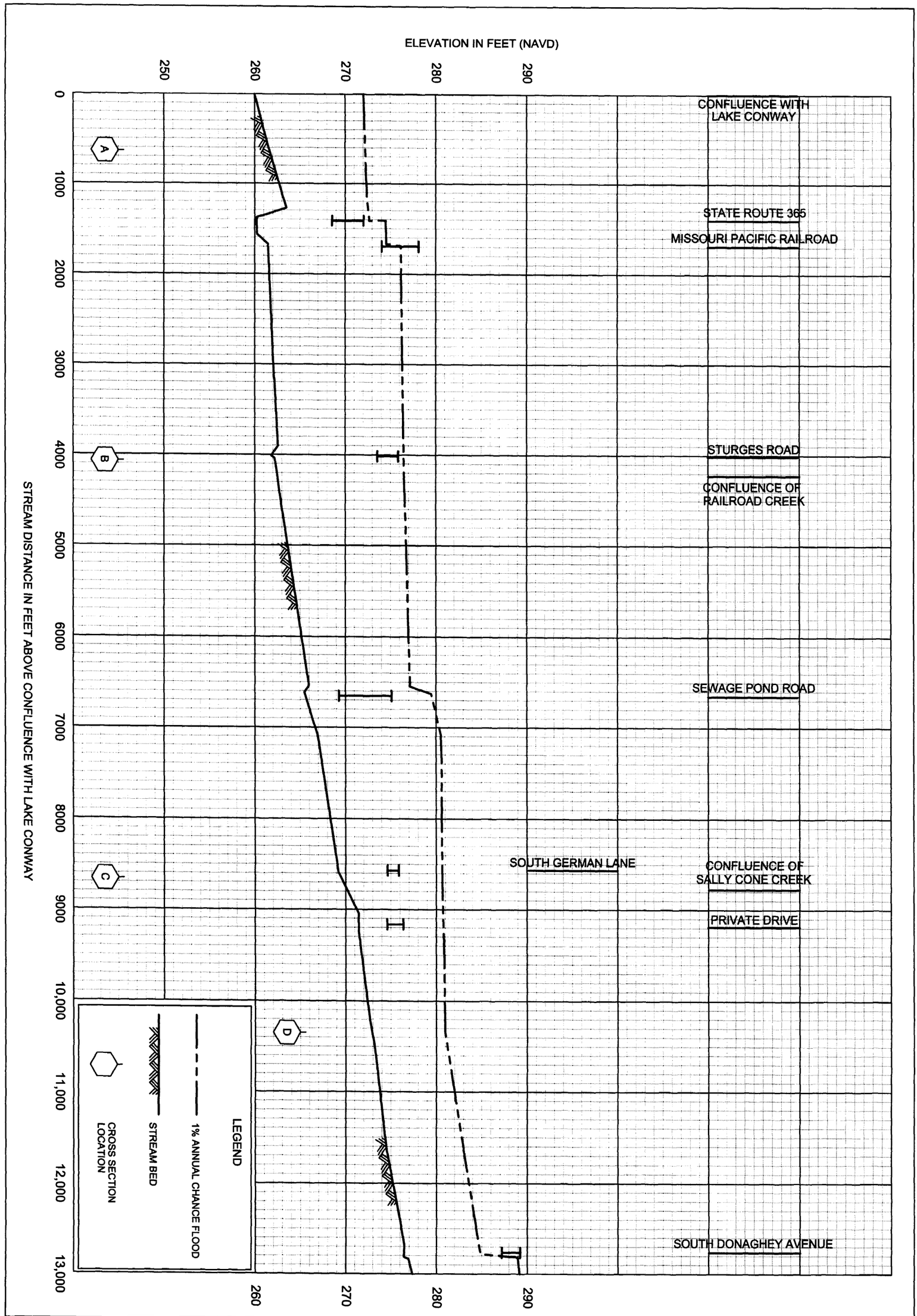
FLOOD PROFILES

ST. JOHN'S BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



51P

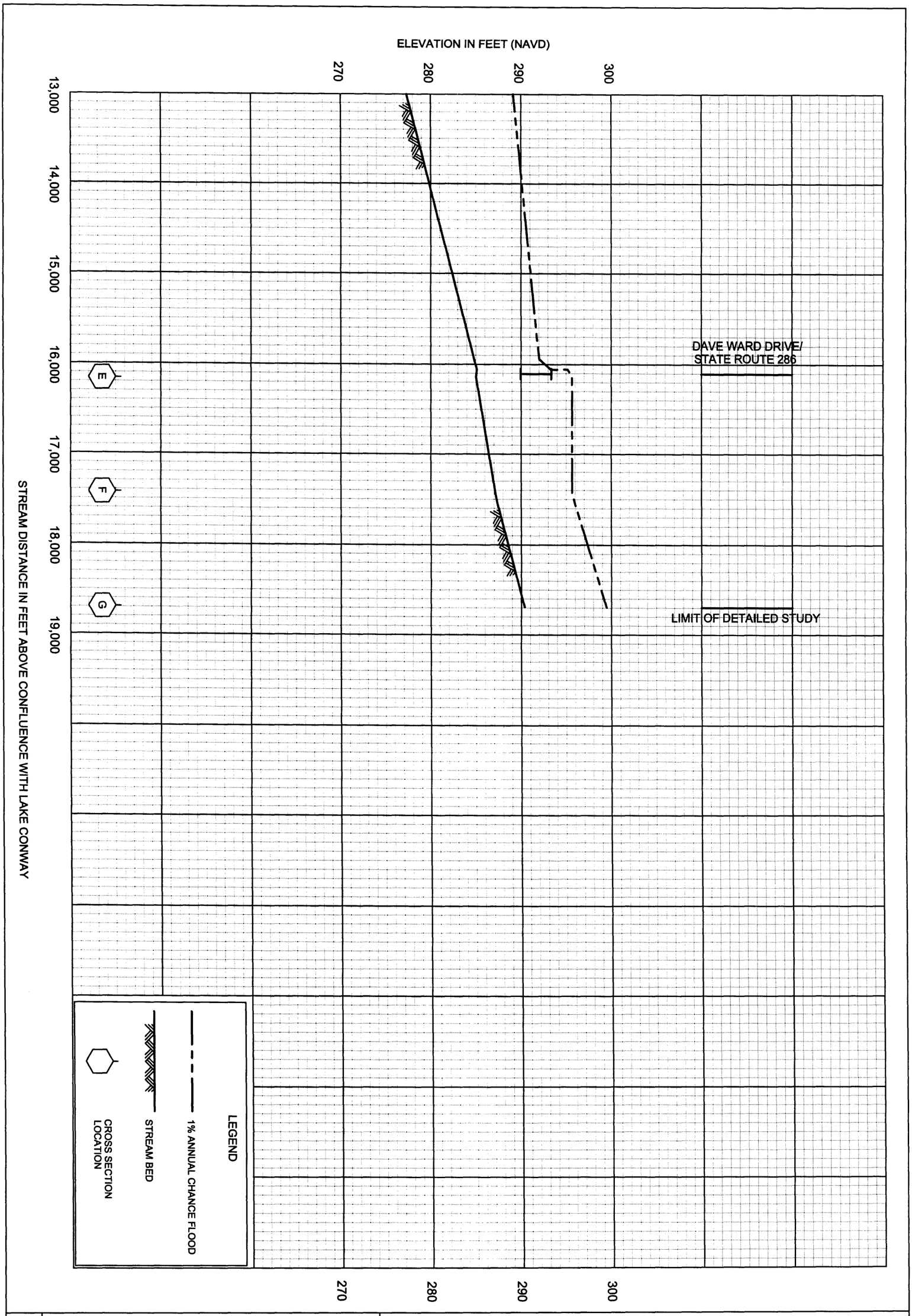
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

STONE DAM CREEK



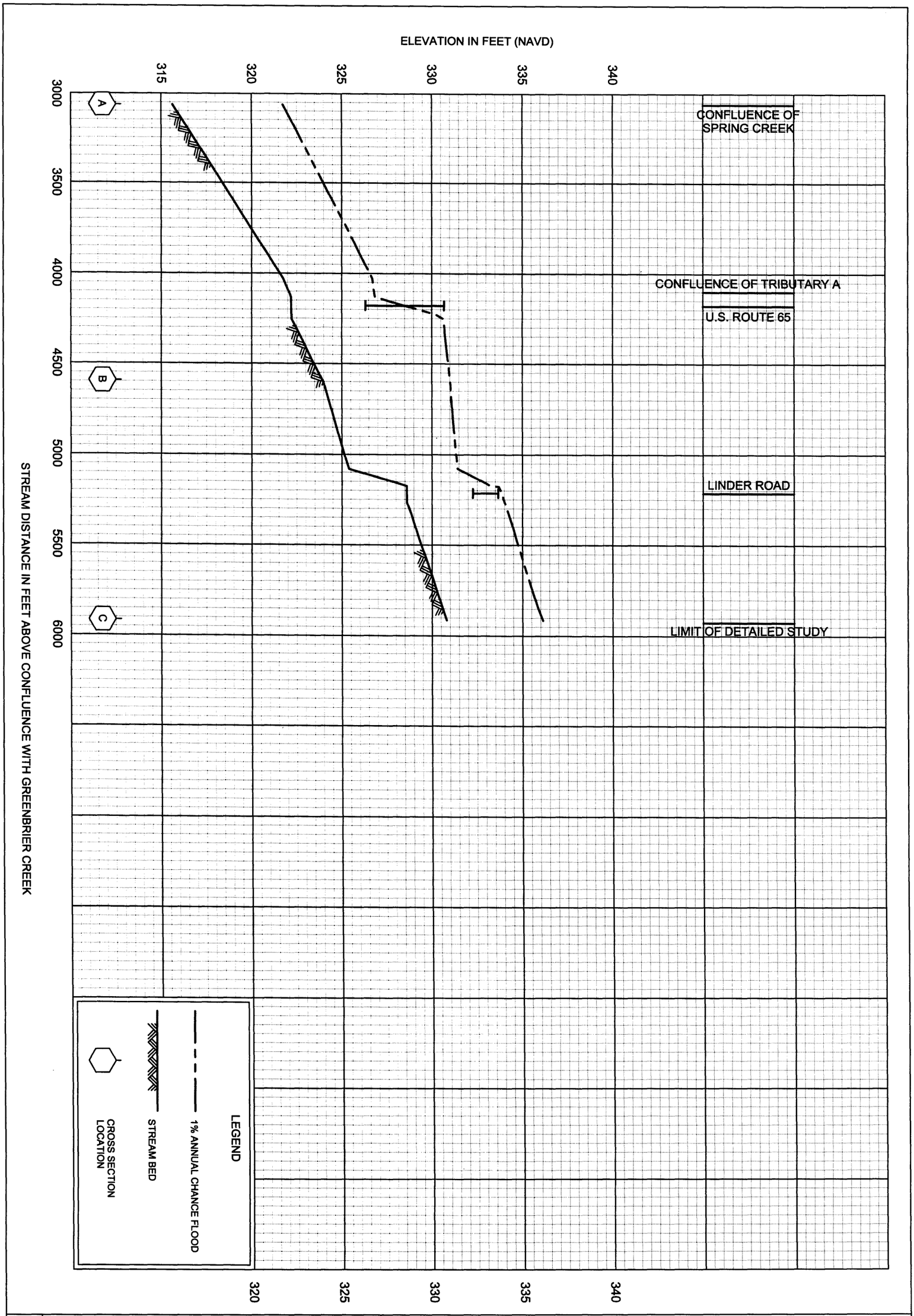
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

STONE DAM CREEK



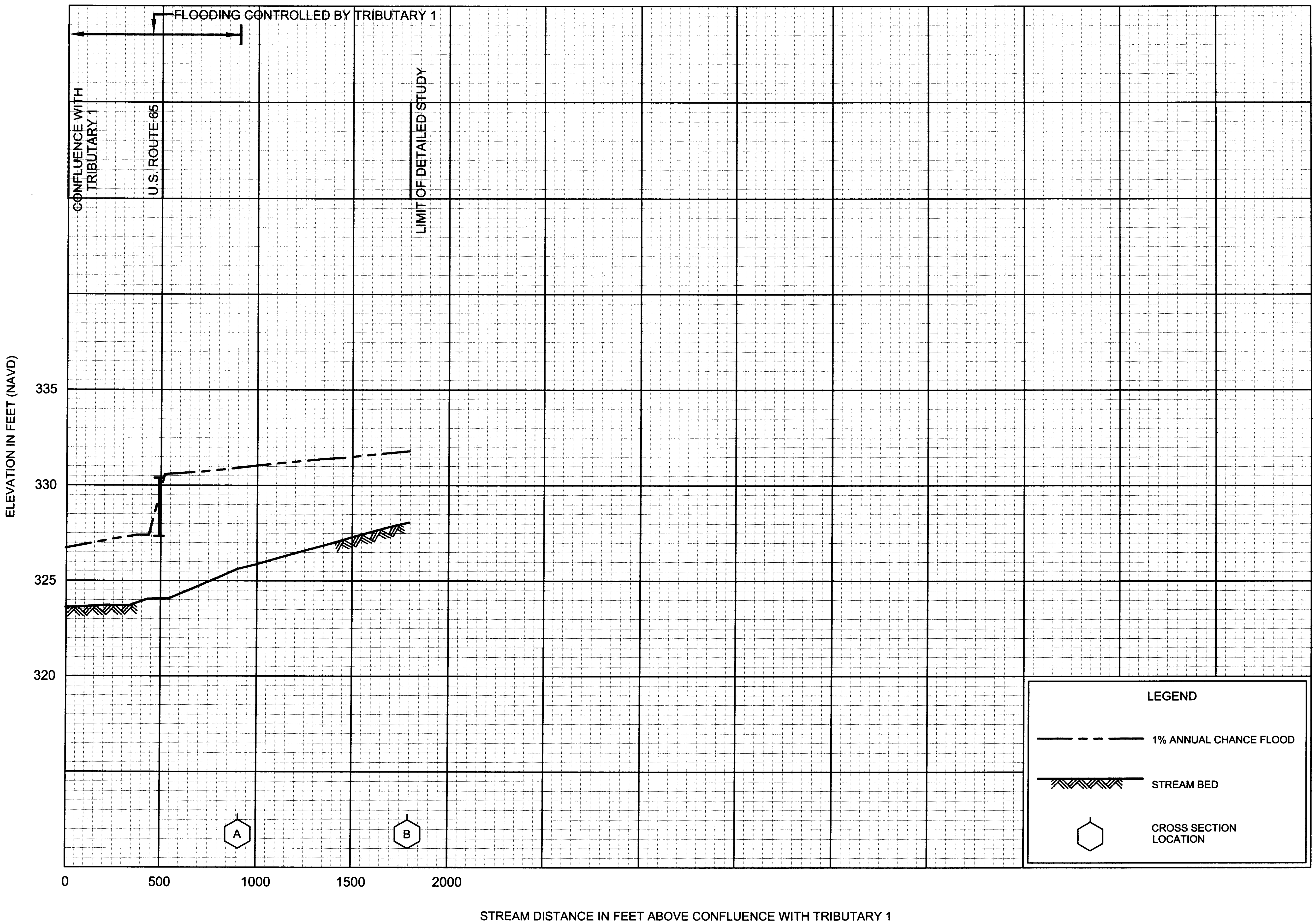
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

TRIBUTARY 1



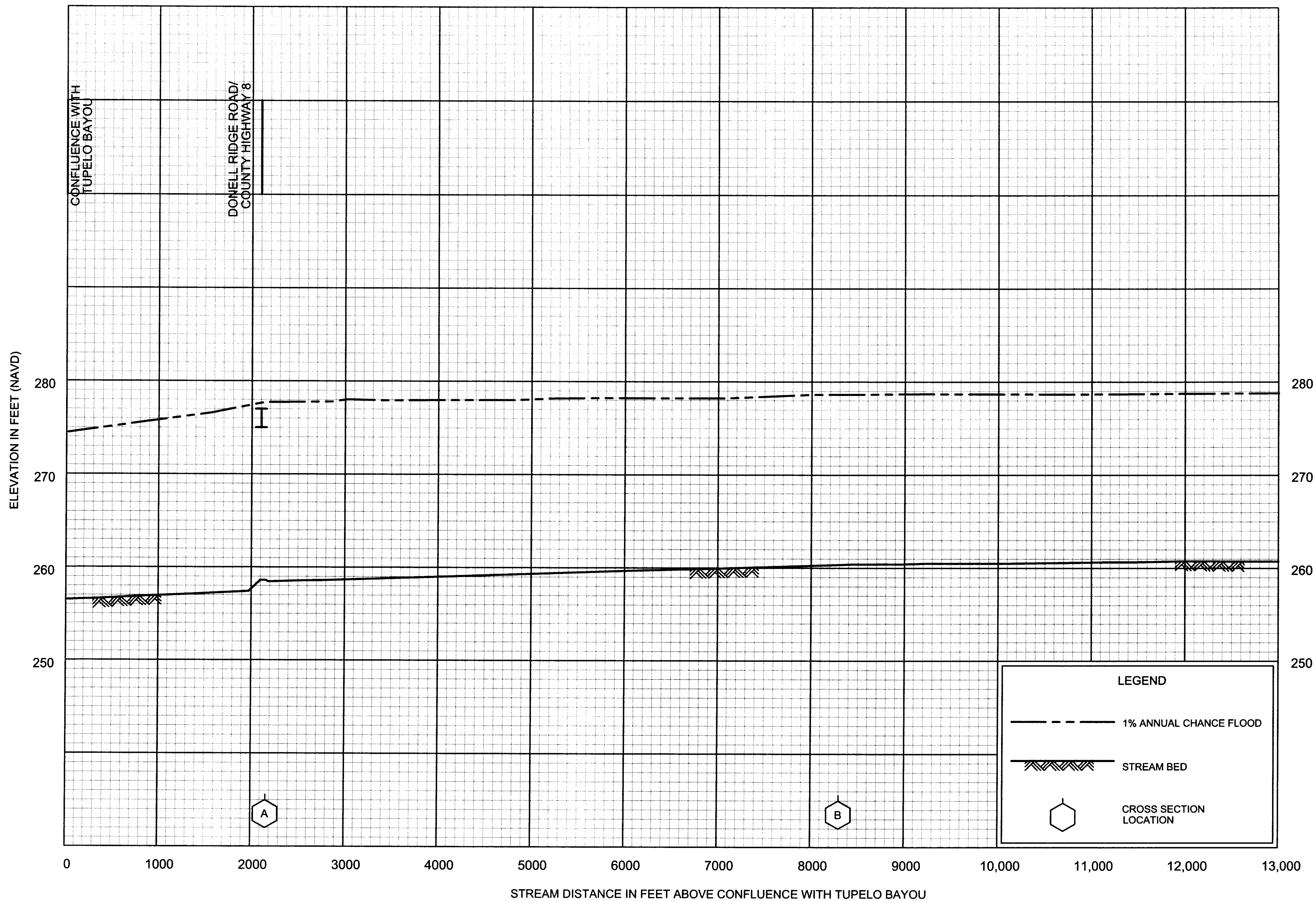
FLOOD PROFILES

TRIBUTARY A

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



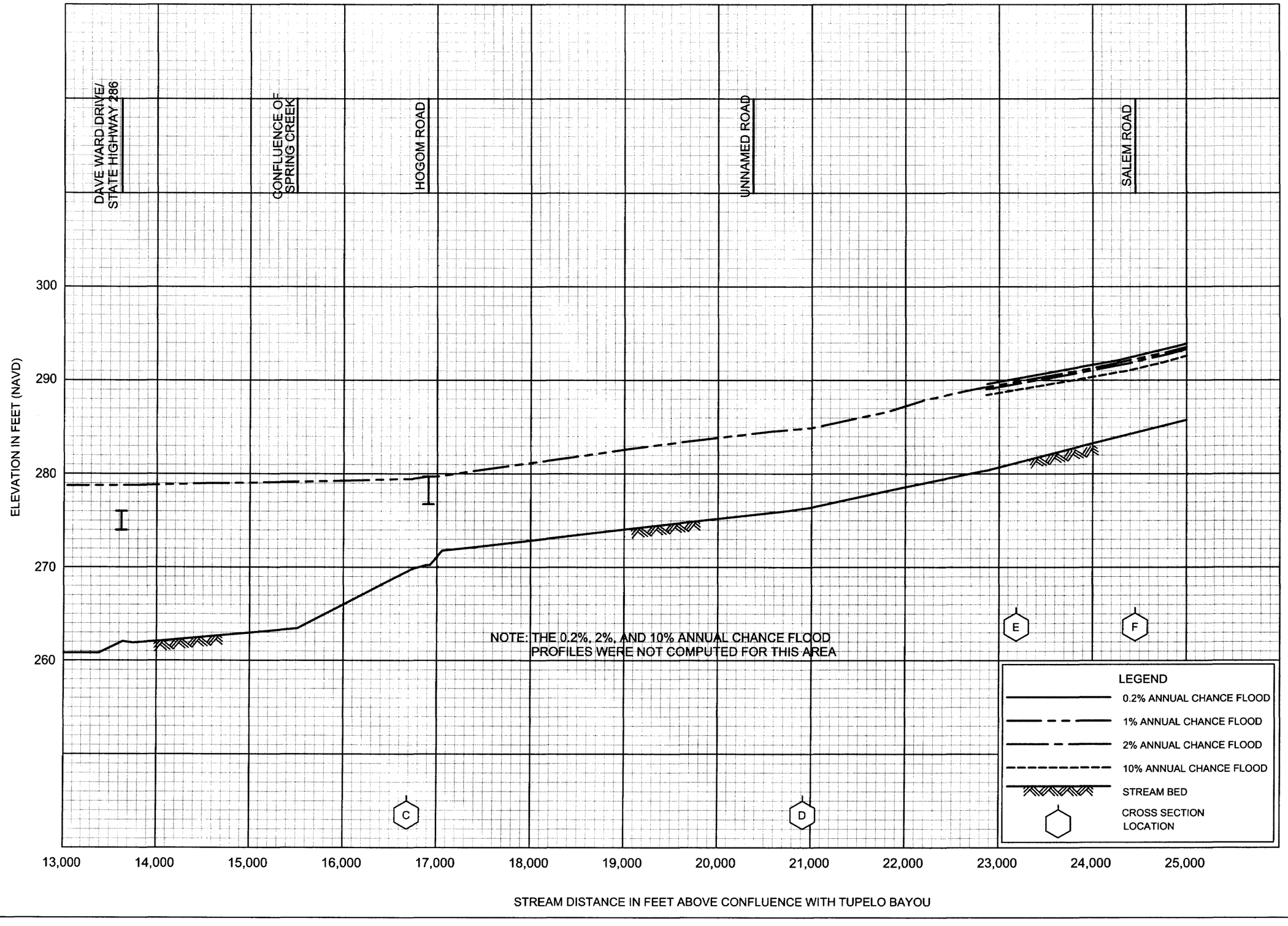
FLOOD PROFILES

TUCKER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

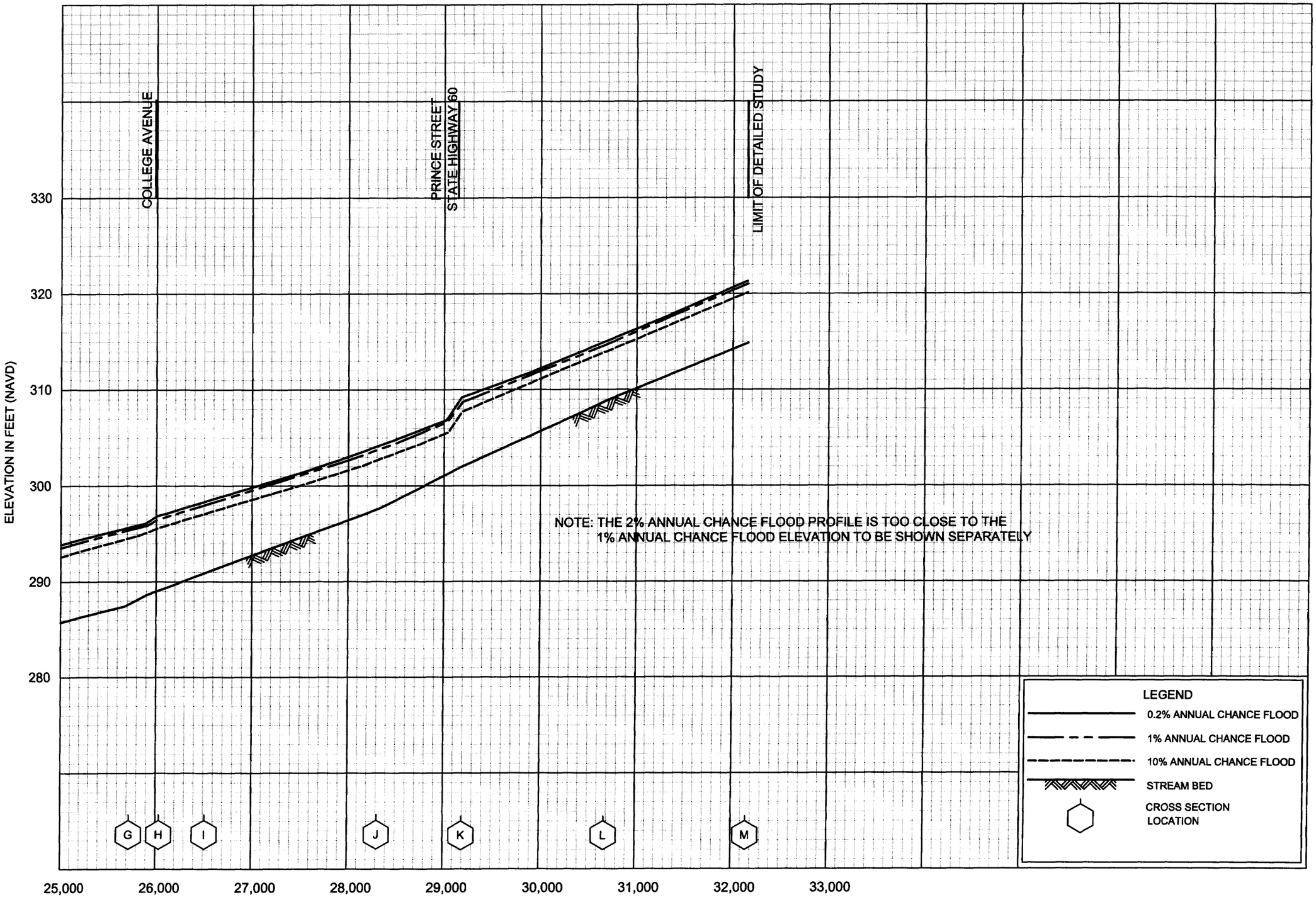
TUCKER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

56P



FLOOD PROFILES

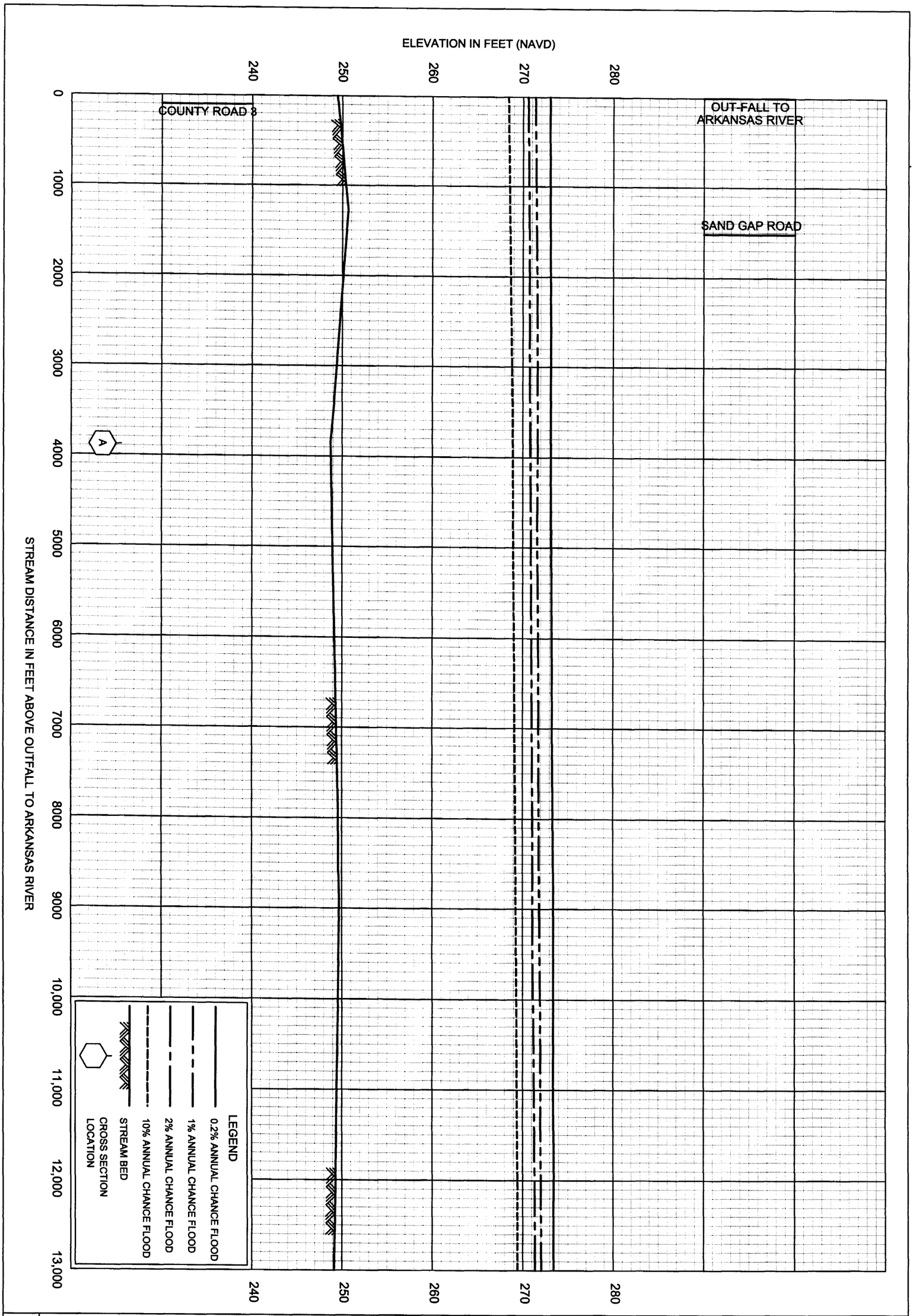
TUCKER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

57P



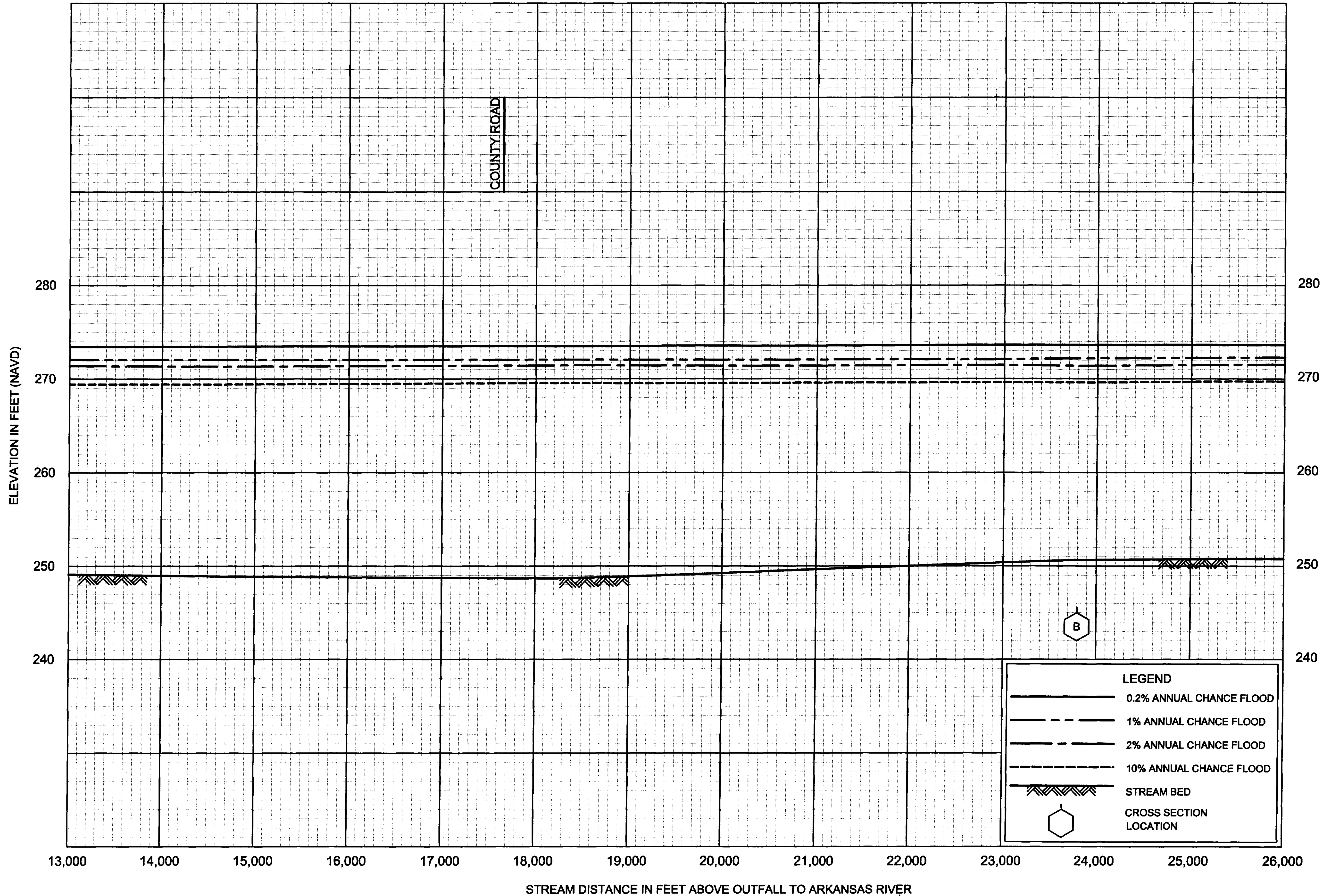
FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

FLOOD PROFILES

TUPELO BAYOU

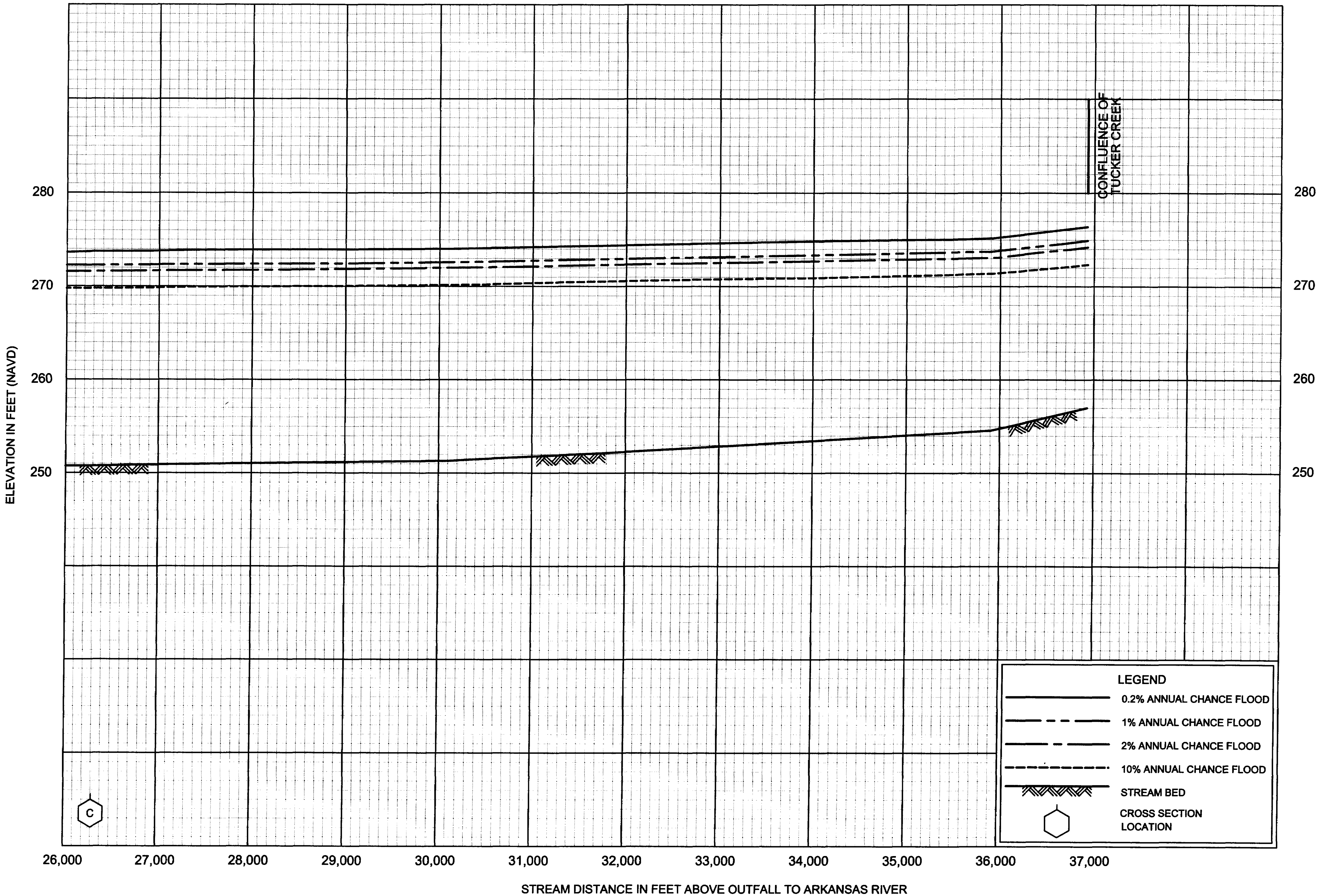


FLOOD PROFILES

TUPELO BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR AND INCORPORATED AREAS



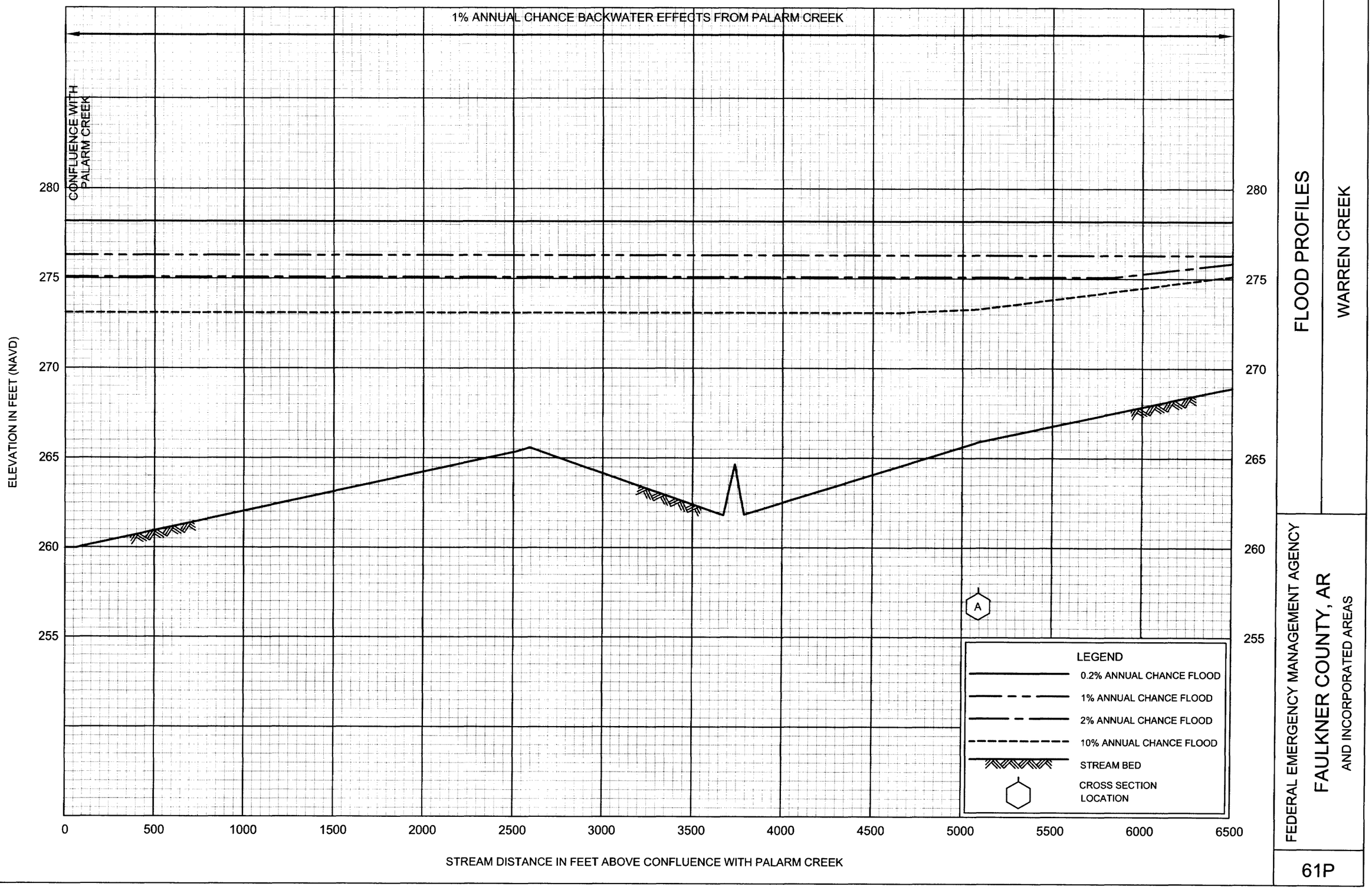
FLOOD PROFILES

TUPELO BAYOU

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS



FLOOD PROFILES

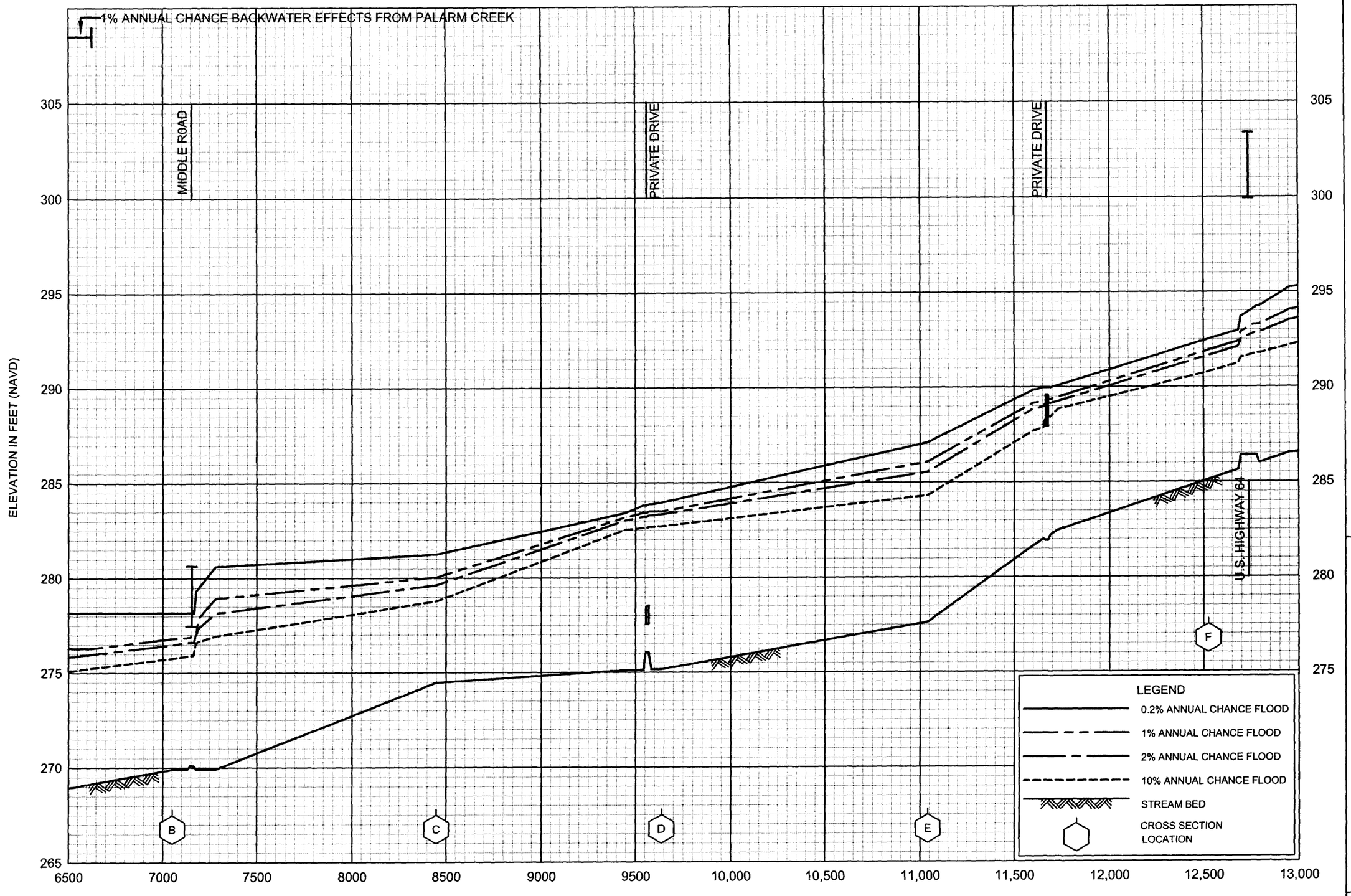
WARREN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

61P



FLOOD PROFILES

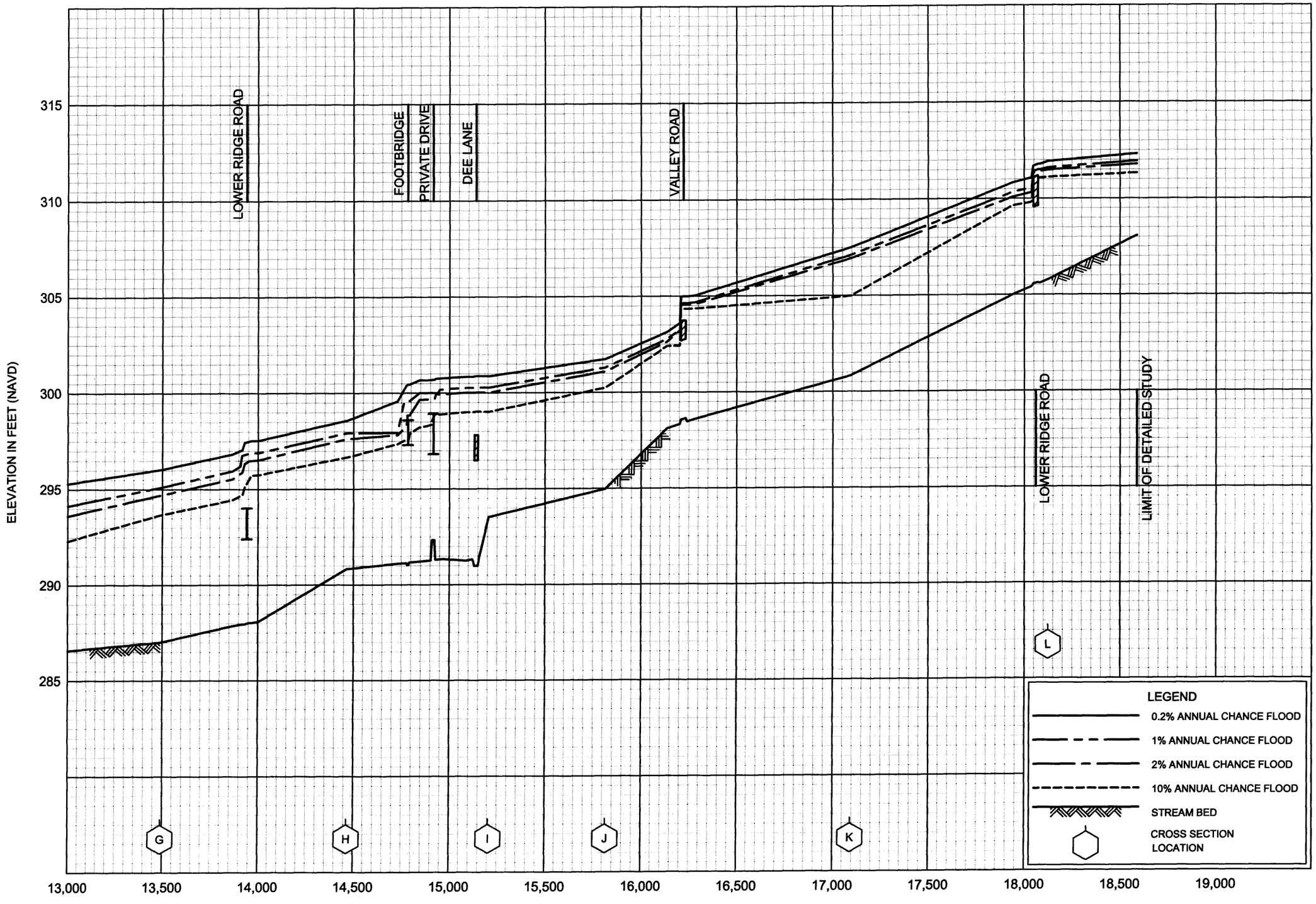
WARREN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

62P



FLOOD PROFILES

WARREN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

FAULKNER COUNTY, AR

AND INCORPORATED AREAS

63P