FLOOD INSURANCE STUDY

MADISON COUNTY, MISSISSIPPI
AND INCORPORATED AREAS

VOLUME 1 OF 2

COMMUNITY NAME	COMMUNITY NUMBER
CANTON, CITY OF	280109
FLORA, TOWN OF	280399
MADISON, CITY OF	280229
MADISON COUNTY (UNINCORPORATED AREAS)	280228
PEARL RIVER VALLEY WATER SUPPLY DISTRICT	280338
RIDGELAND, CITY OF	280110

REVISED:

Federal Emergency Management Agency
FLOOD INSURANCE STUDY NUMBER
28089CV001A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program (NFIP) have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: April 15, 1994

Revised Countywide FIS Dates: February 4, 1998

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FLOOD INSURANCE STUDY
MADISON COUNTY, MISSISSIPPI, AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the Flood Insurance Rate Maps (FIRMs) in the geographic area of Madison County, Mississippi, including the Cities of Canton, Madison, and Ridgeland, the Town of Flora, the Pearl River Valley Water Supply District, and unincorporated areas of Madison County (hereinafter referred to collectively as Madison County. The City of Jackson is not included in the Madison County Study and is shown on the FIRM panels as Area Not Included. The City of Jackson was included in its entirety in the Hinds County FIS.

This FIS 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. This information will also be used by Madison County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and by local and regional planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

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 report are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

For the City of Canton FIS effective May 1979, the hydrologic and hydraulic analyses were performed by Smith and Sanders, Inc., for the Federal Emergency Management Agency (FEMA), under Contract No. H-4057. That work was completed in January 1978.

For the City of Madison FIS effective August 3, 1989, the hydraulic and hydrologic analyses were performed by Smith and Sanders, Inc., for FEMA, under Contract No. H-4507, and revised by Neel-Schaffer, Inc. That work was completed on March 27, 1978.

For the unincorporated areas of Madison County FIS dated July 1979, the hydrologic and hydraulic analyses were performed by Smith and Sanders, Inc., for FEMA under Contract No. H-4057. That work was completed May 17, 1978.

For the City of Ridgeland FIS effective March 1979, the hydrologic and hydraulic analyses were performed by the Mobile District of the U.S. Army Corps of Engineers

(USACE) for FEMA under Inter-Agency Agreement No. IAA-H-16-75, Project Order No. 20. That work was completed in October 1979.

For the Pearl River Valley Water Supply District FIS effective March 2, 1993, the hydrologic and hydraulic analyses were performed by Neel-Schaffer, Inc. (the Study Contractor), for FEMA, under Contract No. EMW-89-C-2826. The hydrologic and hydraulic analyses for Brashear Creek, Culley Creek, Haley Creek, and Stream M were taken from the FIS for the Unincorporated Areas of Madison County, Mississippi (FEMA, 1980).

The initial, April 15, 1994, countywide FIS was prepared to include the incorporated communities within Madison County in a countywide FIS. Information on the authority and acknowledgements for each jurisdiction included in the original countywide FIS, as compiled from their previously printed FIS reports, is shown above. The original countywide FIS also incorporated revised analyses, which were performed by Neel-Schaffer, Inc., for FEMA under Contract No. EMW-88-C-2616. The work was completed August 1989.

For the February 4, 1998, countywide FIS revision, the updated hydraulic analysis for Bear Creek was prepared by Dewberry & Davis, for FEMA. The work was completed in October 1994.

For this countywide FIS revision, the hydrologic and hydraulic analyses were performed by the State of Mississippi for the Federal Emergency Management Agency (FEMA), under Contract No. EMA-2005-CA-5215. This study was completed in September 2008.

The digital base map information files were provided by the Madison County GIS/IS office. This data included digital orthophotography flown and processed by EarthData Inc. in March 2006, with a resolution of 2 feet and are in NAD 83 Mississippi State Plane West, feet projection.

The digital FIRM was produced using the State Plane Coordinate System, Mississippi West, FIPSZONE 2302. The horizontal datum was the North American Datum of 1983, GRS 1980 spheroid. Distance units were measured in U.S. feet.

1.3 Coordination

For the initial single-jurisdiction FIS reports, the dates of the initial and final Consultation Coordination Officer's meetings held for Madison County and the incorporated communities within its boundaries are shown in the following tabulation:

Community Name	Initial CCO Date	Final CCO Date
City of Canton	July 1976	July 31, 1978
City of Madison	July 1976	February 26, 1979
City of Ridgeland	January 8, 1975	October 21, 1976
Unincorporated Areas	July 1976	January 17, 1979
Pearl River Valley Water Supply District	June 8, 1988	August 27, 1991

For the initial April 15, 1994, countywide FIS, an initial CCO meeting was held on June 8, 1988. A final CCO meeting for the City of Canton and the unincoporated areas of Madison County was held on August 27, 1991, and a final CCO meeting for the Cities of Madison and Ridgeland was held on August 29, 1991.

For the February 4, 1998 revision, FEMA notified the City of Canton by letter on September 30, 1994, that a revised FIS would be prepared.

For this countywide FIS revision, an initial Pre-Scoping Meeting was held on July 6, 2005. A Project Scoping Meeting was held on August 3, 2005. Attendees for these meetings included representatives from the Mississippi Department of Environmental Quality, Mississippi Emergency Management Agency, FEMA National Service Provider, Madison County, the City of Canton, the City of Madison, the City of Ridgeland, the Town of Flora, the Pearl River Valley Water Supply District, and the State Study Contractor. Coordination with county officials and Federal, State, and regional agencies produced a variety of information pertaining to floodplain regulations, available community maps, flood history, and other hydrologic data.

2.0 AREA STUDIED

2.1 Scope of Study

For the initial single-jurisdiction FIS reports, all or portions of the following streams were studied by detailed methods:

Batchelor Creek
Batchelor Creek Tributary 1
Batchelor Creek Tributary 2
Bear Creek
Beaver Creek
Beaver Creek Tributary
Bogue Chitto Creek
Brashear Creek
Brown Creek
Culley Creek
Haley Creek
Hanging Moss Creek
Hanging Moss Creek Tributary 4
Hearn Creek
Hearn Creek Tributary `
Limekiln Creek
Little Bear Creek
Panther Creek
Purple Creek
Purple Creek Tributary 1
Purple Creek Tributary 3
Purple Creek Tributary 4
Purple Creek Tributary 5
Purple Creek Tributary 6
Purple Creek Tributary 7
School Creek
Spring Creek
Stream A
Stream B
Stream C
Stream D
Stream E
Stream F
Stream G
Stream H
Stream I
Stream J
Stream K
Stream L
Stream M
Stream N
Stream O
Stream P
Stream Q
Stream R
Stream S
Stream T
Walnut Creek
White Oak Creek

Pearl River Valley Water Supply District FIS, March 2, 1993

The Pearl River Valley Water Supply District (PRVWSD) FIS dated March 2, 1993, covered the incorporated area of the PRVWSD, Hinds, Madison, Leake, Scott, and Rankin Counties, Mississippi. The following streams were studied in detail:

Brashear Creek
Culley Creek
Haley Creek
Hearn Creek
Mill Creek
Pearl River (Ross Barnett Reservoir)
Pelahatchie Creek
Pelahatchie Creek Tributary
Plummer Slough
Spring Branch
Stream M
Turtle Creek

Madison County (Countywide) FIS, April 15, 1994

The initial April 15, 1994, countywide FIS was carried out to include flood hazard information for incorporated communities within Madison County into a countywide FIS; as part of that FIS, updated analyses were included for the following streams:

Batchelor Creek
Batchelor Creek Tributary 1
Batchelor Creek Tributary 2
Bear Creek
Brashear Creek
Culley Creek
Hanging Moss Creek Tributary 4
Hearn Creek
Hearn Creek Tributary
School Creek
Stream I
Stream J
Stream N
Stream O
Stream P
Stream Q
Stream R
Stream S
Stream T

School Creek was restudied from County Line Road to approximately 8,200 feet upstream; all of the other revised streams listed above were restudied by detailed methods for their entire length.

Madison County (Countywide) FIS Revision, February 4, 1998

For the FIS revision dated February 4, 1998, Bear Creek was restudied by detailed methods from the State Highway 22 bridge to the U.S. Highway 51 bridge to incorporate revised modeling for the State Highway 22 bridge.

This Countywide FIS

For this countywide FIS, floodplain boundaries of streams that have been previously studied by detailed methods were redelineated based on more detailed and up-to-date topographic information. Several flooding sources within the county were studied by approximate methods. Approximate analyses are used to study those areas having a low development potential or minimal flood hazards. Certain streams were studied by limited detailed methods. This study type entails collecting basic field measurements of

hydraulic structures and channel geometry. Vertical control for the measurements is established using Real Time Kinematics Global Positioning System instrumentation. Generalized roughness values are estimated from land-use data, aerial photography, and photographs collected during survey. Channel and overbank reach lengths are computed using GIS methods. Model results are calibrated to known stage values, as they are available and deemed reliable.

The following table lists the flooding sources, which were newly studied by detailed methods:

TABLE 1. STREAMS STUDIED BY DETAILED METHODS

Stream	Limits of New Detailed Study
Bear Creek	From Weisenberger Road to Reunion Lake #2
Beaver Creek	From Highway 51 to a point 60 feet downstream of Wheatley Street
Brashear Creek	From Madison Avenue to a point 1500 feet upstream of Highland Colony Parkway
Panther Creek	From a point 400 feet upstream of Stokes Road to a point 160 feet upstream of Catlett Road
Purple Creek	From the county boundary to a point 190 feet downstream of Interstate 55 and from Old Agency Road to Highland Colony Parkway
School Creek	From the county boundary to appoint 40 feet downstream of Lake Harbour Drive
Stream O	From Interstate 55 to Gluckstadt Road
Stream Q	From the confluence with Bear Creek upstream to Reunion Lake #1
Stream R	From the confluence with Stream Q to Dewees Road

TABLE 2. STREAMS STUDIED BY LIMITED DETAILED METHODS

Stream	Limits of New Limited Detailed Study
School Creek Tributary 1	From the confluence with School Creek to Rice Road
School Creek Tributary 2	From the confluence with School Creek to Camelia Lane
White Oak Creek Tributary 1	From the confluence with White Oak Creek to a point 360 feet upstream of Bridgewater Crossing

Also, floodplain boundaries of streams that have been previously studied by detailed methods were redelineated based on more detailed and up-to-date topographic information.

This countywide FIS incorporates the determination of letters issued by FEMA resulting in map changes that are still valid.

LOMC Number	Stream
00-04-257P	Hanging Moss Creek Tributary 4
01-04-403P	Purple Creek Tributary 4
03-04-323P	White Oak Creek
03-04-447P	School Creek
04-04-181P	Hearn Creek
06-04-B265P	Stream S
06-04-BC51P	Culley Creek
06-04-C016P	Bear Creek
98-04-043P	Purple Creek
99-04-107P	White Oak Creek

Several flooding sources within the county were studied by approximate methods. Approximate analyses are used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and the State of Mississippi

2.2 Community Description

Madison County is located in central Mississippi. It is bordered by Attala County to the north; Holmes and Yazoo Counties to the northwest; Hinds County to the west and southwest; Rankin and Scott Counties to the southeast; and Leake County to the east. Madison County is served by Interstate Routes 55 and 220, U.S. Highway 51, and State Routes 16, 22, 43, and 463. Rail service is provided by the Canadian National Railroad.

The 2005 population of Madison County was reported to be 49,131 (U.S. Census Bureau, 2006). Because of its proximity to the Jackson, MS, metropolitan area, the county is experiencing rapid urban development and associated population gain, particularly in the southern portion of the county.

The economy of Madison County is diverse with manufacturing and retail trade being the largest industries (U.S. Census Bureau, 2006).

The topography of Madison County consists of rolling hills with large flat areas in creek and river bottoms. Vegetation consists of moderate stands of pines and a large variety of hardwoods. Most stream channels are filled with vegetation. The floodplains of the streams vary from low swampy areas to dense woods to pasture. The climate of the county is generally mild and humid, with abundant rainfall that averages 55.8 inches annually (National Weather Service, Vicksburg, 2006). Temperatures range from monthly averages of 45 degrees Fahrenheit (°F) in January to 82°F in July (msstate.edu, City of Canton, 2006).

2.3 Principal Flood Problems

Madison County is drained by two large river systems. The Big Black River forms northeast of Canton in Webster County, and flows generally southwest, forming the western boundary of Madison County, to its confluence with the Mississippi River south of Vicksburg. The Big Black River and its major tributaries – Black Creek, Bear Creek, Panther Creek, Bogue Chitto Creek, and Doaks Creek – drain most of the county except for the extreme southern and eastern portions, which are drained by the Pearl River. The Pearl River forms the northeast of Canton in Winston County, and flows initially southwest, forming the eastern boundary of Madison County. The river flows south to its confluence with the Gulf of Mexico. Several Pearl River tributaries, including Brashear Creek, Purple Creek, and White Oak Creek, drain the extreme southern portion of Madison County.

Although the Pearl River and the Big Black River have experienced flooding in the past, little damage to property has occurred since the land along both streams is generally underdeveloped, except in the Ross Barnett Reservoir area on the Pearl River. However, development in the floodplains of other streams is occurring at a rapid pace due to the expansion of the metropolitan area of Jackson. Streams flowing through developing areas include Bear Creek, Batchelor Creek, Brashear Creek, Culley Creek, School Creek, and others. Purple Creek has experienced major development and has had several detention basins constructed along the creek. A portion of Culley Creek has been relocated. Several new developments have been constructed along unstudied streams in the Town of Flora.

2.4 Flood Protection Measures

The Ross Barnett Reservoir, formed by a dam on the Pearl River near the Hinds-Madison County boundary, was designed primarily as a recreational and water supply facility. The reservoir, which was constructed in the early 1960's, operates at a normal pool level of 297.4 feet North American Vertical Datum 1988 (NAVD). The emergency spillway is opened during high-water stages to maintain a maximum pool elevation of 299.9 feet NAVD. Flood retarding measures resulting from operation of this facility are minimal.

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 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.

March 2, 1993, Pearl River Valley Water Supply District FIS Analyses

For the March 2, 1993, Pearl River Valley Water Supply District FIS, hydrologic studies were conducted by the USACE and coordinated with the USGS to develop data for the computation of flood damage reduction benefits used in flood control studies for the City of Jackson and other areas. Frequency analysis was conducted for flood discharges at the City of Jackson, under the assumption that floods were not attenuated by Ross Barnett Reservoir. Two different hydrologic models were developed by the USACE in their flood control projects. The HEC-1 model was used to simulate the basin's runoff characteristics for project design and to analyze the effect of the project at downstream locations (USACE, 1985). The HEC-5 model was used to simulate the long-term operation of the reservoir and to analyze the effect of the proposed Shoccoe Dam Flood Control Project at the reservoir (USACE, 1983).

The HEC-5 model simulates the operation of the reservoir by using the storage curve (elevation-volume) and the spillway rating (elevation-discharge). The model output represents daily outflows and pool elevations. The model was then operated to compute discharges fro various frequencies of floods for natural conditions.

Peak discharge-frequency data for several of the tributaries of the Pearl River (Brashear, Culley, and Haley Creeks, and Stream M) studied in detail were computed using regional relationships relating basin characteristics to streamflow characteristics, with adjustments made when urbanization in the watershed caused significant increases in peak discharges (Dept of Interior, 1978; USGS, 1983). Peak discharge values for the remaining tributaries studied in detail were determined by regression equations (USGS, 1983).

April 15, 1994, Countywide FIS Analyses

For the initial countywide FIS, discharge information for floods on Bear Creek were developed at the crossings of U.S. Route 51 by the USGS using a log-Pearson Type III analysis of annual peaks at two stream gage sites with a period of record from 1951 to 1983. For other sites on Bear Creek, flood frequencies were determined by transfer of stream gage data from the two stream gages using USGS methodology as described in Flood Frequency of Mississippi Streams (Dept. of Interior, 1976).

For other streams revised for the April 15, 1994, FIS, peak discharge-frequency data were developed using regional relationships relating basin characteristics to streamflow characteristics developed by the USGS, with adjustments made when urbanization in the watershed caused significant increases in peak discharges (Dept. of Interior, 1983 and 1984).

Within the unincorporated areas of the county, peak discharge-frequency data for the Pearl River tributaries originating in south Madison County and flowing into Hinds

County through the Jackson Metropolitan area were determined using generalized flow curves developed for various percentages of urbanization (Dept. of Interior, 1974). The curves were developed using records from eight stream gages maintained in the Jackson metropolis area by the USGS. The average period of record for these stream gages was 19 years.

A gaging station on Bogue Chitto Creek at State Route 22 near Flora was operated by the USGS from 1953 to 1970. values for the 10-, 2-, 1-, and 0.2-percent annual chance peak discharges on Bogue Chitto Creek at this location were obtained from a log—Pearson Type III distribution of annual peak flow data for the 18-year period of record. These computations were performed according to the "Guidelines for Determining Flood Flow Frequency." by the U.S. Water Resources Council (Dept. of Interior, July 1976). These values compared favorably with those obtained from the generalized study, Flood Frequency of Mississippi Streams (Dept. of Interior, 1976). However, the final peak flow-frequency values used for Bogue Chitto Creek within the unincorporated areas of the county were those obtained form Flood Frequency of Mississippi Streams (Dept. of Interior, 1976), because the period of record at the gaging station was considered too short to adequately project the 1.0- and 0.2-percent peak discharges.

Within the City of Ridgeland, flood flows were determined using data from USGS gages on eight of the major streams in the Jackson metropolitan area, which have been in operation since 1952. The discharges for floods of the selected recurrence intervals were determined using the computer program FREQFLO, which was developed under the guidance of the U.S. Water Resource Council (University of Texas, 1976). The eight stream gages used to calculate discharge data for streams within the City of Ridgeland are listed below:

Stream Name	Period of Record (Years)	Drainage Area (Square Miles
Caney Creek	14	8.31
Eubanks Creek	22	4.00
Hanging Moss Creek	23	3.45
Hanging Moss Creek Tributary 1	23	16.00
Lynch Creek	22	11.10
Purple Creek	23	5.85
Three Mile Creek	13	1.12

To develop flows at other points along these streams and for other streams in the Ridgeland area, the developed flows for each of these gaging stations were plotted graphically. As the drainage area changed, the associated flow could be determined graphically. Because the percentage of either imperviousness of urbanization also varied throughout the area, flows for various streams would vary according to the percentage of urbanization. To fully consider this change in urbanization, the developed curve plotting the gagin station data had to vary accordingly. A series of parallel lines were selected to show this relationship graphically. These lines were plotted to best fit the interrelationship of the drainage area, flow, and percentage of urbanization. The resulting series of lines could then be used to develop flows for various drainage areas for various percentages of urbanization.

To convert this generalized flow curve into a mathematical equation, the series of lines had to be a function of each other and still best represent the historical data used. The selected slope of the lines best fit a change in urbanization corresponding to five times the change in flow. The resulting equation is a function of flow, drainage area, percentage urbanization, and change in flood frequency:

$$\text{Log } (Q/A) = C + (0.007)(U)$$

where Q is the flow in cubic feet per second (cfs); A is the area in square miles; U is the percentage of urbanization; and C is a constant for various frequencies. Flood flows for the streams within the City of Ridgeland were developed using this equation.

This Countywide Revision Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied by detailed methods affecting the community. Peak discharges for the streams studied by limited detailed methods were calculated based on USGS regional regression equations (U.S. Department of the Interior, 1991). For the discharges calculated based on regional regression equations, the rural regression values were modified to reflect nearby stream gages and/or urbanization as necessary.

For the revised detailed study on Bear Creek, a TR-20 model was used to estimate the flood attenuation effects of Reunion Lake #2. For the revised detailed study on Beaver Creek, a HEC-1 model was used to account for urbanization and estimate the flood attenuation affects of a detention basin located upstream of Wheatley Street. For the revised detailed study on Panther Creek, a HEC-1 model was used to estimate the flood attenuation affects of Lake Caroline, located upstream of Catlett Road. For the revised detailed study on Purple Creek, a HEC-1 model was used to account for urbanization and estimate the flood attenuation effects of a detention basin located upstream of the railroad at Freedom Ridge Park. For the revised detailed study on School Creek, a HEC-1 model was used to account for urbanization and estimate the flood attenuation effects of a detention basin located upstream of Lake Harbour Drive. For the revised detailed study on Stream Q, a HEC-1 model was used to estimate the flood attenuation effects of Reunion Lake #1. These rainfall--runoff models were developed by Aqua Engineers.

A summary of the drainage area-peak discharge relationships for all the streams is shown in Table 3, “Summary of Discharges.”

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
BATCHELOR CREEK					
At mouth	7.52	3,070	4,620	5,690	8,600
Cross Section E	4.66	2,680	3,990	4,890	7,600
Cross Section H	2.41	1,770	2,600	3,150	4,800
Cross Section N	1.32	1,010	1,490	1,770	3,100
Cross Section R	0.70	630	910	1,080	1,430

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
BATCHELOR CREEK TRIBUTARY 1					
At confluence with Batchelor Creek	1.16	800	1,180	1,400	1,960
BATCHELOR CREEK TRIBUTARY 2					
At confluence with Batchelor Creek	1.09	670	1,020	1,220	1,800
BEAR CREEK					
Cross Section A	104.6	10,600	17,600	20,800	30,200
At U.S. Highway 51	87.0	9,500	15,800	18,600	27,000
Cross Section H	67.5	8,160	13,600	16,000	23,200
Cross Section I	58.5	7,490	12,500	14,700	21,300
Cross Section J	37.5	6,410	10,700	13,700	20,100
At U.S. Highway 51	24.4	5,800	9,050	10,600	15,500
Cross Section V	17.4	4,740	7,390	8,650	12,700
Cross Section W	8.0	2,520	3,980	4,800	7,100
At Interstate 55	5.98	2,392	3,397	3,750	4,992
Cross Section AC	4.08	498	724	810	1,106
BEAVER CREEK					
At Mouth	2.28	1,590	2,330	2,820	4,300
At Cross Section C	1.74	1,330	1,940	2,350	3,500
At U.S. Highway 51	1.09	940	1,350	1,630	2,400
At Planters Grove	0.38	283	368	435	684
BRASHEAR CREEK					
At Rice Road	13.02	4,186	5,990	6,933	8,795
Upstream of confluence of Beaver Creek	6.83	1,477	2,568	3,050	3,988
At Interstate 55	2.88	1,377	2,319	2,570	3,346
At Park Place Boulevard	1.54	904	1,420	1,730	2,280
Cross Section AC	0.91	596	920	1,120	1,460
BROWN CREEK					
At Natchez Trace Parkway	4.28	1,500	2,320	2,810	3,660
Cross Section B	1.73	690	1,040	1,280	1,650
Cross Section C	1.04	500	730	890	1,140
BOGUE CHITTO CREEK					
Cross Section A	151.0	15,200	25,400	30,500	40,200
Cross Section D	134.0	14,700	24,800	30,100	39,800

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
CULLEY CREEK					
At mouth	3.16	1,560	2,350	2,830	4,100
Cross Section E	2.47	1,310	1,960	2,390	3,600
Cross Section F	2.17	1,170	1,740	2,120	3,200
Cross Section I	1.72	1,120	1,670	1,960	2,520
At St. Augustine Drive	1.26	927	1,370	1,600	2,040
Cross Section O	0.72	702	1,000	1,170	1,470
Cross Section S	0.21	306	437	509	639
HALEY CREEK					
At Natchez Trace Parkway	1.83	920	1,410	1,720	2,600
Cross Section C	0.89	580	860	1,040	1,500
Cross Section E	0.57	440	640	760	1,060
HALEY CREEK TRIBUTARY 1					
At a point approximately 0.2 mile downstream of the Natchez Trace Parkway	1.17	*	*	1083	*
At a point approximately 0.1 mile downstream of Old Rice Road	0.90	*	*	967	*
HANGING MOSS CREEK					
At County Line Road	1.17	1,180	1,690	1,900	2,400
Cross Section A	0.99	1,100	1,560	1,750	2,250
Cross Section B	0.75	950	1,350	1,500	1,950
HANGING MOSS CREEK TRIBUTARY 4					
At County Line Road	2.02	1,550	2,200	2,500	3,200
At Interstate 220	1.46	1,300	1,900	2,120	2,730
Cross Section C	1.23	1,200	1,750	1,950	2,500
HEARN CREEK					
At Mouth	1.83	920	1,410	1,720	2,600
Cross Section C	0.89	580	860	1,040	1,500
Cross Section E	0.57	440	640	760	1,060
HEARN CREEK TRIBUTARY					
At mouth	0.32	270	410	470	610

* Data Not Available

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
LIMEKILN CREEK					
Cross Section A	18.50	4,950	7,980	9,570	12,570
Cross Section B	13.50	4,160	6,620	7,900	10,350
Cross Section D	11.30	3,990	6,300	7,450	9,750
Cross Section E	8.64	3,190	4,990	5,940	7,750
Cross Section F	3.48	1,390	2,130	2,540	3,290
Cross Section G	1.98	910	1,360	1,610	2,080
Cross Section H	1.41	760	1,110	1,310	1,680
LITTLE BEAR CREEK					
Cross Section A	17.40	3,860	6,250	7,600	9,980
Cross Section B	8.37	2,270	3,600	4,360	5,700
Cross Section E	5.22	1,830	2,850	3,400	4,430
Cross Section F	3.94	1,080	1,620	1,900	2,450
PANTHER CREEK					
Cross Section A	28.50	4,530	7,440	9,140	12,000
Cross Section E	20.60	3,950	6,450	8,010	10,500
Cross Section G	14.50	2,742	3,898	4,514	5,550
At State Route 22	11.70	1,659	2,317	2,669	3,259
Cross Section I	7.49	1,344	1,869	2,146	2,611
Cross Section J	4.43	1,093	1,498	1,707	2,050
PURPLE CREEK					
At County Line Road	*	2,520	3,560	4,000	5,150
Cross Section E	*	2,098	2,725	2,996	3,769
At U.S. Route 51	*	2,069	2,688	2,951	3,716
Cross Section K	*	1,750	2,450	2,700	3,500
At Interstate 55	2.39	1,630	2,300	2,590	3,300
At Old Agency Road	1.95	1,500	2,170	2,420	3,130
At Steed Road	1.26	1,200	1,750	1,970	2,500
Cross Section Q	1.03	1,100	1,600	1,760	2,300
PURPLE CREEK TRIBUTARY 1					
At mouth	*	520	730	820	1,050
Cross Section C	*	450	640	710	920
At Railroad	*	360	510	570	740
At Holmes Street	*	300	420	470	610
Approximately 396 feet upstream of Graves Street	*	200	280	310	400

* Data Not Available

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
PURPLE CREEK TRIBUTARY 3					
At mouth	*	180	250	280	360
At Wheatley Street	*	120	170	190	240
Approximately 1,795 feet upstream of Wheatley Street	*	25	35	40	50
PURPLE CREEK TRIBUTARY 4					
At mouth	*	330	480	520	670
At Wolcott Circle	*	250	350	390	510
At Wheatley Street	*	140	200	230	290
PURPLE CREEK TRIBUTARY 5					
At Lakeland Drive	*	200	280	310	400
At Ford Avenue	*	140	200	230	290
Approximately 1,162 feet upstream of Ford Avenue	*	35	50	55	75
PURPLE CREEK TRIBUTARY 6					
At mouth	*	390	550	610	790
Approximately 3,700 feet upstream of mouth	*	240	340	380	500
PURPLE CREEK TRIBUTARY 7					
At mouth	*	190	270	310	390
At upstream corporate limits of Ridgeland	*	120	160	180	240
SCHOOL CREEK					
At County Line Road	2.37	2,556	3,396	3,860	4,641
At Northpark Drive	1.85	2,458	3,263	3,715	4,472
At Towne Center Boulevard	1.02	1,863	2,486	2,841	3,426
At Lake Harbour Drive	0.67	500	630	710	910
SCHOOL CREEK TRIBUTARY 1					
At Lake Harbour Drive	0.2	*	*	455	*
At Wendover Way	0.08	*	*	771	*
SCHOOL CREEK TRIBUTARY 2					
At mouth	0.12	*	*	1,185	*
At Camelia Lane	0.09	*	*	829	*

* Data Not Available

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
SPRING CREEK					
Cross Section A	2.31	1,120	1,680	1,910	2,460
Cross Section B	1.48	850	1,250	1,400	1,800
STREAM A					
Cross Section B	2.39	1,730	2,450	2,750	3,540
Cross Section D	1.73	1,420	2,020	2,300	3,000
Cross Section E	1.44	1,300	1,870	2,100	2,700
At Railroad	1.19	770	1,080	1,260	1,570
At Frey's Street	1.07	740	1,030	1,200	1,500
STREAM B					
Cross Section A	8.44	2,800	4,380	5,110	6,660
Cross Section C	4.71	1,860	2,875	3,340	4,330
Cross Section E	4.28	1,740	2,680	3,115	4,040
Cross Section F	3.08	1,420	2,140	2,490	3,220
Cross Section H	2.56	1,210	1,820	2,150	2,780
Cross Section I	1.40	805	1,180	1,350	1,730
STREAM C					
At Mouth	2.87	1,250	1,900	2,240	2,890
Cross Section B	1.99	1,042	1,550	1,800	2,300
Cross Section D	1.60	950	1,400	1,600	2,040
Cross Section E	1.17	700	1,010	1,130	1,440
STREAM D					
At mouth	0.97	590	855	960	1,220
STREAM E					
Cross Section A	2.64	875	1,350	1,660	2,150
At Railroad	2.13	830	1,260	1,530	1,980
Cross Section D	1.86	725	1,100	1,350	1,740
Cross Section E	1.31	510	765	965	1,240
STREAM F					
Cross Section A	8.62	2,480	3,930	4,700	6,140
Cross Section B	1.42	655	975	1,150	1,470

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
STREAM G					
Cross Section A	6.26	2,050	3,210	3,800	4,950
Cross Section B	3.83	1,410	2,170	2,560	3,320
Cross Section C	1.88	880	1,320	1,530	1,970
Cross Section F	1.16	700	1,020	1,160	1,480
STREAM H					
Cross Section A	3.27	1,310	2,000	2,390	3,100
Cross Section B	2.24	1,080	1,620	1,900	2,450
STREAM I					
At mouth	5.78	1,390	2,210	2,750	4,300
Cross Section B	4.00	1,080	1,700	2,130	3,400
At Interstate 55	1.46	620	930	1,140	1,700
STREAM J					
At mouth	1.07	490	720	860	1,400
STREAM K					
Cross Section A	4.62	1,930	2,970	3,480	4,510
Cross Section C	3.89	1,630	2,500	2,930	3,800
Cross Section D	2.93	1,410	2,130	2,480	3,200
Cross Section E	1.05	640	930	1,050	1,340
STREAM L					
At Natchez Trace Parkway	1.25	720	1,050	1,210	1,550
Cross Section B	0.97	650	930	1,060	1,350
STREAM M					
At Natchez Trace Parkway	1.60	790	1,180	1,380	1,780
Cross Section	1.24	690	1,010	1,180	1,510
STREAM N					
At mouth	1.75	610	920	1,130	1,700
At Interstate Route 55	1.21	490	820	990	1,500
STREAM O					
At mouth	1.88	720	1,090	1,300	1,900
At Interstate 55	1.23	460	770	930	1,400

TABLE 3. SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
STREAM P					
At mouth	1.73	720	1,090	1,300	1,900
Cross Section E	0.94	510	750	880	1,400
STREAM Q					
At mouth	6.18	1,670	2,640	3,210	4,900
At Gluckstadt Road	4.66	1,510	2,350	2,880	4,400
Cross Section G	2.21	109	150	173	279
STREAM R					
At mouth	2.32	1,550	2,380	2,930	4,600
Cross Section C	1.20	580	850	1,030	1,550
STREAM S					
At mouth	1.33	600	890	1,060	1,600
STREAM T					
At mouth	1.21	540	810	980	1,140
WALNUT CREEK					
Cross Section A	9.04	2,560	4,060	4,860	6,350
Cross Section B	8.62	2,480	3,930	4,700	6,140
Cross Section C	5.70	1,920	2,990	3,580	4,660
WHITE OAK CREEK					
At Interstate Street	4.47	2,320	3,300	3,700	4,600
Cross Section A	3.65	2,100	3,000	3,320	4,300
Cross Section C	2.50	1,730	2,450	2,720	3,520
Cross Section D	1.06	1,100	1,600	1,800	2,300
WHITE OAK CREEK TRIBUTARY 1					
At a point approximately 1000 feet downstream of Old Agency Road	0.60	*	*	624	*
Approximately 200 feet downstream of Oakhurst Trail	0.27	*	*	393	*
Approximately 1000 feet upstream of Oakhurst Trail	0.14	*	*	261	*

* Data Not Available

TABLE 3. SUMMARY OF STILLWATER ELEVATIONS

FLOODING SOURCE AND LOCATION	ELEVATION (Feet) 10-percent	2-percent	1-percent	0.2-percent
Ross Barnett Resevoir At Dam	*	*	299.7	*
Reunion Lake #1 (Stream Q)	329.9	330.3	330.5	330.8
Reunion Lake #2 (Bear Creek)	326.3	327.0	327.3	328.5

* Data Not Available

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied 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 Flood Insurance Rate Map (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.

March 2, 1993, Pearl River Valley Water Supply District FIS Analyses

Cross-section data for the streams in the study areas were obtained by field survey. All roads and bridges were field surveyed to obtain elevation and structural geometry data. Roughness coefficients (Manning's "n") for the streams were assigned on the basis of field inspection of the floodplain areas. Values ranged from 0.028 to 0.100 in the channels, and from 0.055 to 0.20 for the overbank areas.

Water surface elevations for Brashear, Culley, Hearn, and Haley Creeks, and Stream M were developed using the HEC-2 step-backwater computer model (USACE, 1988). Starting water-surface elevations were obtained by slope-conveyance methods.

For the Ross Barnett Reservoir, mathematical models developed in USACE studies were primarily developed for natural conditions with the reservoir operating under a constant pool elevation. The gated spillway at Ross Barnett Reservoir has sufficient capacity to discharge up to 130,000 cfs at a minimum lake level of elevation 295.0 ft NGVD (PRVWSD, 1983).

April 15, 1994, Initial Countywide FIS Analyses

For the April 15, 1994, countywide FIS, cross-section information was obtained by field survey. All roads and bridges were field surveyed to obtain elevation data and structural

geometry. Cross sections were located at close intervals upstream and downstream of bridges in order to compute the effects of these structures on water-surface elevations.

Water surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (USACE 1988). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals. Starting water-surface elevations were determined using slope-conveyance methods and slope/area computations.

The interior drainage at the East Jackson and Fairground levees was evaluated using topographic maps and the Flood Insurance Studies for the City of Ridgeland and the City of Madison (Dept. of Interior, 1980; FEMA, 1979; USACE, 1971).

Roughness factors (Manning's "n") used in the hydraulic computations were assigned on the basis of field inspection of the floodplain areas. Channel "n" values ranged form 0.028 to 0.100, and overbank "n" values ranged from 0.055 to 0.200.

For the Big Black River, the approximate floodplain boundaries were determined using the 1% annual chance water-surface profile developed by the USACE (USACE, 1971).

Approximate stage-frequency elevations for the Ross Barnett Reservoir were determined from operating procedures and statistical analyses of the twelve years (1965-1976) of stage records of the reservoir. A log-Pearson Type III distribution of twelve years of annual peak stages of the reservoir pool produced a 10-year stage elevation of 298.3 feet. It was determined that the twelve year period of record was of adequate length to warrant adoption of this 10-year stage elevation of 298.3 feet, but not to project other frequencies. The reservoir was designed and is operated such that the pool should never exceed an elevation of 300 feet. This elevation was adopted for the purposes of the April 15, 1994, FIS as the 500 year stage on the reservoir. The 2- and 1 annual chance reservoir pool elevations thus determined were 298.9 and 299.3 feet, respectively.

Approximate flood elevations for the Pearl River upstream of the Ross Barnett Reservoir were determined using existing stage frequency relationships and high-water profiles for certain record floods. The USGS, for the publication "Water for Industrial Development in Kemper, Leake, Neshoba, Noxubee, and Winston Counties, Mississippi," developed the 20%, 10%, 4% and 2% annual chance flood elevations for the Pearl River gaging stations at Lena, Carthage, and Edinburg (Dept. of Interior, 1972). All three of these gaging locations are upstream of Madison County. The 1% and 0.2% annual chance flood elevations on the Pearl River at Lena and Carthage were determined from a straight line, logarithmic extrapolation of the other frequencies. The records at Edinberg were not used since this location is the furthest of the three from Madison County.

The hydraulic analyses were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

This Countywide Revision

Cross section geometries were obtained from a combination of terrain data and field surveys. Bridges and culverts located within the new detailed and limited detail study limits were field surveyed to obtain elevation data and structural geometry.

Downstream boundary conditions for the hydraulic models were set to normal depth using a starting slope calculated from values taken from topographic data, or where applicable, derived from the water-surface elevations. Water-surface profiles were computed through the use of the U.S. Army Corps of Engineers (USACE) HEC-RAS version 3.1.3 computer program (USACE, 2005). The model was run for the 1-percent annual chance storm for the limited detail and approximate studies.

In addition to the previously issued Letters of Map Revision listed in Section 1.2, several previously issued Conditional Letters of Map Revision for projects that have since been constructed, are included in this FIS. These include new road crossings and/or channelization work on Bear Creek, Brashear Creek, Purple Creek, Stream O and Stream R.

Channel roughness factors (Manning's "n") values used in the hydraulic computations for both channel and overbank areas were based on recent digital orthophotography and field investigations.

Table 5, "Summary of Roughness Coefficients," shows the ranges of the channel and overbank roughness factors used in the computations for all of the streams studied by detailed methods.

TABLE 5. SUMMARY OF ROUGHNESS COEFFICIENTS

Detailed Study Streams

FLOODING SOURCE	CHANNEL "N"	OVERBANK "N"
Bear Creek	0.03-0.06	0.1-0.12
Beaver Creek	0.04-0.05	0.1-0.12
Panther Creek	0.05	0.03-0.16
School Creek	0.04	0.025-0.16
Stream O	0.045-0.06	0.08-0.15
Stream Q	0.035-0.05	0.08-0.12

Limited Detailed Study Streams

FLOODING SOURCE	CHANNEL "N"	OVERBANK "N"
School Creek Tributary 1	0.015-0.04	0.1-0.13
School Creek Tributary 2	0.015-0.04	0.1-0.13
White Oak Creek Tributary 1	0.05	0.1-0.18

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

The hydraulic analyses for this countywide FIS 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.

Qualifying bench marks within a given jurisdiction that are cataloged by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS)

as First or Second Order Vertical and have a vertical stability classification of A, B, or C are shown and labeled on the FIRM with their 6-character NSRS Permanent Identifier.

Benchmarks cataloged by the NGS and entered into the NSRS vary widely in vertical stability classification. NSRS vertical stability classifications are as follows:

> Stability A: Monuments of the most reliable nature, expected to hold position/elevation well (e.g., mounted in bedrock)
>
> Stability B: Monuments which generally hold their position/elevation well (e.g., concrete bridge abutment)
>
> Stability C: Monuments which may be affected by surface ground movements (e.g., concrete monuments below frost line)
>
> Stability D: Mark of questionable or unknown vertical stability (e.g., concrete monument above frost line, or steel witness post)

In addition to NSRS benchmarks, the FIRM may also show vertical control monument established by a local jurisdiction; these monuments will be shown on the FIRM with the appropriate designations. Local monuments will only be placed on the FIRM if the community has requested that they be included, and if the monuments meet the aforementioned NSRS inclusion criteria.

To obtain current elevation, description, and/or location information for benchmarks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit its website at 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. Interested individuals may contact FEMA to access this data.

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 (NGVD29). With the finalization of the North American Vertical Datum of 1988 (NAVD88), many FIS reports and FIRMs are being prepared using NAVD88 as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD88. Structure and ground elevations in the community must, therefore, be referenced to NAVD88. It is important to note that adjacent communities may be referenced to NGVD29. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between the communities.

The elevations shown in the FIS report and on the FIRM for Madison County are referenced to NAVD88. Ground, structure, and flood elevations may be compared and/or referenced to NGVD29 by applying a conversion factor. To convert elevations from NAVD88 to NGVD29, add 0.15 feet to the NGVD29 elevation. The 0.15 feet value is an average for the entire county. The adjustment value was determined using the USACE Corpscon 6.0.1 computer program (USACE, 2004) and topographic maps (U.S. Dept. of the Interior, 1972). The BFEs shown on the FIRM represent whole-foot rounded values. For example, a BFE of 12.4 feet will appear as 12 feet on the FIRM, and 12.6 feet as 13 feet. Users who wish to convert the elevations in this FIS report to NGVD29 should apply the stated conversion factor to elevations shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1-foot.

For more information regarding conversion between the NGVD and the 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, Rockville, Maryland 20910 (Internet address http://www.ngs.noaa.gov).

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 flood elevations and delineations of the 1- and 0.2-percent-annual-chance 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.

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

4.2 Floodways

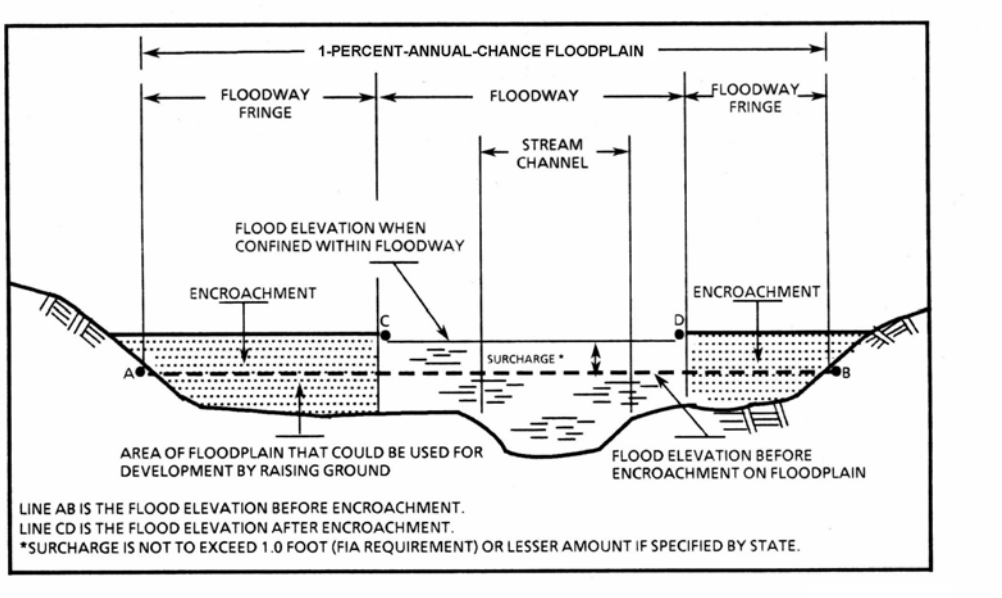
Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development 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 1.0 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 floodway presented in this FIS report and on the FIRM was 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 of detailed study streams (Table 6). For detailed study streams, in cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, “Without Floodway” elevations presented in Table 6, “Floodway Data,” for certain downstream cross sections are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater from other sources.

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. For detailed study streams, a listing of stream velocities at selected cross sections is provided in Table 6. In order to reduce the risk of property damage in areas where the stream velocities are high, the county may wish to restrict development in areas outside the floodway.

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 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 1.



FLOODWAY SCHEMATIC Figure 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BATCHELOR CREEK								
A	2,230	754	5,729	1.0	211.4	211.4	211.7	0.3
B	4,650	695	4,971	1.1	211.5	211.5	212.0	0.5
C	7,240	745	3,360	1.7	211.7	211.7	212.6	0.9
D	9,352	297	1,095	5.2	213.1	213.1	213.9	0.8
E	10,900	393	1,642	3.0	215.6	215.6	216.3	0.7
F	12,050	274	1,347	3.6	218.1	218.1	218.1	0.0
G	13,550	283	852	5.7	219.3	219.3	220.2	0.9
H	14,950	135	754	4.9	222.0	222.0	222.7	0.7
I	15,390	355	2,098	1.8	224.3	224.3	225.0	0.7
J	16,150	282	1,290	2.9	224.6	224.6	225.3	0.7
K	17,450	60	502	7.3	225.3	225.3	226.1	0.8
L	18,650	65	536	6.9	228.4	228.4	228.4	0.0
M	21,350	56	406	4.4	233.1	233.1	233.2	0.1
N	21,600	77	385	4.6	233.5	233.5	233.5	0.0
O	23,490	48	255	6.9	239.1	239.1	239.1	0.0
P	24,160	57	361	4.9	240.6	240.6	241.1	0.5
Q	25,180	53	288	3.7	242.6	242.6	242.8	0.2
R	26,450	24	95	11.4	245.2	245.2	245.2	0.0
S	28,020	179	623	1.7	252.4	252.4	253.2	0.8

[1] FEET ABOVE CONFLUENCE OF TILDA BOGUE

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BATCHELOR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BATCHELOR CREEK TRIBUTARY 1								
A	550	250	1,110	1.3	221.8	221.6[2]	221.6	0.0
B	1,380	348	819	1.7	222.0	222.0	222.3	0.3
C	2,050	179	686	2.0	224.6	224.6	225.5	0.9
D	2,630	194	454	3.1	225.6	225.6	226.3	0.7
E	4,400	175	572	2.4	231.6	231.6	232.1	0.5
F	5,980	399	3,153	0.4	240.2	240.2	241.2	1.0
G	7,300	159	293	4.8	241.0	241.0	241.0	0.0
H	8,520	184	593	2.4	247.7	247.7	248.7	1.0
BATCHELOR CREEK TRIBUTARY 2								
A	190	500	838	1.5	231.7	230.9[2]	231.2	0.3
B	1,950	500	1,080	1.1	237.4	237.4	237.4	0.0
C	3,440	450	1,525	0.8	239.5	239.5	239.7	0.2

[1] FEET ABOVE CONFLUENCE WITH BATCHELOR CREEK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BATCHELOR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BATCHELOR CREEK TRIBUTARY 1 – BATCHELOR CREEK TRIBUTARY 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BEAR CREEK								
A	6,887	2,419	20,717	1.0	210.7	210.7	211.6	0.9
B	11,395	3,898	29,976	0.7	212.4	212.4	213.4	1.0
C	15,910	974	6,674	3.1	215.1	215.1	216.0	0.9
D	17,060	1,458	12,083	1.7	216.6	216.6	217.5	0.9
E	30,706	2,808	20,483	1.0	219.6	219.6	220.5	0.9
F	36,960	3,658	25,166	0.8	221.8	221.8	222.7	0.9
G	39,713	2,093	16,958	1.1	222.9	222.9	223.7	0.8
H	43,808	1,283	11,002	1.5	227.2	227.2	228.1	0.9
I	52,360	2,441	19,845	0.7	230.1	230.1	231.0	0.9
J	53,260	2,230	18,741	0.7	230.4	230.4	231.4	1.0
K	61,360	3,093	23,042	0.6	231.8	231.8	232.8	1.0
L	63,360	2,995	18,235	0.8	232.1	232.1	233.1	1.0
M	66,910	278	2,287	6.0	235.1	235.1	235.2	0.1
N	72,312	2,040	11,767	1.2	238.2	238.2	238.9	0.7
O	78,409	1,403	9,774	1.4	243.1	243.1	244.0	0.9
P	86,561	1,783	12,080	1.1	247.1	247.1	248.1	1.0
Q	94,900	1,972	14,215	1.0	252.9	252.9	253.8	0.9
R	101,600	1,463	9,069	1.5	257.3	257.3	258.2	0.9
S	107,360	1,057	8,879	1.2	262.2	262.2	262.9	0.7
T	109,980	383	4,107	2.6	264.2	264.2	264.7	0.5
U	112,660	434	4,604	2.3	264.9	264.9	265.4	0.5
V	123,185	1,735	6,129	1.4	267.2	267.2	267.9	0.7

[1] FEET ABOVE HEINDL ROAD

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BEAR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BEAR CREEK (CONTINUED)								
W	128,266[1]	658	1,750	2.7	276.0	276.0	276.0	0.0
X	131,960[1]	37	348	11.0	281.1	281.1	281.1	0.0
Y	132,204[1]	154	760	5.0	283.7	283.7	283.7	0.0
Z	137,195[1]	60	422	1.9	290.5	290.5	291.0	0.5
AA	138,490[1]	27	121	6.7	292.4	292.4	292.7	0.3
AB	141,415[1]	89	573	0.6	297.8	297.8	297.8	0.0
AC	143,135[1]	20	70	5.0	304.9	304.9	304.9	0.0
AD	144,470[1]	30	112	3.1	312.6	312.6	313.5	0.9
BEAVER CREEK								
A	2,290[2]	516	1,674	1.7	303.5	303.5	304.5	1.0
B	4,100[2]	50	385	6.1	307.7	307.7	308.6	0.9
C	5,220[2]	94	522	4.5	311.4	311.4	312.3	0.9
D	6,650[2]	20	194	8.4	315.3	315.3	315.8	0.5
E	7,695[2]	44	159	2.7	317.9	317.9	318.1	0.2
F	8,632[2]	85	320	1.4	322.8	322.8	323.8	1.0
G	9,275[2]	80	145	3.0	325.8	325.8	326.7	0.9

[1] FEET ABOVE HEINDL ROAD

[2] FEET ABOVE CONFLUENCE WITH BRASHEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BEAR CREEK – BEAVER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BEAVER CREEK TRIBUTARY								
A	1,162[1]	49	199	3.3	320.3	320.3	321.0	0.7
B	2,059[1]	68	182	1.9	323.5	323.5	324.2	0.7
C	3,274[1]	23	23	2.3	328.7	328.7	328.8	0.1
BOGUE CHITTO CREEK								
A	23,410[2]	2,275	20,401	1.5	167.4	167.4	168.3	0.9
B	31,660[2]	976	12,265	2.5	176.2	176.2	177.2	1.0
C	46,670[2]	1,601	23,061	1.3	183.2	183.2	184.2	1.0
D	52,420[2]	3,533	39,973	0.8	185.3	185.3	186.3	1.0

[1] FEET ABOVE CONFLUENCE WITH BEAVER CREEK
[2] FEET ABOVE MOUTH

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BEAVER CREEK TRIBUTARY – BOGUE CHITTO CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BRASHEAR CREEK								
A	6,430	572	2,456	3.7	286.6	283.5[2]	284.2	0.7
B	8,560	147	1,411	4.9	290.0	290.0	290.3	0.3
C	10,380	100	1,311	5.3	291.7	291.7	292.0	0.3
D	12,260	275	2,418	2.9	296.6	296.6	297.2	0.6
E	13,670	482	2,092	3.3	297.0	297.0	297.8	0.8
F	16,710	290	2,721	3.3	297.7	297.7	298.3	0.6
G	18,000	958	5,025	0.9	300.6	300.6	301.5	0.9
H	20,340	437	1,806	1.7	302.3	302.3	303.3	1.0
I	22,230	133	1,003	3.0	306.6	306.6	307.6	1.0
J	23,070	111	866	3.5	306.9	306.9	307.8	0.9
K	24,420	95	503	6.1	312.3	312.3	313.3	1.0
L	25,910	95	614	5.0	314.4	314.4	314.7	0.3
M	27,120	57	543	5.2	319.9	319.9	320.4	0.5
N	28,550	636	3,189	1.1	325.2	325.2	325.2	0.0
O	29,850	121	834	4.0	325.2	325.2	325.2	0.0
P	31,210	152	1,656	2.0	325.9	325.9	326.2	0.3
Q	31,520	96	734	4.4	326.1	326.1	326.4	0.3
R	32,020	250	2,592	1.3	326.7	326.7	326.9	0.2
S	32,870	153	1,266	2.6	326.7	326.7	327.0	0.3
T	33,670	135	971	3.3	328.1	328.1	328.1	0.0
U	34,660	121	919	3.5	329.8	329.8	329.8	0.0
V	35,360	66	238	10.8	332.3	332.3	332.3	0.0
W	35,740	90	699	3.7	338.5	338.5	339.5	1.0
X	38,495	481	1,298	1.7	348.9	348.9	349.4	0.5

[1] FEET ABOVE CONFLUENCE WITH PEARL RIVER

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM PEARL RIVER

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BRASHEAR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BRASHEAR CREEK (CONTINUED)								
Y	40,680[1]	227	658	2.0	352.9	352.9	353.8	0.9
Z	42,730[1]	242	874	1.5	358.2	358.2	359.1	0.9
AA	44,440[1]	248	556	2.4	365.0	365.0	366.0	1.0
AB	45,725[1]	195	576	1.6	971.3	971.3	372.2	0.9
AC	47,200[1]	62	194	4.8	378.4	378.4	379.3	0.9
AD	49,080[1]	91	315	3.0	395.0	395.0	395.8	0.8
BROWN CREEK								
A	2,900[2]	212	1,395	2.0	312.1	312.1	313.0	0.9
B	8,600[2]	189	802	1.6	322.6	322.6	323.6	1.0
C	13,350[2]	71	149	6.0	336.1	336.1	336.3	0.2

[1] FEET ABOVE CONFLUENCE WITH PEARL RIVER
[2] FEET ABOVE NATCHEZ TRACE PARKWAY

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

BRASHEAR CREEK – BROWN CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CULLEY CREEK								
A	1,060	126	928	3.1	296.4	292.4[2]	292.9	0.5
B	1,350	402	1,940	1.5	296.4	293.0[2]	293.6	0.6
C	3,970	69	414	6.8	296.4	293.7[2]	294.6	0.9
D	5,200	248	1,420	2.0	299.2	299.2	299.3	0.1
E	5,510	279	1,444	2.0	299.5	299.5	299.9	0.4
F	7,900	362	1,933	1.2	303.3	303.3	304.2	0.9
G	9,810	365	1,343	1.6	306.6	306.6	307.0	0.4
H	11,730	316	860	2.2	309.3	309.3	309.5	0.2
I	12,660	500	2,207	0.9	313.7	313.7	313.7	0.0
J	13,050	565	1,999	0.9	313.9	313.9	313.9	0.0
K	13,870	845	2,055	0.8	314.4	314.4	314.4	0.0
L	14,470	115	553	2.9	315.8	315.8	315.8	0.0
M	15,354	165	375	3.4	317.1	317.1	317.6	0.5
N	16,371	51	306	4.2	318.8	318.8	319.6	0.8
O	17,358	61	293	4.0	320.6	320.6	321.0	0.4
P	18,590	47	171	4.0	324.3	324.3	324.7	0.4
Q	19,327	49	180	3.6	327.3	327.3	327.3	0.0
R	20,088	24	98	5.6	330.4	330.4	330.5	0.1
S	20,913	49	227	2.3	333.1	333.1	333.7	0.6

[1] FEET ABOVE CONFLUENCE WITH BRASHEAR CREEK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BRASHEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

CULLEY CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
HALEY CREEK								
A	2,570[1]	305	1,209	1.1	304.2	304.2	305.1	0.9
B	5,060[1]	303	1,080	1.0	311.6	311.6	312.3	0.7
C	6,900[1]	200	488	1.7	314.4	314.4	315.4	1.0
HANGING MOSS CREEK								
A	1,345[2]	235	837	2.1	344.7	344.7	345.7	1.0
B	2,945[2]	216	671	1.0	350.6	350.6	351.6	1.0
HANGING MOSS CREEK TRIBUTARY 4								
A	250[3]	284	1,045	1.6	333.9	333.9	333.9	0.0
B	2,435[3]	160	334	5.1	338.7	338.7	339.2	0.5
C	4,140[3]	280	923	1.1	346.6	346.6	347.3	0.7
D	5,620[3]	300	3,805	0.3	354.0	354.0	354.0	0.0
E	8,435[3]	150	311	3.4	363.9	363.9	363.9	0.0
F	10,405[3]	246	767	0.7	372.3	372.3	373.2	0.9

[1] FEET ABOVE NATCHEZ TRACE PARKWAY
[2] FEET ABOVE COUNTY BOUNDARY
[3] FEET ABOVE INTERSTATE 220

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

HALEY CREEK – HANGING MOSS CREEK – HANGING MOSS CREEK TRIBUTARY 4

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
HEARN CREEK								
A	2,350[1]	220	1,146	1.5	307.3	307.3	307.9	0.6
B	3,230[1]	256	1,156	1.5	308.2	308.2	309.0	0.8
C	4,620[1]	76	514	2.0	311.2	311.2	312.2	1.0
D	5,310[1]	44	315	3.3	311.8	311.8	312.7	0.9
E	6,100[1]	34	204	3.7	313.8	313.8	314.2	0.4
F	7,000[1]	27	166	4.6	317.0	317.0	317.0	0.0
G	8,800[1]	29	144	5.3	326.2	326.2	326.4	0.2
HEARN CREEK TRIBUTARY								
A	640[2]	26	140	3.4	311.8	311.5[3]	312.5	1.0
B	1,470[2]	38	112	4.2	320.1	320.1	320.1	0.0
C	2,070[2]	60	300	1.6	327.3	327.3	328.2	0.9
D	2,550[2]	70	210	2.2	327.8	327.8	328.8	1.0

[1] FEET ABOVE NATCHEZ TRACE PARKWAY
[2] FEET ABOVE CONFLUENCE WITH HEARN CREEK
[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM HEARN CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

HEARN CREEK – HEARN CREEK TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
LIMEKILN CREEK								
A	80[1]	1,650	9,457	1.0	245.0	245.0	245.2	0.2
B	5,160[1]	1,125	6,378	1.2	251.8	251.8	252.8	1.0
C	7,170[1]	909	3,931	2.0	256.5	256.5	257.5	1.0
D	10,320[1]	533	1,492	5.0	262.8	262.8	263.6	0.8
E	12,800[1]	551	3,368	1.8	267.0	267.0	268.0	1.0
F	15,520[1]	623	2,196	2.7	274.3	274.3	275.2	0.9
G	19,385[1]	269	581	2.8	280.8	280.8	281.7	0.9
H	23,380[1]	400	820	2.0	293.9	293.9	294.7	0.8
LITTLE BEAR CREEK								
A	8,000[2]	1,870	9,016	0.8	231.8	231.8	232.8	1.0
B	12,430[2]	1,610	7,120	1.1	233.9	233.9	234.9	1.0
C	22,660[2]	1,618	7,624	0.6	241.4	241.4	242.4	1.0
D	29,600[2]	1,257	5,977	0.7	249.2	249.2	250.2	1.0
E	34,840[2]	938	2,697	1.3	253.8	253.8	254.8	1.0
F	39,620[2]	274	624	4.7	259.2	259.2	260.2	1.0

[1] FEET ABOVE COUNTY BOUNDARY
[2] FEET ABOVE CONFLUENCE WITH BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

LIMEKILN CREEK – LITTLE BEAR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
PANTHER CREEK								
A	30,490	1,027	5,435	1.7	195.9	195.9	196.9	1.0
B	36,395	1,268	6,173	1.5	202.1	202.1	203.1	1.0
C	36,780	1,322	8,325	1.1	203.1	203.1	203.9	0.8
D	42,870	1,621	6,520	1.4	207.2	207.2	208.1	0.9
E	49,690	1,633	9,260	1.0	213.5	213.5	214.5	1.0
F	53,270	479	2,745	0.9	215.0	215.0	215.8	0.8
G	57,445	674	3,638	1.2	220.8	220.8	221.8	1.0
H	63,797	247	862	3.1	227.1	227.1	228.1	1.0
I	70,035	493	861	2.5	235.7	235.7	236.6	0.9
J	75,700	368	1,184	1.4	244.4	244.4	245.2	0.8

[1] FEET ABOVE CONFLUENCE WITH BIG BLACK RIVER

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

PANTHER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
PURPLE CREEK								
A	0	77	591	6.8	302.7	302.7	302.7	0.0
B	1,500	63	420	7.1	306.1	306.1	306.6	0.5
C	2,500	64	432	6.9	311.3	311.3	311.4	0.1
D	3,515	69	486	6.2	314.6	314.6	315.0	0.4
E	4,000	60	457	6.6	315.9	315.9	316.4	0.5
F	4,508	155	659	4.6	317.7	317.7	318.0	0.3
G	4,997	60	514	5.8	318.6	318.6	319.1	0.5
H	5,693	60	554	5.4	320.4	320.4	320.7	0.3
I	6,062	89	312	9.5	321.6	321.6	321.9	0.3
J	7,055	790	4,503	1.1	332.0	332.0	332.7	0.7
K	9,268	552	2,535	1.9	332.5	332.5	333.3	0.8
L	9,774	100	883	5.4	332.7	332.7	333.5	0.8
M	10,405	688	4,084	0.6	333.9	333.9	334.7	0.8
N	11,820	375	1,211	2.1	335.4	335.4	336.4	1.0
O	17,770	478	1,117	4.3	355.4	355.4	356.4	1.0
P	17,960	652	1,458	1.4	358.0	358.0	358.1	0.1
Q	19,510	207	581	3.0	360.8	360.8	361.8	1.0

[1] FEET ABOVE COUNTY BOUNDARY

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

PURPLE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
PURPLE CREEK TRIBUTARY 1								
A	845	89	260	3.2	312.5	312.5	313.5	1.0
B	1,637	347	1,527	0.5	318.1	318.1	319.1	1.0
C	2,640	134	138	5.1	319.7	319.7	319.7	0.0
D	3,326	254	1,678	0.3	329.5	329.5	329.7	0.2
E	3,590	258	1,325	0.4	329.5	329.5	329.7	0.2
F	4,805	27	45	6.9	332.8	332.8	333.2	0.4
G	5,386	21	47	6.6	335.5	335.5	336.0	0.5
PURPLE CREEK TRIBUTARY 3								
A	2,376	97	130	0.6	323.3	323.3	323.3	0.0
B	3,326	50	98	0.5	330.1	330.1	330.1	0.0
PURPLE CREEK TRIBUTARY 4								
A	1,267	42	103	5.1	316.2[2]	314.6	314.9	0.3
B	1,954	39	131	4.0	319.4	319.4	320.1	0.7
C	2,429	84	223	1.7	322.5	322.5	323.4	0.9
D	2,798	29	115	3.4	324.4	324.4	325.2	0.8
E	3,590	60	239	1.0	334.8	334.8	335.1	0.3

[1] FEET ABOVE CONFLUENCE WITH PURPLE CREEK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM PURPLE CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

PURPLE CREEK TRIBUTARY 1 – PURPLE CREEK TRIBUTARY 3 – PURPLE CREEK TRIBUTARY 4

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
PURPLE CREEK TRIBUTARY 5								
A	1,056	38	99	3.8	321.4	321.4	321.5	0.1
B	1,373	20	61	5.9	325.8	325.8	326.1	0.3
C	2,693	50	177	1.2	330.4	330.4	331.3	0.9
D	4,013	65	128	1.7	338.7	338.7	339.6	0.9
PURPLE CREEK TRIBUTARY 6								
A	1,162	264	645	1.0	327.8	327.8	328.7	0.9
B	2,957	55	166	2.3	335.7	335.7	336.2	0.5
PURPLE CREEK TRIBUTARY 7								
A	528	39	111	2.8	332.7	331.3[2]	331.8	0.5
B	1,795	34	115	2.7	336.3	336.3	337.1	0.8

[1] FEET ABOVE CONFLUENCE WITH PURPLE CREEK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM PURPLE CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

PURPLE CREEK TRIBUTARY 5 – PURPLE CREEK TRIBUTARY 6 - PURPLE CREEK TRIBUTARY 7

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SCHOOL CREEK								
A	0	128	1,296	3.0	290.6	290.6	291.4	0.8
B	756	64	583	6.6	290.7	290.7	291.6	0.9
C	1,390	160	1,172	3.3	297.4	297.4	298.2	0.8
D	3,071	175	1,167	3.2	302.4	302.4	302.6	0.2
E	4,337	67	520	5.5	305.8	305.8	306.0	0.2
F	4,702	200	861	3.3	307.4	307.4	308.0	0.6
G	5,266	50	360	2.6	308.1	308.1	308.6	0.5
H	6,167	38	184	5.1	311.8	311.8	312.1	0.3
I	6,980	68	466	1.4	315.7	315.7	316.7	1.0
J	7,770	29	73	9.1	316.6	316.6	316.6	0.0
K	8,470	40	121	5.5	322.7	322.7	323.2	0.5
L	8,870	61	209	3.2	324.2	324.2	324.7	0.5
M	9,070	48	251	2.7	326.3	326.3	326.5	0.2
N	9,294	90	223	3.0	328.6	328.6	328.6	0.0
O	9,885	20	63	7.6	328.7	328.7	328.8	0.1
P	10,250	20	74	6.5	330.6	330.6	330.9	0.3
Q	10,918	20	59	8.1	334.1	334.1	334.1	0.0
R	11,257	46	96	3.7	336.3	336.3	336.3	0.0
S	11,707	25	38	5.7	338.3	338.3	338.6	0.3
T	11,832	26	146	1.5	343.9	343.9	344.7	0.8
U	12,145	33	95	2.3	344.0	344.0	344.8	0.8
V	12,620	16	32	2.5	345.2	345.2	345.5	0.3

[1] FEET ABOVE COUNTY BOUNDARY

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

SCHOOL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING CREEK								
A	3,480[1]	91	566	3.4	185.9	183.9[3]	184.8	0.9
B	7,840[1]	200	479	2.9	198.9	198.9	199.7	0.8
STREAM A								
A	70[2]	501	2,438	1.1	335.8	335.8	336.8	1.0
B	2,250[2]	594	2,455	1.1	338.1	338.1	339.1	1.0
C	4,220[2]	849	5,237	0.5	344.4	344.4	345.4	1.0
D	5,640[2]	372	729	3.2	345.2	345.2	346.1	0.9
E	7,780[2]	314	1,134	1.9	349.7	349.7	350.7	1.0
F	10,270[2]	345	1,470	1.4	356.1	356.1	357.1	1.0

[1] FEET ABOVE CONFLUENCE WITH BOGUE CHITTO CREEK
[2] FEET ABOVE COUNTY LINE ROAD
[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BOGUE CHITTO CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK – STREAM A

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM B								
A	630[1]	1,016	4,243	1.2	265.4	265.4	266.4	1.0
B	6,120[1]	733	3,913	1.3	273.4	273.4	274.4	1.0
C	8,920[1]	1,121	6,627	0.5	276.3	276.3	277.2	0.9
D	11,110[1]	259	558	6.0	281.5	281.5	282.2	0.7
E	12,180[1]	1,047	4,726	0.7	287.2	287.2	288.2	1.0
F	15,670[1]	351	1,401	1.8	293.2	293.2	294.2	1.0
G	18,000[1]	730	3,758	0.7	304.4	304.4	305.4	1.0
H	19,770[1]	561	1,643	1.3	307.5	307.5	308.5	1.0
I	22,160[1]	245	839	1.6	317.3	317.3	318.1	0.8
J	25,320[1]	195	828	1.1	331.3	331.3	332.3	1.0
STREAM C								
A	330[2]	421	1,337	1.7	275.0	274.3[3]	274.3	1.0
B	2,810[2]	349	1,452	1.2	280.2	280.2	281.2	1.0
C	5,600[2]	346	1,826	1.0	286.9	286.9	287.9	1.0
D	8,400[2]	415	1,724	1.0	290.2	290.2	291.2	1.0
E	11,530[2]	222	764	1.5	301.6	301.6	302.5	0.9

[1] FEET ABOVE COUNTY BOUNDARY
[2] FEET ABOVE CONFLUENCE WITH STREAM B
[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM STREAM B

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM B – STREAM C

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM D								
A	900[1]	484	1,442	1.5	307.5	307.5	308.5	1.0
B	1,680[1]	328	1,365	0.7	310.5	310.5	311.4	0.9
STREAM E								
A	2,940[2]	474	1,688	1.0	224.1	223.3[3]	224.3	1.0
B	5,470[2]	318	1,295	1.3	229.4	229.4	230.3	0.9
C	7,420[2]	383	1,494	1.0	234.0	234.0	234.9	0.9
D	9,710[2]	276	874	1.5	239.1	239.1	240.1	1.0
E	12,700[2]	215	375	2.6	247.7	247.7	248.7	1.0
STREAM F								
A	2,530[4]	1,131	3,929	1.2	241.1	241.1	242.1	1.0
B	7,230[4]	358	957	1.2	252.7	252.7	253.6	0.9

[1] FEET ABOVE CONFLUENCE WITH STREAM B
[2] FEET ABOVE CONFLUENCE WITH BEAR CREEK
[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BEAR CREEK
[4] FEET ABOVE CONFLUENCE WITH WALNUT CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM D – STREAM E – STREAM F

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM G								
A	5,230[1]	764	2,862	1.3	232.6	232.6	233.6	1.0
B	10,060[1]	446	1,286	2.0	240.8	240.8	241.8	1.0
C	12,240[1]	629	3,147	0.8	249.1	249.1	249.2	0.1
D	15,910[1]	287	883	1.7	256.8	256.8	257.8	1.0
E	19,100[1]	193	643	2.4	267.7	267.7	268.4	0.7
F	22,530[1]	70	337	3.4	277.3	277.3	278.1	0.8
STREAM H								
A	5,200[2]	716	2543	0.9	243.2	243.2	244.2	1.0
B	9,570[2]	511	1875	1.0	253.3	253.3	254.2	0.9

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK
[2] FEET ABOVE CONFLUENCE WITH LITTLE BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM G – STREAM H

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM I								
A	6,730[1]	757	1,562	1.8	241.7	241.7	242.5	0.8
B	8,700[1]	270	1,139	1.9	244.5	244.5	245.3	0.8
C	13,860[1]	336	1,269	1.7	253.0	253.0	254.0	1.0
D	16,680[1]	449	1,901	1.1	257.5	257.5	258.5	1.0
E	19,080[1]	392	1,177	1.8	261.2	261.2	262.2	1.0
F	20,400[1]	100	349	3.3	264.7	264.7	265.2	0.5
G	21,720[1]	504	1,363	0.8	266.6	266.6	267.6	1.0
H	23,800[1]	213	437	2.6	272.0	272.0	272.1	0.1
STREAM J								
A	1,380[2]	220	884	1.0	247.8	247.8	248.3	0.5
B	2,720[2]	330	270	3.2	253.7	253.7	253.7	0.0
C	4,170[2]	288	802	1.1	258.7	258.7	259.5	0.8
D	5,400[2]	103	269	3.2	262.5	262.5	263.5	1.0
E	6,060[2]	106	334	2.5	266.3	266.3	267.2	0.9

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK
[2] FEET ABOVE CONFLUENCE WITH STREAM I

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM I – STREAM J

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM K								
A	1,340[1]	433	1,712	2.0	267.9	267.9	268.9	1.0
B	5,080[1]	606	2,450	1.4	273.9	273.9	274.9	1.0
C	8,210[1]	467	1,968	1.5	280.4	280.4	281.4	1.0
D	11,780[1]	102	520	4.8	288.1	288.1	288.9	0.8
E	15,280[1]	147	292	3.6	299.4	299.4	300.4	1.0
STREAM L								
A	100[2]	183	2,357	0.5	312.7	312.7	313.7	1.0
B	3,740[2]	187	688	1.5	322.0	322.0	322.9	0.9
STREAM M								
A	8,090[3]	372	1,374	1.0	319.5	319.5	320.3	0.8
B	8,580[3]	477	1,670	0.8	323.1	323.1	323.7	0.6
C	11,500[3]	288	653	1.8	327.2	327.2	327.7	0.5

[1] FEET ABOVE CONFLUENCE WITH LIMEKILN CREEK
[2] FEET ABOVE NATCHEZ TRACE PARKWAY
[3] FEET ABOVE CONFLUENCE WITH PEARL RIVER

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM K – STREAM L – STREAM M

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM N								
A	790	116	419	2.7	260.0	254.3[2]	255.3	1.0
B	2,410	50	211	5.4	260.3	260.5[2]	261.1	0.6
C	4,150	100	210	4.7	266.2	266.2	266.4	0.2
D	5,835	116	337	2.9	272.0	272.0	273.0	1.0
E	8,010	340	782	1.3	276.5	276.5	277.4	0.9
F	8,360	131	252	3.9	277.3	277.3	277.8	0.5
G	10,310	154	434	2.3	282.9	282.9	283.7	0.8
STREAM O								
A	2,000	100	411	3.2	263.8	262.2[2]	263.0	0.8
B	4,200	29	811	3.1	270.3	270.3	270.4	0.1
C	5,230	121	157	5.9	272.2	272.2	272.3	0.1
D	7,030	332	744	1.3	276.3	276.3	276.9	0.6
E	9,190	165	209	4.5	288.6	288.6	288.6	0.0
F	10,600	123	519	1.8	294.5	294.5	295.4	0.9

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK

[2] ELEVATIONS WITHOUT CONSIDERING BACKWATER EFFECTS FROM BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM N – STREAM O

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM P								
A	750	425	1,170	1.1	260.0	255.3[2]	256.3	1.0
B	1,795	60	8,423	0.2	261.9	260.7[2]	261.7	1.0
C	4,530	270	376	3.5	262.9	261.7[2]	262.0	0.3
D	5,030	240	797	1.6	264.0	263.3[2]	264.3	1.0
E	6,460	213	630	2.1	267.6	267.6	268.4	0.8
F	8,010	234	875	1.5	273.1	273.1	273.1	0.0
G	9,380	120	317	2.8	276.0	276.0	276.4	0.4
H	11,290	120	318	2.8	283.7	283.7	284.0	0.3
I	13,130	38	134	6.6	293.6	293.6	294.2	0.6
J	13,570	100	406	2.2	295.4	295.4	296.2	0.8

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK

[2] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM P

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM Q								
A	1,930[1]	129	1,055	3.0	268.3	266.3[3]	267.1	0.8
B	3,595[1]	550	915	3.5	269.5	269.5	269.9	0.4
C	5,905[1]	590	1,975	1.6	274.1	274.1	275.7	0.6
D	9,235[1]	1,106	2,935	1.1	279.6	279.6	279.9	0.3
E	11,415[1]	72	571	5.0	283.4	283.4	283.5	0.1
F	15,525[1]	72	448	3.5	292.0	292.0	292.3	0.3
G	16,970[1]	76	494	0.4	295.4	295.4	296.3	0.9
H	20,640[1]	379	9,622	0.2	299.2	299.2	299.2	0.0
STREAM R								
A	3,600[2]	374	1,823	1.6	299.4	299.4	300.2	0.8
B	5,780[2]	340	3,659	0.3	304.2	304.2	304.2	0.0
C	7,860[2]	110	218	4.7	305.7	305.7	306.0	0.3

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK
[2] FEET ABOVE CONFLUENCE WITH STREAM Q
[3] ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM Q – STREAM R

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STREAM S								
A	1,760	223	376	3.4	278.8	278.8	279.2	0.4
B	3,190	289	2,300	0.5	279.5	279.5	279.8	0.3
C	4,340	140	328	5.4	286.8	286.8	287.2	0.4
D	6,060	119	405	5.1	293.0	293.0	293.7	0.7
STREAM T								
A	660	80	352	2.8	283.4	282.6[2]	283.6	1.0
B	1,850	94	424	2.3	285.9	285.9	286.6	0.7
C	3,260	97	276	3.6	290.6	290.6	291.6	1.0
D	4,640	135	462	2.1	299.2	299.2	299.9	0.7
E	5,040	138	439	2.2	300.8	300.8	301.8	1.0
F	6,090	154	541	1.8	304.7	304.7	305.7	1.0

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK

[2] ELEVATIONS COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BEAR CREEK

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

STREAM S – STREAM T

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
WALNUT CREEK								
A	19,670[1]	1,538	10,796	0.6	239.2	239.2	239.9	0.7
B	22,920[1]	2,594	8,597	0.7	242.4	242.4	243.4	1.0
C	28,830[1]	935	5,265	0.7	248.5	248.5	249.5	1.0
WHITE OAK CREEK								
A	7,980[2]	177	1,213	3.1	324.7	324.7	325.2	0.5
B	10,100[2]	332	2,064	1.8	330.1	330.1	330.9	0.8
C	12,250[2]	307	997	3.7	334.8	334.8	335.1	0.3
D	15,224[2]	868	2,508	1.3	340.3	340.3	341.3	1.0
E	17,704[2]	529	1,785	1.9	346.6	346.6	347.4	0.8
F	19,064[2]	420	1,584	1.7	350.6	350.6	351.5	0.9
G	21,104[2]	341	1,238	1.8	356.0	356.0	356.7	0.7
H	25,844[2]	247	772	2.3	366.7	366.7	367.7	1.0

[1] FEET ABOVE CONFLUENCE WITH BEAR CREEK
[2] FEET ABOVE COUNTY BOUNDARY

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS AND INCORPORATED AREAS

FLOODWAY DATA

WALNUT CREEK – WHITE OAK CREEK

5.0 INSURANCE APPLICATION

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 base (1-percent annual chance) flood elevations (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 AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within the zone.

Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 1-percent annual chance shallow flooding (usually sheet flow on sloping terrain) where the average depths are between 1 and 3 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within the zone.

Zone A99

Zone A99 is the flood insurance rate zone that corresponds to areas of the 1-percent floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or depths are shown within this zone.

Zone V

Zone V is the flood insurance rate zone that corresponds to the 1-percent coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no base flood elevations are shown within this zone.

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 1-percent coastal floodplains that have additional hazards associated with storm waves. Whole-foot base flood elevations 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 base flood by levees. No BFEs or depths are shown within this zone.

Zone D

Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

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 Madison County. Previously, FIRMs were prepared for each incorporated community and the unincorporated areas of the County identified as flood-prone. This countywide FIRM also includes flood-hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFMs), where applicable. Historical data relating to the maps prepared for each community are presented in Table 7, “Community Map History.”

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Canton, City of	June 7, 1974	January 16, 1976	November 15, 1979	April 15, 1994
Flora, Town of	----	----	April 15, 1994	February 4, 1998
Madison, City of	December 13, 1974	December 12, 1975	December 16, 1980	August 3, 1989 April 15, 1994 February 4, 1998
Madison, County of (Unincorporated Areas)	August 11, 1978	----	January 2, 1980	April 15, 1994 February 4, 1998
Pearl River Valley Water Supply District	June 8, 1988	----	March 2, 1993	----
Ridgeland, City of	June 28, 1974	September 26, 1975	September 28, 1979	April 15, 1994 February 4, 1998

TABLE 7

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

This FIS report either supersedes or is compatible with all previous studies published on streams studied in this report and should be considered authoritative for the 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 Federal Insurance and Mitigation Division, FEMA Region IV, Koger-Center — Rutgers Building, 3003 Chamblee Tucker Road, Atlanta, GA 30341.

9.0 BIBLIOGRAPHY AND REFERENCES

EM 1110-2-1405, Engineering and Design-Flood Hydrograph Analysis on Computations, August 31, 1959

Federal Emergency Management Agency, Federal Insurance Administration, Flood Insurance Study, City of Canton, Madison County, Mississippi, Washington D.C., January 1979, Flood Insurance Rate Map, dated September 28, 1979

Federal Emergency Management Agency, Federal Insurance Administration, Flood Insurance Study, City of Ridgeland, Madison County, Mississippi, Washington, D.C., January 1979, Flood Insurance Rate Map, dated September 28, 1979.

Federal Emergency Management Agency, Flood Insurance Study, Madison County, Mississippi Unincorporated Areas, Mississippi, April 17, 1987.

Federal Emergency Management Agency, Flood Insurance Study, Town of Madison, Madison County, Mississippi, Washington, D.C., August 3, 1989.

Federal Emergency Management Agency, Flood Insurance Study, Madison County, Mississippi, Mississippi, February 4, 1998.

Interagency Advisory Committee on Water Data, Bulletin No.17B, Guidelines for Determining Flood Flow Frequency, 1981.

National Weather Service, Website, Jackson, Mississippi, Vicksburg, MS monitoring station, http://www.srh.noaa.gov/jan/climate/climate_vicksburgmilitarypk.htm, September 18, 2006.

Pearl River Valley Water Supply District, 1983 Flood Inflow-Outflow Hydrographs at Ross Barnett Reservoir Dam, Jackson, Mississippi, 1983.

University of Texas, Center for Research in Water Resources, Computer Program FREQFLO, Leo R. Beard, Austin, Texas, 1976.

U.S. Army Corps of Engineers, Vicksburg District, Big Black River Elevation-Frequency and SPF Profile, September 1971.

U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-1 Flood Hydrograph Package, Computer Program 723-X6-L2010, Davis, California, September 1981, revised January 1985.

U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-5 Simulation of Flood Control and Conservation Systems, Computer Program 723-X6-l2500, Davis, California, April 1982, revised May 1983.

U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-5 Simulation of Flood Control and Conservation Systems, Computer Program 723-X6-L202A, Davis, California, April 1984, revised May 1988

U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water Surface Profiles, Generalized Computer Program, Davis, California, September 1988.

U.S. Army Corps of Engineers (November 2005). Hydrologic Engineering Center, HEC-RAS River Analysis System, User's Manual, version 3.1.3, Davis, California.

U.S. Army Corps of Engineers, Topographic Engineering Center, Corpscon version 6.0.1, Alexandria, Virginia, August 2004.

U.S. Census Bureau, Website–2005 Population Estimate, August 2006.

U.S. Census Bureau, Website–2005 Economic Fact Sheet, August 2006.

U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Insurance Study, Madison County, Unincorporated Areas, Missouri, May 1979.

U.S. Department of the Interior, Geological Survey, in cooperation with the Mississippi Research and Development Center, "Water for Industrial Development in Kemper, Leake, Neshoba, Noxubee, and Winston Counties," Mississippi, 1972.

U.S. Department of the Interior, Geological Survey, An Approach to Estimating Flood Frequency for Urban Areas in Oklahoma, Oklahoma City, Oklahoma, July 1974.

U.S. Department of the Interior, Geological Survey, Flood Frequency of Mississippi Streams, B.E. Colson and J.W. Hudson, 1976.

U.S. Department of the Interior, Geological Survey, Office of Water Data Collection, Interagency Advisory Committee on Water Data, "Guidelines for Determining Flood Flow Frequency," Bulletin 178, Reston, Virginia, Revised July 1976

U.S. Department of the Interior, Geological Survey, 7.5-Minute and 15-Minute Series Topographic Maps; Scales 1:24,000 and 1:62,500, Contour Intervals 10 Feet and 20 Feet: Canton, Mississippi, 1961; Clinton, Mississippi, 1963, Photorevised 1971; Jackson,

Mississippi, 1963, Photorivsed 1971; Jackson Southeast, Mississippi, 1963, Photorevised 1971; Madison, Mississippi, 1980; Ridgeland, Mississippi, 1980; Sharon, Mississippi, 1960.

U.S. Department of the Interior, Geological Survey, Water-Supply Paper No. 2207, Flood Characteristics of Urban Watersheds in the United States, V.B. Sauer, W.O. Thomas, V.A. Stricker, and K.V. Wilson, 1983.
U.S. Department of the Interior, Geological Survey, Jackson District, letter dated January 23, 1984 to Mississippi State Highway Department, 1984.

U.S. Department of the Interior, Geological Survey, Flood Characteristics of Mississippi Streams, Water-Resources Investigations Report 91-4037, Jackson, MS, 1991.

ELEVATION IN FEET (NAVD)

260
250
240
230
220
210
200
190
180
170

CONFLUENCE OF TILDA BOGUE
INTERSTATE 55
KING RANCH ROAD
FREYS LANE
OWENS STREET
JOHNSON AVENUE

A
B
C
D
E
F

LEGEND

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

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000 12,000 13,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE OF TILDA BOGUE

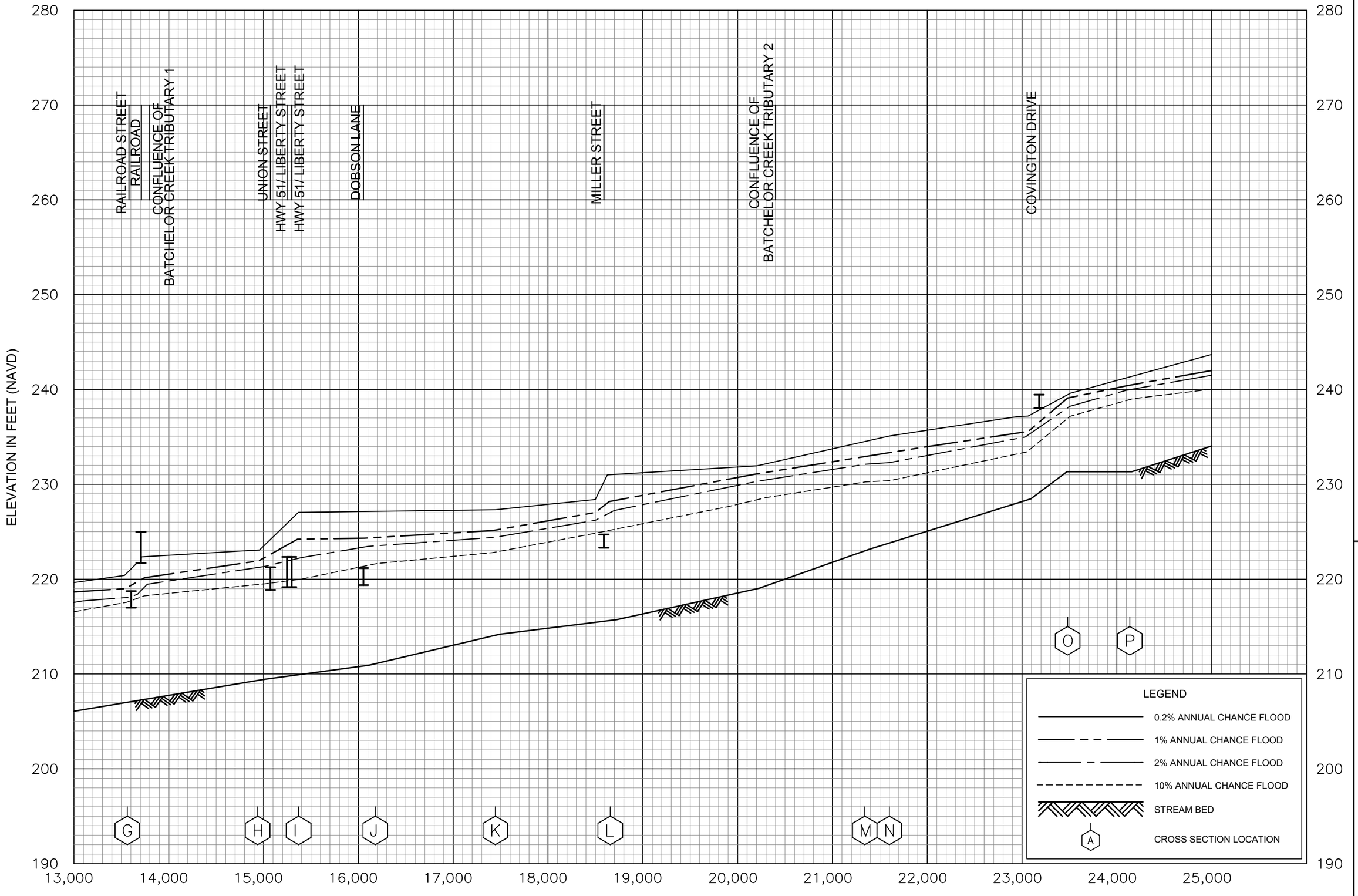
FLOOD PROFILES

BATCHELOR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

1P



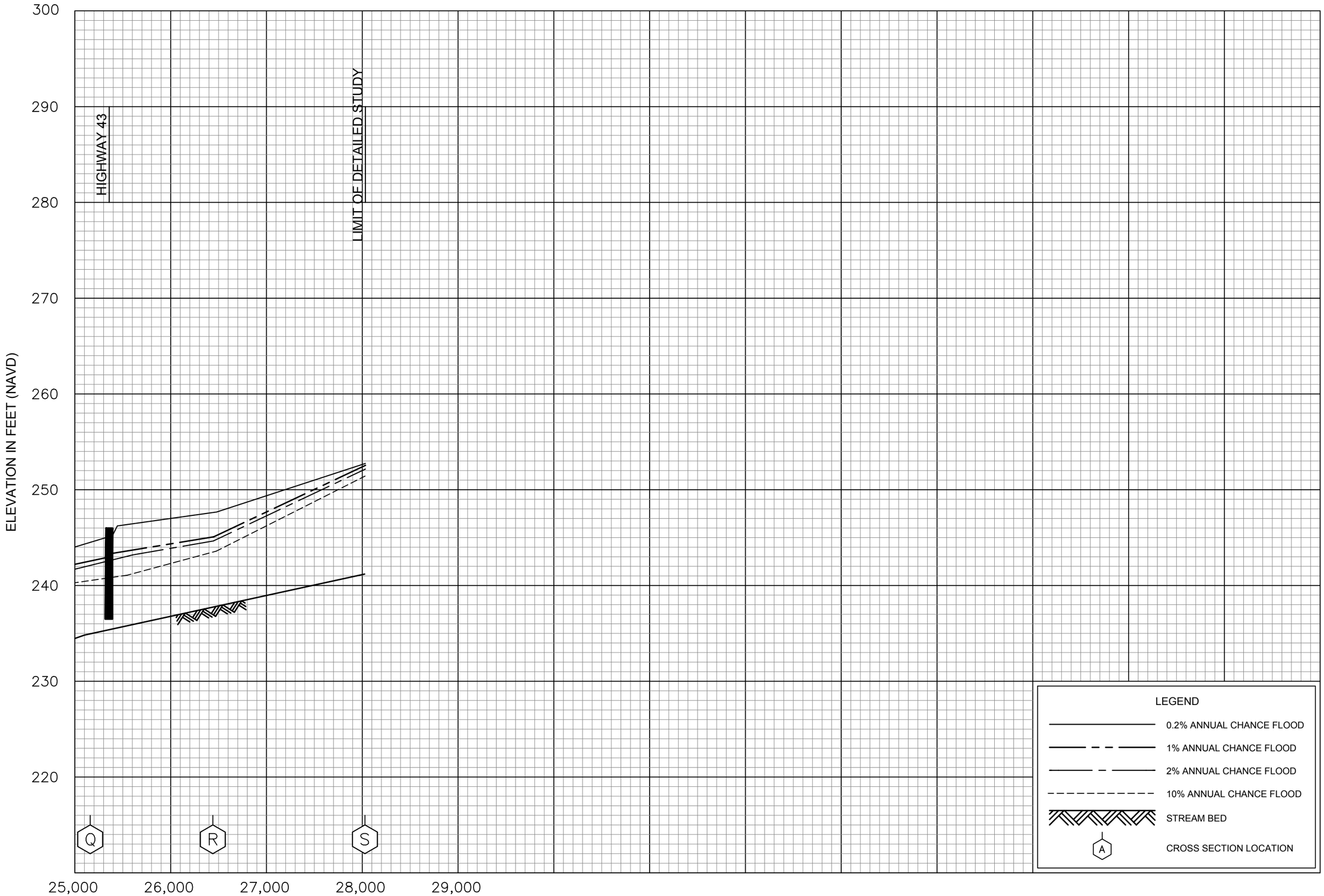
FLOOD PROFILES

BATCHELOR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

2P

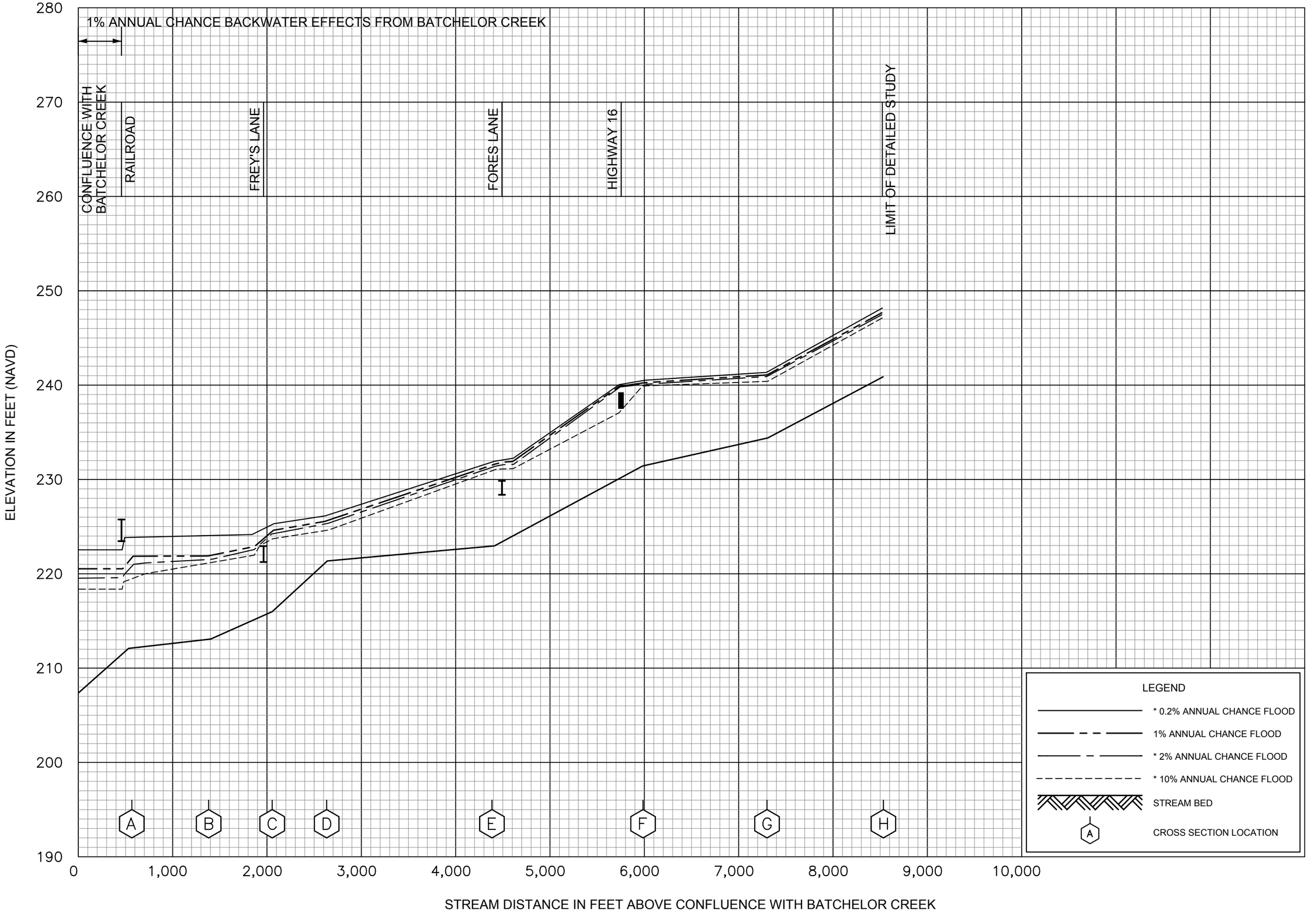


FLOOD PROFILES

BATCHELOR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

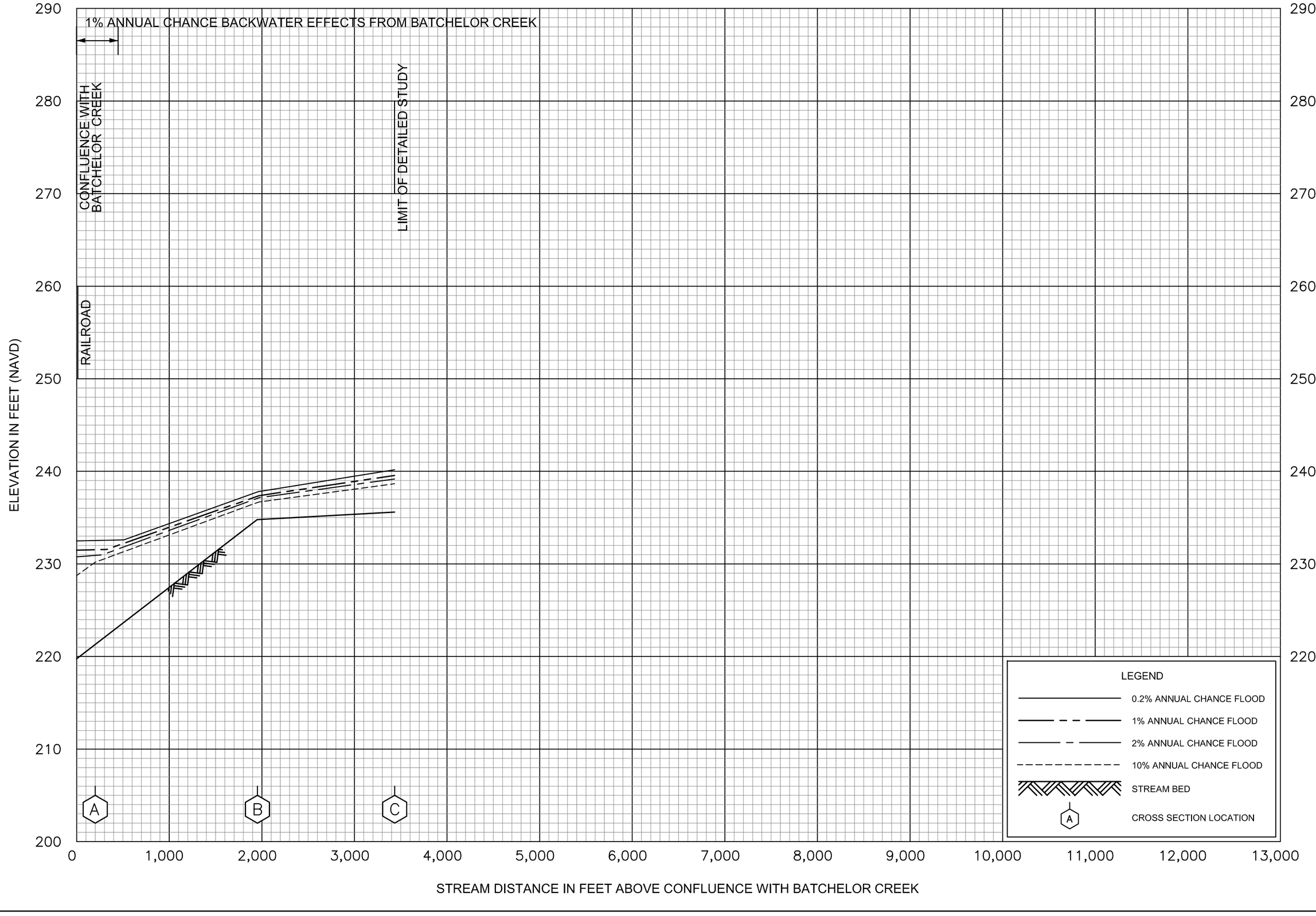
BATCHELOR CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

4P



FLOOD PROFILES

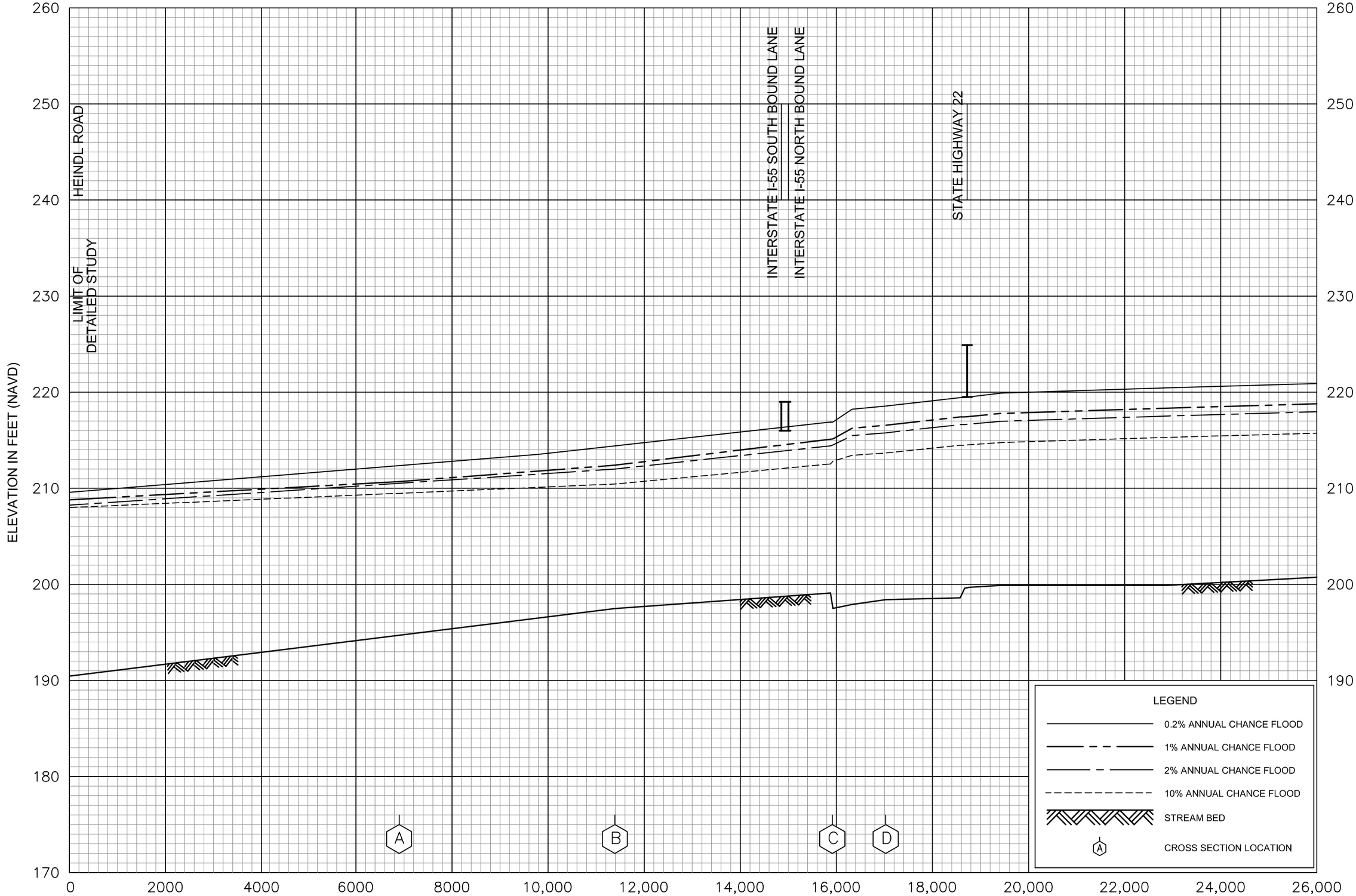
BATCHELOR CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

5P



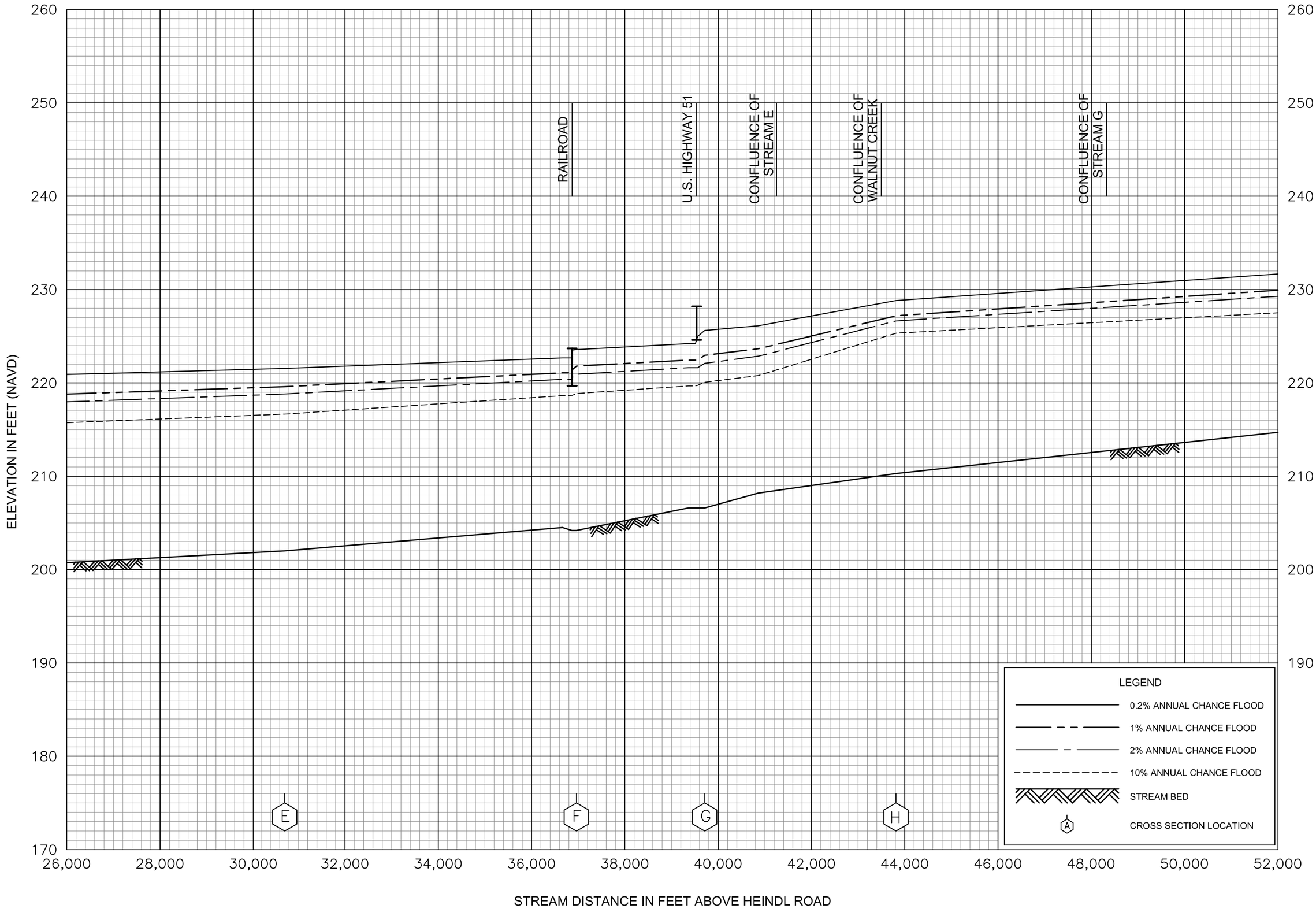
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

6P



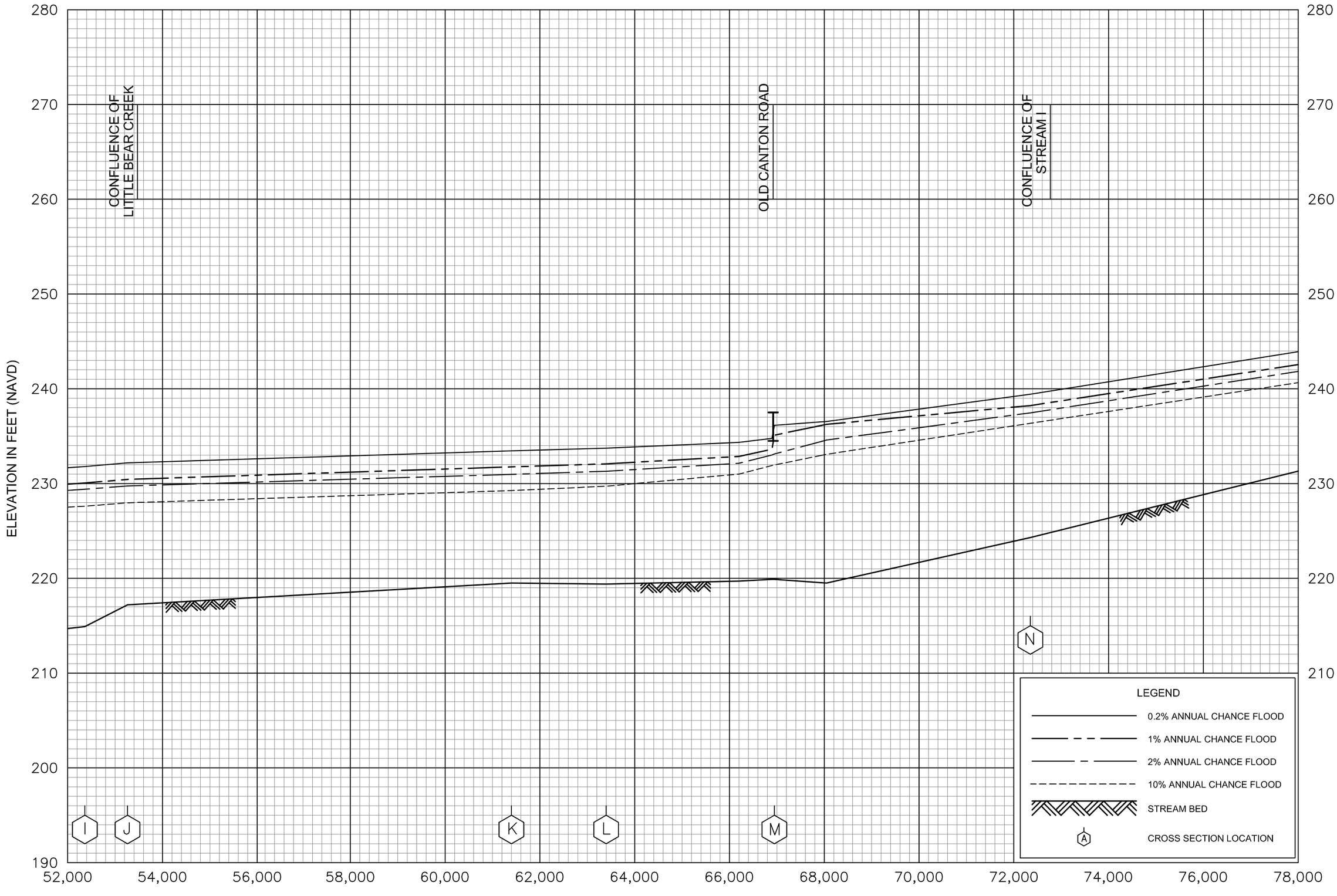
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

7P



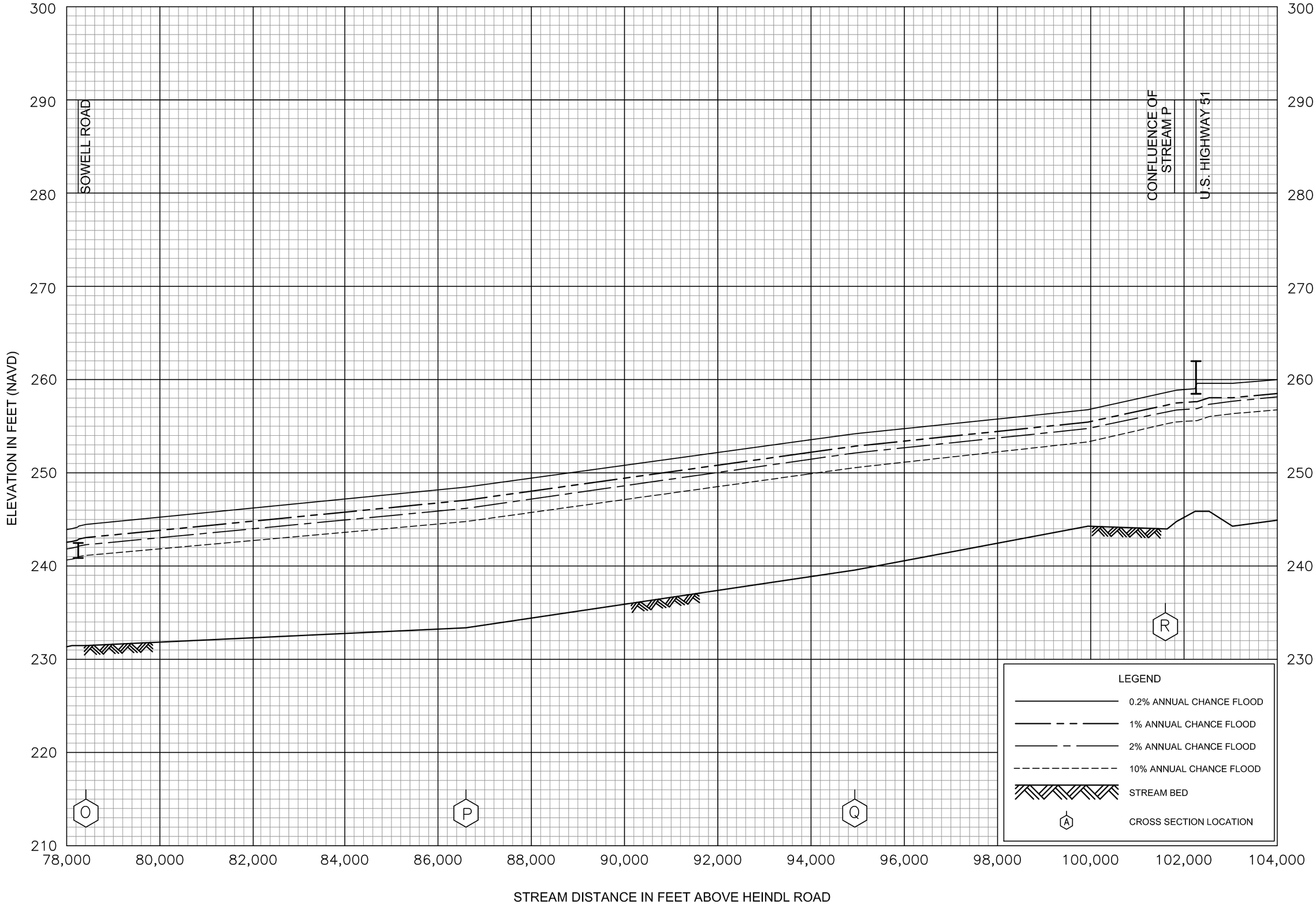
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

8P



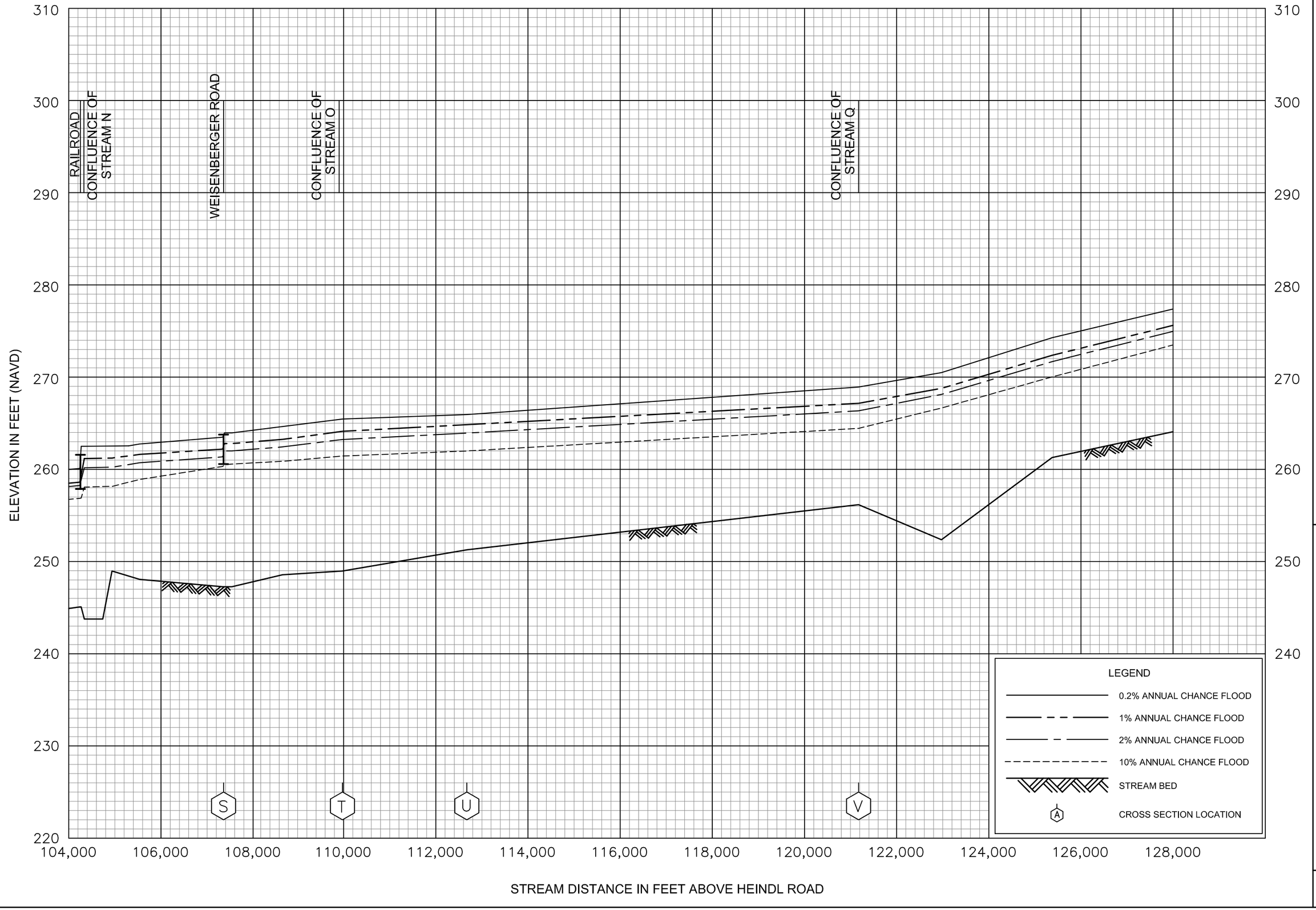
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

9P



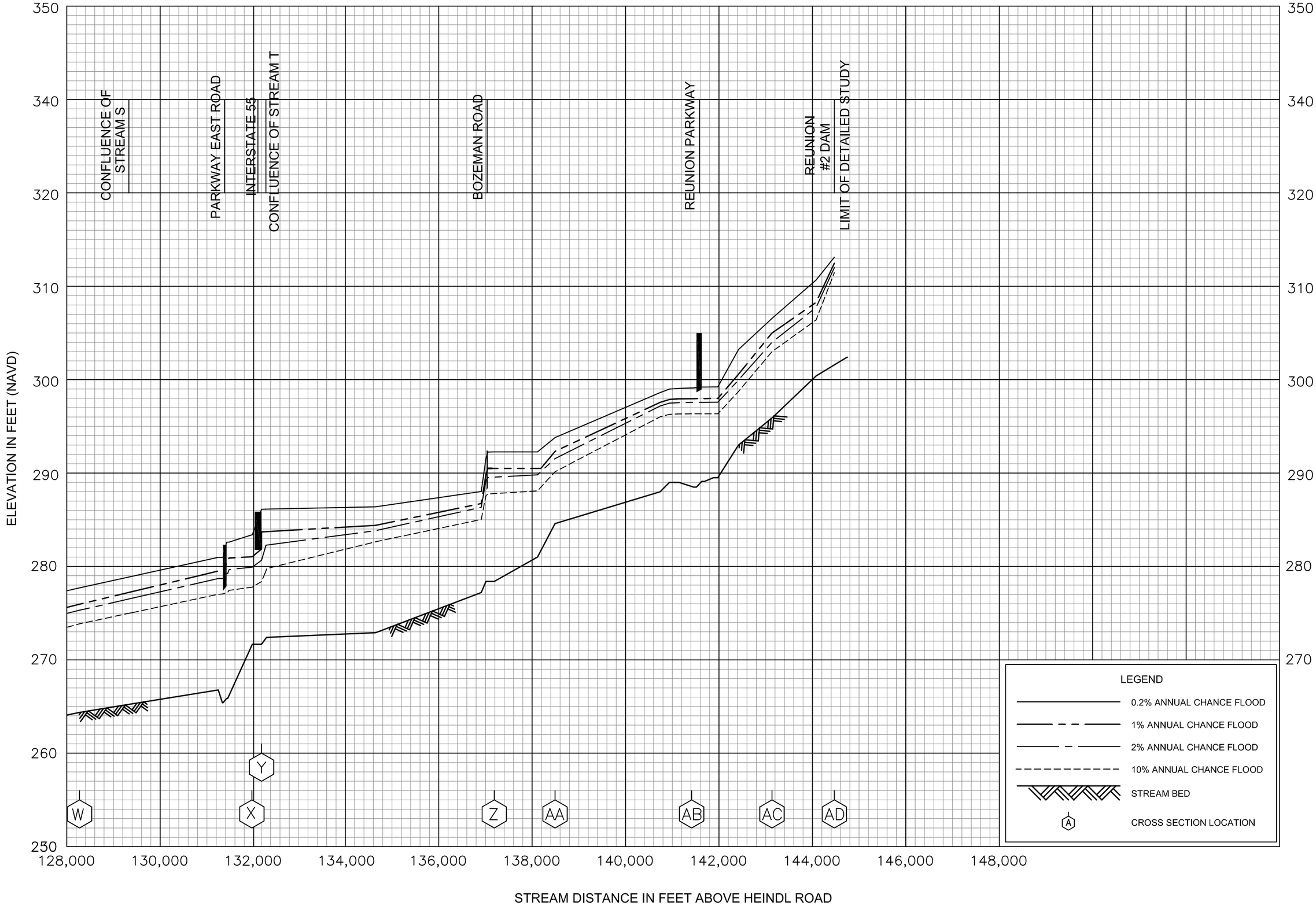
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

10P



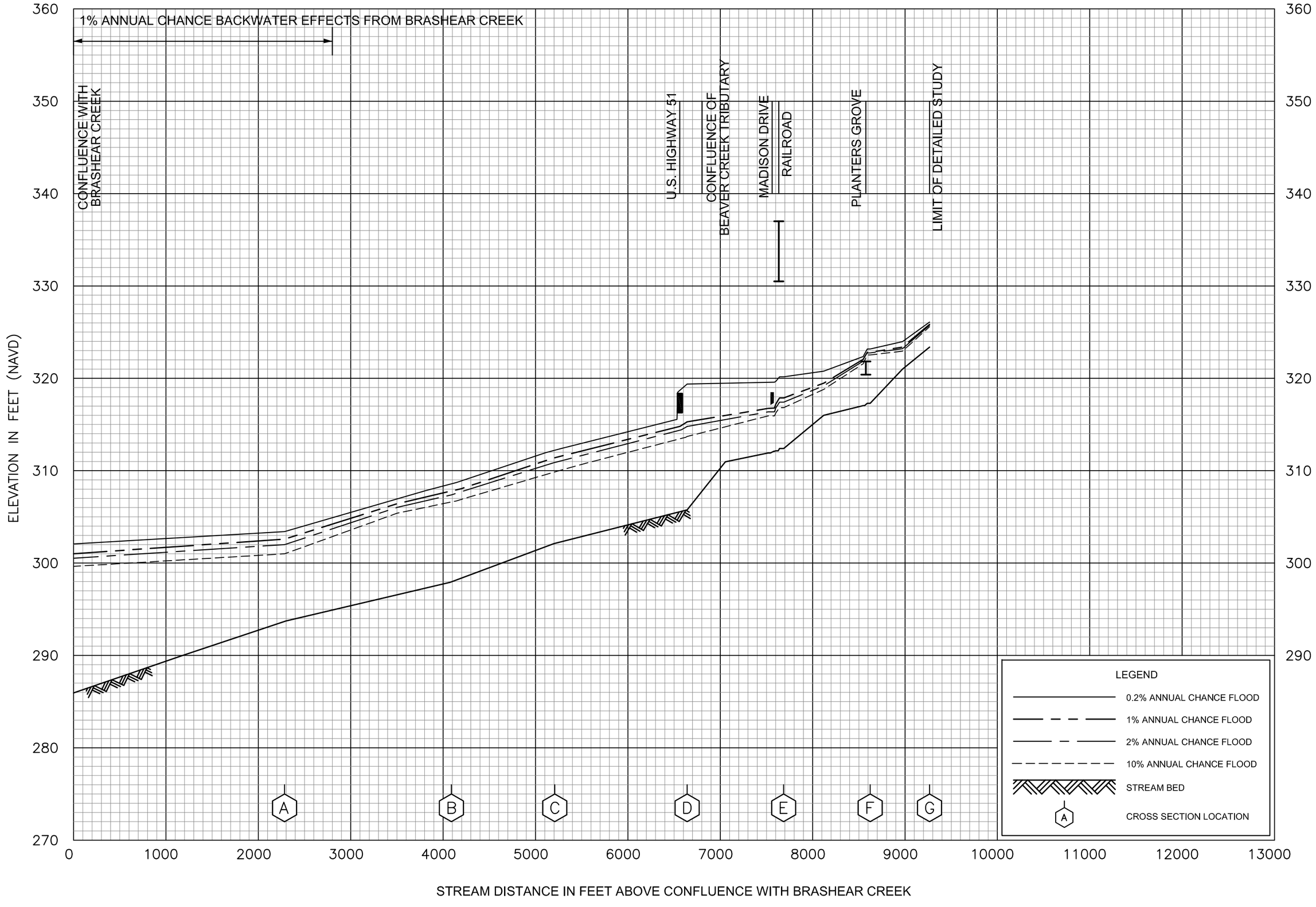
FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS
AND INCORPORATED AREAS

11P



FLOOD PROFILES

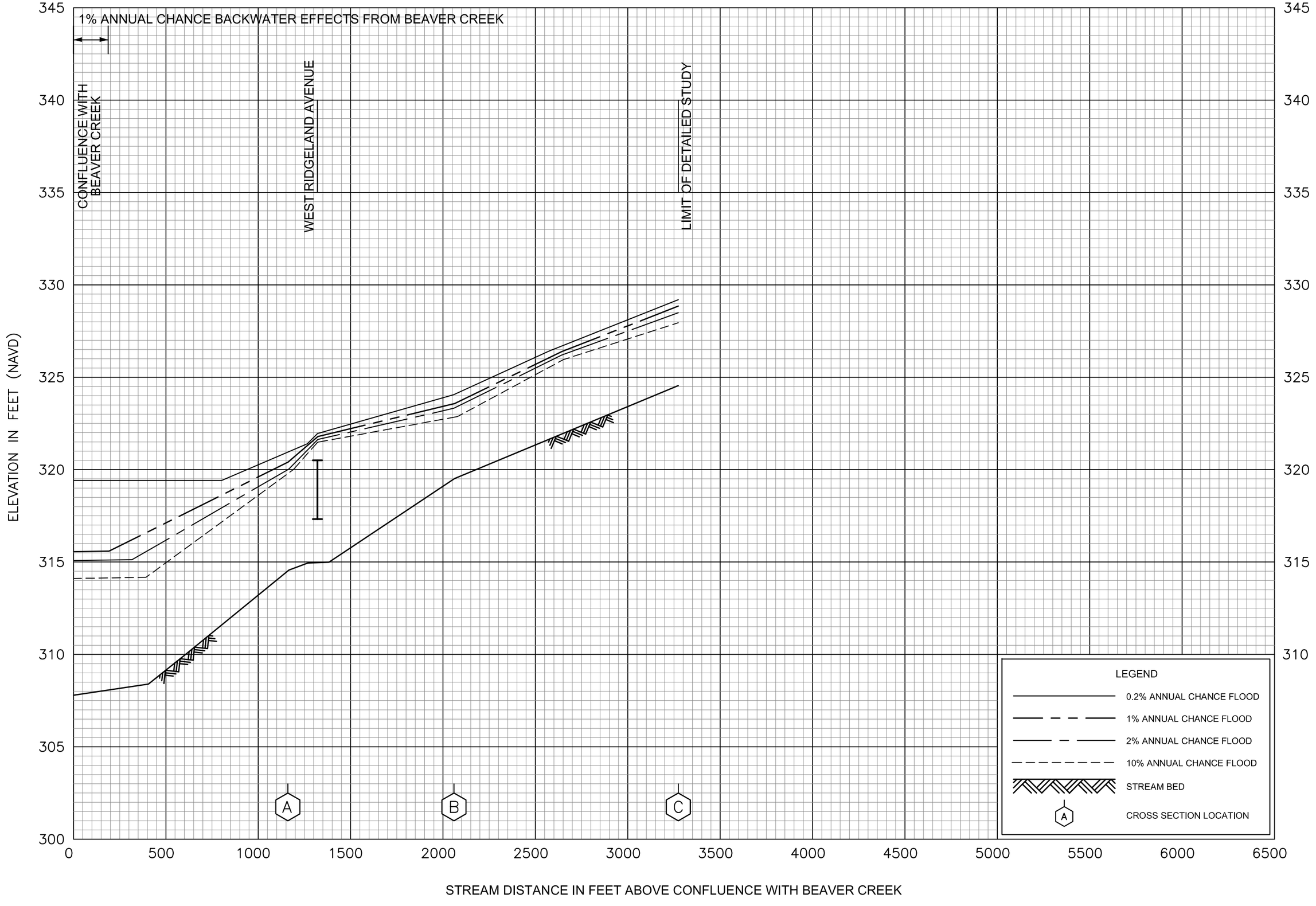
BEAVER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

12P



FLOOD PROFILES

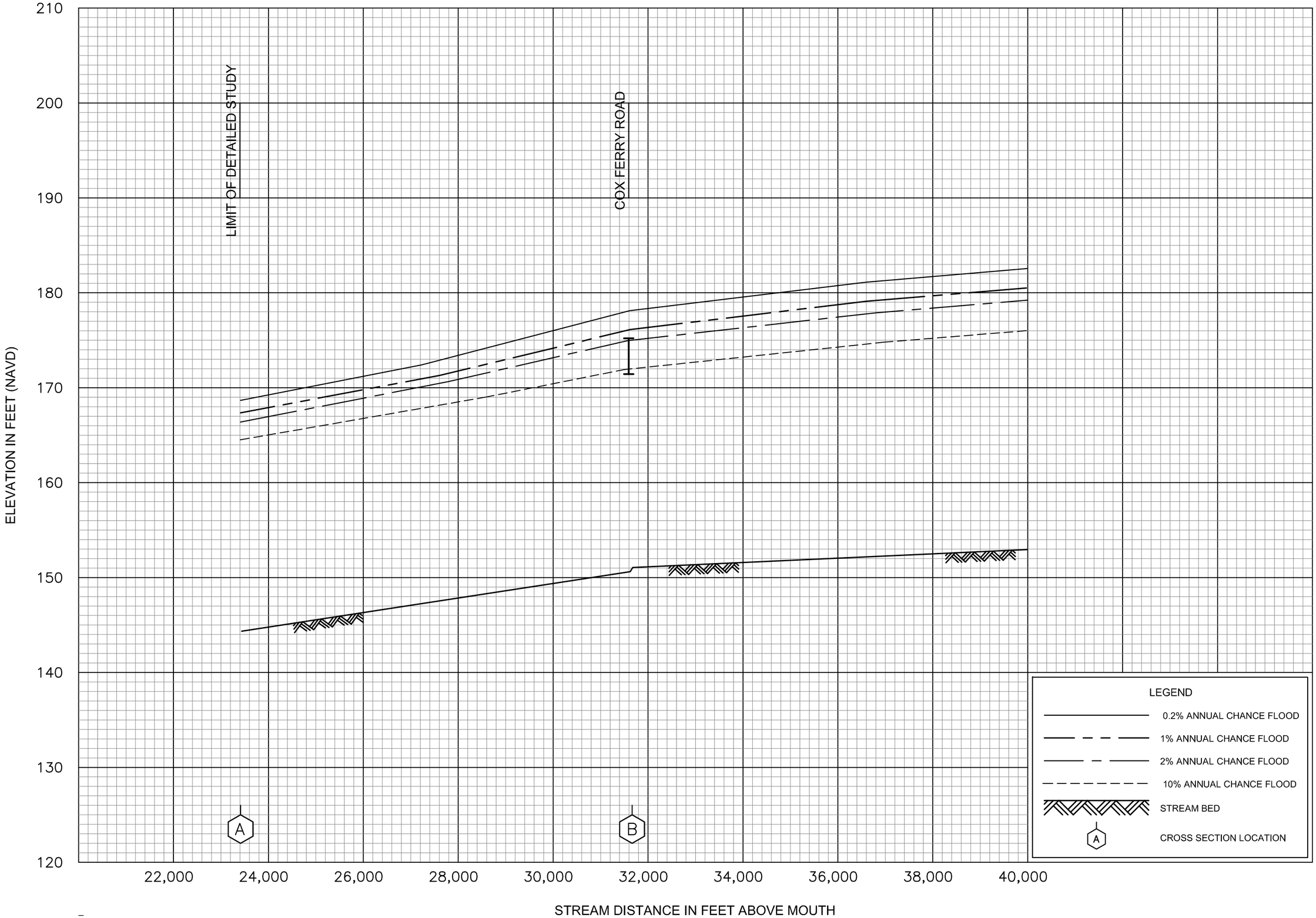
BEAVER CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

13P



FLOOD PROFILES

BOGUE CHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

14P

ELEVATION IN FEET (NAVD)

220
210
200
190
180
170
160
150
140
130

CONFLUENCE OF SPRING CREEK

LIMIT OF DETAILED STUDY

C

D

LEGEND

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

40,000 42,000 44,000 46,000 48,000 50,000 52,000 54,000 56,000 58,000

STREAM DISTANCE IN FEET ABOVE MOUTH

FLOOD PROFILES

BOGUE CHITTO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

15P

1% ANNUAL CHANCE BACKWATER EFFECTS FROM PEARL RIVER

LIMIT OF FLOODING AFFECTING COMMUNITY

COUNTY BOUNDARY

LAKE HARBOUR DRIVE

RICE ROAD

CONFLUENCE OF CULLEY CREEK

ELEVATION IN FEET (NAVD)

330
320
310
300
290
280
270
260
250
240

2000 3000 4000 5000 6000 7000 8000 9000 10,000 11,000 12,000 13,000 14,000 15,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH PEARL RIVER

A B C D E

LEGEND

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

FLOOD PROFILES

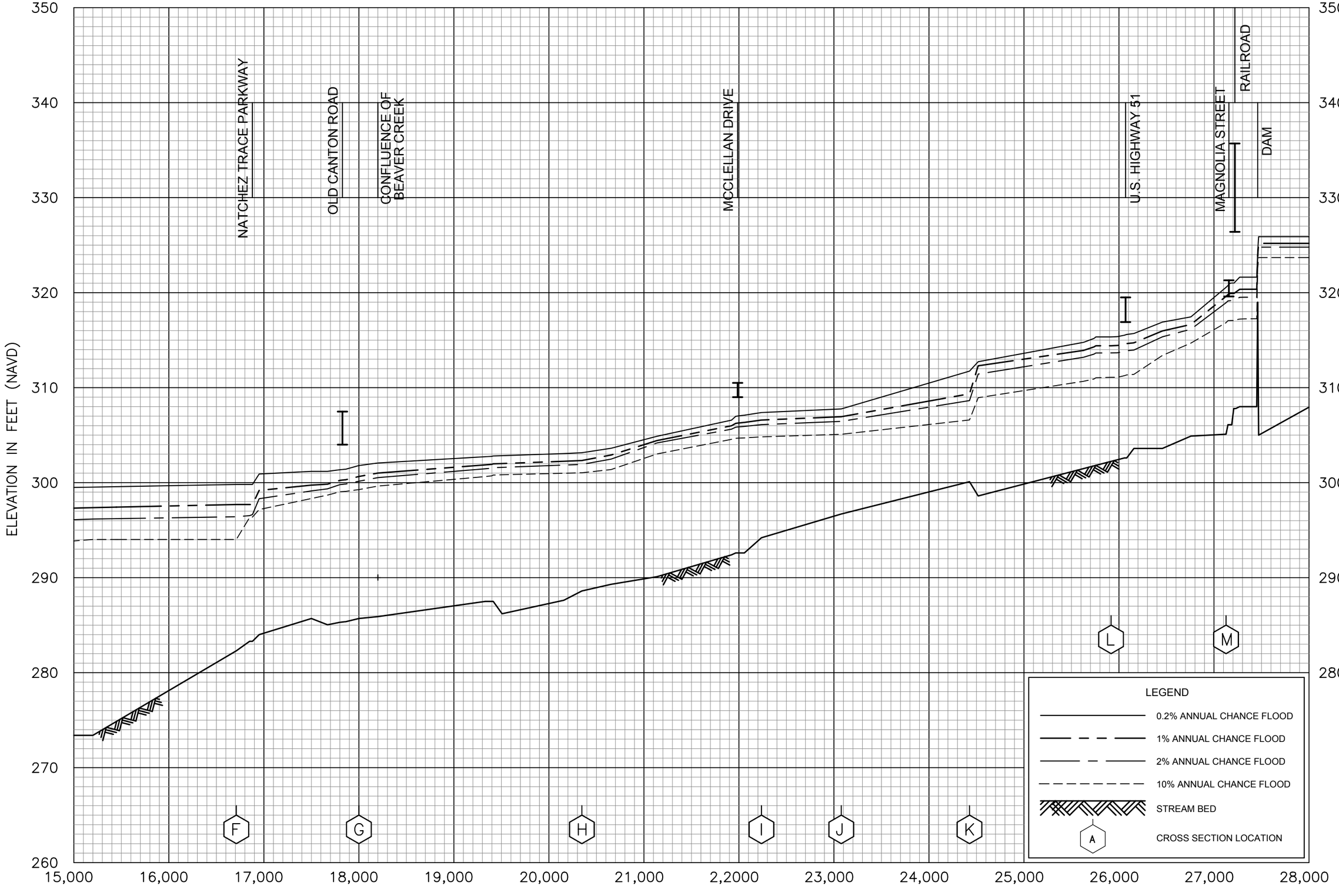
BRASHEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

16P



FLOOD PROFILES

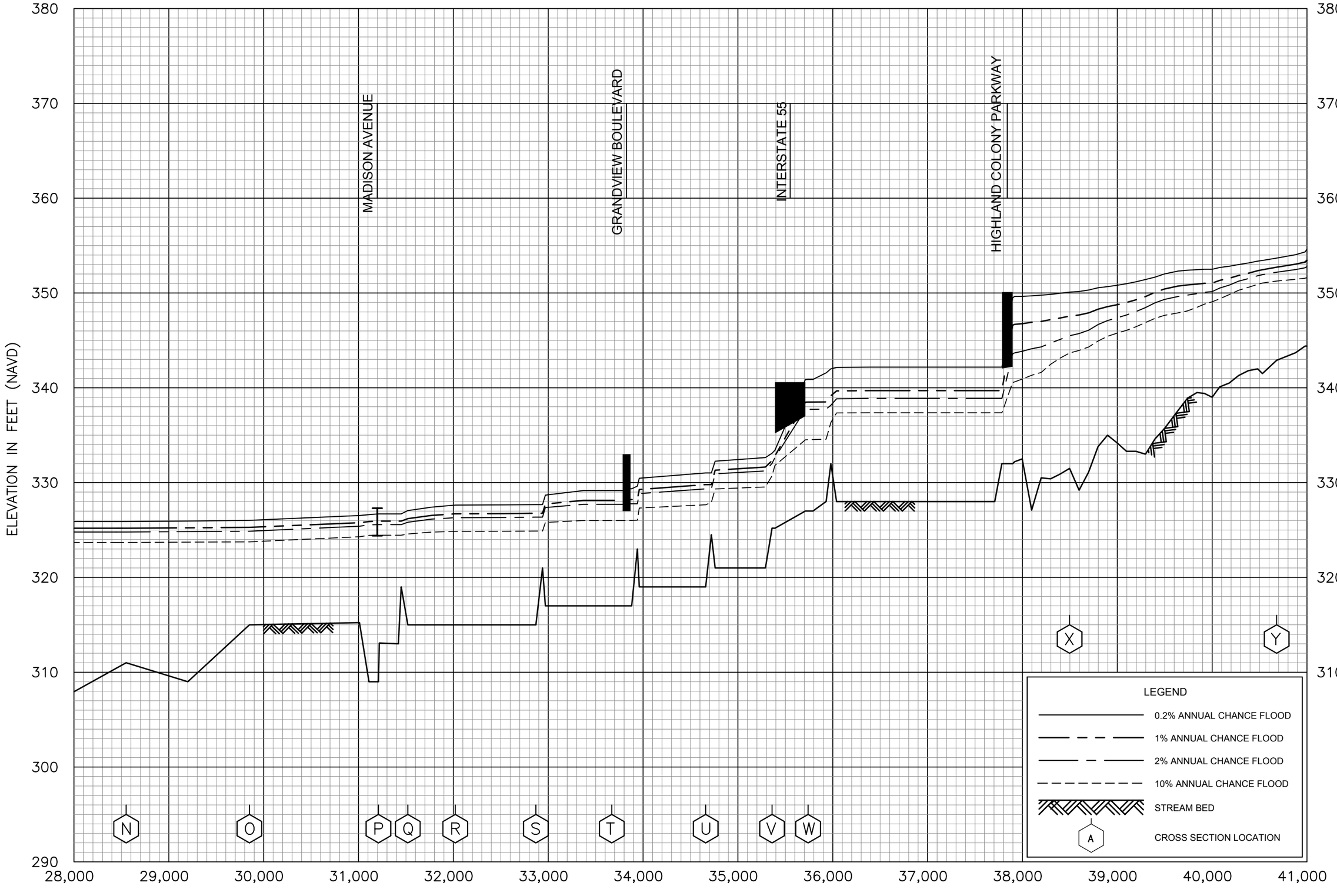
BRASHEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

17P



FLOOD PROFILES

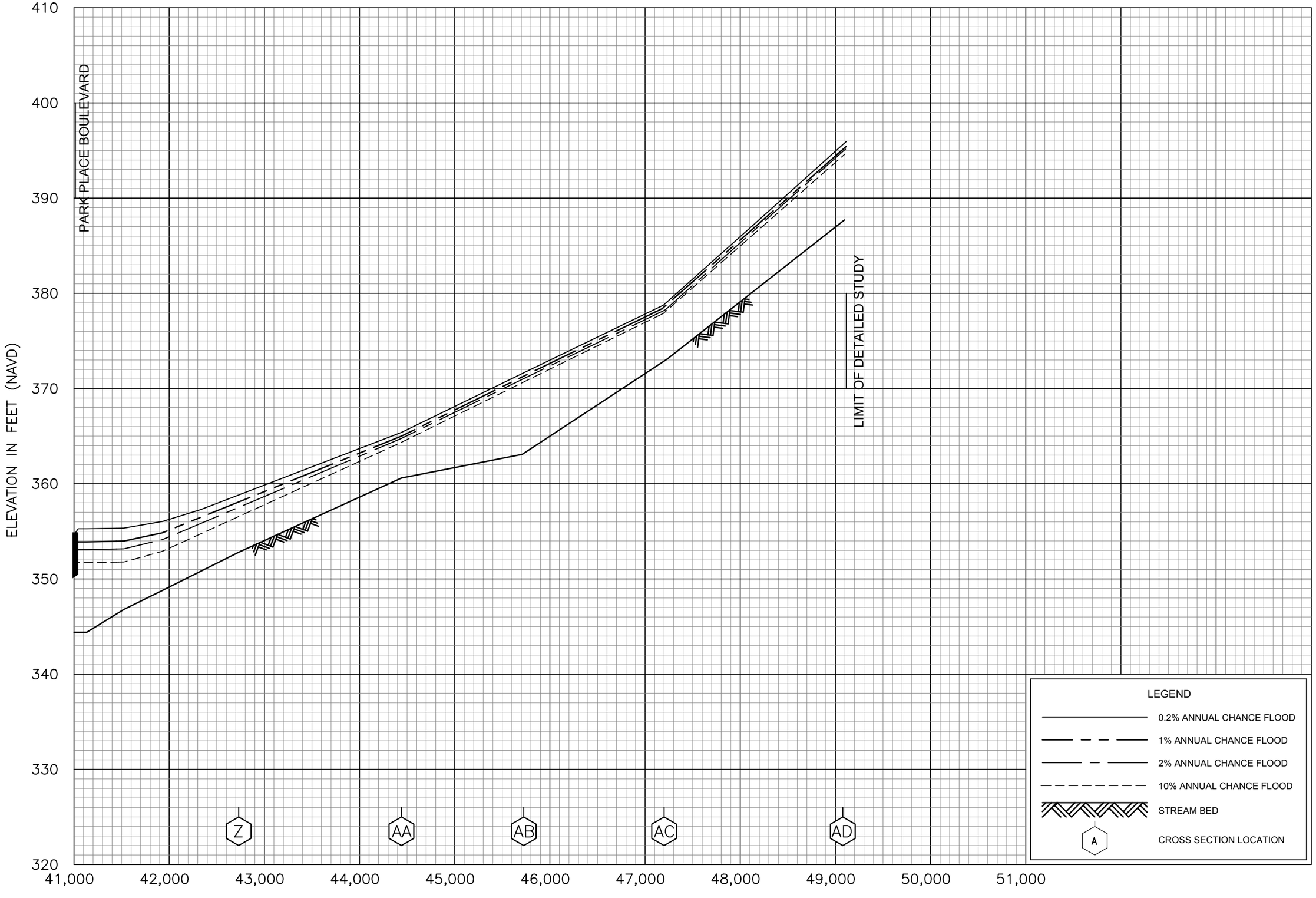
BRASHEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

18P



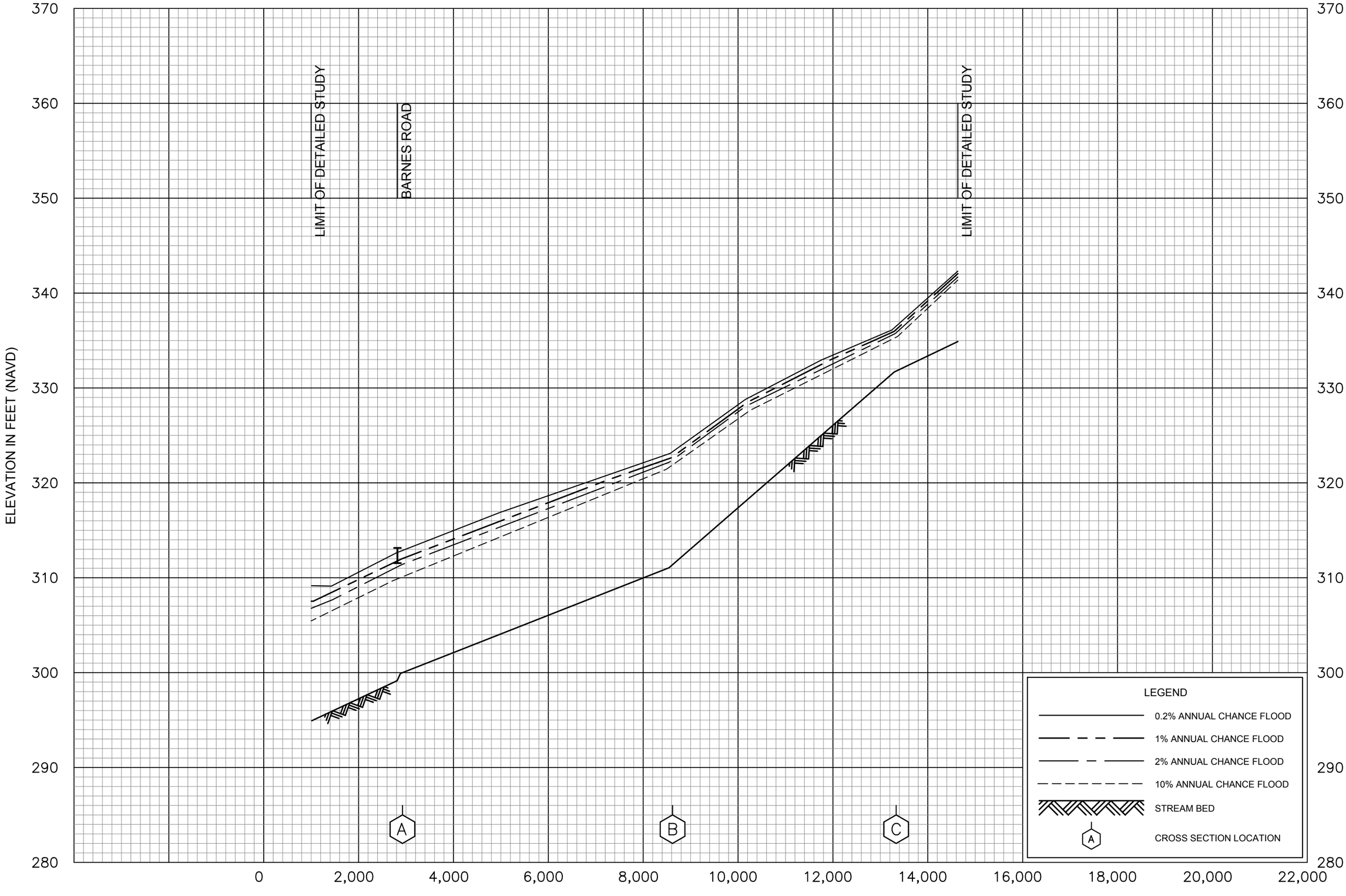
FLOOD PROFILES

BRASHEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



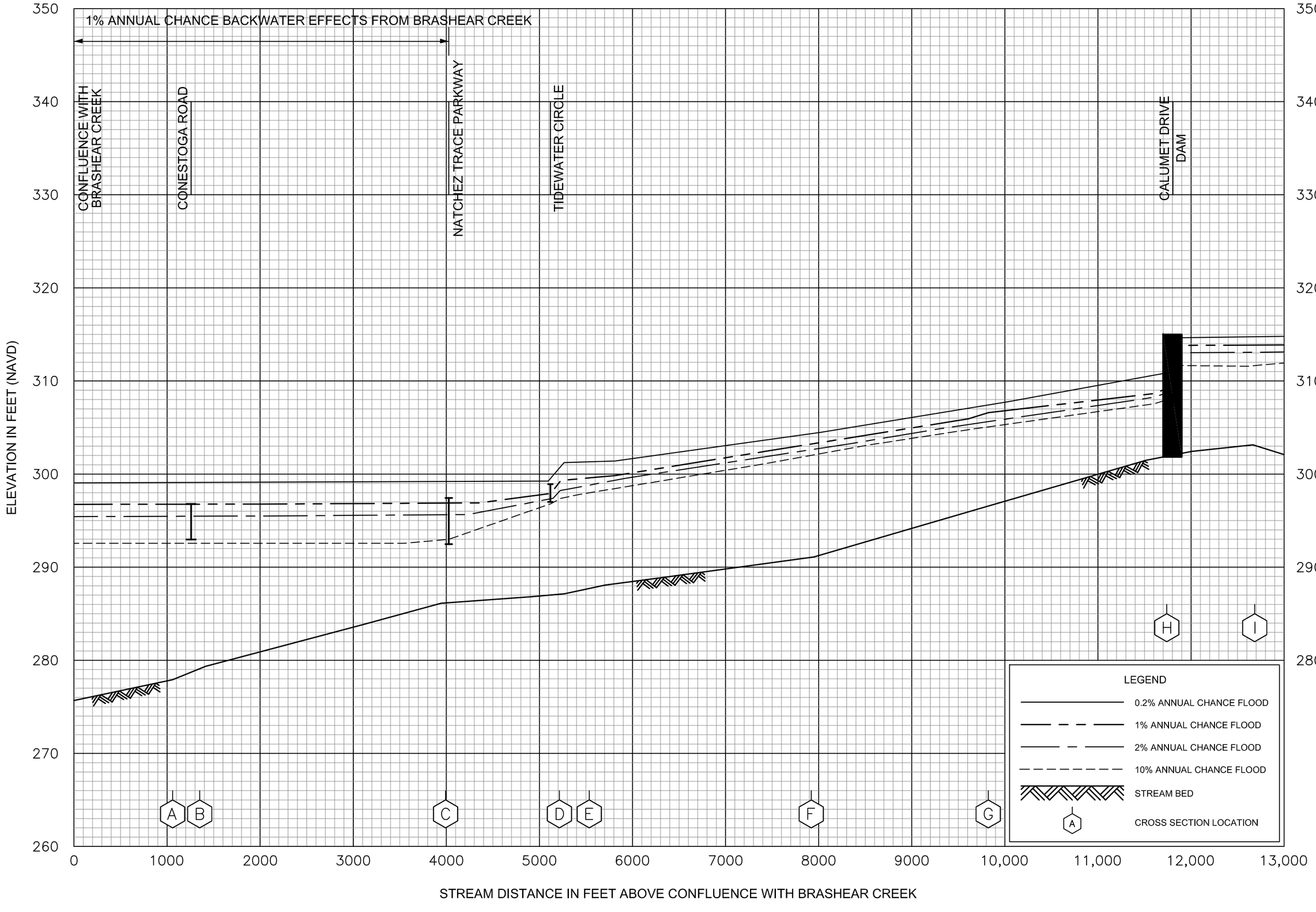
FLOOD PROFILES

BROWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

CULLEY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

ST. AUGUSTINE DRIVE
OLD CANTON ROAD
MADISON AVENUE
MAIN STREET
STRAWBERRY HILL ROAD
LIMIT OF DETAILED STUDY
CULVERT

ELEVATION IN FEET (NAVD)

370
360
350
340
330
320
310
300
290
280

13,000 14,000 15,000 16,000 17,000 18,000 19,000 20,000 21,000 22,000 23,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BRASHEAR CREEK

J K L M N O P Q R S

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

FLOOD PROFILES

CULLEY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

22P

ELEVATION IN FEET (NAVD)

360
350
340
330
320
310
300
290
280
270

LIMIT OF DETAILED STUDY

OLD RICE ROAD

LIMIT OF DETAILED STUDY

A
B
C

LEGEND

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

−2,000 −1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000

STREAM DISTANCE IN FEET ABOVE NATCHEZ TRACE PARKWAY

FLOOD PROFILES

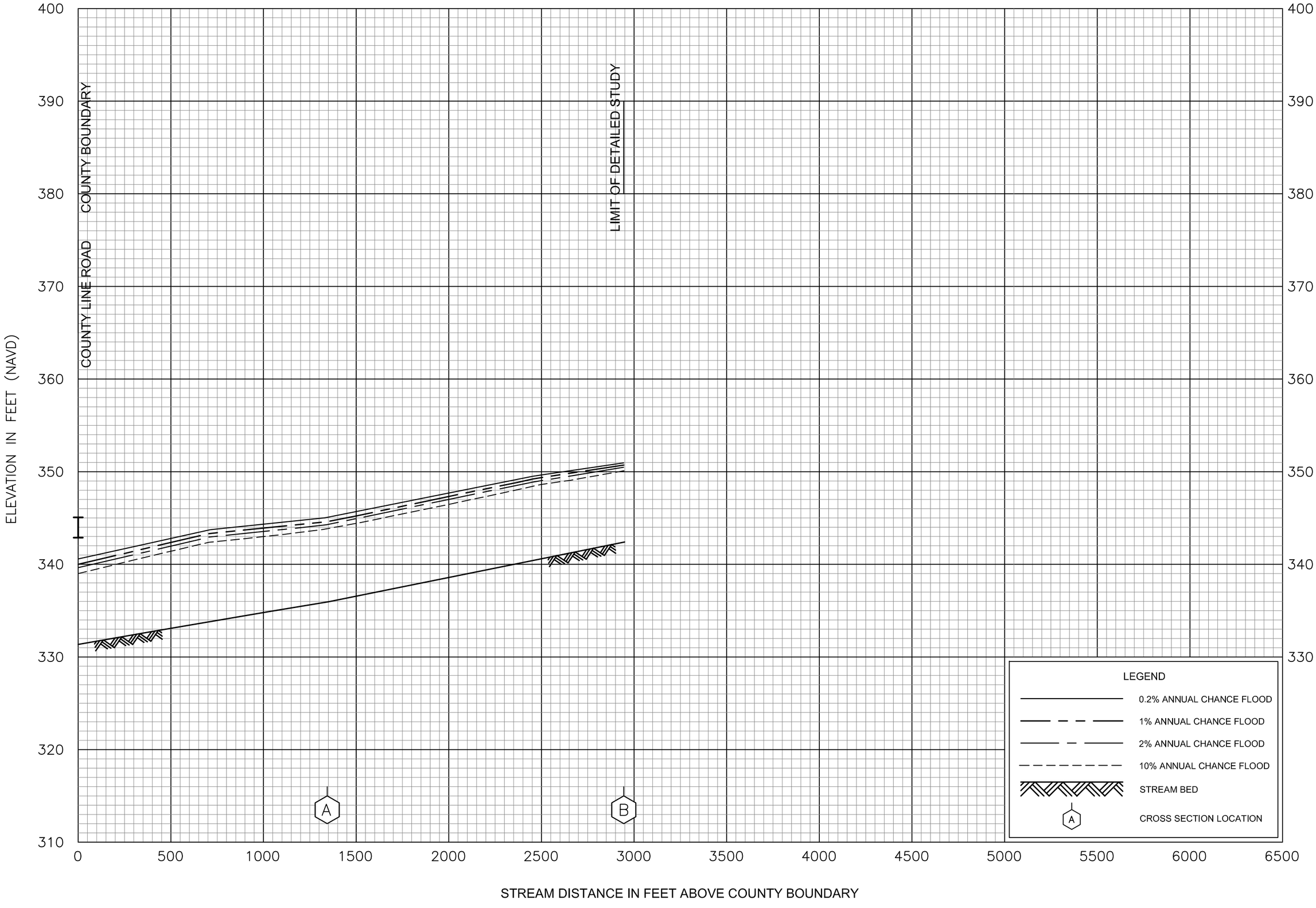
HALEY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

23P



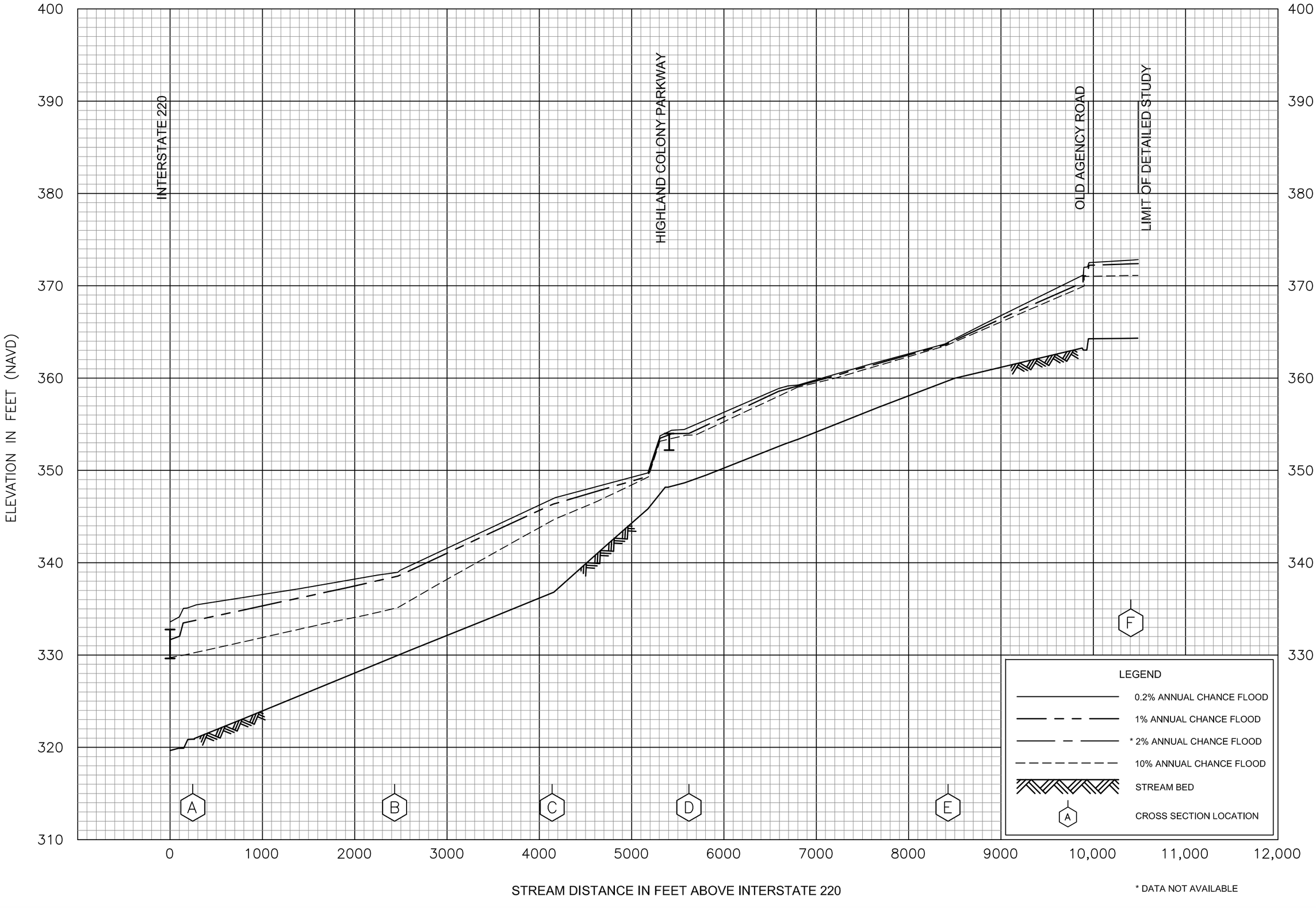
FLOOD PROFILES

HANGING MOSS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

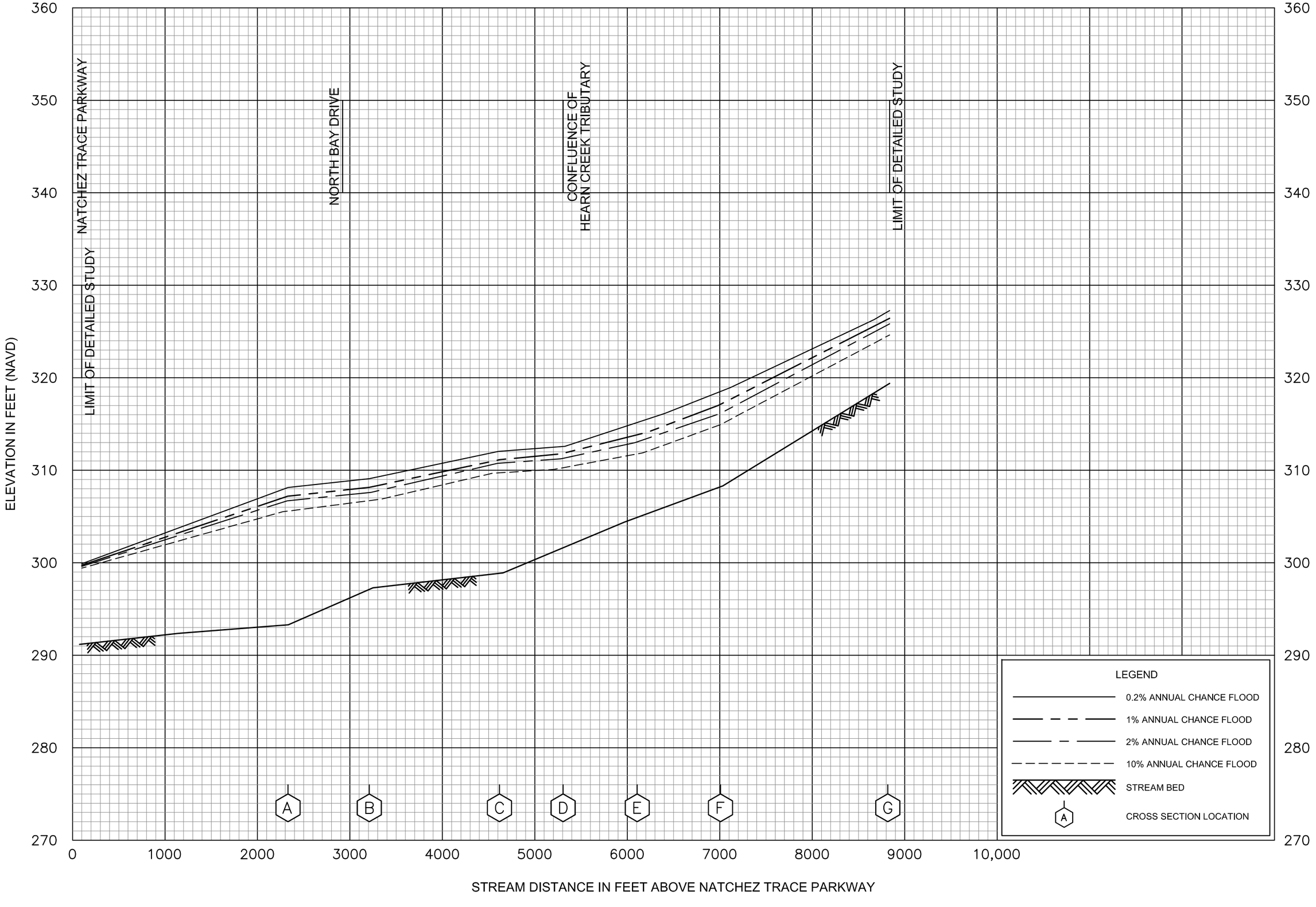
HANGING MOSS CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

25P



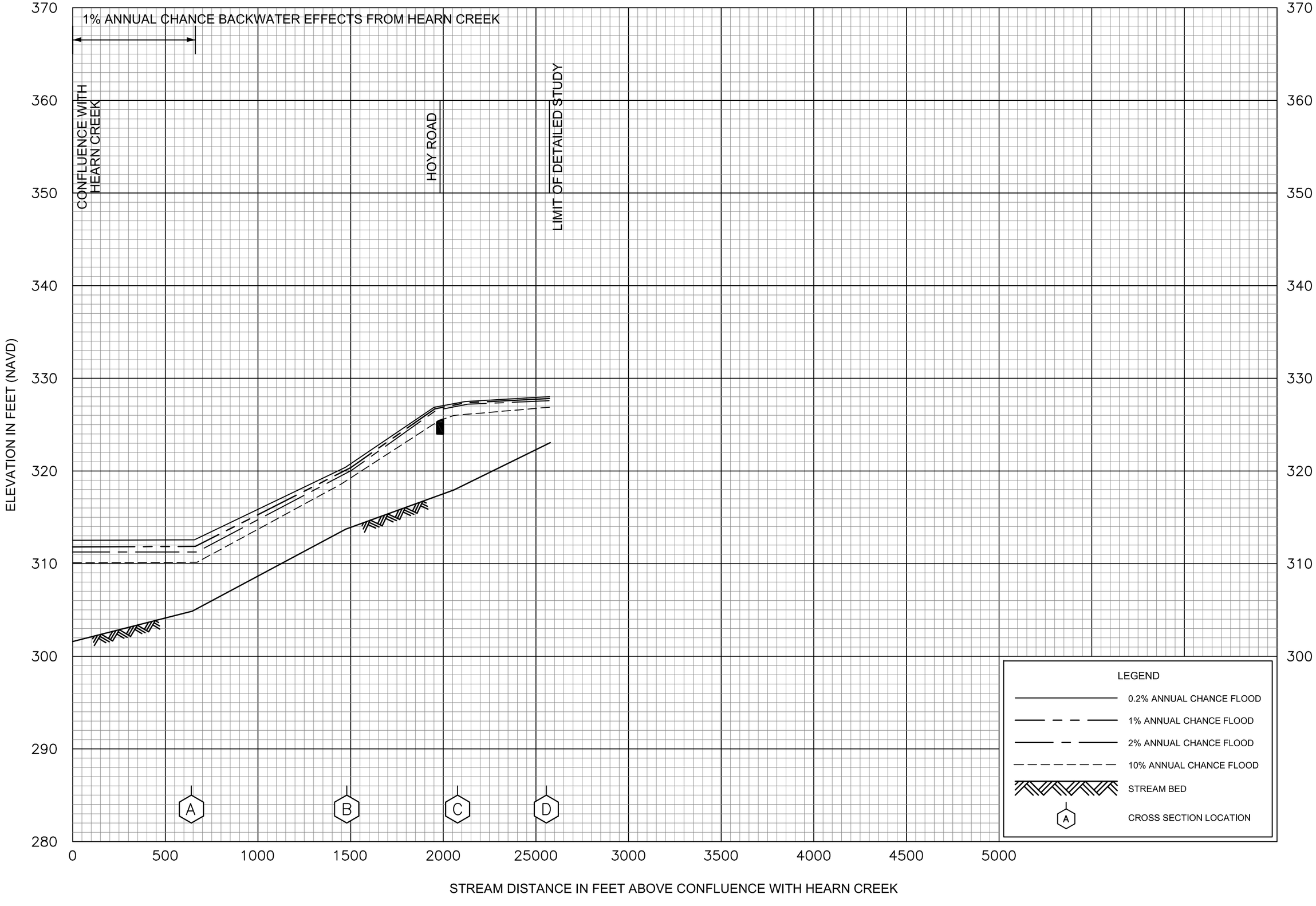
FLOOD PROFILES

HEARN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

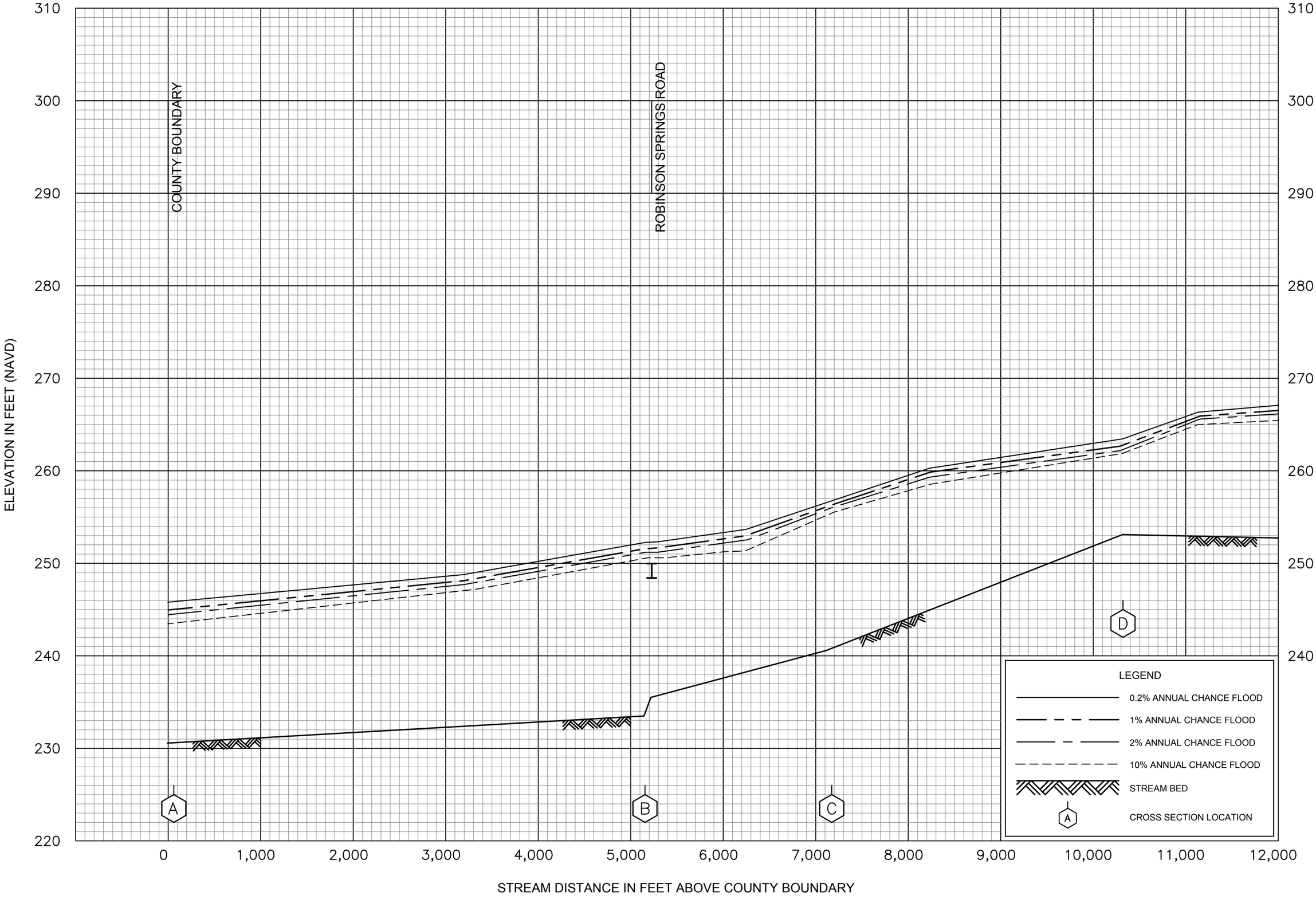
HEARN CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

27P



FLOOD PROFILES

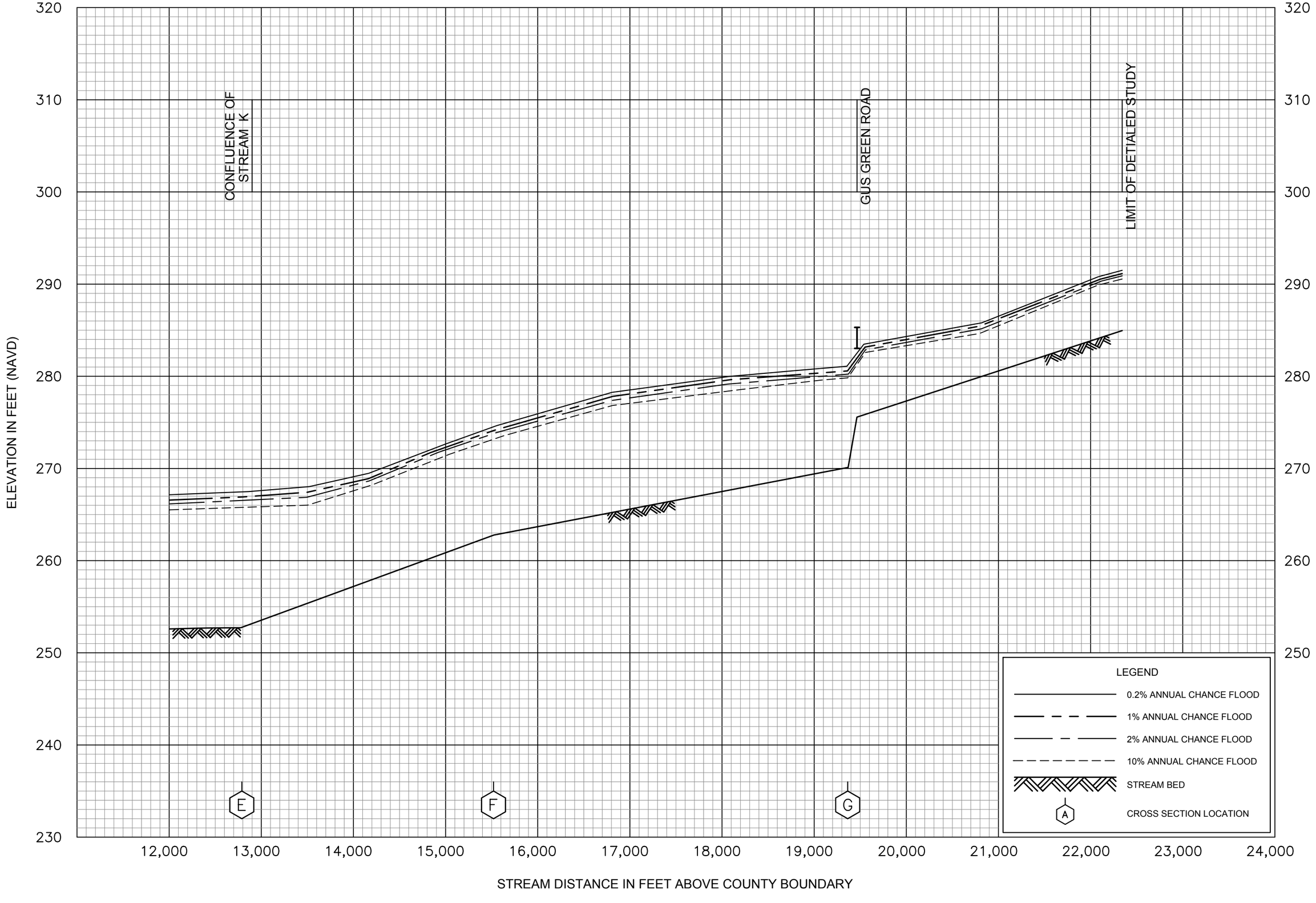
LIMEKILN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

28P



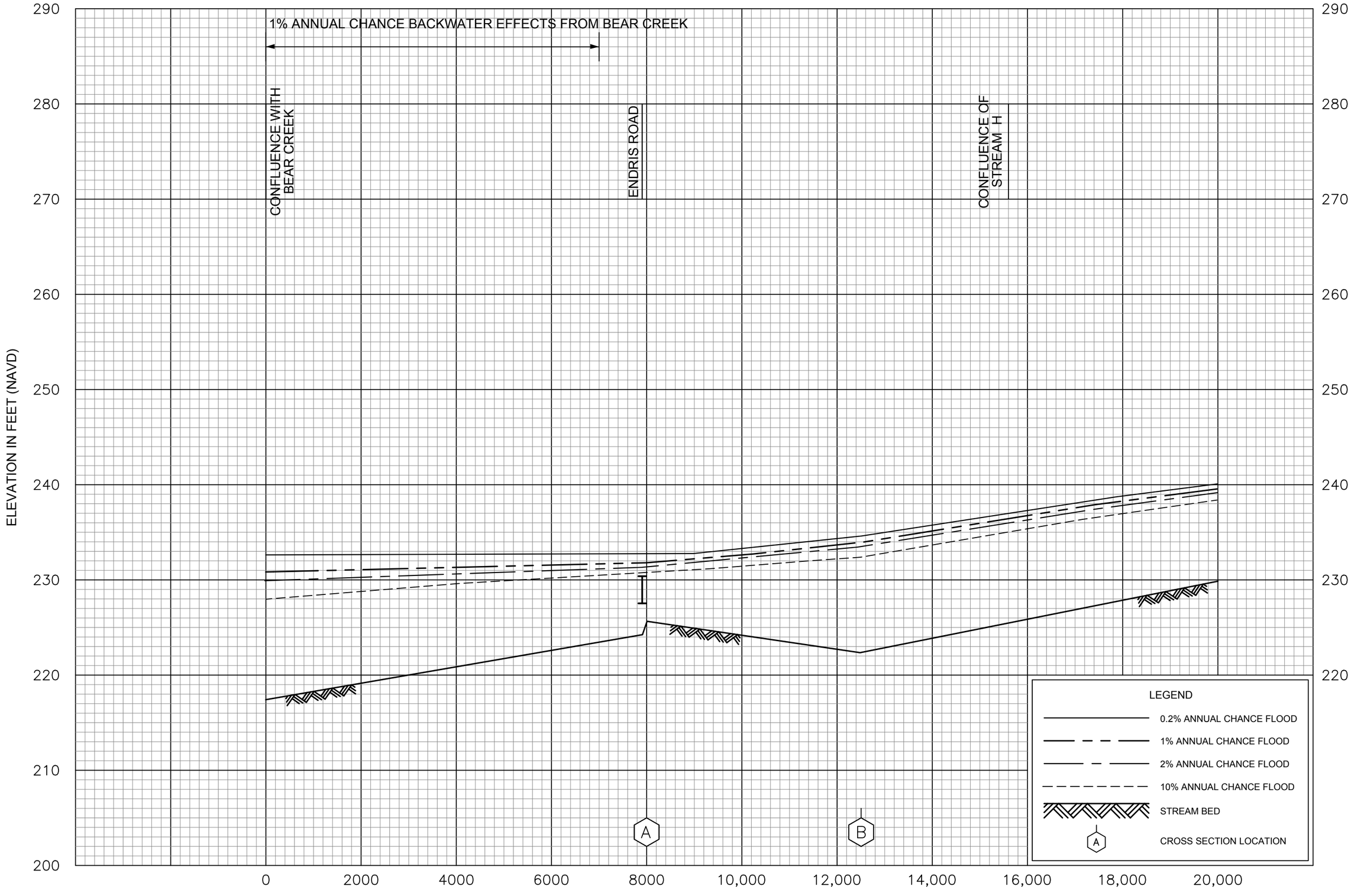
FLOOD PROFILES

LIMEKILN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



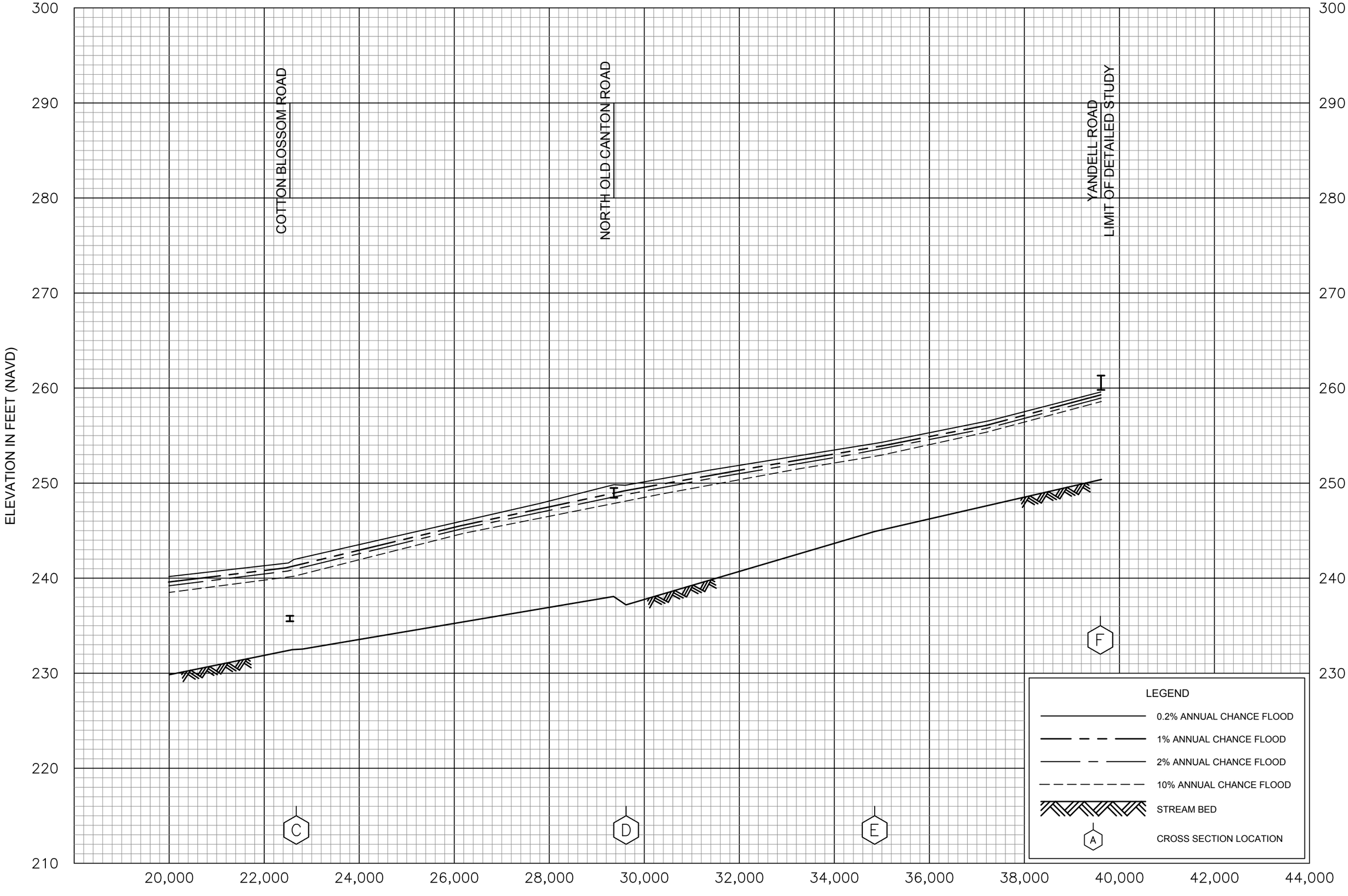
FLOOD PROFILES

LITTLE BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



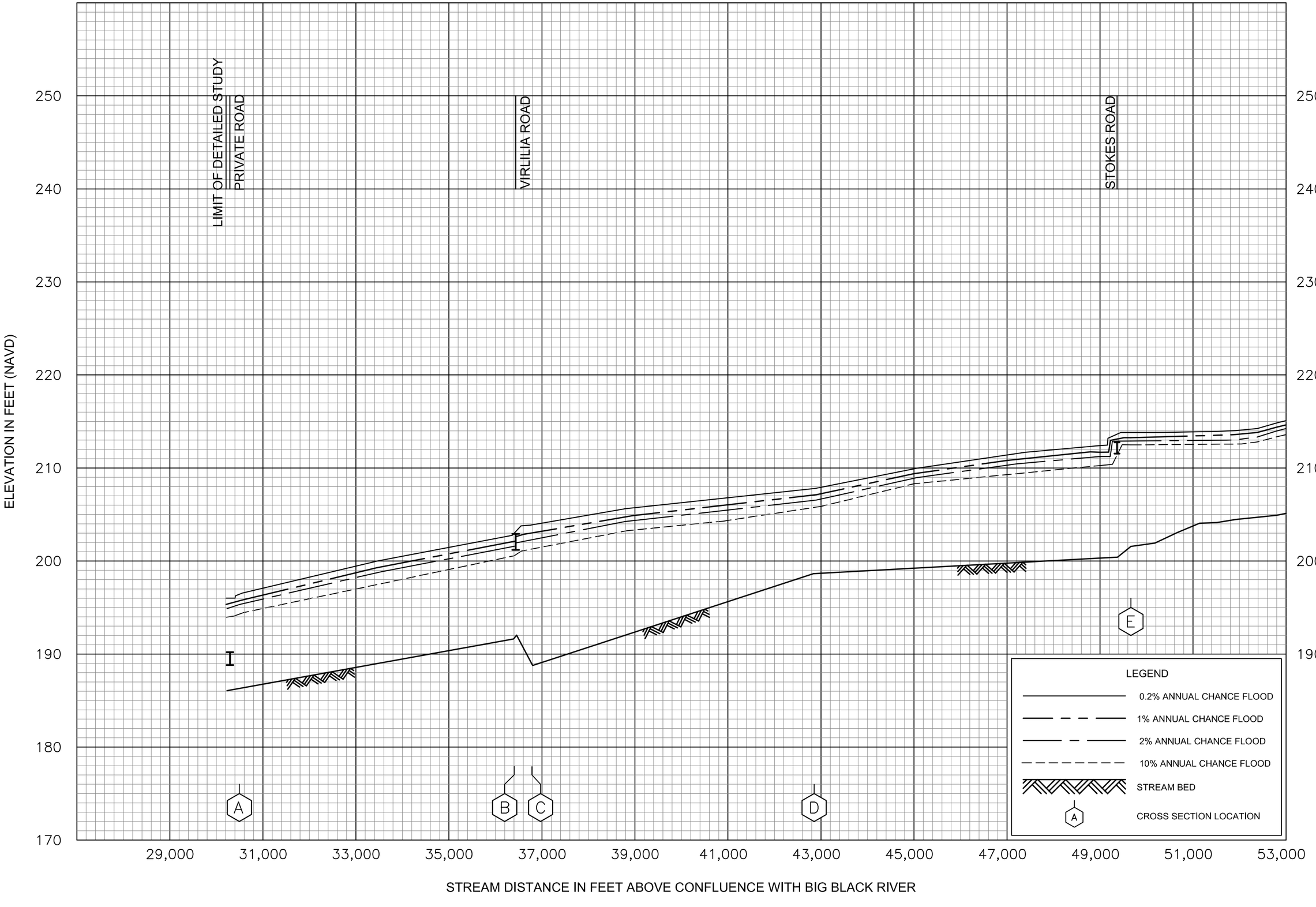
FLOOD PROFILES

LITTLE BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

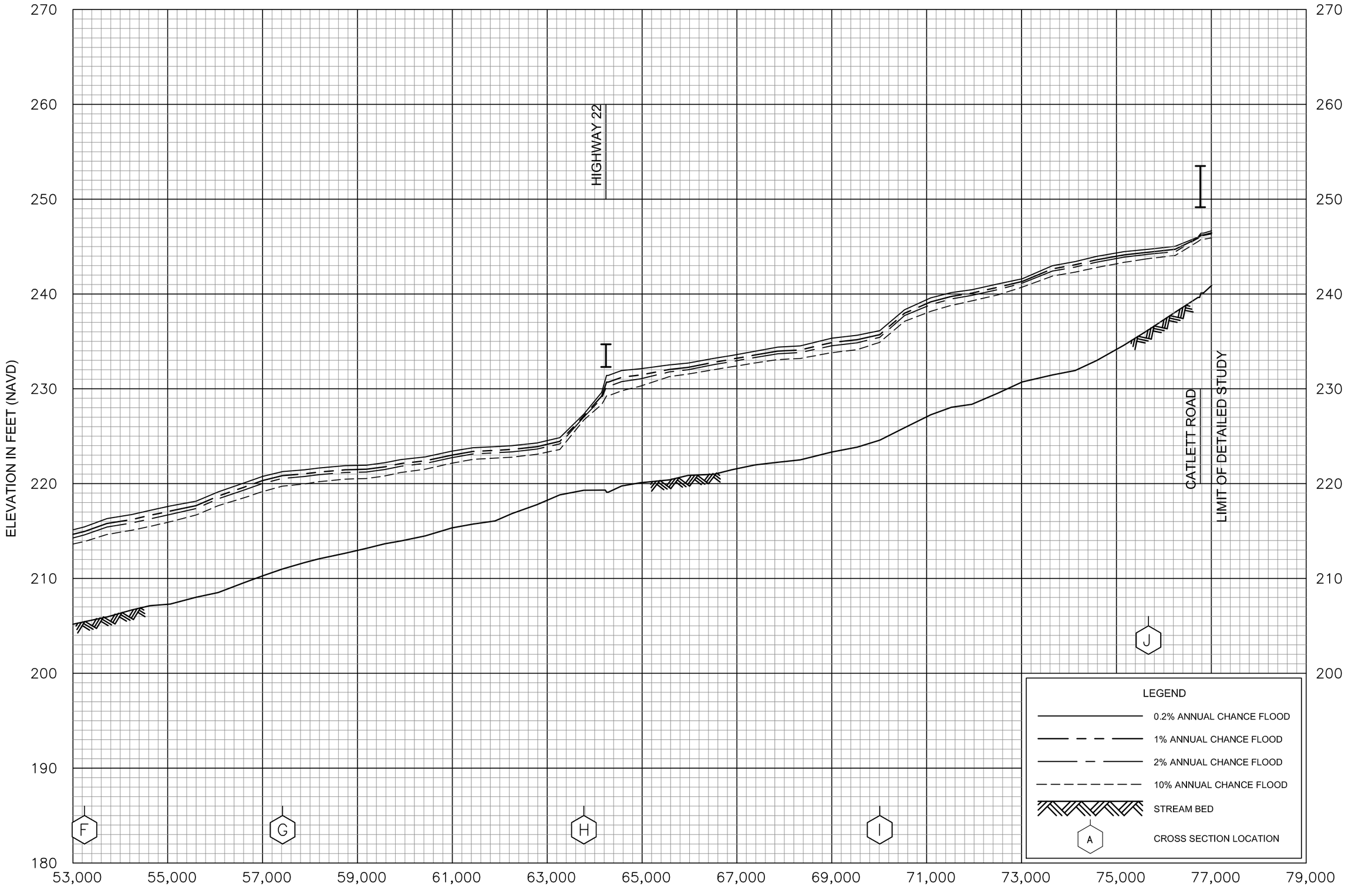
PANTHER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

32P



FLOOD PROFILES

PANTHER CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

FLOOD INSURANCE STUDY

MADISON COUNTY, MISSISSIPPI
AND INCORPORATED AREAS

VOLUME 2 OF 2

COMMUNITY NAME	COMMUNITY NUMBER
CANTON, CITY OF	280109
FLORA, TOWN OF	280399
MADISON, CITY OF	280229
MADISON COUNTY (UNINCORPORATED AREAS)	280228
PEARL RIVER VALLEY WATER SUPPLY DISTRICT	280338
RIDGELAND, CITY OF	280110

REVISED:

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
28089CV002A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program (NFIP) have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: April 15, 1994

Revised Countywide FIS Dates: February 4, 1998

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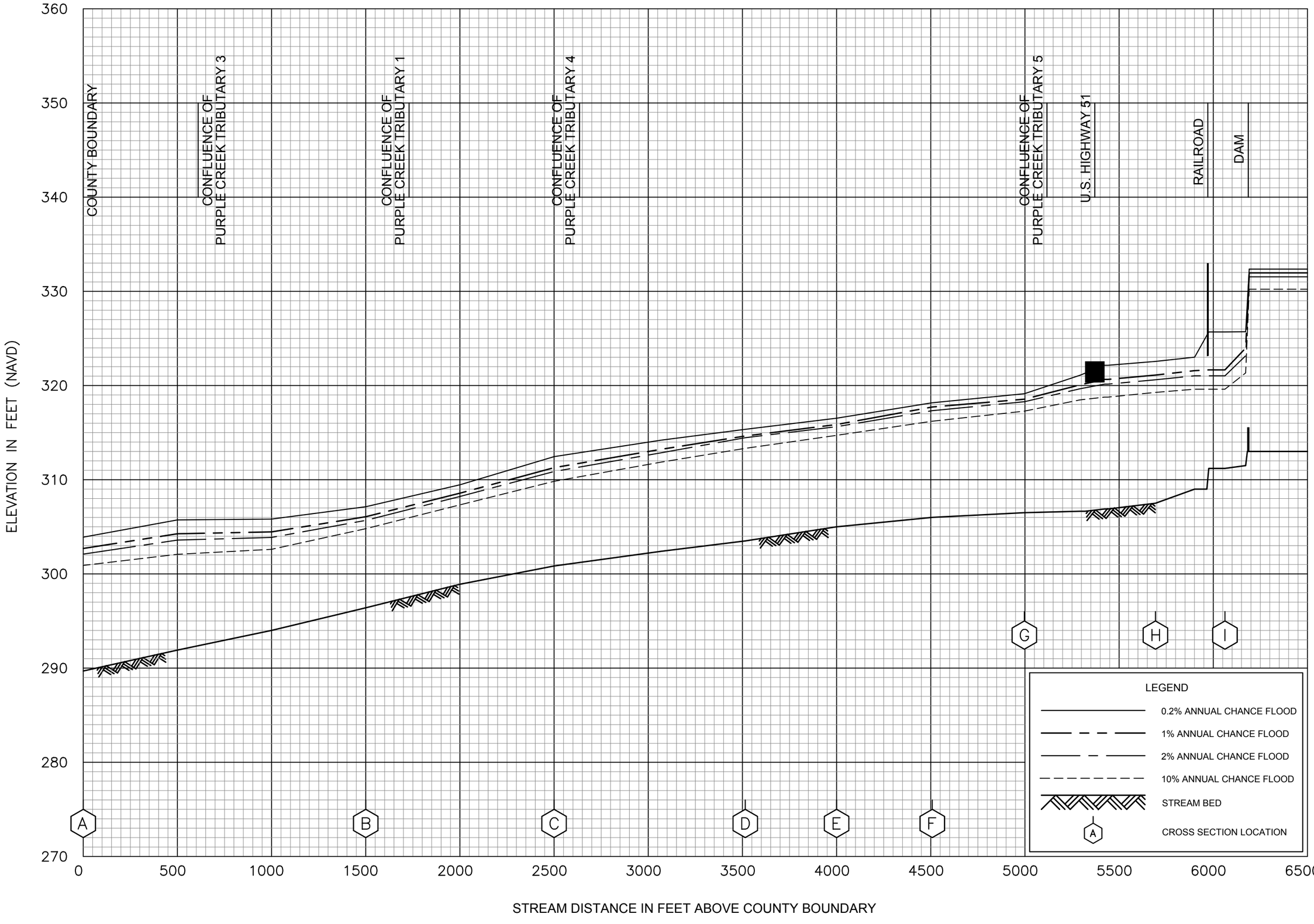
TABLE OF CONTENTS – Volume 1 – continued

TABLE OF CONTENTS – Volume 2

EXHIBITS – continued

Exhibit 1 - Flood Profiles - continued



FLOOD PROFILES

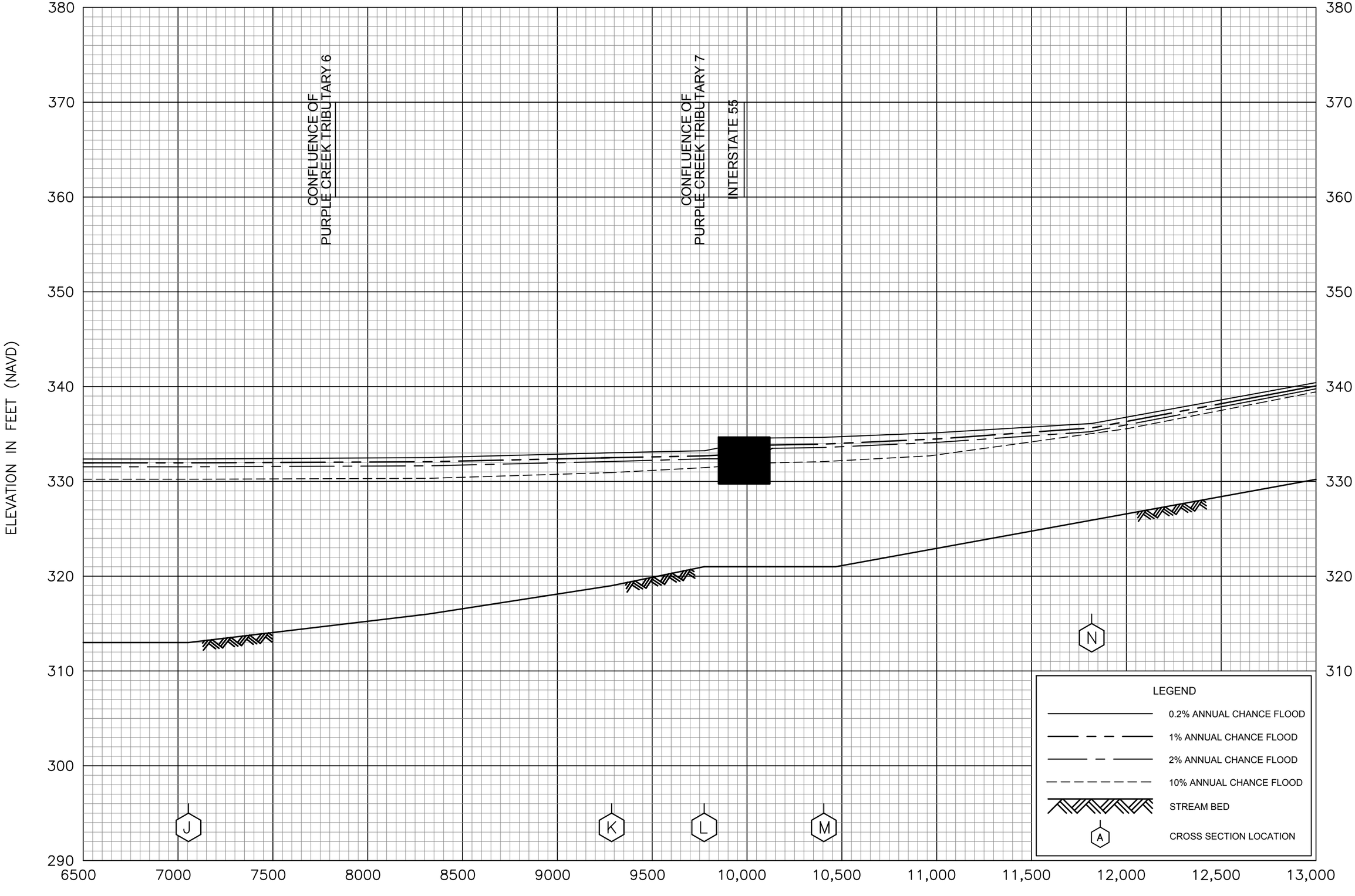
PURPLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

34P



FLOOD PROFILES

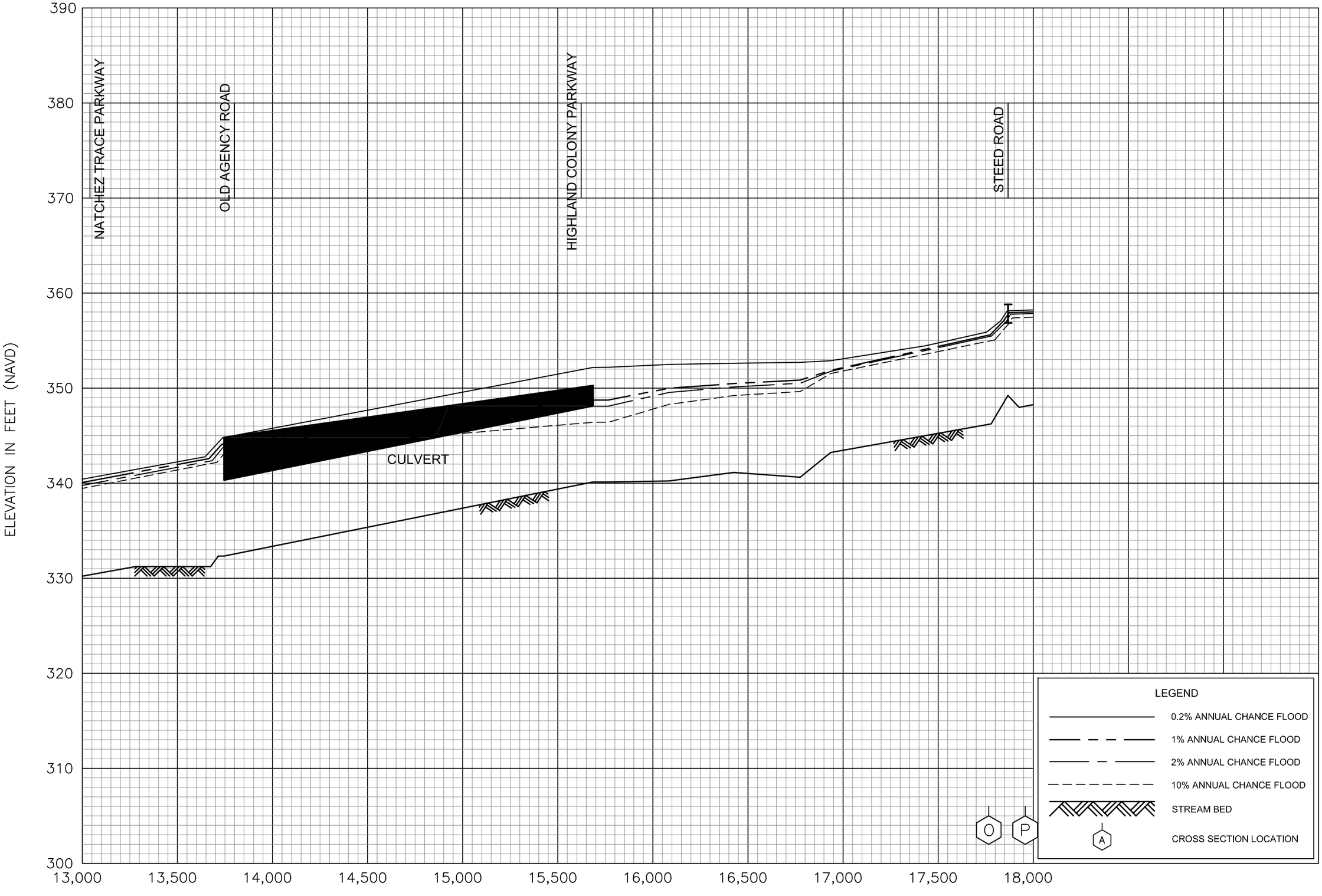
PURPLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

35P



FLOOD PROFILES

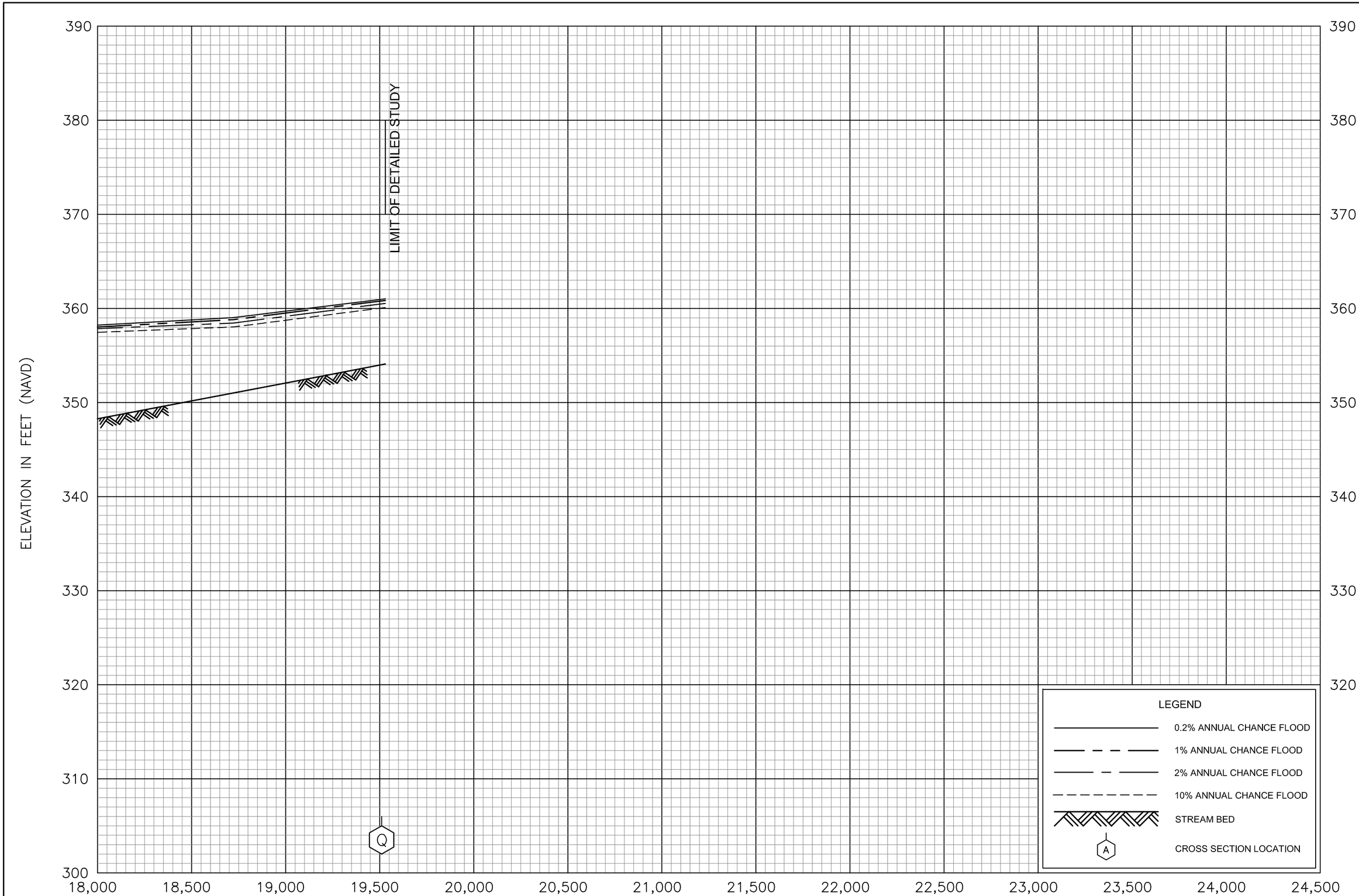
PURPLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

36P



FLOOD PROFILES

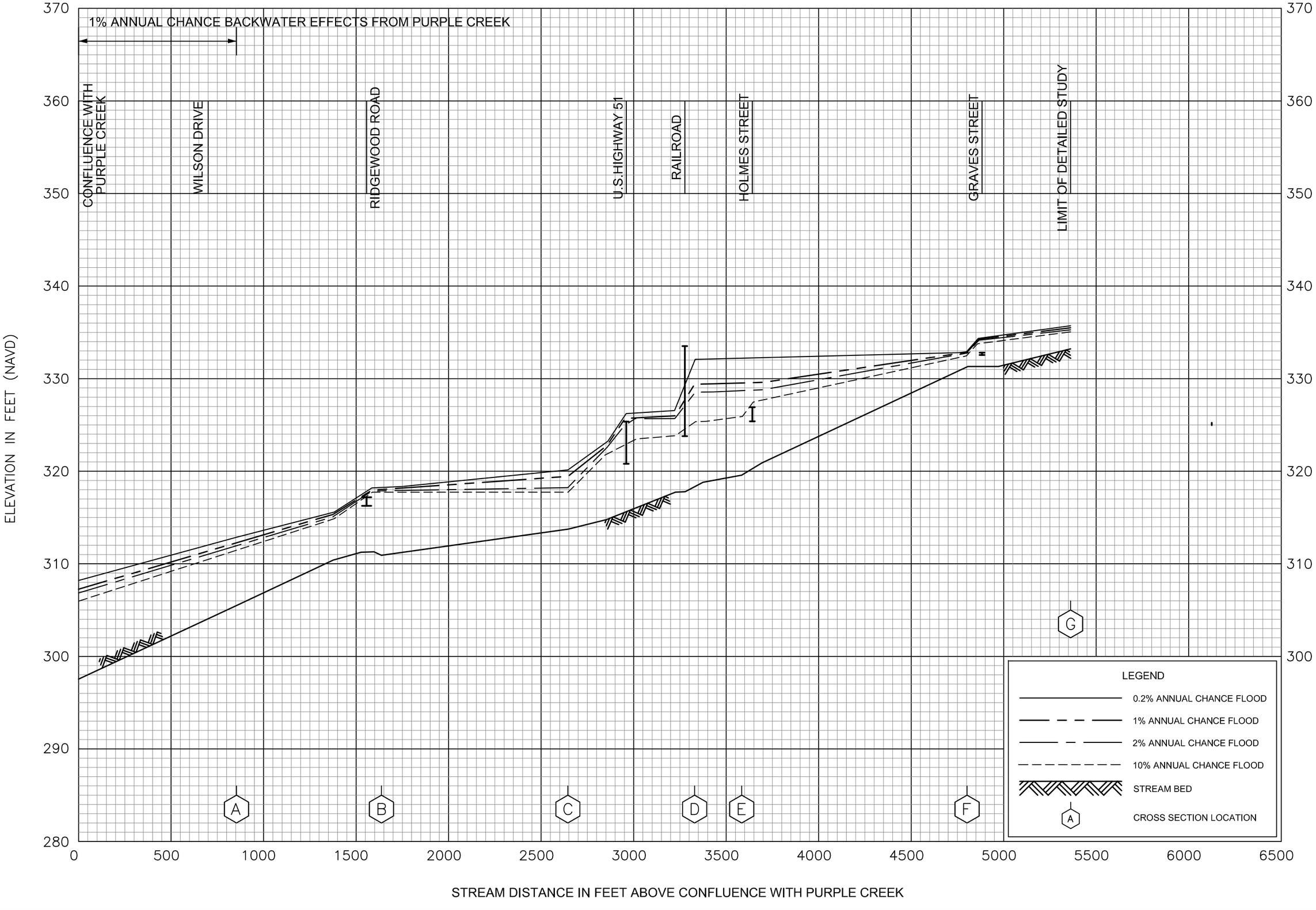
PURPLE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

37P



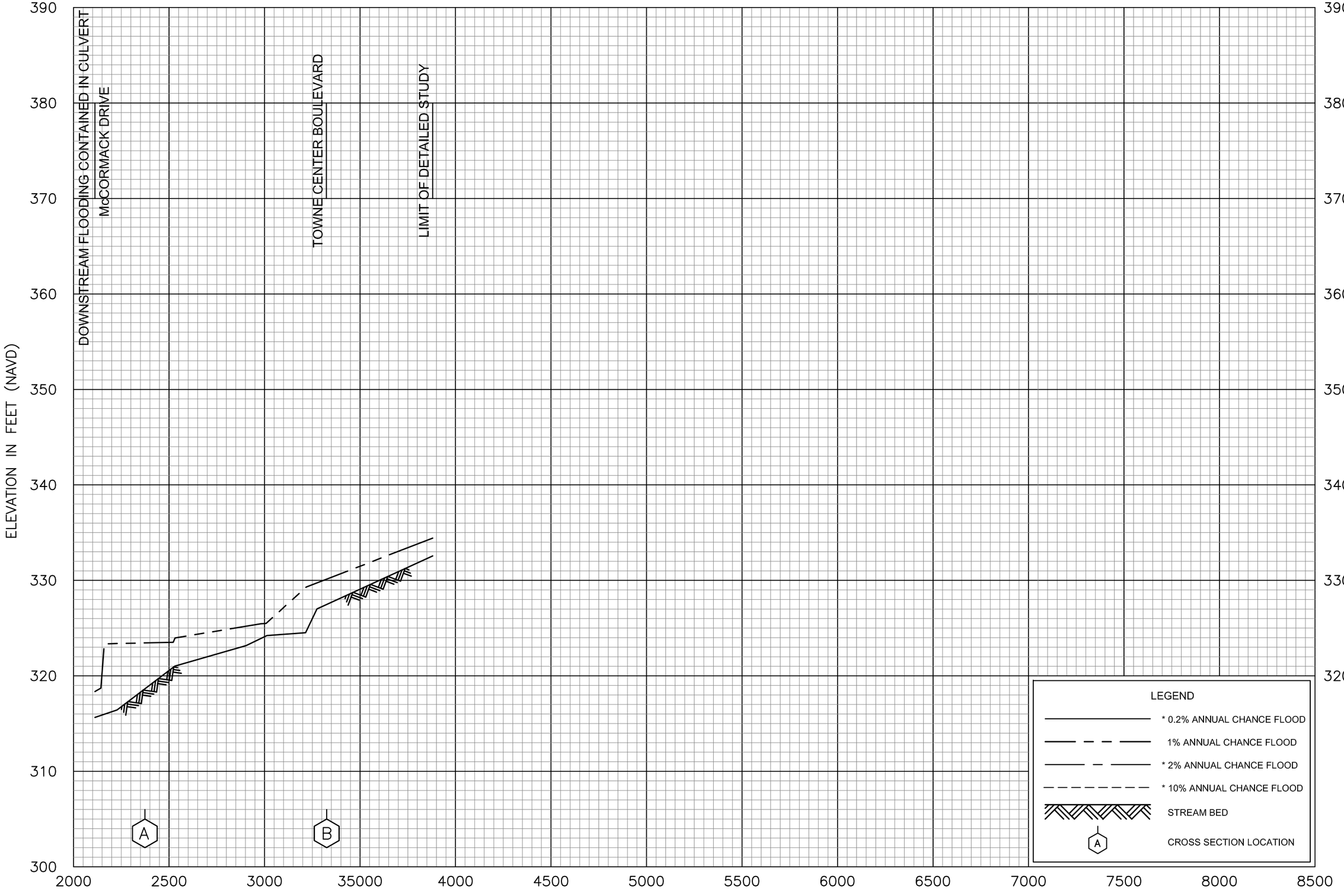
FLOOD PROFILES

PURPLE CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



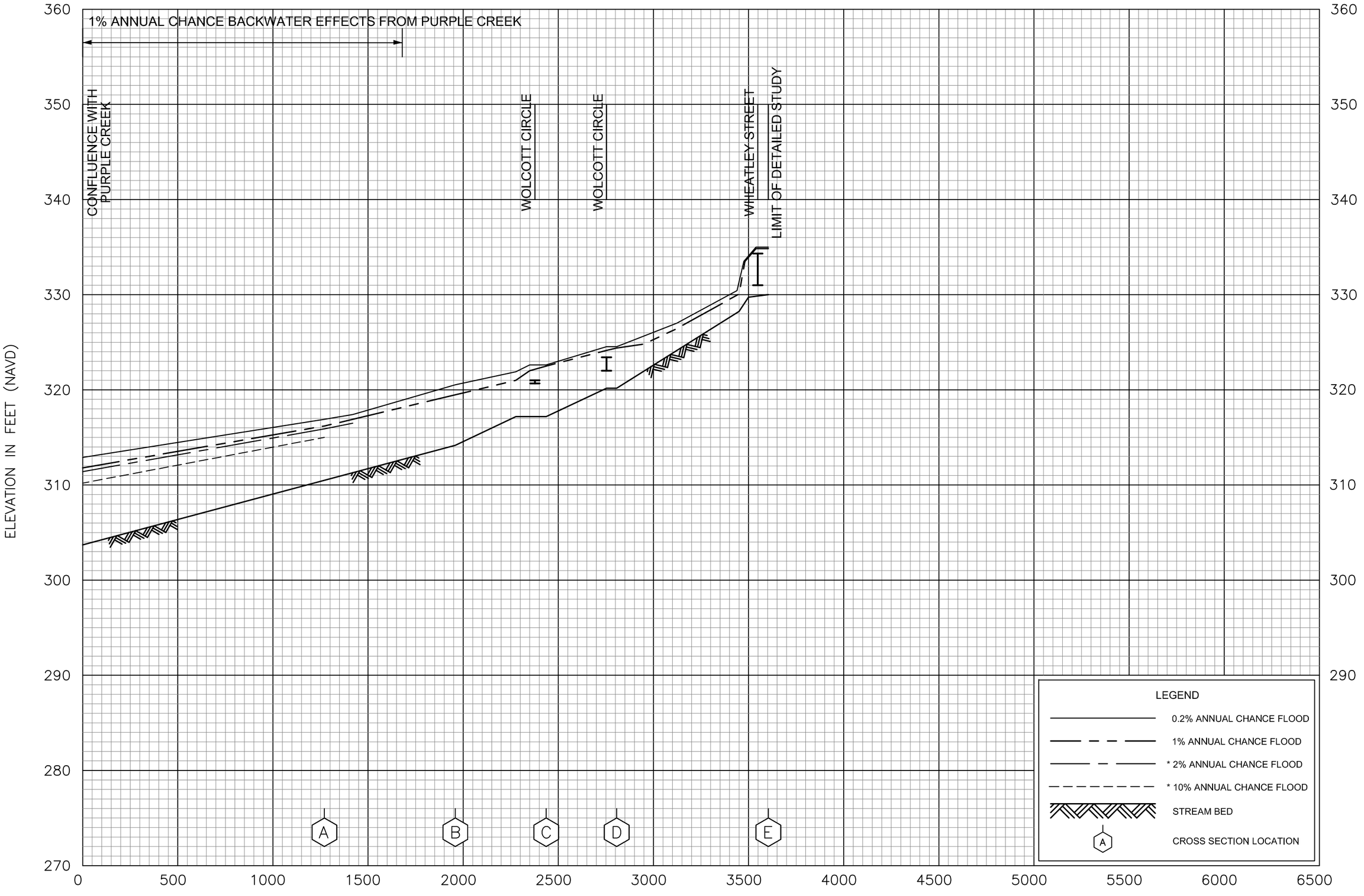
FLOOD PROFILES

PURPLE CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

PURPLE CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

1% ANNUAL CHANCE BACKWATER EFFECTS FROM PURPLE CREEK

CONFLUENCE WITH PURPLE CREEK

LAKE HARBOUR DRIVE

CHRISTINE DRIVE

RIDGELAND PLAZA

FORD STREET

LIMIT OF DETAILED STUDY

ELEVATION IN FEET (NAVD)

370
360
350
340
330
320
310
300
290
280

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH PURPLE CREEK

A B C D

LEGEND

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

FLOOD PROFILES

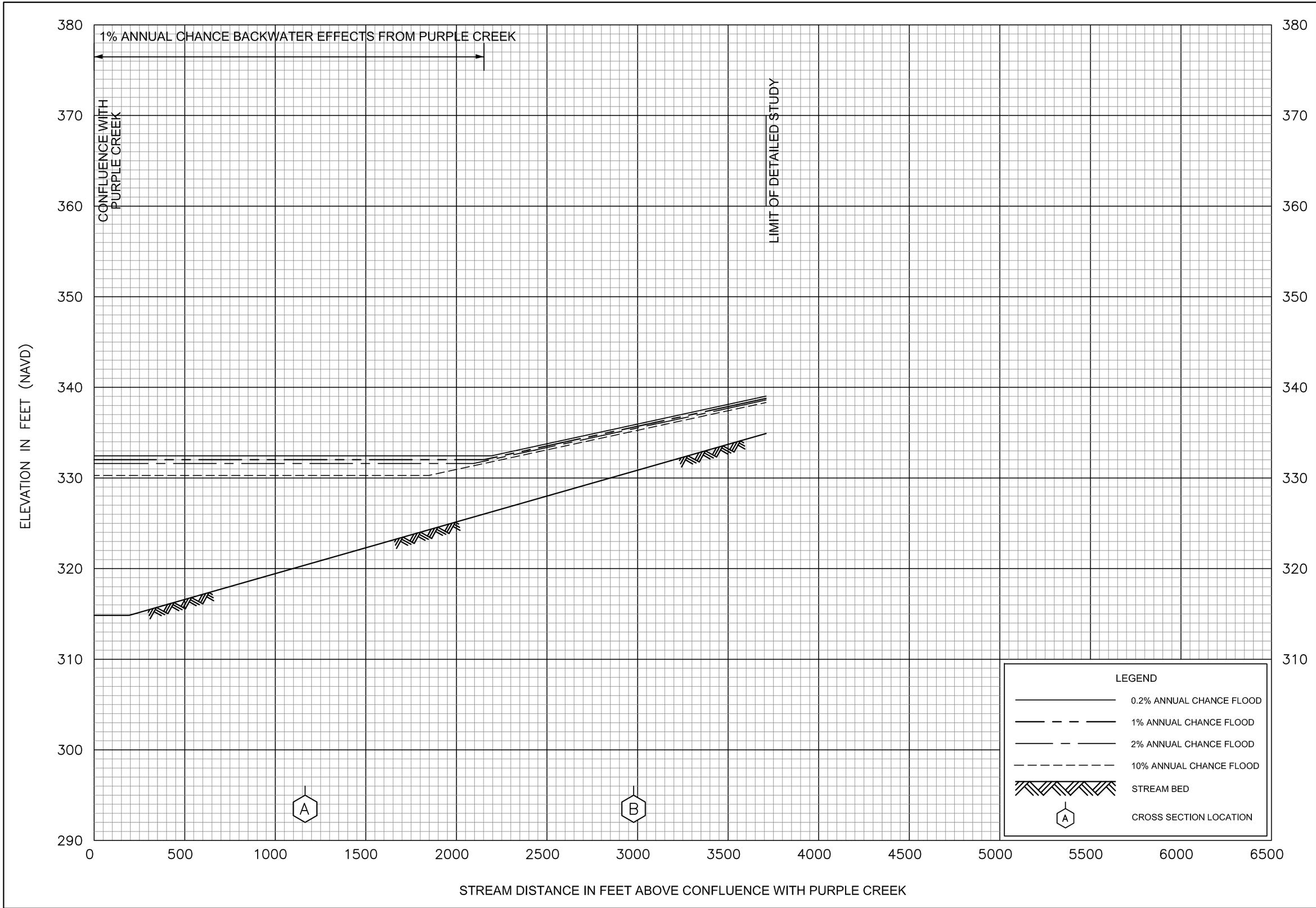
PURPLE CREEK TRIBUTARY 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

41P



FLOOD PROFILES

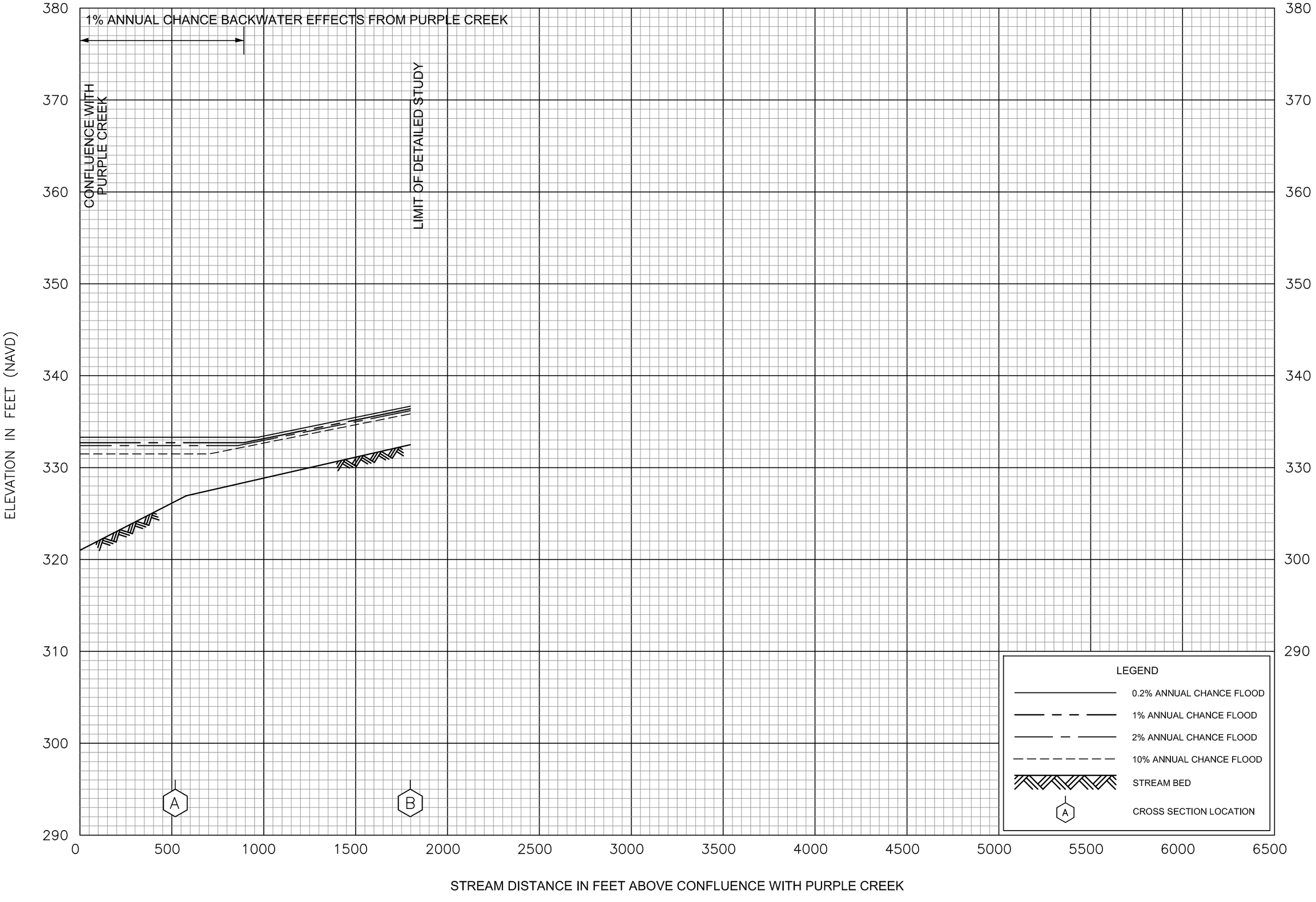
PURPLE CREEK TRIBUTARY 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

42P



FLOOD PROFILES

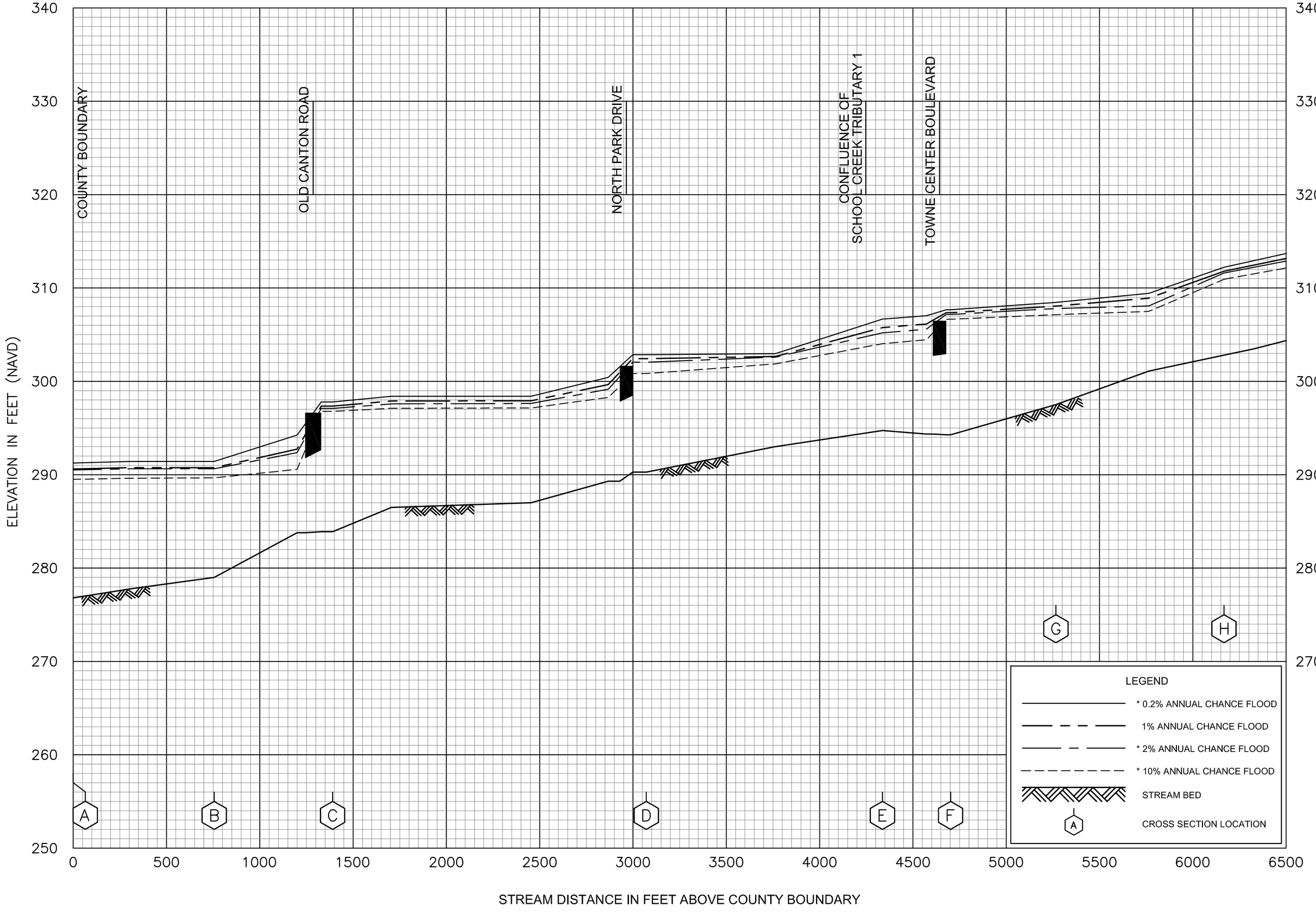
PURPLE CREEK TRIBUTARY 7

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

43P



FLOOD PROFILES

SCHOOL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

LAKE HARBOUR DRIVE
DAM
CONFLUENCE OF SCHOOL CREEK TRIBUTARY 2
PEAR ORCHARD DRIVE
LONGMEADOW DRIVE
SCHOOL STREET
LIMIT OF DETAILED STUDY

ELEVATION IN FEET (NAVD)

370
360
350
340
330
320
310
300
290
280

6500 7000 7500 8000 8500 9000 9500 10,000 10,500 11,000 11,500 12,000 12,500 13,000

STREAM DISTANCE IN FEET ABOVE COUNTY BOUNDARY

I J K L M N O P Q R S T U V

LEGEND

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

FLOOD PROFILES

SCHOOL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
MADISON COUNTY, MS
AND INCORPORATED AREAS

1% ANNUAL CHANCE BACKWATER EFFECTS FROM SCHOOL CREEK

CONFLUENCE WITH SCHOOL CREEK

LAKE HARBOUR DRIVE

DAM

WENDOVER WAY

LIMIT OF DETAILED STUDY

ELEVATION IN FEET (NAVD)

370
360
350
340
330
320
310
300
290
280

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SCHOOL CREEK

A B C

LEGEND

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

* DATA NOT AVAILABLE

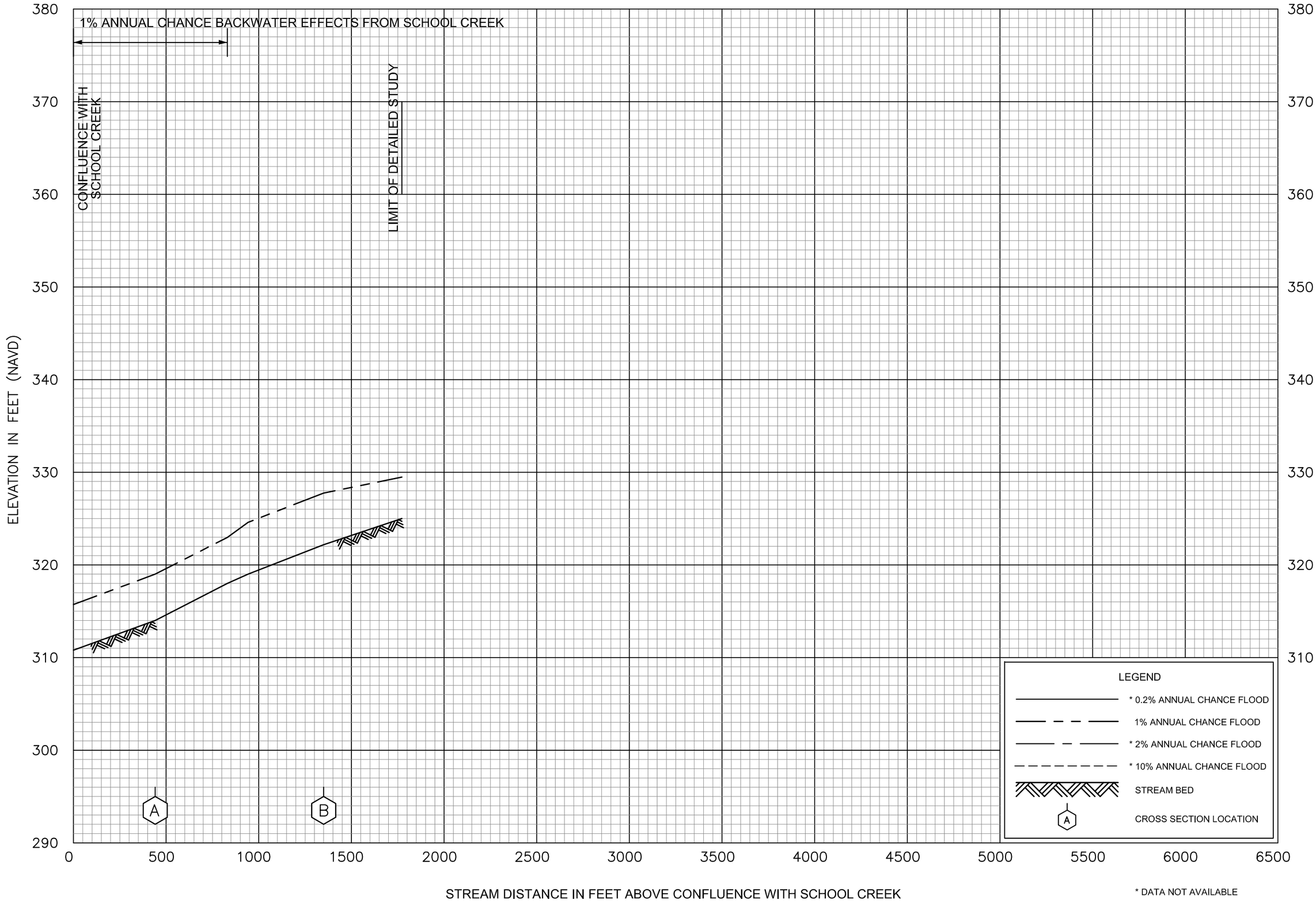
FLOOD PROFILES

SCHOOL CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



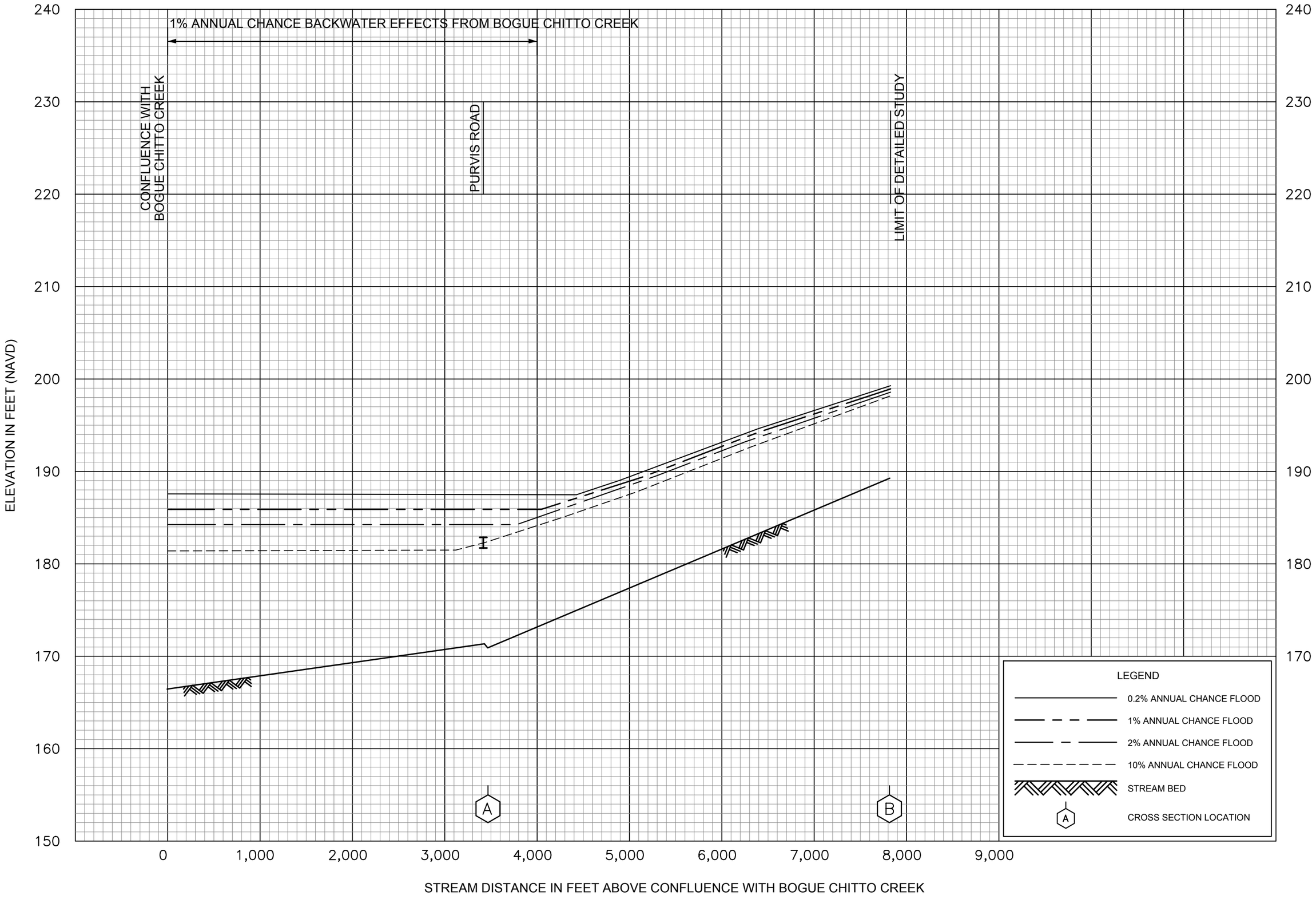
FLOOD PROFILES

SCHOOL CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



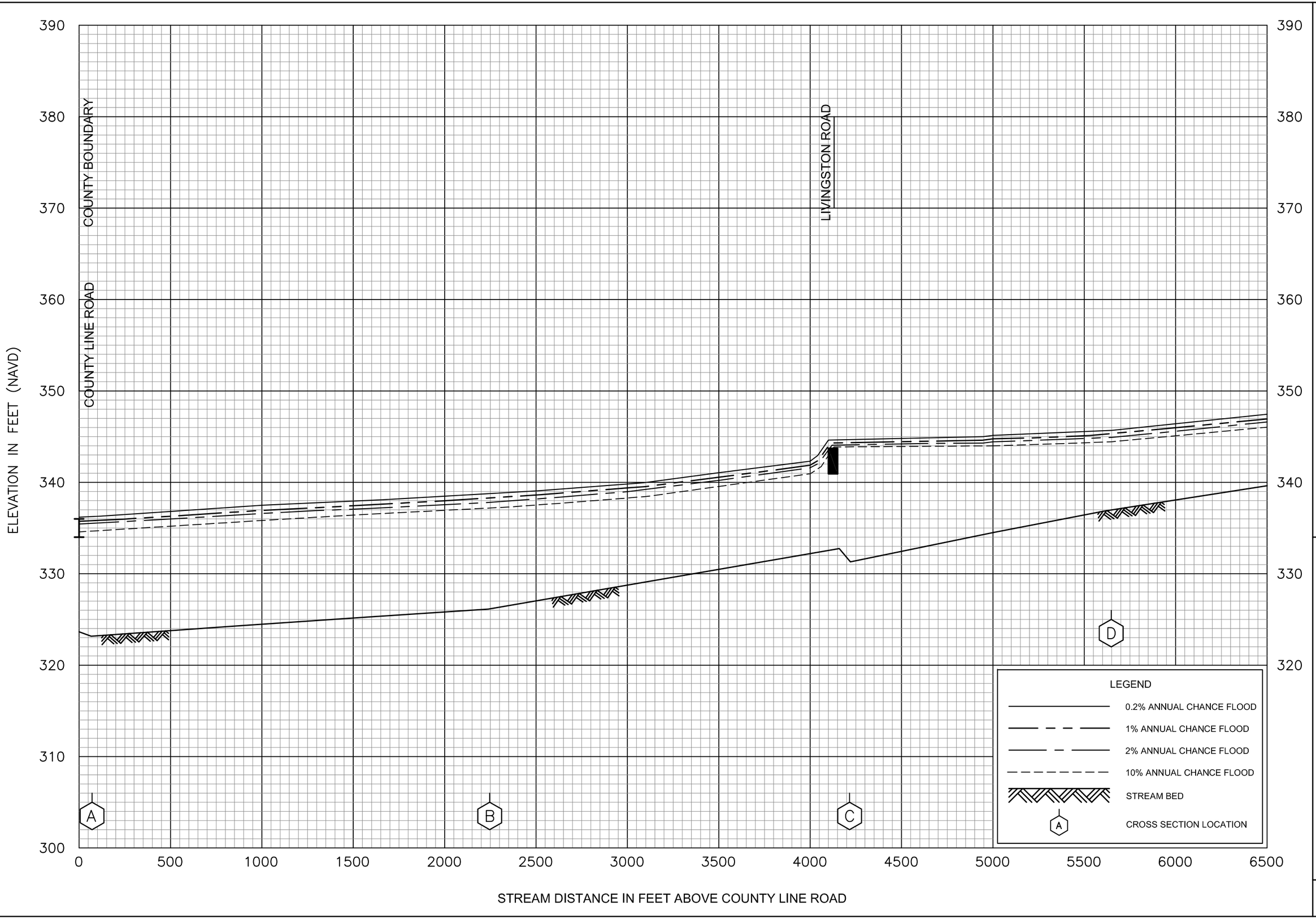
FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



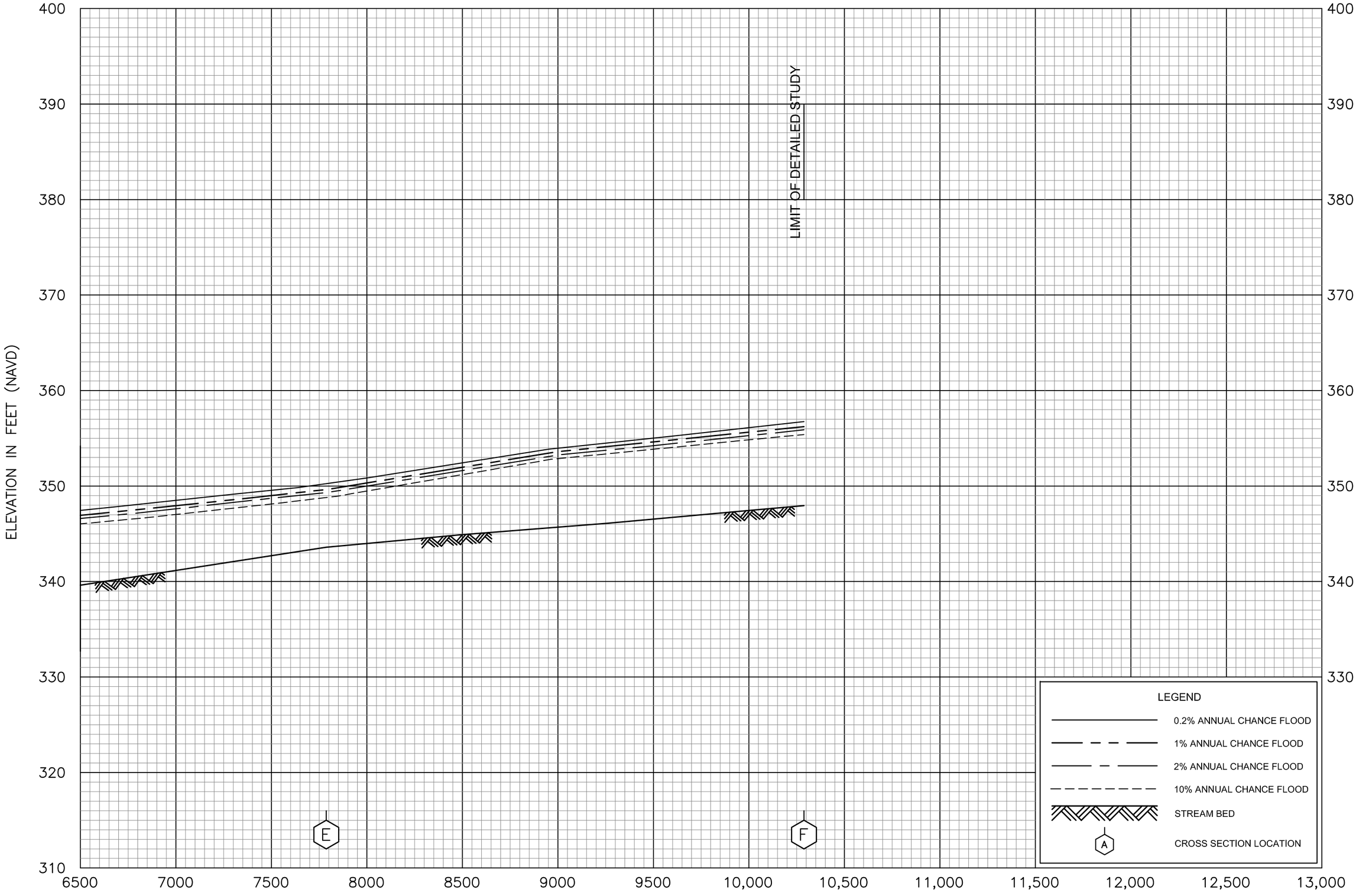
FLOOD PROFILES

STREAM A

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



STREAM DISTANCE IN FEET ABOVE COUNTY LINE ROAD

FLOOD PROFILES

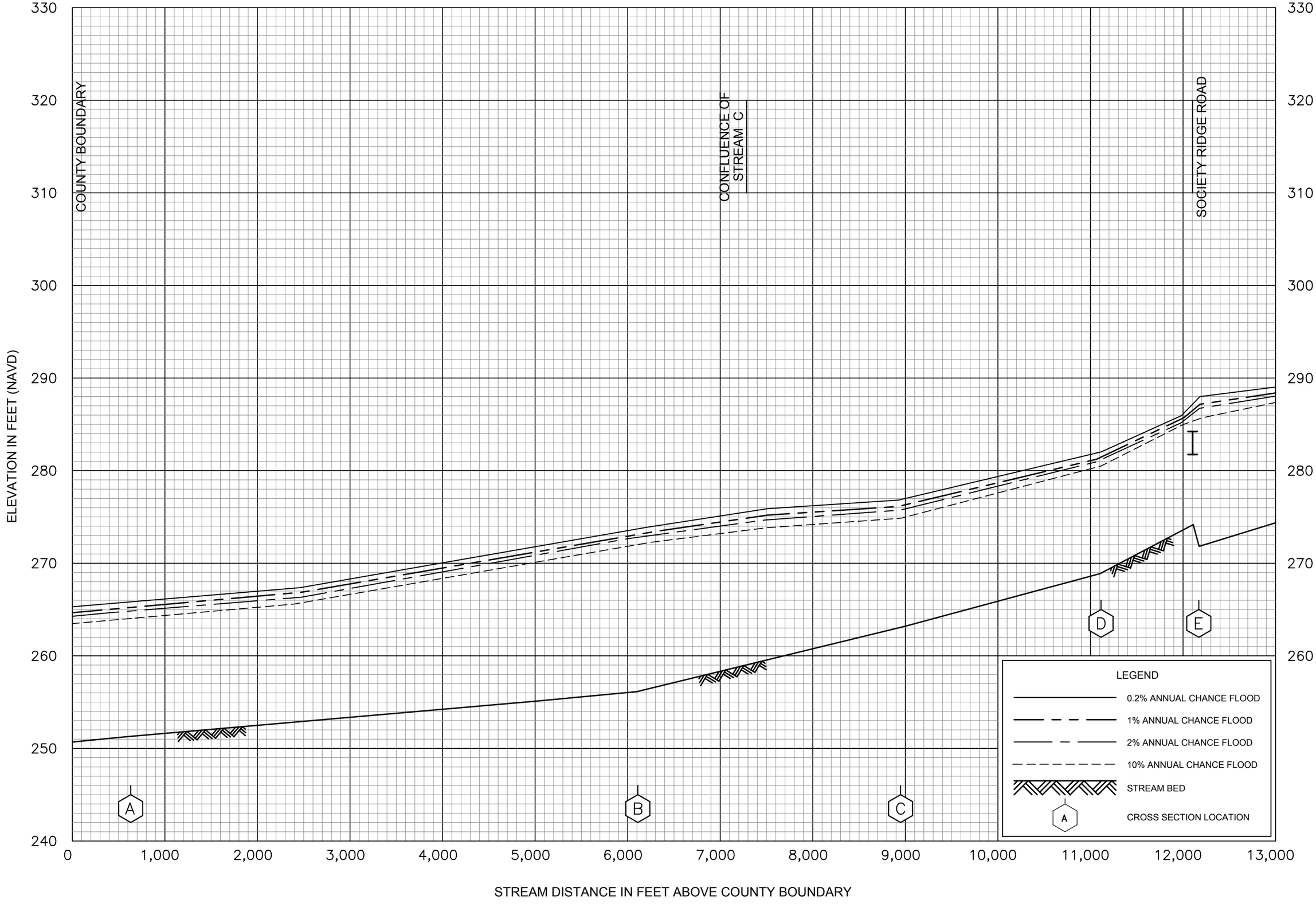
STREAM A

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

50P



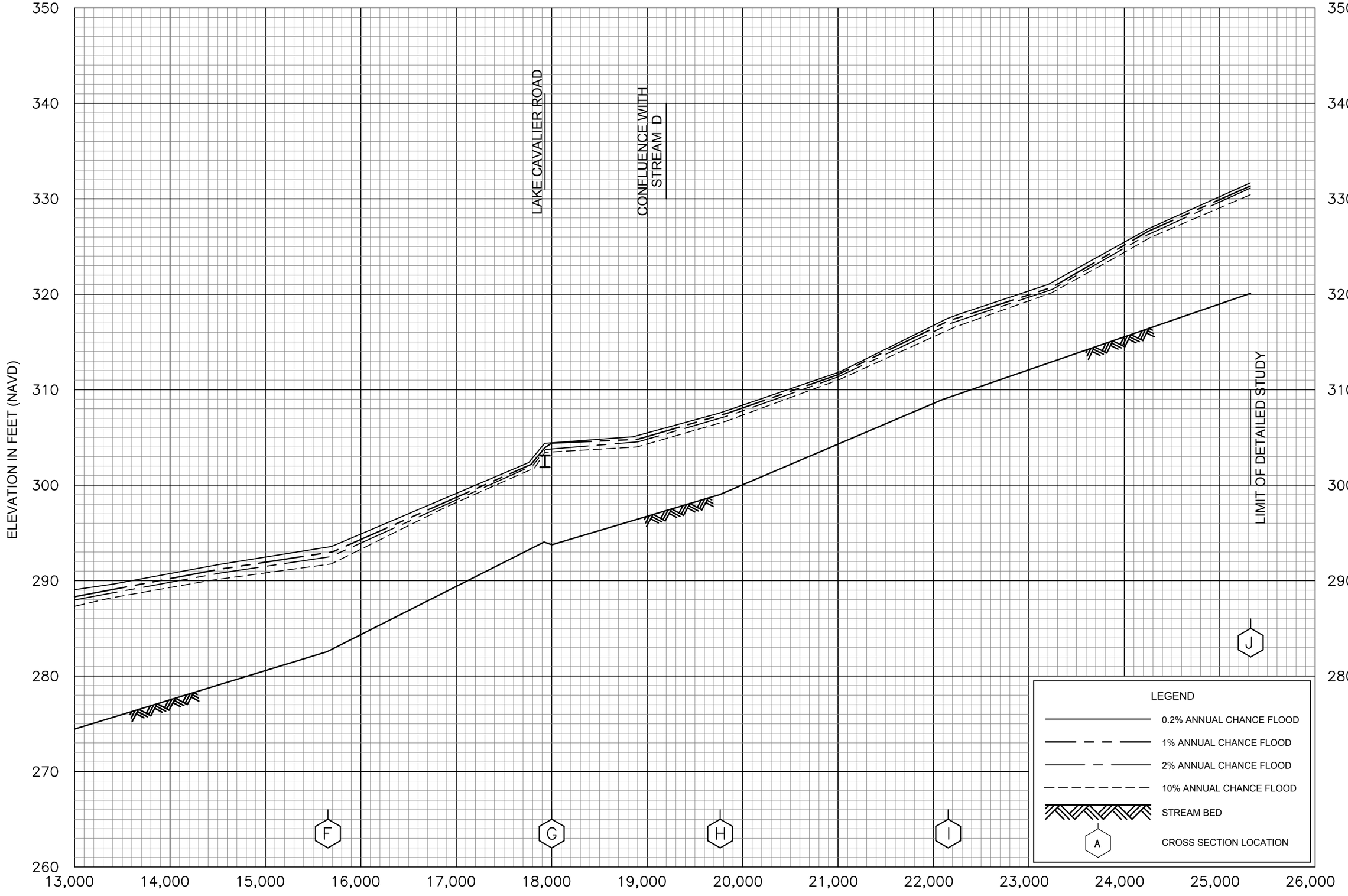
FLOOD PROFILES

STREAM B

FEDERAL EMERGENCY MANAGEMENT AGENCY

HINDS COUNTY, MS

AND INCORPORATED AREAS



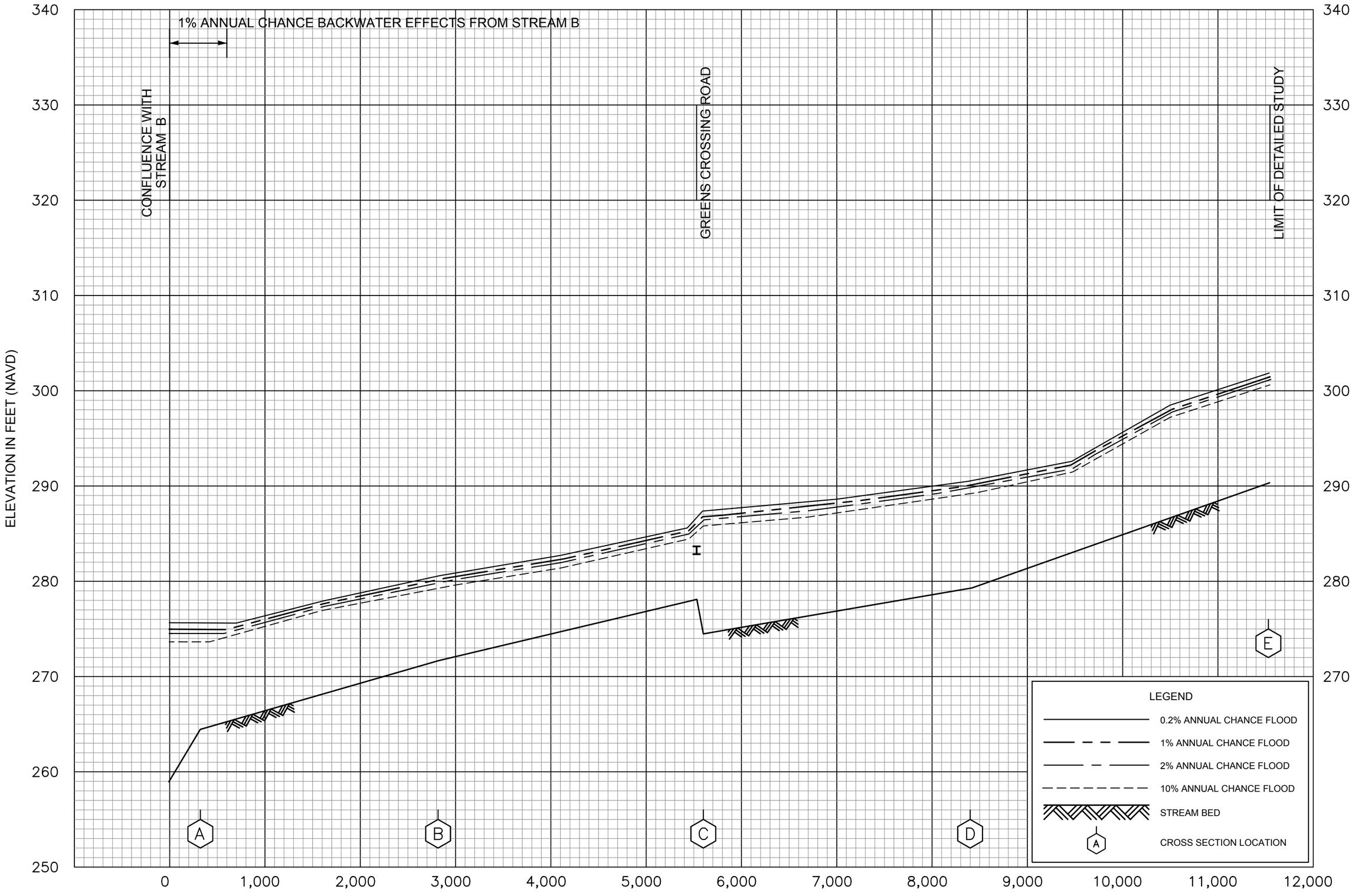
FLOOD PROFILES

STREAM B

FEDERAL EMERGENCY MANAGEMENT AGENCY

HINDS COUNTY, MS

AND INCORPORATED AREAS



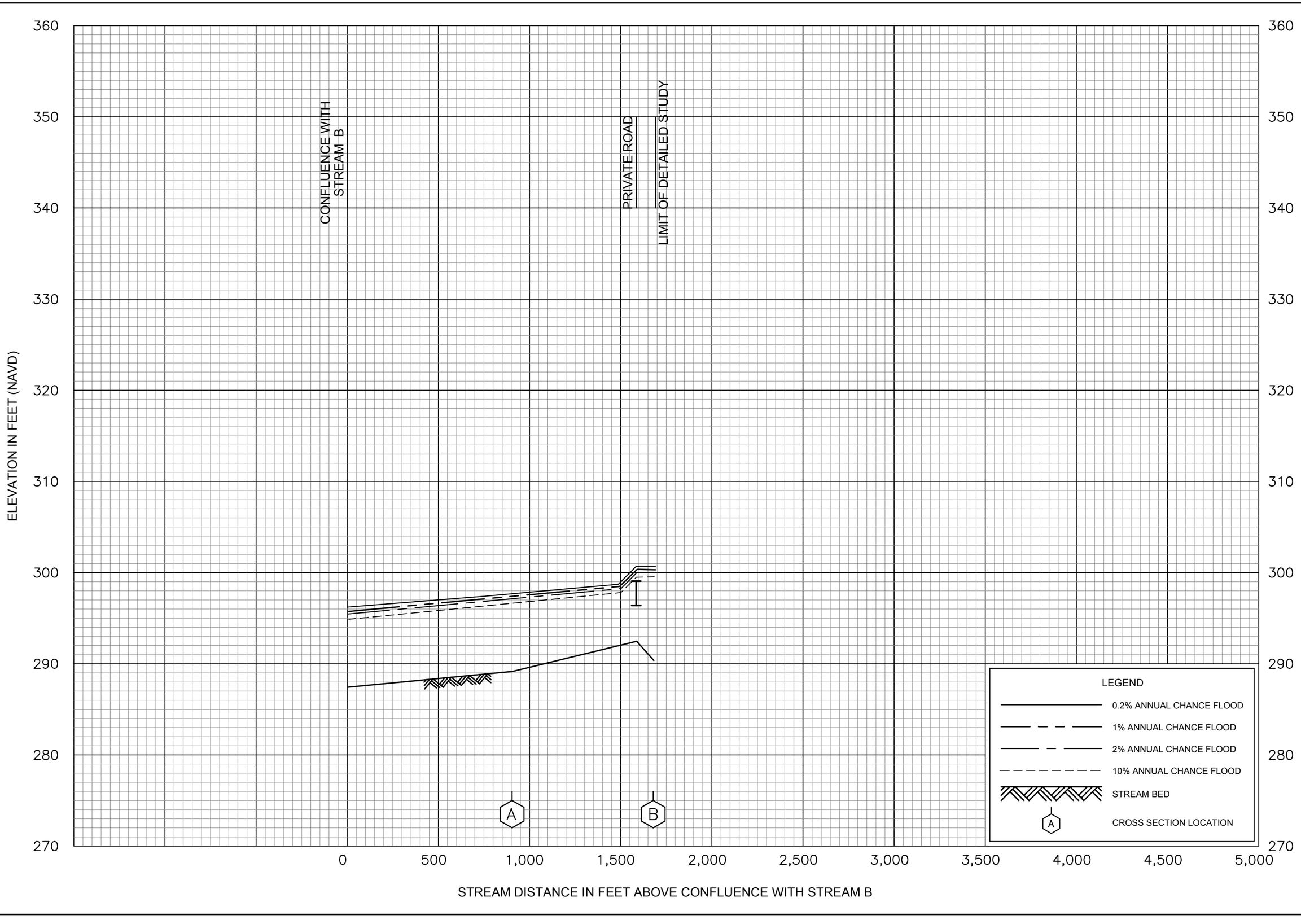
FLOOD PROFILES

STREAM C

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



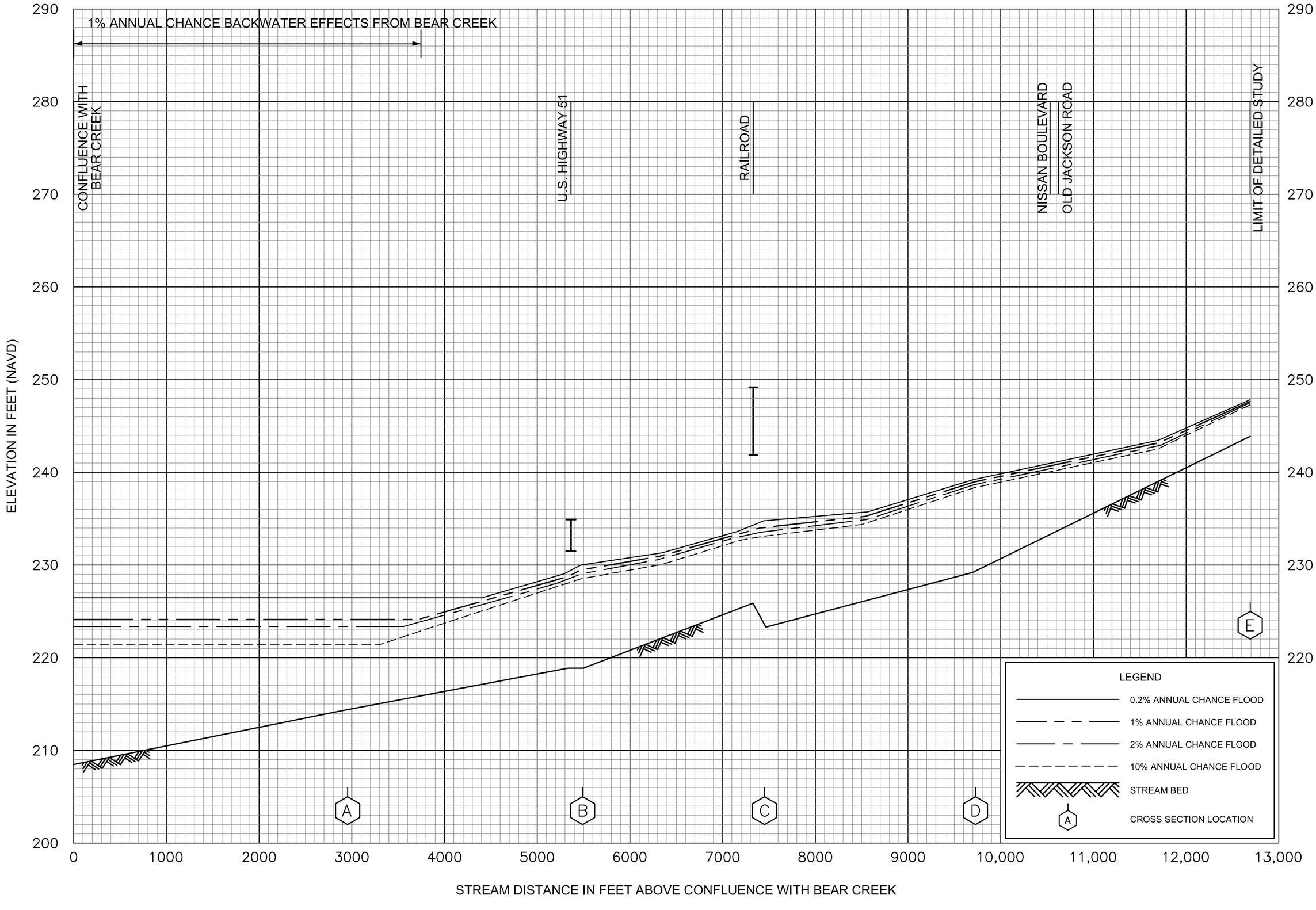
FLOOD PROFILES

STREAM D

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

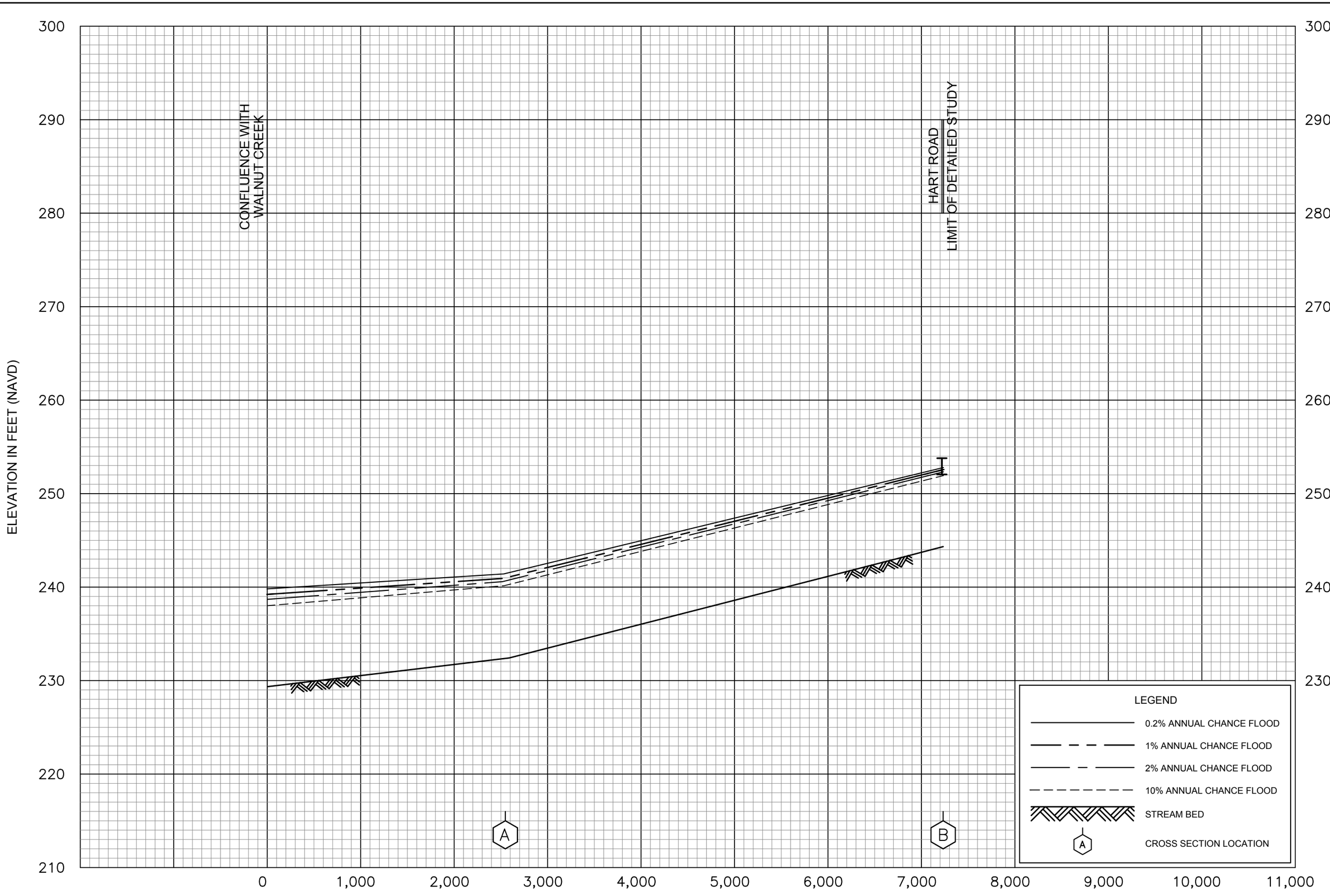
STREAM E

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

55P



FLOOD PROFILES

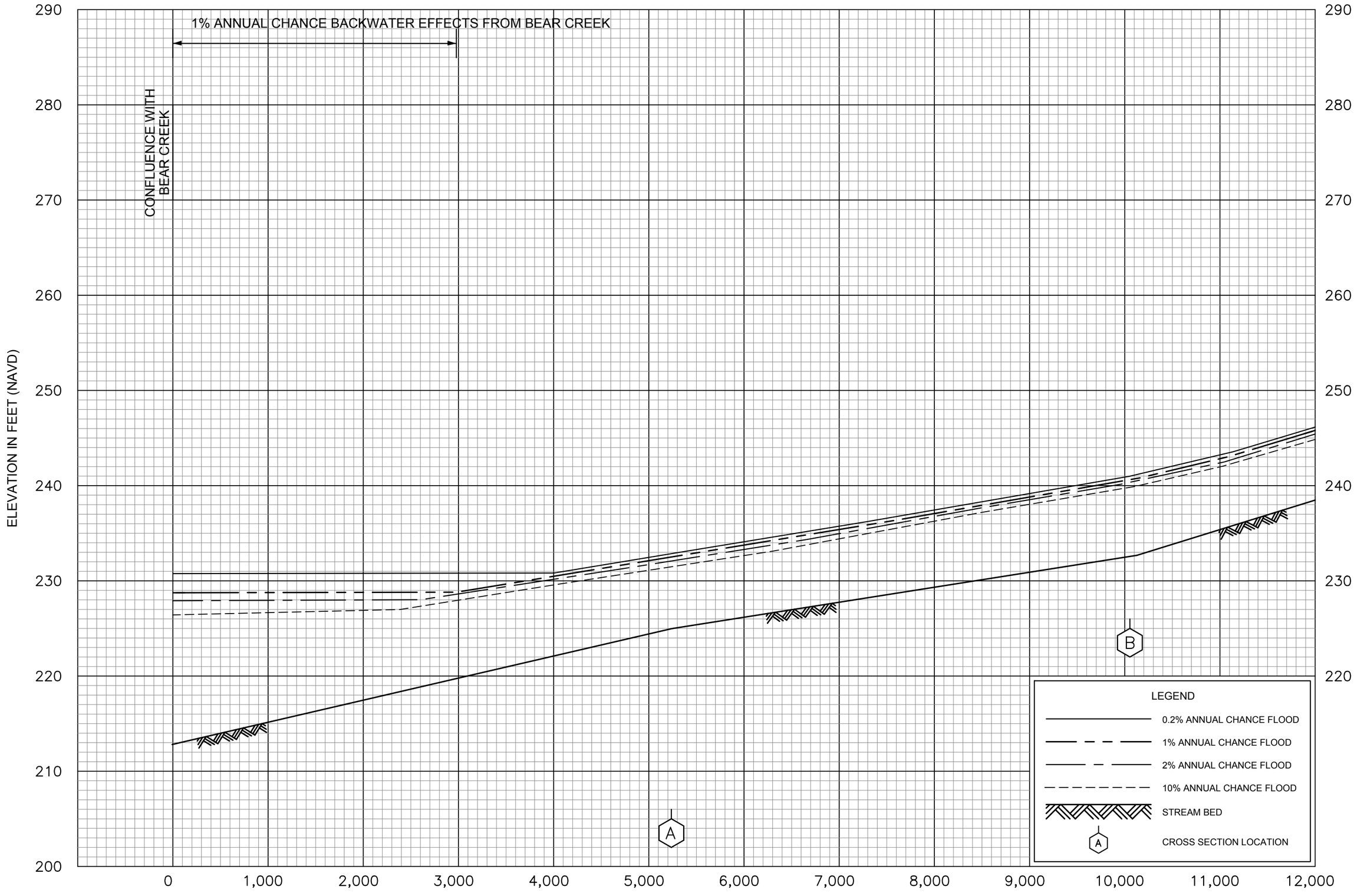
STREAM F

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

56P



FLOOD PROFILES

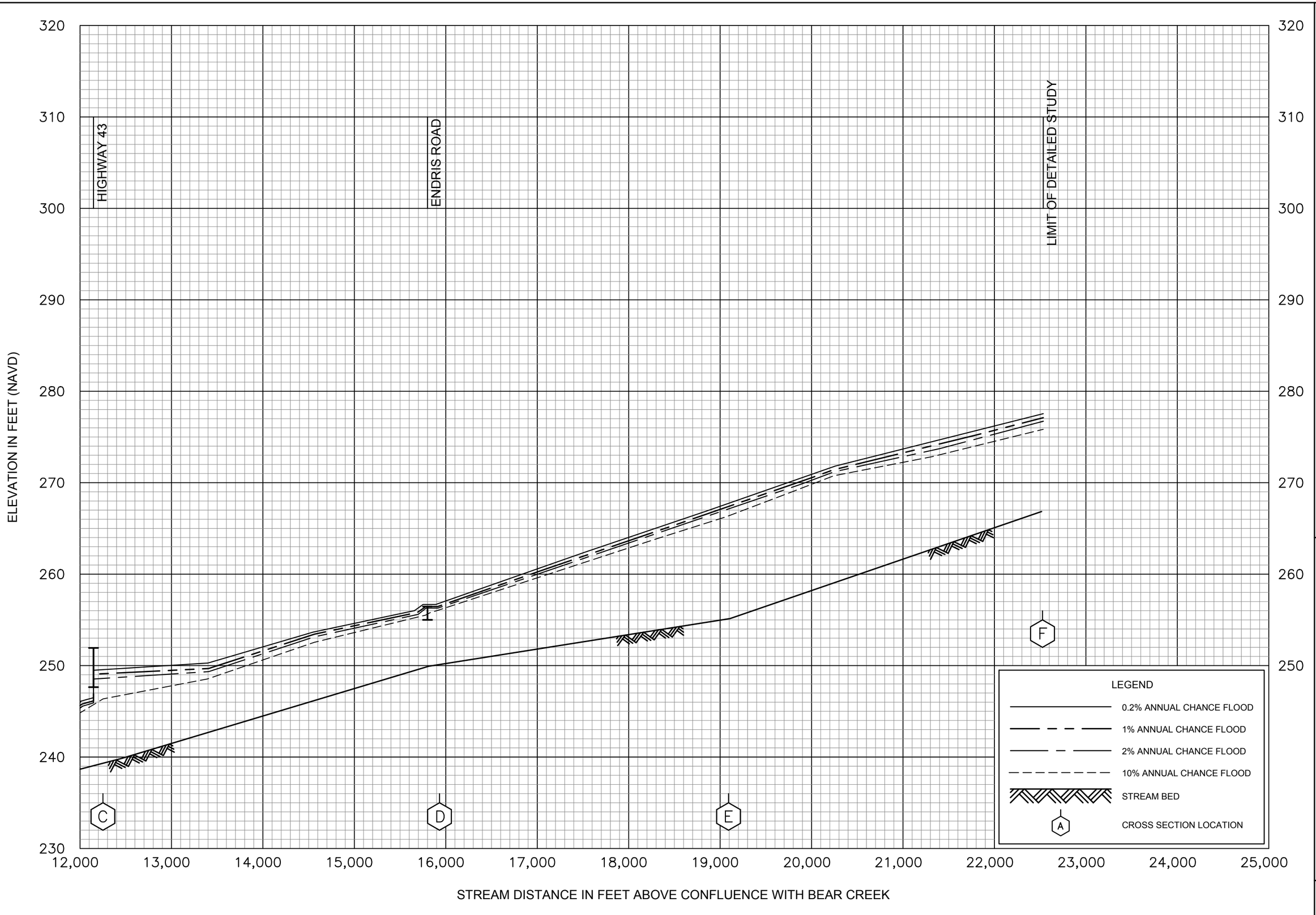
STREAM G

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

57P



FLOOD PROFILES

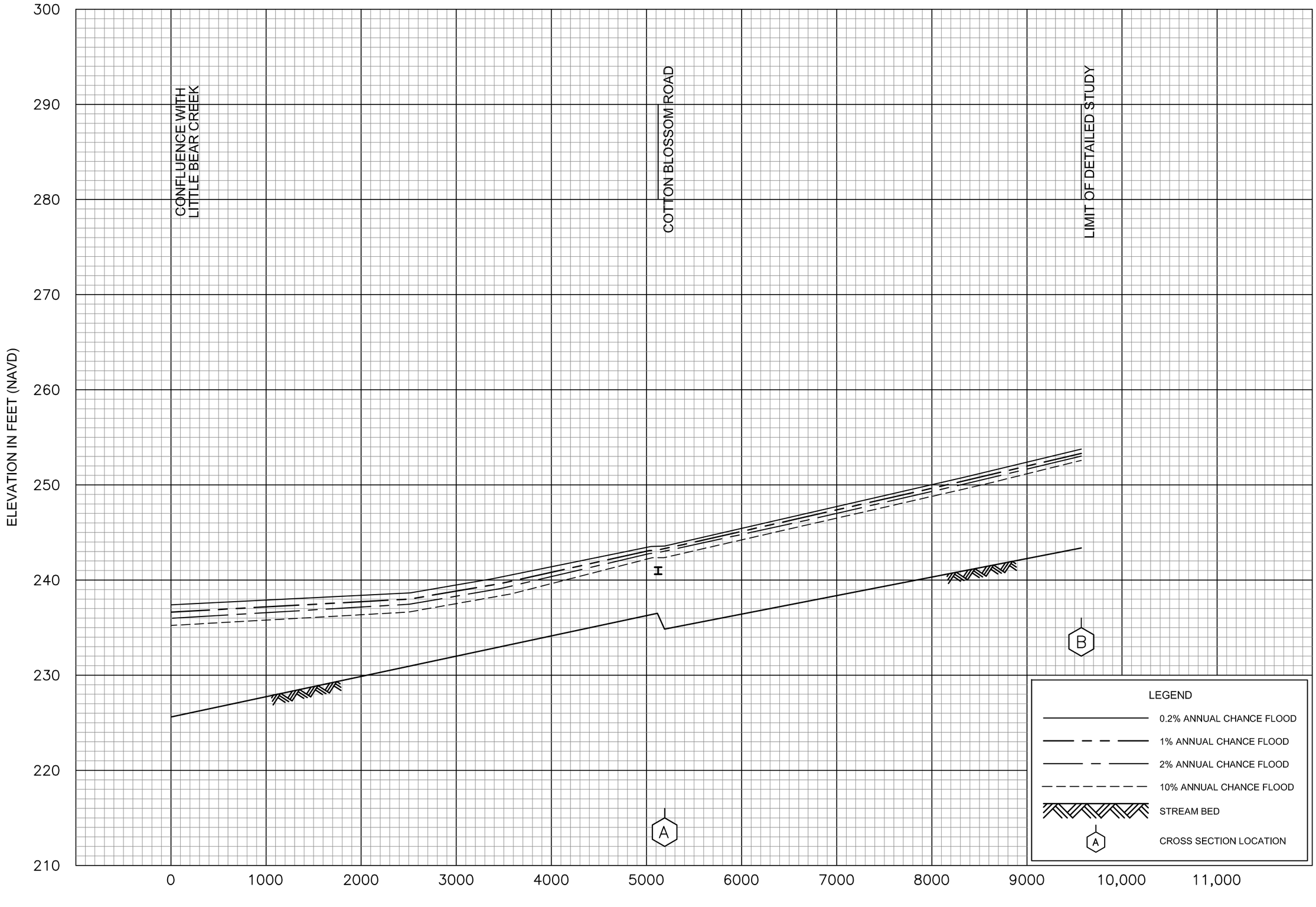
STREAM G

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

58P



FLOOD PROFILES

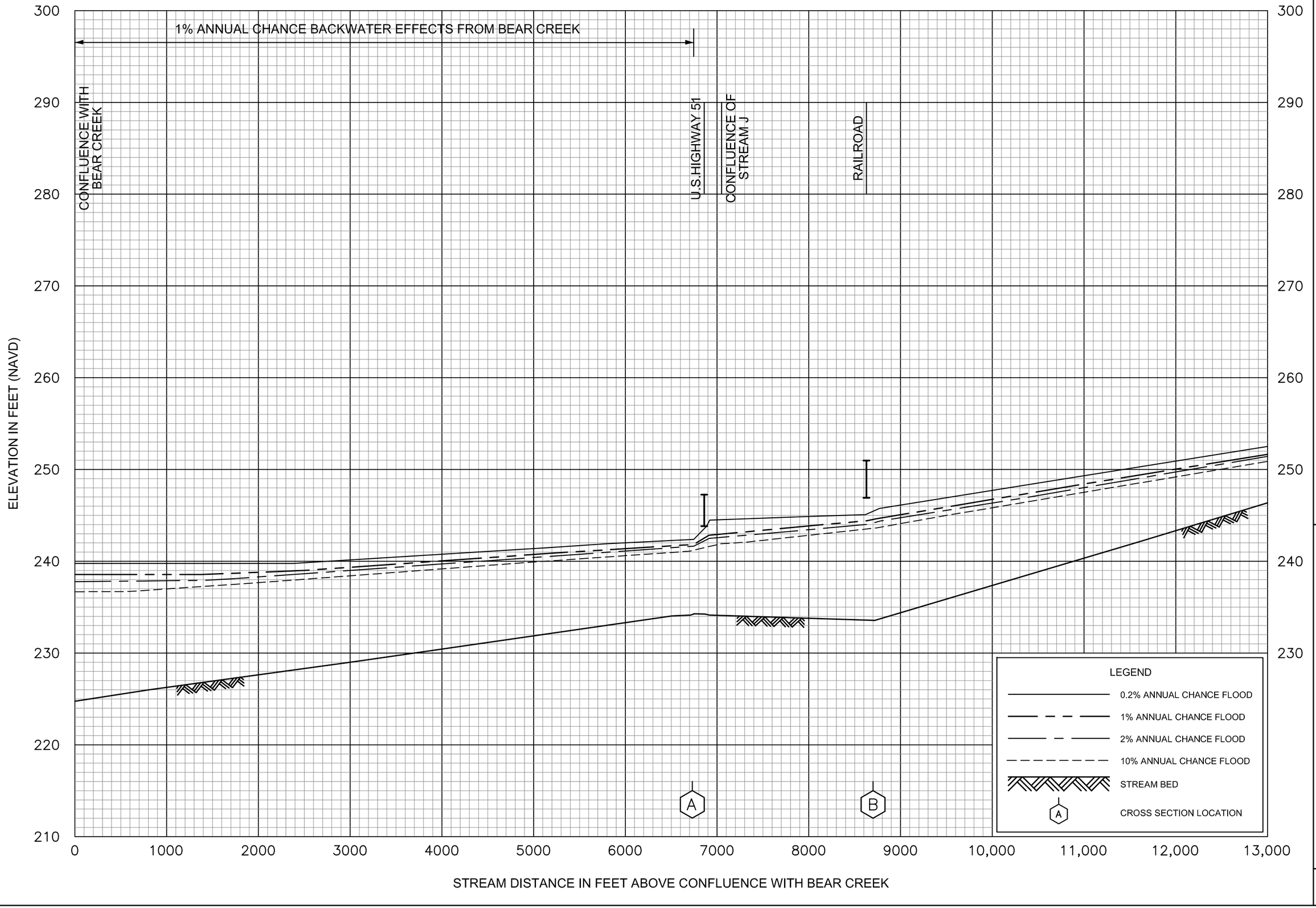
STREAM H

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

59P



FLOOD PROFILES

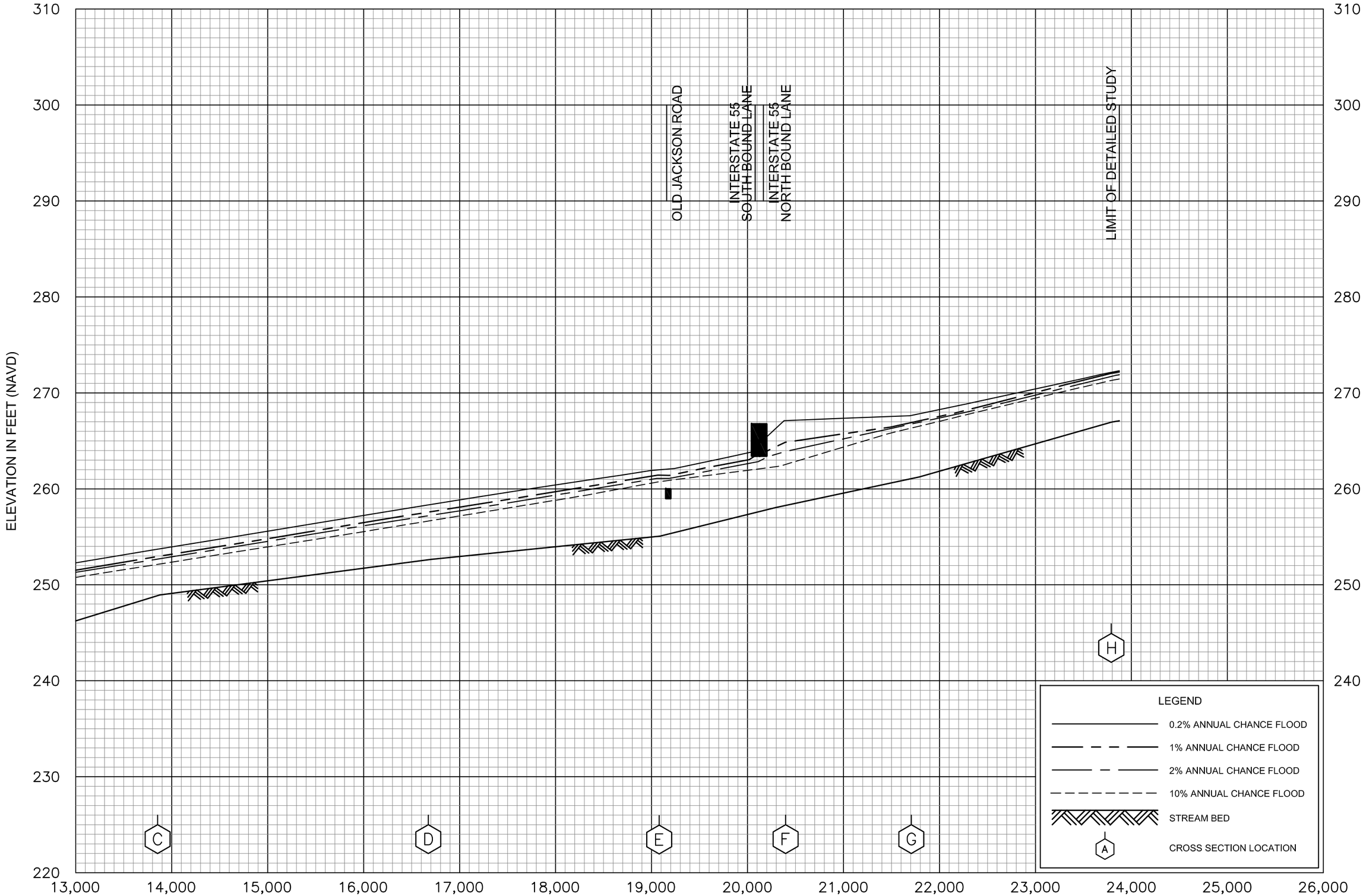
STREAM I

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

60P



FLOOD PROFILES

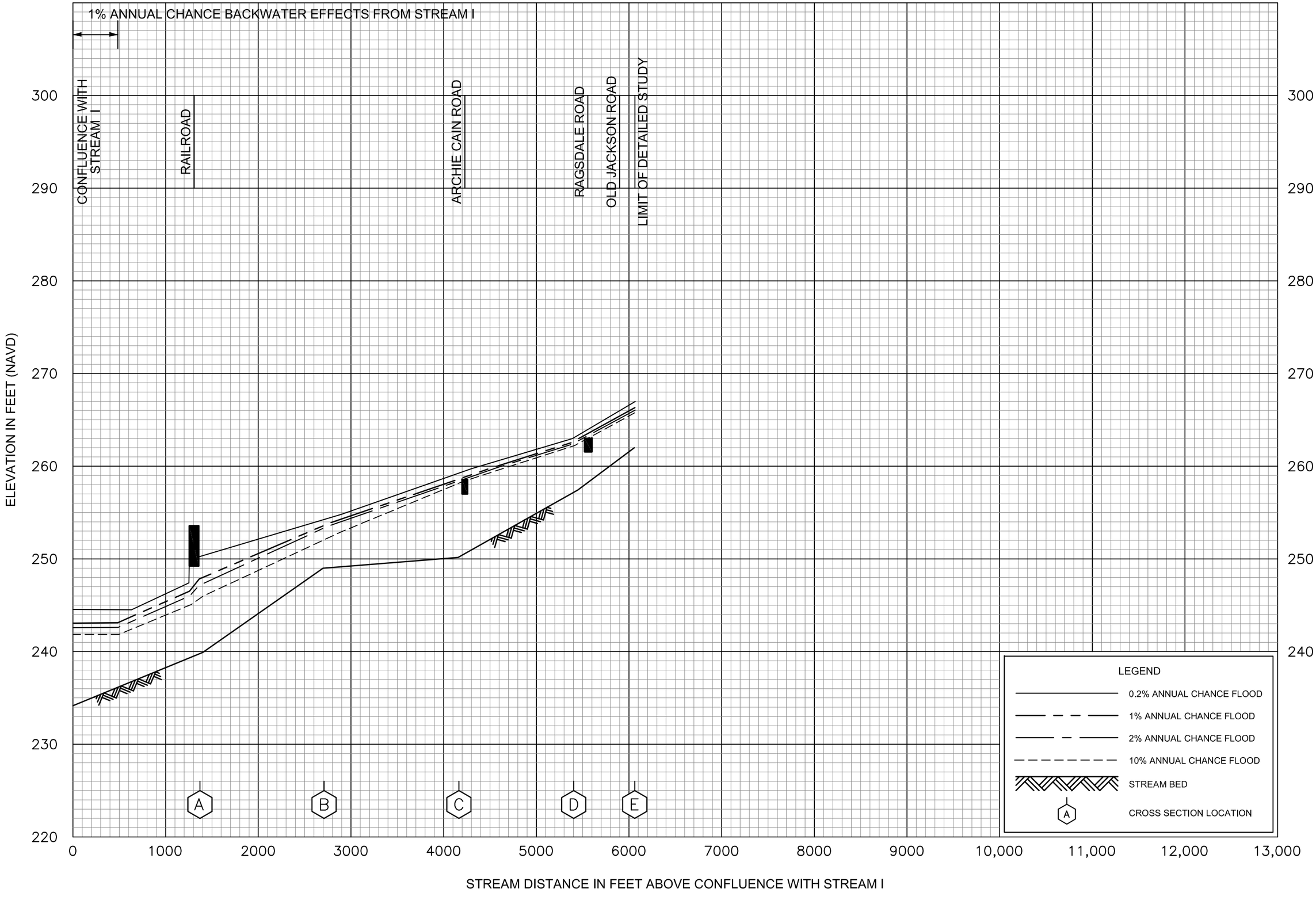
STREAM I

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

61P



FLOOD PROFILES

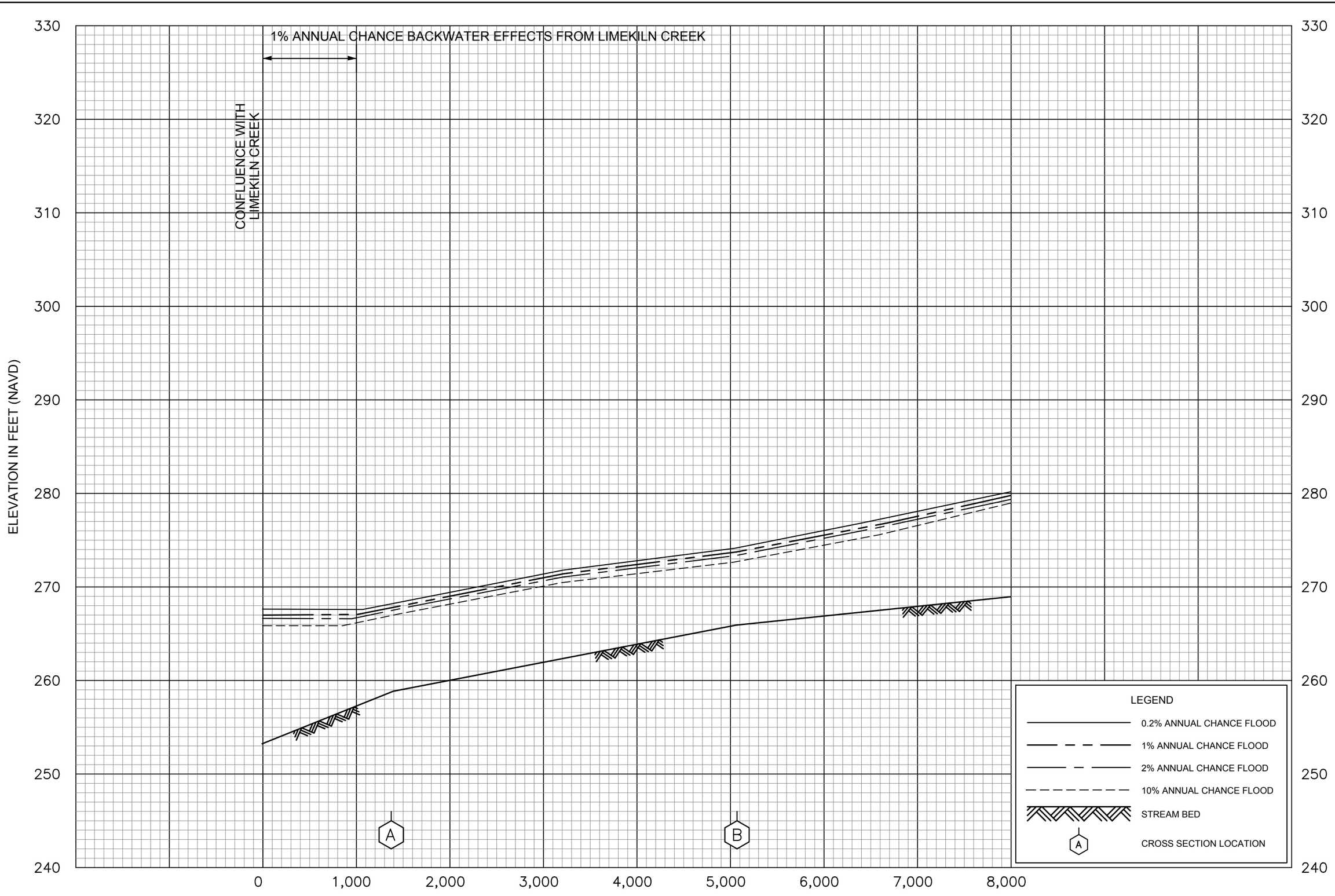
STREAM J

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

62P



FLOOD PROFILES

STREAM K

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

63P

ELEVATION IN FEET (NAVD)

350
340
330
320
310
300
290
280
270
260

GUS GREEN ROAD

ANNANDALE DRIVE

LIMIT OF DETAILED STUDY

C

D

E

LEGEND

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

8,000 9,000 10,000 11,000 12,000 13,000 14,000 15,000 16,000 17,000 18,000 19,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH LIMEKILN CREEK

FLOOD PROFILES

STREAM K

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

380
370
360
350
340
330
320
310
300
290

LIMIT OF DETAILED STUDY
NATCHEZ TRACE PARKWAY

LIMIT OF DETAILED STUDY

A

B

LEGEND

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

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500

STREAM DISTANCE IN FEET ABOVE NATCHEZ TRACE PARKWAY

FLOOD PROFILES

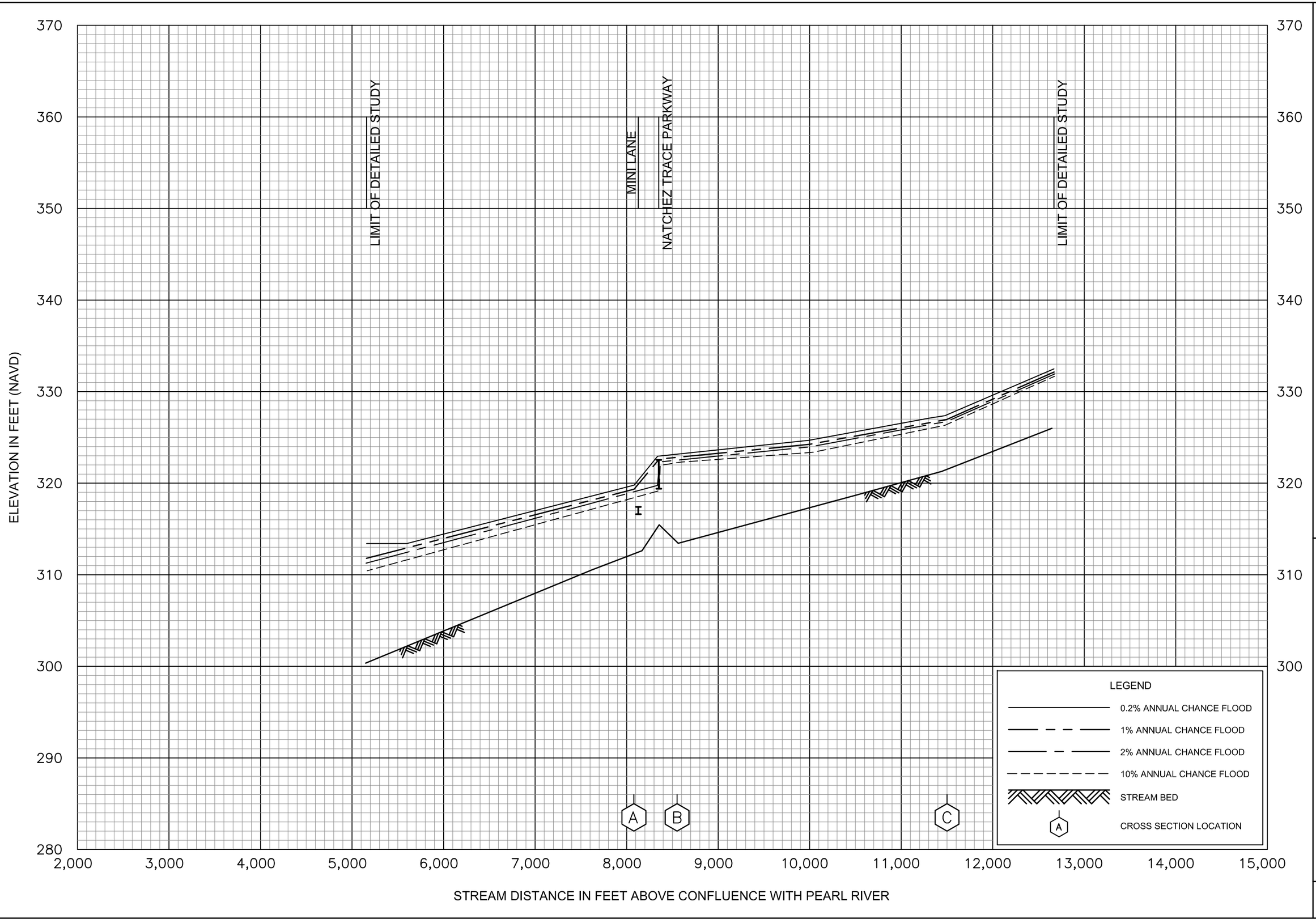
STREAM L

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

65P



FLOOD PROFILES

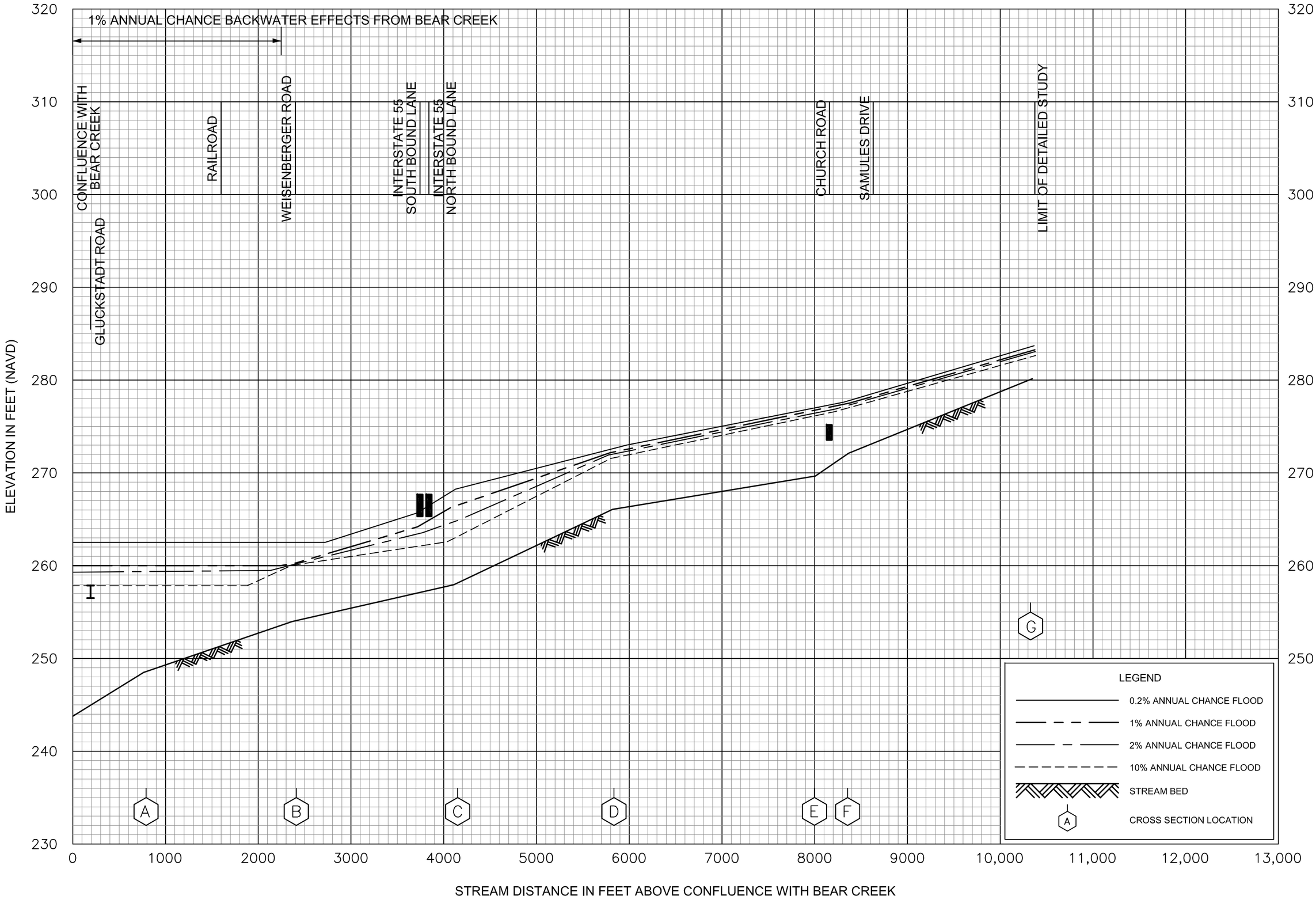
STREAM M

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

66P



FLOOD PROFILES

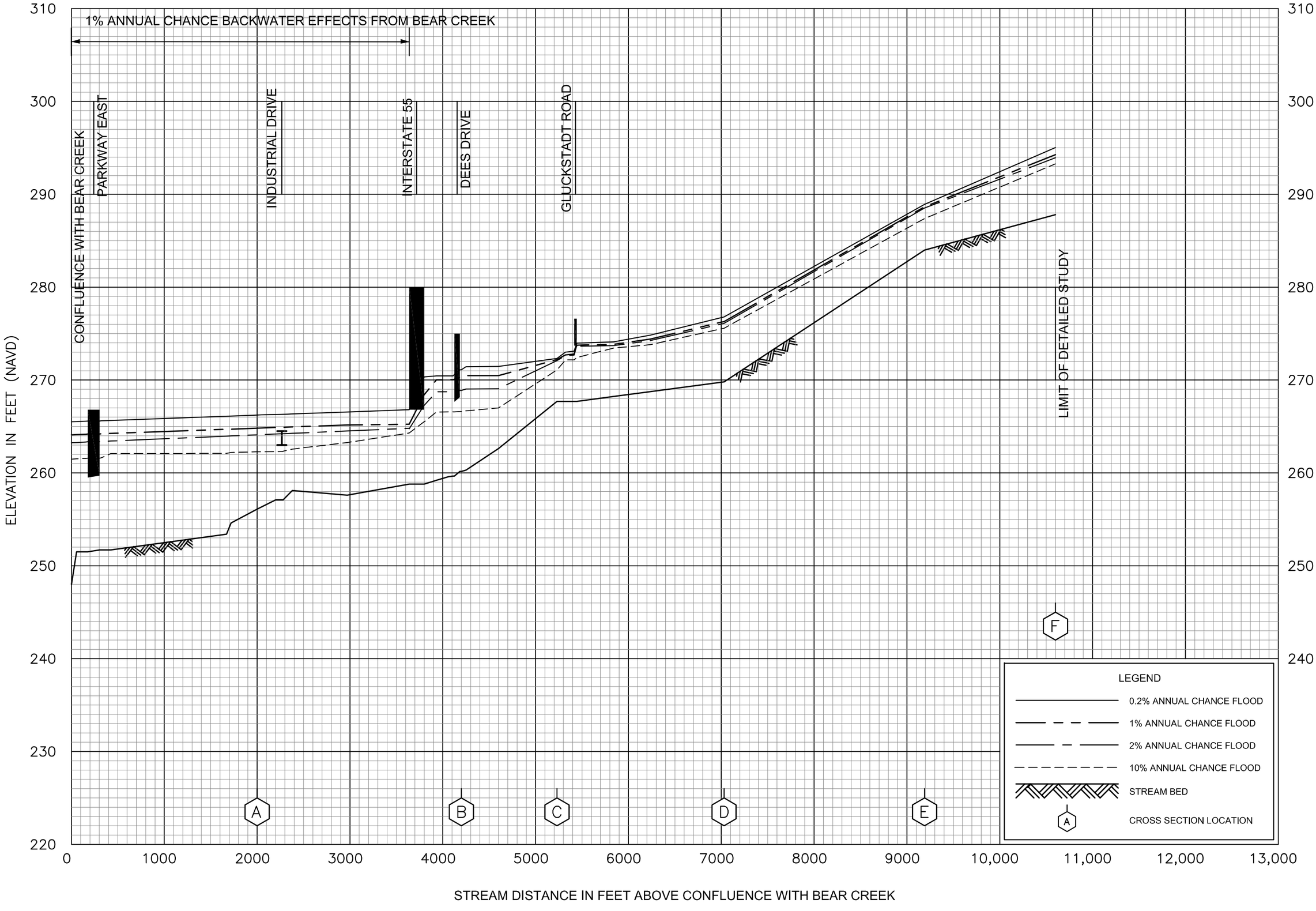
STREAM N

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

67P



FLOOD PROFILES

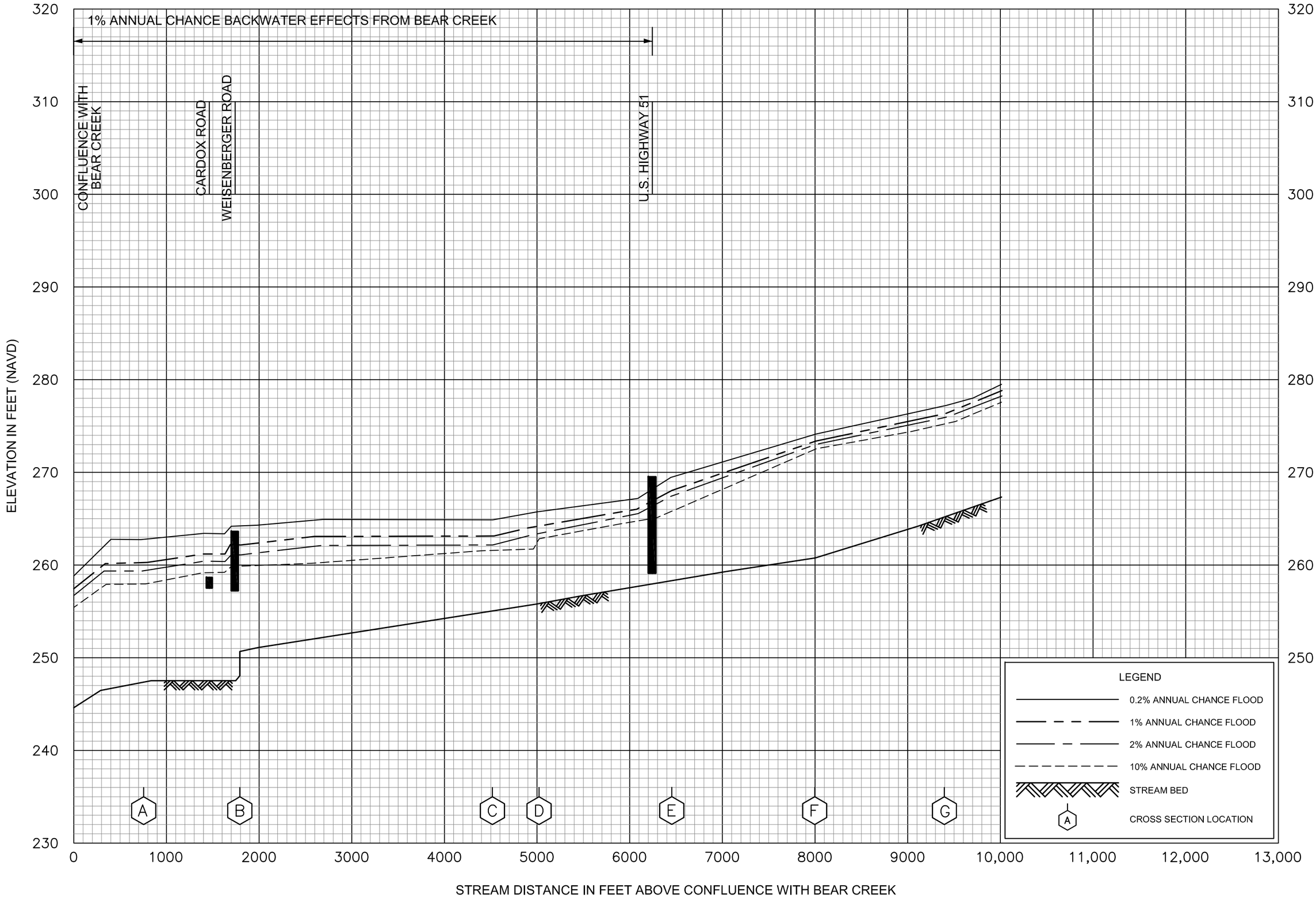
STREAM O

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

68P



FLOOD PROFILES

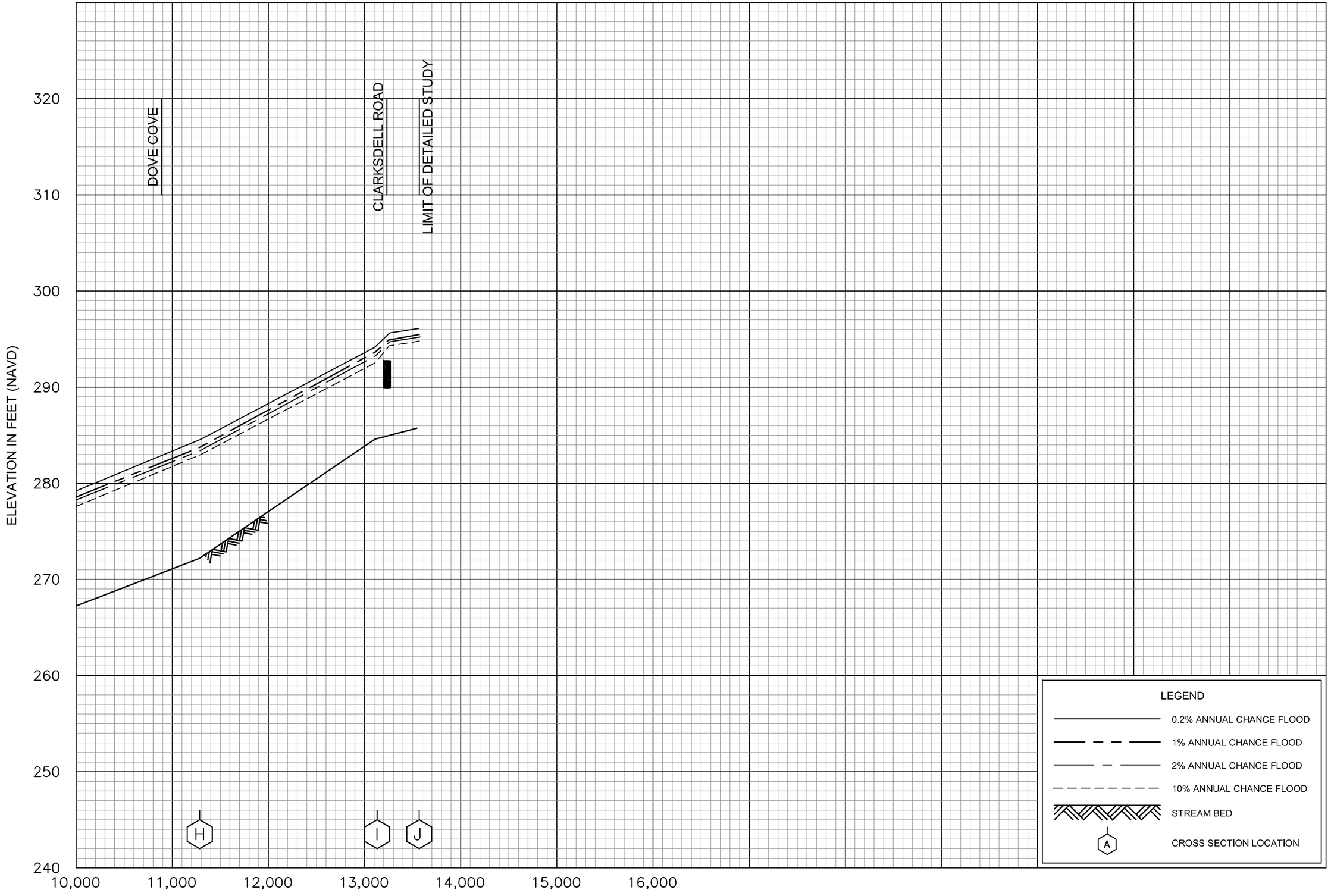
STREAM P

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

69P



FLOOD PROFILES

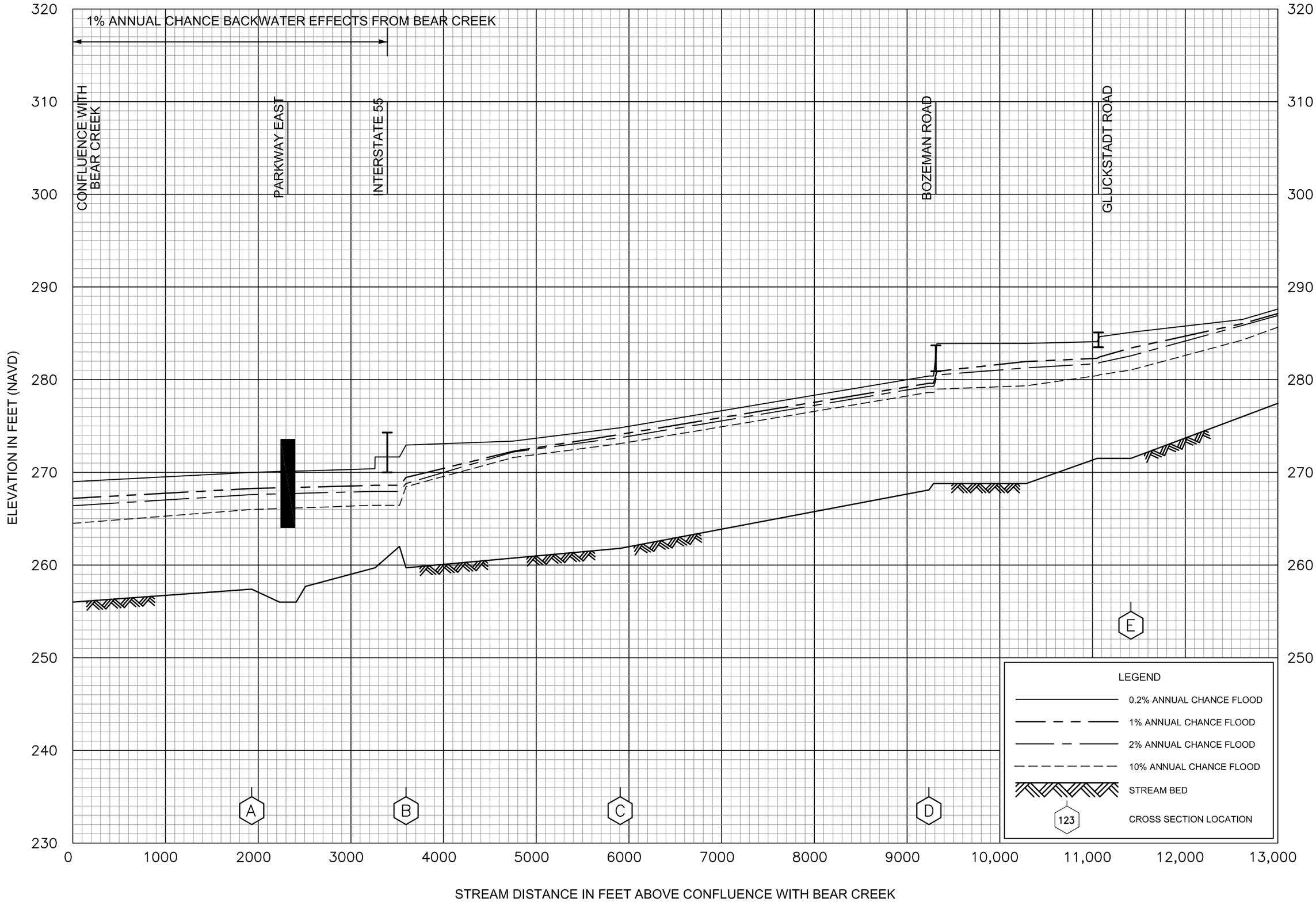
STREAM P

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

70P



FLOOD PROFILES

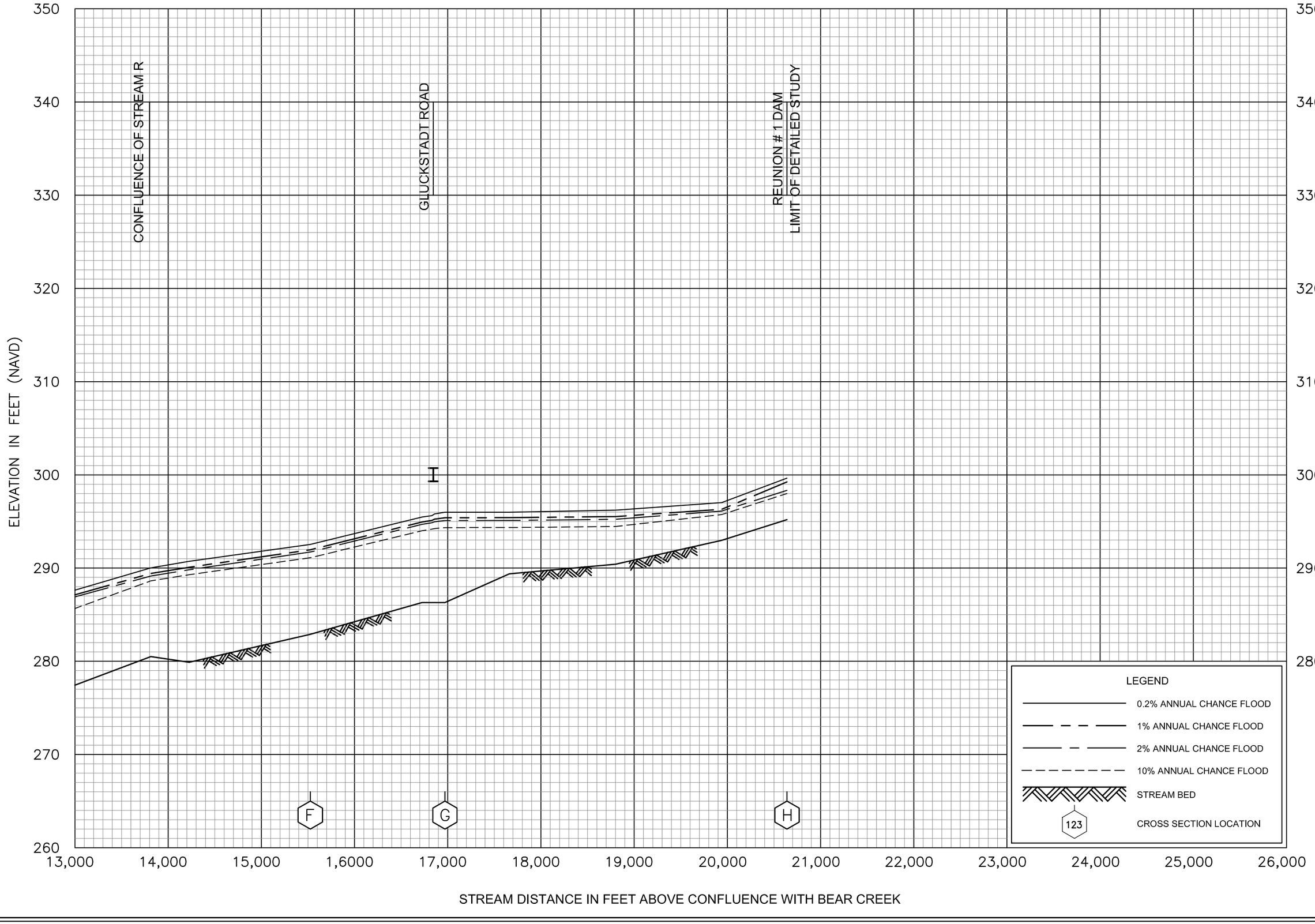
STREAM Q

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

71P



FLOOD PROFILES

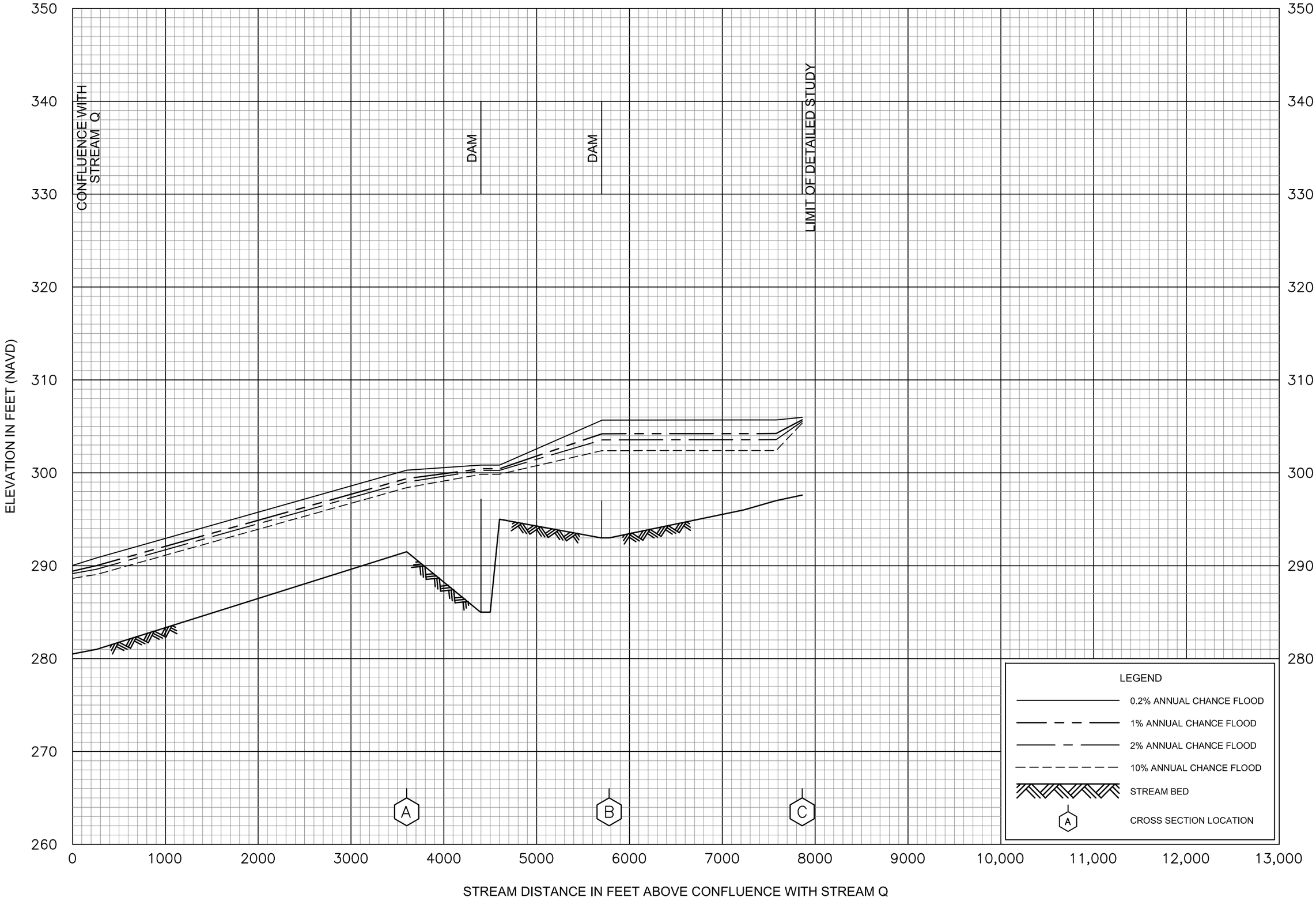
STREAM Q

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

72P



FLOOD PROFILES

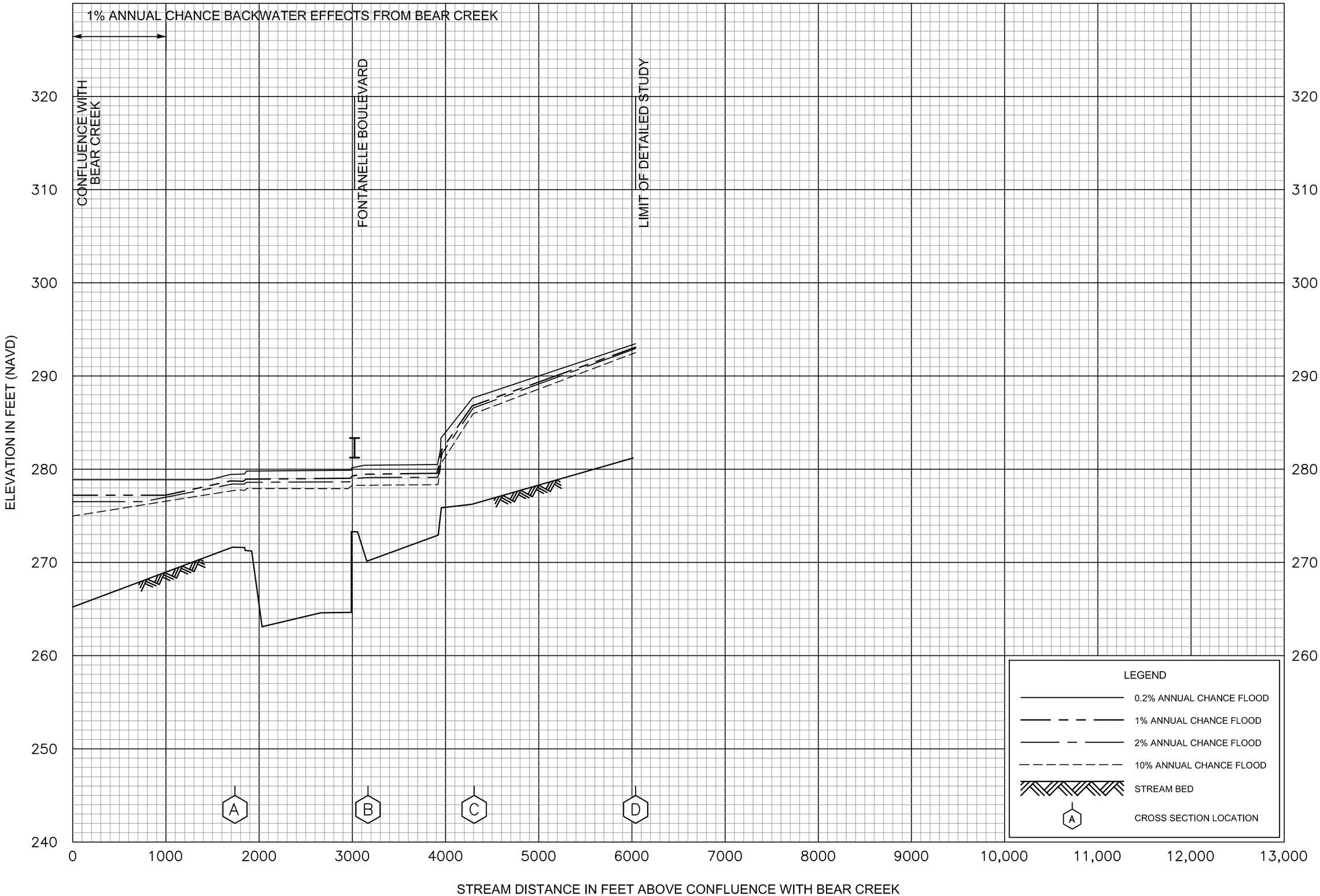
STREAM R

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

73P



FLOOD PROFILES

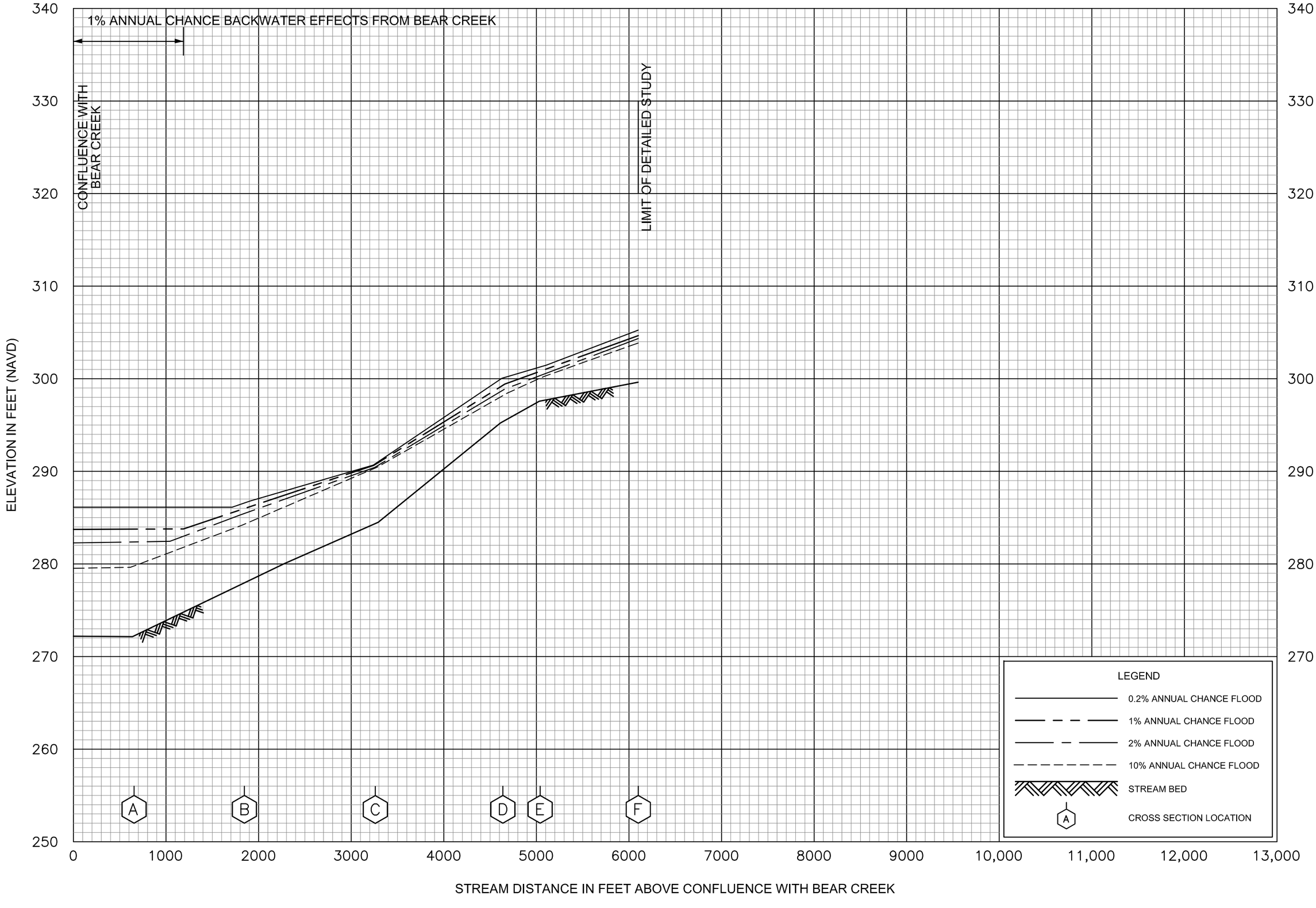
STREAM S

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

74P



FLOOD PROFILES

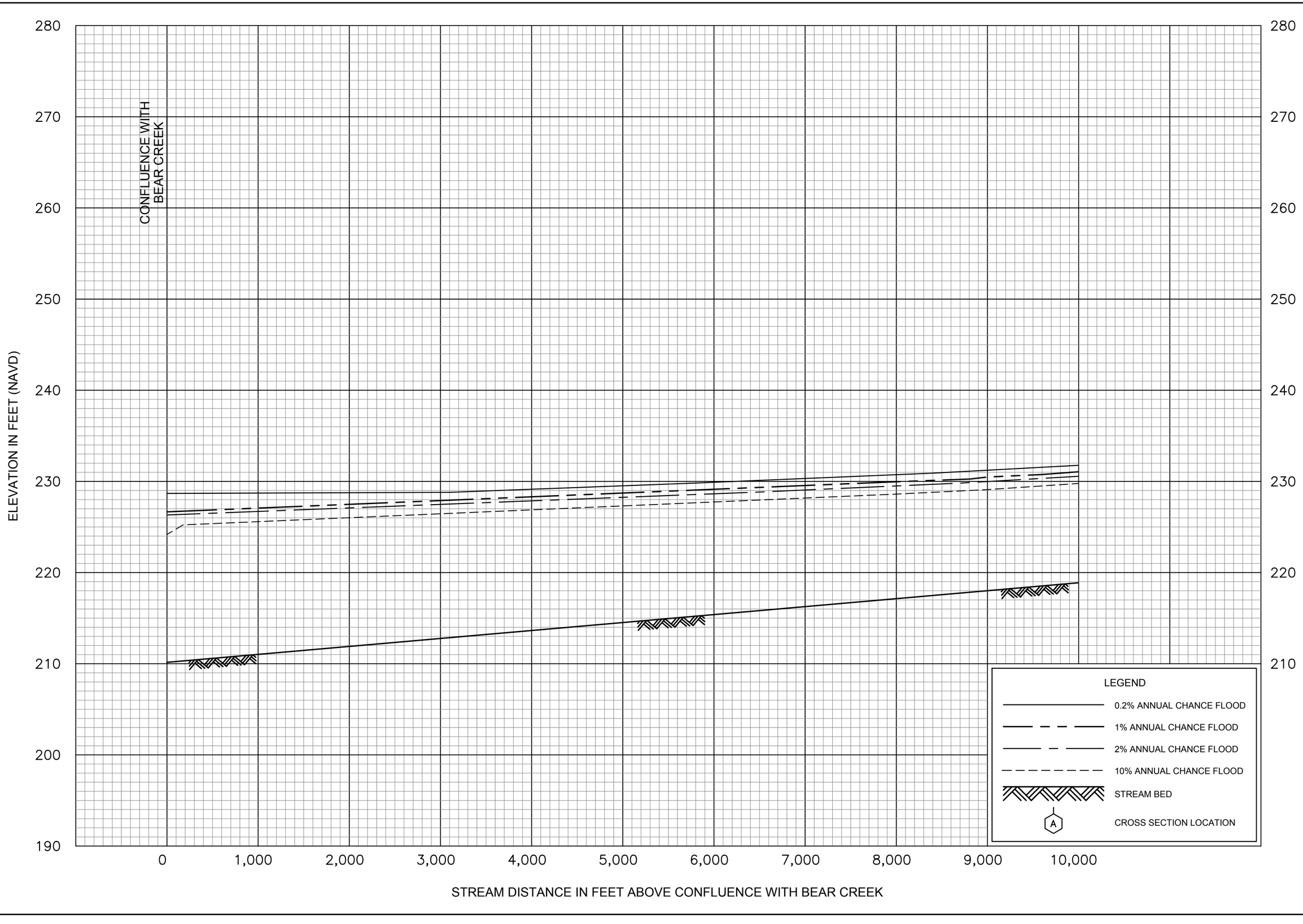
STREAM T

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

75P



FLOOD PROFILES

WALNUT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

76P

ELEVATION IN FEET (NAVD)

290
280
270
260
250
240
230
220
210
200

HIGHWAY 43

CONFLUENCE OF STREAM F

A

LEGEND

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

10,000 11,000 12,000 13,000 14,000 15,000 16,000 17,000 18,000 19,000 20,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BEAR CREEK

FLOOD PROFILES

WALNUT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

77P

ELEVATION IN FEET (NAVD)

300
290
280
270
260
250
240
230
220
210

GLENFIELD ROAD

LIMIT OF DETAILED STUDY

20,000 21,000 22,000 23,000 24,000 25,000 26,000 27,000 28,000 29,000 30,000 31,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BEAR CREEK

LEGEND

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

B

C

FLOOD PROFILES

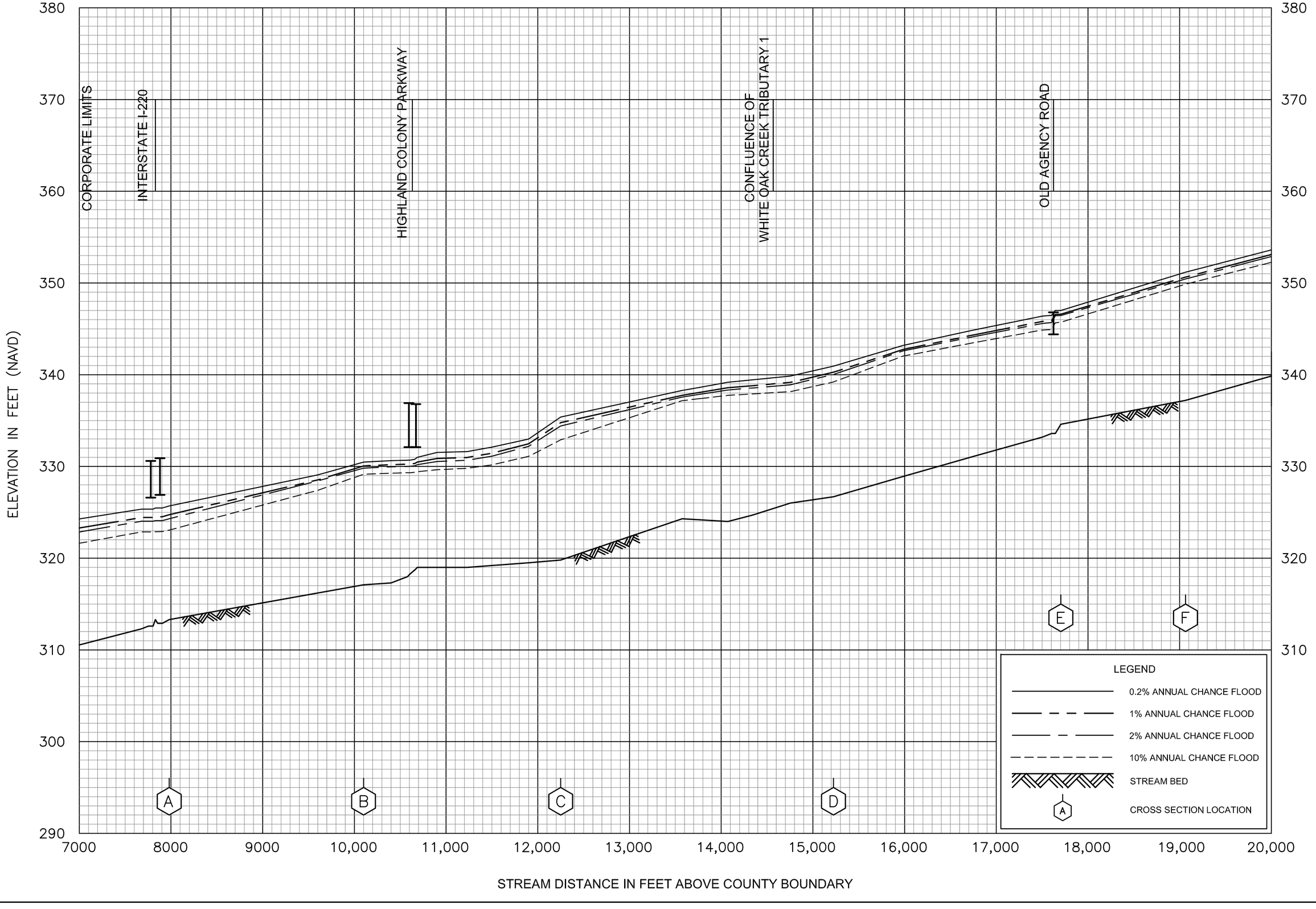
WALNUT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

78P



FLOOD PROFILES

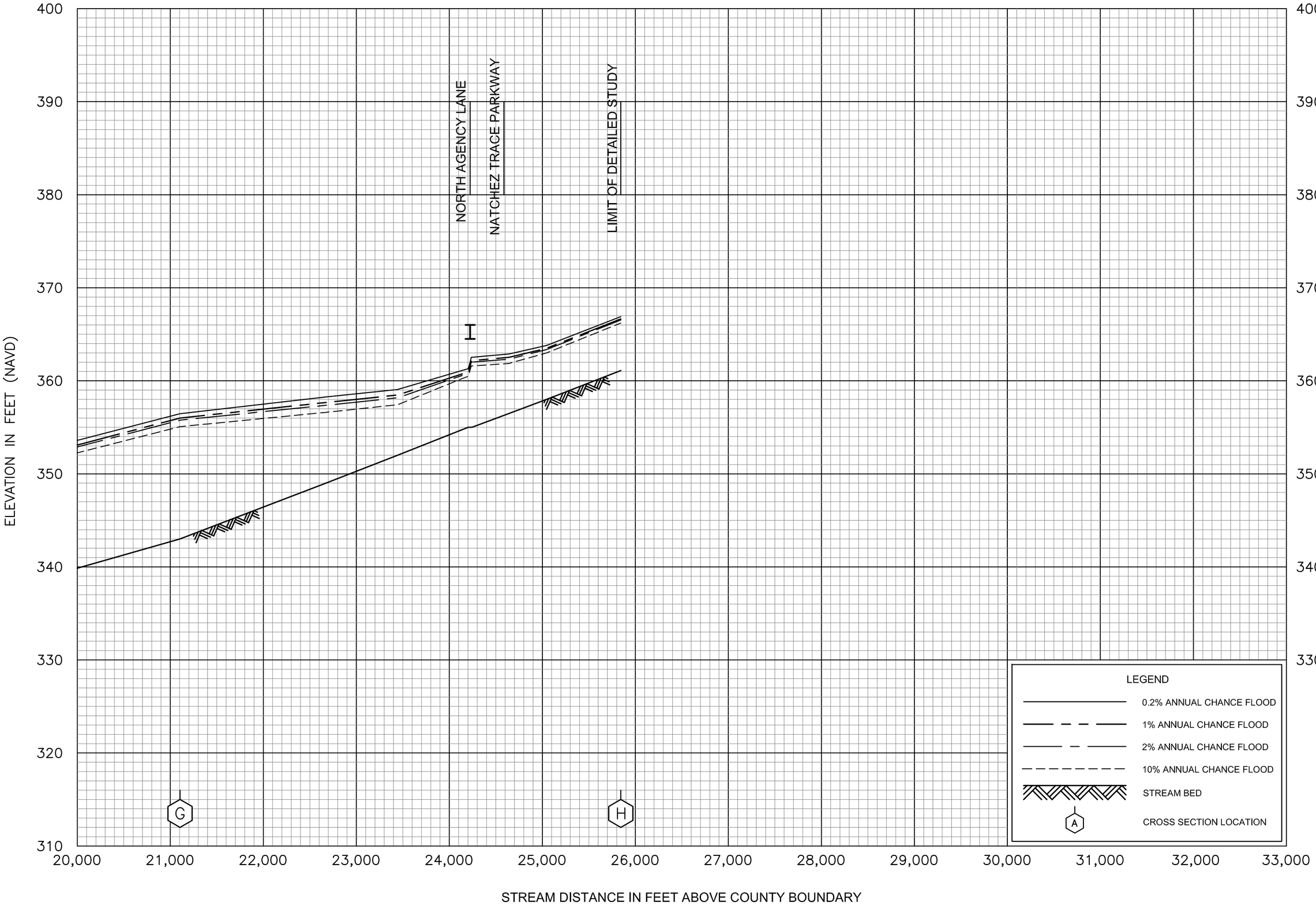
WHITE OAK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

79P



FLOOD PROFILES

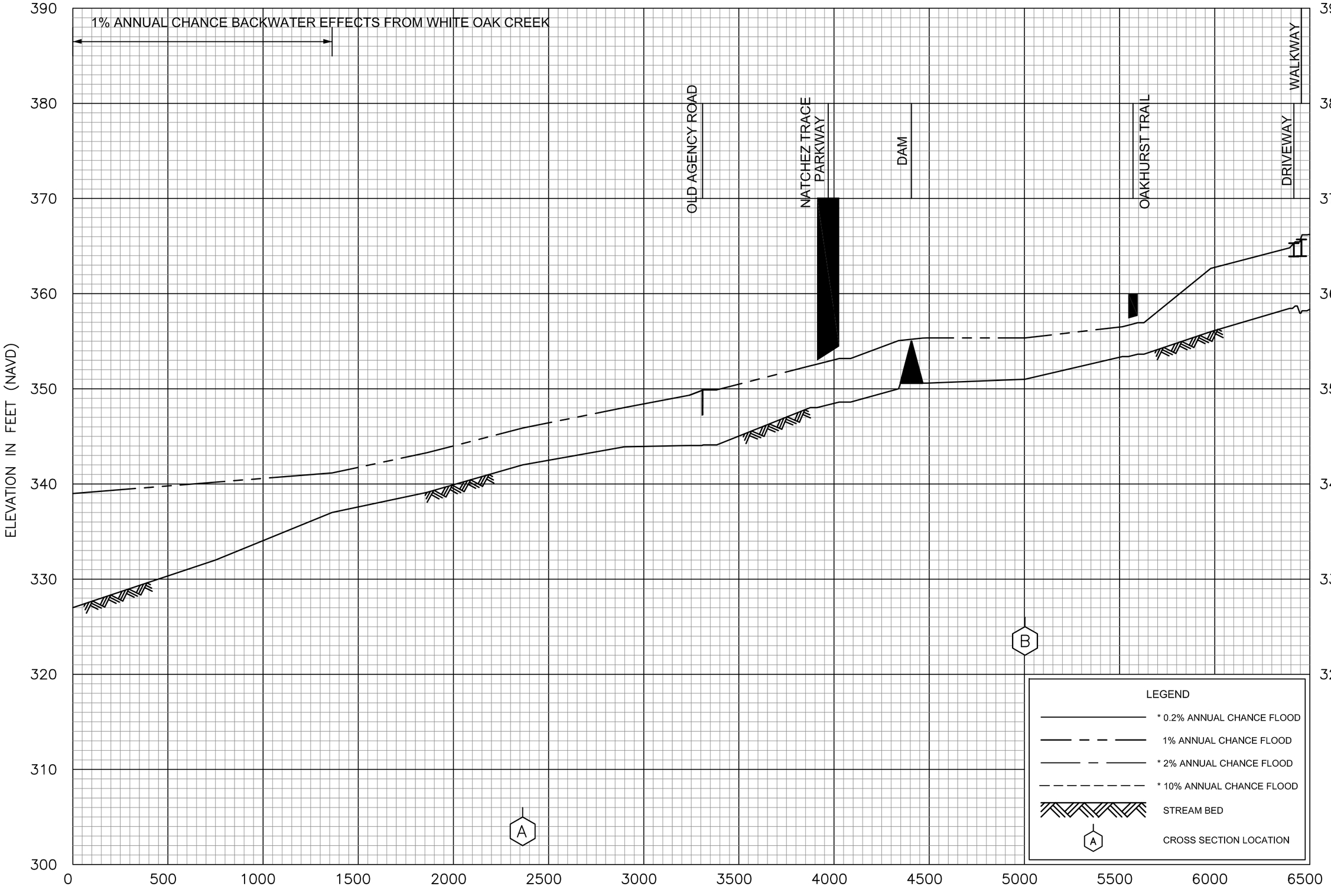
WHITE OAK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

80P



FLOOD PROFILES

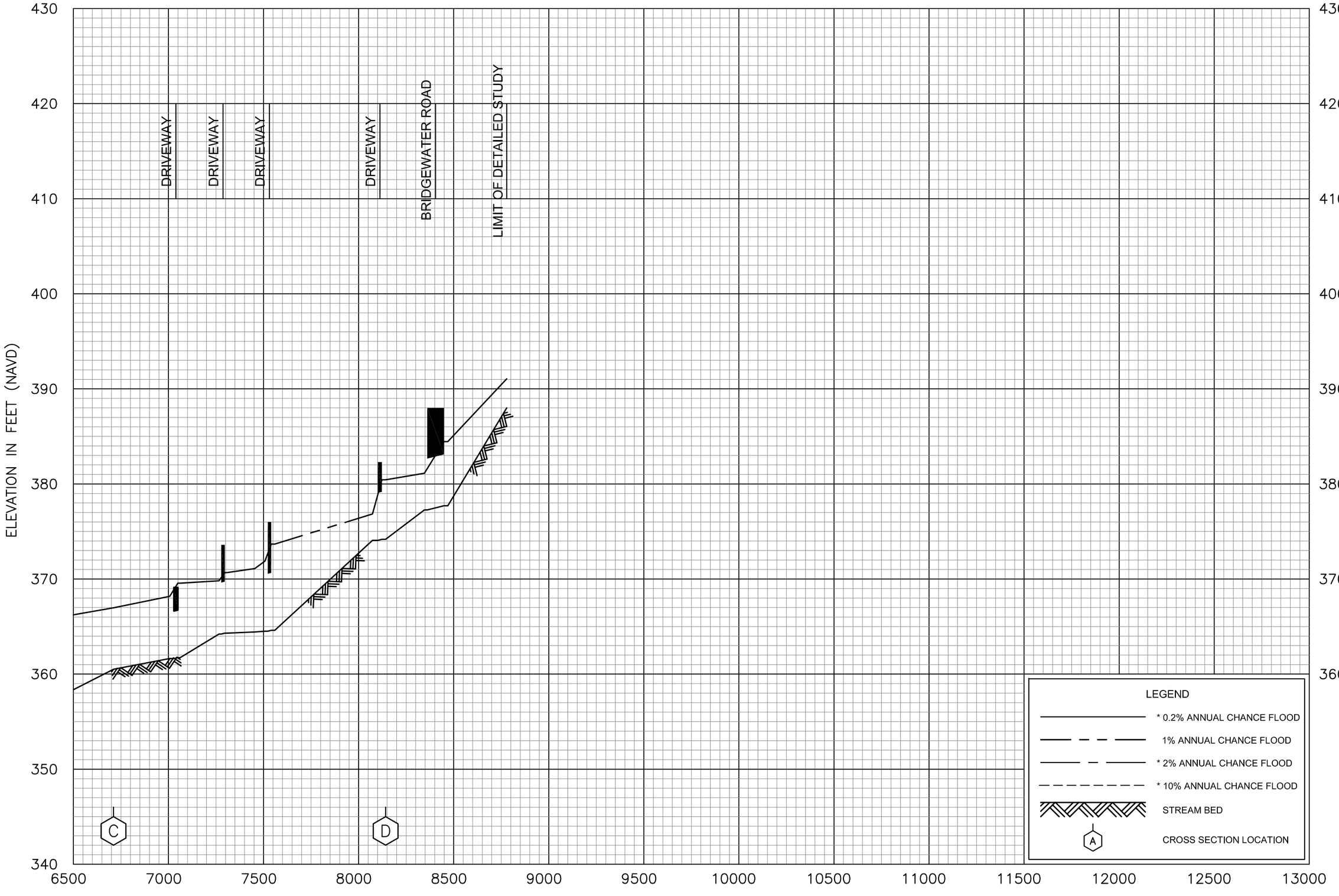
WHITE OAK CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

81P



FLOOD PROFILES

WHITE OAK CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

MADISON COUNTY, MS

AND INCORPORATED AREAS

82P