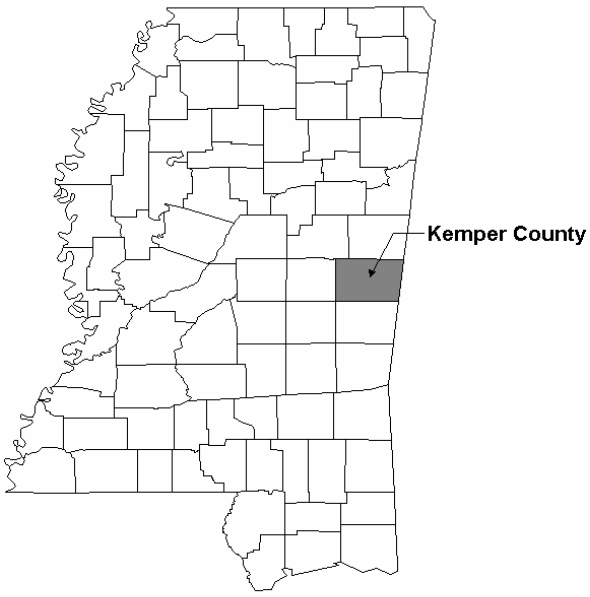
FLOOD INSURANCE STUDY

KEMPER COUNTY, MISSISSIPPI
AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
DE KALB, TOWN OF	280247
KEMPER COUNTY (UNINCORPORATED AREAS)	280246
SCOOBA, TOWN OF	280334



REVISED:

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
28069CV000

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:

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FLOOD INSURANCE STUDY
KEMPER COUNTY, MISSISSIPPI, AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the FIS reports and/or Flood Insurance Rate Maps (FIRMs) in the geographic area of Kemper County, Mississippi, including the Town of De Kalb, Town of Scooba, and unincorporated areas of Kemper County (herinafter referred to collectively as Kemper County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates. This information will also be used by Kemper 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.

This FIS was prepared to include the unincorporated area of, and incorporated communities within, Kemper County in a countywide format. Information on the authority and acknowledgements for each jurisdiction included in this countywide FIS, as compiled from their previous printed FIS reports, is shown below.

Scooba, Town of	The hydrologic and hydraulic analyses for this study were obtained from the U.S. Army Corps of Engineers (COE) Special Flood Hazard Evaluation, Scooba, Mississippi report on the Little Scooba Creek.

The hydrologic and hydraulic analyses for this study were performed by the State of Mississippi for the Federal Emergency Management Agency (FEMA), under Contract No. EMA-2004-CA-5028. This study was completed in June 2006.

The digital base map information files were provided by the State of Mississippi.

The digital FIRM was produced using the State Plane Coordinate System, Mississippi East, FIPSZONE 2301. The horizontal datum was the North American Datum of 1983, GRS 80 spheroid. Distance units were measured in U.S. feet.

1.3 Coordination

An initial Consultation Coordination Officer's (CCO) meeting is held with representatives from FEMA, the community, and the study contractor to explain the nature and purpose of a FIS, and to identify the streams to be studied by detailed methods. A final CCO meeting is held with representatives from FEMA, the community, and the study contractor to review the results of the study.

For the September 5, 1990 Town of Scooba FIS study, an initial coordination meeting was held on November 19, 1987 with representatives of FEMA, the Town of Scooba, and Kemper County. It was decided that the Flood Insurance Study would be based on the Special Flood Hazard Evaluation report (Reference 1).

For this FIS study, an initial Pre-Scoping Meeting was held on May 5, 2004. A Project Scoping Meeting was held on July 28, 2004, followed by a Post-Scoping Meeting on August 26, 2004. Attendees for these meetings included representatives from the Mississippi Department of Environmental Quality, Mississippi Emergency Management Agency, FEMA National Service Provider, Kemper County, 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. All problems raised in the meetings have been addressed.

2.0 AREA STUDIED

2.1 Scope of Study

The September 5, 1990 study covered the incorporated area of the Town of Scooba, Kemper County, Mississippi.

This FIS report covers the geographic area of Kemper County, Mississippi, including the incorporated communities listed in Section 1.1.

For this FIS study, no new detailed studies were performed.

Limited detail analyses were 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. For this FIS study, the following table lists the streams which were restudied and/or newly studied by limited detail methods:

TABLE 1. STREAMS STUDIED BY LIMITED DETAIL METHODS

Stream	Limits of Revision/New Limited Detail Study
Hull Branch	From the confluence with Snoody Creek to a point approximately 10,360 feet upstream of Old Jackson Rd
Okatibbee Creek	From the confluence with Houston Creek to a point approximately 2,338 feet upstream of Bull Swamp Rd
Snoody Creek	From a point about 2,293 feet downstream of State Road 39 to the confluence of Hull Branch

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

Numerous flooding sources in the county were studied by approximate methods, and are the basis of the revised Zone A mappings included on the FIRMs. These streams include portions or all of the following: Big Scooba Creek and Tributaries, Blackwater Creek and Tributaries, Bodka Creek, Cap Branch, Chamberlin Creek, Delphia Creek, Flat Creek, Flat Scooba Creek and Tributaries, Houston Creek and Tributaries, Indian Branch, King Canal, Liberty Branch, Little Minnow Creek and Tributaries, Little Ross Branch, Little Scooba Creek and Tributaries, Mineral Springs Branch, Oak Grove-Blackwater Creek, Okatibbee Creek, Parker Creek, Pawticfaw Creek and Tributaries, Poole Branch and Tributaries, Running Tiger Creek, Seals Branch, Snoody Creek and Tributaries, Steel Creek, Straight Creek and Tributaries, Sucarnoochee Creek, Tallachula Creek and Tributaries, Toles Branch, and Yazoo Creek.

This countywide FIS reflects a vertical datum conversion from the National Geodetic Vertical Datum of 1929 (NGVD29) to the North American Vertical Datum of 1988 (NAVD88).

No determinations of letters issued by FEMA resulting in map changes exist for Kemper County and its communities.

2.2 Community Description

Kemper County is located in east central Mississippi and is bordered by Noxubee County, Mississippi, and Winston County, Mississippi on the north; Neshoba County, Mississippi, on the west; Lauderdale County, Mississippi, on the south; and Sumter County, Alabama, on the east. The county covers approximately 767 square miles, and has 2 municipalities. The county is served by U.S. Highway 45, and State Highways 16 and 39. The county is also served by the Kansas City Southern Railroad.

The 2005 population of Kemper County was estimated to be 10,246 (Reference 2).

Kemper County consists mainly of forested, undeveloped lands. The climate of the county is generally mild to humid, with abundant rainfall that averages 55.63 inches annually. Temperatures range from monthly averages of 43 degrees Fahrenheit (°F) in January to 80 °F in July (Reference 3).

2.3 Principal Flood Problems

The section of Little Scooba Creek evaluated in the original FIS for the Town of Scooba flows easterly and southerly through the Town of Scooba. During periods of intense rainfall the runoff exceeds the capacity of the channel and inundates adjacent low-lying areas. No recent channelization or realignment of Little Scooba Creek has occurred. The stream was apparently diverted either intentionally or accidentally in the past to a ditch providing drainage along the Illinois Central Railroad. This diversion did not exacerbate flooding problems as the ditch roughly parallels the old channel. The Town of DeKalb currently experiences flooding from Snoody Creek on the southwest side of town, in the vicinity of the industrial park off Highway 16.

2.4 Flood Protection Measures

No flood protection measures exist in the county.

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.

Pre-Countywide FIS Analyses

Discharges for the 10-, 50-, and 100-year events on Little Scooba Creek were determined using U.S. Geological Survey (USGS) procedures (Reference 4). The drainage area magnitudes for locations on Little Scooba Creek were determined from topographic maps (Reference 5). Stream slopes were also determined from the topographic maps. Frequency curves were plotted for each location and flows for the 500-year event were extrapolated from them.

Peak discharge-drainage area relationships for the 10-, 50-, 100-, and 500-year floods of Little Scooba Creek are shown in Table 2**.**

This Countywide Study

Peak discharges for the streams studied by limited detail methods were calculated based on USGS regional regression equations (Reference 6).

For the discharges calculated based on regional regression equations, the rural regression values were updated to reflect urbanization as necessary.

A summary of the drainage area-peak discharge relationships for all the streams is shown in Table 2, "Summary of Discharges."

TABLE 2. SUMMARY OF DISCHARGES

Detail Study Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
Little Scooba Creek					
About 1.6 miles downstream of US Route 45	12.4	2,440	3,940	4,820	7,000
About 1.0 mile upstream of US Route 45	10.0	2,530	4,040	4,890	7,100
About 1,600 feet downstream of County Road	3.9	1,200	1,870	2,250	3,050
About 1.4 miles upstream of County Road	2.9	1,140	1,740	2,090	2,850

Limited Detail Study Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
Hull Branch					
At confluence with Hull Branch Tributary 1	4.3	*	*	2,683	*
1 mile upstream of confluence with Hull Branch Tributary 1	2.8	*	*	2,302	*
700 ft upstream of confluence with Hull Branch	1.3	*	*	1,166	*
Okatibbee Creek					
Downstream of Kittrell Swamp Road	55.9	*	*	10,751	*
1600 ft upstream of confluence with Tallachula Creek	33.5	*	*	7,665	*
4600 ft downstream of Bull Swamp Road	29.7	*	*	7,552	*
2400 ft upstream of Bull Swamp Road	15.3	*	*	4,501	*
Snoody Creek					
At confluence with Hull Branch	7.1	*	*	3,148	*

* 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.

Pre-Countywide FIS 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.

Water-surface elevations for floods of the selected recurrence intervals were determined using the USACE HEC-2 step-backwater computer program (Reference 7).

The cross sections were determined using topographic maps (Reference 5) and by field observation. Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles and on the Flood Insurance Rate map.

Roughness coefficients (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and based on field observation. The channel values for Little Scooba Creek ranged from 0.04 to 0.08 and the overbank values ranged from 0.08 to 0.15.

Water-surface elevations were determined from critical depth.

Flood profiles were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals. In cases where the 50- and 100-year flood elevations are close together, due to limitations of the profile scale, only the 100-year profile has been shown.

Countywide Analysis

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

Downstream boundary conditions for the hydraulics 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 of existing effective flood elevations or recalculated flood elevations. Water surface profiles were computed through the use of the USACE HEC-RAS version 3.1.2 computer program (Reference 8). The model was run for the 1-percent-annual-chance storm for the limited detail and approximate studies.

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 3, "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 limited detailed methods.

TABLE 3. SUMMARY OF ROUGHNESS COEFFICIENTS

Limited Detail Study Streams

FLOODING SOURCE	CHANNEL "N"	OVERBANK "N"
Hull Branch	0.05	0.15
Okatibbee Creek	0.05	0.15
Snoody Creek	0.05	0.15

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

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

All elevations are referenced to NAVD88.

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.

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.

Bench marks 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)

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 Kemper 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 0.07 feet to the NGVD29 elevation. The 0.07 feet value is an average for the entire County. 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.

To obtain current elevation, description, and/or location information for bench marks shown on the FIRM for this jurisdiction, or for information regarding conversion between the NGVD29 and NAVD88, 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).

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

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance 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 and Floodway Data 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.

For this study, 10 meter Digital Elevation Model (DEM) data from the United States Geological Survey were used to delineate the floodplain boundaries.

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 4) and

limited detailed study streams (Table 5). 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 4, "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 4. 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.

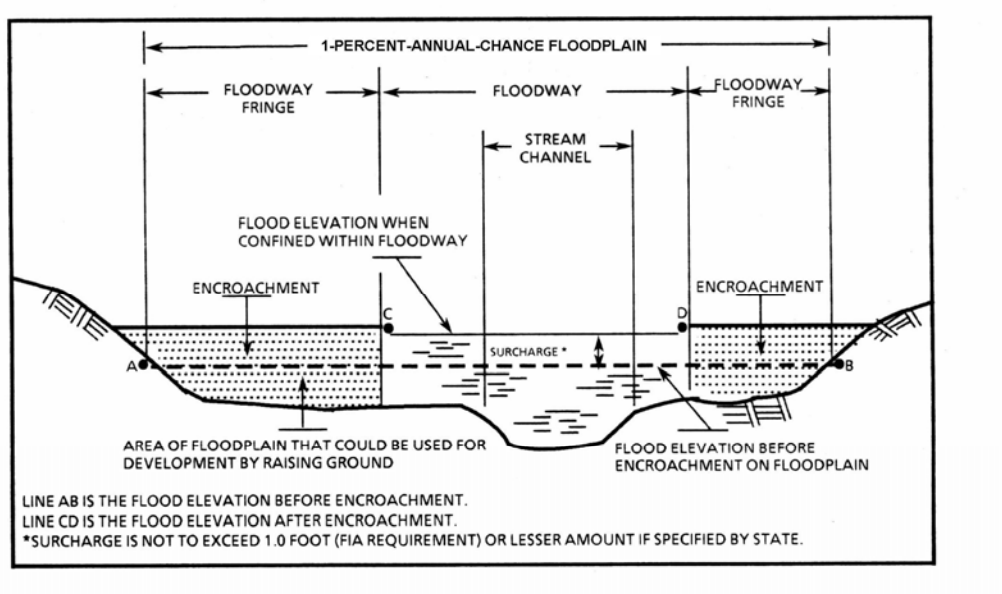


FIGURE 1. FLOODWAY SCHEMATIC

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Scooba Creek								
A	4800	712[2]	1908	2.5	169.6	169.6	170.6	1.0
B	8755	963[2]	4355	1.1	176.1	176.1	177.1	1.0
C	13,271	210[2]	1338	3.7	180.7	180.7	181.5	0.8
D	18,324	713[2]	3350	1.5	184.6	184.6	185.6	1.0
E	20,424	449[2]	2765	1.8	187.8	187.8	188.8	1.0
F	22,168	552[2]	526	9.3	188.9	188.9	189.9	1.0
G	23,161	787[2]	5031	1.0	191.1	191.1	192.1	1.0
H	23,769	435[2]	608	3.7	191.3	191.3	192.3	1.0
I	24,877	132	635	3.5	194.1	194.1	195.1	1.0
J	25,227	437	2853	0.8	195.1	195.1	196.0	0.9
K	26,589	633	3040	0.7	195.5	195.5	196.5	1.0
L	32,131	310[2]	982	2.1	201.6	201.6	202.6	1.0

[1] FEET ABOVE MOUTH
[2] THIS WIDTH IS BEYOND CORPORATE LIMITS

Based on Town of Scooba, Mississippi FIS dated 09/05/1990

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

LITTLE SCOOBA CREEK

TABLE 5. LIMITED DETAILED STUDY FLOODWAY DATA TABLE

Stream	Cross Section	Width
Hull Branch	A	76
	B	51
	C	76
Okatibbee Creek	A	331
	B	1164
	C	107
Snoody Creek	A	552

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 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.

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 Kemper 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 6, "Community Map History."

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Kemper County (Unincorporated Areas)	---	---	Preliminary 2006	---
De Kalb, Town of	---	---	Preliminary 2006	---
Scooba, Town of	August 29, 1989	---	September 5, 1990	Preliminary 2006

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
KEMPER COUNTY, MS
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

An FIS has been prepared for the Town Of Scooba, Mississippi, (References 1 and 9).

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

1. U.S. Army Corps of Engineers, Mobile District, Special Flood Hazard Evaluation, Scooba, Mississippi, June 1987.

2. U.S. Census Bureau, website – Annual Estimates of the Population for Counties: April 1, 2000 to July 1, 2005, U.S. Census Bureau, Population Division, http://www.census.gov/popest/counties/CO-EST2005-01.html.

3. National Weather Service. website, Jackson, Mississippi, Kipling, MS monitoring station, July 1, 2002, http://www.srh.noaa.gov/jan/climate/climate_kipling.htm.

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

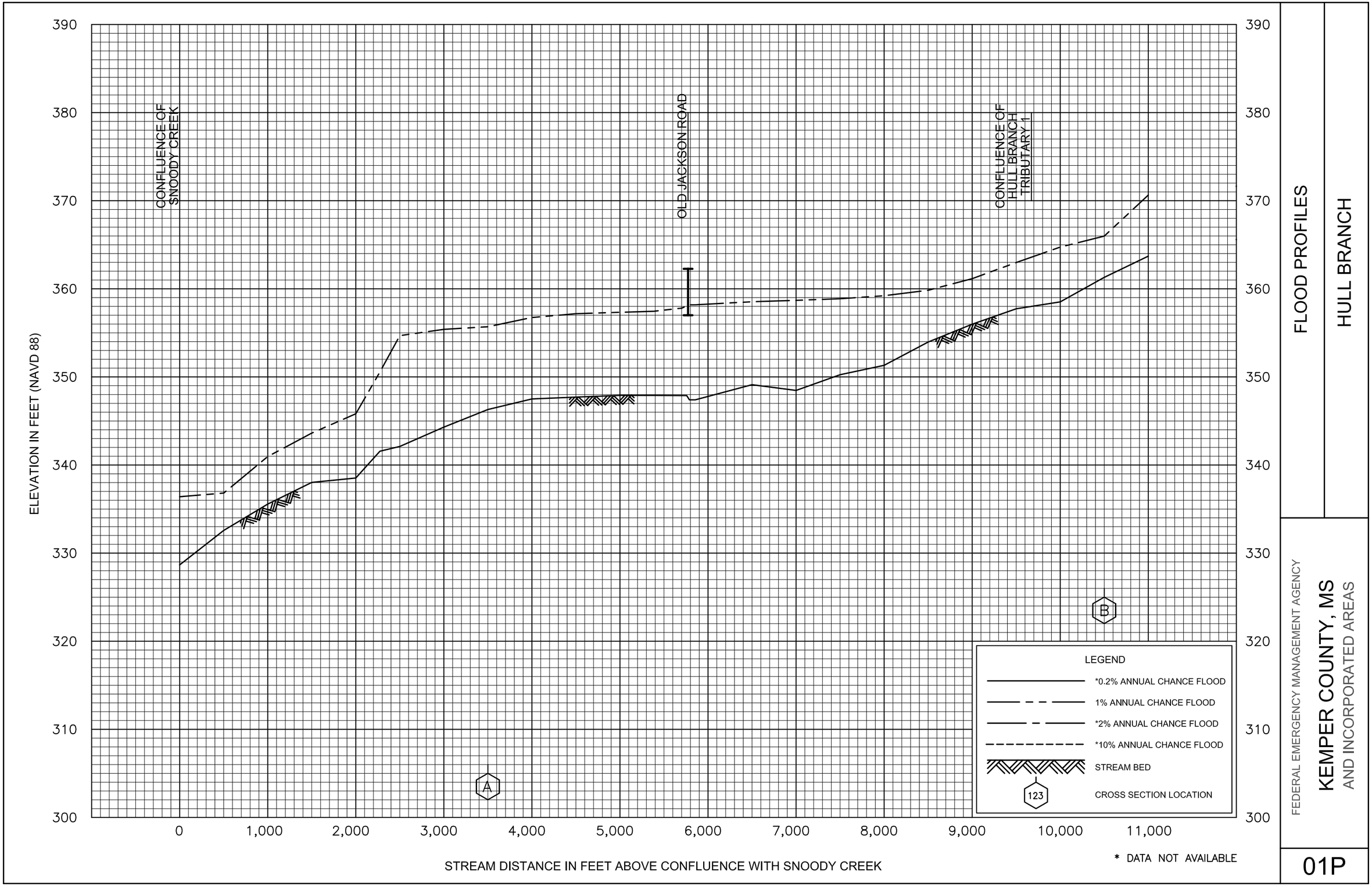
5. U.S. Department of the Interior, Geological Survey, 7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Interval 10 Feet: Center Hill, Mississippi, Photorevised 1985; Daleville, Mississippi, Photorevised 1985; De Kalb, Mississippi, Photorevised 1982; Gholson, Mississippi, Photorevised 1982; House, Mississippi, Photorevised 1985; Lauderdale, Mississippi, Photorevised 1985; Lauderdale NW, Mississippi, Photorevised 1985; Lynville, Mississippi, Photorevised 1982; Moscow, Mississippi, Photorevised 1985; Oak Grove, Mississippi, Photorevised 1985; Owl Creek, Mississippi, Photorevised 1982; Paulette, Mississippi, 1973; Porterville, Mississippi, Photorevised 1987; Post, Mississippi, Photorevised 1985; Preston, Mississippi, 1962; Scooba, Mississippi, 1973; Shuqualak, Mississippi, Photorevised 1982; Townsend, Mississippi, Photorevised 1982; Vernon, Mississippi, Photorevised 1982; Tamola, Mississippi-Alabama, Photorevised 1987; Geiger, Alabama-Mississippi, 1973; Panola, Alabama-Mississippi, 1973; Emelle, Alabama, Photorevised 1987.

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

7. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water Surface Profiles, Computer Program 723-X6-L202A, Davis, California, April 1984.

8. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-RAS River Analysis System, User's Manual, version 3.1, Davis, California, November 2002.

9. Federal Emergency Management Agency, Flood Insurance Study, Town of Scooba, Mississippi, Washington, D. C., September 5, 1990.



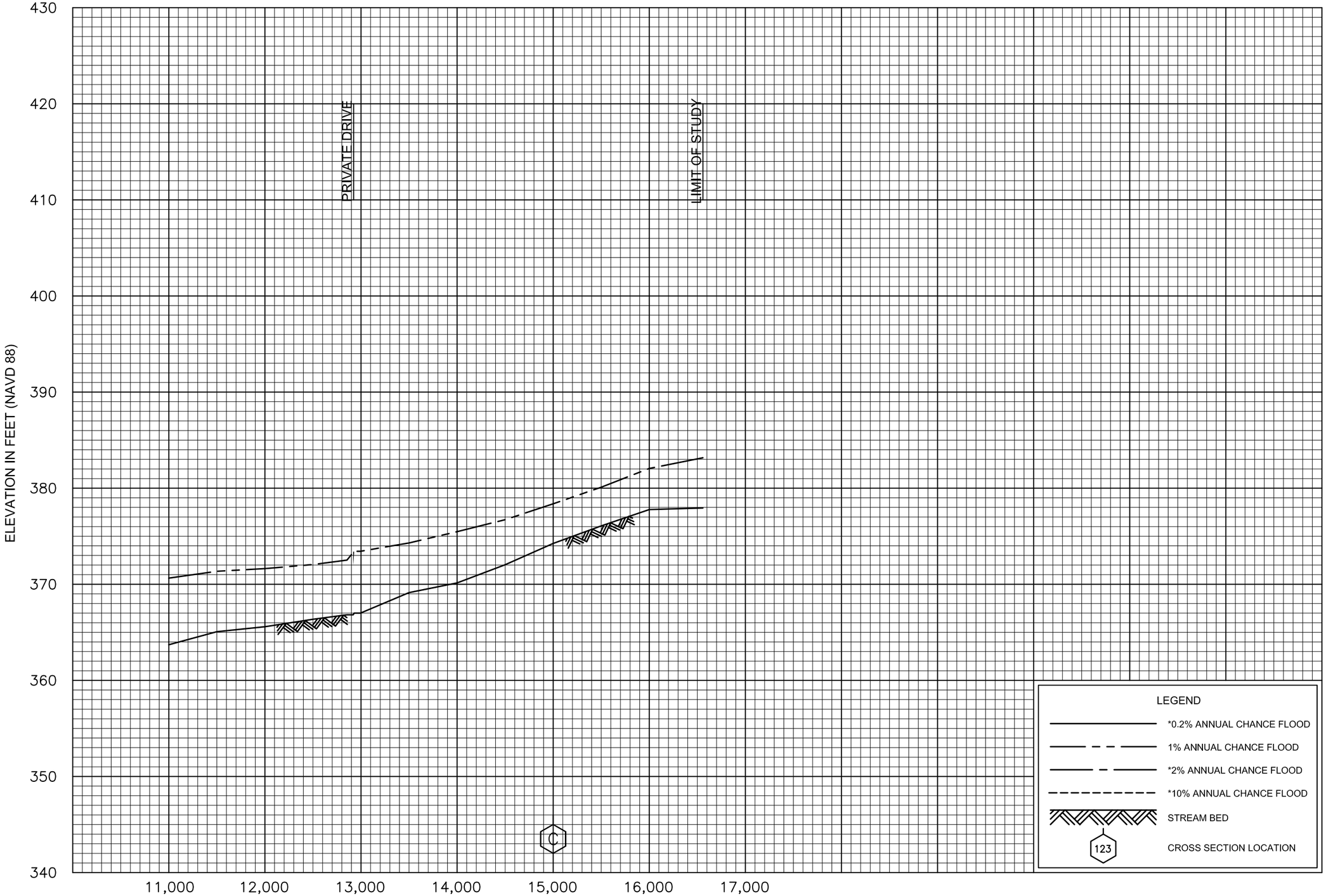
FLOOD PROFILES

HULL BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS
AND INCORPORATED AREAS

01P



FLOOD PROFILES

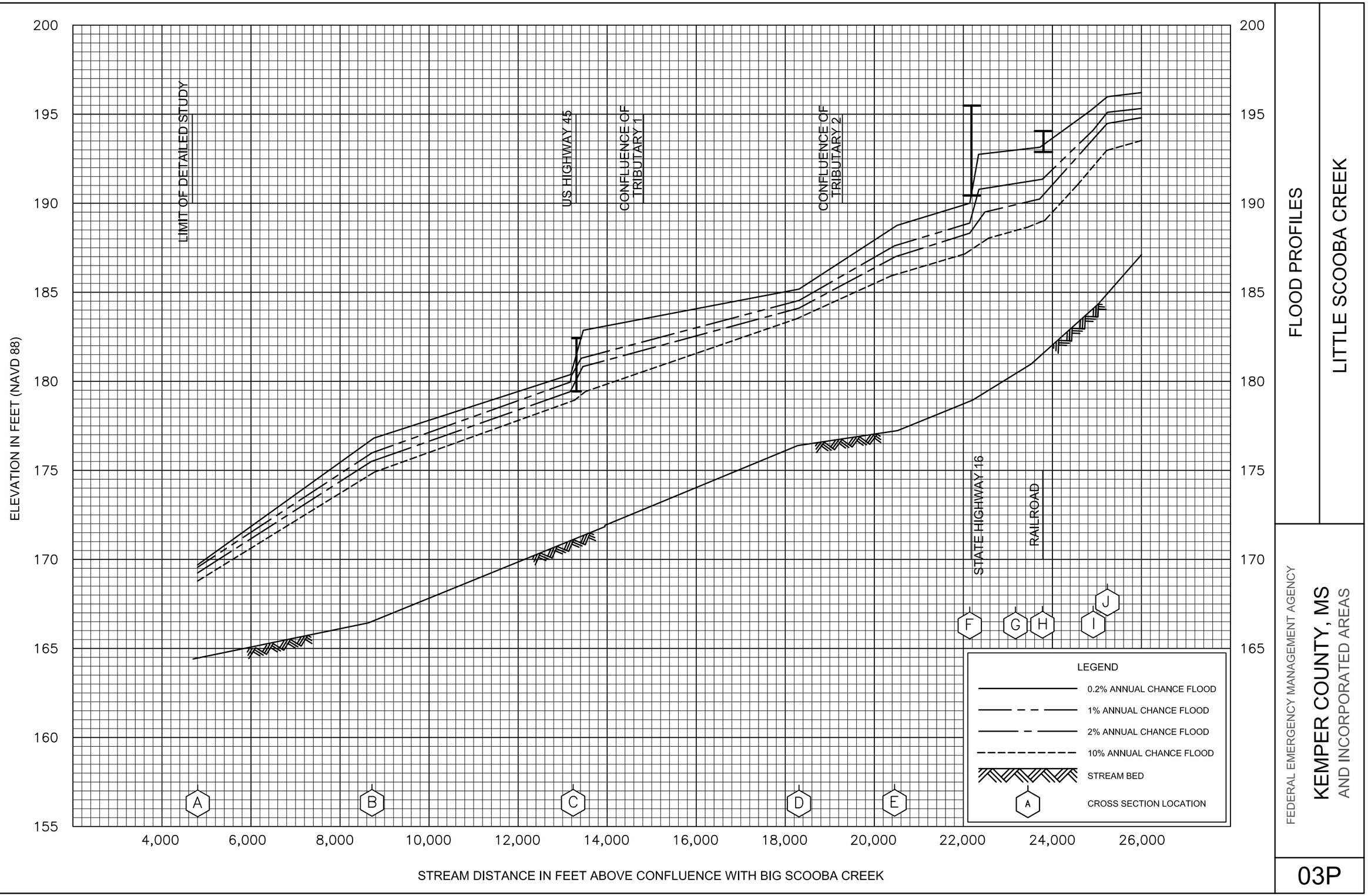
HULL BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS

AND INCORPORATED AREAS

02P



FLOOD PROFILES

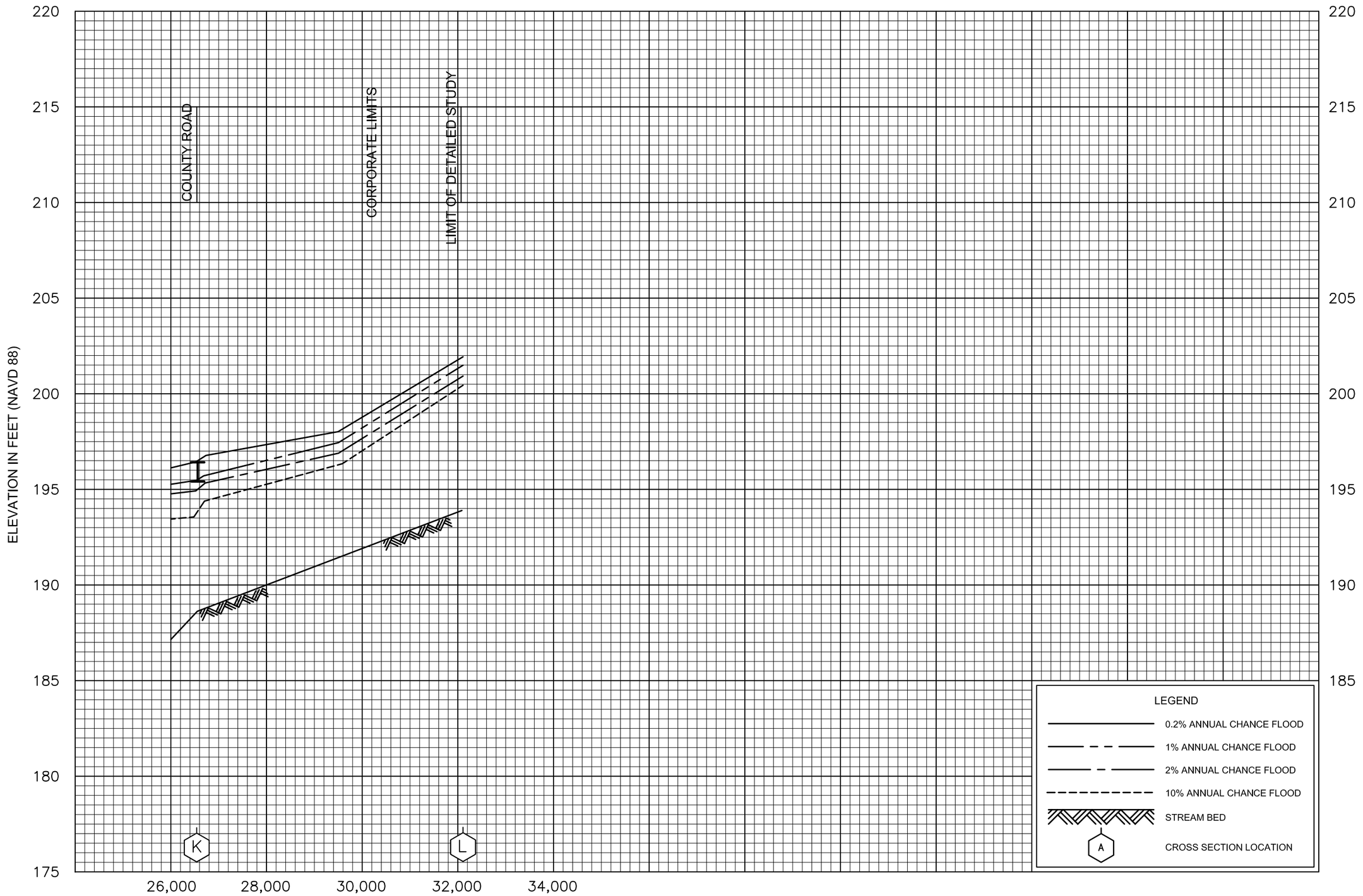
LITTLE SCOOBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS

AND INCORPORATED AREAS

03P



FLOOD PROFILES

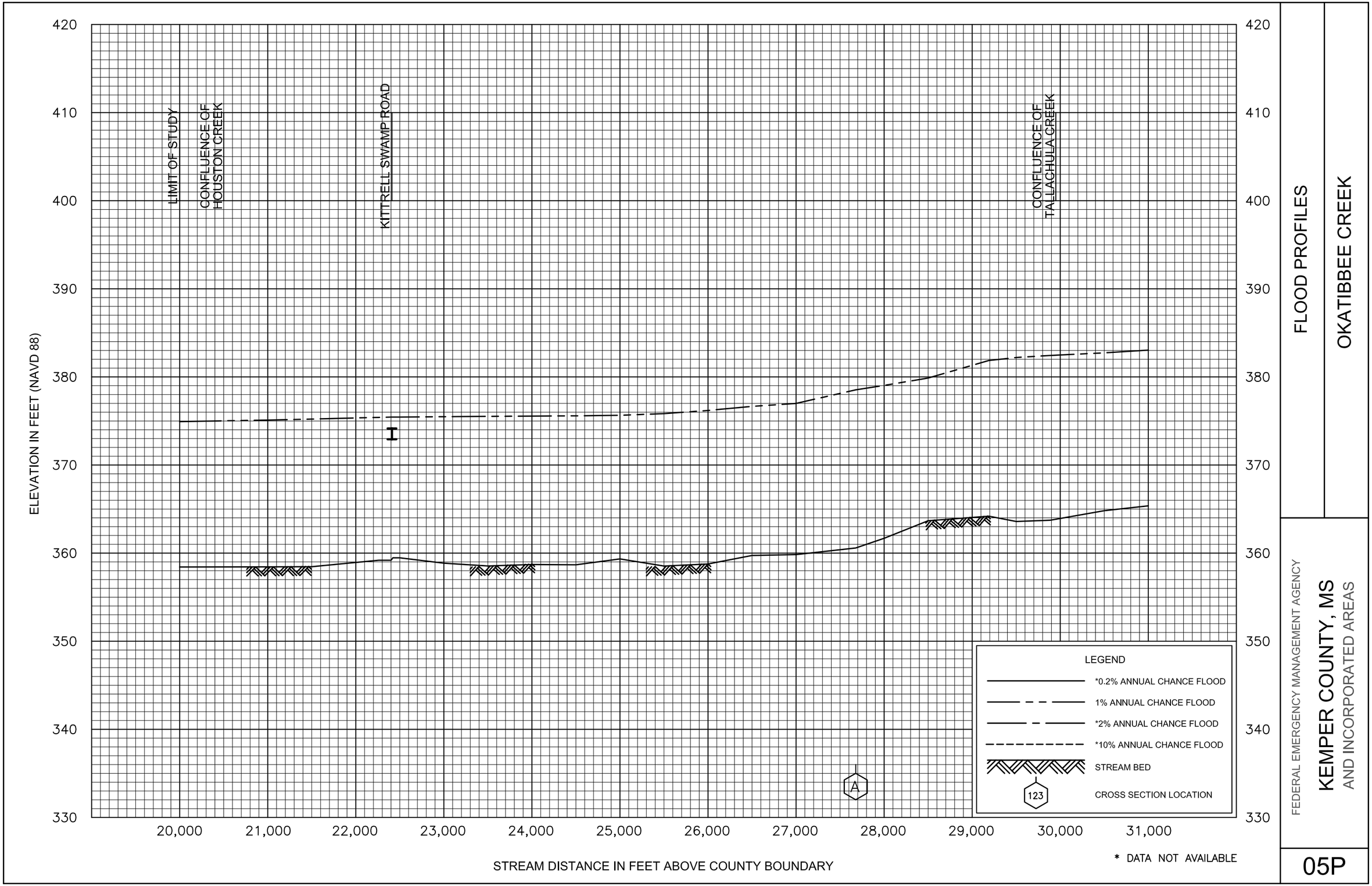
LITTLE SCOOBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS

AND INCORPORATED AREAS

04P



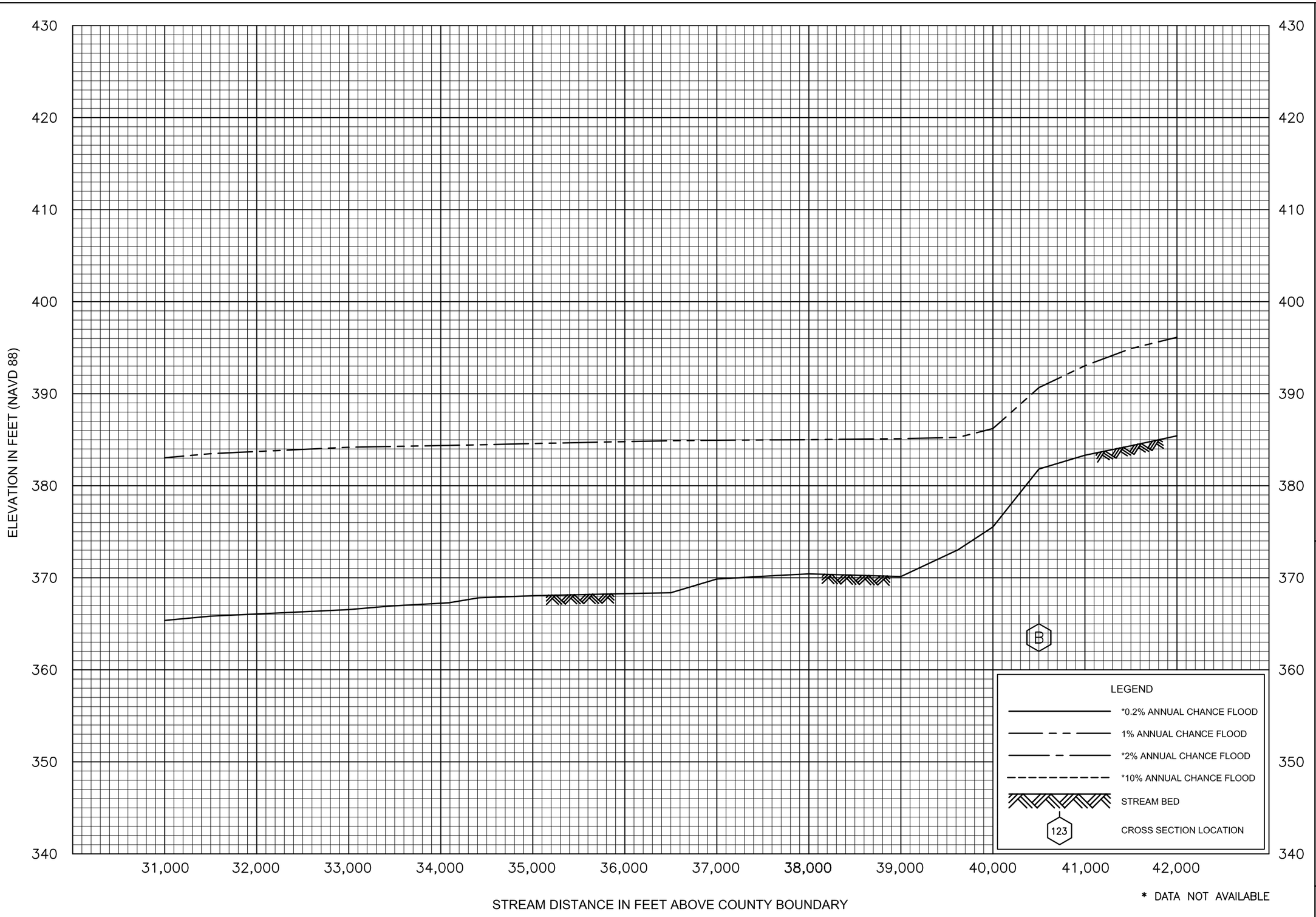
FLOOD PROFILES

OKATIBBEE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS
AND INCORPORATED AREAS

05P



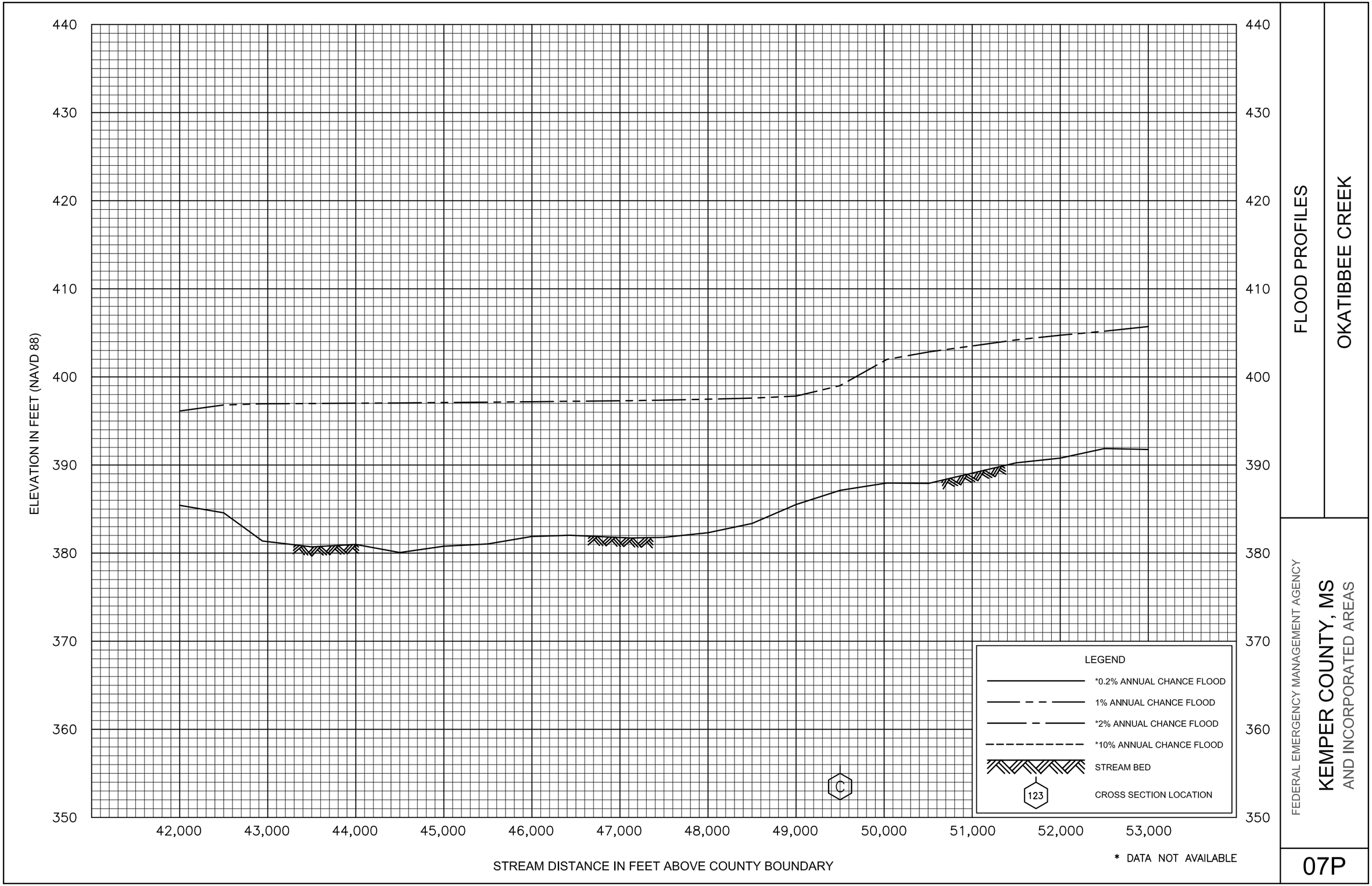
FLOOD PROFILES

OKATIBBEE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS
AND INCORPORATED AREAS

06P



FLOOD PROFILES

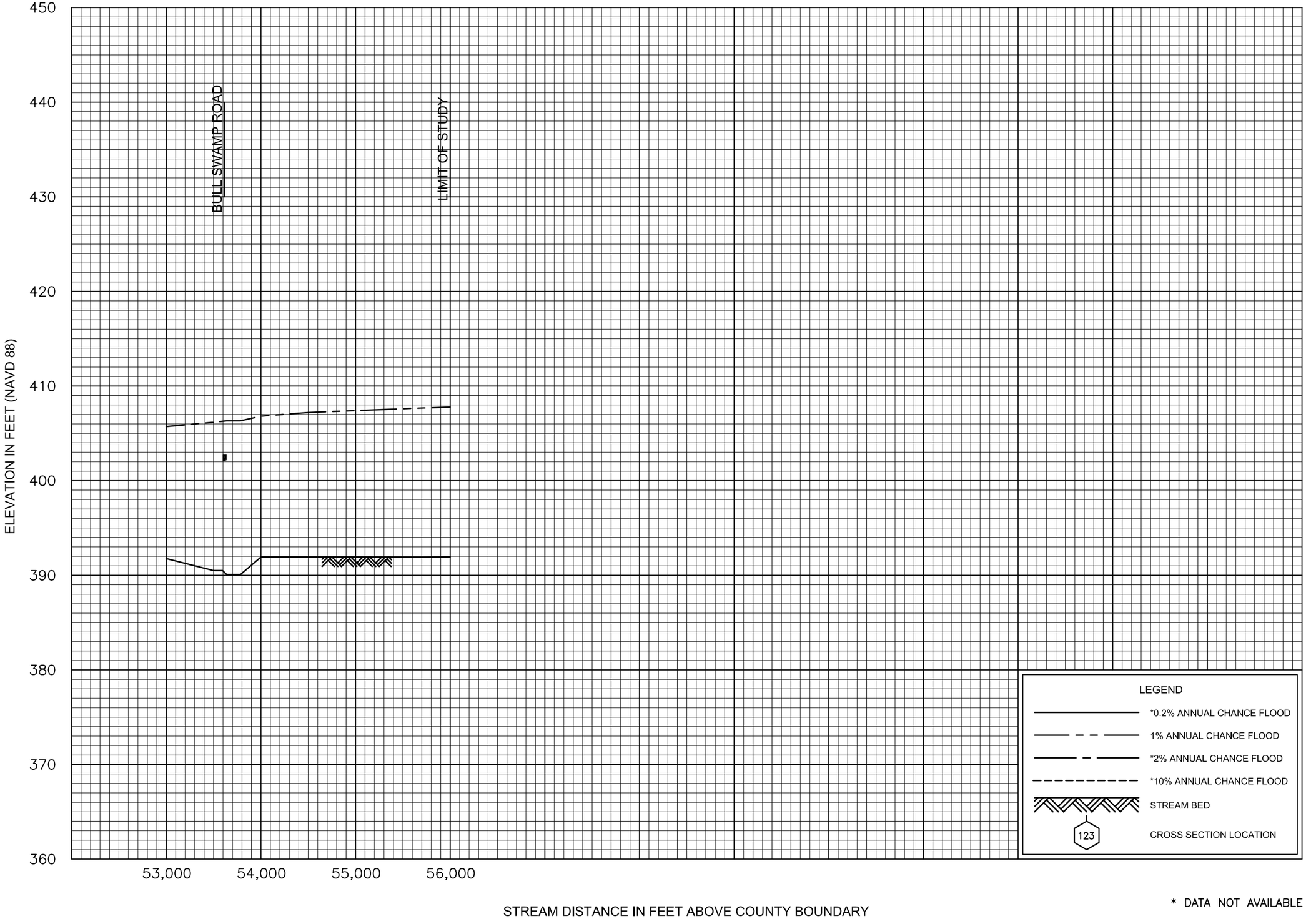
OKATIBBEE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS

AND INCORPORATED AREAS

07P



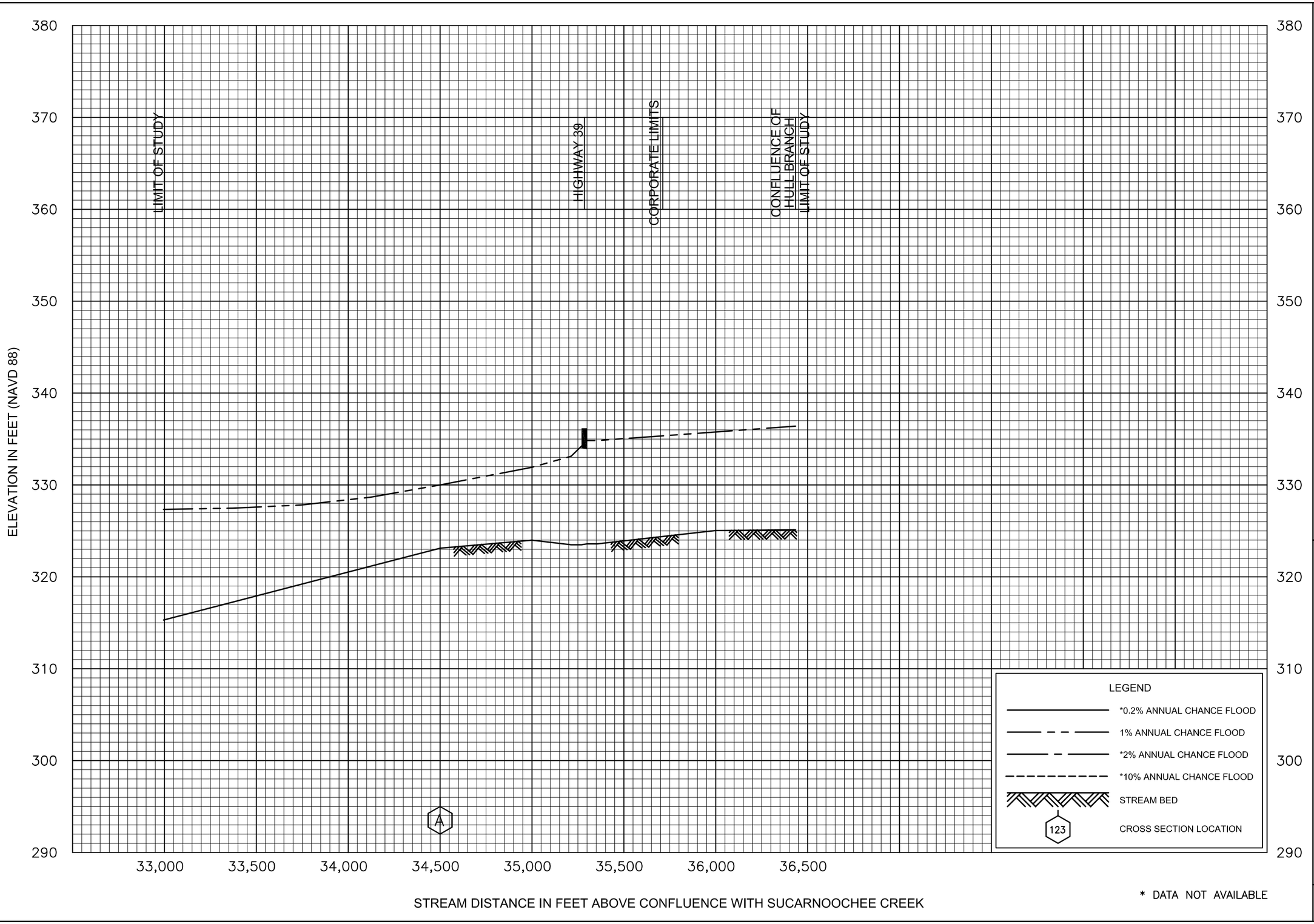
FLOOD PROFILES

OKATIBBEE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS
AND INCORPORATED AREAS

08P



FLOOD PROFILES

SNOODY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

KEMPER COUNTY, MS
AND INCORPORATED AREAS

09P