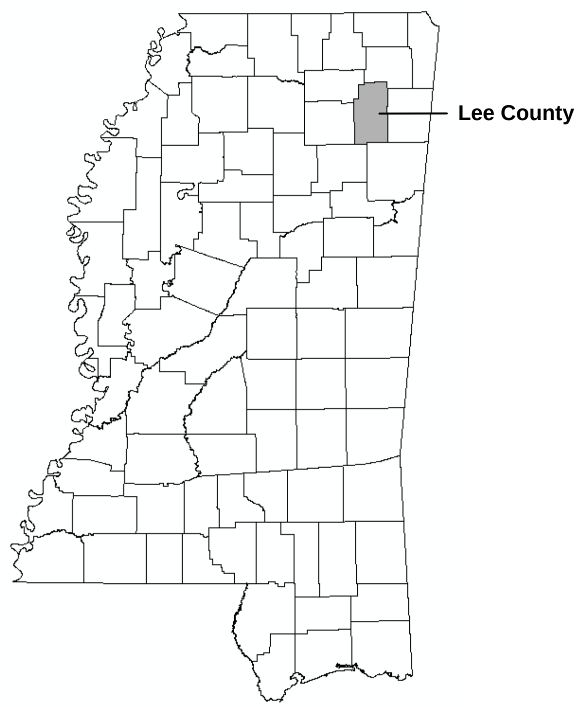
FLOOD INSURANCE STUDY

LEE COUNTY, MISSISSIPPI
AND INCORPORATED AREAS



Community Name	Community Number
BALDWYN, CITY OF	280134
GUNTOWN, TOWN OF	280345
LEE COUNTY (UNINCORPORATED AREAS)	280227
NETTLETON, TOWN OF	280344
PLANTERSVILLE, VILLAGE OF	280099
SALTILLO, CITY OF	280261
SHANNON, TOWN OF	280343
TUPELO, CITY OF	280100
VERONA, TOWN OF	280262

REVISED
MONTH DAY, 2012

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
28081CV000B

NOTICE TO
FLOOD INSURANCE STUDY USERS

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

This preliminary revised Flood Insurance Study contains profiles presented at a reduced scale to minimize reproduction costs. All profiles will be included and printed at full scale in the final published report.

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

Initial Countywide FIS Effective Date: October 20, 1999

Revised Countywide FIS Date: February 3, 2010
Month Day, 2012

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EXHIBITS

FLOOD INSURANCE STUDY

LEE COUNTY, MISSISSIPPI AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and updates information on the existence and severity of flood hazards in the geographic area of Lee County, including the City of Baldwyn, City of Tupelo, Town of Guntown, Town of Nettleton, City of Saltillo, Town of Shannon, Town of Verona, Village of Plantersville, and unincorporated areas of Lee County (referred to collectively herein as Lee County). The City of Baldwyn is included in its entirety in Lee County; The City of Sherman is not included in this FIS and is shown on the FIRM panels as Area Not Included.

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 and to assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

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.

The Digital Flood Insurance Rate Map (DFIRM) and FIS Report for this countywide study have been produced in digital format. Flood hazard information was converted to meet the Federal Emergency Management Agency (FEMA) DFIRM database specifications and geographic information standards and is provided in a digital format so that it can be incorporated into a local Geographic Information System and be accessed more easily by the community.

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.

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

Lee County (Unincorporated Areas):	The hydrologic and hydraulic analyses for the FIS report dated March 5, 1990, were prepared by Allen and Hoshall, Ltd., for FEMA, under Contract No. EMA-86-C-0108. That work was completed in September 1987. Additional information was incorporated from the April 1978 FIS for the City of Tupelo (Reference 1).
Tupelo, City of:	The hydrologic and hydraulic analyses for the FIS report dated April 1978 were prepared by Michael Baker, Jr., Inc., for the Federal Insurance Administration (FIA), under Contract No. H-3800. That work was completed in February 1977. For the FIS report dated August 18, 1992, the hydrologic and hydraulic analyses were prepared by the U.S. Army Corps of Engineers (USACE), Mobile District, for FEMA, under Inter-Agency Agreement No. IA-EMW-89-E-2994, Project Order No. 2, Task Order No. 2- MOB.

The authority and acknowledgements for the Cities of Baldwyn and Saltillo and the Towns of Guntown, Nettleton, Shannon, and Verona, and the Village of Plantersville are not included because there were no previously printed FIS reports for those communities.

For the October 20, 1999 countywide FIS, the updated hydrologic and hydraulic analyses were prepared for FEMA by the USACE, Mobile District, under Inter-Agency Agreement No. EMW-93-E-4115. This work was completed in June 1994. FEMA contracted Dewberry & Davis to revise the hydrologic and hydraulic analyses along Kings Creek, Little Coonewah Creek, Mud Creek, Town Creek, Tulip Creek, and West Tulip Creek to represent existing conditions. That work was completed in March 1998.

For the February 3, 2010 revision to the countywide FIS, the hydrologic and hydraulic analyses were performed for FEMA by the State of Mississippi. That study was completed in March 2008 under Contract No. EMA-2005-CA-5215.

For this revision of the countywide FIS, new hydrologic and hydraulic analyses were prepared by Mississippi Geographic Information, LLC (MGI, LLC), the Study Contractor, for FEMA, under Contract No. EMA-2009-CA-5932. This revised study was completed in January 2012. The following streams were included in this study:

- Brock Creek
- Coonewah Creek
- Euclatubba Creek Tributary 1
- Kings Creek Tributary 1
- Kings Creek Tributary 2.5
- Kings Creek Tributary 3

- Kings Creek Tributary 4
- Kings Creek Tributary 5
- Mud Creek Tributary 4
- Sand Creek Tributary 2

Table 1, "Summary of Flooding Sources Presented in Current Study," provides a summary of the flooding sources within Lee County included in this current study, the contract number under which they were performed, and the communities affected by each.

Table 1: Summary of Flooding Sources Presented in Current Study

Flooding Source	Completion Date	Study Contractor(s)	Contract or Inter-Agency Agreement No.	Communities Affected
Brock Creek	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Campbelltown Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Chiwapa Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Coonewah Creek	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Coonewah Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Coonewah Creek	*	*	*	*
Coonewah Creek Tributary 1	*	*	*	*
Coonewah Creek Tributary 2	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Coonewah Creek Tributary 3	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Euclatubba Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Euclatubba Creek Tributary 1	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County

Table 1: Summary of Flooding Sources Presented in Current Study

Flooding Source	Completion Date	Study Contractor(s)	Contract or Inter-Agency Agreement No.	Communities Affected
Kings Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Kings Creek Tributary 1	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Kings Creek Tributary 1	February 1977	Michael Baker, Jr., Inc.	H-3800	City of Tupelo
Kings Creek Tributary 2	February 1977	Michael Baker, Jr., Inc.	H-3800	City of Tupelo
Kings Creek Tributary 2.5	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Kings Creek Tributary 3	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Kings Creek Tributary 3	February 1977	Michael Baker, Jr., Inc.	H-3800	City of Tupelo
Kings Creek Tributary 4	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Kings Creek Tributary 4	February 1977	Michael Baker, Jr., Inc.	H-3800	City of Tupelo
Kings Creek Tributary 5	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Little Coonewah Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Little Coonewah Creek Tributary 1	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Mud Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Mud Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County

Table 1: Summary of Flooding Sources Presented in Current Study

Flooding Source	Completion Date	Study Contractor(s)	Contract or Inter-Agency Agreement No.	Communities Affected
Mud Creek Tributary 1	March 1998	USACE, Mobile District	EMW-93-E-4115	Lee County
Mud Creek Tributary 2	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Mud Creek Tributary 4	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Reeds Branch	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Russell Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Sand Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Sand Creek Tributary 1	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Sand Creek Tributary 2	January 2012	MGI, LLC	EMA-2009-CA-5932	Lee County
Sand Creek Tributary 2	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Town Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
Town Creek	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Town Creek North	*	*	*	*
Town Creek Downstream Reach	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Town Creek Tributary 1	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County

Table 1: Summary of Flooding Sources Presented in Current Study

Flooding Source	Completion Date	Study Contractor(s)	Contract or Inter-Agency Agreement No.	Communities Affected
Town Creek Tributary 2	September 1987	Allen and Horshall,Ltd.	EMA-86-C-0108	Lee County
Town Creek Upstream Reach	March 2008	State of Mississippi	EMA-2005-CA-5215	Lee County
Tulip Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County
West Tulip Creek	March 1998	U.S. Army Corps of Engineers, Mobile District	EMW-93-E-4115	Lee County

*Data not available

For the February 3, 2010 FIS for Lee County, the digital base map information was provided by The State of Mississippi. The aerial photography was obtained from the National Agriculture Imagery Program (NAIP) and was photogrammetrically compiled at a scale of 1:400 from aerial photography dated March 2006.

Base map information for the revised panels of Lee County and all incorporated communities within Lee County was provided in digital format by the State of Mississippi. The digital orthoimagery was photogrammetrically compiled at a scale of 1:40,000 from aerial photography dated June 2010.

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 (CCO) meeting (also occasionally referred to as the Scoping meeting) is held with representatives of the communities, FEMA, and the study contractors to explain the nature and purpose of the FIS and to identify the streams to be studied by detailed methods. A final CCO (often referred to as the Preliminary DFIRM Community Coordination, or PDCC, meeting) is held with representatives of the communities, FEMA, and the study contractors to review the results of the study.

For this revision of the countywide FIS, the initial CCO meeting was held on September 18, 2009, and attended by representatives of FEMA, the Mississippi Emergency Management Agency, Lee County, the Cities of Saltillo and Tupelo, private contractors, and MGI, LLC.

The final CCO meeting was held on ___________ to review and accept the results of this FIS. Those who attended this meeting included representatives of Lee County, the Study Contractor, FEMA, and the communities. All problems raised at that meeting have been addressed in this study.

The dates of the historical initial and final CCO meetings held for the communities within the boundaries of Lee County are shown in Table 2, "Historical CCO Meeting Dates."

Table 2: Historical CCO Meeting Dates

Community Name	Initial CCO Date	Final CCO Date
Lee County and Incorporated Areas (February 3, 2010)	July 18, 2005 August 15, 2005	*
Lee County (Unincorporated Areas)	January 29, 1986	September 3, 1998
Tupelo, City of	September 24, 1975	April 28, 1977

*Data not available

For the February 3, 2010 FIS, an initial Pre-Scoping Meeting was held on July 18, 2005. A Project Scoping Meeting was held on August 15, 2005. Attendees for these meetings included representatives from the Mississippi Department of Environmental Quality, Mississippi Emergency Management Agency, FEMA National Service Provider, Lee County and the incorporated communities within Lee County, and Mississippi Geographic Information, LLC, 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

This FIS report covers the geographic area of Lee County, Mississippi, including the incorporated community listed in Section 1.1. The scope and methods of this study were proposed to, and agreed upon, by FEMA and Lee County.

For this revision to the countywide FIS, new detailed studies were performed for Euclatubba Creek Tributary 1, Kings Creek Tributary 1, Kings Creek Tributary 2.5, Kings Creek Tributary 3, Kings Creek Tributary 4, Kings Creek Tributary 5, and Sand

Creek Tributary 2. In addition, a U.S. Army Corps of Engineers (USACE) detailed study of Coonewah Creek was incorporated (Reference 2).

All or portions of the flooding sources listed in Table 3, "Flooding Sources Studied by Detailed Methods," were studied by detailed methods. Limits of detailed study are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

The profile for Town Creek Tributary No. 1 from the previously printed FIS for the City of Tupelo has not been included in this FIS because flood elevations along Town Creek Tributary No. 1 are completely controlled by Town Creek.

Table 3: Flooding Sources Studied by Detailed Methods

Coonewah Creek*	Kings Creek Tributary 3*	Russell Creek
Coonewah Creek Tributary 1	Kings Creek Tributary 4*	Sand Creek
Coonewah Creek Tributary 2	Kings Creek Tributary 5*	Sand Creek Tributary 2*
Euclatubba Creek Tributary 1*	Little Coonewah Creek	Town Creek
Kings Creek	Little Coonewah Creek Tributary 1	Town Creek Tributary 1
Kings Creek Tributary 1*	Mud Creek	Town Creek Tributary 2
Kings Creek Tributary 2	Mud Creek Tributary 1	Tulip Creek
Kings Creek Tributary 2.5*	Mud Creek Tributary 2	West Tulip Creek

*Flooding source with new or revised analysis incorporated as part of the current study update

This revision includes new limited detailed studies for Brock Creek and Mud Creek Tributary 4 as well as limited detailed studies that were conducted for previous FIS reports, except when newer detailed studies have been performed for those streams.

The areas studied by limited detailed methods were selected for areas having low to moderate development potential or flood hazards. The flooding sources studied by limited detailed methods are presented in Table 4, "Flooding Sources Studied by Limited Detailed Methods."

Table 4: Flooding Sources Studied by Limited Detailed Methods

Brock Creek*	Euclatubba Creek	Sand Creek
Campbelltown Creek	Mud Creek	Sand Creek Tributary 1
Chiwapa Creek	Mud Creek Tributary 4*	Town Creek

Coonewah Creek Tributary 3	Reeds Branch	Town Creek Tributary 1

*Flooding source with new or revised analysis incorporated as part of the current study update

Numerous streams were studied by approximate methods, as indicated in Table 5, "Flooding Sources Studied by Approximate Methods." Approximate analyses were used to study those areas having a low development potential or minimal flood hazards.

Table 5: Flooding Sources Studied by Approximate Methods

Boguefala Creek	Little Coonewah Creek	Sand Creek East
Boguegaba Creek	Little Dry Creek	Smith Creek
Brock Creek	Little Garrett Creek	South Tulip Creek
Busfaloba Creek	Little Sand Creek	Threemile Branch
Campbelltown Creek	Louisa Creek	Tishomingo Creek
Carmichael Creek	Mantachie Creek	Town Creek
Chiwapa Creek	Middle Tulip Creek	Town Creek North
Coonewah Creek	Mud Creek	Tubbalubba Creek
Cowpenna Creek	Okeelala Creek	Tulip Creek
Euclatubba Creek	Patch Creek	Twentymile Creek
Flat Creek	Penny Creek	Union Branch
Garrett Creek	Puncheon Creek	West Tulip Creek
Gormans Branch	Russell Creek	Yonaba Creek
Leaper Creek	Sand Creek	Various Unnamed Steams
Lick Creek		

2.2 Community Description

Lee County is located in northeastern Mississippi. It is bordered by Prentiss County to the north, Itawamba County to the east, Monroe and Chickasaw Counties to the south, and Pontotoc and Union Counties to the west. The county is served by the U.S. Routes 45 and 78; State Routes 6, 145, 178, 348, 363, 370, and 371; and the Natchez Trace Parkway.

Most drainage basins in Lee County are wide, flat floodplains extending to moderately rolling and steep hills in the upper segments. The soils in these basins vary from somewhat poorly drained to well drained. Vegetative cover is mostly pine and hardwoods.

Lee County has a warm, humid climate and abundant rainfall that averages 53 inches annually. Temperatures range from a January average of 44 degrees Fahrenheit (°F) to a July average of 81 °F.

Lee County's economy is supported by agriculture, trade, and industry. A number of industrial developments are located within the floodplains of Town and Kings Creeks. The major portion of this industrial development is less significant, with the majority of these dwellings lying along Mud Creek. According to the U.S. Census, the 2010 population of Lee County was 82,910 (Reference 3).

2.3 Principal Flood Problems

Principal flooding problems in Lee County arise from overflow of some streams in the county into relatively flat, developed overbanks.

Extensive damage to urban, residential, and industrial properties has occurred along Kings and Town Creeks. The storm of March 21 and 22, 1955, is the record storm for the Town Creek watershed, and was computed to have a recurrence interval of 100 years by the Natural Resources Conservation Services (NRCS). This storm resulted in $160,000 in damages (Reference 4).

In the City of Tupelo, the NRCS has estimated damages resulting from a flood on Kings Creek on April 11, 1962, to exceed $800,000. The maximum recorded flood on Coonewah Creek occurred in 1962. The NRCS used data in a published report to estimate that the channel only carries 17 percent of the 50-year discharge (Reference 5). Floodflows of Mud and Town Creeks presently merge on both sides of the Southrail Railroad due to the floodplain being relatively flat. The channel is fairly small and carries only a small percentage of floodflows (Reference 6).

The most recent flood of significance in Lee County occurred on March 16 and 17, 1973. This storm was determined by statistical analysis if rainfall-frequency curves of historical data to have a reoccurrence interval of approximately 30 years (Reference 7).

2.4 Flood Protection Measures

Flood protection measures completed by the NRCS and private individuals consist of channel improvements, channel relocation, and installation of floodwater-retarding structures. Other measures include periodic debris removal from culverts and bridges on streams within the City of Tupelo corporate limits.

In 1963, the Town Creek Master Water Management District planned to build 26 flood-retarding structures in the Town Creek watershed. Between 1968 and 1978, 15 flood-retarding structures were built, and between 1991 and 1995, 4 additional structures were completed. Floodwater-retarding structures on Mud Creek, 1 structure on Kings Creek, 1 structure on Tulip Creek, 1 structure on West Tulip Creek, 1 structure on Coonewah

Creek and 1 structure on Little Coonewah Creek (Reference 4). The effect of these structures is considered in the hydrologic and hydraulic analyses for Kings Creek, Little Coonewah Creek, Mud Creek, Town Creek, Tulip Creek, and West Tulip Creek.

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 is 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

3.1.1 Methods for Flooding Sources with New or Revised Analyses in Current Study

Peak discharges for the streams studied by limited detailed methods and detailed study methods were calculated based on USGS regional regression equations (Reference 8).

For the discharges calculated based on regional regression equations, the rural regression values were updated to reflect urbanization as necessary. The seven-parameter equation from United States Geological Survey (USGS) Water-Supply Paper 2207 (Reference 9) was used to calculate discharge for urban watershed. Because the newly computed discharges of Kings Creek Tributary 1, Kings Creek Tributary 3 and Kings Creek Tributary 4 are close to effective discharges at same locations, the effective discharges were used for new hydraulics analysis.

The U.S. Army Corps of Engineers Mobile District studied hydrology of Coonewah Creek. The discharges from the report (Reference 2) selected for hydraulics analysis was based on the comparison of values for the HMS model, the regression equation calculation, the USGS data and the previous FEMA FIS data.

A summary of the drainage area-peak discharge relationships for the detailed study streams is shown in Table 6, “Summary of Discharges for Detailed Study

Streams”, and for limited detail study streams is shown in Table 7, “Summary of Discharges for Limited Detailed Study Streams.”

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
COONEWAH CREEK					
At Brewer Road	57.78	8,800	14,500	16,787	21,300
At Old Highway 45	48.2	*	*	16,095	21,183
At County Road 590	45.4	*	*	15,207	20,152
At Palmetto Road	39.0	*	*	12,765	17,061
Just downstream of Natchez Trace Pkwy	24.1	*	*	7,548	10,076
COONEWAH CREEK TRIBUTARY 1					
Approximately 0.5 mile south of Green Tee Road	1.62	732	1,094	1,310	1,720
At Green Tee Road	1.40	657	973	1,178	1,550
Approximately 0.6 mile north of Green Tee Road	0.63	366	524	622	770
COONEWAH CREEK TRIBUTARY 2					
At confluence with Coonewah Creek	1.59	689	1,016	1,134	1,456
At Cliff Gookin Road	0.55	362	526	582	739
EUCLATUBBA CREEK TRIBUTARY 1					
At confluence with Euclatubba Creek	0.94	732	876	925	977
At Westbrier Drive	0.50	463	569	599	638
KINGS CREEK					
At confluence with Town Creek	15.84	6,133	7,488	7,992	9,045

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
KINGS CREEK (continued)					
Just downstream of confluence of Kings Creek Tributary 1	15.07	5,876	7,198	7,667	8,719
Just upstream of confluence of Kings Creek Tributary 4	7.59	1,565	2,052	2,267	2,748
At Natchez Trace Parkway	6.49	1,034	1,330	1,472	1,789
KINGS CREEK TRIBUTARY 1					
At Confluence with Kings Creek	1.29	1,203	1,624	1,855	2,606
At West Jackson Street	1.11	1,072	1,438	1,639	2,291
At Cross Section H	0.77	808	1,702	1,212	1,673
At Antler Drive	0.40	487	633	706	954
At Cross Section M	0.27	360	461	510	681
KINGS CREEK TRIBUTARY 2					
At Industrial Road	2.79	2,182	3,021	3,505	5,054
At Lawndale Drive (North)	2.61	2,073	2,863	3,318	4,772
At Cross Section D	1.71	1,496	2,037	2,341	3,320
At Cross Section F	0.91	1,119	1,524	1,751	2,483
At Lawndale Drive (South)	0.68	742	1,011	1,161	1,647

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
KINGS CREEK TRIBUTARY 2.5					
At confluence with Kings Creek Tributary 2	0.81	997	1,174	1,240	1,299
At Monument Drive	0.65	918	1,088	1,149	1,209
At South Foster Drive	0.29	540	633	664	696
KINGS CREEK TRIBUTARY 3					
At confluence with Kings Creek	1.15	1,101	1,480	1,687	2,361
At Lumpkin Avenue	0.93	935	1,248	1,416	1,968
At North Foster Drive	0.63	692	912	1,027	1,409
At North Thomas Drive	0.57	641	841	946	1,293
KINGS CREEK TRIBUTARY 4					
At confluence with Kings Creek	0.93	935	1,248	1,416	1,968
At Lumpkin Avenue	0.85	872	1,161	1,315	1,822
At Robindale Drive	0.60	667	877	986	1,351
KINGS CREEK TRIBUTARY 5					
At Confluence with Kings Creek Tributary 2	0.77	821	980	1,038	1,084
At Cla Wood Place	0.30	402	488	515	538
LITTLE COONEWAH CREEK					
At confluence with Coonewah Creek	10.87	1,911	2,695	3,053	3,873

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
LITTLE COONEWAH CREEK (continued)					
Just downstream of confluence of Russell Creek	8.94	758	1,036	1,186	1,514
At Old Chesterville Road	5.04	1,481	2,206	2,475	3,204
Downstream of Endville Road	1.32	614	899	1,001	1,280
LITTLE COONEWAH CREEK TRIBUTARY 1					
At confluence with Little Coonewah Creek	0.95	495	727	809	1,036
MUD CREEK					
At confluence with Town Creek	90.22	9,695	14,080	16,331	21,871
Just downstream of Little Sand Creek	85.31	9,952	14,742	17,249	22,841
MUD CREEK TRIBUTARY 1					
At confluence with Mud Creek	0.73	459	679	754	967
Approximately 300 feet upstream of Old Saltillo Road	0.30	277	408	450	574
MUD CREEK TRIBUTARY 2					
At confluence with Mud Creek	0.87	423	613	683	868
At Barnes Crossing Road	0.13	170	242	266	333
RUSSELL CREEK					
At confluence with Little Coonewah Creek	1.84	763	1,125	1,255	1,612

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second) 10-percent	2-percent	1-percent	0.2-percent
RUSSELL CREEK (continued)					
At Chesterfield Road	1.30	536	799	982	4,558
Approximately 0.5 mile downstream of Savannah Lane	0.53	334	486	539	687
At Butler Drive	0.35	216	305	359	455
SAND CREEK					
At Lake Lamar Bruce Road	7.60	3,442	5,464	6,420	8,100
At Pea Ridge Road	4.70	2,106	3,292	3,916	5,359
SAND CREEK TRIBUTARY 2					
At confluence with Sand Creek	0.69	598	720	759	800
At upstream side of West Water Street	0.31	372	448	470	495
TOWN CREEK					
Just upstream of Smith Creek	382.02	25,954	40,123	45,194	55,286
Below confluence of Tulip Creek	269.75	20,001	29,210	34,137	48,001
Below confluence of Kings Creek	233.09	18,820	26,949	31,098	42,536
Below confluence of Mud Creek	217.25	18,155	26,096	30,143	41,241
TOWN CREEK TRIBUTARY 1	*	*	*	*	*

Table 6: Summary of Discharges for Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
TOWN CREEK TRIBUTARY 2					
At confluence wtih Town Creek	0.93	345	516	757	878
At Brewer Road	0.67	280	463	566	819
TULIP CREEK					
At confluence with Town Creek	32.49	6,590	8,448	9,312	11,489
Below confluence of South Tulip Creek	26.87	6,712	9,272	10,467	13,659
Below confluence of West Tulip Creek	19.97	4,877	7,062	8,066	10,692
WEST TULIP CREEK					
At confluence with Tulip Creek	6.16	1,065	1,502	1,702	2,159
At Elvis Presley Lake Dam	4.37	66	101	118	128

* Data Not Available

Table 7: Summary of Discharges for Limited Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second) 10-percent	2-percent	1-percent	0.2-percent
BROCK CREEK					
At confluence with Sand Creek	10.1	*	*	4,391	*
At County Road 885	7.9	*	*	3,635	*
CAMPBELLTOWN CREEK					
At US-45	10.42	*	*	3,817	*
At Lee County Road 2790	5.95	*	*	2,510	*
CHIWAPA CREEK					
At Natchez Trace Parkway	118.79	*	*	28,246	*
COONEWAH CREEK					
At Railroad	58.35	*	*	16,690	*
COONEWAH CREEK TRIBUTARY 3					
At Lee County Road 484	1.04	*	*	898	*
EUCLATUBBA CREEK					
At confluence with Euclatubba Creek Tributary 1	19.60	*	*	6,579	*
MUD CREEK					
At US-45	61.82	*	*	11,955	*
At Natchez Trace Parkway	40.31	*	*	8,393	*
At Lee County Road 681	34.70	*	*	7,608	*

* Data Not Available

Table 7: Summary of Discharges for Limited Detailed Study Streams

Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second) 10-percent	2-percent	1-percent	0.2-percent
MUD CREEK TRIBUTARY 4					
At confluence with Mud Creek	1.3	*	*	905	*
REEDS BRANCH					
At Natchez Trace Parkway	4.77	*	*	2,130	*
At Palmetto Rd	3.82	*	*	1,867	*
At Lee County Road 900	1.24	*	*	1,457	*
SAND CREEK					
At confluence with Mud Creek	24.71	*	*	7,375	*
At confluence of Brock Creek	12.51	*	*	4,505	*
SAND CREEK TRIBUTARY 1					
At confluence with Sand Creek	0.15	*	*	217	*
TOWN CREEK DOWNSTREAM REACH					
At MS State Road 178	28.95	*	*	7,299	*
TOWN CREEK UPSTREAM REACH					
At confluence with Yonaba Creek	18.5	*	*	5,727	*
TOWN CREEK TRIBUTARY 1					
At the county boundary	1.52	*	*	1,100	*
At Railroad	0.94	*	*	894	*

* Data Not Available

3.1.2 Methods for Flooding Sources Incorporated from Previous Studies

This section describes the methodology used in previous studies of flooding sources incorporated into this FIS that were not revised for this countywide study.

Pre-Countywide FIS Analyses

Only Lee County (Unincorporated Areas) and the City of Tupelo had previously printed FIS report narratives. The hydrologic analyses described in those reports have been compiled and are summarized below.

Peak discharge computations were based on a regional flood frequency report prepared by the USGS, applicable to unurbanized basins in Mississippi (Reference 10). Techniques for estimating future flood magnitudes were developed in the report, based on analyses for both recorded and synthetic streamflow data. Because the regional analysis is applicable only to unurbanized basins, adjustment factors were applied to include consideration for urbanization in many stream basins in the study area.

The effects of the Soil Conservation Service floodwater retarding structures on all streams were considered in a reservoir routing analysis, using the modified Puls Method included in the USACE HEC-1 flood hydrograph computer program (Reference 11).

Peak discharges were obtained for approximate study streams by the same methods described above (Reference 10).

October 20, 1999 FIS Countywide FIS Analyses

Information on the methods used to determine peak discharge-frequency relationships for the flooding sources restudied as part of that countywide FIS is shown below.

For Coonewah Creek Tributary 2, Little Coonewah Creek Tributary 1, Mud Creek Tributaries 1 and 2, and Russell Creek, peak discharges were based on a regional flood frequency report by the USGS (Reference 8). This report divided the state into three regions. The equations for the East region were used to compute the discharges for this countywide FIS and are listed below.

$$Q_{10} = 482\ (A)^{.85}\ (S)^{.09}\ (L)^{-.34}$$
$$Q_{50} = 648\ (A)^{.85}\ (S)^{.11}\ (L)^{-.31}$$
$$Q_{100} = 716\ (A)^{.85}\ (S)^{.11}\ (L)^{-.30}$$
$$Q_{500} = 874\ (A)^{.85}\ (S)^{.12}\ (L)^{-.28}$$

Where:

Q_T = the estimated peak discharge, in cubic feet per second (cfs), for an exceedance frequency of T percent.

A = the drainage area in square miles

S = the channel slope, in feet per mile, measured between the points 10 and 85 percent along the main channel
L = the main channel length, in miles, from the discharge point to the drainage divide

Peak discharges for Town Creek (from approximately 100 feet downstream of the confluence of Tulip Creek to Natchez Trace Parkway) and its tributaries, Mud Creek, Tulip Creek, West Tulip Creek, Little Coonewah Creek, and Kings Creek, were developed using the NRCS Technical Release No. 20 (TR-20) computer program (Reference 12). A TR-20 model of the Town Creek watershed upstream of the confluence of Smith Creek was developed on a mainframe computer by the NRCS in 1987 to show the effects of flood control structures existing at that time.

Dewberry & Davis converted the NRCS TR-20 model from a mainframe computer version to a personal computer version and updated the model to reflect the effects of 5 additional flood-control structures (Reference 12). No additional flood-control structures were constructed in the Kings Creek watershed between 1987 and 1997. Therefore, peak discharges for Kings Creek were taken from the mainframe TR-20 model of the Kings Creek watershed developed by the NRCS in 1987.

The Town Creek watershed TR-20 model was run for the 5-, 10-, 50-, 100-, and 500-year events using 24-hour rainfall values from National Weather Service Technical Paper No. 40 and an NRCS Type II rainfall distribution (Reference 7). The rainfall loss for each subwatershed was computed using the NRCS curve number method and the runoff hydrographs were computed using the NRCS dimensionless unit hydrograph. The modified attenuation-kinematic method of channel flood routing was used and the stage, storage, and discharge relationships for the flood-control structures within the Town Creek watershed were taken from the mainframe NRCS TR-20 model.

A February 1998, Town Creek watershed TR-20 model was calibrated to the May 1991, and May 1982, historic storm events. In addition, the results of the Town Creek watershed TR-20 model were compared to gage data obtained from the USGS gage at Tupelo, Mississippi, to examine the credibility of the results. The simulated flows were favorable compared with the statistical discharge-frequency values derived from procedures in USGS Bulletin No. 17B (Reference 13). The resulting flood discharges were used in the USACE HEC-2 step-backwater model of Town Creek and Mud Creek to generate water-surface profiles (Reference 14).

The peak flow discharges for Tulip Creek, West Tulip Creek, and Little Coonewah Creek were taken from a November 1007 TR-20 model of the Town Creek watershed which used the same watershed parameters as the 1987 NRCS mainframe TR-20 model. This November 1997 TR-20 model used NRCS Type I rainfall distribution. The base (1-percent-annual-chance) flood elevations computed using results from this TR-20 model were not significantly different from those of the calibrated Town Creek watershed model.

February 3, 2010 Countywide FIS Analyses

Peak discharges for the streams studied by limited detailed methods were calculated based on USGS regional regression equations.

For the discharges calculated based on regional regression equations, the rural regression values were updated to reflect urbanization as necessary. There are six USGS stream gages located along newly limited detailed study streams. Gage data is used to adjust discharges. Gage weighted discharges are calculated following the guidelines set forth in USGS report 91-4037 (Reference 8).

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 FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data tables 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 in conjunction with the data shown on the FIRM.

Flood profiles were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals. 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 sections are also shown on the FIRM (Exhibit 2).

Roughness coefficients (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 8, “Summary of Roughness Coefficients,” contains the channel and overbank "n" values for the streams studied by limited detail study and detailed study methods.

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 for North American Vertical Datum of 1988.

Table 8: Summary of Roughness Coefficients

Flooding Source	Channel	Overbanks
Brock Creek	0.05	0.15
Campbelltown Creek	0.05	0.06
Chiwapa Creek	0.05	0.065
Coonewah Creek	0.030-0.060	0.070-0.9
Euclatubba Creek	0.05	0.600-0.150
Euclatubba Creek Tributary 1	0.03-0.05	0.1-0.13
Coonewah Creek Tributary 1	0.030-0.060	0.070-0.230
Coonewah Creek Tributary 2	0.035-0.070	0.060-9.000
Coonewah Creek Tributary 3	0.035-0.070	0.060-9.000
Kings Creek	0.035-0.070	0.060-9.000
Kings Creek Tributary 1	0.025-0.035	0.08-0.12
Kings Creek Tributary 2	0.030-0.060	0.070-0.230
Kings Creek Tributary 2.5	0.023-0.03	0.08-0.12
Kings Creek Tributary 3	0.025-0.045	0.1-0.14
Kings Creek Tributary 4	0.025-0.035	0.1-0.12
Kings Creek Tributary 5	0.03-0.04	0.09-0.13
Little Coonewah Creek	0.035-0.070	0.060-9.000
Little Coonewah Creek Tributary 1	0.035-0.070	0.060-9.000
Mud Creek	0.035-0.070	0.060-9.000
Mud Creek Tributary 1	0.035-0.070	0.060-9.000
Mud Creek Tributary 2	0.035-0.070	0.060-9.000
Mud Creek Tributary 4	0.04-0.05	0.1-0.15
Reeds Branch	0.035-0.070	0.060-9.000
Russell Creek	0.05	0.15
Sand Creek	0.035-0.070	0.060-9.000
Sand Creek Tributary 1	0.030-0.060	0.070-0.230
Sand Creek Tributary 2	0.035-0.045	0.08-0.13
Town Creek	0.035-0.070	0.060-9.000

Table 8: Summary of Roughness Coefficients

Flooding Source	Channel	Overbanks
Town Creek Tributary 1	0.05	0.15
Town Creek Tributary 2	0.030-0.060	0.070-0.230
Tulip Creek	0.030-0.060	0.070-0.230
West Tulip Creek	0.035-0.070	0.060-9.000

3.2.1 Methods for Flooding Sources with New or Revised Analyses in Current Study

Cross section geometries were obtained from a combination of terrain data and field surveys. The computer program WISE was used as a preprocessor to extract cross section topographic data from the WISE terrain project (Reference 15). Structure data is based on Mississippi Department of Transportation (MDOT) as-built data and field surveys. Standard limited detailed survey method was used to collect elevation data and structural geometry for bridges and culverts located within the limited detail study limits, detailed survey method was used to collect elevations data and structural geometry for natural cross sections and structures within the detail study limits.

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 USACE HEC-RAS version 4.1 computer program (Reference 16). The model was run for the 1-percent-annual-chance storm for the limited detail and for the 10-, 2-, 1-, and 0.2-percent-annual-chance-flood and floodway for detailed studies. The study of Coonewah Creek was adopted from U.S. Corp Engineers Special Flood Hazard Evaluation with 1- and 0.2-percent-annual-chance-flood.

3.2.2 Methods for Flooding Sources Incorporated from Previous Studies

Pre-Countywide Analyses

Only Lee County (Unincorporated Areas) and the City of Tupelo had previously printed FIS report narratives. The hydraulic analyses described in those reports have been compiled and are summarized below.

Cross sections of stream channels and bottom lands were field surveyed, and bridge culvert waterway openings were measured in the field. Several road profiles were obtained from the Mississippi State Highway Department and were correlated with field information. All bridges, dams, and culverts were field surveyed to obtain elevation data and structural geometry.

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 14).

Starting water-surface elevations were developed using the slope/area method.

Roughness coefficients (Manning's "n") used in the computation for the flooding sources studied by detailed methods were chosen by engineering judgment based on field observations of the stream and floodplain areas. The channel and overbank "n" values for the streams studied by detailed methods are shown in Table 8, "Summary of Roughness Coefficients."

For the flooding sources studied for the June 1977 FIS for the City of Tupelo, the March 1973 flood elevation contained in the USGS stream gage records for a station on Town Creek at Eason Boulevard compared favorably with profiles determined in that FIS (References 1 and 17).

For the approximate study areas, calculated peak discharges, stream characteristics based on field observations, and floodplain cross sections as determined from available contour mapping were used in Manning's equation to determine approximate flood elevations (Reference 18).

October 20, 1999 Countywide FIS Analyses

Information on the methods used to determine water-surface elevation data for the flooding sources revised or restudied as part of this countywide FIS is shown below.

Cross sections were obtained from field surveys. All bridges, dams, culverts, were field surveyed to obtain elevation data and structural geometry.

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

Along certain portions of Little Coonewah Creek, a profile base line is shown on the maps to represent channel distances as indicated on the flood profiles and floodway data tables.

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 14). Starting water-surface elevations were obtained from the slope/area method. Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals. A flood profile for Town Creek Tributary 1 is not included because flooding along its entire reach is controlled by Town Creek.

Roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment based on field observation of the channel and floodplain areas.

Manning's "n" values used in the hydraulic computations of Town Creek, from approximately 100 feet downstream of the confluence of Tulip Creek to Natchez Trace Parkway, were calibrated based on rating curves provided by the USGS (Reference 19).

The hydraulic analyses for the October 20, 1999 FIS were based on obstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). Elevation reference marks used in the October 20, 1999 FIS, and their descriptions, are shown on the FIRM.

February 3, 2010 Countywide FIS Analyses

Detailed models were developed through a combination of effective HEC-2 model data and WISE by extracting cross section topographic data directly from the WISE terrain project and supplemented with field surveys. Structure data is based on Mississippi Department of Transportation (MDOT) as-built data where available and additional field surveys where it was not. Regional regression equations were used as a basis for the discharges in the HEC-RAS (Reference 20) models.

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 USACE HEC-RAS version 3.1.2 computer program (Reference 20). The model was run for the 1-percent-annual-chance storm for the limited detailed and approximate studies and for the 10-, 2-, 1-, and 0.2-percent-annual-chance-flood and floodway for detailed 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 8, "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 and limited detailed methods.

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

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

All elevations are referenced to the North American Vertical Datum of 1988.

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 used for newly created or revised FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD). With the completion of the North American Vertical Datum of 1988 (NAVD), many FIS reports and FIRMs are now prepared using NAVD as the referenced vertical datum.

Qualifying bench marks within a given jurisdiction that are catalogued 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 catalogued 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 NAVD. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. It is important to note that adjacent communities may be referenced to NGVD. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between the communities.

Ground, structure, and flood elevations may be compared and/or referenced to NGVD by adding 0.19 feet to the NAVD elevation. The 0.19 foot 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 NGVD 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 more information regarding conversion between the NGVD and NAVD, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988* (Reference 21), visit the National Geodetic Survey website at www.ngs.noaa.gov, or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

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. To assist in this endeavor, each FIS report provides 1-percent-annual-chance floodplain data, which may include a combination of the following: 10-, 2-, 1-, and 0.2-percent-annual-chance flood elevations; delineations of the 1- and 0.2-percent-annual-chance floodplains; and a 1-percent-annual-chance floodway. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS report as well as additional information that may be available at the local community 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 or limited detailed methods, the 1-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section.

For this study, 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 revised panels of this update, between cross sections, the boundaries were interpolated using survey cross-section data and a 10 meter Digital Elevation Model (DEM) from the USGS (Reference 22).

For the streams studied by limited detailed 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 base flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (Table 9). The computed floodways are shown on the FIRM (Exhibit 2). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

Floodways were not computed for Coonewah Creek, Coonewah Creek Tributary 1, Town Creek Tributary 2, and Sand Creek. The floodway shown for a portion of Town Creek Tributary No. 1 was computed in the previously published FIS for the City of Tupelo. The results of floodway computations for Town Creek Tributary 1 are not available. Therefore, this information is not shown in Table 9.

"Floodway Data" for certain downstream cross sections of Kings Creek, Kings Creek Tributary 1, Kings Creek Tributary 2.5, Kings Creek Tributary 3, Little Coonewah Creek Tributary 1, Mud Creek Tributary 2, and West Tulip Creek 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. A listing of stream velocities at selected cross sections is provided in Table 9, "Floodway Data." In order to reduce the risk of property damage in areas where the stream velocities are high, the community 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 by 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.

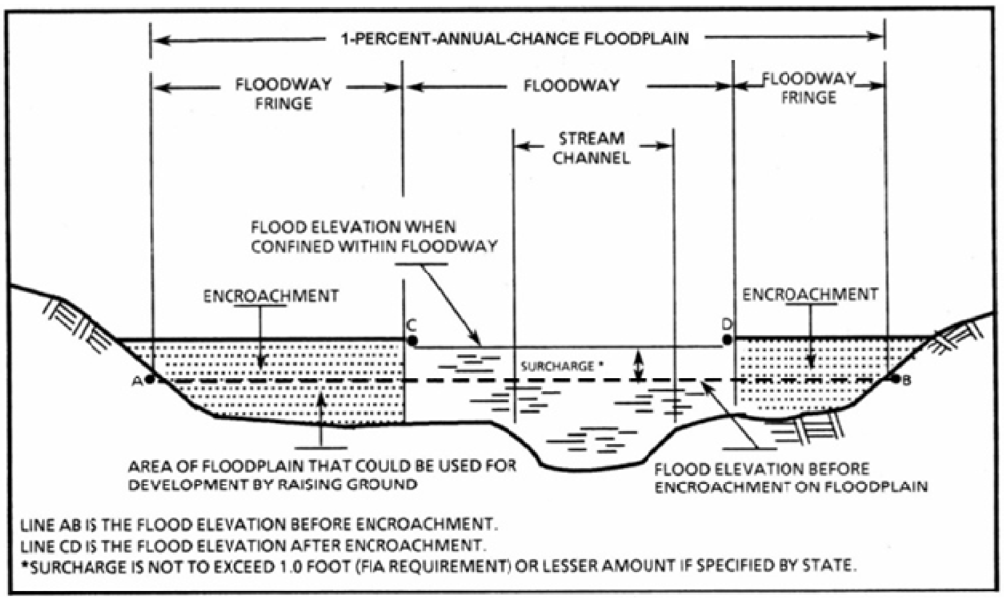

Figure 1: Floodway Schematic

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Coonewah Creek Tributary 2								
A	3,900[1]	33	195	5.8	278.7	278.7	279.5	0.8
B	4,204[1]	154	544	2.1	279.8	279.8	280.7	0.9
C	7,610[1]	60	80	7.3	295.2	295.2	295.2	0.0
D	8,900[1]	19	109	5.3	302.2	302.2	303.2	1.0
Euclatubba Creek Tributary 1								
A	769[2]	47	197	4.7	283.4	283.4	283.5	0.1
B	2,901[2]	33	151	6.1	289.3	289.3	289.5	0.2
C	4,995[2]	85	340	2.3	294.2	294.2	295.1	0.9
D	6,625[2]	32	84	7.1	299.8	299.8	300.3	0.5
E	9,494[2]	35	101	5.9	311.7	311.7	312.3	0.6
F	11,966[2]	44	142	2.6	324.7	324.7	325.5	0.8
G	13,525[2]	200	438	0.8	328.5	328.5	329.2	0.7
Kings Creek								
A	1,375[3]	90	950	8.4	258.5	249.0[4]	249.1	0.1
B	3,700[3]	91	946	8.1	260.1	255.4[4]	255.6	0.2
C	5,700[3]	80	1,194	6.4	261.7	261.7	261.8	0.1
D	6,060[3]	112	1,187	6.5	262.3	262.3	262.5	0.2
E	6,268[3]	115	1,291	5.9	262.8	262.8	263.3	0.5
F	9,625[3]	100	1,158	6.6	266.6	266.6	267.2	0.6
G	10,160[3]	219	1,380	5.6	267.8	267.8	268.1	0.3
H	11,490[3]	104	1,105	2.8	269.8	269.8	270.6	0.8

[1] Feet above confluence with Coonewah Creek
[2] Feet above confluence with Euclatubba Creek
[3] Feet above confluence with Town Creek
[4] Elevation computed without consideration of overflow effects from Town Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

COONEWAH CREEK TRIBUTARY 2 – EUCLATUBBA CREEK TRIBUTARY 1 – KINGS CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Kings Creek (Continued)								
I	13,125[1]	516	2,200	1.4	271.0	271.0	271.4	0.4
J	13,464[1]	805	3,434	0.9	271.1	271.1	271.6	0.5
K	15,780[1]	277	818	2.8	271.9	271.9	272.5	0.6
L	18,450[1]	596	1,536	1.5	275.0	275.0	275.9	0.9
M	20,460[1]	218	573	2.6	278.4	278.4	278.8	0.4
N	21,200[1]	275	844	1.7	279.5	279.5	279.7	0.2
O	24,585[1]	991	2,204	0.7	282.3	282.3	282.9	0.6
P	28,300[1]	760	6,452	0.2	296.7	296.7	296.7	0.0
Q	35,200[1]	353	2,173	0.7	312.0	312.0	312.0	0.0
R	38,800[1]	300	187	4.3	317.2	317.2	317.2	0.0
S	42,050[1]	111	271	3.0	335.9	335.9	336.0	0.1
Kings Creek Tributary 1								
A	1,366[2]	70	281	6.6	270.1	266.4[3]	266.4	0.0
B	2,087[2]	105	372	5.0	270.1	269.2[3]	270.2	1.0
C	2,579[2]	85	498	3.7	270.9	270.9	271.6	0.7
D	3,374[2]	50	285	6.5	274.9	274.9	275.7	0.8
E	3,862[2]	140	835	2.2	276.1	276.1	277.0	0.9
F	4,500[2]	55	347	5.4	278.5	278.5	278.9	0.4
G	5,172[2]	110	628	2.6	279.4	279.4	279.5	0.1
H	6,678[2]	45	231	7.1	280.7	280.7	281.1	0.4
I	8,049[2]	58	182	6.7	283.7	283.7	283.8	0.1
J	8,772[2]	110	383	3.2	290.8	290.8	291.2	0.4

[1] Feet above confluence with Town Creek
[2] Feet above confluence with Kings Creek
[3] Elevation computed without consideration of backwater effects from Kings Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEE COUNTY, MS
AND INCORPORATED AREAS

FLOODWAY DATA

KINGS CREEK – KINGS CREEK TRIBUTARY 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Kings Creek Tributary 1 Continued								
K	9,331[1]	75	359	2.0	291.7	291.7	292.1	0.4
L	9,947[1]	51	317	2.2	293.9	293.9	294.6	0.7
Kings Creek Tributary 2								
A	430[1]	229	1,472	2.4	271.4	271.4	272.3	0.9
B	2,750[1]	580	2,232	1.5	273.8	273.8	274.7	0.9
C	4,080[1]	100	679	4.9	277.2	277.2	278.1	0.9
D	5,460[1]	237	1,021	2.3	279.0	279.0	279.8	0.8
E	6,330[1]	265	1,004	2.3	281.2	281.2	282.2	1.0
F	7,482[1]	243	553	2.1	284.7	284.7	285.4	0.7
G	8,672[1]	46	220	3.6	289.4	289.4	290.3	0.9
H	9,562[1]	69	145	5.4	294.3	294.3	294.3	0.0
I	10,597[1]	21	94	5.1	297.6	297.6	298.5	0.9
J	11,657[1]	70	155	2.3	303.3	303.3	304.2	0.9
K	12,953[1]	32	85	2.8	311.0	311.0	311.7	0.7
Kings Creek Tributary 2.5								
A	968[2]	63	134	9.3	277.2	272.9[3]	272.9	0.0
B	2,402[2]	28	149	7.7	278.5	278.5	278.5	0.0
C	2,772[2]	25	137	8.4	281.4	281.4	281.4	0.0
D	3,064[2]	26	157	7.3	283.4	283.4	283.4	0.0

[1]Feet above confluence with Kings Creek
[2]Feet above confluence with Kings Creek Tributary 2
[3]Elevation computed without consideration of backwater effects from Kings Creek Tributary 2

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

KINGS CREEK TRIBUTARY 1 – KINGS CREEK TRIBUTARY 2 – KINGS CREEK TRIBUTARY 2.5

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Kings Creek Tributary 2.5 Continued								
E	3,521[1]	24	146	5.9	284.9	284.9	284.9	0.0
F	4,276[1]	100	345	1.9	289.8	289.8	290.6	0.8
G	4,951[1]	56	158	4.2	296.6	296.6	297.4	0.8
Kings Creek Tributary 3								
A	500[2]	34	207	8.16	271.5	268.9[3]	269.0	0.1
B	1,922[2]	44	281	6.5	276.1	276.1	276.3	0.2
C	2,648[2]	49	314	4.5	279.0	279.0	279.7	0.7
D	4,419[2]	37	222	4.6	284.6	284.6	285.2	0.6
E	5,519[2]	36	167	5.7	288.6	288.6	289.1	0.5
F	6,432[2]	33	135	7.0	292.7	292.7	292.7	0.0
G	7,591[2]	108	348	2.1	301.6	301.6	301.6	0.0
H	8,690[2]	30	81	5.7	316.6	316.6	316.6	0.0
Kings Creek Tributary 4								
A	1,549[2]	26	196	7.2	276.9	276.9	277.0	0.1
B	2,895[2]	31	159	8.3	283.1	283.1	283.5	0.4
C	5,000[2]	25	156	8.4	293.1	293.1	293.5	0.4
D	5,944[2]	34	353	2.8	302.3	302.3	302.5	0.2
E	7,498[2]	80	308	3.2	309.1	309.1	310.0	0.9

[1] Feet above confluence with Kings Creek Tributary 2
[2] Feet above confluence with Kings Creek
[3] Elevation computed without consideration of backwater effects from Kings Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEE COUNTY, MS
AND INCORPORATED AREAS

FLOODWAY DATA

KINGS CREEK TRIBUTARY 2.5 – KINGS CREEK TRIBUTARY 3 – KINGS CREEK TRIBUTARY 4

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Kings Creek Tributary 5								
A	1,968[1]	37	106	9.8	284.2	284.2	284.2	0.0
B	2,962[1]	37	175	5.9	289.2	289.2	289.2	0.0
C	4,412[1]	130	438	1.2	298.5	298.5	299.3	0.8
Little Coonewah Creek								
A	3,250[2]	119	829	3.7	291.9	291.9	292.1	0.2
B	4,650[2]	534	1,696	1.8	292.5	292.5	293.3	0.8
C	9,573[2]	100	499	2.4	299.3	299.3	300.3	1.0
D	13,850[2]	405	933	1.3	306.1	306.1	306.7	0.6
E	17,850[2]	322	693	0.2	312.1	312.1	312.4	0.3
F	20,155[2]	33	147	1.0	312.2	312.2	312.5	0.3
G	24,650[2]	623	6,125	0.4	335.8	335.8	335.8	0.0
H	27,770[2]	680	3,466	0.7	336.0	336.0	336.1	0.1
I	30,100[2]	206	896	2.8	338.3	338.3	339.2	0.9
J	32,900[2]	305	1,071	2.3	346.8	346.8	347.4	0.6
K	35,776[2]	111	414	2.4	354.4	354.4	355.2	0.8
L	39,000[2]	49	181	5.5	361.8	361.8	362.5	0.7
Little Coonewah Creek Tributary 1								
A	3,250[3]	39	162	5.0	335.8	334.9[4]	335.4	0.5
B	5,490[3]	56	124	4.4	348.5	348.5	349.0	0.5
C	7,600[3]	67	64	5.6	359.1	359.1	359.1	0.0

[1] Feet above confluence with Kings Creek Tributary 2
[2] Feet above confluence with Coonewah Creek
[3] Feet above confluence with Little Coonewah Creek
[4] Elevation computed without consideration of backwater effects from Little Coonewah Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

KINGS CREEK TRIBUTARY 5 – LITTLE COONEWAH CREEK – LITTLE COONEWAH CREEK TRIBUTARY 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Mud Creek								
A	1,768[1]	1,770[3]	15,642	1.9	259.5	259.5[5]	260.0	0.5
B	5,611[1]	2,126[3]	19,776	1.5	260.3	260.3[5]	260.9	0.6
C	10,003[1]	2,525[3]	22,865	1.3	264.7	264.7[5]	265.5	0.8
D	12,355[1]	3,636[3]	31,893	0.9	265.0	265.0[5]	265.7	0.7
E	14,796[1]	4,020	27,282	1.1	265.7	265.7[5]	266.3	0.6
F	18,110[1]	2,746	16,380	1.0	266.5	266.5	267.2	0.7
G	19,202[1]	795	5,155	3.6	267.6	267.6	268.2	0.6
H	22,301[1]	2,437[4]	13,806	1.2	269.6	269.6	270.4	0.8
I	27,616[1]	158	2,590	6.7	274.8	274.8	275.7	0.9
J	30,157[1]	285	3,759	4.6	277.6	277.6	278.6	1.0
K	33,214[1]	2,323	18,982	0.9	279.2	279.2	279.7	0.5
Mud Creek Tributary 1								
A	3,062[2]	190	347	2.2	274.8	274.8	275.8	1.0
B	4,840[2]	221	80	5.6	290.8	290.8	290.8	0.0
C	6,007[2]	42	146	3.1	303.1	303.1	303.5	0.4
D	6,763[2]	97	123	3.7	308.8	308.8	308.8	0.0
E	7,090[2]	59	297	1.5	316.5	316.5	317.0	0.5

[1] Feet above confluence with Town Creek
[2] Feet above confluence with Mud Creek
[3] Combined Mud Creek/Town Creek floodway
[4] Combined Mud Creek/Mud Creek Tributary 2 floodway
[5] Elevation extracted from Town Creek model; no independent analysis done for Mud Creek at these cross sections

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

MUD CREEK – MUD CREEK TRIBUTARY 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Mud Creek Tributary 2								
A	3,100[1]	66	374	1.8	272.3	267.2[4]	267.6	0.4
B	4,350[1]	108	481	1.4	273.0	267.8[4]	268.1	0.3
C	6,200[1]	141	513	0.5	273.1	270.9[5]	270.9	0.0
D	8,610[1]	85	335	0.2	273.1	271.0[5]	271.1	0.1
Russell Creek								
A	3,325[2]	168	469	2.7	311.9	311.9	312.6	0.7
B	5,625[2]	27	171	4.2	317.2	317.2	317.8	0.6
C	8,710[2]	37	158	3.4	323.9	323.9	324.2	0.3
D	11,175[2]	231	1,523	0.2	339.7	339.7	339.8	0.1
Sand Creek Tributary 2								
A	584[3]	88	440	1.7	305.2	305.2	306.1	0.9
B	2,267[3]	33	157	4.8	309.6	309.6	309.8	0.2
C	4,031[3]	75	268	1.8	320.7	320.7	321.6	0.9
D	6,122[3]	15	63	7.5	337.8	337.8	338.4	0.6

[1] Feet above confluence with Mud Creek
[2] Feet above confluence with Little Coonewah Creek
[3] Feet above confluence with Sand Creek
[4] Elevation computed without consideration of overflow effects from Mud Creek
[5] Elevation computed without consideration of backwater effects from Mud Creek

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

MUD CREEK TRIBUTARY 2 – RUSSELL CREEK – SANDAND CREEK TRIBUTARY 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Town Creek								
A	8,800[1]	*	*	*	229.2	*	*	*
B	11,900[1]	*	*	*	232.0	*	*	*
C	20,250[1]	*	*	*	237.7	*	*	*
D	23,270[1]	*	*	*	240.8	*	*	*
E	24,400[1]	*	*	*	241.4	*	*	*
F	25,690[1]	*	*	*	243.0	*	*	*
G	47,137[1]	2,697	11,334	3.0	249.6	249.6	250.4	0.8
H	52,376[1]	1,215	7,973	3.9	253.2	253.2	254.0	0.8
I	56,431[1]	1,240	9,604	3.2	255.8	255.8	256.6	0.8
J	61,051[1]	1,770[3]	15,642	1.9	259.7	259.7	260.0	0.3
K	64,198[1]	2,126[3]	19,776	1.5	260.3	260.3	260.9	0.6
L	68,454[1]	2,525[3]	22,865	1.3	265.3	265.3	265.9	0.6
M	70,895[1]	3,636[3]	31,893	0.9	265.5	265.5	266.1	0.6
N	72,617[1]	4,062[3]	27,357	1.1	265.7	265.7	266.3	0.6
O	78,229[1]	3,257	18,751	1.6	270.1	270.1	270.3	0.2
P	81,251[1]	1,183	8,737	2.0	271.2	271.2	271.5	0.3
Q	85,751[1]	1,704	13,593	1.3	273.4	273.4	273.9	0.5
R	87,838[1]	179	3,305	5.3	274.3	274.3	274.9	0.6
Tulip Creek								
A	6,391[2]	300	1,790	5.2	254.5	254.5	255.4	0.9
B	9,900[2]	1,565	7,339	1.3	260.3	260.3	261.1	0.8
C	12,095[2]	362	2,422	3.8	265.9	265.9	266.1	0.2
D	15,850[2]	508	2,604	4.0	271.0	271.0	271.7	0.7
E	19,485[2]	1,146	6,115	1.7	275.0	275.0	276.0	1.0

[1] Feet above county boundary
[2] Feet above confluence with Town Creek
[3] Combined Town Creek/Mud Creek floodway
*Data not computed

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY
LEE COUNTY, MS
AND INCORPORATED AREAS

FLOODWAY DATA

TOWN CREEK – TULIP CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (NAVD)	WITHOUT FLOODWAY (NAVD)	WITH FLOODWAY (NAVD)	INCREASE
Tulip Creek Continued								
F	22,130[1]	2,060	6,618	1.6	277.2	277.2	278.2	1.0
G	24,468[1]	179	2,306	3.5	279.1	279.1	280.0	0.9
H	27,550[1]	*	*	*	283.4	283.4	*	*
I	30,000[1]	*	*	*	287.1	287.1	*	*
West Tulip Creek								
A	1,022[2]	45	195	8.7	279.5	278.5[3]	278.5	0.0
B	2,600[2]	55	367	4.6	284.1	284.1	284.1	0.0
C	4,277[2]	57	400	3.6	286.3	286.3	286.5	0.2
D	6,865[2]	41	253	4.6	292.6	292.6	292.6	0.0
E	10,500[2]	30	148	5.9	300.8	300.8	300.9	0.1
F	13,076[2]	40	194	3.0	310.5	310.5	310.5	0.0
G	13,830[2]	84	491	0.2	310.9	310.9	310.9	0.0

[1] Feet above confluence with Town Creek
[2] Feet above confluence with Tulip Creek
[3] Elevation computed without consideration of backwater effects from Tulip Creek
*Data not computed

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOODWAY DATA

TULIP CREEK – WEST TULIP CREEK

5.0 INSURANCE APPLICATIONS

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

Zone A

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

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS report by detailed methods. 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 rate 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 (sq. mi.), 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 rate 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 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 Lee County. Historical data relating to the maps prepared for each community are presented in Table 10, “Community Map History.”

7.0 OTHER STUDIES

Studies have been prepared for the City of Tupelo and the unincorporated areas of Lee County; and FIRMs for the City of Baldwyn, the Village of Plantersville, the Towns of Saltillo, Verona, and Sherman, and Pontotoc County (References 23–30).

This FIS report 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.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Baldwyn, City of	June 7, 1974	August 20, 1976	September 18, 1987	October 20, 1999 February 3, 2010
Guntown, Town of	October 20, 1999	None	October 20, 1999	February 3, 2010
Lee County (Unincorporated Areas)	September 3, 1976	None	March 5, 1990	October 20, 1999 February 3, 2010
Nettleton, Town of	October 20, 1999	None	October 20, 1999	February 3, 2010
Plantersville, Village of	June 14, 1974	June 25, 1976	August 1, 1986	October 20, 1999 February 3, 2010

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Saltillo, City of	February 14, 1975	March 10, 1978	September 18, 1987	October 20, 1999 February 3, 2010
Shannon, Town of	October 20, 1999	None	October 20, 1999	February 3, 2010
Tupelo, City of	June 14, 1974	August 27, 1976	April 3, 1978	October 20, 1999 February 3, 2010
Verona, Town of	December 13, 1974	None	June 4, 1987	October 20, 1999 February 3, 2010

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

9.0 BIBLIOGRAPHY AND REFERENCES

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10.0 REVISION DESCRIPTIONS

This section has been added to provide information regarding significant revisions made since the original FIS was printed. Future revisions may be made that do not result in the republishing of the FIS report. To assure that the user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data located at:

- Baldwyn City Hall
  202 South Second Street
  Baldwyn, Mississippi 38824

- Guntown Town Hall
  Mayor's Office
  1527 Main Street
  Guntown, Mississippi 38849

- Lee County Courthouse
  201 West Jefferson, Suite A
  Tupelo, Mississippi 38801

- Nettleton Town Hall
  124 Short Avenue
  Nettleton, Mississippi 38858

- Plantersville, Village of
  2587 Main Street
  Plantersville, Mississippi 38862

- Saltillo, City of
  205 South Second Street
  Saltillo, Mississippi 38866

- Shannon Town Hall
  1426 North Street
  Shannon, Mississippi 38868

- Tupelo Planning Department
  Tupelo City Hall
  117 North Broadway, 2nd Floor
  Tupelo, Mississippi 38802

- Verona City Hall
  194 Main Street
  Verona, Mississippi 38879

10.1 First Revision (Revised February 3, 2010)

The February 3, 2010 revision to the countywide FIS included new detailed studies for portions of Mud Creek and Town Creek and limited detailed studies for Campbelltown Creek, Chiwapa Creek, Coonewah Creek and its Tributary 3, Euclatubba Creek, Mud Creek, Reeds Branch, Sand Creek and its Tributaries 1 and 2, Town Creek (downstream and upstream reaches) and its Tributary 1. Numerous flooding sources in the county were studied by approximate methods for that revision.

10.2 Second Revision (Revised Month Day, 2012)

This xx/xx/xxxx revision was initiated in support of the FEMA Risk MAP Program.

This revision involved updating the mapping for portions of Lee County, MS. The revision includes new detailed studies on Coonewah Creek, Euclatubba Creek Tributary 1, Kings Creek Tributary 1, Kings Creek Tributary 2.5, Kings Creek Tributary 3, Kings Creek Tributary 4, Kings Creek Tributary 5, and Sand Creek Tributary 2 and new limited detailed studies on Brock Creek and Mud Creek Tributary 4. These revisions resulted in refined floodplain boundaries.

Floodplain boundaries for only the previously mentioned streams were updated. Therefore, only the panels affected by these floodplain boundaries have been updated. The following panels were updated in support of the Risk MAP Program:

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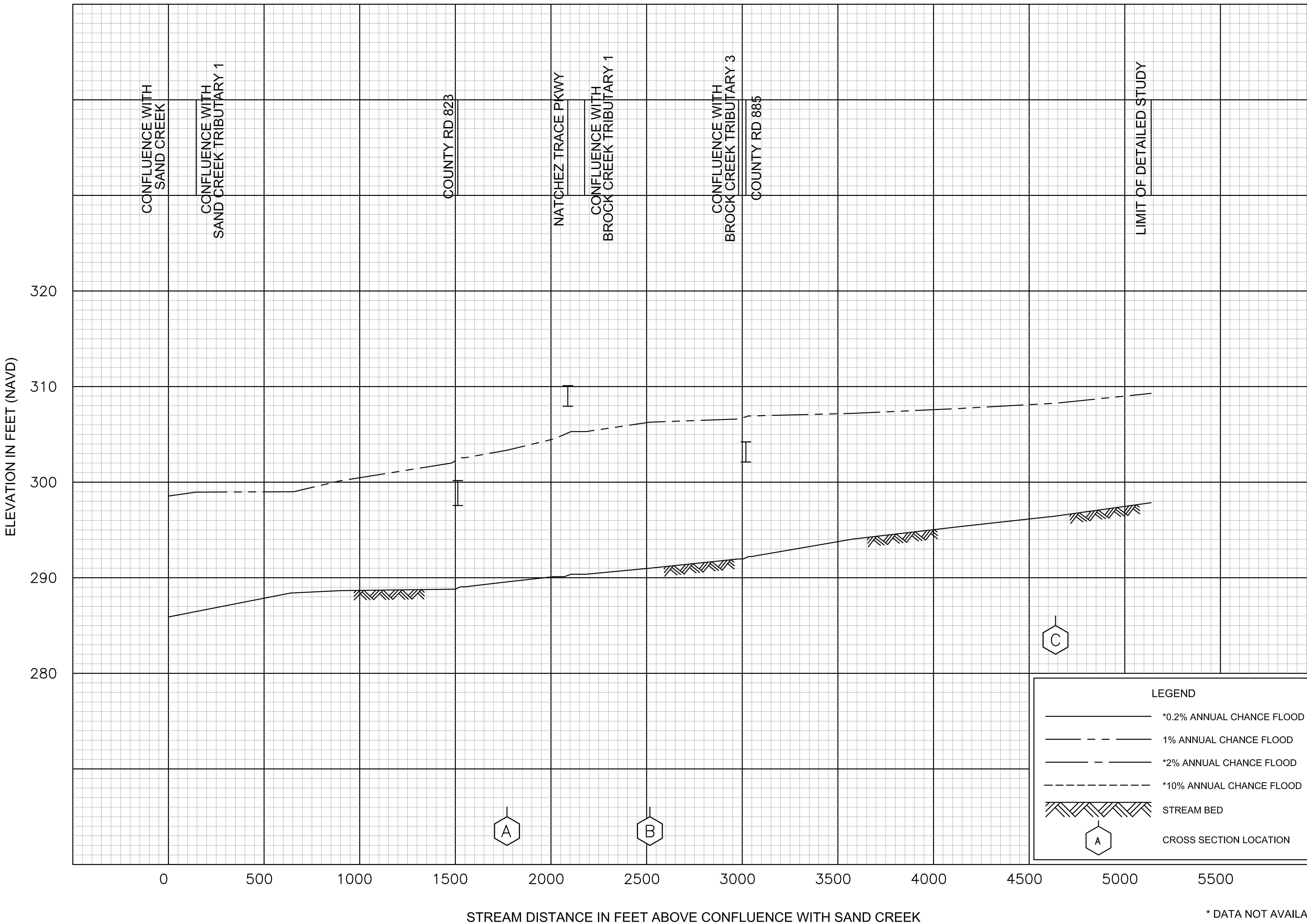


* DATA NOT AVAILABLE

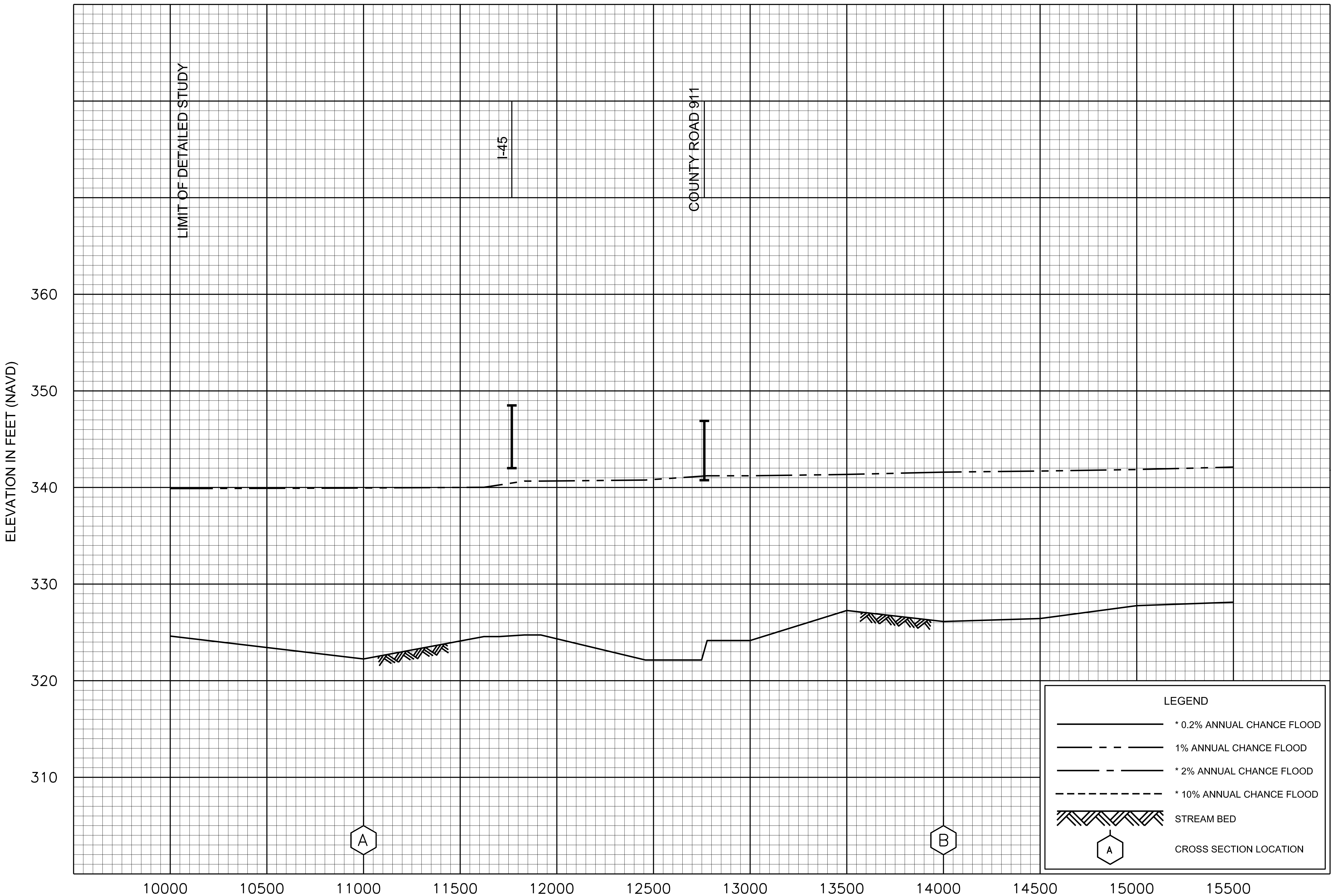
FLOOD PROFILES

BROCK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

01P



STREAM DISTANCE IN FEET ABOVE THE CONFLUENCE WITH OKEELALA CREEK

* DATA NOT AVAILABLE

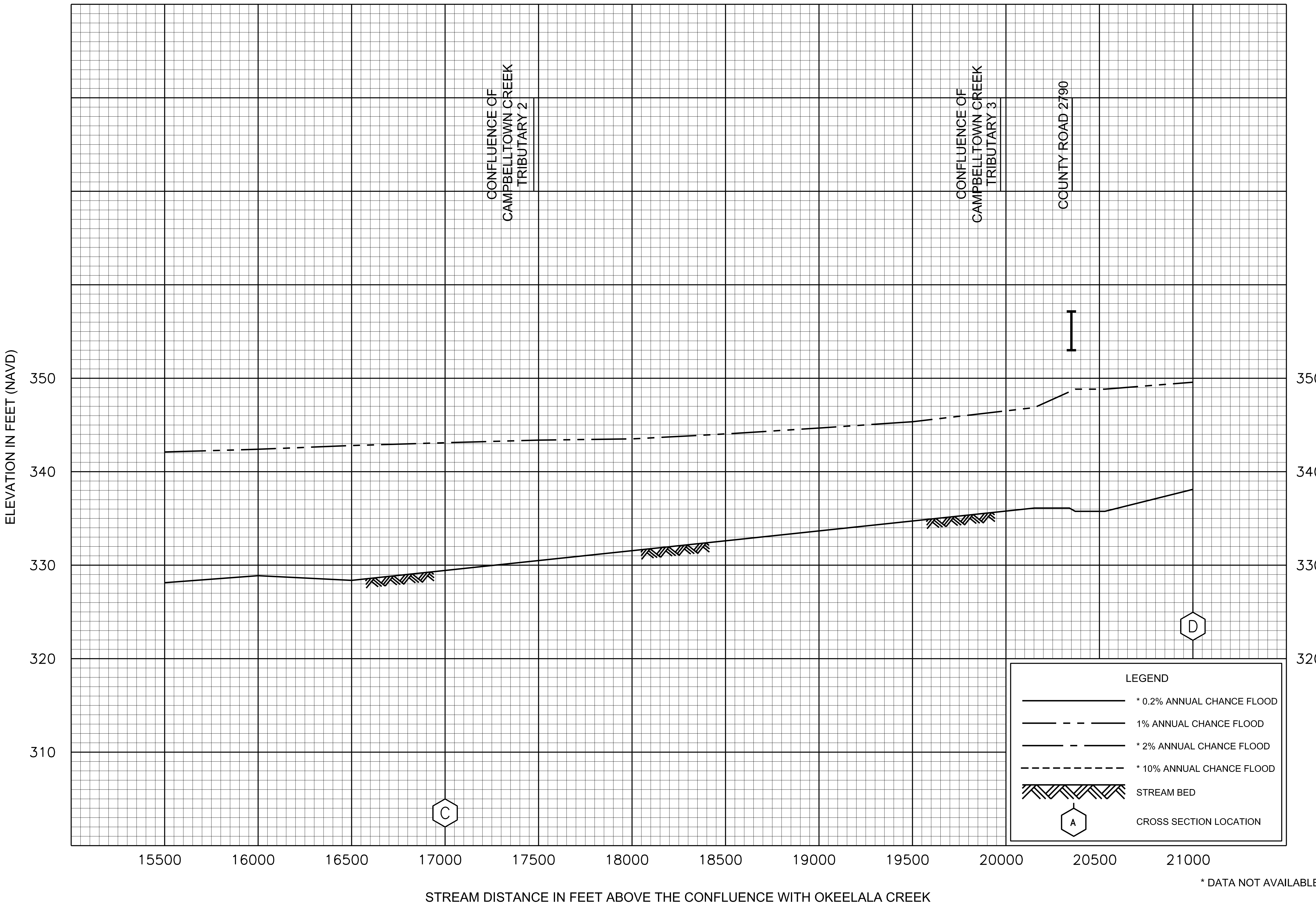
FLOOD PROFILES

CAMPBELLTOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

02P



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FLOOD PROFILES

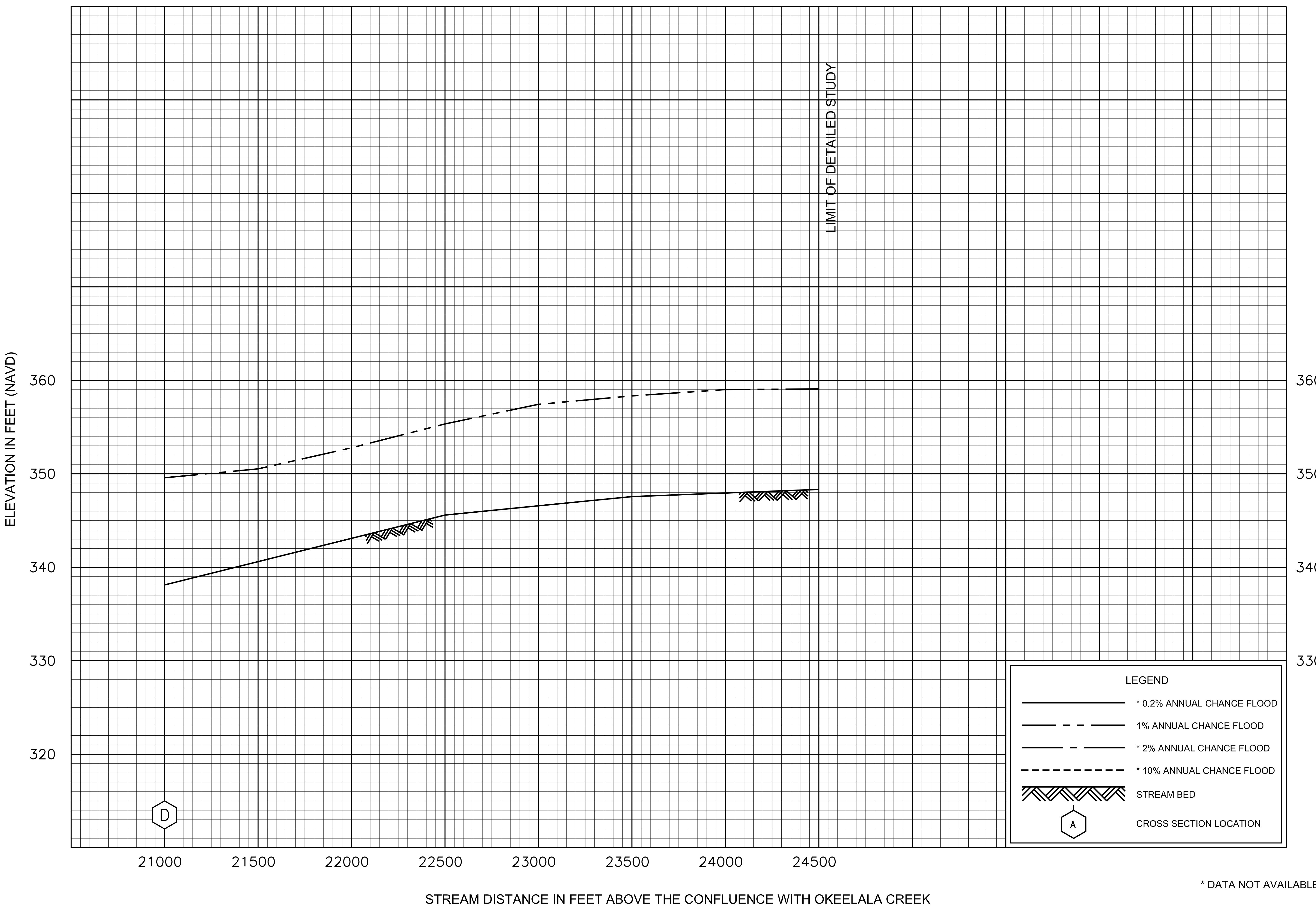
CAMPBELLTOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

03P



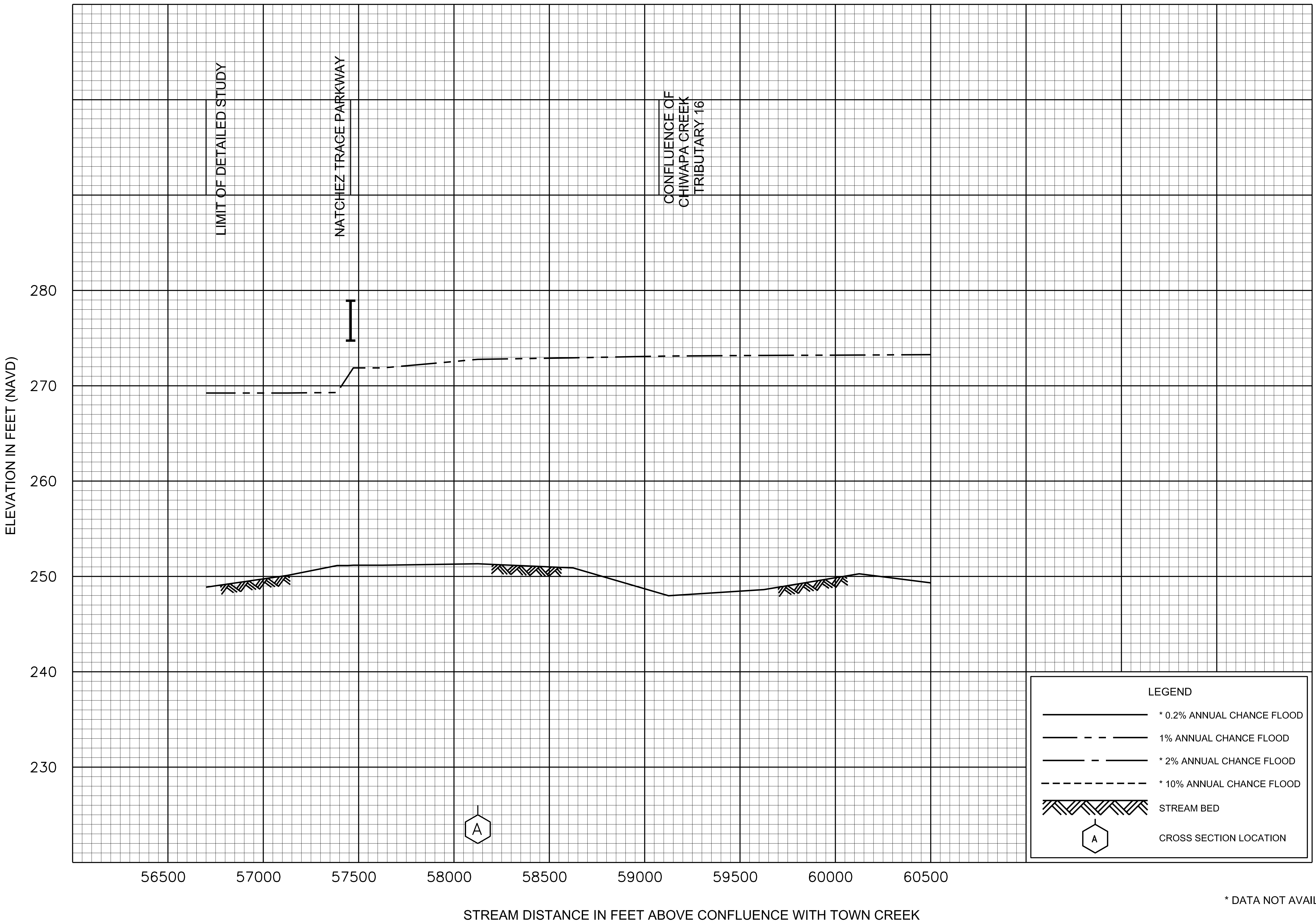
FLOOD PROFILES

CAMPBELLTOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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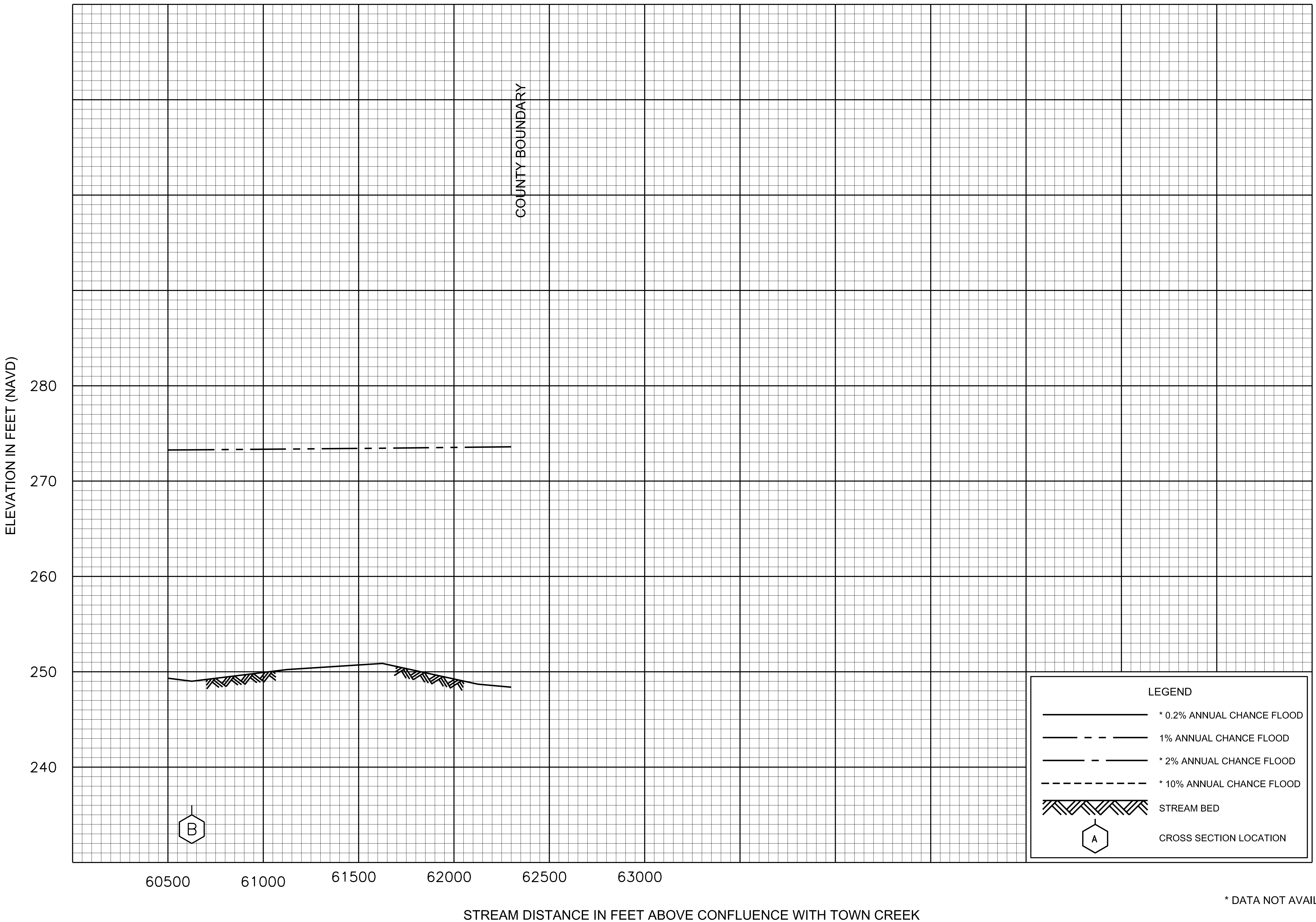
FLOOD PROFILES

CHIWAPA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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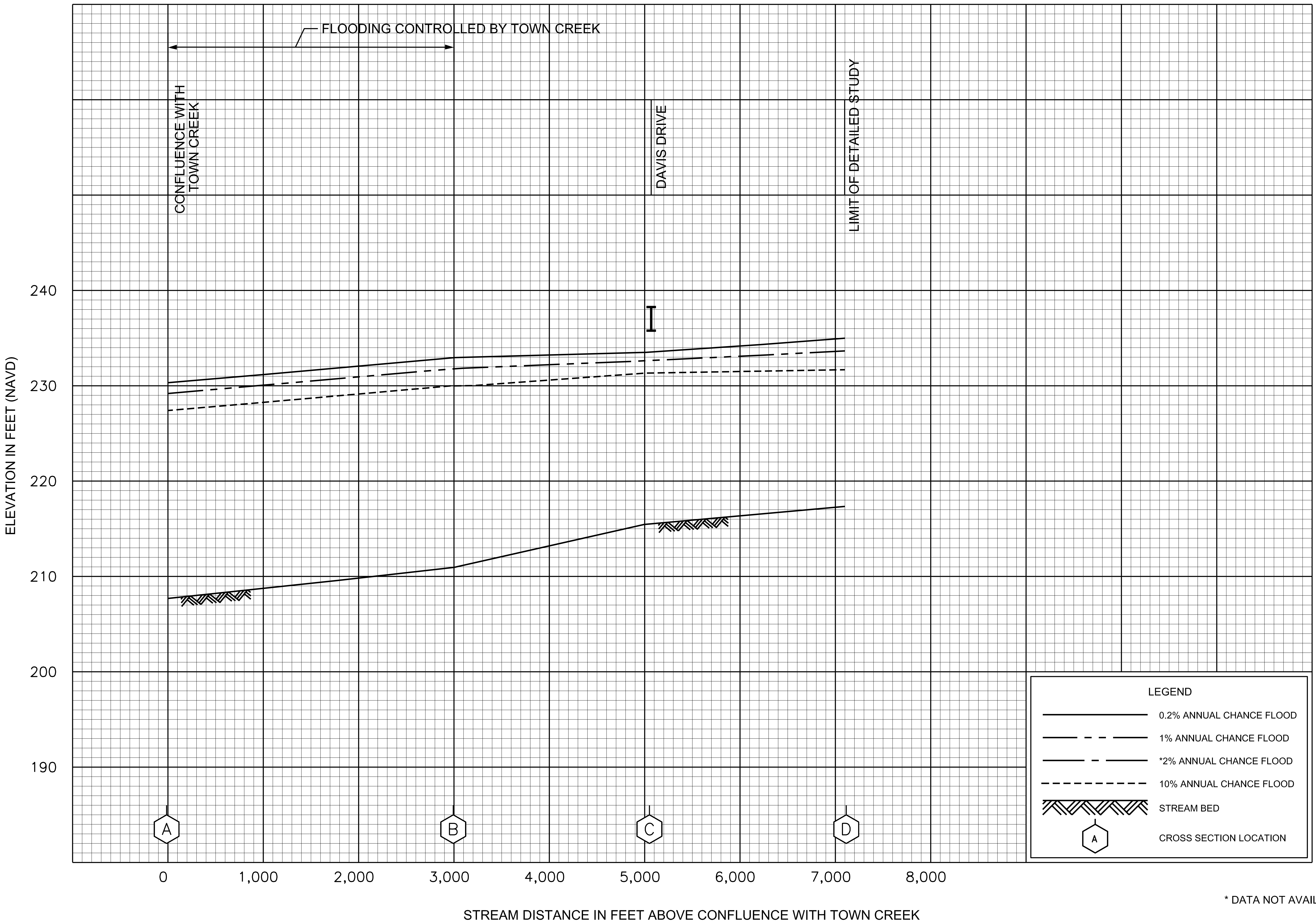
FLOOD PROFILES

CHIWAPA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

06P



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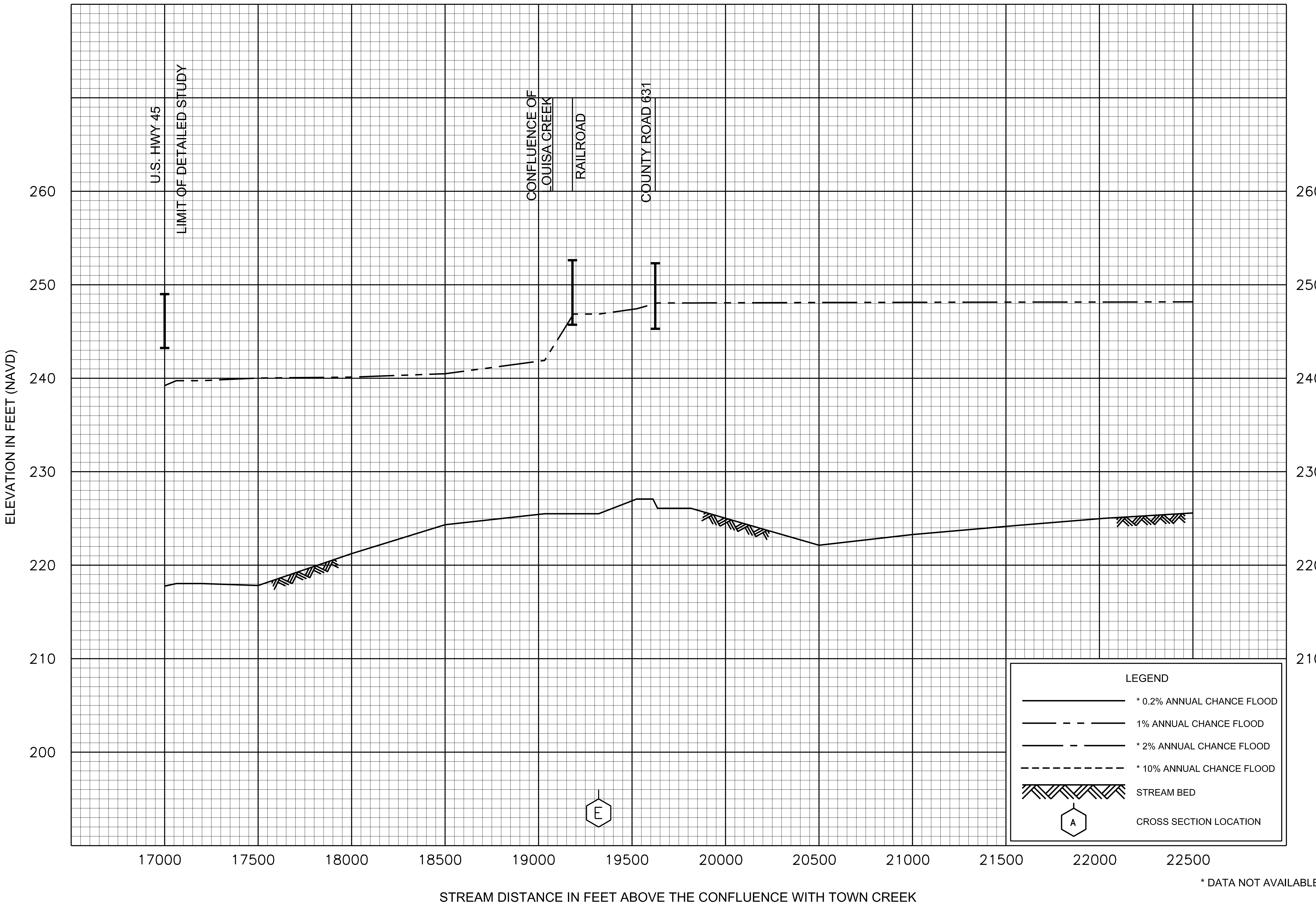
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



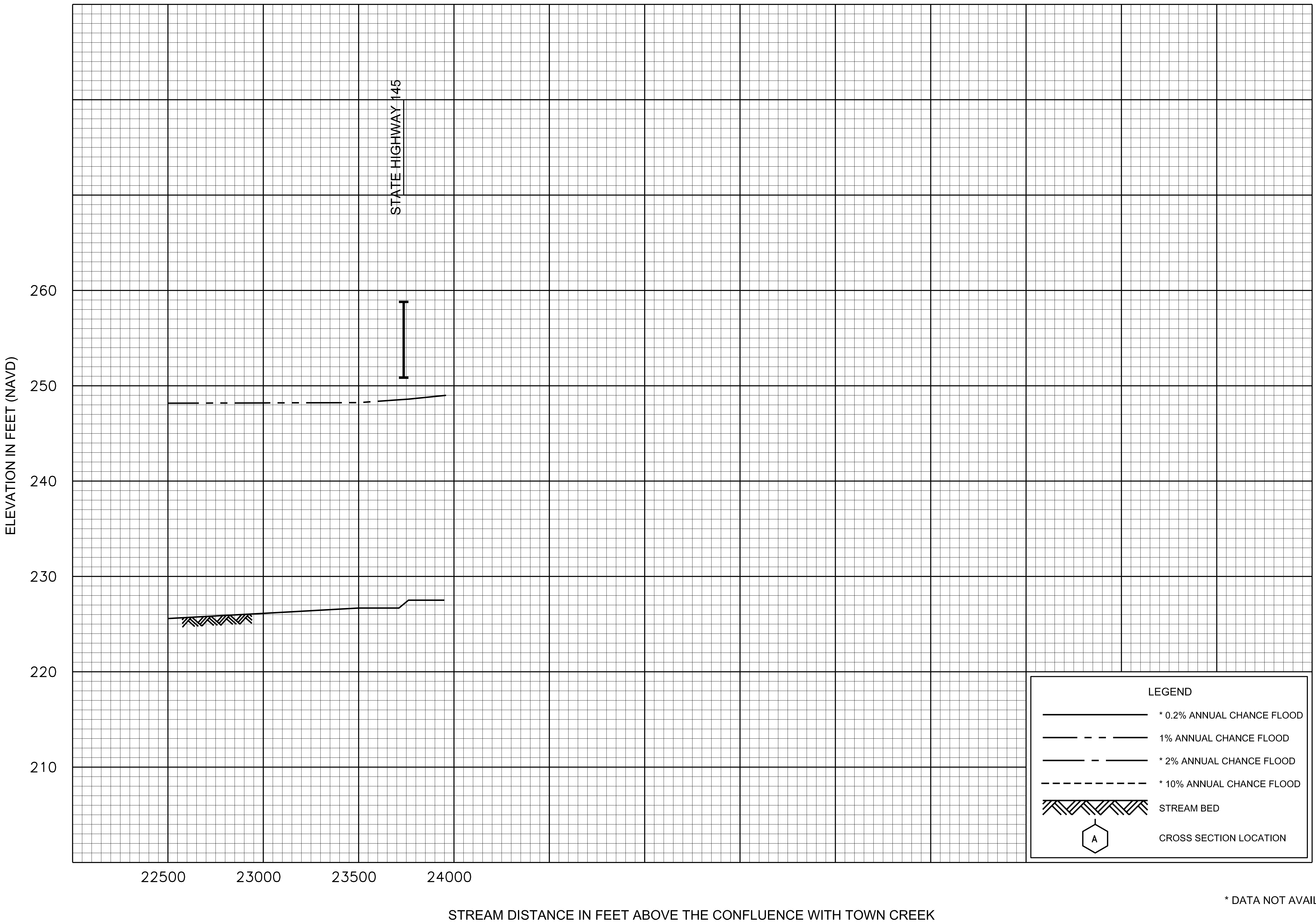
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

08P



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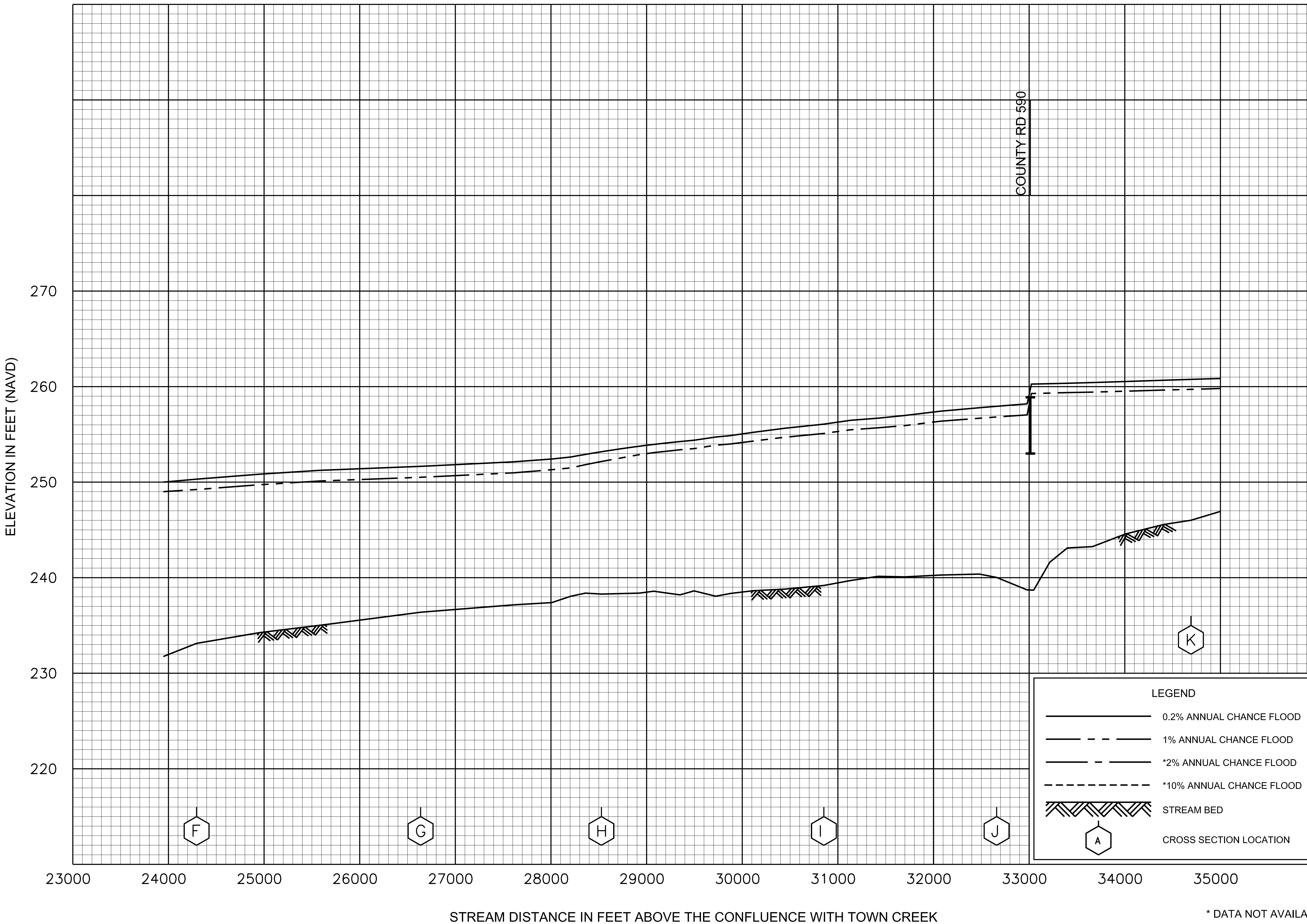
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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FLOOD PROFILES

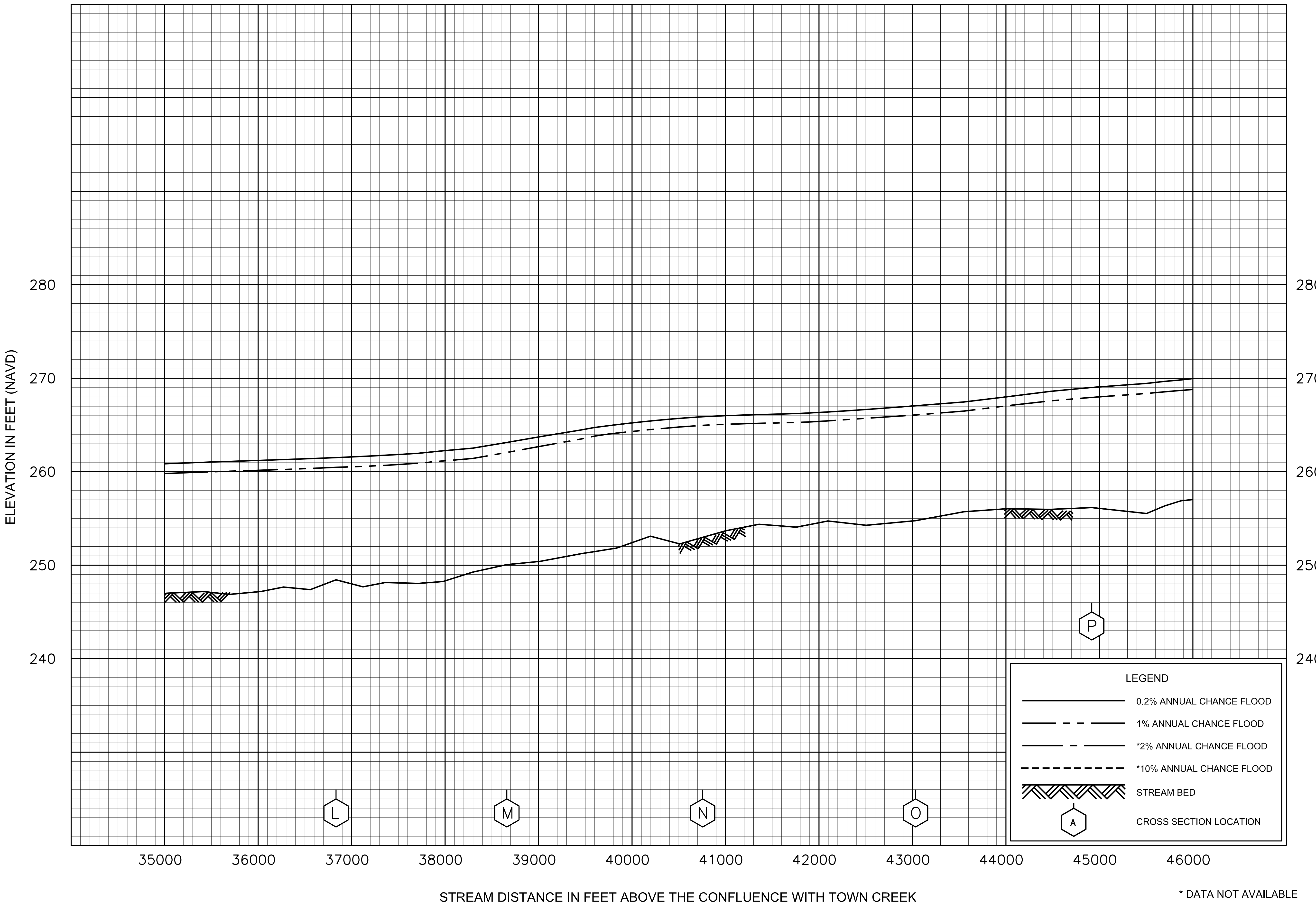
COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

10P

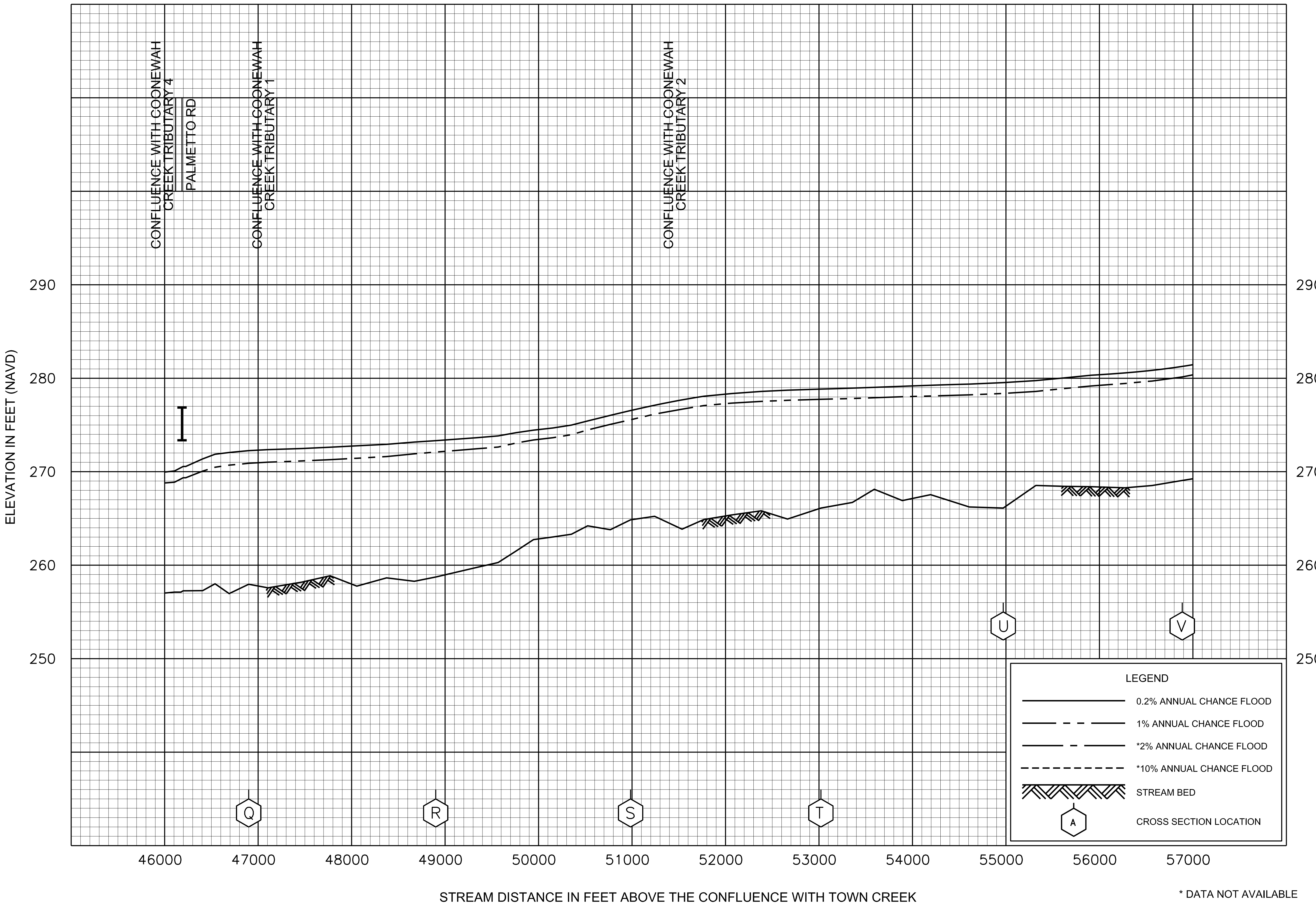


FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



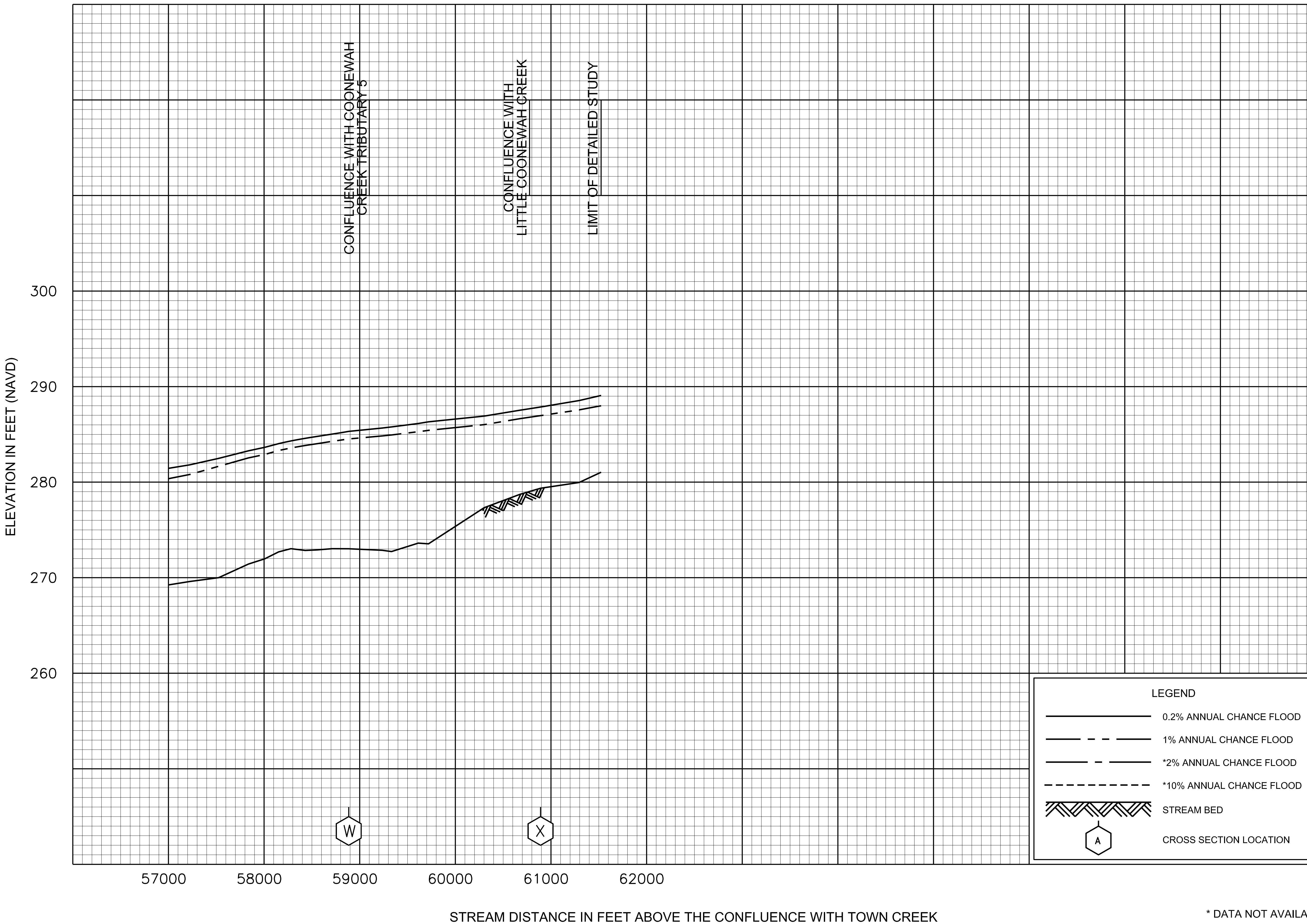
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

12P



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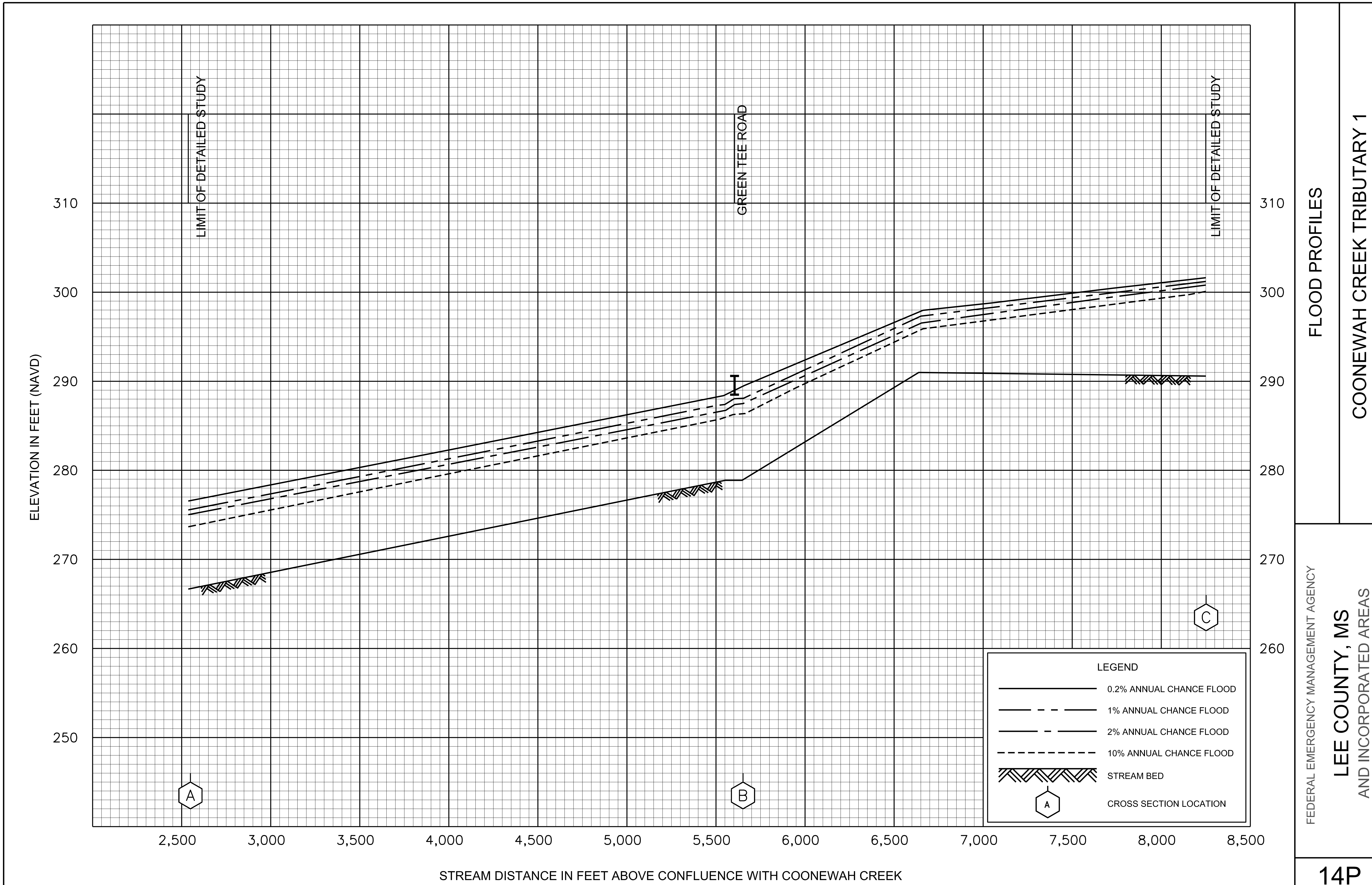
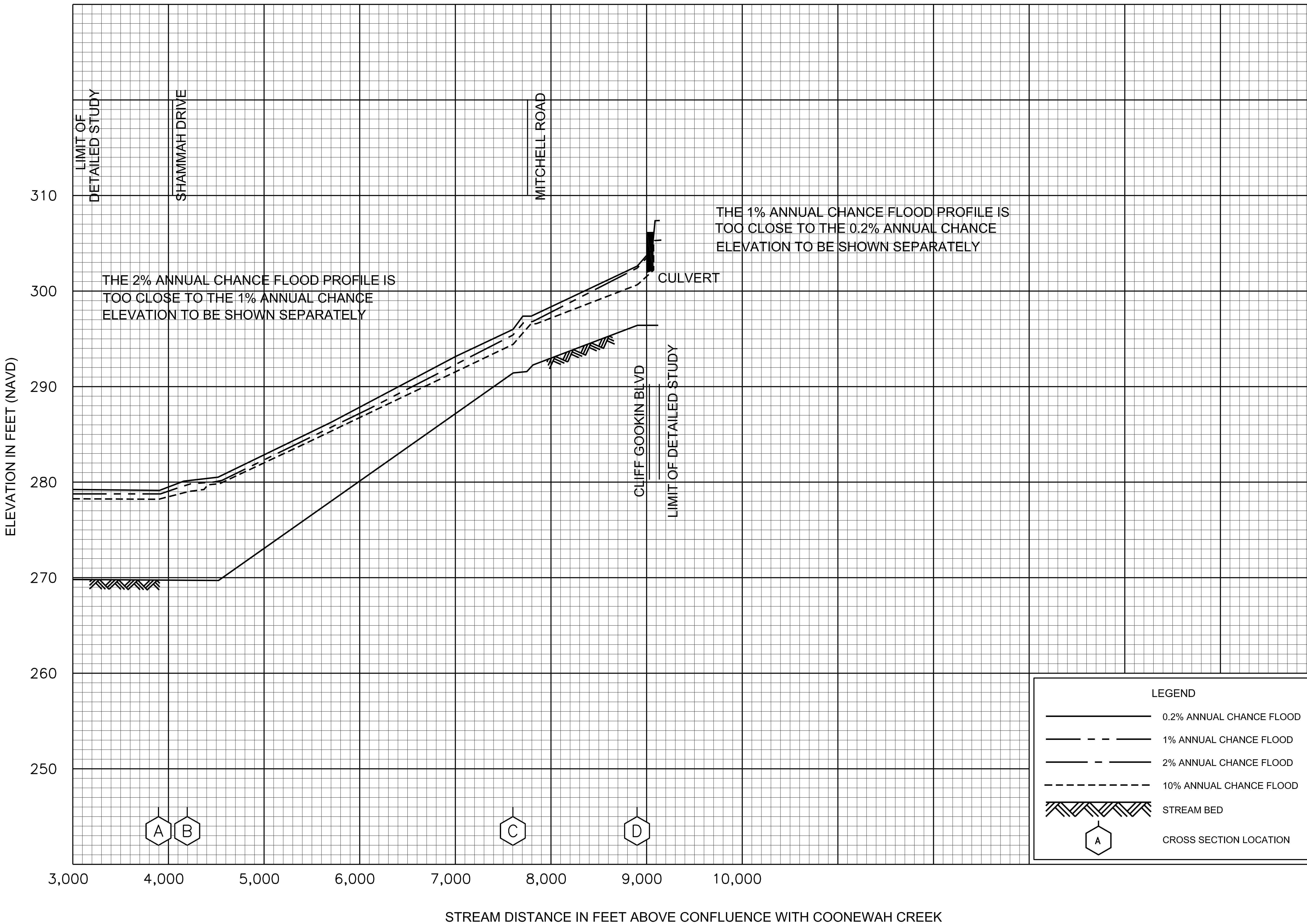
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS


LIMIT OF DETAILED STUDY
GREEN TEE ROAD
LIMIT OF DETAILED STUDY
ELEVATION IN FEET (NAVD)
310
300
290
280
270
260
250
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
7,000
7,500
8,000
8,500
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH COONEWAH CREEK
A
B
C
LEGEND
0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
2% ANNUAL CHANCE FLOOD
10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
COONEWAH CREEK TRIBUTARY 1
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEE COUNTY, MS
AND INCORPORATED AREAS
14P

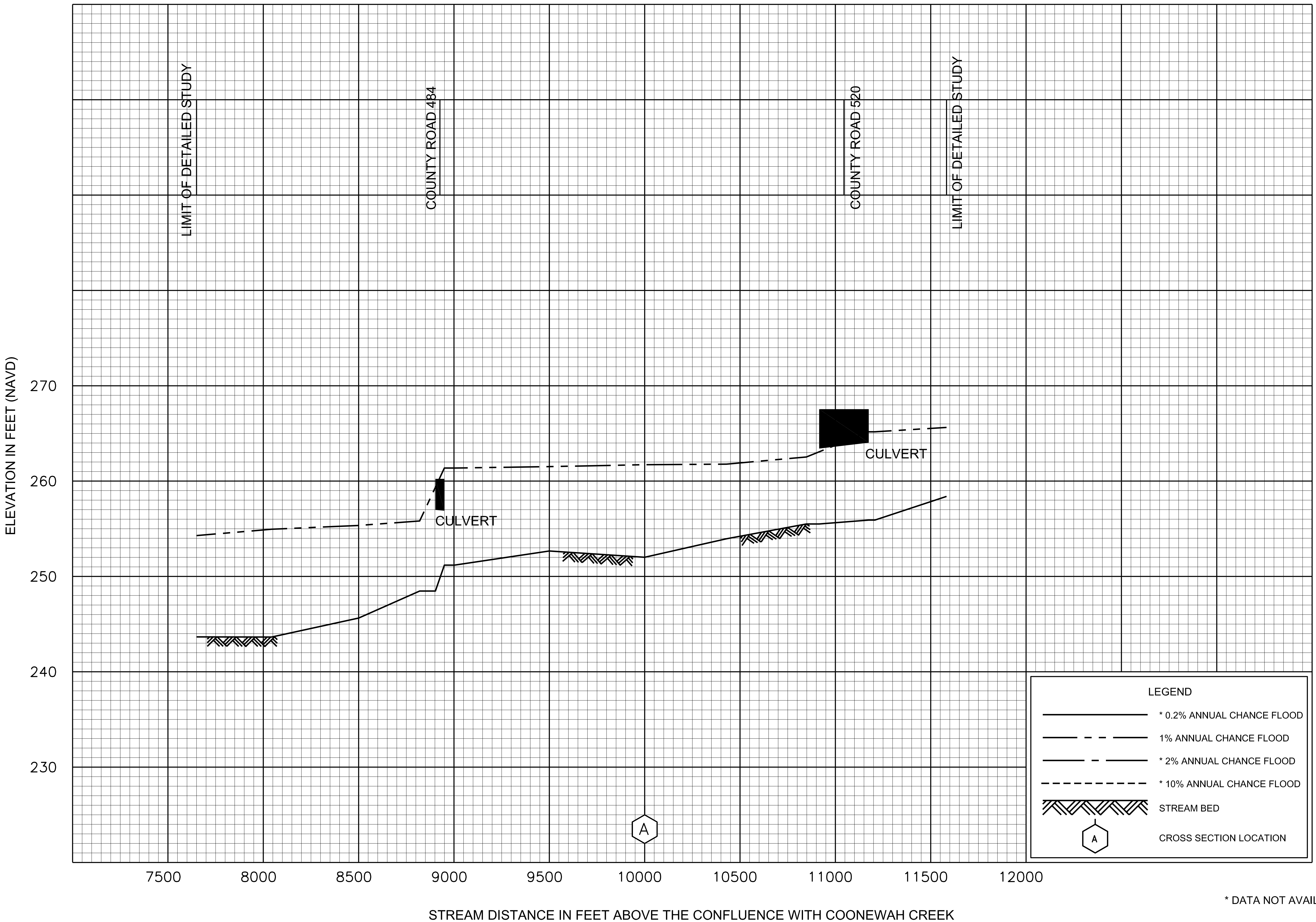


FLOOD PROFILES

COONEWAH CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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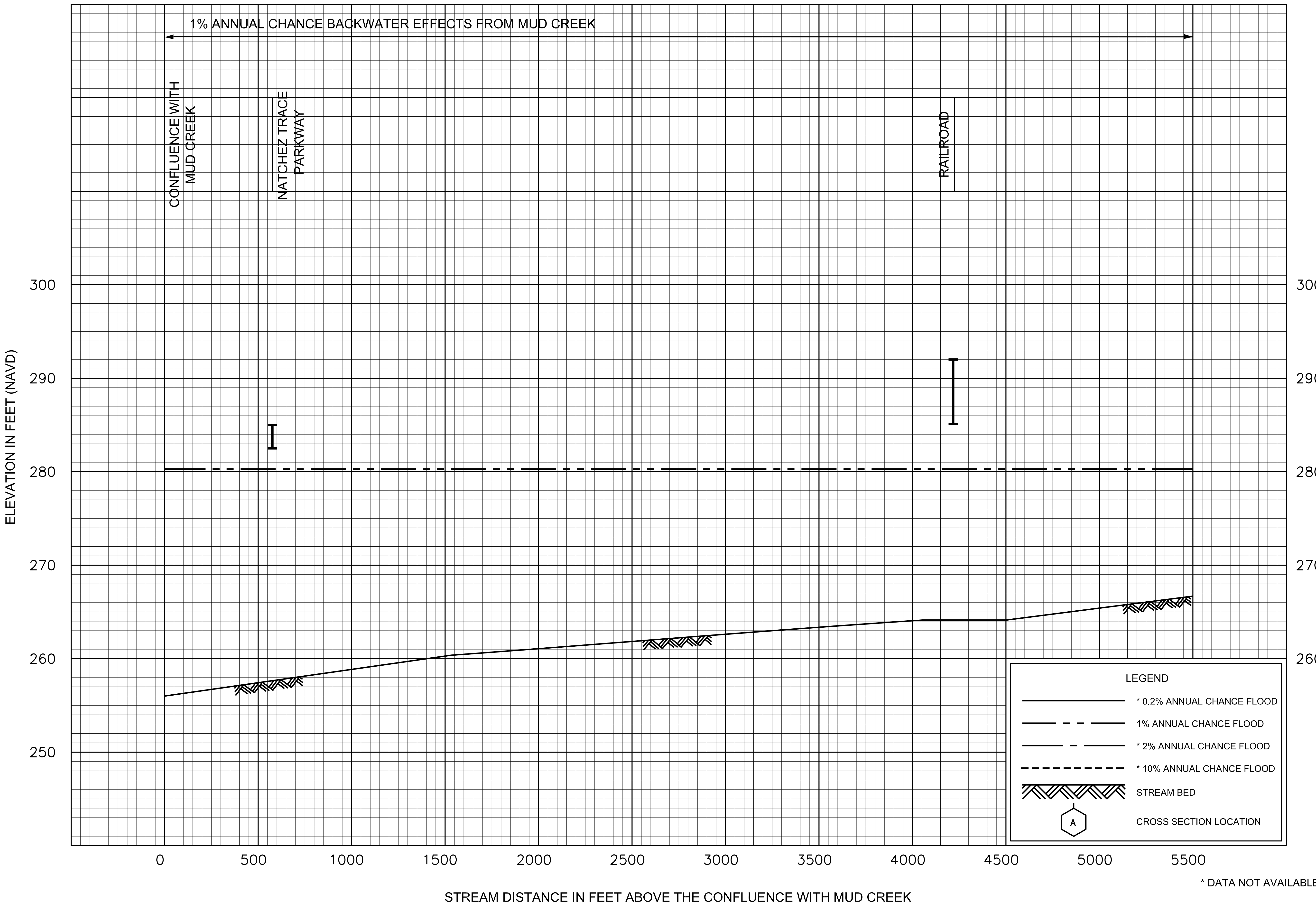
FLOOD PROFILES

COONEWAH CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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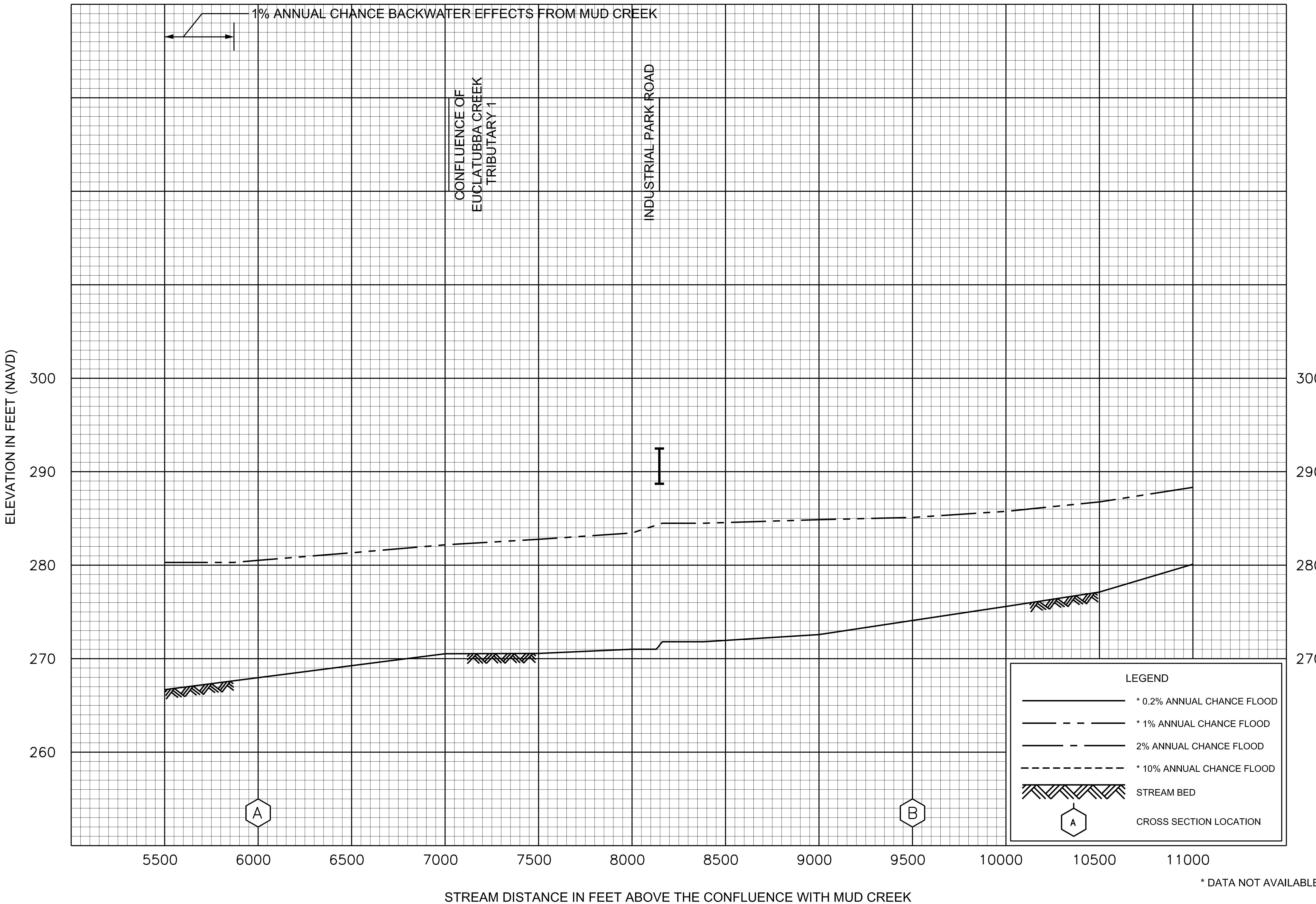
FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

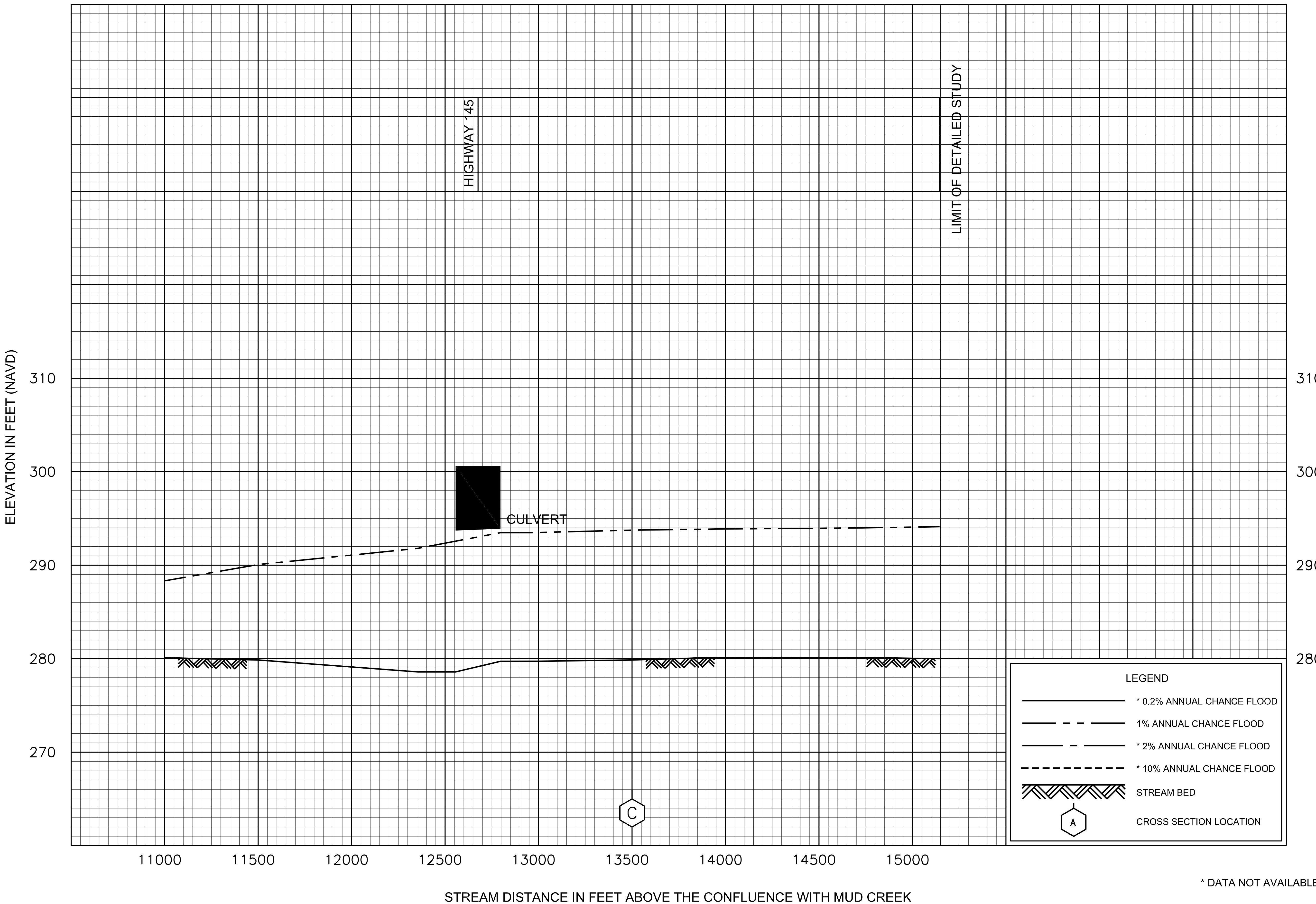


FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



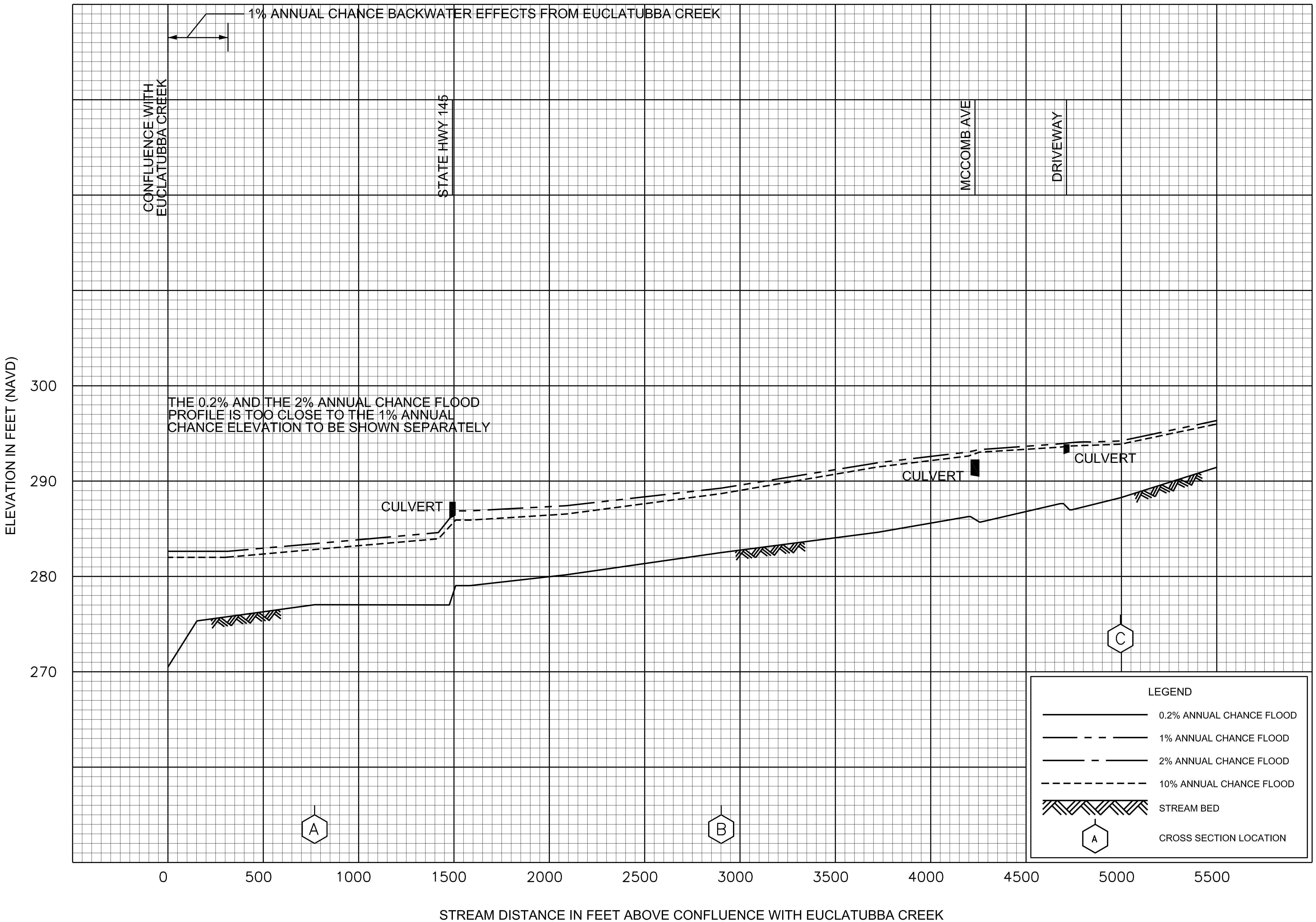
FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

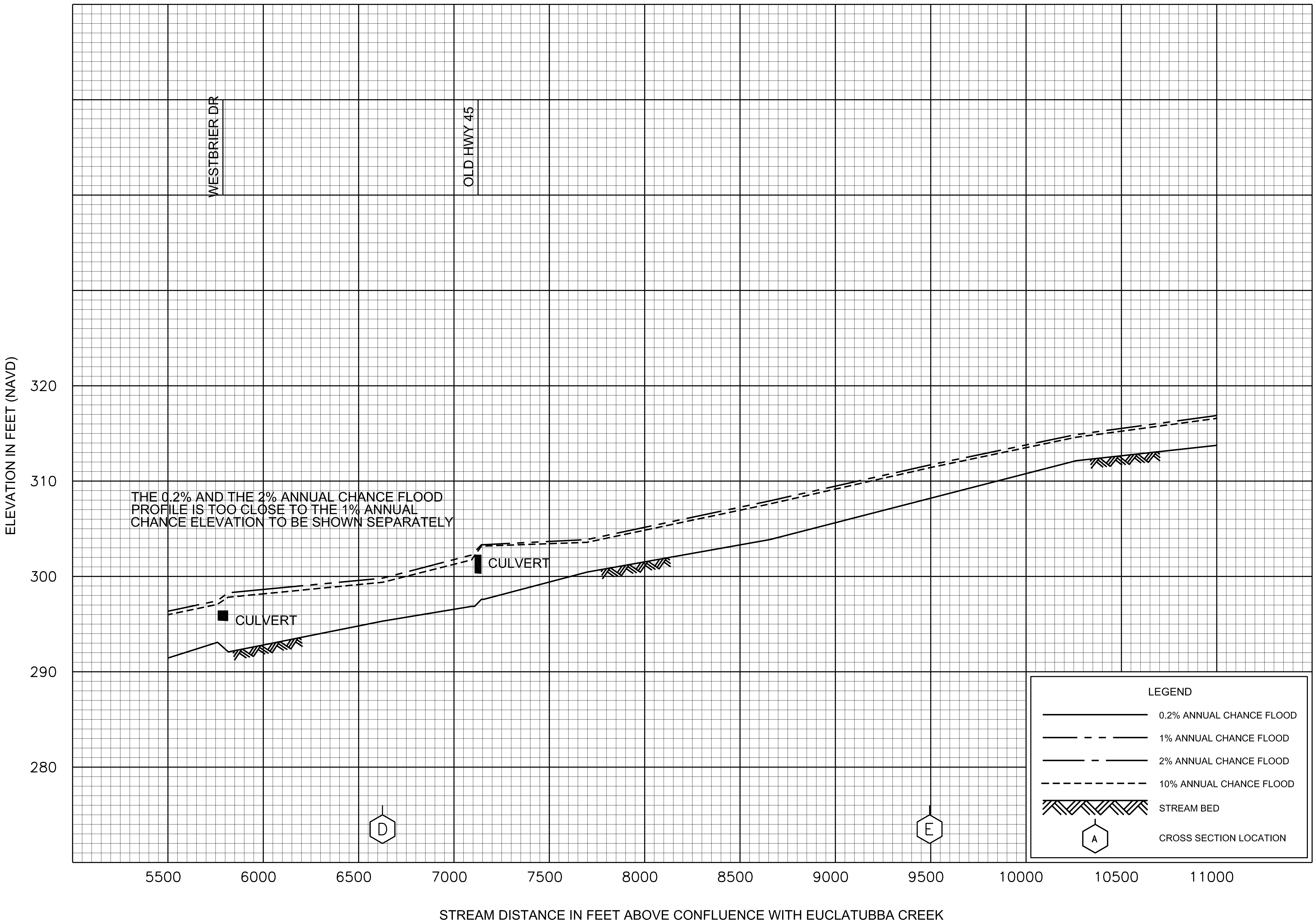


FLOOD PROFILES

EUCLATUBBA CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



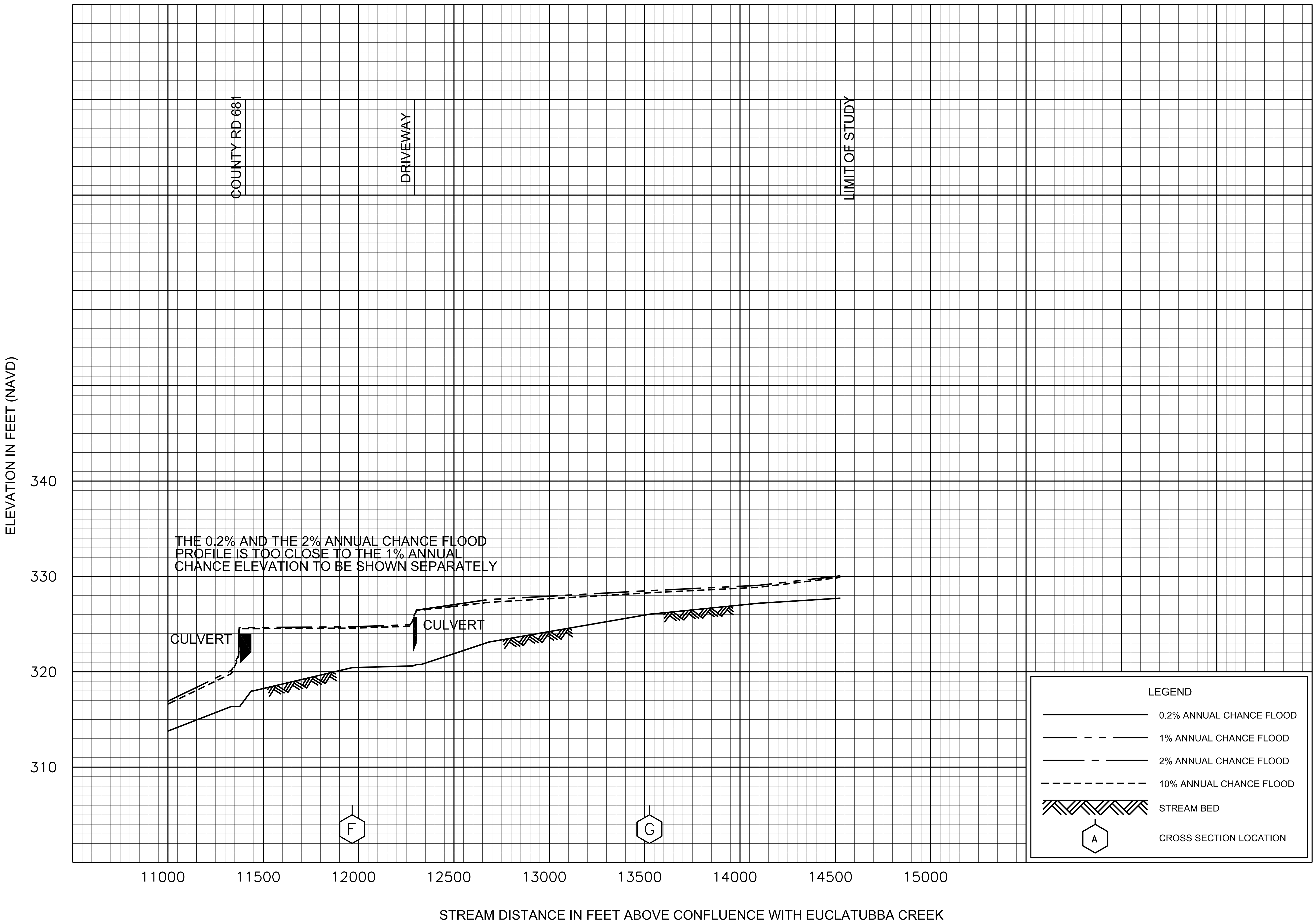
FLOOD PROFILES

EUCLATUBBA CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

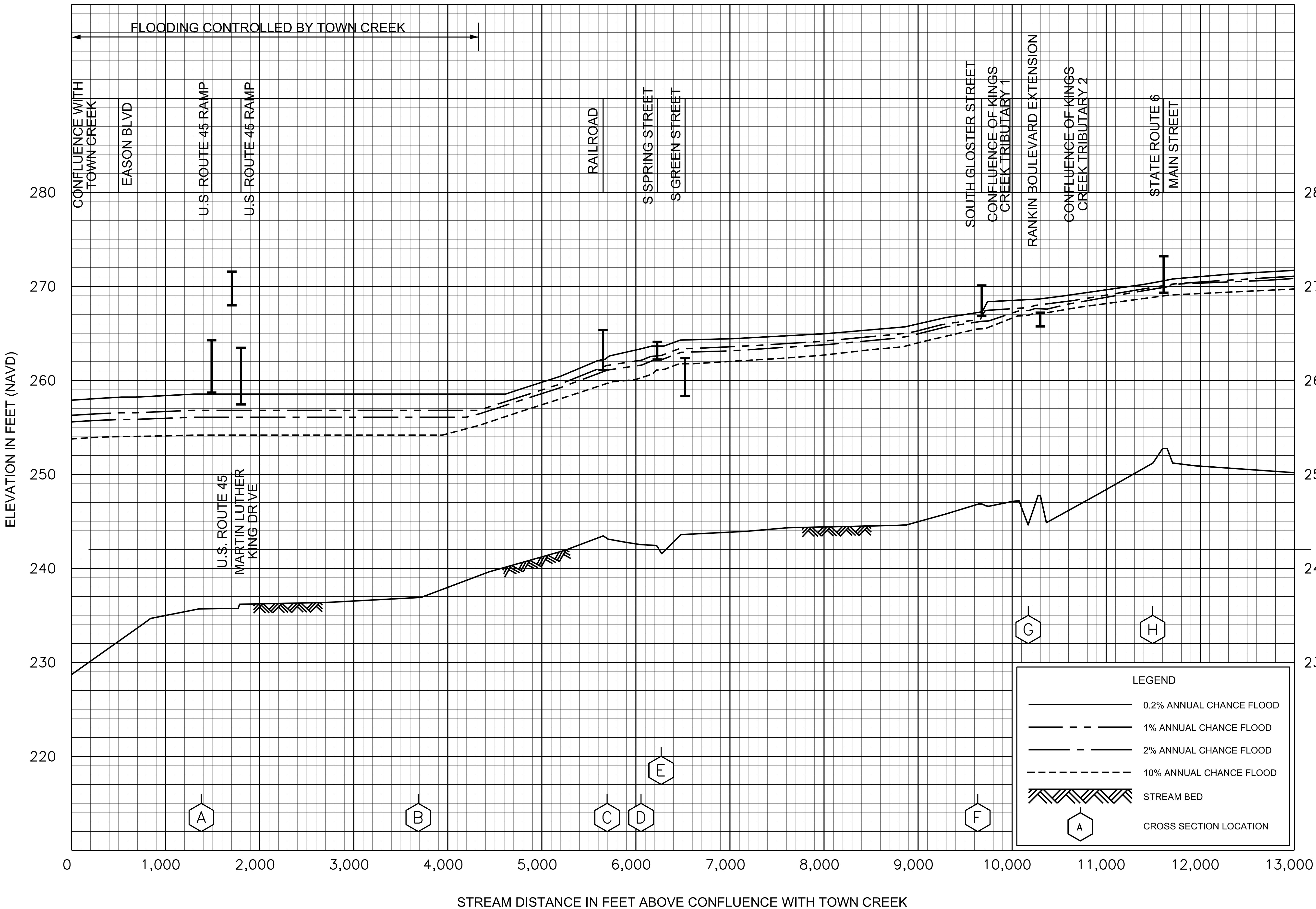


FLOOD PROFILES

EUCLATUBBA CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



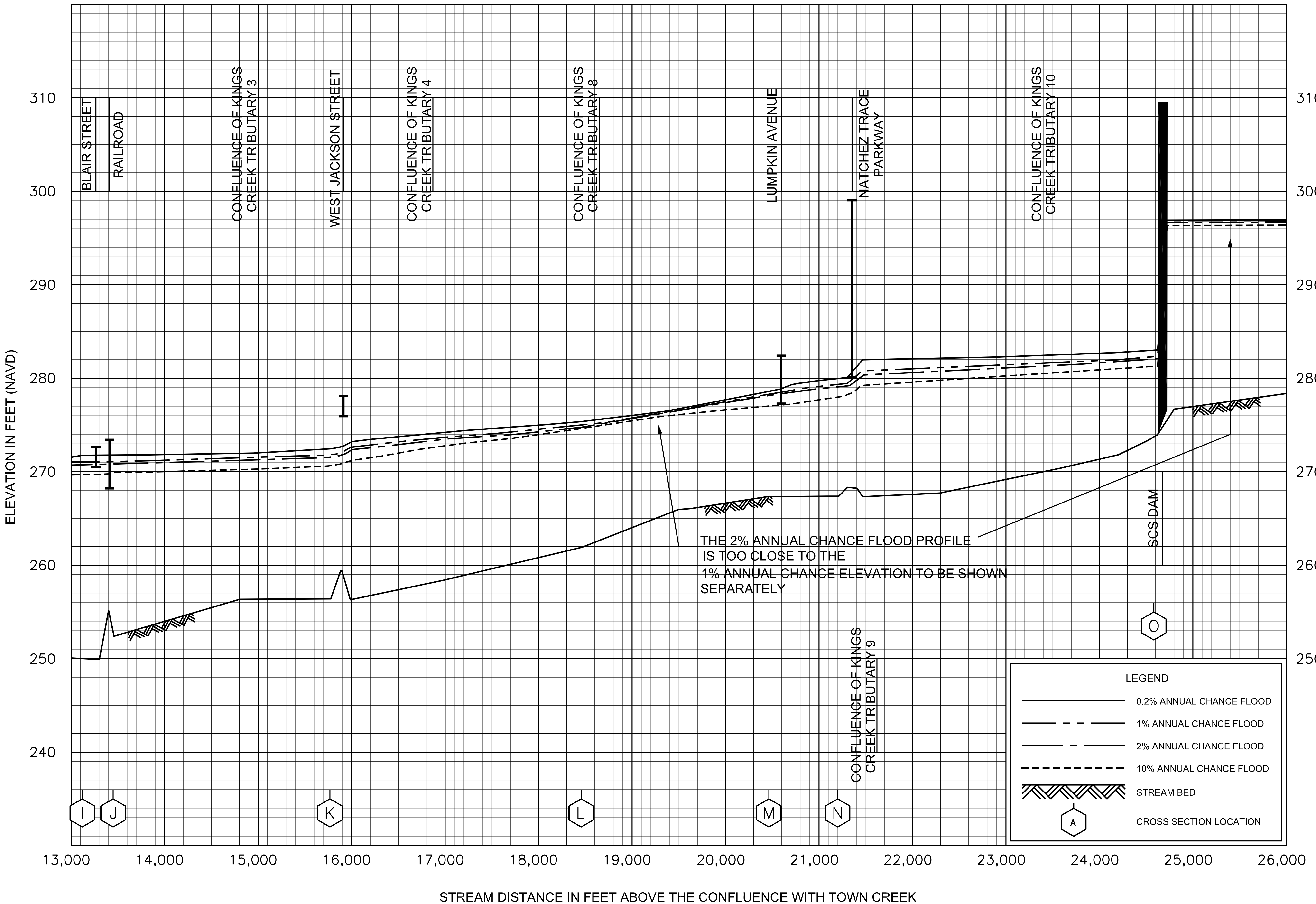
FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

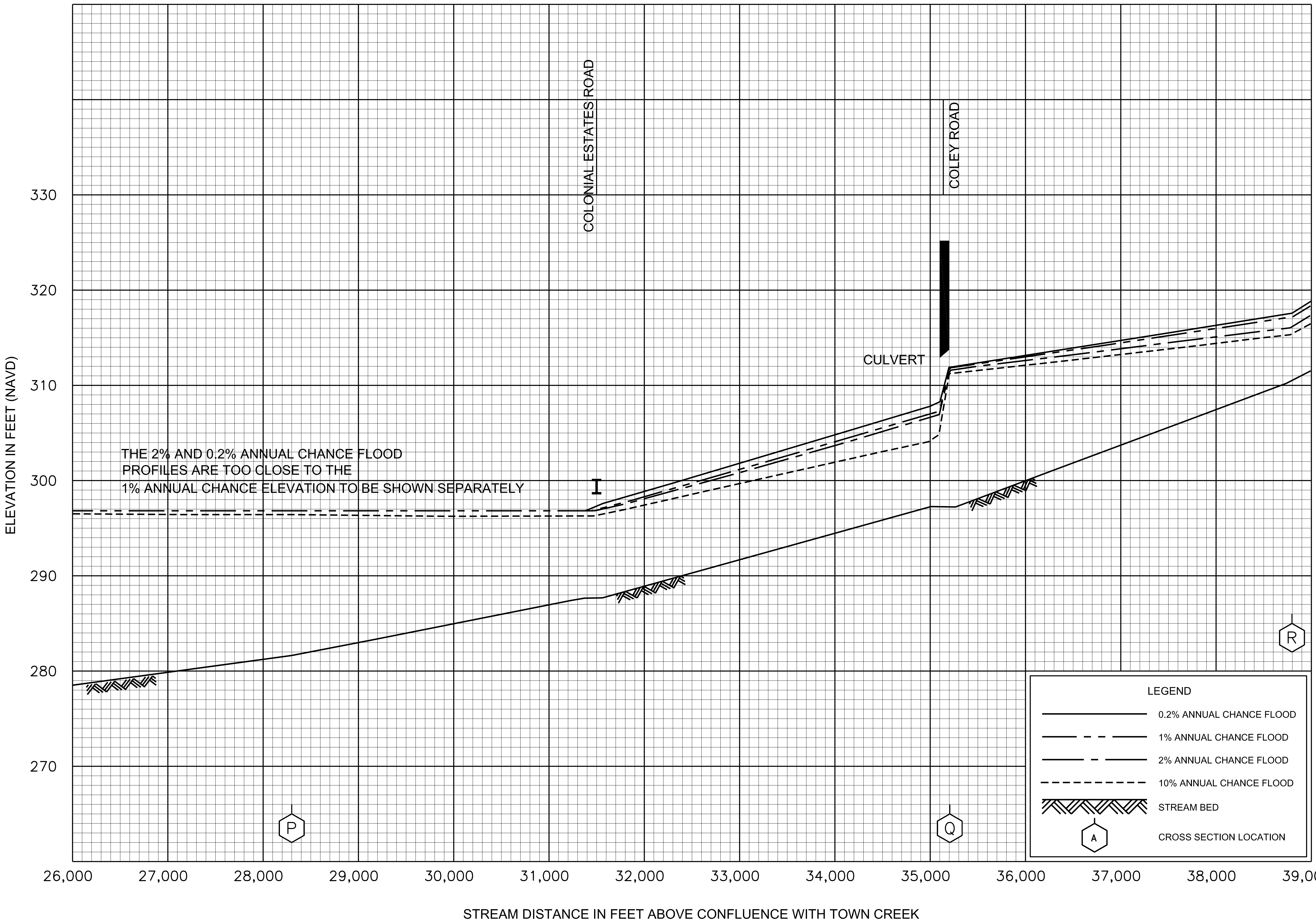


FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS AND INCORPORATED AREAS

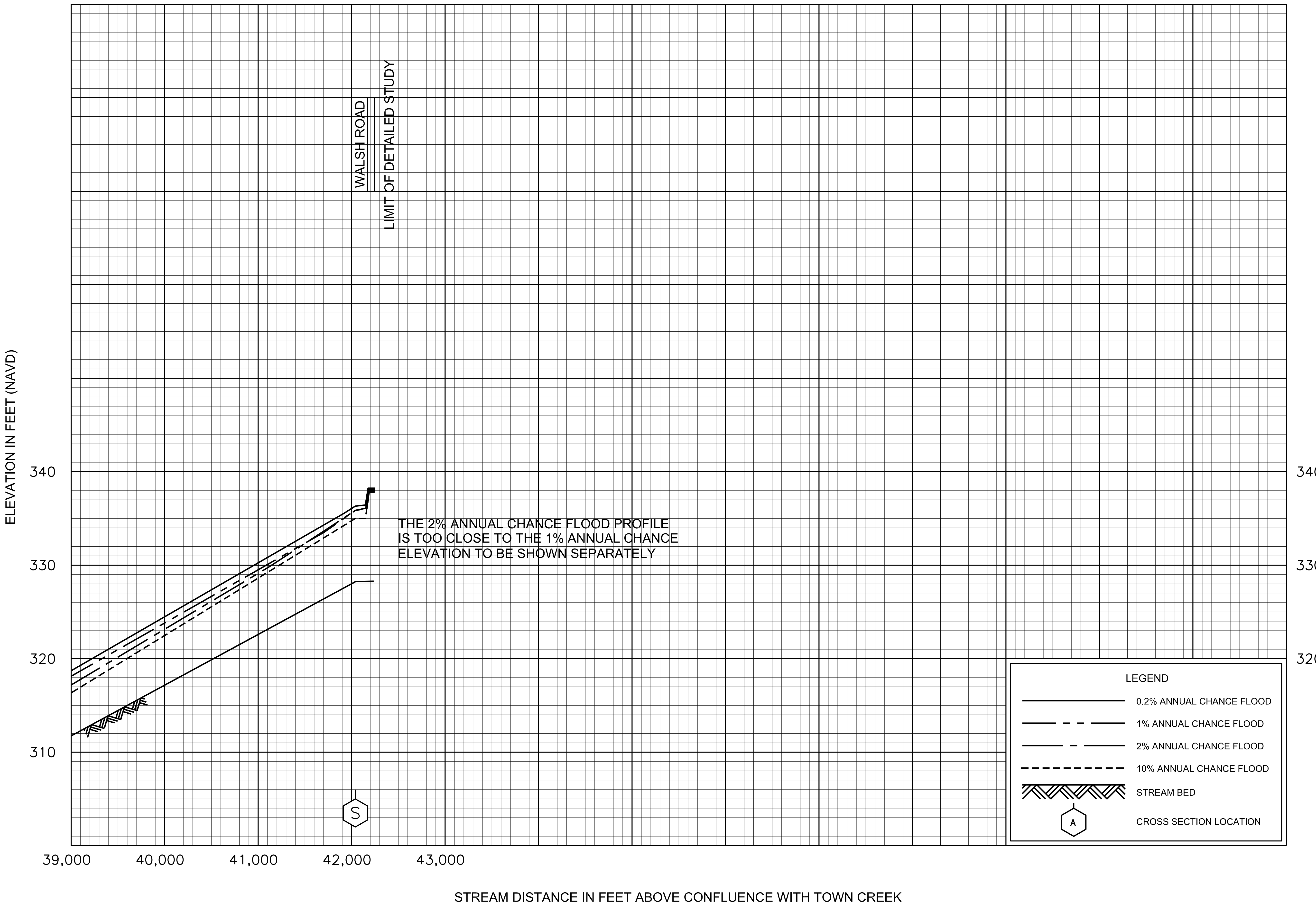


FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

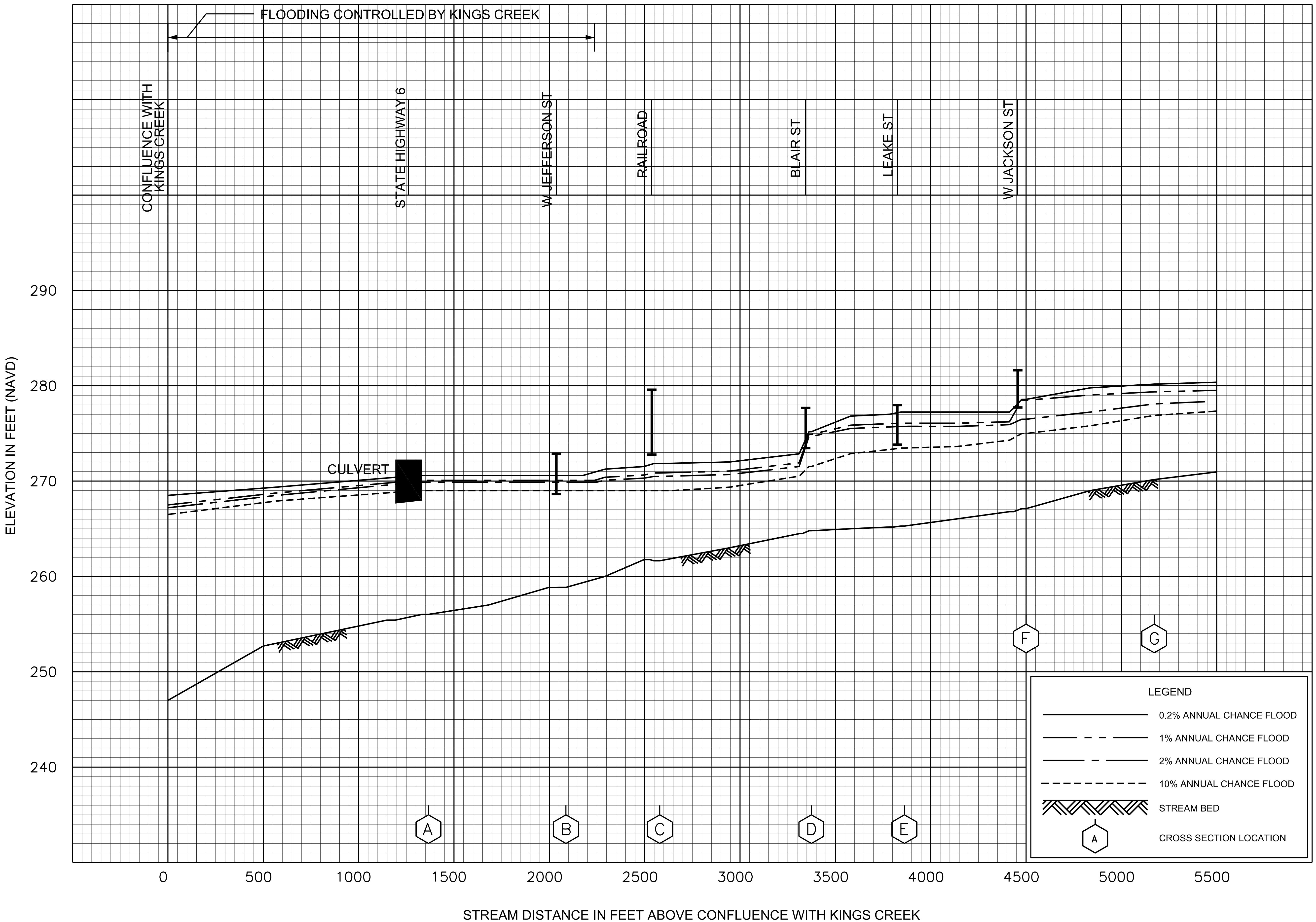


FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

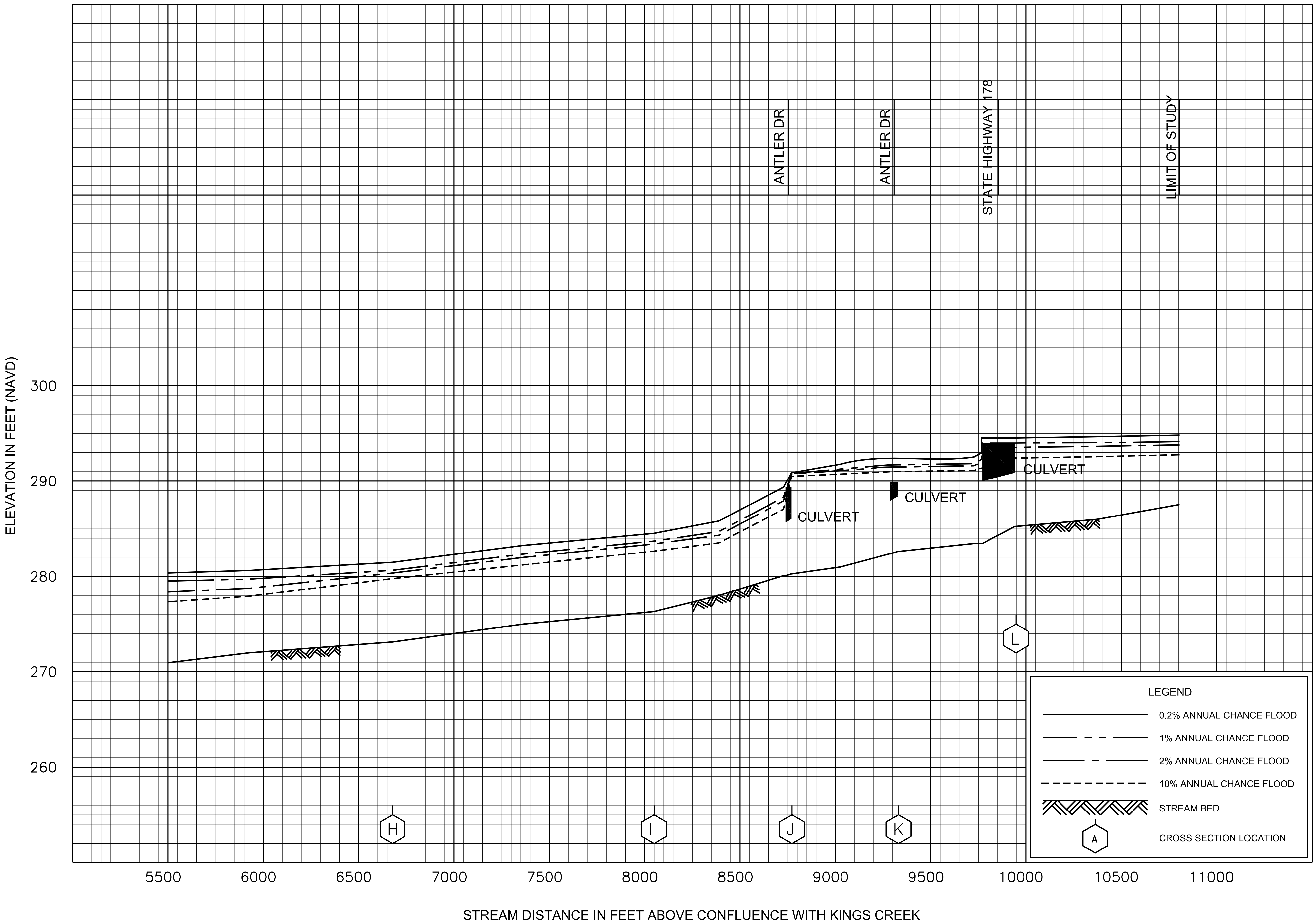
KINGS CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

27P



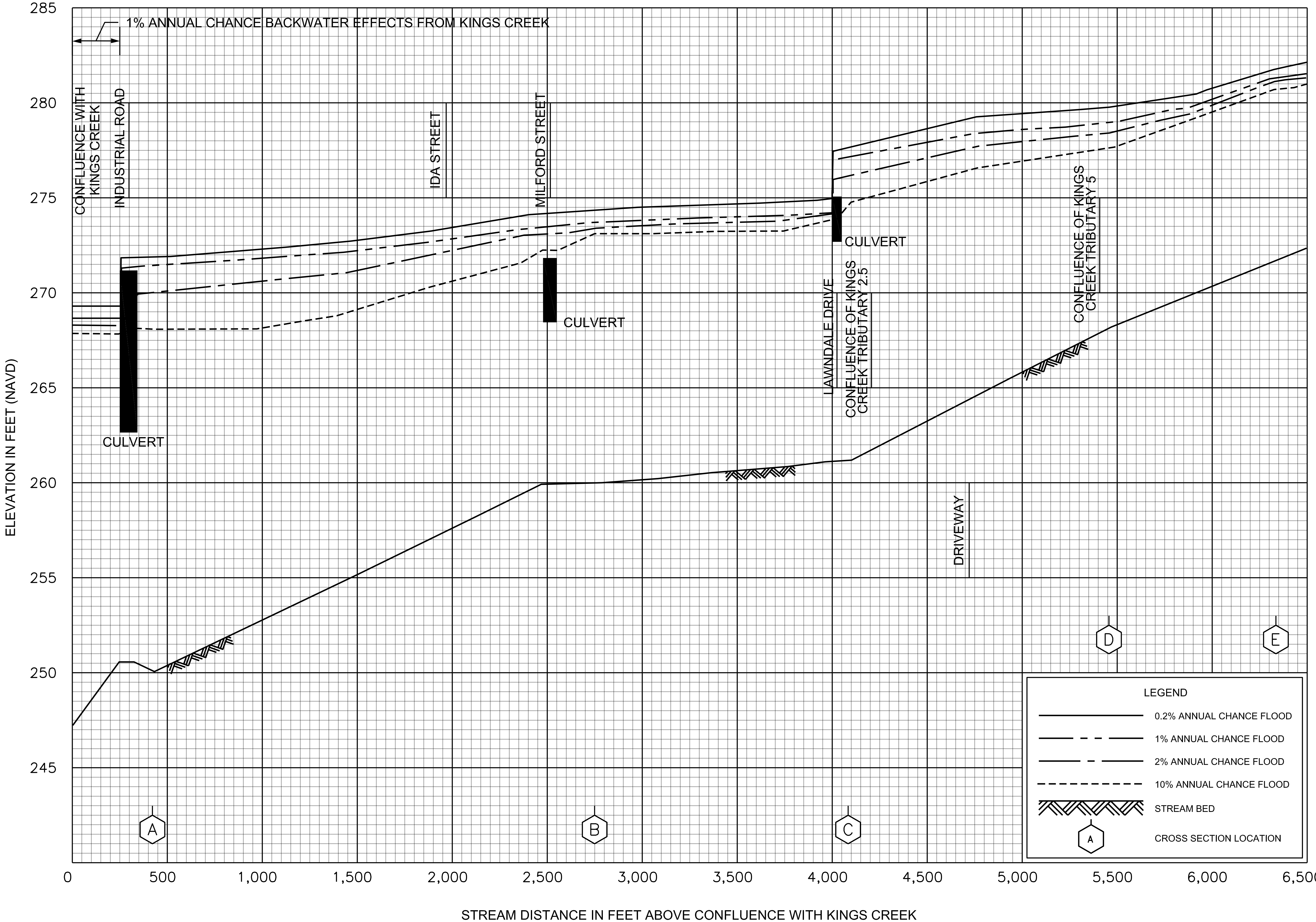
FLOOD PROFILES

KINGS CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

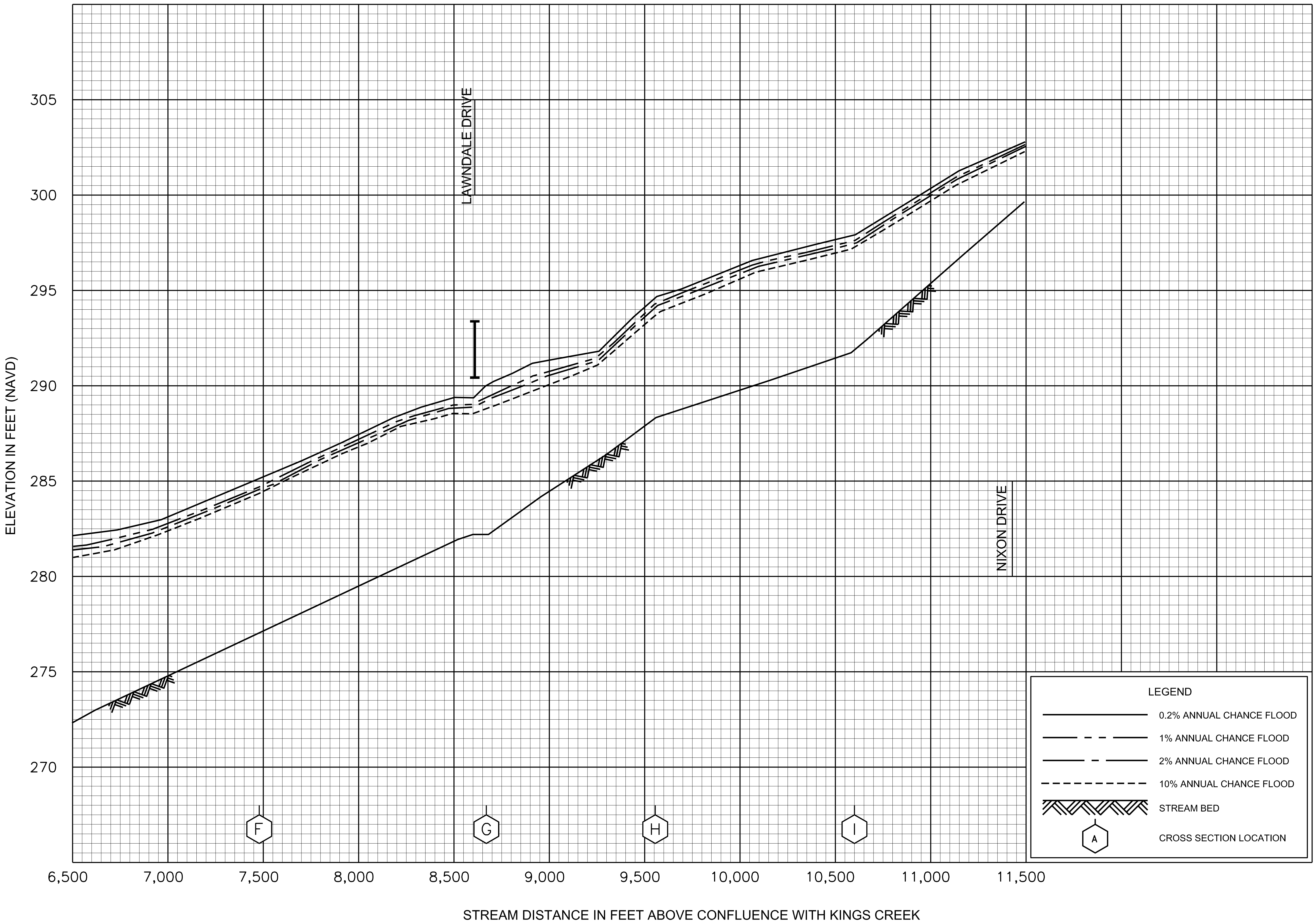


FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



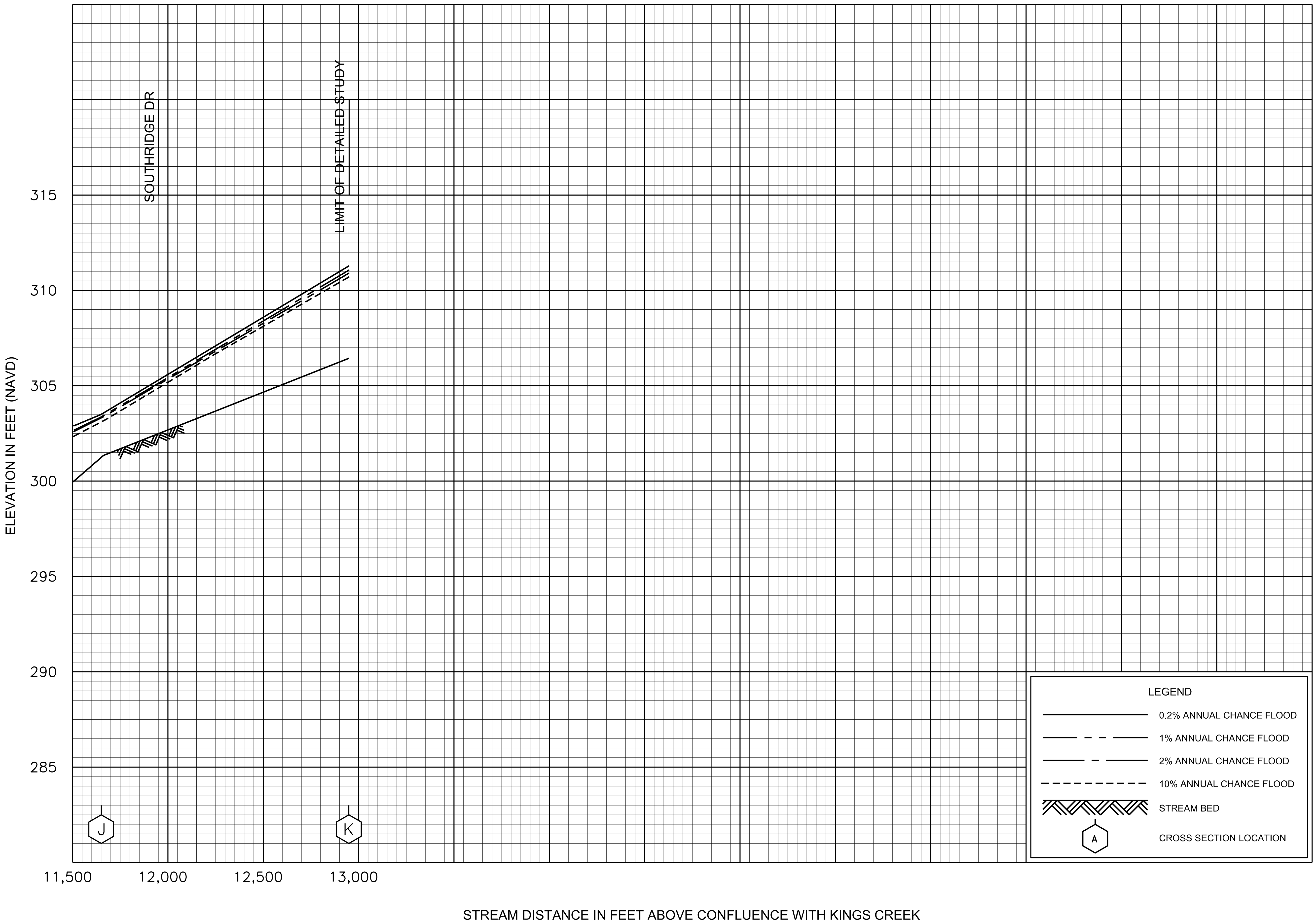
FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



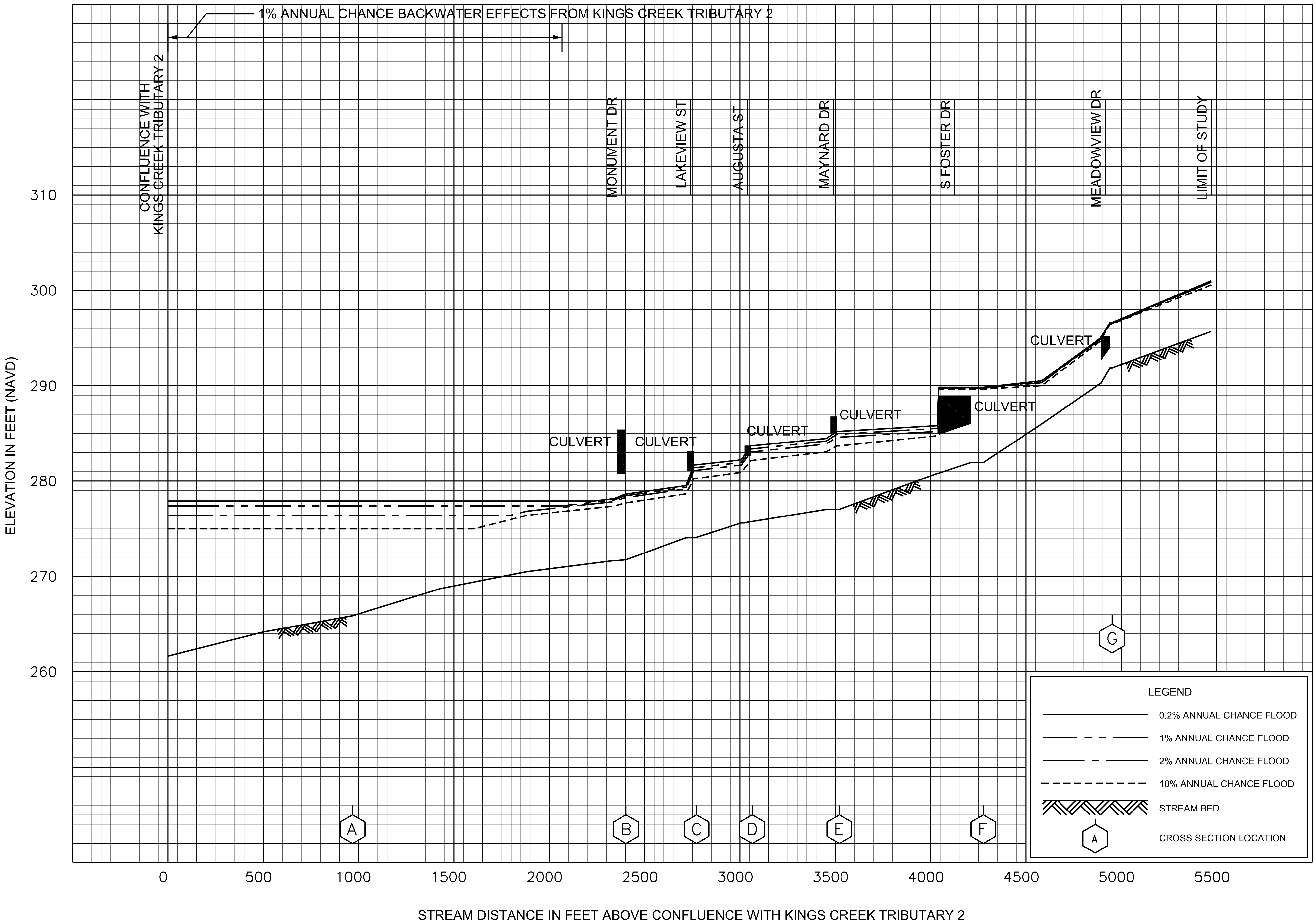
FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



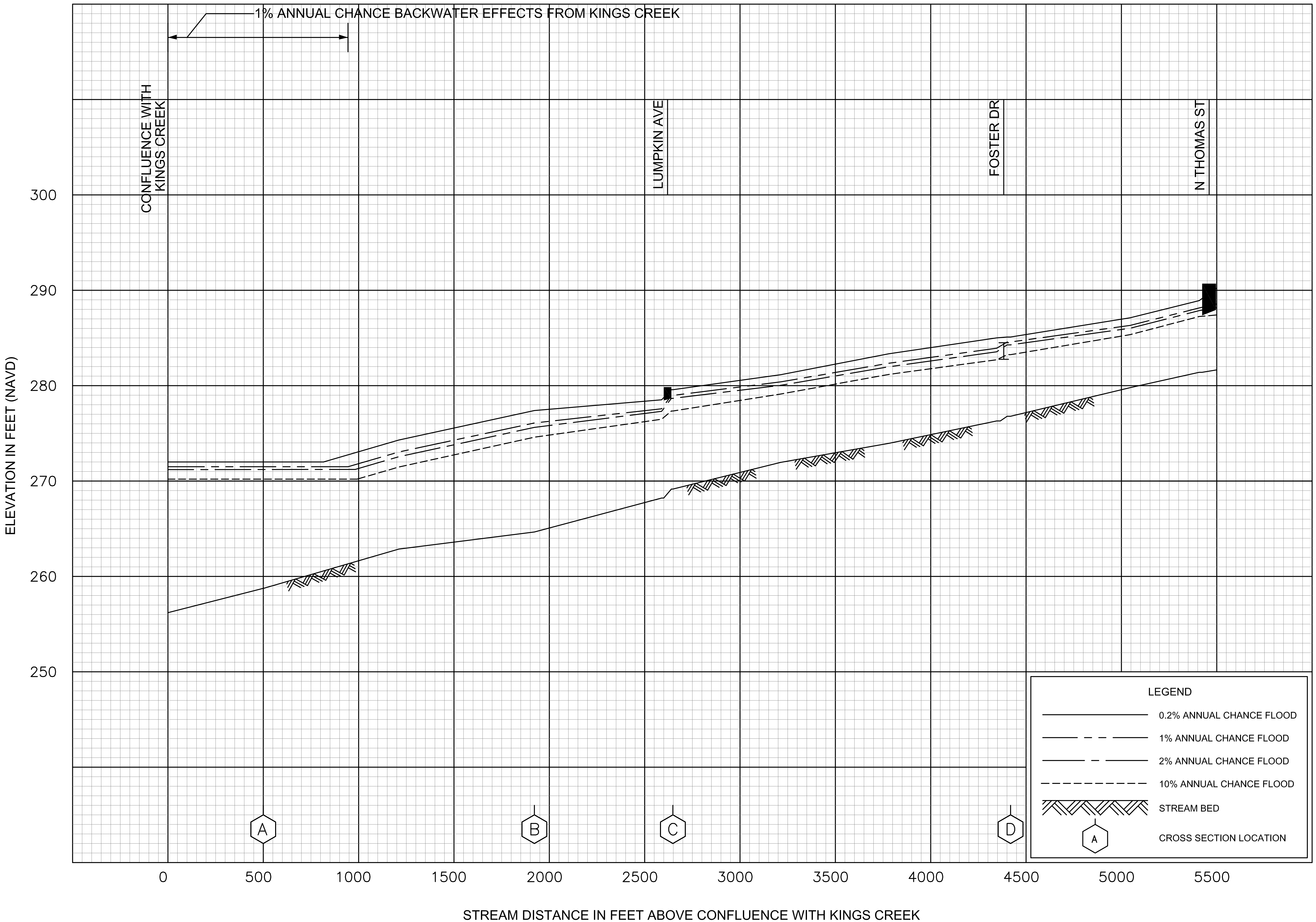
FLOOD PROFILES

KINGS CREEK TRIBUTARY 2.5

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

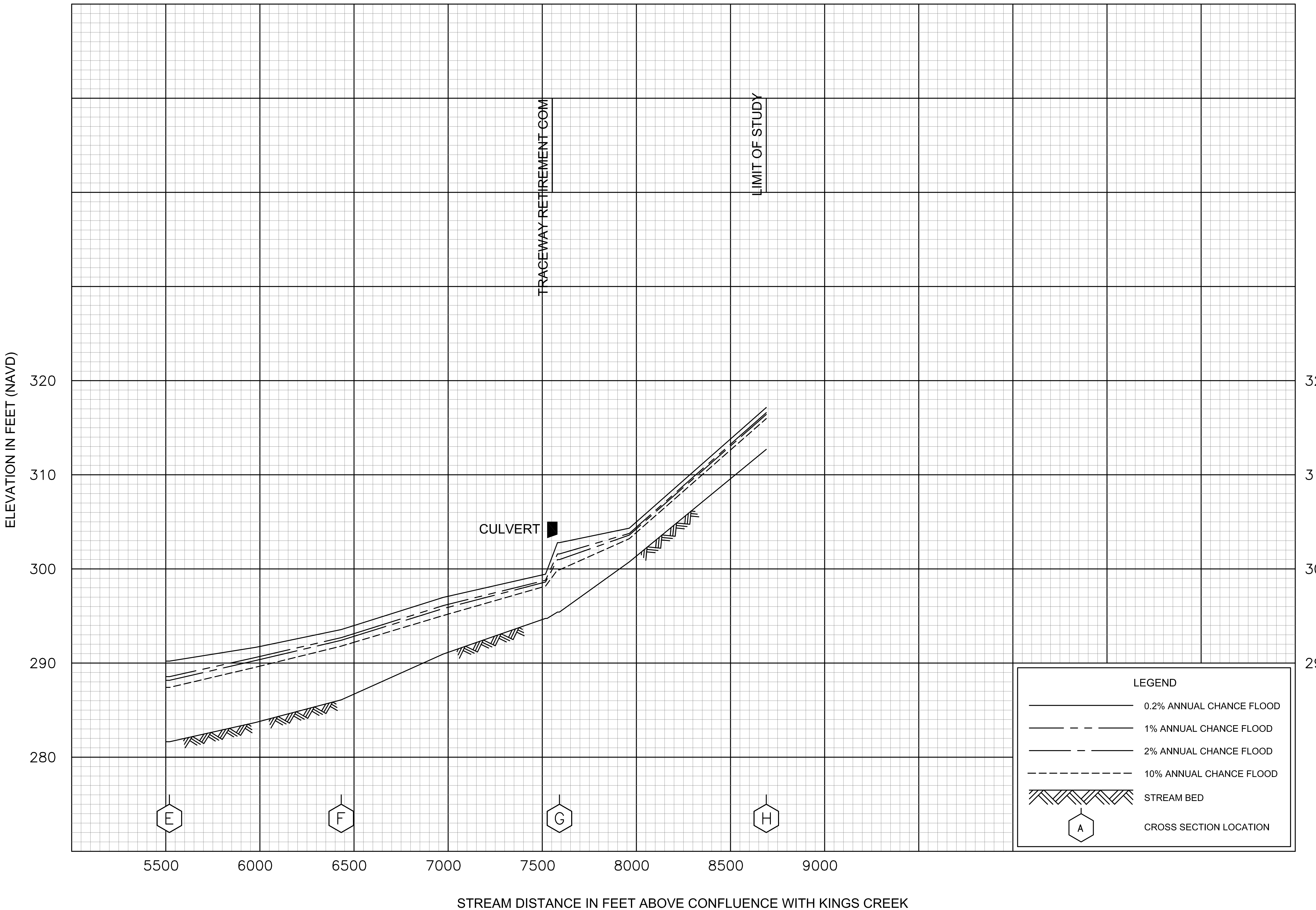


FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



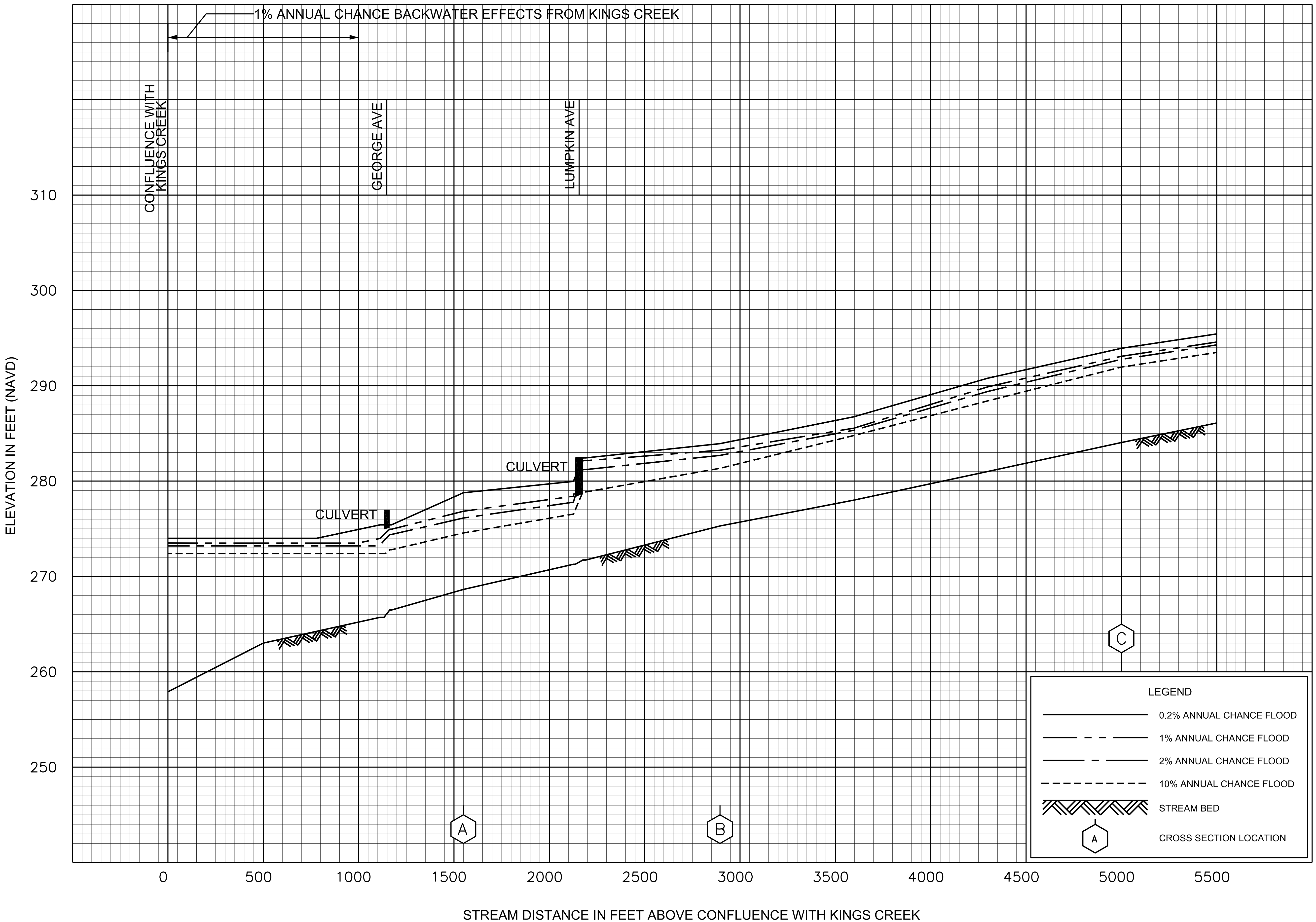
FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

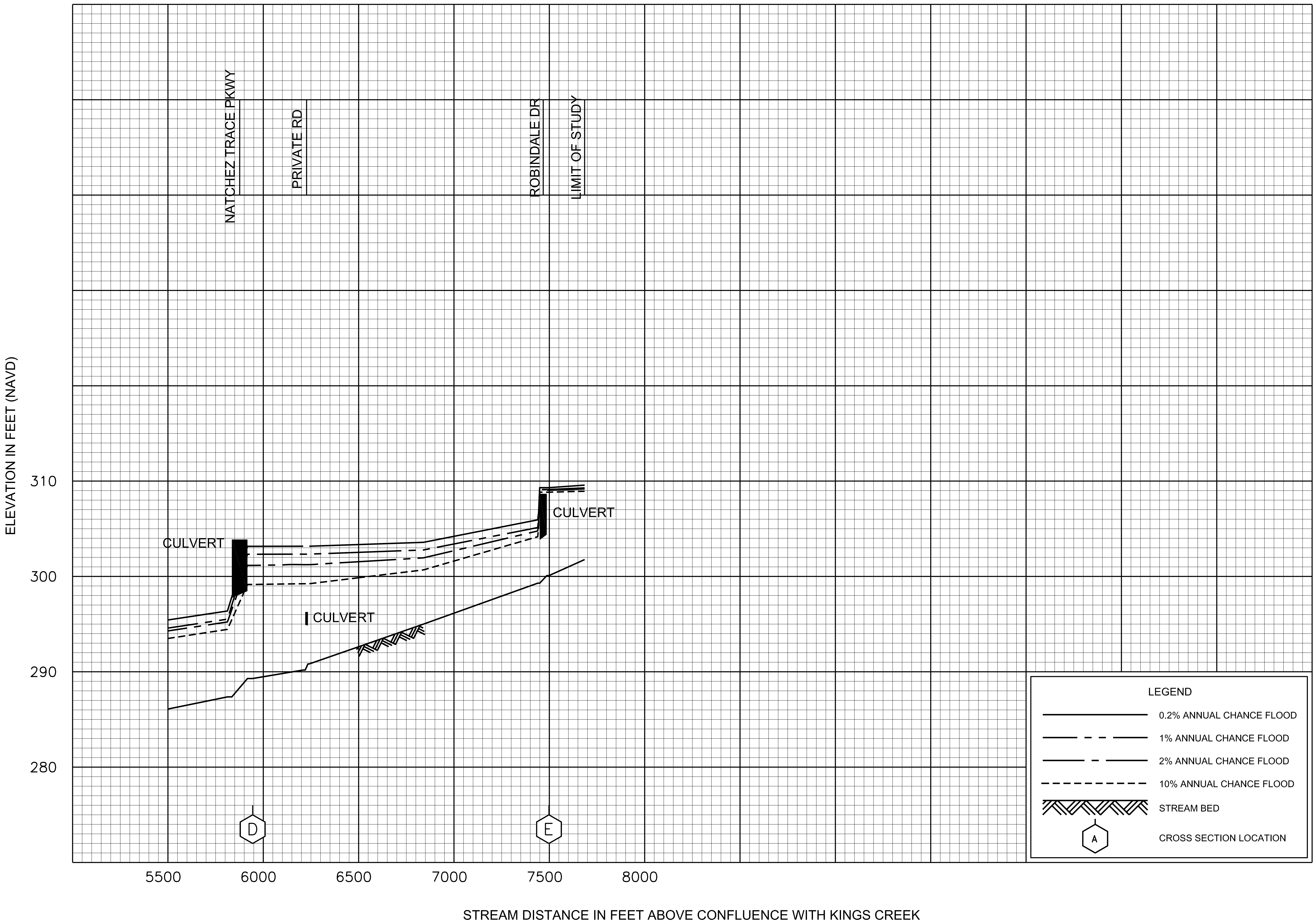


FLOOD PROFILES

KINGS CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



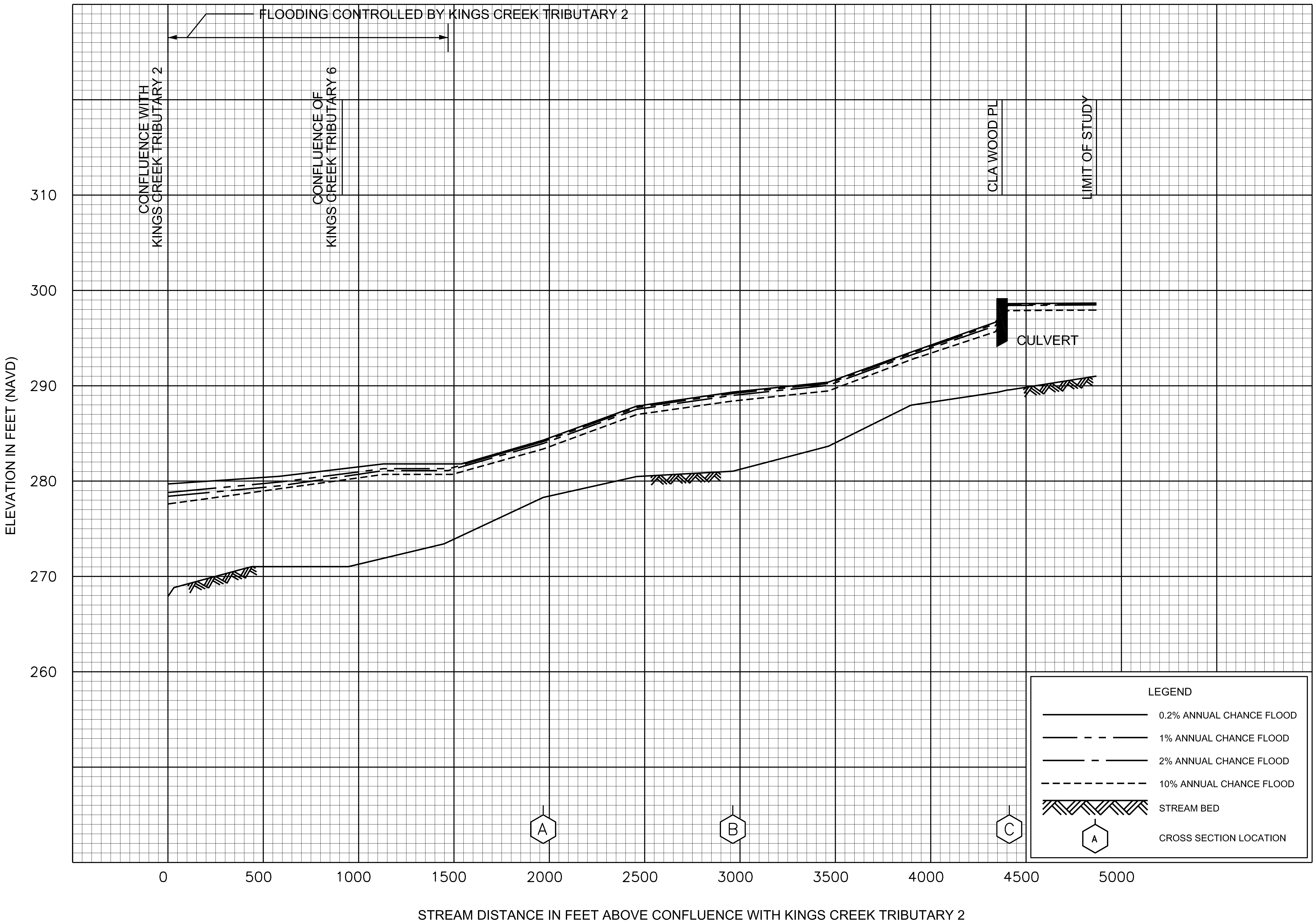
FLOOD PROFILES

KINGS CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

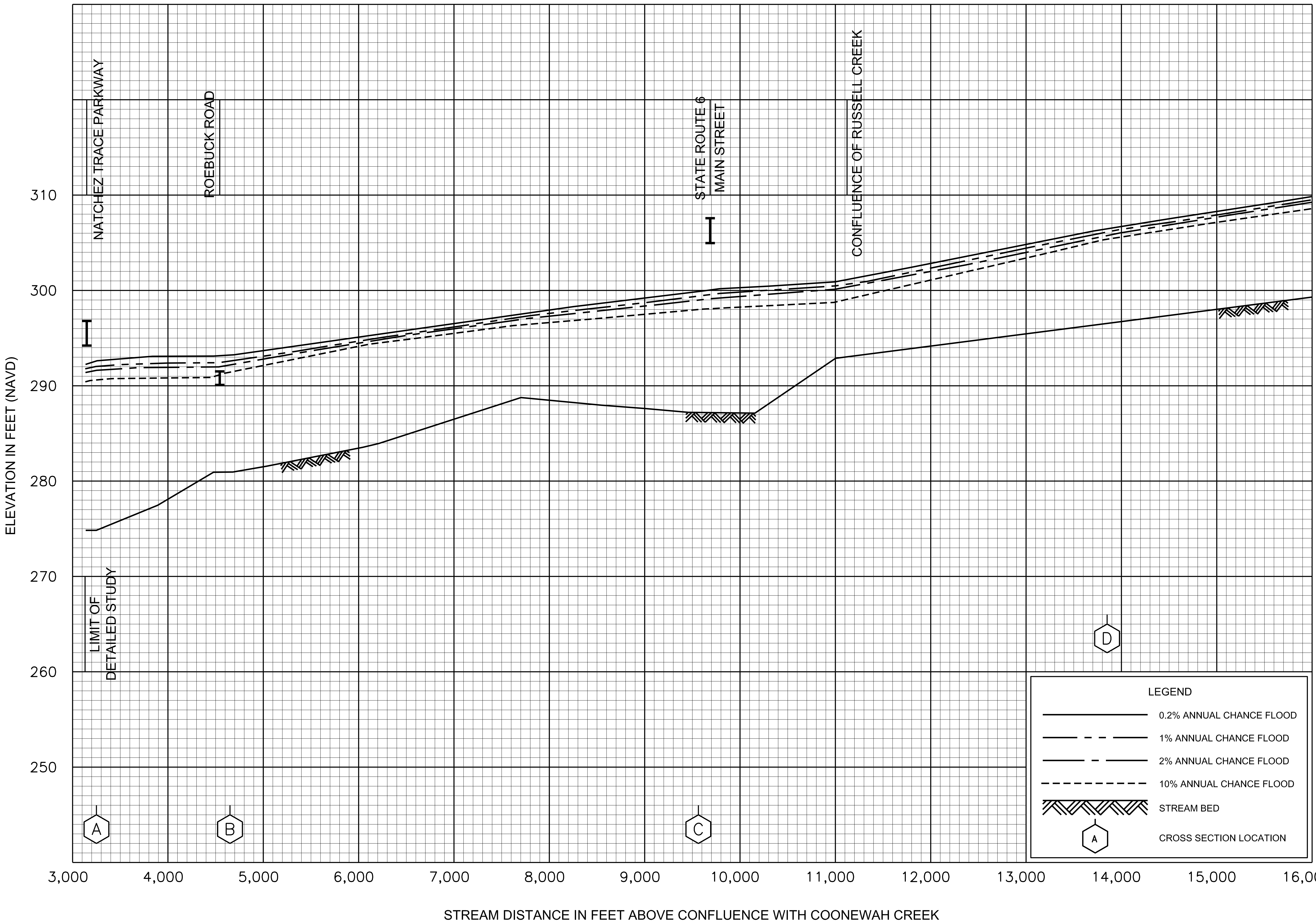


FLOOD PROFILES

KINGS CREEK TRIBUTARY 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



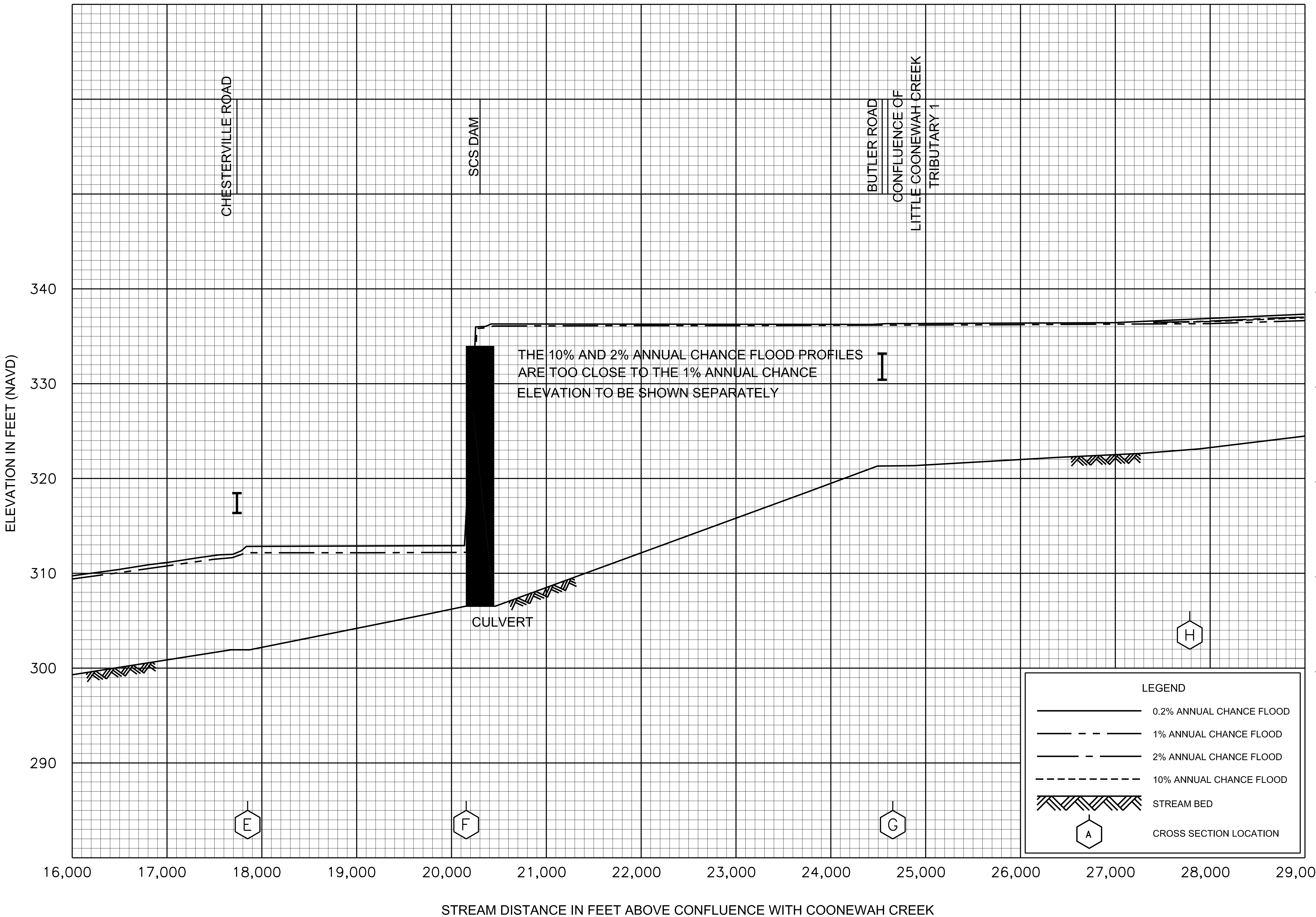
FLOOD PROFILES

LITTLE COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

38P



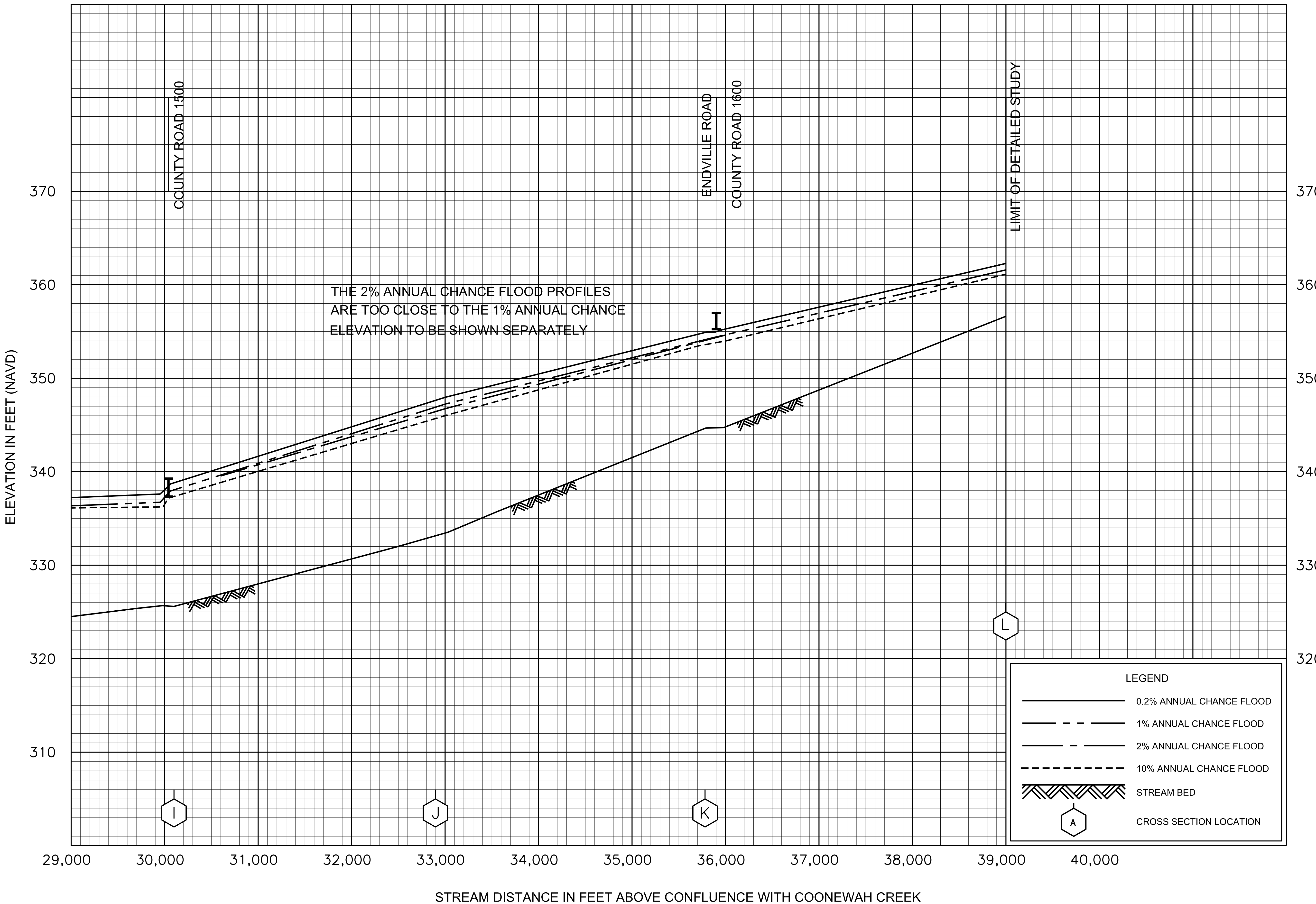
FLOOD PROFILES

LITTLE COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



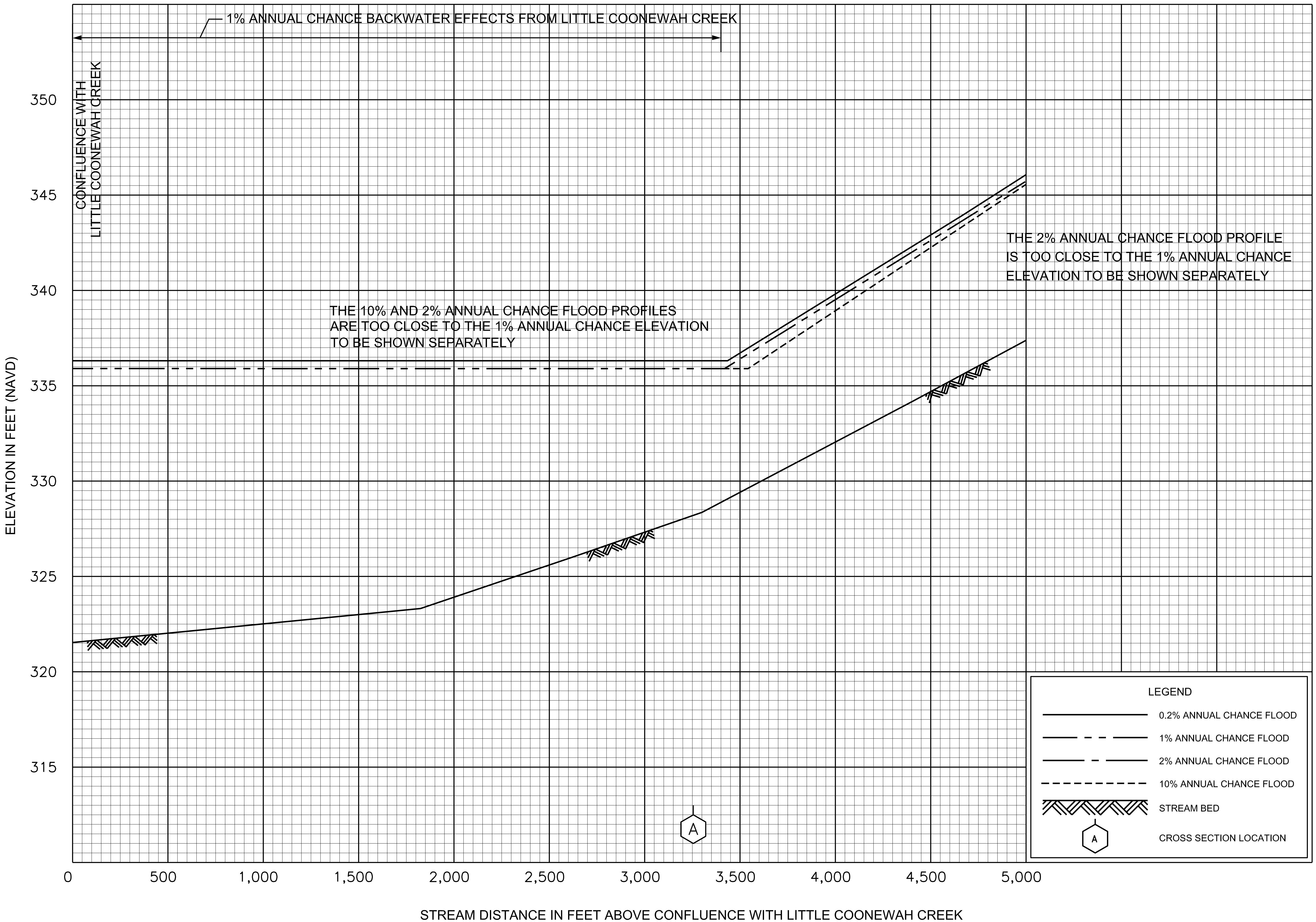
FLOOD PROFILES

LITTLE COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



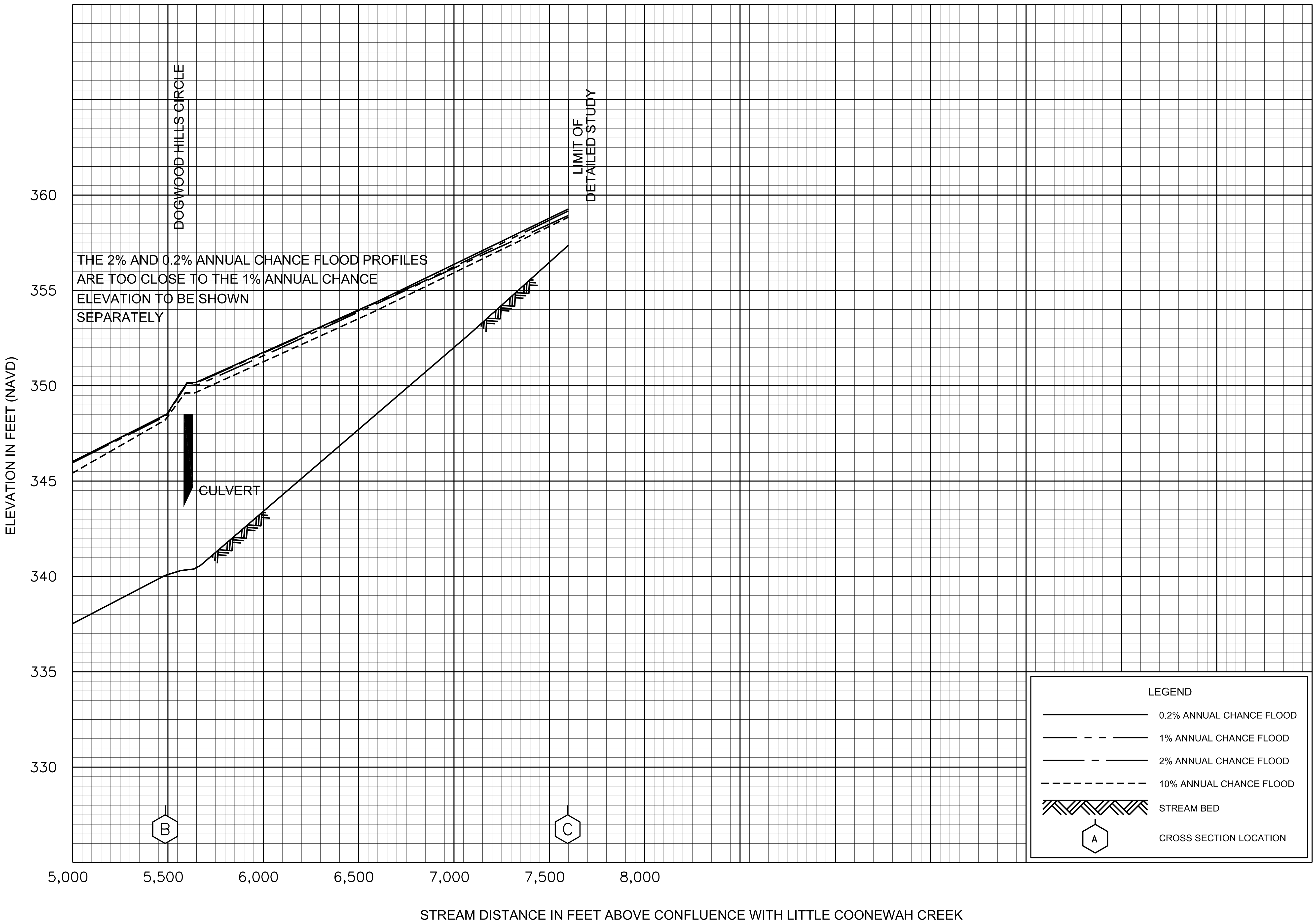
FLOOD PROFILES

LITTLE COONEWAH CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

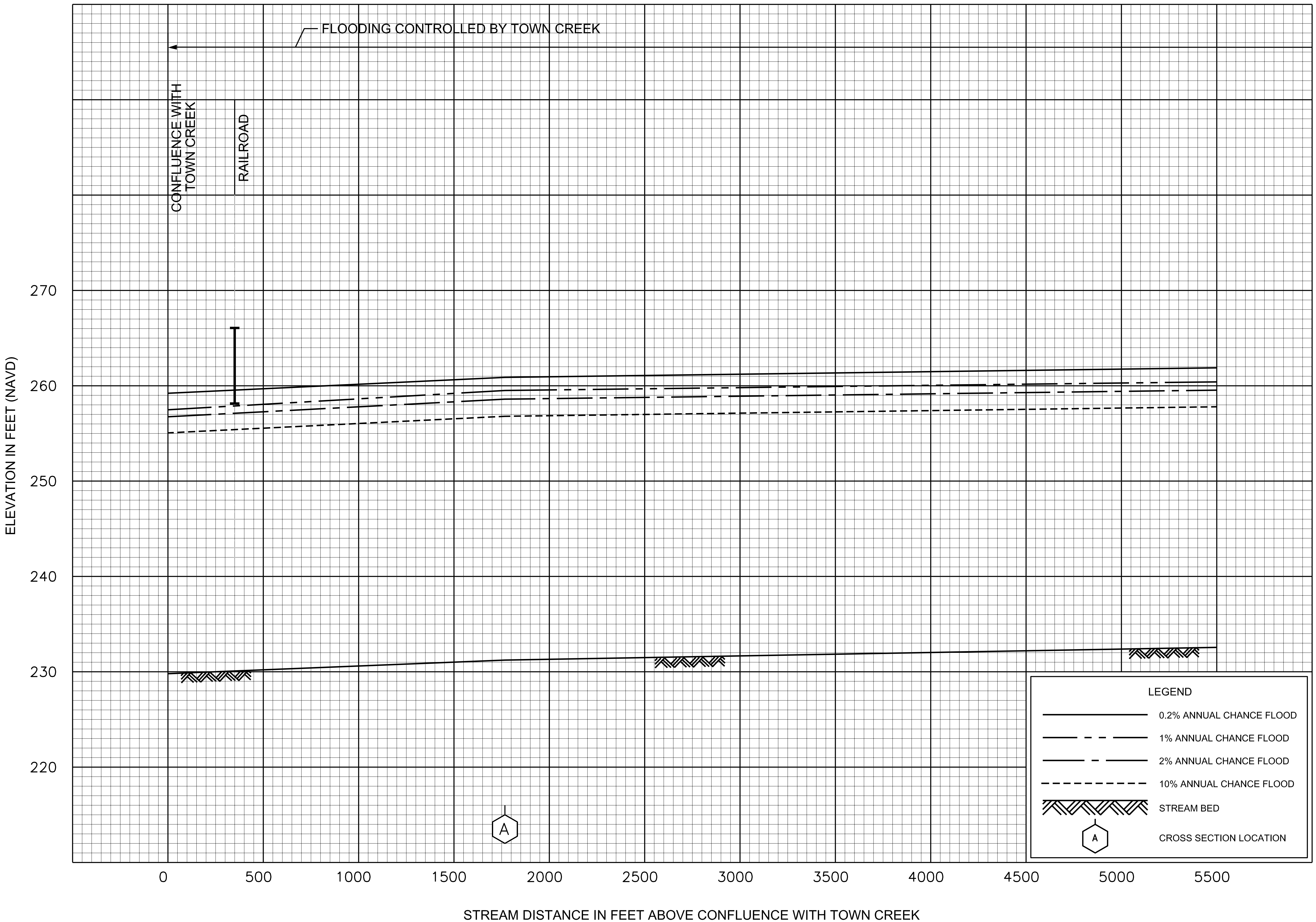


FLOOD PROFILES

LITTLE COONEWAH CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

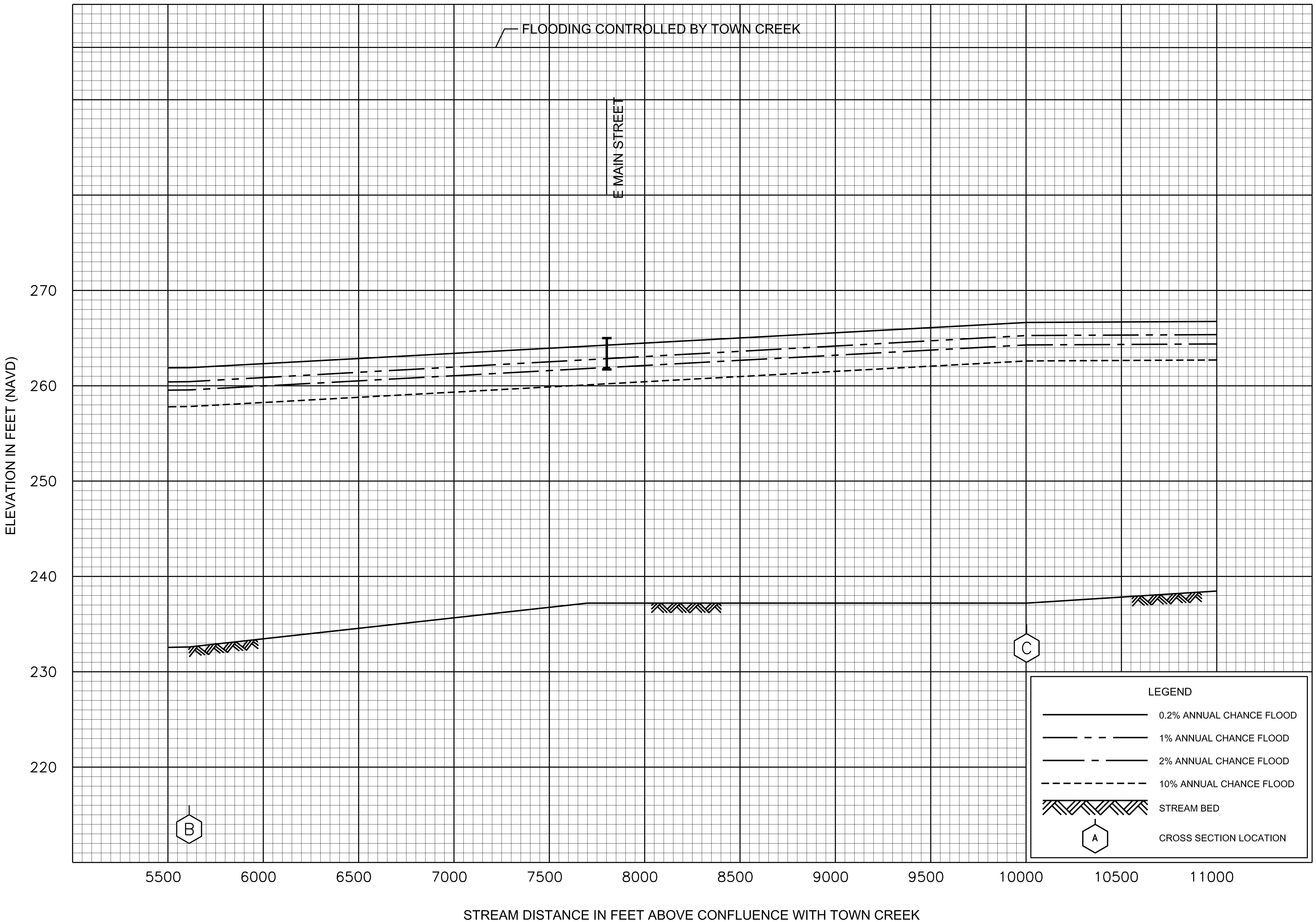


FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



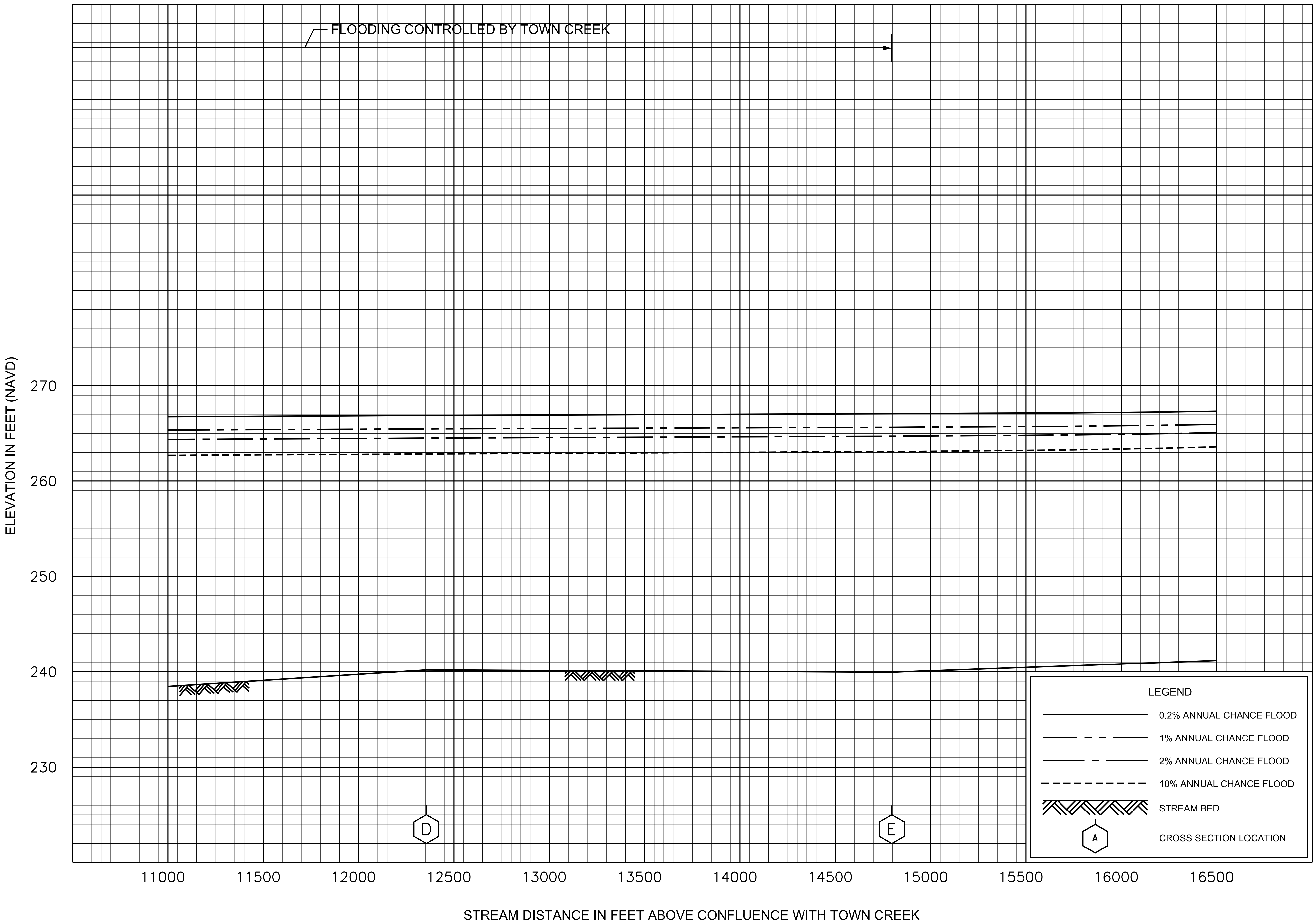
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

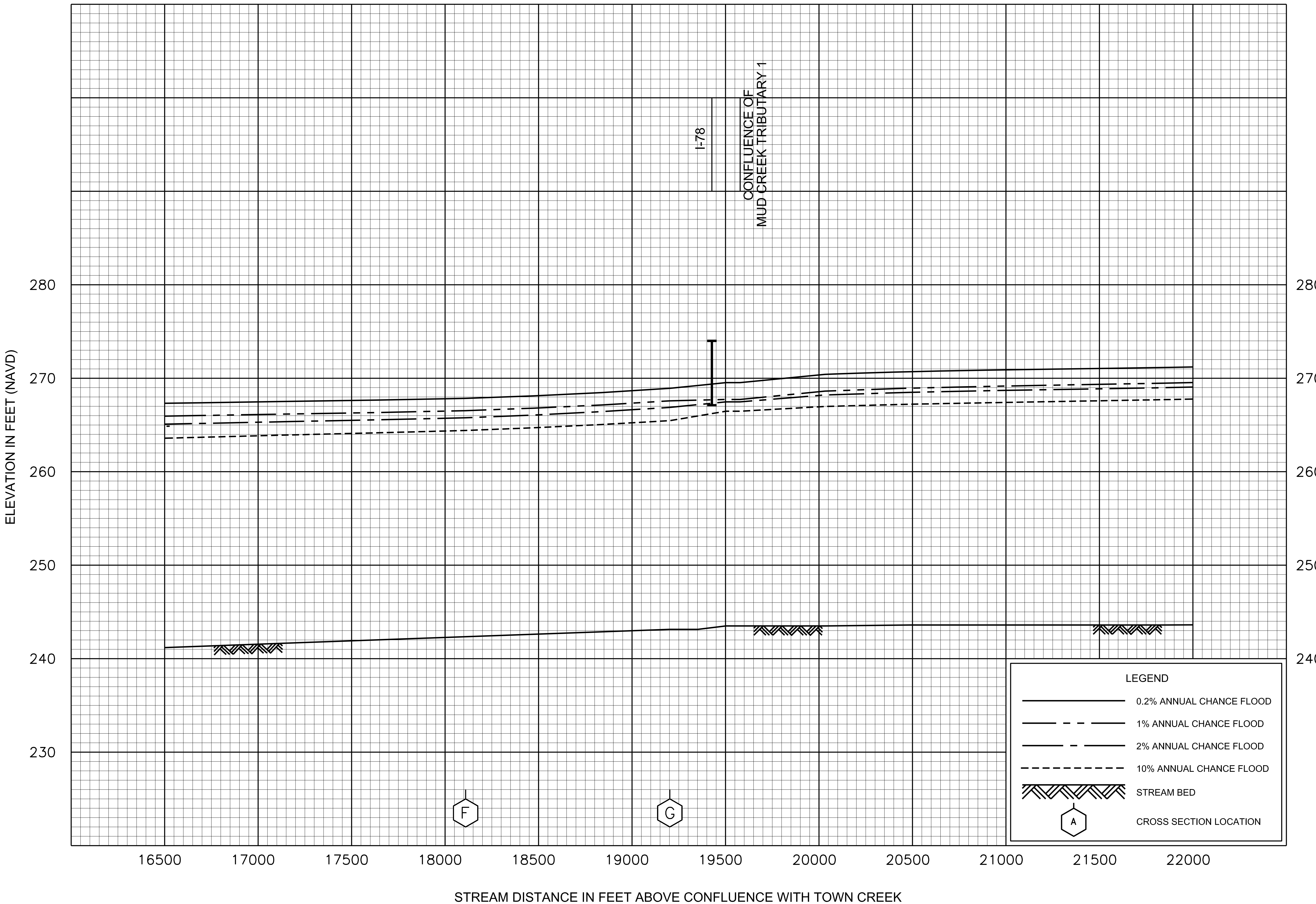


FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



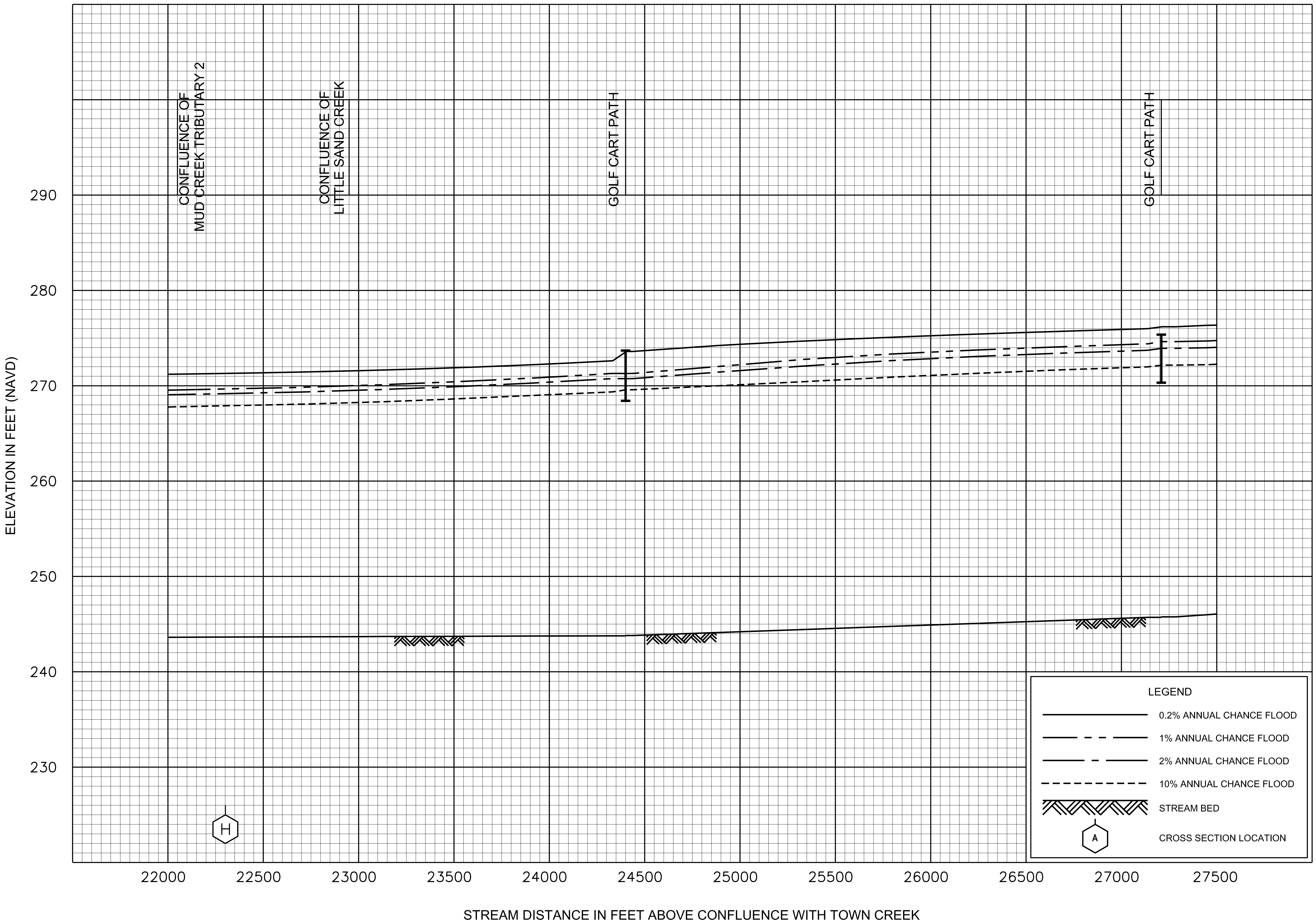
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



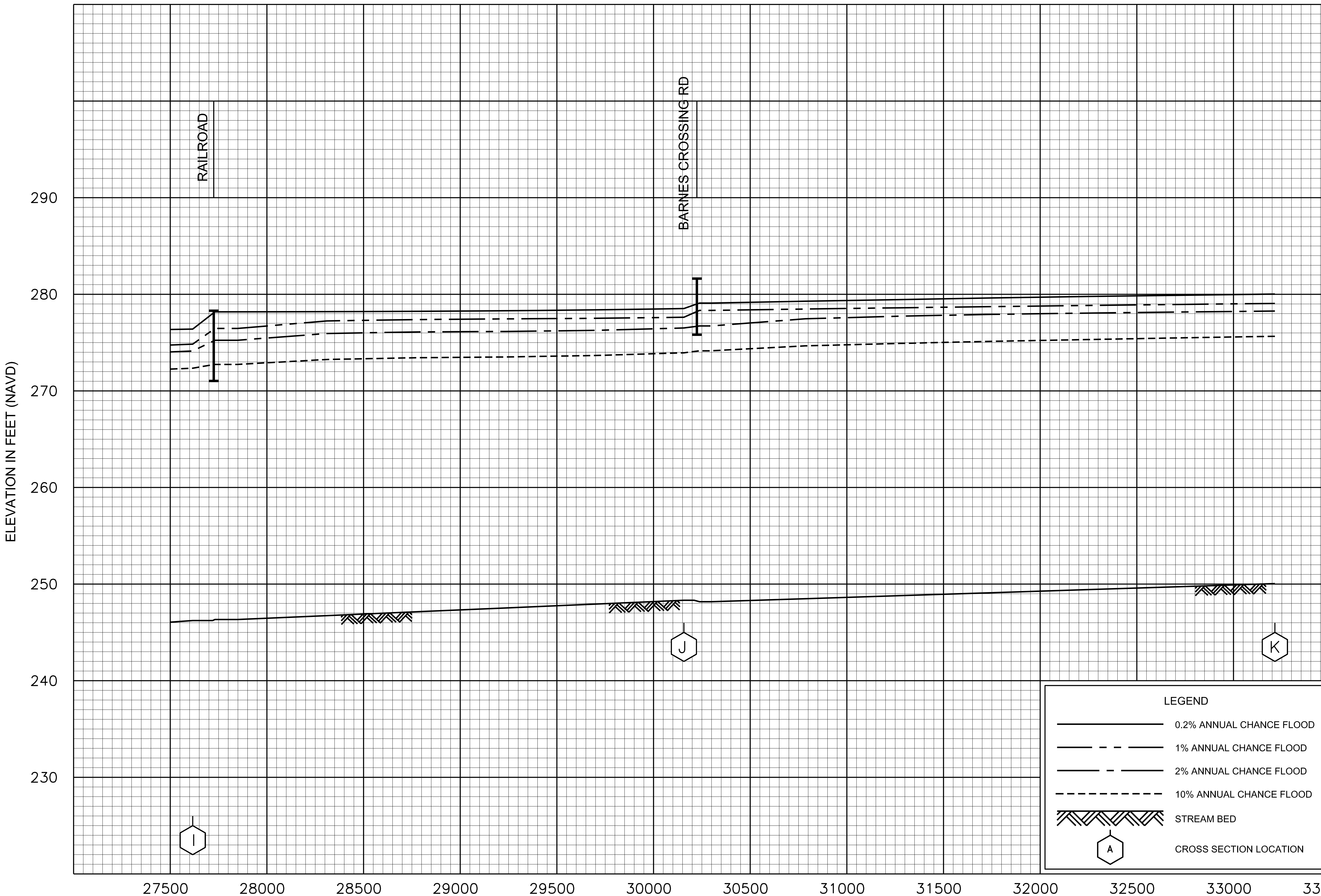
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



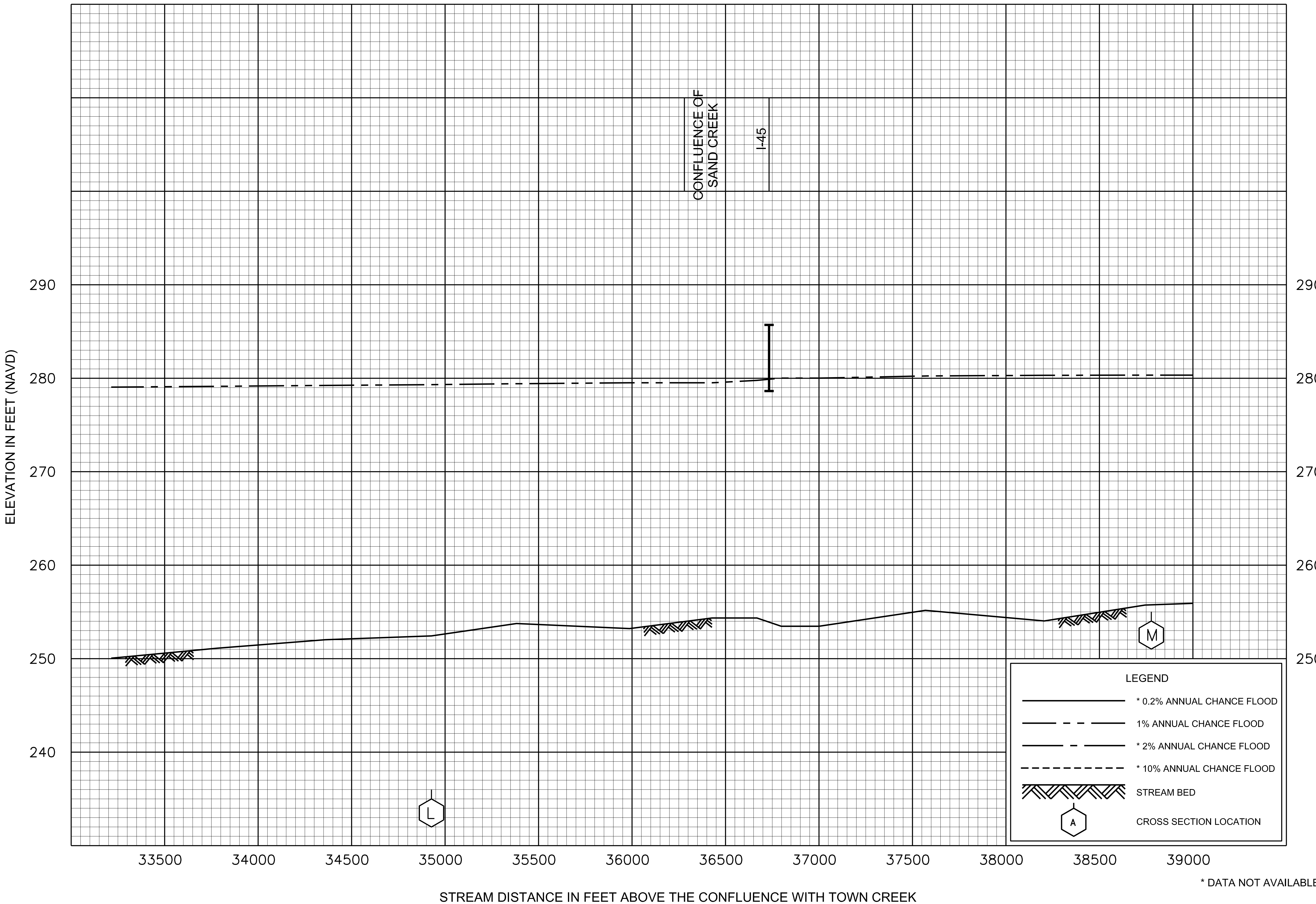
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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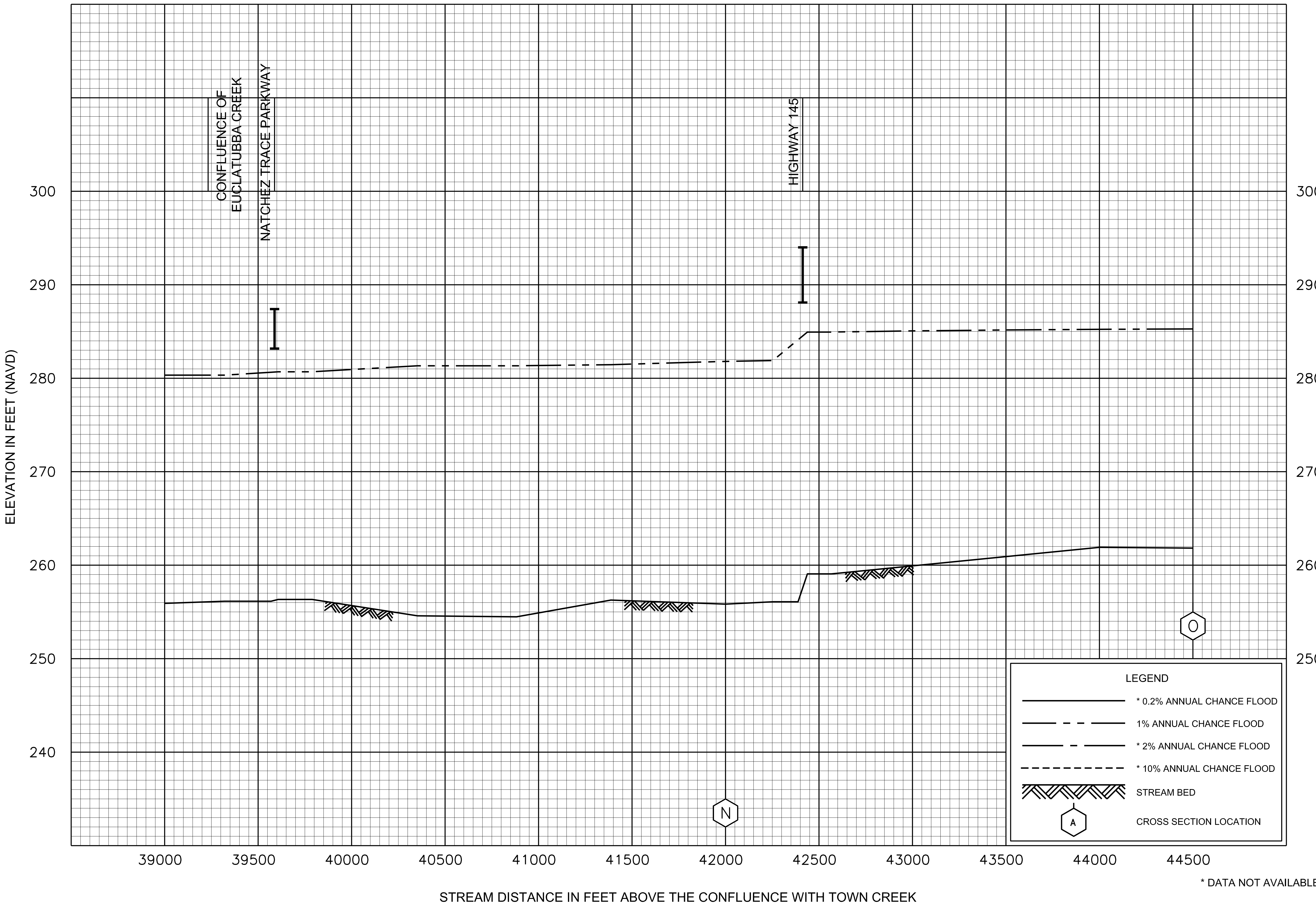
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

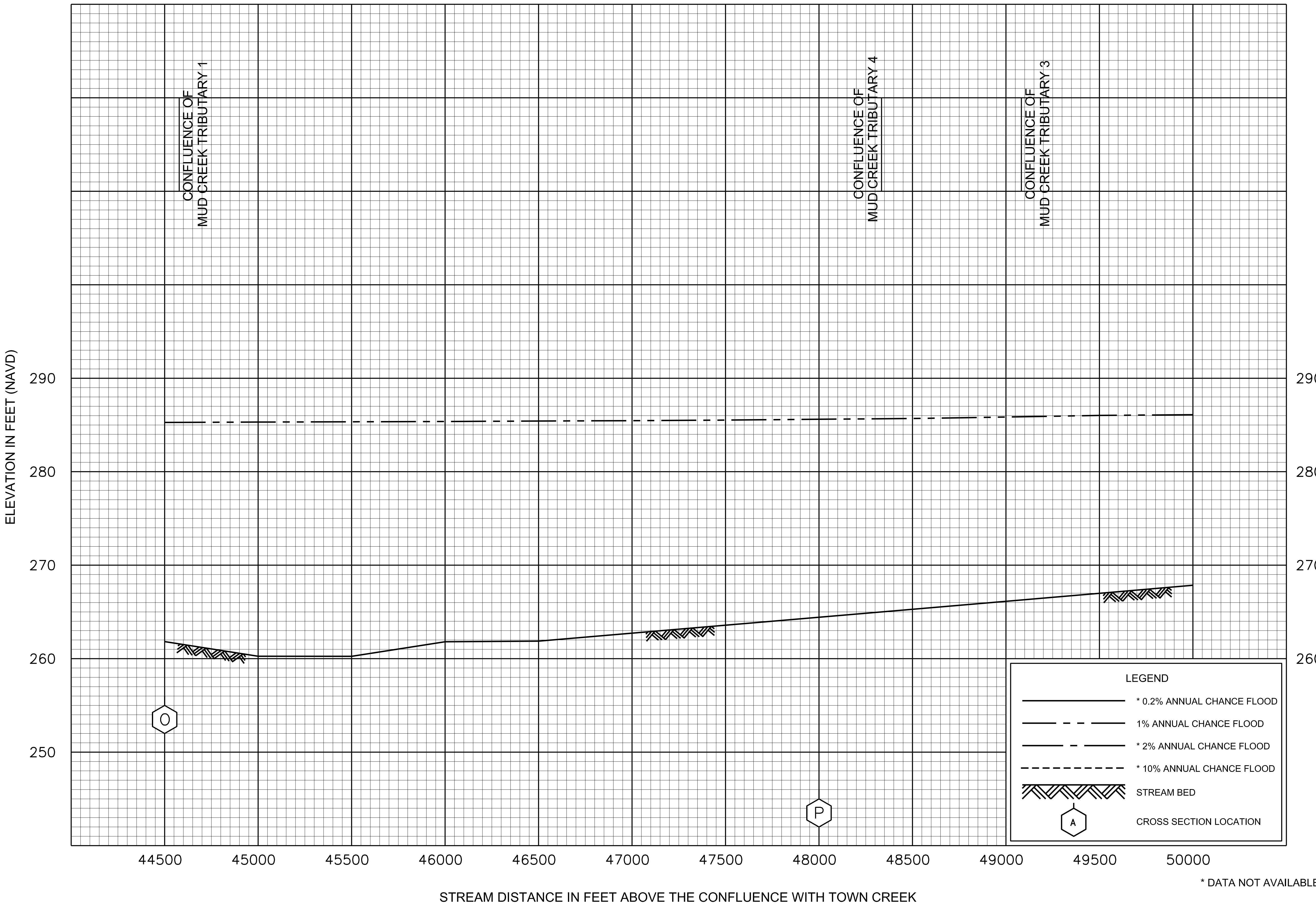


FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

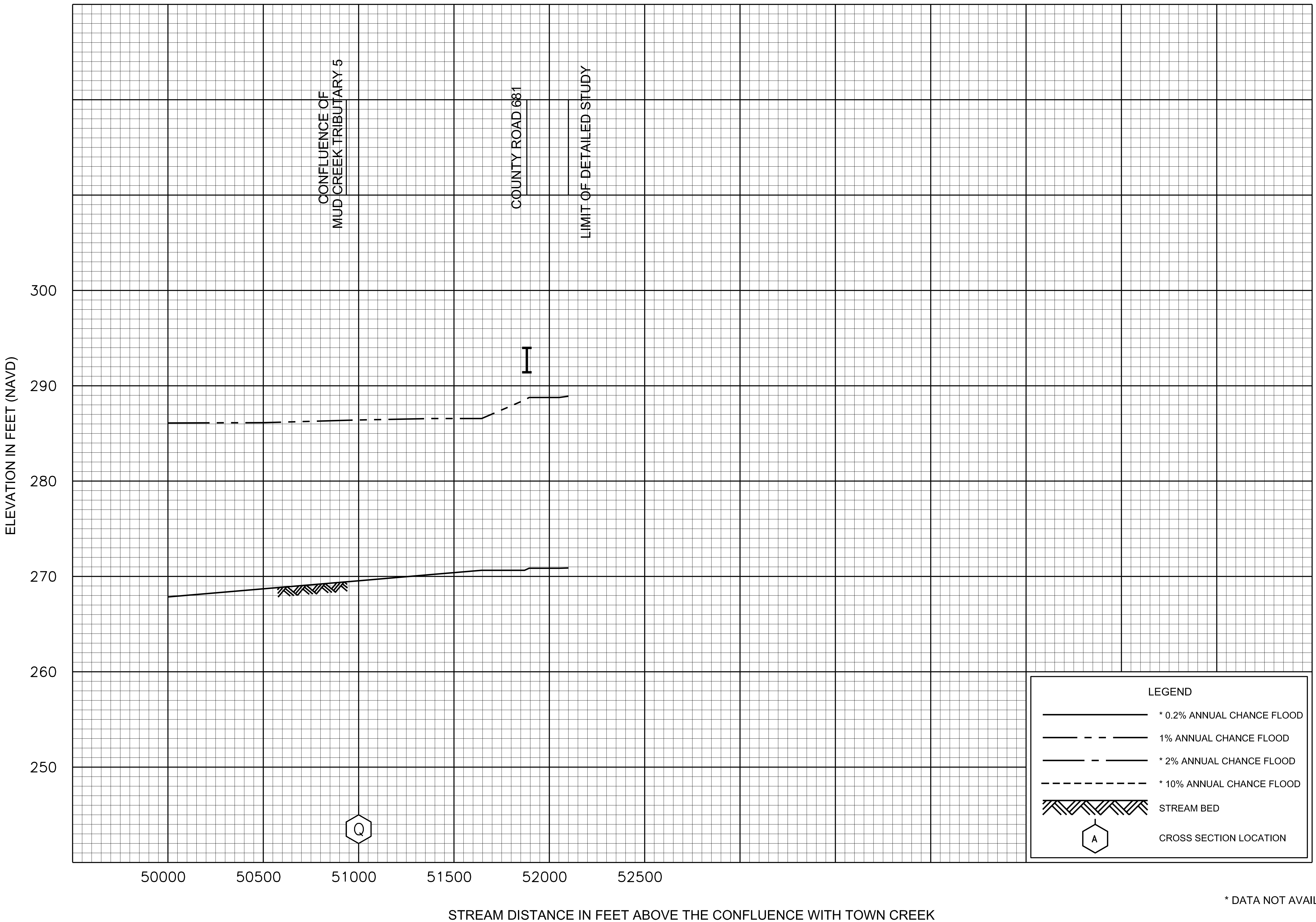


FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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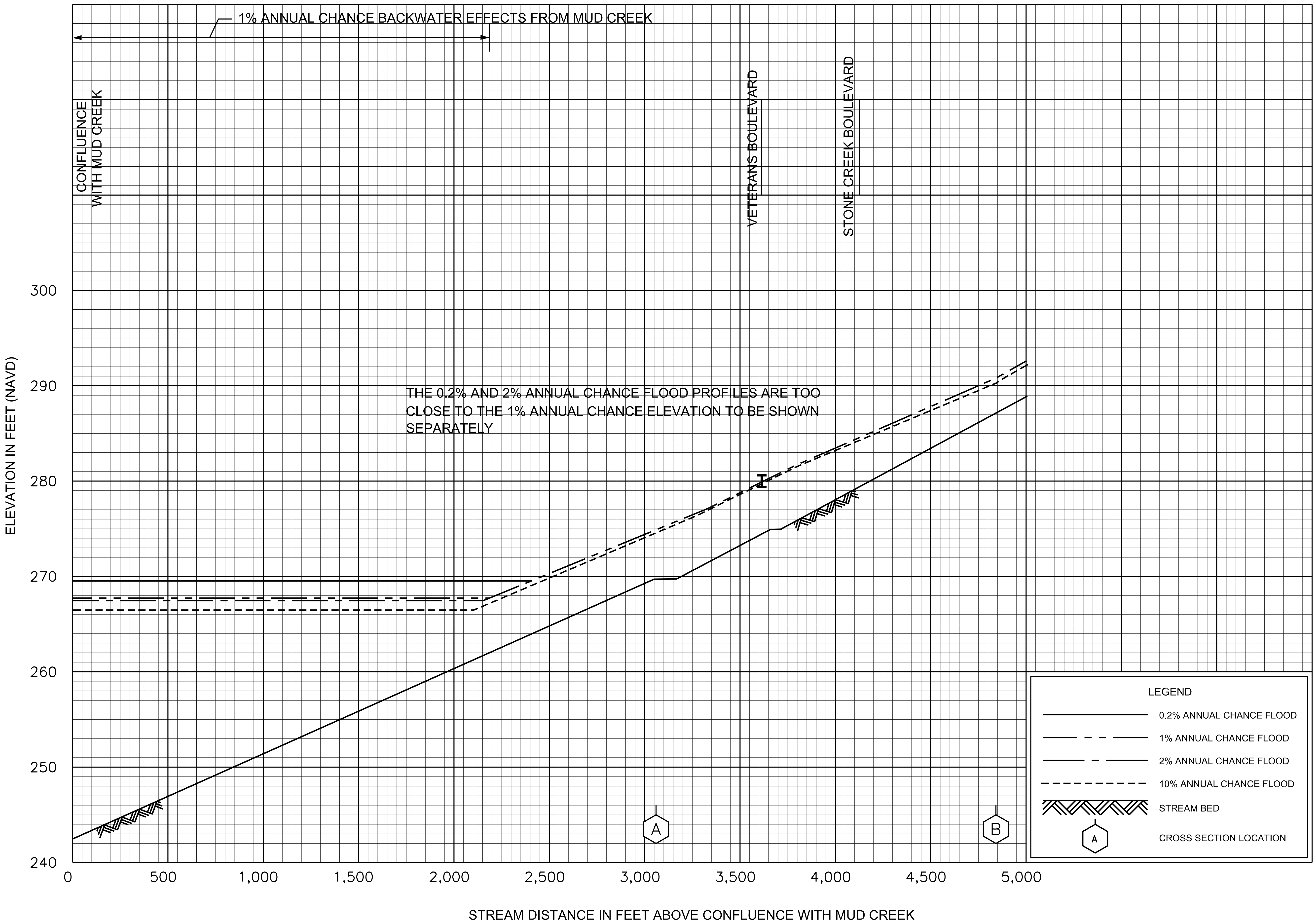
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

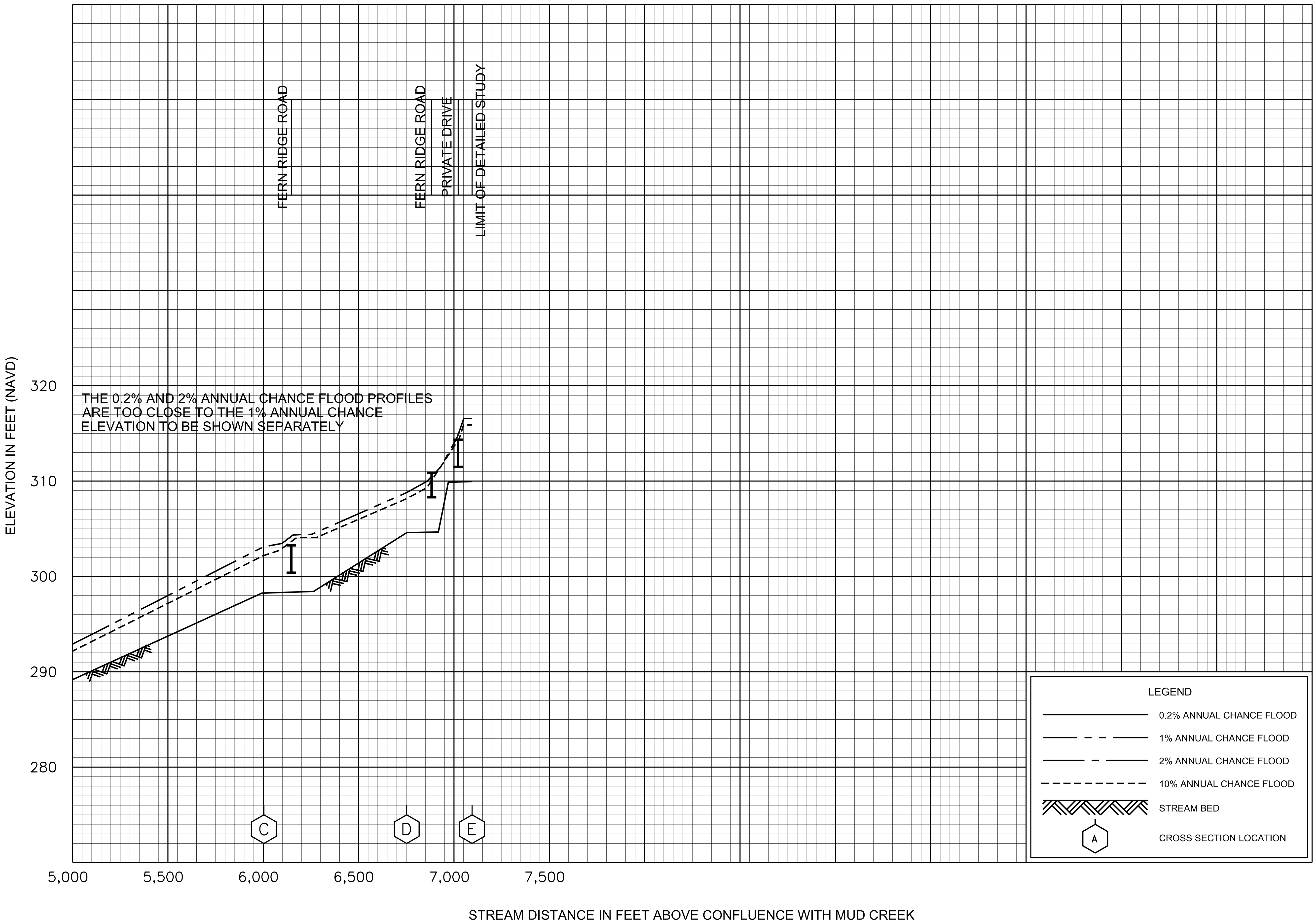


FLOOD PROFILES

MUD CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



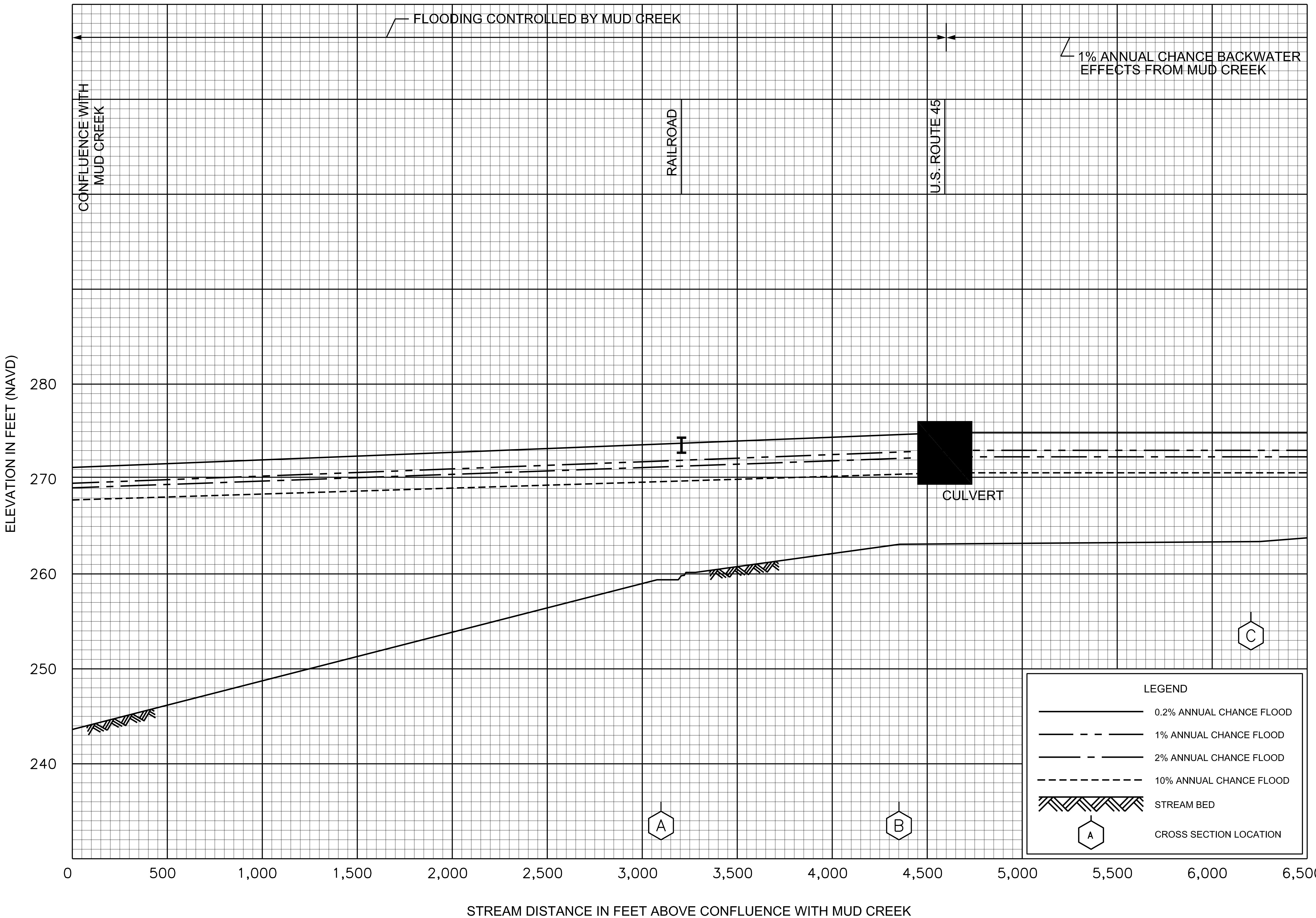
FLOOD PROFILES

MUD CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

54P

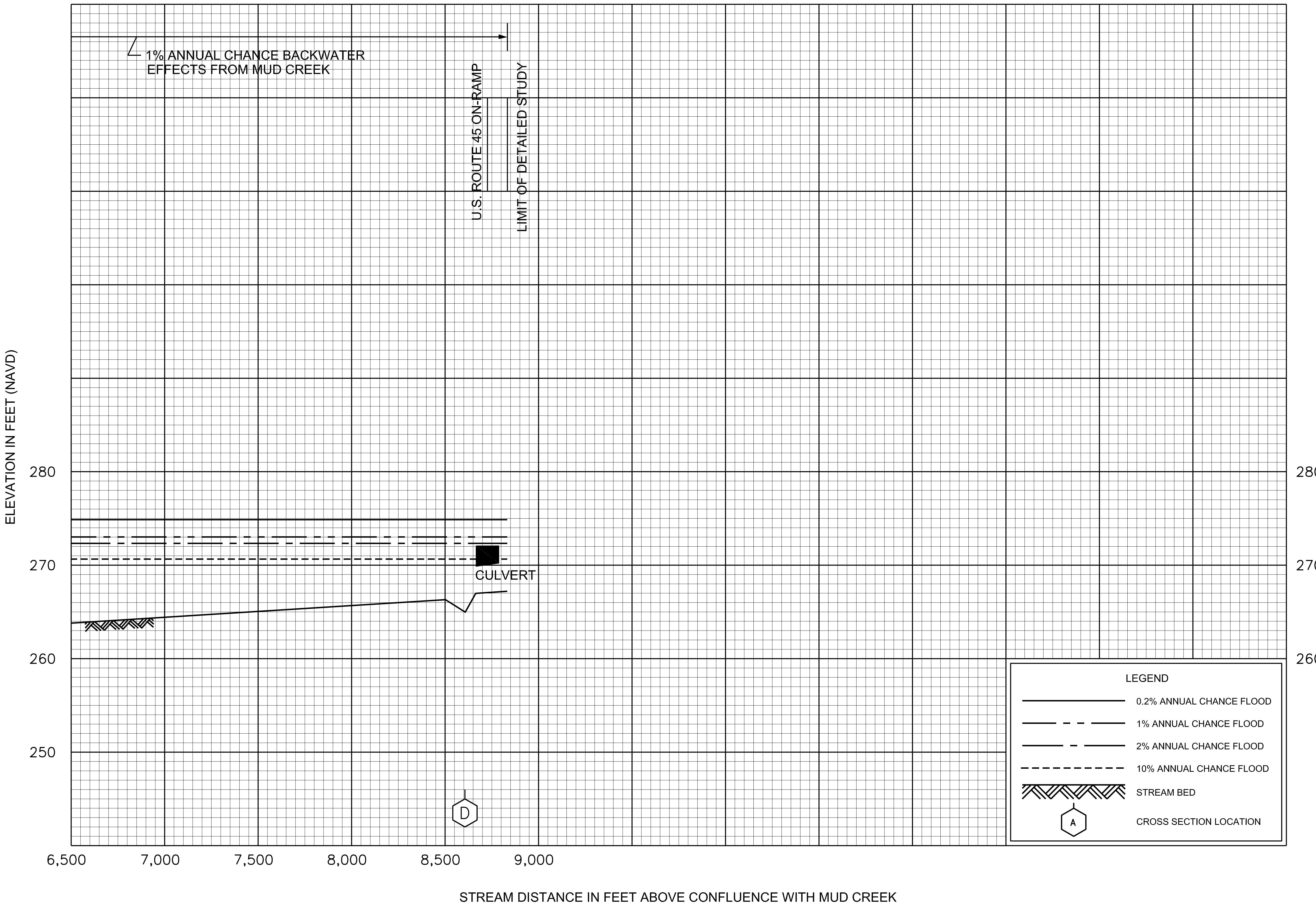


FLOOD PROFILES

MUD CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

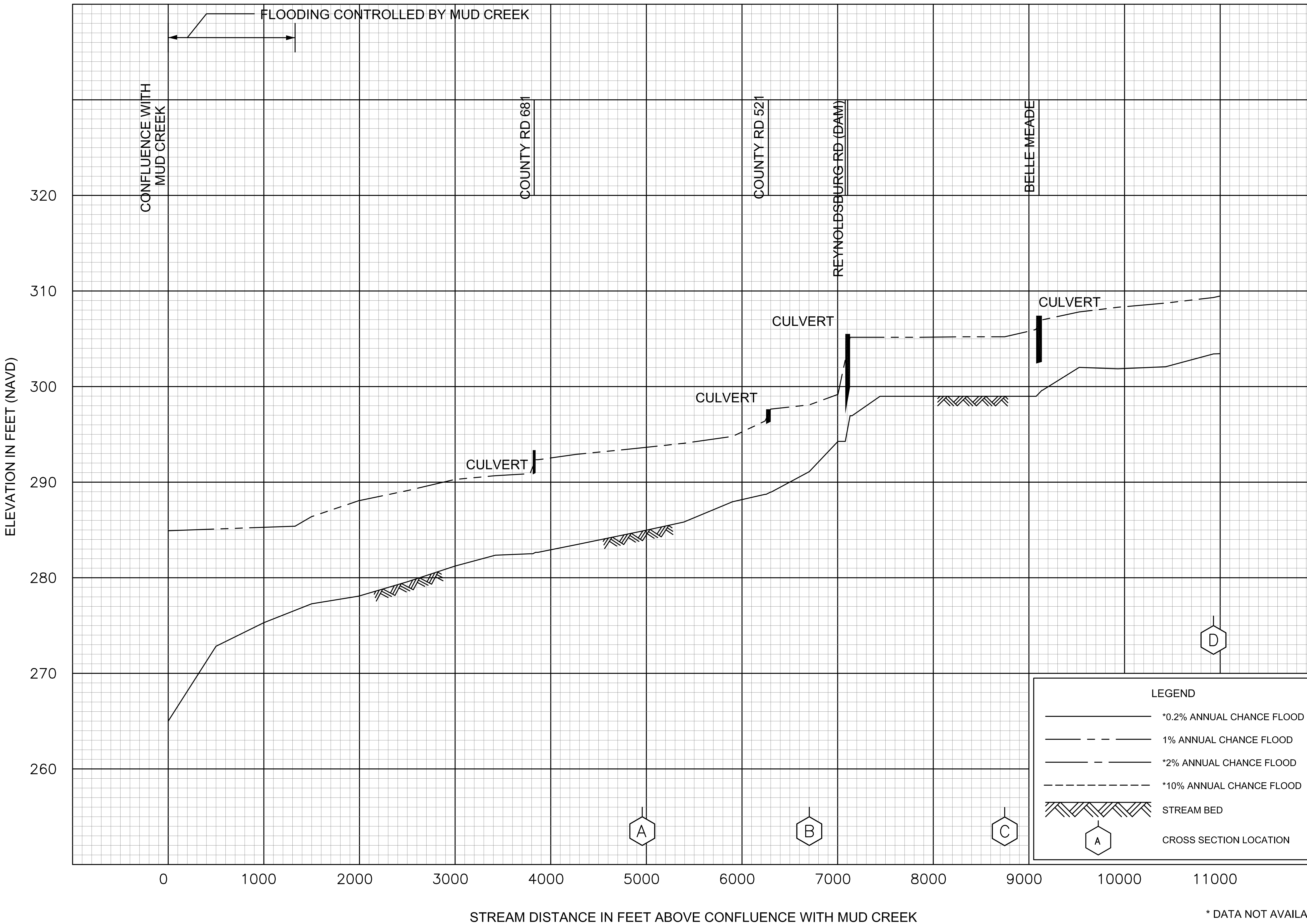


FLOOD PROFILES

MUD CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



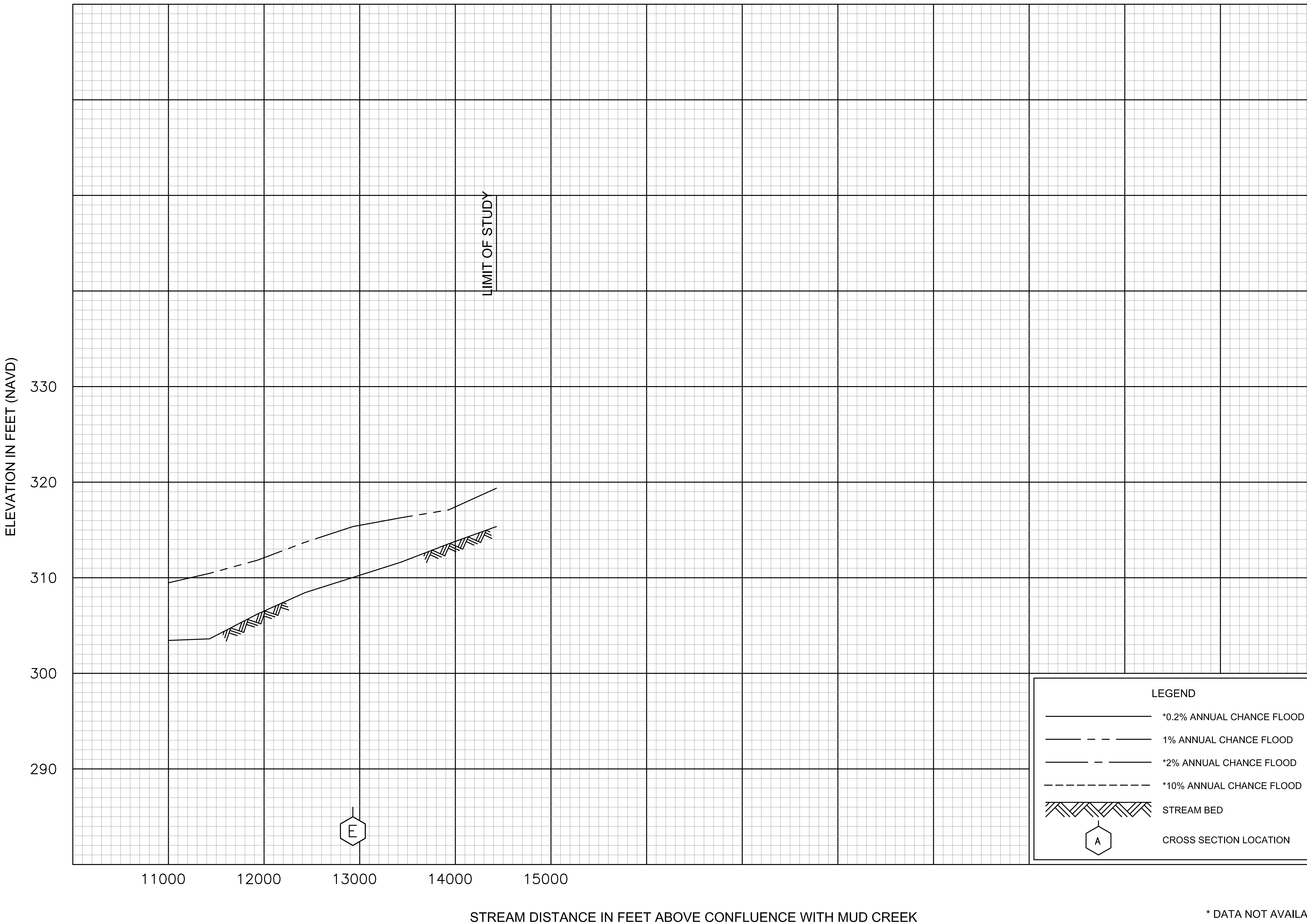
FLOOD PROFILES

MUD CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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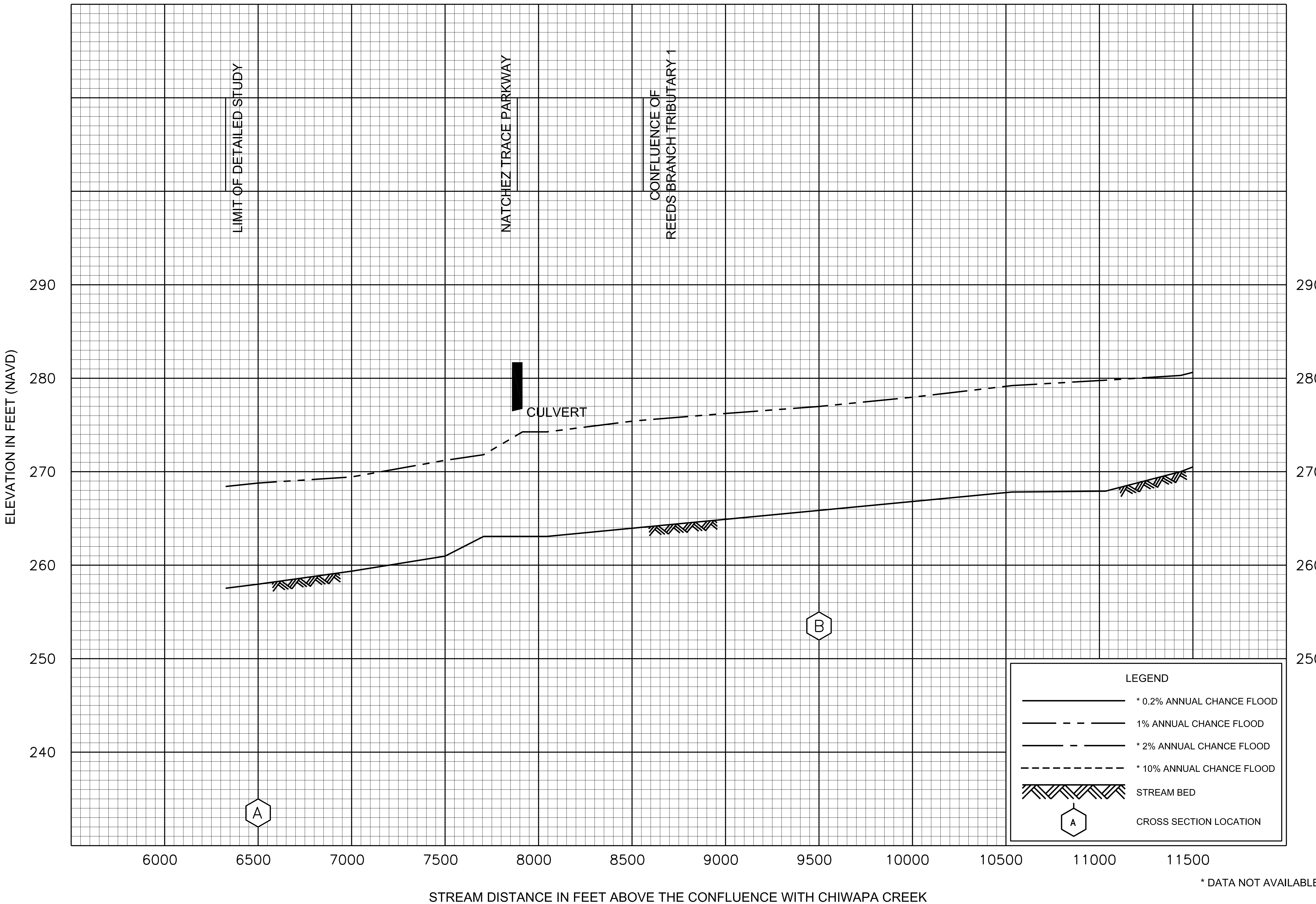
FLOOD PROFILES

MUD CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

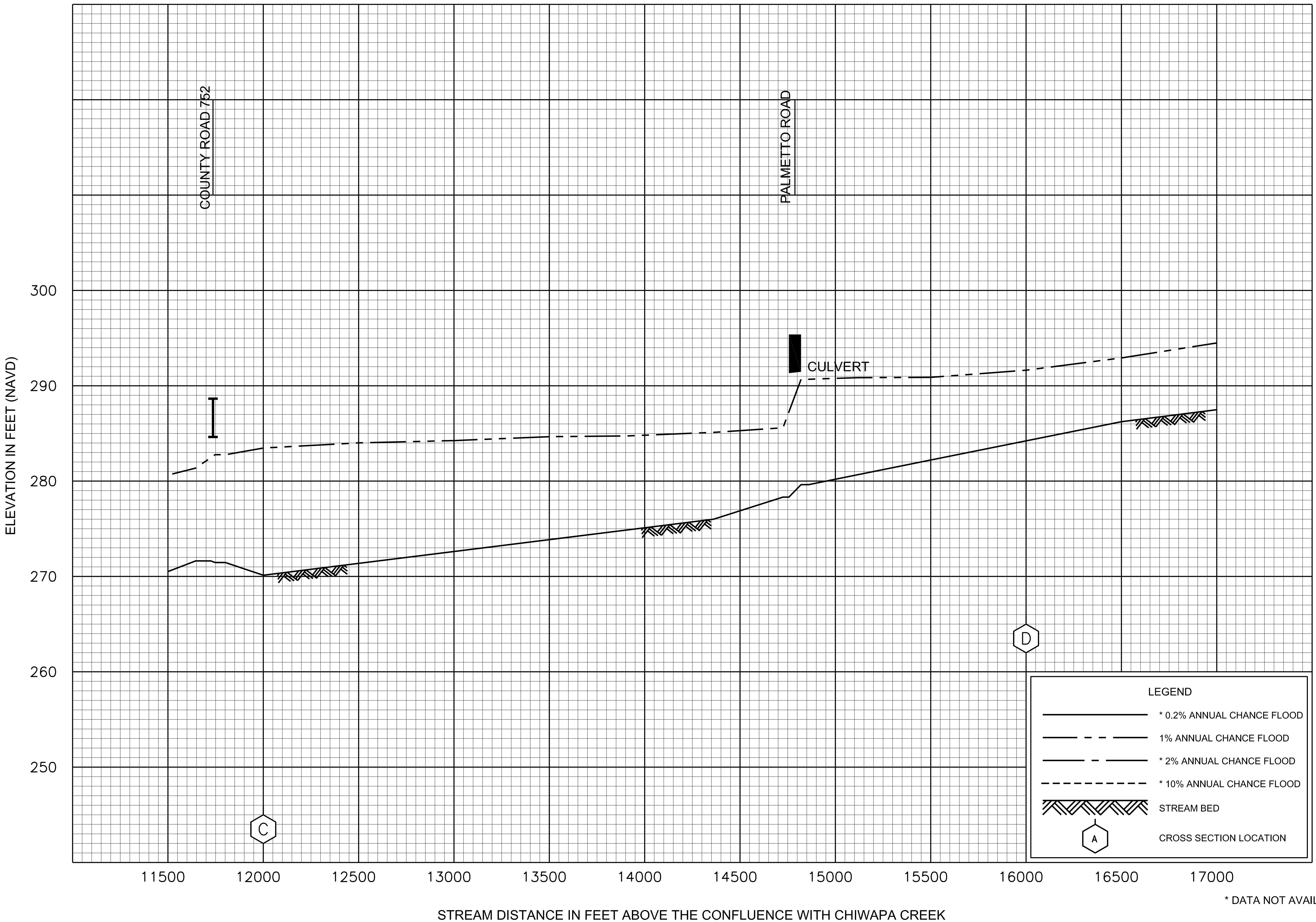


FLOOD PROFILES

REEDS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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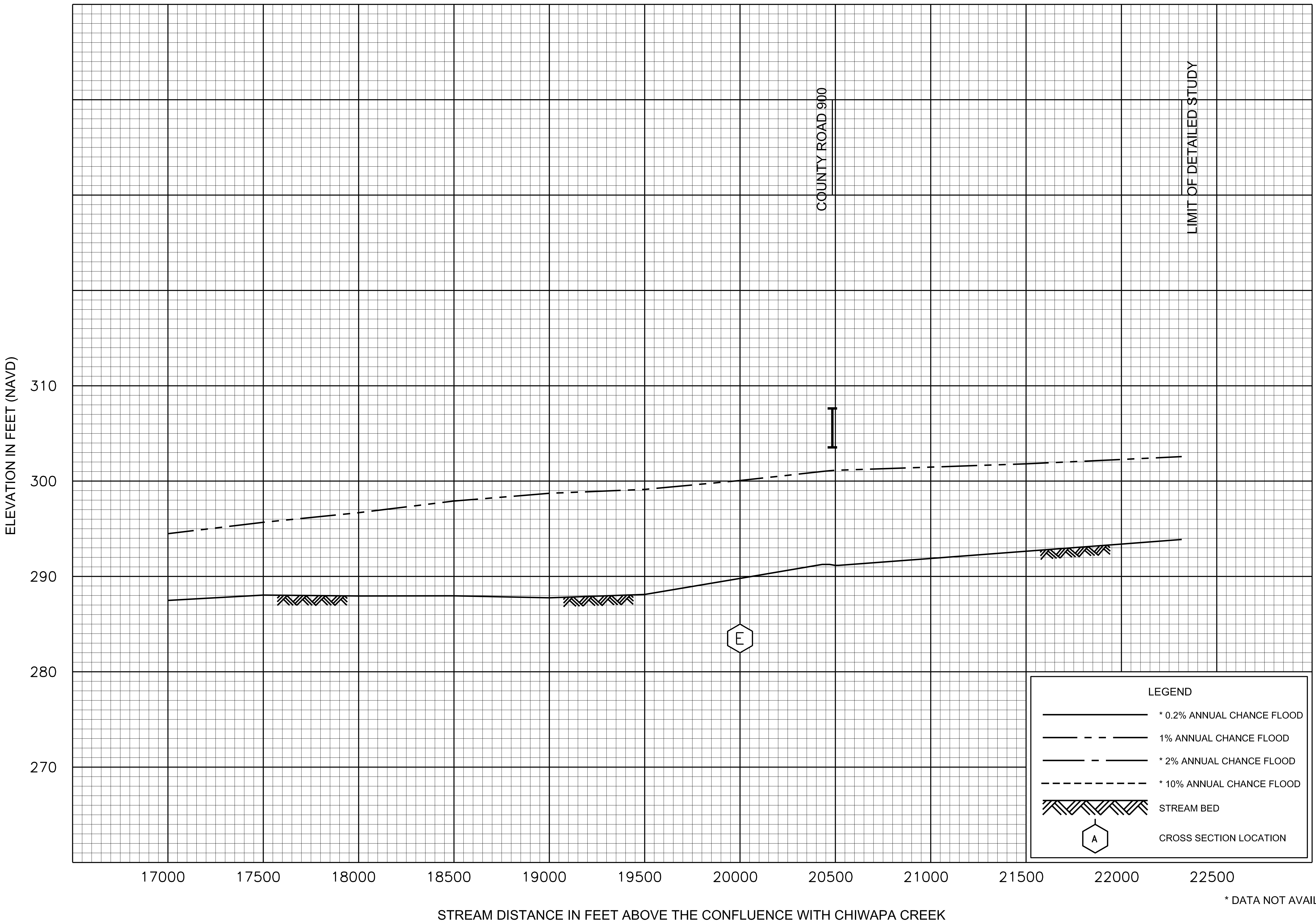
FLOOD PROFILES

REEDS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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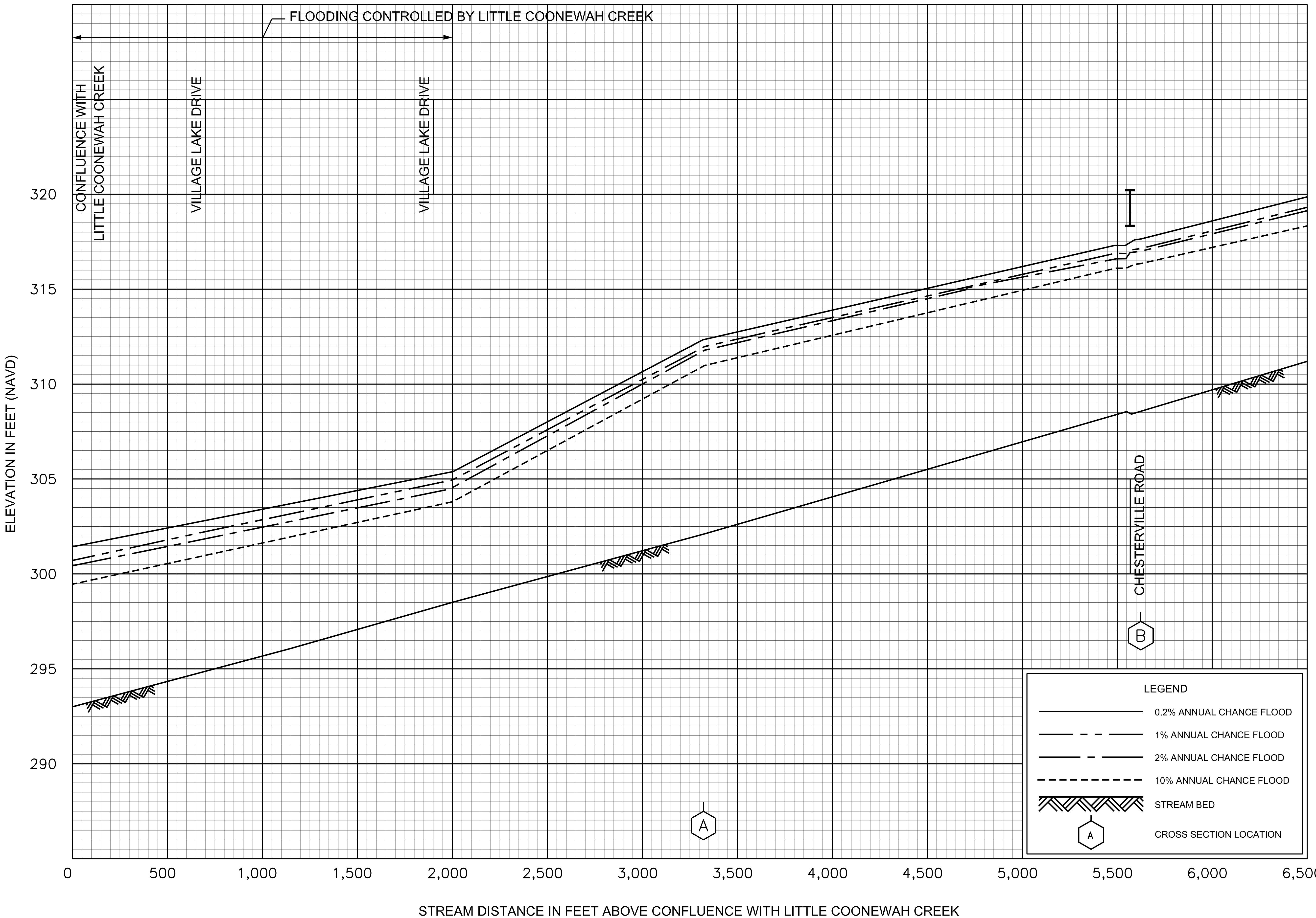
FLOOD PROFILES

REEDS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

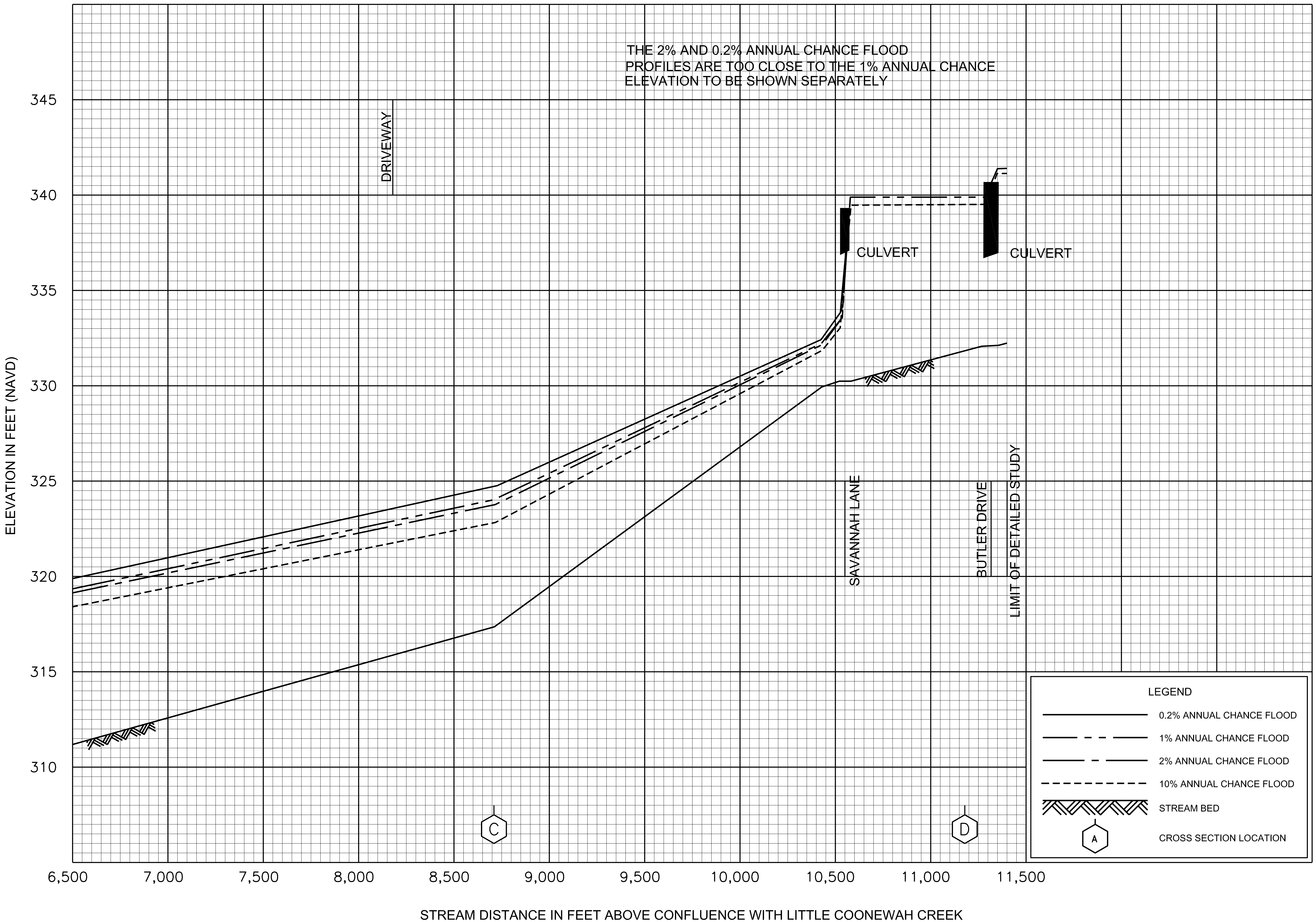


FLOOD PROFILES

RUSSELL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

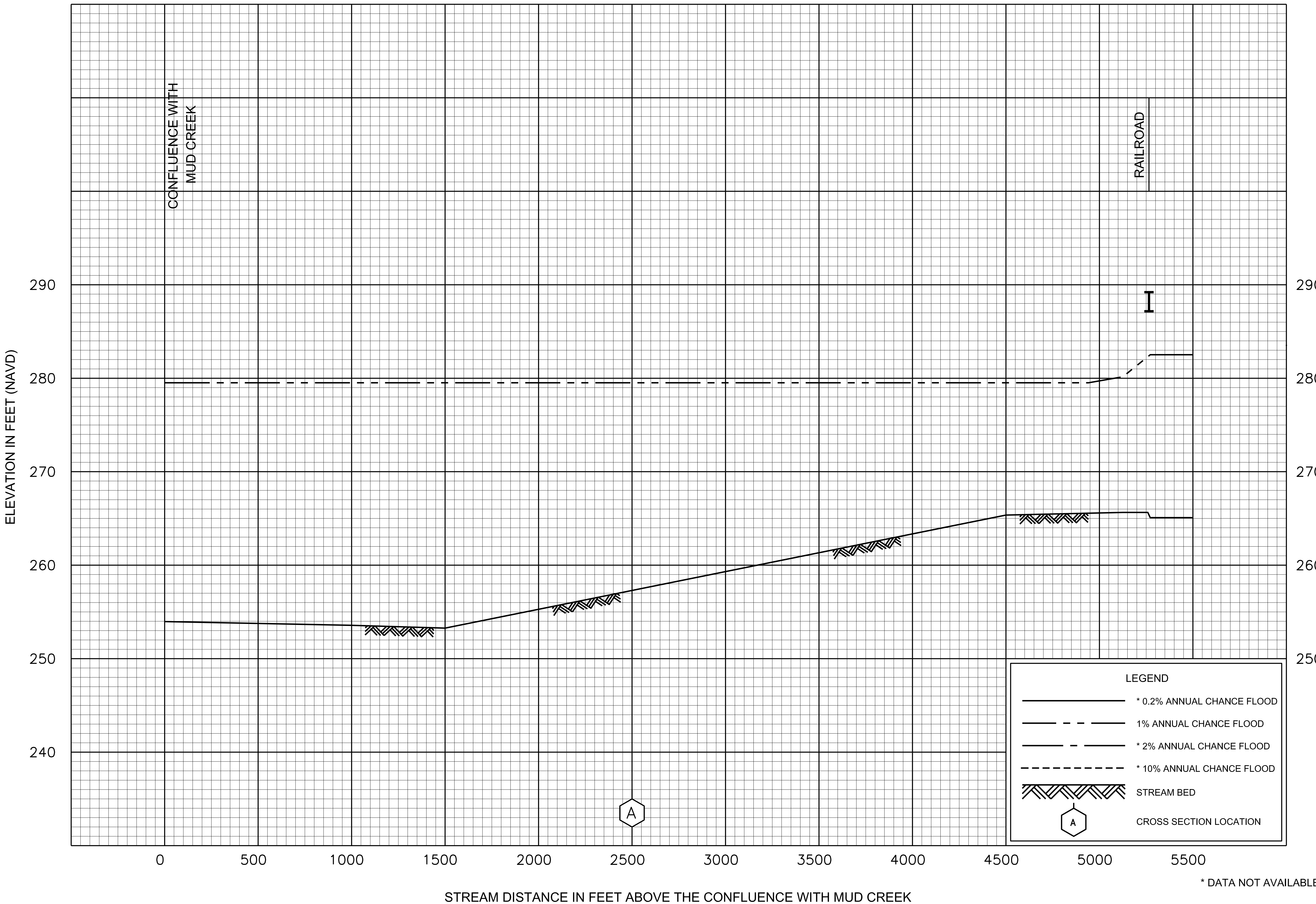


FLOOD PROFILES

RUSSELL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

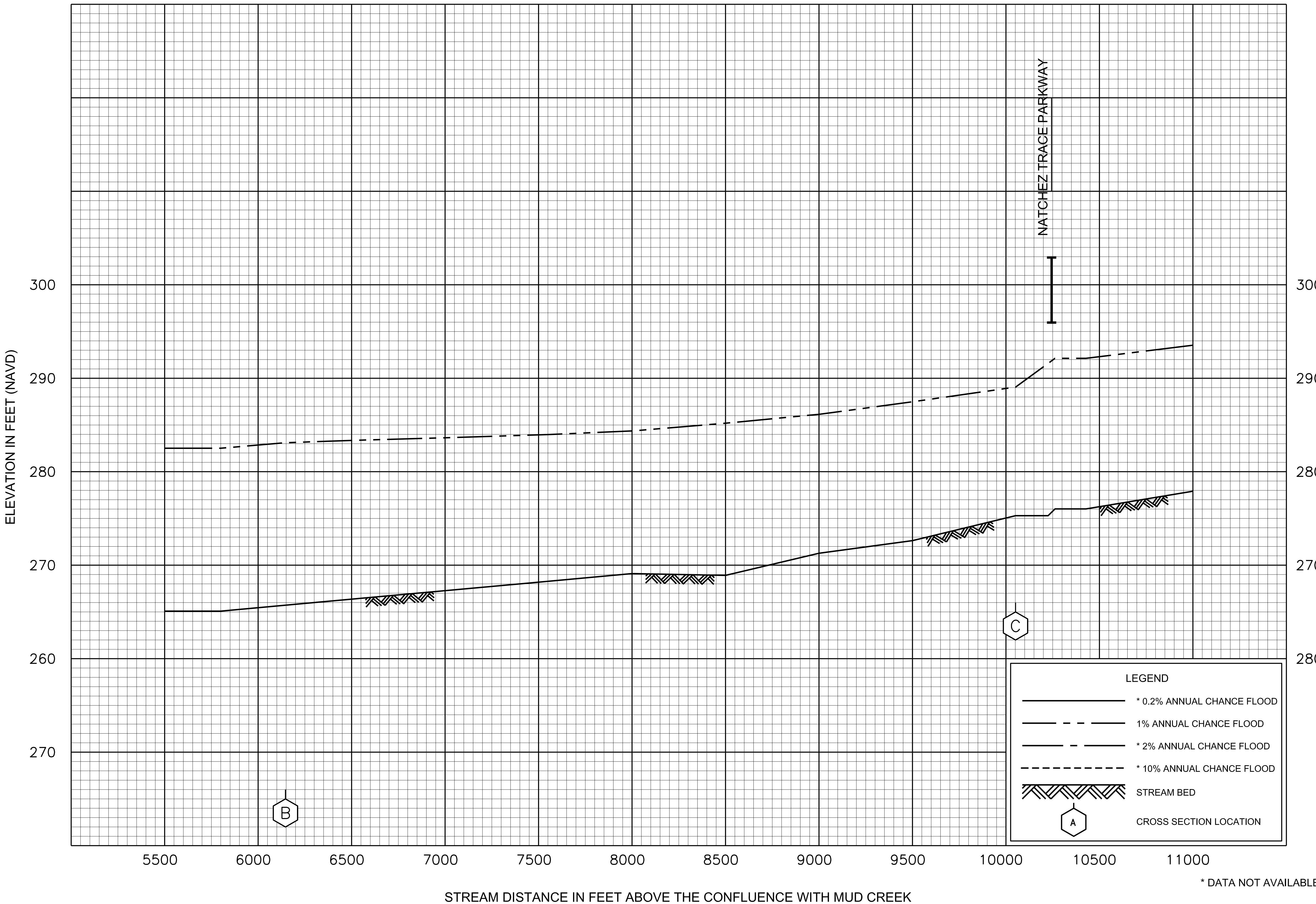


FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



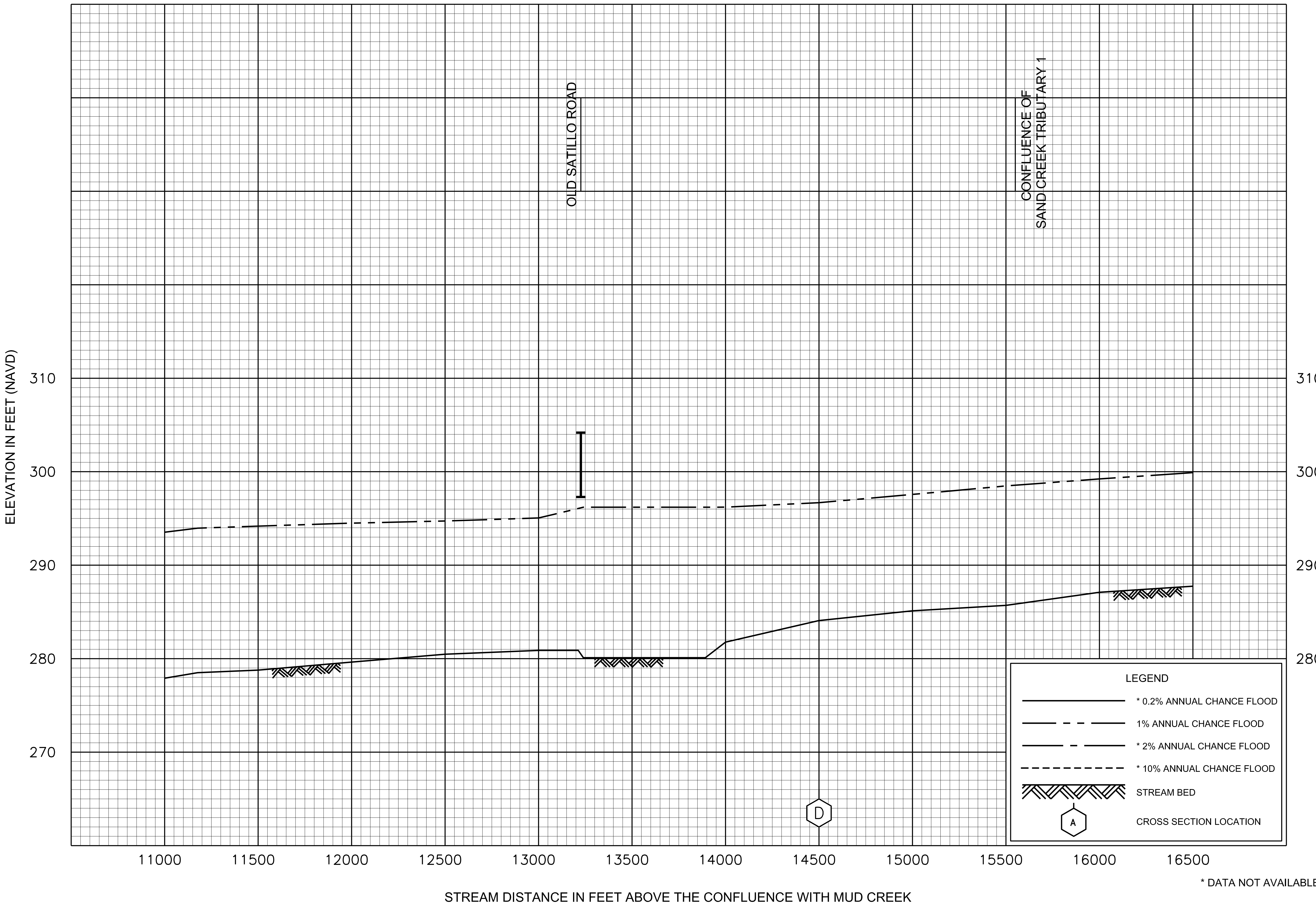
FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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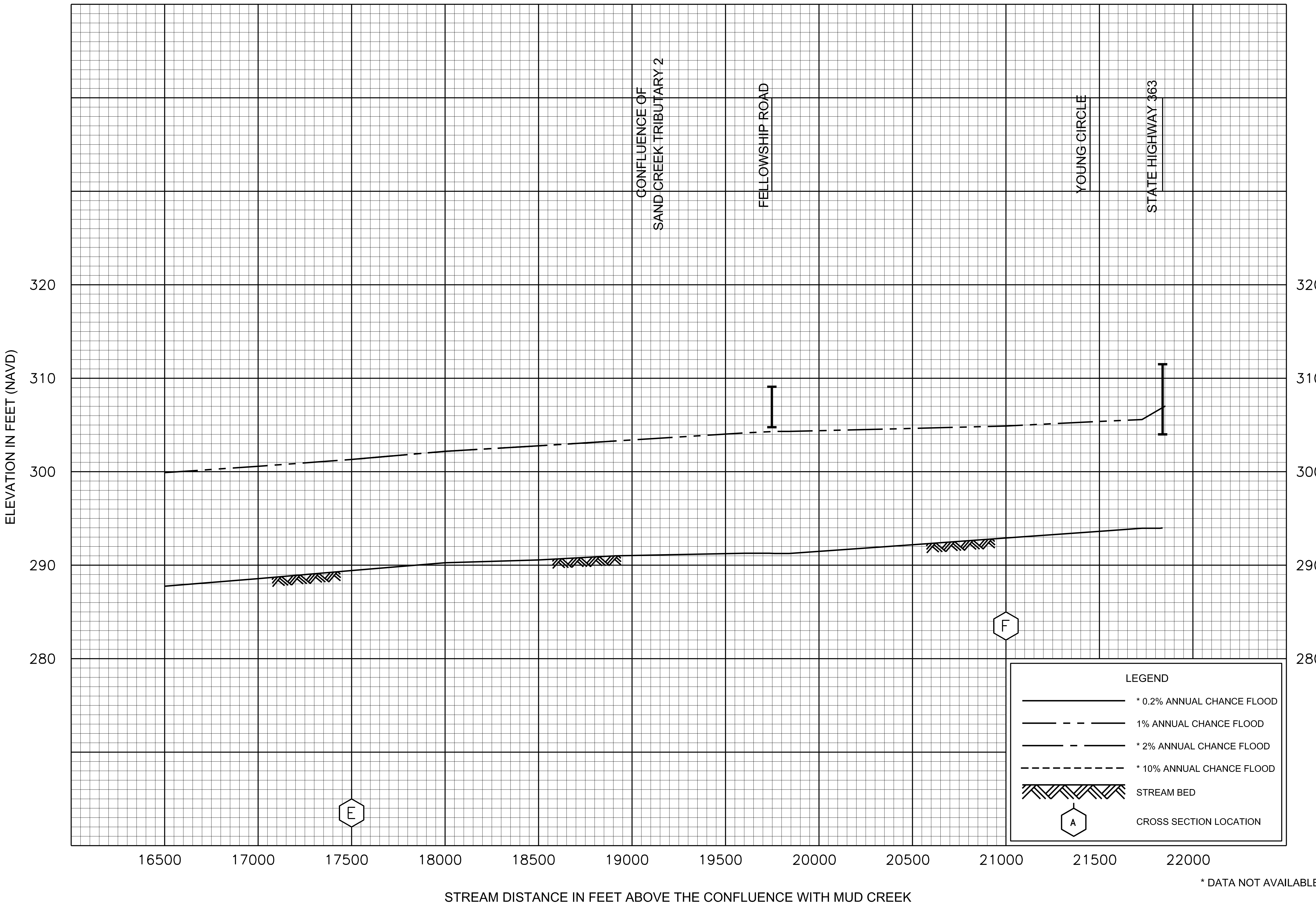
FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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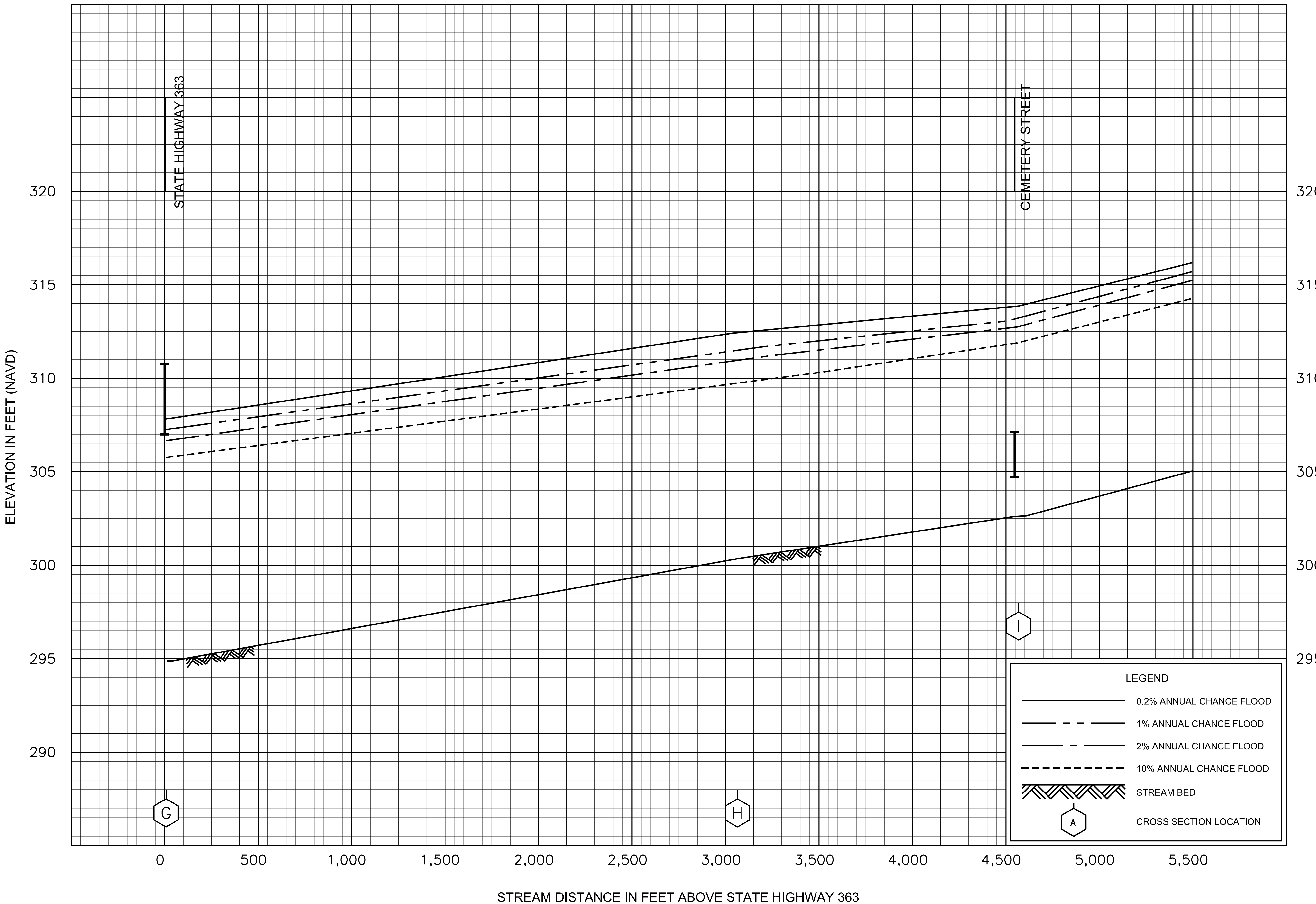
FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

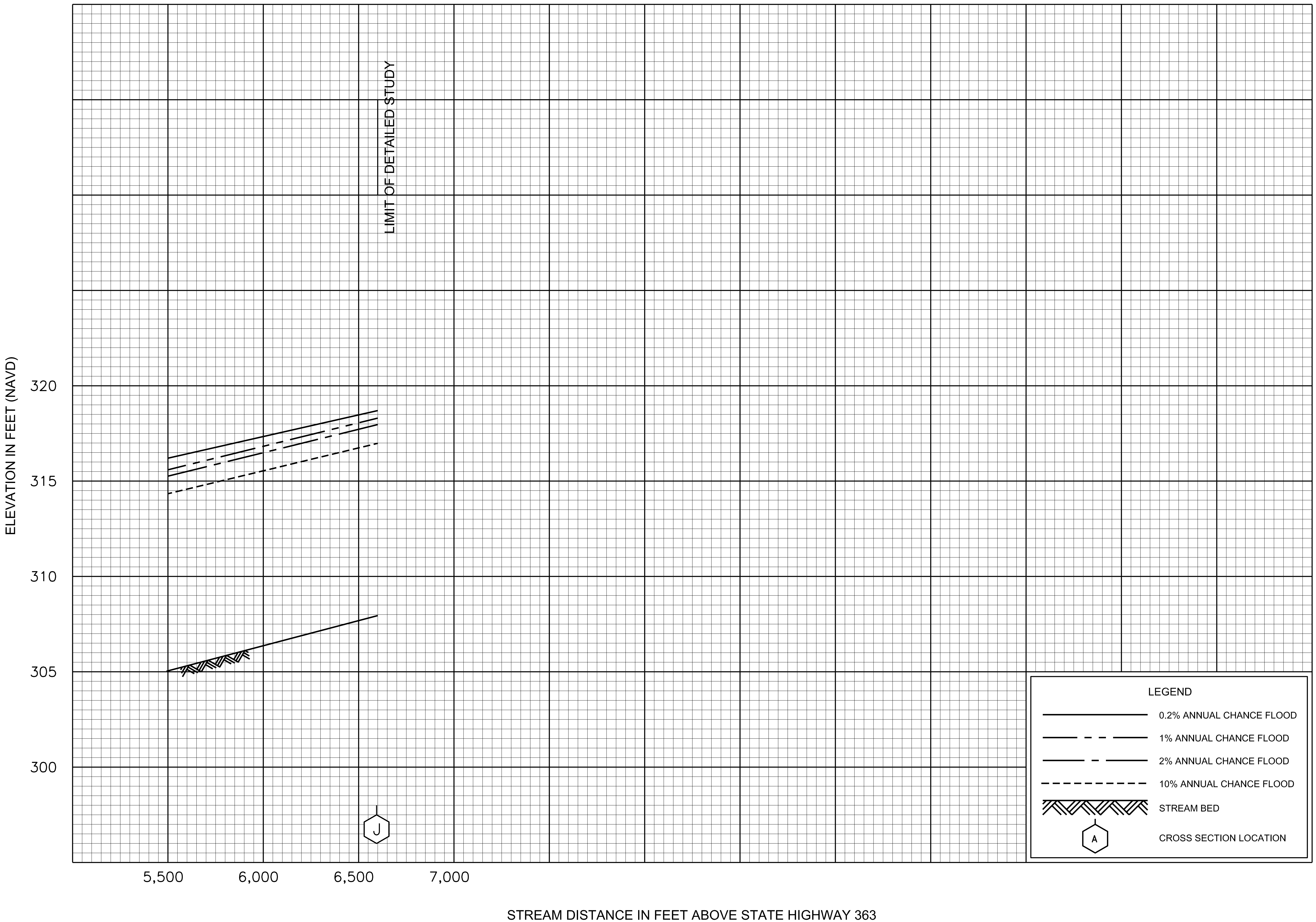


FLOOD PROFILES

SANDY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



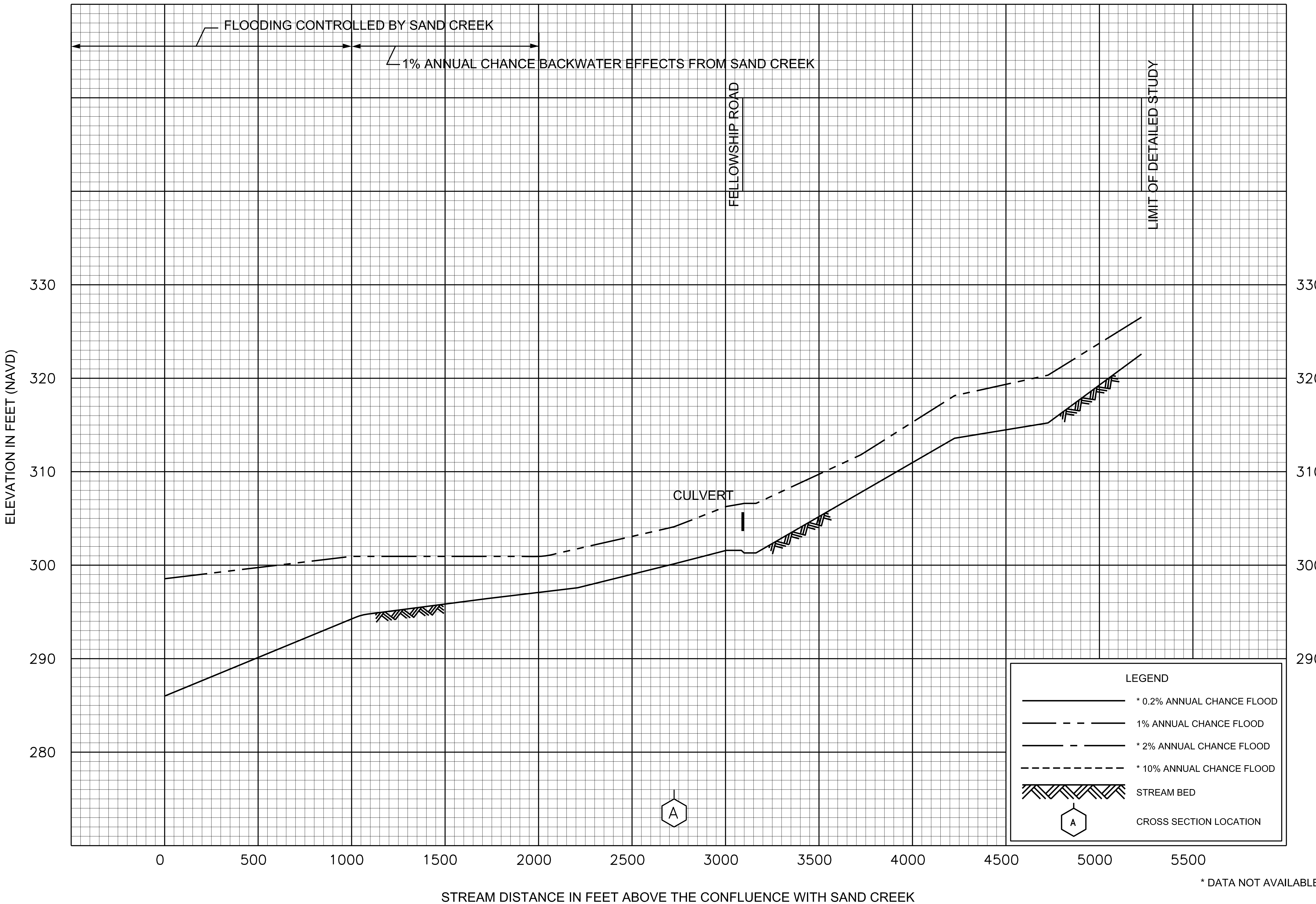
FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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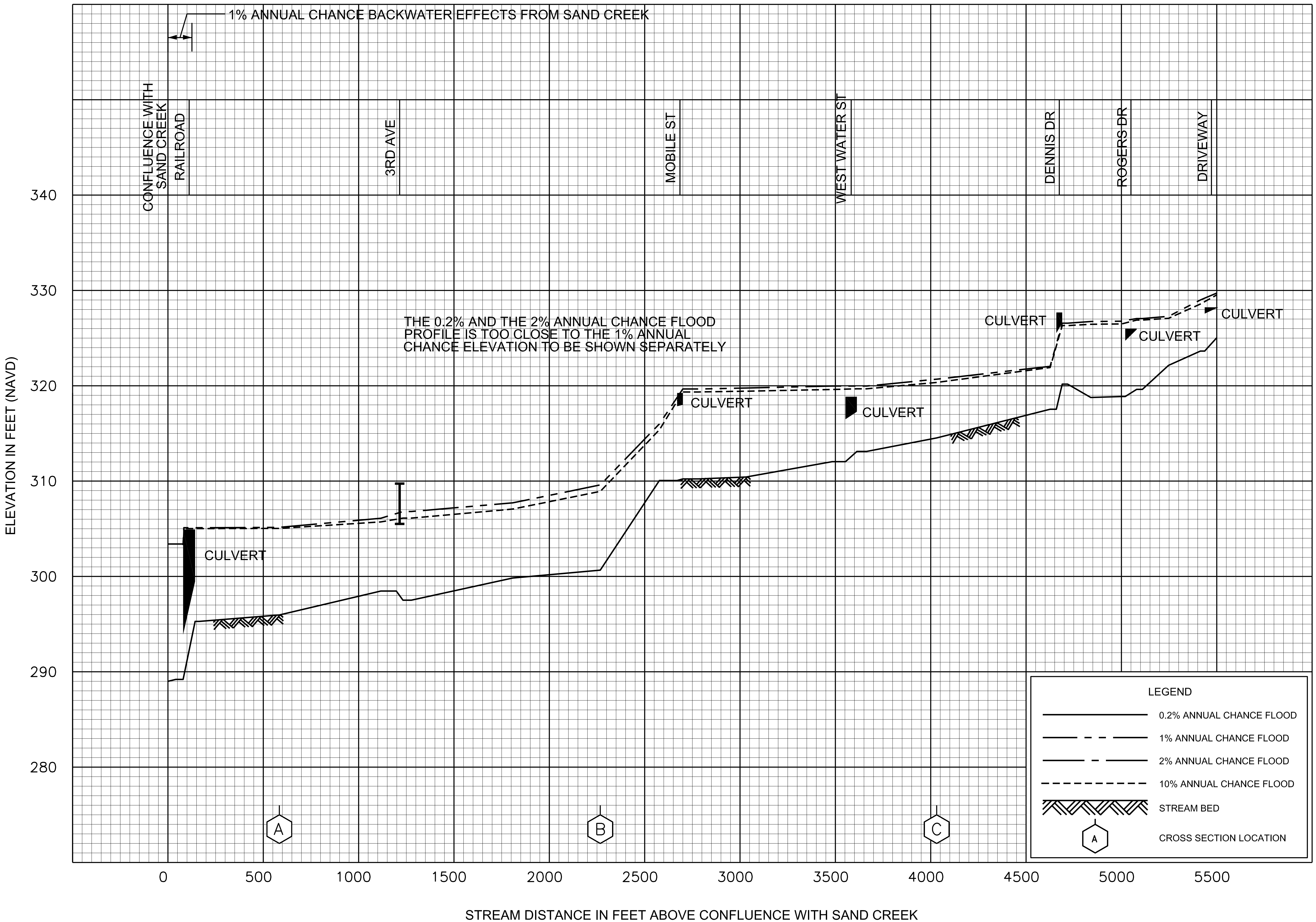
FLOOD PROFILES

SAND CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



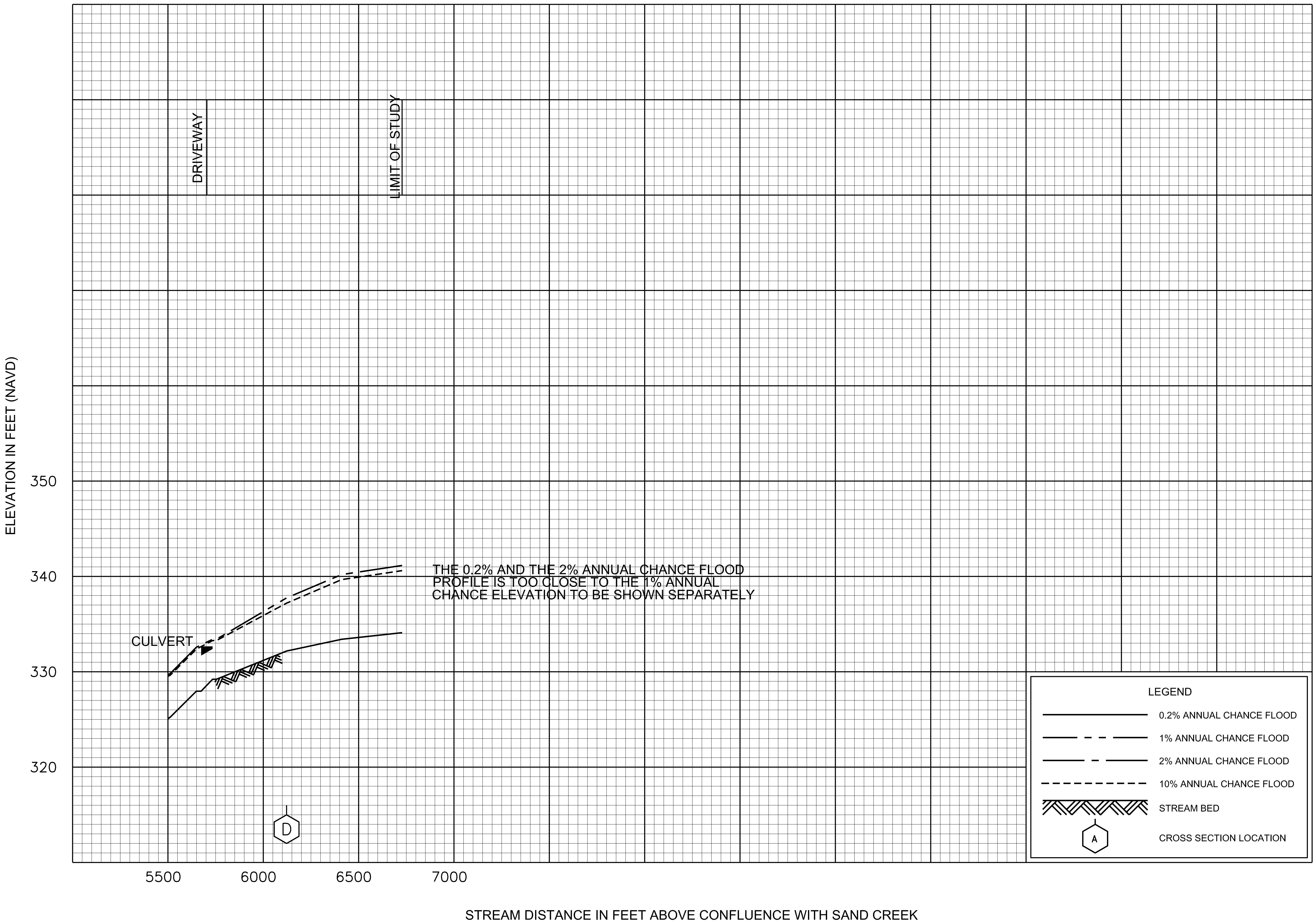
FLOOD PROFILES

SAND CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



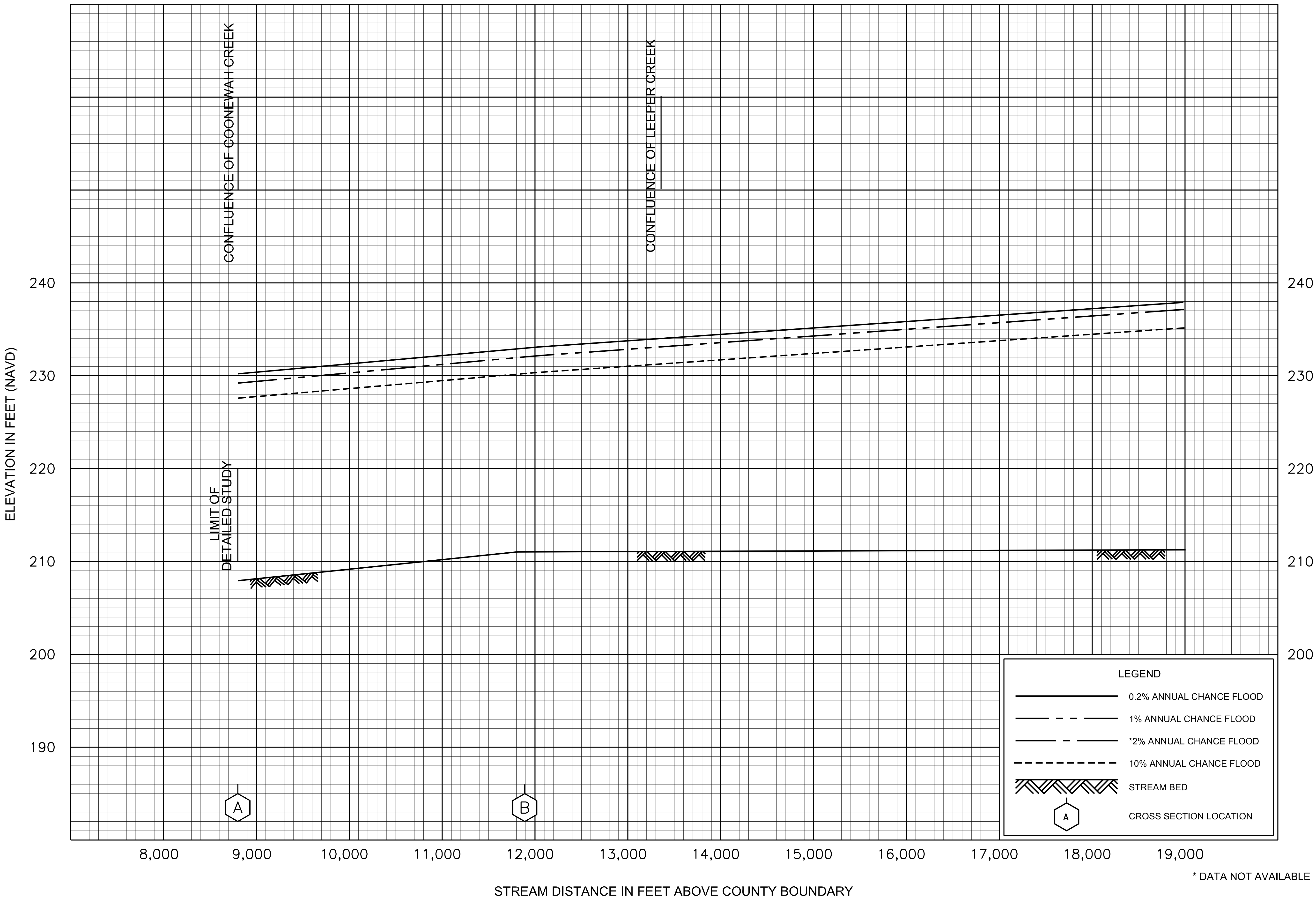
FLOOD PROFILES

SAND CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



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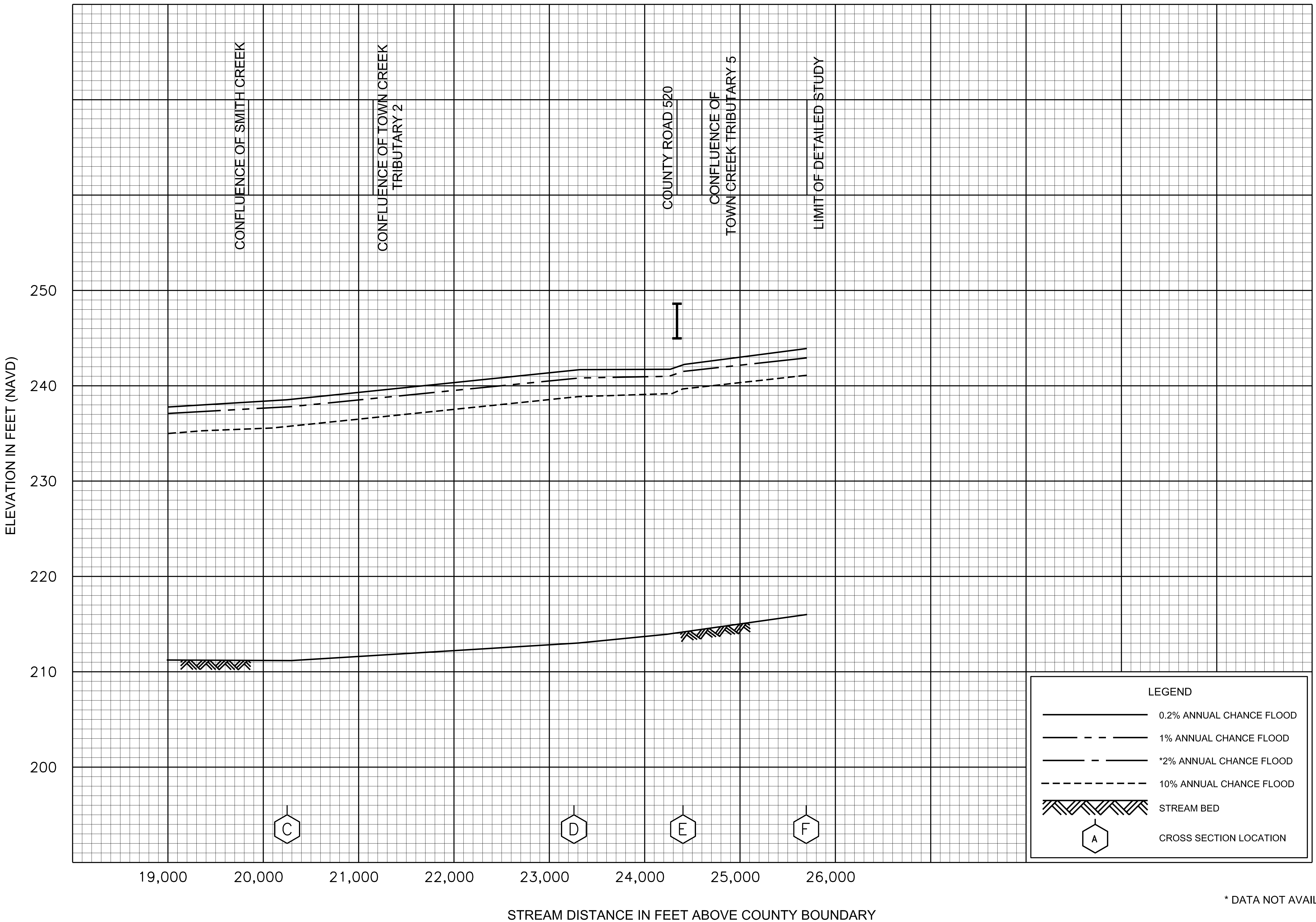
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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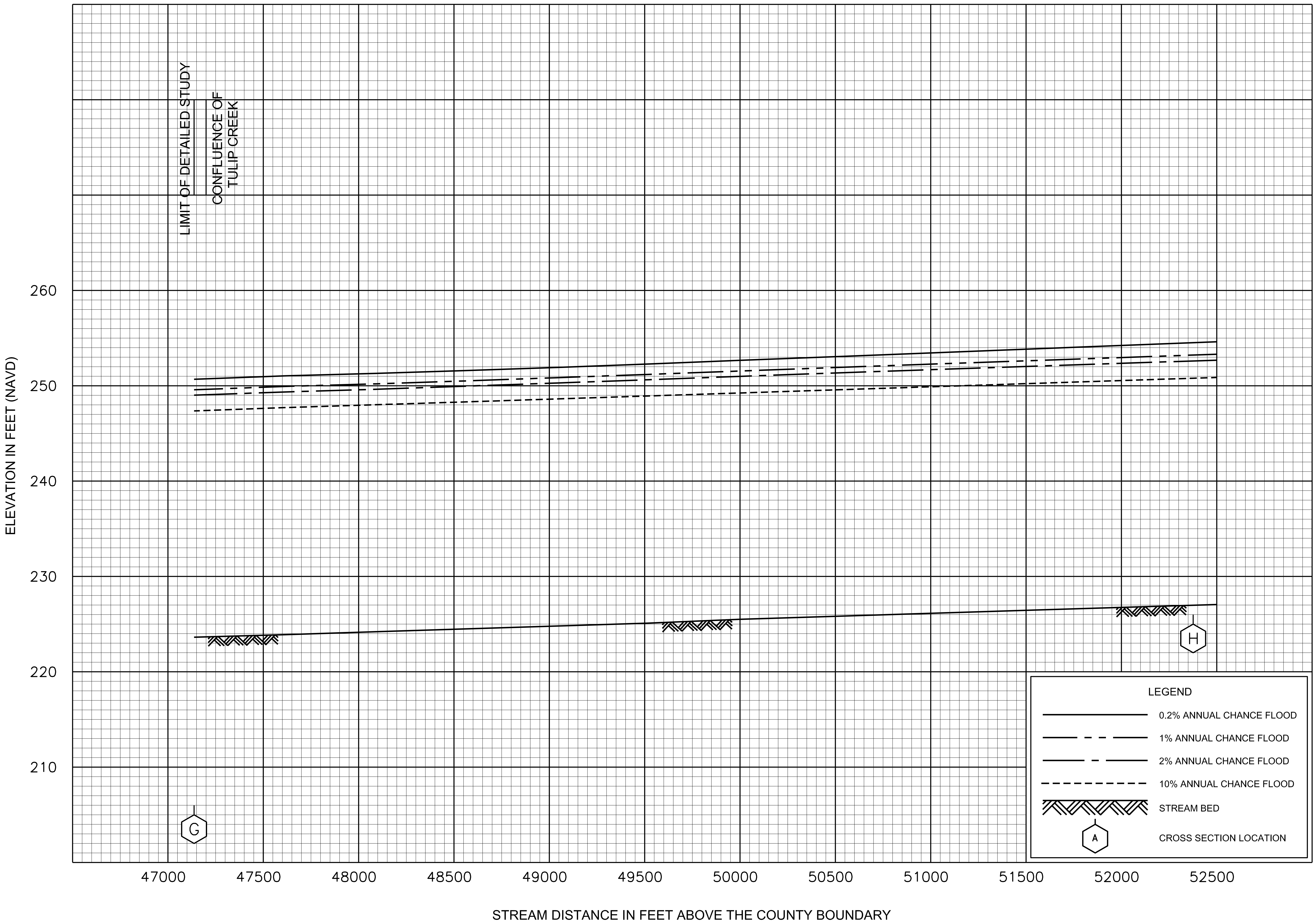
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



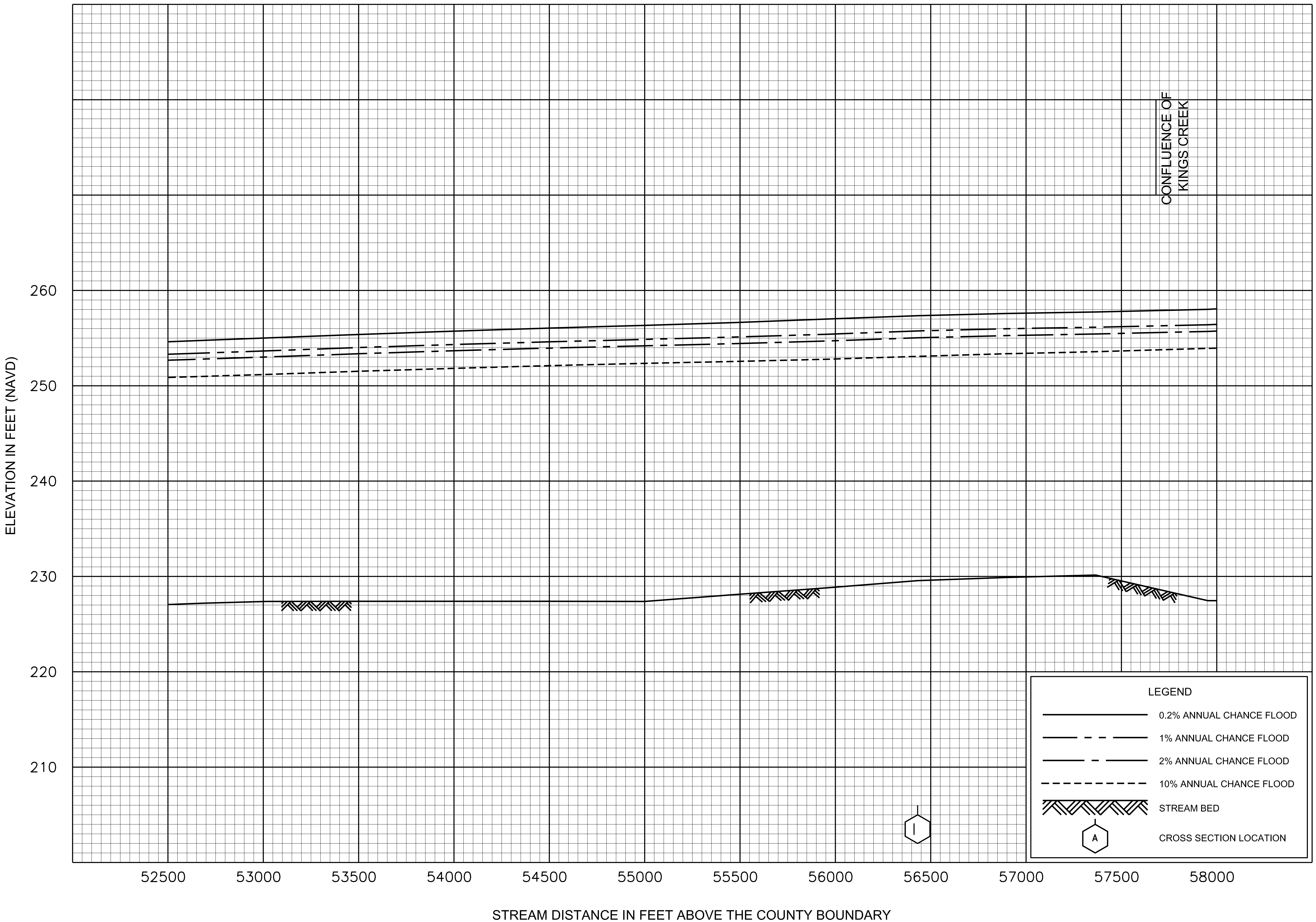
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

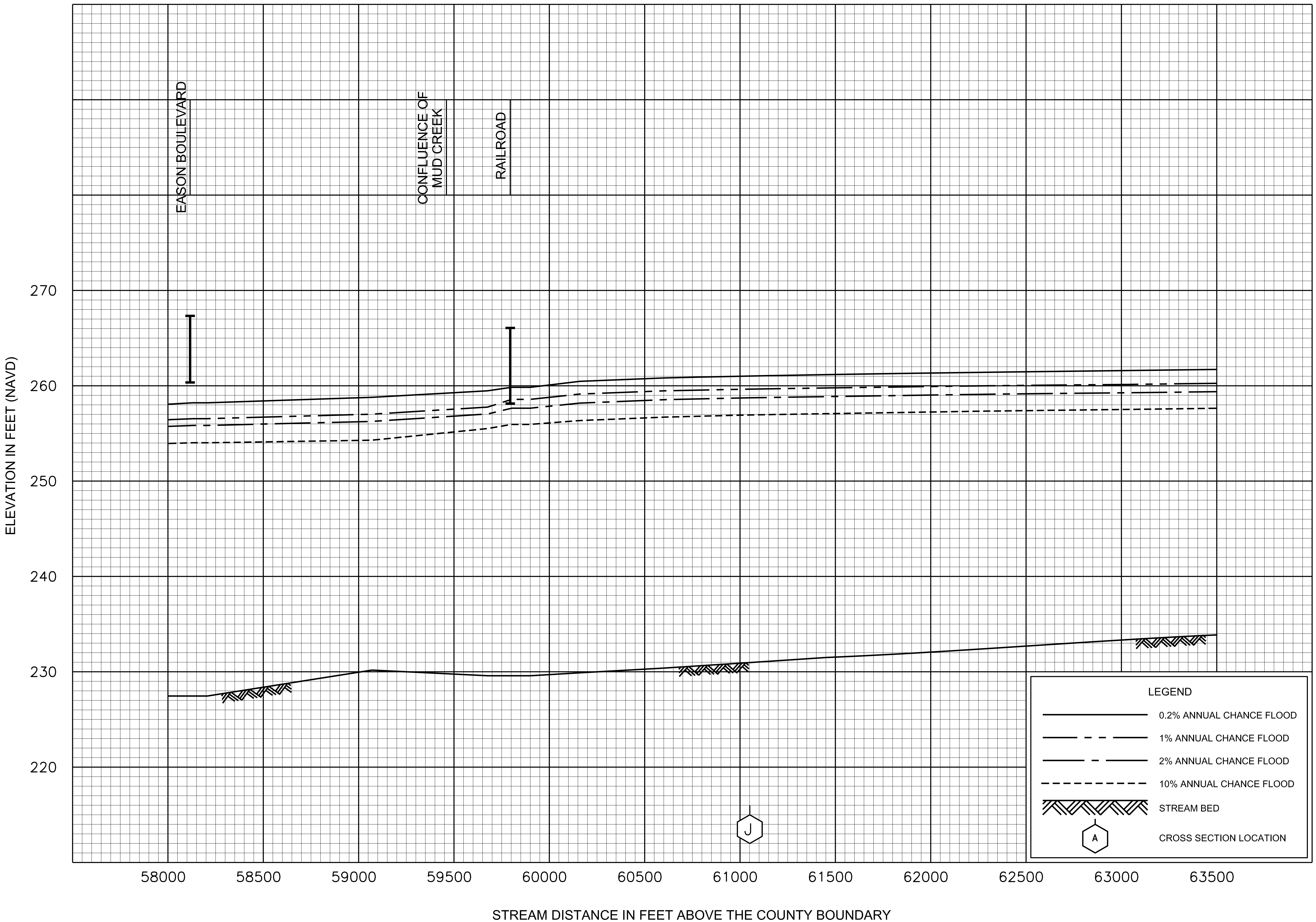


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

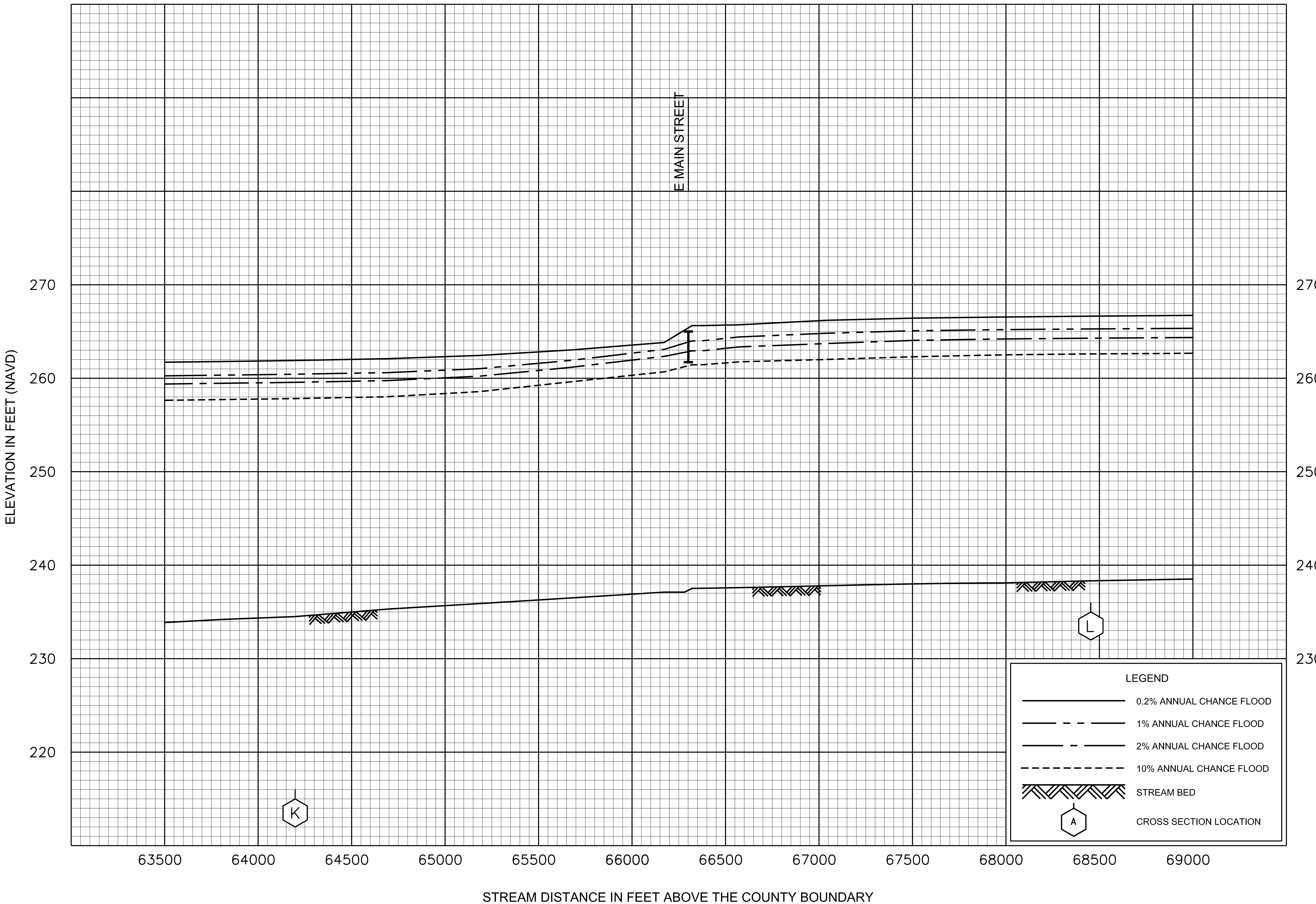


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



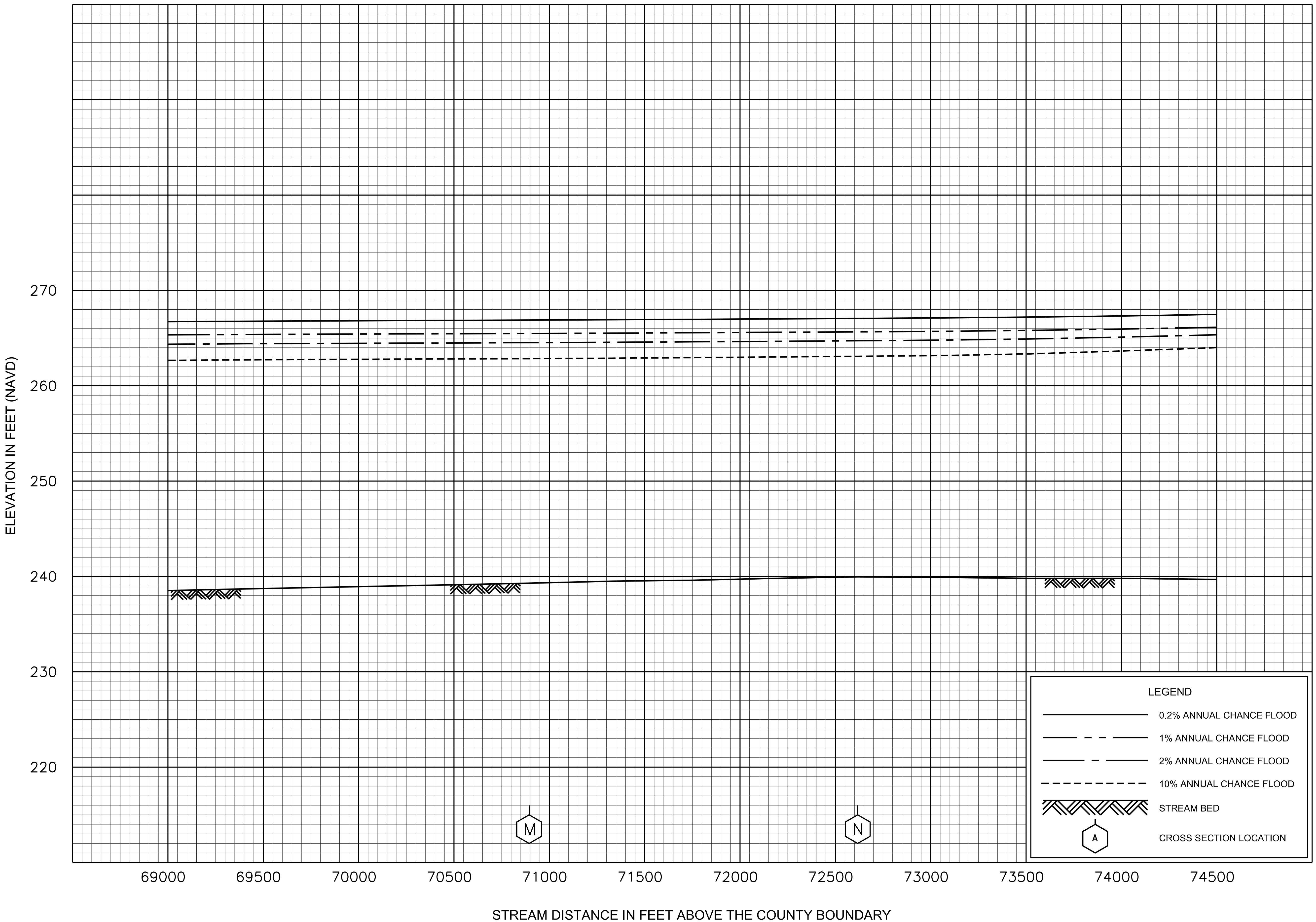
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

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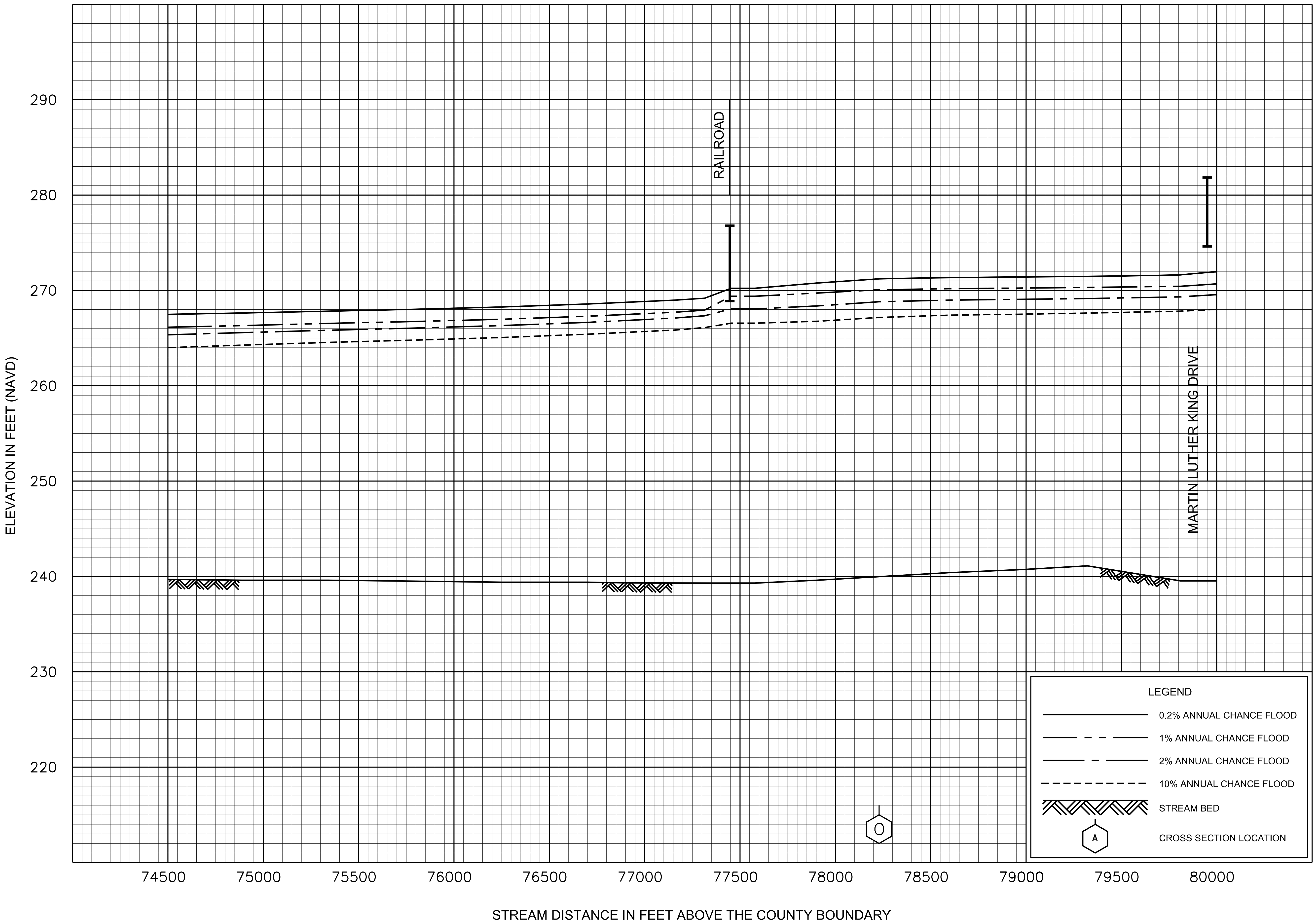


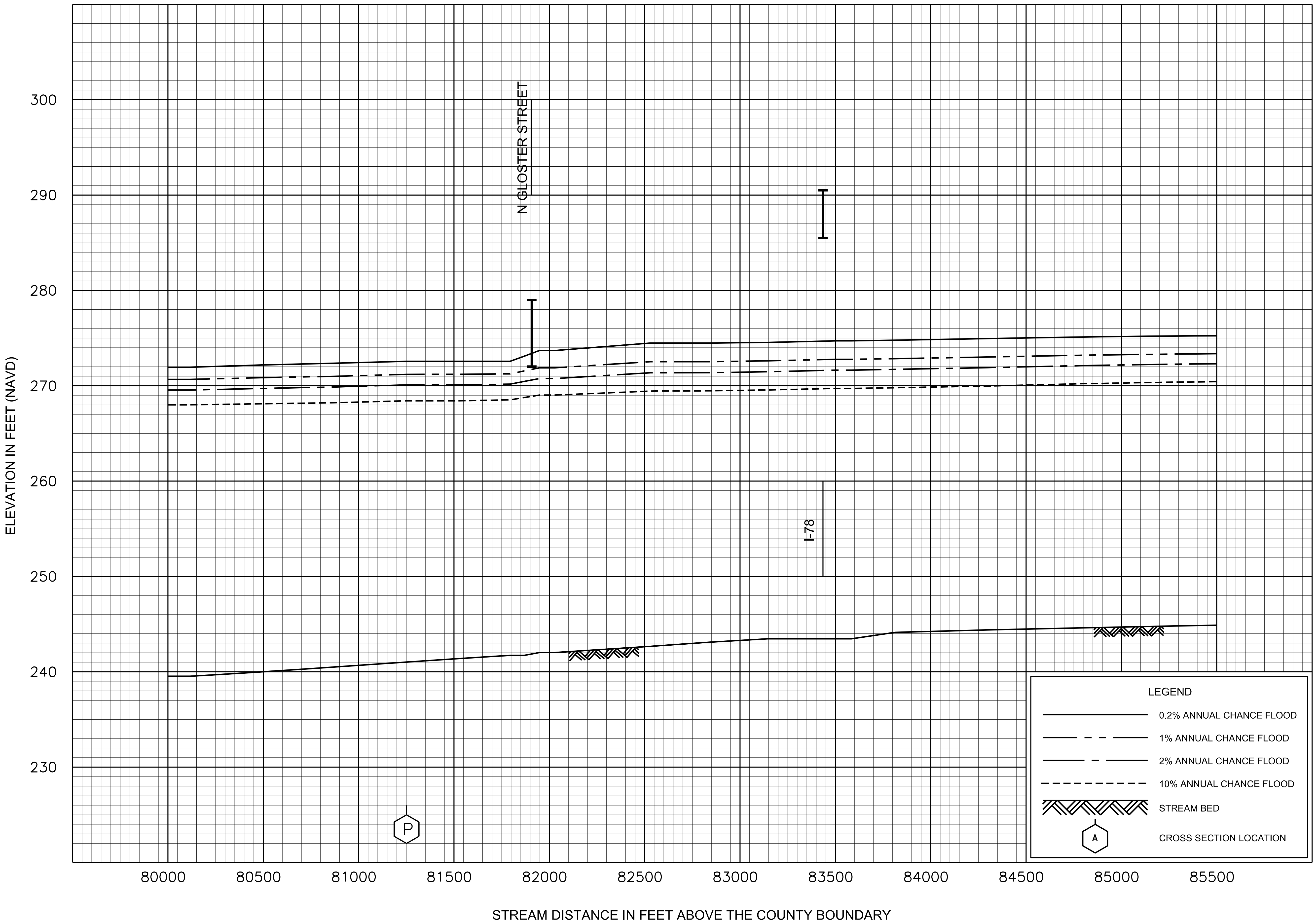
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

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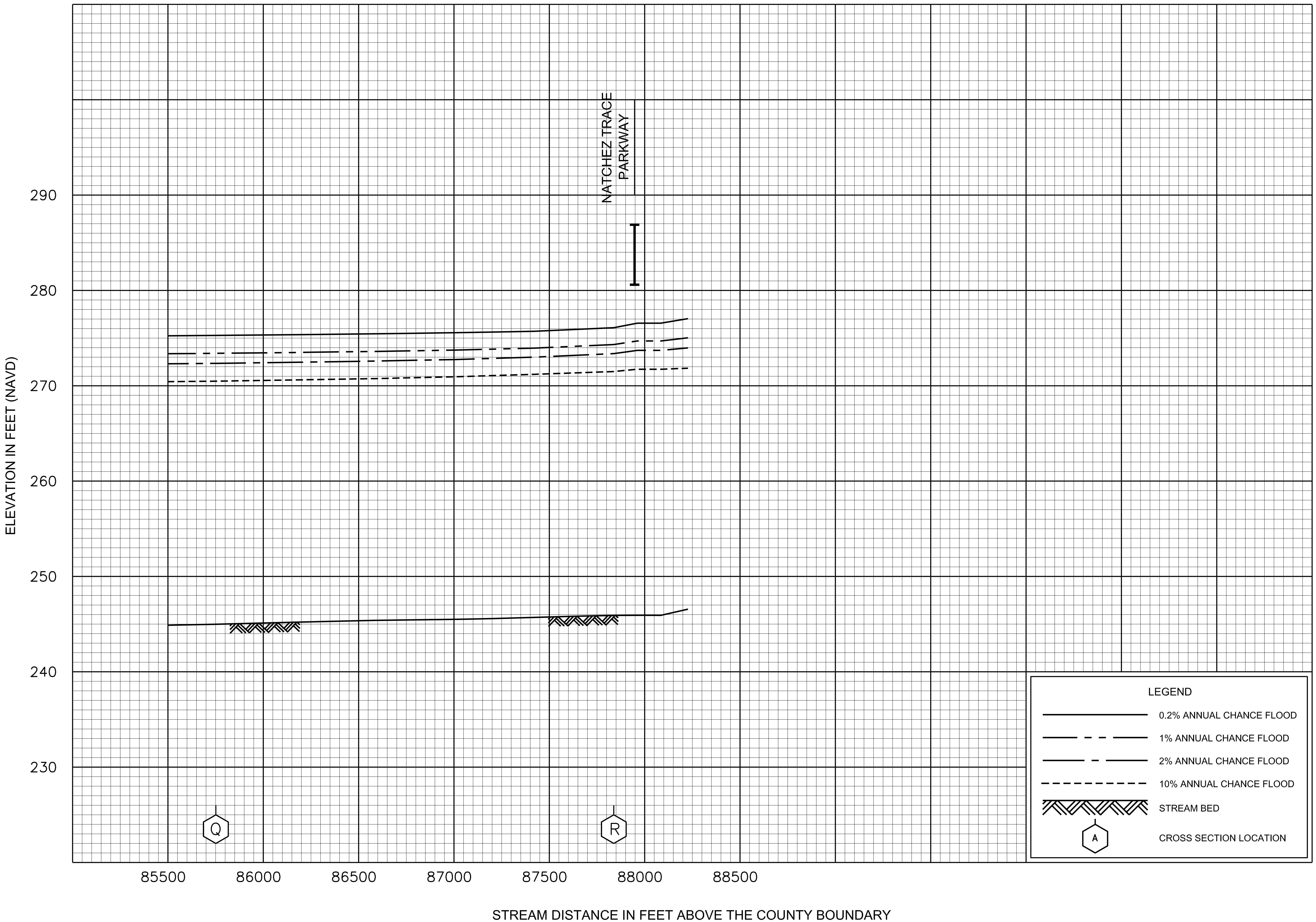
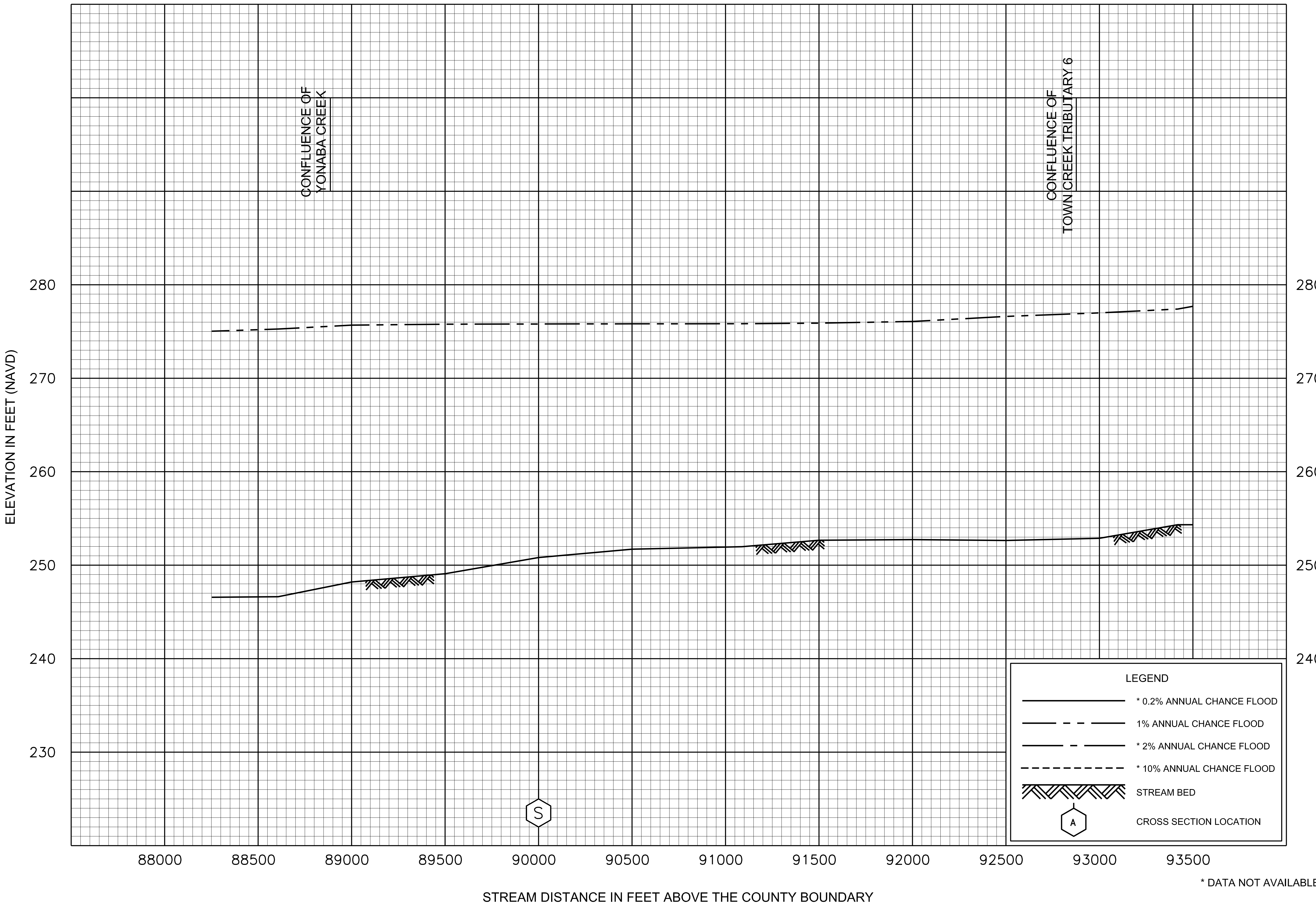


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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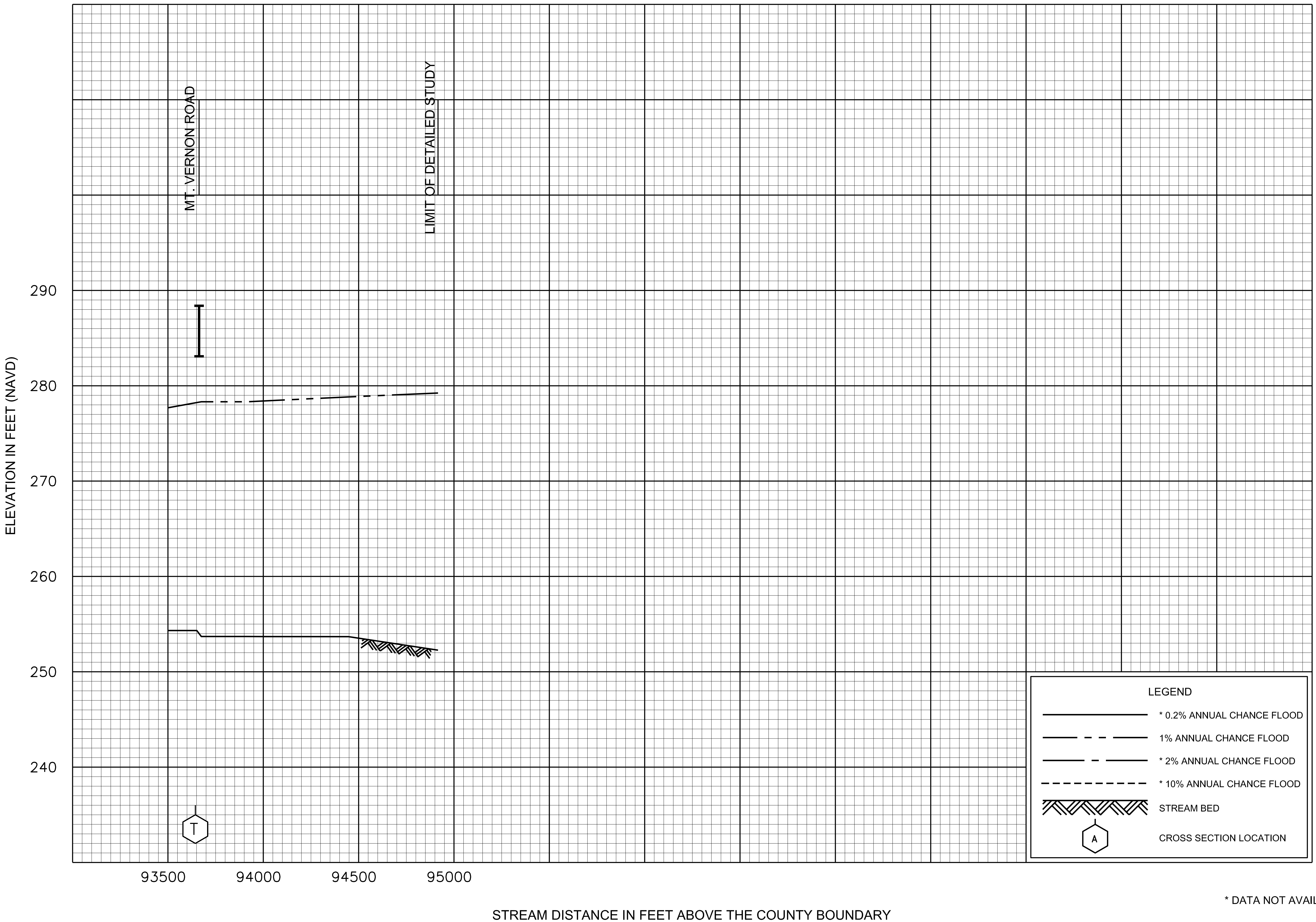
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
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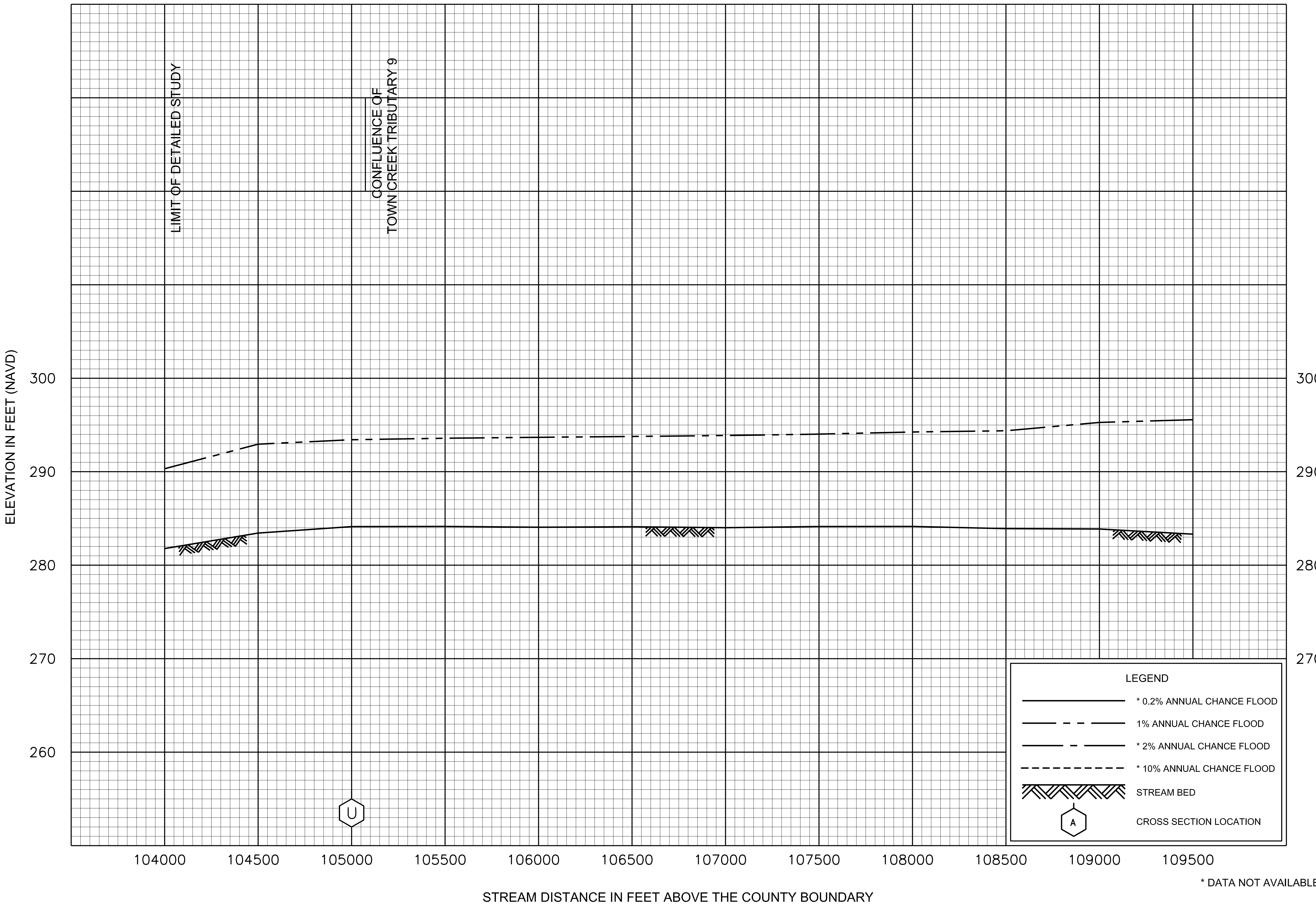

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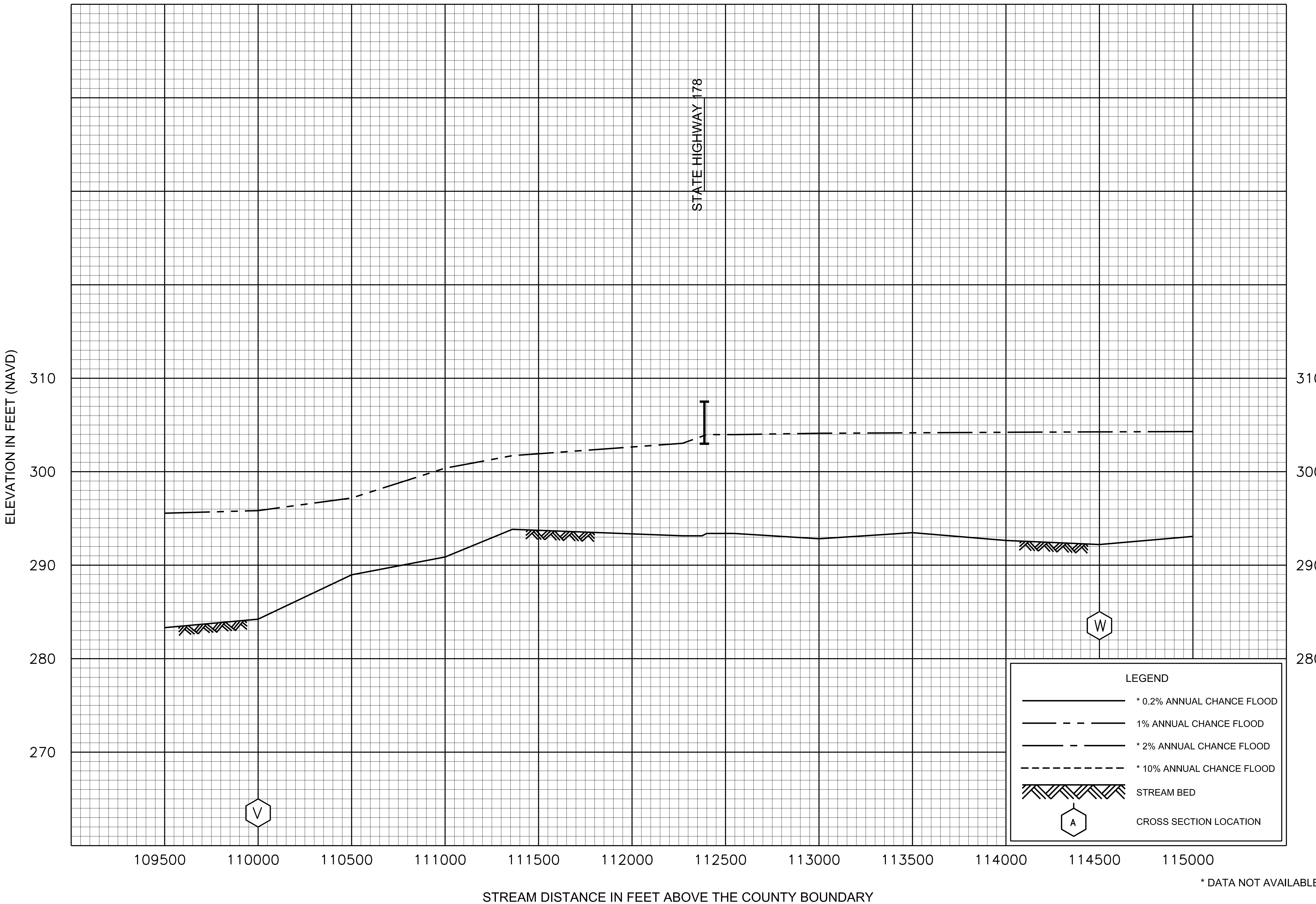
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

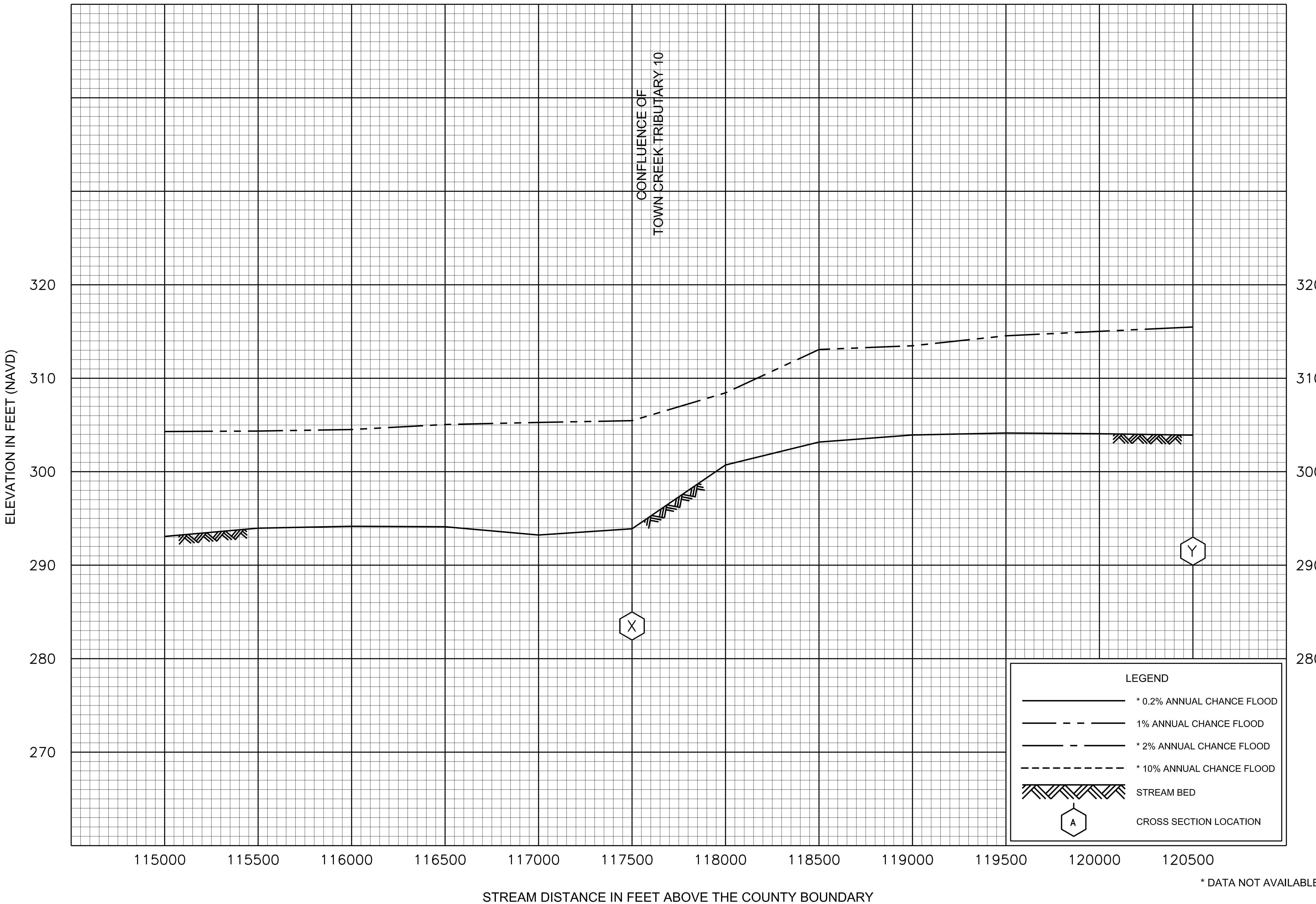


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

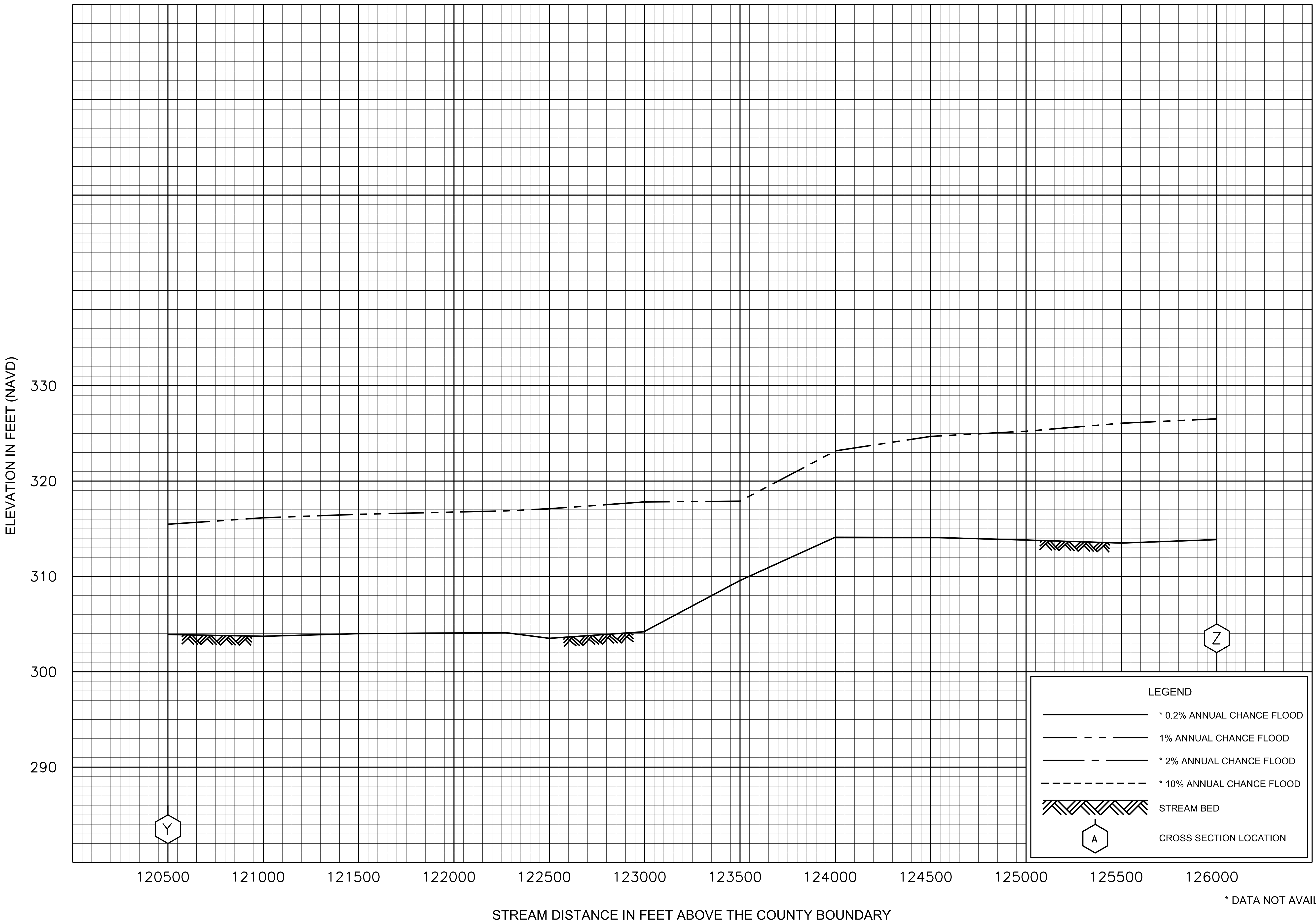


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



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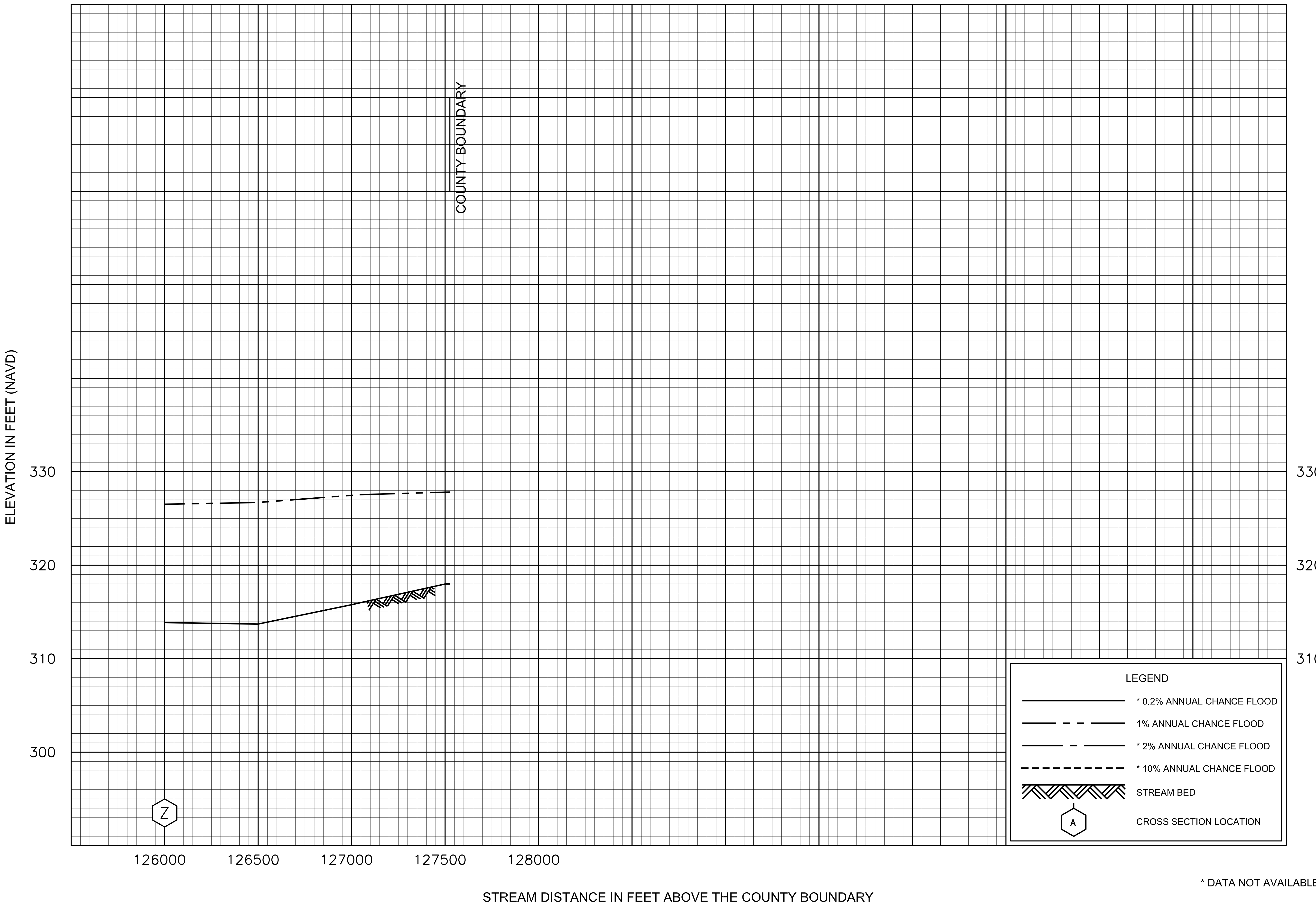
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

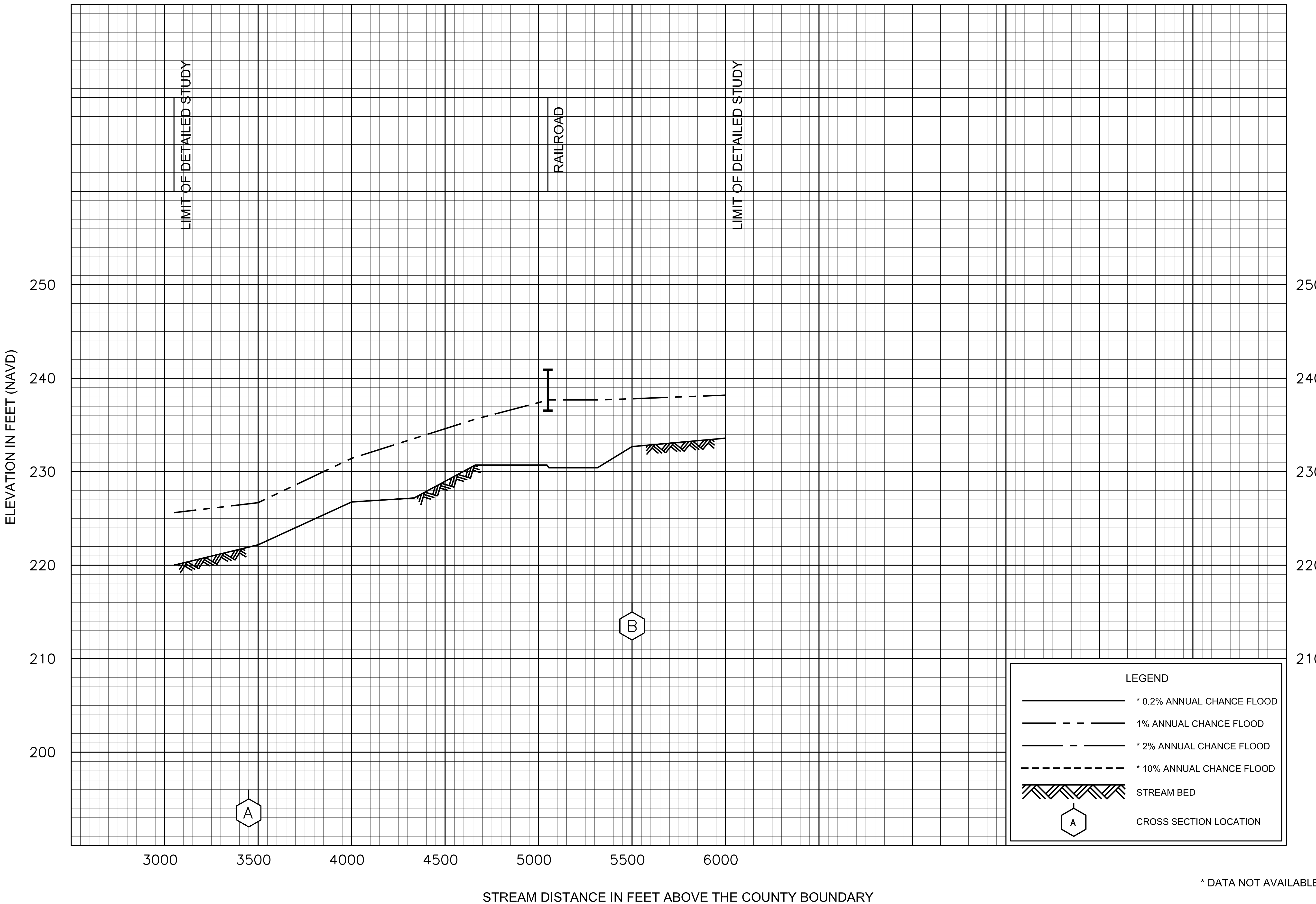


FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



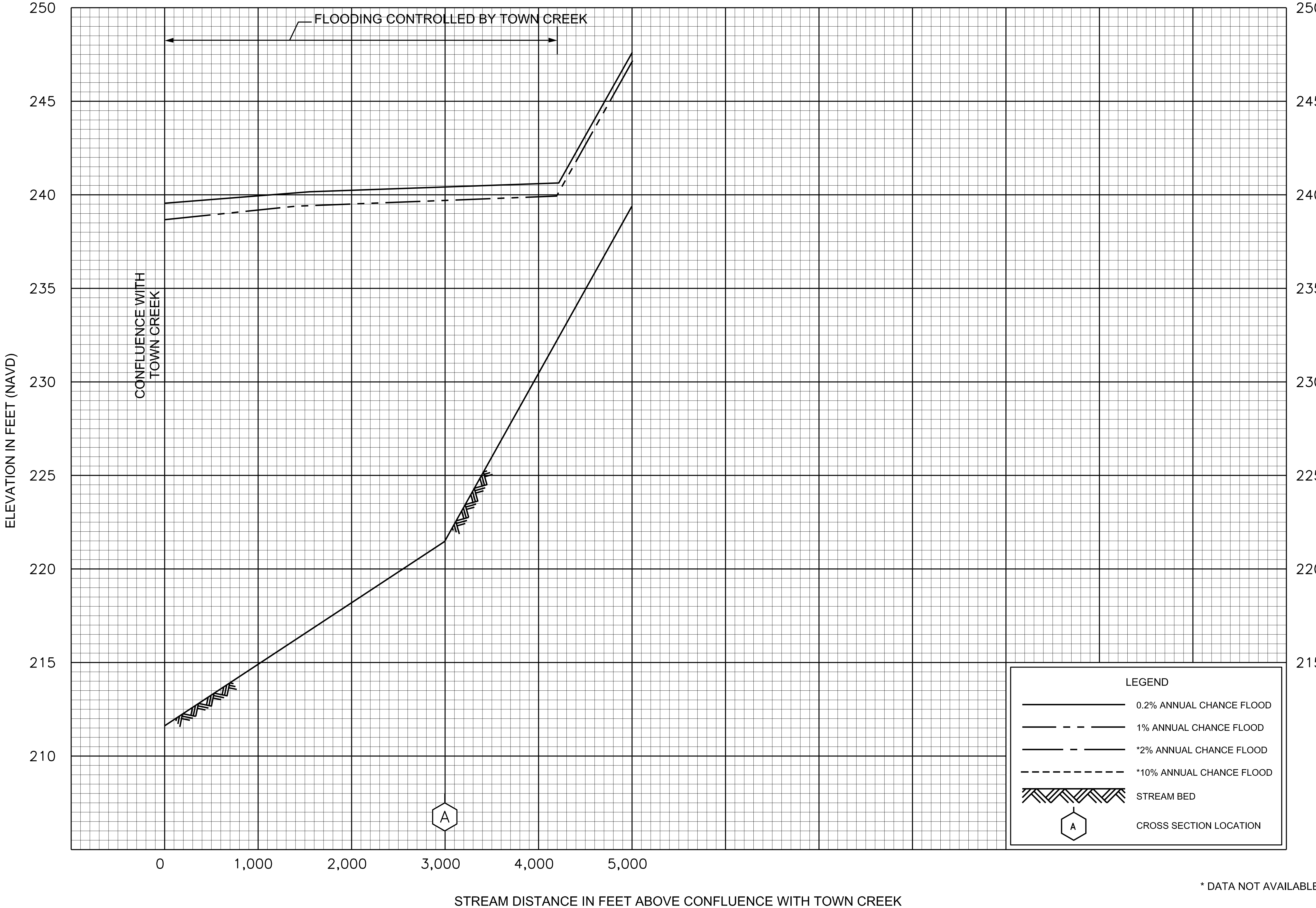
FLOOD PROFILES

TOWN CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

90P



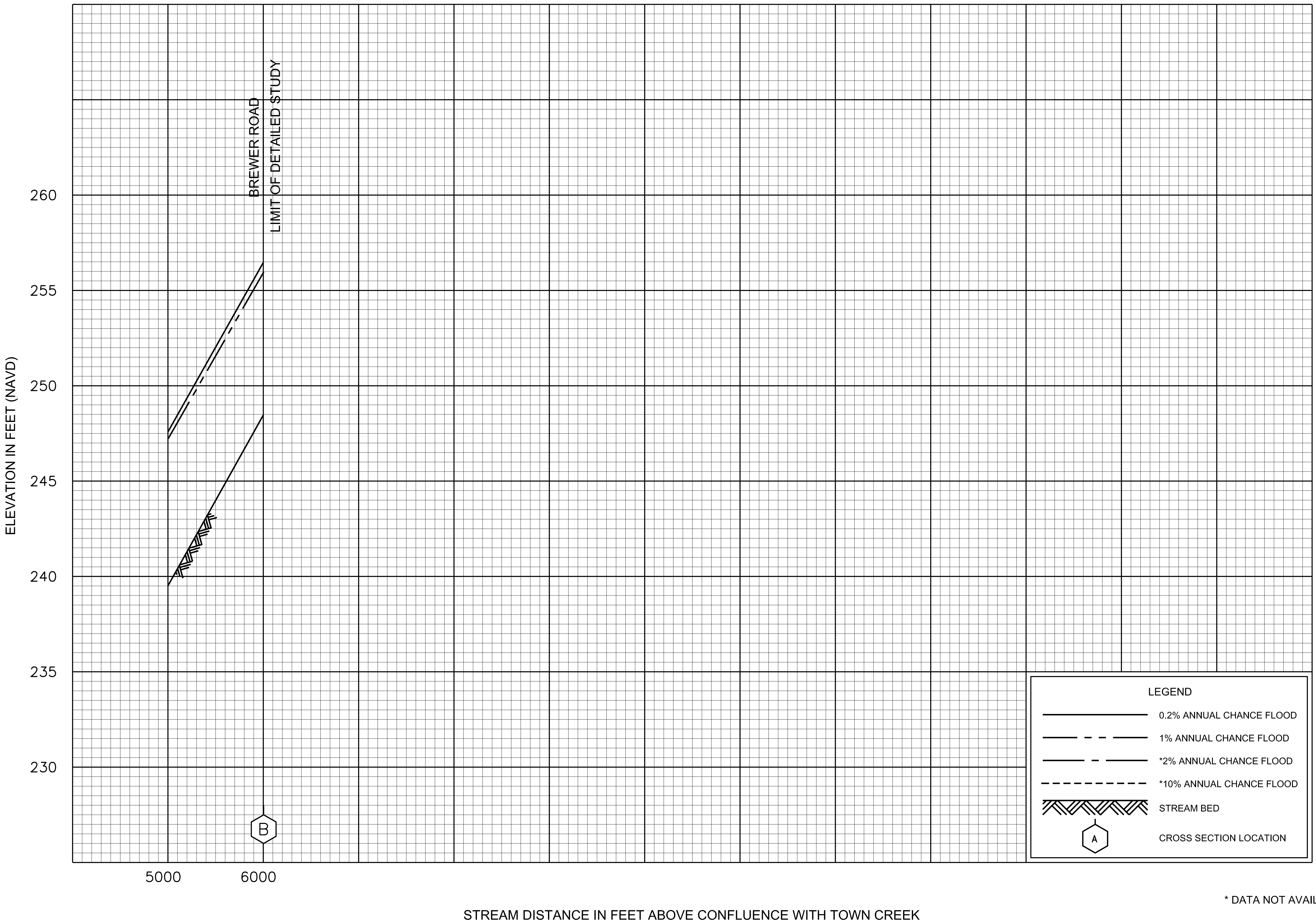
FLOOD PROFILES

TOWN CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



* DATA NOT AVAILABLE

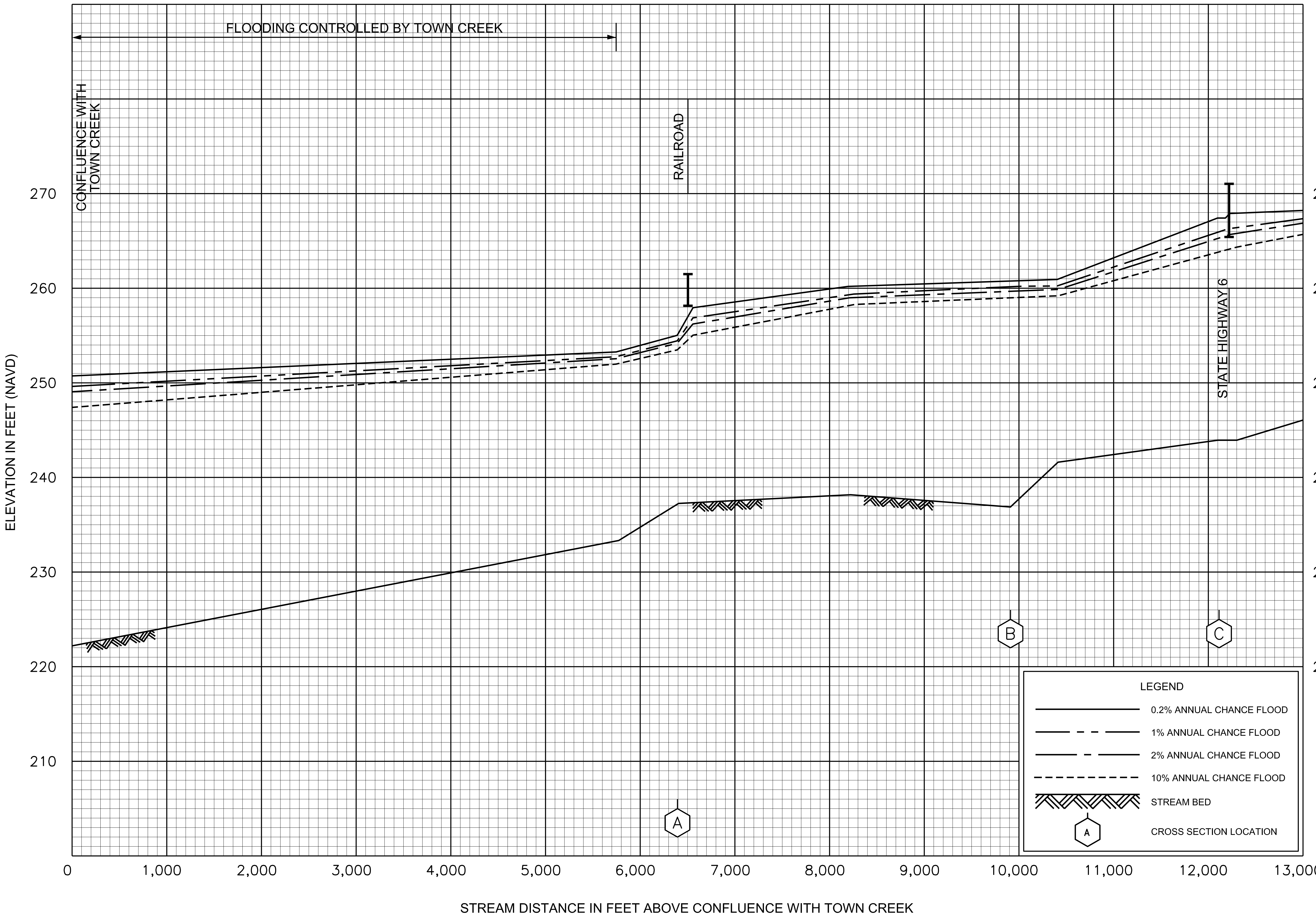
FLOOD PROFILES

TOWN CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

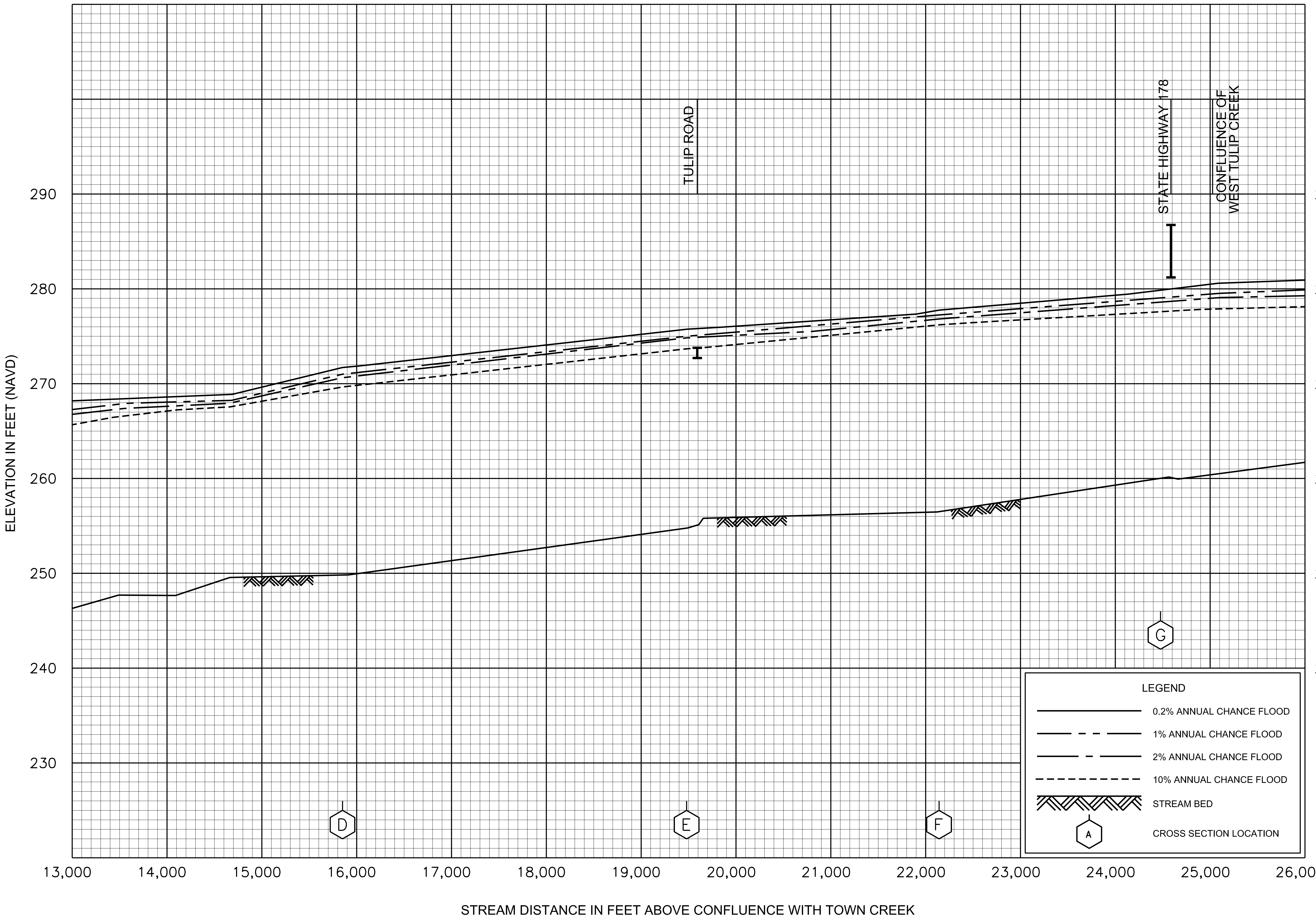


FLOOD PROFILES

TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



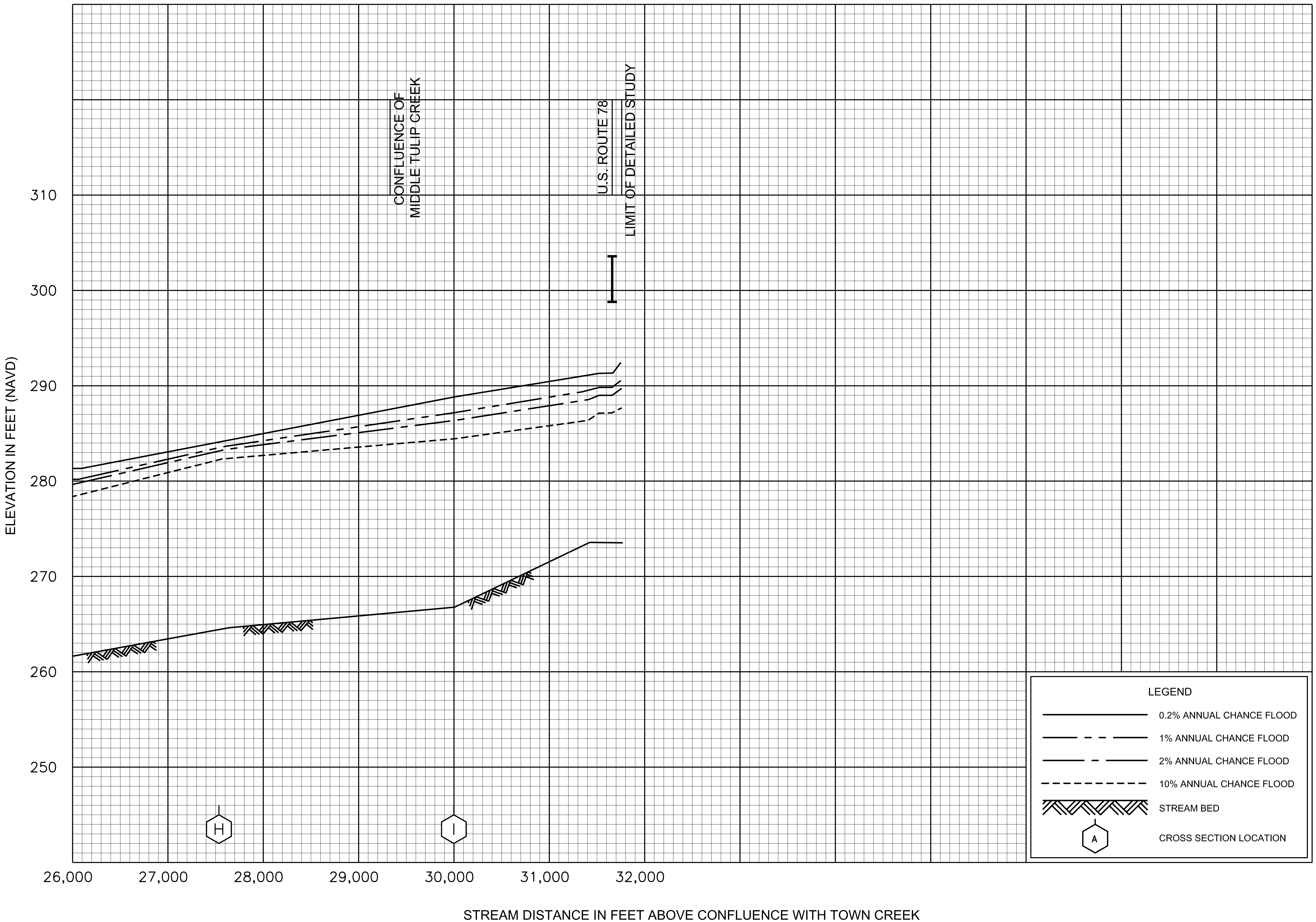
FLOOD PROFILES

TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



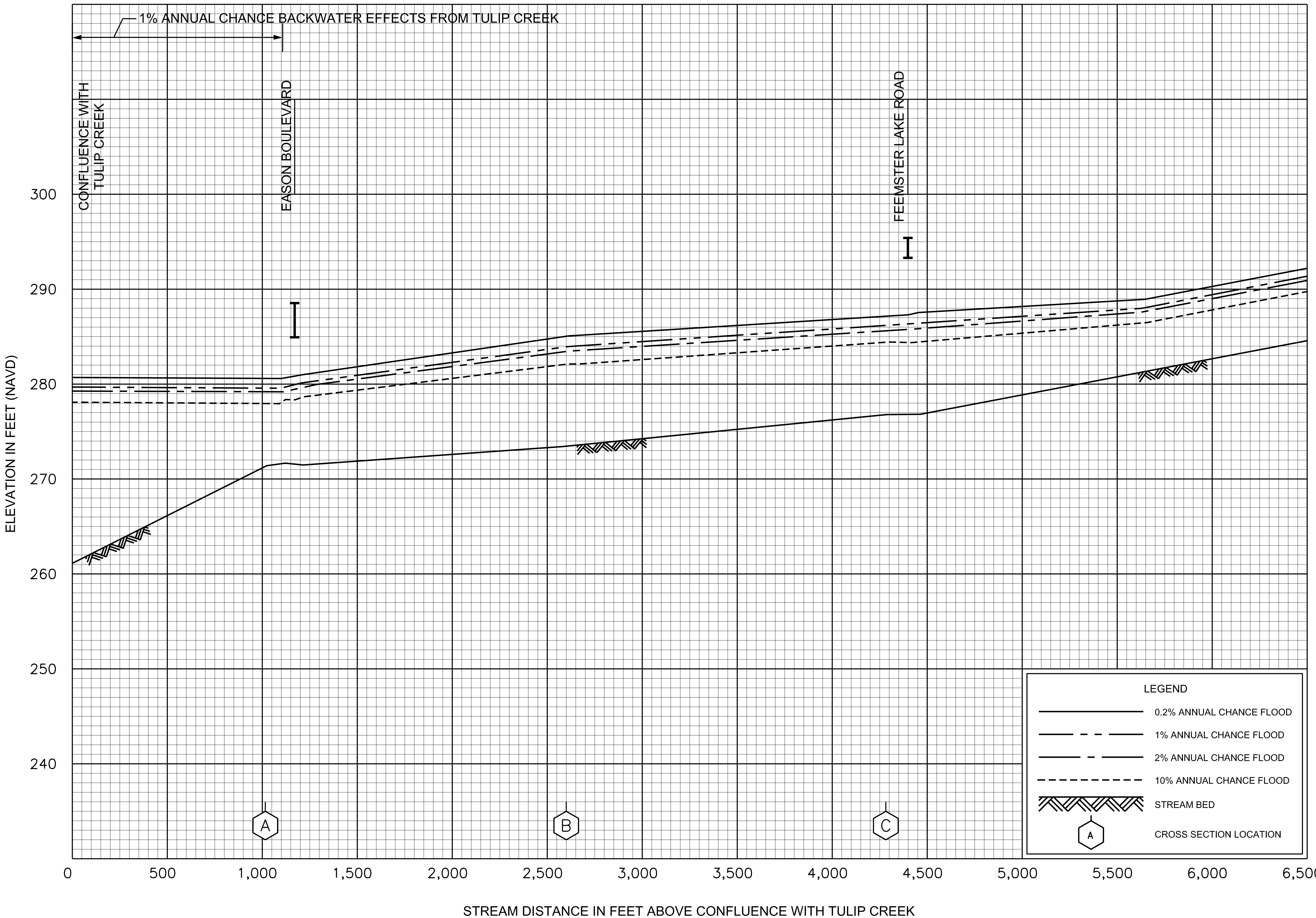
FLOOD PROFILES

TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

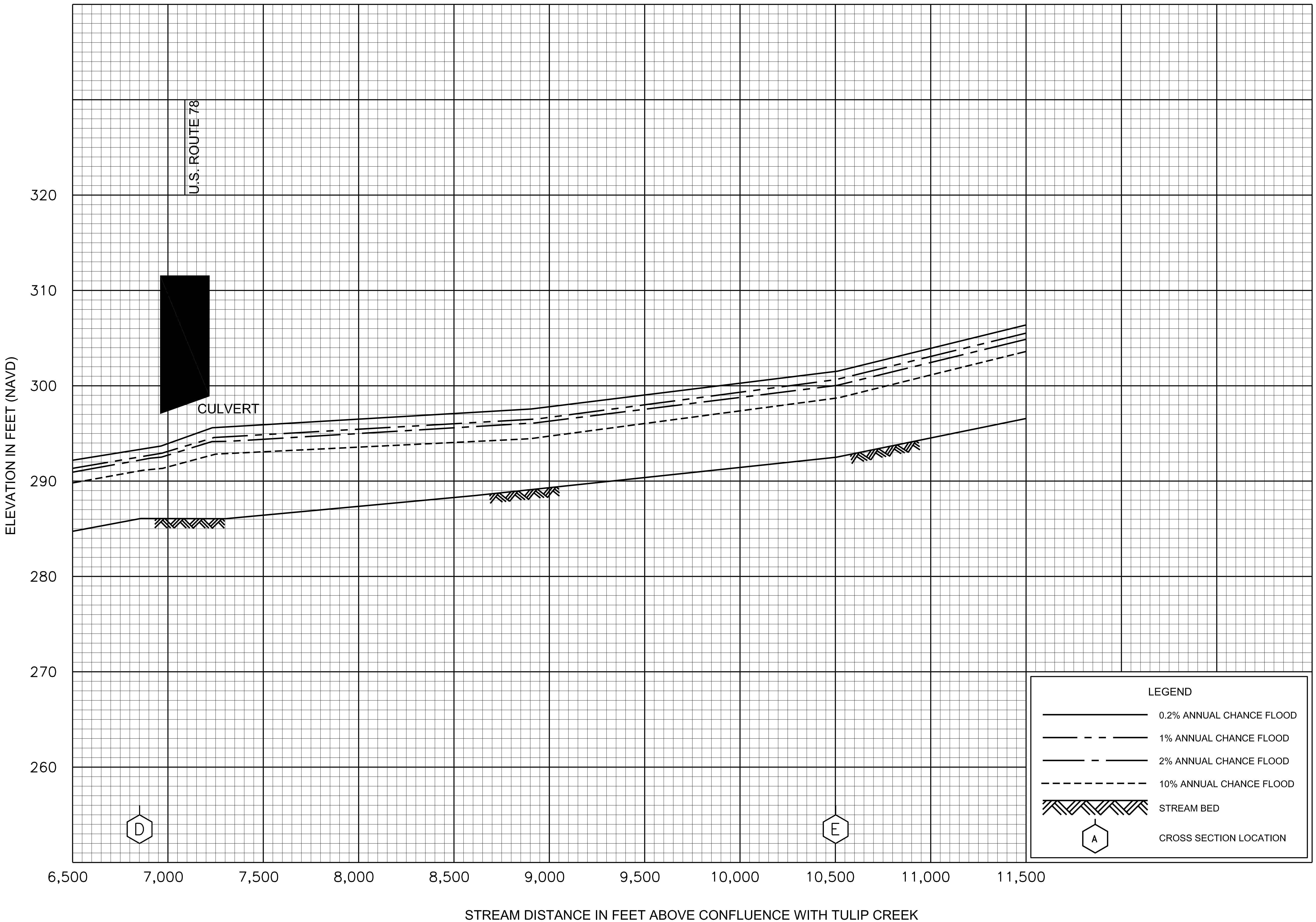


FLOOD PROFILES

WEST TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



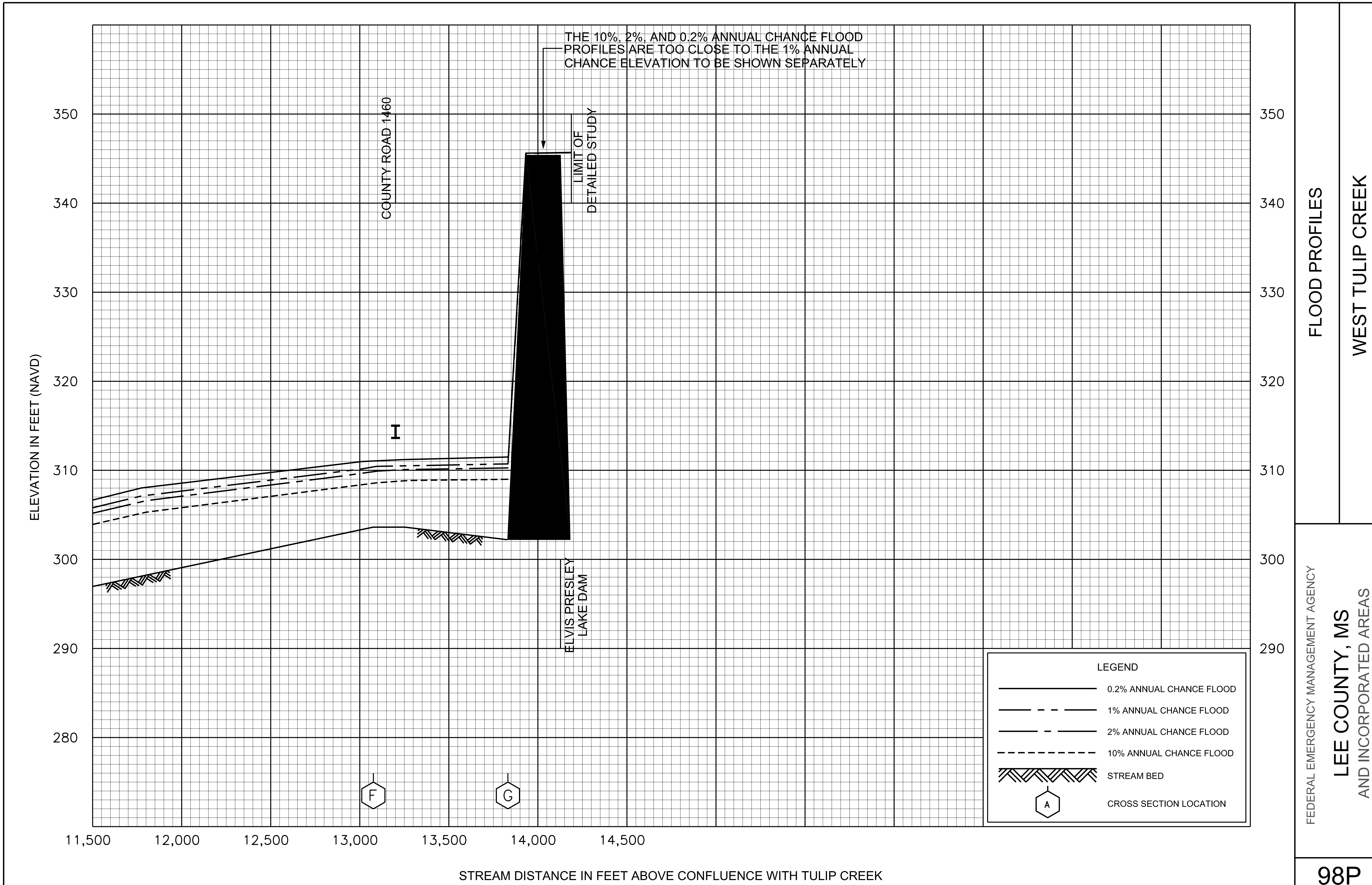
FLOOD PROFILES

WEST TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS


THE 10%, 2%, AND 0.2% ANNUAL CHANCE FLOOD PROFILES ARE TOO CLOSE TO THE 1% ANNUAL CHANCE ELEVATION TO BE SHOWN SEPARATELY
COUNTY ROAD 1460
LIMIT OF DETAILED STUDY
ELVIS PRESLEY LAKE DAM
ELEVATION IN FEET (NAVD)
350
340
330
320
310
300
290
280
11,500
12,000
12,500
13,000
13,500
14,000
14,500
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TULIP CREEK
F
G
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
WEST TULIP CREEK
FEDERAL EMERGENCY MANAGEMENT AGENCY
LEE COUNTY, MS
AND INCORPORATED AREAS
98P