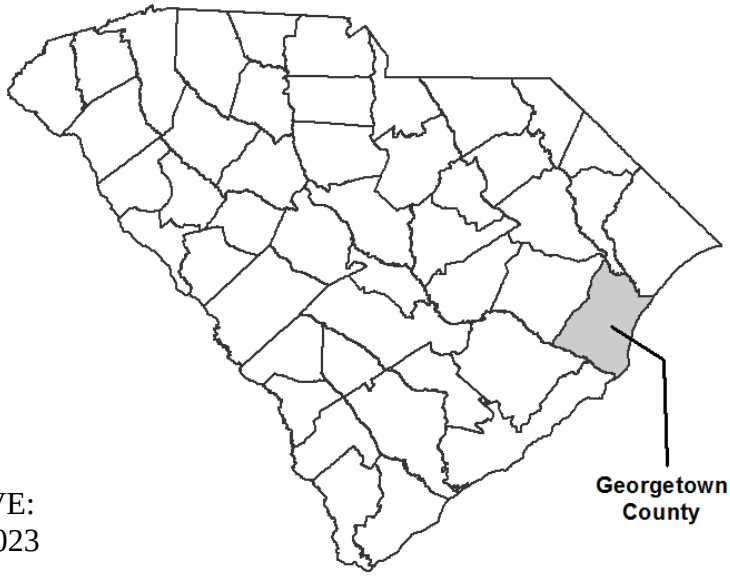
FLOOD INSURANCE STUDY

GEORGETOWN COUNTY, SOUTH CAROLINA
AND INCORPORATED AREAS

Community Name	Community Number
ANDREWS, TOWN OF	450086
GEORGETOWN COUNTY (UNINCORPORATED AREAS)	450085
GEORGETOWN, CITY OF	450087
PAWLEYS ISLAND, TOWN OF	450255



EFFECTIVE:
MAY 9, 2023

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
45043CV000A

NOTICE TO
FLOOD INSURANCE STUDY USERS

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

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

Initial Countywide FIS Effective Date: May 9, 2023

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Exhibit 1 – Flood Profiles – continued

FLOOD INSURANCE STUDY
GEORGETOWN COUNTY, SOUTH CAROLINA 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 Georgetown County, South Carolina, including the City of Georgetown; the Towns of Andrews and Pawleys Island; and all unincorporated areas of Georgetown County (referred to collectively herein as Georgetown County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood-risk data for various areas of the community that will be used to establish actuarial flood insurance rates and to assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

The Town of Andrews is geographically located in Georgetown and Williamsburg Counties. The Town of Andrews is included in its entirety in this countywide study, as most of the community's land areas are within Georgetown County.

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

1.2 Authority and Acknowledgements

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

This FIS was prepared to include all jurisdictions within Georgetown County into a countywide format FIS. Information on the authority and acknowledgements for each jurisdiction with a previously printed FIS report included in this countywide FIS is shown below.

Georgetown County (Unincorporated Areas): The hydrologic and hydraulic analyses for the March 16, 1989, FIS report were performed by Tetra Tech Inc. for the Federal Emergency Management Agency (FEMA) under Contract No. EMW-83-C-1180. This

	study was completed in March 1986 (FEMA, 1989a).
Georgetown, City of:	The hydrologic and hydraulic analyses for the March 16, 1989, FIS report were performed by Tetra Tech Inc. for FEMA under Contract No. EMW-83-C-1180. This study was completed in November 1984 (FEMA, 1989b).
Pawleys Island, Town of:	The hydrologic and hydraulic analyses for the March 16, 1989, FIS report were obtained from the March 16, 1989, FIS for Georgetown County (Unincorporated Areas). This study was completed in March 1986 (FEMA, 1989c).

There is no previous FIS for the Town of Andrews; therefore the previous authority and acknowledgement information for this area is not included in this FIS.

For this initial countywide FIS, new hydrologic and hydraulic analyses were completed for Black River Tributary 3, Canaan Branch, Parsonage Creek Tributary, Whites Creek, Whites Creek Tributary No. 4, and streams studied by limited-detailed methods; additionally all other detailed floodplains were re-delineated by URS Corporation (URS) for the State of South Carolina Department of Natural Resources (SCDNR), a Cooperating Technical Partner, under Contract No. SCDNR MAS FY06.07. This study was completed in October 2014.

In addition, for this initial countywide FIS, the South Carolina storm surge project was initiated under the Cooperating Technical Partner (CTP) agreement between SCDNR and FEMA Region IV under Mapping Activity Statements (MAS) 7, 8, and 10 for coastal storm surge activities being conducted as a statewide effort. FEMA, SCDNR, and a Steering Committee that consisted of an independent panel of experts provided project oversight and guidance on any unusual circumstances encountered on the project. This analysis was initiated in 2007 and completed in December 2013 and the results were used to develop the stillwater surfaces that are used for the overland wave height analysis. The creation of the final FIRM database and coastal floodplain mapping for this revision were performed by URS and was completed in October 2014.

For this initial countywide FIS, the base map information shown on the Flood Insurance Rate Map (FIRM) was collected from Georgetown County. The terrain used for floodplain modeling and mapping was developed from the Light Detection and Ranging (LiDAR) data dated 2005 and one-foot contour information acquired from Georgetown County (Georgetown County, 2005).

The coordinate system used for the production of this FIRM is State Plane South Carolina FIPS 3900 (Feet), North American Datum of 1983 (NAD 83). Corner coordinates shown on the FIRM are in latitude and longitude referenced to the State Plane projection, NAD 83. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of information shown on the FIRM.

1.3 Coordination

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

The dates of the pre-countywide initial and final CCO meetings held for the communities within Georgetown County are shown in Table 1, "Initial and Final Precountywide CCO Dates."

Table 1 – Initial and Final Precountywide CCO Meetings

Community Name	Initial CCO Date	Final CCO Date
Georgetown County (Unincorporated Areas)	April 1984	February 10, 1988
Georgetown, City of	April 1984	February 10, 1988
Pawleys Island, Town of	April 1984	February 11, 1988

For the initial countywide FIS, an initial CCO meeting was held on June 27, 2007, and was attended by representatives from Georgetown County, the Towns of Andrews and Pawley Island, Waccamaw Regional Council of Governments, SCDNR, FEMA, the study contractors. The purpose of this meeting was to obtain local information on needs for flood studies in Georgetown County.

The results of the initial countywide FIS were reviewed at the final CCO meeting held on March 8, 2016, and attended by representatives of FEMA, the study contractors, and local officials. All concerns or issues raised at that meeting have been addressed in this study.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS report covers the geographic area of Georgetown County, South Carolina, including the incorporated communities listed in Section 1.1. The areas

studied by detailed methods were selected with priority given to all known flood hazards and areas of projected development or proposed construction through October 2014.

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

Table 2 – Flooding Sources Studied by Detailed Methods

Allston Creek Tributary No. 1
Allston Creek Tributary No. 2
Bells Swamp
Bells Swamp Tributary
Black River
Black River Tributary 3
Boser Swamp
Canaan Branch
Chapel Creek
Chapel Creek Tributary No. 1
Chapel Creek Tributary No. 2
Chapel Creek Tributary No. 3
Chapel Creek Tributary No. 4
Chapel Creek Tributary No. 5
Cypress Creek
Cypress Creek Tributary No. 1
Cypress Creek Tributary No. 2
Parsonage Creek Tributary
Pennyroyal Creek
Port Creek Tributary
Port Creek-Pennyroyal Swamp
Ports Creek
Sampit River
St. Pauls Branch
St. Pauls Branch Tributary No. 1
St. Pauls Branch Tributary No. 2
Turkey Creek
Whites Creek
Whites Creek Tributary
Whites Creek Tributary No. 1
Whites Creek Tributary No. 2
Whites Creek Tributary No. 3
Whites Creek Tributary No. 4
Whites Creek Tributary No. 5
Whites Creek Tributary No. 6
Whites Creek Tributary No. 7
Winyah Bay Tributary

For this initial countywide FIS, updated or new detailed analyses were performed for the flooding sources listed in Table 3, "Initial Countywide FIS Detailed Study Streams." Limits of studies for the detailed studied streams are shown in Table 3.

Table 3 – Initial Countywide FIS Detailed Study Streams

Stream Name	Limits of Study
Black River Tributary 3	From the confluence with Black River to approximately 230 feet upstream of North Fraser Street (U.S. Highway 701)
Canaan Branch	From the confluence with Ports Creek to Sabine Drive
Parsonage Creek Tributary	From Neely Court to approximately 20 feet upstream of Ocean Highway
Whites Creek	From the confluence with Sampit River to approximately 5.3 miles upstream of confluence with Sampit River
Whites Creek Tributary No. 4	From the confluence with White Creek Tributary No. 3 to Mercer Avenue

Floodplain boundaries for streams not listed in Table 3, that have been studied previously by detailed methods were re-delineated based on more up-to-date topographic mapping.

Numerous streams that were previously studied by approximate methods were studied by limited-detailed methods for the initial countywide FIS. Please see Section 4.2, Table 9, "Limited Detailed Flood Hazard Data" for streams studied by limited-detailed methods.

Numerous streams were studied by approximate methods. Approximate analyses were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and Georgetown County.

LOMR 12-04-7938P and 02-04-441P affect Allston Creek Tributary No. 2. LOMR 02-04-441P was incorporated and it removed the 1% riverine floodplain from approximately 600 feet downstream of U.S. Route 17 to approximately 1,800 feet upstream of U.S. Route 17. While coastal portions of LOMR 12-04-7938P have been superseded, the riverine portion was still valid and incorporated into this study.

2D modeling and mapping analysis was performed for Great Pee Dee River and Bull Creek, which are two border rivers between Horry County and Georgetown County. The 2D modeling and mapping analysis also affects Waccamaw River within Georgetown County.

Engineering analysis was also performed on the entire coastline of Georgetown County, where the flooding source is the Atlantic Ocean. The scope of this study included establishing the frequency-peak elevation relationships for coastal

flooding sources, conducting overland wave height analysis, including erosion, WHAFIS and runup analysis, and preparing flood hazard mapping in Georgetown County.

2.2 Community Description

Georgetown County occupies a land area of approximately 813.5 square miles and lies on the coast of South Carolina (U.S. Census Bureau, 2014). The Atlantic Ocean forms the southeastern boundary, and the Great Pee Dee River and Marion and Horry Counties form the northeastern boundary. Along its southwestern border, just across the South Santee River, lie Charleston and Berkeley Counties, and to the northwest lies Williamsburg County. U.S. Routes 17, 521, and 701; State Routes 41 and 51; and the CSX railroad serve Georgetown County.

The population of Georgetown County at the 2010 U.S. Census was 60,158 (U.S. Census Bureau, 2014). This represents a 7.8 percent increase over the 2000 census population of 55,797 (U.S. Census Bureau, 2014).

Elevations in Georgetown County range from generally level to gently sloping, with elevations ranging from sea level, sloping 60 feet (ft) on the mainland to an elevation of 76 ft North American Vertical Datum 1988 (NAVD 88) on Sandy Island. For the most part, the county is flat with gradual changes in elevation. Marshy or low-lying regions are quite characteristic of the terrain. Only 3 percent of the county exceeds 50 ft NAVD 88 in elevation, and approximately 70 percent of the land is less than 40 ft above sea level. Georgetown County is located in the Atlantic Coastal Plain, which consists chiefly of unconsolidated rock material approximately 1,200 feet thick (Georgetown County, 2010).

The climate is classified as temperate. January is the coldest month, on average, with an average low temperature of 36 degrees Fahrenheit (°F) while July is the warmest month, on average, with an average high temperature of 90°F. The average annual temperature is approximately 65°F. Rainfall is moderate with an average annual perception of roughly 54 inches. The heaviest rainfall occurs during the summer months (South Carolina State Climatology Office, 2014a). However, the late summer and early fall months represent the hurricanes season in coastal South Carolina, bringing high wind velocities and torrential rain to the area.

The U.S. Department of Agriculture (USDA) has identified ten soil associations in Georgetown County: the Bohicket is nearly level, very poorly drained soils that are flooded daily by ocean tide; the Levy is nearly level, very poorly drained soils along the major rivers and backwater areas; the Chastain is nearly level, poorly drained soils along the upper reaches of the major rivers; Cape Fear is nearly level, very poorly drained soils in depressions; the Lakeland-Chipley-Centenary is nearly level to gently sloping, excessively drained and moderately well drained soils; the Leon-Lynn Haven-Shipley is nearly level, poorly drained and

moderately well drained soils; the Yauhannah-Yemassee is nearly level, moderately well drained and somewhat poorly drained soils; the Bladen Wahee-Eulonia is nearly level, poorly drained to moderately well drained soils; the Hobony is nearly level, very poorly drained organic soils on soils in depressions (USDA, 1982). These soils associations are classified in Soil Classification System Groups A, B, C, and D (USDA, 1972).

2.3 Principal Flood Problems

The dominant source of flooding in Georgetown County is wind-driven surge generated in the Atlantic Ocean by tropical storms and hurricanes. High winds associated with tropical storms can also produce extremely large waves which create higher than normal surge. The wave action during a tidal flood can be much more damaging than the higher water level alone. Flooding from heavy rainfall occurs on lowland areas and streams. Not all storms passing close to the study area produce extremely high surge. Similarly, storms that produce flooding conditions in one area may not necessarily produce flooding in other parts of the study area.

South Carolina experiences both hurricanes and tropical storms. Hurricanes are large and violent low pressure systems that originate in the South Atlantic and migrate northward. The late summer and early fall months represent the hurricanes season in coastal South Carolina. High wind velocities and torrential rain accompany hurricanes. The flooding from surge and precipitation along with substantial wind damage has produced severe floods as well as extensive structural damages in Georgetown County. The South Carolina State Climatology Office reports that hurricanes and tropical storms are irregular visitors to coastal South Carolina. In the period, 1901-2009, only 27 tropical cyclones made landfall on the South Carolina coast. Of these, only eight were Category 2 to Category 4 intensity on the Saffir-Simpson Hurricane Scale (South Carolina State Climatology Office, 2014b). Hurricane Hugo was the costlist storm in South Carolina history (South Carolina State Climatology Office, 2014b) and is described below. The brief descriptions of several significant storms provide historical information to which coastal flood hazards and flood depths can be compared.

<u>August 29, 2004 (Hurricane Gaston)</u>

Hurricane Gaston made landfall near Bulls Bay, causing widespread wind damage in northern Charleston and Berkeley Counties. The high winds blew down numerous trees and branches, destroying eight homes. In total over 3,000 structures sustained minor to significant damage. The heaviest rains fell from Williamsburg County, through Florence and Darlington Counties, where rainfall amounts ranged from 5 in. to over 10 in. This resulted in flash flooding, up to 5 ft deep in some cases. In Berkeley County, 20 structures were severely damage or

destroyed, and dozens of other structures suffered minor flood damage (National Weather Service, 2004a).

August 9-15, 2004 (Hurricane Charley)

Hurricane Charley struck near Cape Romain, South Carolina, with maximum sustained winds estimated at between 75 and 85 miles per hour (mph). At the National Data Buoy Center (NDBC) Station No. 41004, located 41 nautical miles southeast of Charleston, 16-foot seas were recorded as the center of Hurricane Charley passed by the South Carolina region. Surge plus tide levels at Charleston Harbor were measured at 5.63 ft mean sea level (MSL). Rainfall totals in Charleston, which had received 2.52 in. of rain from Hurricane Bonnie on August 12, 2004, measured an additional 2.09 in. in downtown Charleston from Hurricane Charley (National Weather Service, 2004b). The heavy rain during these storms was followed by more torrential rain with the landfall of Hurricane Gaston on August 29, 2004. The effects of Hurricane Charley in South Carolina include $20 million in damages in 2004 U.S. Dollars (USD) and 135,000 power outages. There were no fatalities.

September 17-24, 1989 (Hurricane Hugo)

Hurricane Hugo made landfall at Isle of Palms, South Carolina as a Category 4 hurricane and struck the Charleston, South Carolina area at about midnight on September 22, 1989, near high tide. High-water elevations (including wave setup and wave crest contributions) were 10 to 11 ft NAVD 88 at the open coast from the City of Folly Beach, South Carolina, northward to the City of Myrtle Beach, South Carolina, with elevations up to 18 ft NAVD 88 in bay areas in the vicinity of the maximum winds. Wind speeds at landfall were sustained at 138 mph, with gusts over 160 mph. At the time, Hurricane Hugo was the costliest storm in history of the United States and South Carolina, with over $7 billion in damages, 35 hurricane related fatalities and storm surges greater than 20 ft (National Weather Service, 1989). The worst destruction occurred in beach towns north of Charleston, such as Sullivan's Island and the Isle of Palms, where the majority of homes were rendered uninhabitable because of the fact that this area received the strongest winds and highest storm surge (National Weather Service, 1989).

September 11-13, 1984 (Hurricane Diana)

Hurricane Diana was the first major hurricane that threatened the east coast of the United States since 1960. Hurricane Diana impacted the southeastern coast of North Carolina and the northern coast of South Carolina with torrential rains and damaging winds. Winds were measured at 115 mph on Oak Island near Cape Fear, North Carolina, as the eye of the hurricane was about 20 miles south-southeast of Wilmington, North Carolina. Diana's highest sustained winds were 135 mph, and gales extended 125 miles in all directions. The hurricane moved onshore during a falling astronomical tide. This, combined with the fact that the

hurricane lost intensity as it moved onshore, led to a peak surge of only 5.1 ft above MSL. After the threat of the hurricane eased, the more than 9,000 persons that had been evacuated to shelters in the Myrtle Beach area were permitted to return home (Mitchell, et al., 1986).

September 12-13, 1964 (Tropical Storm Dora)

Tropical Storm Dora moved parallel to the South Carolina coast from 25 miles inland until it left the state by way of Horry, Marion, and Dillon Counties. Wind damage was relatively minor, but rains in the eastern part of the state ranged from 3 to over 8 inches (South Carolina Disaster Preparedness Agency, 1973).

September 11, 1960 (Hurricane Donna)

Hurricane Donna bypassed the South Carolina coast by about 50 miles and entered the North Carolina coast near Moorehead City. Highest tides along the South Carolina coast during its passage were only about 2 feet above normal, with maximum sustained winds of 40 mph with wind gusts up to 70 mph at Georgetown, South Carolina (Secretary of the Army, 1963).

September 24, 1958 (Hurricane Helene)

Hurricane Helene bypassed the South Carolina coast by about 40 miles during the morning of September 27, 1958; its center passed just southeast of the Cape Fear River, North Carolina at about noon. Wind gusts reading from 70 to 95 mph were observed on an anemometer aboard a yacht moored at Briarcliffe Yacht Basin. The highest wind velocity reading, of 95 mph, occurred at about 11:00 AM. The total rainfall at Myrtle Beach was 2.06 in. The U.S. Army Corps of Engineers (USACE) estimated damage at Surfside and Garden City to have totaled only about $3,000 (USACE, 1960).

August 12, 1955 (Hurricane Connie)

Though the storm passed about 1,745 miles and 100 miles offshore from Charleston and Myrtle Beach, respectively, and maximum sustained winds at Myrtle Beach reached 29 mph, tides along the coast from Georgetown to the North Carolina State line were about 4 feet higher than normal. Property damage to the coastal section between Georgetown to the North Carolina-South Carolina State line was estimated to have been $87,000. The USACE noted that damage to the Surfside and Garden City beached was minor and confined to beach erosion (USACE, 1960).

August 10-17, 1955 (Hurricane Diane)

Hurricane Diane was first observed in the vicinity of the Leeward Islands, Lesser Antilles, at about the time Hurricane Connie was off the coast of Georgia. The

hurricane did not penetrate the South Carolina coast but passed 50 miles off the coast of Myrtle Beach. The highest tide, averaging about 4 feet above normal, occurred at Surfside and Garden City on August 16, 1955. Heavy rains were noted in the vicinity of Myrtle Beach and Little River, South Carolina. The USACE estimated hurricane damages to the beaches between Georgetown and Little River at $86,000 (UASCE, 1960).

October 15, 1954 (Hurricane Hazel)

Hurricane Hazel entered the coast just north of Myrtle Beach, South Carolina, and was one of the most destructive hurricanes in terms of property damage. Hurricane winds hit the Atlantic coast between Georgetown, South Carolina and Cape Lookout, North Carolina, and storm tides devastated the immediate ocean-front of this stretch of coast. Every fishing pier from Myrtle Beach to Cedar Island, North Carolina, a distance of 170 miles, was destroyed. At Cherry Grove Beach, tides of 17 feet above MSL destroyed all front row houses and washed some second row houses from their foundations. At Tilgham Beach, Ocean Drive, Cresent Beach, Atlantic Beach, and Windy Hill, South Carolina, practically all front row houses were destroyed or damaged, with waves breaking at housetop heights along some of the beachfront. At Myrtle Beach, high-water marks at the Edgewater Apartments near 16th Avenue South indicated a tide height of 15.5 feet above MSL. The highest wind gust at Myrtle Beach Air Force Base was 106 mph. It is estimated that the effects of wind and water combined to badly damage or destroy about 80 percent of the beachfront property in the Myrtle Beach area. At Surfside and Garden City, South Carolina, hundreds of houses were destroyed by tides in excess of 13 feet above MSL. On Pawleys Island, South Carolina, 75 percent of the houses on the beach were badly damaged and 10-foot waves covered the northern and southern ends of the island, as well as low-lying areas in the middle. At Georgetown, sections of the street were inundated. Folly Island, Sullivan's Island, and Isle of Palms suffered light property damage and slight beach erosion (FEMA, 1962).

2.4 Flood Protection Measures

Some areas along the coastline of Georgetown County have been designated as coastal barriers by the Department of the Interior under the Coastal Barriers Resources Act (PL 97-348). Development is prohibited in these areas.

A notable nonstructural flood protection measure is the Public Warning System for severe weather conditions operated by the National Oceanic and Atmospheric Administration (NOAA), through the NWS, in cooperation with various state, county and local officials. This system can provide some measure of flood protection by compelling coastal residents to take the necessary precautions in the event of a major storm.

3.0 ENGINEERING METHODS

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

3.1 Hydrologic Analyses

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

Information on the methods used to determine peak discharge-frequency relationships for the streams studied by detailed methods is shown below.

Pre-Countywide Analyses

For each community within Georgetown County that has a previously printed FIS report, the hydrologic analyses described in those reports have been compiled and are summarized below.

Regionalized regression equations developed by the U.S. Geological Survey (USGS) were used for deriving the peak discharge frequency relationships for streams studies in Georgetown County (Unincorporated Areas), City of Georgetown and Town of Pawleys Island; including Allston Creek Tributary Nos. 1 and 2, Bells Swamp, Bells Swamp Tributary, Black River, Boser Swamp, Canaan Branch, Chapel Creek, Chapel Creek Tributary 1, 2, 3, 4, and 5, Cypress Creek, Cypress Creek Tributary 1 and 2, Ports Creek, Parsonage Creek Tributary, Penny Royal Creek, Port Creek-Penny Royal Swamp, Port Creek Tributary, Sampit River, St. Pauls Branch, St. Pauls Branch Tributary 1 and 2, Turkey Creek, Whites Creek, Whites Creek Tributary 1, 2, 3, 4, 5, 6, and 7, and Winyah Bay Tributary. The hydrologic calculations are detailed in WRE Note 84-1 (Tetra Tech, 1984).

This Countywide Analyses

Discharges for the 10-, 2-, 1-, and 0.2-percent-annual-chance recurrence intervals for the streams studied by detailed methods were determined using USGS regression analyses. This includes Black River Tributary 3, Cannan Branch, Parsonage Creek Tributary 3, Whites Creek, and Whites Creek Tributary 4. The calculations used the most recent edition of equations for both rural (Feaster and Tasker, 2002) and urban (Feaster and Guimaraes, 2004) streams.

Discharges for the 1-percent-annual-chance recurrence intervals for the streams studied by limited-detailed methods were determined using USGS regression analyses. The calculations used the most recent edition of equations for both rural (Feaster and Tasker, 2002) and urban (Feaster and Guimaraes, 2004) streams.

Gage analyses were also performed on streams with available gage data in accordance with the Bulletin 17B guidelines (USGS, 1982). These streams include Black River, Great Pee Dee River, Santee River and Turkey Run.

Peak discharge-drainage area relationships for the selected recurrence intervals are shown in Table 4, "Summary of Discharges."

Table 4 – Summary of Discharges

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
ALLSTON CREEK					
TRIBUTARY NO. 1					
At U.S. Route 17	1.2	175	325	410	620
Approximately 1 mile upstream of U.S Route 17	0.2	60	115	150	225
ALLSTON CREEK					
TRIBUTARY NO. 2					
At U.S. Business Route 17	0.4	90	144	173	250
BELLS SWAMP					
At mouth	2.7	295	535	660	1,015
At State Route 128	2.0	245	455	560	860
Approximately 0.3 mile upstream of State Route 126	1.3	190	350	440	670
At State Route 249	0.4	90	170	225	340
BELLS SWAMP TRIBUTARY					
At mouth	0.5	115	215	275	415
At State Route 126	0.3	75	145	185	280

Table 4 – Summary of Discharges - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
BLACK RIVER					
At State Route 51	1,617	14,975	25,610	30,380	44,000
BLACK RIVER TRIBUTARY 3					
At the confluence with Black River	3.0	277	504	624	947
At intersection with Fraser Street	0.7	103	192	239	373
BOSER SWAMP					
At mouth	15.0	795	1,375	1,630	2,560
At State Route 14	13.7	750	1,305	1,550	2,435
Just upstream of confluence of Boser Swamp Tributary	7.1	515	915	1,100	1,710
CANAAN BRANCH					
At confluence with Ports Creek	5.0	383	694	858	1,322
At intersection with High Market Street/Alternate US 17	3.8	321	582	71	1,112
At approximately 180 feet downstream from intersection with Sabine Road	0.7	105	194	242	377
CHAPEL CREEK					
At mouth	9.1	595	1,045	1,250	1,950
Just upstream of confluence of Chapel Creek Tributary No. 1	7.5	530	940	1,130	1,760
Just upstream of confluence of Chapel Creek Tributary No. 2	4.4	385	695	845	1,310
Just upstream of confluence of Chapel Creek Tributary No. 4	2.8	300	550	675	1,040
At State Route 180	1.9	240	440	545	835
At U.S. Route 701	1.4	200	370	460	705
CHAPEL CREEK TRIBUTARY NO. 1					
At mouth	1.3	190	355	440	670
CHAPEL CREEK TRIBUTARY NO. 2					
At mouth	2.6	285	520	635	980
Just upstream of confluence of Chapel Creek Tributary No. 3	0.9	160	300	375	570

Table 4 – Summary of Discharges - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
CHAPEL CREEK TRIBUTARY NO. 3					
At mouth	1.3	190	355	440	670
At State Route 180	0.9	155	295	365	555
CHAPEL CREEK TRIBUTARY NO. 4					
At mouth	0.7	140	265	330	500
Just upstream of confluence of Chapel Creek Tributary No. 5	0.2	65	125	160	240
CHAPEL CREEK TRIBUTARY NO. 5					
At mouth	0.4	100	190	240	365
CYPRESS CREEK					
At mouth	7.9	545	965	1,160	1,805
At State Route 264	7.3	525	930	1,115	1,740
At U.S. Route 701	5.0	420	750	910	1,405
CYPRESS CREEK TRIBUTARY NO. 1					
At mouth	0.9	155	295	365	555
Just upstream of confluence of Cypress Creek Tributary No. 2	0.6	120	230	290	440
CYPRESS CREEK TRIBUTARY NO. 2					
At mouth	0.3	75	150	190	285
PARSONAGE CREEK TRIBUTARY					
Just upstream of Murrells Inlet Road	0.24	53	100	125	197
Just downstream of Ocean Highway	0.21	49	92	115	181
Just upstream of Ocean Highway	0.16	42	80	100	157

Table 4 – Summary of Discharges - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
PENNYROYAL CREEK					
Approximately 0.5 mile upstream of mouth	14.1	765	1,330	1,575	2,475
Just upstream of confluence of Turkey Creek	8.7	580	1,020	1,225	1,910
At Pennyroyal Road	7.3	520	925	1,110	1,730
PORT CREEK-PENNYROYAL SWAMP					
At mouth	30.9	1,205	2,045	2,390	3,790
At confluence of Tyler Creek	28.6	1,155	1,960	2,595	3,635
Just upstream of confluence of Port Creek Tributary	22.4	1,000	1,715	2,015	3,180
Just upstream of confluence of Boser Swamp	7.1	515	910	1,100	1,710
At the downstream crossing of State Route 513	6.5	490	870	1,050	1,630
At the upstream crossing of State Route 513	3.1	320	580	710	1,090
PORT CREEK TRIBUTARY					
Approximately 0.75 mile upstream of mouth	15.2	800	1,385	1,640	2,575
PORTS CREEK					
Approximately 0.75 mile upstream of confluence of the Sampit River	15.2	800	1,385	1,640	2,575
At U.S. Route 521	11.5	680	1,190	1,420	2,220
SAMPIT RIVER					
Just upstream of confluence of Ports Creek	94.5	2,310	3,785	4,325	6,940
About 0.63 downstream of CSX railroad	67.5	1,900	3,145	3,615	5,785
At U.S. Route 17A	57.0	1,720	2,865	3,305	5,275
ST. PAULS BRANCH					
About 1mile upstream of mouth	6.3	480	885	1,030	1,605
Just upstream of confluence of St. Pauls Branch Tributary No. 2	3.1	320	580	710	1,095
At U.S. Route 701	1.8	230	420	520	800

Table 4 – Summary of Discharges - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
ST. PAULS BRANCH TRIBUTARY NO. 1					
At mouth	0.9	120	230	290	440
ST PAULS BRANCH TRIBUTARY NO. 2					
At mouth	1.6	215	405	500	765
TURKEY CREEK					
At mouth	5.0	415	740	900	1,395
At Pennyroyal Road	3.1	320	580	710	1,090
WHITES CREEK					
At confluence with Sampit River	7.6	2,239	3,037	3,330	4,124
Approximately 0.49 miles downstream of Seaboard Coast Line Railroad	6.7	1,078	1,434	1,564	1,900
Approximately 0.25 miles downstream of Seaboard Coast Line Railroad	5.6	935	1,242	1,355	1,640
Approximately 0.11 miles downstream of High Market Street	4.6	364	659	816	1,257
At CSX railroad	3.5	525	880	1,055	1,545
At Dirt Road (approximately 0.50 mile upstream of High Market Street)	2.9	270	491	609	941
Approximately 1.36 miles upstream of High Market Street	1.4	170	312	387	602
Approximately 2.25 miles upstream of High Market Street	0.6	94	175	218	341
WHITE CREEK TRIBUTARY					
At mouth	0.4	165	280	340	475
WHITES CREEK TRIBUTARY NO. 1					
About 500 feet upstream of mouth	0.3	75	145	185	280
WHITES CREEK TRIBUTARY NO. 2					
About 500 feet upstream of mouth	0.2	65	130	165	245

Table 4 – Summary of Discharges - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) % Annual Chance 10%	2%	1%	0.2%
WHITES CREEK TRIBUTARY NO. 3					
At mouth	1.2	280	470	575	820
Just upstream of confluence of Whites Creek Tributary No. 4	0.5	150	260	320	455
WHITES CREEK TRIBUTARY NO. 3 (continued)					
About 0.57 miles upstream of confluence of Whites Creek Tributary No. 6	0.7	55	110	145	215
WHITES CREEK TRIBUTARY NO. 4					
At confluence with Whites Creek Tributary No. 3	0.6	359	449	485	567
Approximately 0.16 miles downstream of High Market St.	0.5	210	258	277	319
WHITES CREEK TRIBUTARY NO. 5					
At mouth	0.1	55	100	125	180
WHITES CREEK TRIBUTARY NO. 6					
At mouth	0.9	210	365	445	640
Just upstream of confluence of Whites Creek Tributary No. 7	0.3	100	180	220	305
WHITES CREEK TRIBUTARY NO. 7					
At mouth	0.4	125	215	270	380
WINYAH BAY TRIBUTARY					
About 1,000 feet upstream of mouth	1.8	230	430	530	810

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 table in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS report in conjunction with the data shown on the FIRM.

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).

Cross sections for the flooding sources studied by detailed methods were obtained from field surveys. All bridges, dams, and culverts were field-surveyed to obtain elevation data and structural geometry. All topographic mapping used to determine cross sections is referenced in section 4.1.

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

Flood Profiles (Exhibit 1) were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals. In cases where the 2- and 1-percent-annual-chance flood elevations are close together, because of limitations of the profile scale, only the 1-percent-annual-chance flood has been drawn.

Pre-Countywide FIS Analyses

For each community within Georgetown County that has a previously printed FIS report, the hydraulic analyses described in those reports have been compiled and are summarized below.

For areas subject to stream overflow, water-surface elevations for floods of the selected recurrence intervals were developed using the USACE Hydrologic Engineering Center (HEC) HEC-2 water-surface profile computer model (HEC, 1982). Cross sections for the backwater analyses were obtained from field surveys. Topographic maps were used to extend surveyed cross sections. All bridges, dams and culverts were field-checked to obtain elevation data and

structural geometry. Starting water-surface elevations were determined using the normal-depth calculation method except for those influenced by coastal flooding.

Roughness coefficients used in the hydraulics computations were determined on the basis of field observation, aerial photographs of the streams and floodplain areas, and the USGS Water Supply Paper 1849 (USGS, 1967). The channel "n" value for the streams ranged from 0.04 to 0.06, and the overbank "n" values ranged from 0.1 and 0.2.

Countywide Analyses

Analyses of the hydraulic characteristics of flooding from the riverine sources studied were carried out to provide estimates of the elevations of floods of the selected percent annual chance floods. For the detailed studies, 10-, 2-, 1- and 0.2-percent-annual-chance flood elevations were determined. For the limited-detailed and approximate-detailed studies, the 1-percent-annual-chance flood was analyzed.

For all studied streams, water-surface elevations for floods of the selected percent annual chance floods were developed using the USACE Hydrologic Engineering Center's (HEC) HEC-RAS water-surface profiles computer model, version 3.1.3 (HEC, 2005). LiDAR data was used for overbank topographic information. The bathymetric information was interpolated using information from structure surveys or engineering judgment. Bridge, dam, and culvert information was obtained from professional survey.

Channel roughness coefficients (Manning's "n" Values) used in the hydraulic computations were determined based on landuse type. Landuse types were obtained for the study area from the University of South Carolina GIS Data Server. Assignment of Manning's value for a given landuse was based on engineering judgment. For detailed and limited-detailed studies, the range of roughness values used for the stream channels was 0.040 to 0.055, and for the overbank values, the range was 0.10 to 0.20. The approximate studies were assigned a Manning's value of 0.15 for the overbanks and 0.045 for the main channel. Table 5, "Manning's "n" Values, provides a listing of roughness coefficients used in the models.

Table 5 – Manning's "n" Values

Stream	Channel "n"	Overbank "n"
Allston Creek Tributary No. 1	0.040 – 0.055	0.100 – 0.200
Allston Creek Tributary No. 2	0.040 – 0.055	0.100 – 0.200
Bells Swamp	0.040 – 0.055	0.100 – 0.200
Bells Swamp Tributary	0.040 – 0.055	0.100 – 0.200
Black River	0.040 – 0.055	0.100 – 0.200
Black River Tributary 3	0.045	0.145

Table 5 – Manning's "n" Values - continued

Stream	Channel "n"	Overbank "n"
Boser Swamp	0.040 – 0.055	0.100 – 0.200
Canaan Branch	0.045	0.030 – 0.145
Chapel Creek	0.040 – 0.055	0.100 – 0.200
Chapel Creek Tributary No. 1	0.040 – 0.055	0.100 – 0.200
Chapel Creek Tributary No. 2	0.040 – 0.055	0.100 – 0.200
Chapel Creek Tributary No. 3	0.040 – 0.055	0.100 – 0.200
Chapel Creek Tributary No. 4	0.040 – 0.055	0.100 – 0.200
Chapel Creek Tributary No. 5	0.040 – 0.055	0.100 – 0.200
Cypress Creek	0.040 – 0.055	0.100 – 0.200
Cypress Creek Tributary No. 1	0.040 – 0.055	0.100 – 0.200
Cypress Creek Tributary No. 2	0.040 – 0.055	0.100 – 0.200
Parsonage Creek Tributary	0.05	0.15
Pennyroyal Creek	0.040 - 0.055	0.100 - 0.200
Port Creek/Pennyroyal Swamp	0.040 - 0.055	0.100 - 0.200
Port Creek Tributary	0.040 - 0.055	0.100 - 0.200
Ports Creek	0.040 - 0.055	0.100 - 0.200
Sampit River	0.040 - 0.055	0.100 - 0.200
St. Pauls Branch	0.040 - 0.055	0.100 - 0.200
St. Pauls Branch Tributary No. 1	0.040 - 0.055	0.100 - 0.200
St. Pauls Branch Tributary No. 2	0.040 - 0.055	0.100 - 0.200
Turkey Creek	0.040 - 0.055	0.100 - 0.200
Whites Creek	0.045	0.145
Whites Creek Tributary	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 1	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 2	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 3	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 4	0.045	0.145
Whites Creek Tributary No. 5	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 6	0.040 - 0.055	0.100 - 0.200
Whites Creek Tributary No. 7	0.040 - 0.055	0.100 - 0.200
Winyah Bay Tributary	0.040 - 0.055	0.100 - 0.200

Normal Depth was used as the boundary condition for modeling. If a stream had been previously studied by detailed methods as shown on the effective FIRMs, known water surface elevations were used as the boundary condition to tie-in with existing studies as required.

Qualifying bench marks within a given jurisdiction that are cataloged by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS) as First or Second Order Vertical and have a vertical stability classification of A, B, or C are shown and labeled on the FIRM with their 6-character NSRS Permanent Identifier.

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

- Stability A: Monuments of the most reliable nature, expected to hold position/elevation well (e.g., mounted in bedrock)

- Stability B: Monuments which generally hold their position/elevation well (e.g., concrete bridge abutment)

- Stability C: Monuments which may be affected by surface ground movements (e.g., concrete monument below the frost line)

- Stability D: Mark of questionable or unknown vertical stability (e.g., concrete monument above frost line, or steel witness post)

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

To obtain elevation, description, and /or location information for bench marks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their Web site at www.ngs.noaa.gov.

It is important to note that 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 this FIS and FIRM. Interested individuals may contact FEMA to access this data.

3.3 Coastal Analyses

The stillwater surge elevation is the water elevation due solely to the effects of the astronomical tides, storm surge, and wave setup on the water surface but which does not include wave heights. The inclusion of wave heights, which is the distance from the trough to the crest of the wave, increases the water-surface elevations. The height of a wave is dependent upon wind speed and duration, depth of water, and length of fetch. The wave crest elevation is the sum of the stillwater elevation and the portion of the wave height above the stillwater elevation.

Countywide Analyses

Coastal analysis for this revision, considering storm characteristics and the shoreline and bathymetric characteristics of the flooding sources studied, were carried out to provide estimates of the elevations of floods of the selected recurrence intervals along the shoreline. Users of the FIRM should be aware that coastal flood elevations are provided in Table 6, "Summary of Coastal Stillwater Elevations" table in this report. If the elevation on the FIRM is higher than the elevation shown in this table, a wave height, wave runup, and/or wave setup component likely exists, in which case the higher elevation should be used for construction and/or floodplain management purposes.

The South Carolina storm surge project was initiated under the CTP agreement between SCDNR and FEMA Region IV under Mapping Activity Statements (MAS) 7, 8, and 10 for coastal storm surge activities being conducted as a statewide effort. The project team consists of FEMA, SCDNR, URS, AECOM/Watershed Concepts and their subcontractors, Taylor Engineering, Risk Engineering, and Ocean Weather, Inc. The study replaces outdated coastal analyses as well as previously published storm surge stillwater elevations for all FIS Reports in the study area, including Georgetown County, SC and serves as the basis for updated FIRMs. Study efforts were initiated in 2007 and concluded in 2013.

In addition to FEMA and SCDNR, project oversight and guidance are being provided by a Steering Committee for this project, which consists of an independent panel of scientists identified by SCDNR. The purpose of the Steering Committee is to provide oversight and guidance in the event of unusual circumstances that are encountered on the project.

The purpose of the South Carolina storm surge project was to develop updated storm surge analyses for the 10-percent, 2-percent, 1-percent, and 0.2-percent-annual-chance stillwater elevations or storm surge levels along the entire South Carolina coast. Storm surge includes the cumulative effects of storm winds, wave forces, and tides. The storm surge levels were determined by using the ADCIRC hydrodynamic model in concert with the Steady State Spectral Wave (STWAVE) model to complete a series of model runs with input data from artificial storms created using the Joint Probability Method (JPM) statistical analysis. After the completion of this process, the data were analyzed to determine the stillwater elevations, and then overland wave height analysis was performed with the Wave Height Analysis for Flood Insurance Studies (WHAFIS) model, to determine the final Base Flood Elevations (BFEs). The results of the overland wave height study were used to update the FIRMs and FISs for the counties in South Carolina affected by coastal surge.

The storm surge from Atlantic Ocean affects 79 miles of Georgetown County coastline, and that entire length was modeled for overland wave propagation. The

storm-surge elevations for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods along the coastline of Georgetown are shown in Table 6, "Summary of Coastal Stillwater Elevations." The analyses reported herein reflect the stillwater elevations due to storm surge and wave setup effects. As storm surge is driven by wind and the inverse barometric effect of low atmospheric pressure and is also influenced by waves, tides, and uneven bathymetric and topographic surfaces, it varies along the shoreline.

Table 6 – Summary of Coastal Stillwater Elevations

	ELEVATION (feet NAVD88)			
	% Annual Chance			
FLOODING SOURCE AND LOCATION	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Atlantic Ocean				
Coastline from Georgetown/Horry County boundary to north of the mouth of Winyah Bay	5.3	9.0-9.5	11.1-11.5	15.5-16.3
Coastline from the mouth of Winyah Bay to Georgetown/Charleston county boundary	5.4	7.9-8.5	9.6-10.3	13.4-14.5
Coastline of the Murrell Inlet Marsh	5.3	9.5-10.8	11.7-12.9	16.6-17.8
Coastline of the Pawleys Island Marsh	5.3	9.7-10.1	11.9-12.4	16.7-17.3
Winyah Bay				
Entire Coastline	5.4	8.1-8.9	9.9-11.0	14.0-15.9

The methodology for analyzing the effects of wave heights associated with coastal storm surge flooding is described in a report prepared by the National Academy of Sciences (NAS; NAS, 1977). This method is based on three major concepts. First, depth-limited waves in shallow water reach maximum breaking height that is equal to 0.78 times the stillwater depth. The wave crest is 70 percent of the total wave height above the stillwater level. The second major concept is that wave height may be diminished by dissipation of energy because of obstructions, such as sand dunes, dikes and seawalls, buildings and vegetation. The amount of energy dissipation is a function of the physical characteristics of the obstruction and is determined by procedures described in the NAS Report. The third major concept is that wave height can be regenerated in open fetch areas because of the transfer of wind energy to the water. This added energy is related to fetch length and depth.

The coastal analysis for this revision involved transect layout, field reconnaissance, erosion analysis, and overland wave modeling, wave height analysis and wave runup.

The Atlantic Ocean and Winyah Bay are the primary coastal flooding sources in Georgetown County. Coastal flooding from Winyah Bay affects the southeastern section of the City of Georgetown. The Atlantic Ocean affects the Town of Pawleys Island. Wave heights were computed along transects that were located along coastal shores of Georgetown County, as illustrated on the FIRMs. The transects were located with consideration given to existing transect locations and to the physical and cultural characteristics of the land so that they would closely represent conditions in the locality.

Each transect was taken perpendicular to the shoreline and extended inland to a point where coastal flooding ceased. Along each transect, wave heights and elevations were computed in consideration of the combined effects of changes in ground elevation, vegetation, and physical features. The stillwater elevations for a 1-percent-annual-chance event were used as the starting elevations for these computations. Wave heights were calculated to the nearest 0.1 foot, and wave elevations were determined at whole-foot increments along the transects. The location of the 3-foot breaking wave for determining the terminus of the Zone VE (area with velocity wave action) was computed at each transect.

The entire Atlantic Ocean coastline is composed of dunes with peak elevations that vary from 25.1 ft to 9.1 ft (NAVD88) where a continuous dune feature exists. Historical data was evaluated, and no erodible bluffs were identified in Georgetown County. Thus, only dune erosion was taken into account along the Atlantic Ocean coastline. A review of the geology and shoreline type in Georgetown County was made to determine the applicability of standard erosion methods, and FEMA's standard erosion methodology for coastal areas having primary frontal dunes, referred to as the "540 rule," was used (FEMA, 2007[a]). This methodology first evaluates the dune's cross-sectional profile to determine whether the dune has a reservoir of material that is greater or less than 540 square feet. If the reservoir is greater than 540 square feet, the "retreat" erosion method is employed and approximately 540 square feet of the dune is eroded using a standardized eroded profile, as specified in FEMA guidelines. If the reservoir is less than 540 square feet, the "removal" erosion method is employed where the dune is removed for subsequent analysis, again using a standard eroded profile. The storm surge study provided the return period stillwater elevations required for erosion analyses. Each cross-shore transect was analyzed for erosion, where applicable. In summary, erosion analysis was conducted for 33 transects out of 36 transects that are along the open coast. Transects 12, 28 and 40 do not have erosion analysis conducted because they do not cross any sand dune features.

Wave height calculations used in this flood insurance study are based on the methodologies described in the FEMA guidance for coastal mapping (FEMA, 2007[a]). Wave setup results in an increased water level at the shoreline due to the breaking of waves and transfer of momentum to the water column during hurricanes and severe storms. For the Georgetown County study, wave setup was determined directly from the coupled wave and storm surge model. The total

stillwater elevation (SWEL) with wave setup was then used for simulations of overland wave propagation conducted using FEMA's WHAFIS model Version 4.0 (FEMA, 2007[b]). WHAFIS is a one-dimensional model that was applied to each transect in the study area. The model uses the specified SWEL and the starting wave conditions as input. Simulations of wave transformations were then conducted with WHAFIS taking into account the storm-induced erosion and overland features of each transect. Output from the model includes the combined SWEL and wave height along each cross-shore transect allowing for the establishment of BFEs and flood zones from the shoreline to points inland within the study area.

Wave runup is defined as the maximum vertical extent of wave uprush on a beach or structure. FEMA's 2007 Guidelines and Specifications require the 2-percent wave runup level be computed for the coastal feature being evaluated (cliff, coastal bluff, dune, or structure; FEMA, 2007[a]). The 2-percent runup level is the highest 2-percent of wave runup affecting the shoreline during the 1-percent annual chance flood event. Each transect defined within the study area was evaluated for the applicability of wave runup, and if necessary, the appropriate runup methodology was selected and applied to each transect. Runup 2.0 was applied at four transects in Georgetown County. They are transects 8, 23, 30 and 35. Runup elevations were then compared to WHAFIS results to determine the dominant process affecting BFEs and associated flood hazard levels. Based on wave runup, wave overtopping was computed following the FEMA 2007 Guidelines and Specifications.

The starting wave conditions at each transect are shown in Table 7, "Transect Data." Computed controlling wave heights at the shoreline range from 10.2 feet to 19.1 feet (NAVD88) along the coastline of Atlantic Ocean, and from 6.9 feet to 9.3 feet (NAVD88) along the Winyah Bay shore, where the length of fetch is shorter. However, the coastal BFEs include storm surge, wave height, and runup, where it is applicable.

Figure 1, "Transect Location Map," illustrates the location of each transect. Along each transect, wave envelopes were computed considering the combined effects of changes in ground elevation, vegetation and physical features. Between transects, elevations were interpolated using topographic maps, land-use and land-cover data, and engineering judgment to determine the aerial extent of flooding. The results of the calculations are accurate until local topography, vegetation, or cultural development within the community undergoes major changes. In Table 7, the flood hazard zone and base flood elevations for each transect flooding source are provided, along with the 10-, 2-, 1-, and 0.2-percent-annual-chance stillwater elevations for the respective flooding sources.

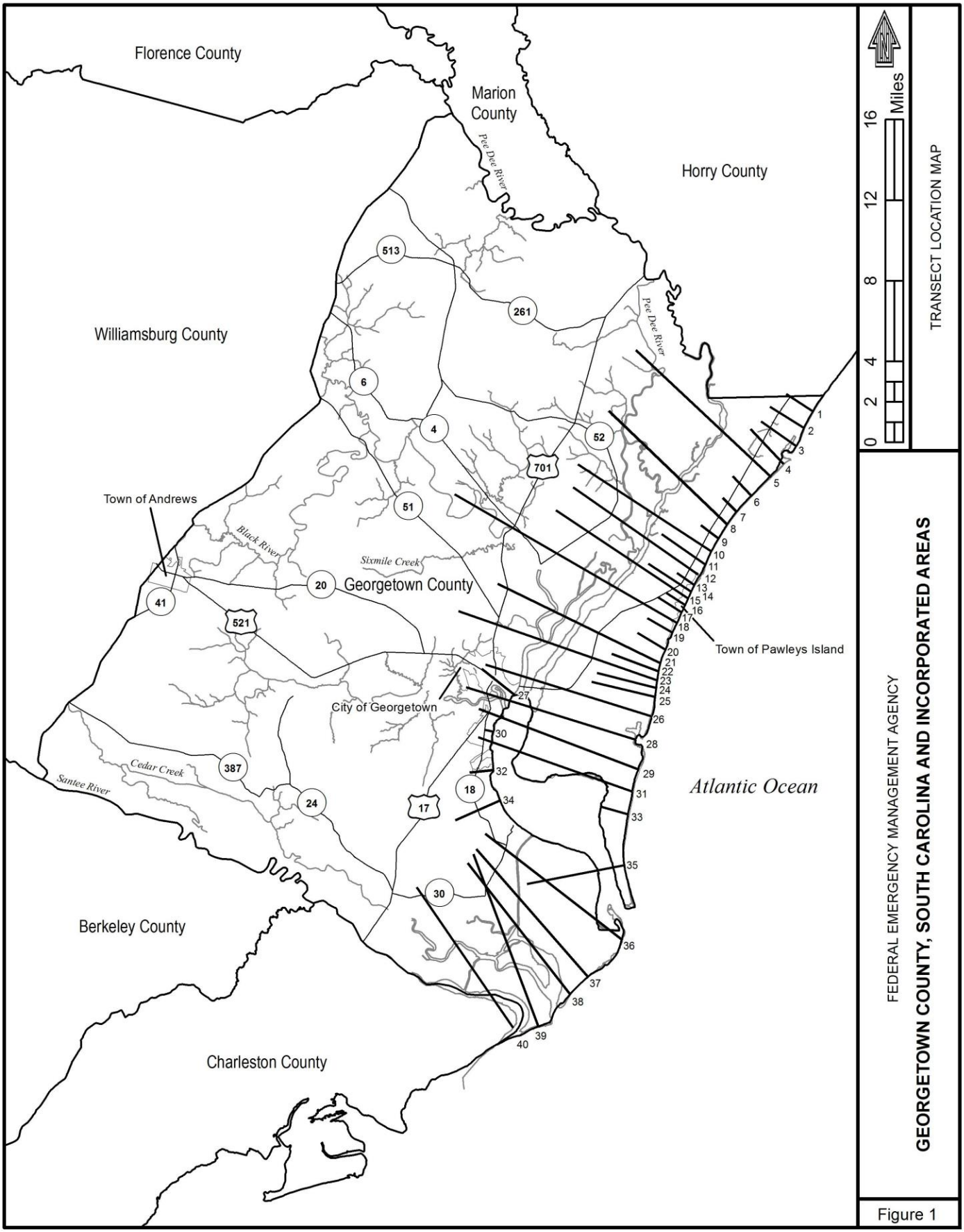
Florence County
Marion County
Horry County
Williamsburg County
Berkeley County
Charleston County
Georgetown County
Town of Andrews
Town of Pawleys Island
City of Georgetown
Atlantic Ocean
Pee Dee River
Black River
Sixmile Creek
Cedar Creek
Santee River
513
261
6
4
52
701
51
20
41
521
387
24
17
18
30
0 2 4 8 12 16 Miles
TRANSECT LOCATION MAP
FEDERAL EMERGENCY MANAGEMENT AGENCY
GEORGETOWN COUNTY, SOUTH CAROLINA AND INCORPORATED AREAS
Figure 1

Table 7 – Transect Data

		Starting Wave Conditions for the 1% Annual Chance			Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations* (ft NAVD88)			
Flood Source	Transect	Coordinates	Significant Wave Height H_s (ft)	Peak Wave Period T_p (sec)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	1	N 33.560723 W 79.010951	11.1	8.3	5.3	9.2 9.2-10.0	11.3 11.3-12.3	16.3 16.3-17.3
Atlantic Ocean	2	N 33.548795 W 79.018831	10.7	8.2	5.3	9.2 9.2-10.1	11.3 11.3-12.3	16.4 16.4-17.4
Atlantic Ocean	3	N 33.536124 W 79.026221	11.1	8.6	5.3	9.2 9.2-10.0	11.4 11.2-12.4	16.3 16.3-17.4
Atlantic Ocean	4	N 33.523402 W 79037515	10.7	8.8	5.3	9.2 9.2-10.1	11.4 11.4-12.5	16.3 16.3-17.5
Atlantic Ocean	5	N 33.514261 W 79.048281	8.5	8.9	5.3	9.2 3.3-10.4	11.3 4.6-12.6	16.1 6.7-17.6
Atlantic Ocean	6	N 33.500719 W 79.065310	10.1	8.6	5.3	9.3 9.3-10.2	11.4 11.4-13.0	16.2 16.2-17.9
Atlantic Ocean	7	N 33.489320 W 79.078253	10.9	8.6	5.3	9.2 8.5-9.7	11.4 11.4-12.2	16.3 15.7-17.1
Atlantic Ocean	8	N 33.480494 W 79.086428	11.3	8.3	5.3	9.4 4.7-9.9	11.5 5.9-12.2	16.4 7.7-17.2
Atlantic Ocean	9	N 33.470475 W 79.094202	11.5	8.2	5.3	9.4 9.4-10.1	11.6 11.6-12.3	16.4 16.1-17.1
Atlantic Ocean	10	N 33.461560 W 79.100534	11.6	8.2	5.3	9.4 5.7-10.0	11.7 6.9-12.2	16.5 8.8-17.2
Atlantic Ocean	11	N 33.451865 W 79.105707	11.8	8.2	5.3	9.4 9.4-10.0	11.6 7.3-12.4	16.4 9.2-17.5
Atlantic Ocean	12	N 33.445182 W 79.112843	11.7	8.4	5.3	9.7 6.2-10.0	11.9 7.3-12.3	16.8 8.6-17.5
Atlantic Ocean	13	N 33.437543 W 79.115543	11.3	8.4	5.3	9.3 9.3-10.1	11.6 11.6-12.3	16.4 12.2-17.1
Atlantic Ocean	14	N 33.432796 W 79.118642	11.6	8.4	5.3	9.4 6.4-10.0	11.6 7.8-12.2	16.4 10.6-17.1
Atlantic Ocean	15	N 33.428055 W 79.121458	11.2	8.5	5.3	9.5 6.3-10.0	11.7 7.9-12.2	16.5 8.5-17.1
Atlantic Ocean	16	N 33.423464 W 79.124199	11.6	8.4	5.3	9.5 9.5-10.0	11.7 11.7-12.5	16.4 16.4-17.2
Atlantic Ocean	17	N 33.418129 W 79.127287	11.6	8.4	5.3	9.4 9.4-10.1	11.6 11.6-12.5	16.4 16.4-17.5
Atlantic Ocean	18	N 33.410755 W 79.131493	11.4	8.6	5.3	9.4 6.7-10.0	11.6 8.1-12.8	16.4 11.1-17.1
Atlantic Ocean	19	N 33.403808 W 79.135737	11.4	8.6	5.3	9.5 9.5-10.1	11.6 11.6-12.3	16.4 16.4-17.2
Atlantic Ocean	20	N 33.391655 W 79.141659	11.4	8.6	5.3	9.5 9.2-9.5	11.6 10.9-11.7	16.4 15.9-16.5

* For transects with a constant stillwater elevation, only one number is provided to represent both the starting value and range.

Table 7 – Transect Data - continued

		Starting Wave Conditions for the 1% Annual Chance			Starting Stillwater Elevations (ft NAVD88) Range of Stillwater Elevations* (ft NAVD88)			
Flood Source	Transect	Coordinates	Significant Wave Height H_s (ft)	Peak Wave Period T_p (sec)	10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Atlantic Ocean	21	N 33.381721 W 79.146163	11.5	8.5	5.3	9.4 6.7-9.4	11.6 8.7-11.7	16.3 11.7-16.4
Atlantic Ocean	22	N 33.376014 W 79.147957	11.5	8.4	5.3	9.4 8.7-9.4	11.5 10.9-11.6	16.3 15.7-16.8
Atlantic Ocean	23	N 33.369567 W 79.149667	12.0	8.4	5.3	9.4 7.3-9.4	11.3 8.3-11.7	15.3 12.0-17.4
Atlantic Ocean	24	N 33.364275 W 79.150568	11.8	8.4	5.3	9.5 8.4-9.5	11.3 10.3-11.8	16.4 15.4-17.5
Atlantic Ocean	25	N 33.357831 W 79.151812	10.1	9.0	5.3	9.5 8.7-9.5	11.4 10.7-11.7	16.4 15.6-16.9
Atlantic Ocean	26	N 33.343854 W 79.155135	10.0	9.3	5.3	9.4 7.8-9.5	11.4 9.5-11.8	16.1 12.8-16.8
Winyah Bay	27	N 33.361036 W 79.272160	4.3	3.6	5.4	8.3 7.8-8.4	10.2 9.6-10.4	14.2 14.1-14.4
Atlantic Ocean	28	N 33.327470 W 79.169276	7.2	9.9	5.3	9.2 8.1-9.7	11.2 8.9-12.0	15.8 12.6-17.0
Atlantic Ocean	29	N 33.305885 W 79.166799	9.6	9.6	5.3	9.2 8.3-9.6	11.3 9.4-11.9	15.8 12.2-16.7
Winyah Bay	30	N 33.334684 W 79.289902	5.4	3.9	5.4	8.6	10.5 10.5-10.6	14.8
Atlantic Ocean	31	N 33.289933 W 79.172115	9.8	9.5	5.3	9.2 8.2-9.3	11.3 9.8-11.4	15.8 14.5-15.9
Winyah Bay	32	N 33.307066 W 79.176440	5.4	4.0	5.4	8.7 8.7-8.8	10.8 10.8-11.0	15.4 15.4-15.8
Atlantic Ocean	33	N 33.273618 W 79.176440	10.4	8.9	5.4	9.2 8.0-9.2	11.0 9.8-11.0	15.8 14.2-15.8
Winyah Bay	34	N 33.285220 W 79.285229	5.8	4.1	5.4	8.9 8.9-9.0	11.0 10.8-11.2	15.9 15.7-16.1
Atlantic Ocean	35	N 33.237078 W 79.180112	11.1	8.4	5.4	9.2 7.2-9.2	11.2 9.6-11.2	15.8 13.7-15.8
Atlantic Ocean	36	N 33.237078 W 79.182927	8.0	10.9	5.4	8.5 7.1-8.7	10.3 9.5-11.1	14.5 14.1-15.5
Atlantic Ocean	37	N 33.157062 W 79.212816	8.1	12.4	5.4	8.2 7.2-9.0	10.1 9.0-10.8	14.3 12.8-15.4
Atlantic Ocean	38	N 33.144596 W 79.228242	8.0	11.7	5.4	8.2 7.3-8.2	10.0 8.7-10.1	14.1 12.5-14.8
Atlantic Ocean	39	N 33.121489 W 79.255892	9.0	14.0	5.4	8.0 7.4-8.0	9.7 9.0-10.2	13.6 12.9-14.9
Atlantic Ocean	40	N 33.121422 W 79.277781	6.4	13.4	5.4	8.1 7.5-8.1	9.9 9.3-10.3	13.9 13.4-15.4

* For transects with a constant stillwater elevation, only one number is provided to represent both the starting value and range.

Areas of coastline subject to significant wave attack are referred to as coastal high hazard zones. The coastal high hazard zone is depicted on the FIRMs as Zone VE.

The USACE has established the 3-foot breaking wave as the criterion for identifying the limit of coastal high hazard zones. The one exception to the 3-foot wave criteria is where a primary frontal dune exists. The limit of the coastal high hazard area then becomes the landward toe of the primary frontal dune or where a 3-foot or greater breaking wave exists, whichever is most landward. The delineation of the landward toe of the primary frontal dune are based on the methodologies described in the FEMA guidance (FEMA, 2007[a]). It extends along the coastline of Georgetown County except for at the inlet openings. The basis of the VE zone is presented in the Technical Support Data Notebook in association with the FIS report and FIRM for this community. Zone AE is depicted on the FIRMs where the delineated flood hazard includes wave heights less than three feet. A depiction of how the Zones VE and AE are mapped is shown in Figure 2.

Post-storm field visits and laboratory tests have confirmed that wave heights as small as 1.5 feet can cause significant damage to structures constructed without consideration to the coastal hazards. Additional flood hazards associated with coastal waves include floating debris, high velocity flow, erosion, and scour which can cause damage to Zone AE-type construction in these coastal areas. To help community officials and property owners recognize this increased potential for damage due to wave action in the AE zone, FEMA issued guidance in December 2008 on identifying and mapping the 1.5-foot wave height line, referred to as the Limit of Moderate Wave Action (LiMWA). While FEMA does not impose floodplain management requirements based on the LiMWA, the LiMWA is provided to help communicate the higher risk that exists in that area. Consequently, it is important to be aware of the area between this inland limit and the Zone VE boundary, as it still poses a high risk, though not as high a risk as Zone VE (see Figure 2, "Transect Schematic.")

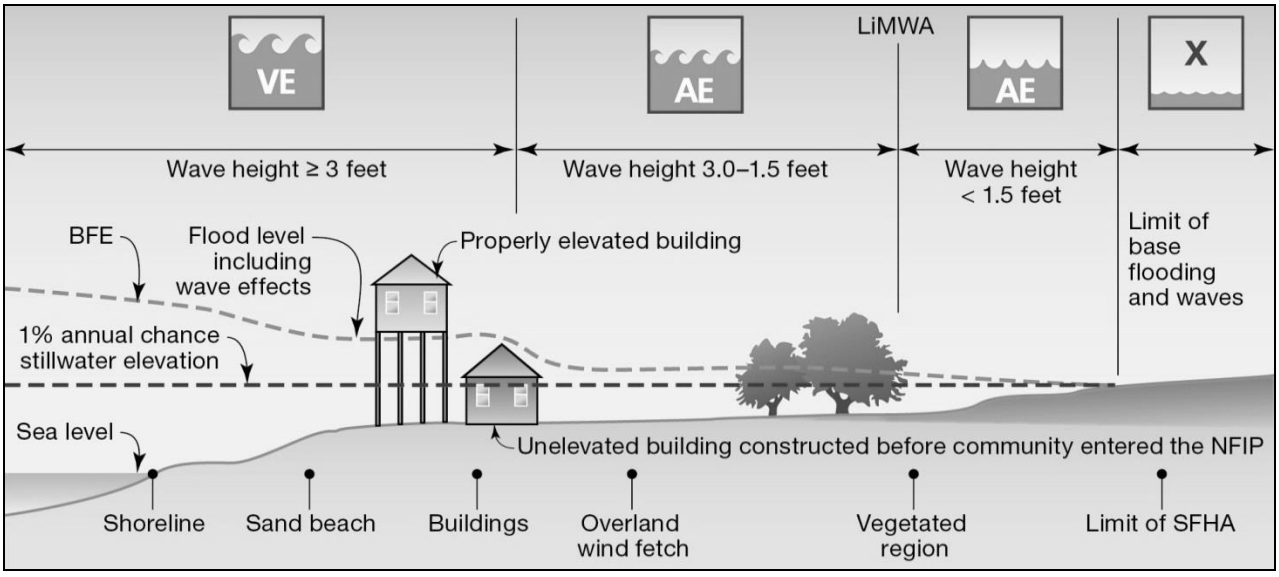

Figure 2 – Transect Schematic

3.4 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 references 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 29). With the completion of NAVD 88, many FIS reports and FIRMs are now prepared using NAVD 88 as the referenced vertical datum.

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD 88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. It is important to note that adjacent counties may be referenced to NGVD 29, which may result in differences in BFEs across county lines. For this countywide FIS, the vertical datum conversion between NGVD 29 and NAVD 88 is -1.0 ft.

NGVD 29 – 1.0ft = NAVD 88

The BFEs shown on the FIRM represent whole-foot rounded values. For example, a BFE of 102.4 will appear as 102 on the FIRM and 102.6 will appear as 103. Therefore, users that wish to convert the elevations in this FIS to NGVD 29 should apply the stated conversion factor to elevation shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1 foot.

For information regarding conversion between NGVD 29 and NAVD 88, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of* 1988 (FEMA, 1992), visit the National Geodetic Survey website at www.ngs.noaa.gov, or contact the National Geodetic Survey (NGS) at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey, SSMC3 #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301)713-3242

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages state and local governments to adopt sound floodplain management programs. To assist in the 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 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 Elevations Table. Users should reference that 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 methods, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section.

For this countywide FIS, flood boundaries between cross sections were interpolated using topographic data derived from 2005 and one-foot contour information acquired from Georgetown County (Georgetown County, 2005). Additionally the coastal boundaries were mapped using Light Detection and Ranging (LiDAR) data obtained from South Carolina.

The 1- and 0.2-percent-annual-chance floodplain boundaries for streams studied by detailed methods are shown on the FIRM. On this map, the 1-percent-annual-chance floodplain boundaries correspond to the boundary of the areas of special flood hazards (Zones A, AE, AO and VE), and the 0.2-percent-annual-chance floodplain boundaries correspond 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 because of limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by approximate and limited-detailed 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 study 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 in Table 8, "Floodway Data." 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.

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 8, "Floodway Data." 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.

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, "Without Floodway" elevations presented in Table 8 for certain downstream cross sections of Bells Swamp, Boser Swamp, Chapel Creek, Chapel Creek Tributaries No. 1 through No. 5, Cypress Creek, Cypress Creek Tributary No. 1, Port Creek/Pennyroyal Swamp, Port Creek Tributary, St. Pauls Branch, St. Pauls Branch Tributary No. 2, and Whites Creek Tributary No. 7 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.

For streams in the coastal floodplain, the floodway related to the riverine flooding source and is shown for administrative purposes, the BFEs are associated with the coastal flooding. Therefore, elevations presented in Table 8 for certain cross sections of Allston Creek Tributary No. 2, Black River, Black River Tributary 3, Canaan Branch, Pennyroyal Creek, Ports Creek, Sampit River, Turkey Creek, Whites Creek, White Creek Tributary, White Creek Tributary Nos. 1, 2, 3, and 6, and Winyah Bay Tributary have been removed. For Whites Creek Tributary No. 3 the floodway width at cross sections A and B is the result of updated modeling for Whites Creek.

No floodways have been computed for streams studied by limited-detailed methods. Information pertaining to the flood discharges and 1-percent-annual-chance water surface elevations for selected cross sections along streams studied

by limited-detailed methods is shown on Table 9, “Limited Detailed Flood Hazard Data.”

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 3, "Floodway Schematic.”

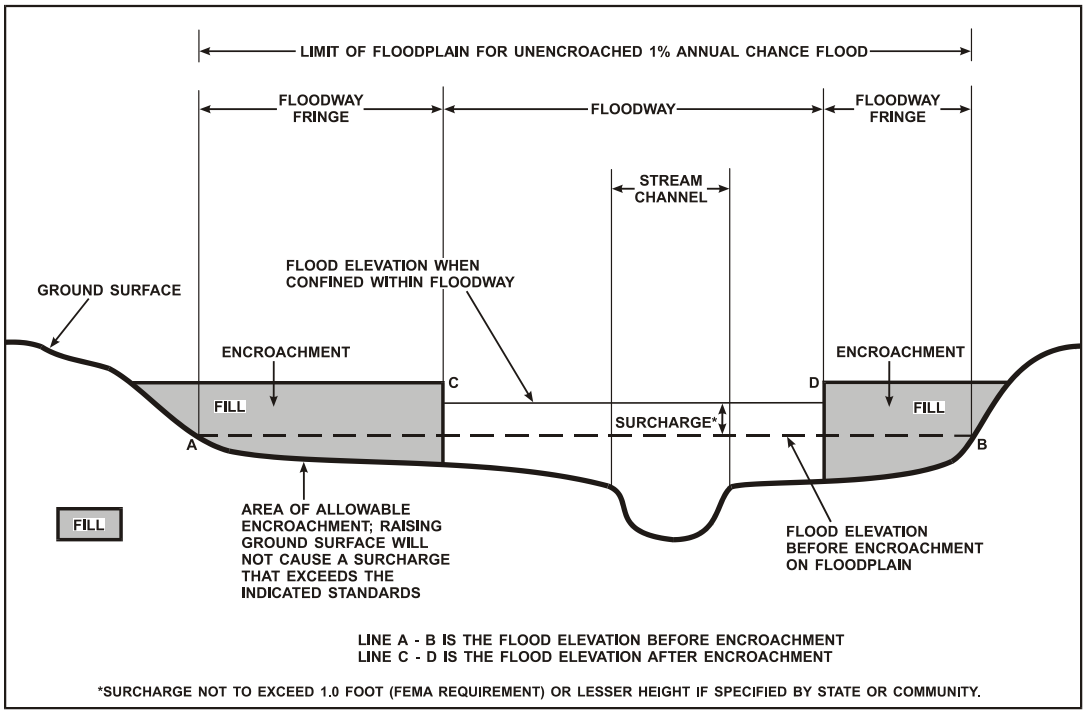

Figure 3 – Floodway Schematic

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Allston Creek Tributary No. 1								
A	1,357[1]	22	112	5.3	13.1	13.1	14.1	1.0
B	3,110[1]	55	385	0.9	22.8	22.8	23.8	1.0
C	4,790[1]	29	143	2.4	23.6	23.6	23.2	0.4
Allston Creek Tributary No. 2								
A	573[1]	19	54	2.5	*	6.6[5]	7.1	0.5
B	990[1]	11	32	4.2	*	8.3[5]	8.4	0.1
C	1,476[1]	13	26	3.5	12.7	12.7	12.8	0.1
Bells Swamp								
A	1,180[2]	144	467	1.4	18.6	11.1[4]	12.1	1.0
B	4,380[2]	61	203	2.8	18.6	18.0[4]	18.7	0.7
C	11,730[2]	50	116	1.9	37.3	37.3	37.9	0.6
Bells Swamp Tributary								
A	3,500[3]	54	121	1.5	27.8	27.8	28.7	0.9

[1] Distance in feet above U.S. Business Route 17
[2] Distance in feet above confluence with Port Creek-Pennyroyal Swamp
[3] Distance in feet above confluence with Bells Swamp
[4] Elevation computed without considering backwater effects from Great Pee Dee River
[5] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Allston Creek Tributary No. 1 – Allston Creek Tributary No. 2 – Bells Swamp – Bells Swamp Tributary

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Black River								
A	0	372	9,762	3.1	*	0.7[2]	0.7	0.0
B	7,498	780	10,642	2.9	*	2.5[2]	3.5	1.0
C	16,148	870	13,569	2.2	*	4.6[2]	5.3	0.7
D	22,748	792	12,396	2.5	*	5.5[2]	6.2	0.7
E	34,468	370	10,826	2.8	*	6.9[2]	7.7	0.8
F	47,638	623	12,127	2.5	*	8.3[2]	9.1	0.8
G	63,838	441	14,768	2.1	9.5	9.5	10.3	0.8
H	70,582	782	14,864	2.0	10.0	10.0	10.8	0.8
I	77,782	458	13,685	2.2	10.5	10.5	11.4	0.9
J	84,982	1,298	21,901	1.4	11.0	11.0	11.9	0.9
K	89,332	931	14,502	2.1	11.3	11.3	12.2	0.9
L	89,632	536	11,182	2.7	11.4	11.4	12.3	0.9

[1] Distance in feet above U.S. Route 701
[2] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Black River

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Black River Tributary 3								
A	5,108	184	507	1.2	*	5.3[2]	6.3	1.0
B	5,926	198	666	0.4	*	5.5[2]	6.5	1.0
C	6,858	196	682	0.4	*	5.6[2]	6.6	1.0
D	7,840	127	431	0.6	*	5.7[2]	6.7	1.0
E	8,396	90	294	0.8	*	5.9[2]	6.9	1.0
F	8,815	95	325	0.7	*	6.0[2]	7.0	1.0
G	9,014	97	268	0.9	*	6.2[2]	7.2	1.0
H	9,521	35	148	1.6	*	6.4[2]	7.4	1.0
I	10,396	17	88	2.7	*	7.2[2]	8.2	1.0
J	11,007	14	64	3.7	*	8.6[2]	9.4	0.8
K	11,339	81	274	0.9	10.9	10.9	11.1	0.2
L	11,971	54	168	1.4	11.1	11.1	11.4	0.3
M	12,703	25	85	2.8	11.9	11.9	12.3	0.4
N	13,499	17	77	3.1	13.2	13.2	13.9	0.7
O	13,933	15	77	3.1	13.9	13.9	14.7	0.8
P	14,419	20	95	2.5	14.6	14.6	15.4	0.8
Q	14,919	35	259	0.9	18.8	18.8	19.2	0.4

[1] Distance in feet above confluence with Black River
[2] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Black River Tributary 3

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Boser Swamp								
A	600[1]	234	2,044	0.8	19.0	17.1[3]	18.1	1.0
B	6,400[1]	527	2,550	0.6	19.4	19.4	20.4	1.0
C	9,128[1]	426	2,936	0.5	20.2	20.2	21.2	1.0
D	11,778[1]	138	638	1.7	21.1	21.1	22.1	1.0
E	11,903[1]	32	214	4.6	22.1	22.1	23.1	1.0
Canaan Branch								
A	2,202[2]	70	285	3.0	*	2.5[4]	3.4	0.8
B	2,826[2]	98	329	2.6	*	3.1[4]	4.0	1.0
C	4,219[2]	144	538	1.3	*	3.6[4]	4.5	0.9
D	5,406[2]	90	507	1.4	*	3.9[4]	4.8	0.9
E	6,231[2]	112	538	1.3	*	4.2[4]	5.2	1.0
F	7,180[2]	127	542	1.3	*	5.0[4]	5.9	1.0
G	8,498[2]	70	353	2.0	*	7.9[4]	8.6	0.7
H	9,482[2]	60	308	2.3	*	8.5[4]	9.3	0.8
I	10,304[2]	63	304	2.4	*	9.6[4]	10.6	0.9
J	11,486[2]	41	195	3.7	14.2	14.2	14.8	0.6
K	11,724[2]	90	526	1.4	14.8	14.8	15.5	0.7
L	12,716[2]	285	1,297	0.2	14.9	14.9	15.6	0.7
M	13,658[2]	55	198	1.2	16.2	16.2	16.5	0.3
N	14,592[2]	28	131	1.8	16.5	16.5	16.8	0.2
O	15,952[2]	55	142	1.7	18.3	18.3	19.2	1.0

[1] Distance in feet above confluence with Port Creek-Pennyroyal Swamp
[2] Distance in feet above confluence with Ports Creek
[3] Elevation computed without considering backwater effects from Port Creek-Pennyroyal Swamp
[4] Elevation computed without considering coastal effects from Atlantic Ocean

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Boser Swamp – Canaan Branch

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Chapel Creek								
A	4,395[1]	80	788	1.6	8.7	3.5[3]	4.4	0.9
B	5,166[1]	70	778	1.5	8.7	3.6[3]	4.6	1.0
C	10,987[1]	138	998	1.1	8.7	4.7[3]	5.7	1.0
D	14,990[1]	249	1,172	0.7	8.7	6.4[3]	7.4	1.0
E	16,082[1]	147	815	0.8	8.7	7.1[3]	8.0	0.9
F	19,560[1]	90	258	2.6	10.7	10.7	11.5	0.8
G	21,115[1]	105	398	1.4	17.5	17.5	18.3	0.8
H	23,457[1]	380	1,018	0.5	19.6	19.6	20.3	0.7
I	25,808[1]	1,218	5,683	0.1	21.5	21.5	22.5	1.0
Chapel Creek Tributary No. 1								
A	552[2]	137	469	0.9	8.7	3.2[3]	4.2	1.0
B	3,152[2]	135	510	0.9	8.7	6.3[3]	7.2	0.9
C	4,817[2]	105	559	0.8	9.3	9.3	10.0	0.7
D	5,456[2]	53	173	2.5	9.7	9.7	10.4	0.7
Chapel Creek Tributary No. 2								
A	437[2]	68	298	2.1	8.7	3.2[3]	4.2	1.0
B	2,992[2]	126	593	1.1	8.7	6.7[3]	7.7	1.0
C	3,714[2]	253	1,228	0.5	8.7	7.3[3]	8.2	0.9
D	4,824[2]	57	168	2.2	8.7	8.2[3]	8.8	0.6
E	7,517[2]	93	335	1.1	16.3	16.3	17.1	0.8

[1] Distance in feet above confluence with Great Pee Dee River
[2] Distance in feet above confluence with Chapel Creek
[3] Elevation computed without considering backwater effects from Great Pee Dee River

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Chapel Creek – Chapel Creek Tributary No. 1 – Chapel Creek Tributary No. 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Chapel Creek Tributary No. 3								
A	700[1]	85	302	1.5	8.7	8.5[4]	9.5	1.0
B	2,500[1]	89	336	1.3	15.0	15.0	15.8	0.8
C	4,070[1]	85	320	1.1	18.2	18.2	19.0	0.8
Chapel Creek Tributary No. 4								
A	600[2]	98	357	0.9	8.7	6.0[4]	6.9	0.9
B	3,108[2]	48	128	1.3	12.6	12.6	13.1	0.5
C	4,986[2]	77	228	0.7	14.3	14.3	15.1	0.8
Chapel Creek Tributary No. 5								
A	200[3]	35	127	1.9	12.3	10.6[5]	11.6	1.0
B	413[3]	20	75	3.3	12.3	11.8[5]	12.8	1.0
C	1,449[3]	66	311	0.8	14.6	14.6	15.6	1.0

[1] Distance in feet above confluence with Chapel Creek Tributary No. 2
[2] Distance in feet above confluence with Chapel Creek
[3] Distance in feet above confluence with Chapel Creek Tributary No. 4
[4] Elevation computed without considering backwater effects from Great Pee Dee River
[5] Elevation computed without considering backwater effects from Chapel Creek Tributary No. 4

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Chapel Creek Tributary No. 3 – Chapel Creek Tributary No. 4 – Chapel Creek Tributary No. 5

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cypress Creek								
A	710[1]	572	2,730	0.4	9.9	5.1[4]	6.1	1.0
B	5,410[1]	508	2,738	0.4	9.9	5.6[4]	6.6	1.0
C	9,666[1]	581	3,245	0.4	9.9	6.2[4]	7.1	0.9
D	13,766[1]	342	2,028	0.4	9.9	7.1[4]	7.9	0.8
E	14,607[1]	400	2,829	0.3	10.6	10.6	10.8	0.2
F	19,737[1]	205	951	1.0	11.2	11.2	11.6	0.4
Cypress Creek Tributary No. 1								
A	800[2]	80	293	1.3	9.9	4.8[4]	5.8	1.0
B	1,400[2]	102	304	1.2	9.9	7.1[4]	8.0	0.9
C	2,108[2]	21	106	2.7	9.9	9.8[4]	10.7	0.9
D	3,808[2]	15	64	4.5	16.9	16.9	17.6	0.7
Cypress Creek Tributary No.2								
A	273[3]	110	764	0.2	11.6	11.6	11.6	0.0
B	893[3]	17	83	2.3	11.7	11.7	12.5	0.8

[1] Distance in feet above confluence with Great Pee Dee River
[2] Distance in feet above confluence with Cypress Creek
[3] Distance in feet above confluence with Cypress Creek Tributary No. 1
[4] Elevation computed without consideration of the backwater effects from Great Pee Dee River

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Cypress Creek – Cypress Creek Tributary No. 1 – Cypress Creek Tributary No. 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Parsonage Creek Tributary								
A	540[1]	95	217	0.6	12.5	12.5	12.7	0.2
B	738[1]	38	124	1.0	13.4	13.4	14.1	0.8
C	891[1]	47	123	1.0	15.1	15.1	15.6	0.5
D	1,058[1]	38	163	0.7	16.6	16.6	17.0	0.4
E	1,236[1]	39	135	0.9	16.6	16.6	17.0	0.4
F	1,440[1]	30	108	1.1	16.7	16.7	17.1	0.4
G	1,680[1]	45	167	0.6	17.7	17.7	18.2	0.5
Pennyroyal Creek								
A	2,100[2]	160	1513	1.0	*	0.6[5]	0.6	0.0
B	4,200[2]	180	1428	1.1	*	0.8[5]	0.8	0.0
C	7,200[2]	131	873	1.4	*	1.1[5]	1.1	0.0
D	12,114[2]	74	639	9.1	*	2.1[5]	2.1	0.0
E	14,898[2]	89	415	2.7	*	3.2[5]	3.6	0.4
Port Creek/ Pennyroyal Swamp								
A	0[3]	135	1249	1.7	18.6	15.3[4]	16.3	1.0
B	3,148[3]	226	1921	1.0	18.6	16.8[4]	17.8	1.0
C	14,448[3]	89	748	1.4	23.0	23.0	24.0	1.0
D	19,886[3]	53	317	2.2	28.5	28.5	29.4	0.9
E	22,366[3]	138	559	1.3	32.5	32.5	33.4	0.9

[1] Distance in feet above Neely Court [2] Distance in feet above confluence with Sampit River [3] Distance in feet above Old Pee Dee Road
[4] Elevation computed without considering backwater effects from Great Pee Dee River
[5] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Parsonage Creek Tributary – Pennyroyal Creek – Port Creek/Pennyroyal Swamp

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Port Creek Tributary								
A	900[1]	99	280	1.1	18.6	17.3[4]	18.3	1.0
B	3,900[1]	116	332	0.9	23.8	23.8	24.7	0.9
C	7,020[1]	269	677	0.5	38.7	38.7	39.4	0.7
Ports Creek								
A	5,700[2]	117	1,071	1.5	*	0.6[5]	0.6	0.0
B	12,458[2]	200	950	1.7	*	2.3[5]	2.5	0.2
C	16,458[2]	214	1,254	1.3	*	3.3[5]	3.8	0.5
D	21,693[2]	513	2,372	0.7	*	5.1[5]	5.9	0.8
E	23,179[2]	484	2,527	0.6	*	5.7[5]	6.5	0.8
F	23,435[2]	34	393	3.6	*	5.8[5]	6.6	0.8
Sampit River								
A	10,900[3]	510	6,679	0.6	*	0.6[5]	1.6	1.0
B	18,280[3]	543	6,553	0.7	*	0.9[5]	1.9	1.0
C	26,180[3]	202	2,100	1.7	*	2.0[5]	2.8	0.8
D	29,780[3]	176	1,692	2.1	*	3.1[5]	3.8	0.7
E	32,143[3]	298	1,971	1.8	*	4.2[5]	5.1	0.9
F	36,093[3]	951	5,276	0.7	*	6.2[5]	7.1	0.9
G	38,730[3]	61	603	5.5	*	7.5[5]	8.4	0.9

[1] Distance in feet above confluence with Port Creek-Pennyroyal Swamp
[2] Distance in feet above confluence with Sampit River
[3] Distance in feet above confluence with Ports Creek
[4] Elevation computed without considering backwater effects from Great Pee Dee River
[5] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Port Creek Tributary – Ports Creek – Sampit River

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
St. Pauls Branch								
A	5,644[1]	789	2,404	0.4	10.4	3.1[3]	4.1	1.0
B	9,779[1]	397	1,559	0.6	10.4	4.4[3]	5.4	1.0
C	12,479[1]	621	2,819	0.3	10.4	5.1[3]	6.1	1.0
D	13,732[1]	222	869	0.8	10.4	6.0[3]	7.0	1.0
E	15,362[1]	82	393	1.6	10.4	7.6[3]	8.5	0.9
F	18,157[1]	76	236	2.6	13.5	13.5	14.4	0.9
St. Pauls Branch Tributary No. 1								
A	1,411[2]	244	2,084	0.2	12.4	12.4	13.4	1.0
B	3,011[2]	20	124	1.9	12.7	12.7	13.7	1.0
C	4,291[2]	20	39	2.0	15.2	15.2	15.5	0.3
D	4,571[2]	18	59	1.3	15.5	15.5	15.7	0.2
St. Pauls Branch Tributary No. 2								
A	480[2]	86	302	1.7	10.4	3.4[3]	4.4	1.0
B	1,789[2]	73	335	1.5	10.4	7.3[3]	8.3	1.0
C	2,577[2]	117	475	1.1	10.8	10.8	11.7	0.9

[1] Distance in feet above confluence with Great Pee Dee River
[2] Distance in feet above confluence with St. Pauls Branch
[3] Elevation computed without considering backwater effects from Great Pee Dee River

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

St. Pauls Branch – St. Pauls Branch Tributary No. 1 – St. Pauls Branch Tributary No. 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Turkey Creek								
A	1,290[1]	95	613	1.5	*	0.6[3]	0.6	0.0
B	7,290[1]	42	330	2.7	*	2.6[3]	2.9	0.3
C	11,595[1]	41	181	3.9	*	5.8[3]	6.7	0.9
Whites Creek								
A	273[2]	1,684	8,132	0.3	*	5.5[3]	6.5	1.0
B	1,365[2]	1,334	6,328	0.2	*	5.5[3]	6.5	1.0
C	2,363[2]	992	4,813	0.2	*	5.5[3]	6.5	1.0
D	3,311[2]	1,082	5,508	0.2	*	5.5[3]	6.5	1.0
E	4,568[2]	940	4,357	0.2	*	5.6[3]	6.6	1.0
F	5,609[2]	804	4,008	0.3	*	5.6[3]	6.6	1.0
G	6,694[2]	1,080	5,579	0.2	*	5.6[3]	6.6	1.0
H	7,814[2]	939	4,385	0.2	*	5.6[3]	6.6	1.0
I	8,990[2]	827	4,079	0.3	*	5.7[3]	6.7	1.0
J	10,041[2]	1,385	6,097	0.2	*	5.7[3]	6.7	1.0
K	11,083[2]	405	2,067	0.5	*	5.7[3]	6.7	1.0
L	12,135[2]	475	2,551	0.4	*	5.8[3]	6.8	1.0
M	13,068[2]	725	3,738	0.3	*	5.9[3]	6.9	1.0
N	14,126[2]	350	2,014	0.5	*	6.0[3]	7.0	1.0
O	15,054[2]	725	3,773	0.2	*	6.1[3]	7.0	1.0
P	16,667[2]	525	2,904	0.3	*	6.1[3]	7.1	1.0
Q	17,363[2]	68	378	2.2	*	6.4[3]	7.3	0.9

[1] Distance in feet above confluence with Pennyroyal Creek
[2] Distance in feet above confluence with Sampit River
[3] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Turkey Creek – Whites Creek

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Whites Creek - continued								
R	18.510[1]	63	375	2.2	*	6.7[3]	7.6	0.9
S	19.474[1]	50	285	1.9	*	7.4[3]	8.2	0.8
T	20.677[1]	89	463	1.2	*	7.7[3]	8.4	0.8
U	21,718[1]	248	1,137	0.5	*	7.8[3]	8.6	0.8
V	22,252[1]	158	773	0.7	*	7.9[3]	8.7	0.8
W	23,385[1]	80	292	1.3	*	8.0[3]	8.9	0.9
X	24,521[1]	26	115	3.4	*	8.9[3]	9.7	0.9
Y	25,380[1]	28	117	3.3	10.9	10.9	11.3	0.4
Z	26,311[1]	30	145	2.7	13.4	13.4	14.2	0.8
AA	26,399[1]	40	177	2.2	14.0	14.0	14.7	0.7
AB	27,480[1]	34	145	2.7	15.2	15.2	15.7	0.5
AC	28,105[1]	28	137	2.8	16.0	16.0	16.7	0.7
Whites Creek Tributary								
A	880[2]	98	357	1.0	*	7.7[3]	8.7	1.0
B	1,630[2]	149	592	0.6	*	8.2[3]	9.2	1.0
C	2,030[2]	153	412	0.8	*	8.7[3]	9.6	0.9

[1] Distance in feet above confluence with Sampit River
[2] Distance in feet above confluence with Whites Creek
[3] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Whites Creek – Whites Creek Tributary

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Whites Creek Tributary No. 1								
A	650	67	206	0.9	*	7.0[2]	8.0	1.0
B	1,648	15	49	3.8	11.2	11.2	11.8	0.6
Whites Creek Tributary No. 2								
A	407	20	57	2.9	*	5.9[2]	6.7	0.8
B	1,246	52	154	1.1	*	8.9[2]	9.8	0.9
C	1,514	60	290	0.6	*	9.2[2]	10.1	0.9
D	2,561	36	132	1.3	10.6	10.6	11.5	0.9
Whites Creek Tributary No. 3								
A	726	777	855	0.7	*	2.8[2]	3.8	1.0
B	1,059	398	622	0.5	*	3.1[2]	4.1	1.0
C	1,505	39	69	4.6	*	6.0[2]	6.7	0.7
D	2,285	40	152	2.1	9.9	9.9	10.8	0.9
E	3,185	36	122	2.2	14.5	14.5	15.3	0.8
F	5,007	163	295	0.5	17.1	17.1	17.8	0.7

[1] Distance in feet above confluence with Whites Creek
[2] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Whites Creek Tributary No. 1 – Whites Creek Tributary No. 2 – Whites Creek Tributary No. 3

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Whites Creek Tributary No. 4								
A	1,723[1]	50	382	0.7	15.0	15.0	15.7	0.7
B	2,569[1]	50	349	0.8	15.1	15.1	15.8	0.7
C	3,186[1]	60	486	0.6	15.1	15.1	15.8	0.7
D	3,662[1]	65	496	0.6	15.1	15.1	15.9	0.8
E	4,379[1]	60	224	1.2	15.1	15.1	16.0	0.9
F	5,368[1]	60	130	2.1	16.0	16.0	16.9	0.9
Whites Creek Tributary No. 5								
A	310[1]	9	27	4.6	11.3	11.3	12.0	0.7
B	492[1]	48	150	0.8	12.6	12.6	13.5	0.9
C	1,742[1]	20	48	2.6	16.5	16.5	17.4	0.9
D	1,842[1]	154	304	0.4	16.9	16.9	17.8	0.9
Whites Creek Tributary No. 6								
A	100[2]	204	608	0.7	*	6.4[3]	7.4	1.0
B	697[2]	71	119	3.8	10.4	10.4	10.4	0.0
C	877[2]	88	281	1.6	12.3	12.3	13.2	0.9
D	1,883[2]	942	2,460	0.2	15.8	15.8	16.7	0.9

[1] Distance in feet above confluence with Whites Creek Tributary No. 3
[2] Distance in feet above confluence with Whites Creek
[3] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Whites Creek Tributary No. 4 – Whites Creek Tributary No. 5 – Whites Creek Tributary No. 6

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Whites Creek Tributary No. 6 - continued								
E	3,077[1]	667	2,569	0.2	15.9	15.9	16.8	0.9
F	4,877[1]	105	573	0.4	16.0	16.0	16.9	0.9
G	7,487[1]	208	485	0.5	17.2	17.2	18.1	0.9
Whites Creek Tributary No. 7								
A	500[2]	13	44	6.2	15.9	15.4[4]	15.9	0.5
B	2,500[2]	273	613	0.3	17.1	17.1	18.1	1.0
Winyah Bay Tributary								
A	5,122[3]	45	186	3.5	*	9.6[5]	10.6	1.0
B	5,857[3]	294	1,384	0.4	*	10.5[5]	11.4	0.9
C	6,097[3]	220	839	0.7	*	10.6[5]	11.5	0.9

[1] Distance in feet above confluence with Whites Creek
[2] Distance in feet above confluence with Whites Creek Tributary No. 6
[3] Distance in feet above mouth of Winyah Bay
[4] Elevation computed without consideration backwater effects from Whites Creek Tributary No. 6
[5] Elevation computed without considering coastal effects from Atlantic Ocean
* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC AND INCORPORATED AREAS

FLOODWAY DATA

Whites Creek Tributary No. 6 – Whites Creek Tributary No. 7 – Winyah Bay Tributary

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BIG BRANCH			
006	632	1,799	9.6[3]
011	1,085	1,663	9.6[3]
013	1,306	1,663	9.6[3]
022	2,209	1,663	9.8
032	3,167	1,663	10.6
041	4,135	1,663	11.5
045	4,541	1,663	11.9
057	5,689	1,631	12.6
068	6,841	1,631	13.3
079	7,896	1,631	14.2
084	8,439	1,631	14.7
087	8,688	1,631	15.0
BLACK MINGO CREEK			
005	496	10,191	11.0
016	1,565	10,133	11.0
041	4,075	10,133	11.0
068	6,845	10,133	11.1
096	9,561	10,133	11.1
108	10,816	10,133	11.1
134	13,391	10,061	11.1
148	14,782	10,061	11.2
158	15,758	10,061	11.2
167	16,661	9,680	11.2
176	17,636	9,680	11.2
209	20,861	9,680	11.3
226	22,584	9,680	11.3
238	23,764	9,680	11.3
255	25,466	9,680	11.3
265	26,531	9,680	11.4
275	27,526	9,680	11.4
283	28,303	9,680	11.4
299	29,903	9,680	11.4
329	32,926	9,680	11.5
340	34,002	9,680	11.6
350	35,037	9,467	11.6
367	36,660	9,467	11.6
384	38,355	9,467	11.6
392	39,237	9,467	11.7
404	40,363	9,467	11.7
434	43,391	9,467	11.8
443	44,267	9,467	11.8

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BLACK MINGO CREEK (continued)			
454	45,362[2]	9,467	11.8
466	46,601[2]	9,467	11.9
479	47,905[2]	9,467	12.0
492	49,176[2]	8,523	12.2
503	50,284[2]	8,523	12.3
513	51,284[2]	8,523	12.4
537	53,661[2]	8,523	12.5
547	54,666[2]	8,523	12.6
549	54,867[2]	8,523	12.8
BLACK RIVER			
000	0[3]	48,459	11.4
018	1,773[3]	48,292	11.8
032	3,233[3]	48,292	12.1
062	6,191[3]	48,292	12.6
159	15,911[3]	48,292	13.6
181	18,118[3]	48,292	13.8
201	20,129[3]	48,292	14.1
225	22,511[3]	48,292	14.5
257	25,728[3]	48,292	15.1
282	28,199[3]	48,292	15.8
295	29,516[3]	48,292	15.9
365	36,492[3]	48,292	17.1
394	39,418[3]	48,292	17.2
419	41,916[3]	48,292	17.3
443	44,299[3]	48,292	17.5
464	46,446[3]	48,292	17.6
490	48,979[3]	48,292	18.1
521	52,115[3]	48,292	18.2
534	53,384[3]	48,292	18.2
557	55,684[3]	48,292	18.3
583	58,295[3]	48,170	18.4
605	60,483[3]	48,170	18.6
626	62,589[3]	48,170	18.7
649	64,931[3]	48,170	18.8
673	67,328[3]	48,170	18.8
697	69,668[3]	48,170	18.9
722	72,242[3]	48,170	18.9
747	74,692[3]	48,170	19.1

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map

[2] Feet above mouth

[3] Feet above State Route 51

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BLACK RIVER (continued)			
766	76,622[2]	48,170	19.1
797	79,711[2]	48,170	19.2
813	81,291[2]	48,022	19.2
838	83,849[2]	48,022	19.2
863	86,349[2]	48,022	19.2
878	87,825[2]	48,022	19.3
895	89,542[2]	48,022	19.3
907	90,735[2]	48,022	19.3
933	93,338[2]	48,022	19.3
950	94,975[2]	47,910	19.3
963	96,326[2]	47,910	19.3
984	98,351[2]	47,910	19.3
996	99,602[2]	47,910	19.3
1012	101,158[2]	47,910	19.4
1026	102,621[2]	47,001	19.4
1045	104,450[2]	47,001	19.4
1071	107,098[2]	47,001	19.4
1114	111,373[2]	47,001	19.4
1167	116,690[2]	46,861	19.5
1198	119,823[2]	46,861	19.5
1221	122,083[2]	46,861	19.5
1251	125,125[2]	46,861	19.5
1269	126,888[2]	46,861	19.6
BLACK SWAMP			
152	15,185[3]	250	10.9
163	16,318[3]	250	13.6
178	17,758[3]	250	16.0
194	19,442[3]	235	18.1
BLACK SWAMP TRIBUTARY 1			
002	154[3]	86	15.7
007	668[3]	79	16.6
010	978[3]	46	17.8
019	1,921[3]	46	18.1
028	2,750[3]	30	18.6
BOGGY SWAMP			
001	112[3]	4,076	*
008	766[3]	4,053	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above State Route 51

[3] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BOGGY SWAMP (continued)			
015	1,476	4,053	9.4
024	2,363	4,053	9.8
031	3,144	3,960	10.2
041	4,078	3,960	10.7
048	4,805	3,960	11.0
058	5,819	3,960	11.4
066	6,589	3,921	11.7
075	7,499	3,921	12.1
082	8,188	3,921	12.5
091	9,138	3,808	13.0
100	10,008	3,808	13.6
111	11,069	3,808	14.1
121	12,053	3,808	14.4
129	12,938	2,327	14.5
139	13,939	2,327	14.6
149	14,920	2,327	14.8
159	15,896	2,327	15.0
170	17,004	2,327	15.2
181	18,065	2,327	15.4
191	19,095	2,327	15.7
203	20,280	1,348	16.0
213	21,254	1,348	16.3
218	21,784	1,348	16.4
226	22,626	1,348	16.6
234	23,438	1,348	17.0
242	24,192	1,348	17.6
251	25,096	1,348	18.3
261	26,124	1,348	18.8
270	27,041	1,348	19.1
273	27,336	1,264	19.2
274	27,444	1,264	19.9
284	28,445	1,264	20.0
294	29,446	1,264	20.2
305	30,477	1,264	20.6
315	31,528	1,264	20.9
325	32,539	1,264	21.2
327	32,696	1,264	21.3
335	33,519	1,264	21.7
343	34,308	1,264	22.0
350	34,979	1,264	22.2
360	35,974	1,125	22.5
369	36,906	1,125	23.0
379	37,928	1,125	23.4
382	38,172	1,125	23.5
387	38,721	1,125	23.6

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BOGGY SWAMP TRIBUTARY 1			
000	9	396	15.8[3]
010	975	341	15.8[3]
020	1,963	341	15.9
022	2,188	341	18.3
029	2,856	341	18.3
034	3,355	341	18.4
043	4,301	304	18.6
053	5,252	304	21.2
BOGGY SWAMP TRIBUTARY 2			
001	62	467	13.8[3]
011	1,143	313	13.8[3]
017	1,738	313	13.8[3]
024	2,422	176	14.6
027	2,722	176	16.2
036	3,558	176	16.4
045	4,501	176	16.6
054	5,387	176	16.9
062	6,230	176	17.2
069	6,902	176	17.3
080	7,991	176	17.5
088	8,843	176	17.7
095	9,489	176	17.8
097	9,741	176	18.5
BOGGY SWAMP TRIBUTARY 2.1			
001	132	261	14.0
011	1,129	238	16.6
020	1,970	205	19.0
021	2,117	205	19.7
024	2,431	205	20.2
BOGGY SWAMP TRIBUTARY 2.2			
000	7	204	17.2
005	526	170	17.3
015	1,470	147	17.8
021	2,142	147	18.5
BOGGY SWAMP TRIBUTARY 2.2.2			
003	254	42	17.2[3]
009	938	20	17.2[3]
015	1,532	20	22.1

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BOGGY SWAMP 1			
001	53	1,088	16.4
010	1,006	860	16.4
016	1,559	644	16.7
027	2,742	582	17.8
037	3,672	582	18.7
047	4,723	582	19.7
055	5,527	582	20.6
063	6,290	582	22.6
070	7,045	582	22.7
080	7,984	582	23.1
BOGGY SWAMP 1 TRIBUTARY 1			
000	44	839	16.6[3]
008	802	839	16.6[3]
016	1,632	839	16.6[3]
026	2,609	839	16.7
034	3,419	839	17.0
037	3,714	839	17.1
043	4,326	839	17.8
052	5,173	839	19.2
059	5,933	417	19.9
066	6,639	417	20.0
074	7,360	417	20.3
081	8,065	236	20.5
088	8,787	236	20.6
097	9,678	236	20.9
105	10,512	236	21.3
114	11,442	236	21.7
BOND SWAMP			
002	227	2,536	15.0[3]
011	1,051	1,777	15.0[3]
019	1,909	1,777	15.0[3]
028	2,785	1,777	15.0[3]
038	3,763	1,777	15.2
048	4,758	1,777	15.8
058	5,838	1,777	16.4
068	6,811	1,777	16.8
078	7,753	1,777	17.2
082	8,219	1,777	17.5

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BOND SWAMP (continued)			
083	8,327	1,777	17.5
086	8,565	1,777	17.7
094	9,357	1,670	18.1
103	10,291	1,670	18.4
111	11,080	1,670	18.9
120	11,981	1,670	19.7
127	12,674	1,670	20.0
135	13,540	1,670	20.3
146	14,551	1,658	20.5
156	15,587	1,658	20.9
158	15,796	1,658	21.0
165	16,486	1,658	21.1
172	17,166	1,484	21.2
179	17,895	1,484	21.2
188	18,822	897	21.3
196	19,559	897	21.3
205	20,527	897	21.5
215	21,488	897	21.7
223	22,337	897	21.8
233	23,285	627	22.0
241	24,086	627	22.2
249	24,882	627	22.6
258	25,829	627	23.1
267	26,662	627	23.4
275	27,495	627	23.7
283	28,297	627	24.1
292	29,225	627	24.6
302	30,192	627	25.1
311	31,148	627	25.5
BOND SWAMP TRIBUTARY 2			
000	19	123	21.2[3]
012	1,174	113	21.2[3]
017	1,708	113	21.2[3]
023	2,294	113	21.2[3]
033	3,282	113	21.6
041	4,070	113	23.4
BOND SWAMP TRIBUTARY 3			
000	39	279	20.3[3]

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
BOND SWAMP TRIBUTARY 3 (continued)			
016	1,576	267	20.6
025	2,468	237	20.9
035	3,483	237	21.5
CANAAN BRANCH 1			
000	10	953	21.9
017	1,696	325	22.1
027	2,745	325	22.4
CARVERS BAY CREEK			
002	173	2,037	9.6[3]
012	1,247	1,943	9.6[3]
023	2,281	1,943	9.6[3]
033	3,319	1,943	9.6[3]
045	4,454	1,943	9.6[3]
056	5,553	1,943	9.6[3]
064	6,396	1,896	9.6[3]
070	7,039	1,896	9.6[3]
082	8,190	272	9.6[3]
091	9,130	272	9.6[3]
102	10,201	272	9.6[3]
111	11,058	272	9.6[3]
116	11,611	272	9.6[3]
118	11,806	272	9.6[3]
127	12,718	272	9.6[3]
CEDAR CREEK			
001	58	2,054	17.4[4]
013	1,290	2,035	17.6[4]
021	2,148	2,035	17.6[4]
030	2,952	2,035	17.7[4]
040	3,977	2,035	17.8[4]
041	4,114	1,443	17.8[4]
042	4,185	1,443	17.8[4]
042	4,230	1,443	17.8[4]
043	4,278	1,443	17.8[4]
056	5,635	1,443	17.8[4]
069	6,949	1,443	17.9[4]
086	8,555	1,443	18.0[4]

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

[4] Elevation includes flooding controlled by Santee River

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
CEDAR CREEK (continued)			
104	10,363	1,443	18.1[3]
119	11,865	1,443	18.2[3]
133	13,315	1,443	18.3[3]
148	14,806	1,443	18.4[3]
162	16,179	339	18.6[3]
177	17,664	339	19.0[3]
194	19,368	339	19.0[3]
212	21,171	339	19.1[3]
232	23,221	339	19.2[3]
243	24,331	339	19.4[4]
244	24,391	339	19.4[4]
244	24,431	339	19.4[4]
245	24,483	339	19.4[4]
257	25,677	339	19.4[4]
275	27,547	339	19.4[4]
289	28,890	339	19.4[4]
310	30,973	136	19.4[4]
325	32,498	136	19.4[4]
340	33,975	136	19.4[4]
347	34,695	136	19.4[4]
348	34,799	136	19.4[4]
355	35,547	136	19.4[4]
363	36,308	136	19.4[4]
CHOPPEE CREEK			
003	304	1,389	9.5[4]
012	1,216	1,389	9.5[4]
026	2,594	1,389	9.5[4]
037	3,709	1,389	9.5[4]
046	4,648	1,156	9.5[4]
057	5,721	1,119	9.5[4]
067	6,703	1,101	9.5[4]
080	7,989	1,101	9.5[4]
082	8,236	1,101	9.5[4]
CYPRESS CREEK			
213	21,273	727	11.3
218	21,782	690	13.0
228	22,779	690	14.3

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes flooding controlled by Santee River

[4] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
CYPRESS CREEK (continued)			
234	23,444	664	15.2
242	24,224	664	15.9
CYPRESS CREEK TRIBUTARY 2			
006	573	294	13.2
011	1,106	294	14.3
017	1,744	294	16.3
020	2,047	294	16.6
FARDICK CREEK			
001	98	816	*
006	570	600	*
007	739	600	*
013	1,336	600	*
026	2,623	600	*
037	3,729	600	*
047	4,739	600	*
059	5,856	600	*
070	7,028	600	*
080	7,988	304	*
091	9,050	304	9.7
105	10,543	226	11.1
117	11,728	226	11.8
128	12,810	226	12.3
140	14,046	226	12.6
151	15,089	226	13.6
158	15,847	226	14.0
170	16,984	226	14.2
181	18,139	226	14.3
192	19,210	226	14.5
FARDICK CREEK TRIBUTARY 1			
001	95	397	10.5
011	1,112	377	13.0
013	1,281	377	13.5
023	2,330	377	15.9
032	3,227	377	17.0
036	3,571	184	17.2
037	3,737	184	17.4
049	4,852	184	18.0

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
FARDICK CREEK TRIBUTARY 1 (continued)			
060	6,032	184	18.5
GUINEA CREEK TRIBUTARY 1			
001	58	407	*
010	977	401	*
022	2,236	315	*
035	3,536	134	*
046	4,567	134	*
056	5,554	134	10.9
057	5,739	134	13.2
066	6,649	104	14.3
075	7,503	104	15.1
GUINEA CREEK TRIBUTARY 1.3			
001	145	198	*
004	412	138	*
007	652	138	*
009	917	138	9.1[3]
012	1,231	138	10.8
015	1,533	138	12.0
019	1,871	138	14.5
021	2,051	138	16.3
023	2,301	113	16.4
026	2,562	113	16.4
027	2,712	113	16.4
028	2,845	113	16.4
033	3,281	113	16.6
036	3,586	113	16.6
039	3,887	113	17.0
041	4,137	113	17.0
042	4,201	113	17.0
043	4,283	113	17.3
GUINEA CREEK TRIBUTARY 2			
002	186	200	*
007	724	178	*
018	1,784	178	*
027	2,708	144	10.3
036	3,649	144	14.6

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
GUINEA CREEK TRIBUTARY 2 (continued)			
038	3,807	132	16.3
048	4,782	132	17.5
INDIAN HUT SWAMP			
059	5,853	846	19.2[3]
067	6,699	704	19.2[3]
077	7,650	704	19.2[3]
078	7,836	704	19.2[3]
089	8,882	704	19.2[3]
100	10,009	668	19.2[3]
110	11,047	668	19.2[3]
122	12,176	668	19.2[3]
134	13,366	420	19.2[3]
144	14,443	283	21.7
147	14,706	283	26.1
LANES CREEK			
001	104	1,475	10.1[3]
013	1,296	1,346	10.1[3]
021	2,064	1,346	10.1[3]
035	3,535	1,346	10.1[3]
049	4,862	1,346	10.1[3]
065	6,483	1,346	10.1[3]
071	7,132	1,241	10.1[3]
081	8,058	1,241	10.1[3]
092	9,170	1,241	10.1[3]
100	10,045	1,241	10.1[3]
111	11,054	1,241	10.1[3]
125	12,467	1,241	10.1[3]
127	12,704	1,241	10.1[3]
138	13,768	877	10.1[3]
149	14,895	877	10.1[3]
162	16,212	877	10.1[3]
164	16,357	734	10.1[3]
174	17,386	734	10.1[3]
183	18,307	734	10.1[3]
194	19,405	734	10.1[3]
202	20,160	734	10.4
215	21,538	734	13.5
223	22,283	734	15.2

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
LANES CREEK (continued)			
225	22,492	734	17.9
235	23,508	734	18.2
LANES CREEK TRIBUTARY 1.1			
001	144	62	10.1[3]
010	990	62	10.1[3]
015	1,481	30	14.0
LANES CREEK TRIBUTARY 2			
001	118	692	10.1[3]
012	1,161	566	10.1[3]
022	2,176	566	10.1[3]
035	3,473	566	10.5
046	4,575	344	12.6
057	5,735	344	14.4
065	6,535	344	15.5
067	6,731	119	16.6
078	7,757	119	16.7
088	8,785	119	17.2
094	9,387	119	17.9
LANES CREEK TRIBUTARY 2.1			
002	192	268	10.1[3]
011	1,107	195	10.1[3]
022	2,205	195	13.0
033	3,315	195	16.4
042	4,152	195	17.6
048	4,822	195	18.4
050	4,983	195	18.7
063	6,252	146	19.3
LESTER CREEK			
179	17,938	1,203	19.5[3]
188	18,799	952	19.5[3]
190	18,977	952	19.5[3]
200	20,037	952	19.5[3]
212	21,214	803	19.5[3]
213	21,328	803	19.5[3]
215	21,517	803	19.5[3]
222	22,187	803	19.5[3]
223	22,332	803	19.5[3]
232	23,165	803	20.6

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
LESTER CREEK (continued)			
238	23,763	803	22.0
240	24,028	803	26.1
MACHINE BRANCH			
000	16	851	19.1[3]
011	1,101	839	19.1[3]
019	1,875	839	19.1
027	2,711	839	19.5
028	2,839	786	20.4
031	3,143	786	20.7
039	3,950	771	21.1
049	4,903	771	21.7
057	5,735	771	22.2
PENNYROYAL CREEK TRIBUTARY 1.1			
003	270	241	*
012	1,163	132	*
015	1,476	51	13.0
019	1,864	51	13.0
027	2,737	51	13.0
037	3,656	51	13.0
046	4,577	51	13.0
047	4,664	51	13.0
057	5,670	51	13.2
PENNYROYAL CREEK TRIBUTARY 1.2			
004	445	159	10.7[3]
011	1,126	159	10.7[3]
013	1,325	159	12.1
023	2,306	159	12.2
025	2,479	159	12.3
026	2,641	159	12.3
029	2,867	159	12.3
031	3,141	159	12.3
PENNYROYAL CREEK TRIBUTARY 2			
013	1,279	455	*
022	2,158	455	*
031	3,145	455	*
043	4,329	375	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
PENNYROYAL CREEK TRIBUTARY 2 (continued)			
054	5,372	375	10.9
064	6,402	375	12.1
074	7,366	375	13.1
077	7,693	375	14.0
084	8,405	375	14.5
PENNYROYAL CREEK TRIBUTARY 2.2			
001	58	290	14.2[3]
009	938	260	14.4
019	1,900	260	15.7
PETERS CREEK			
002	211	3,184	*
018	1,797	3,178	*
029	2,878	3,178	*
034	3,420	3,178	*
037	3,681	3,023	*
049	4,909	3,023	*
058	5,788	3,023	*
072	7,227	2,731	*
085	8,488	2,731	*
098	9,755	2,731	*
112	11,188	2,575	*
137	13,688	2,575	*
146	14,616	2,575	*
166	16,571	2,575	*
179	17,896	2,575	*
188	18,765	2,575	*
203	20,257	2,575	*
221	22,109	2,575	*
237	23,742	2,575	*
250	25,011	2,575	*
261	26,144	2,575	*
272	27,228	2,575	*
285	28,498	2,298	*
296	29,641	2,286	*
308	30,814	2,286	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
PETERS CREEK (continued)			
310	30,979	2,286	9.5
317	31,651	2,251	9.6
328	32,834	624	9.6
341	34,060	624	9.6
352	35,164	624	9.6
361	36,090	423	9.6
369	36,889	423	9.6
382	38,163	423	9.6
397	39,678	423	9.8
409	40,850	271	10.2
423	42,289	271	11.6
433	43,269	271	12.5
435	43,489	169	14.2
437	43,722	169	14.2
445	44,454	169	14.3
PETERS CREEK TRIBUTARY 3			
001	113	204	9.6[3]
009	884	186	9.6[3]
016	1,558	186	9.6[3]
017	1,709	186	9.6[3]
027	2,659	142	9.6[3]
035	3,542	142	11.9
POLE CASTLE BRANCH			
028	2,786	421	11.9[3]
034	3,389	316	11.9[3]
042	4,234	316	11.9[3]
051	5,122	159	11.9[3]
060	5,966	159	11.9[3]
069	6,881	159	11.9[3]
079	7,876	159	14.3
088	8,845	159	16.7
091	9,068	159	16.9
PORT CREEK			
040	4,031	2,689	18.6[3]
050	4,979	2,536	18.6[3]
062	6,166	2,536	18.6[3]
071	7,056	2,536	18.6[3]
077	7,741	2,401	18.6[3]

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
PORT CREEK (continued)			
085	8,465	2,401	18.6[3]
094	9,428	2,401	18.6[3]
103	10,343	2,401	18.6[3]
113	11,280	2,401	18.6[3]
122	12,212	2,401	18.6[3]
132	13,225	2,401	18.6[3]
141	14,079	2,401	18.6[3]
POST FOOT BRANCH TRIBUTARY 1			
002	206	109	*
012	1,163	98	*
017	1,706	98	9.8
019	1,874	98	12.9
025	2,479	98	16.9
PUNCHEON CREEK 1			
042	4,218	513	19.3[3]
051	5,063	378	19.3[3]
053	5,270	378	19.3[3]
062	6,185	378	19.3[3]
073	7,282	311	19.3[3]
084	8,413	311	19.3[3]
SAMPIT RIVER TRIBUTARY 7.2			
001	91	1,789	*
008	827	1,786	*
011	1,111	1,786	*
021	2,104	1,749	10.3
032	3,231	1,749	11.2
044	4,365	1,749	12.3
054	5,418	1,749	13.1
056	5,628	1,749	13.3
065	6,524	1,692	13.8
074	7,419	1,692	14.1
085	8,465	1,692	14.4
SANTEE RIVER			
478	47,755	155,000	*
610	61,008	155,000	*
679	67,872	155,000	*
733	73,828	155,000	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SANTEE RIVER (continued)			
739	73,870	155,000	*
756	75,591	155,000	*
770	77,043	155,000	*
784	78,421	155,000	9.6
795	79,466	155,000	9.7
810	80,962	155,000	9.8
827	82,712	155,000	10.1
841	84,137	155,000	10.1
855	85,490	155,000	10.7
870	87,033	155,000	11.3
886	88,628	155,000	11.9
902	90,189	155,000	12.3
918	91,804	155,000	12.5
936	93,586	155,000	12.8
950	95,033	155,000	13.1
973	97,284	155,000	13.5
983	98,288	155,000	13.6
993	99,285	155,000	13.7
1,003	100,281	155,000	13.8
1,016	101,563	155,000	13.8
1,054	105,448	155,000	14.5
1,076	107,628	155,000	14.9
1,137	113,738	155,000	16.1
1,185	118,471	155,000	17.0
1,230	123,030	155,000	17.6
1,288	128,837	155,000	18.0
1,317	131,733	155,000	18.1
1,350	134,979	155,000	18.2
1,385	138,514	155,000	18.4
1,425	142,514	155,000	18.7
1,461	146,115	155,000	19.0
1,486	148,646	155,000	19.1
1,516	151,638	155,000	19.3
1,579	157,942	155,000	19.5
1,604	160,446	155,000	19.6
1,634	163,383	155,000	19.8

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SANTEE RIVER (continued)			
1,655	165,546	155,000	19.9
1,679	167,883	155,000	20.0
1,704	170,394	155,000	20.3
1,729	172,865	155,000	20.6
1,740	173,985	155,000	20.7
1,762	176,150	155,000	20.9
1,795	179,457	155,000	21.2
1,828	182,787	155,000	21.4
1,865	186,478	155,000	21.7
1,897	189,702	155,000	22.0
1,918	191,809	155,000	22.1
1,939	193,922	155,000	22.3
1,959	195,862	155,000	22.6
1,984	198,437	155,000	23.1
1,999	199,888	155,000	23.7
2,018	201,786	155,000	24.2
SIXMILE CREEK			
021	2,144	2,348	*
026	2,589	2,250	*
034	3,391	2,250	*
049	4,917	2,250	*
059	5,873	2,250	*
064	6,420	2,250	*
069	6,932	2,250	*
083	8,344	2,250	*
089	8,854	2,250	*
091	9,124	2,250	*
096	9,618	2,250	*
104	10,418	2,134	*
110	10,974	2,134	*
116	11,646	2,134	*
125	12,505	2,134	*
145	14,518	2,134	*
156	15,562	2,134	*
161	16,135	2,134	*
168	16,817	2,134	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SIXMILE CREEK (continued)			
185	18,514	2,134	*
198	19,770	2,134	*
213	21,271	2,134	*
223	22,330	2,134	*
231	23,104	2,134	*
243	24,266	2,134	*
253	25,319	2,031	*
268	26,773	1,885	*
278	27,793	1,885	*
286	28,637	1,885	*
295	29,457	1,885	*
301	30,138	1,885	8.4
306	30,615	1,885	8.6
314	31,409	1,834	8.6
321	32,105	1,834	8.7
332	33,214	1,834	8.8
341	34,115	1,834	8.9
350	35,026	1,834	9.0
351	35,130	1,834	9.0
361	36,120	1,834	9.2
371	37,138	1,683	9.3
382	38,235	1,683	9.3
394	39,387	1,683	9.4
401	40,143	1,512	9.4
407	40,732	1,512	9.4
419	41,886	1,512	9.5
427	42,673	1,098	9.5
435	43,533	1,098	9.5
452	45,172	1,098	9.6
461	46,148	1,098	9.7
470	47,037	1,098	9.7
476	47,592	999	9.8
487	48,732	999	9.9
496	49,626	999	10.1
506	50,636	999	10.3

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SIXMILE CREEK (continued)			
518	51,751	999	10.6
527	52,655	999	11.1
535	53,547	999	11.4
538	53,770	849	11.8
545	54,549	849	11.9
554	55,385	849	12.0
562	56,210	849	12.2
571	57,089	849	12.3
581	58,143	849	12.5
591	59,125	849	12.8
599	59,929	745	13.1
609	60,850	745	13.5
619	61,900	745	14.4
625	62,477	745	15.1
632	63,237	745	16.0
634	63,404	745	17.1
637	63,745	745	17.3
647	64,710	745	17.7
SPRING GULLY			
001	131	1,165	*
012	1,239	1,055	*
022	2,242	1,055	*
031	3,067	1,055	*
042	4,220	1,055	*
052	5,156	1,055	*
060	6,005	1,055	*
069	6,855	613	*
078	7,780	613	*
088	8,777	613	*
098	9,805	613	*
108	10,823	613	11.5
116	11,638	613	12.0
126	12,571	481	12.3
134	13,396	481	12.8
142	14,166	306	13.2
144	14,380	306	13.3

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SPRING GULLY (continued)			
153	15,297	306	13.5
163	16,338	306	16.0
174	17,379	306	16.0
183	18,280	306	16.0
192	19,198	306	16.1
194	19,401	306	16.1
203	20,266	306	16.3
ST. PAULS BRANCH TRIBUTARY NO. 2 TRIBUTARY 1			
001	147	276	10.4[3]
010	1,048	240	10.4[3]
017	1,679	240	10.4[3]
020	2,004	87	13.3
028	2,759	87	13.5
035	3,453	87	14.9
039	3,854	87	18.1
044	4,367	87	18.5
SUMMONS SWAMP			
000	16	1,317	17.5
010	999	1,266	18.0
019	1,927	1,266	18.5
027	2,668	1,266	18.7
038	3,843	1,266	18.9
047	4,680	1,266	19.4
049	4,935	1,125	19.9
058	5,844	1,125	20.1
067	6,656	1,125	20.2
077	7,704	1,038	20.4
087	8,669	1,038	20.7
094	9,422	1,038	20.9
103	10,310	489	21.1
111	11,071	489	21.2
113	11,302	489	21.2
121	12,070	489	21.3
130	12,965	489	21.5
138	13,819	416	22.0
148	14,759	416	22.5
157	15,748	416	22.7
168	16,790	416	23.7

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
SUMMONS SWAMP (continued)			
175	17,532	416	25.5
181	18,060	416	26.6
182	18,235	416	27.6
SUMMONS SWAMP TRIBUTARY 3			
004	371	243	20.9[3]
012	1,165	184	20.9[3]
017	1,714	184	20.9[3]
027	2,662	78	20.9[3]
034	3,389	78	20.9[3]
040	4,048	78	21.2
SUMMONS SWAMP TRIBUTARY 4			
000	47	386	20.1[3]
013	1,300	386	20.1[3]
020	2,029	386	21.0
TURKEY CREEK			
124	12,437	3,434	*
134	13,416	1,363	12.0
144	14,406	1,363	17.3
154	15,414	1,363	20.4
164	16,401	1,363	20.8
174	17,417	1,363	22.4
183	18,327	1,363	24.2
193	19,335	1,363	24.6
203	20,336	1,363	24.9
213	21,332	1,363	25.2
222	22,220	1,363	25.6
232	23,221	1,363	25.8
242	24,218	1,363	25.9
252	25,212	1,363	25.9
261	26,088	1,363	25.9
270	27,026	1,363	26.5
TURKEY CREEK TRIBUTARY 1			
000	45	243	*
010	1,005	86	*
014	1,401	86	*

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
TURKEY CREEK TRIBUTARY 1 (continued)			
024	2,402	86	*
034	3,381	86	13.6
043	4,329	86	16.5
053	5,291	86	17.4
061	6,092	86	18.2
065	6,450	86	20.4
068	6,791	86	20.4
076	7,596	86	20.5
TYLER SWAMP			
025	2,496	429	18.6[3]
033	3,279	411	18.6[3]
037	3,719	397	18.6[3]
045	4,539	397	18.6[3]
052	5,242	381	18.6[3]
060	5,964	381	18.6[3]
071	7,075	356	18.6[3]
081	8,120	308	18.6[3]
091	9,137	308	18.6[3]
101	10,097	308	18.6[3]
103	10,348	291	18.6[3]
112	11,200	291	19.1
WHITES CREEK TRIBUTARY			
019	1,947	453	*
020	1,957	453	*
039	3,896	102	11.4
043	4,349	102	11.5
045	4,539	20	11.6
WHITES CREEK TRIBUTARY NO. 1			
000	0[4]	70	11.8
001	101[4]	70	11.8
011	1,114[4]	70	11.9
022	2,185[4]	70	12.6
026	2,581[4]	70	13.2
WILKES BRANCH			
003	255	820	19.4[3]
016	1,646	671	19.4[3]

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

[4] Feet above Old Silver Hill Drive

* Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
WILKES BRANCH (continued)			
035	3,512	671	19.4[3]
048	4,751	671	19.4[3]
060	5,950	671	19.4[3]
062	6,151	671	19.4[3]
074	7,364	671	19.4[3]
082	8,226	671	19.4[3]
089	8,890	671	21.0
YAUHANNAH CREEK			
006	555	1,853	13.7[3]
011	1,083	1,751	13.7[3]
020	1,986	1,751	13.7[3]
029	2,910	1,751	13.7[3]
037	3,716	1,751	13.7[3]
046	4,607	1,751	13.7[3]
055	5,516	1,751	13.7[3]
064	6,403	1,751	13.7[3]
073	7,302	1,751	13.7[3]
082	8,232	1,629	13.7[3]
091	9,136	1,629	13.7[3]
101	10,061	1,629	13.7[3]
110	10,989	1,629	13.7[3]
120	11,950	1,629	13.7[3]
129	12,899	1,629	13.7[3]
139	13,880	1,629	13.7[3]
142	14,158	1,445	13.7[3]
150	15,013	1,445	13.7[3]
159	15,931	1,445	13.7[3]
168	16,835	1,445	13.7[3]
178	17,797	1,445	13.7[3]
188	18,767	1,445	13.7[3]
194	19,430	1,445	13.7[3]
202	20,223	1,445	14.2
212	21,201	1,445	15.1
214	21,396	1,445	16.5
223	22,303	1,445	16.9
231	23,078	1,445	17.2
240	24,034	1,445	17.6

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

[3] Elevation includes backwater effects

TABLE 9—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)
YAUHANNAH CREEK (continued)			
250	25,015	1,158	17.9
258	25,759	1,158	18.0
265	26,548	1,158	18.3
274	27,364	1,158	18.7
283	28,342	1,158	19.0
297	29,653	939	19.2
305	30,467	939	19.7
312	31,175	939	20.2
318	31,751	939	21.0

[1] This table reflects all modeled cross sections. Some cross sections shown in this table may not appear on map.

[2] Feet above mouth

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 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 AO

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

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance coastal floodplains that have additional hazards associated with storm waves. 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 current FIRM presents flooding information for the entire geographic area of Georgetown County. This FIRM includes flood hazard information that was previously presented separately on FIRMs that were prepared for each incorporated community with identified flood hazards areas. Historical map dates relating to pre-countywide maps prepared for each community are presented in Table 10, "Community Map History."

7.0 OTHER STUDIES

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Georgetown County has been compiled into this FIS. Therefore, this FIS 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
Andrews, Town of	May 24, 1974	None	September 10, 1976	
Georgetown County (Unincorporated Areas)	January 3, 1975	April 7, 1978 October 1, 1983	March 1, 1984	March 16, 1989 October 16, 1992 August 2, 1996 December 20, 2000
Georgetown, City of	June 7, 1974	March 28, 1975	September 29, 1978	March 1, 1984 March 16, 1989
Pawleys Island, Town of	January 3, 1975	April 7, 1978 October 1, 1983	March 1, 1984	March 16, 1989

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

9.0 BIBLIOGRAPHY AND REFERENCES

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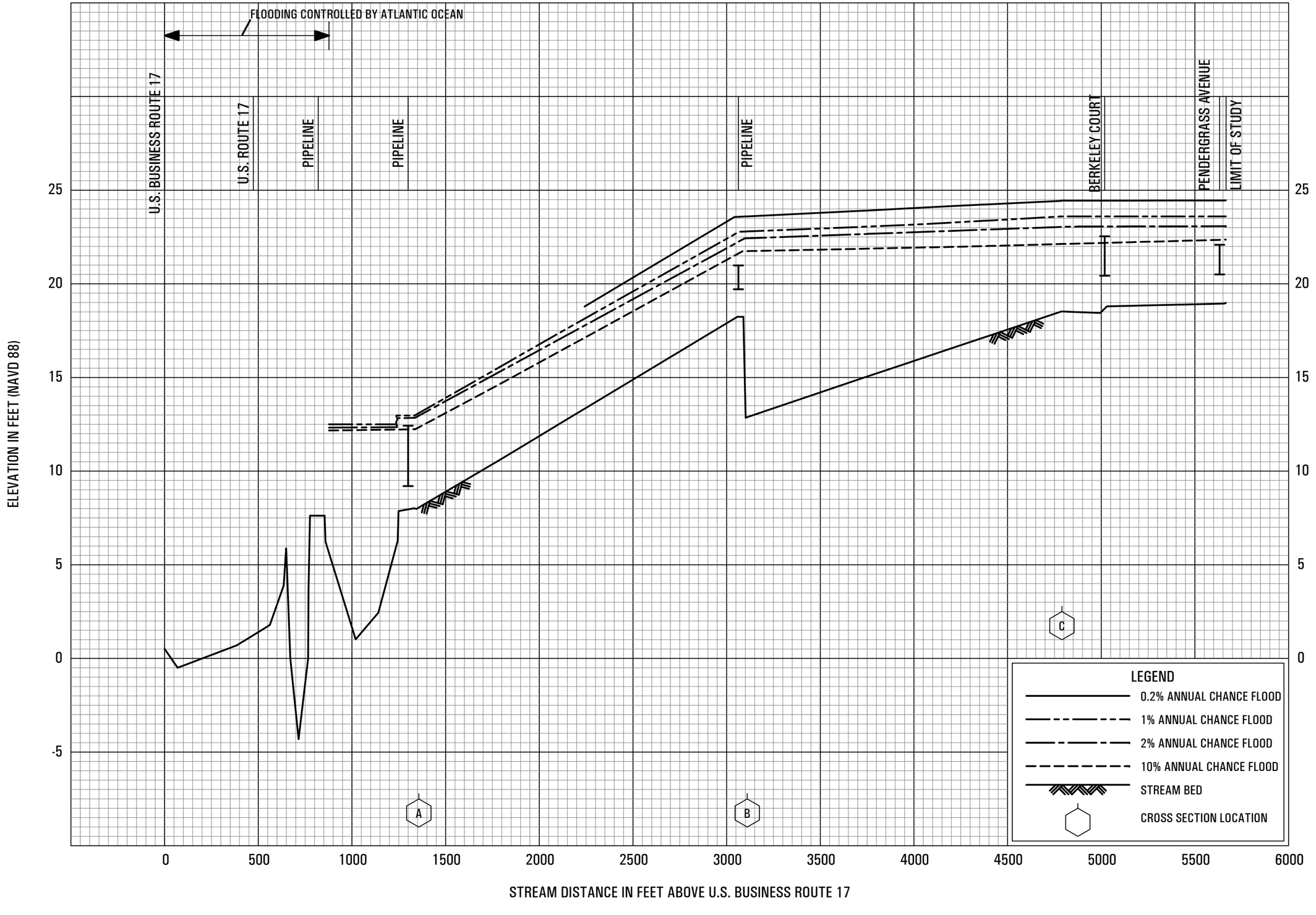


FLOOD PROFILES

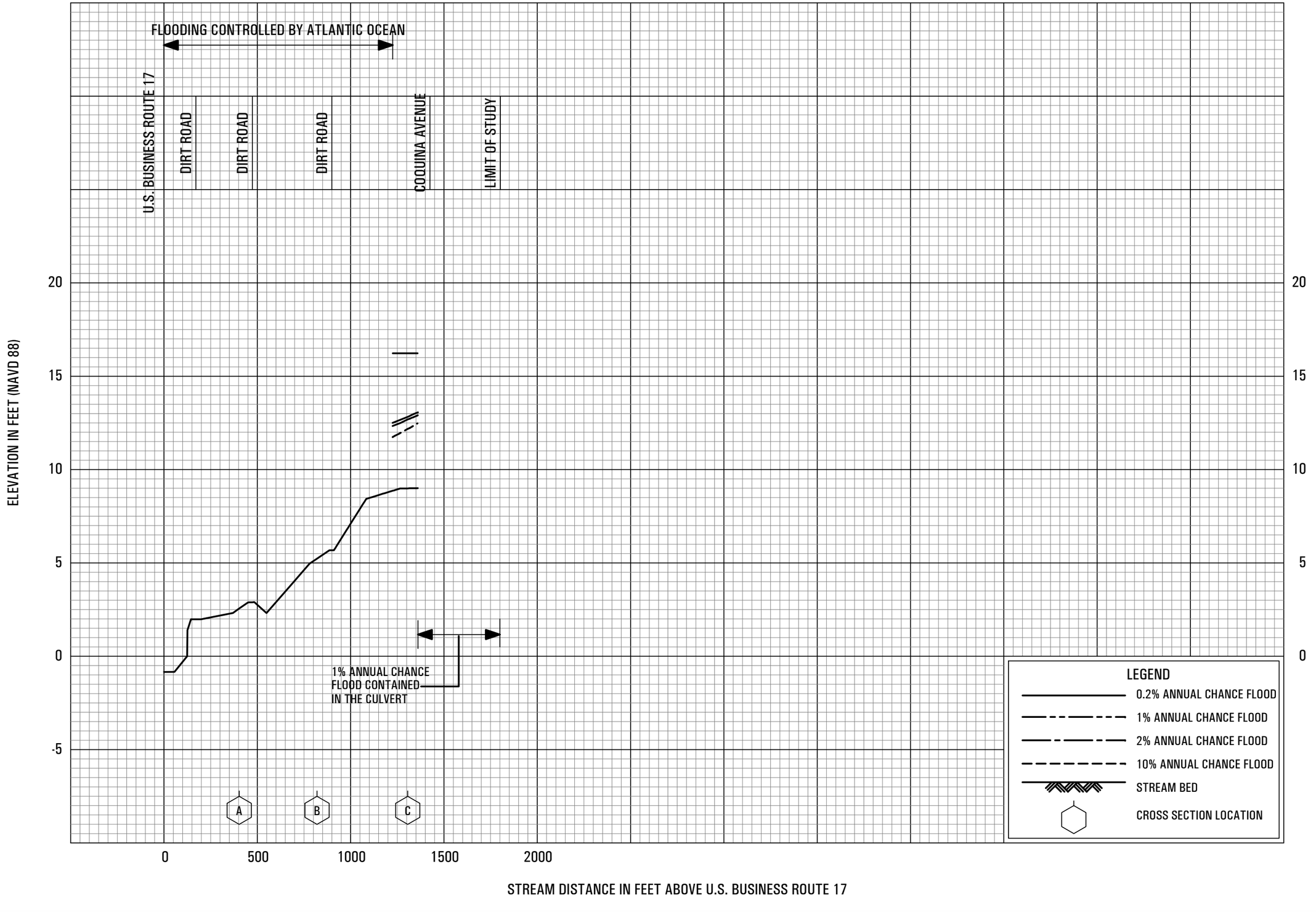
ALLSTON CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

01P



FLOOD PROFILES

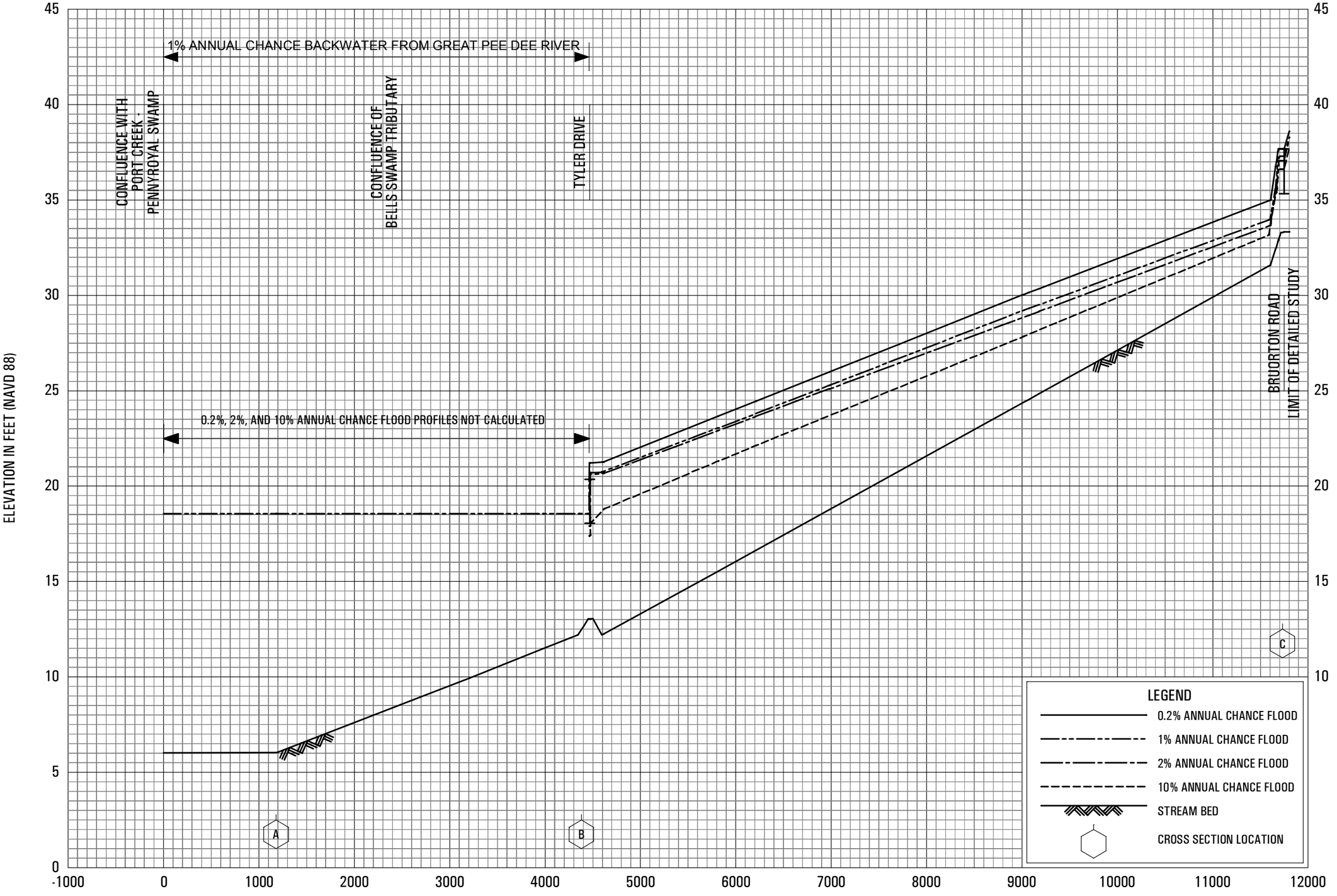
ALLSTON CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

02P



FLOOD PROFILES

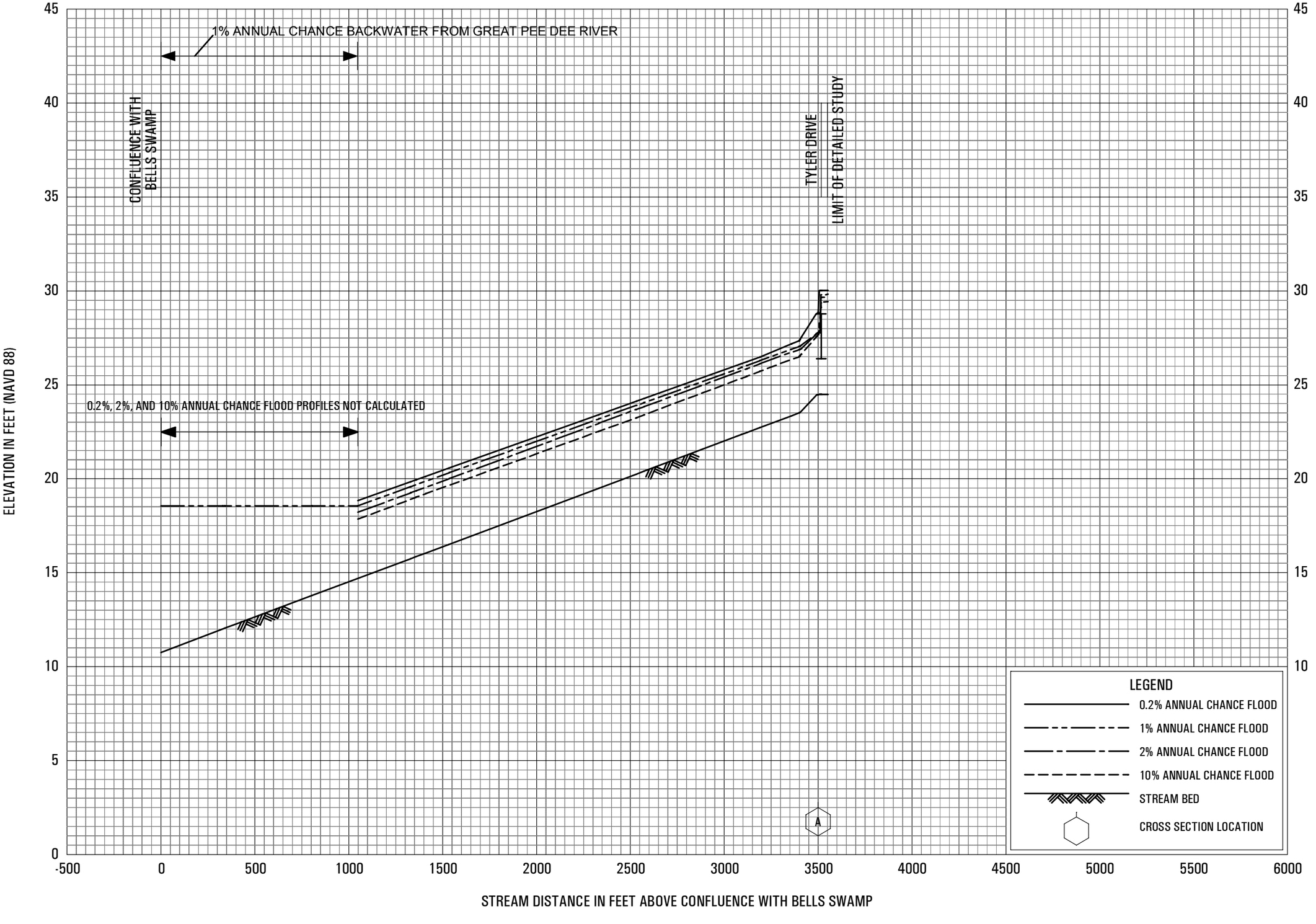
BELLS SWAMP

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

03P



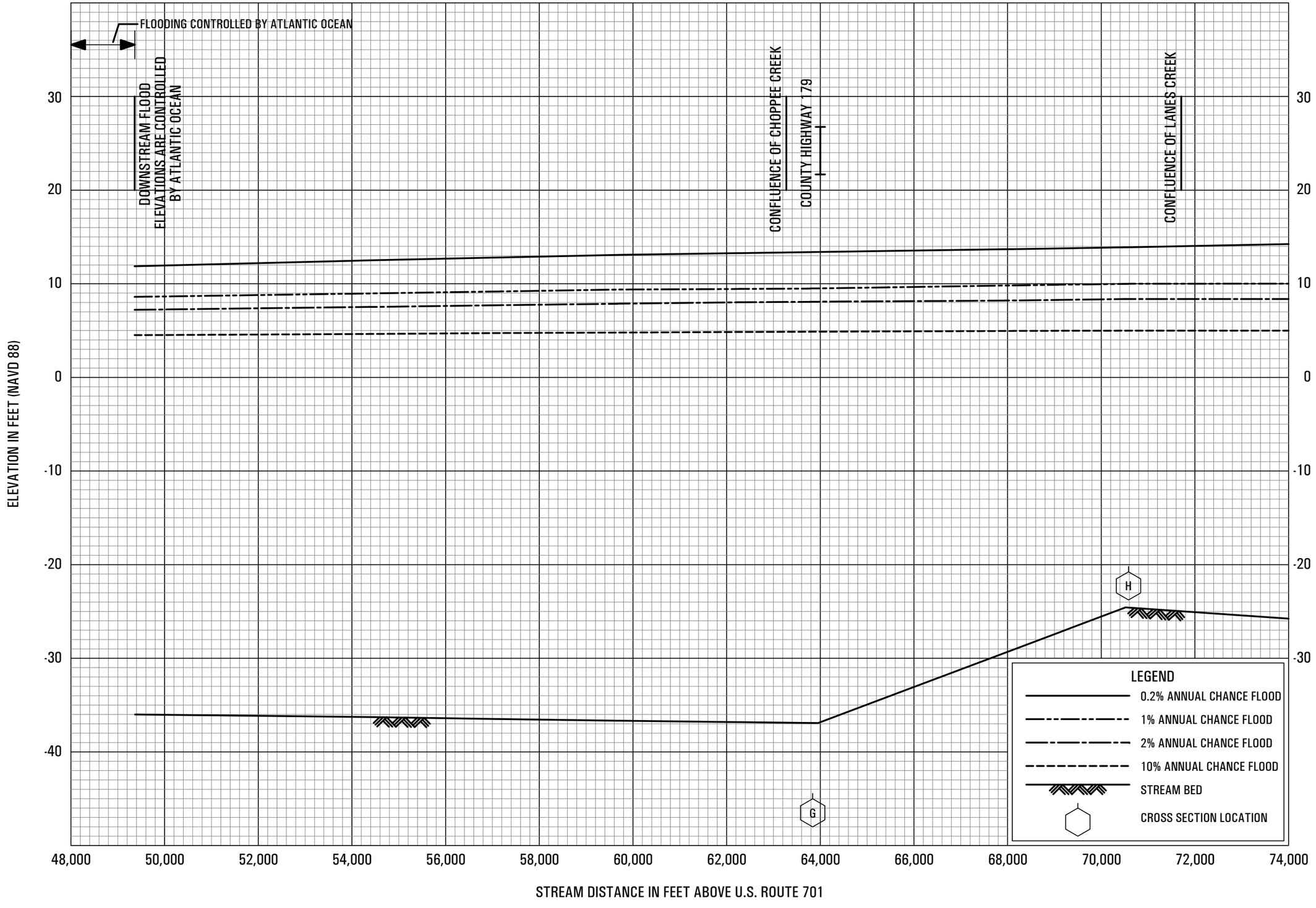
FLOOD PROFILES

BELLS SWAMP TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



FLOOD PROFILES

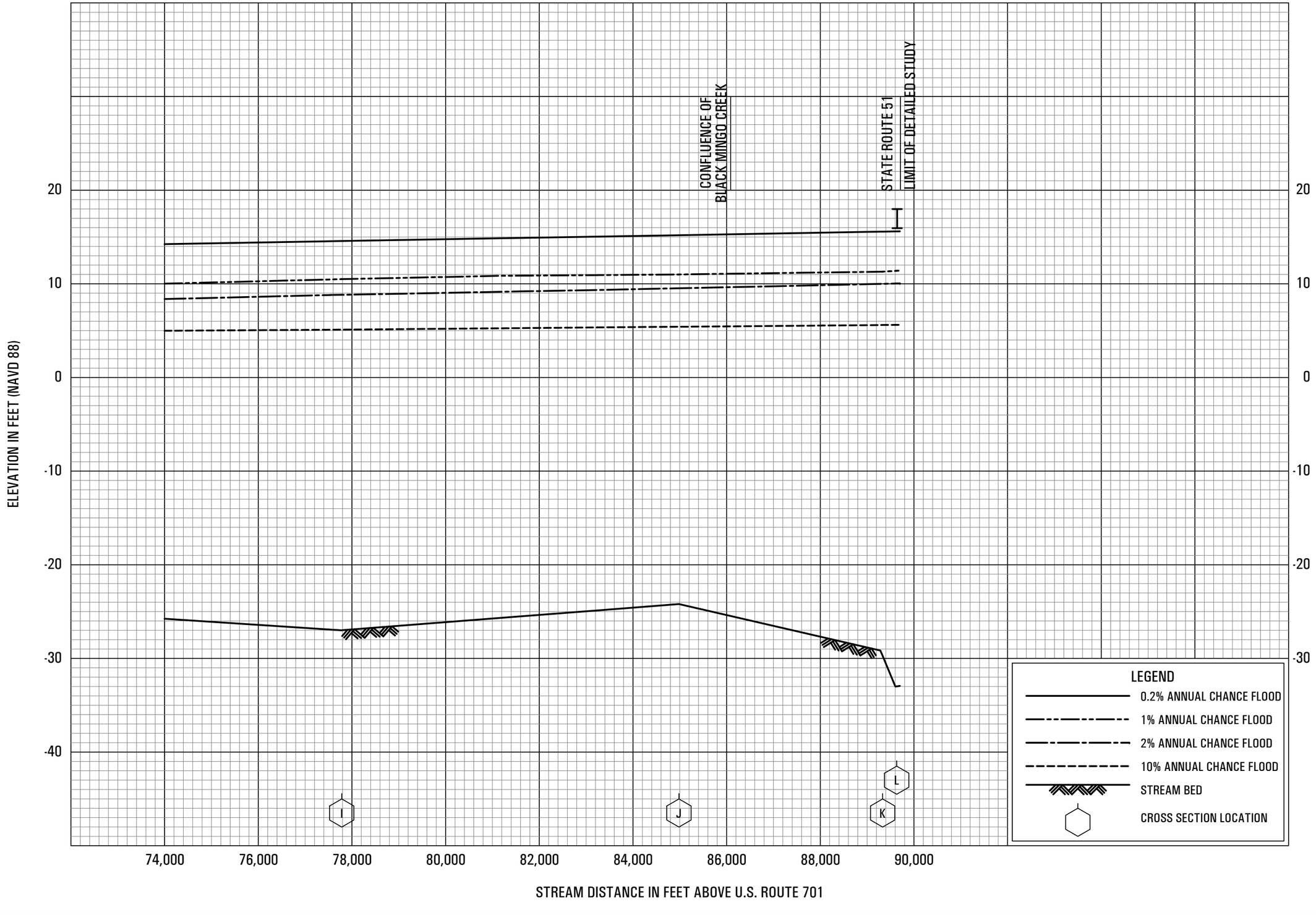
BLACK RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

05P



FLOOD PROFILES

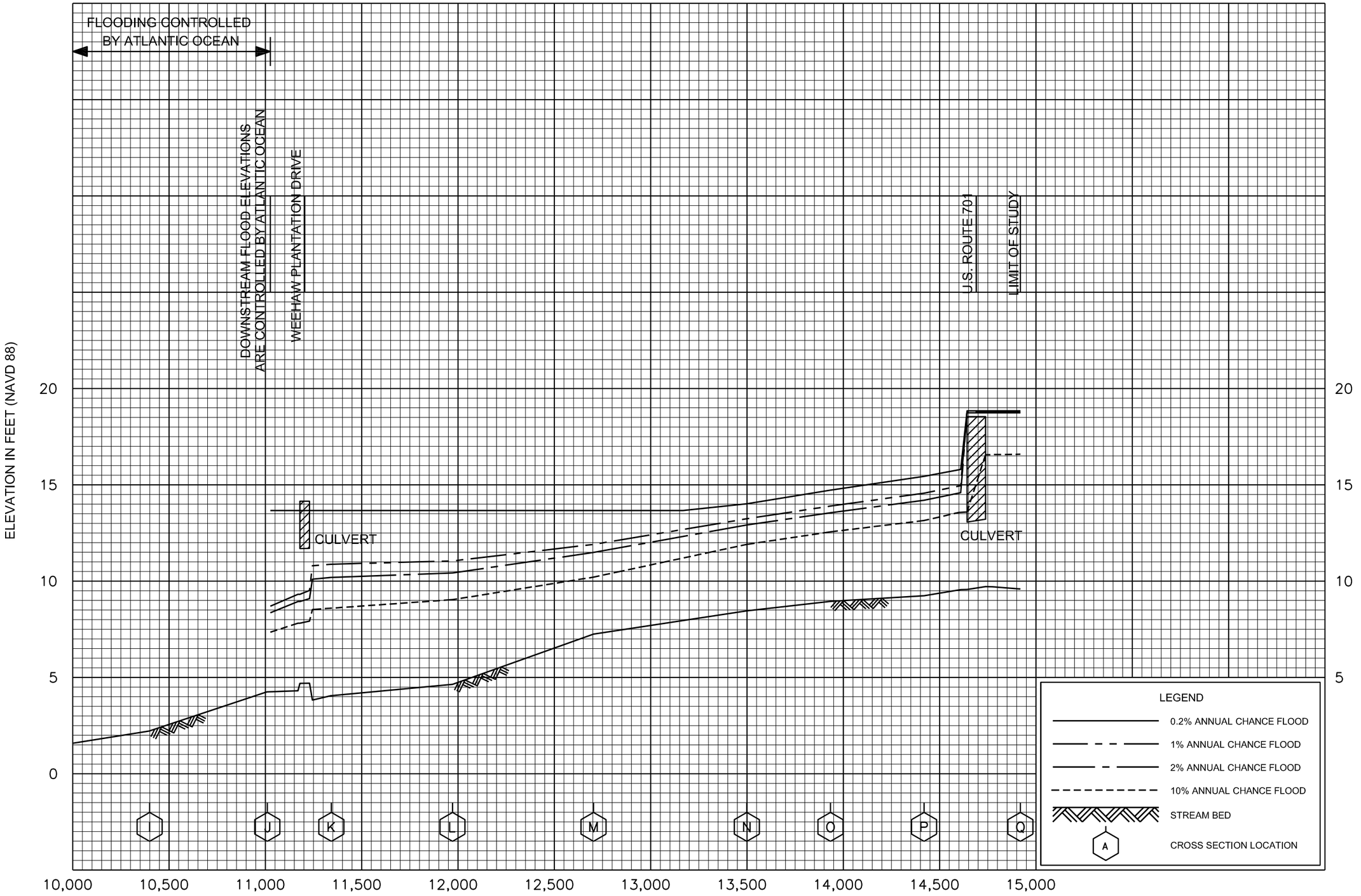
BLACK RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

06P



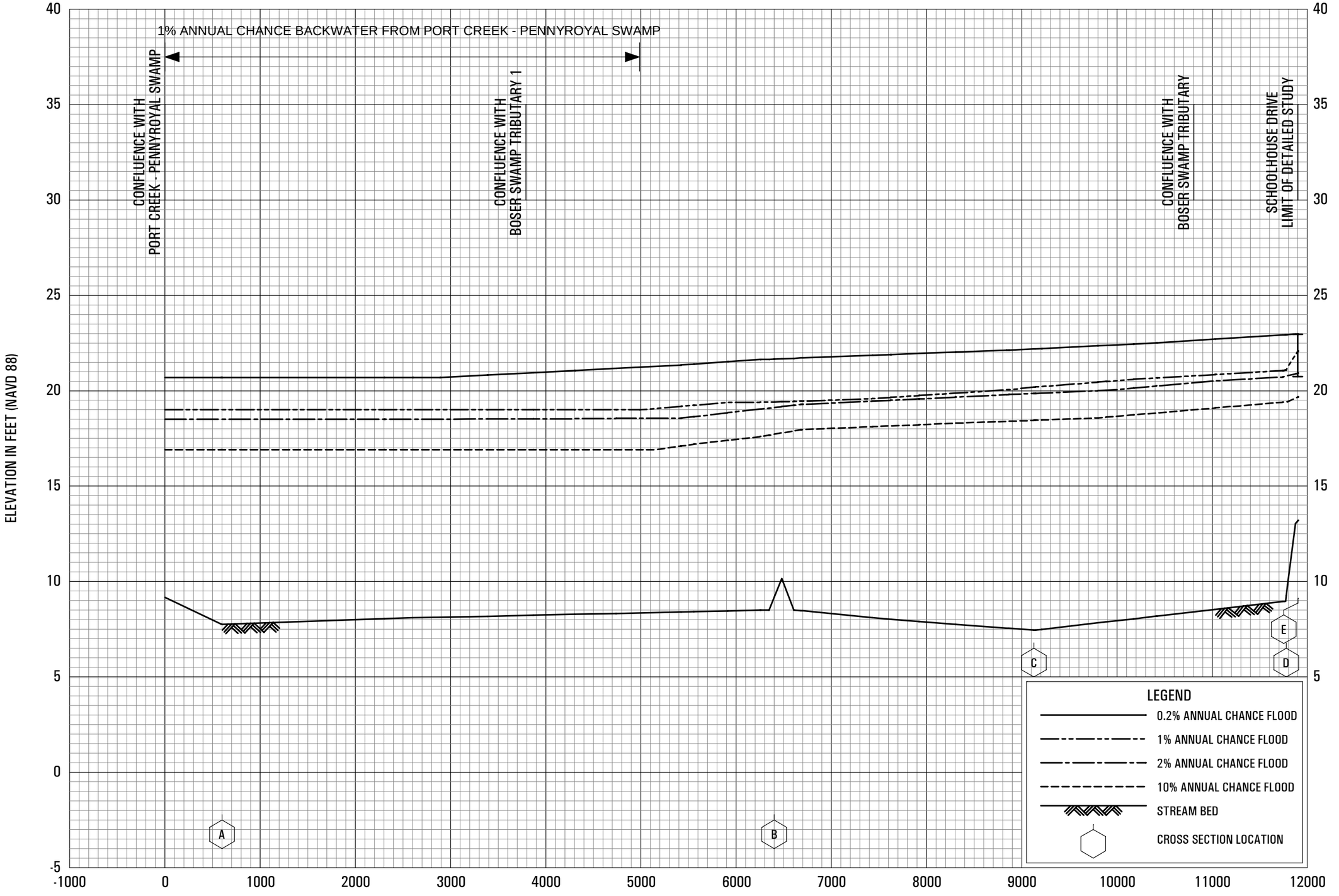
FLOOD PROFILES

BLACK RIVER TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS

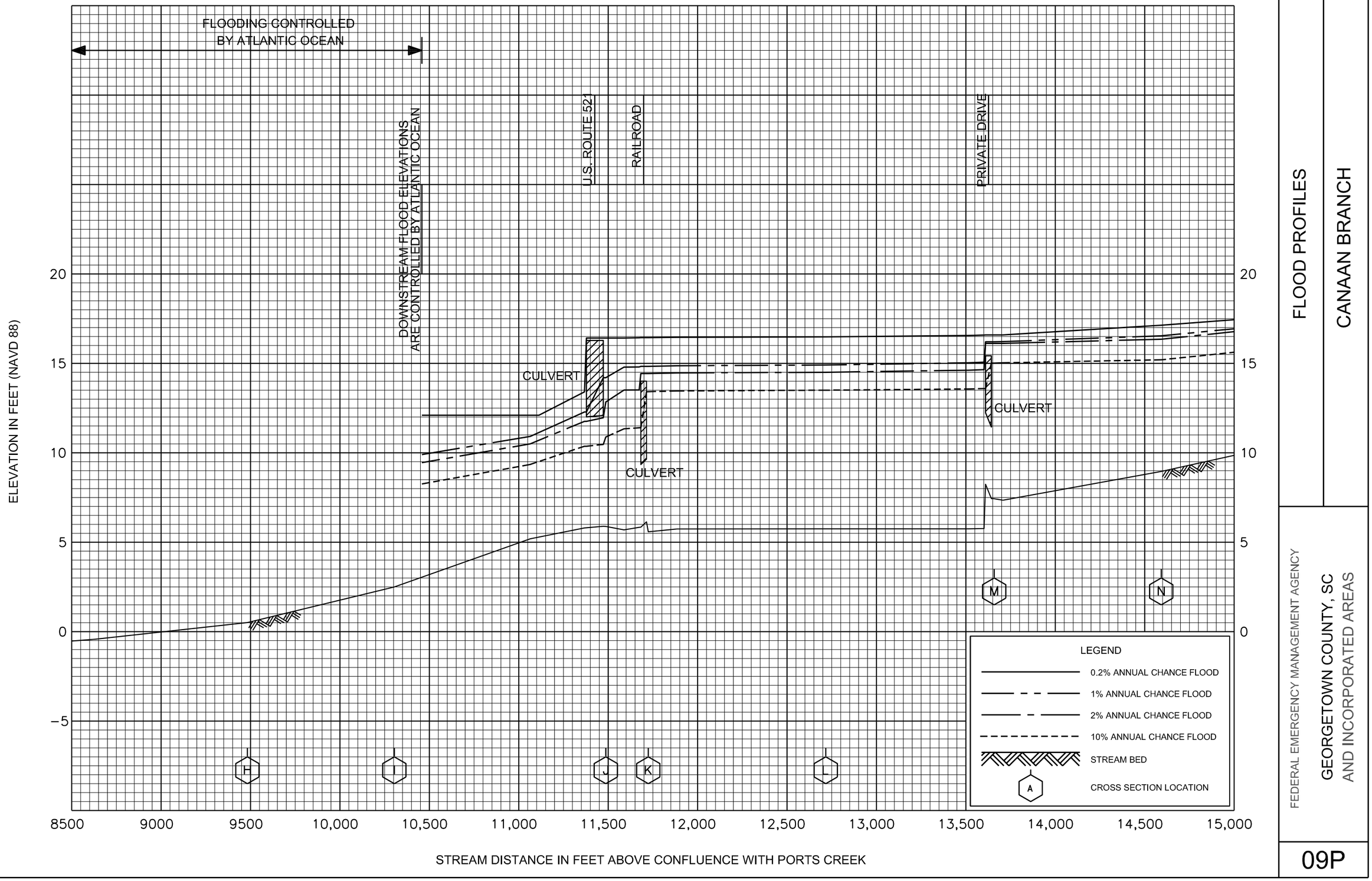
07P



FLOOD PROFILES

BOSER SWAMP

FEDERAL EMERGENCY MANAGEMENT AGENCY
GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS



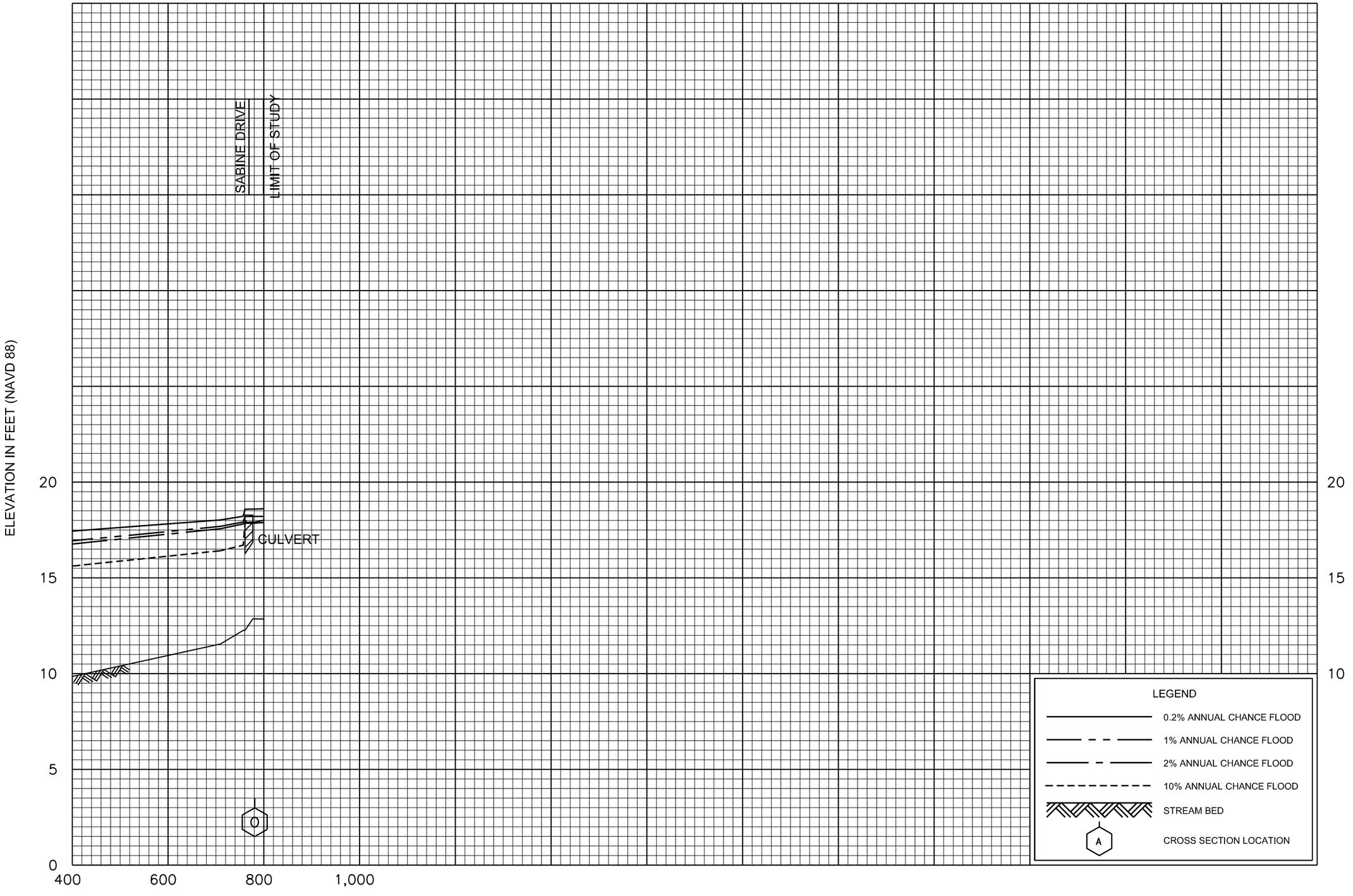
FLOOD PROFILES

CANAAN BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS

09P



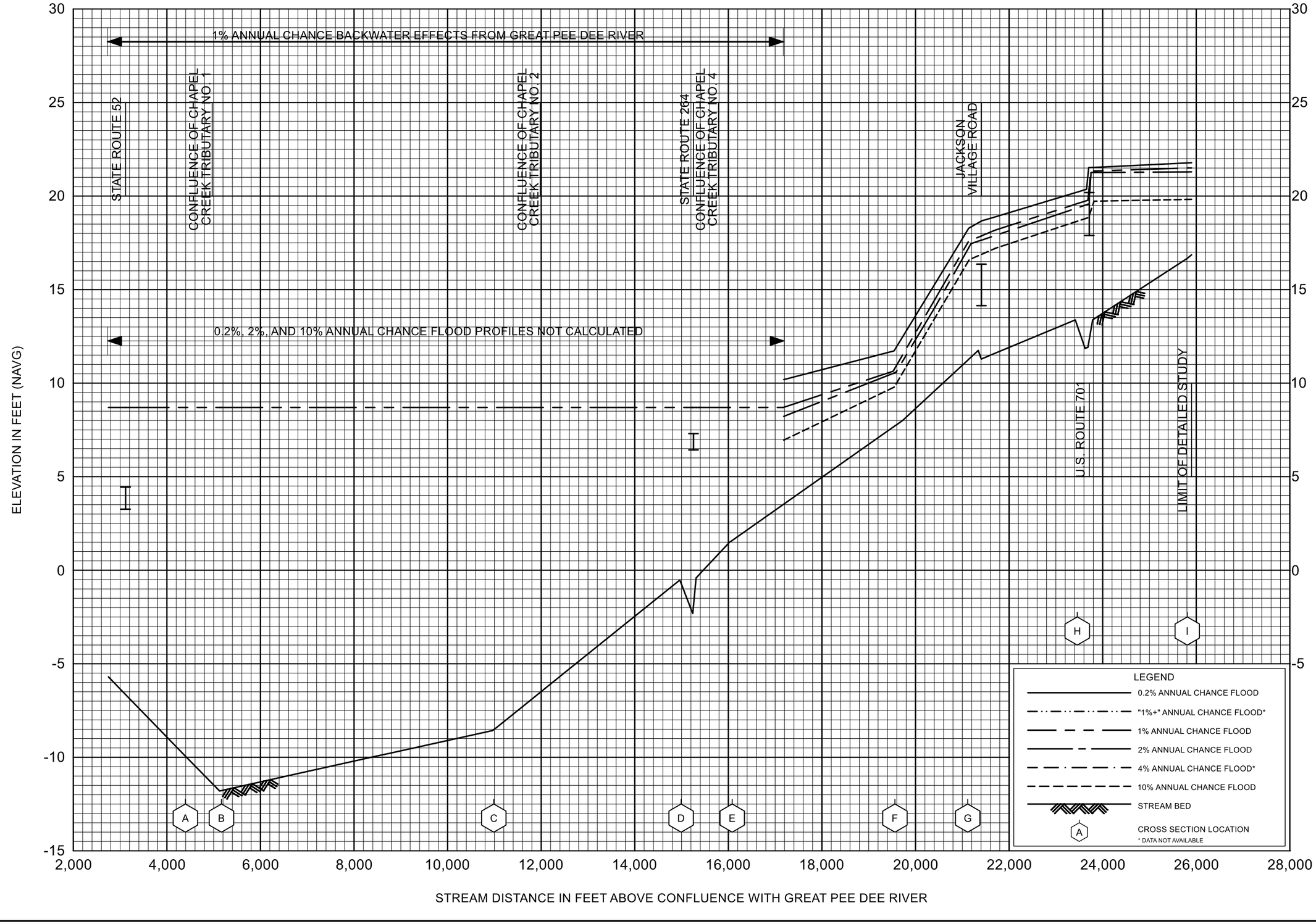
FLOOD PROFILES

CANAAN BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS

10P



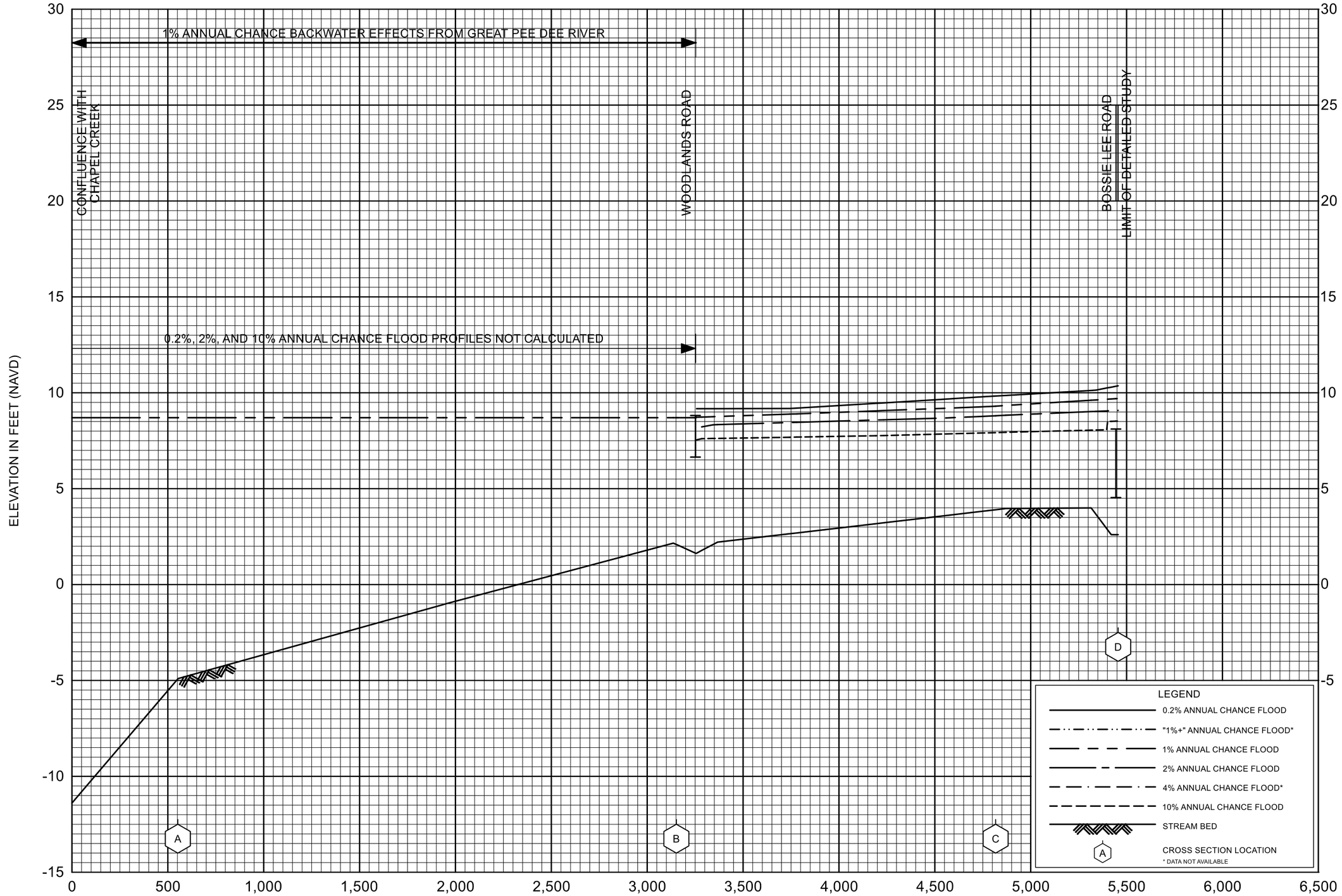
FLOOD PROFILES

CHAPEL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



FLOOD PROFILES

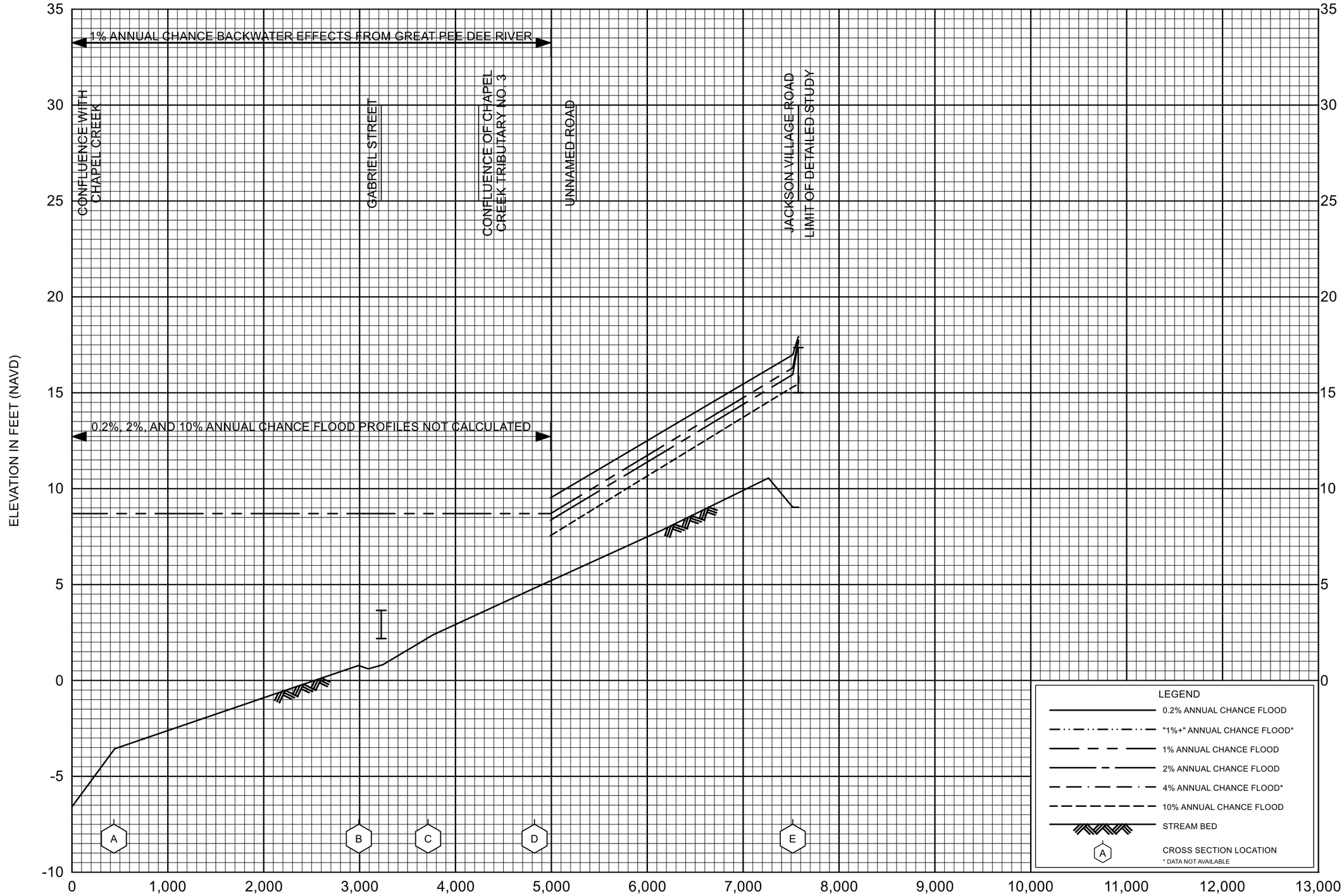
CHAPEL CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

12P



FLOOD PROFILES

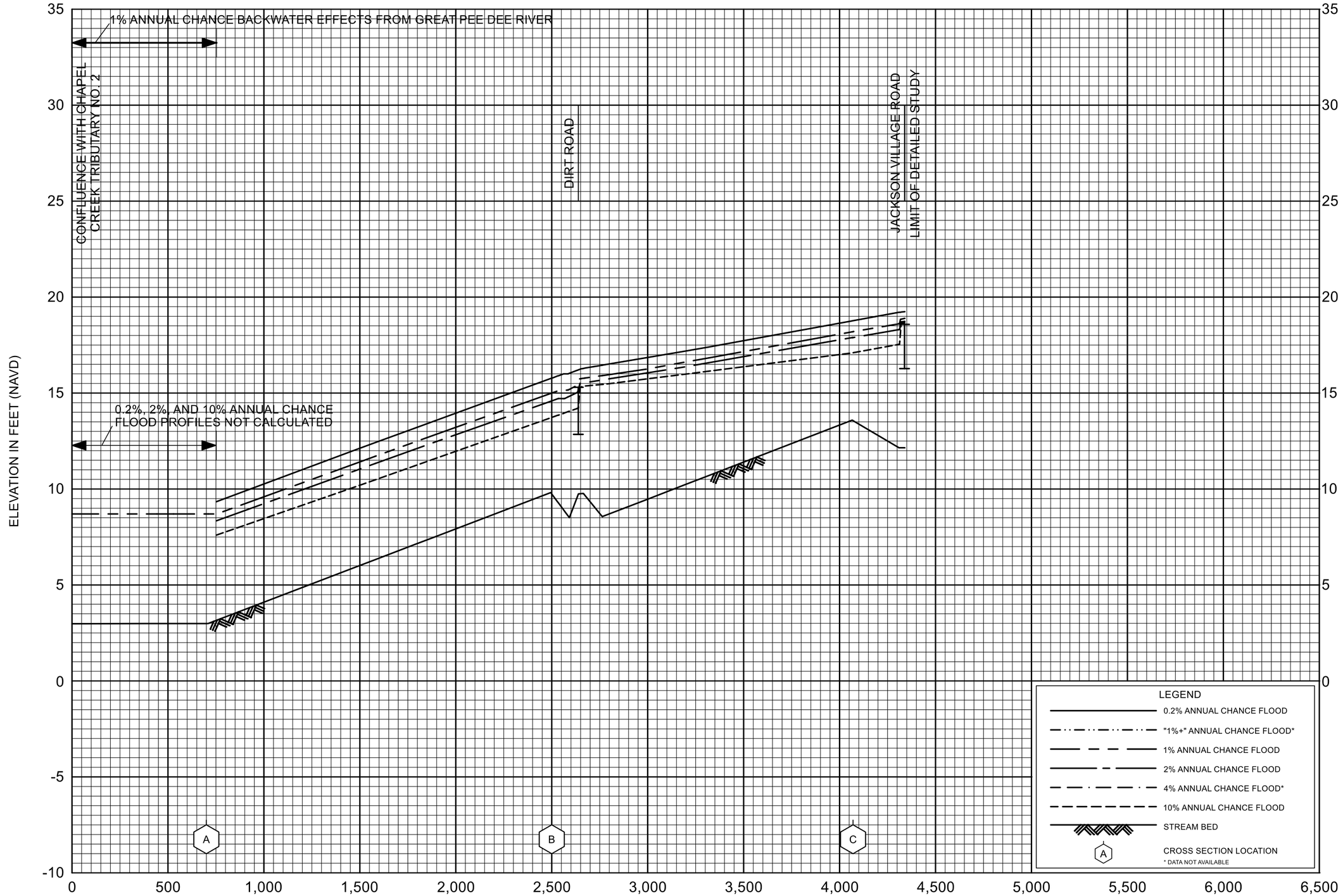
CHAPEL CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

(AND INCORPORAED AREAS

13P



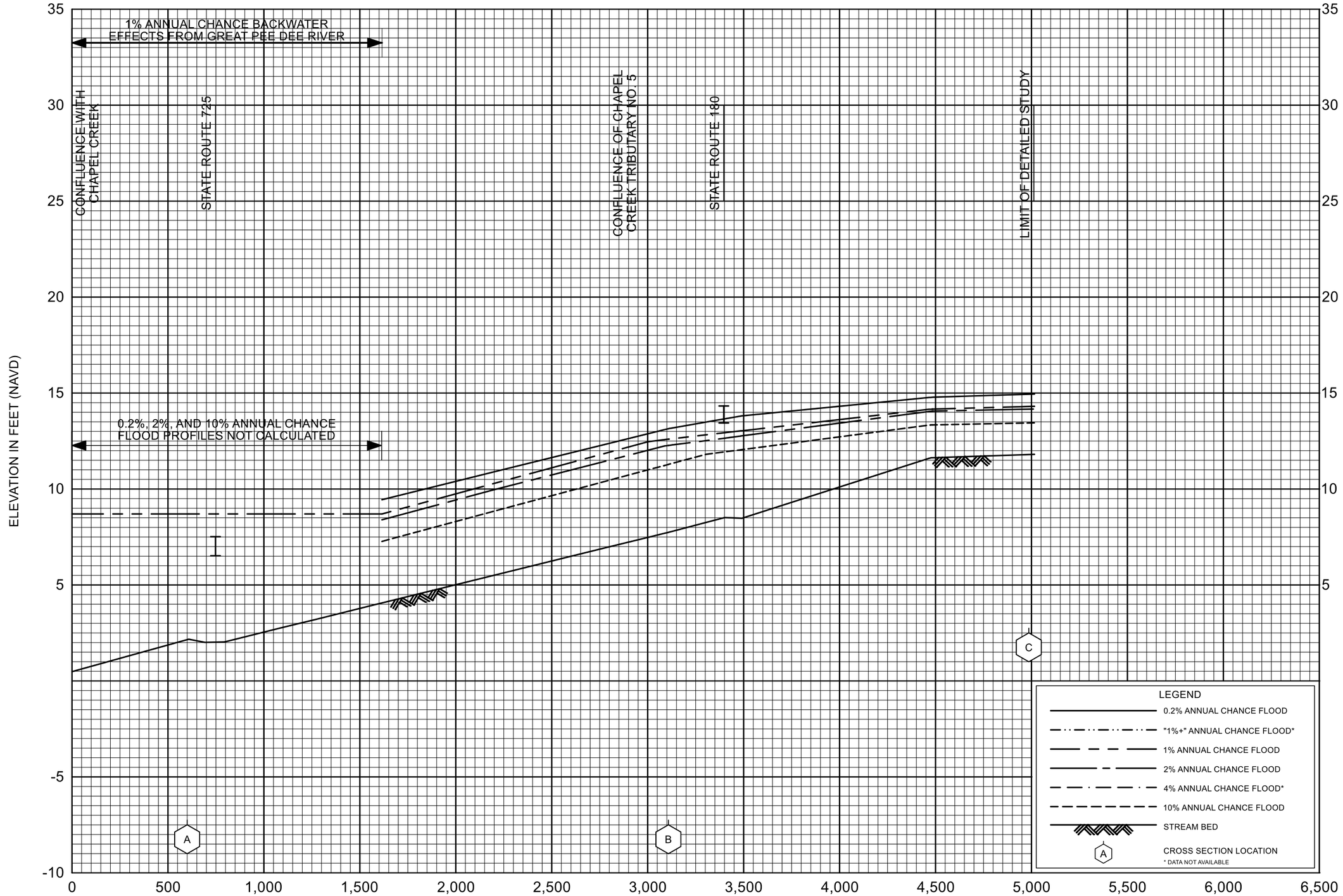
FLOOD PROFILES

CHAPEL CREEK TRIBUTARY NO. 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



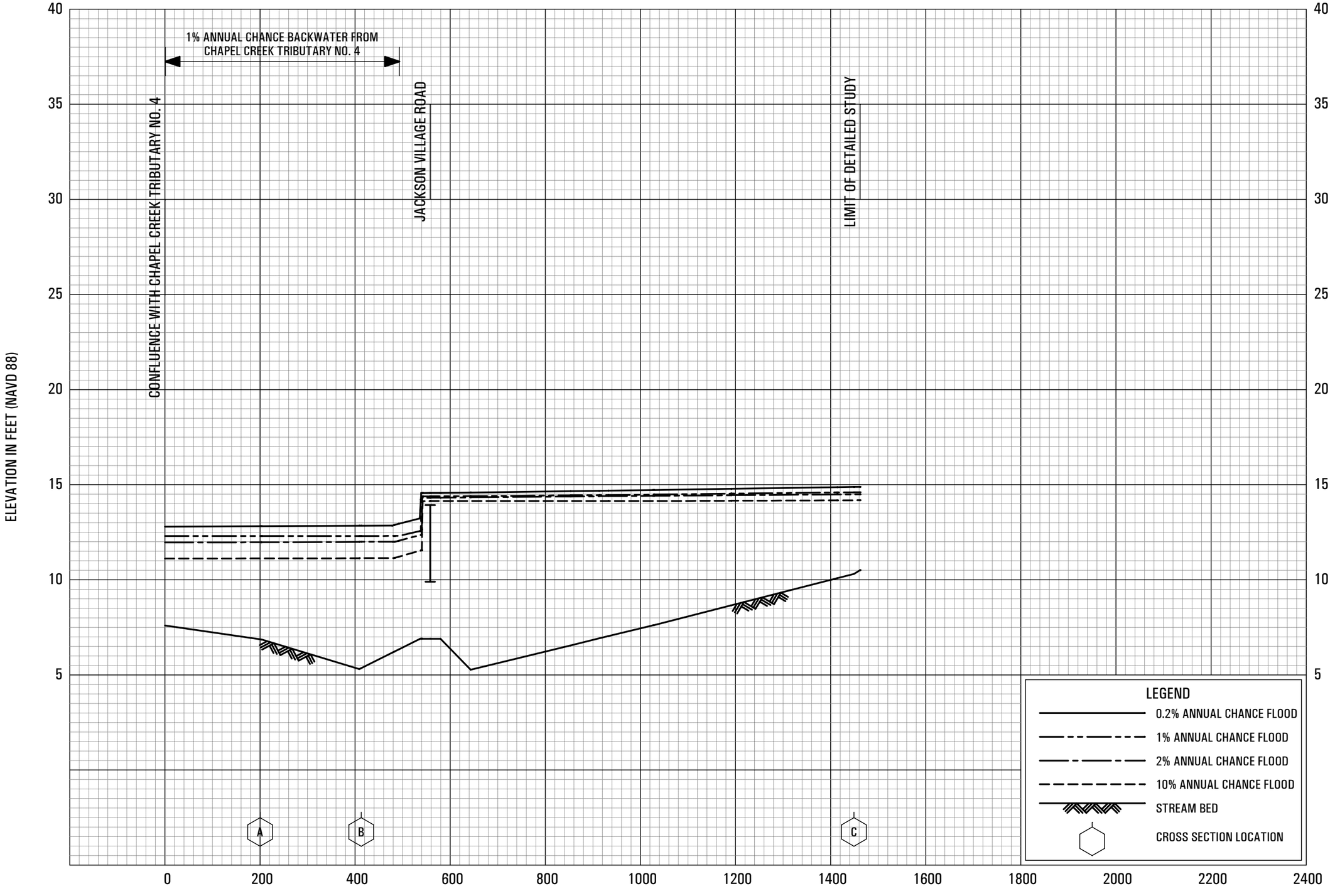
FLOOD PROFILES

CHAPEL CREEK TRIBUTARY NO. 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



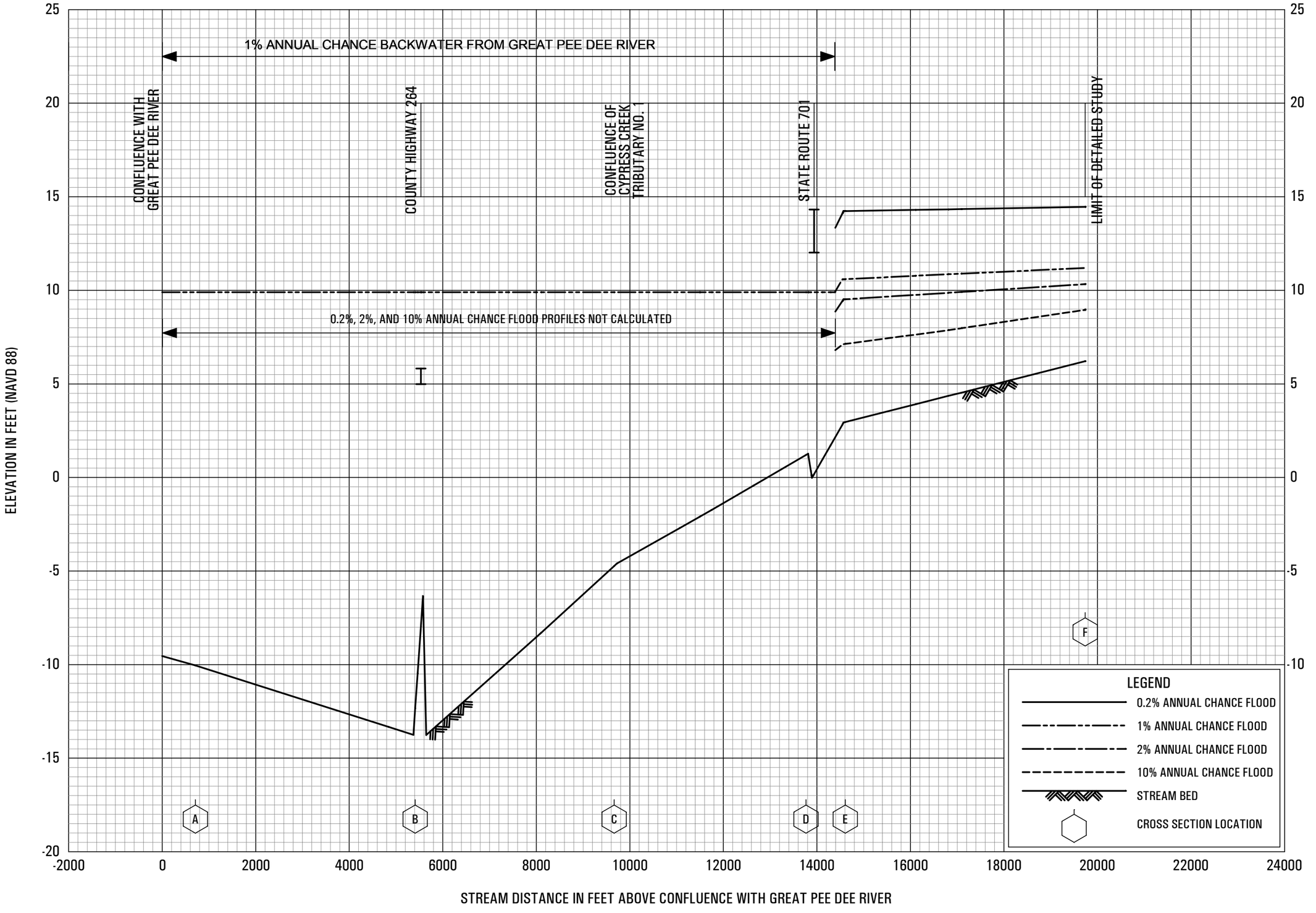
FLOOD PROFILES

CHAPEL CREEK TRIBUTARY NO. 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



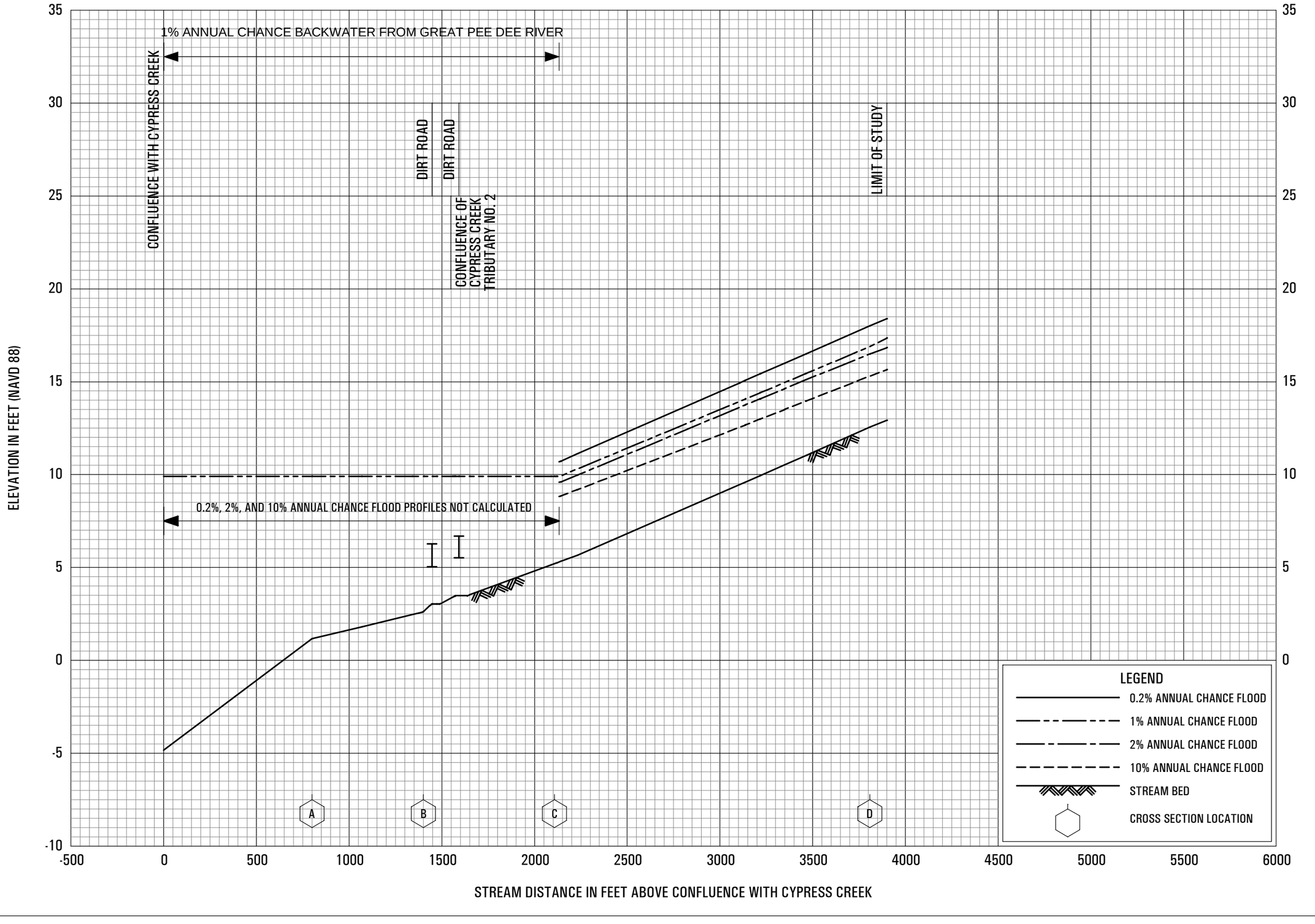
FLOOD PROFILES

CYPRESS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



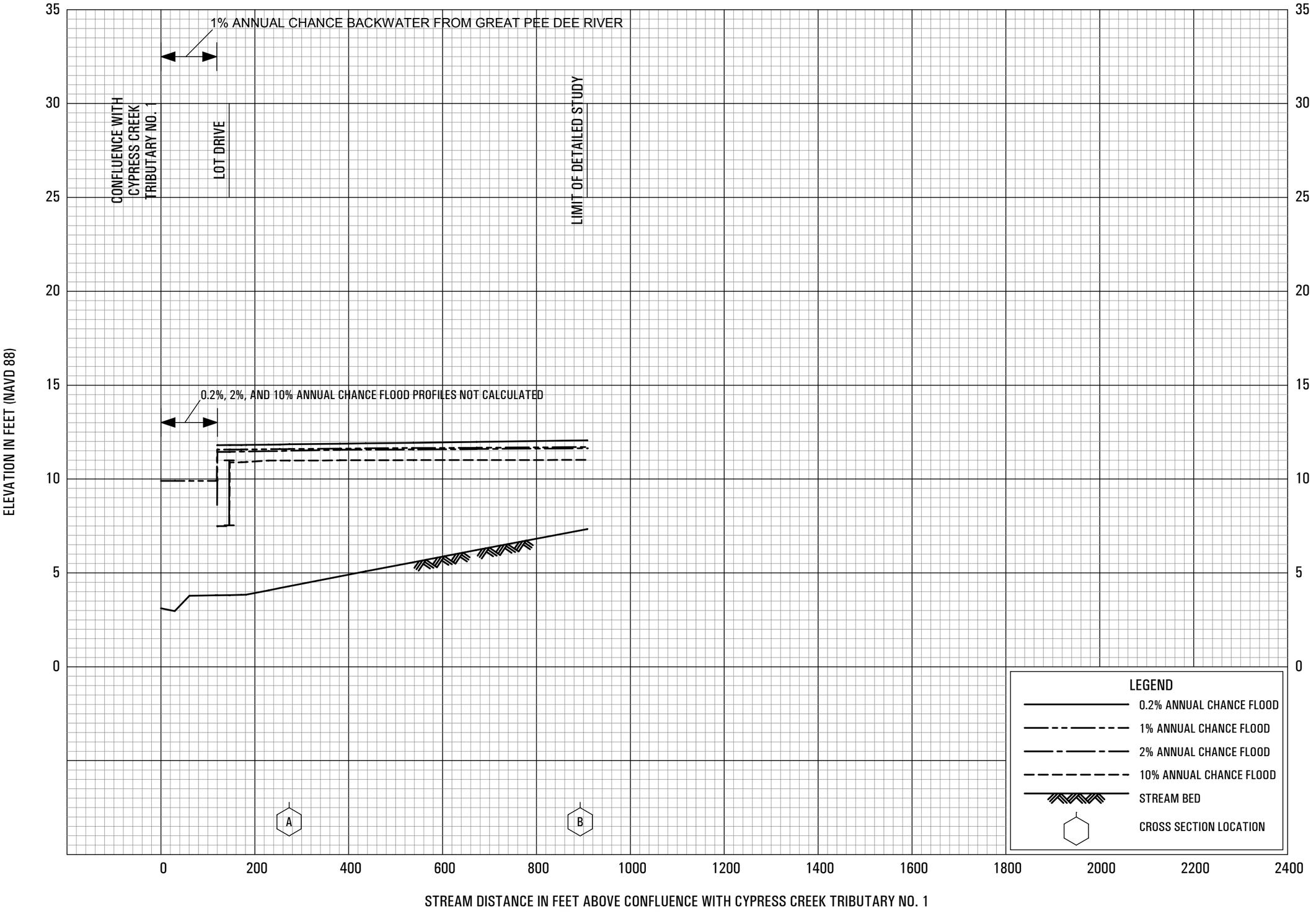
FLOOD PROFILES

CYPRESS CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



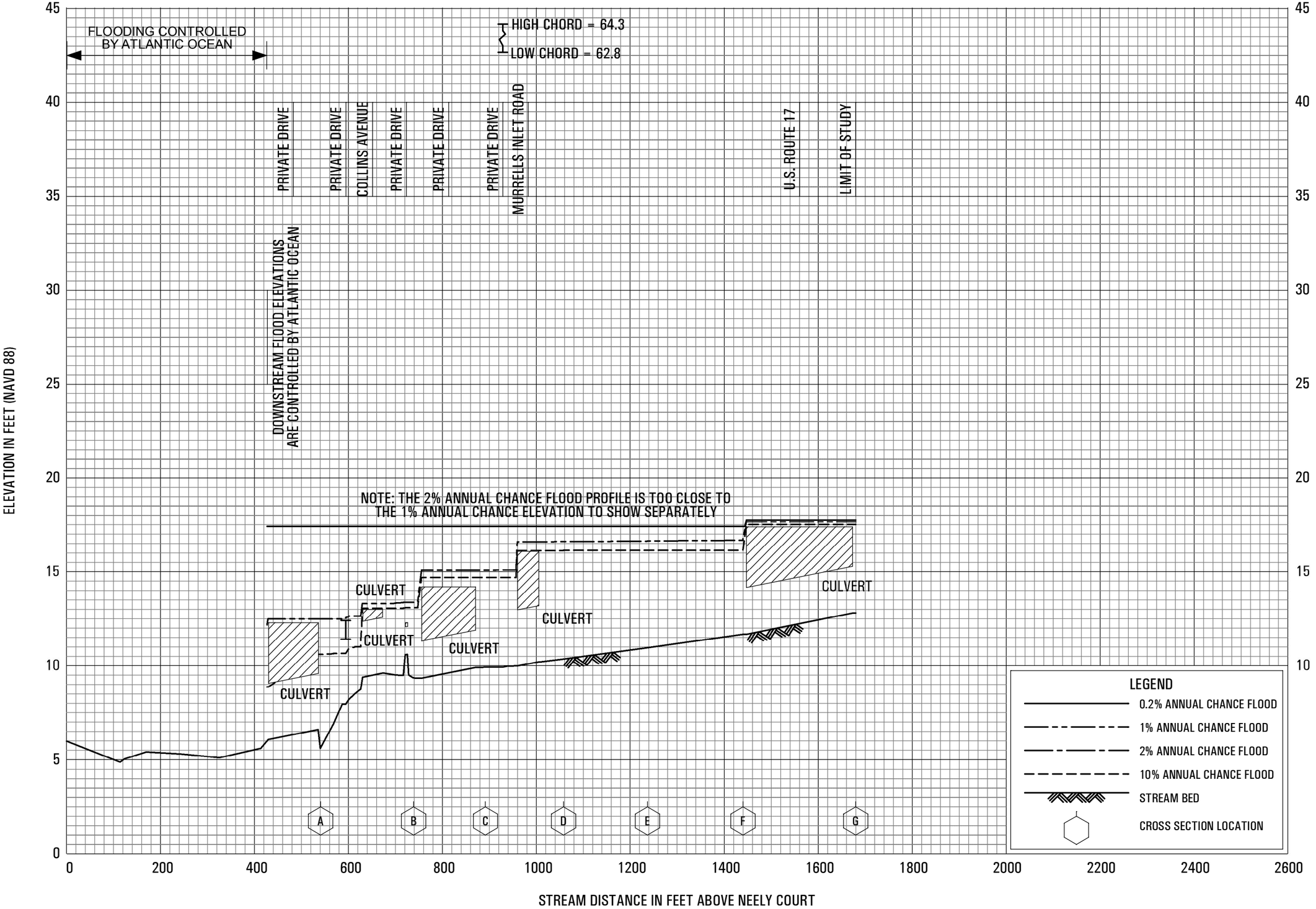
FLOOD PROFILES

CYPRESS CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



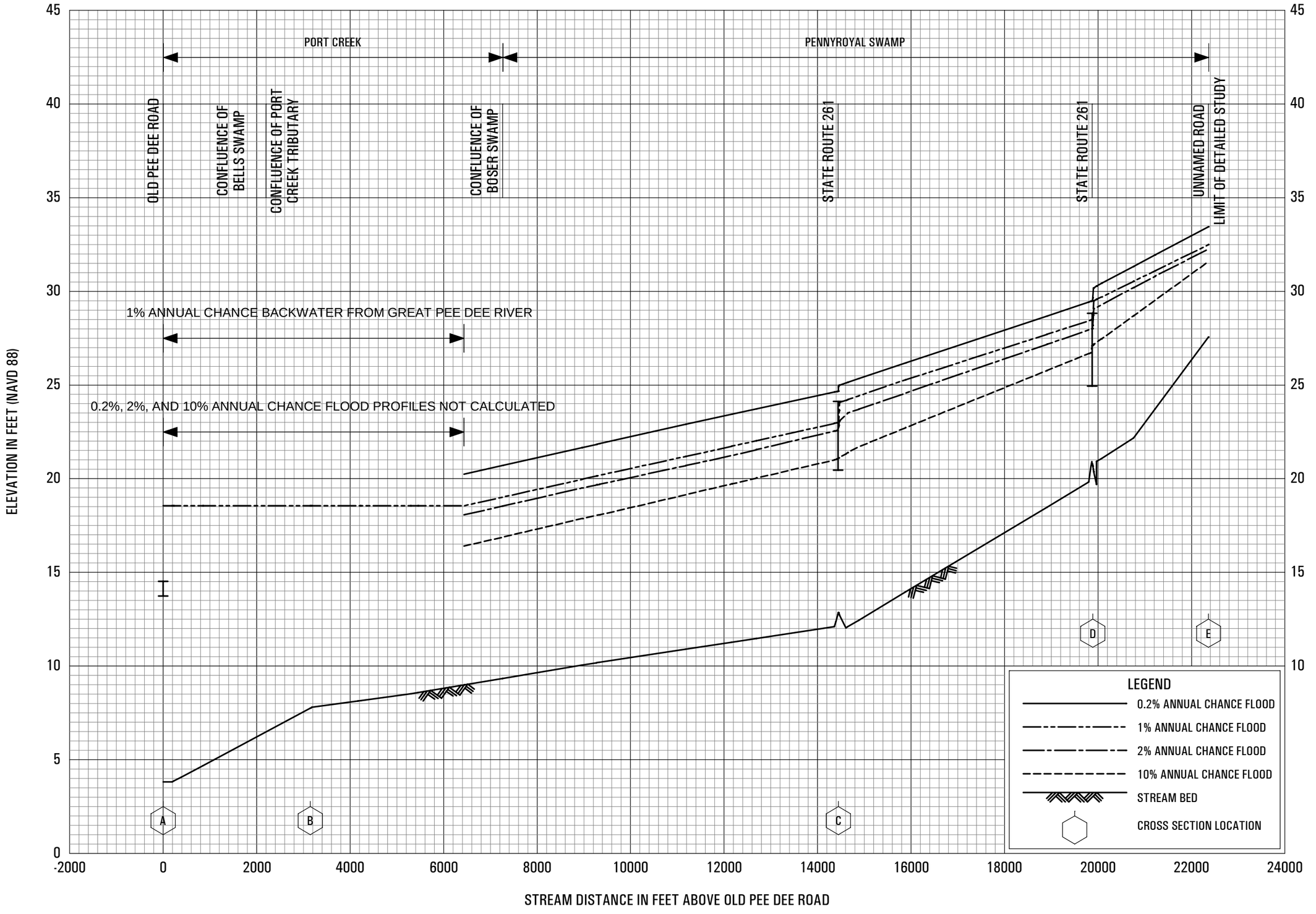
FLOOD PROFILES

PARSONAGE CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



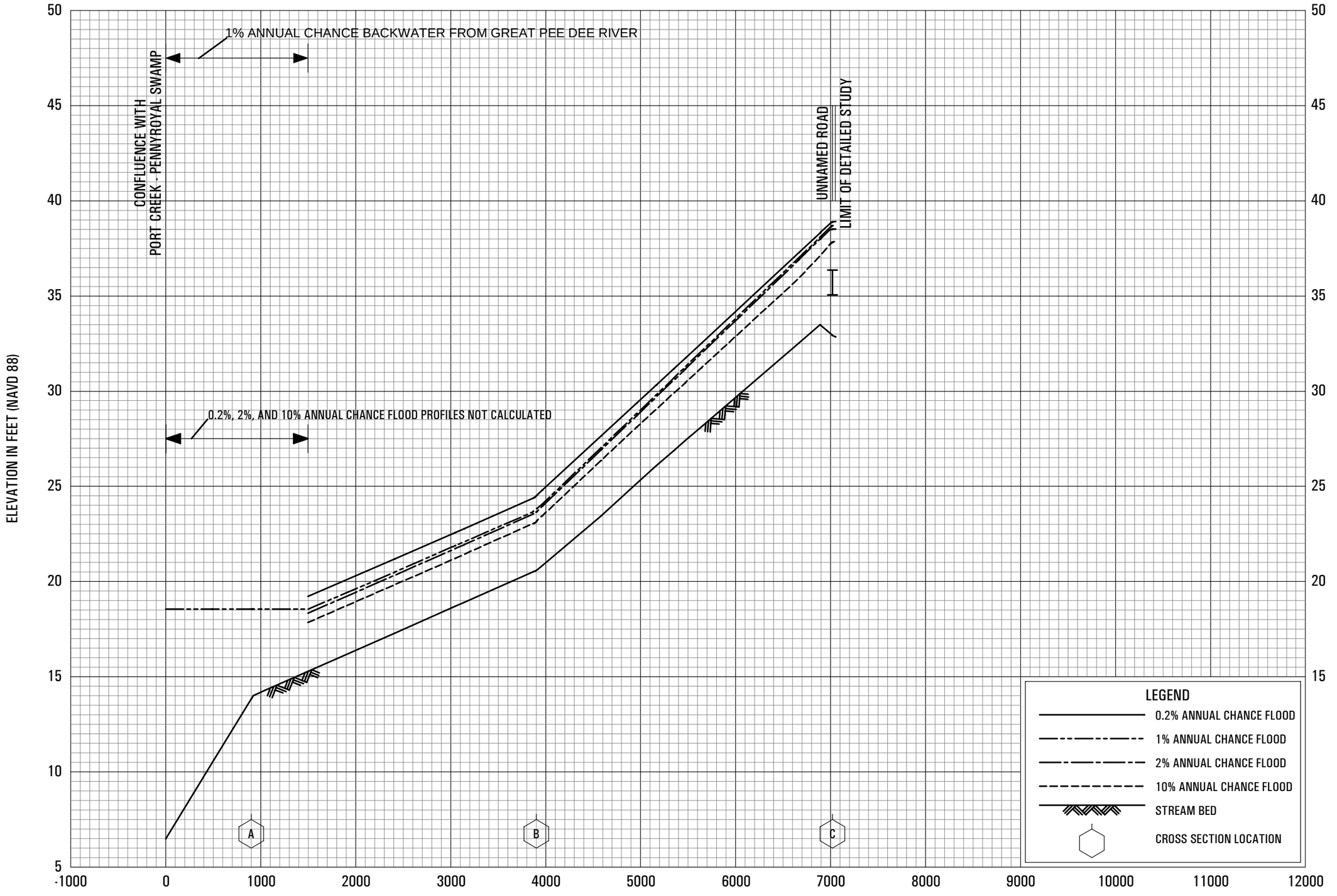
FLOOD PROFILES

PORT CREEK - PENNYROYAL SWAMP

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



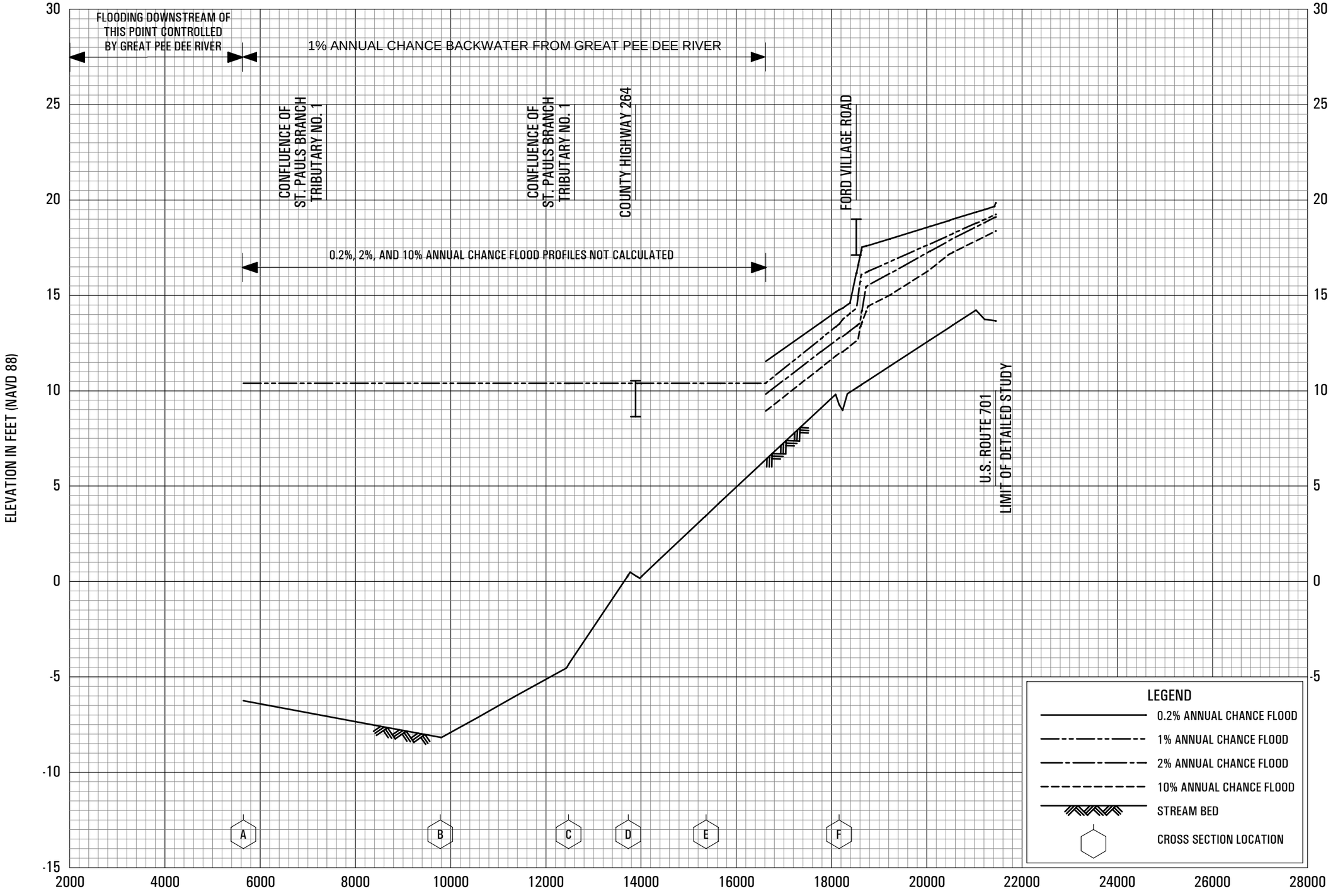
FLOOD PROFILES

PORT CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



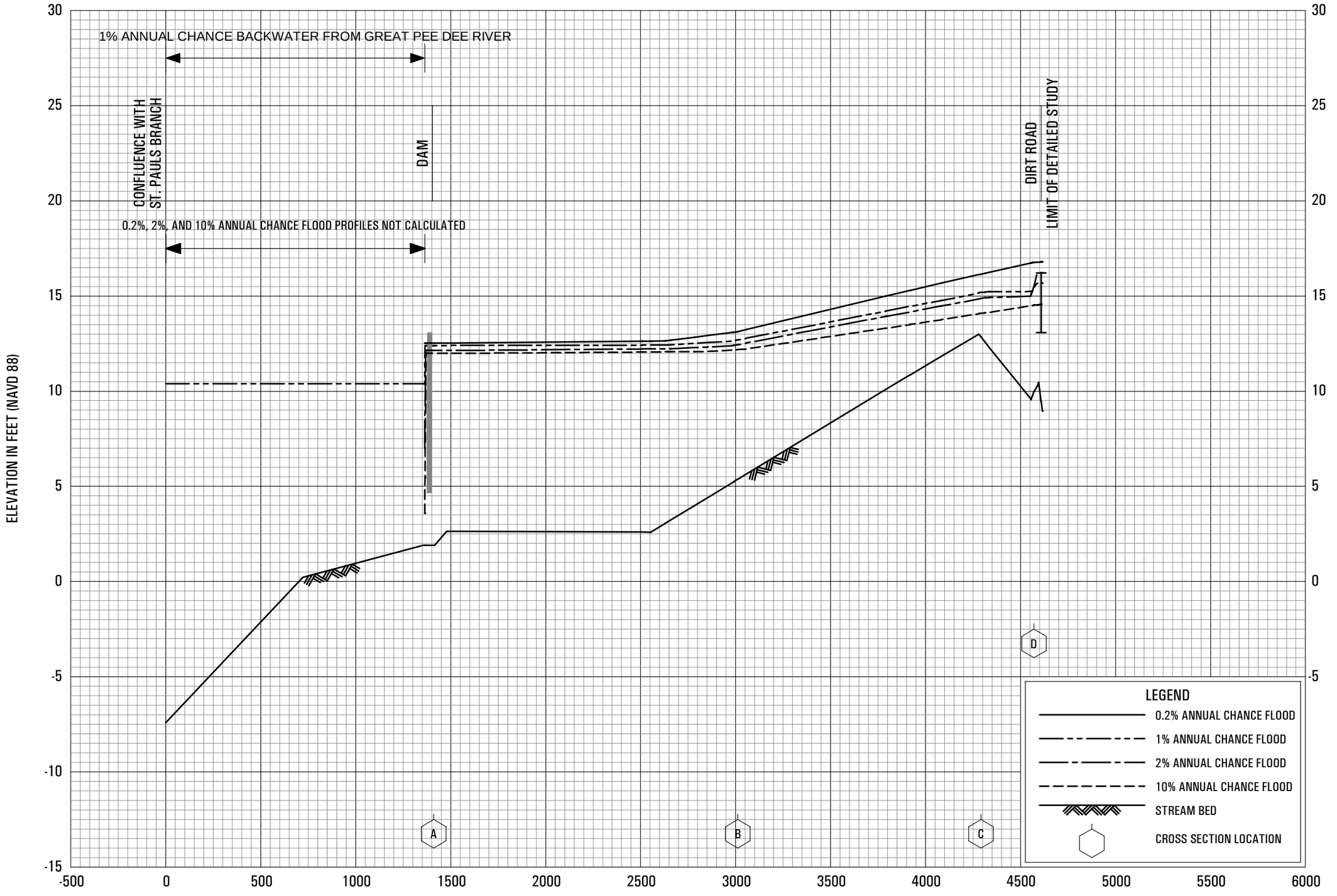
FLOOD PROFILES

ST. PAULS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



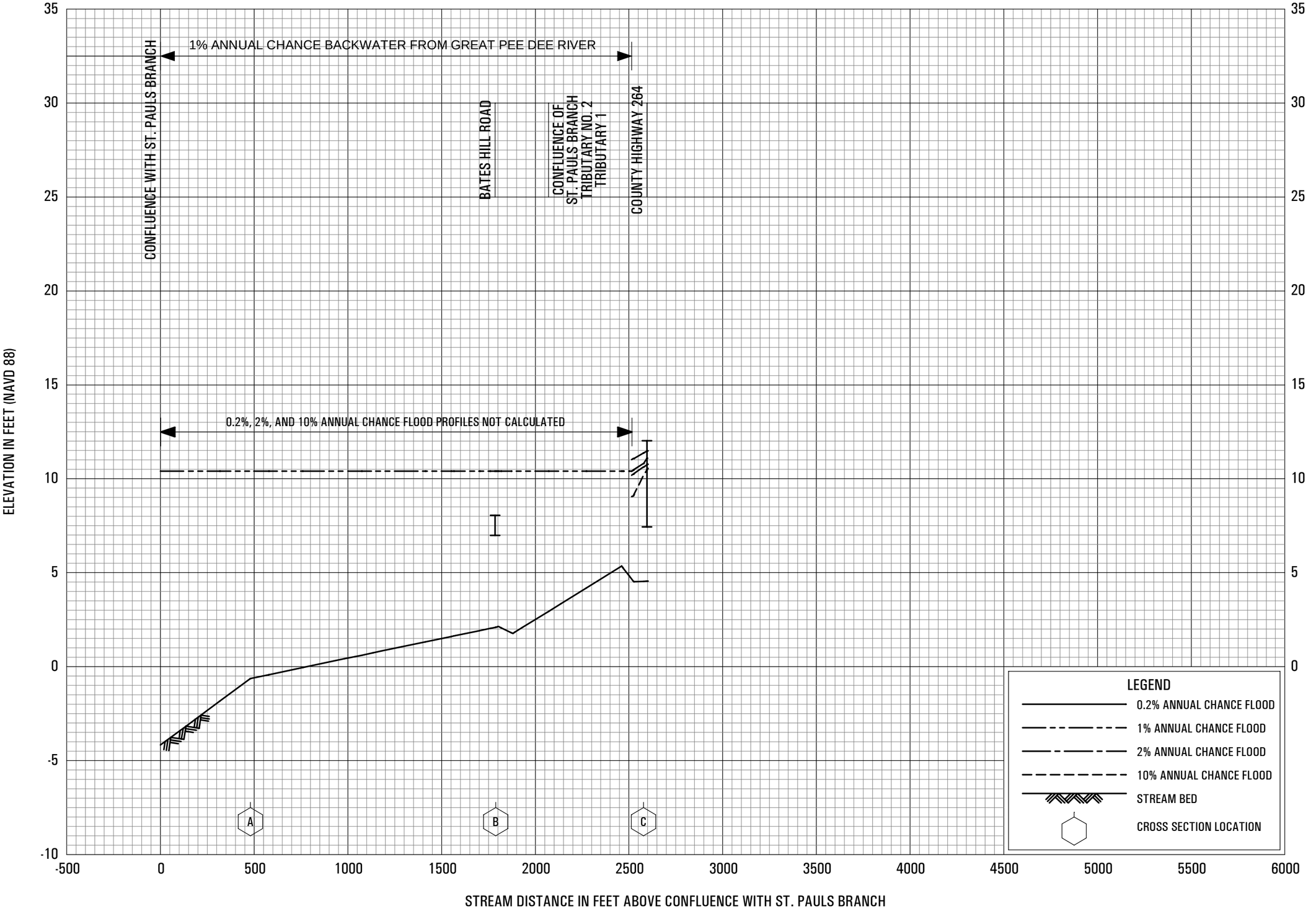
FLOOD PROFILES

ST. PAULS BRANCH TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



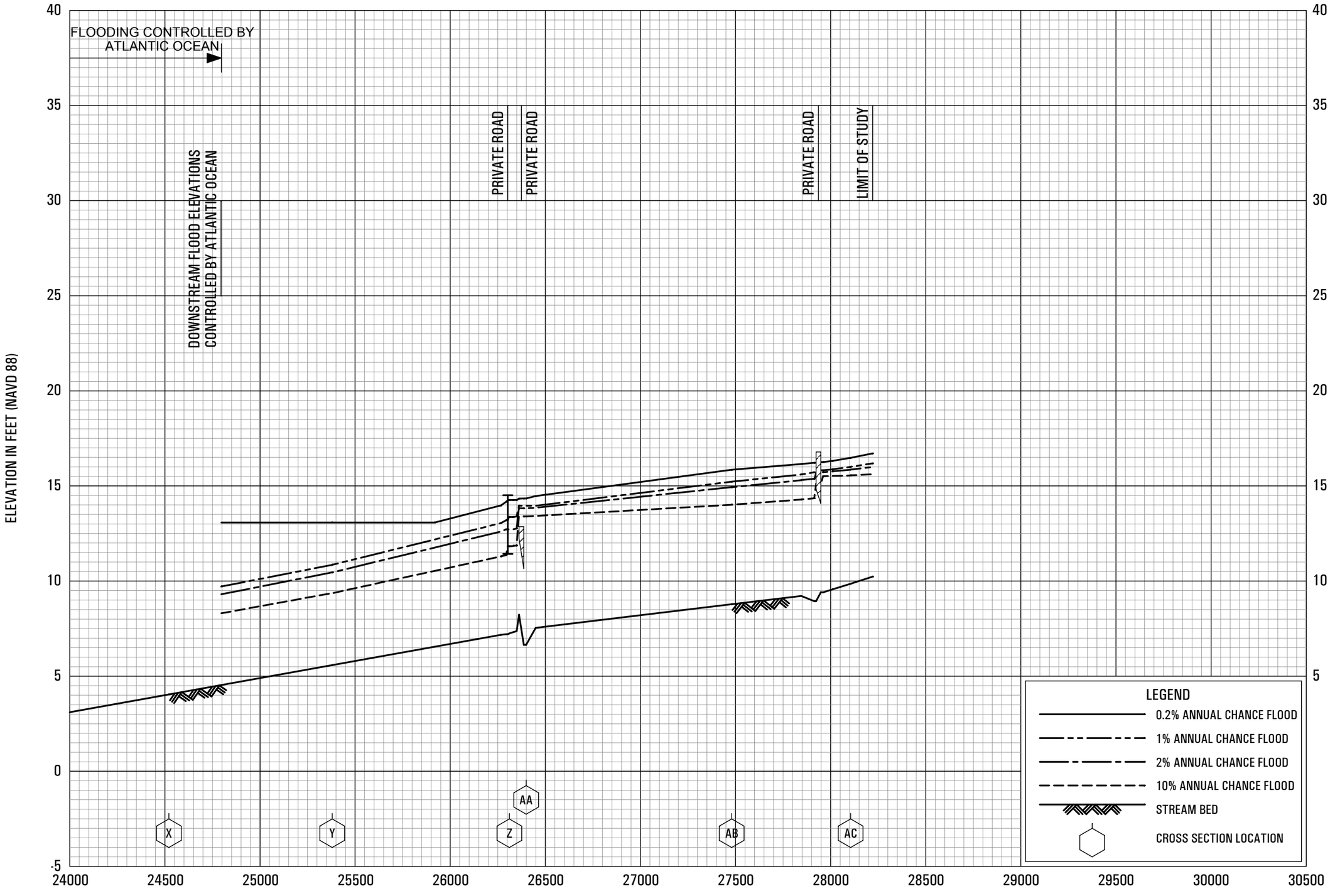
FLOOD PROFILES

ST. PAULS BRANCH TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



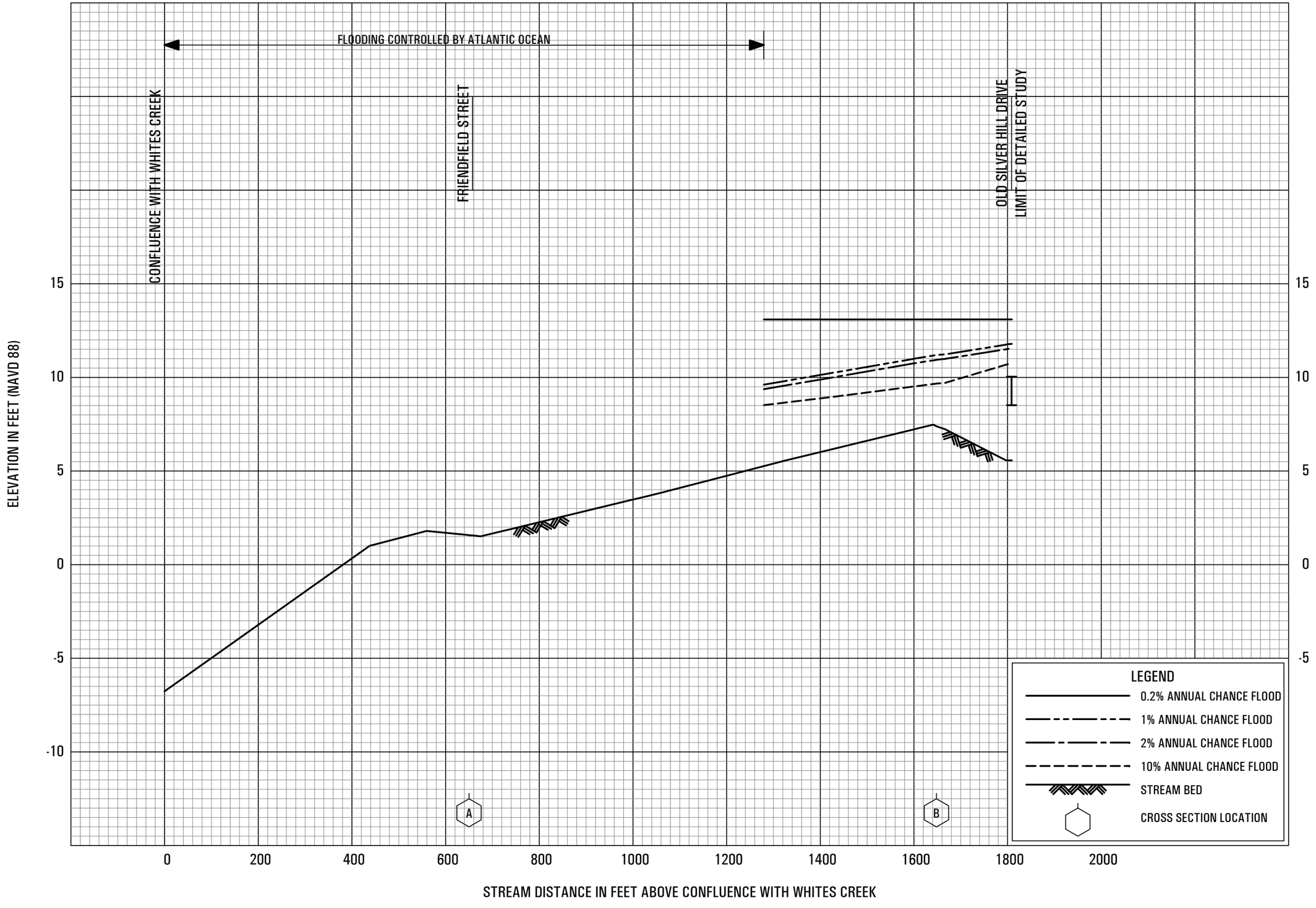
FLOOD PROFILES

WHITES CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



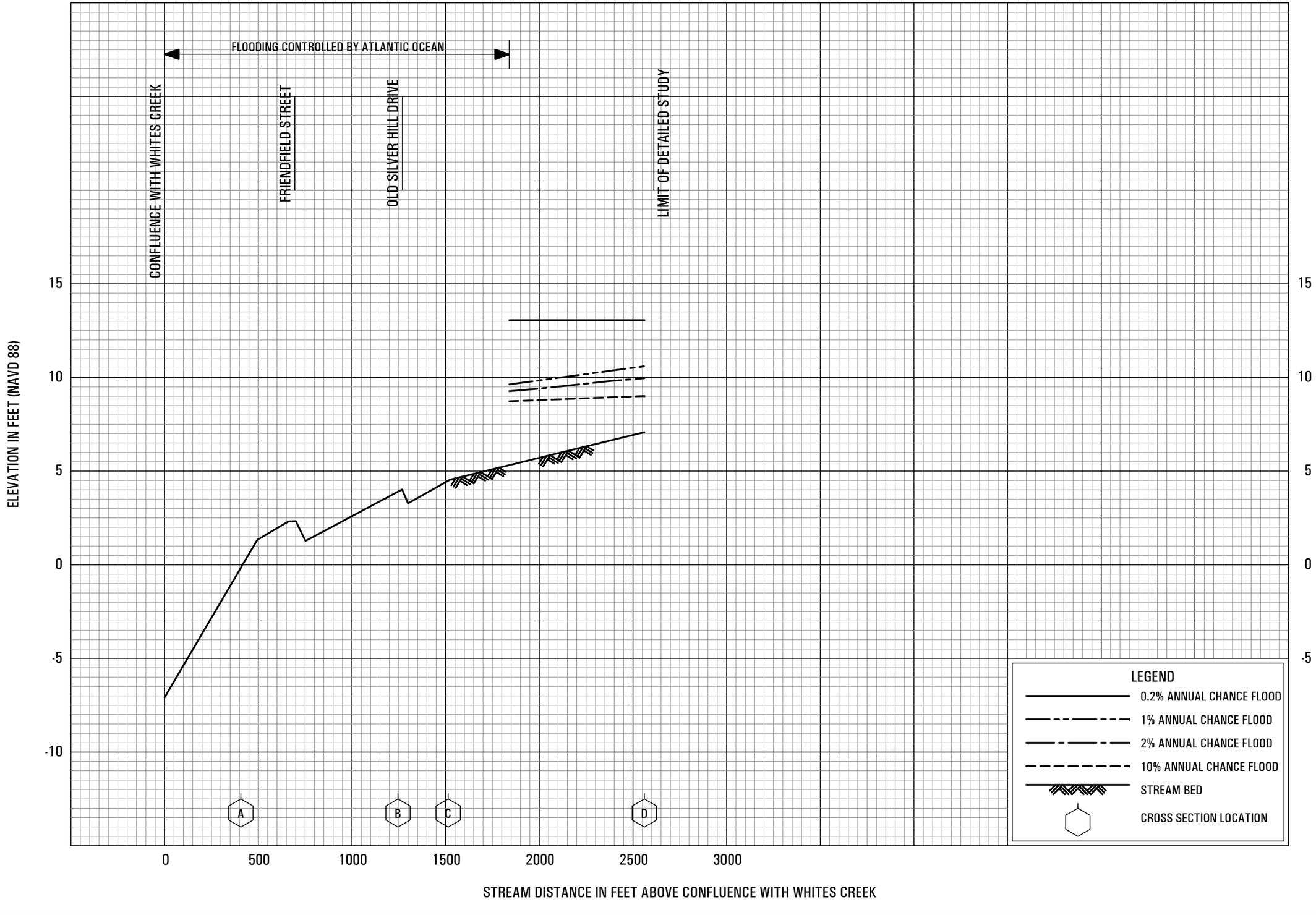
FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



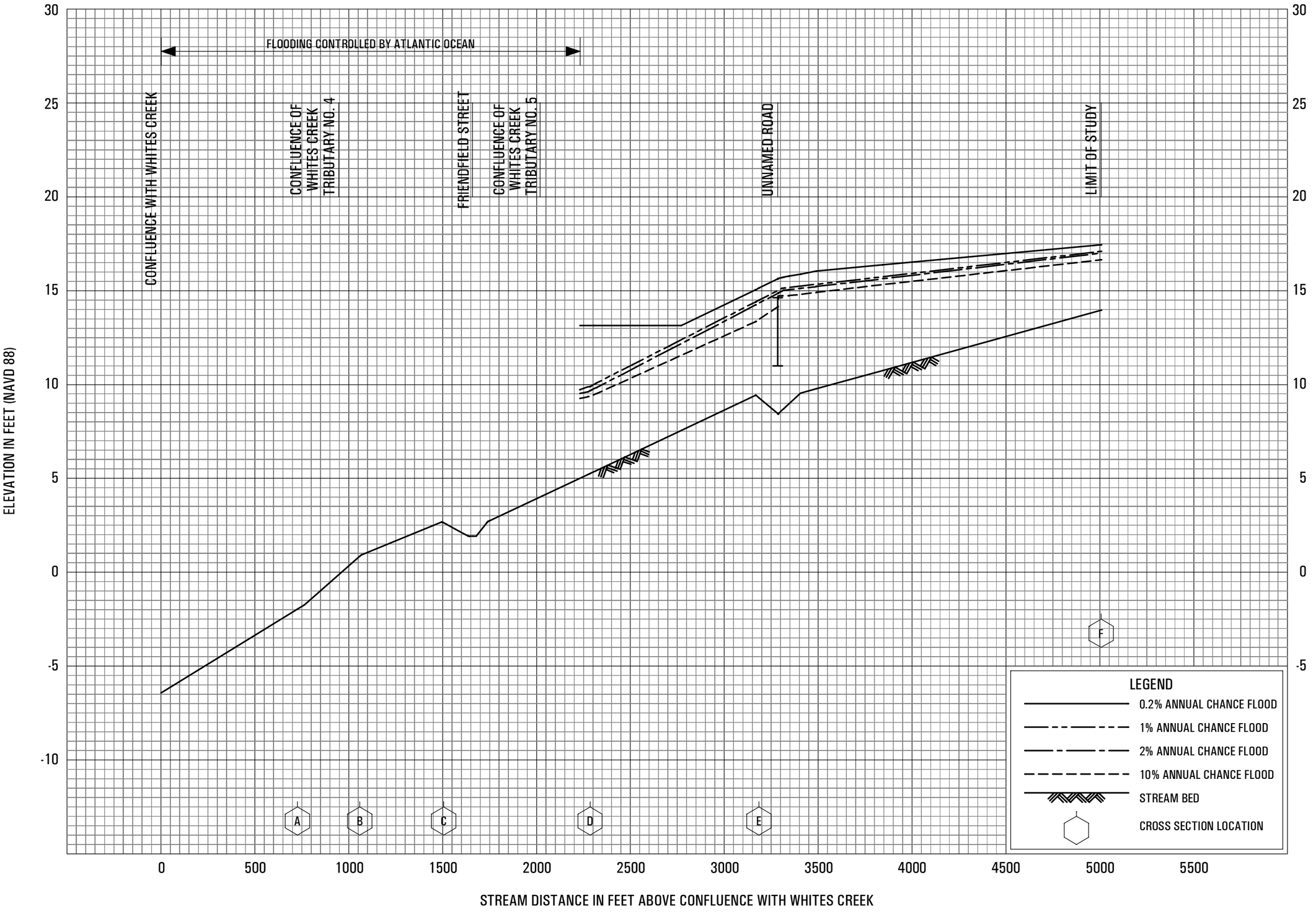
FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



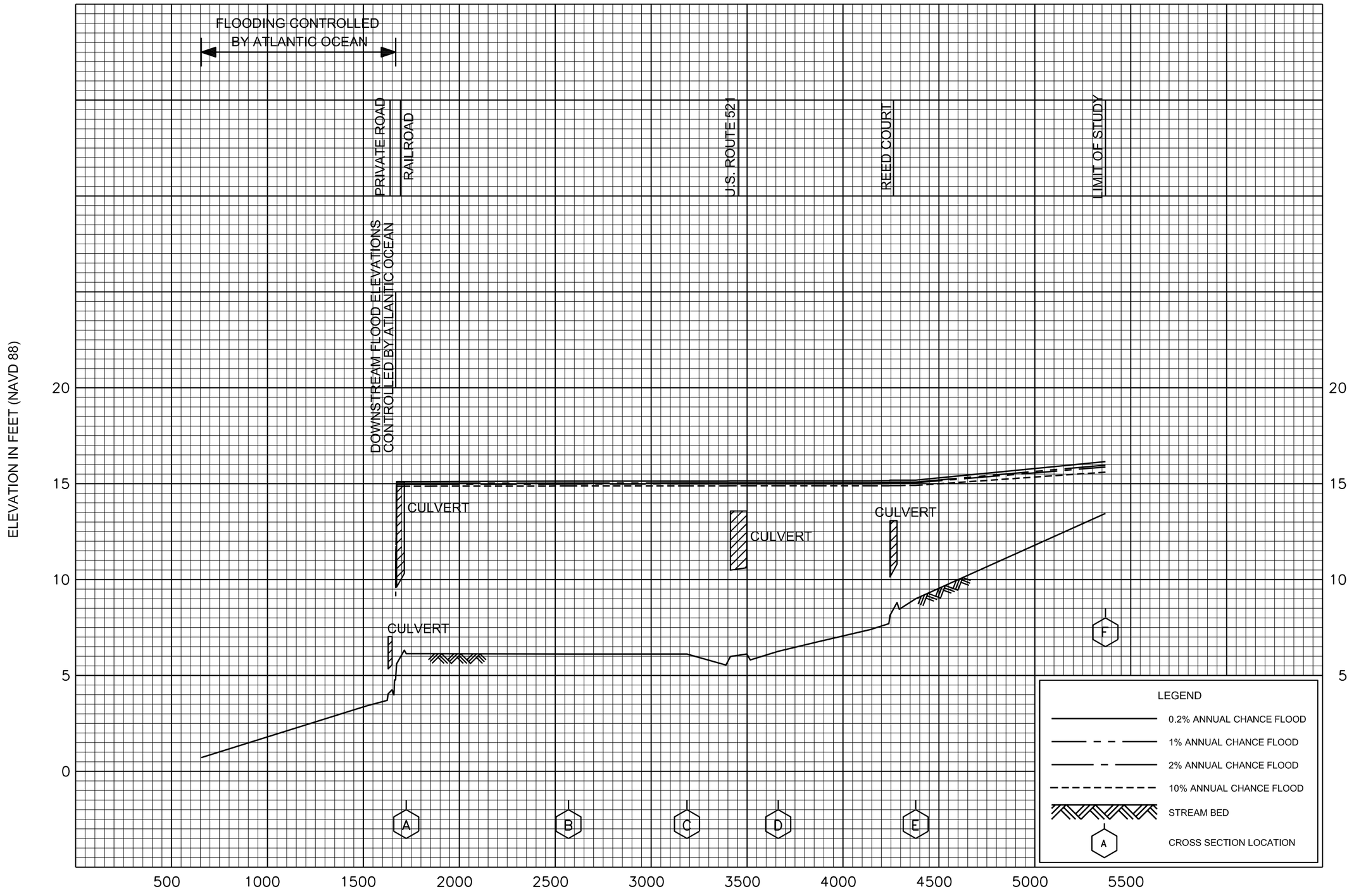
FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS

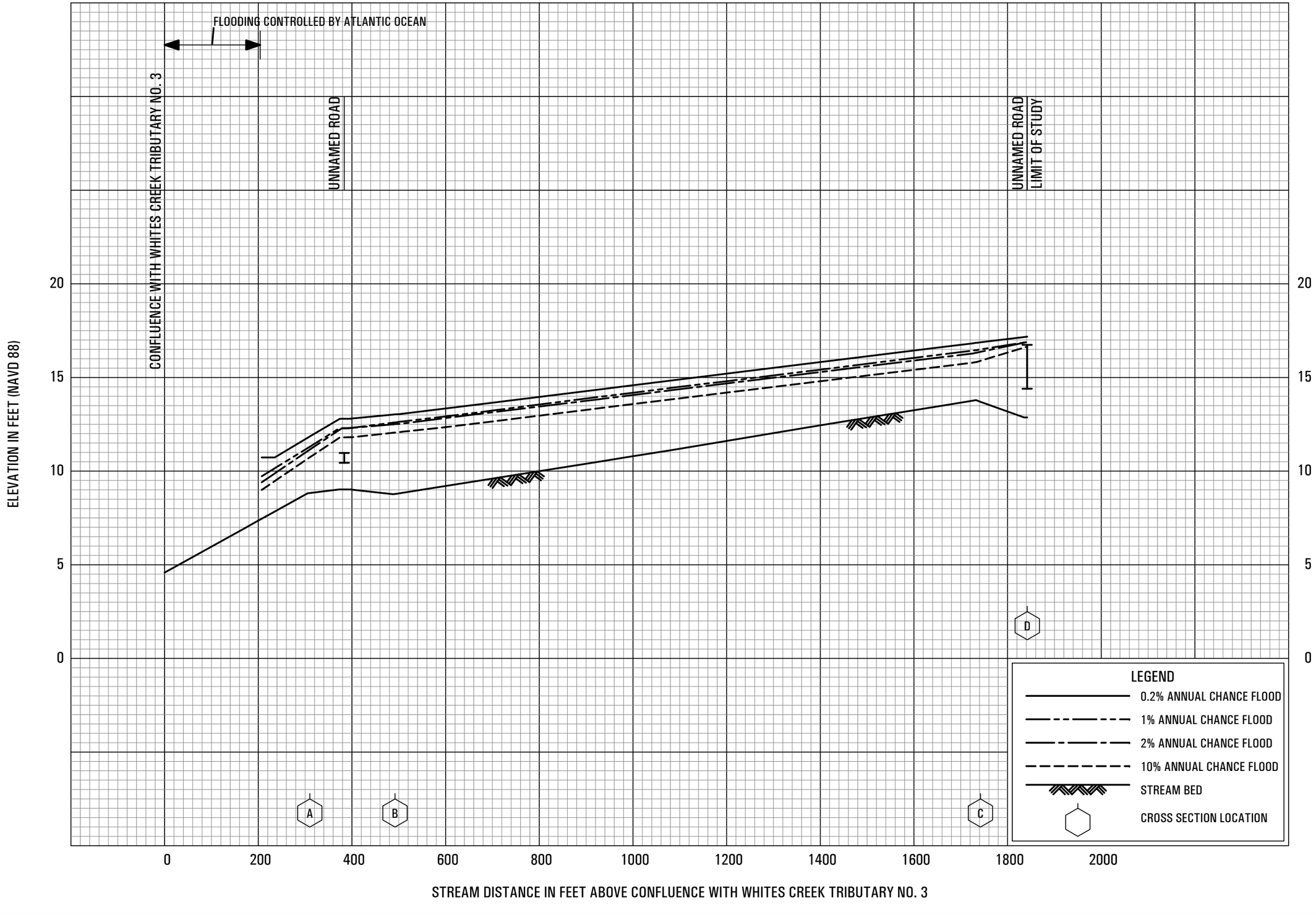


FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC
AND INCORPORATED AREAS



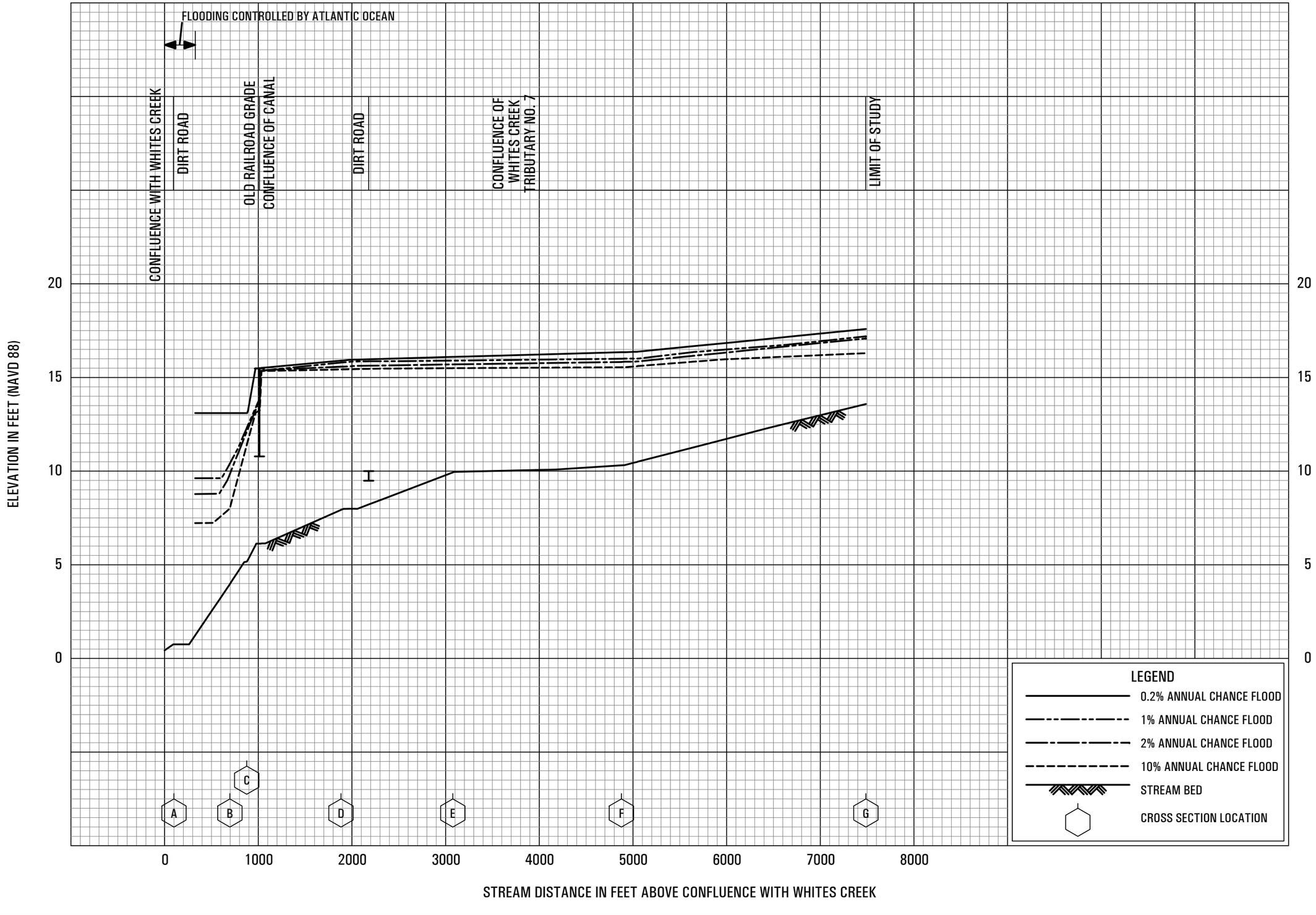
FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



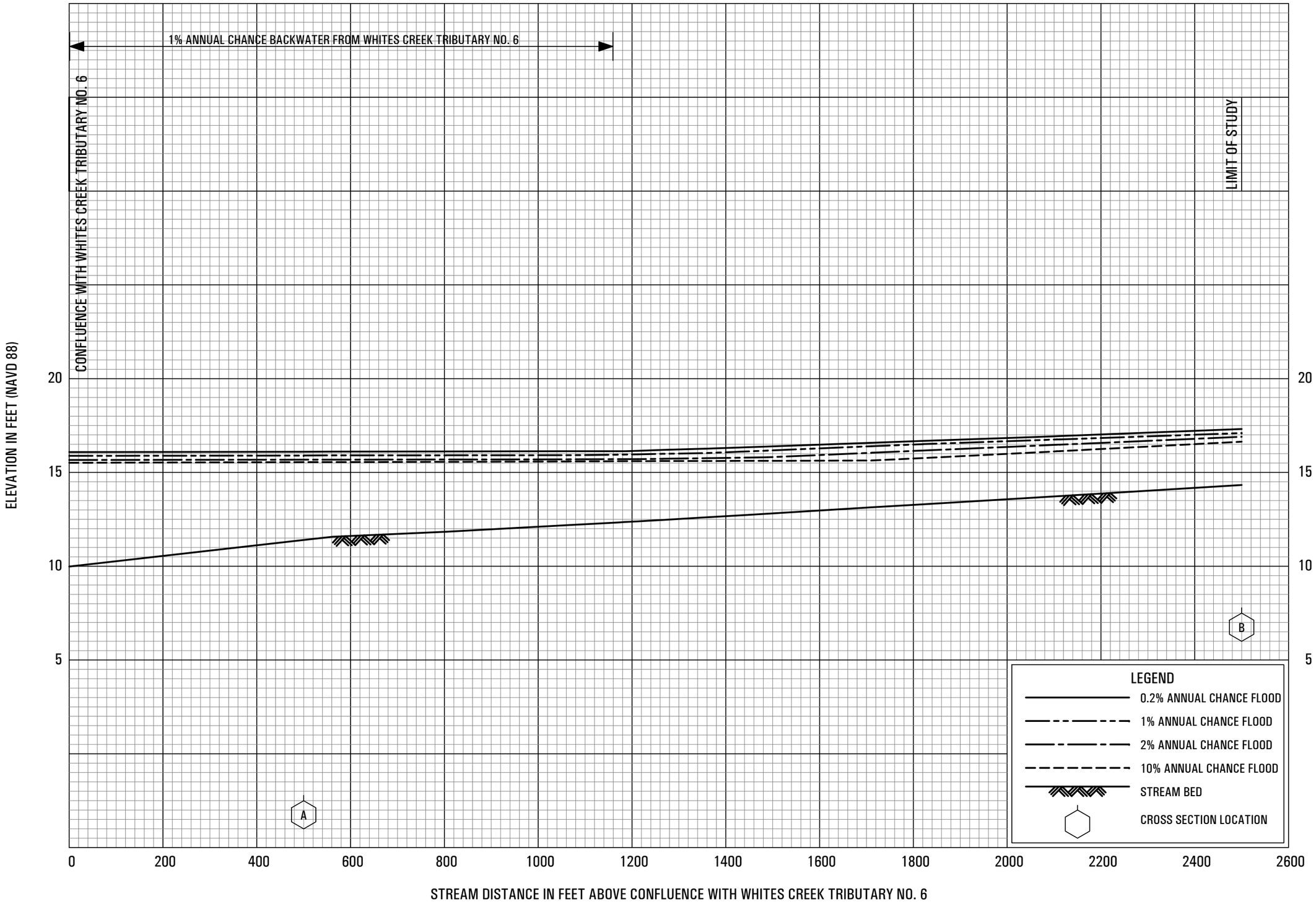
FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS



FLOOD PROFILES

WHITES CREEK TRIBUTARY NO. 7

FEDERAL EMERGENCY MANAGEMENT AGENCY

GEORGETOWN COUNTY, SC

AND INCORPORATED AREAS