

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 OF 4



CHATHAM COUNTY, GEORGIA AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
BLOOMINGDALE, CITY OF	130452
CHATHAM COUNTY, UNINCORPORATED AREAS	130030
GARDEN CITY, CITY OF	135161
POOLER, CITY OF	130261
PORT WENTWORTH, CITY OF	135162
SAVANNAH, CITY OF	135163
THUNDERBOLT, TOWN OF	130460
TYBEE ISLAND, CITY OF	135164
VERNONBURG, TOWN OF	135165



FEMA

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Colonial Oaks Canal	11-12 P
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Published Separately

Flood Insurance Rate Map (FIRM)

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 31, “Map Repositories”).

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit www.fema.gov/floodplain-management/letter-map-amendment-loma and download the form “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill”. Visit the “Flood Map-Related Fees” section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA’s determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/floodplain-management/letter-map-amendment-loma for the “MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill” or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the “Flood Map-Related Fees” section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/mt-2-application-forms-and-instructions and download the form “MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision”. Visit the “Flood Map-Related Fees” section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Chatham County FIRM are listed in Table 27. Please note that this table only includes LOMCs that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

Table 27: Incorporated Letters of Map Change

Case Number	Effective Date	Flooding Source	FIRM Panel(s)
12-04-3344P	07-12-2013	The Gates/Culvert Swamp	13051C0109F 13051C0117F 13051C0128F
12-04-3661P	12-10-2012	Chippewa Canal, Krogers Canal	13051C0163F

6.5.4 Physical Map Revisions

Physical Map Revisions (PMRs) are an official republication of a community’s NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community’s chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the “Flood Map Revision Processes” section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Chatham County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBM) and/or Flood Boundary and Floodway Maps (FBFM) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 28, “Community Map History.” A description of each of the column headings and the source of the date is also listed below.

- *Community Name* includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- *Initial Identification Date (First NFIP Map Published)* is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or “pending” (for Preliminary FIS Reports) is shown. If the community is listed in Table 28 but not identified on the map, the community is treated as if it were unmapped.
- *Initial FHBM Effective Date* is the effective date of the first Flood Hazard Boundary Map (FHBM). This date may be the same date as the Initial NFIP Map Date.
- *FHBM Revision Date(s)* is the date(s) that the FHBM was revised, if applicable.
- *Initial FIRM Effective Date* is the date of the first effective FIRM for the community.
- *FIRM Revision Date(s)* is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated

accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as Physical Map Revisions (PMR) of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Chatham County FIRMs in countywide format was 09/26/2008.

Table 28: Community Map History

Community Name	Initial Identification Date	Initial FHB Effective Date	FHB Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Bloomington, City of	10/15/1976	10/15/1976	N/A	07/02/1981	05/07/2001 09/26/2008 08/05/2013 07/07/2014
Chatham County, Unincorporated Areas	03/05/1976	03/05/1976	N/A	08/01/1980	09/20/1995 09/03/1992 05/19/1987 09/26/2008 08/05/2013 07/07/2014
Garden City, City of	03/16/1973	03/16/1973	N/A	03/16/1973	05/19/1987 11/21/1980 09/26/2008 08/05/2013
Pooler, City of	07/25/1975	07/25/1975	N/A	09/30/1981	09/26/2008 08/05/2013 07/07/2014
Port Wentworth, City of	03/16/1973	03/16/1973	07/23/2008	03/16/1973	01/05/1984 05/19/1987 12/26/1975 09/26/2008 08/05/2013 07/07/2014
Savannah, City of	09/18/1970	09/18/1970	N/A	05/21/1971	01/05/1984 09/04/1987 11/21/1980 09/26/2008 08/05/2013 07/07/2014

Table 28: Community Map History - continued

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Thunderbolt, Town of	12/23/1977	12/23/1977	N/A	07/02/1987	09/26/2008 08/05/2013 07/07/2014
Tybee Island, City of	03/18/1970	03/18/1970	N/A	05/21/1971	09/05/1975 06/17/1986 09/26/2008 08/05/2013 07/07/2014
Vernonburg, Town of	07/27/1973	07/27/1973	08/05/2013 07/07/2014	10/31/1975	07/02/1987 10/31/1975 09/26/2008 08/05/2013 07/07/2014

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 29 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 29: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Atlantic Ocean (Flooding Controlled by the Atlantic Ocean)		BakerAECOM	HSFEHQ-09-D-0368 Task Order: HSFE04-10-J-0075	2015	Chatham County, Unincorporated Areas; Port Wentworth, City of; Savannah, City of; Thunderbolt, Town of Tybee Island, City of; Vernonburg, Town of
Belford Tract		Atkins	EMA-2010-GA-5087	2012	Chatham County, Unincorporated Areas; Savannah, City of
Black Creek	09/26/2008	PBS&J	EMA-2005-CA5211	2007 (redelineated 2015)	Chatham County, Unincorporated Areas; Port Wentworth, City of
Black Creek Tributary No. 2	09/26/2008	PBS&J	EMA-2005-CA5211	2007 (redelineated 2015)	Port Wentworth, City of
Chatham Unnamed Tributary No. 7		Atkins	EMA-2010-GA-5087	2012	Bloomingtondale, City of
Chippewa Canal	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Chippewa Canal		LOMR	LOMR 12-04-3661P	2012	Savannah, City of
Coffee Bluff Basin	09/26/2008	PBS&J	DR912	1996 (redelineated 2007)	N/A
Colonial Oaks Canal	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Colonial Oaks Canal Tributary No. 1	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Colonial Oaks Canal Tributary No. 1.1	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Culvert Swamp		LOMR	LOMR 12-04-3344P	2013	Chatham County, Unincorporated Areas; Pooler, City of

Table 29: Summary of Contracted Studies Included in this FIS Report - continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Evergreen Cemetery Tributary	09/26/2008	PBS&J	DR912	precounty (redelineated 2007)	N/A
Fell Street Basin	09/26/2008	PBS&J	DR912	precounty (redelineated 2007)	N/A
Hardin Canal	074/07/2014	Atkins	EMA-2010-GA-5087	2012	Bloomingtondale, City of
Hardin Canal	09/26/2008	PBS&J	QBS-06-8-4	2007 (redelineated in 2012)	Chatham County, Unincorporated Areas; Bloomingtondale, City of; Pooler, City of; Savannah, City of;
Harmon Canal	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Kingsway Canal	09/26/2008	PBS&J	QBS-06-8-4	2007	Chatham County, Unincorporated Areas
Kroger Canal		LOMR	LOMR 12-04-3661P	2012	Savannah, City of
Little Ogeechee River	074/07/2014	Atkins	EMA-2010-GA-5087	2012	Chatham County, Unincorporated Areas; Bloomingtondale, City of
Little Ogeechee River		Atkins	EMA-2010-GA-5087	2012	Chatham County, Unincorporated Areas; Bloomingtondale, City of
Little Ogeechee River	07/02/1981 05/19/1987 09/04/1987	PBS&J	11-4778	1979, 1984 (redelineated 2012)	Chatham County, Unincorporated Areas; Bloomingtondale, City of; Pooler, City of; Savannah, City of
Little Ogeechee River Tributary	09/26/2008	PBS&J	DR912	2007 (redelineated 2015)	Chatham County, Unincorporated Areas; Savannah, City of
Louis Mills Branch	09/26/2008	PBS&J	QBS-06-8-4	2007	Chatham County, Unincorporated Areas; Savannah, City of
Ogeechee River		Atkins	EMA-2010-GA-5087	2012	Chatham County, Unincorporated Areas
Pipe Makers Canal	08/05/2013	LOMR - FIS 08/05/2013	LOMR 10-04-0658P	2012	Chatham County, Unincorporated Areas; Garden City, City of
Pipe Makers Canal		Atkins	EMA-2010-GA-5087	2012	Pooler, City of; Savannah, City of
Pipe Makers Canal	074/07/2014	LOMR	EMA-2010-GA-5087	2007	Bloomingtondale, City of

Table 29: Summary of Contracted Studies Included in this FIS Report - continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Pipe Makers Canal Tributary No. 2	01/02/1981 03/30/1981	PBS&J	11-4778	1979 (redelineated in 2012)	Bloomingtondale, City of; Pooler, City of
Pipe Makers Canal Tributary No. 2	074/07/2014	Atkins	EMA-2010-GA-5087	2012	Bloomingtondale, City of; Pooler, City of
Pipe Makers Canal Tributary No. 3	074/07/2014	Atkins	EMA-2010-GA-5087	2012	Bloomingtondale, City of; Pooler, City of
Pipe Makers Canal Tributary No. 3		Atkins	EMA-2010-GA-5087	2012	N/A
Placentia Canal	09/26/2008	PBS&J	QBS-06-8-4	2007	N/A
Quacco Canal	09/26/2008	PBS&J	QBS-06-8-4	2007	Chatham County, Unincorporated Areas
Rahn Dairy Canal	09/26/2008	PBS&J	QBS-06-8-4	2007	Chatham County, Unincorporated Areas
Salt Creek Tributary	03/30/1981	PBS&J	11-4778	1979	Garden City, City of; Pooler, City of
Springfield Canal	09/26/2008	PBS&J	DR912	precounty (redelineated 2007)	Savannah, City of
Springfield Canal Tributary A	09/26/2008	PBS&J	DR912	precounty (redelineated 2007)	Savannah, City of
St. Augustine Creek - Walthour Swamp		Atkins	EMA-2010-GA-5087	2012	Chatham County, Unincorporated Areas; Port Wentworth, City of; Savannah, City of
St. Augustine Creek Tributary		Atkins	EMA-2010-GA-5087	2012	Pooler, City of; Savannah, City of
St. Augustine Creek Tributary No. 1		Atkins	EMA-2010-GA-5087	2012	N/A
Tributary to Little Ogeechee River Tributary	09/26/2008	PBS&J	DR912	2007 (redelineated 2015)	Chatham County, Unincorporated Areas; Savannah, City of
Wilshire Canal	09/26/2008	PBS&J	DR912	precounty (redelineated 2007)	Savannah, City of
Wilshire Canal Tributary A	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Wilshire Canal Tributary A-1	09/26/2008	PBS&J	DR912	2007	Savannah, City of

Table 29: Summary of Contracted Studies Included in this FIS Report - continued

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Windsor Forest Canal East	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Windsor Forest Canal Tributary	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Windsor Forest Canal Tributary No. 2	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Windsor Forest Canal Tributary No. 3	09/26/2008	PBS&J	DR912	2007	Savannah, City of
Windsor Forest Canal West	09/26/2008	PBS&J	DR912	2007	Savannah, City of

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 30. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Chatham County and Incorporated Areas			Workmap	FEMA, Georgia DNR, CDM Smith, BakerAECOM, LLC, Atkins, and community officials
			CCO Meeting	FEMA, Georgia DNR, CDM Smith, BakerAECOM, LLC, Atkins, and community officials
Chatham County and Incorporated Areas	07/07/2014	11/09/2010	CCO Meeting	FEMA, Georgia DNR, Atkins, and community officials from Chatham County, the City of Bloomingdale, the City of Pooler, and other affected groups
		11/16/2010	Scoping	FEMA, Georgia DNR, Atkins, Coastal Regional Commission, and community officials
		12/07/2012	CCO Meeting	FEMA, Georgia DNR, Atkins, Coastal Regional Commission, and community officials
Chatham County and Incorporated Areas	08/05/2013	04/17/2012	CCO Meeting	FEMA, Georgia DNR, AECOM, Atkins, CDM Smith, and community officials
Chatham County and Incorporated Areas	09/26/2008	09/29/2004	CCO Meeting	FEMA, Georgia DNR, PBS&J, and community officials
		11/07/2007	CCO Meeting	FEMA, Georgia DNR, PBS&J, and all community officials except for the Town of Vernonburg
Bloomingdale, City of	01/802/1981	05/1978	CCO Meeting	FEMA, study contractor, and community officials
		08/27/1980	CCO Meeting	FEMA, study contractor, and community officials
Bloomingdale, City of	05/07/2001	07/01/1999*	CCO Meeting	FEMA, study contractor, and community officials
		**	CCO Meeting	FEMA, study contractor, and community officials
Chatham County (Unincorporated Areas)	05/19/1987	06/22/1982	CCO Meeting	FEMA, study contractor, and community officials
		11/21/1985	CCO Meeting	FEMA, study contractor, and community officials
Garden City, City	05/19/1987	**	CCO Meeting	FEMA, study contractor, and community officials

Table 30: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
of		11/19/1980	CCO Meeting	FEMA, study contractor, and community officials
Pooler, City of	03/30/1981	05/1978	CCO Meeting	FEMA, study contractor, and community officials
		08/27/1980	CCO Meeting	FEMA, study contractor, and community officials
Port Wentworth, City of	05/19/1987	**	CCO Meeting	FEMA, study contractor, and community officials
		11/19/1985	CCO Meeting	FEMA, study contractor, and community officials
Savannah, City of	09/04/1987	**	CCO Meeting	FEMA, study contractor, and community officials
		11/21/1985	CCO Meeting	FEMA, study contractor, and community officials
Thunderbolt, Town of	07/02/1987	**	CCO Meeting	FEMA, study contractor, and community officials
		11/19/1985	CCO Meeting	FEMA, study contractor, and community officials
Tybee Island, City of	07/17/1986	**	CCO Meeting	FEMA, study contractor, and community officials
		11/20/1985	CCO Meeting	FEMA, study contractor, and community officials
Vernonburg, Town of	07/02/1987	**	CCO Meeting	FEMA, study contractor, and community officials
		11/22/1985	CCO Meeting	FEMA, study contractor, and community officials

*Notified by Letter
 **Data not available

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see www.fema.gov.

The additional data that was used for this project includes the FIS Report and FIRM that were previously prepared for Chatham County, (FEMA 2014).

Table 31 is a list of the locations where FIRMs for Chatham County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 31: Map Repositories

Community	Address	City	State	Zip Code
Bloomington, City of	City Hall #8 West U.S. Route 80	Bloomington	GA	31302
Chatham County, Unincorporated Areas	Old Chatham County Courthouse 124 Bull Street, Room 430	Savannah	GA	31401
Garden City, City of	Garden City Hall 100 Central Avenue	Garden City	GA	31405
Pooler, City of	City Hall 100 SW U.S. Highway 80	Pooler	GA	30322
Port Wentworth, City of	City Hall 305 S Coastal Highway	Port Wentworth	GA	31407
Savannah, City of	City of Savannah Department of Development Services 5515 Abercorn Street	Savannah	GA	31402
Thunderbolt, Town of	Town Hall 2821 River Drive	Thunderbolt	GA	31404
Tybee Island, City of	Tybee Island City Hall 403 Butler Avenue	Tybee Island	GA	31328
Vernonburg, Town of	Town Hall 110 East President Street, Second Floor	Savannah	GA	31401

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 32.

Table 32 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 32: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region IV	Federal Emergency Management Agency, 3003 Chamblee Tucker Road, Atlanta, Georgia 30341
Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	Tom Shillock, CFM Dept. of Natural Resources Environmental Protection Division 2 Martin Luther King Jr. Drive Atlanta, Georgia 30334
State GIS Coordinator	Not Applicable

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 33 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 33: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Atkins 2012	Atkins	<i>Chatham County, GA: Hydraulics Report</i>	Atkins		August 2012	
Atlanta Regional Commission 2001	Atlanta Regional Commission	<i>Georgia Stormwater Management Manual</i>	Atlanta Regional Commission		August 2001	
BakerAECOM 2015	BakerAECOM	<i>Coastal Hazard Analysis TSDN, Chatham County – Intermediate Data Submittals 4 & 5</i>	BakerAECOM		June 2015	
Dunn, G.E. and B.I. Miller 1964	Louisiana State University	<i>Atlantic Hurricanes</i>	Dunn, G.E. and B.I. Miller		1964	
EMC Engineering	EMC Engineering	<i>Pipe Makers Canal Drainage Study, Supplemental Report</i>	EMC Engineering		April 1999	
ESRI 2005	ESRI	<i>ArcView GIS Version 9.1 for Windows</i>	ESRI	Redlands, California	May 18, 2005	
FEMA 1971	Federal Emergency Management Agency	<i>Type 10 Flood Insurance Study, Chatham County, Unincorporated Areas, Georgia</i>		Washington, D.C.	June 1971	FEMA Flood Map Service Center msc.fema.gov
FEMA 2014	Federal Emergency Management Agency	<i>Flood Insurance Study, Chatham County, Georgia, and Incorporated Areas</i>		Washington, D.C.	July 7, 2014	FEMA Flood Map Service Center msc.fema.gov

Table 33: Bibliography and References - continued

Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
GEMA 2006	Georgia Emergency Management Agency	<i>Preparedness Bulletin #2</i>	Georgia Emergency Management Agency		April 14, 2006	
HEC 1984	U.S. Army Corps of Engineers	<i>HEC-2 Water Surface Profiles</i>	Hydrologic Engineering Center	Davis, California	April 1984	
HEC 1991	U.S. Army Corps of Engineers	<i>HEC-2 Water Surface Profiles</i>	Hydrologic Engineering Center	Davis, California	May 1991	
HEC 1998	U.S. Army Corps of Engineers	<i>HEC-HMS Hydrologic Modeling System, Version 1.0</i>	Hydrologic Engineering Center	Davis, California	May 1998	
HEC 2001b	U.S. Army Corps of Engineers	<i>HEC-RAS River Analysis System, Version 3.0.1</i>	Hydrologic Engineering Center	Davis, California	March 2001b	
HEC 2002	U.S. Army Corps of Engineers	<i>HEC-GeoRAS, Version 3.1.1</i>	Hydrologic Engineering Center	Davis, California	October 2002	
HEC 2003	U.S. Army Corps of Engineers	<i>HEC-RAS River Analysis System, Version 3.1.1</i>	Hydrologic Engineering Center	Davis, California	May 2003	
HEC 2005	U.S. Army Corps of Engineers	<i>HEC-RAS River Analysis System, Version 3.1.3</i>	Hydrologic Engineering Center	Davis, California	May 2005	

Table 33: Bibliography and References - continued

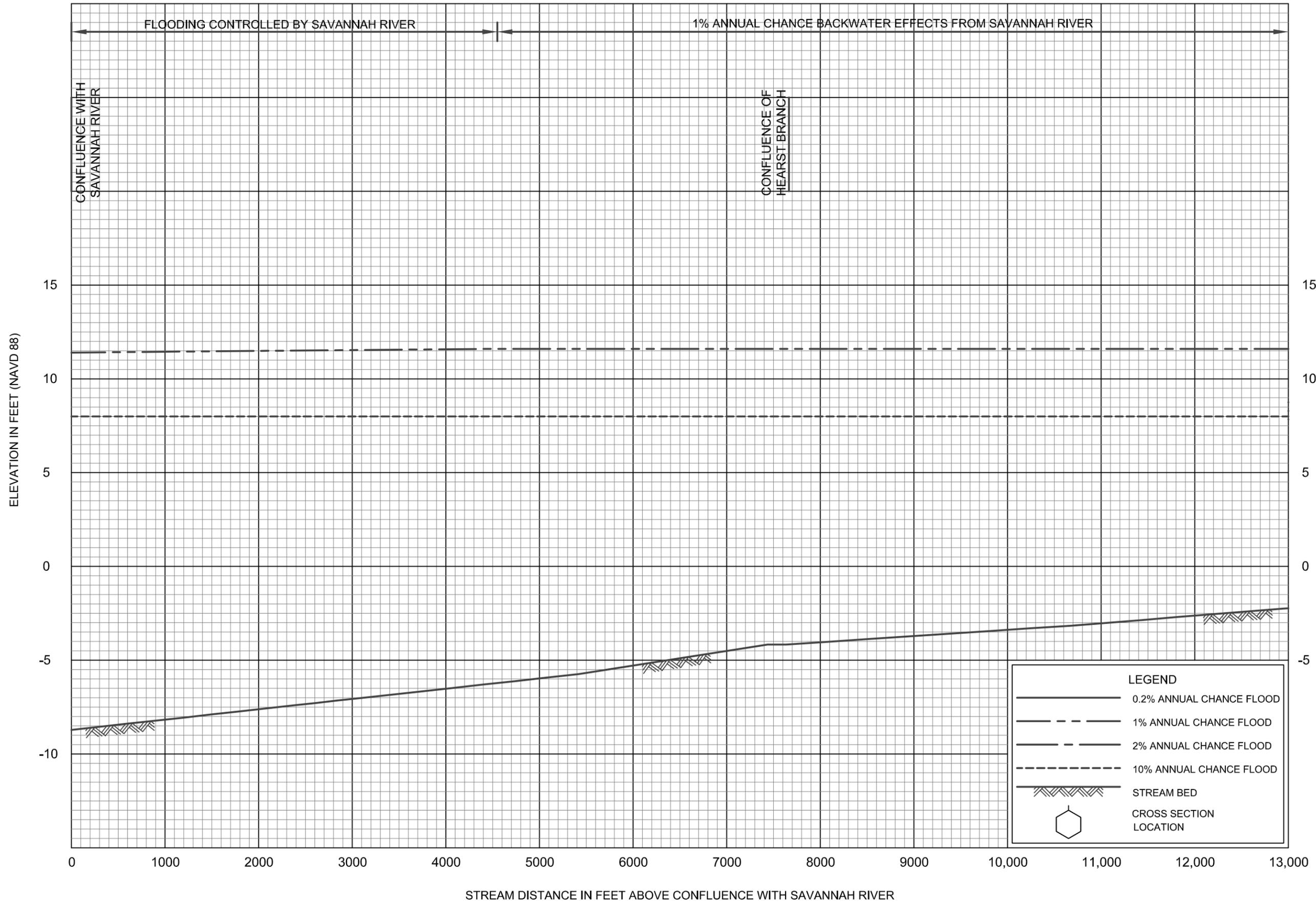
Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Hussey, Gay, Bell, & DeYoung, Inc. 2000	Hussey, Gay, Bell, & DeYoung, Inc	<i>Certified Topographic Survey Map, Scale 1"=500', Contour Interval 1 foot</i>			January 31, 2000	
Metropolitan Planning Commission 2009	Metropolitan Planning Commission	<i>LiDAR and 1-foot contours derived from LiDAR</i>			2009	
NRCS 2011	NRCS	<i>Soil Survey Geographic Database for Chatham County</i>	U.S. Department of Agriculture, March 9, 2011		December 2011	http://SoilDataMart.nrcs.usda.gov
NWS 1961	U.S. Department of Commerce	<i>National Weather Service, Rainfall Frequency Atlas of the United States, 30-Minute to 24-Hour Durations, 1- to 100-year Return Periods, Technical Paper No. 40</i>	National Weather Service		1961	
Sanborn 2009	Sanborn	<i>LiDAR</i>			2009	
Streamline Technologies, Inc. 2002	Streamline Technologies, Inc.	<i>Interconnected Channel and Pond Routing (ICPR) Model</i>	Streamline Technologies, Inc.		2002	
Thomas & Hutton Engineering Company 1998	Thomas & Hutton Engineering Company	<i>Louis Mills Branch/Redgate Canal Engineering Analysis</i>	Thomas & Hutton Engineering Company		Marc 27, 1998	

Table 33: Bibliography and References - continued

Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
Thomas & Hutton Engineering Company 2000	Thomas & Hutton Engineering Company	<i>Hardin Canal Re-Analysis Using ALTM Data</i>	Thomas & Hutton Engineering Company		January 7, 2000	
Thomas & Hutton Engineering Company 2001	Thomas & Hutton Engineering Company	<i>LiDAR Data, Contour Interval 1 foot: Chatham County, Georgia</i>	Thomas & Hutton Engineering Company		August 2001	
Thomas & Hutton Engineering Company 2004a	Thomas & Hutton Engineering Company	<i>Kingsway Canal Design Study Report</i>	Thomas & Hutton Engineering Company		July 2004	
Thomas & Hutton Engineering Company 2004b	Thomas & Hutton Engineering Company	<i>Redgate/Rahn Dairy Canal Design Study Report</i>	Thomas & Hutton Engineering Company		July 2004	
Thomas & Hutton Engineering Company 2005	Thomas & Hutton Engineering Company	<i>Quacco/Regency Park Drainage Improvements Alternatives Report</i>	Thomas & Hutton Engineering Company		November 2005	
USACE 1968	U.S. Army Corps of Engineers, Savannah District	<i>Flood Plain Information Report, Casey Canal-South</i>	U.S. Army Corps of Engineers		June 1968	

Table 33: Bibliography and References - continued

Citation in this FIS	Publisher/ Issuer	<i>Publication Title, "Article," Volume, Number, etc.</i>	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USACE 1976	U.S. Army Corps of Engineers	<i>100-Year Tidal Flood Elevations for Chatham County, Georgia, Scale 1:48,000</i>	U.S. Army Corps of Engineers		December 1976	
USDA 1986	U.S. Department of Agriculture	<i>Urban Hydrology for Small Watersheds, Technical Release No. 55</i>	Soil Conservation Service		1986	
USGS 1993	U.S. Department of the Interior	<i>Techniques For Estimating Magnitude and Frequency of Floods in Rural Basins of Georgia, Water Resources Investigations Report 93-4016</i>	U.S. Geological Survey		1993	
USGS 1994	U.S. Department of the Interior	<i>Flood Frequency Relations for Urban Streams in Georgia – 1994 Update, Water Resources Investigations Report 93-4017</i>	U.S. Geological Survey		1994	
USGS 2011a	USGS	<i>Magnitude and Frequency of Rural Floods in the U.S., Magnitude and Frequency of Floods for Urban and Small Rural Streams in Georgia, 2008</i>	Scientific Investigations Report 2011-5042		2011	
USGS 2011b	USGS	<i>National Hydrography Dataset, 2008</i>			2011	http://horizon-systems.com/nhdplus/data.php
XP Software Inc. 2006	XP Software Inc.	<i>XP-SWMM Storm and Wastewater Management Model, Version 10.00</i>	XP Software Inc.	Portland, Oregon	Februar 2006	

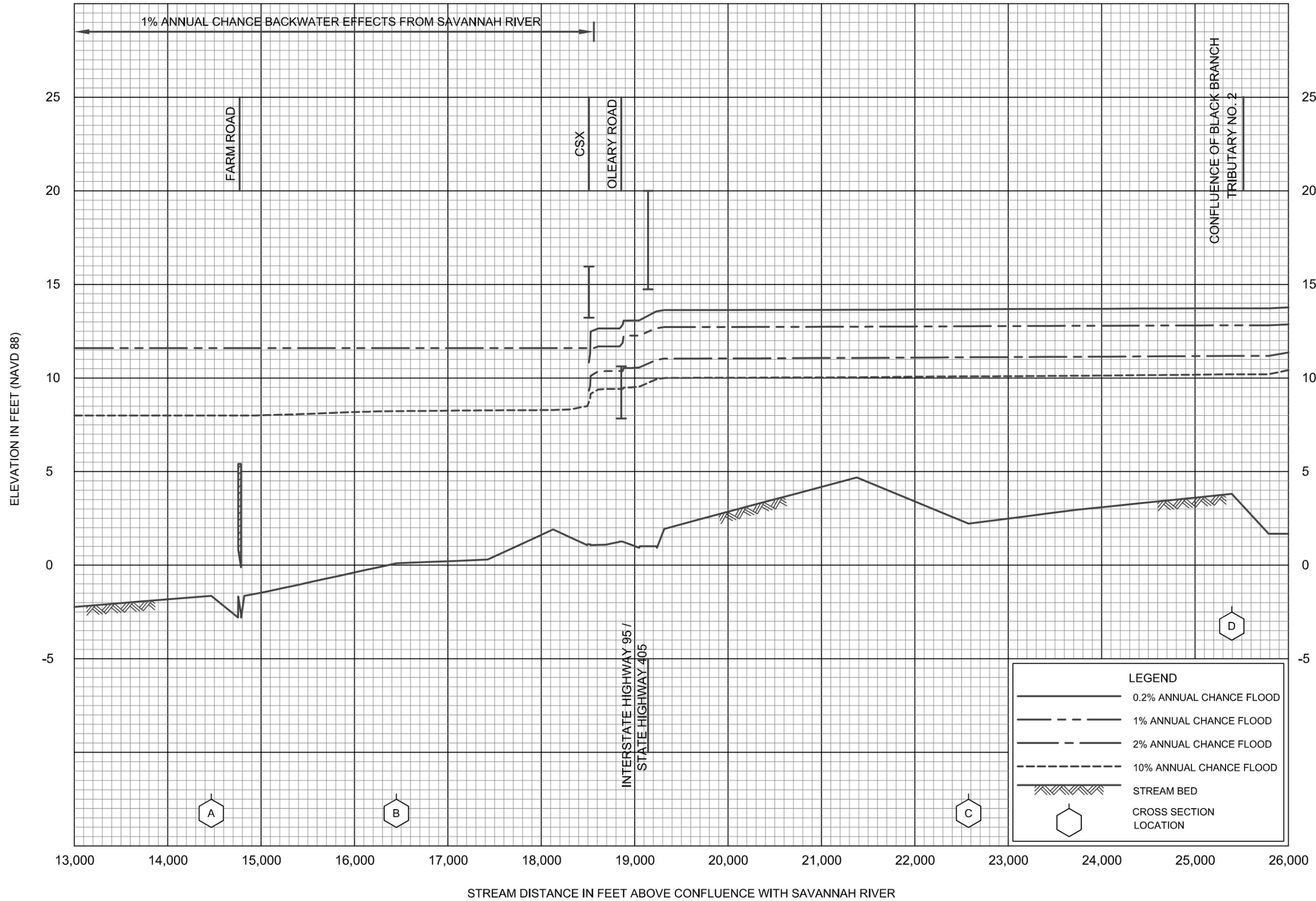


FLOOD PROFILES

BLACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

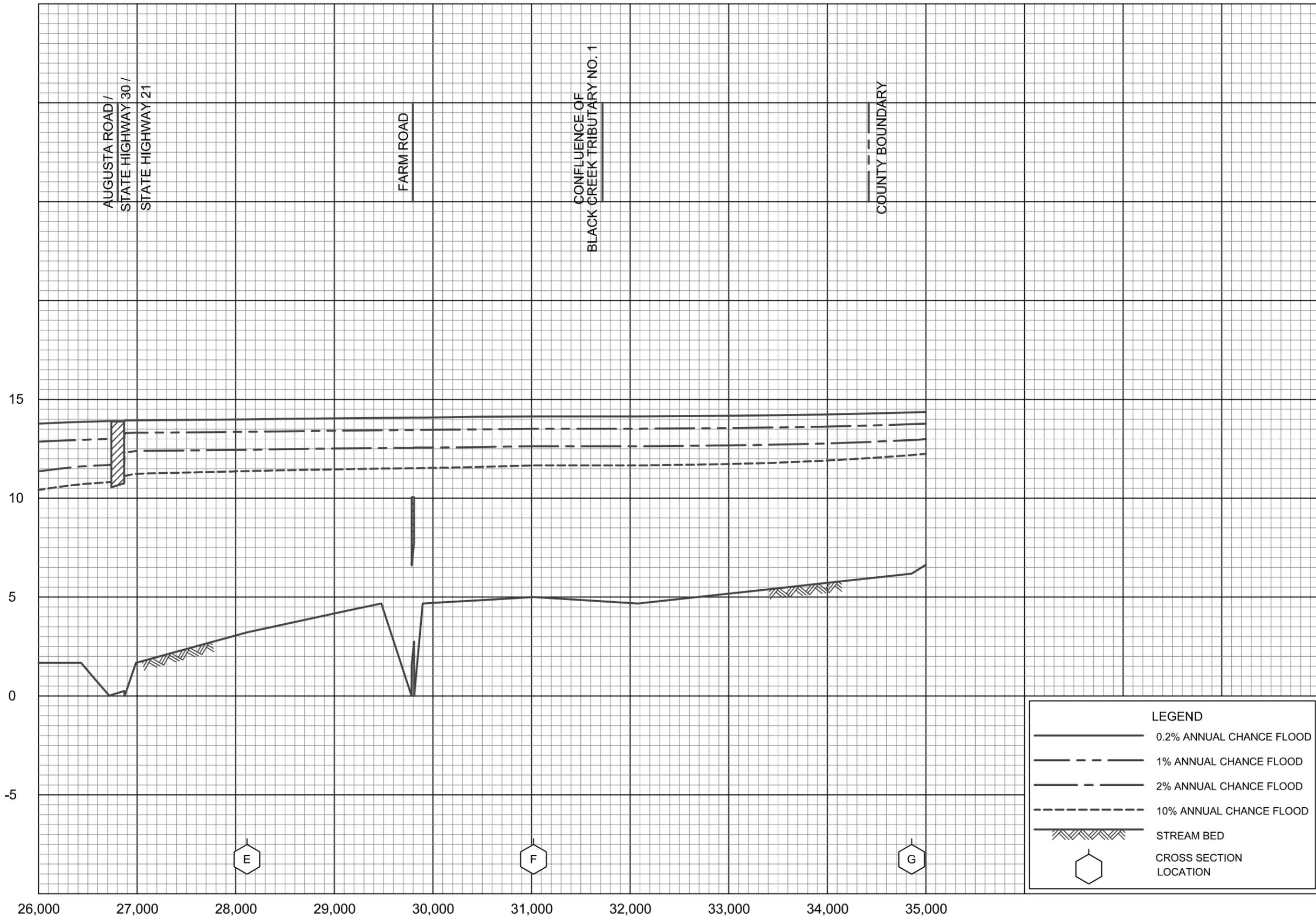


FLOOD PROFILES

BLACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



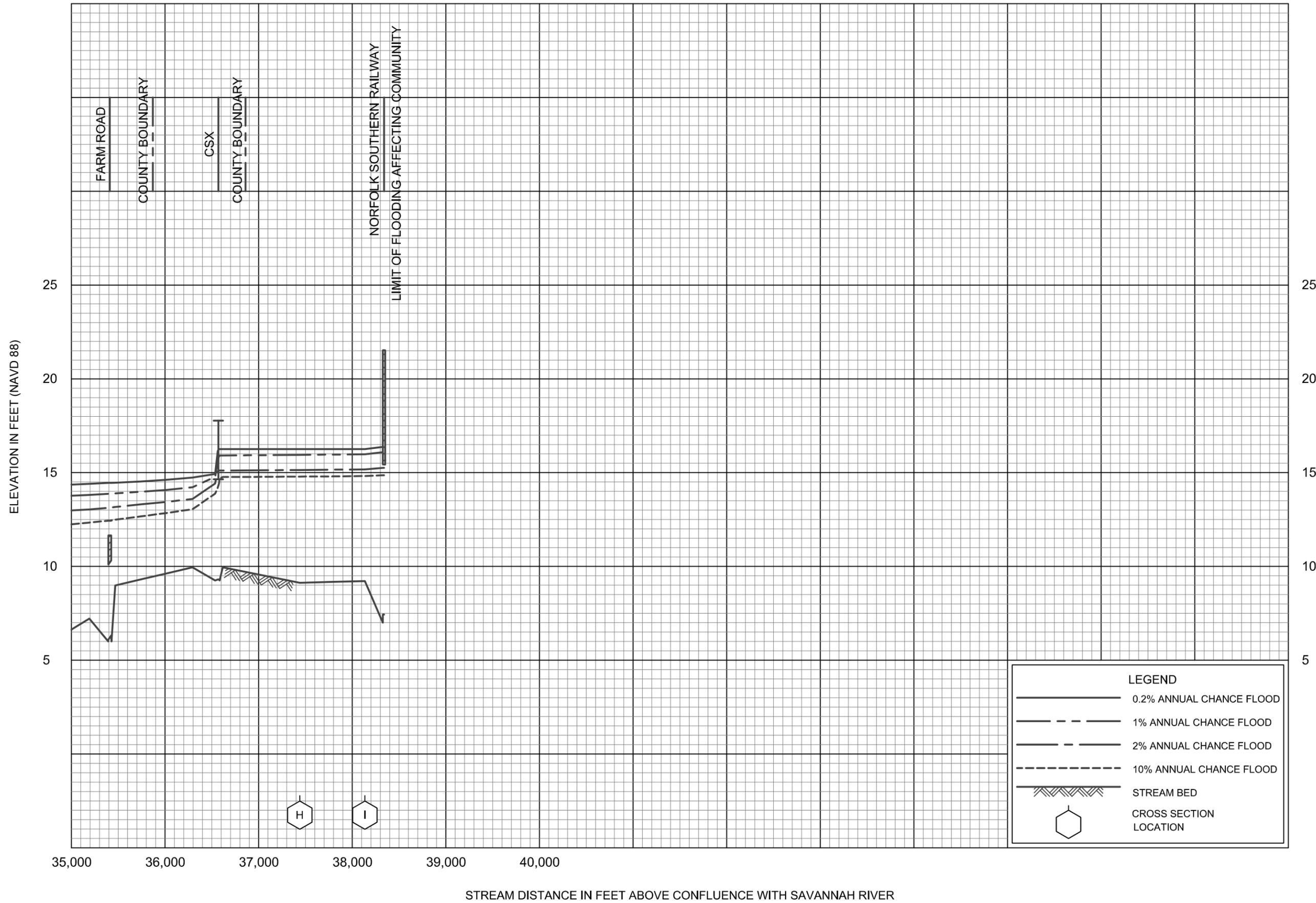
LEGEND

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

FLOOD PROFILES

BLACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

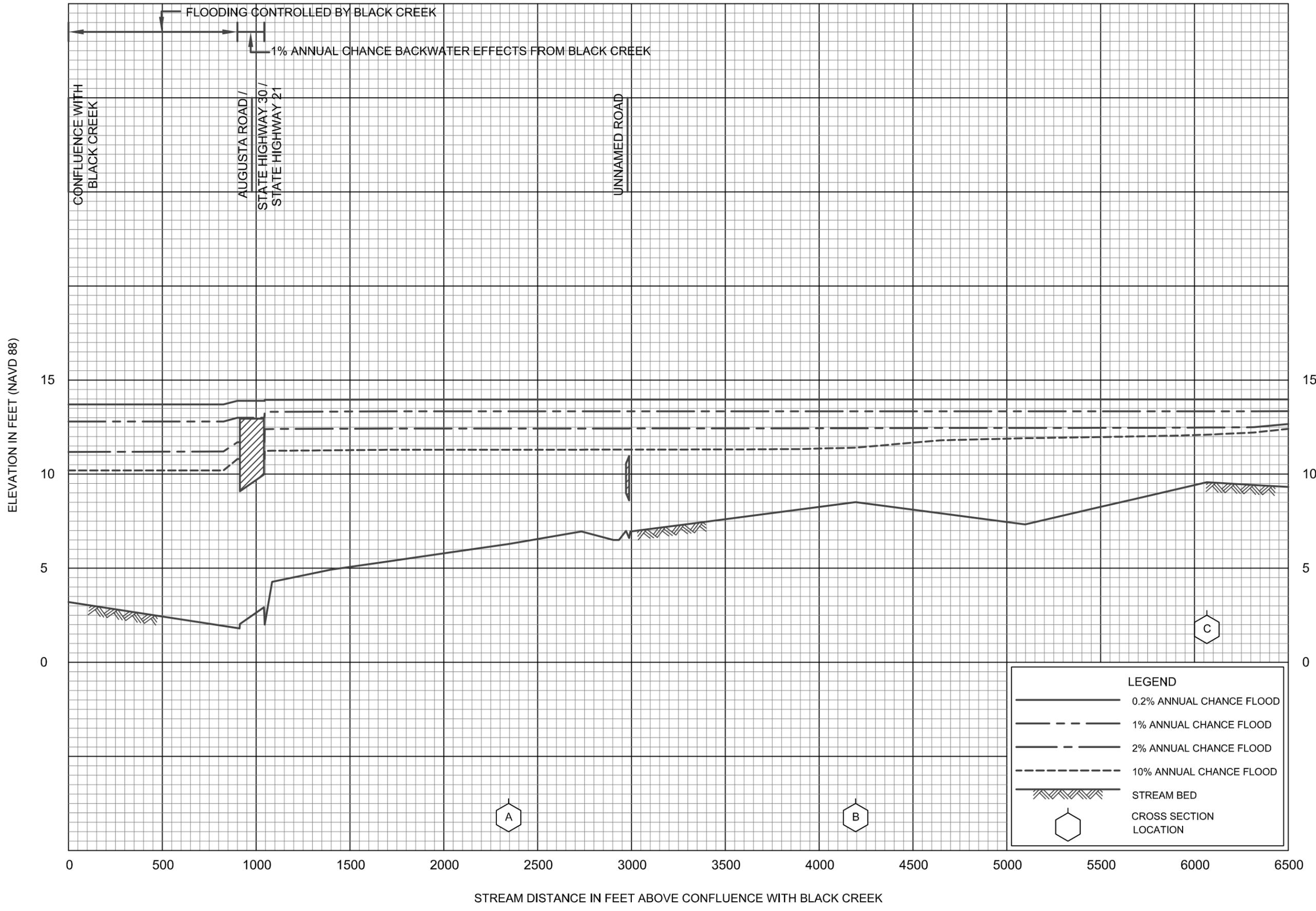


FLOOD PROFILES

BLACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS



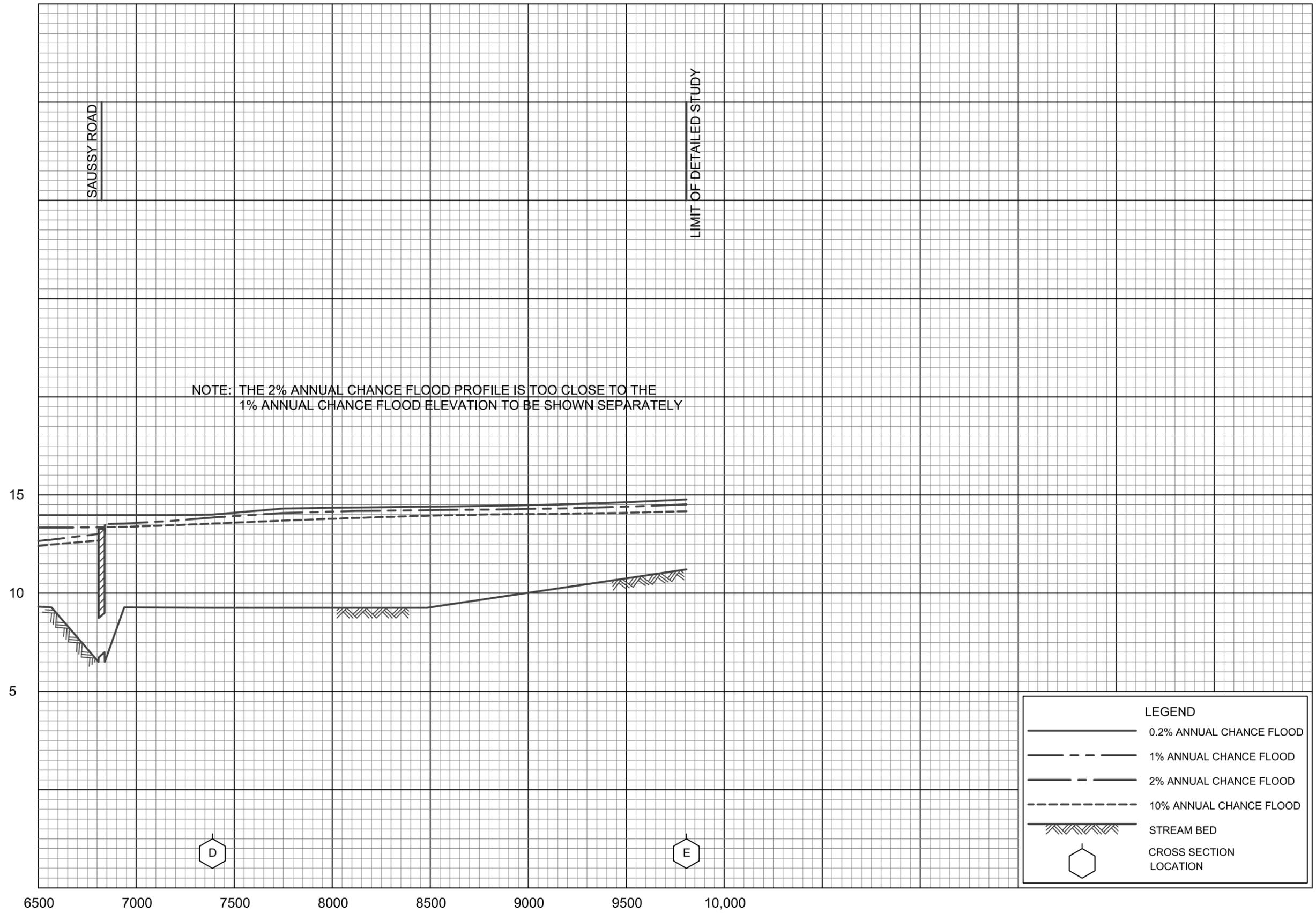
FLOOD PROFILES

BLACK CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



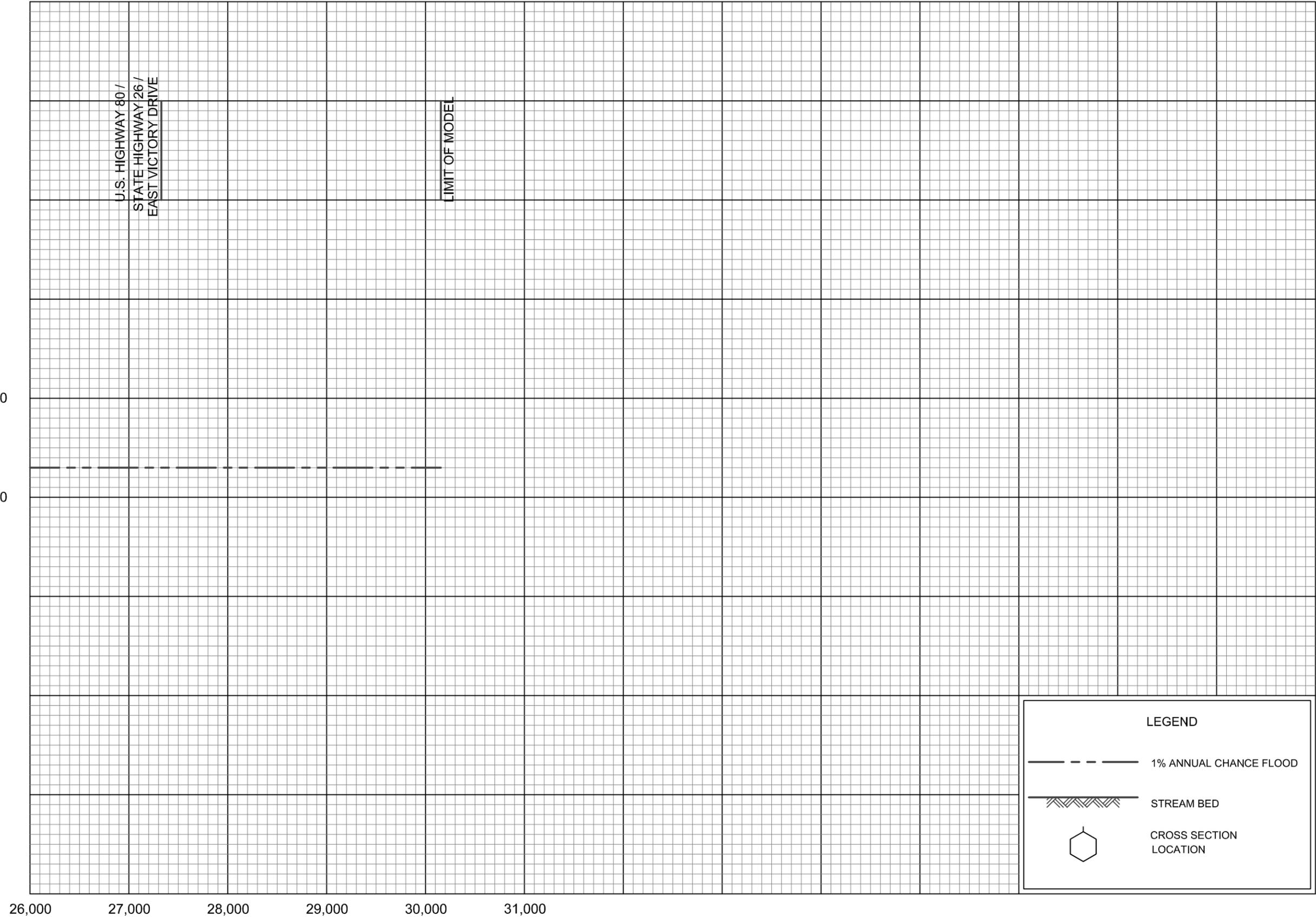
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BLACK CREEK

FLOOD PROFILES

BLACK CREEK TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



20
10

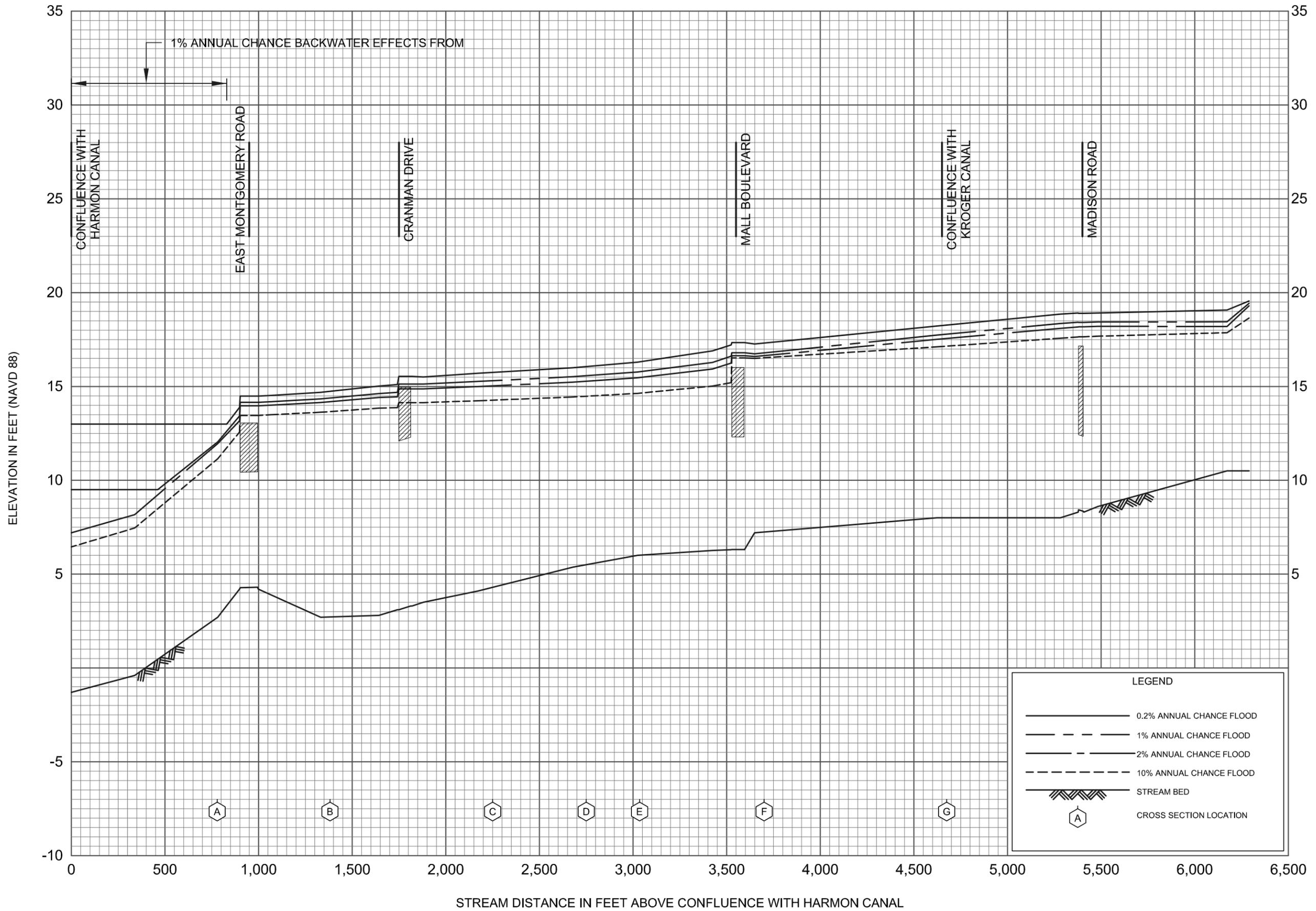
FLOOD PROFILES

CASEY CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

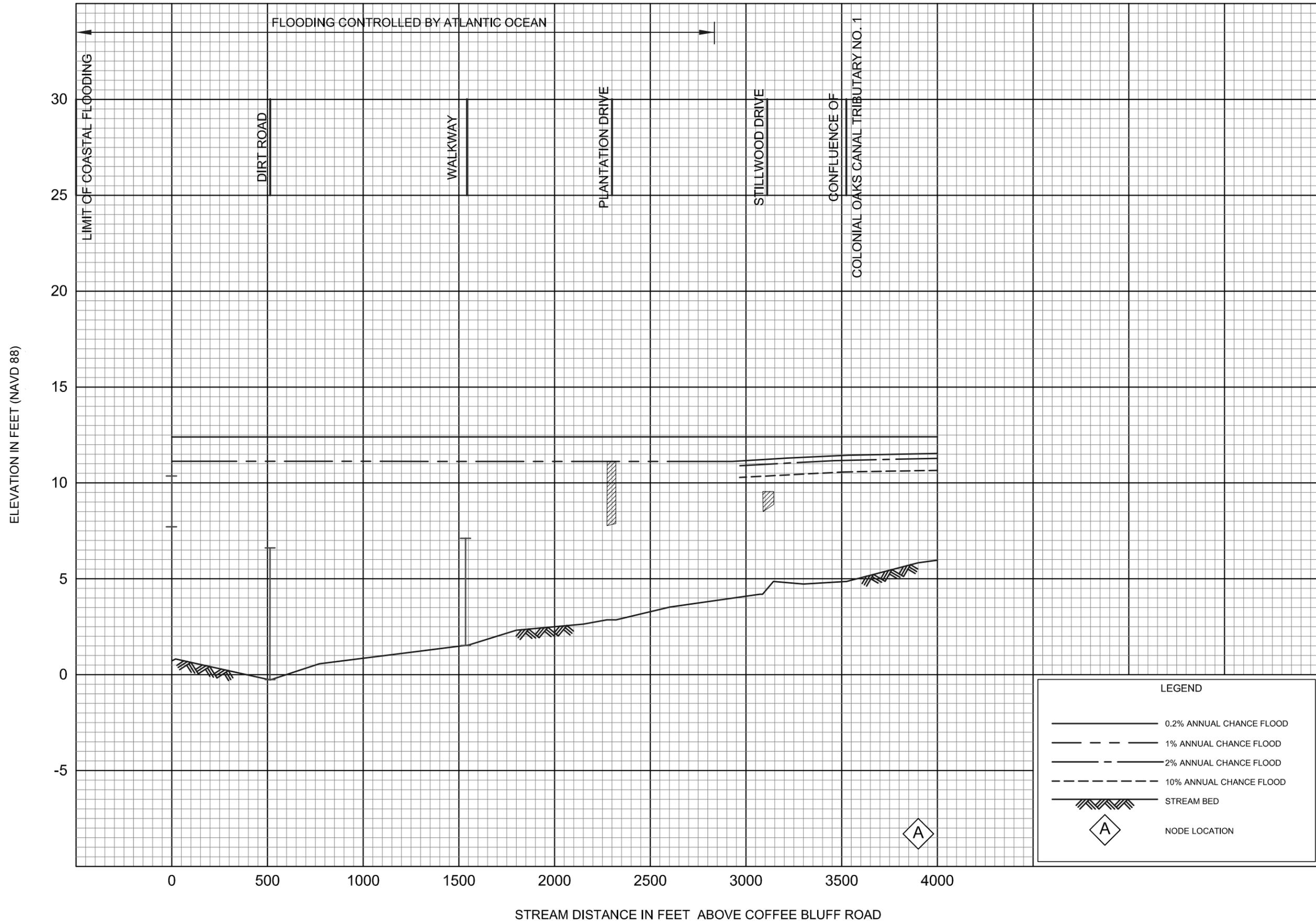
09P

STREAM DISTANCE IN FEET ABOVE EAST MONTGOMERY CROSS ROAD



FLOOD PROFILES
CHIPPEWA CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

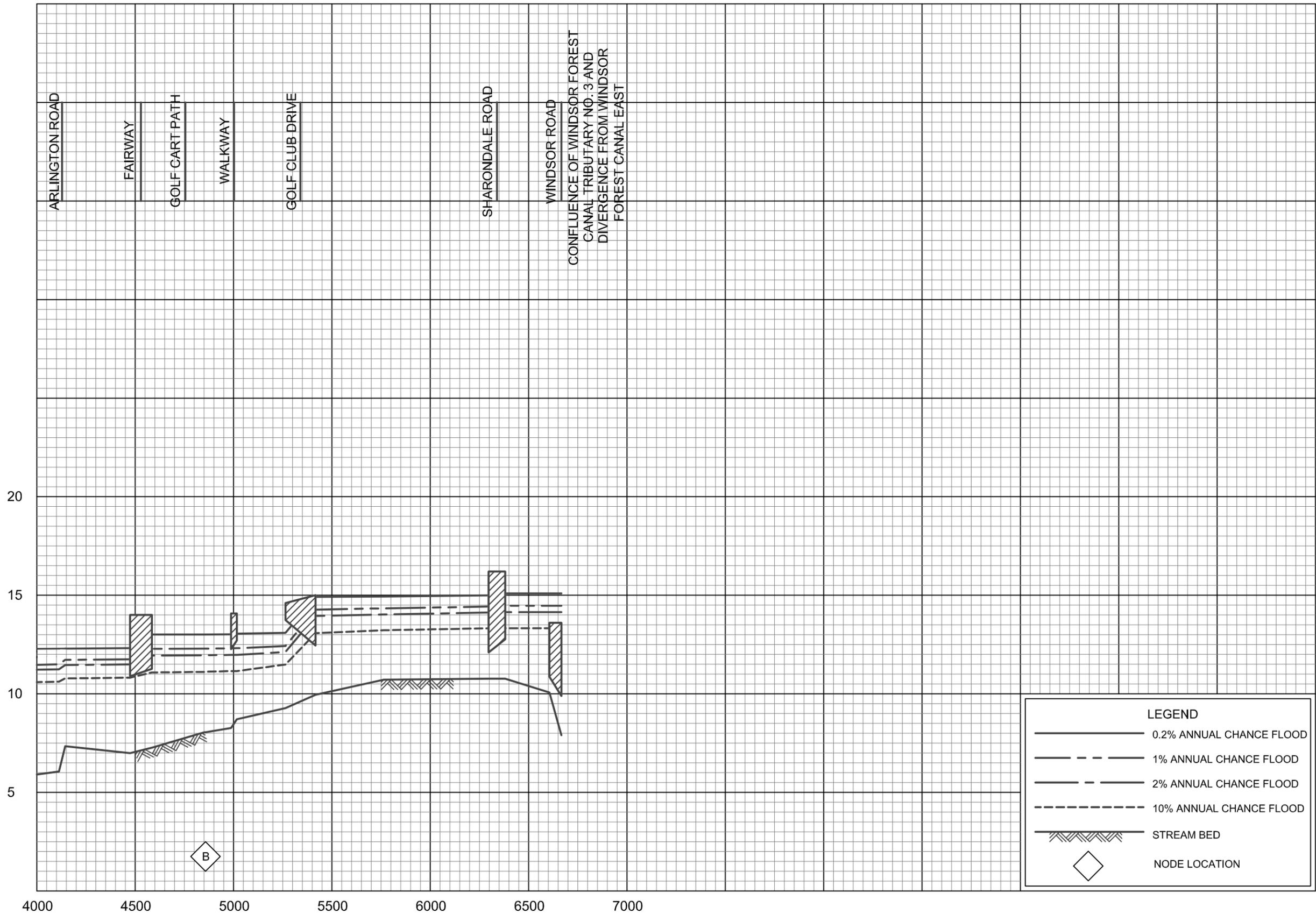


FLOOD PROFILES

COLONIAL OAKS CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE COFFEE BLUFF ROAD

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- . - . 2% ANNUAL CHANCE FLOOD
- . - . 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ◇ NODE LOCATION

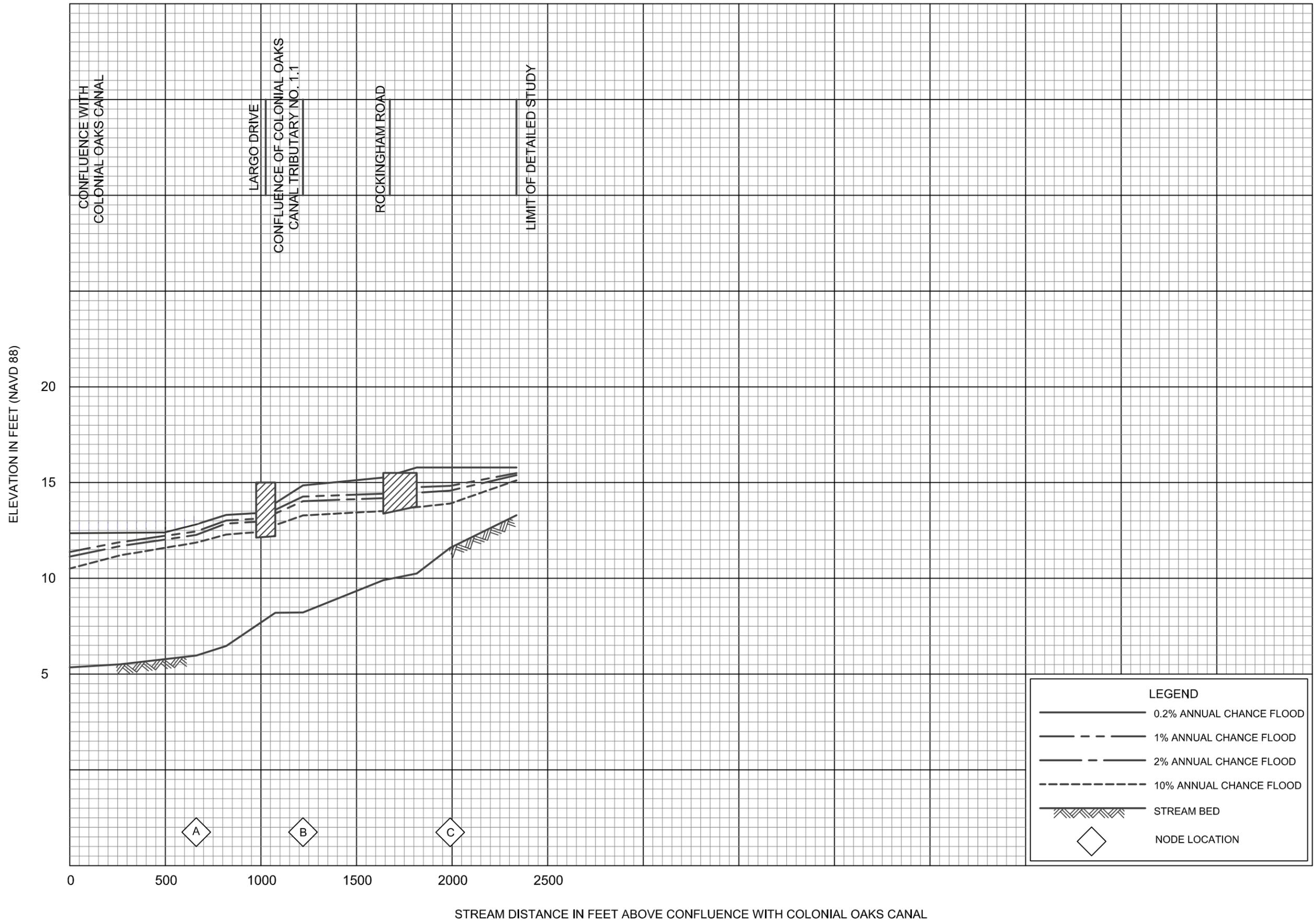
FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA

AND INCORPORATED AREAS

FLOOD PROFILES

COLONIAL OAKS CANAL

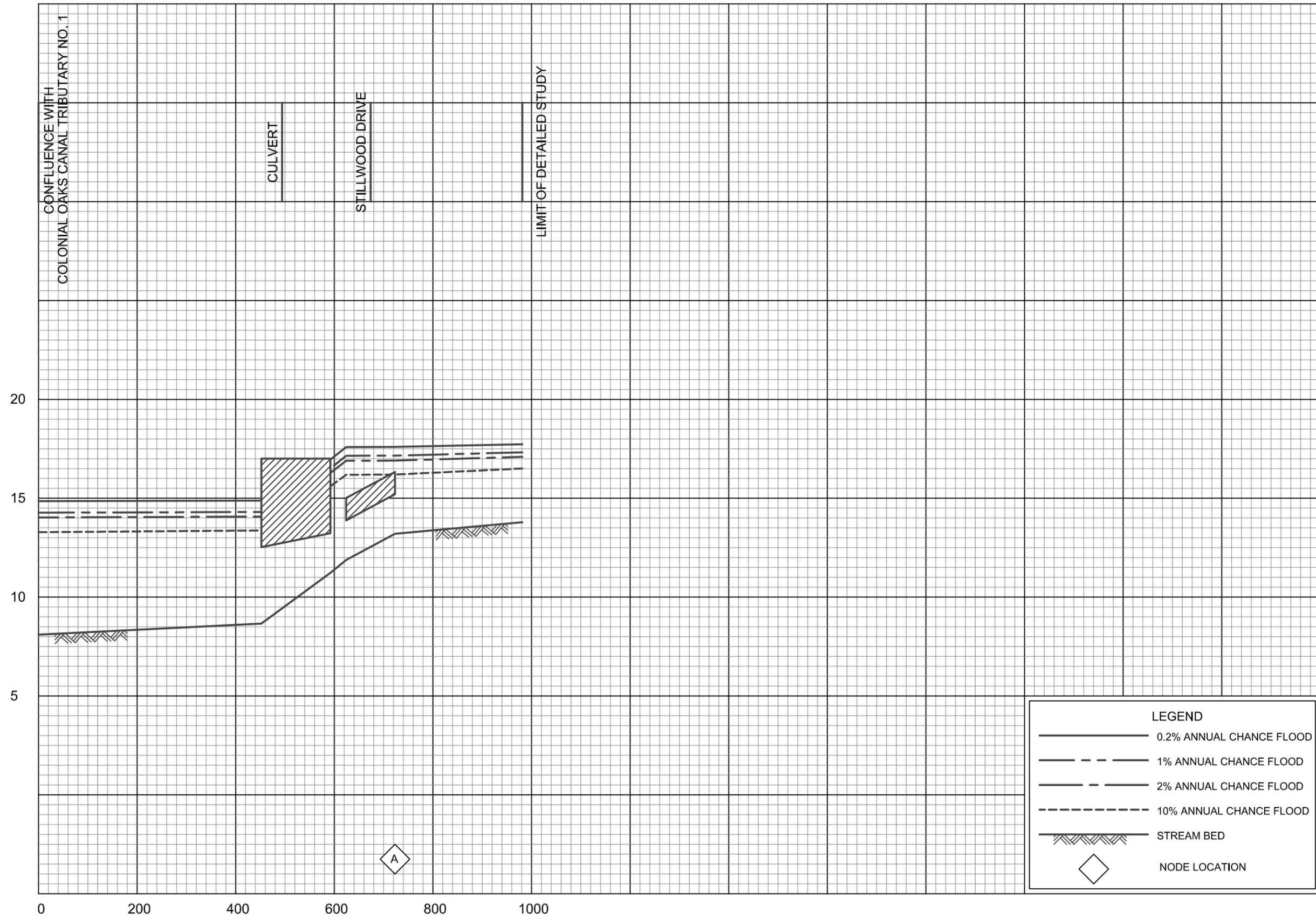


FLOOD PROFILES

COLONIAL OAKS CANAL TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



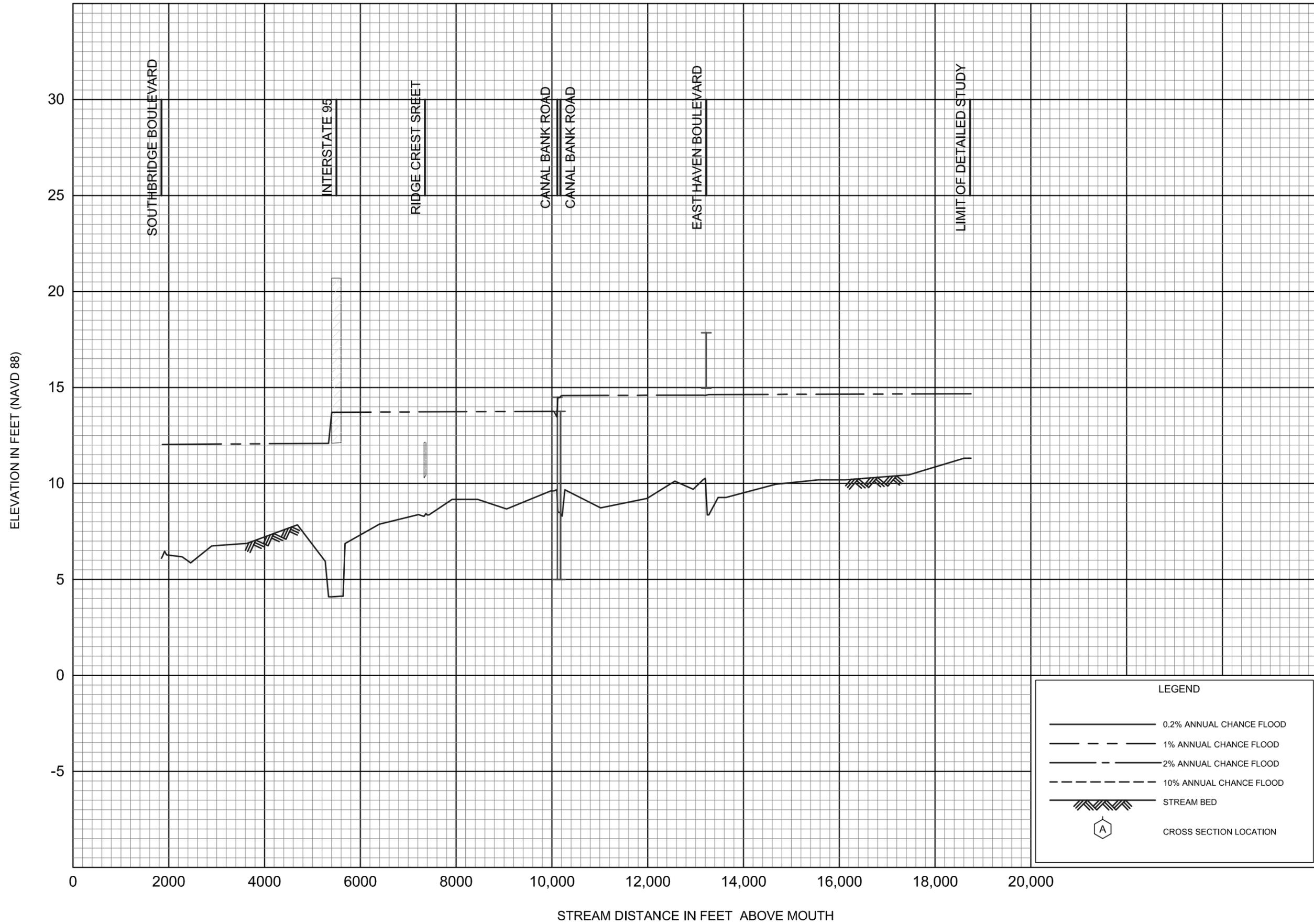
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH COLONIAL OAKS CANAL TRIBUTARY NO. 1

20
15
10
5

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES

COLONIAL OAKS CANAL TRIBUTARY NO. 1.1

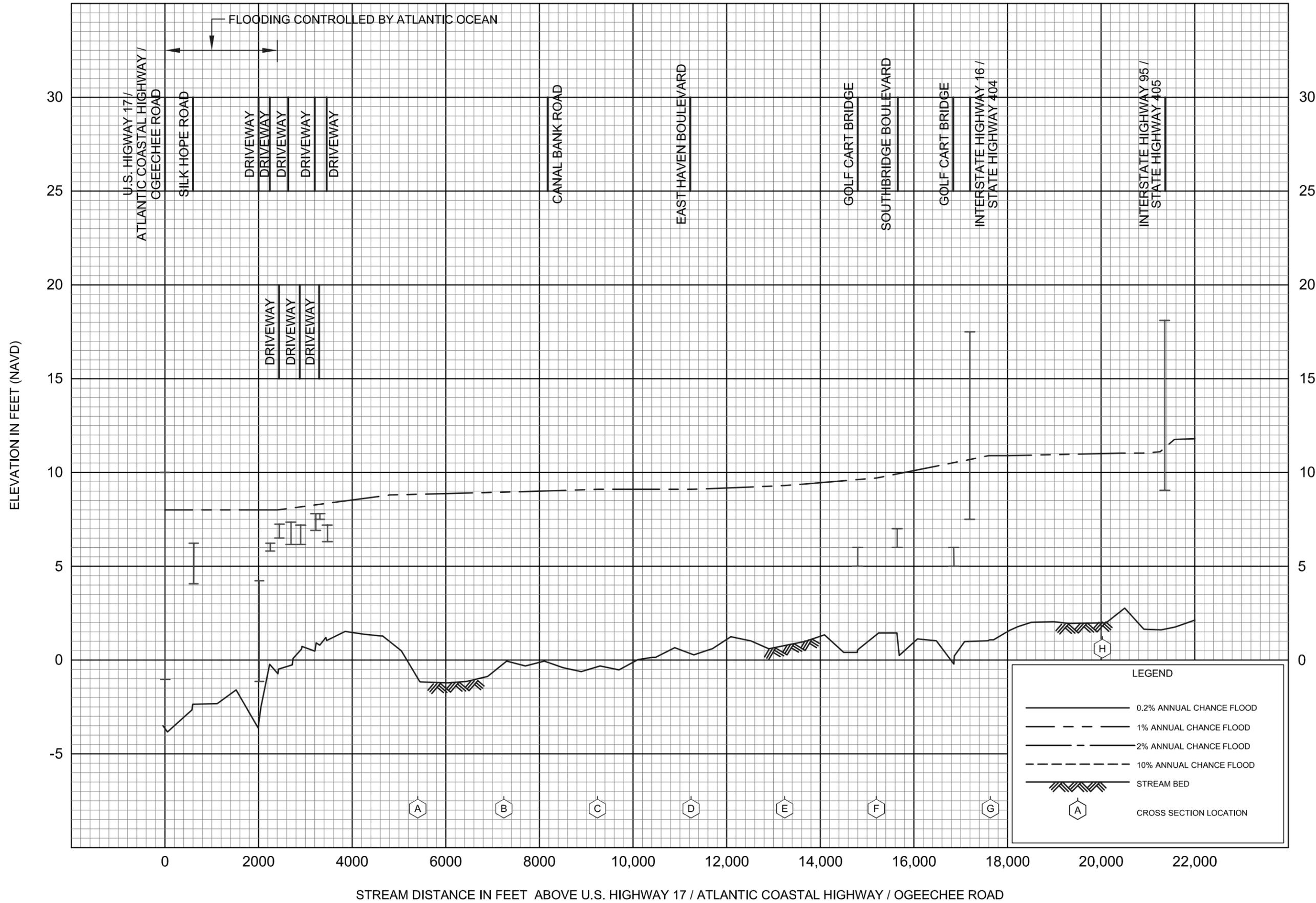


FLOOD PROFILES

CULVERT SWAMP

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

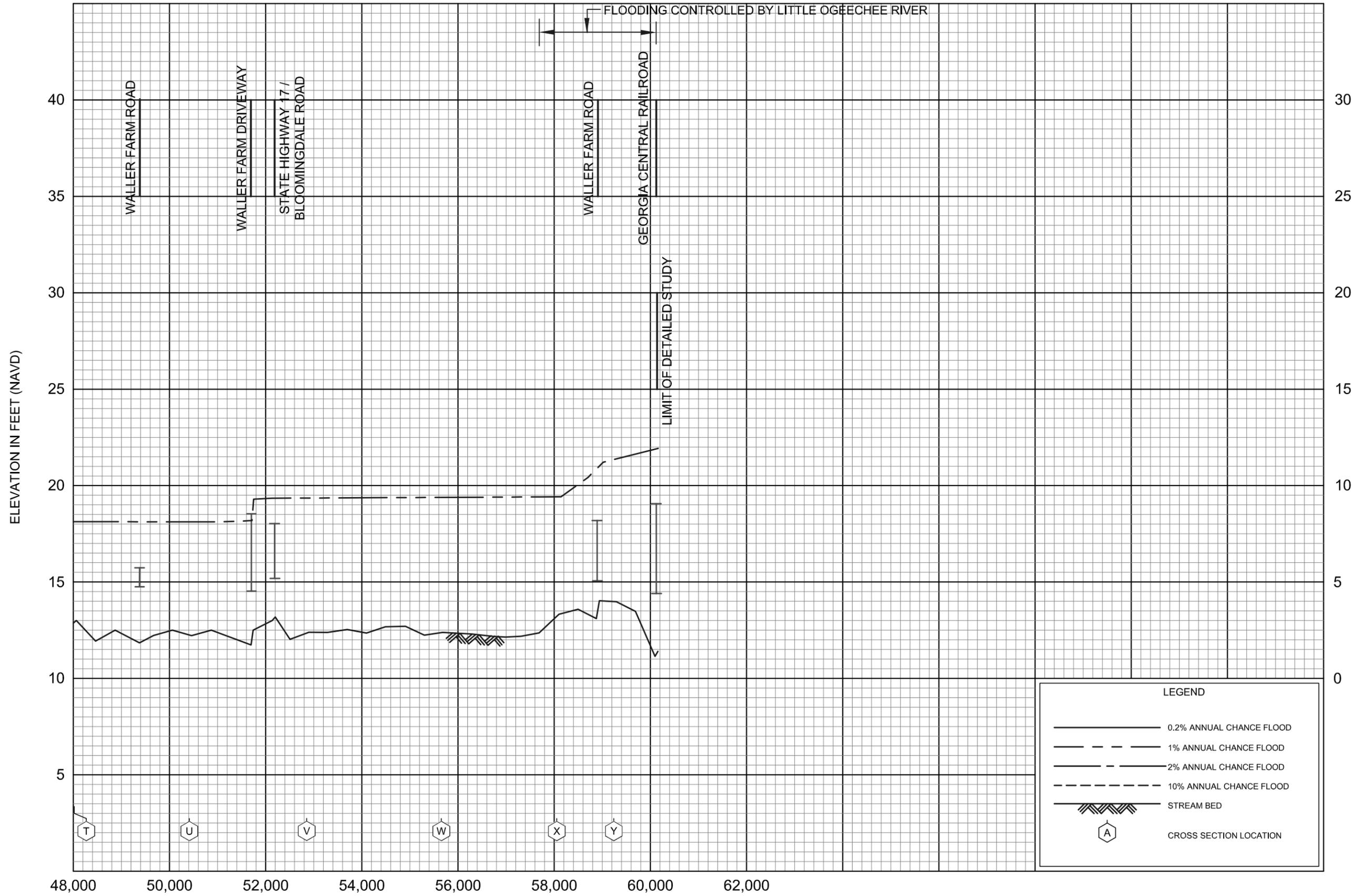


FLOOD PROFILES

HARDIN CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

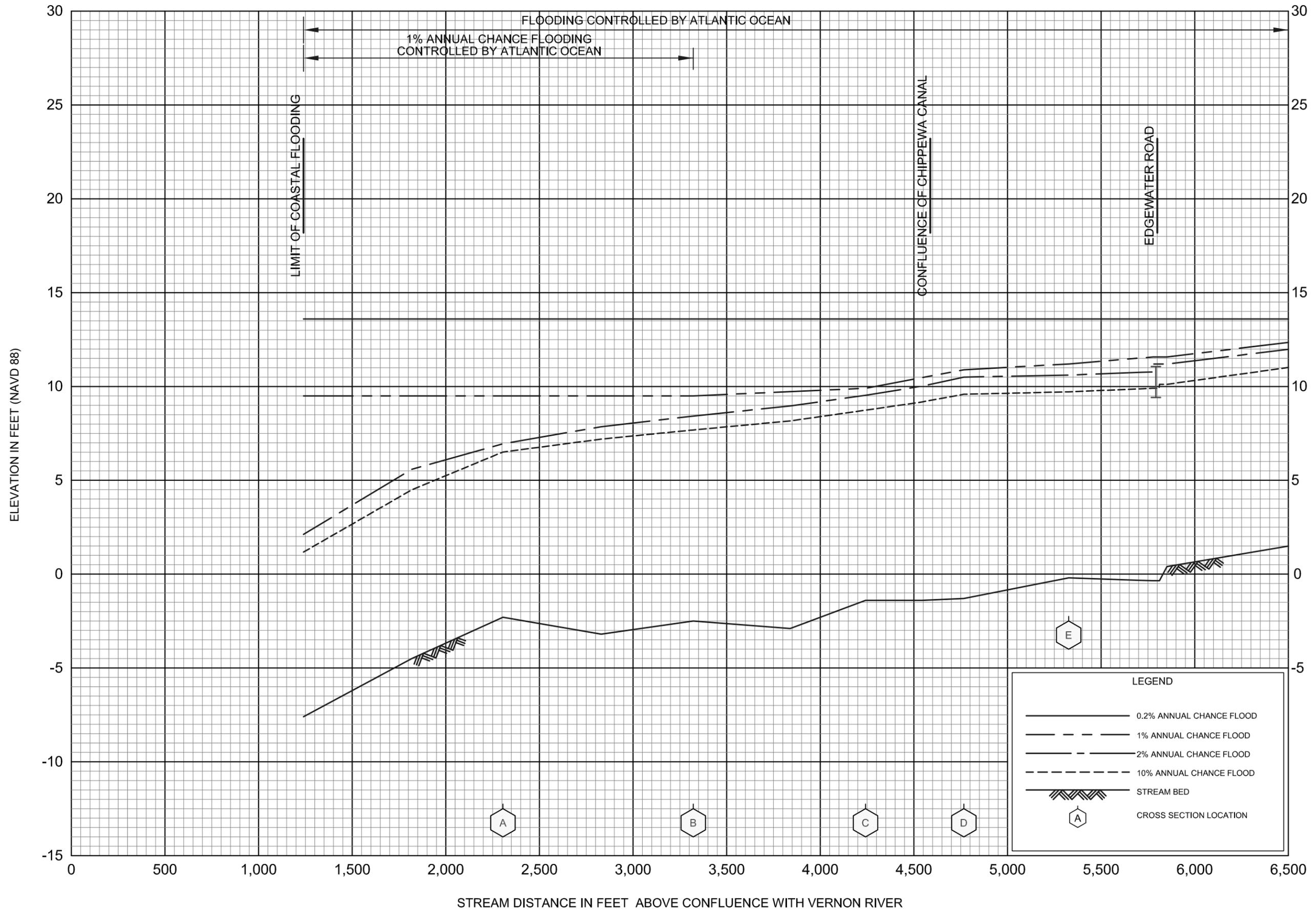


STREAM DISTANCE IN FEET ABOVE U.S. HIGHWAY 17 / ATLANTIC COASTAL HIGHWAY / OGEECHEE ROAD

FLOOD PROFILES

HARDIN CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

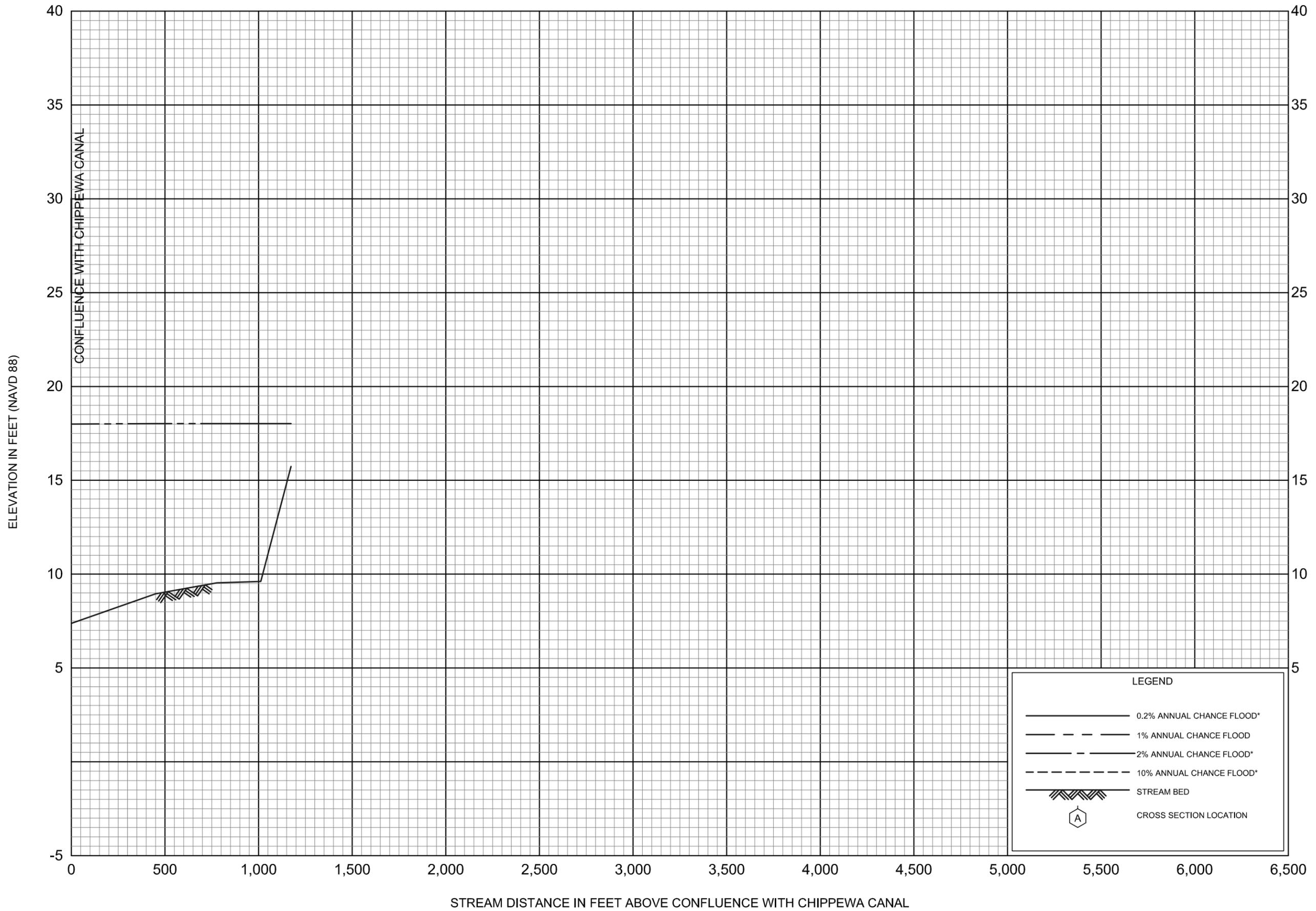


FLOOD PROFILES

HARMON CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

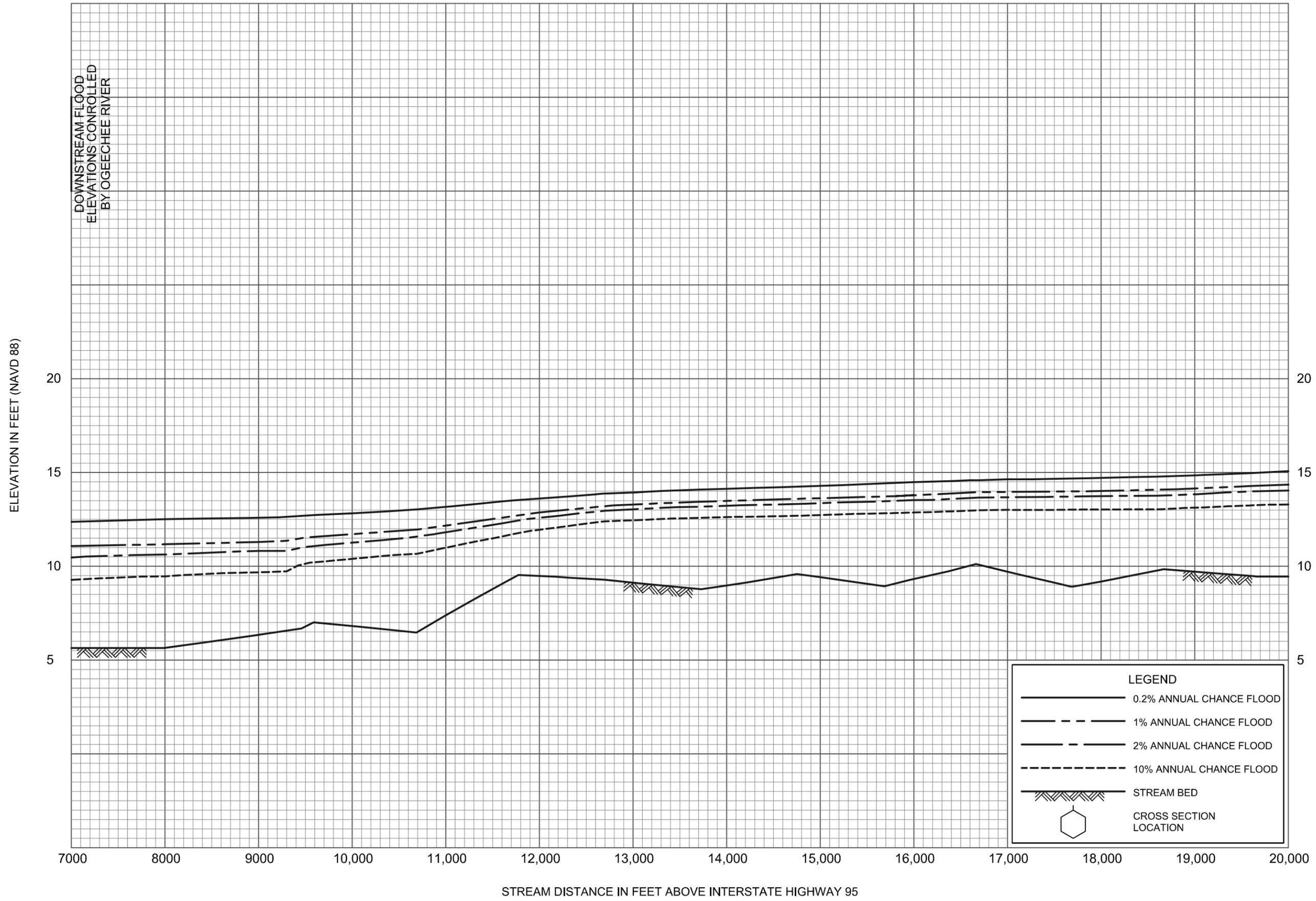


FLOOD PROFILES

KROGER CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

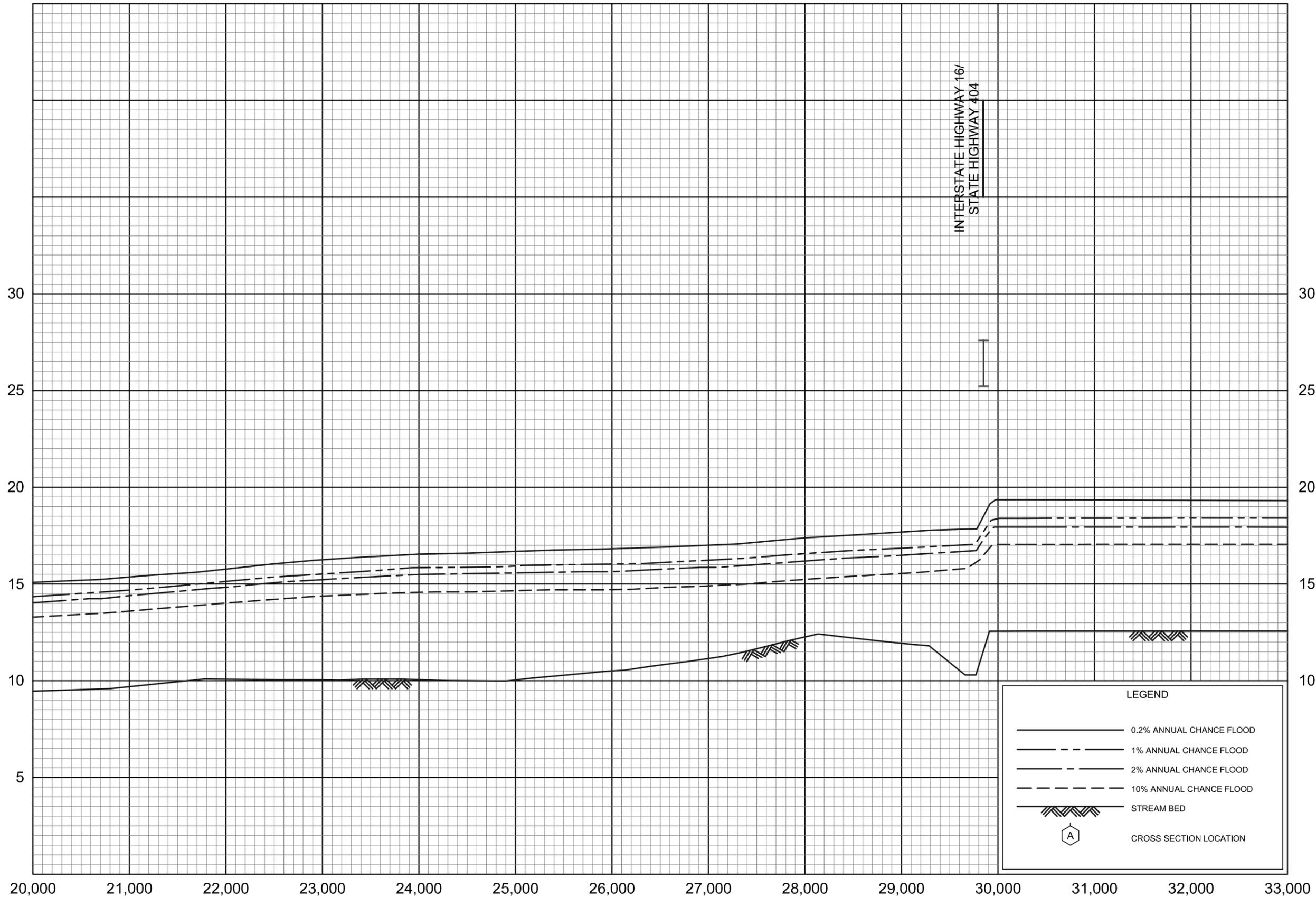


FLOOD PROFILES

LITTLE OGEECHEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)

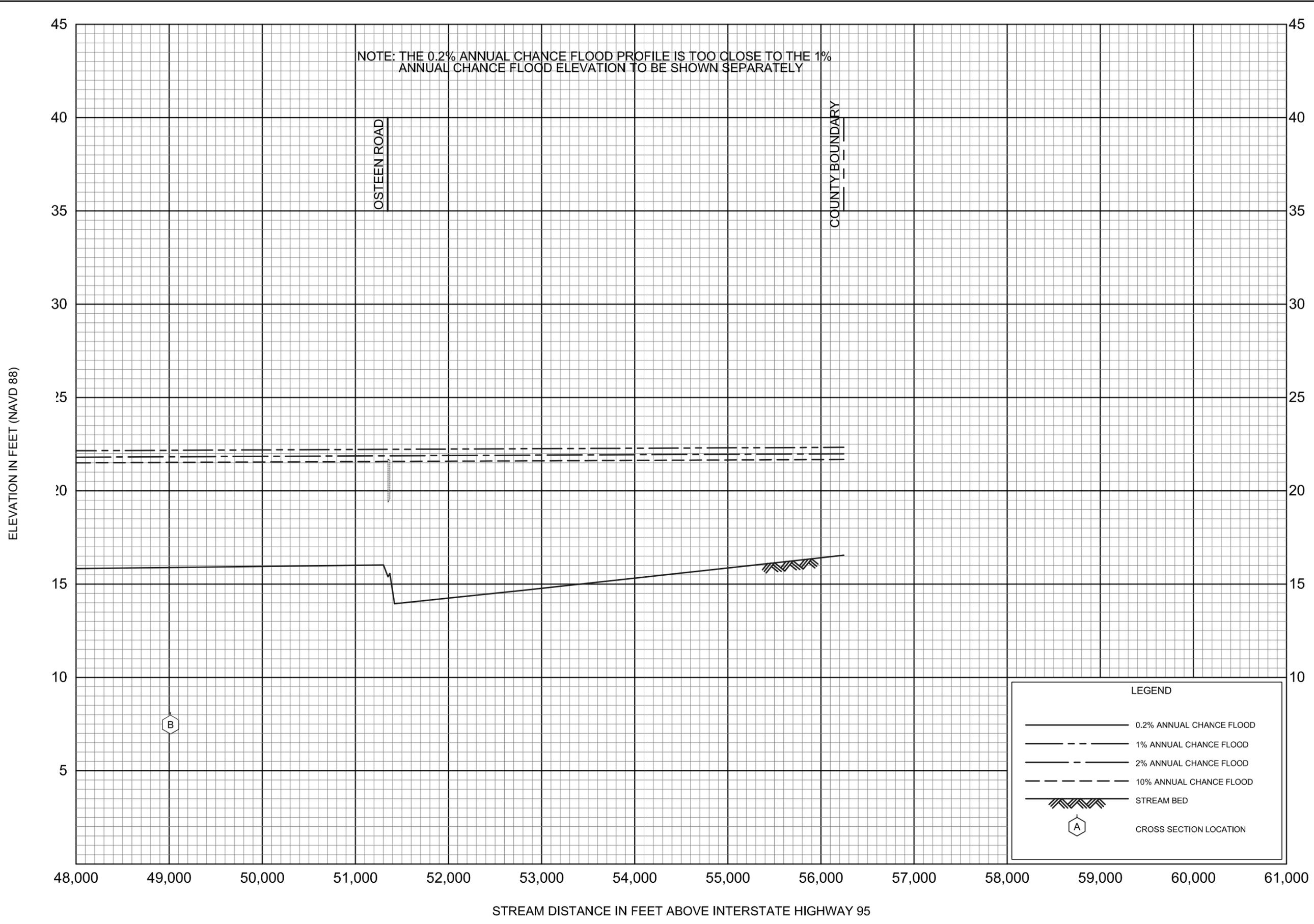


FLOOD PROFILES

LITTLE OGEECHEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

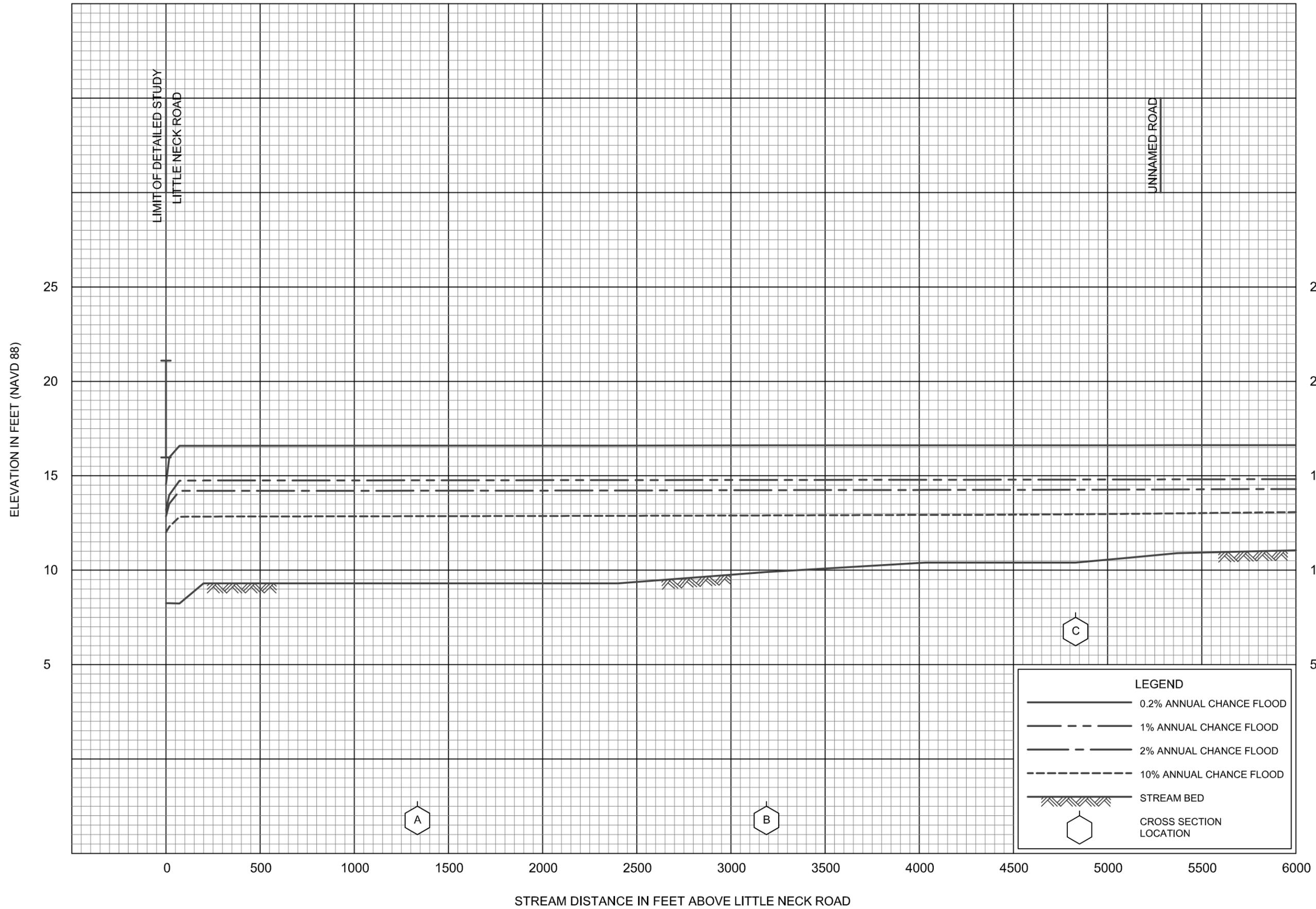


FLOOD PROFILES

LITTLE OGEECHEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

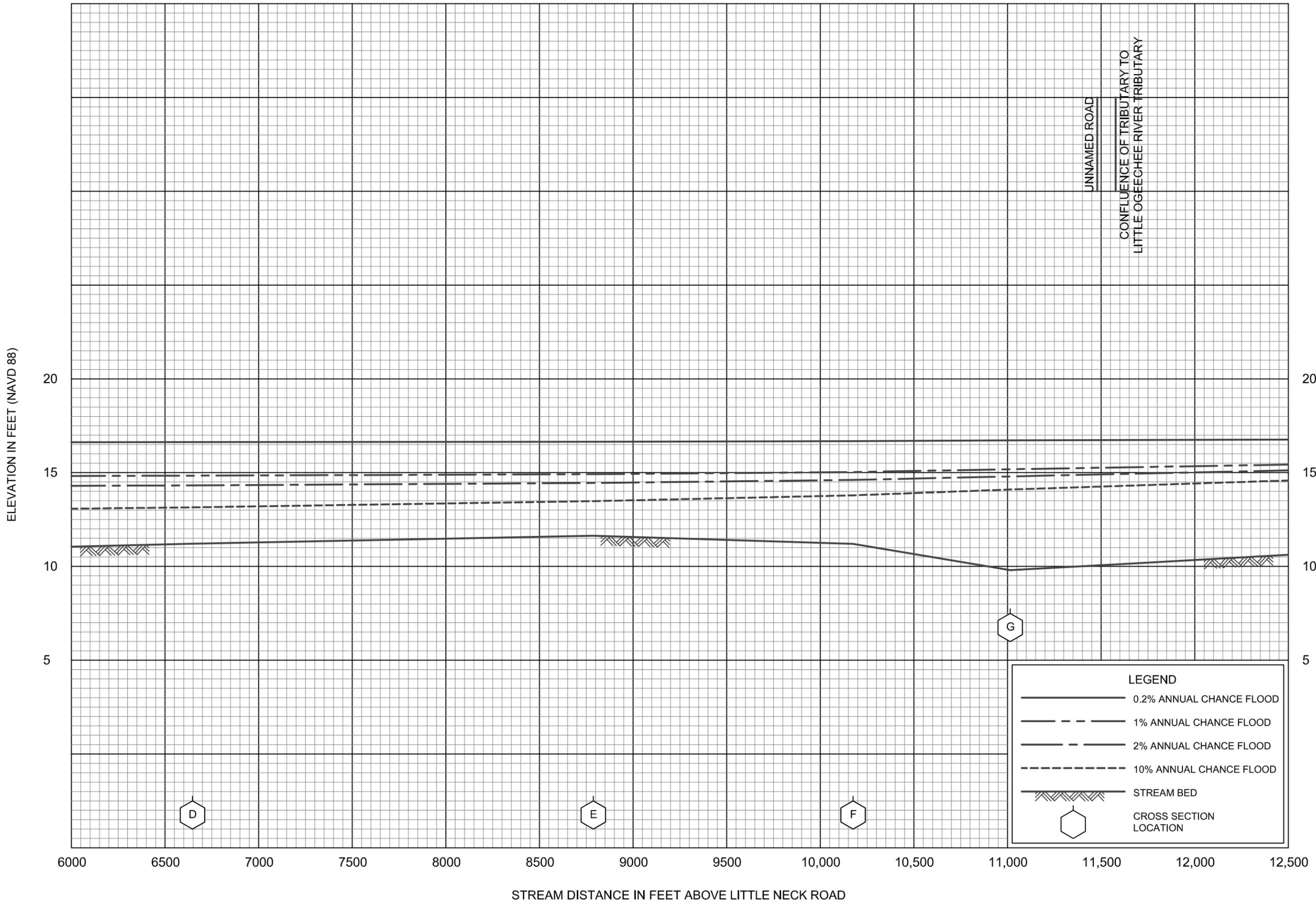
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



FLOOD PROFILES

LITTLE OGEECHEE RIVER TRIBUTARY

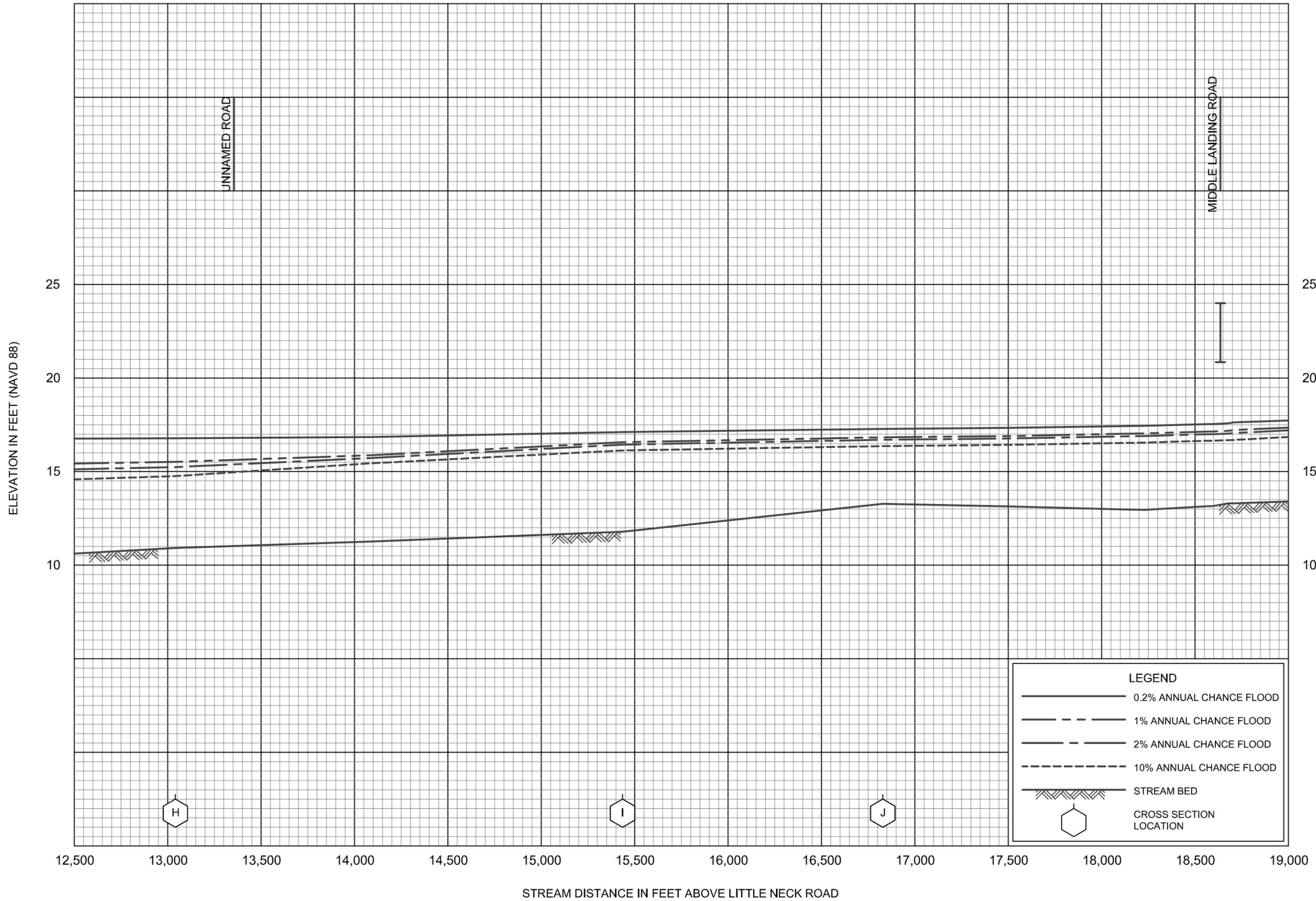
FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

LITTLE OGEECHEE RIVER TRIBUTARY

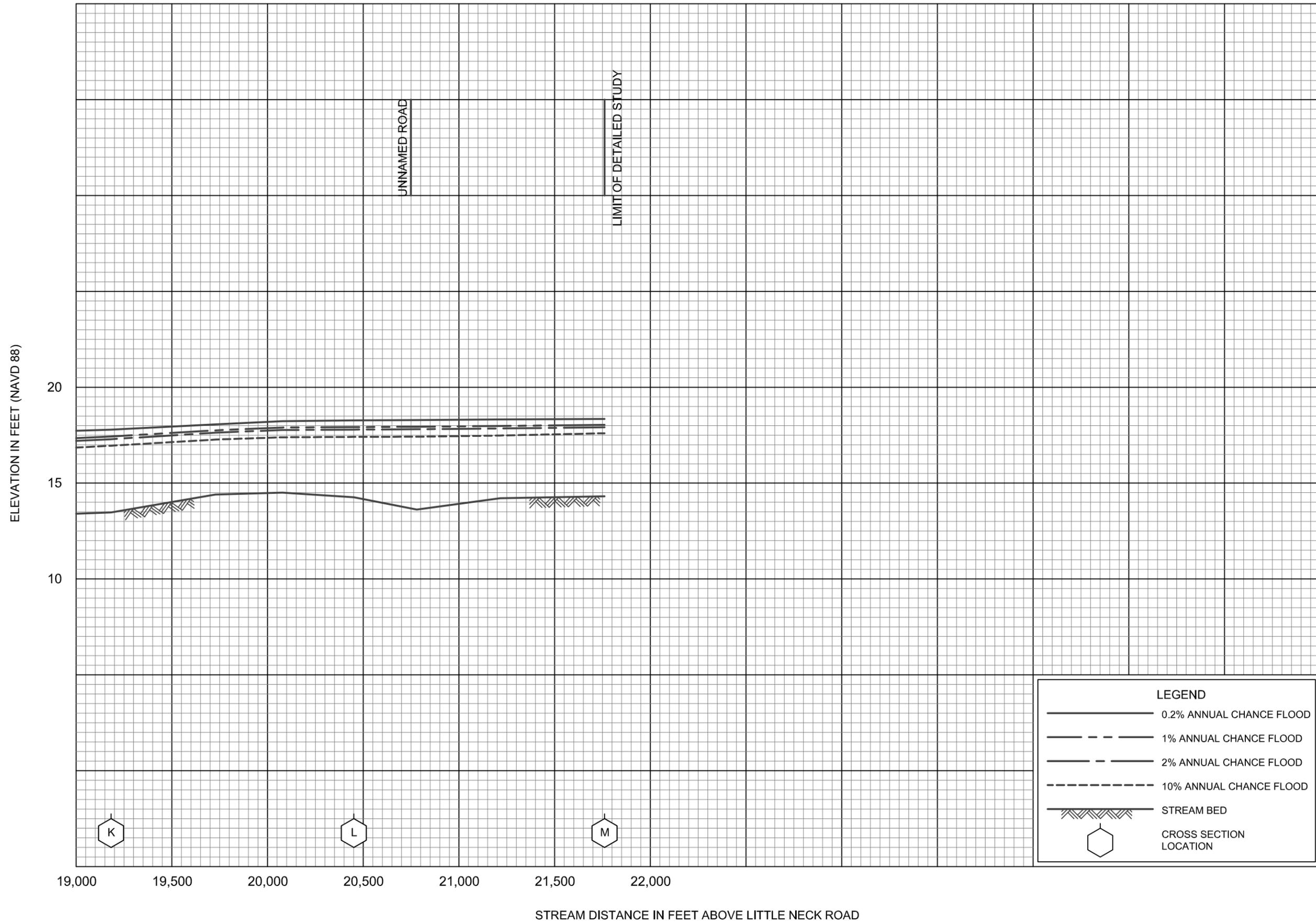
FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

LITTLE OGEECHEE RIVER TRIBUTARY

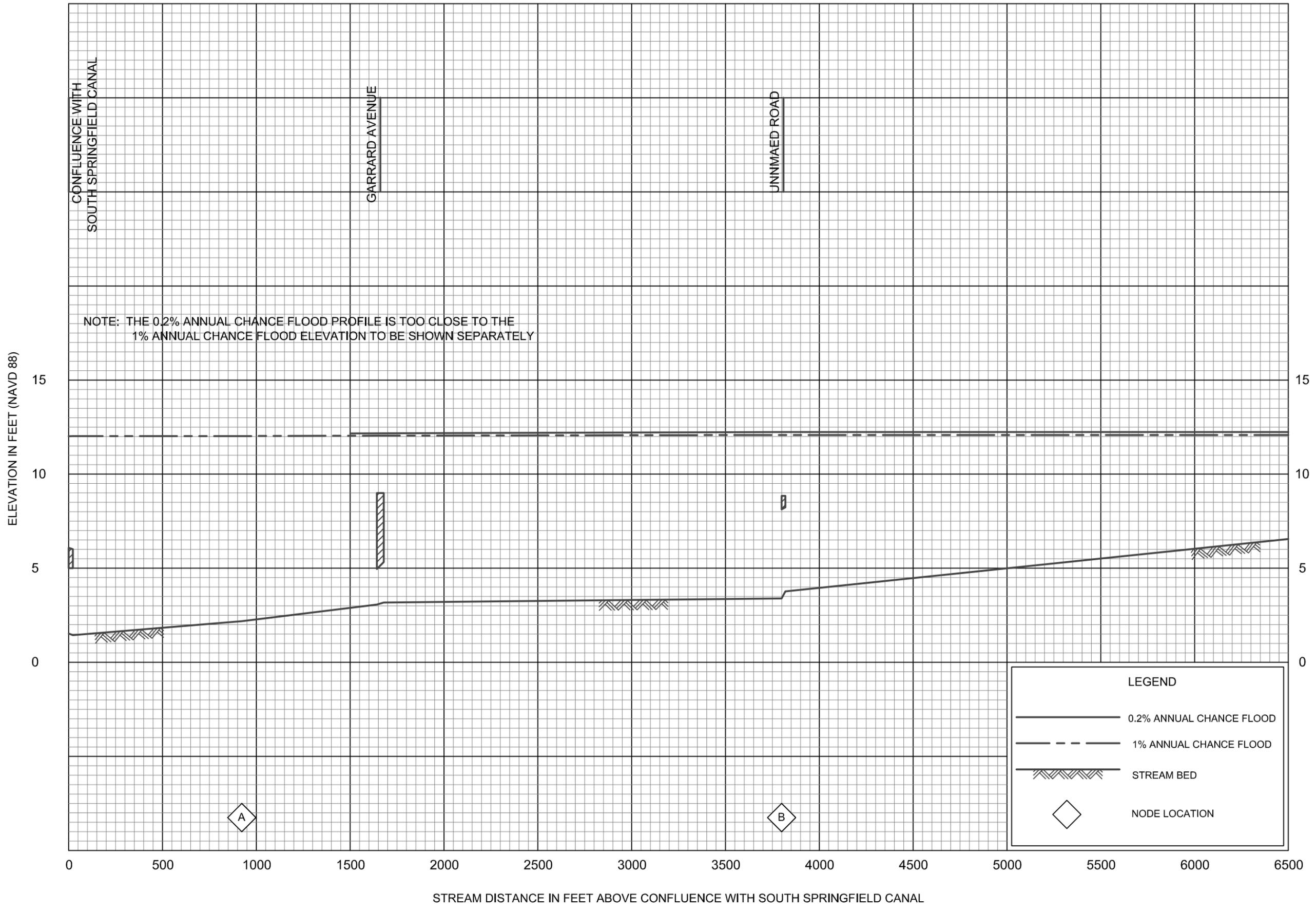
FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

LITTLE OGEECHEE RIVER TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

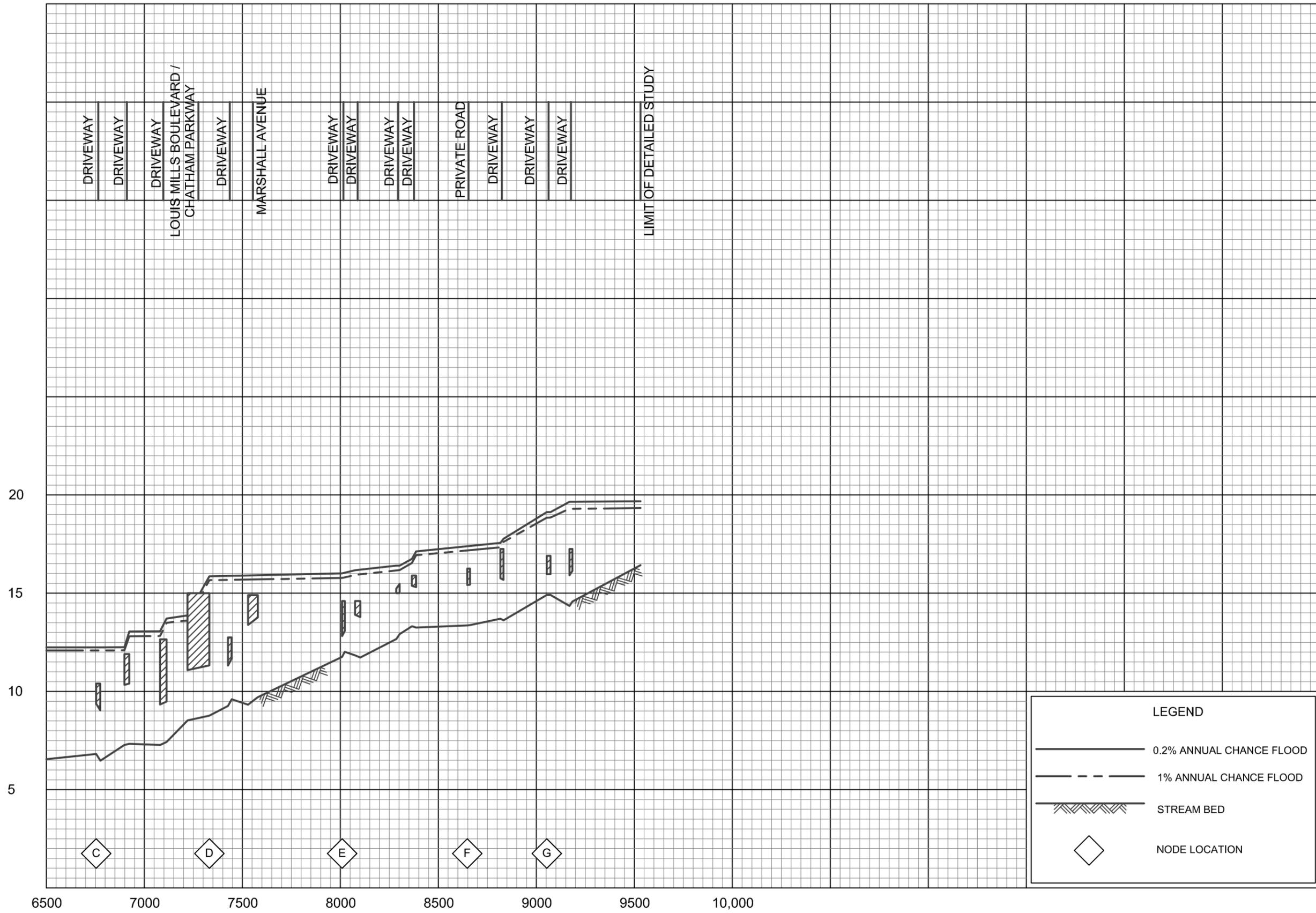
LOUIS MILLS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA

AND INCORPORATED AREAS

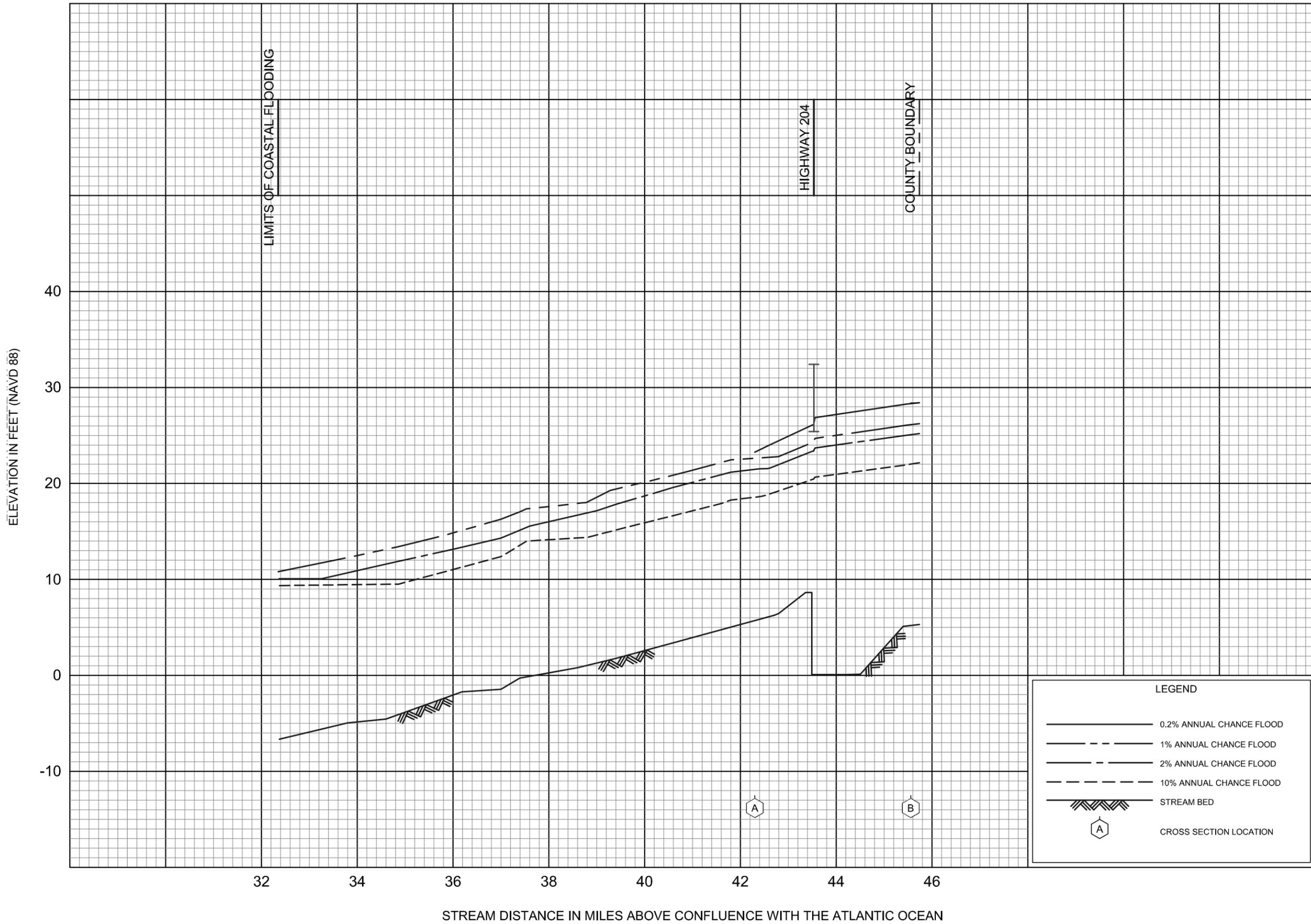
ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SOUTH SPRINGFIELD CANAL

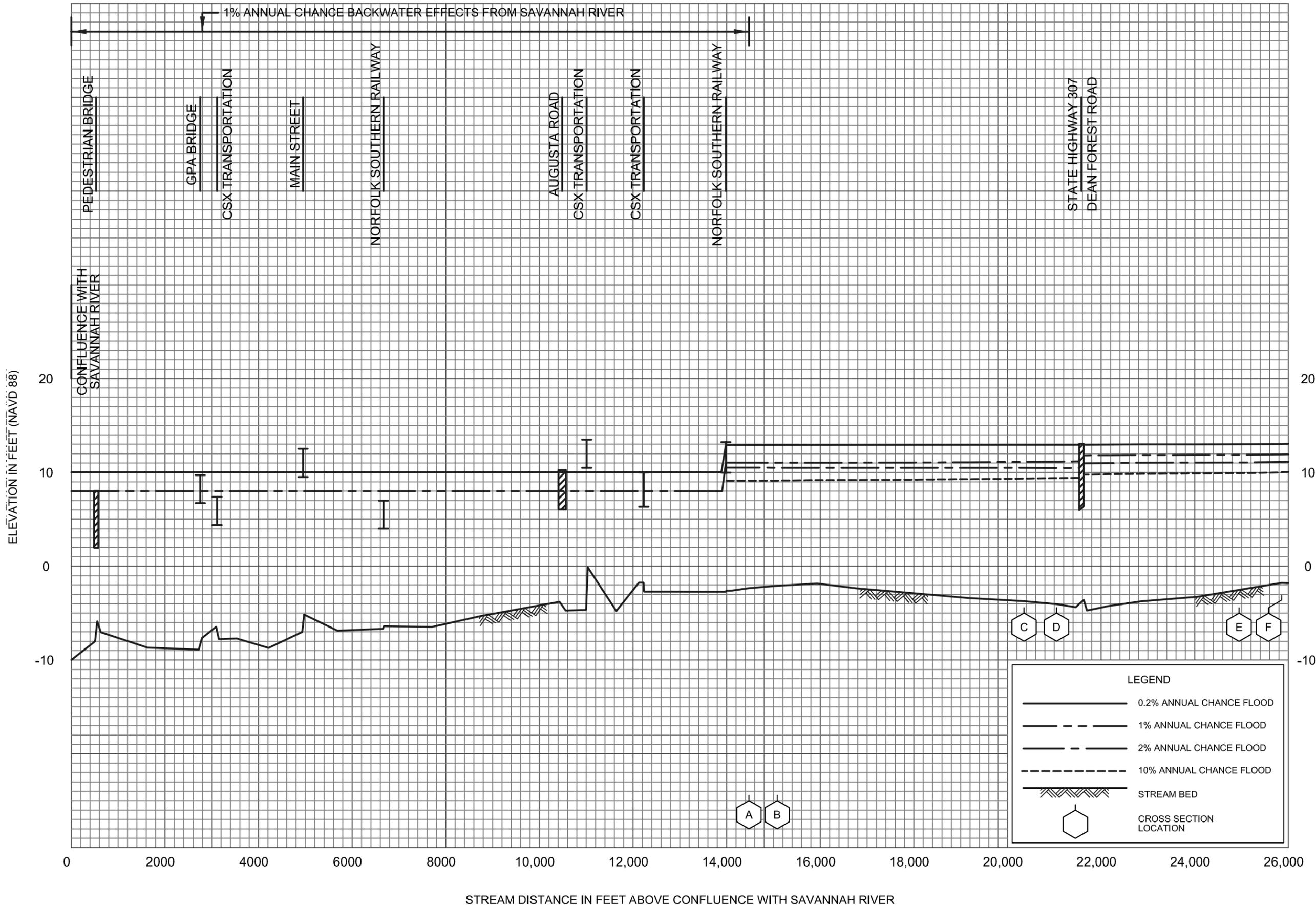
FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES
LOUIS MILLS BRANCH



FLOOD PROFILES
OGEECHEE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



FLOOD PROFILES

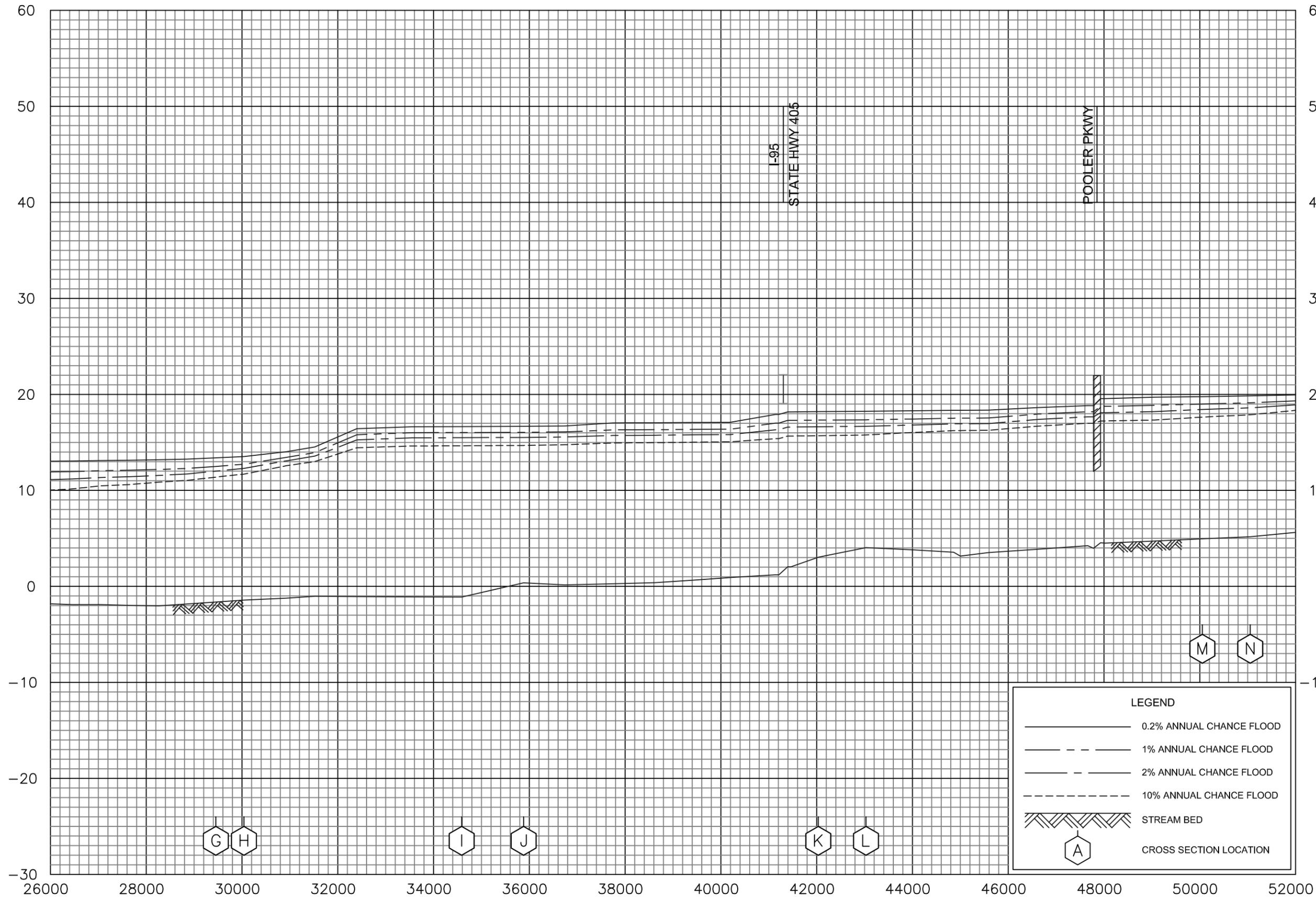
PIPE MAKERS CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA

AND INCORPORATED AREAS

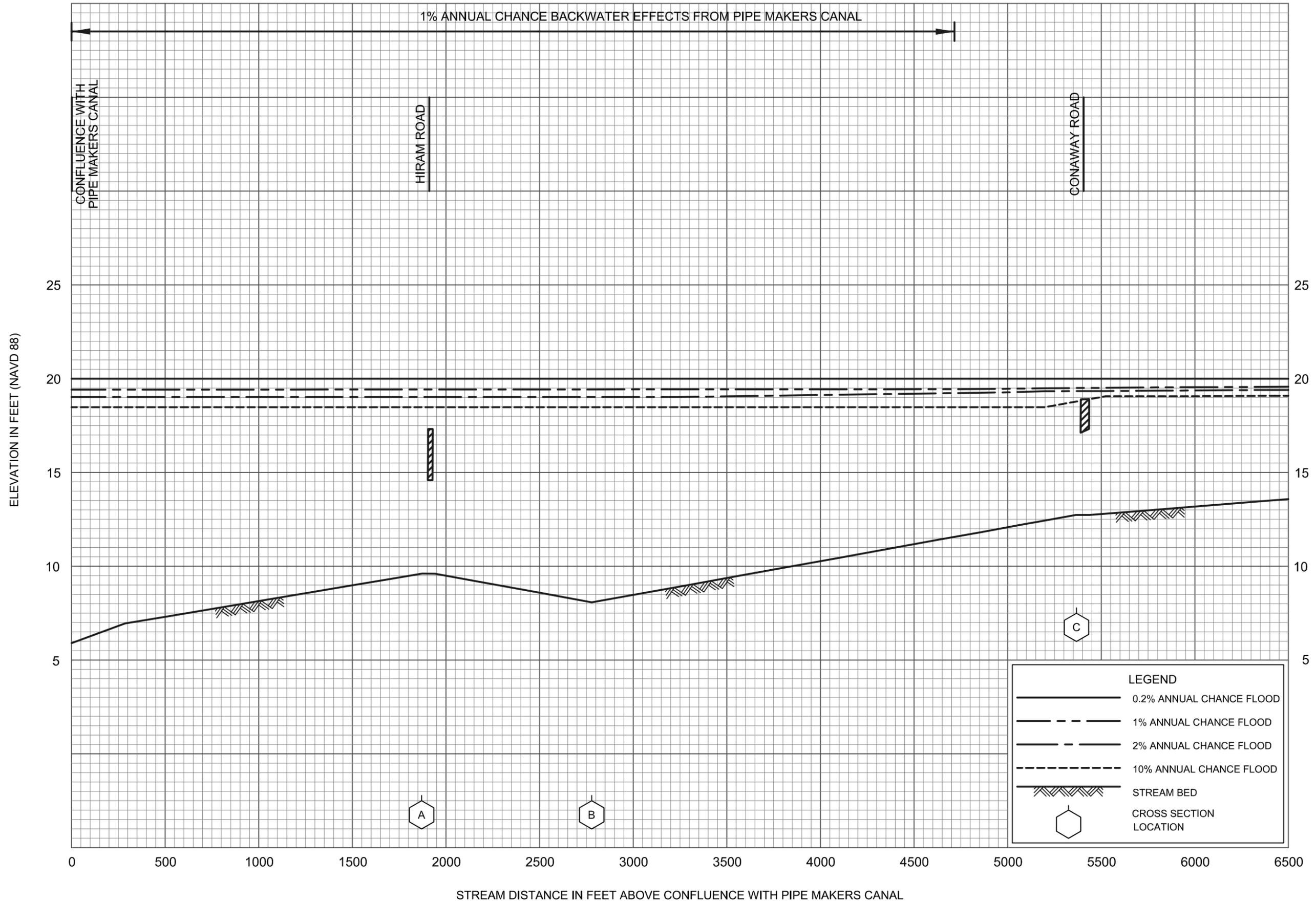
ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAVANNAH RIVER

FLOOD PROFILES
PIPE MAKERS CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

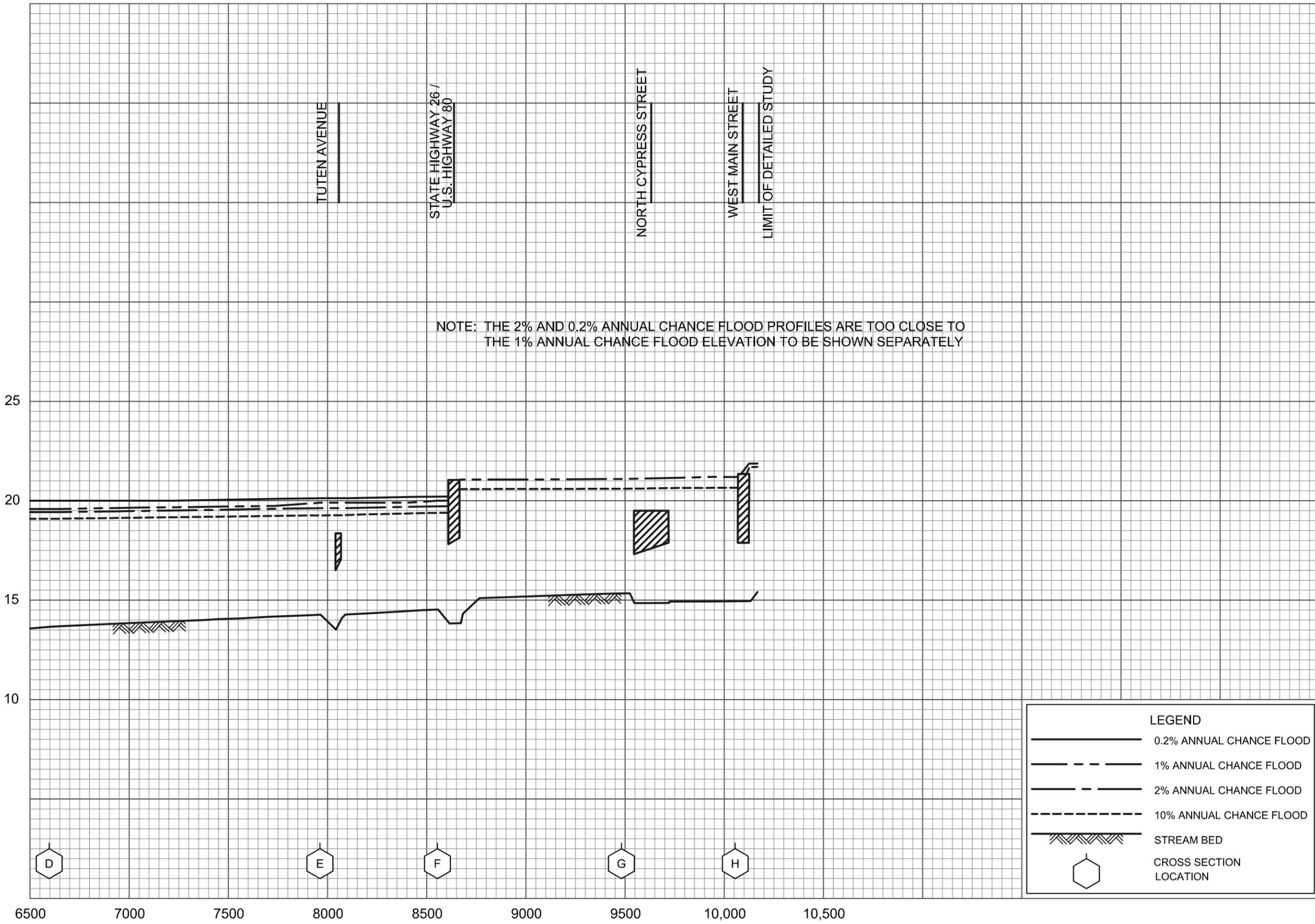


FLOOD PROFILES

PIPE MAKERS CANAL TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



NOTE: THE 2% AND 0.2% ANNUAL CHANCE FLOOD PROFILES ARE TOO CLOSE TO THE 1% ANNUAL CHANCE FLOOD ELEVATION TO BE SHOWN SEPARATELY

LEGEND

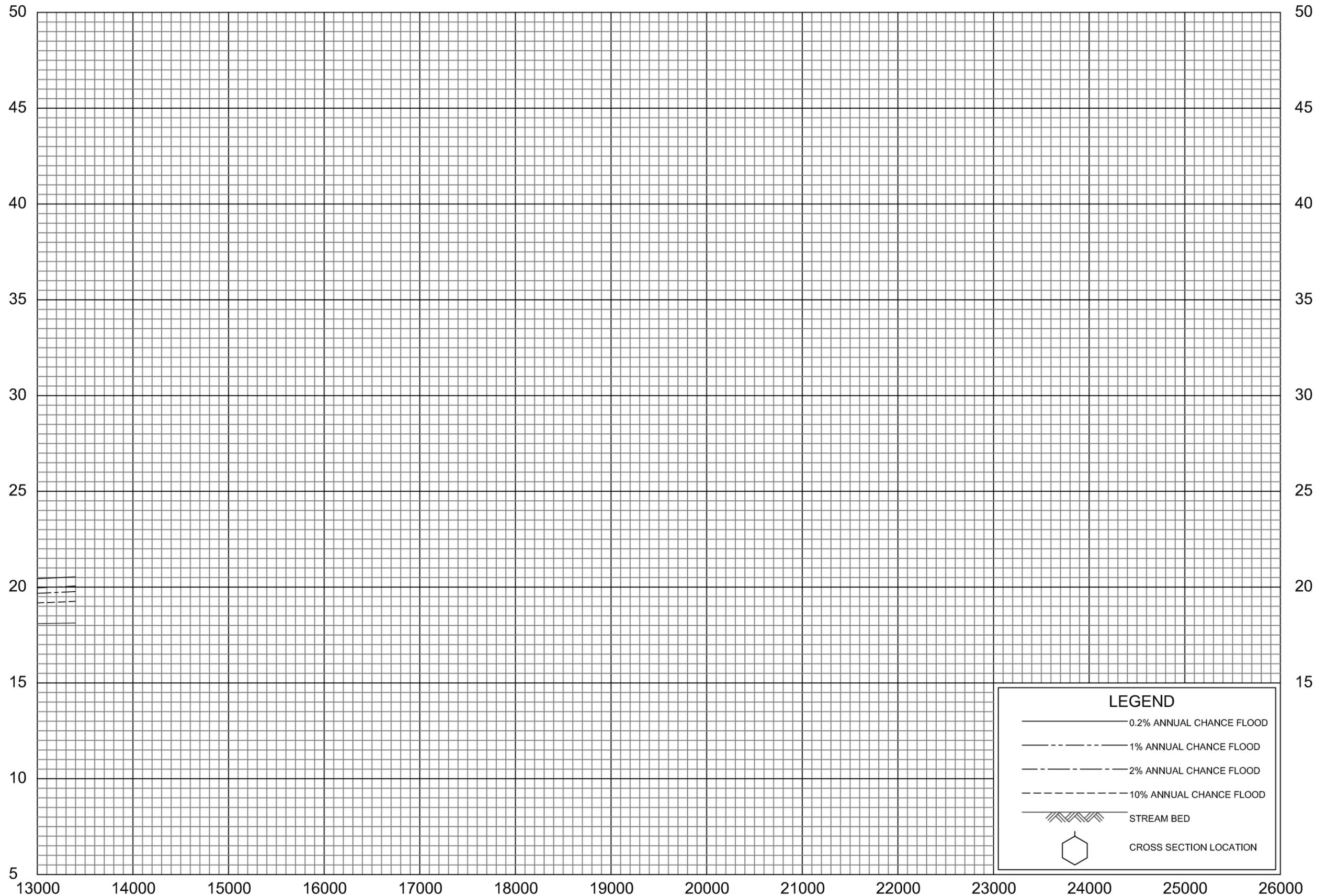
- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

PIPE MAKERS CANAL TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH PIPE MAKERS CANAL

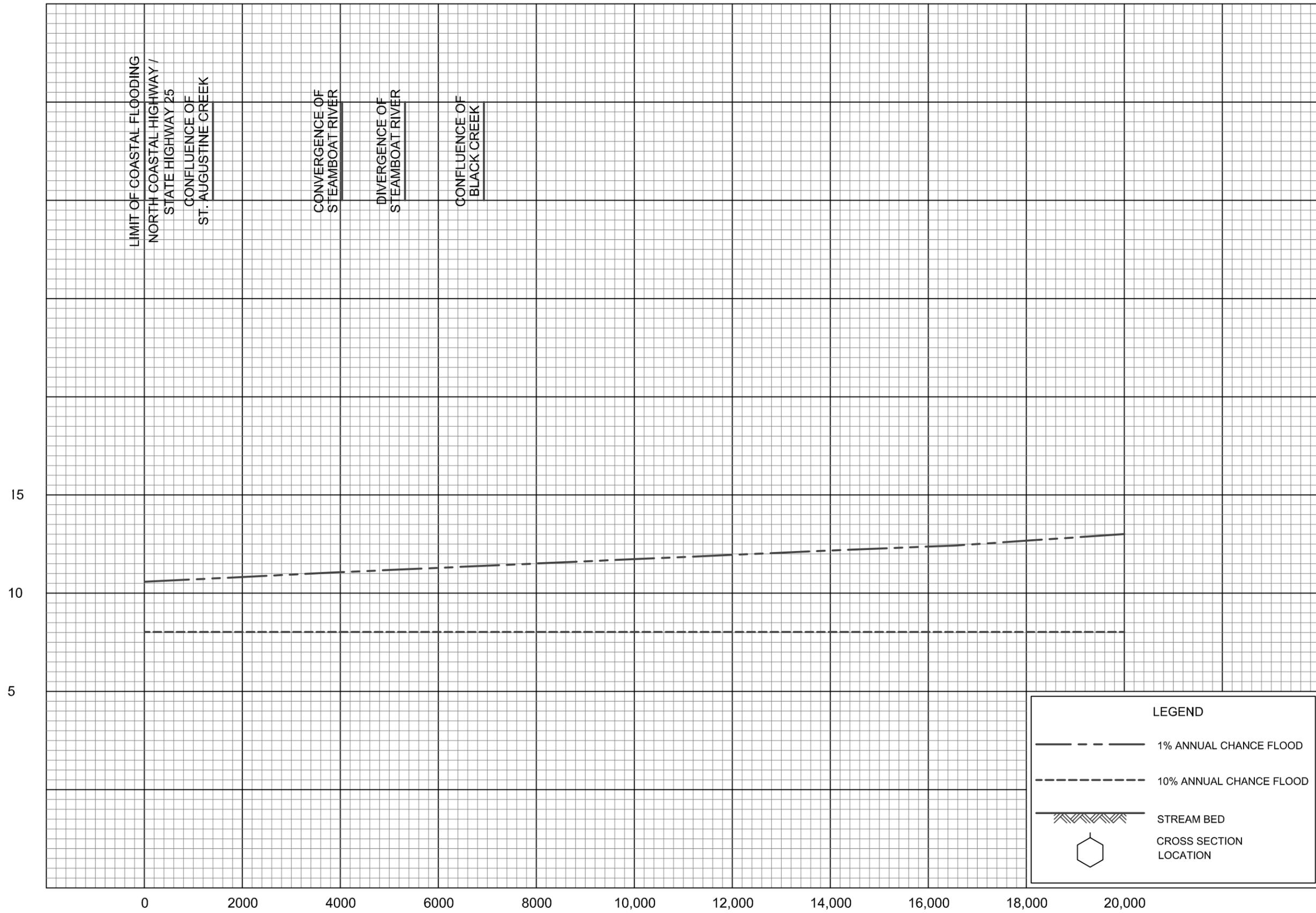
FLOOD PROFILES

PIPE MAKERS CANAL TRIBUTARY NO. 3

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

40P

ELEVATION IN FEET (NAVD 88)



LEGEND

- 1% ANNUAL CHANCE FLOOD
- - - 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION

STREAM DISTANCE IN FEET ABOVE NORTH COASTAL HIGHWAY

FLOOD PROFILES

SAVANNAH RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



20,000 22,000 24,000 26,000 28,000

STREAM DISTANCE IN FEET ABOVE NORTH COASTAL HIGHWAY

LEGEND

- 1% ANNUAL CHANCE FLOOD
- .-.- 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION

5 10 15

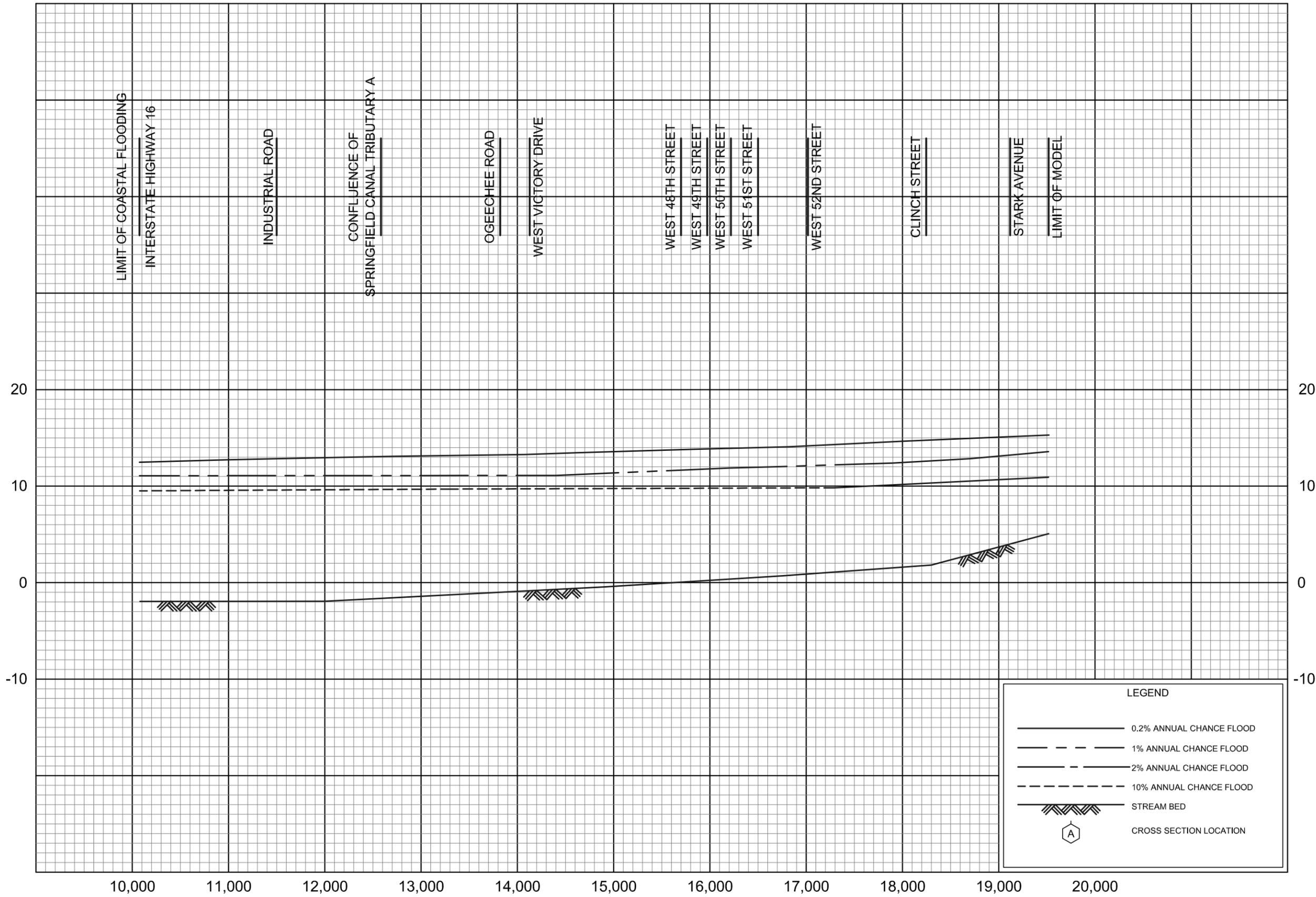
FLOOD PROFILES

SAVANNAH RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAVANNAH RIVER

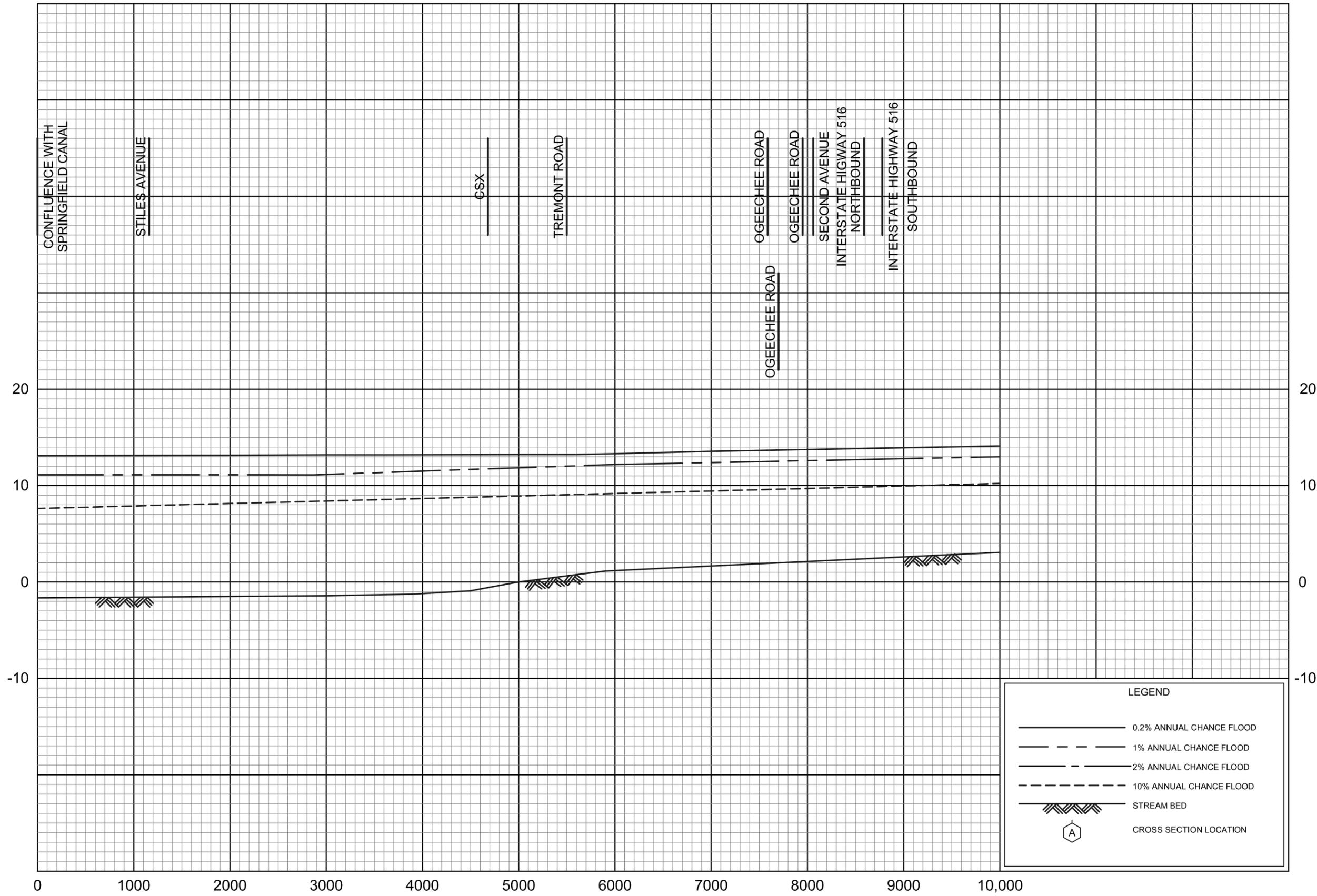
FLOOD PROFILES

SPRINGFIELD CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPRINGFIELD CANAL

LEGEND

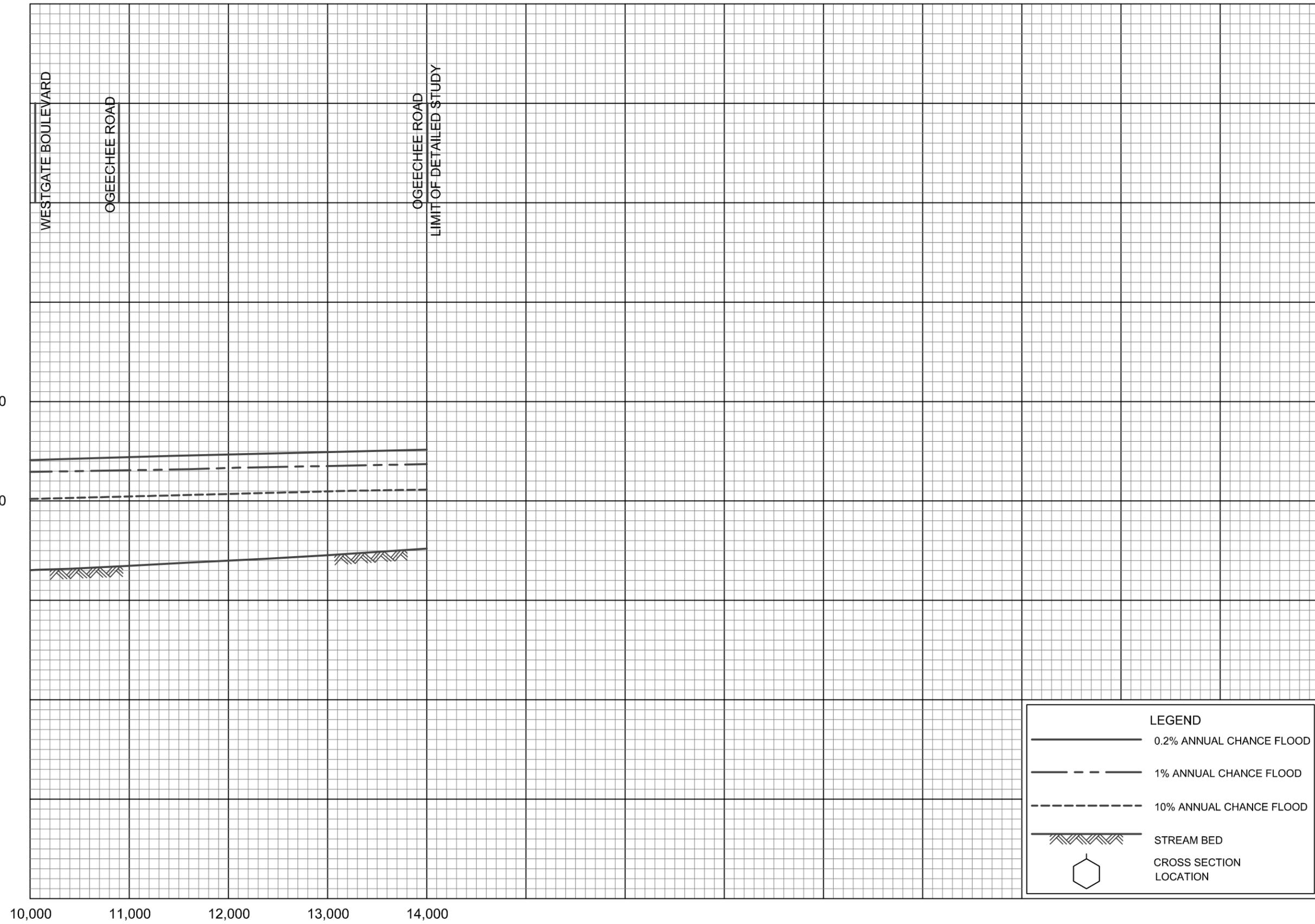
- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- CROSS SECTION LOCATION

FLOOD PROFILES

SPRINGFIELD CANAL TRIBUTARY A

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)

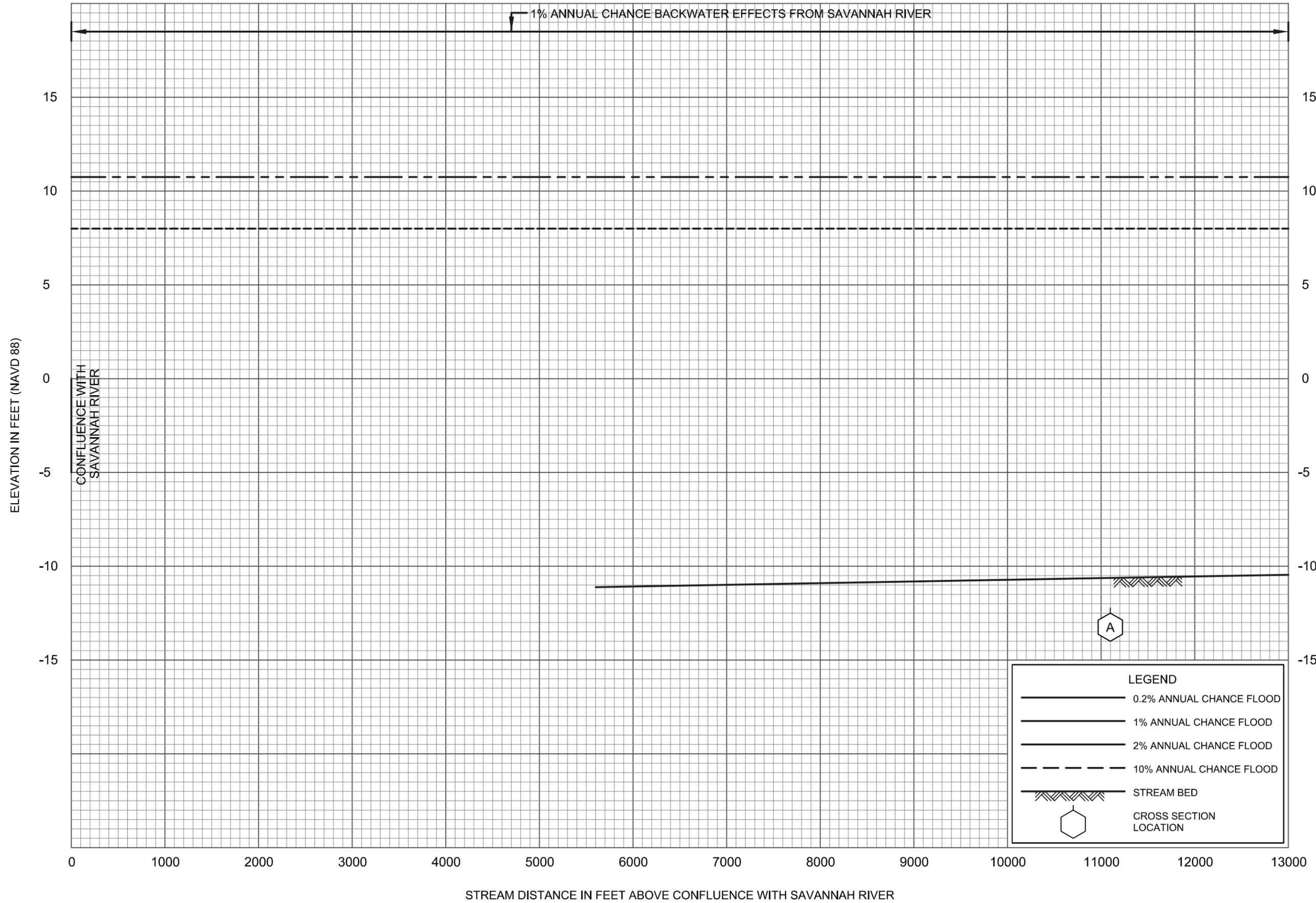


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SPRINGFIELD CANAL

ELEVATION IN FEET (NAVD 88)

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES
SPRINGFIELD CANAL TRIBUTARY A

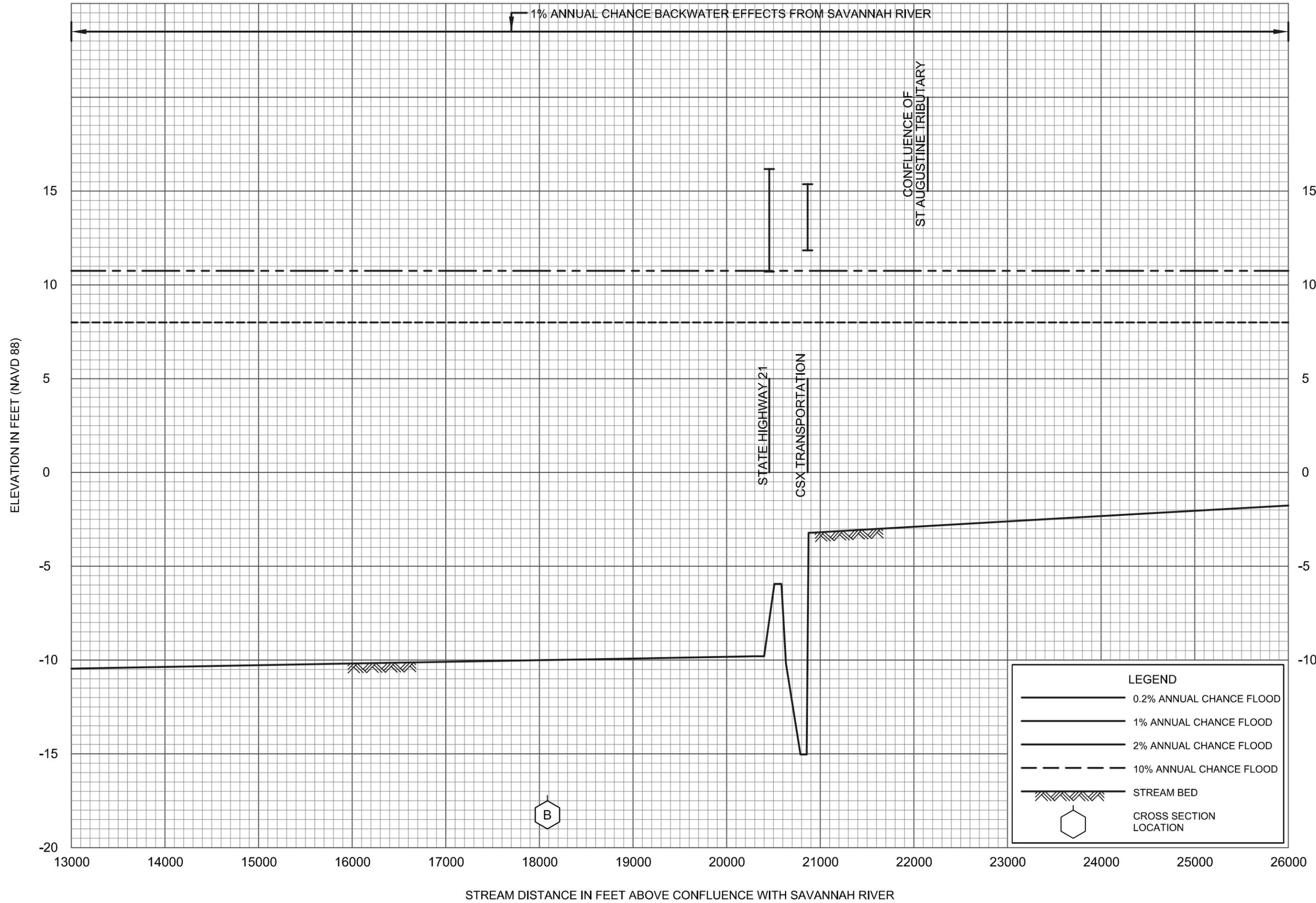


FLOOD PROFILES

ST AUGUSTINE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

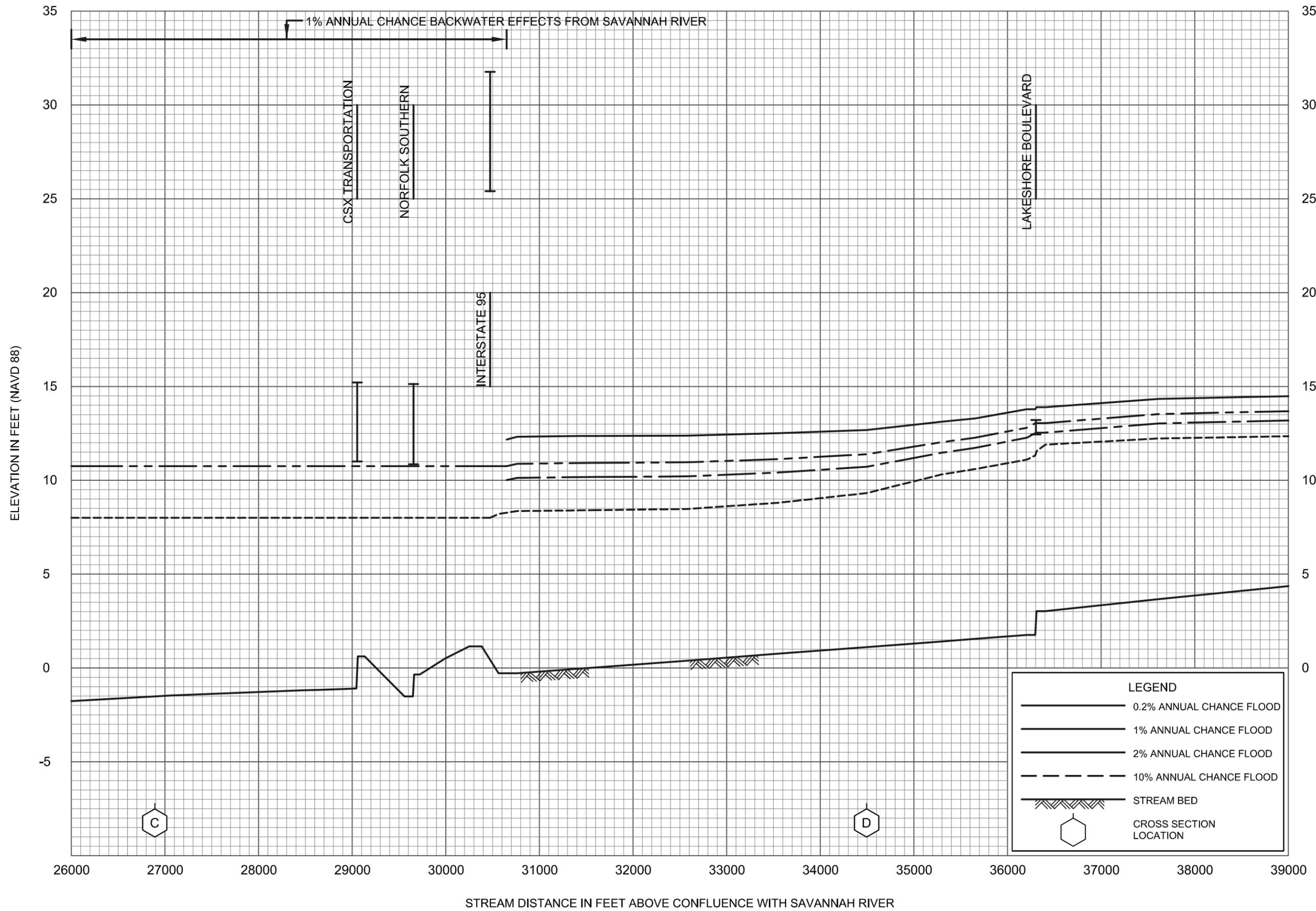


FLOOD PROFILES

ST AUGUSTINE CREEK

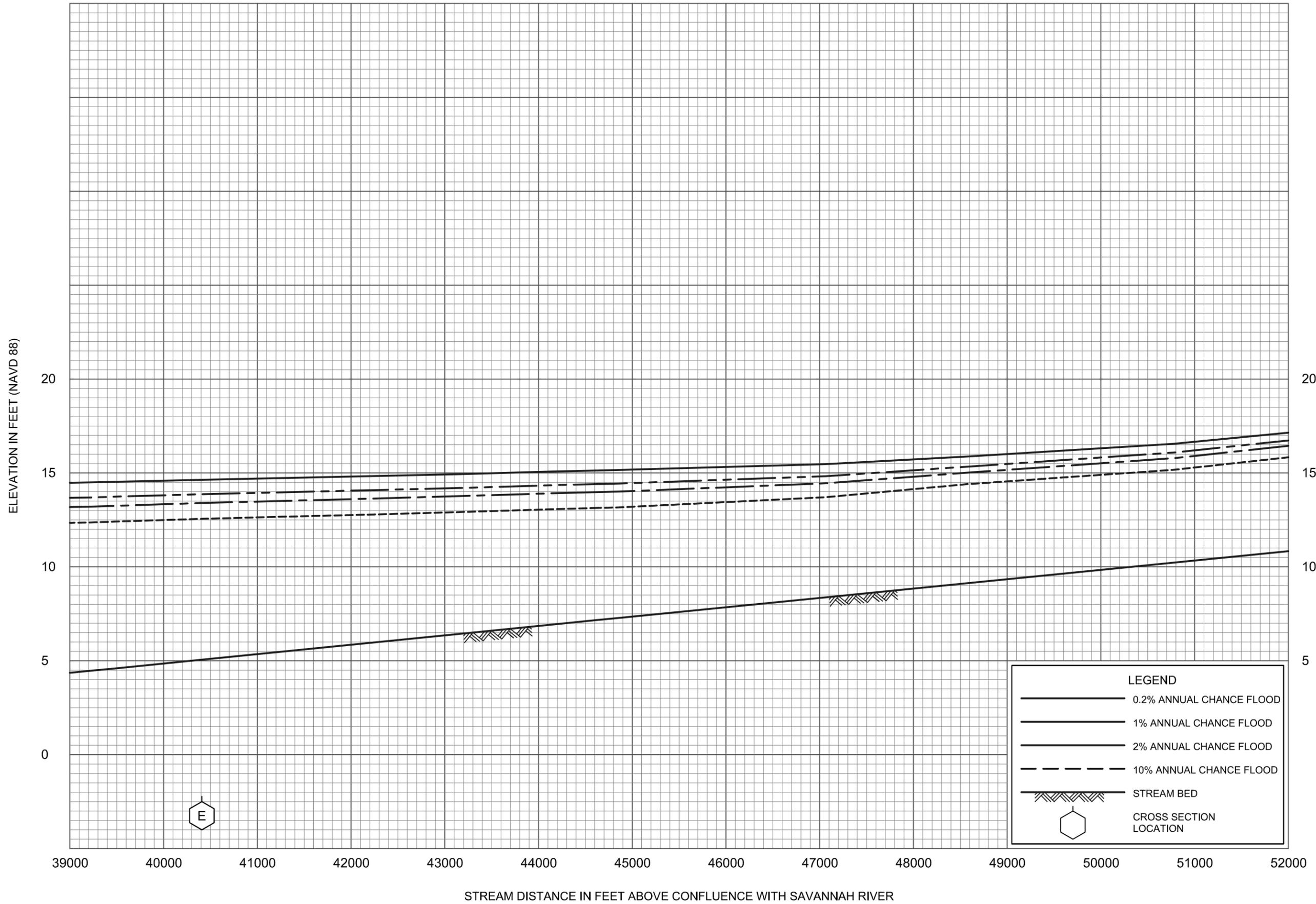
FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS



FLOOD PROFILES
ST AUGUSTINE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

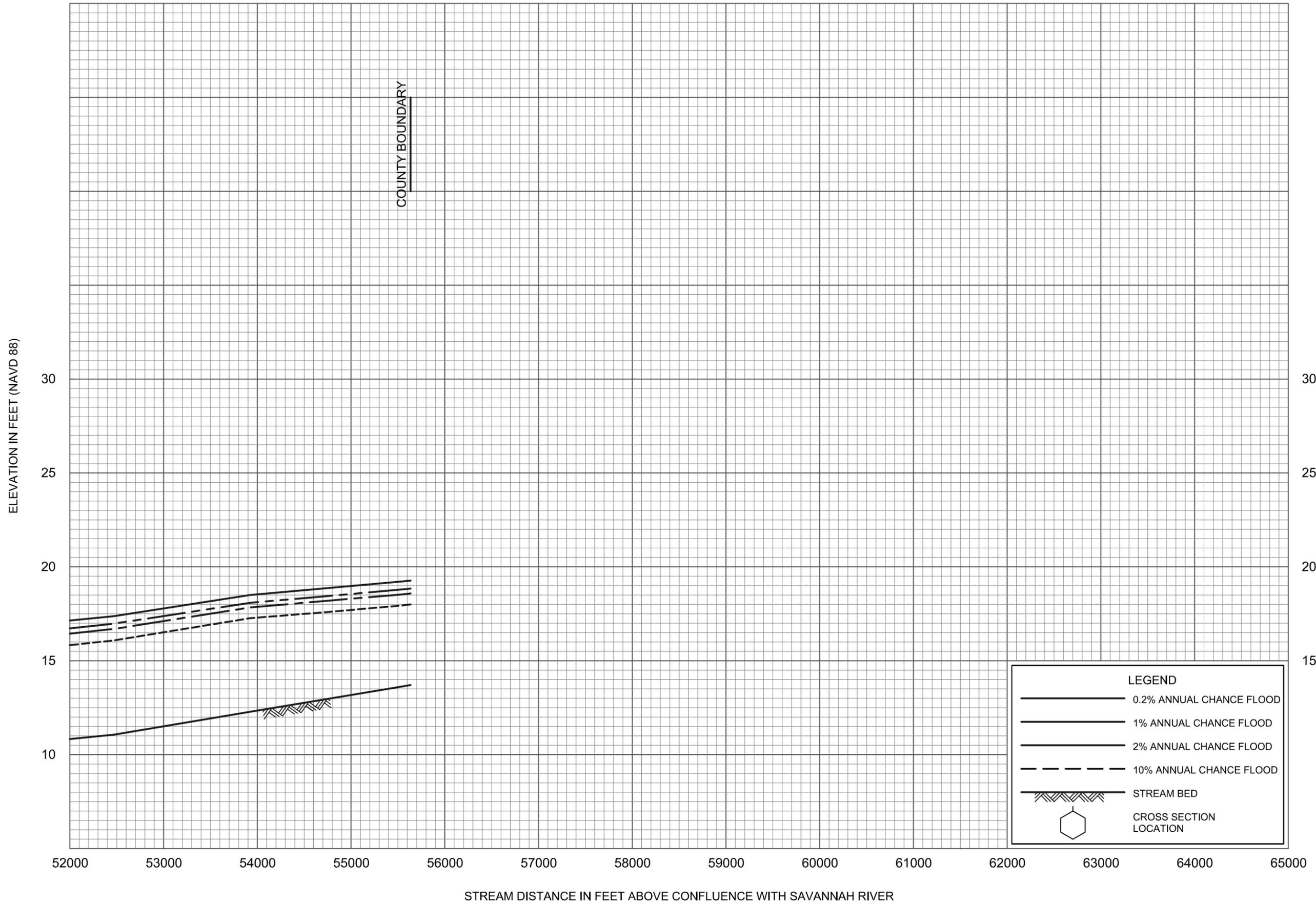


FLOOD PROFILES

ST AUGUSTINE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

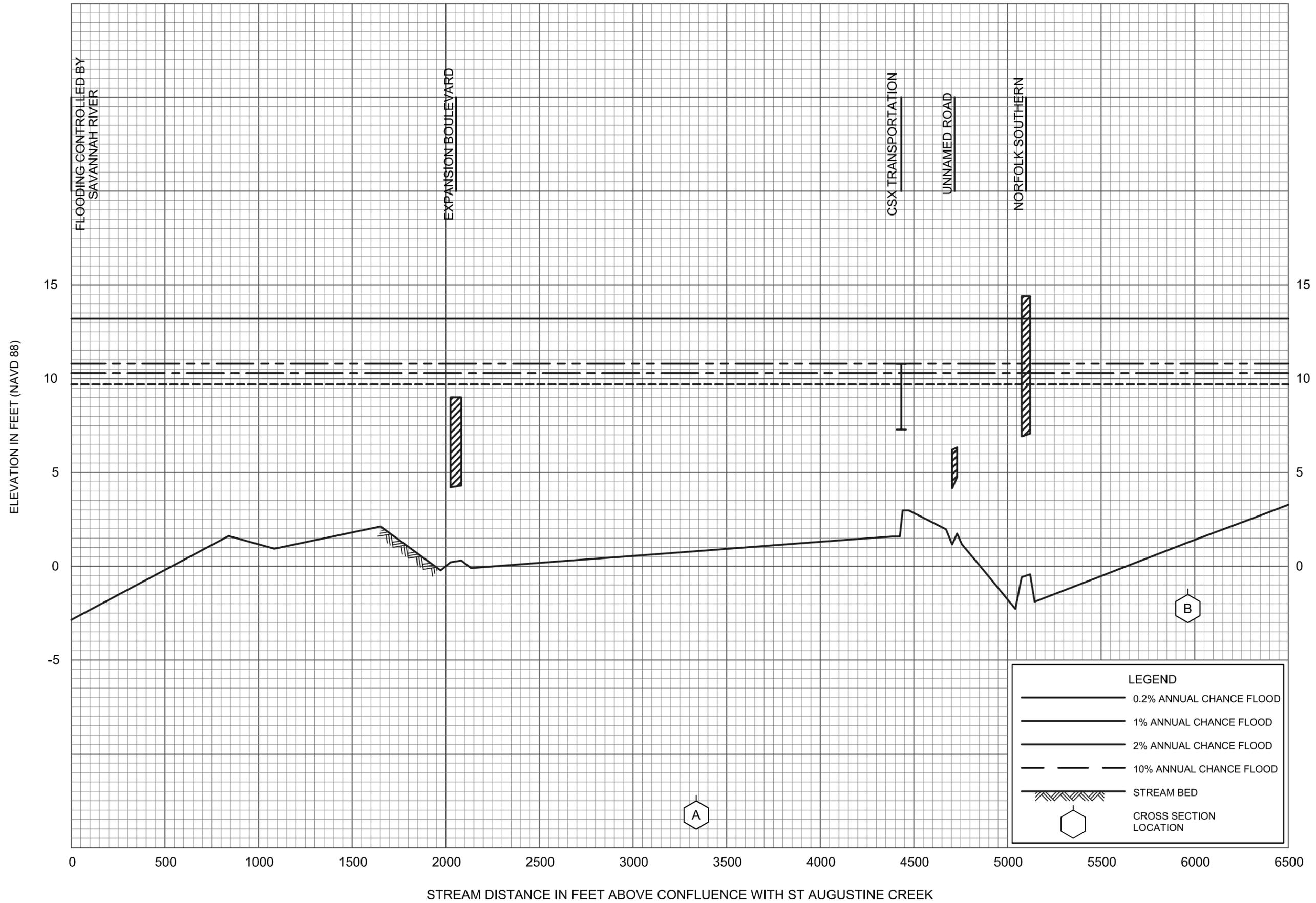


FLOOD PROFILES

ST AUGUSTINE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

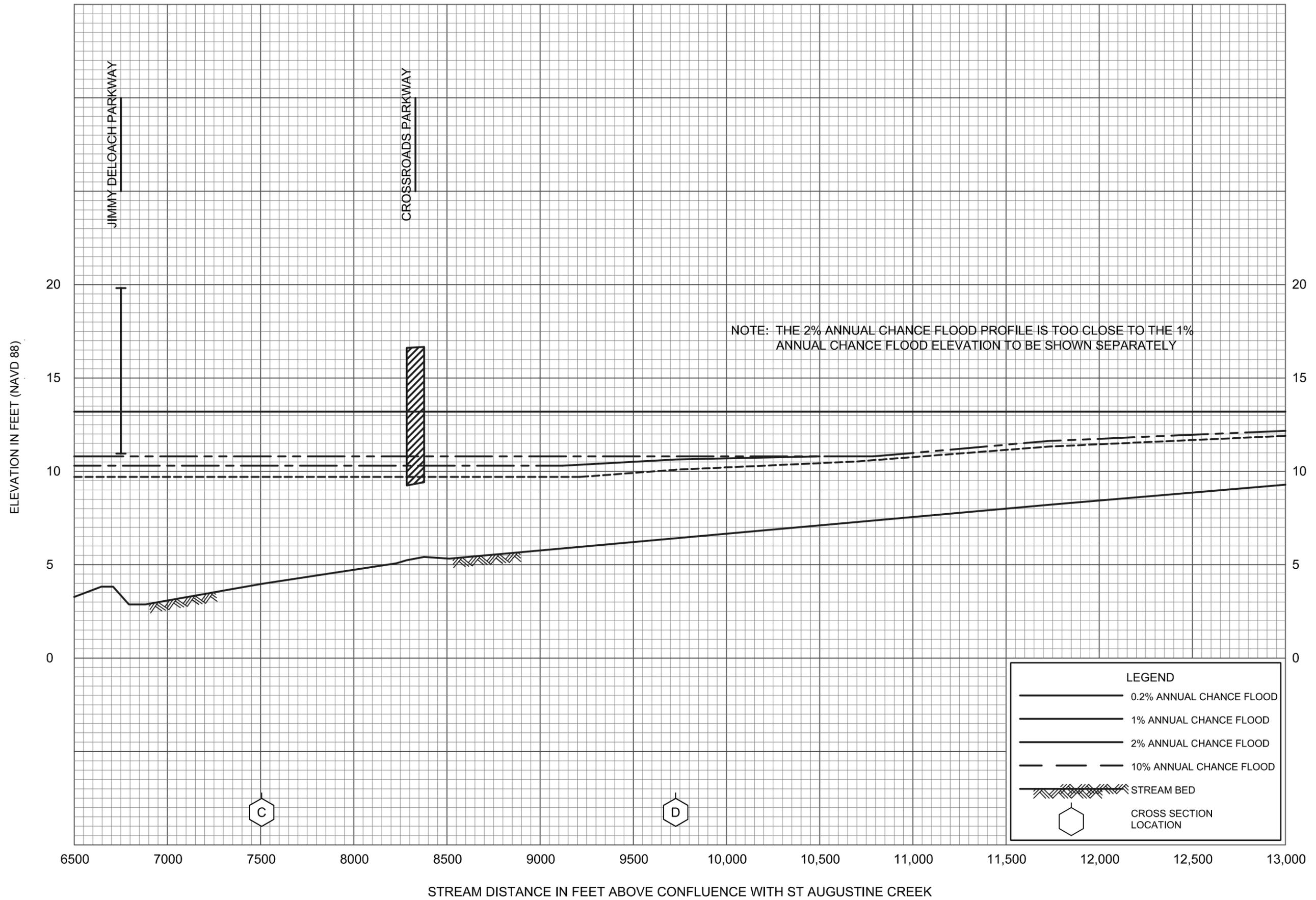
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY

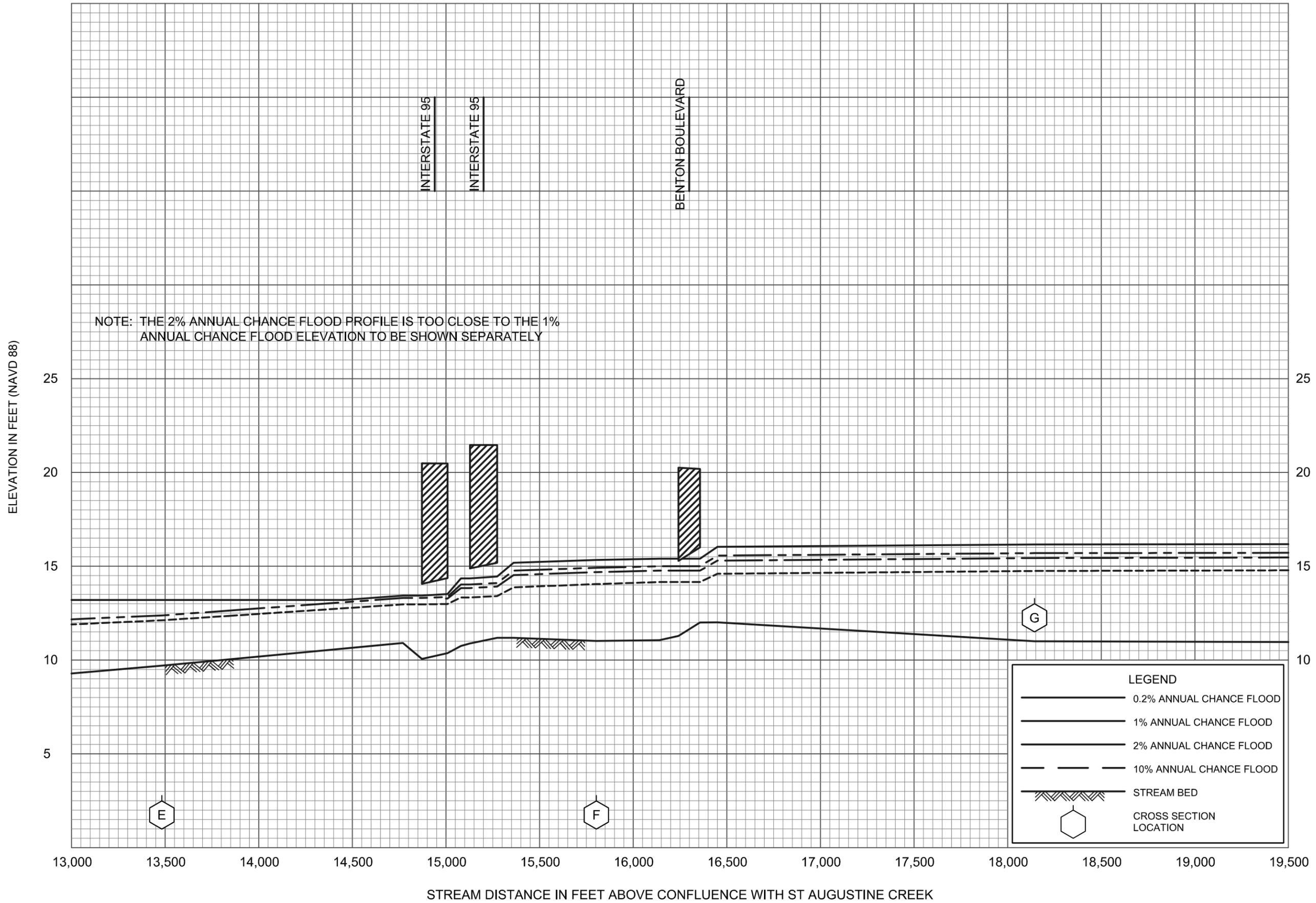
FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY

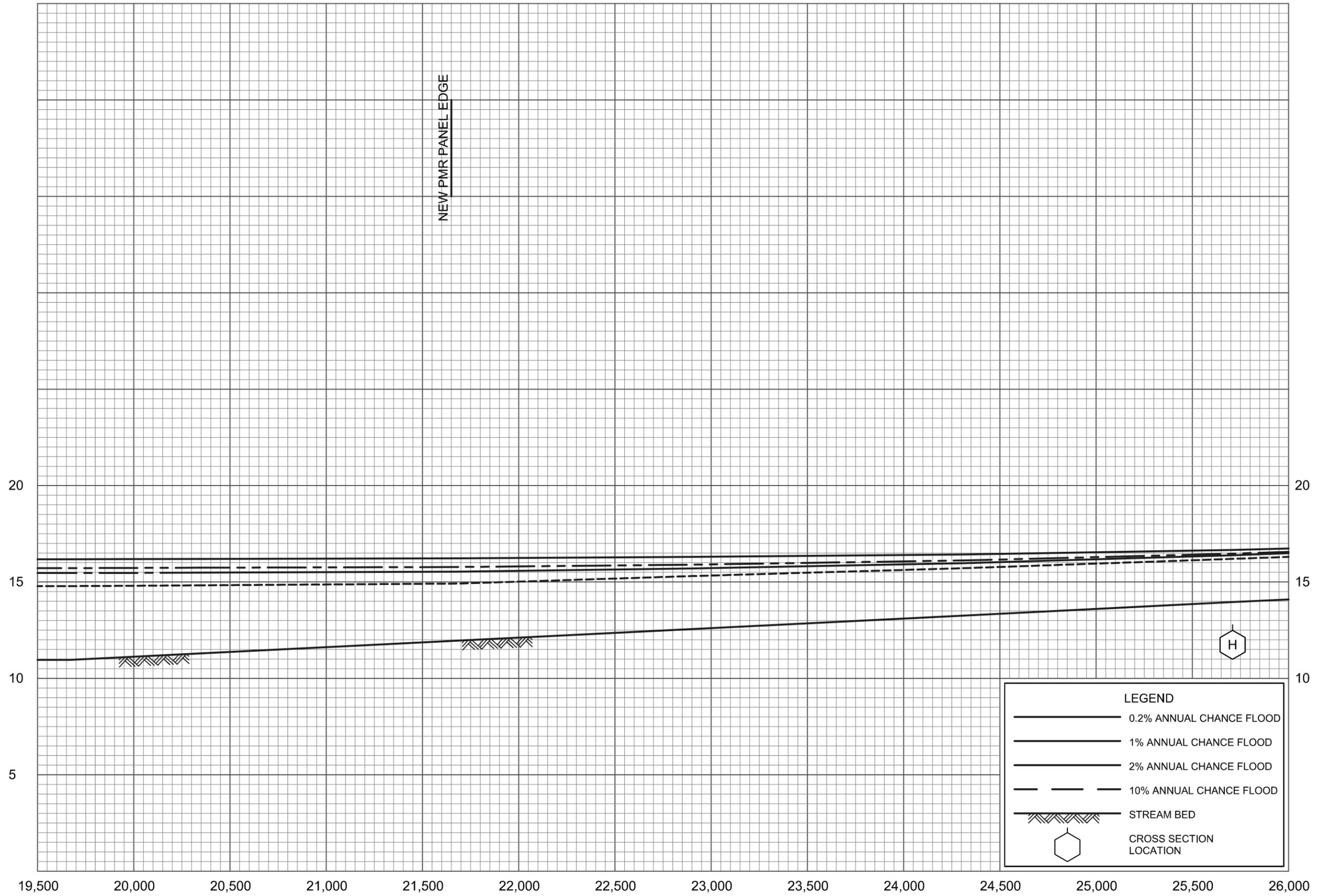
FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES
ST AUGUSTINE CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)

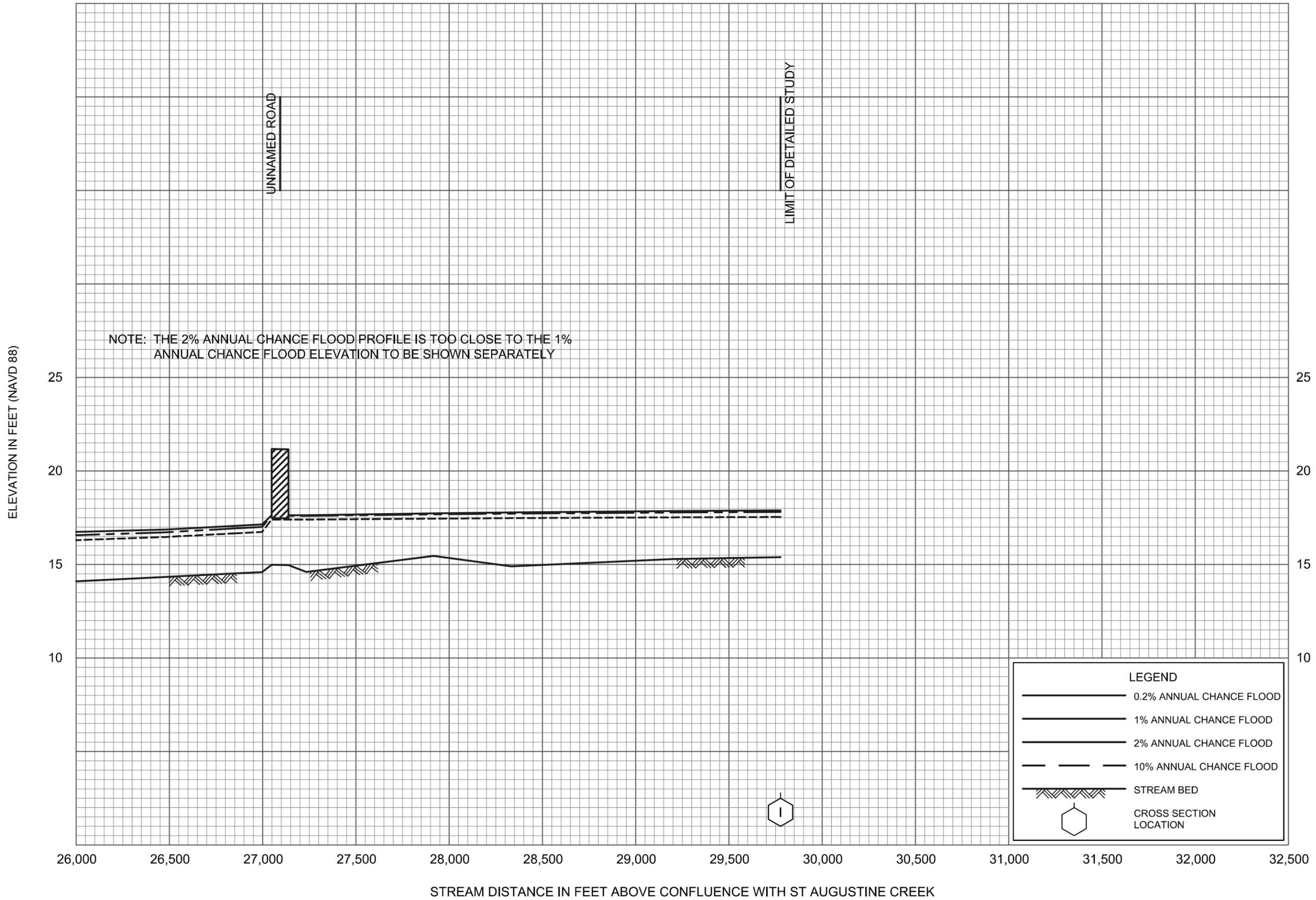


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH ST AUGUSTINE CREEK

FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY

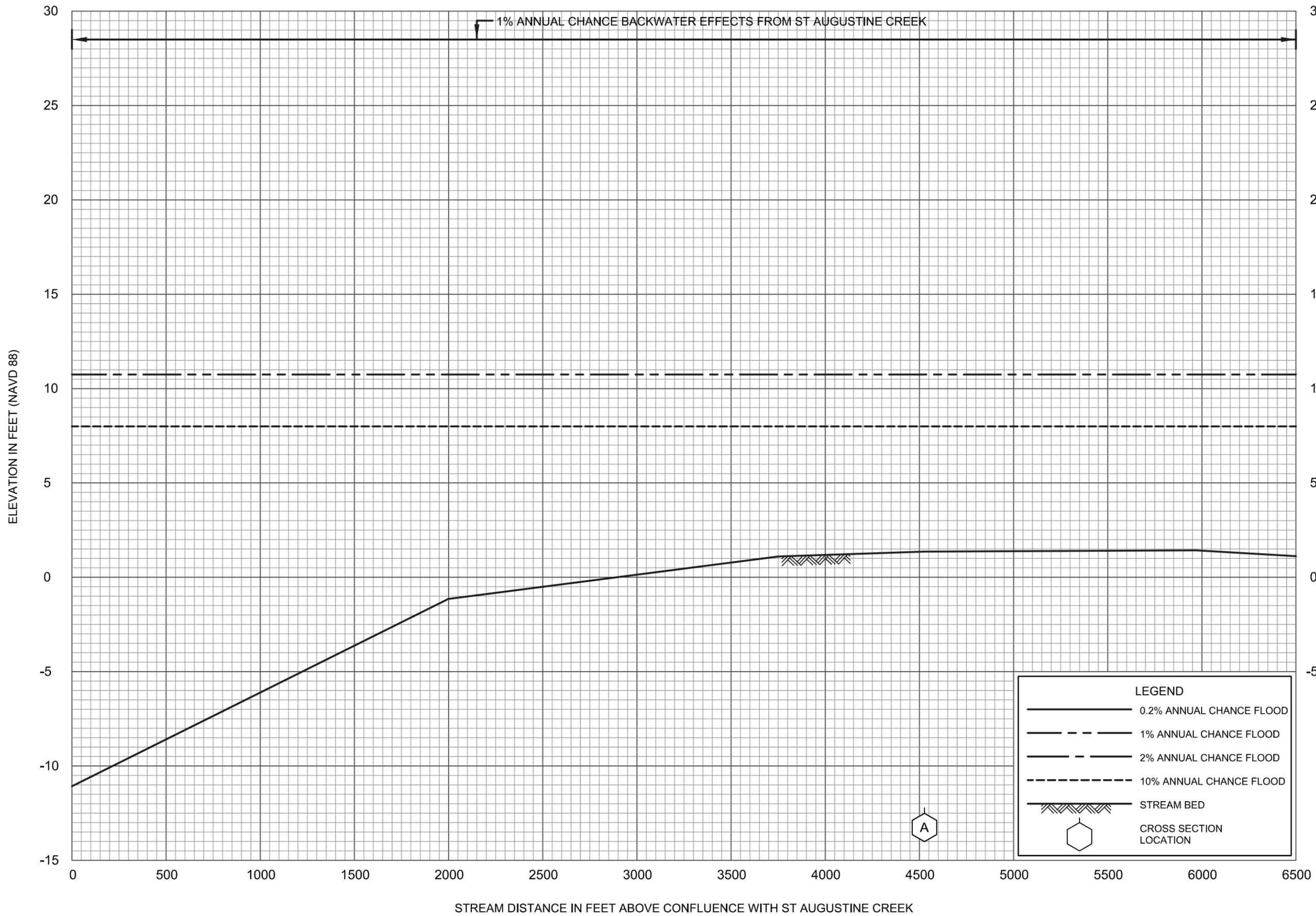
FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY

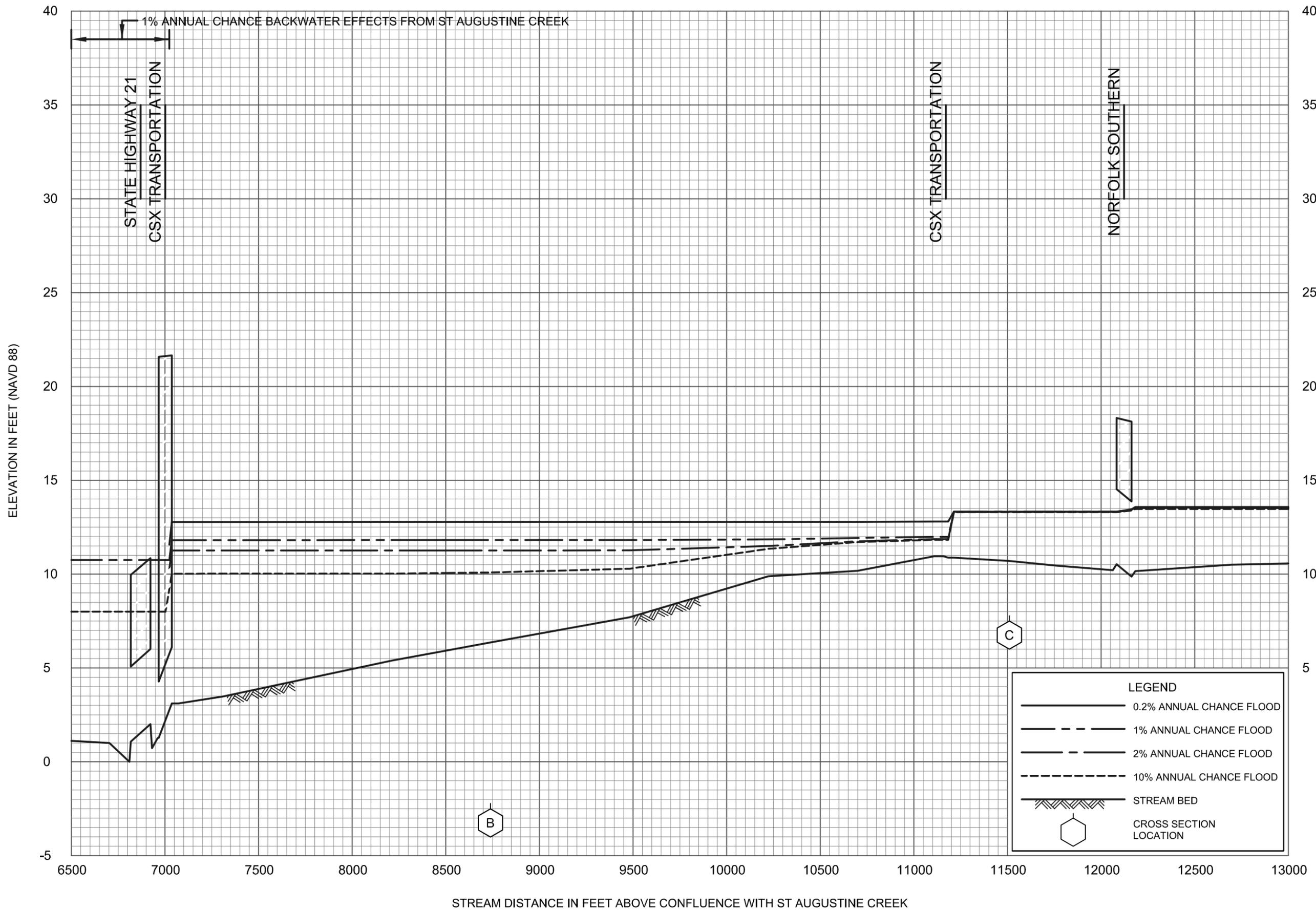
FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY 1

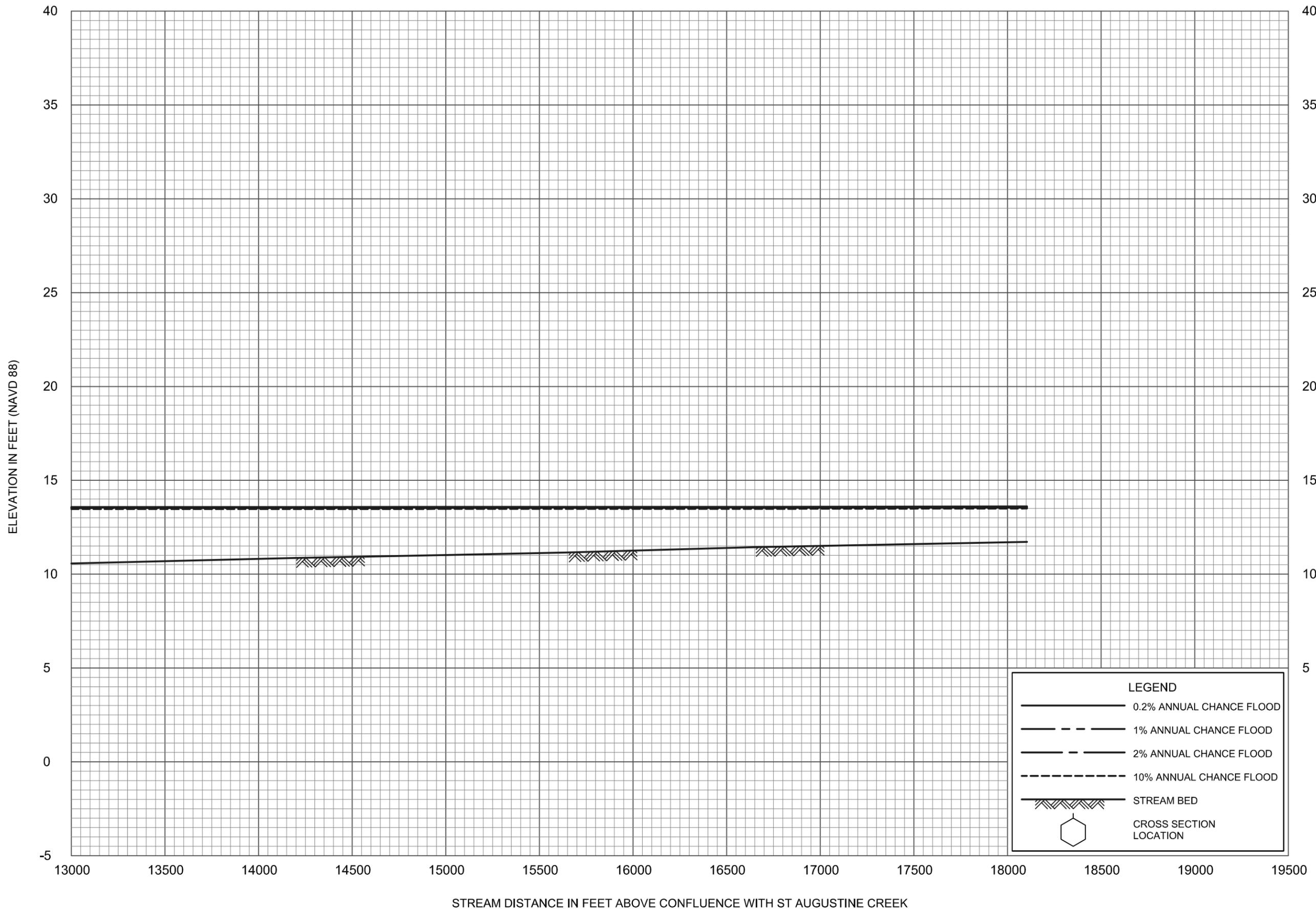
FEDERAL EMERGENCY MANAGEMENT AGENCY
 CHATHAM COUNTY, GA
 AND INCORPORATED AREAS



FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

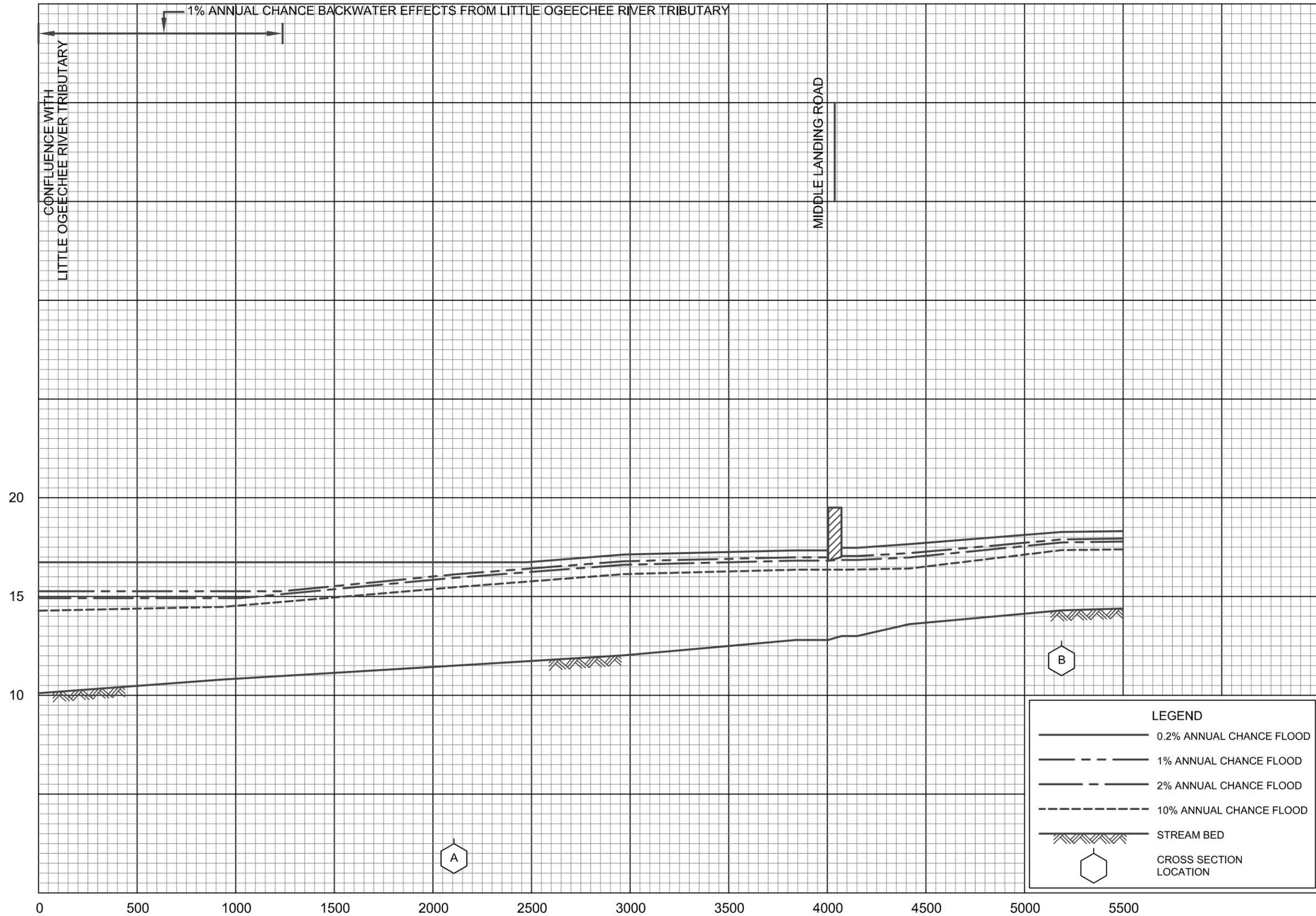


FLOOD PROFILES

ST AUGUSTINE CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
 AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



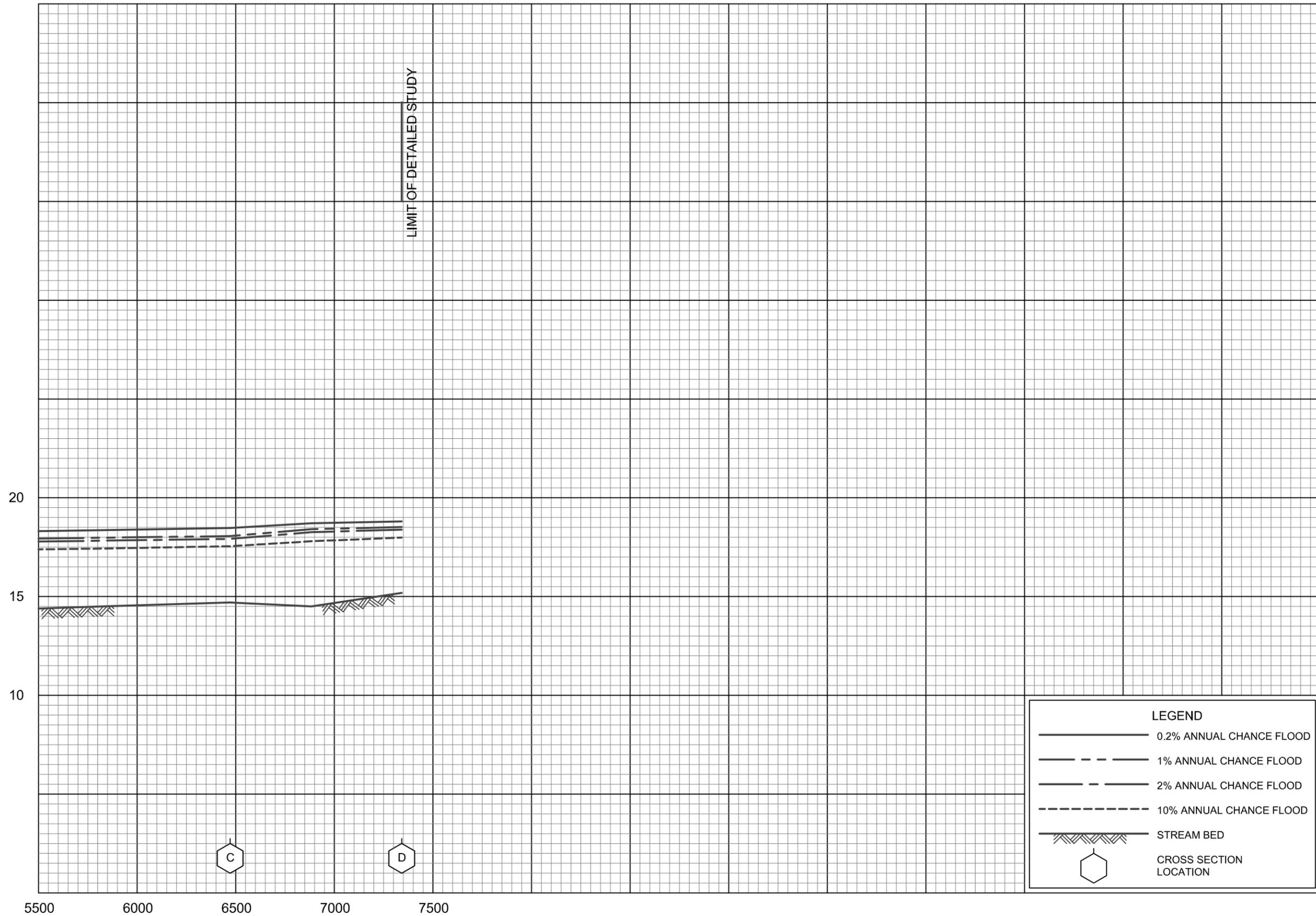
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH LITTLE OGEECHEE RIVER TRIBUTARY

FLOOD PROFILES

TRIBUTARY TO LITTLE OGEECHEE RIVER TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



LIMIT OF DETAILED STUDY

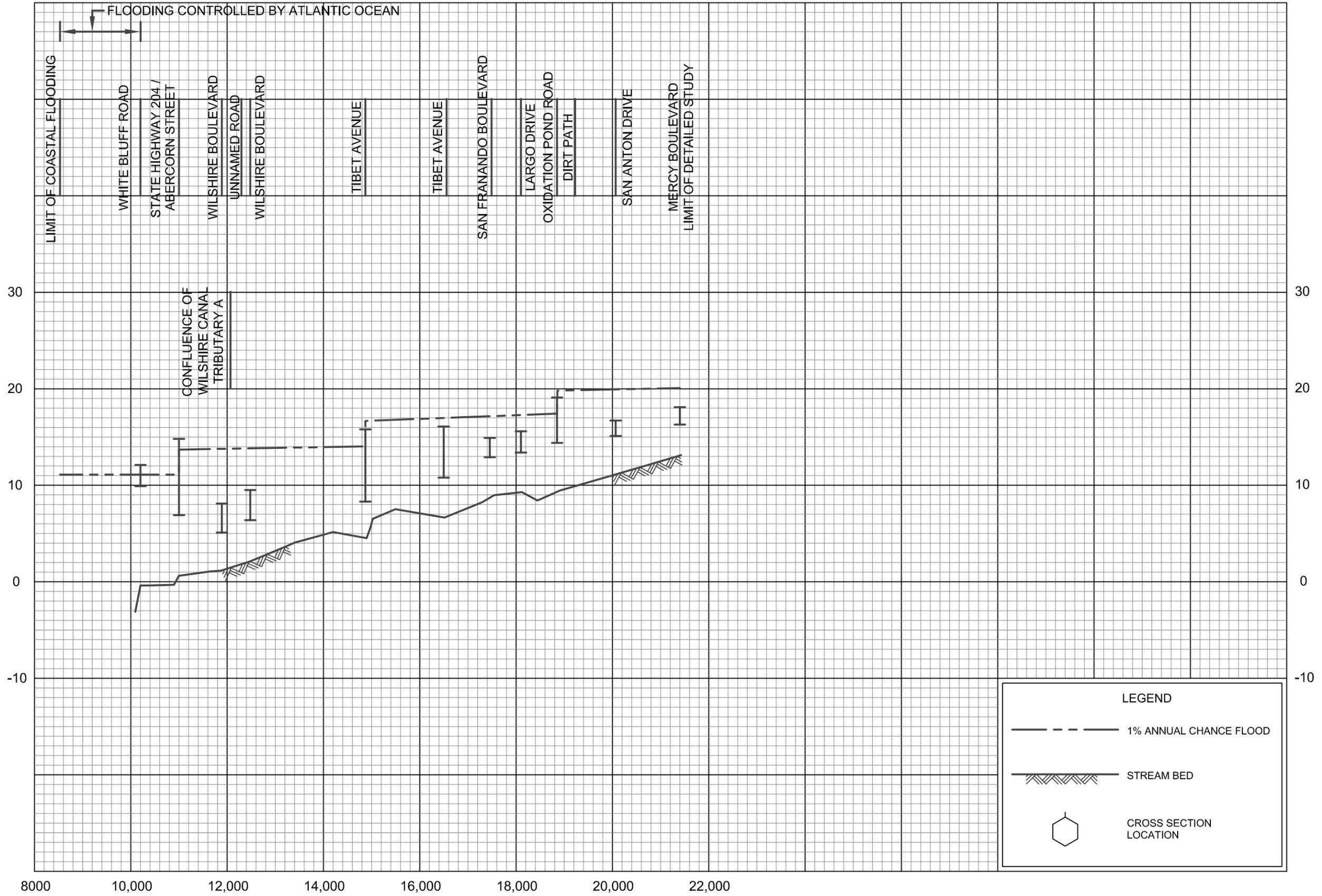
FLOOD PROFILES

TRIBUTARY TO LITTLE OGEECHEE RIVER TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)

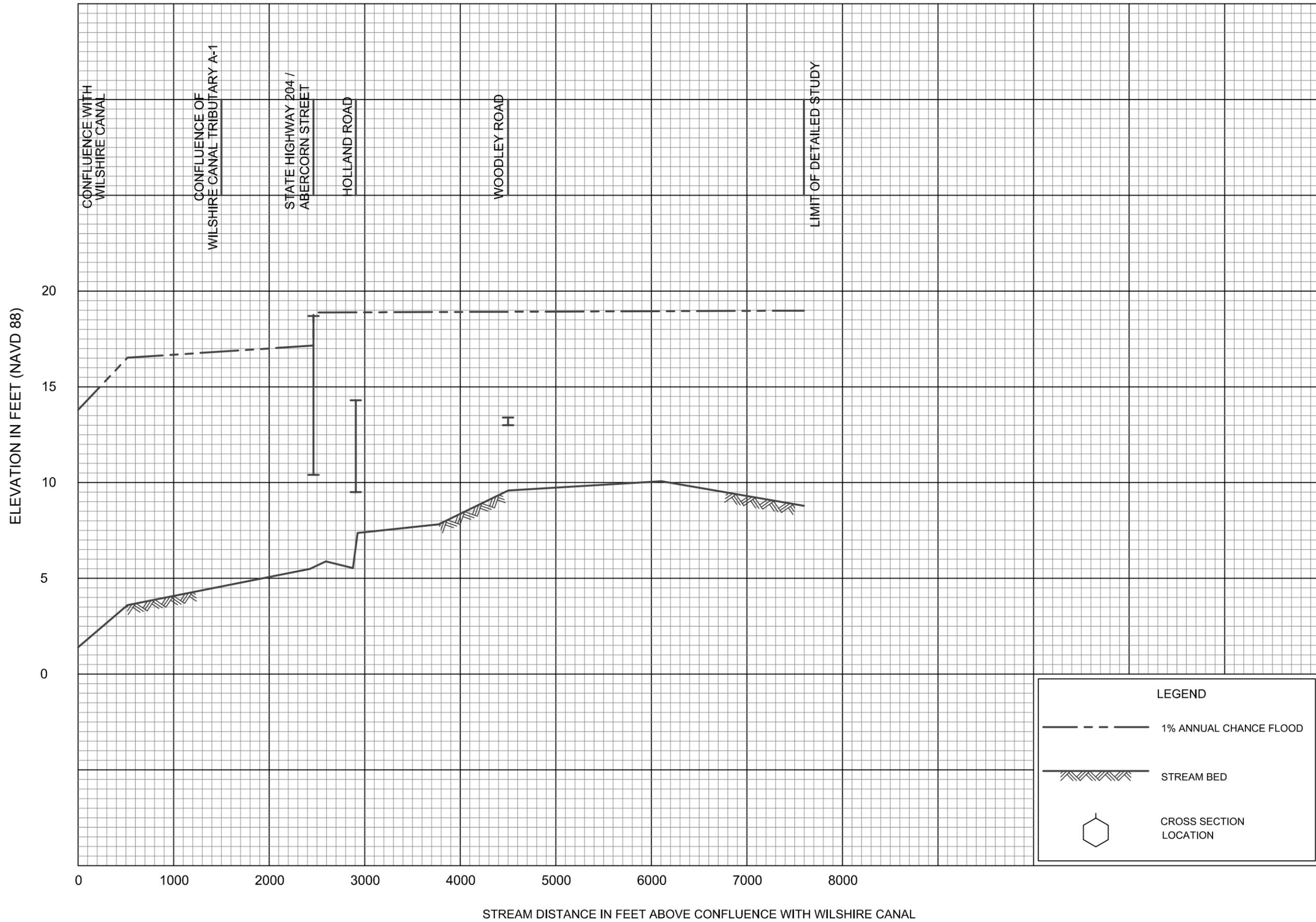


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH VERNON RIVER

FLOOD PROFILES

WILSHIRE CANAL

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



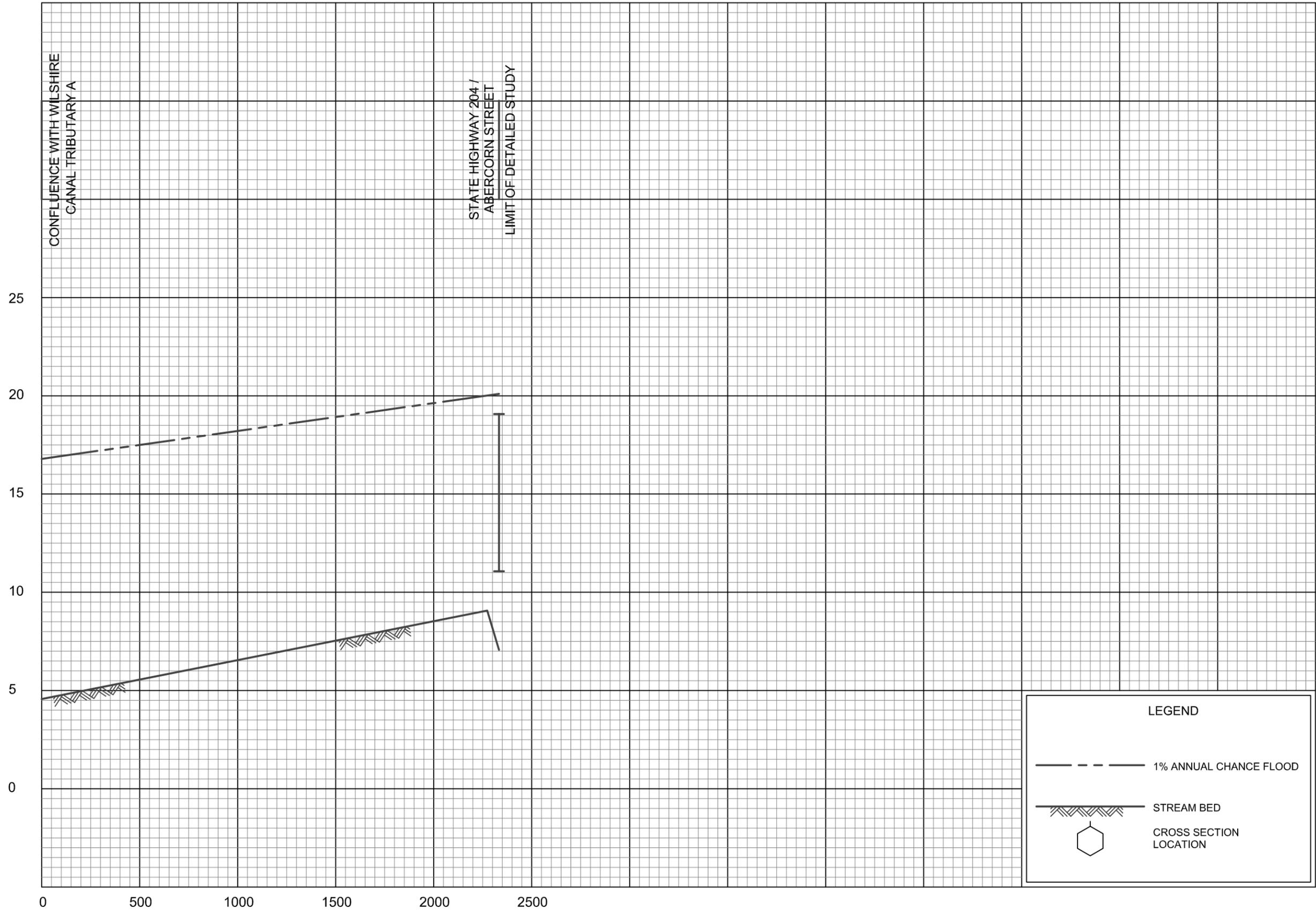
FLOOD PROFILES

WILSHIRE CANAL TRIBUTARY A

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)

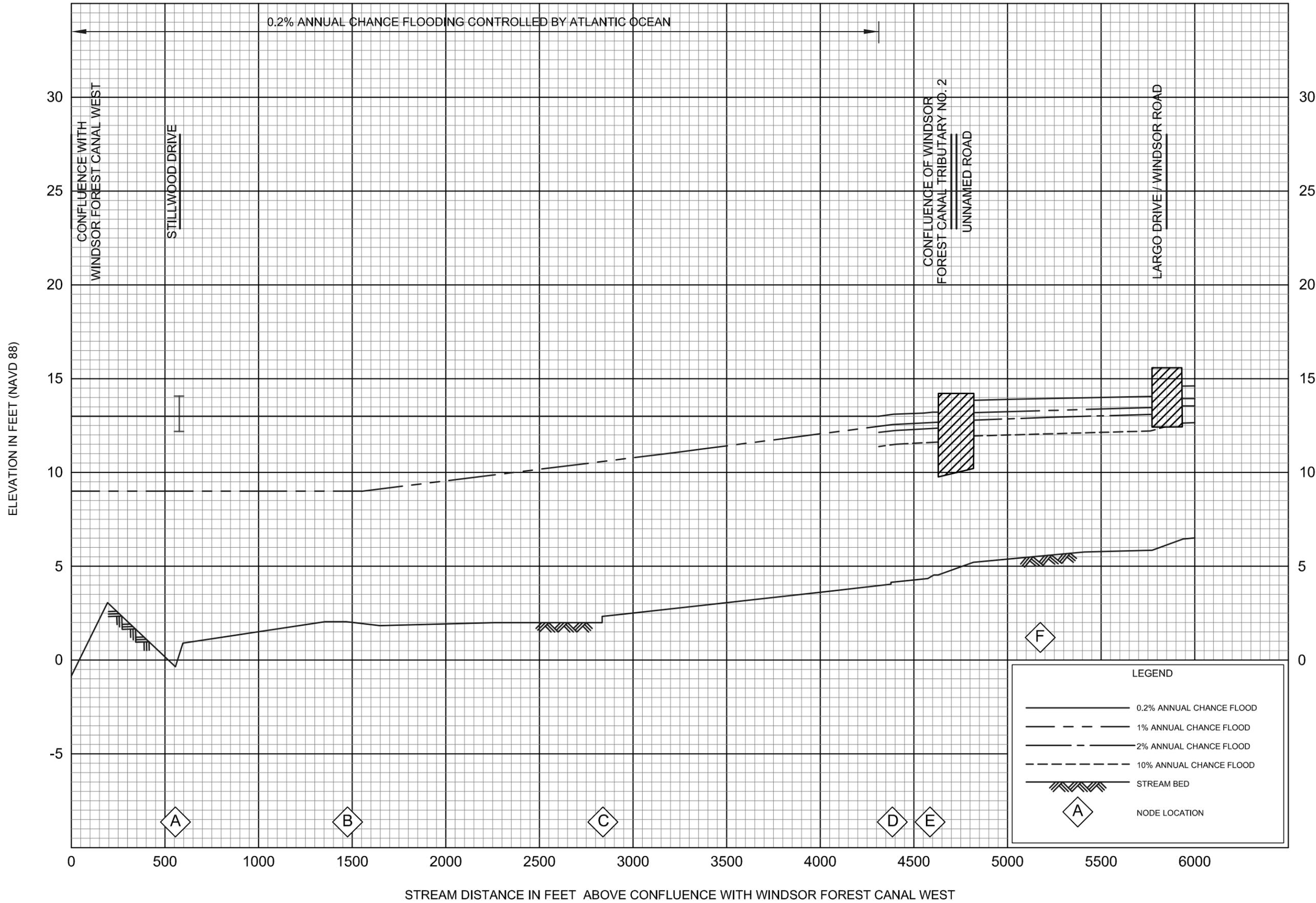


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WILSHIRE CANAL TRIBUTARY A

FLOOD PROFILES

WILSHIRE CANAL TRIBUTARY A-1

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS



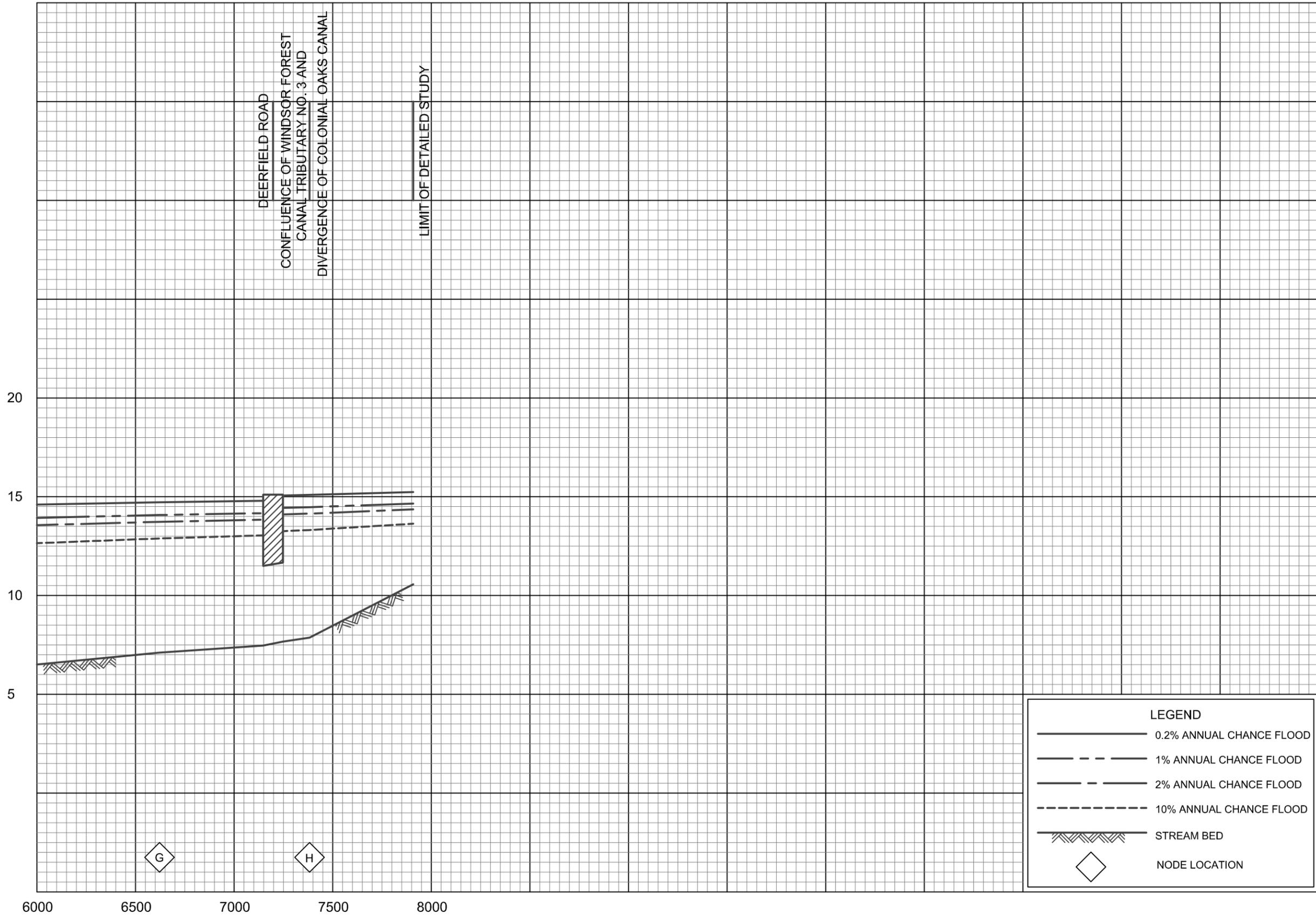
FLOOD PROFILES

WINDSOR FOREST CANAL EAST

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



6000 6500 7000 7500 8000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WINDSOR FOREST CANAL WEST

LEGEND

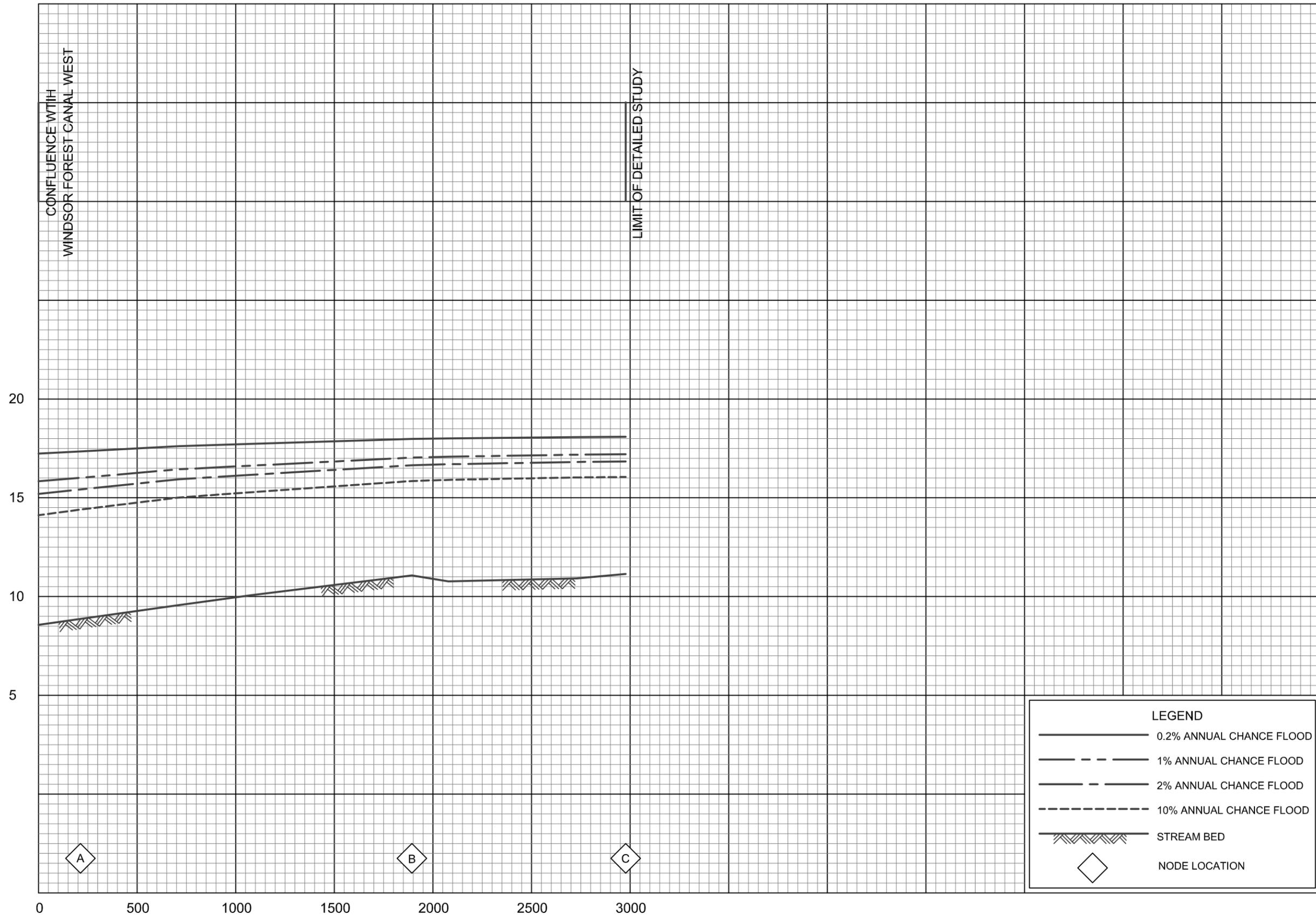
- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- NODE LOCATION

FLOOD PROFILES

WINDSOR FOREST CANAL EAST

FEDERAL EMERGENCY MANAGEMENT AGENCY
CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WINDSOR FOREST CANAL WEST

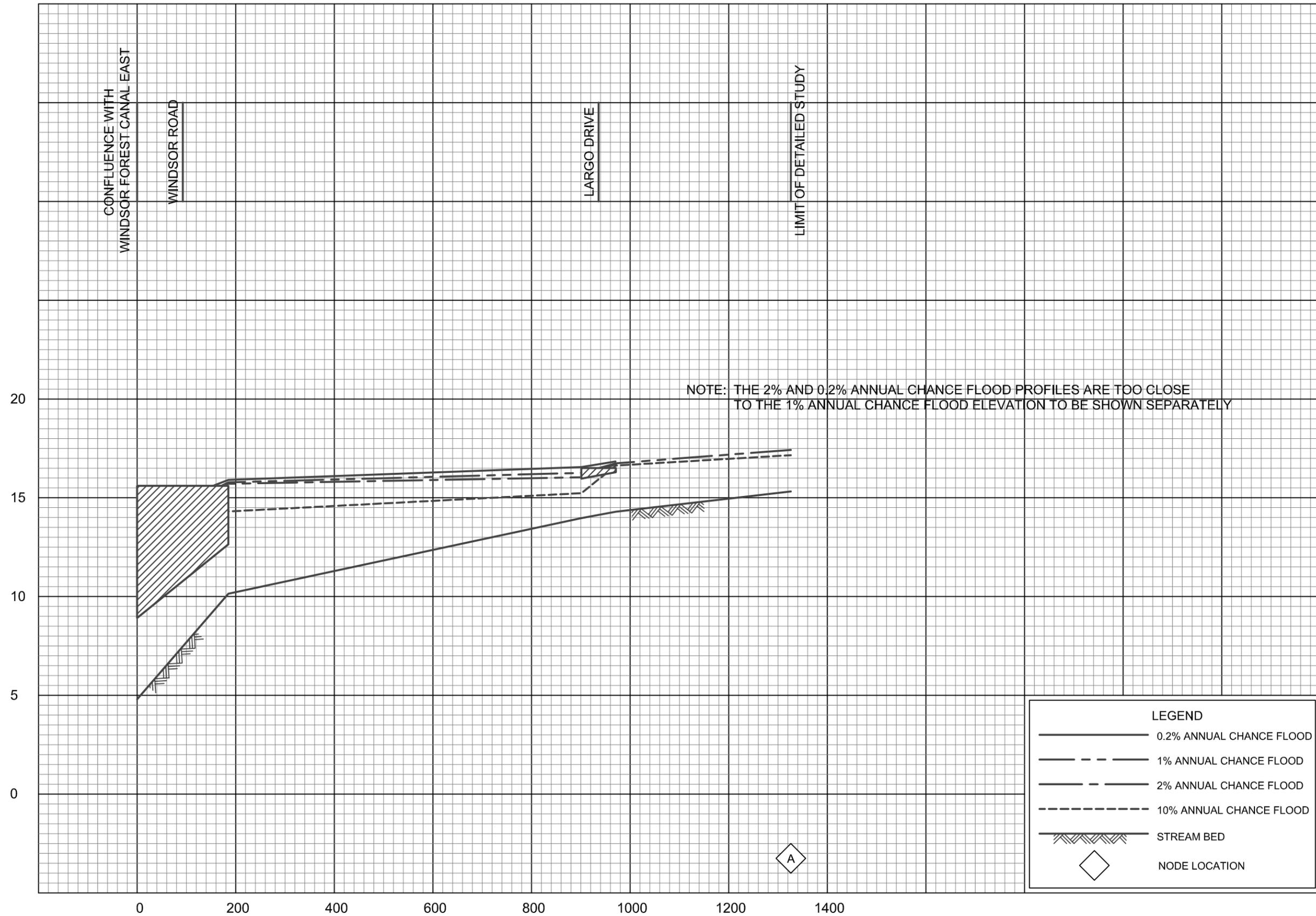
FLOOD PROFILES

WINDSOR FOREST CANAL TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WINDSOR FOREST CANAL EAST

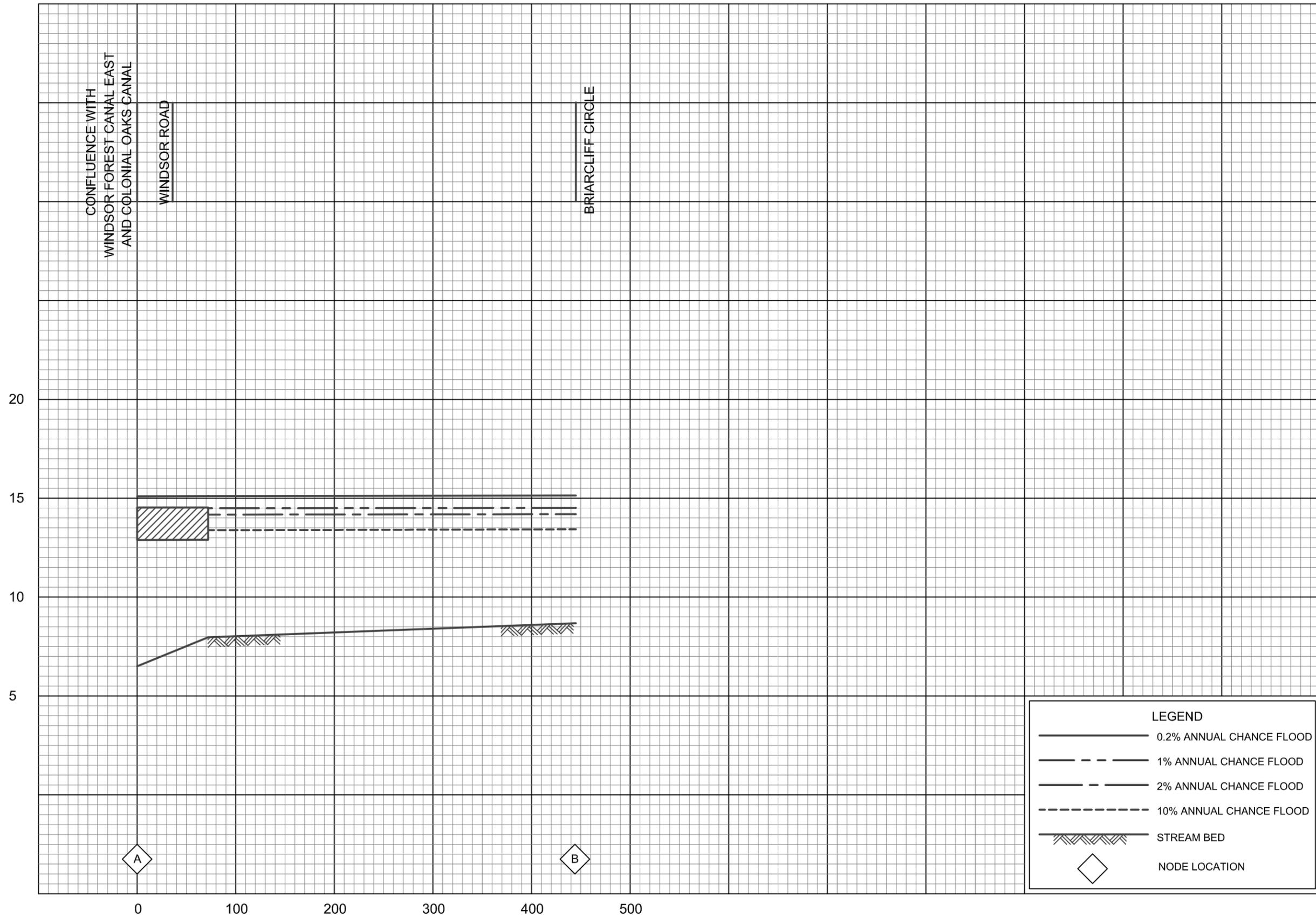
FLOOD PROFILES

WINDSOR FOREST CANAL TRIBUTARY NO. 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH WINDSOR FOREST CANAL EAST AND COLONIAL OAKS CANAL

FLOOD PROFILES

WINDSOR FOREST CANAL TRIBUTARY NO. 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHATHAM COUNTY, GA
AND INCORPORATED AREAS

