

FLOOD INSURANCE STUDY



SIMPSON COUNTY, MISSISSIPPI AND INCORPORATED AREAS

SIMPSON COUNTY



COMMUNITY NAME	COMMUNITY NUMBER
BRAXTON, VILLAGE OF	280156
D'LO, TOWN OF	280157
MAGEE, CITY OF	280158
MENDENHALL, CITY OF	280159
SIMPSON COUNTY (UNINCORPORATED AREAS)	280281

EFFECTIVE:



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
28127CV000A

NOTICE TO
FLOOD INSURANCE STUDY USERS

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

Selected Flood Insurance Rate Map panels for this community contain information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways, cross sections),. In addition, former flood hazard zone designations have been changed as follows:

Old Zone(s)	New Zone
A1 through A30	AE
V1through V30	VE
B	X
C	X

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

Initial Countywide FIS Report Effective Date:

Revised Countywide FIS Report Dates:

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**FLOOD INSURANCE STUDY
SIMPSON COUNTY, MISSISSIPPI AND INCORPORATED AREAS**

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the FIS reports and/or Flood Insurance Rate Maps (FIRMs) in the geographic area of Simpson County, Mississippi, including the Cities of Magee and Mendenhall, the Town of D'Lo, the Village of Braxton, and unincorporated areas of Simpson County (hereinafter referred to collectively as Simpson County).

This FIS aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates. This information will also be used by Simpson County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and by local and regional planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

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

1.2 Authority and Acknowledgments

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

March 1980, Simpson County (Unincorporated Areas) FIS

The hydrologic and hydraulic analyses for this study were performed by Michael Baker, Jr., Inc., for the Federal Insurance Administration, under Contract No. H-4631. This study, which was completed in April 1979, covered all significant flooding sources affecting the unincorporated areas of Simpson County.

June 1980, Town of D'Lo FIS

The hydrologic and hydraulic analyses for this study were performed by Michael Baker, Jr., Inc., for the Federal Insurance Administration, under Contract No. H-4631. This work, which was completed in May 1979, covered all significant flooding sources affecting the Town of D'Lo.

February 1980, City of Magee FIS

The hydrologic and hydraulic analyses for this study were performed by Michael Baker, Jr., Inc., for the Federal Insurance Administration, under Contract No. H-4631. This work, which was completed in March 1979, covered all significant flooding sources affecting the City of Magee.

March 1980, City of Mendenhall FIS

The hydrologic and hydraulic analyses for this study were performed by Michael Baker, Jr., Inc., for the Federal Insurance Administration under Contract No. H-4631. This work, which was completed in June 1979, covered all significant flooding sources in the City of Mendenhall.

This Countywide FIS

The hydrologic and hydraulic analyses for this countywide FIS were performed by the State of Mississippi for the Federal Emergency Management Agency (FEMA), under Contract No. EMA-2007-CA-5774. This study was completed in August 2009.

The digital base map information files were provided by the U.S. Army Corps of Engineers—Vicksburg District, 4155 East Clay Street, Vicksburg, MS 39183, phone number (601) 631-5053. The digital orthophotography was acquired in March 2006, with the imagery processed to a 2-foot pixel resolution.

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

The Letter of Map Change (LOMC) 05-04-1476P dated November 22, 2005, for the City of Magee has been incorporated into this FIS. The LOMC affected Goodwater Creek from Pinola Drive to approximately 1,000 feet upstream of Pinola Drive.

1.3 Coordination

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

March 1980, Simpson County (Unincorporated Areas) FIS

Streams requiring detailed study were identified at a meeting attended by representatives of Simpson County, the study contractor, the Federal Insurance Administration (FIA), and the State Coordinating Agency in February 1978. Throughout the study, contact was maintained with the County the U.S. Geological Survey (USGS), the U.S. Army Corps of Engineers (USACE), Mobile District, and the State Coordinating Agency to seek information and review study findings. A final coordination meeting was held November 19, 1979.

June 1980, Town of D’Lo FIS

Streams requiring detailed study were identified at a meeting attended by representatives of the study contractor, the FIA, and the Town of D’Lo in February 1978. Throughout the study, contact was maintained with the Town of D’Lo, the USGS, the USACE, Mobile District, and the State Coordinating Agency to seek information and review study findings. A final coordination meeting was held on December 4, 1979.

February 1980, City of Magee FIS

Streams requiring detailed and approximate study were identified at a meeting attended by representatives of the study contractor, the FIA, and the city in February 1978. Throughout the study, contact was maintained with the City of Magee, the USGS, and the State Coordinating Agency to seek information and review study findings.

The results of this study were reviewed at a final community coordination meeting held on August 28, 1979. Attending the meeting were representatives of the FIA, the study contractor, and the city.

March 1980, City of Mendenhall FIS

Streams requiring detailed study were identified at a meeting attended by representatives of the study contractor, the FIA, and the City of Mendenhall in February 1978. Throughout the study, contact was maintained with the City of Mendenhall, the USGS, the USACE, Mobile District, and the State Coordinating Agency to seek information and review study findings. A final coordination meeting was held on November 19, 1979.

This Countywide FIS

For this countywide FIS, the Project Scoping Meeting was held on March 18, 2008 in Mendenhall, MS. Attendees for these meetings included representatives from the Mississippi Department of Environmental Quality, Mississippi Emergency Management Agency, FEMA National Service Provider, Simpson County, the Cities of Magee and Mendenhall, the Town of D’Lo, the Village of Braxton, the State, and the Study Contractor. Coordination with county officials and Federal, State, and regional agencies produced a variety of information pertaining to floodplain regulations, available community maps, flood history, and other hydrologic data. All problems raised in the meetings have been addressed.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Simpson County, Mississippi, and its incorporated communities listed in Section 1.1. Several flooding sources within the county were studied by approximate methods. Approximate analyses are used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and the State of Mississippi.

March 1980, Simpson County (Unincorporated Areas) FIS

Four streams within the county were studied in detail. These streams were:

1. Strong River, from the confluence of Dabbs Creek located south of D'Lo, Mississippi to U.S. Highway 49
2. Dabbs Creek, from its confluence with the Strong River to a point approximately 14,775 feet upstream.
3. Sellers Creek, from its confluence with the Strong River to a point 1,100 feet upstream of the confluence with the Strong River, and Rails Creek Road to a county road located approximately 11,875 feet upstream.
4. Terrapin Creek, from U.S. Highway 49 to a county road located approximately 5,700 feet upstream.

Approximate studies were done on various streams and tributaries throughout the county.

In general, areas that are developed or have a high potential for development were studied in detail; the remaining significant flood prone areas were studied by approximate methods.

The areas studied by detailed methods were selected with priority given to all known flood hazard areas, and areas of projected development or proposed construction for the next five years, though April 1984.

June 1980, Town of D'Lo FIS

The following streams which lie outside the corporate limits of D'Lo but affect the flood prone areas of D'Lo, were studied by detailed methods:

1. That portion of Dabbs Creek which flows in a southerly direction west of the corporate limits which affects the western boundaries of the community. This stream is a tributary of the Strong River.
2. That portion of the Strong River which flows in a southwesterly direction outside the eastern and southern corporate limits which affects the southeastern boundaries of the Town of D'Lo. This river helps drain the central portion of the county.

The areas studied by detailed methods were selected with priority given to all known flood hazard areas, and areas of projected development or proposed construction for the next five years, through 1984.

February 1980, City of Magee FIS

Three streams within the corporate limits of the City of Magee were studied in detail. Streams studied in detail were:

1. Goodwater Creek, from a point 4,365 feet downstream of U.S. Highway 49 to a point 3,375 feet upstream of Pinola Drive. This stream flows southeasterly and helps drain the southern portion of the community.
2. Mill Creek, from a point 10,500 feet upstream of the confluence with Okatoma Creek to a point 1,625 feet upstream of 11th Avenue. This stream flows southeasterly and helps drain the northern portion of the county.
3. Mill Creek Tributary One, from its confluence with Mill Creek northerly to Colonial Drive. This stream flows southerly and helps drain the north-central portion of the community.

Approximate methods of analyses were used to study those areas having a low development potential or a minimal flood hazard.

Those areas studied by detailed methods were chosen with consideration given to all proposed construction and forecasted development through 1984.

March 1980, City of Mendenhall FIS

The following streams which affect the flood prone areas of Mendenhall were studied by detailed methods:

That portion of the Strong River, which flows in a southwesterly direction outside the northwestern corporate limits which affects the western boundaries of the City of Mendenhall. This river helps drain the central portion of the County.

Sellers Creek, from the western corporate limits of Mendenhall, Mississippi, 16,703 feet upstream to the eastern corporate limits at Rail Creek Road and then 4,052 feet upstream along the southeastern corporate limits. This stream which flows into the Strong River drains the City of Mendenhall.

1. Terrapin Creek, from its confluence with Sellers Creek 2,740 feet upstream to U.S. Highway 49.
2. Patterson Branch, from its confluence with Sellers Creek 5,687 feet upstream to U.S. Highway 49.
3. Sellers Creek Tributary No. 1, from old U.S. Highway 49 2,468 feet upstream to Mississippi Highway 13.

Those areas studied by detailed methods were chosen with consideration given to all proposed construction and forecasted development through 1984.

This Countywide FIS

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

The study for the Pearl River was taken from the December 16, 2008, countywide Covich County FIS (FEMA, 2008) and incorporated into the Simpson County FIS.

Floodplain boundaries of streams that have been previously studied by detailed methods were redelineated based on best available topographic information.

2.2 Community Description

Simpson County is located in the central portion of Mississippi. It is situated approximately 20 miles southeast of Jackson, Mississippi, and 65 miles southwest of Meridian, Mississippi. According to U.S. Census Bureau, the population in 2008 was estimated to be 28,034 (U.S. Census Bureau, 2009).

The terrain may be described as gently rolling, with well-defined drainage basins and moderately well-drained to poorly-drained soils. Vegetation in the drainage basins varies from mostly pine and hardwoods with heavy undergrowth to mild grass and light undergrowth.

Simpson County has a warm, humid climate and abundant rainfall that averages 60 inches annually. Temperatures range from monthly averages of 45 °F in January to 80 °F in July (Mississippi State Climatologist, 2009).

2.3 Principal Flood Problems

The principal flood problems in Simpson County arise from overflow into the relatively flat overbanks along the Strong River and its tributary, Dabbs Creek. Sellers Creek and Terrapin Creek have also been the cause of flooding within the City of Mendenhall.

2.4 Flood Protection Measures

No flood protection measures have been instituted for Simpson County other than normal channel maintenance and periodic replacement of aged and undersized drainage structures under streets and roadways.

3.0 **ENGINEERING METHODS**

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

potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

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

Precountywide Analyses

Since 1928, the USGS has maintained a stream gage on the Strong River at the old U.S. Highway 49 Bridge between Mendenhall and D'Lo. Peak discharges for the 1- and 0.2-percent annual chance floods for the Strong River were determined by the USACE, Mobile District. Unit hydrographs for the Strong River were developed from the available USGS gaging station records.

Synthetic unit hydrographs were used for Sellers Creek and Terrapin Creek since no gaging stations exist along these streams. These synthetic unit hydrographs were developed by relating Snyder's coefficients to weighted stream slopes from analysis of gaged streams in the area with similar basin characteristics and then adjusted for urbanization using the USACE, Tulsa District method as outlined in the "Proceedings of a Seminar on Urban Hydrology" published by the Hydrologic Engineering Center, Davis, California. Storm rainfall was developed for the Strong River Basin by using USACE engineering manual EM 110-2-1411, U.S. Department of Commerce Technical Papers 40 and 49 (USACE, 1974). Peak discharges for the 10- and 2-percent-annual-chance floods for the Strong River were determined in a similar manner.

Peak discharge computations for Dabbs Creek were based on a regional flood-frequency report prepared by the USGS (Department of the Interior, 1976). Techniques for estimating future flood magnitudes were developed in the USGS report using records of annual peaks for 89 basins and observed annual peak-flow data for 221 stream gaging stations. The length of record for 82 of the 221 stations with actual records is 25 years or more. The natural drainage areas for which flood frequency is defined range from 0.14 square miles to 6,630 square miles. Multi-regression analyses were used to average the chance variability of the data and relate flood frequency to basin characteristics, the most significant being drainage area, slope, and length. Urbanization adjustment factors were not applied because the drainage basins under study were less than 10 percent urbanized.

This Countywide FIS Analysis

Peak discharges were calculated based on USGS regional regression equations (U.S. Department of the Interior, 1991). For the discharges calculated based on regional regression equations, the rural regression values were modified to reflect stream gage weighting and/or urbanization as necessary.

The hydrologic data for the Pearl River was obtained from the December 16, 2008, countywide Covich County FIS (FEMA, 2008).

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

TABLE 1. SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. mi.)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-percent</u>	<u>2-percent</u>	<u>1-percent</u>	<u>0.2-percent</u>
DABBS CREEK					
At Canadian National Railroad	20.42	6,078	9,936	11,802	19,091
GOODWATER CREEK					
At Cross Section A	11.82	2,962	4,730	5,546	8,759
At U.S. Highway 49	10.52	2,833	4,505	5,270	8,283
At Siloam Avenue Southeast	8.49	2,619	4,130	4,812	7,501
At Pinola Drive Southwest	7.69	2,526	3,967	4,615	7,165
MILL CREEK					
At Cross Section A	6.03	2,053	3,207	3,750	5,803
At Cross Section D	5.64	1,985	3,091	3,610	5,568
At State Highway 541	3.94	1,657	2,535	2,941	4,459
At Cross Section K	3.52	1,565	2,382	2,758	4,158
At Cross Section N	2.91	1,422	2,144	2,474	3,696
MILL CREEK TRIBUTARY 1					
At confluence with Mill Creek	2.38	577	849	968	1,410
At Cross Section D	1.96	547	800	912	1,321
At Colonial Drive	1.57	483	696	792	1,133
PATTERSON BRANCH					
At State Highway 149	0.7	532	756	820	1,145
At Pine Avenue	0.6	510	721	776	1,076
At Cross Section H	0.3	362	491	515	653
PEARL RIVER					
At State Highway 28	3,744	*	*	101,000	*
SELLERS CREEK					
At confluence with Strong River	33.9	11,508	16,591	19,000	31,500
At Cross Section F	31.5	10,200	14,050	17,000	28,000
Immediately above confluence with Terrapin Creek	23.0	9,057	12,775	14,500	24,000
SELLERS CREEK TRIBUTARY 1					
At State Highway 149	0.4	343	479	521	716
At State Highway 13	0.2	214	290	305	405
STRONG RIVER					
At State Highway 149	429	19,000	30,000	38,500	73,000

* Data Not Available

TABLE 1. SUMMARY OF DISCHARGES

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. mi.)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10-percent</u>	<u>2-percent</u>	<u>1-percent</u>	<u>0.2-percent</u>
TERRAPIN CREEK					
At confluence of Sellers Creek	6.5	3,340	4,758	5,300	8,400
At Cross Section B	5.5	3,000	4,150	4,900	7,800
At Cross Section C	4.8	2,750	3,800	4,500	7,250

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.

March 1980, Simpson County (Unincorporated Areas) FIS

For Dabbs Creek, cross sections of stream channels were field surveyed, along with bridge and culvert waterway openings, following reconnaissance of the study areas by engineers. Cross sections of stream overbanks and road profiles were obtained by photogrammetric methods using manuscript maps at a scale of 1:2400, with a contour interval of 2 feet, developed specifically for this study by the study contractor (Michael Baker, Jr., Inc., 1979).

Roughness coefficients (Manning's "n") for the computations were estimated on the basis of field inspection. The roughness coefficients ranged from 0.020 to 0.100 for the main channel and 0.020 to 0.200 for the overbank areas.

The 1.0- and 0.2-percent annual chance flood elevations for the Strong River, Sellers Creek, and Terrapin Creek were determined by the USACE, Mobile District (USACE, 1974). With stream characteristics determined by field observation, flood profiles were computed using the HEC-2 step-backwater computer model developed by the USACE (USACE, 1976). HEC-2 models for the Strong River, Sellers Creek, and Terrapin Creek were provided by the USACE, Mobile District and used to determine the 10- and 2.0-percent annual chance flood frequency elevations.

June 1980, Town of D'Lo FIS

The 1.0- and 0.2-percent annual chance flood elevations for the Strong River were determined by the USACE (USACE, 1974). The HEC-2 model for the Strong River was provided by the USACE, Mobile District and used to determine the 10- and 2.0-percent annual chance flood elevations (USACE, 1976).

For Dabbs Creek, cross sections of stream channels were field surveyed, along with bridge and culvert waterway openings, following reconnaissance of the study areas by engineers. Cross sections of stream overbanks and road profiles were obtained by photogrammetric methods using manuscript maps at a scale of 1:2400, with a contour interval of 2 feet, developed specifically for this study by the study contractor (U.S. Department of Commerce, 1964).

With stream characteristics determined by field observation, flood profiles were computed using the HEC-2 step-backwater computer model developed by the USACE (USACE, 1976).

Roughness coefficients (Manning's "n") used in the computations ranged from 0.030 to 0.100 in the channel and from 0.03 to 0.200 for the banks.

Starting water surface elevations for all streams studied by detailed methods were developed by the slope-area method.

February 1980, City of Magee FIS

With stream characteristics determined by field observation, water-surface elevations were computed using the HEC-2 step-backwater computer model developed by the USACE (USACE, 1976).

Cross sections of stream channels were field surveyed along with bridge and culvert waterway openings following reconnaissance of the study areas by engineers. Cross sections of stream overbanks and road profiles were obtained by photogrammetric methods using maps at a scale 1:2,400, with a contour interval of 2 feet, developed specifically for this study (Michael Baker, Jr., 1979).

Roughness coefficients (Manning's "n") used in the computations were determined by field survey, and ranged from 0.013 to 0.055 in the channel and from 0.060 to 0.170 for the overbanks.

Starting water-surface elevations for all streams were developed by the slope-area method.

For approximate study areas, calculated peak discharges, stream characteristics based on field observations, and flood plain cross sections determined from maps developed for this study were used in Manning's equation to determine approximate flood elevations in conjunction with the previously published Flood Hazard Boundary Map (U.S. Department of Housing and Urban Development, 1978).

March 1980, City of Mendenhall FIS Analyses

The 1.0- and 0.2-percent annual chance flood elevations for the Strong River, Sellers Creek, and Terrapin Creek were determined by the USACE, Mobile District (USACE, 1974). The HEC-2 model for the above streams was provided by the USACE, Mobile District and used to determine the 10- and 2.0-percent annual chance flood elevations (USACE, 1976).

For Patterson Branch and Sellers Creek Tributary 1, cross sections of stream channels were field surveyed along with bridge and culvert waterway openings, following reconnaissance of the study areas by engineers. Cross sections of stream overbanks and road profiles were obtained by photogrammetric methods using manuscript maps at a scale of 1:2400, with a contour interval of 2 feet, developed specifically for this study by the study contractor (Michael Baker, Jr., Inc., 1979).

With stream characteristics determined by field observation, flood profiles were computed using the HEC-2 step-backwater computer model developed by the USACE (USACE, 1976).

Roughness coefficients (Manning's "n") used in the computations ranged from 0.013 to 0.10 in the channel and from 0.02 to 0.15 for the overbanks.

For the approximate study areas, calculated peak discharges, stream characteristics based on field observations, and flood plain cross sections determined from 2-foot contour interval maps developed for this study were used in the HEC-2 step-backwater computer model (USACE, 1976).

Starting water-surface elevations for all streams studied by detailed methods were developed by the slope-area method.

This Countywide FIS Analysis

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

Downstream boundary conditions for the hydraulic models were set to normal depth using a starting slope calculated from values taken from topographic data, or where applicable, derived from the water-surface elevations. Water-surface profiles were computed through the use of the USACE HEC-RAS version 3.1.3 computer program (USACE, 2003). The model was run for the 1-percent-annual-chance storm for the limited detail and approximate studies.

The hydraulic analysis and profile in LOMC 05-04-1476P dated November 22, 2005 for Goodwater Creek in the City of Magee has been incorporated into this countywide hydraulic analysis.

The hydraulic analysis for the Pearl River was obtained from the December 16, 2008, countywide Covich County FIS (FEMA, 2008).

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

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

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

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

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

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

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

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

To obtain current elevation, description, and/or location information for benchmarks shown on the FIRM for this jurisdiction, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

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

3.3 Vertical Datum

All FIS reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the finalization of the North American Vertical Datum of 1988 (NAVD88), many FIS reports and FIRMs are being prepared using NAVD88 as the referenced vertical datum.

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

Ground, structure, and flood elevations may be compared and/or referenced to NGVD29 by applying a conversion factor. To convert elevations from NAVD88 to NGVD29, add 0.01 feet to the NAVD88 elevation. The 0.01 feet value is an average for the entire county. The adjustment value was determined using the USACE Corpscon 6.0.1

computer program (USACE, 2004) and topographic maps (U.S. Department of the Interior, 1968). The BFE's shown on the FIRM represent whole-foot rounded values. For example, a BFE of 12.4 feet will appear as 12 feet on the FIRM, and 12.6 feet as 13 feet. Users who wish to convert the elevations in this FIS report to NGVD29 should apply the stated conversion factor to elevations shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1-foot.

For more information regarding conversion between the NGVD and the NAVD, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988* or contact the Vertical Network Branch, National Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Rockville, Maryland 20910 (Internet address <http://www.ngs.noaa.gov>).

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance flood elevations and delineations of the 1- and 0.2-percent-annual-chance floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Table and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community. For each stream studied by detailed methods, the 1- and 0.2-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:24,000 with a contour interval of 10 feet (USGS, 1972).

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A and AE); and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

For the streams studied by limited detailed and approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2). Floodplain boundaries for these streams, as well as those streams that have been previously studied by detailed methods, were generated using USGS 10-meter Digital Elevation Models (USGS), then refined using detailed hydrographic data.

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

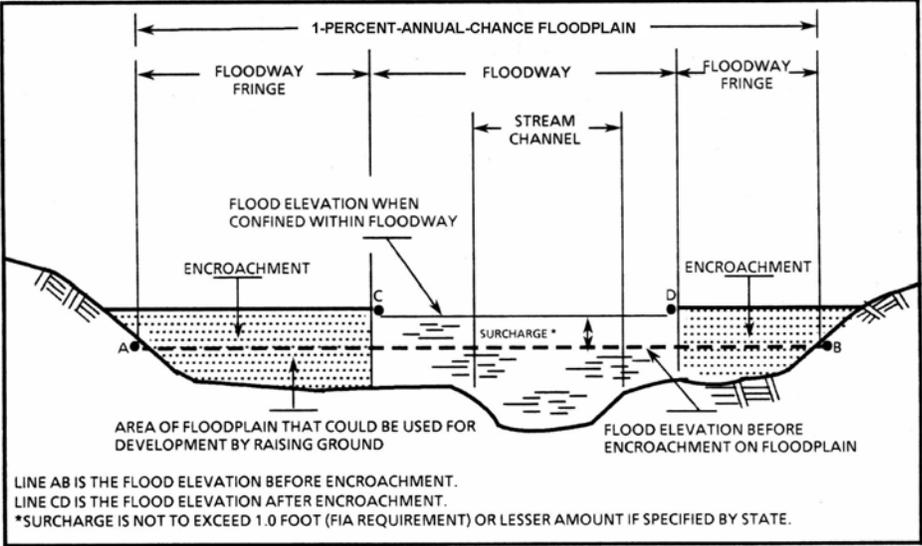
The floodway presented in this FIS report and on the FIRM was computed for certain stream segments on the basis of equal-conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results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

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, “Without Floodway” elevations presented in Table 2, “Floodway Data,” for certain downstream cross sections are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater from other sources.

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. For detailed study streams, a listing of stream velocities at selected cross sections is provided in Table 2. In order to reduce the risk of property damage in areas where the stream velocities are high, the county may wish to restrict development in areas outside the floodway.

The area between the floodway and 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent-annual-chance flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 1.

Floodways were calculated for Dabbs, Creek, Goodwater Creek, Mill Creek, Mill Creek Tributary 1, Patterson Branch, Sellers Creek, Sellers Creek Tributary 1, Strong River, and Terrapin Creek.



FLOODWAY SCHEMATIC

Figure 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
DABBS CREEK								
A	3,010	441	4,725	2.5	293.8	281.1 ²	282.0	0.9
B	6,316	498	3,607	3.3	294.5	284.3 ²	285.2	0.9
C	12,098	1,318	7,574	1.6	294.5	290.0 ²	290.7	0.7
D	14,774	831	8,898	1.3	294.5	291.0 ²	292.0	1.0

¹ FEET ABOVE MOUTH

² ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM STRONG RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

DABBS CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION - (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GOODWATER CREEK								
A	10,500	228	1,355	4.1	370.3	370.3	370.6	0.3
B	11,504	492	3,029	1.8	372.8	372.8	373.7	0.9
C	12,364	439	2,984	1.9	373.5	373.5	374.5	1.0
D	13,447	327	2,095	2.6	374.7	374.7	375.7	1.0
E	14,543	73	746	7.1	376.8	376.8	377.8	1.0
F	14,895	350	3,810	1.4	379.2	379.2	380.0	0.8
G	15,691	293	2,515	2.1	379.3	379.3	380.1	0.8
H	17,105	246	1,836	2.9	380.1	380.1	381.1	1.0
I	18,049	197	1,464	3.6	381.4	381.4	382.4	1.0
J	18,943	280	1,308	3.7	385.1	385.1	385.1	0.0
K	19,787	406	2,061	2.3	386.7	386.7	387.3	0.6
L	20,519	368	1,891	2.5	388.2	388.2	388.9	0.7
M	21,839	1,071	4,243	1.1	390.2	390.2	391.2	1.0
N	22,661	617	4,129	1.2	390.8	390.8	391.8	1.0
O	23,779	495	3,072	1.6	391.6	391.6	392.6	1.0
P	24,633	431	2,506	1.8	392.4	392.4	393.4	1.0
Q	25,556	85	753	6.3	397.5	397.5	397.5	0.0
R	26,204	79	703	6.6	398.0	398.0	398.0	0.0

¹ FEET ABOVE CONFLUENCE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

GOODWATER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION - (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MILL CREEK								
A	10,520	693	3,802	1.0	384.4	384.4	385.4	1.0
B	11,352	490	2,313	1.6	385.6	385.6	386.6	1.0
C	12,642	446	2,456	1.5	387.6	387.6	388.6	1.0
D	13,558	334	1,845	2.0	389.5	389.5	390.5	1.0
E	14,594	470	2,530	1.4	391.4	391.4	392.4	1.0
F	15,696	194	872	4.1	393.7	393.7	394.6	0.9
G	17,048	293	1,878	1.6	398.6	398.6	399.4	0.8
H	18,166	342	1,615	1.8	400.3	400.3	401.2	0.9
I	19,180	349	1,669	1.8	402.4	402.4	403.3	0.9
J	20,482	726	2,533	1.2	404.4	404.4	405.4	1.0
K	21,882	314	1,276	2.2	406.2	406.2	407.2	1.0
L	23,142	302	1,558	1.8	408.9	408.9	409.8	0.9
M	24,026	358	1,295	2.1	414.9	414.9	414.9	0.0
N	25,010	446	2,292	1.1	416.0	416.0	416.8	0.8
O	25,584	508	2,877	0.9	416.3	416.3	417.3	1.0

¹ FEET ABOVE CONFLUENCE WITH OKATOMA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

MILL CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MILL CREEK TRIBUTARY 1								
A	134	188	522	1.9	396.3	394.2 ²	395.1	0.9
B	617	192	648	1.5	398.5	398.5	398.5	0.0
C	1,591	160	499	1.9	402.0	402.0	403.0	1.0
D	2,545	174	490	1.9	407.7	407.7	408.6	0.9
E	3,599	147	316	2.9	414.3	414.3	415.1	0.8
F	4,399	149	310	2.6	419.0	419.0	420.0	1.0

¹ FEET ABOVE MOUTH

² ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM MILL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

MILL CREEK TRIBUTARY 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION - (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
PATTERSON BRANCH								
A	852	23	123	6.7	319.7	311.8 ²	312.2	0.4
B	1,173	33	124	6.6	319.7	314.1 ²	314.2	0.1
C	1,981	82	488	1.7	321.0	321.0	321.0	0.0
D	2,175	85	411	1.9	321.1	321.1	321.1	0.0
E	3,201	30	144	5.4	324.7	324.7	325.2	0.5
F	4,085	48	231	3.4	331.1	331.1	331.7	0.6
G	4,825	22	115	5.1	334.8	334.8	335.7	0.9
H	5,687	18	53	9.8	342.8	342.8	342.8	0.0

¹ FEET ABOVE MOUTH

² ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM SELLERS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

PATTERSON BRANCH

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
SELLERS CREEK								
A	0.78	733	6,933	2.7	295.9	292.7 ²	293.5	0.8
B	0.80	771	7,717	2.5	295.9	293.4 ²	294.2	0.8
C	1.46	641	6,872	2.8	299.3	299.3	300.2	0.9
D	1.82	862	5,427	3.5	303.8	303.8	304.1	0.3
E	2.02	683	5,962	3.2	305.8	305.8	306.8	1.0
F	2.45	896	6,894	2.5	309.1	309.1	309.8	0.7
G	3.01	1,051	9,049	1.9	316.0	316.0	317.0	1.0
H	3.59	974	9,967	1.7	323.0	323.0	324.0	1.0
I	3.84	1,073	8,227	1.8	325.2	325.2	326.2	1.0
J	5.13	1,299	7,760	1.9	334.3	334.3	335.2	0.9
K	6.58	884	6,430	2.3	353.8	353.8	354.7	0.9

¹ DISTANCE IN MILES ABOVE MOUTH

² ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM STRONG RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

SELLERS CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SELLERS CREEK TRIBUTARY 1								
A	2,163	53	300	1.7	301.0	301.0	301.7	0.7
B	3,358	55	181	2.9	308.6	308.6	309.2	0.6
C	4,326	34	137	2.2	312.6	312.6	313.1	0.5

¹ FEET ABOVE MOUTH

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

SELLERS CREEK TRIBUTARY 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
STRONG RIVER								
A	25.88	4,506	62,813	0.6	293.5	293.5	294.5	1.0
B	26.48	4,200	47,355	0.8	293.8	293.8	294.8	1.0
C	27.31	5,176	58,574	0.7	294.5	294.5	295.5	1.0
D	27.74	3,937	44,716	0.9	295.1	295.1	296.1	1.0
E	28.20	2,468	34,290	1.1	295.9	295.9	296.9	1.0
F	28.92	2,297	35,081	1.0	296.8	296.8	297.8	1.0
G	29.72	2,531	36,529	1.0	297.6	297.6	298.6	1.0

¹ MILES ABOVE MOUTH

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

STRONG 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
TERRAPIN CREEK								
A	0.04	1159	2921	1.8	325.2	321.5 ²	322.4	0.9
B	0.10	1286	3190	1.6	325.2	322.3 ²	323.1	0.8
C	0.52	82	486	10.9	325.3	325.3	326.0	0.7
D	0.57	289	2095	2.5	330.4	330.4	330.4	0.0
E	1.10	451	2332	2.1	336.0	336.0	336.5	0.5
F	1.59	326	1687	2.7	346.7	346.7	347.7	1.0

¹ MILES ABOVE MOUTH

² ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM SELLERS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TABLE 2

**SIMPSON COUNTY, MS
AND INCORPORATED
AREAS**

FLOODWAY DATA

TERRAPIN CREEK

5.0 INSURANCE APPLICATION

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

Zone A

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

Zone AE

Zone AE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AH

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

Zone AO

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

Zone A99

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

Zone V

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

Zone VE

Zone VE is the flood insurance rate zone that corresponds to the 1-percent coastal floodplains that have additional hazards associated with storm waves. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance risk zone that corresponds to areas outside the 0.2-percent annual chance floodplain, areas within the 0.2-percent annual chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the base flood by levees. No BFEs or depths are shown within this zone.

Zone D

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

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance risk zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot BFEs or average depths. Insurance agents use the zones and BFEs in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The countywide FIRM presents flooding information for the entire geographic area of Simpson County. Previously, FIRMs were prepared for each incorporated community and the unincorporated areas of the County identified as flood-prone. This countywide FIRM also includes flood-hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFMs), where applicable. Historical data relating to the maps prepared for each community, up to and including this countywide FIS are presented in Table 3, "Community Map History."

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Simpson County (Unincorporated Areas)	October 21, 1977	--	September 30, 1980	--
Village of Braxton	July 19, 1974	July 16, 1976	February 8, 1980	--
Town of D'Lo	June 7, 1974	July 23, 1976	December 16, 1980	--
City of Magee	August 1, 1975	--	August 15, 1980	--
City of Mendenhall	June 14, 1974	October 17, 1975 September 1, 1978	September 30, 1980	--

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY
SIMPSON COUNTY, MS
 AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

Information pertaining to revised and unrevised flood hazards for each jurisdiction within Simpson County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FIS reports, FIRMs, and/or FBFMs for all of the incorporated and unincorporated jurisdictions within Simpson County and should be considered authoritative for 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.

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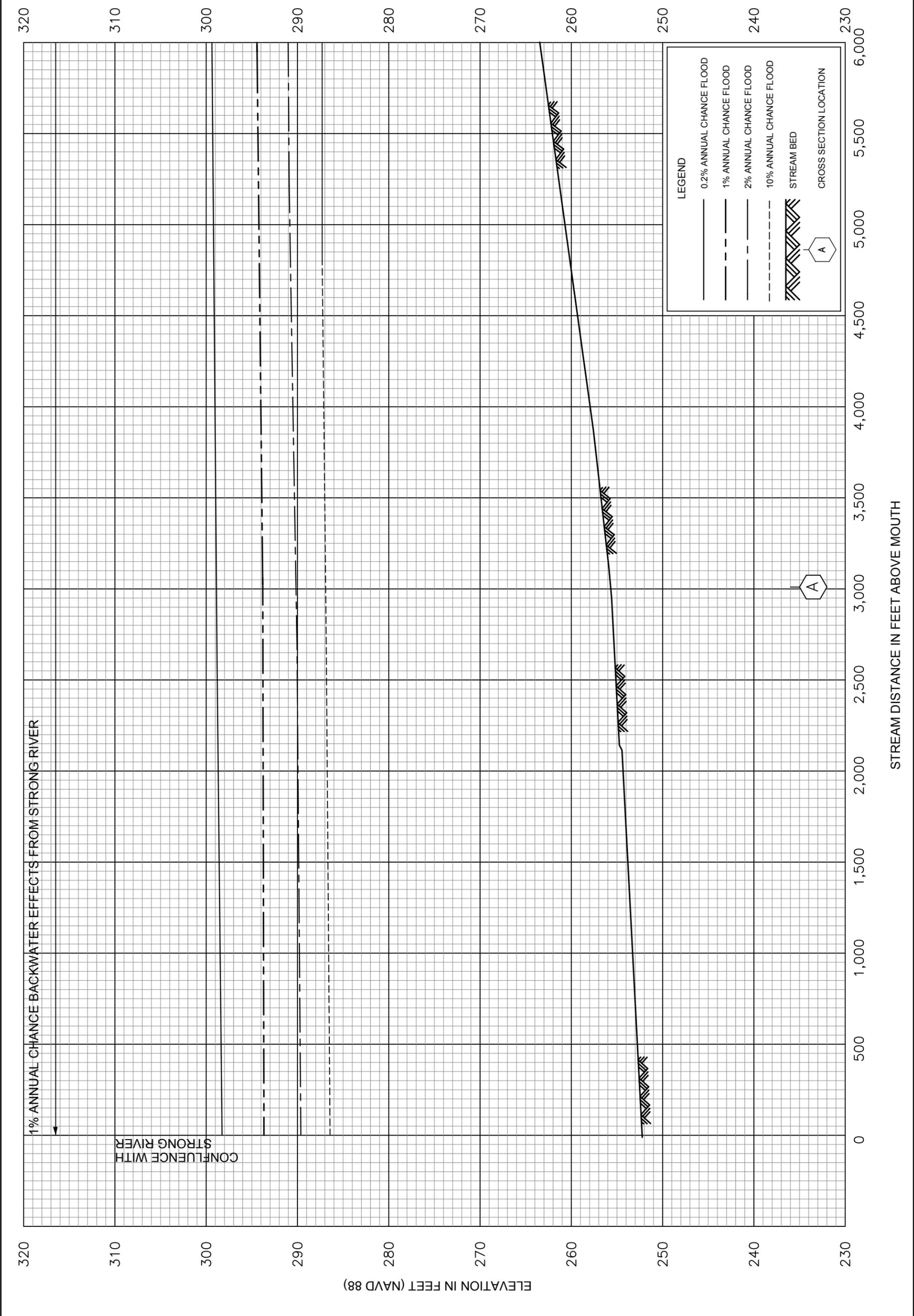
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U.S. Department of the Interior, Geological Survey, 7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour interval 10 Feet: Braxton, Mississippi, 1968; Georgetown, Mississippi, 1971; Harrisville, Mississippi, 1970; Hopewell, Mississippi, 1970; Magee North, Mississippi, 1975; Magee South, Mississippi, 1975; Mendenhall East, Mississippi, 1970; Mendenhall SE, Mississippi, 1971; Mendenhall West, Mississippi, 1971; Puckett, Mississippi, 1968; Schley, Mississippi, 1971; Shivers, Mississippi, 1971; Star, Mississippi, 1971; Whites, Mississippi, 1971; White Oak, Mississippi, 2000.

U.S. Geological Survey, 7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Interval 10 feet: Homesville, McComb North, McComb South, Mississippi, 1972.

U.S. Geological Survey, Open File Report 83-685, Floods of April 1983 in Southern Mississippi and Southeastern Louisiana, D.D. Carlson and G.D. Firda, 1983.



STREAM DISTANCE IN FEET ABOVE MOUTH

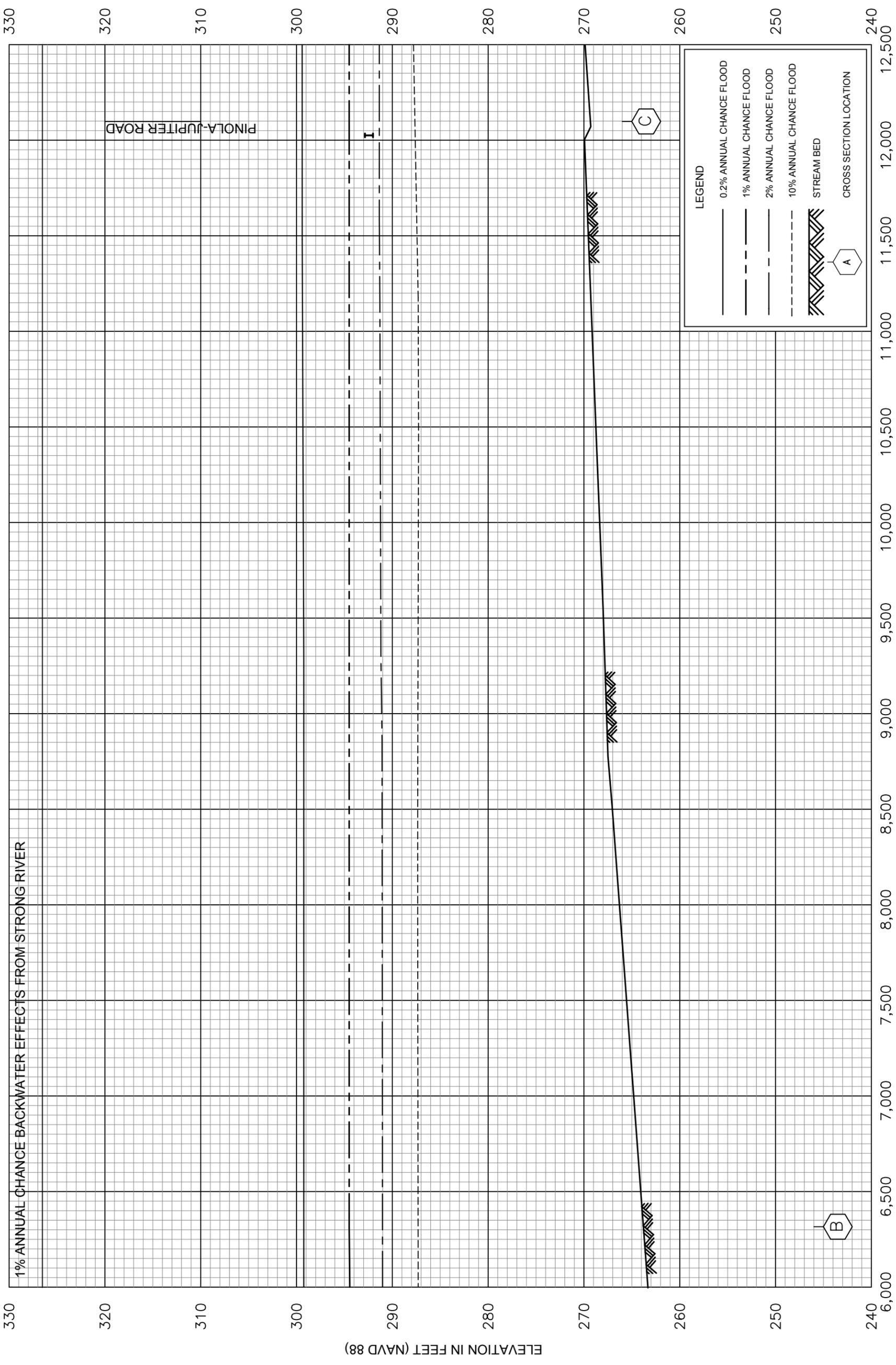
ELEVATION IN FEET (NAVD 88)

1% ANNUAL CHANCE BACKWATER EFFECTS FROM STRONG RIVER

CONFLUENCE WITH STRONG RIVER

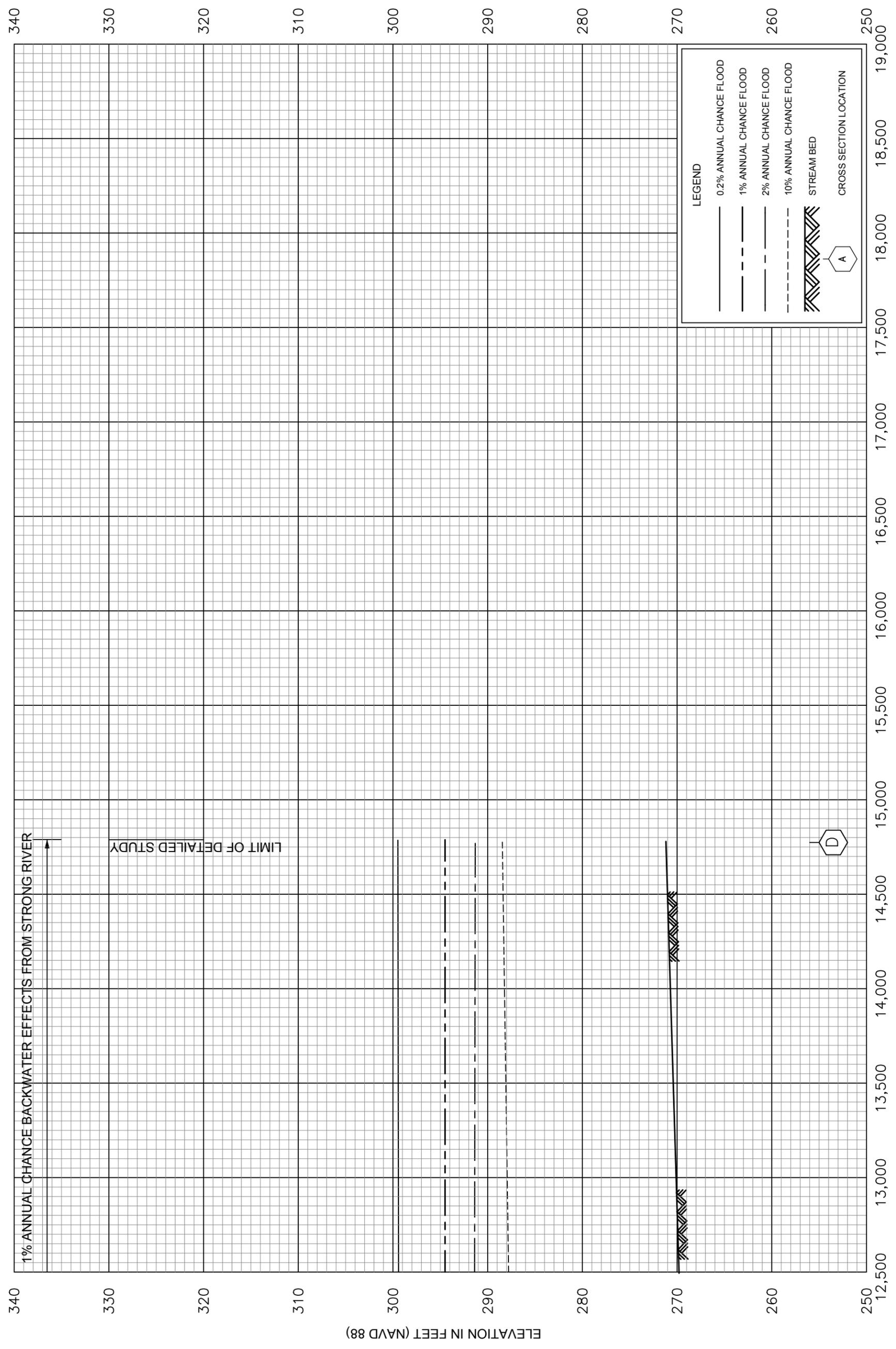
LEGEND

- 0.2% ANNUAL CHANCE FLOOD (solid line)
- 1% ANNUAL CHANCE FLOOD (long dashed line)
- 2% ANNUAL CHANCE FLOOD (short dashed line)
- 10% ANNUAL CHANCE FLOOD (dash-dot line)
- STREAM BED (hatched area)
- CROSS SECTION LOCATION (hexagon with 'A')



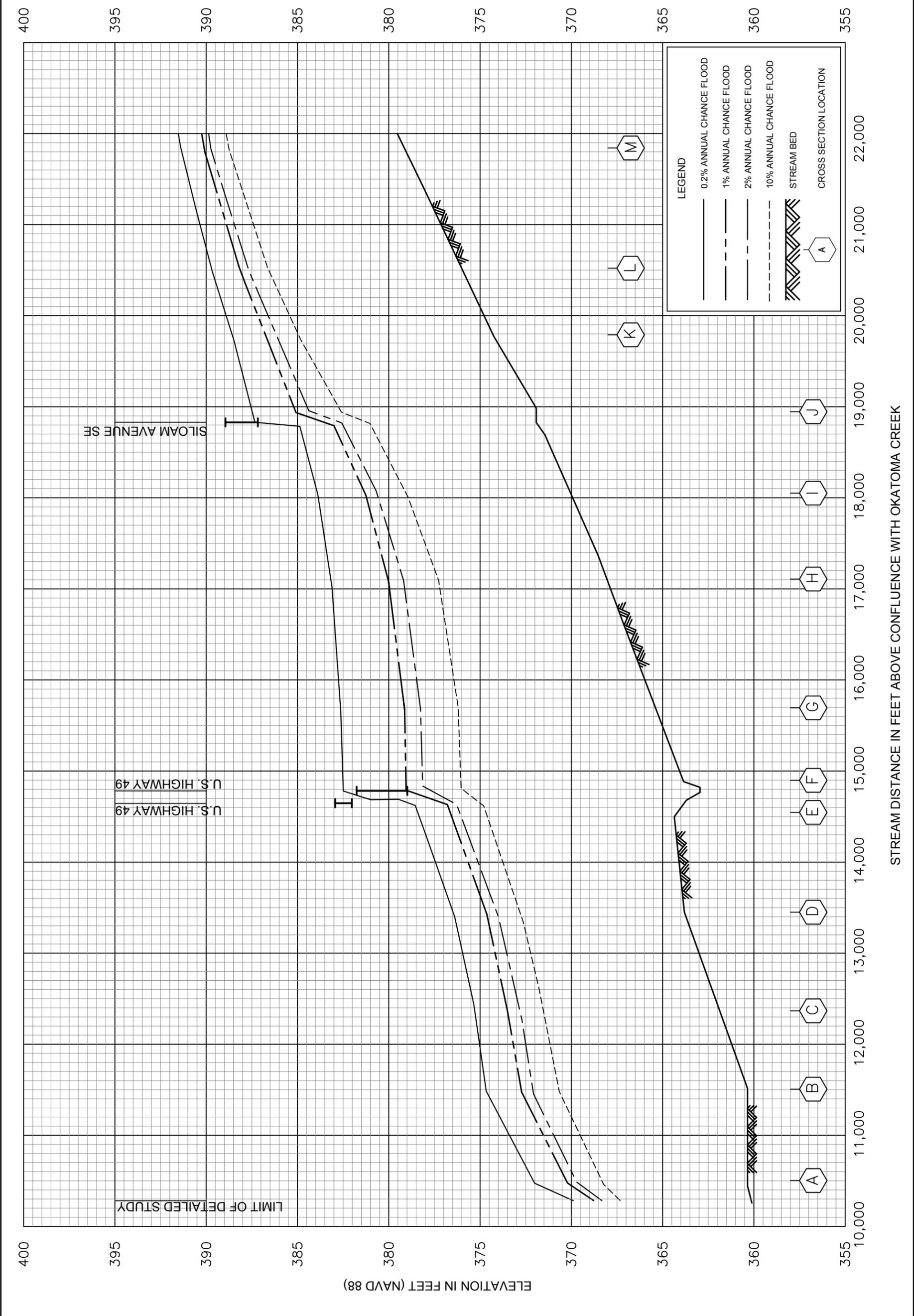
STREAM DISTANCE IN FEET ABOVE MOUTH

ELEVATION IN FEET (NAVD 88)

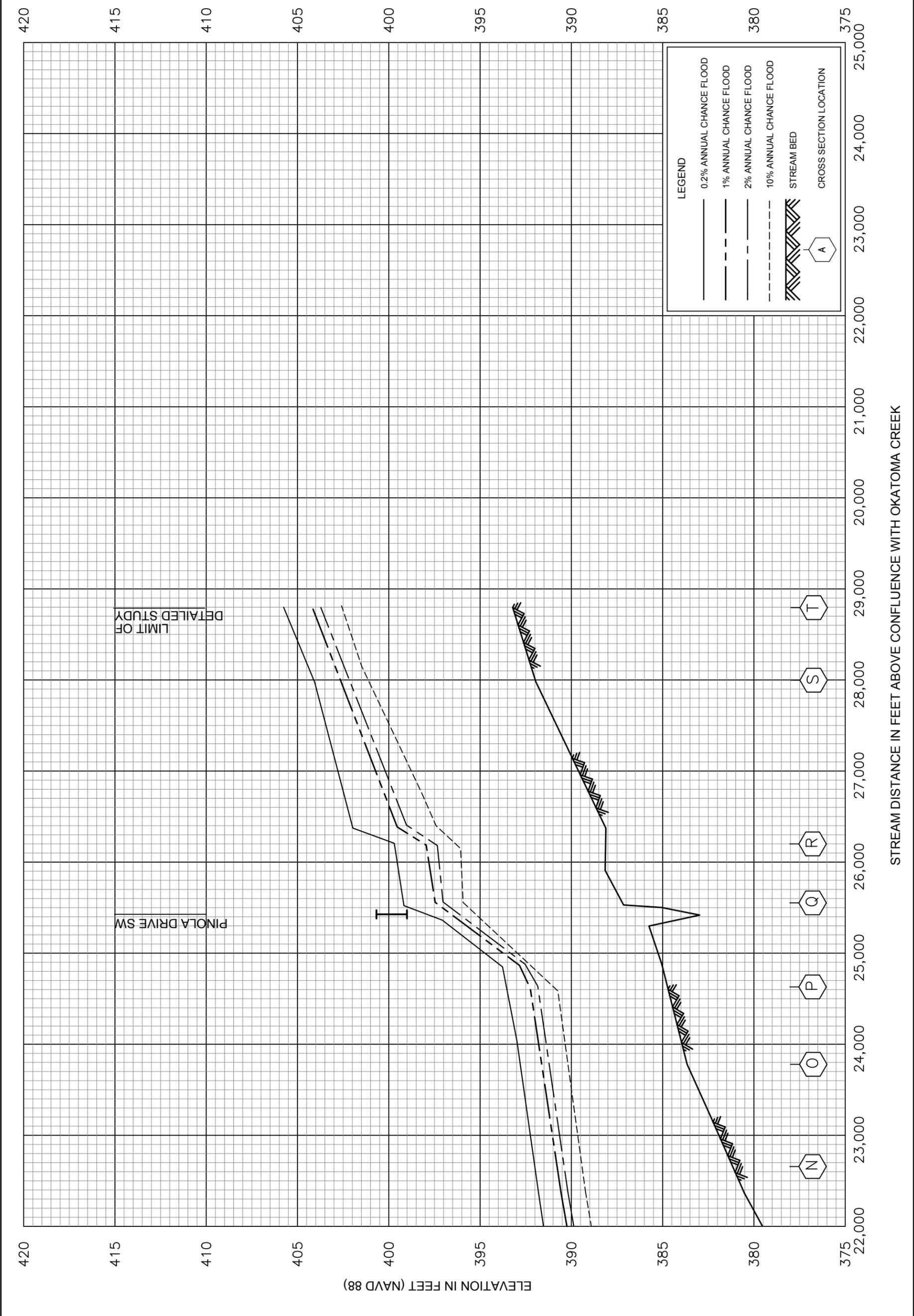


STREAM DISTANCE IN FEET ABOVE MOUTH

ELEVATION IN FEET (NAVD 88)

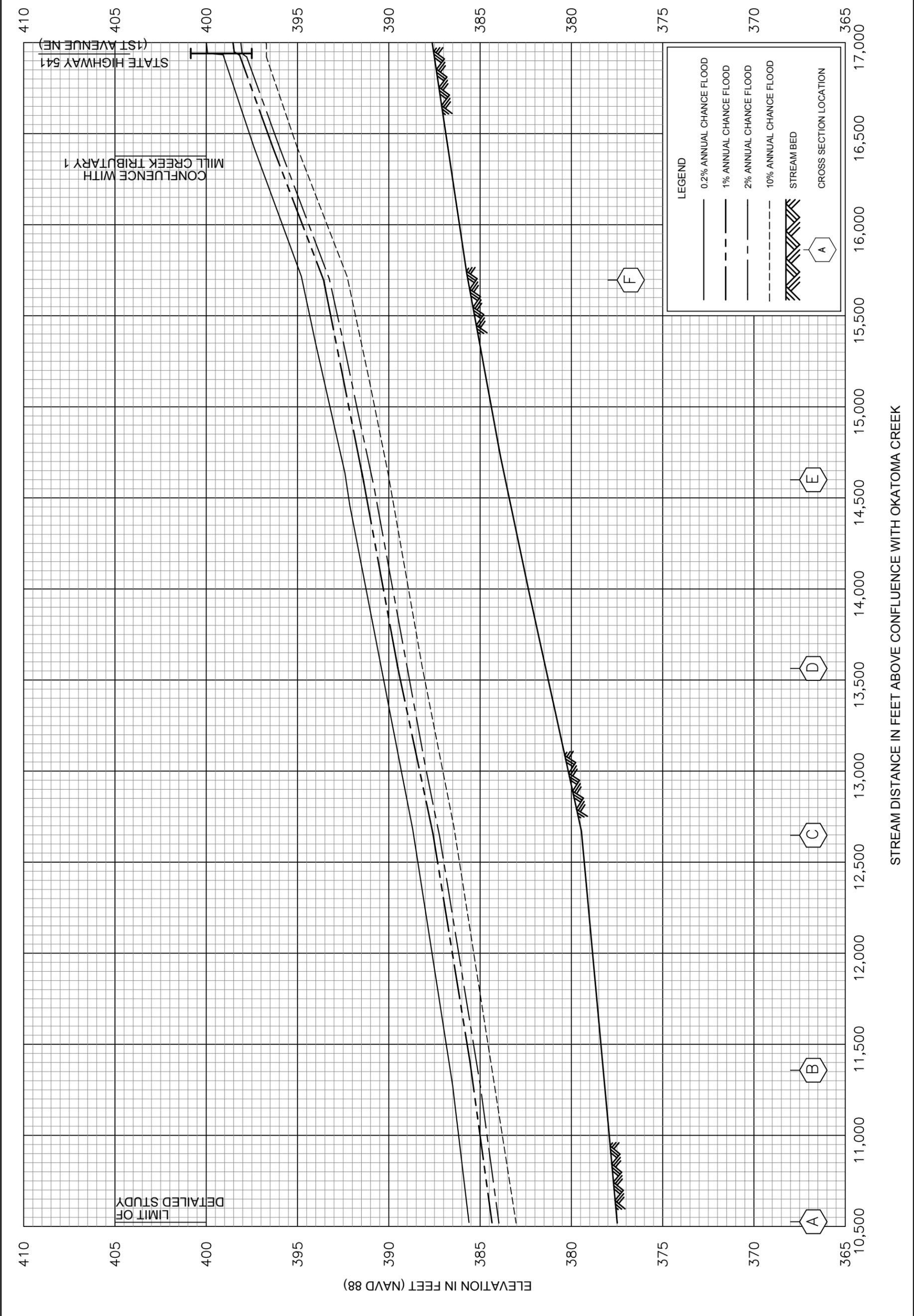


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH OKATOMA CREEK

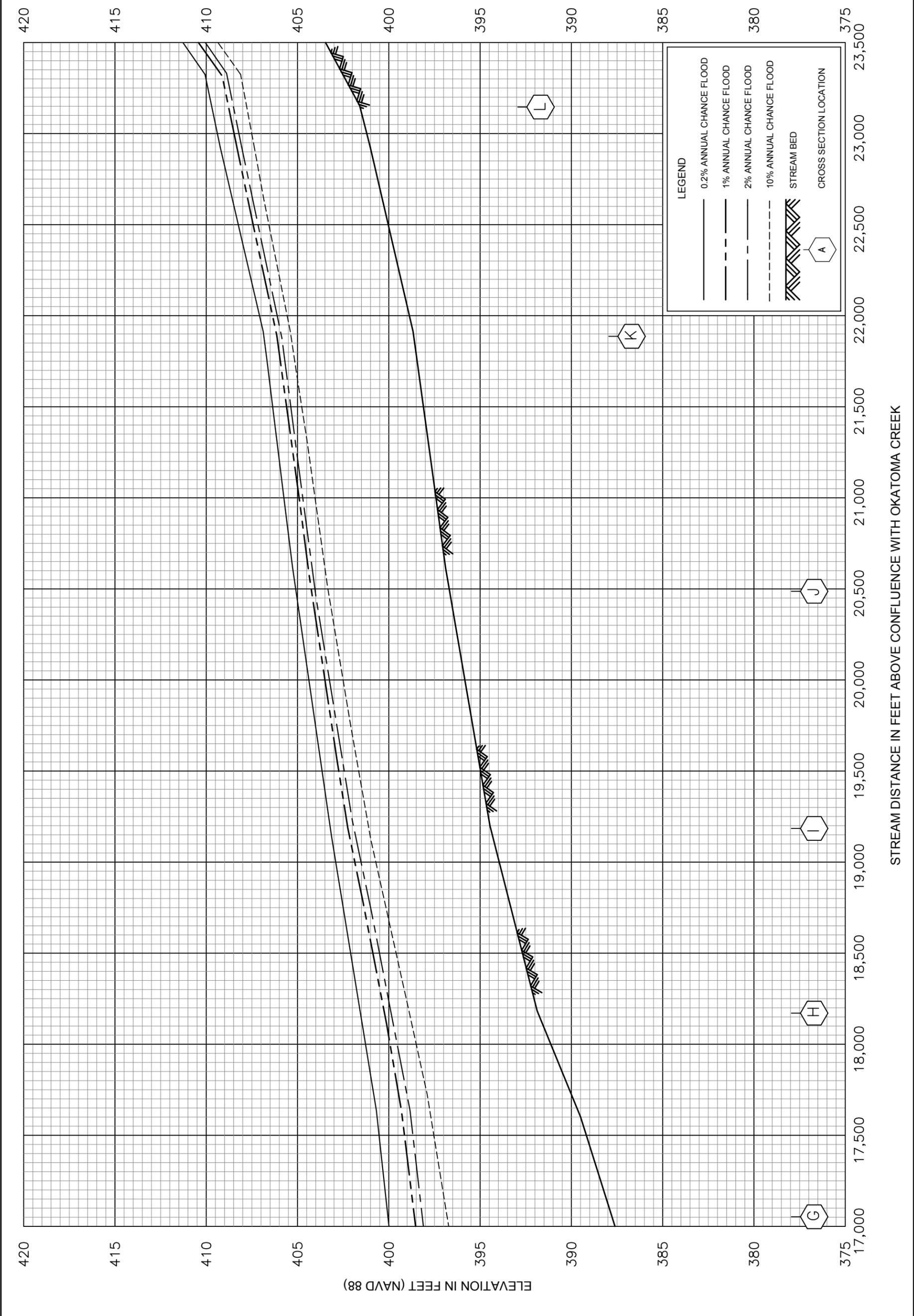


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH OKATOMA CREEK

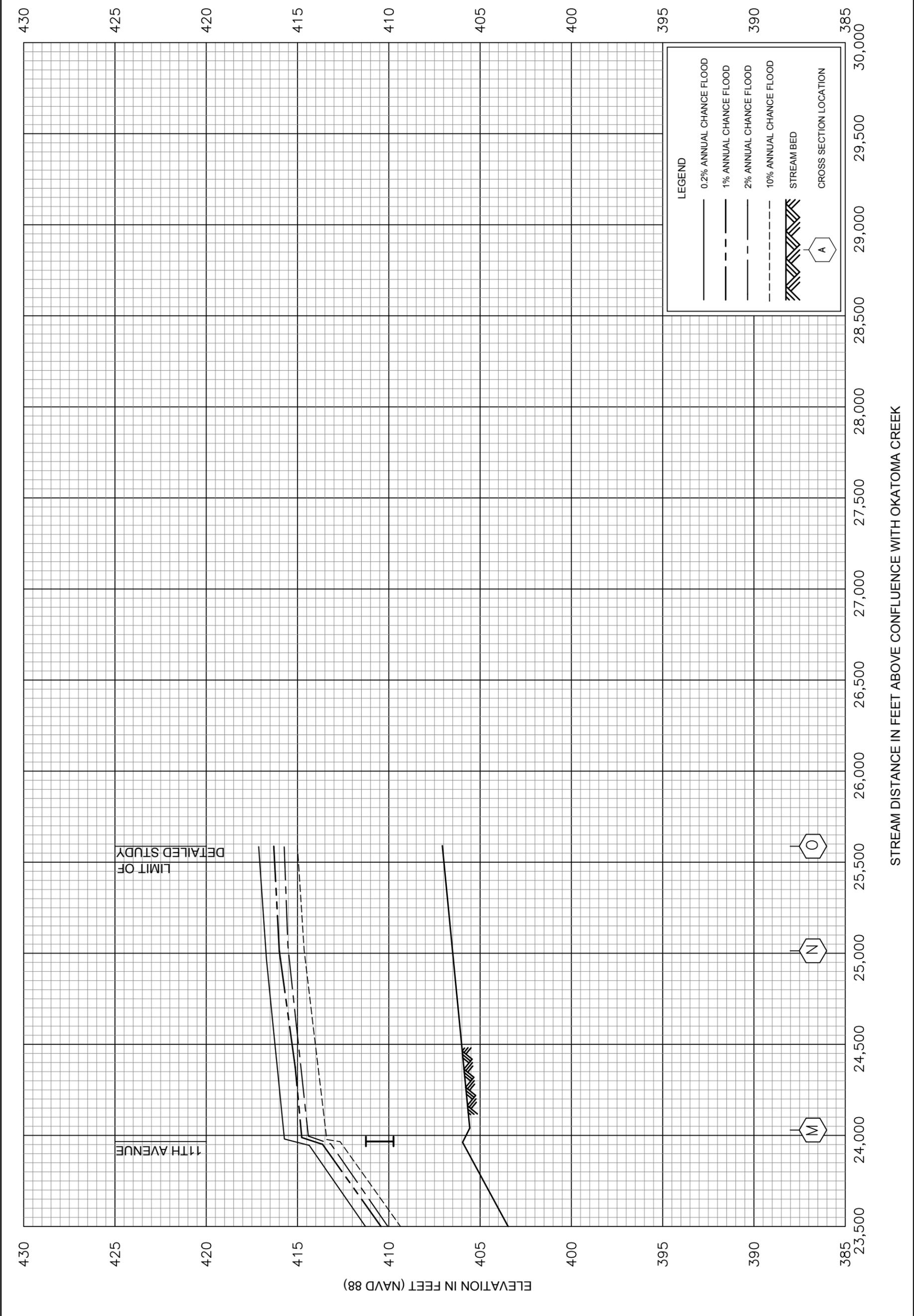
FLOOD PROFILES
MILL CREEK



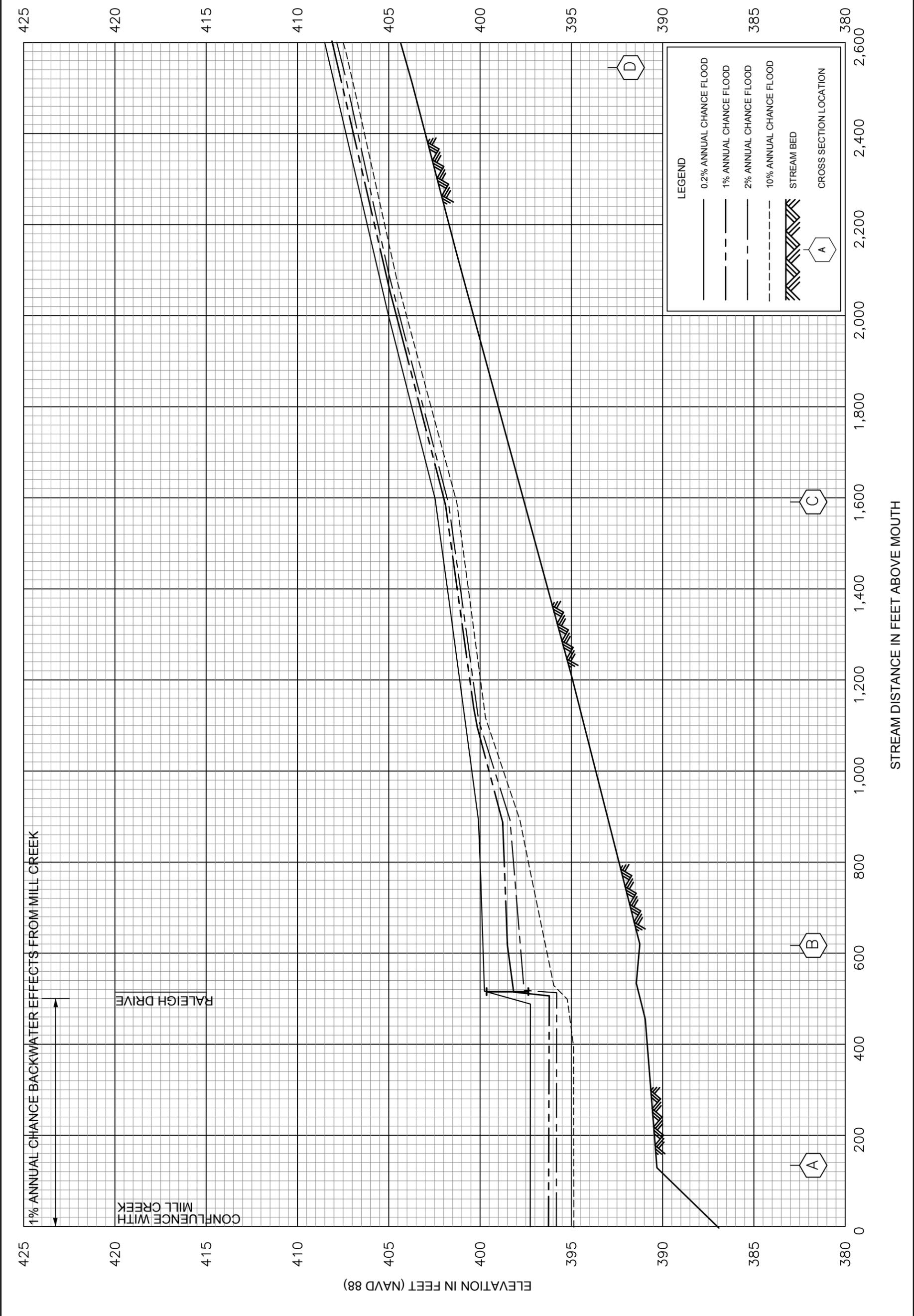
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH OKATOMA CREEK

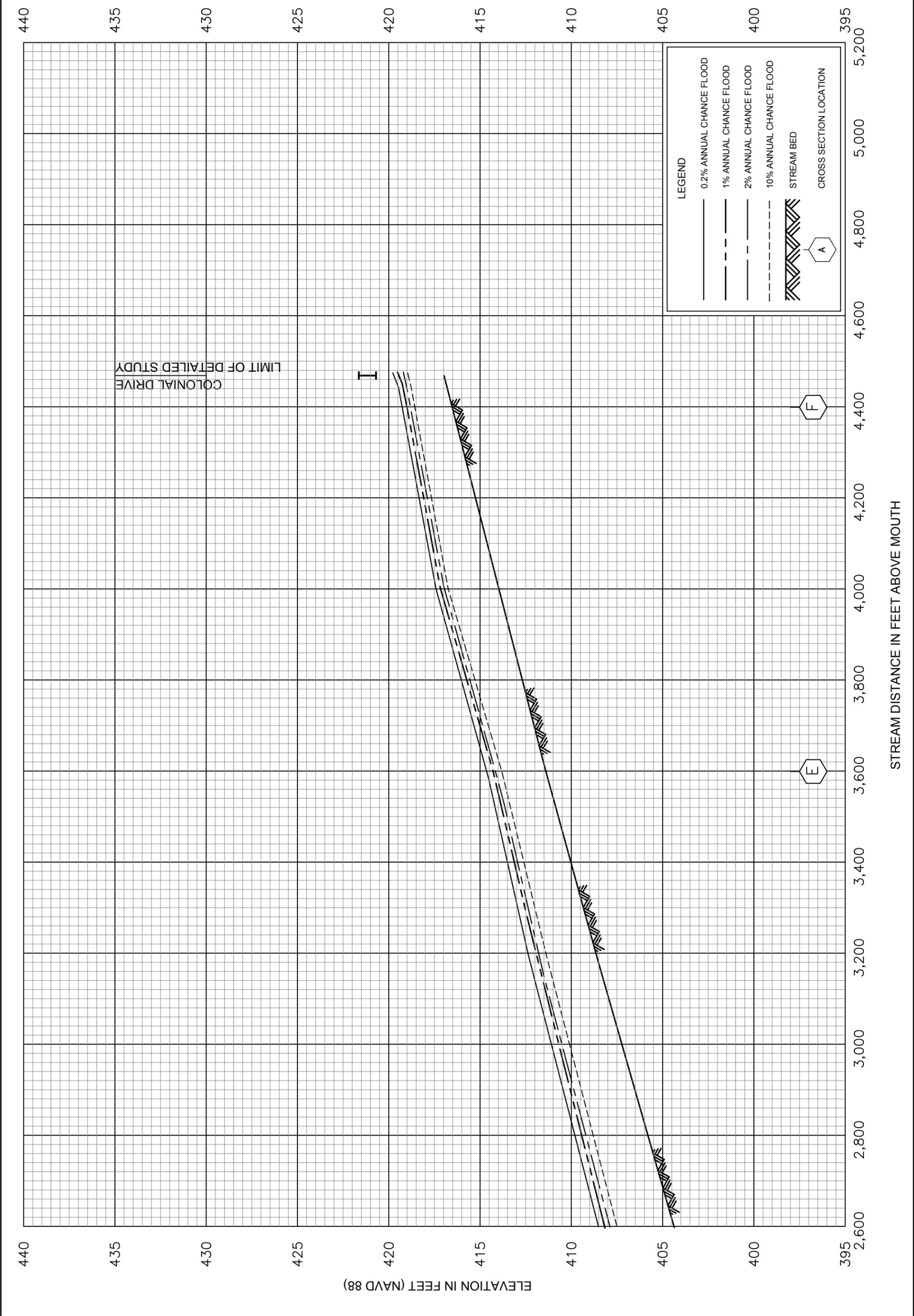


STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH OKATOMA CREEK



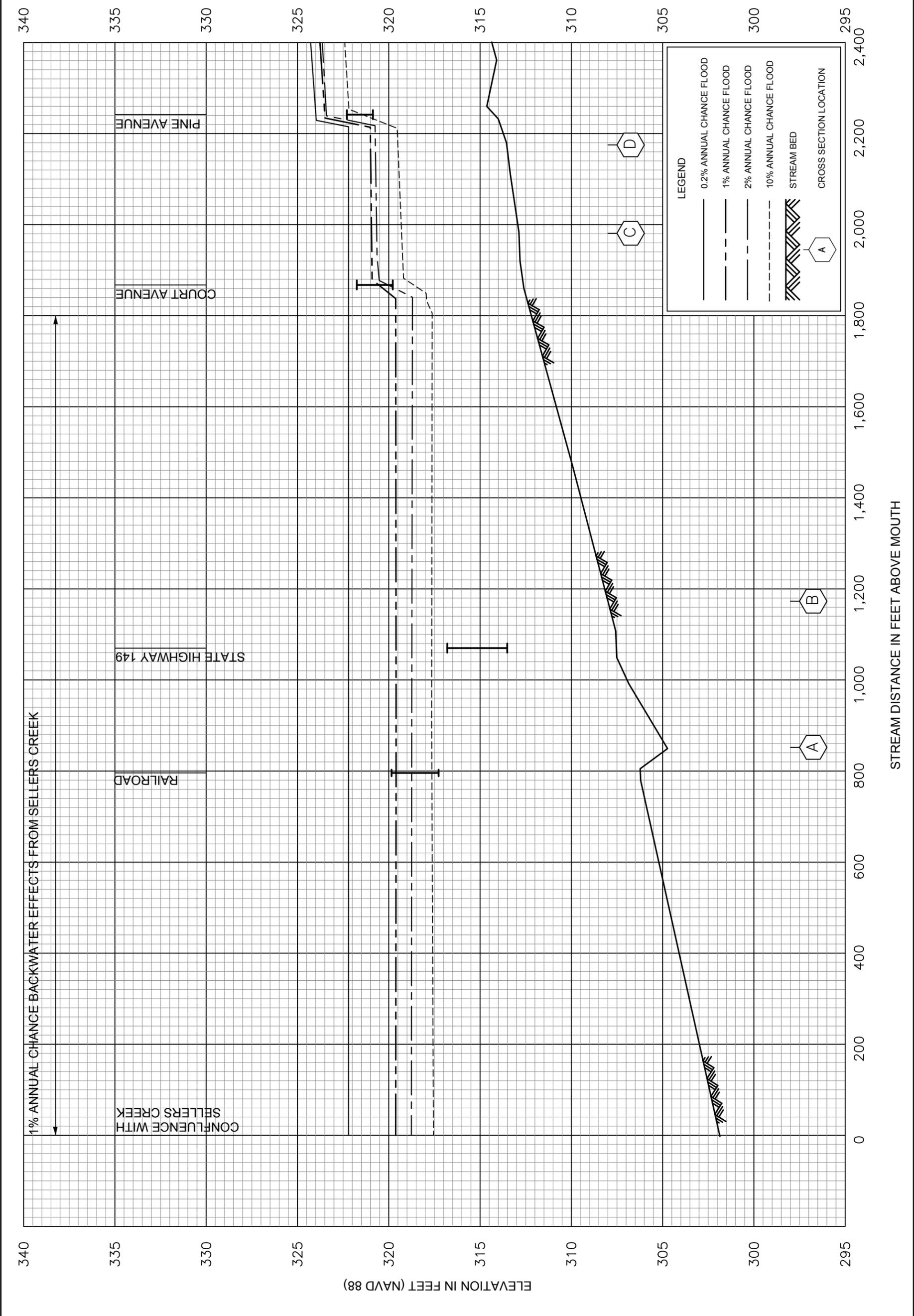
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH OKATOMA CREEK





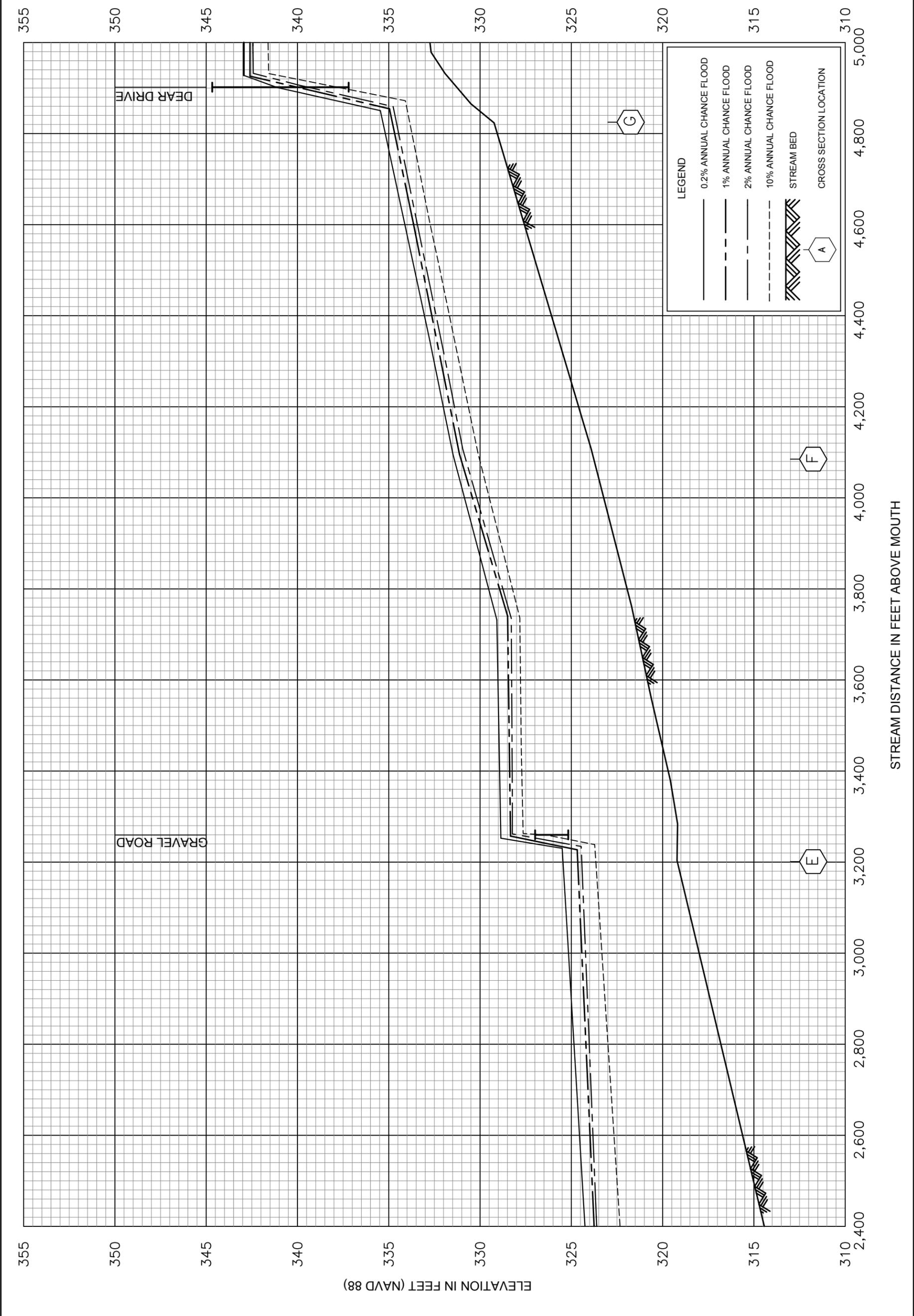
STREAM DISTANCE IN FEET ABOVE MOUTH

ELEVATION IN FEET (NAVD 88)



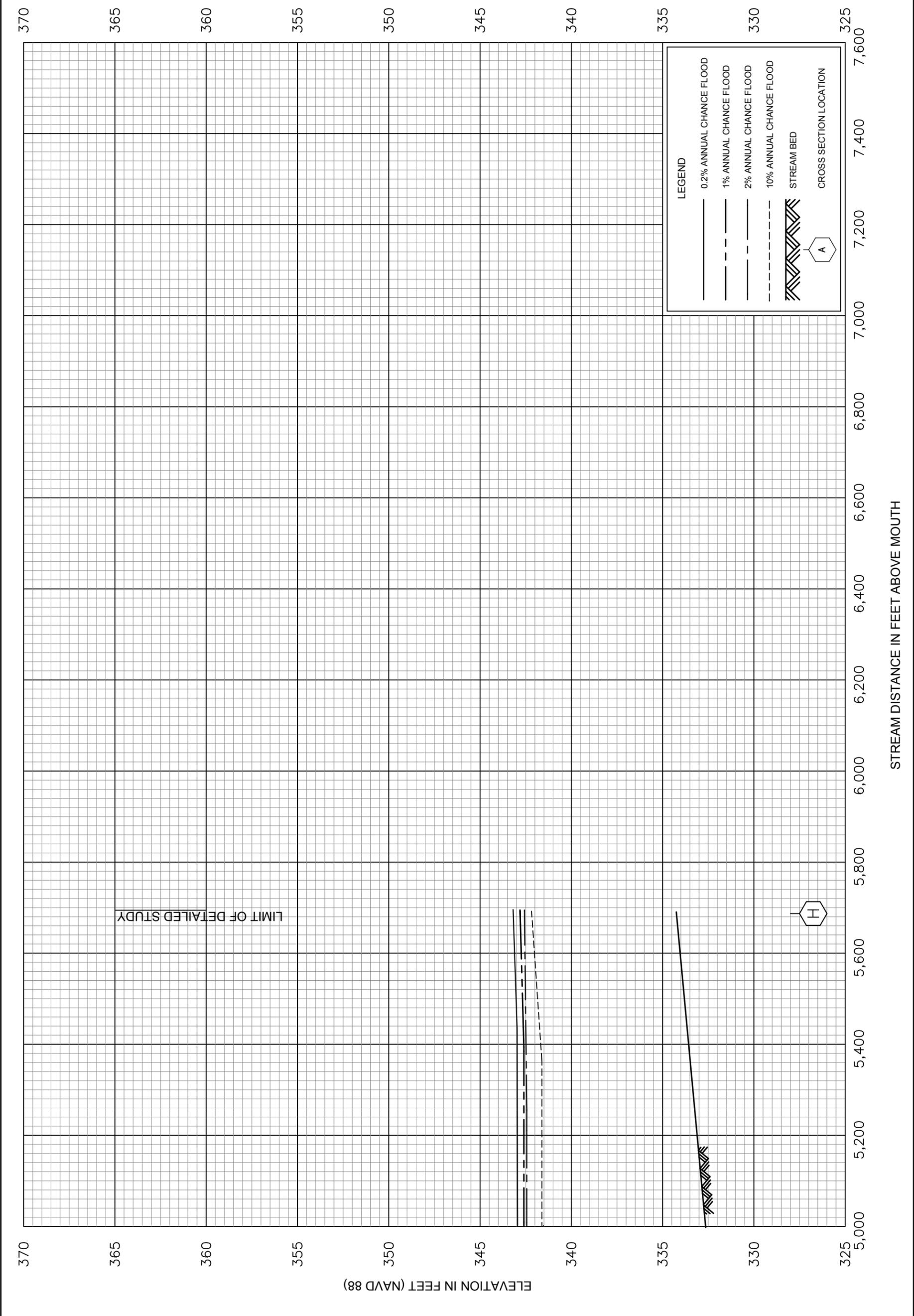
ELEVATION IN FEET (NAVD 88)

STREAM DISTANCE IN FEET ABOVE MOUTH



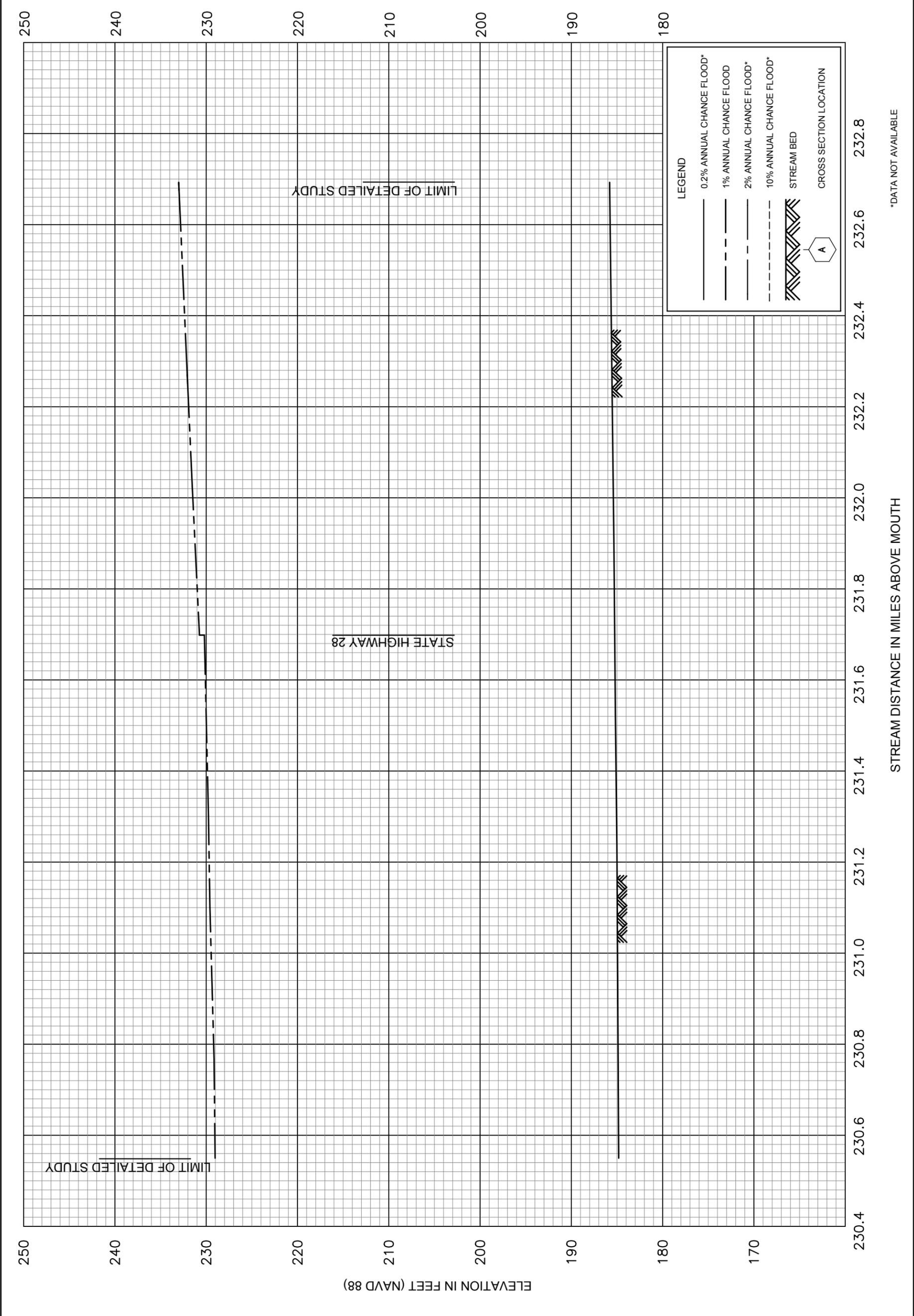
STREAM DISTANCE IN FEET ABOVE MOUTH

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE MOUTH

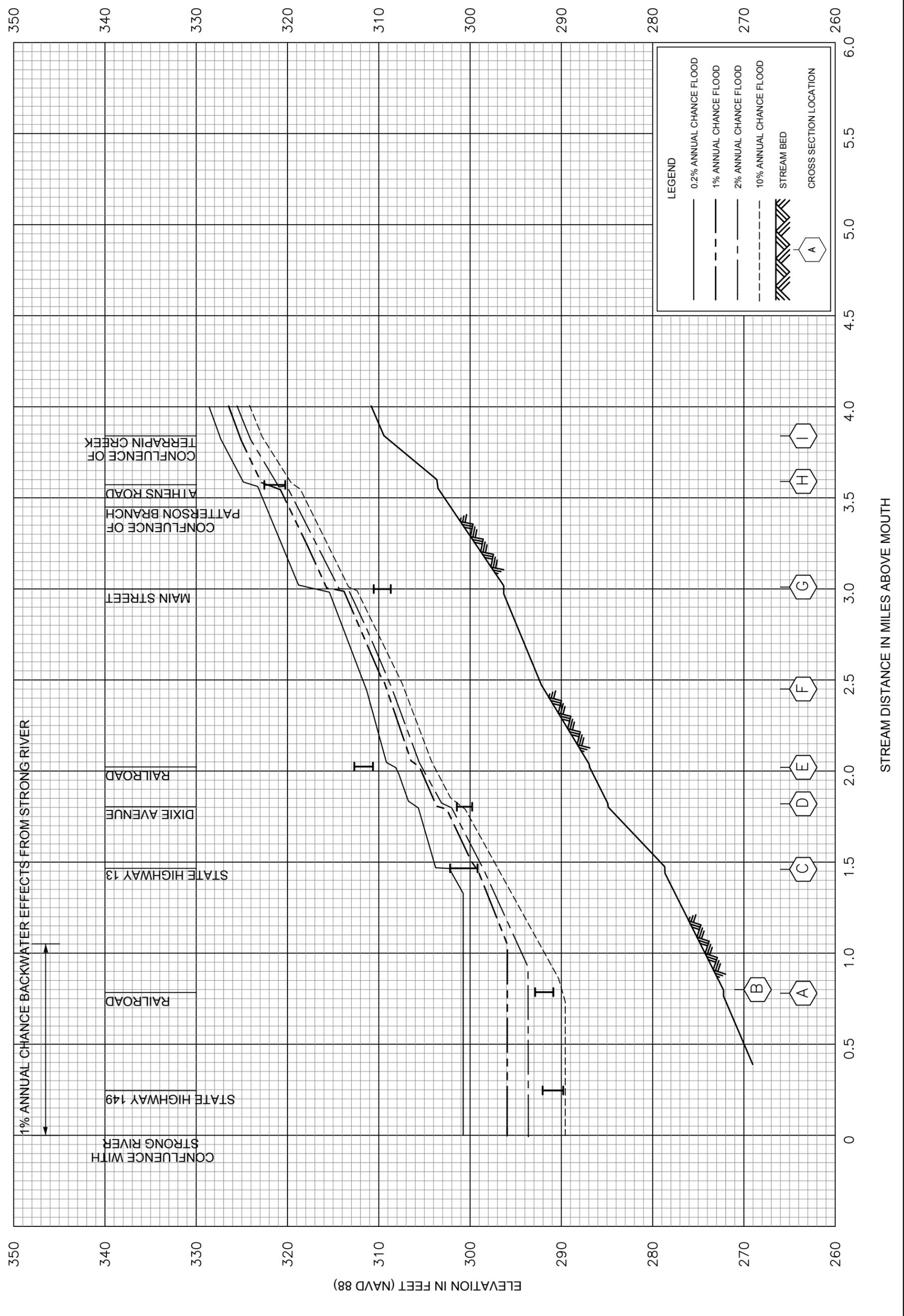
ELEVATION IN FEET (NAVD 88)



*DATA NOT AVAILABLE

STREAM DISTANCE IN MILES ABOVE MOUTH

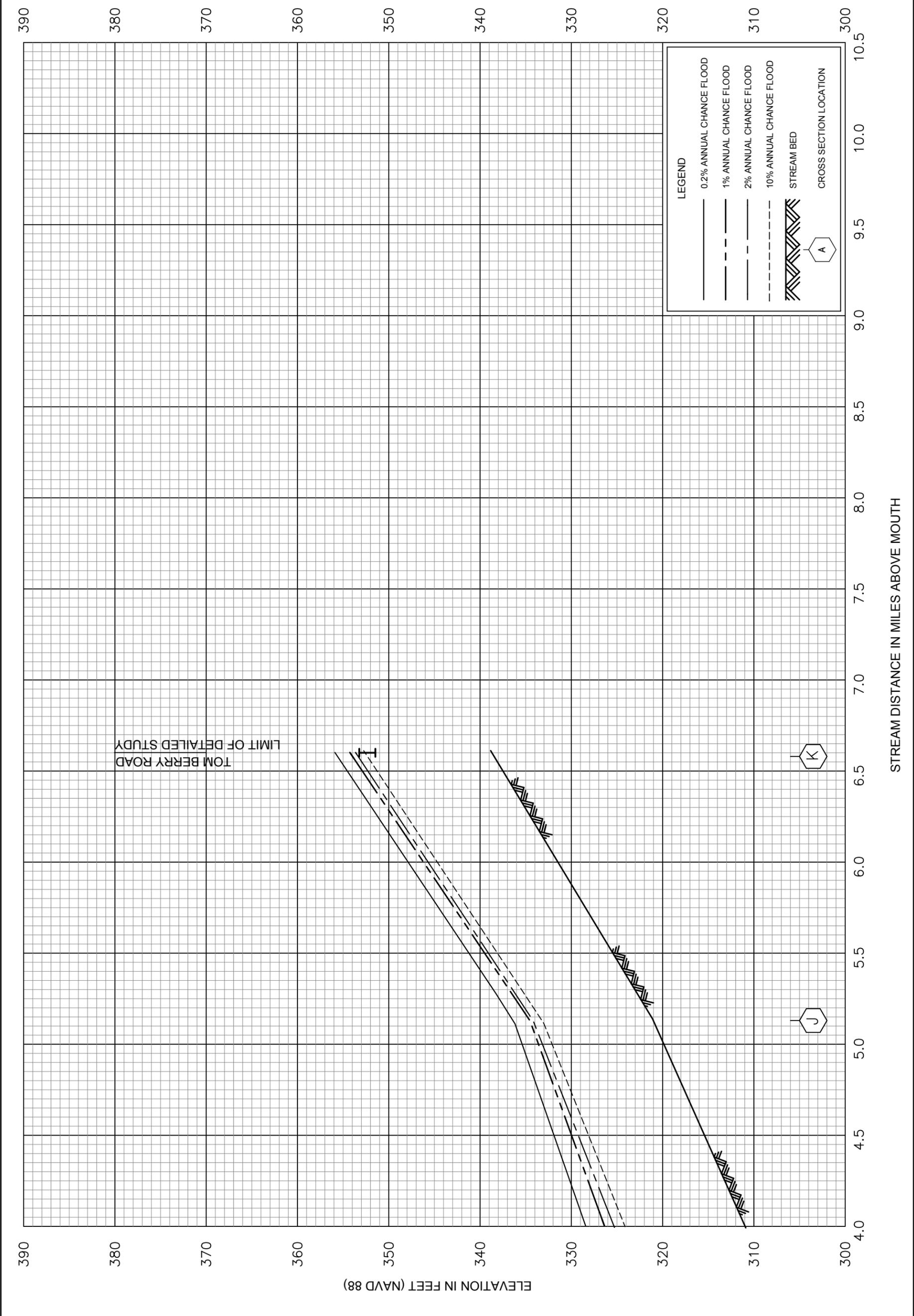
ELEVATION IN FEET (NAVD 88)



1% ANNUAL CHANCE BACKWATER EFFECTS FROM STRONG RIVER

ELEVATION IN FEET (NAVD 88)

STREAM DISTANCE IN MILES ABOVE MOUTH



ELEVATION IN FEET (NAVD 88)

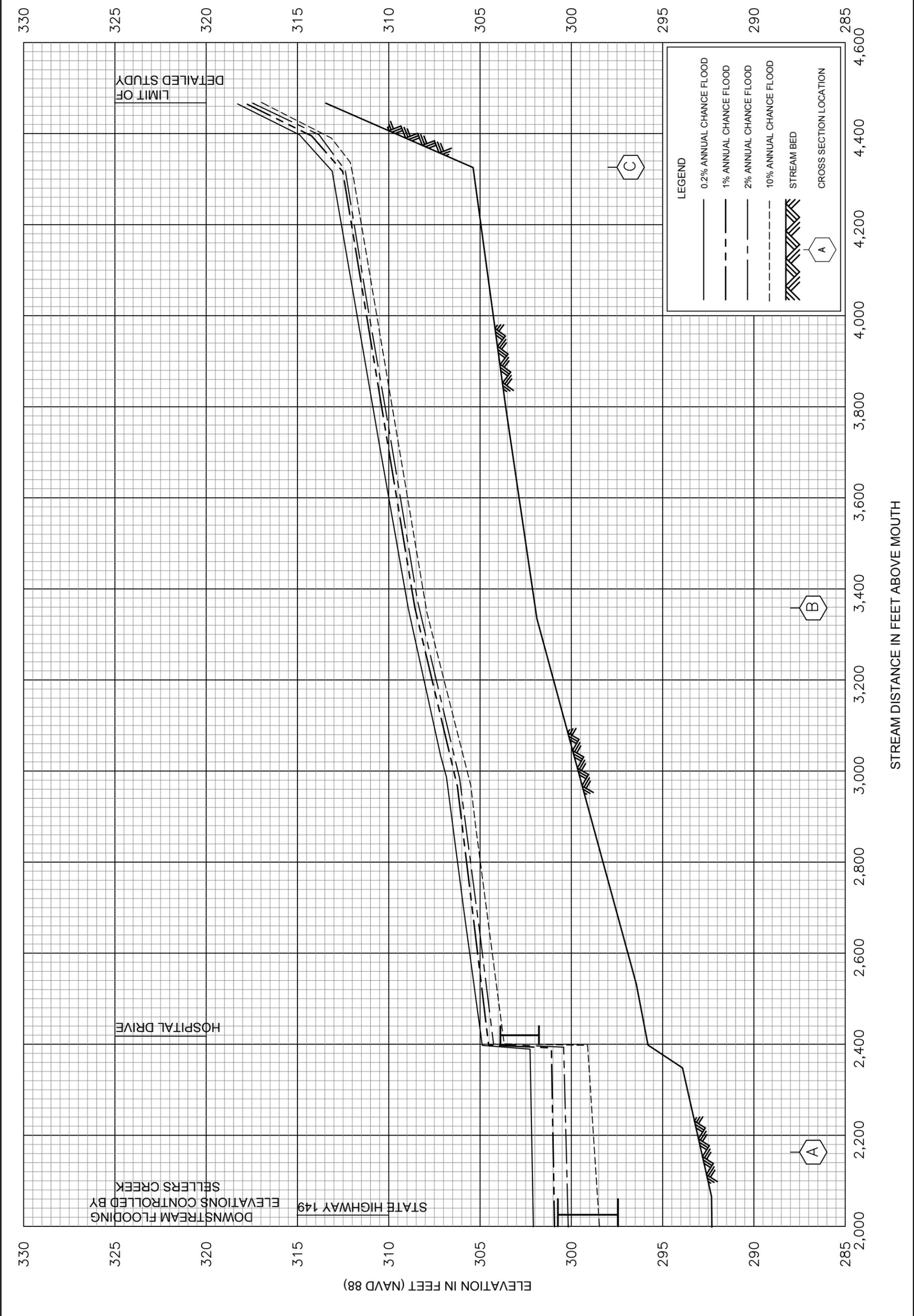
STREAM DISTANCE IN MILES ABOVE MOUTH

TOM BERRY ROAD
LIMIT OF DETAILED STUDY

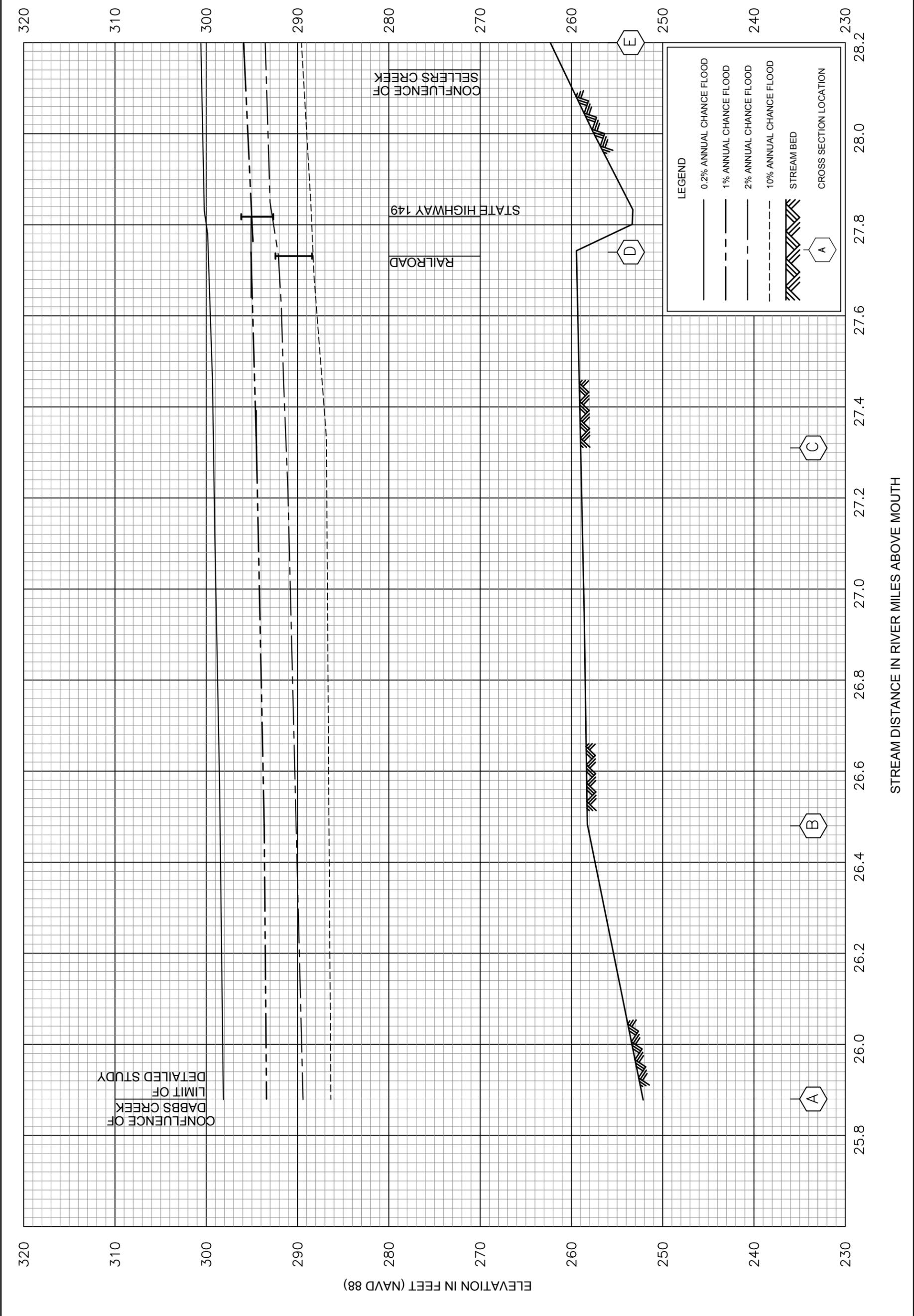
K

J

A



FLOOD PROFILES
STRONG RIVER



STREAM DISTANCE IN RIVER MILES ABOVE MOUTH

