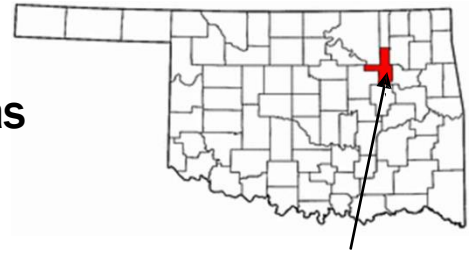


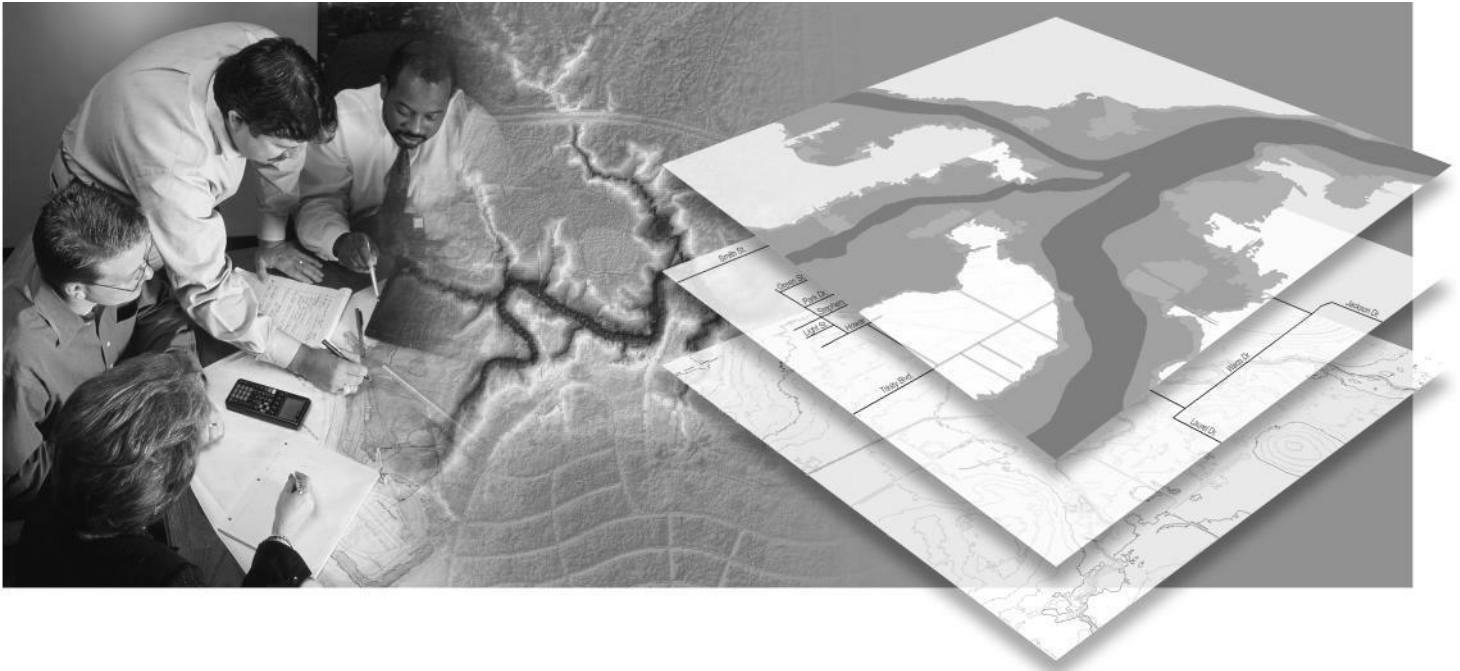
# Flood Insurance Study

Tulsa County, Oklahoma and Incorporated Areas

VOLUME 4 of 8



Tulsa  
County



## COMMUNITY NAME

## COMMUNITY NO.

Bixby, City of	400207
Broken Arrow, City of	400236
Collinsville, City of	400360
Glenpool, City of	400208
Jenks, City of	400209
Lotsee, Village of <sup>1</sup>	400546
Owasso, City of	400210
Sand Springs, City of	400211
Sapulpa, City of	400053
Skiatook, Town of	400212
Sperry, Town of	400213
Tulsa, City of	405381
Tulsa County (Unincorporated Areas)	400462

<sup>1</sup> No Special Flood Hazard Areas Identified

Revised: September 12, 2024  
FLOOD INSURANCE STUDY NUMBER  
40143CV004F



# FEMA

## **NOTICE TO FLOOD INSURANCE STUDY USERS**

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

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

Users should refer to Section 10.0, Revision Description, for further information. Section 10.0 is intended to present the most up-to-date information for specific portions of this FIS report. Therefore, users of the FIS report should be aware that the information presented in Section 10.0 supersedes information in Section 1.0 through 9.0 of this FIS report.

Initial Countywide FIS Effective Date: September 22, 1999.

First Revised Countywide FIS Revision Date: Map revised September 7, 2001 to change base flood elevations, to change special flood hazard areas, to reflect updated topographic information, and to change floodway.

Second Revised Countywide FIS Revision Date: Map revised April 16, 2003 to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to revise vertical datum, to update roads and road names, to incorporate previously issued Letters of Map Revision, and to reflect updated topographic information.

Third Revised Countywide FIS Revision Date: Map revised August 3, 2009 to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to revise vertical datum, to update roads and road names, to incorporate previously issued Letters of Map Revision, and to reflect updated topographic information.

Fourth Revised Countywide FIS Revision Date: Map revised October 16, 2012 to change Special Flood Hazard Areas, to reflect updated topographic information, and to incorporate previously issued Letter of Map Revision.

Fifth Revised Countywide FIS Revision Date: Map revised September 30, 2016 to change Base Flood Elevations and Special Flood Hazard Areas, and to incorporate previously issued Letters of Map Revision.

Sixth Revised Countywide FIS Revision Date: Map revised May 2, 2019 to change Special Flood Hazard Areas to reflect new detailed modeling of Joe Creek and its tributaries and to incorporate previously issued Letters of Map Revision.

Seventh Revised Countywide FIS Revision Date: Map revised September 12, 2024 to change Special Flood Hazard Areas to reflect new detailed modeling of Brookhollow Creek and its tributaries, Haikey Creek, and Little Haikey Creek, and to incorporate a channelization project related to a newly accredited levee along Haikey Creek.

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Exhibit 2 – Flood Insurance Rate Map Index (Published Separately)  
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FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET NAVD 88)
<b>Tributary to Brookhollow Creek Tributary</b>								
A	284	145	814	2.0	695.0	695.0	695.8	0.8
B	970	75	430	3.0	699.9	699.9	699.9	0.0
C	1,467	53	328	3.9	702.6	702.6	702.9	0.3
D	2,063	280	1709	0.7	707.2	707.2	708.1	0.9
E	2,772	60	254	4.0	711.0	711.0	711.7	0.7
F	3,457	33	132	6.9	713.8	713.8	713.8	0.0
G	3,933	31	85	9.1	715.1	715.1	715.1	0.0
H	4,510	17	83	9.3	719.2	719.2	719.2	0.0

<sup>1</sup> Feet above confluence with Brookhollow Creek Tributary

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

**TULSA COUNTY, OK**

AND INCORPORATED AREAS

**FLOODWAY DATA**

**TRIBUTARY TO BROOKHOLLOW CREEK TRIBUTARY**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Tupelo Creek</b>								
A	1,825	65	364	9.3	621.3	621.3	621.3	0.0
B	2,825	194	1,125	3.1	625.7	625.7	625.8	0.1
C	4,750	204	1,004	2.9	637.3	637.3	638.3	1.0
D	6,441	131	889	3.3	641.3	641.3	642.2	0.9
E	7,598	79	473	4.6	645.4	645.4	645.9	0.5
F	9,883	62	190	8.5	649.1	649.1	649.1	0.0
G	10,866	49	267	10.4	656.4	656.4	656.4	0.0
H	12,827	190	1,007	2.5	668.5	668.5	669.3	0.8

<sup>1</sup>Feet above confluence with Mingo Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**TUPELO CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Tupelo Creek Tributary A</b>								
A	1,150	13	52	10.7	654.7	654.7	655.4	0.7
B	1,505	36	77	8.3	661.7	661.7	661.7	0.0
C	1,803	50	128	5.0	664.5	664.5	664.9	0.4
D	2,186	70	151	3.5	667.9	667.9	668.5	0.6
E	2,394	120	378	1.1	668.6	668.6	669.3	0.7
F	4,515	55	185	7.7	686.7	686.7	686.8	0.1
G	5,115	73	218	6.5	689.2	689.2	689.9	0.7

<sup>1</sup>Feet above confluence with Tupelo Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**TUPELO CREEK TRIBUTARY A**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Tupelo Creek Tributary C</b>								
A	650	30	135	3.6	641.8	641.8	642.7	0.9
B	1,225	198	1,560	0.6	647.2	647.2	647.2	0.0
C	2,267	21	80	7.9	657.3	657.3	657.4	0.1
D	3,780	36	109	5.8	674.1	674.1	674.5	0.4
E	5,674	63	109	4.1	689.1	689.1	689.7	0.6
F	6,351	45	65	6.9	693.3	693.3	693.3	0.0

<sup>1</sup>Feet above confluence with Tupelo Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**TUPELO CREEK TRIBUTARY C**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Turtle Creek</b>								
A	500	53	273	5.5	664.8	662.4 <sup>2</sup>	663.4	1.0
B	1,000	50	213	7.0	664.8	664.8	664.9	0.1
C	1,500	40	183	8.2	667.2	667.2	667.2	0.0
D	2,000	43	193	7.8	669.9	669.9	670.0	0.1
E	3,000	40	194	6.3	676.3	676.3	676.3	0.0
F	4,000	43	248	4.9	684.7	684.7	684.9	0.2
G	4,500	41	189	6.4	685.4	685.4	685.7	0.3
H	5,000	44	161	7.5	687.2	687.2	687.3	0.1
I	5,500	38	100	7.3	691.4	691.4	691.8	0.4
J	6,500	27	90	8.1	699.2	699.2	699.3	0.1
K	7,000	38	131	5.5	702.1	702.1	702.3	0.2
L	7,445	31	109	6.7	704.5	704.5	704.7	0.2

<sup>1</sup>Feet above confluence with Middle Branch Haikey Creek.

<sup>2</sup>Water-surface elevations computed without consideration of backwater effects.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**TURTLE CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Unnamed Tributary 1 to West Branch Broken Arrow Creek								
A	128	112	772	2.3	655.2	655.2	656.2	1.0
B	334	61	426	4.1	655.2	655.2	656.2	1.0
C	562	42	295	5.9	655.4	655.4	656.3	0.9
D	1,010	35	243	7.2	656.7	656.7	657.5	0.8
E	1,329	26	187	9.3	658.0	658.0	658.8	0.8
F	1,839	30	216	8.1	661.3	661.3	662.2	0.9
G	2,234	29	197	8.9	663.6	663.6	664.0	0.4

<sup>1</sup> Feet above confluence with West Branch Broken Arrow Creek

<b>TABLE 8</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY	<b>FLOODWAY DATA</b>
	<b>TULSA COUNTY, OK AND INCORPORATED AREAS</b>	<b>UNNAMED TRIBUTARY 1 TO WEST BRANCH BROKEN ARROW CREEK</b>

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Skalall Creek Tributary</b>								
A	270	59	532	8.0	641.2	630.8 <sup>2</sup>	631.4	0.6
B	1,345	87	514	8.3	641.2	635.6 <sup>2</sup>	636.0	0.4
C	3,960	215	1,682	2.5	641.2	639.3 <sup>2</sup>	639.7	0.4
D	5,160	93	443	9.6	641.2	639.3 <sup>2</sup>	640.2	0.9
E	6,160	89	910	4.7	648.2	648.2	649.1	0.9
F	6,840	138	1,238	3.4	649.0	649.0	649.9	0.9
G	8,320	142	688	6.2	652.9	652.9	653.4	0.5
H	9,235	87	432	9.8	656.7	656.7	657.4	0.7
I	9,870	125	646	6.6	660.9	660.9	661.9	1.0
J	10,370	146	811	5.2	663.2	663.2	664.1	0.9
K	10,875	115	545	7.8	664.9	664.9	665.7	0.8
L	11,680	195	806	3.6	669.0	669.0	670.0	1.0
M	12,605	72	378	7.6	673.0	673.0	674.0	1.0
N	13,200	46	247	11.6	678.4	678.4	679.1	0.7

<sup>1</sup> Feet above confluence with Skalall Creek.

<sup>2</sup> Elevations calculated without consideration to backwater effects.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**SKALALL CREEK TRIBUTARY**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Unnamed Tributary 3 to West Branch Broken Arrow Creek								
A	26	67	407	1.7	677.4	677.4	678.4	1.0
B	188	47	249	2.7	677.5	677.5	678.4	0.9
C	395	28	73	9.2	678.4	678.4	678.9	0.5
D	587	196	755	0.9	683.2	683.2	683.7	0.5
E	1,086	104	355	1.9	683.3	683.3	683.7	0.4
F	1,419	36	82	8.2	685.4	685.4	686.2	0.8
G	1,649	36	131	5.1	688.1	688.1	688.8	0.7

<sup>1</sup> Feet above confluence with West Branch Broken Arrow Creek

<b>TABLE 8</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY	<b>FLOODWAY DATA</b>
	<b>TULSA COUNTY, OK</b> AND INCORPORATED AREAS	



FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Unnamed Tributary 4 to West Branch Broken Arrow Creek								
A	141	128	447	1.3	691.9	691.9	692.5	0.6
B	290	62	178	3.3	691.9	691.9	692.7	0.8
C	937	55	274	2.2	699.2	699.2	699.9	0.7
D	1,161	71	212	3.6	699.2	699.2	700.0	0.8
E	1,189	71	184	4.1	700.1	700.1	700.8	0.7
F	1,316	36	125	6.0	700.9	700.9	701.2	0.3
G	1,596	47	133	4.0	701.9	701.9	702.7	0.8
H	2,060	38	86	6.2	708.7	708.7	708.7	0.0
J	2,115	61	181	2.9	709.2	709.2	710.1	0.9
K	2,683	86	136	3.9	711.5	711.5	711.9	0.4
L	3,061	52	83	6.4	715.0	715.0	715.3	0.3
M	3,363	38	81	6.6	719.6	719.6	719.7	0.1

<sup>1</sup> Feet above confluence with West Branch Broken Arrow Creek

<b>TABLE 8</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY	<b>FLOODWAY DATA</b>
	<b>TULSA COUNTY, OK AND INCORPORATED AREAS</b>	<b>UNNAMED TRIBUTARY 4 TO WEST BRANCH BROKEN ARROW CREEK</b>

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Valley View Creek</b>								
A	425	81	592	6.3	622.4	622.4	623.1	0.7
B	1,400	73	424	8.8	622.8	622.8	622.9	0.1
C	2,671	115	742	5.0	627.9	627.9	627.9	0.0
D	3,742	63	407	9.2	631.6	631.6	631.6	0.0
E	4,499	56	584	6.4	641.4	641.4	641.8	0.4
F	5,101	48	531	7.0	645.8	645.8	645.8	0.0
G	5,826	48	399	8.7	646.0	646.0	646.0	0.0
H	6,560	39	204	12.6	646.3	646.3	646.3	0.0
I	7,861	35	193	13.4	657.4	657.4	657.4	0.0
J	8,151	38	198	13.0	658.9	658.9	658.9	0.0
K	8,868	38	198	13.0	664.8	664.8	664.8	0.0
L	9,143	38	198	13.0	666.8	666.8	666.8	0.0

<sup>1</sup>Feet above confluence with Flat Rock Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**VALLEY VIEW CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Vensel Creek</b>								
A	3,050	60	260	18.8	628.1	628.1	628.1	0.0
B	3,600	61	266	18.4	630.2	630.2	630.2	0.0
C	4,200	59	333	13.4	634.6	634.6	634.6	0.0
D	4,600	175	553	7.3	636.8	636.8	636.8	0.0
E	5,172	88	795	6.0	641.2	641.2	641.2	0.0
F	5,800	210	899	4.1	647.3	647.3	647.4	0.1
G	6,465	297	666	5.6	651.5	651.5	651.5	0.0
H	7,600	316	740	4.3	656.1	656.1	656.1	0.0
I	9,200	45	337	8.2	665.6	665.6	665.6	0.0
J	10,610	61	364	5.6	673.2	673.2	673.2	0.0
K	11,400	61	300	6.8	678.1	678.1	678.1	0.0
L	11,920	118	45	3.5	690.4	690.4	690.4	0.0

<sup>1</sup>Feet above confluence with Arkansas River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**VENSEL CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Vensel Creek South</b>								
A	710	54	420	6.8	611.4	609.6 <sup>2</sup>	610.1	0.5
B	1,890	119	738	4.1	614.0	614.0	614.2	0.2
C	3,300	315	1,820	1.7	615.2	615.2	616.2	1.0
D	6,700	75	220	0.3	616.4	616.4	617.4	1.0

<sup>1</sup> Feet above confluence with the Arkansas River

<sup>2</sup> Elevation computed without consideration of backwater from Arkansas River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**VENSEL CREEK SOUTH**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Vensel Creek Tributary D</b>								
A	100	25	65	14.0	634.6	631.4 <sup>2</sup>	631.4	0.0
B	1,600	22	50	18.2	643.6	643.6	643.6	0.0

<sup>1</sup>Feet above confluence with Vensel Creek.

<sup>2</sup>Water-surface elevations computed with consideration of backwater effects from Vensel Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**VENSEL CREEK TRIBUTARY D**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Vensel Creek Tributary H</b>								
A	650	85	738	7.2	616.2	616.2	616.2	0.0
B	1,650	91	493	6.4	617.8	617.8	617.8	0.0

<sup>1</sup>Feet above confluence with Vensel Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**VENSEL CREEK TRIBUTARY H**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
West Branch Broken Arrow Creek								
A	2,570	139	909	5.5	603.5	603.5	604.0	0.5
B	4,632	303	1,953	2.5	606.5	606.5	607.3	0.8
C	6,453	221	916	5.4	608.7	608.7	609.3	0.6
D	8,825	143	863	5.7	613.2	613.2	613.9	0.7
E	10,626	228	983	5.1	617.6	617.6	618.2	0.6
F	10,687	228	1,694	3.0	620.4	620.4	621.0	0.6
G	11,565	156	1,037	4.8	620.8	620.8	621.7	0.9
H	12,342	146	883	5.7	622.0	622.0	622.9	0.9
I	12,680	169	932	5.4	624.5	624.5	624.5	0.0
J	13,459	193	1,247	4.0	627.9	627.9	628.0	0.1
K	13,546	183	1,068	4.7	627.8	627.8	628.7	0.9
L	15,454	204	995	5.1	635.3	635.3	635.3	0.0
M	16,877	142	539	9.1	636.9	636.9	637.3	0.4
N	16,908	142	981	5.0	639.4	639.4	640.3	0.9
O	17,037	194	1,070	4.6	639.9	639.9	640.6	0.7
P	17,066	194	1,248	3.9	640.5	640.5	641.5	1.0
Q	17,896	114	852	5.8	641.1	641.1	642.1	1.0
R	17,950	117	928	5.3	642.1	642.1	643.0	0.9
S	19,893	210	1,273	3.9	644.9	644.9	645.7	0.8
T	22,322	150	770	6.1	649.1	649.1	649.7	0.6
U	22,387	150	895	5.3	649.7	649.7	650.4	0.7

<sup>1</sup> Feet above confluence with Broken Arrow Creek

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**TULSA COUNTY, OK  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**WEST BRANCH BROKEN ARROW CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
West Branch Broken Arrow Creek								
V	23,295	198	960	4.6	653.1	653.1	653.8	0.7
W	24,644	169	999	4.0	655.0	655.0	655.9	0.9
X	26,841	82	728	5.4	662.2	662.2	662.3	0.1
Y	27,817	72	572	6.6	663.4	663.4	663.8	0.4
Z	27,923	72	765	4.9	666.6	666.6	667.1	0.5
AA	29,021	80	557	4.2	667.1	667.1	667.9	0.8
AB	30,030	65	462	5.1	669.8	669.8	670.5	0.7
AC	31,323	51	352	6.6	673.8	673.8	674.7	0.9
AD	32,289	71	417	4.3	677.0	677.0	677.9	0.9
AE	34,788	64	389	4.6	684.5	684.5	685.1	0.6
AF	35,959	78	452	3.9	687.3	687.3	687.6	0.3
AG	36,867	116	428	4.2	691.6	691.6	692.0	0.4
AH	37,038	73	236	5.1	692.0	692.0	692.4	0.4
AI	37,268	67	242	5.0	694.2	694.2	694.6	0.4
AJ	37,567	129	445	2.7	697.4	697.4	697.9	0.5
AK	38,433	44	152	6.8	704.3	704.3	704.3	0.0
AL	39,145	37	112	9.3	708.8	708.8	709.5	0.7

<sup>1</sup> Feet above confluence with Broken Arrow Creek

**TABLE  
8**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**TULSA COUNTY, OK  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**WEST BRANCH BROKEN ARROW CREEK**



FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>West Branch Haikey Creek</b>								
A	463	250	1,018	4.2	662.5	657.8 <sup>2</sup>	656.1	0.2
B	1,353	90	594	7.1	662.5	662.5	662.5	0.0
C	2,480	120	735	3.3	664.8	664.8	665.1	0.3
D	3,379	66	277	8.7	666.7	666.7	666.8	0.1
E	4,490	56	348	6.9	669.4	669.4	669.5	0.1
F	4,851	100	845	2.7	672.9	672.9	673.3	0.4
G	5,966	70	441	5.1	673.6	673.6	674.1	0.5
H	7,034	140	857	2.6	676.6	676.6	677.0	0.4
I	7,975	92	515	4.4	677.9	677.9	678.3	0.4
J	9,047	97	657	2.8	680.2	680.2	680.4	0.2
K	10,175	125	899	2.1	691.6	691.6	691.9	0.3
L	11,062	104	748	2.5	691.8	691.8	692.3	0.5
M	12,000	99	537	3.4	692.3	692.3	692.8	0.5
N	13,402	57	303	6.1	694.7	694.7	695.2	0.5

<sup>1</sup>Feet above confluence with Haikey Creek.

<sup>2</sup>Water-surface elevations computed without consideration of backwater effects.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**WEST BRANCH HAIKEY CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>West Branch Haikey Creek Tributary</b>								
A	572	65	464	3.3	666.9	665.0 <sup>2</sup>	666.0	1.0
B	1,437	55	353	4.3	668.2	668.2	668.4	0.2
C	2,527	85	458	3.3	672.2	672.2	672.7	0.5
D	3,763	70	456	3.3	673.8	673.8	674.6	0.8

<sup>1</sup>Feet above confluence with West Branch Haikey Creek.

<sup>2</sup>Water-surface elevations computed without consideration of backwater effects.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**WEST BRANCH HAIKEY CREEK TRIBUTARY**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
<b>West Branch Joe Creek</b>								
A	71	190	720	10.6	660.9	660.9	661.1	0.2
B	640	121	631	0.6	664.6	665.0 <sup>2</sup>	665.7	0.7
C	1,810	55	108	2.2	665.1	665.3 <sup>2</sup>	666.0	0.7
D	2,796	79	60	3.7	669.7	669.7	670.6	0.9
E	3,929	73	277	1.6	678.7	678.7	679.3	0.6
F	4,880	116	500	1.4	683.4	683.4	684.4	1.0
G	5,524	45	563	1.7	687.5	687.5	688.3	0.8
H	7,314	90	500	1.2	697.8	697.8	698.7	0.9
I	8,792	73	338	2.2	707.2	707.2	707.7	0.5
J	9,908	80	329	2.3	711.5	711.5	712.2	0.7
K	10,649	161	789	0.8	717.0	717.0	717.9	0.9
L	11,178	56	270	2.2	720.1	720.1	720.9	0.8
M	11,808	114	332	0.7	722.6	722.6	723.3	0.7

<sup>1</sup>Feet above confluence with Joe Creek.

<sup>2</sup>Elevation computed without consideration of backwater.

<b>TABLE 8</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY	<b>FLOODWAY DATA</b>
	<b>TULSA COUNTY, OK</b> AND UNINCORPORATED AREAS	

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>White Church Creek</b>								
A	121	72	450	6.1	603.3	594.0 <sup>2</sup>	595.0	1.0
B	1,189	163	870	3.3	604.0	602.3 <sup>2</sup>	603.3	1.0
C	2,115	273	626	4.6	606.0	605.4 <sup>2</sup>	606.4	1.0
D	2,836	199	631	4.6	609.2	609.2	610.1	0.9
E	3,820	58	333	6.7	613.5	613.5	614.1	0.6
F	4,724	103	472	4.7	617.6	617.6	618.5	0.9
G	5,448	188	604	3.7	619.0	619.0	620.0	1.0
H	6,079	43	191	8.6	620.3	620.3	620.8	0.5
I	6,850	56	359	4.6	624.5	624.5	625.5	1.0
J	7,278	140	831	2.0	629.0	629.0	629.9	0.9
K	7,989	164	859	1.9	630.6	630.6	631.6	1.0
L	8,410	105	429	3.8	631.7	631.7	632.4	0.7
M	9,123	45	342	4.8	636.2	636.2	636.6	0.4
N	9,698	129	600	2.3	636.4	636.4	637.4	1.0
O	10,565	48	318	4.4	638.9	638.9	639.7	0.8
P	11,242	55	377	3.7	644.0	644.0	644.8	0.8
Q	11,850	42	217	6.4	644.6	644.6	645.2	0.6
R	12,581	60	316	4.4	647.7	647.7	648.6	0.9
S	13,600	59	248	5.6	652.2	652.2	652.9	0.7
T	14,107	65	269	5.2	654.8	654.8	655.6	0.8

<sup>1</sup>Feet above confluence with Haikey Creek.

<sup>2</sup>Water surface elevation controlled by flooding from Haikey Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**WHITE CHURCH CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
White Church Creek (cont)								
U	14,444	116	378	3.7	656.4	656.4	657.4	1.0
V	15,025	108	793	1.8	665.2	665.2	665.9	0.7
W	15,638	121	1,213	1.2	665.2	665.2	666.0	0.8
X	16,217	115	539	2.6	665.4	665.4	666.2	0.8
Y	17,552	244	438	2.6	668.0	668.0	668.2	0.2
Z	18,932	170	1,101	1.1	675.7	675.7	675.7	0.0
AA	19,701	212	899	1.3	675.7	675.7	675.8	0.1
AB	20,996	163	260	4.4	678.9	678.9	678.9	0.0
AC	21,300	115	338	3.0	679.5	679.5	680.0	0.5
AD	21,390	110	436	2.3	680.9	680.9	681.4	0.5

<sup>1</sup>Feet above confluence with Haikey Creek.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**WHITE CHURCH CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Wilmott Creek</b>								
A	2,075	73	321	1.4	612.3	612.3	613.3	1.0
B	2,900	45	160	2.2	612.9	612.9	613.5	0.6
C	4,090	50	201	1.1	613.4	613.4	614.1	0.7
D	4,870	45	176	1.3	613.6	613.6	614.2	0.6
E	5,730	58	251	0.2	613.6	613.6	614.3	0.7

<sup>1</sup>Feet upstream of Jenks Levee.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**WILMOTT CREEK**

**APPENDIX A**

**Table 9: Listing of NFIP Jurisdictions**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Bixby, City of	400207	11110101	40143C0369L 40143C0388M 40143C0429L 40143C0432M 40143C0433L 40143C0434L 40143C0440L 40143C0445L 40143C0451M 40143C0453M 40143C0454M 40143C0458L 40143C0459L 40143C0465L 40143C0470K 40143C0505K 40143C0510K 40143C0530K	
Broken Arrow, City of	400236	11110101 11070105 11070107	40143C0377M 40143C0378L 40143C0379L 40143C0385M 40143C0386M 40143C0387L 40143C0388M 40143C0389M 40143C0391L 40143C0392L 40143C0393M 40143C0394M 40143C0451M 40143C0452M 40143C0454M 40143C0456M 40143C0457M 40143C0458L 40143C0459L	
Collinsville, City of	400360	11070106 11070107	40143C0045K 40143C0065K 40143C0070K 40143C0110L 40143C0130K 40143C0135K	

**Table 9: Listing of NFIP Jurisdictions, Continued**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Glenpool, City of	400208	11110101	40143C0407L 40143C0409K 40143C0420K 40143C0426L 40143C0428L 40143C0429L 40143C0440L 40143C0485K	
Jenks, City of	400209	11110101	40143C0342L 40143C0344L 40143C0361L 40143C0362L 40143C0363L 40143C0364L 40143C0407L 40143C0426L 40143C0427L 40143C0428L 40143C0429L 40143C0431L 40143C0433L	
Lotsee, Village of <sup>1</sup>	400546	11110101	40143C0190K	
Owasso, City of	400210	11070106 11070107	40143C0110L 40143C0120L 40143C0130K 40143C0135K 40143C0136K 40143C0137K 40143C0138L 40143C0139L 40143C0145K	
Sand Springs, City of	400211	11110101	40143C0190K 40143C0192K 40143C0194K 40143C0211L 40143C0212L 40143C0213L 40143C0214L 40143C0305K 40143C0307K 40143C0309K 40143C0326L 40143C0327L 40143C0328K <sup>2</sup> 40143C0329K <sup>2</sup>	
Sapulpa, City of	400053	11110101	40143C0333L	



**Table 9: Listing of NFIP Jurisdictions, Continued**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Skiatook, Town of	400212	11070106 11070107	40143C0040K 40143C0045K 40143C0085K 40143C0105L 40143C0110L	
Sperry, Town of	400213	11070107	40143C0115L	
Tulsa, City of	405381	11110101 11070107 11070105	40143C0210L 40143C0212L 40143C0214L 40143C0220L 40143C0226L 40143C0227L 40143C0228L 40143C0229L 40143C0231L 40143C0232L 40143C0233L 40143C0234L 40143C0240L 40143C0241L 40143C0242L 40143C0243L 40143C0244L 40143C0251L 40143C0252L 40143C0253L 40143C0254L 40143C0261L 40143C0262L 40143C0263L 40143C0264M 40143C0270M 40143C0331L 40143C0332L 40143C0333L 40143C0334L 40143C0342L 40143C0351L 40143C0352M 40143C0353L 40143C0354M 40143C0356M 40143C0357L 40143C0358M 40143C0359M	

**Table 9: Listing of NFIP Jurisdictions, Continued**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Tulsa, City of (Continued)	405381	11110101 11070107 11070105	40143C0361L 40143C0362L 40143C0364L 40143C0366L 40143C0367M 40143C0368L 40143C0369L 40143C0376M 40143C0377M 40143C0378L 40143C0379L 40143C0385M 40143C0386M 40143C0388M 40143C0427L 40143C0431L 40143C0432M 40143C0434L	
Tulsa County, Unincorporated Areas	400462	11110101 11070106 11050003 11060006 11070107	40143C0020K 40143C0040K 40143C0045K 40143C0065K 40143C0070K 40143C0085K 40143C0095L 40143C0105L 40143C0110L 40143C0115L 40143C0120L 40143C0130K 40143C0135K 40143C0136K 40143C0137K 40143C0138L 40143C0139L 40143C0145K 40143C0170K 40143C0190K 40143C0191K 40143C0192K 40143C0193K 40143C0194K 40143C0210L 40143C0211L 40143C0212L 40143C0213L 40143C0214L 40143C0220L	

**Table 9: Listing of NFIP Jurisdictions, Continued**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Tulsa County, Unincorporated Areas (Continued)	400462		40143C0226L 40143C0227L 40143C0228L 40143C0231L 40143C0232L 40143C0233L 40143C0234L 40143C0240L 40143C0241L 40143C0242L 40143C0243L 40143C0251L 40143C0252L 40143C0253L 40143C0260K <sup>2</sup> 40143C0261L 40143C0285K 40143C0305K 40143C0306K 40143C0307K 40143C0308K 40143C0309K 40143C0326L 40143C0327L 40143C0328K <sup>2</sup> 40143C0329K <sup>2</sup> 40143C0331L 40143C0332L 40143C0333L 40143C0334L 40143C0342L 40143C0344L 40143C0351L 40143C0362L 40143C0363L 40143C0364L 40143C0389M 40143C0392L 40143C0394M 40143C0407L 40143C0409K 40143C0420K 40143C0426L 40143C0427L 40143C0428L 40143C0429L 40143C0431L	
		11110101 11070106 11050003 11060006 11070107		

**Table 9: Listing of NFIP Jurisdictions, Continued**

Community	CID	HUC-8 Sub Basins	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Tulsa County, Unincorporated Areas (Continued)	400462	11110101 11070106 11050003 11060006 11070107	40143C0432M 40143C0433L 40143C0434L 40143C0440L 40143C0445L 40143C0451M 40143C0452M 40143C0453M 40143C0454M 40143C0457M 40143C0458L 40143C0459L 40143C0465L 40143C0470K 40143C0485K 40143C0505K 40143C0510K 40143C0530K	

<sup>1</sup>No Special Flood Hazard Areas Identified

<sup>2</sup>Panel Not Printed

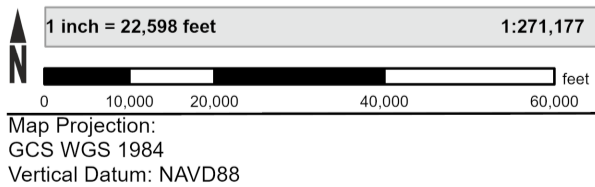
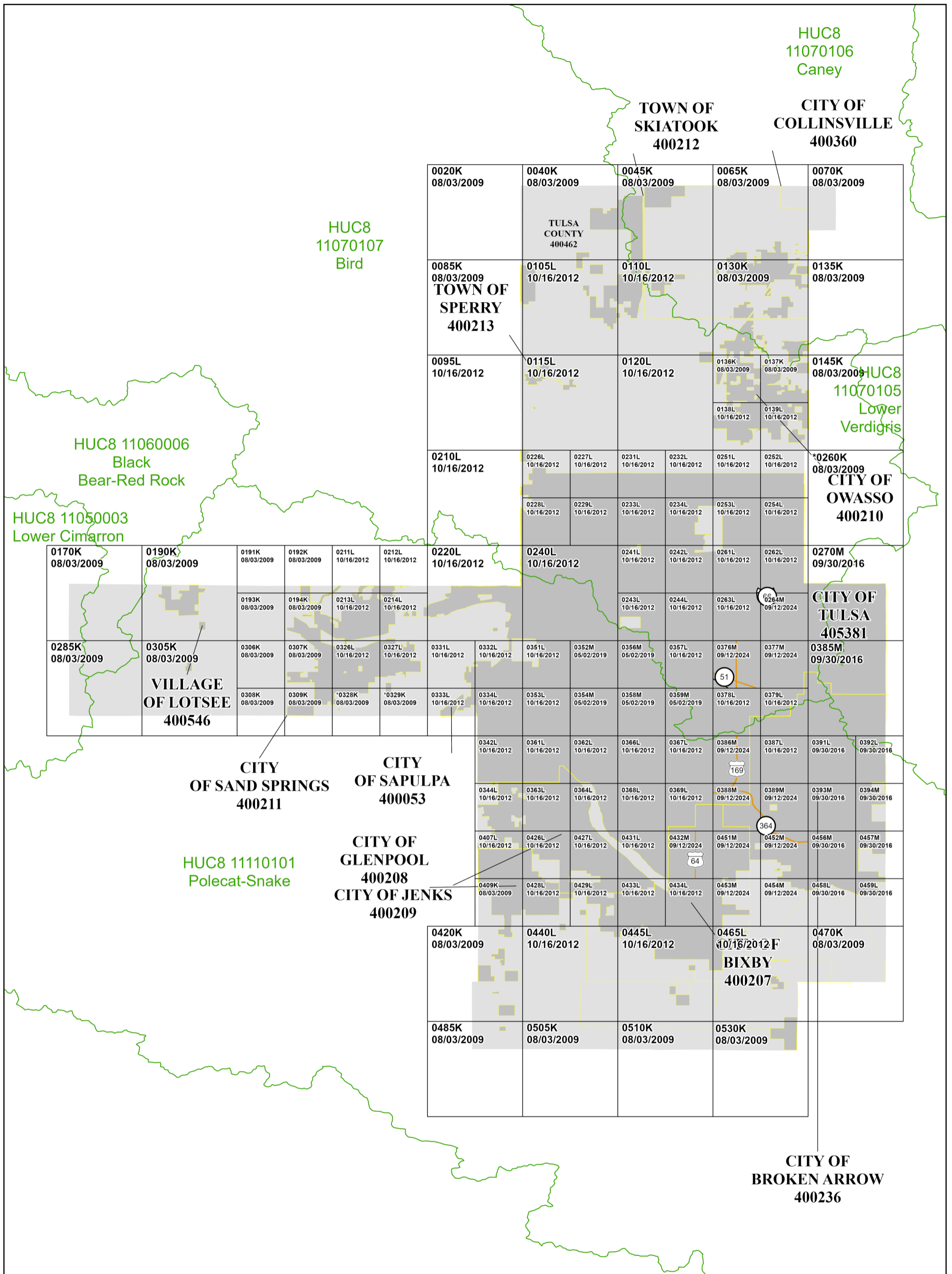
**Table 10: Map Repositories**

Community	Address	City	State	Zip Code
Bixby, City of	Public Works Dawes Building 113 West Dawes Avenue	Bixby	OK	74008
Broken Arrow, City of	Operations Building 485 North Poplar Avenue	Broken Arrow	OK	74012
Collinsville, City of	City Hall 106 North 12th Street	Collinsville	OK	74021
Glenpool, City of	City Hall 12205 South Yukon Avenue	Glenpool	OK	74033
Jenks, City of	City Hall 211 North Elm Street	Jenks	OK	74037
Lotsee, Village of	Flying G Ranch 19310 West Highway 51	Lotsee	OK	74063
Owasso, City of	Public Works 301 West 2nd Avenue	Owasso	OK	74055
Sand Springs, City of	Public Works Building 13101 West 46th Street	Sand Springs	OK	74063

**Table 10: Map Repositories, Continued**

Community	Address	City	State	Zip Code
Sapulpa, City of	City Hall 425 East Dewey Avenue	Sapulpa	OK	74067
Skiatook, Town of	Municipal Building 100 North Broadway Street	Skiatook	OK	74070
Sperry, Town of	Town Hall 115 North Cincinnati Street	Sperry	OK	74103
Tulsa County, Unincorporated Areas	Tulsa County Headquarters 218 West 6th Street, Suite 210	Tulsa	OK	74119
Tulsa, City of	Stormwater Design Office 2317 South Jackson Avenue, Suite 302	Tulsa	OK	74107

Figure 2: FIRM Index



THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)  
SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP INDEX

TULSA COUNTY, OKLAHOMA And Incorporated Areas

PANELS PRINTED:

0020, 0040, 0045, 0070, 0085, 0095, 0105, 0110, 0115, 0120, 0130, 0135, 0136, 0137, 0138, 0139, 0145, 0170, 0190, 0191, 0192, 0193, 0194, 0210, 0211, 0212, 0213, 0214, 0220, 0226, 0227, 0228, 0229, 0231, 0232, 0233, 0234, 0240, 0241, 0242, 0243, 0244, 0251, 0252, 0253, 0254, 0261, 0262, 0263, 0264, 0270, 0285, 0305, 0306, 0307, 0308, 0309, 0326, 0327, 0331, 0332, 0333, 0334, 0342, 0344, 0351, 0352, 0353, 0354, 0356, 0357, 0358, 0359, 0361, 0362, 0363, 0364, 0366, 0367, 0368, 0369, 0376, 0377, 0378, 0379, 0385, 0386, 0387, 0388, 0389, 0391, 0392, 0393, 0394, 0407, 0409, 0420, 0426, 0427, 0428, 0429, 0431, 0432, 0433, 0434, 0440, 0445, 0451, 0452, 0453, 0454, 0456, 0457, 0458, 0459, 0465, 0470, 0485, 0505, 0510, 0530



FEMA

MAP NUMBER  
40143CIND1F

EFFECTIVE DATE  
September 12, 2024

\* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

**Figure 3: FIRM Notes to Users**

<p style="text-align: center;"><b>NOTES TO USERS</b></p> <p>For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <a href="http://msc.fema.gov">msc.fema.gov</a>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Mapping and Insurance eXchange.</p> <p>Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.</p> <p>For community and countywide map dates, refer to Table 5 in this FIS Report.</p> <p>To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.</p>
<p>The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.</p> <p><b>BASE FLOOD ELEVATIONS:</b> For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.</p>
<p><b>FLOODWAY INFORMATION:</b> Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.</p>

### Figure 3: FIRM Notes to Users

**FLOOD CONTROL STRUCTURE INFORMATION:** Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 “Flood Protection Measures” of this FIS Report for information on flood control structures for this jurisdiction.

**PROJECTION INFORMATION:** The projection used in the preparation of the map was State Plane Lambert Conformal Conic, Oklahoma North Zone 3501. The horizontal datum was the North American Datum of 1983 NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

**ELEVATION DATUM:** Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 10 of this FIS Report.

**BASE MAP INFORMATION:** Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables may reflect stream channel distances that differ from what is shown on the map.

Corporate limits shown on the map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

#### **NOTES FOR FIRM INDEX**

**REVISIONS TO INDEX:** As new studies are performed and FIRM panels are updated within Tulsa County, OK, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 5 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

**ATTENTION:** The corporate limits shown are based on the best information available at the time of publication of this FIRM Index. As such, they may be more current than those shown on the FIRM panels issued before September 12, 2024.



**Figure 3: FIRM Notes to Users**

**SPECIAL NOTES FOR SPECIFIC FIRM PANELS**

This Notes to Users section was created specifically for Tulsa County, Oklahoma, effective September 12, 2024.

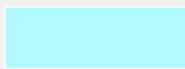
ACCREDITED LEVEE SYSTEM: Check with your local community to obtain more information on the levee system(s) shown as providing flood hazard reduction on this panel. To mitigate flood hazards in residual risk areas, property owners and residents are encouraged to review the community's emergency preparedness plan and to consider flood insurance and floodproofing or other risk reduction measures. For more information on flood insurance, interested parties should visit [www.fema.gov/flood-insurance](http://www.fema.gov/flood-insurance).

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Tulsa County.

**Figure 4: Map Legend for FIRM**

**SPECIAL FLOOD HAZARD AREAS:** The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.








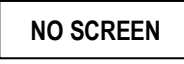




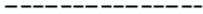



Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)

- Zone A The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
- Zone AE The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
- Zone AH The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
- Zone AO The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
- Zone AR The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- Zone A99 The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
- Zone V The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
- Zone VE Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.


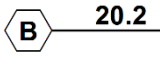
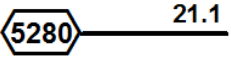
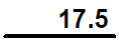
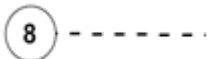


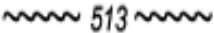





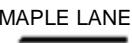



Regulatory Floodway determined in Zone AE.




**Figure 4: Map Legend for FIRM**

<b>OTHER AREAS OF FLOOD HAZARD</b>	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.
	Area with Reduced Flood Risk due to Levee: Areas where an accredited levee, dike, or other flood control structure has reduced the flood risk from the 1% annual chance flood.
	Area with Flood Risk due to Levee: Areas where a non-accredited levee, dike, or other flood control structure is shown as providing protection to less than the 1% annual chance flood.
<b>OTHER AREAS</b>	
	Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.
	Unshaded Zone X: Areas of minimal flood hazard.
<b>FLOOD HAZARD AND OTHER BOUNDARY LINES</b>	
 (ortho)      (vector)	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet
<b>GENERAL STRUCTURES</b>	
 <i>Aqueduct Channel Culvert Storm Sewer</i>	Channel, Culvert, Aqueduct, or Storm Sewer
 <i>Dam Jetty Weir</i>	Dam, Jetty, Weir
	Levee, Dike, or Floodwall
 <i>Bridge</i>	Bridge

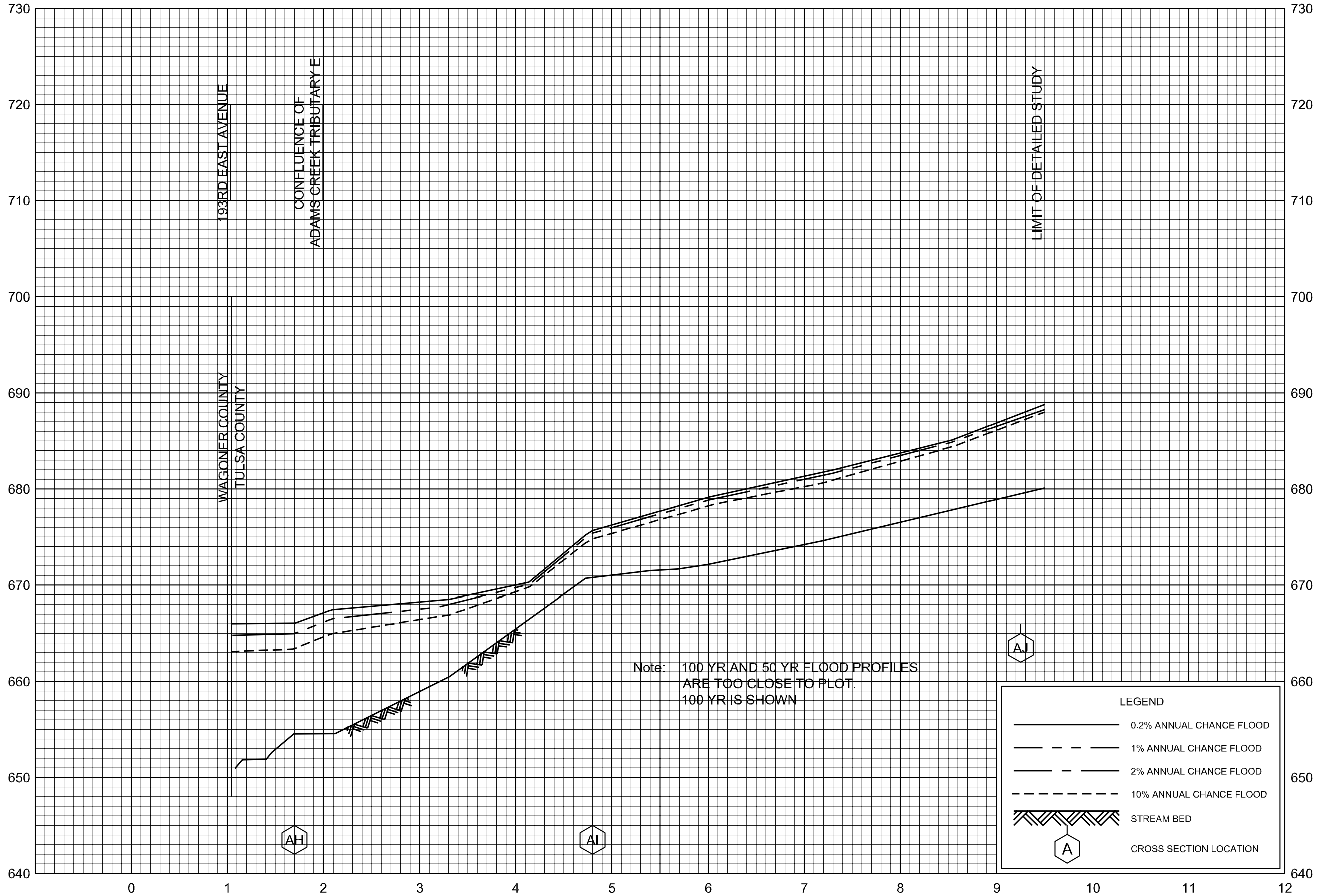
**Figure 4: Map Legend for FIRM**

<b>REFERENCE MARKERS</b>	
	River mile Markers
<b>CROSS SECTION &amp; TRANSECT INFORMATION</b>	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
	Base Flood Elevation Line
<b>ZONE AE (EL 16)</b>	Static Base Flood Elevation value (shown under zone label)
<b>ZONE AO (DEPTH 2)</b>	Zone designation with Depth
<b>ZONE AO (DEPTH 2) (VEL 15 FPS)</b>	Zone designation with Depth and Velocity
<b>BASE MAP FEATURES</b>	
	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
<b>RAILROAD</b>	

**Figure 4: Map Legend for FIRM**

	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
<sup>42</sup> 76 <sup>000m</sup> E	Horizontal Reference Grid Coordinates (UTM)
<b>365000 FT</b>	Horizontal Reference Grid Coordinates (State Plane)
<b>80° 16' 52.5"</b>	Corner Coordinates (Latitude, Longitude)

ELEVATION IN FEET (NAVD)



Note: 100 YR AND 50 YR FLOOD PROFILES ARE TOO CLOSE TO PLOT. 100 YR IS SHOWN

**LEGEND**

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

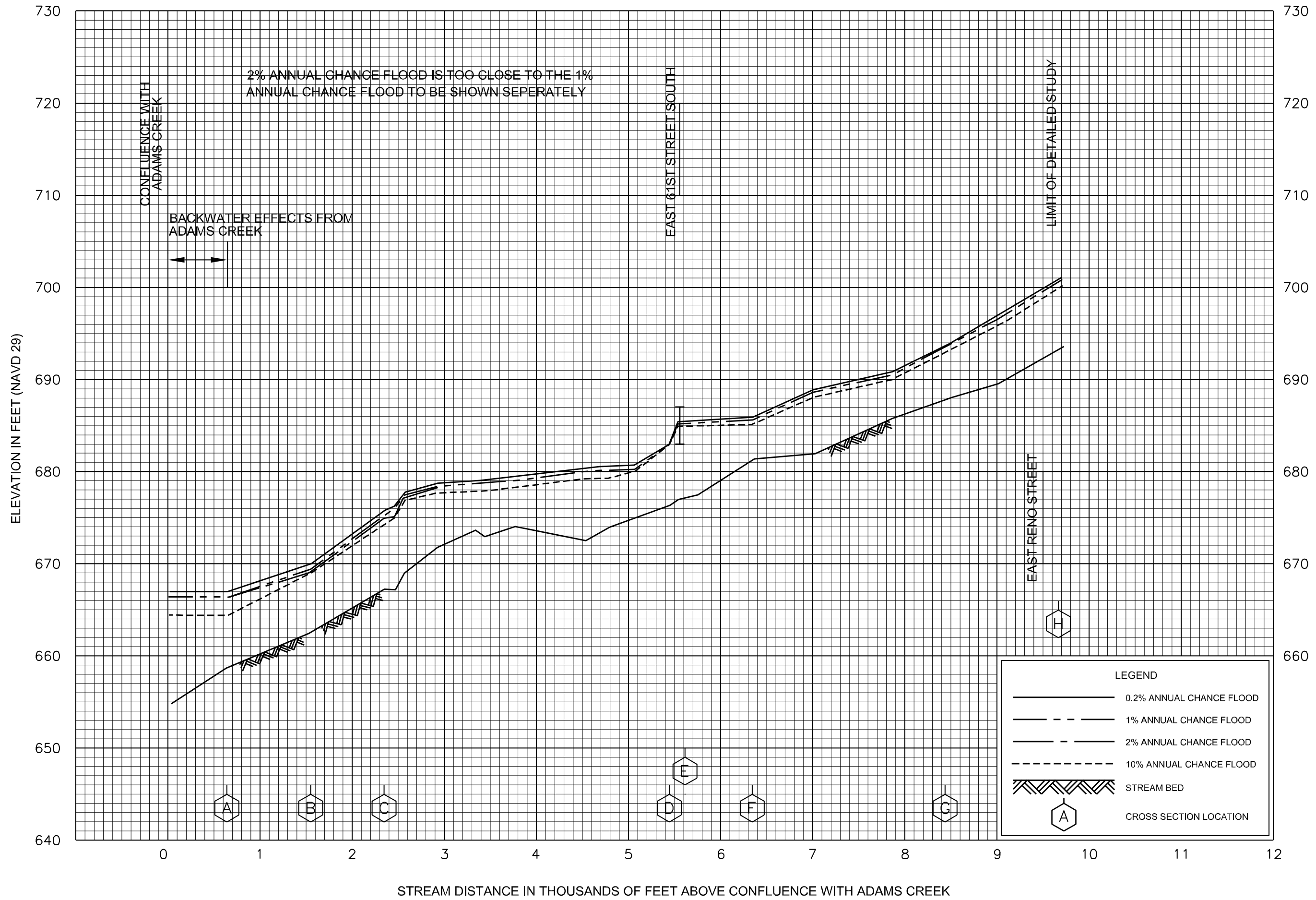
FLOOD PROFILES

ADAMS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

001P

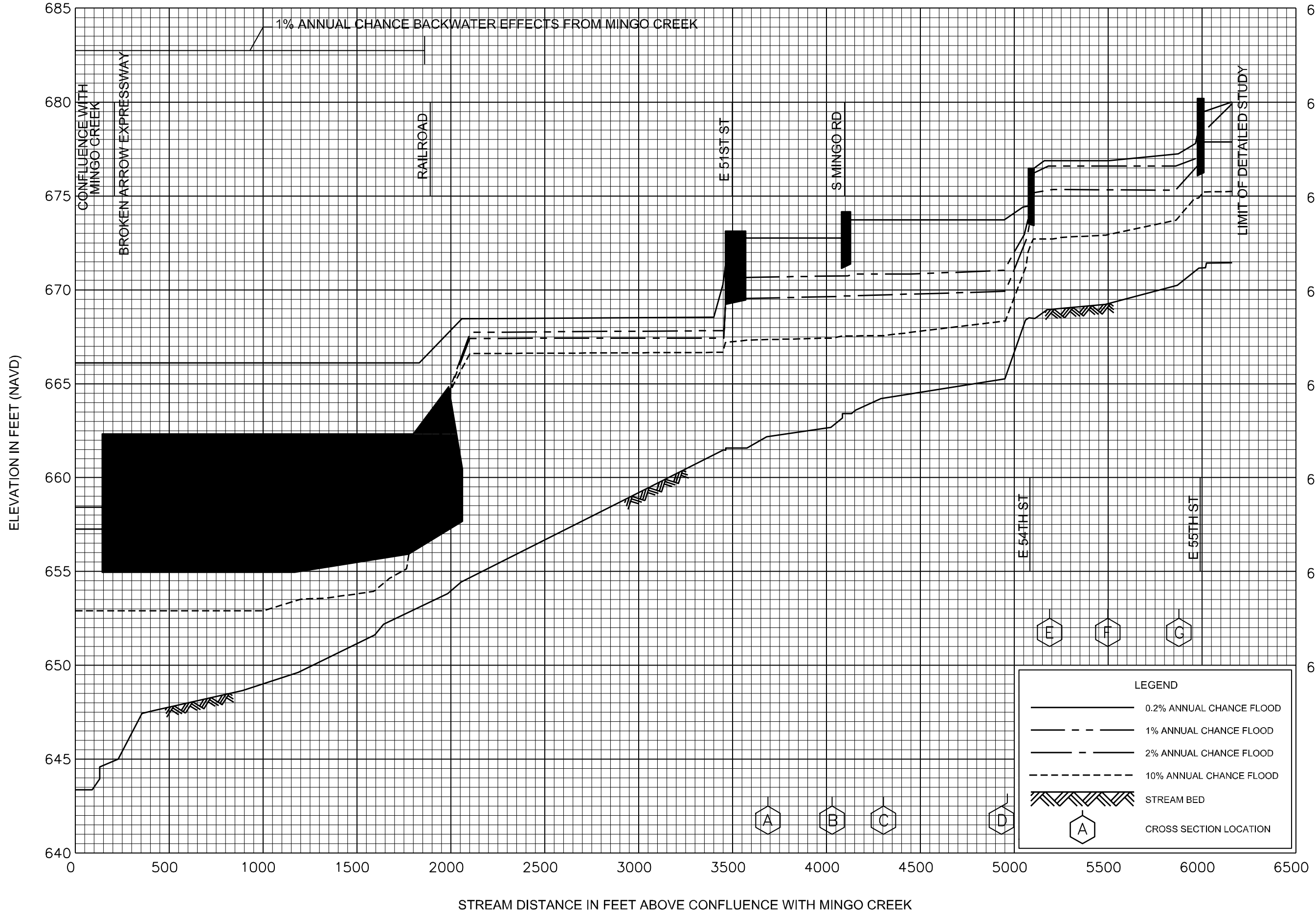


FLOOD PROFILES

ADAMS CREEK TRIBUTARY E

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

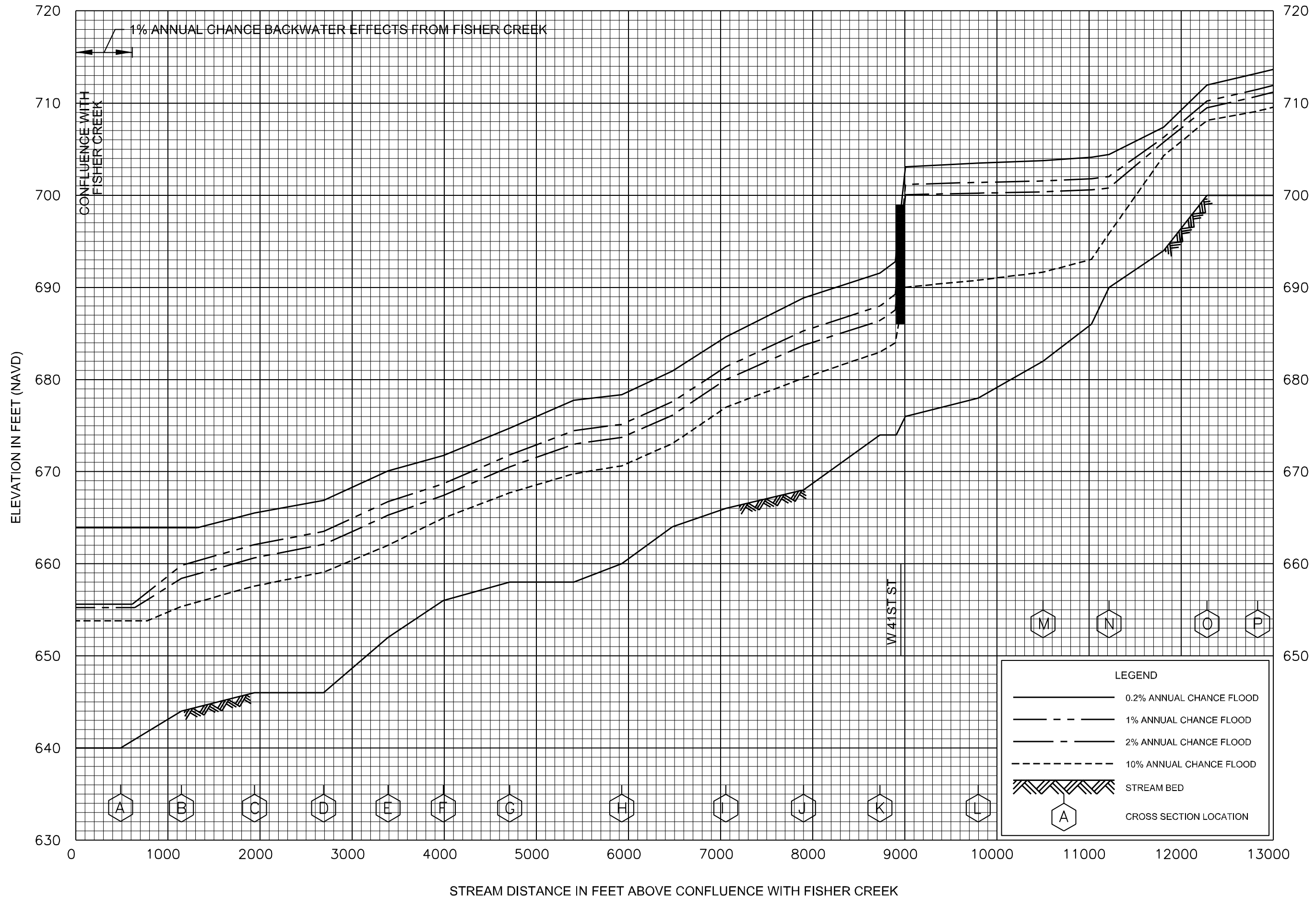


FLOOD PROFILES  
ALSUMA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

003P

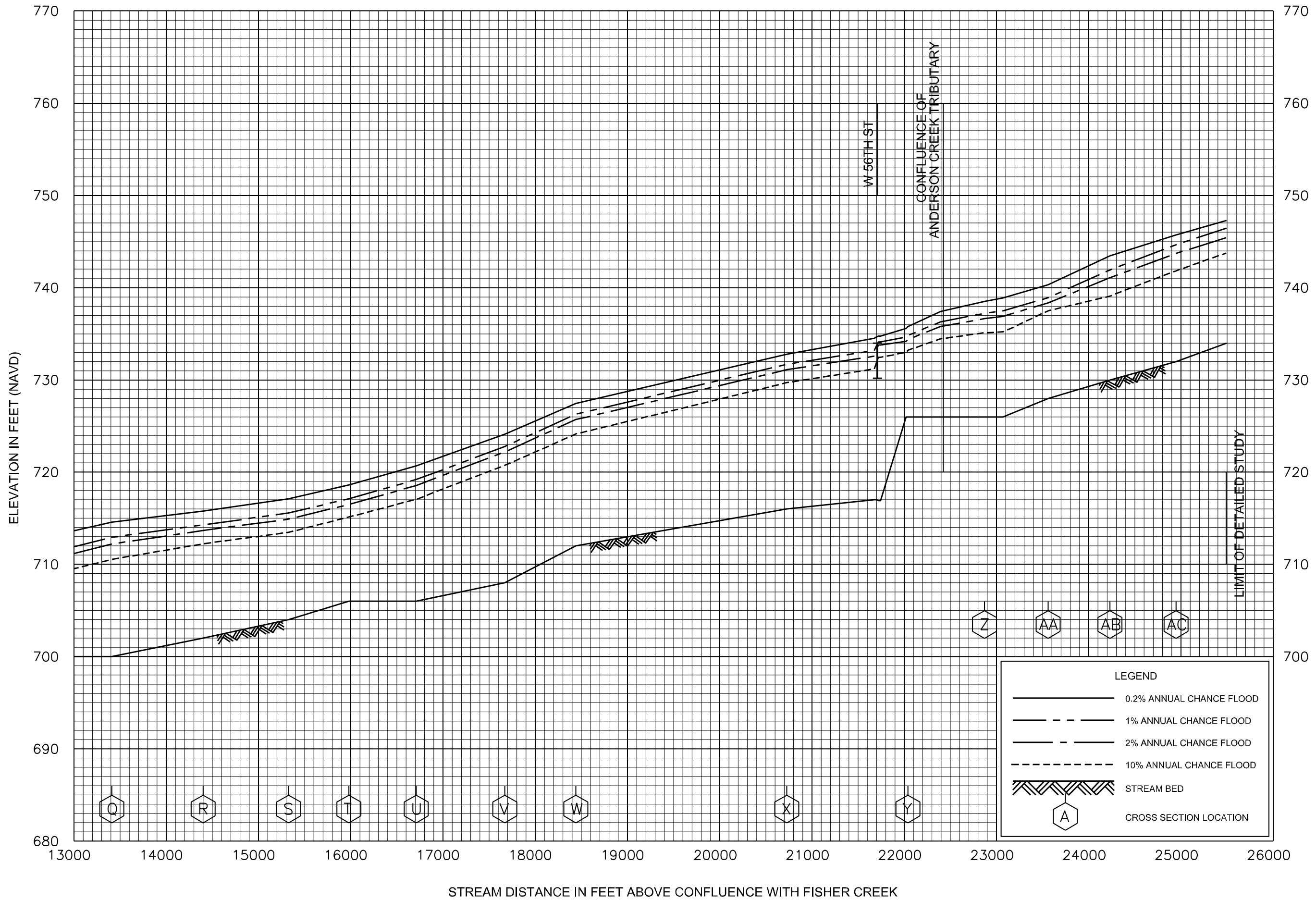




FLOOD PROFILES  
ANDERSON CREEK

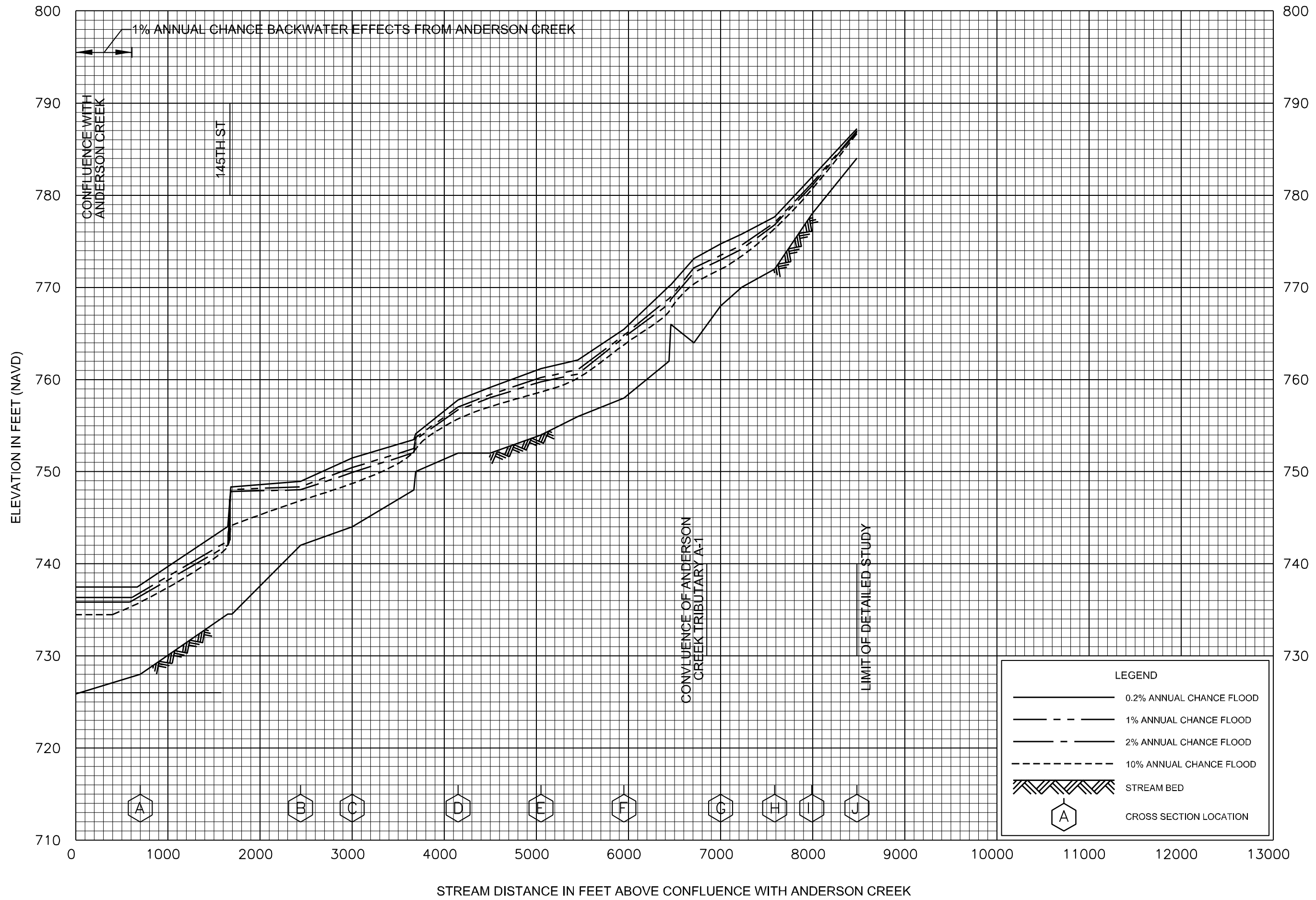
FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

004P



FLOOD PROFILES  
ANDERSON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



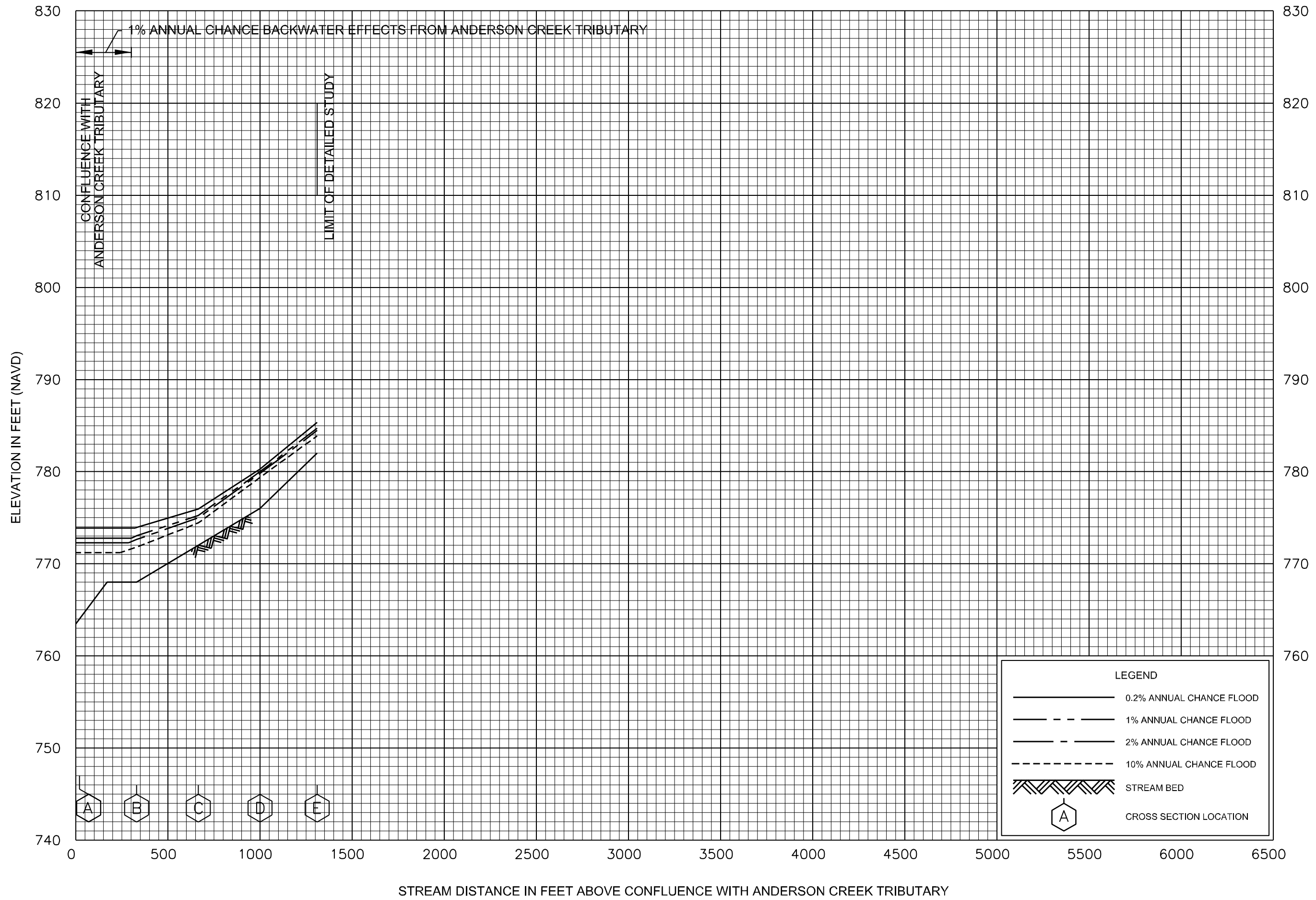
**LEGEND**

- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - 2% ANNUAL CHANCE FLOOD
- · · 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ A CROSS SECTION LOCATION

FLOOD PROFILES  
ANDERSON CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

006P



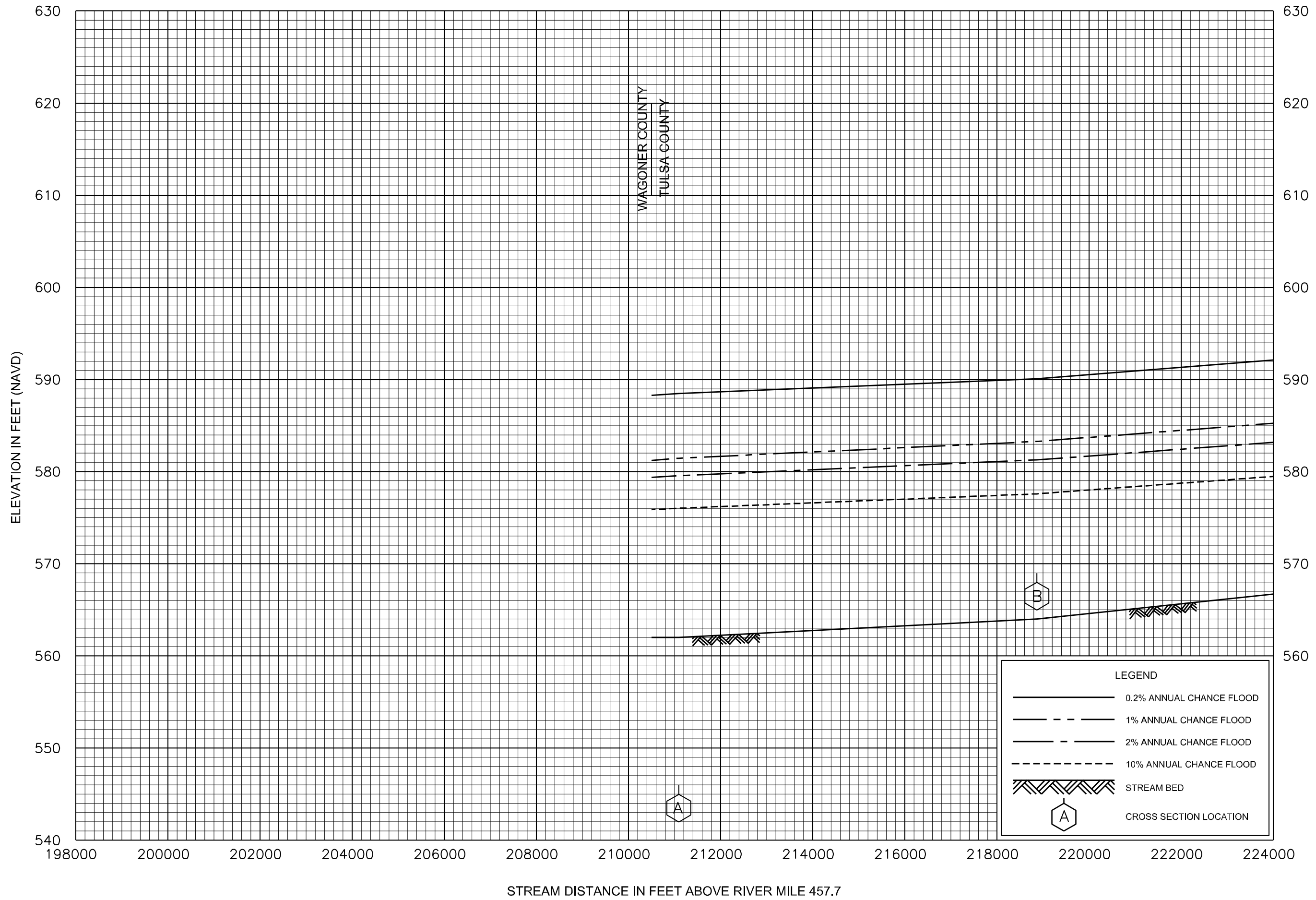
FLOOD PROFILES

ANDERSON CREEK TRIBUTARY A-1

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

007P



WAGONER COUNTY  
TULSA COUNTY

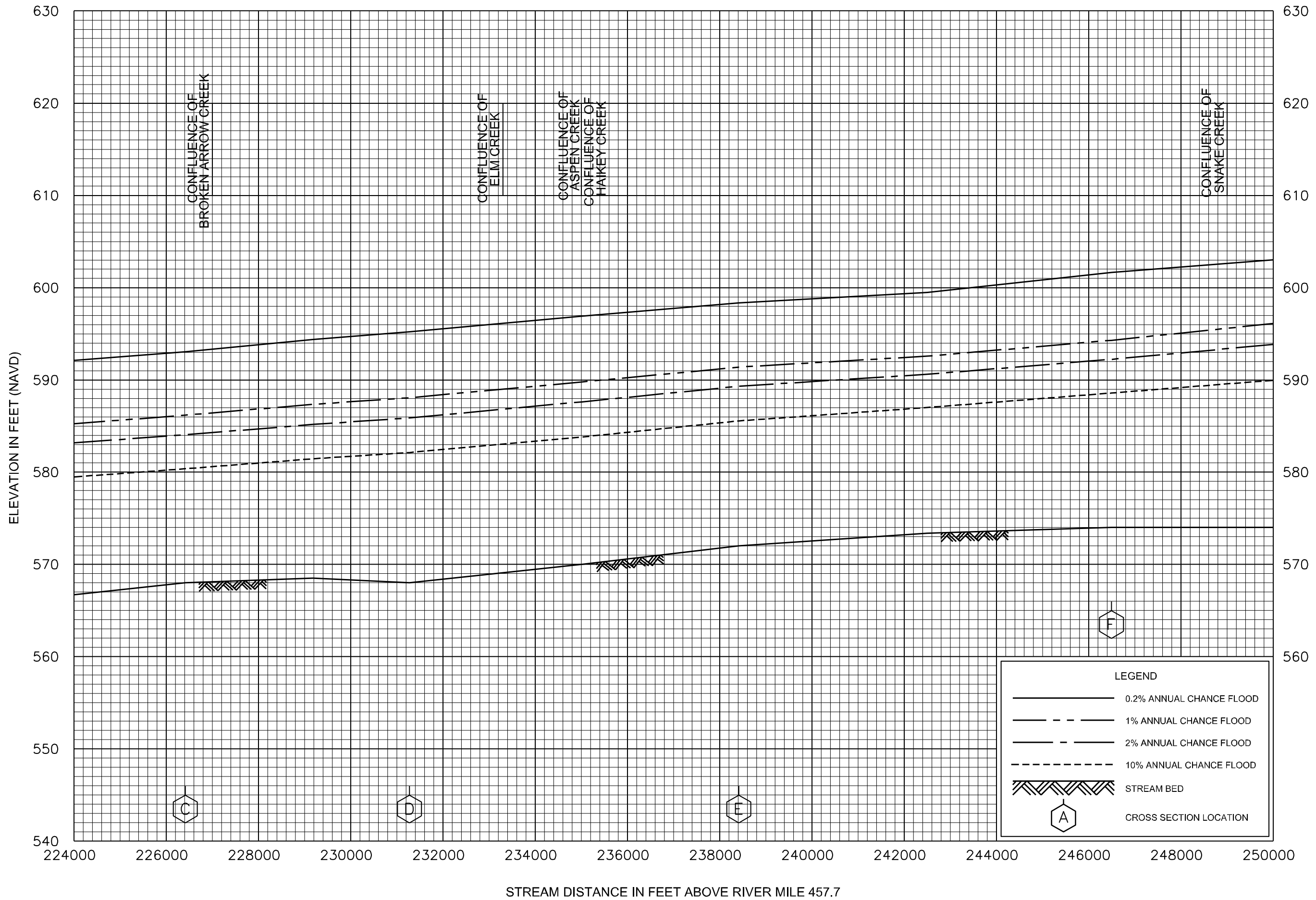
FLOOD PROFILES

ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

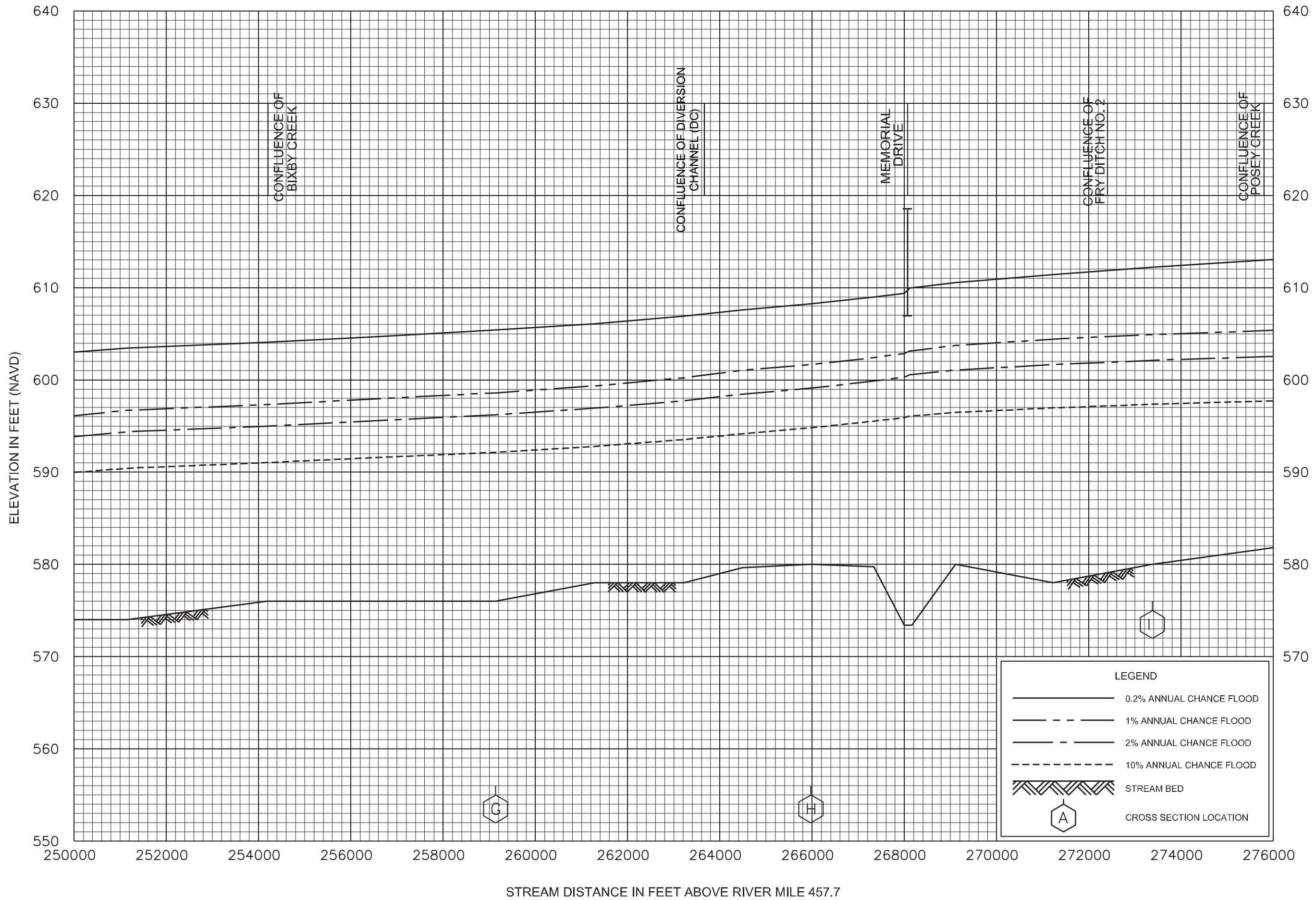
TULSA COUNTY, OK  
AND INCORPORATED AREAS

008P



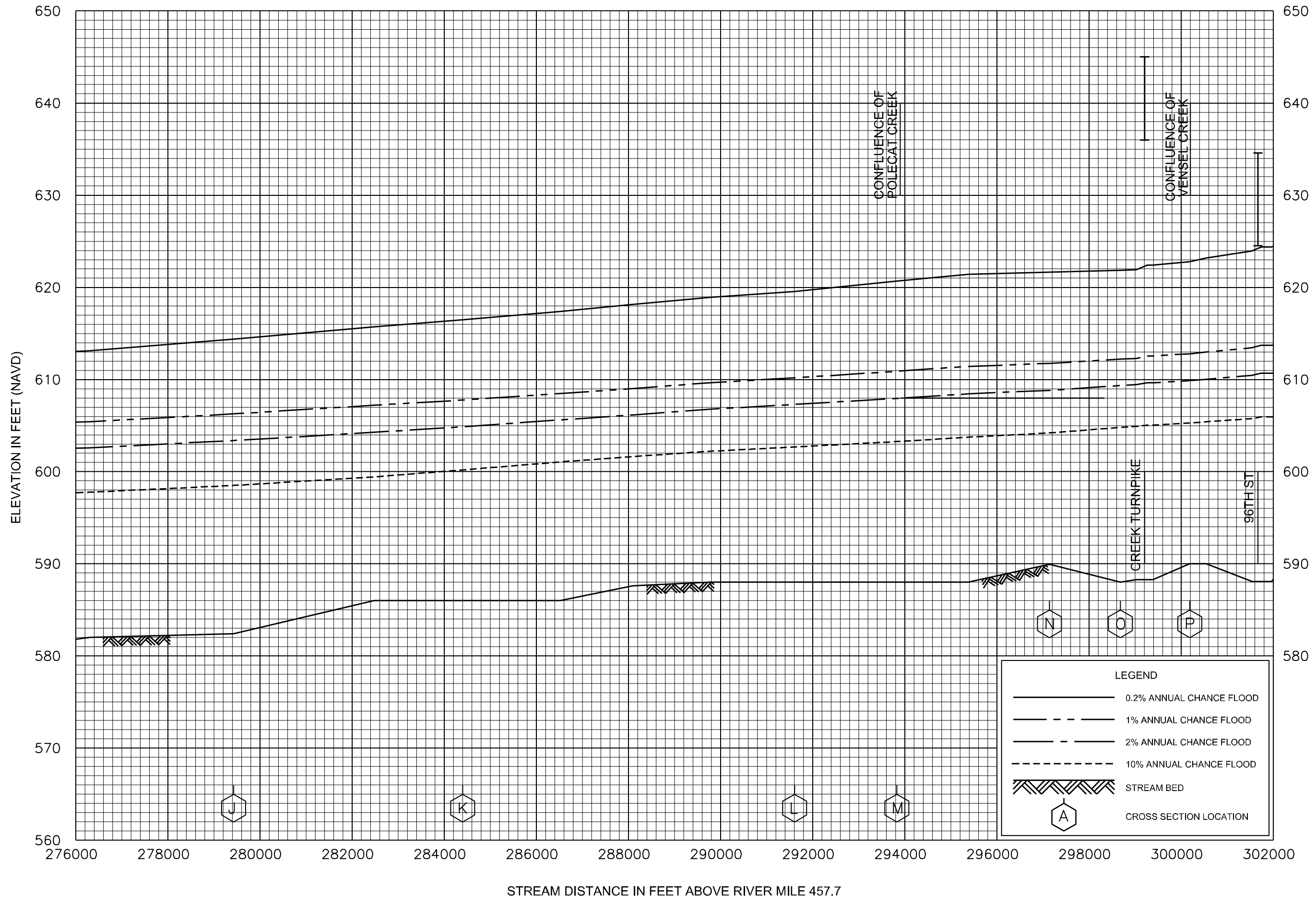
FLOOD PROFILES  
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
ARKANSAS RIVER

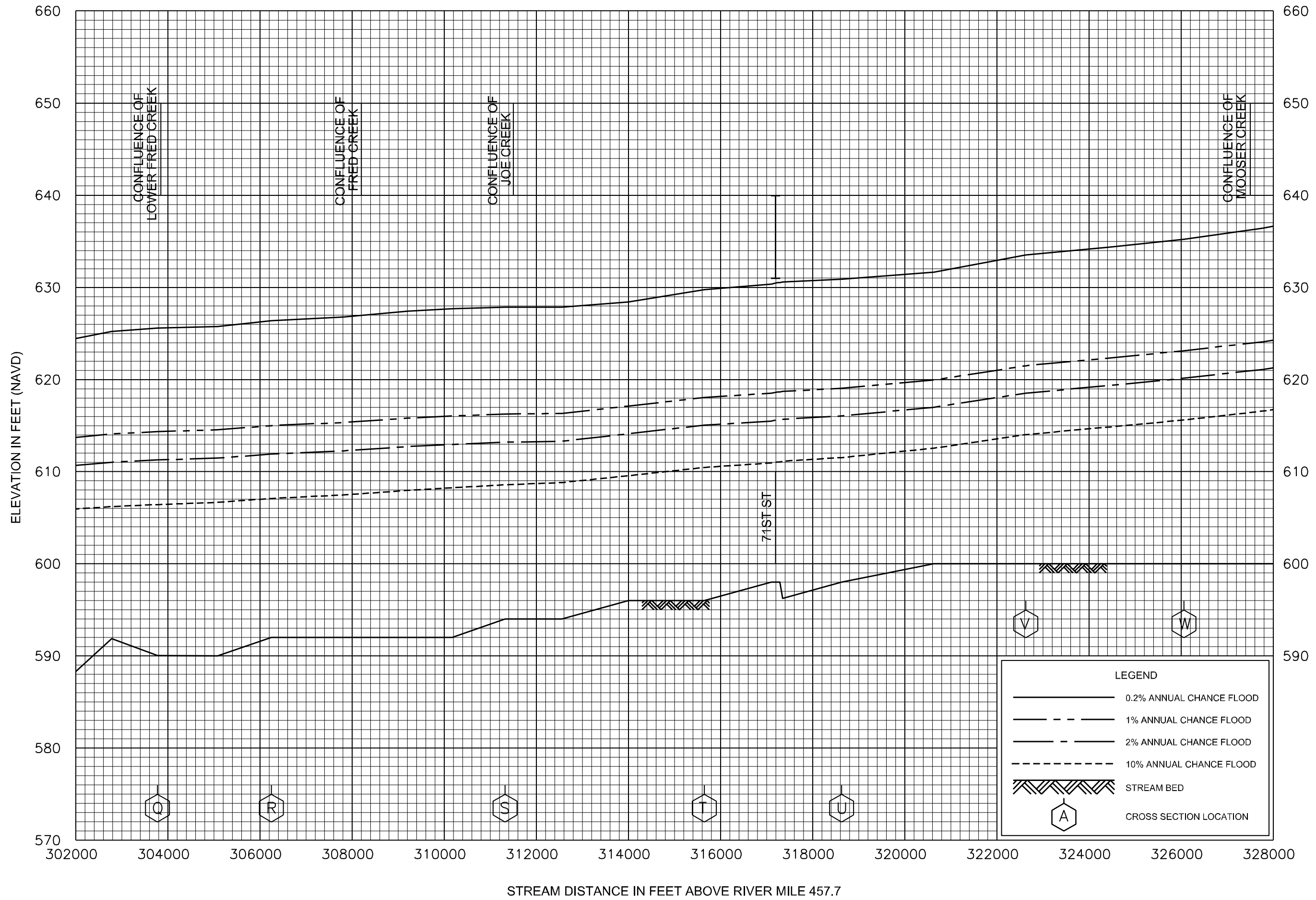
FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
ARKANSAS RIVER

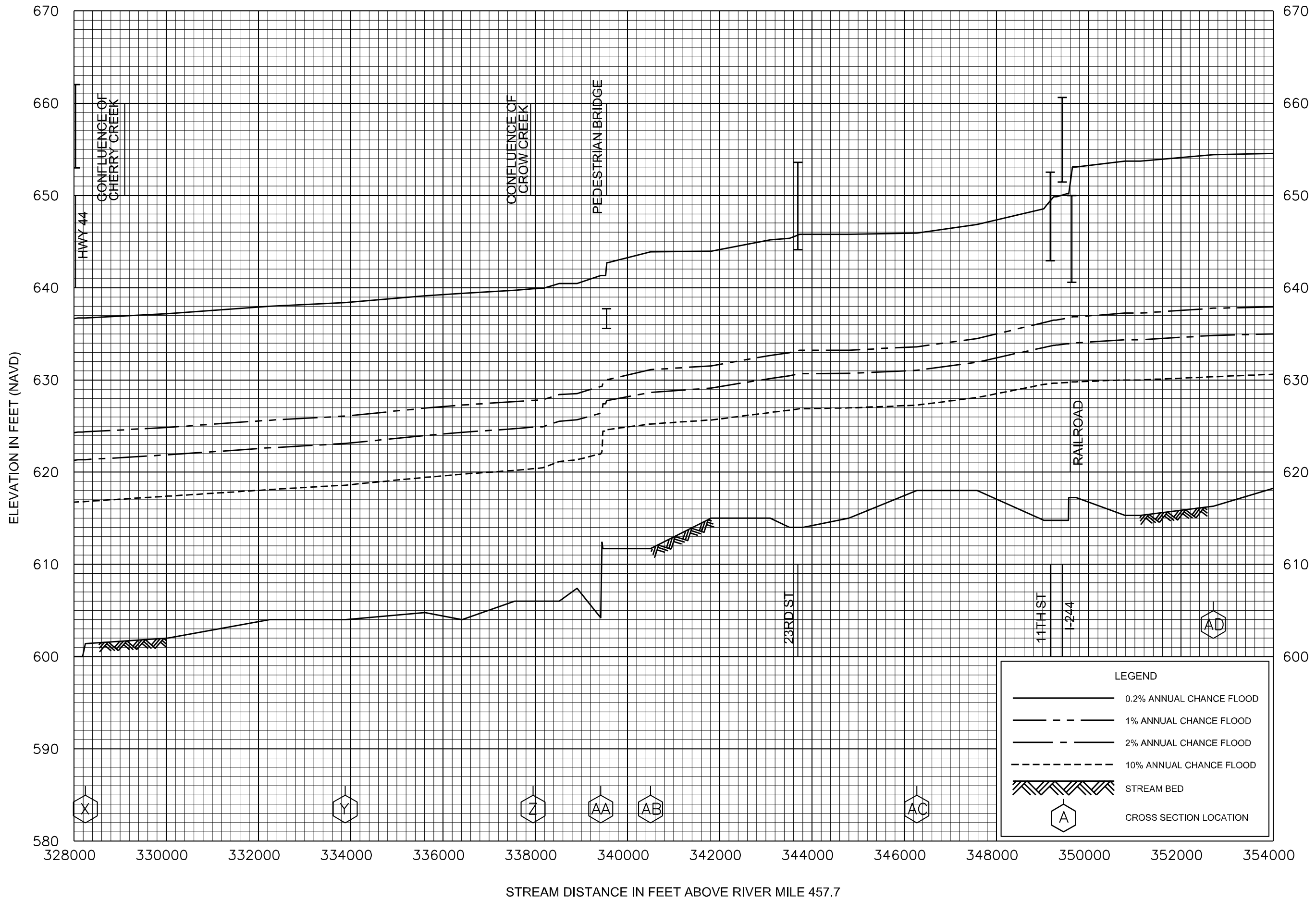
FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS





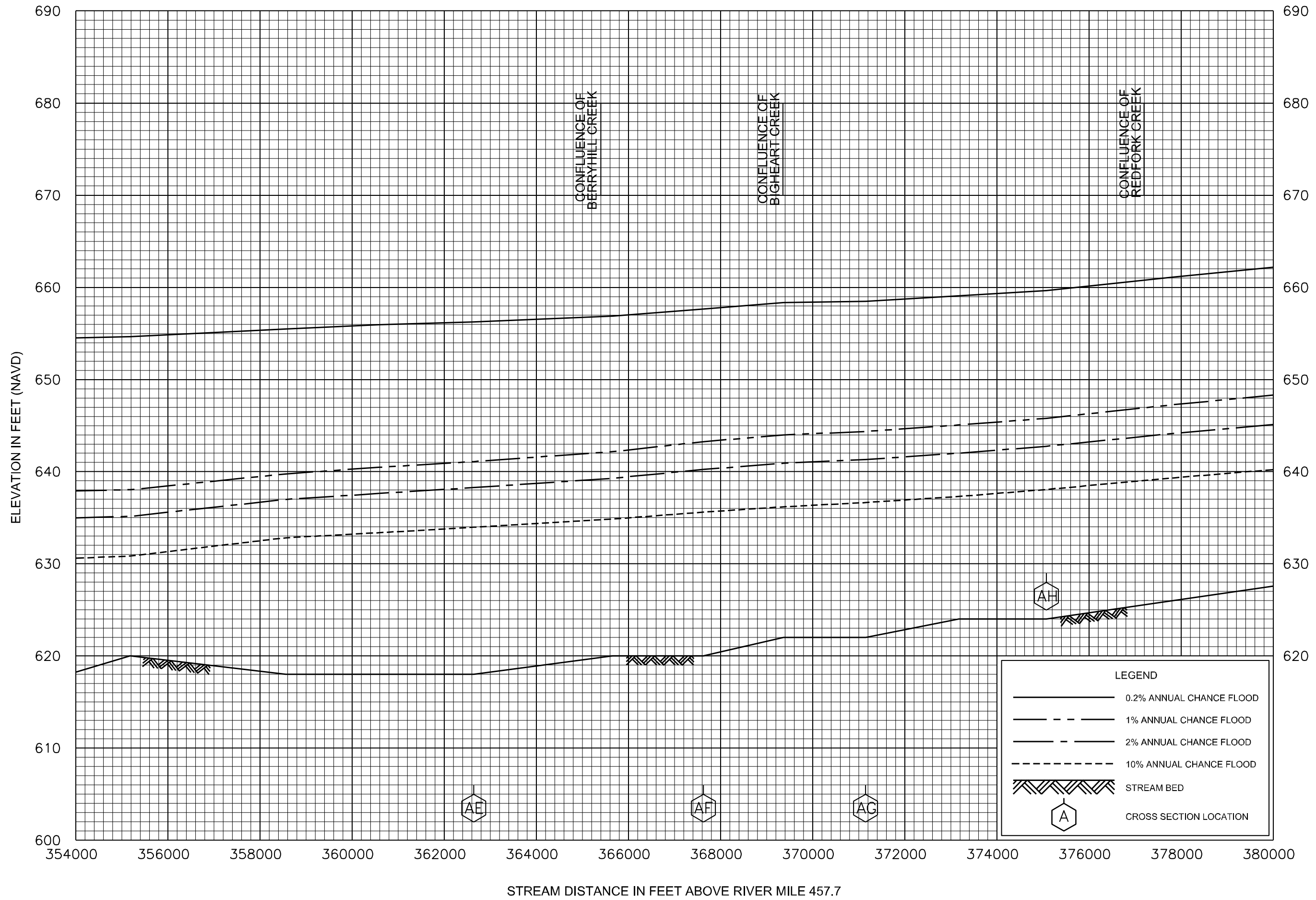
FLOOD PROFILES  
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**TULSA COUNTY, OK**  
AND INCORPORATED AREAS



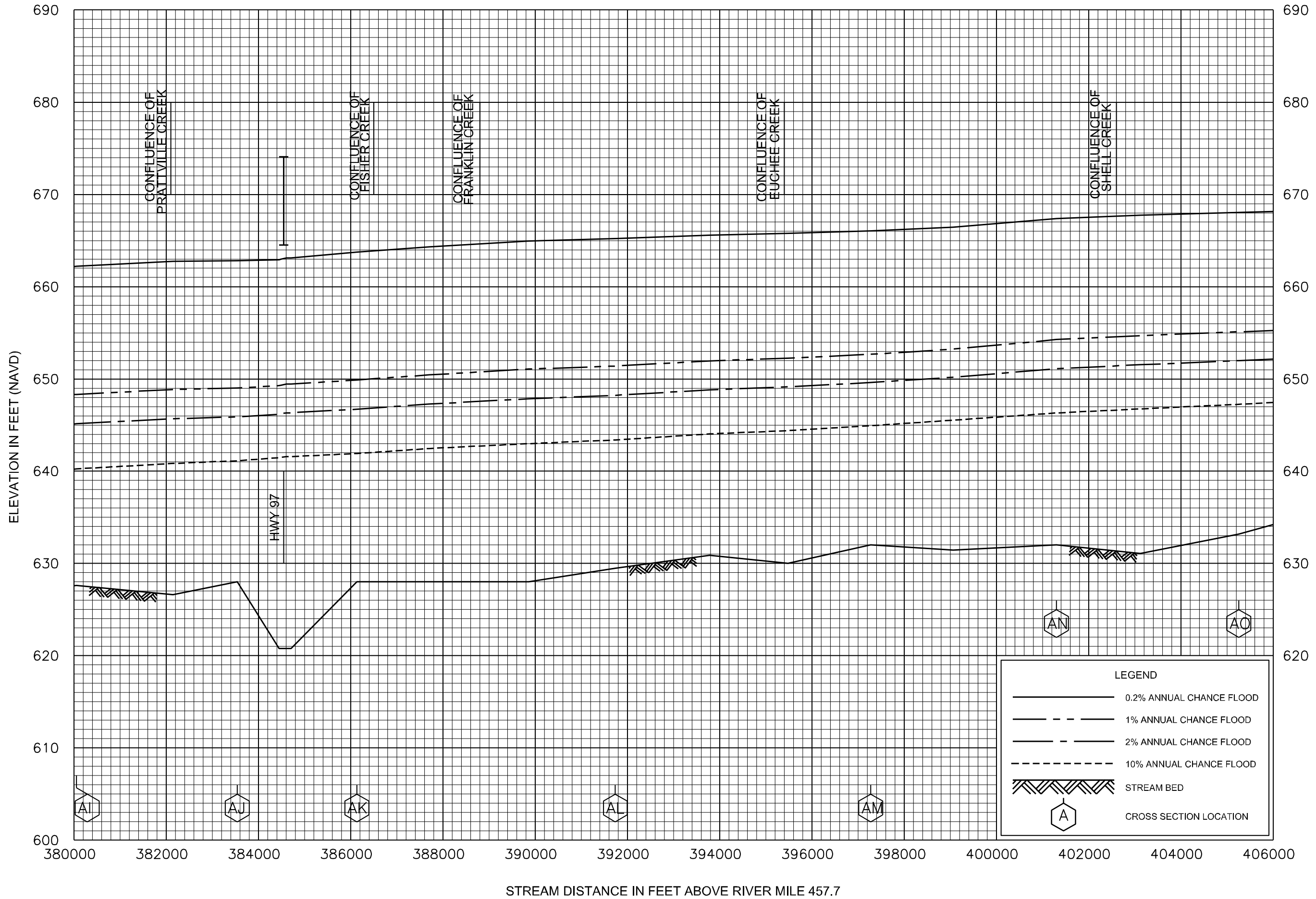
FLOOD PROFILES  
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

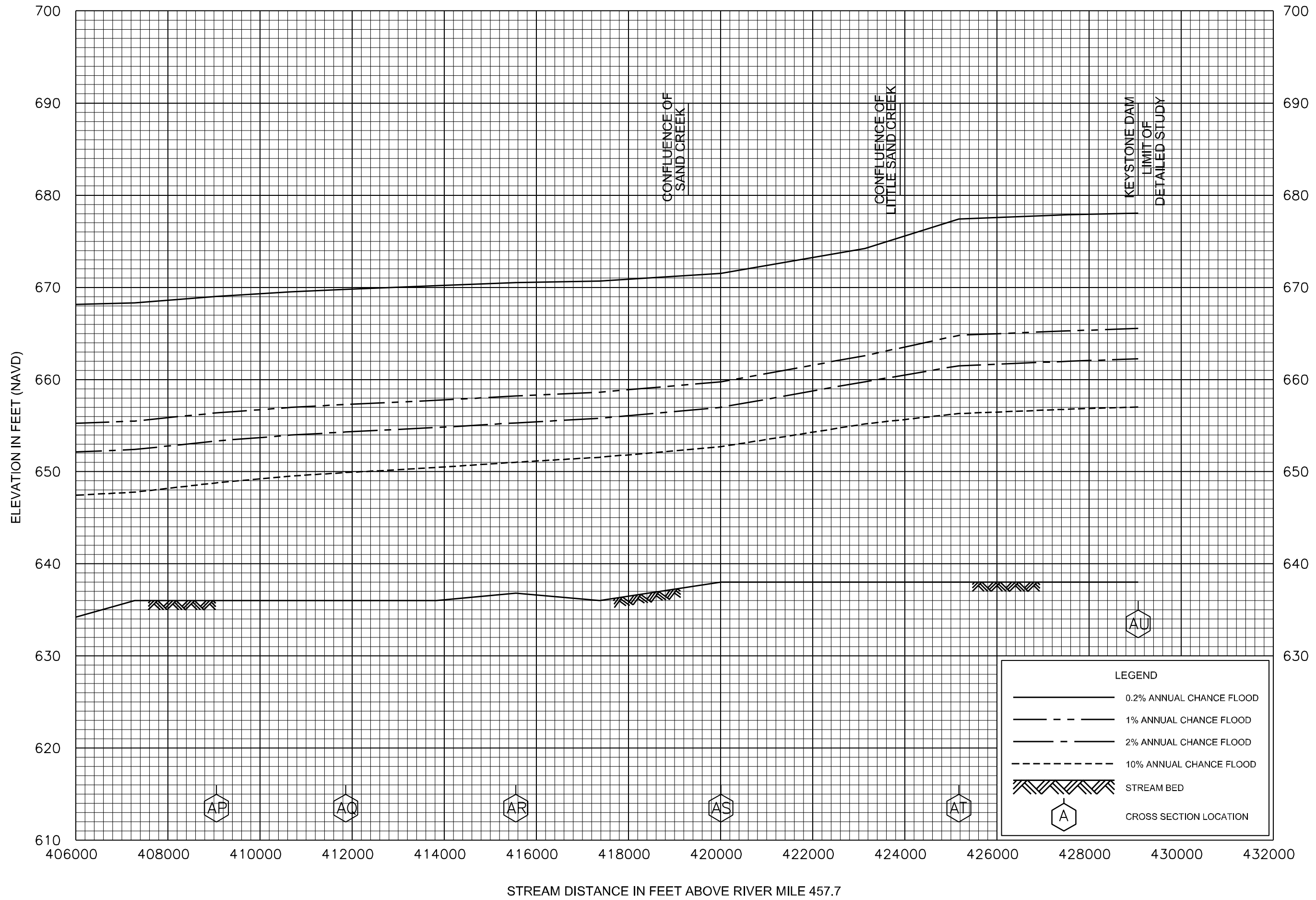


STREAM DISTANCE IN FEET ABOVE RIVER MILE 457.7

FLOOD PROFILES  
ARKANSAS RIVER

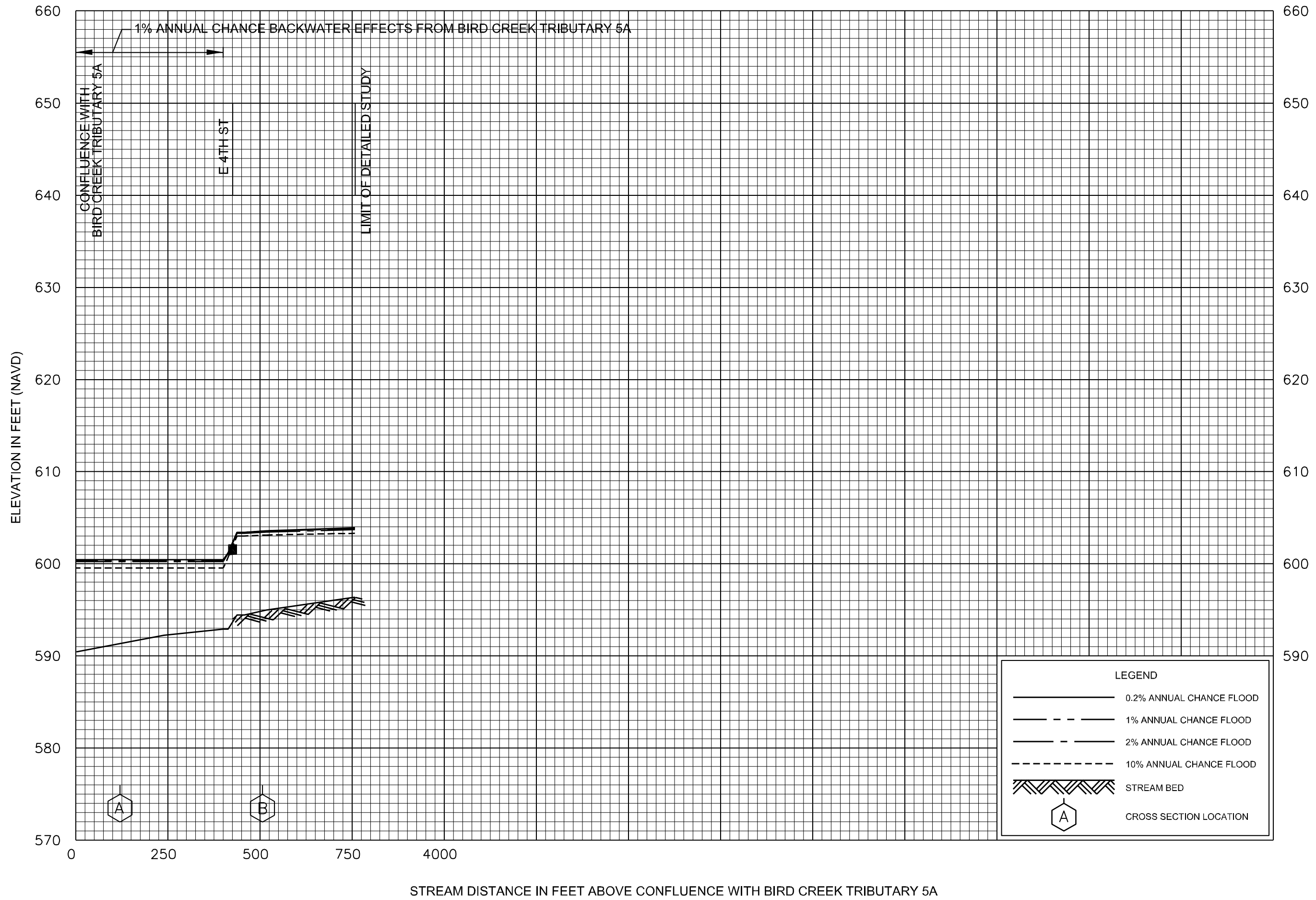
FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

015P



FLOOD PROFILES  
 ARKANSAS RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY  
 TULSA COUNTY, OK  
 AND INCORPORATED AREAS

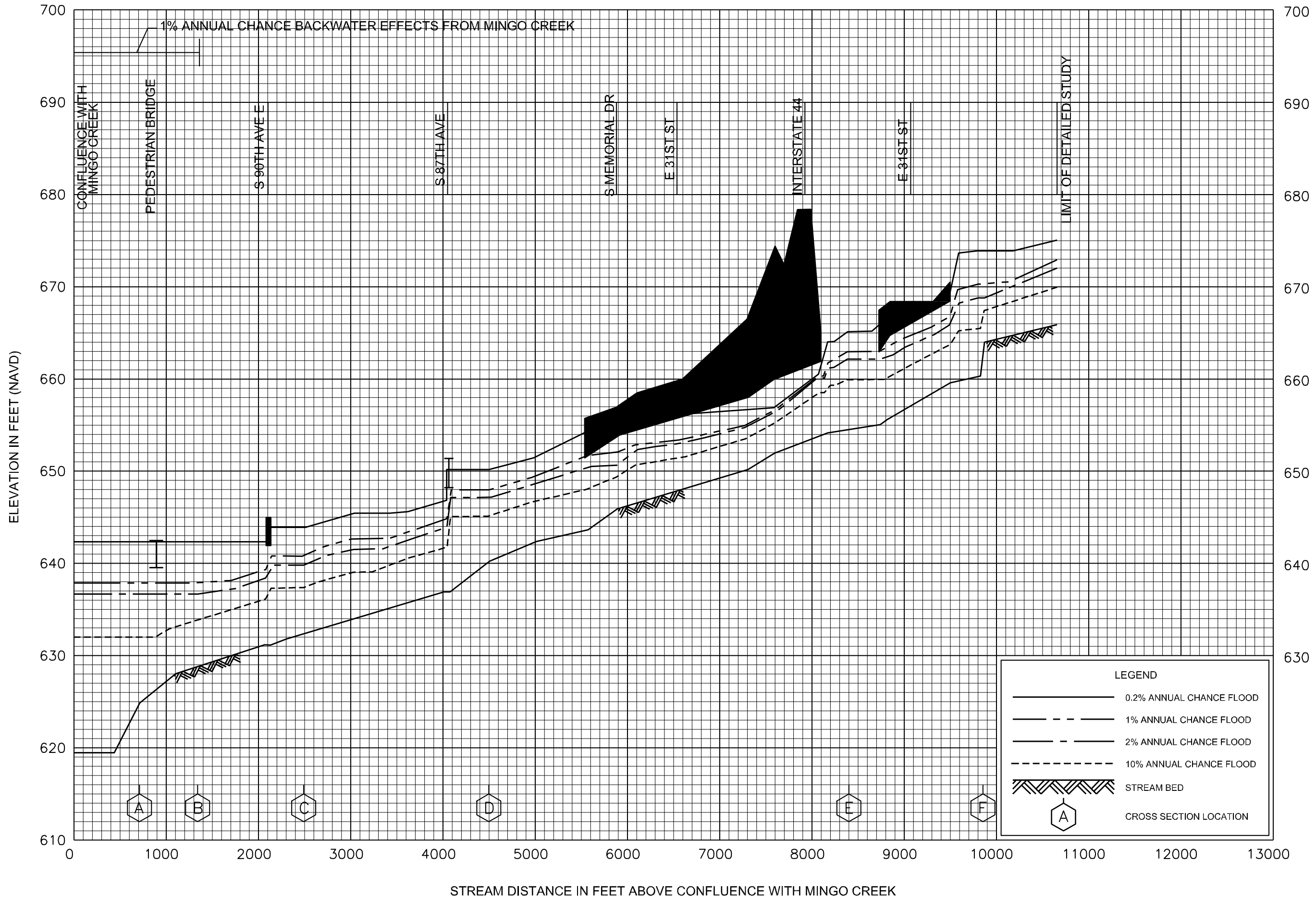


FLOOD PROFILES

ATOR TRIBUTARY

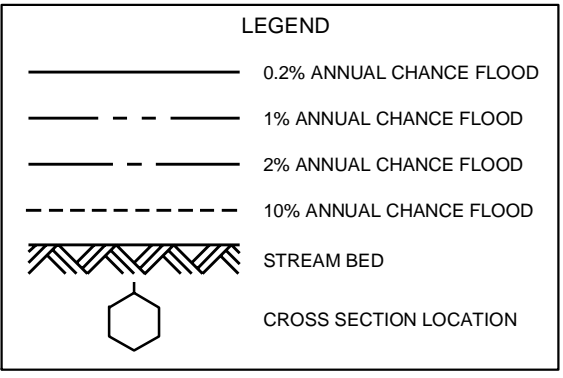
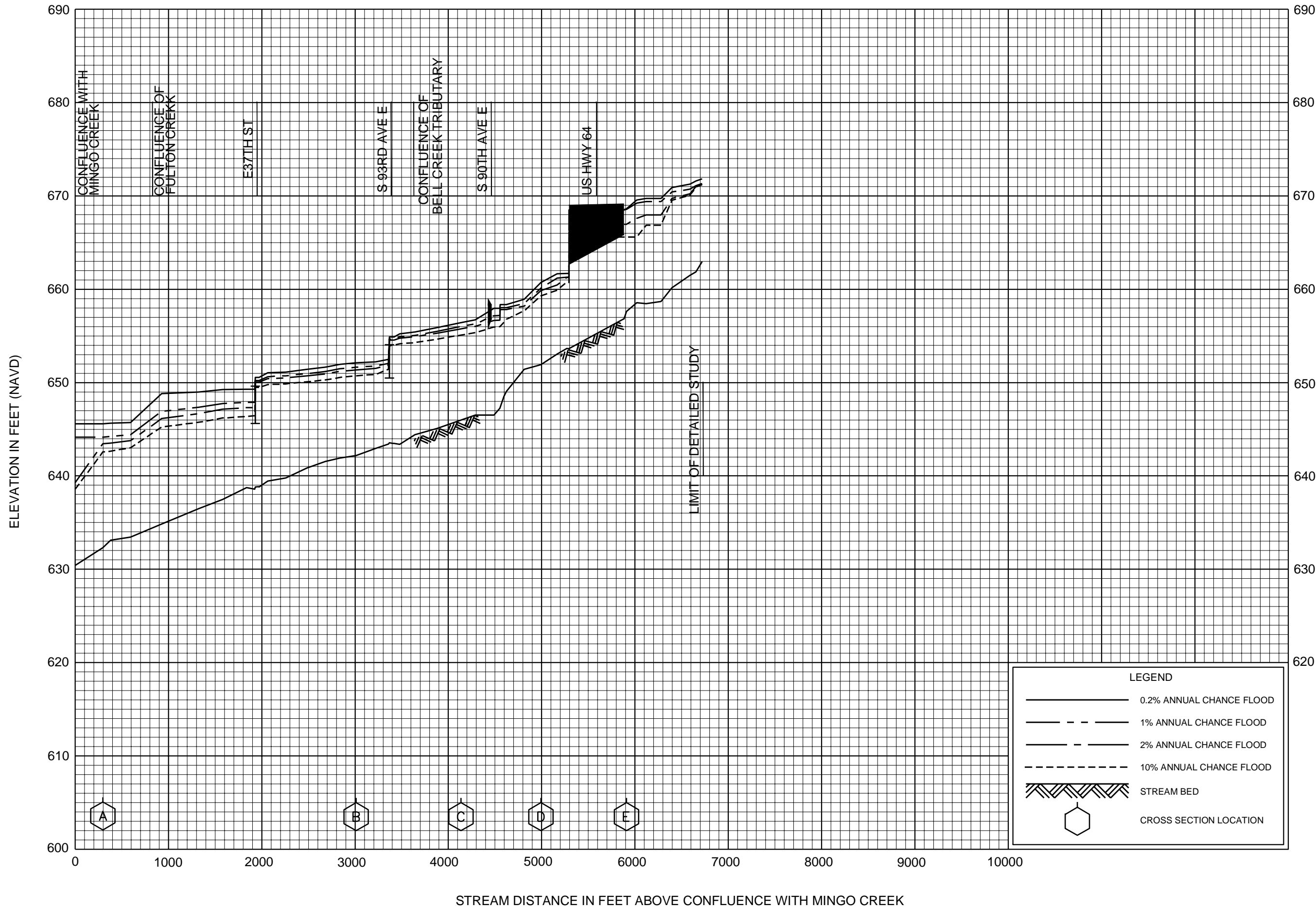
FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
AUDUBON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES

BELL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS





**LEGEND**

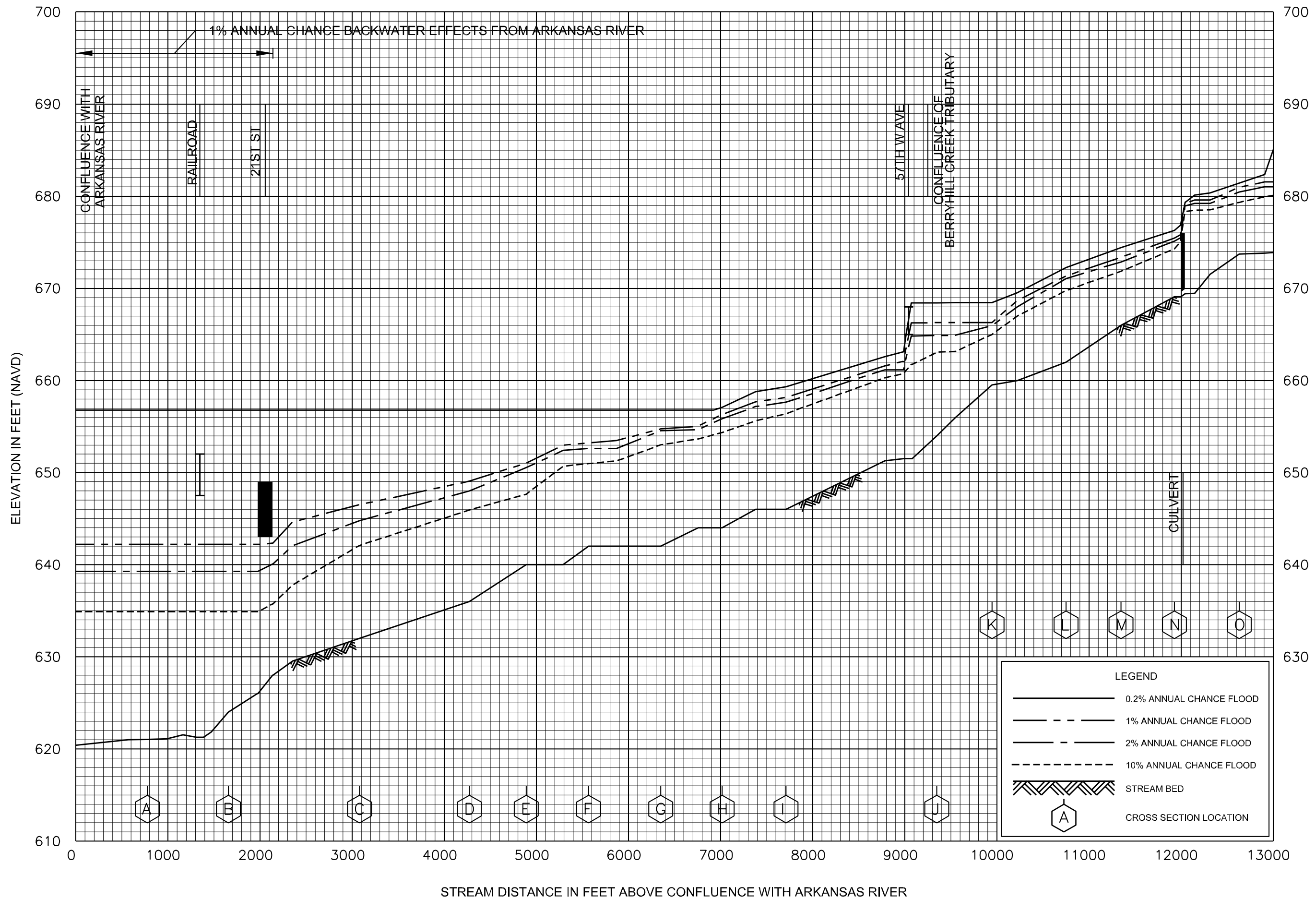
- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - · 2% ANNUAL CHANCE FLOOD
- · - · 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION

FLOOD PROFILES

BELL CREEK TRIBUTARY

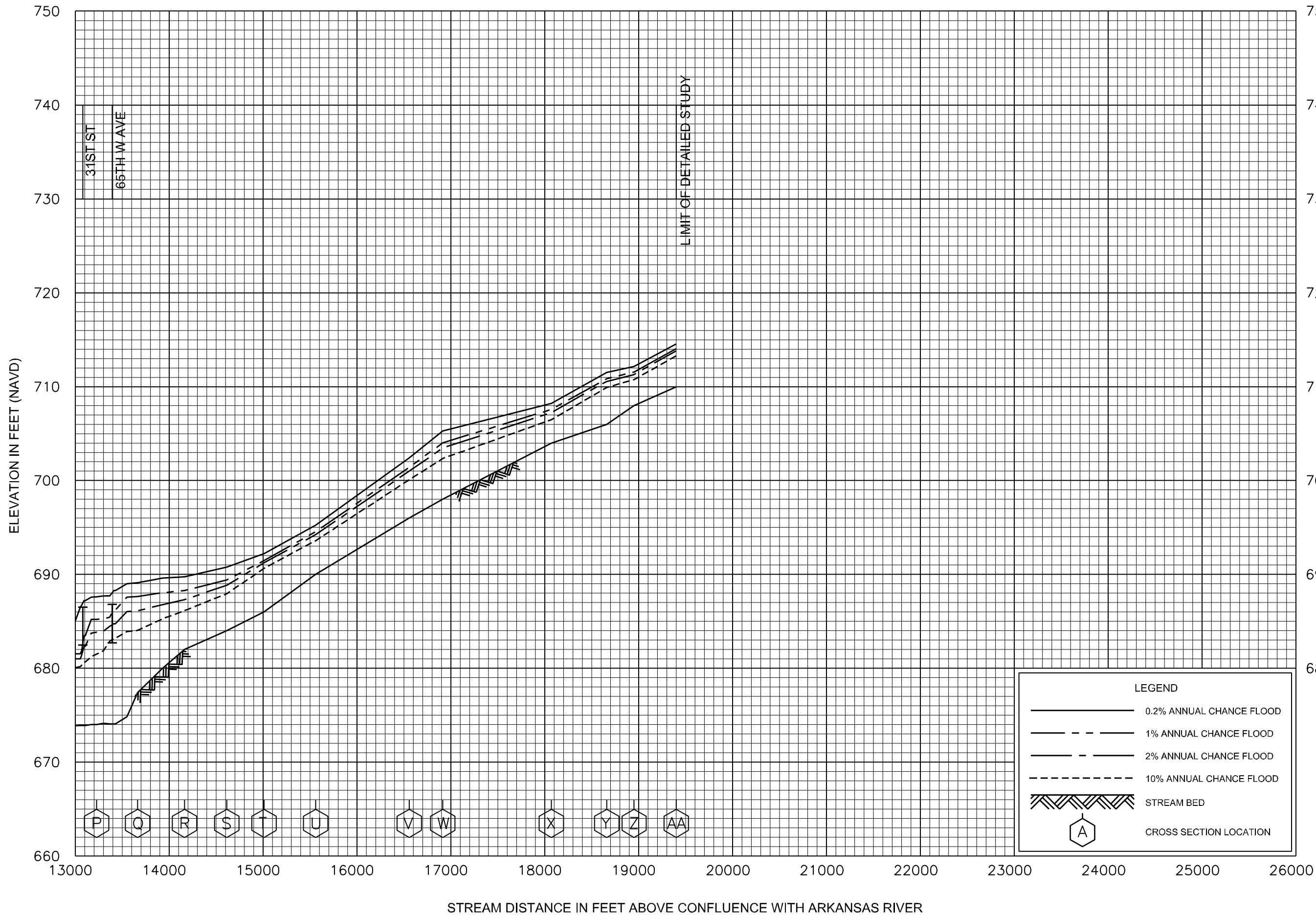
FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



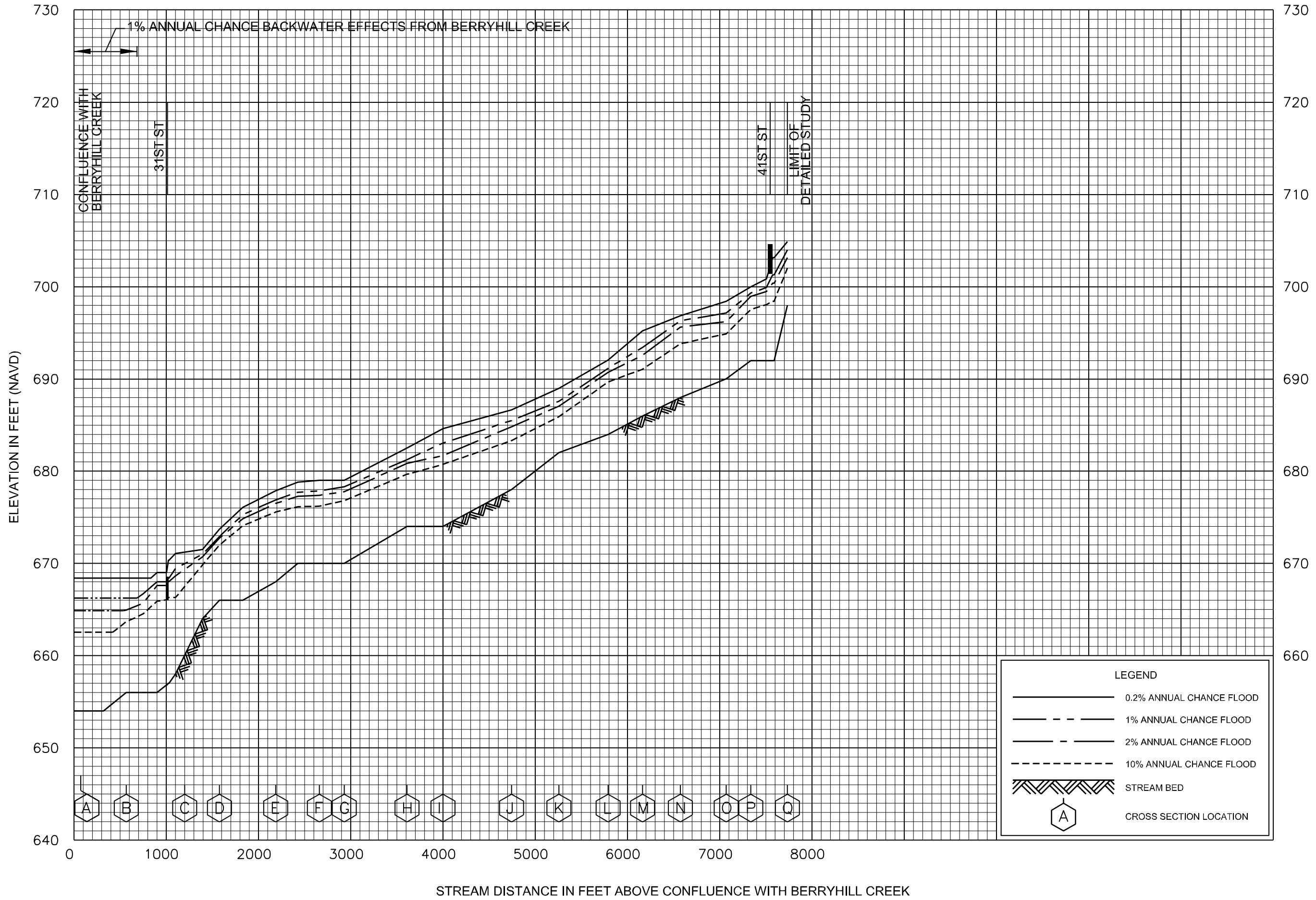
FLOOD PROFILES  
BERRYHILL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
BERRYHILL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



**LEGEND**

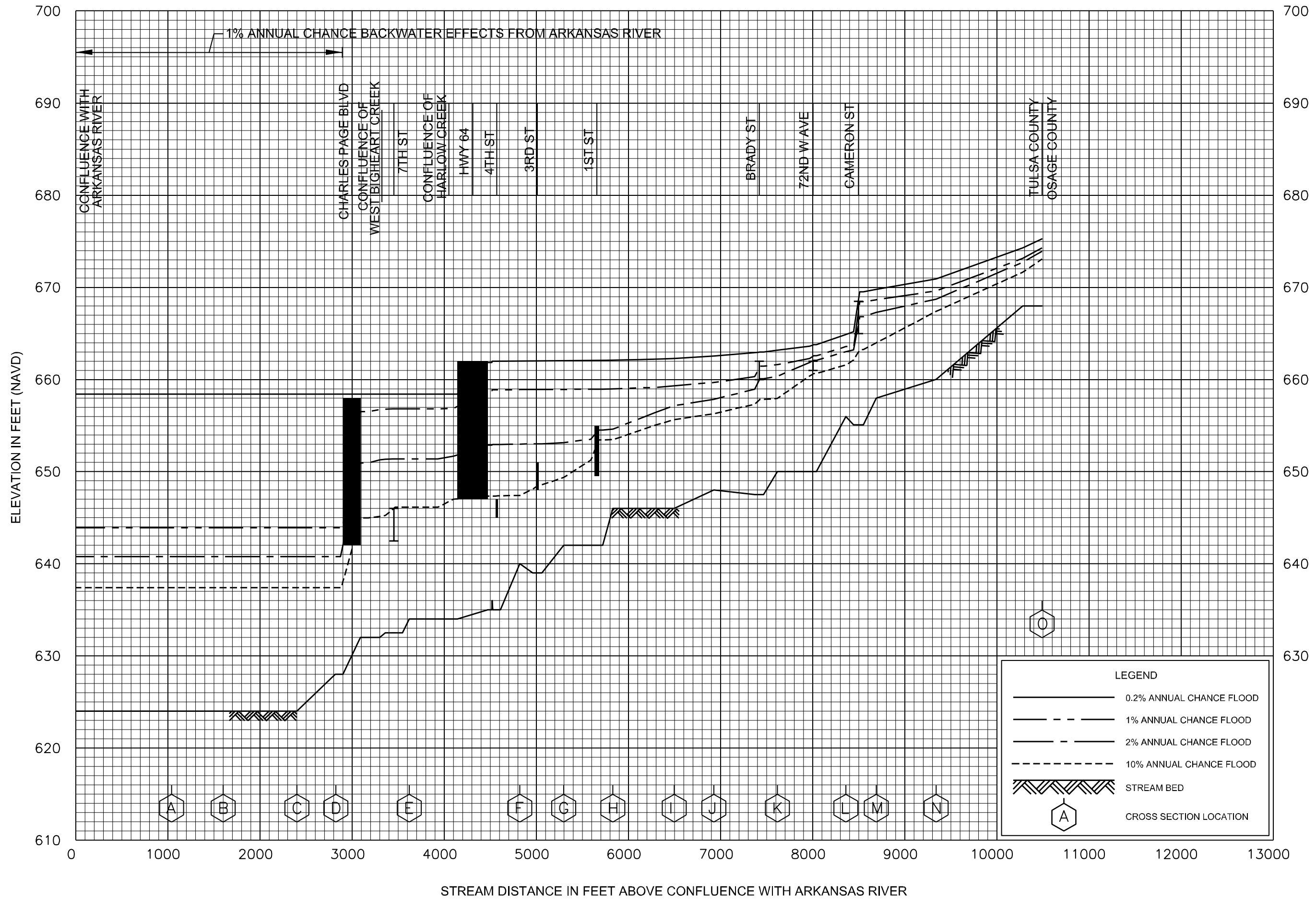
	0.2% ANNUAL CHANCE FLOOD
	1% ANNUAL CHANCE FLOOD
	2% ANNUAL CHANCE FLOOD
	10% ANNUAL CHANCE FLOOD
	STREAM BED
	CROSS SECTION LOCATION

FLOOD PROFILES

BERRYHILL CREEK TRIBUTARY

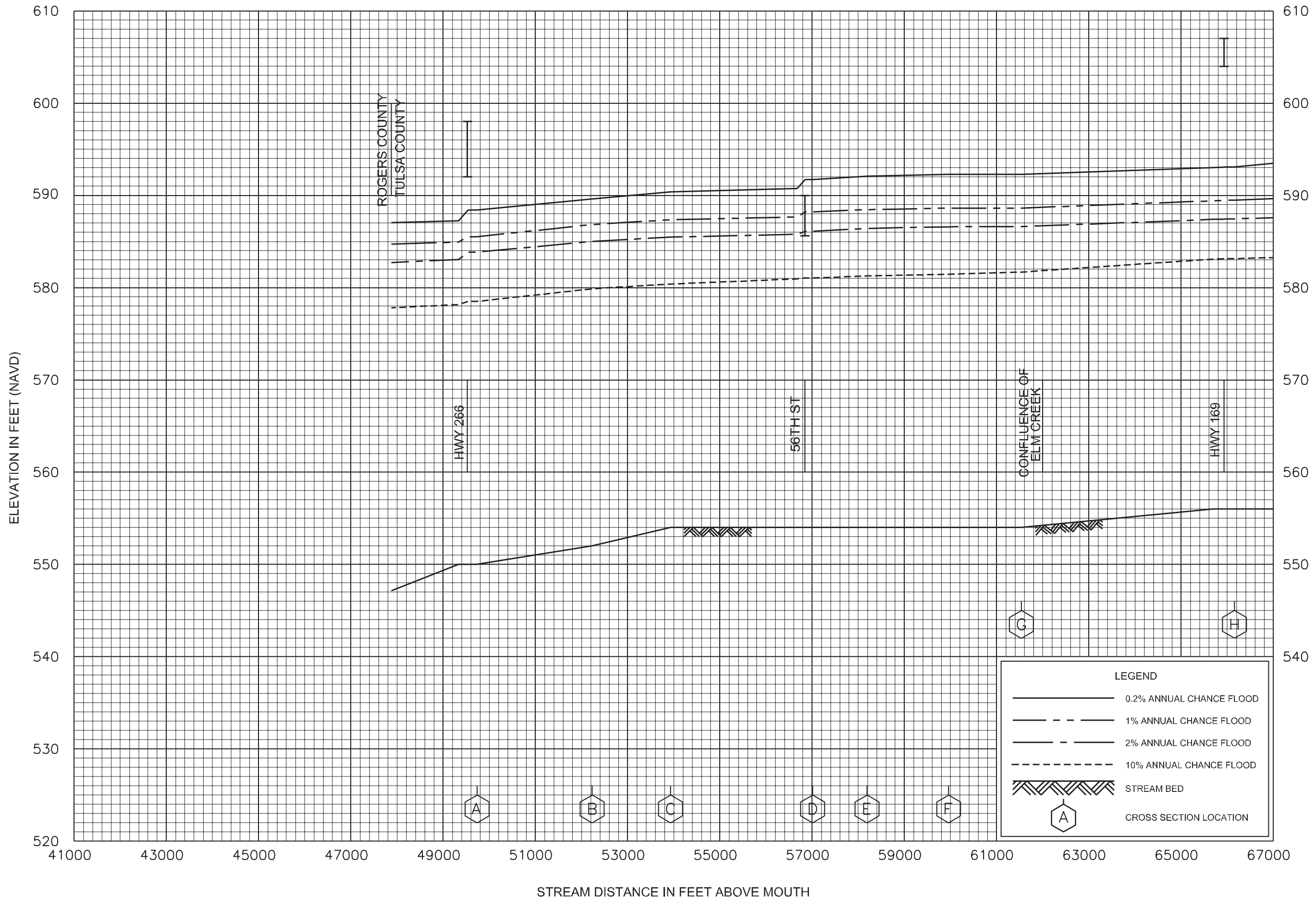
FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



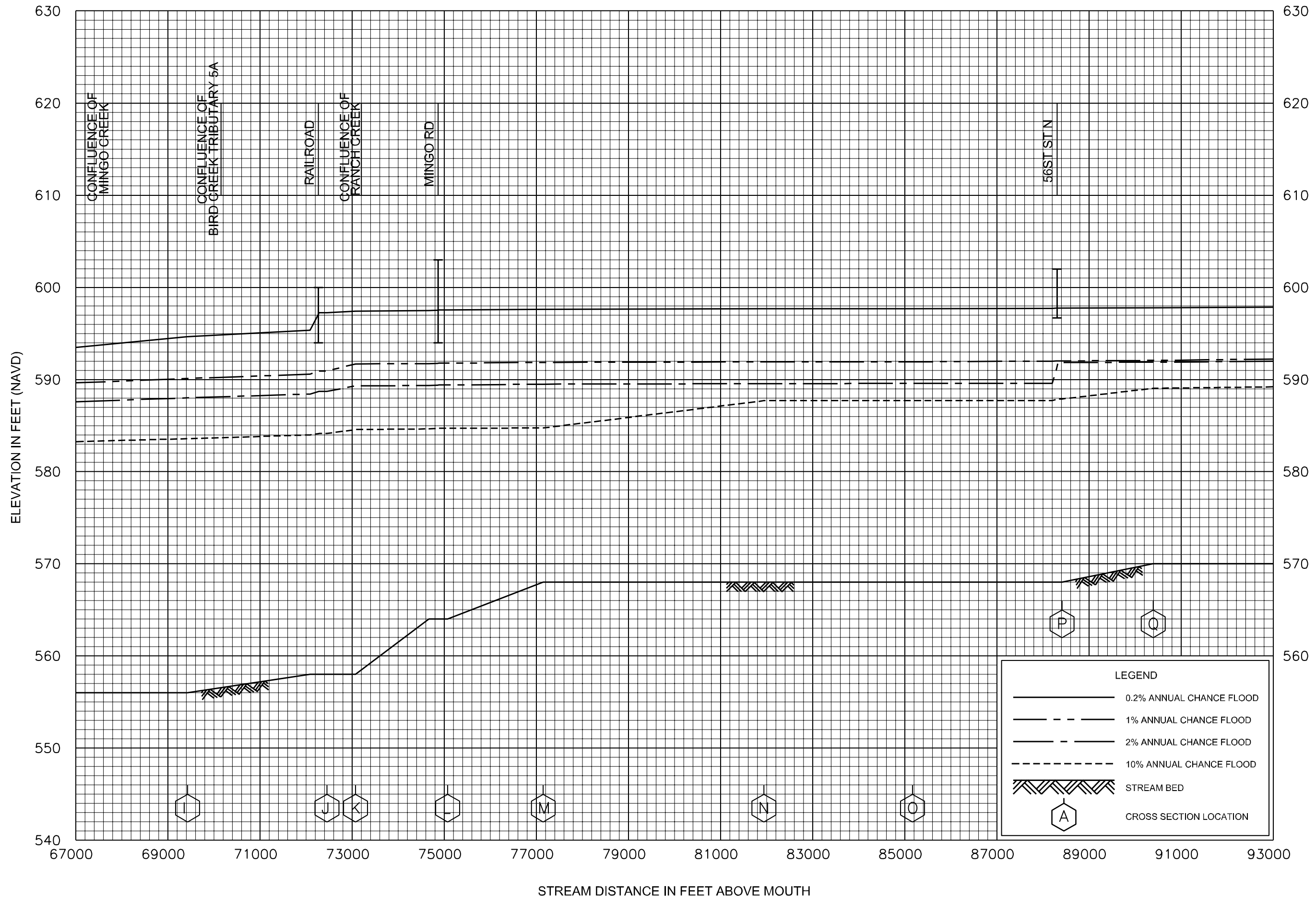
FLOOD PROFILES  
BIGHEART CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

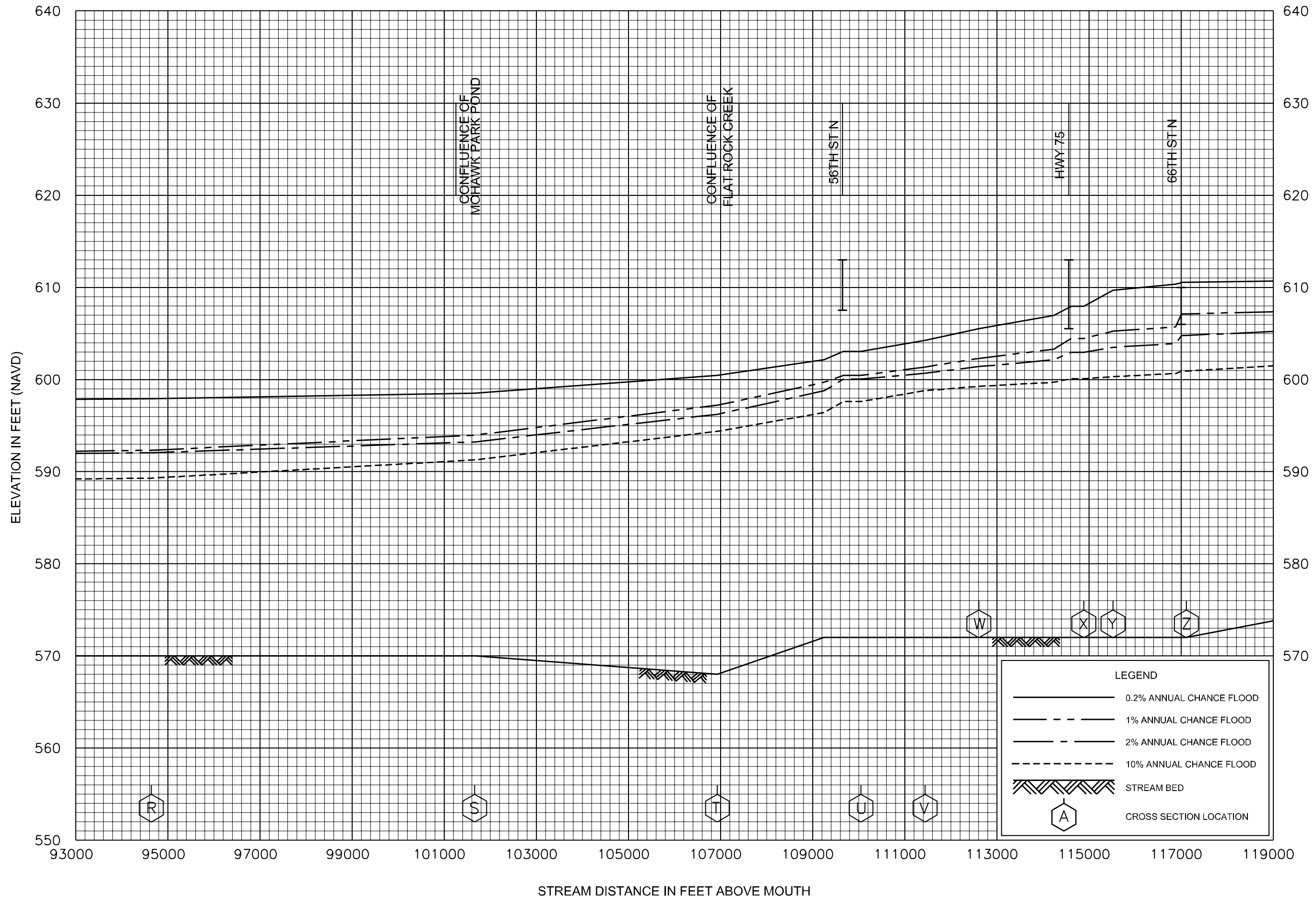


FLOOD PROFILES

BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES

BIRD CREEK

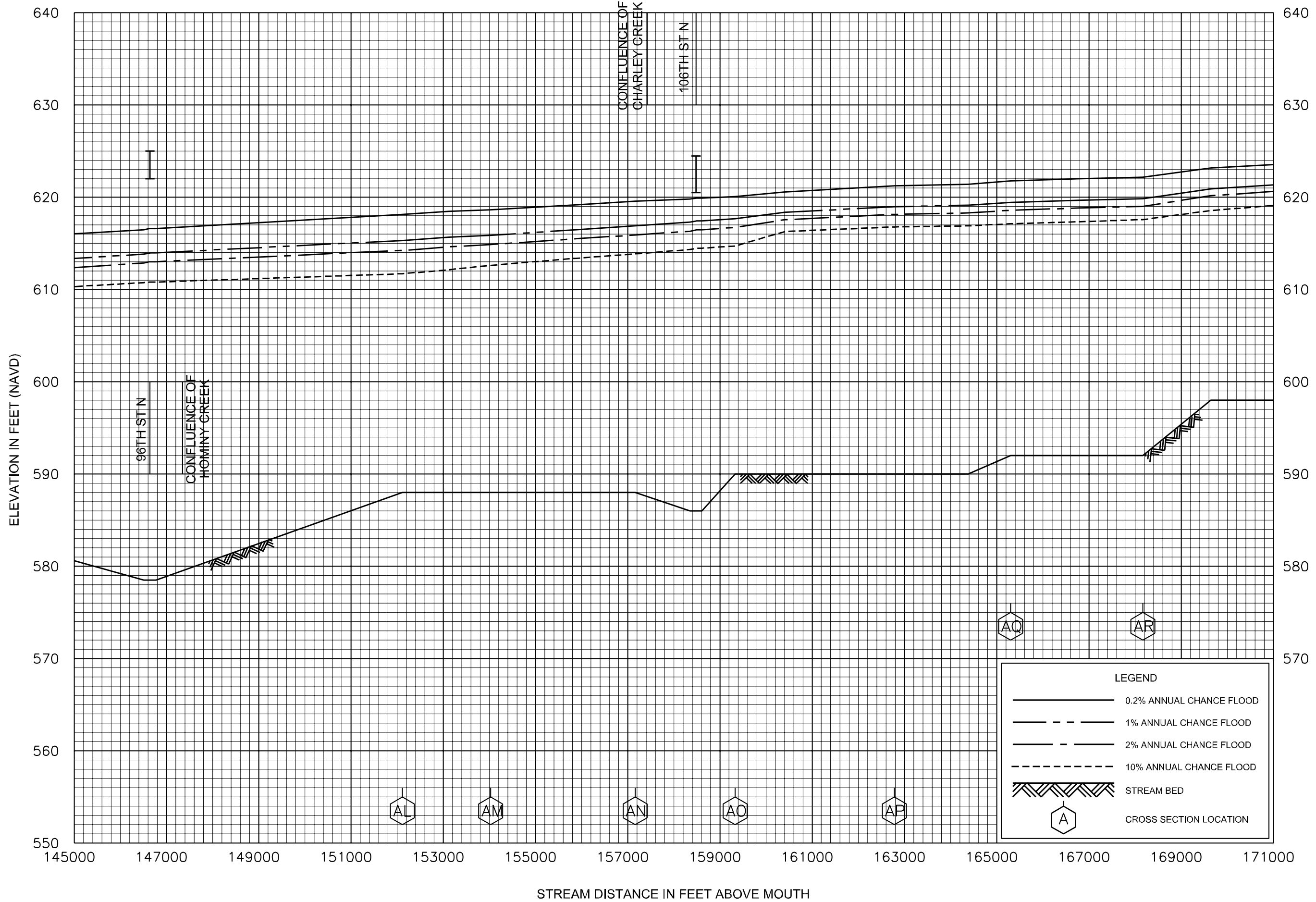
FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

027P







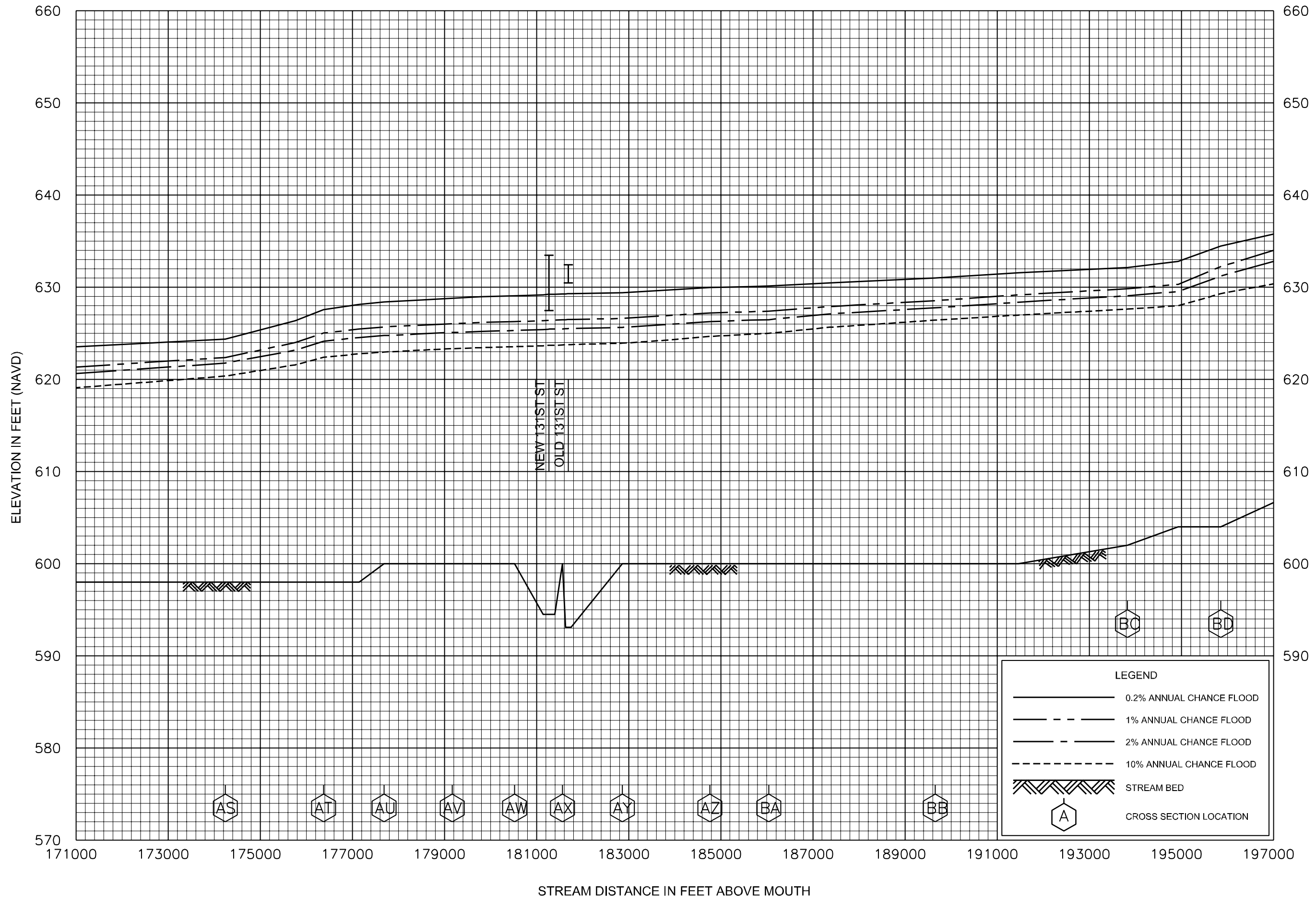
FLOOD PROFILES

BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

029P



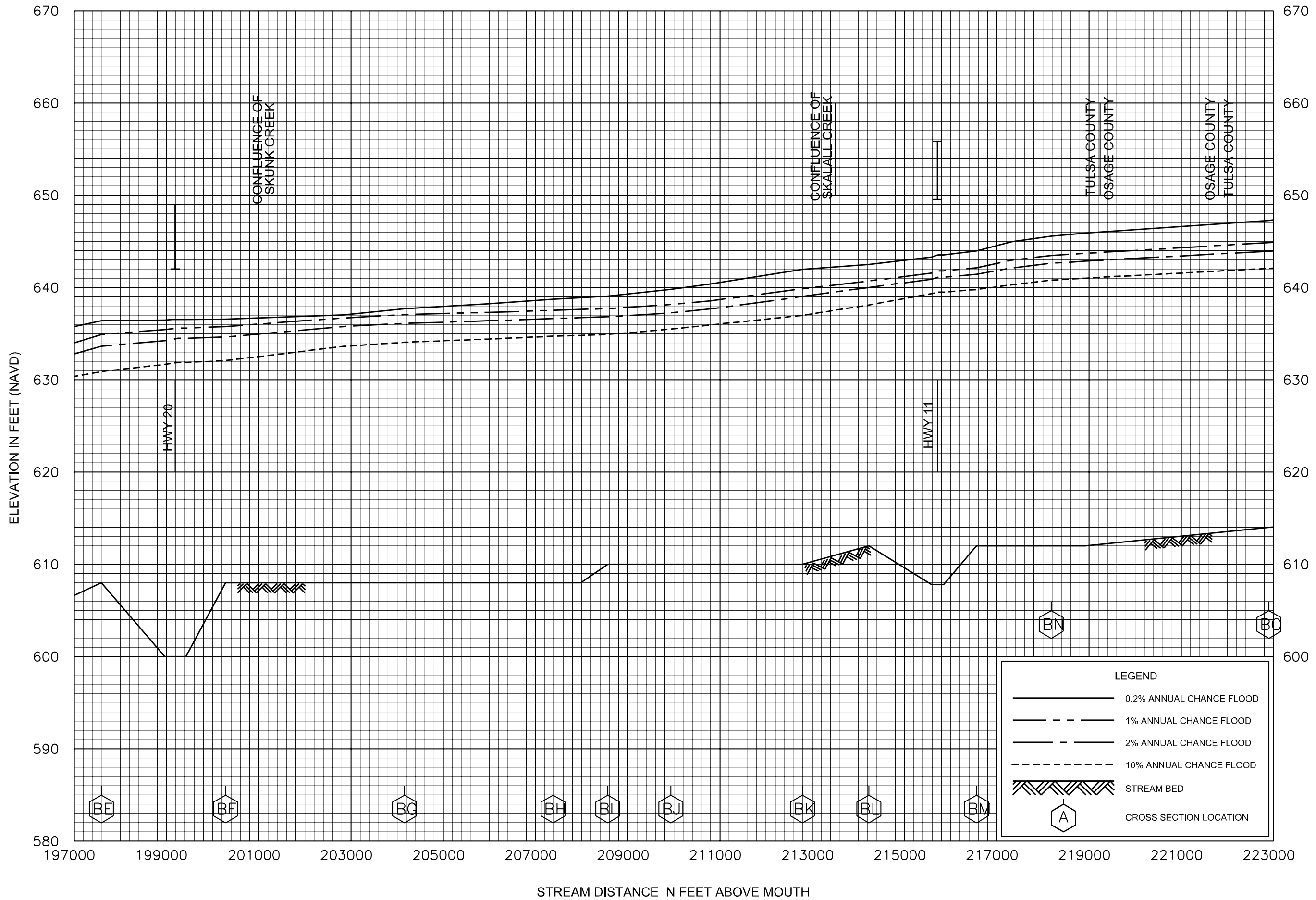
FLOOD PROFILES

BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

030P



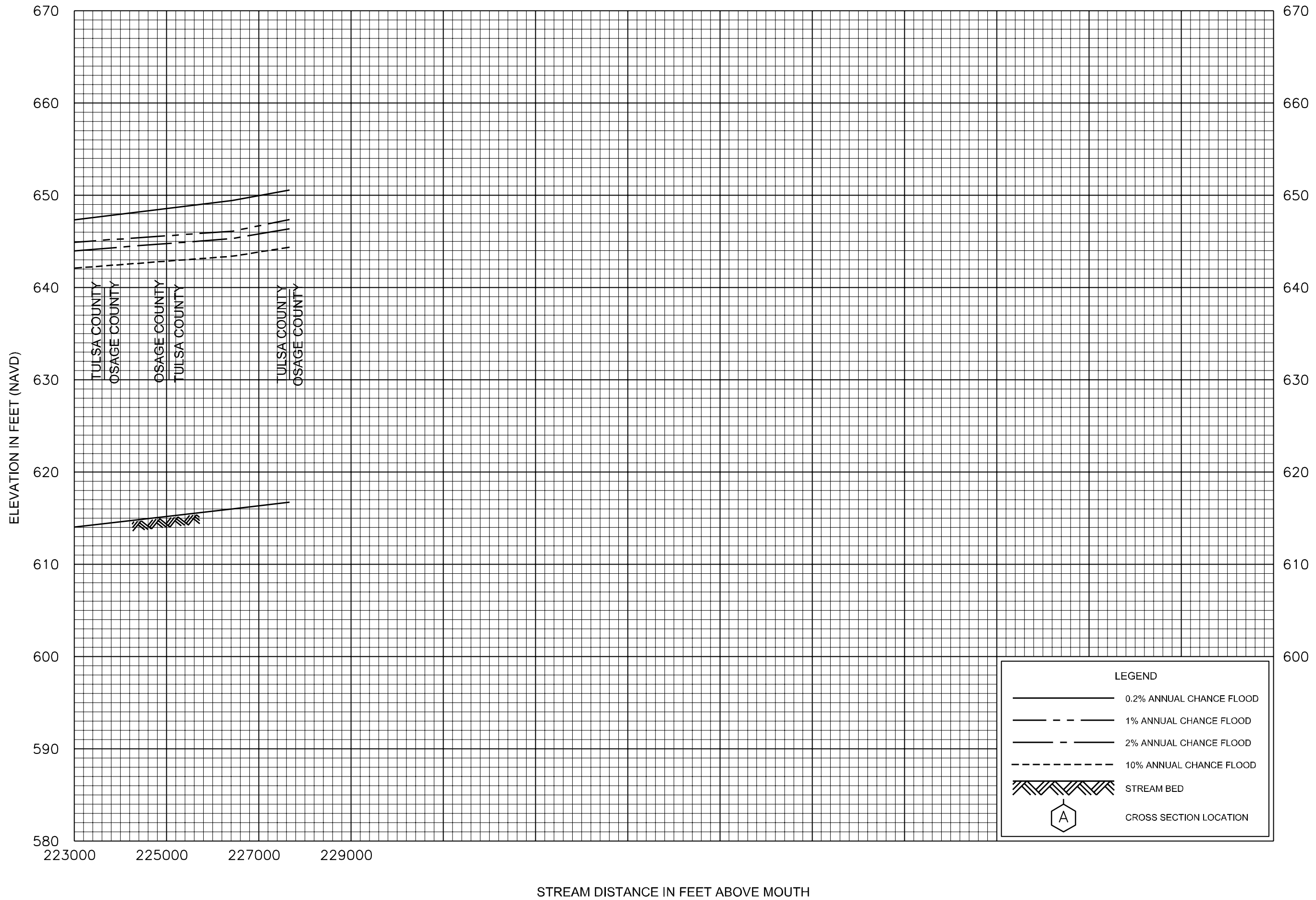
FLOOD PROFILES

BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

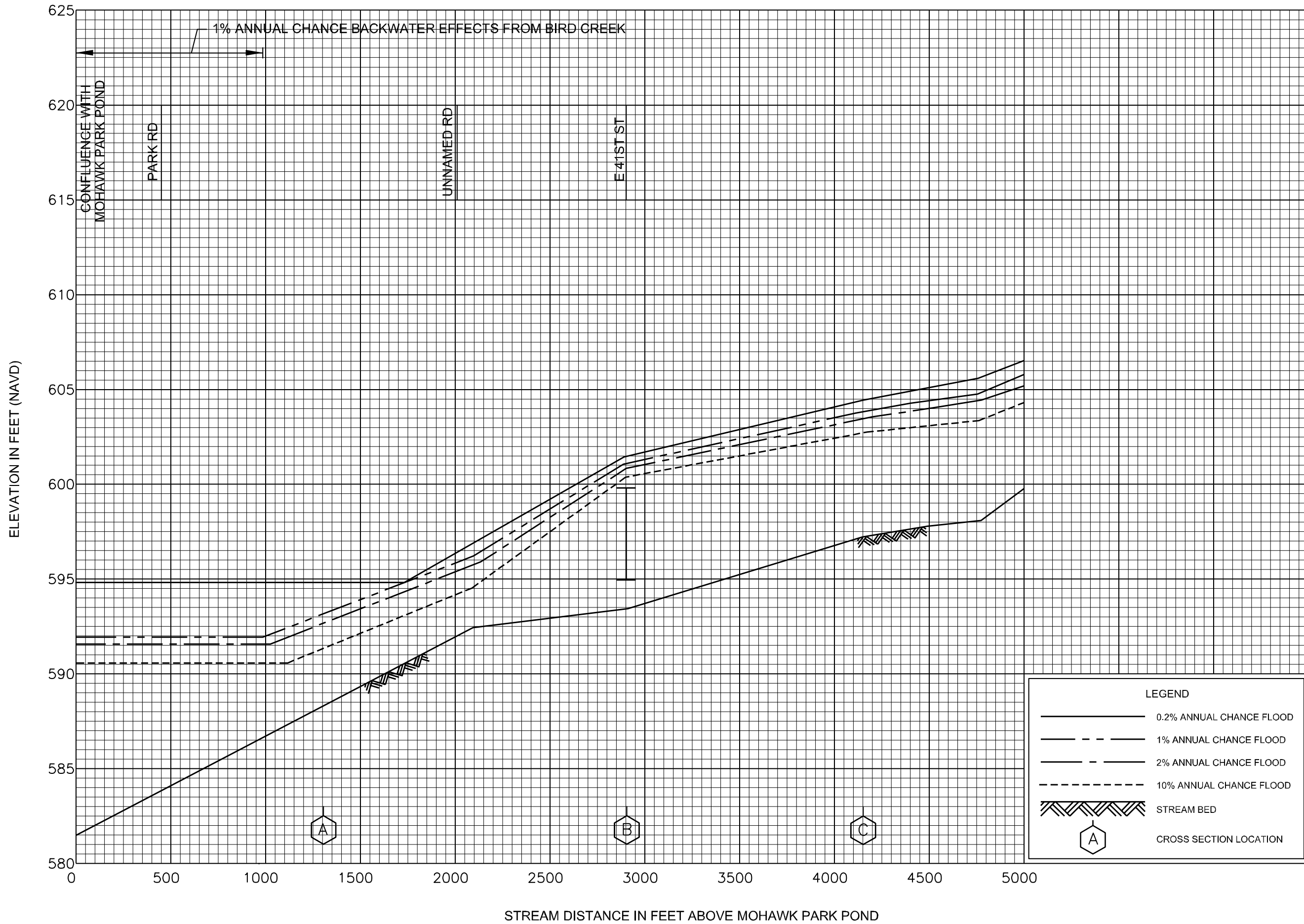
TULSA COUNTY, OK  
AND INCORPORATED AREAS

031P



FLOOD PROFILES  
BIRD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

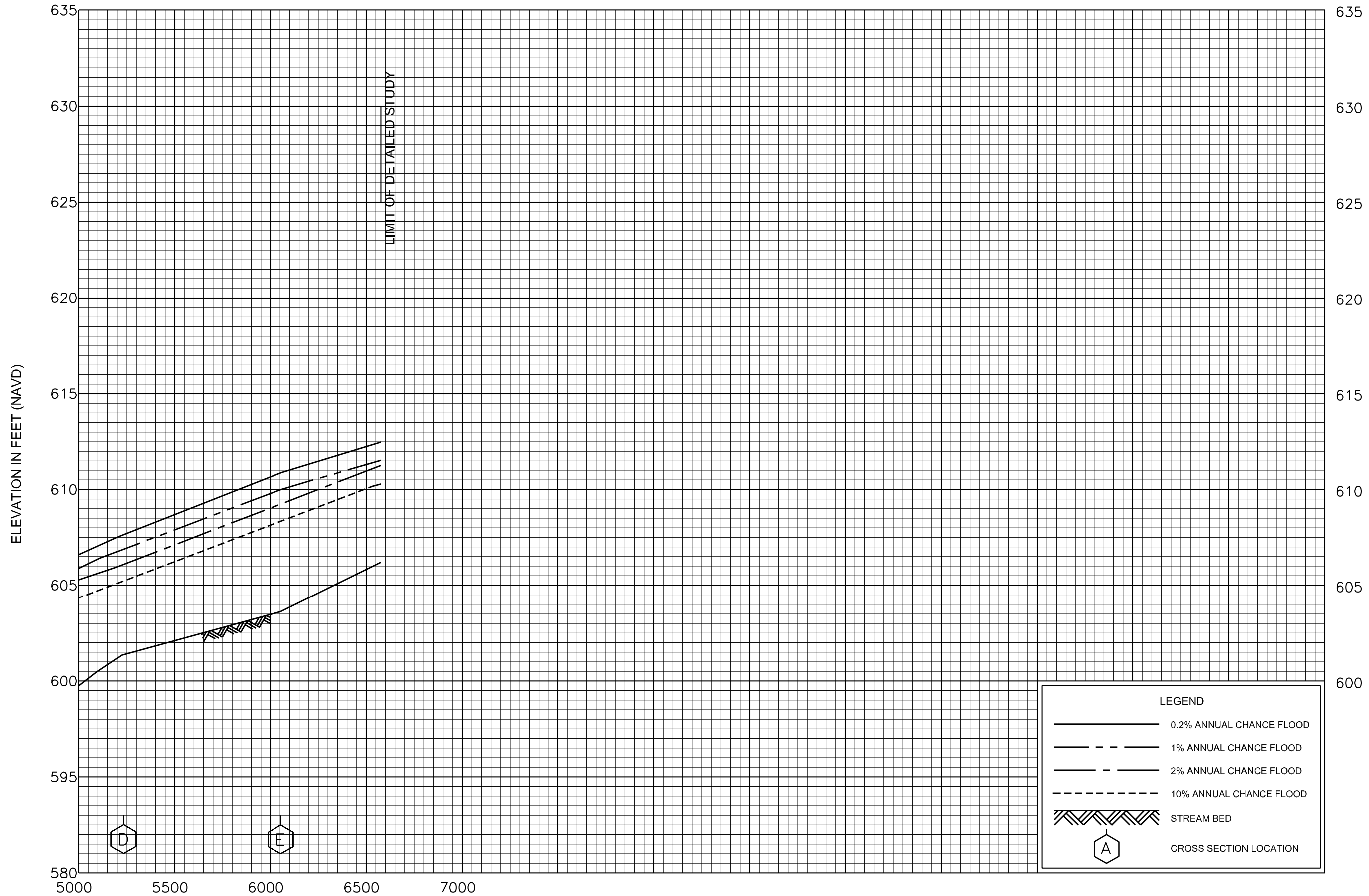


**FLOOD PROFILES**

**BIRD CREEK TRIBUTARY**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**TULSA COUNTY, OK**  
AND INCORPORATED AREAS



STREAM DISTANCE IN FEET ABOVE MOHAWK PARK POND

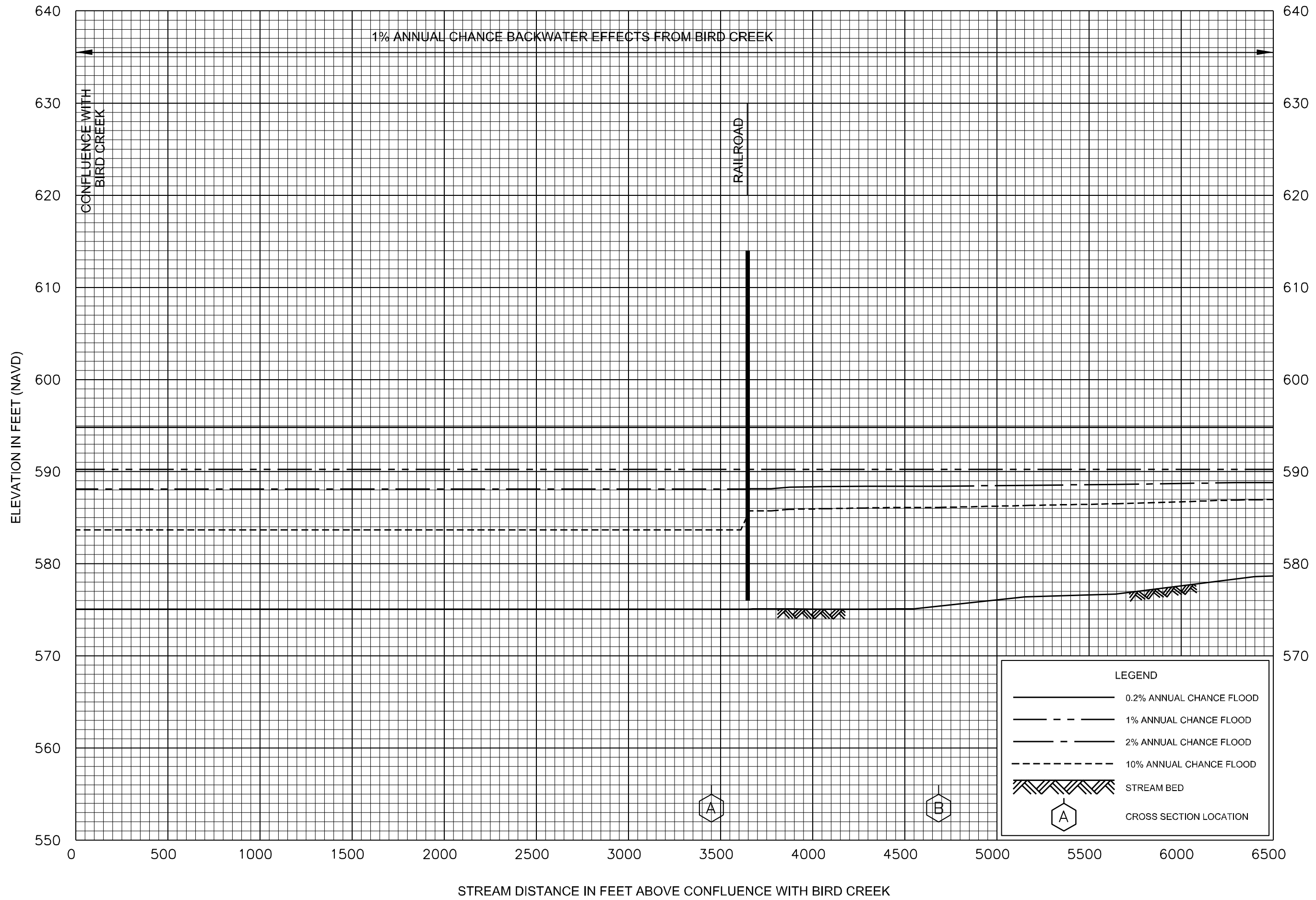
FLOOD PROFILES

BIRD CREEK TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

034P



FLOOD PROFILES

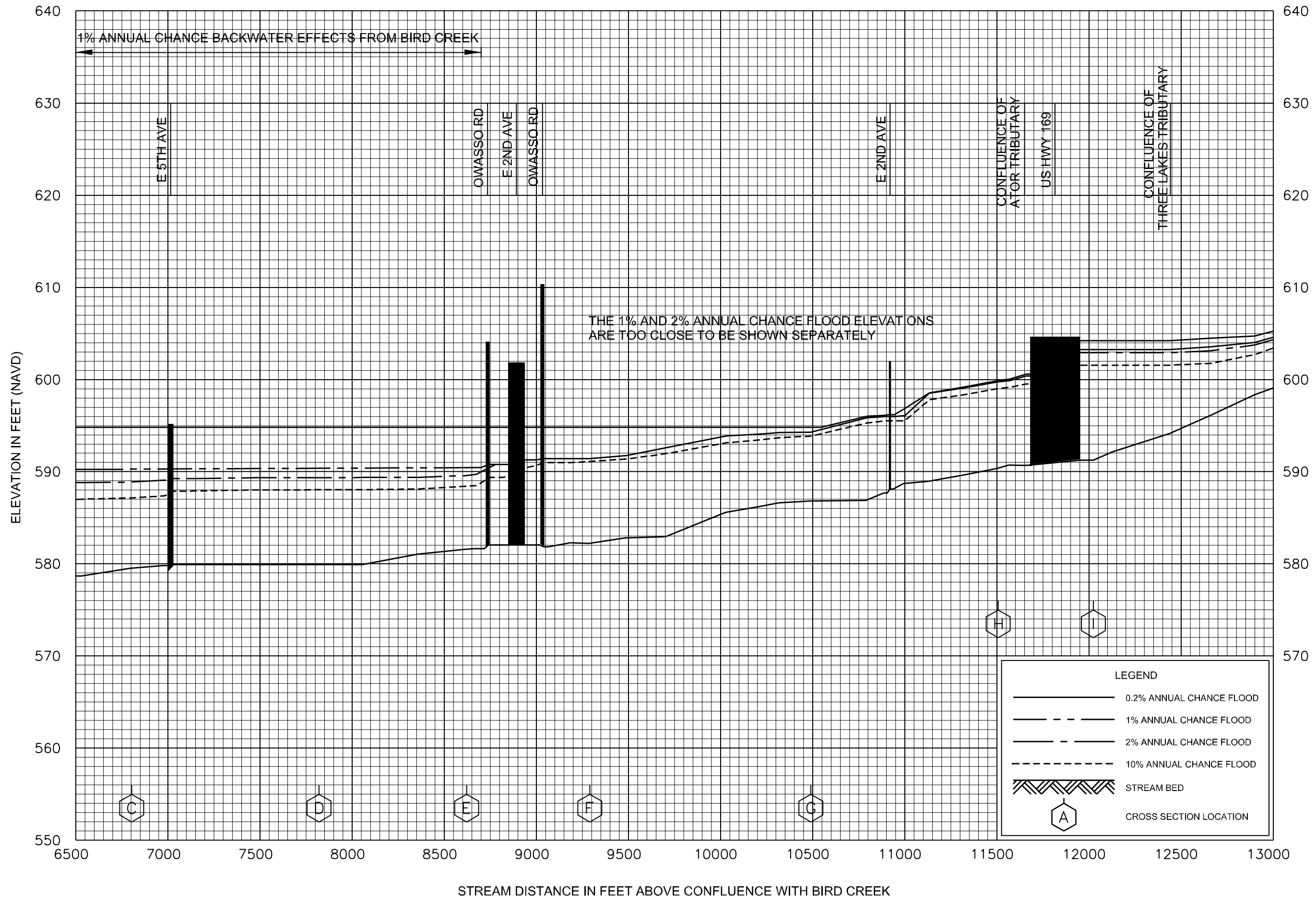
BIRD CREEK TRIBUTARY 5A

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

035P



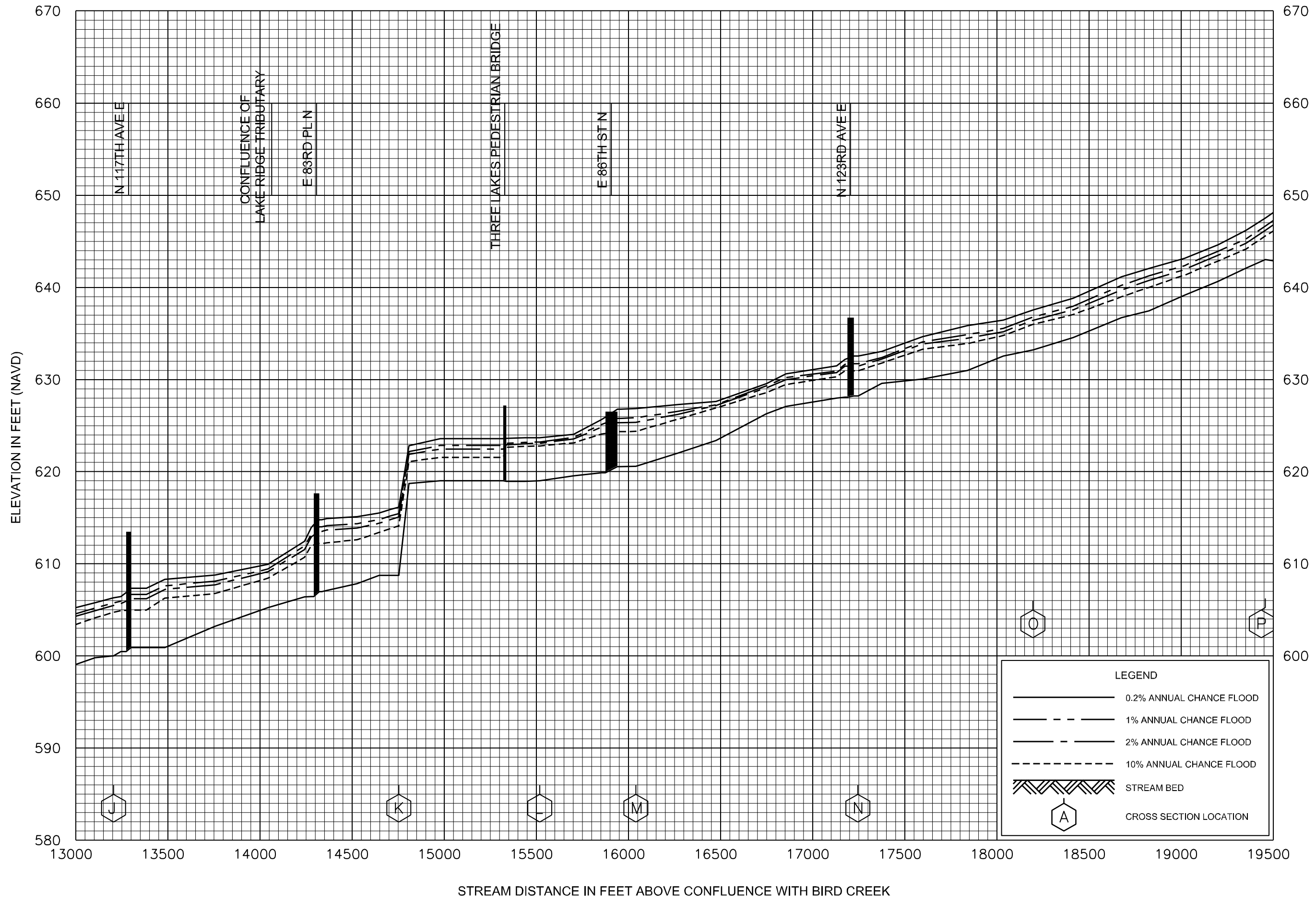


FLOOD PROFILES

BIRD CREEK TRIBUTARY 5A

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



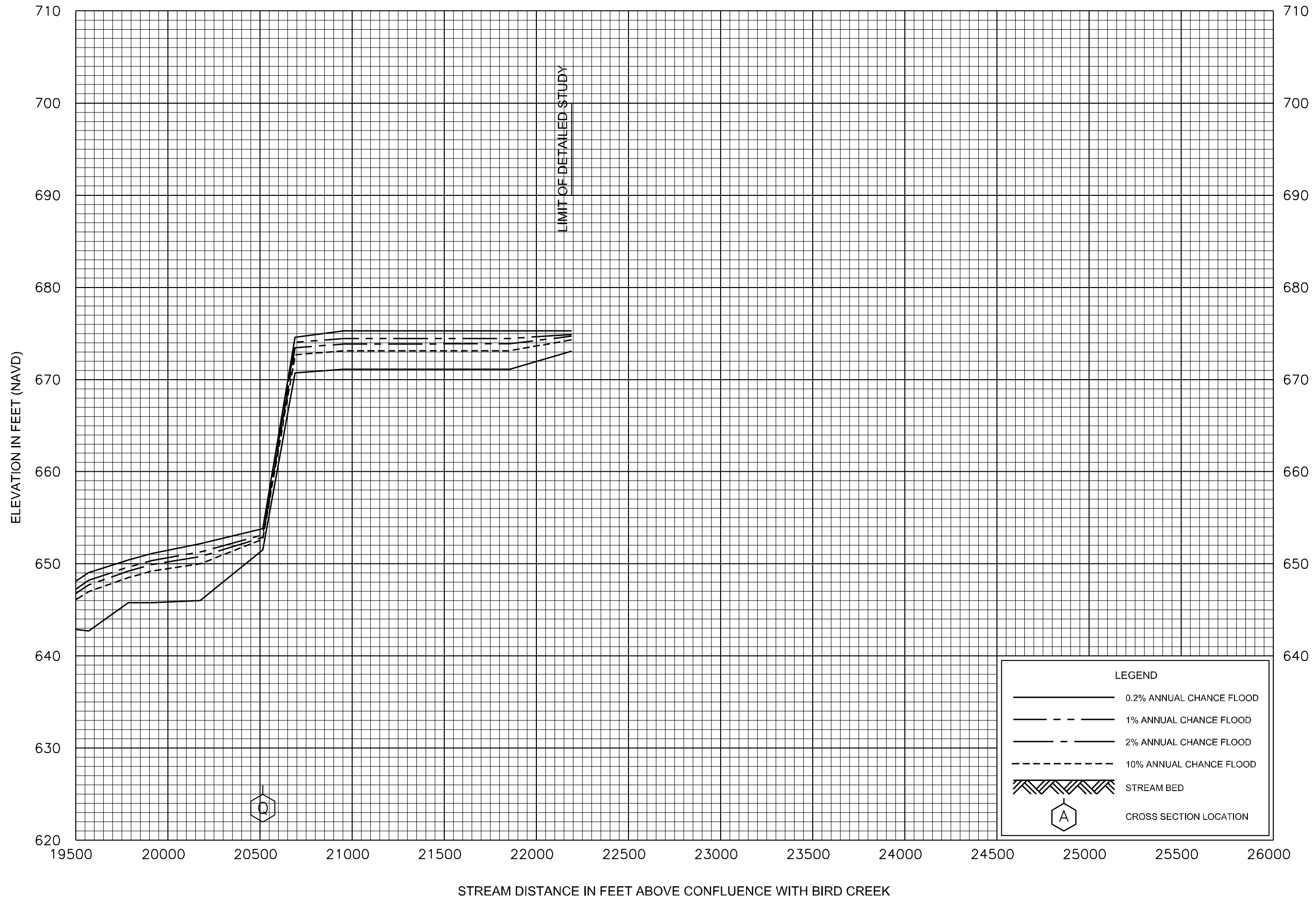
**LEGEND**

- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - 2% ANNUAL CHANCE FLOOD
- · · 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ A CROSS SECTION LOCATION

FLOOD PROFILES  
BIRD CREEK TRIBUTARY 5A

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

037P

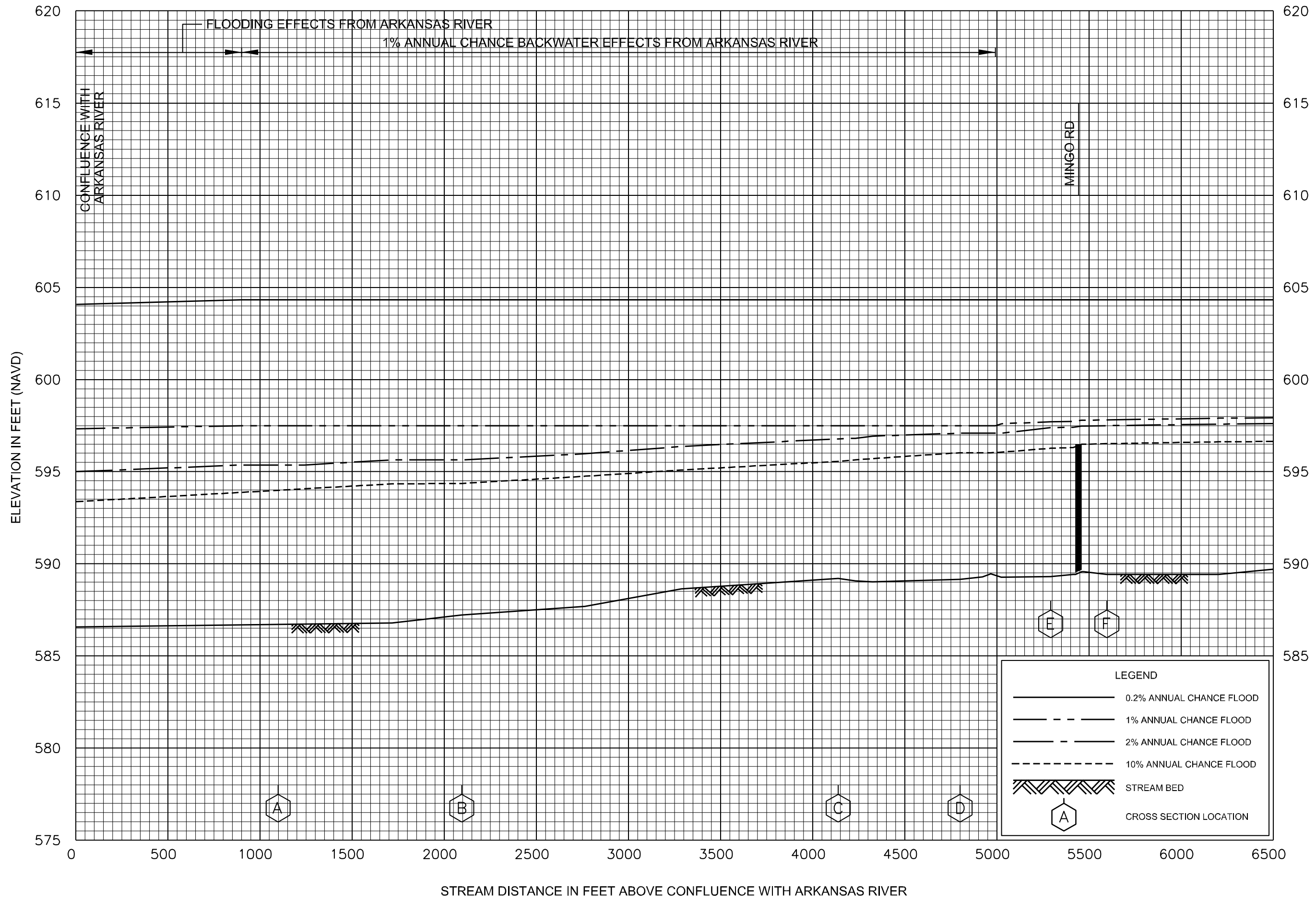


FLOOD PROFILES

BIRD CREEK TRIBUTARY 5A

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

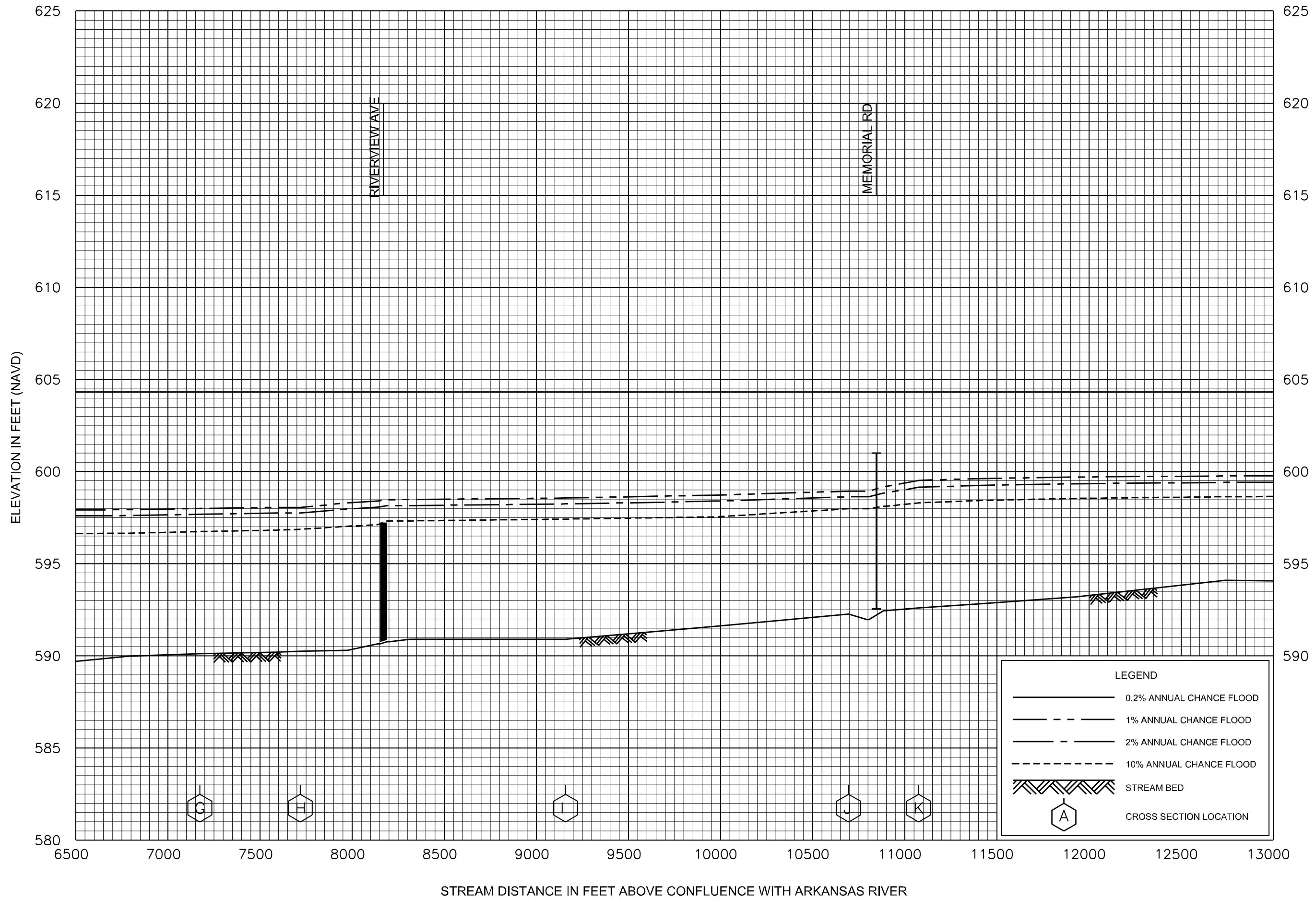


FLOOD PROFILES

BIXBY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
 AND INCORPORATED AREAS

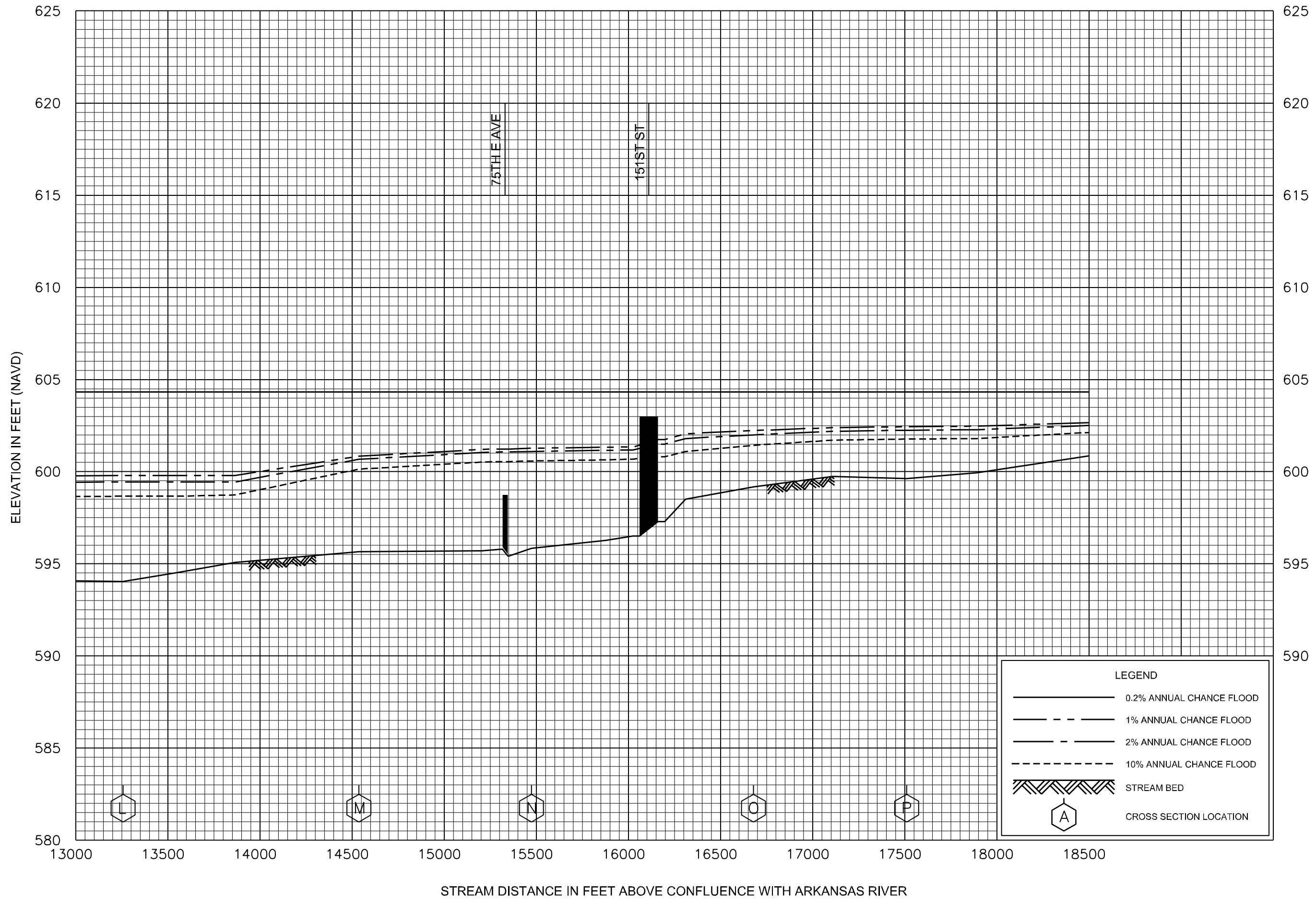


FLOOD PROFILES

BIXBY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



**LEGEND**

- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - 2% ANNUAL CHANCE FLOOD
- · · 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ A CROSS SECTION LOCATION

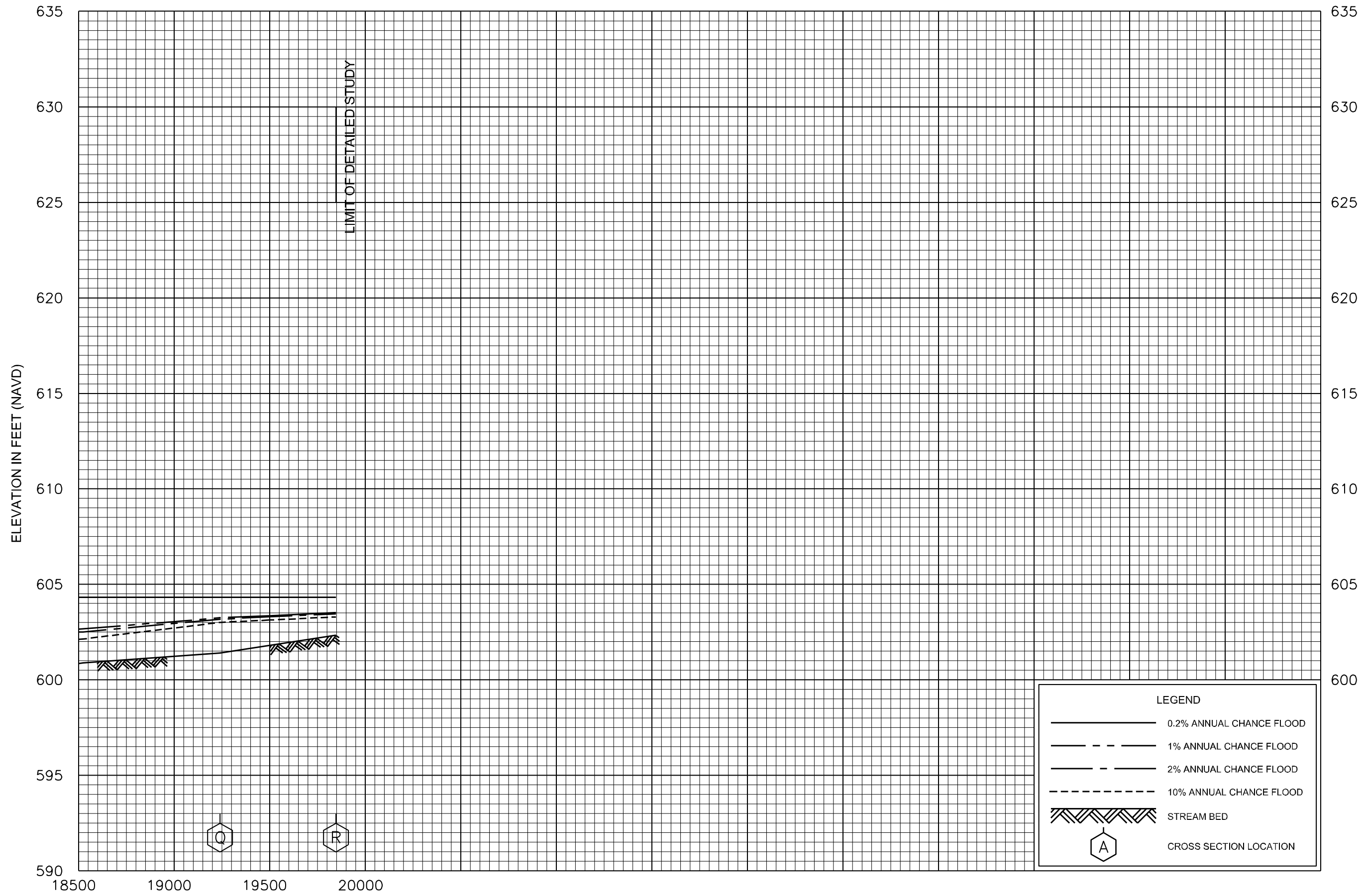
FLOOD PROFILES

BIXBY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

041P



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH ARKANSAS RIVER

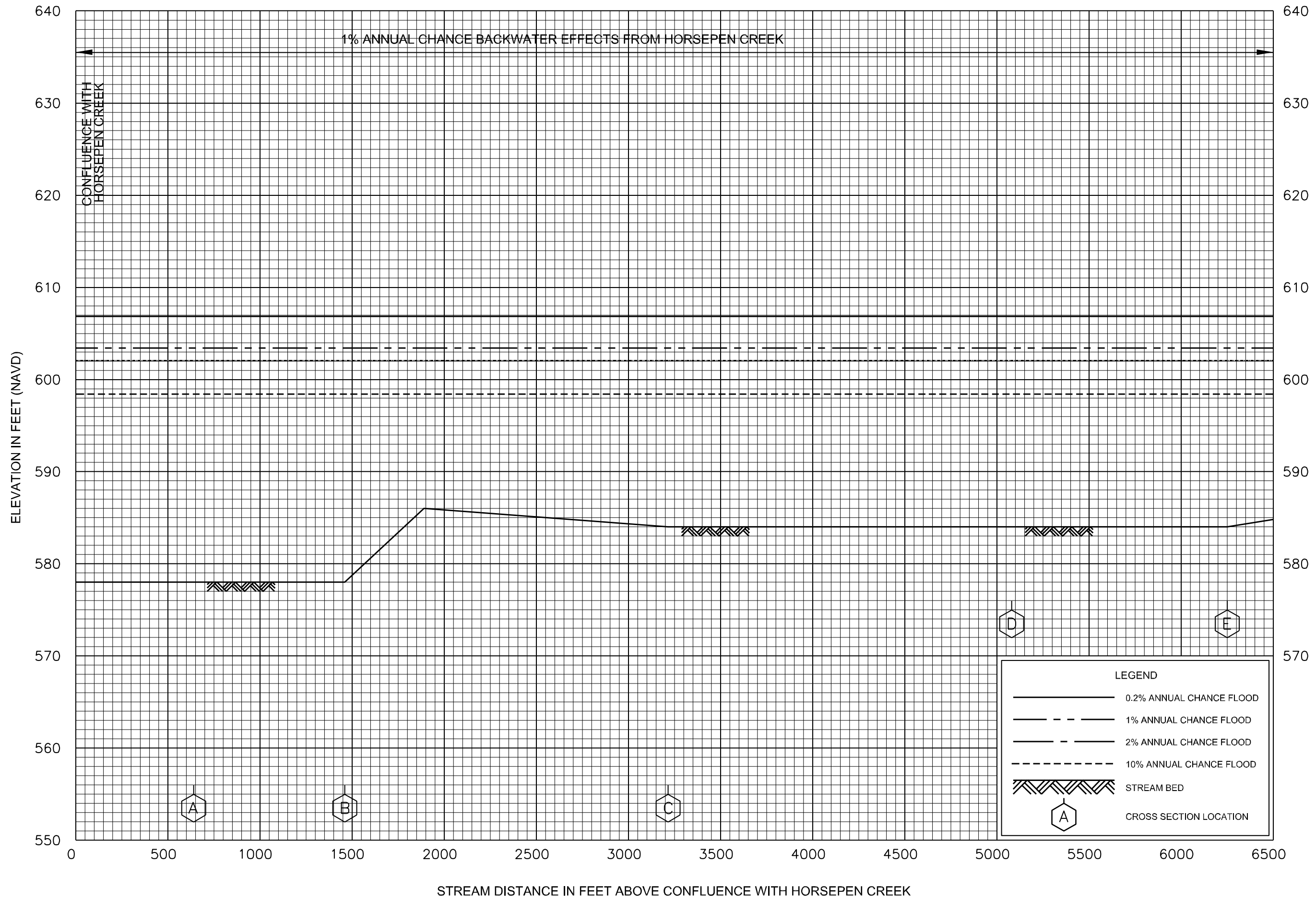
FLOOD PROFILES

BIXBY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS

042P

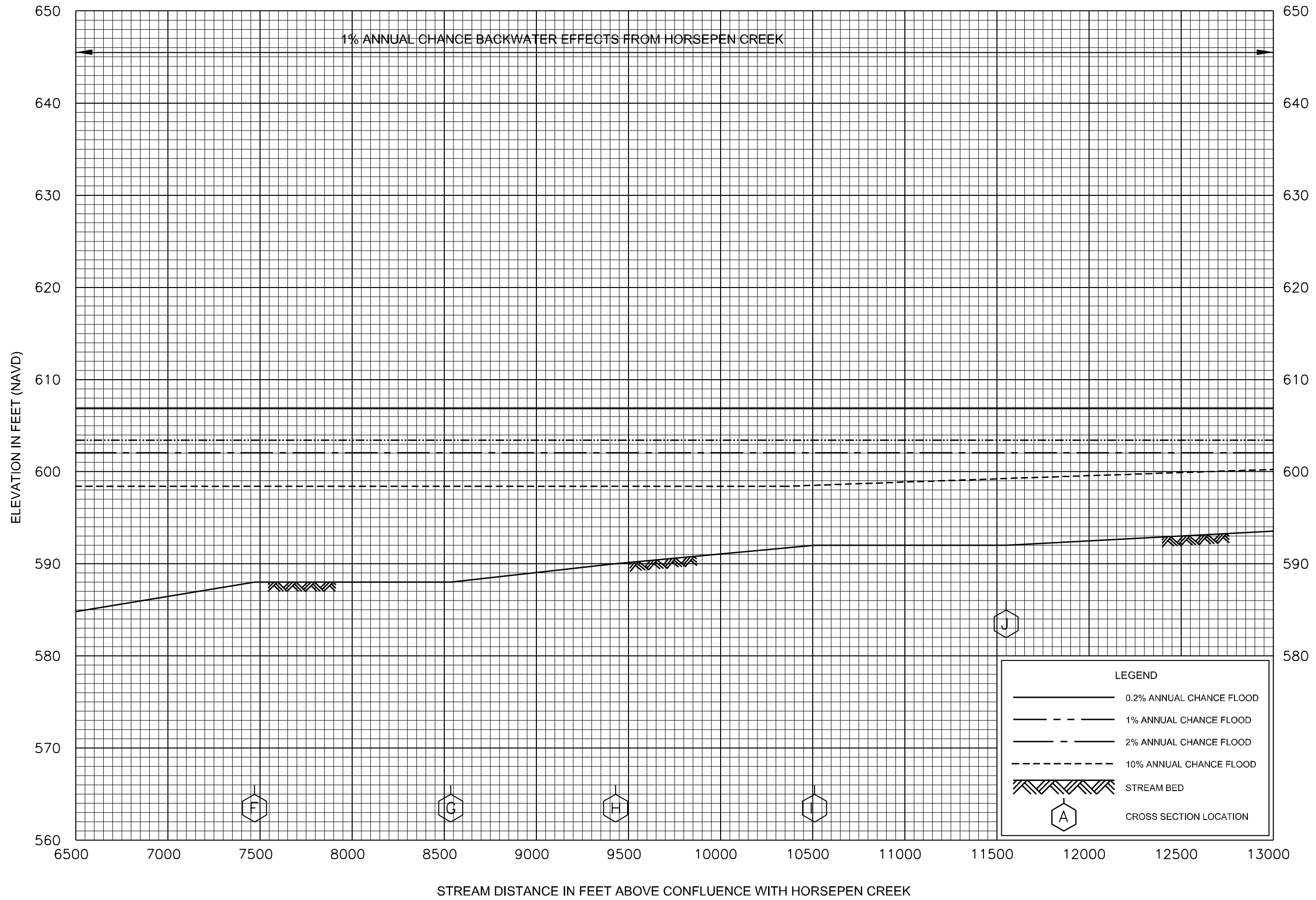


FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

043P

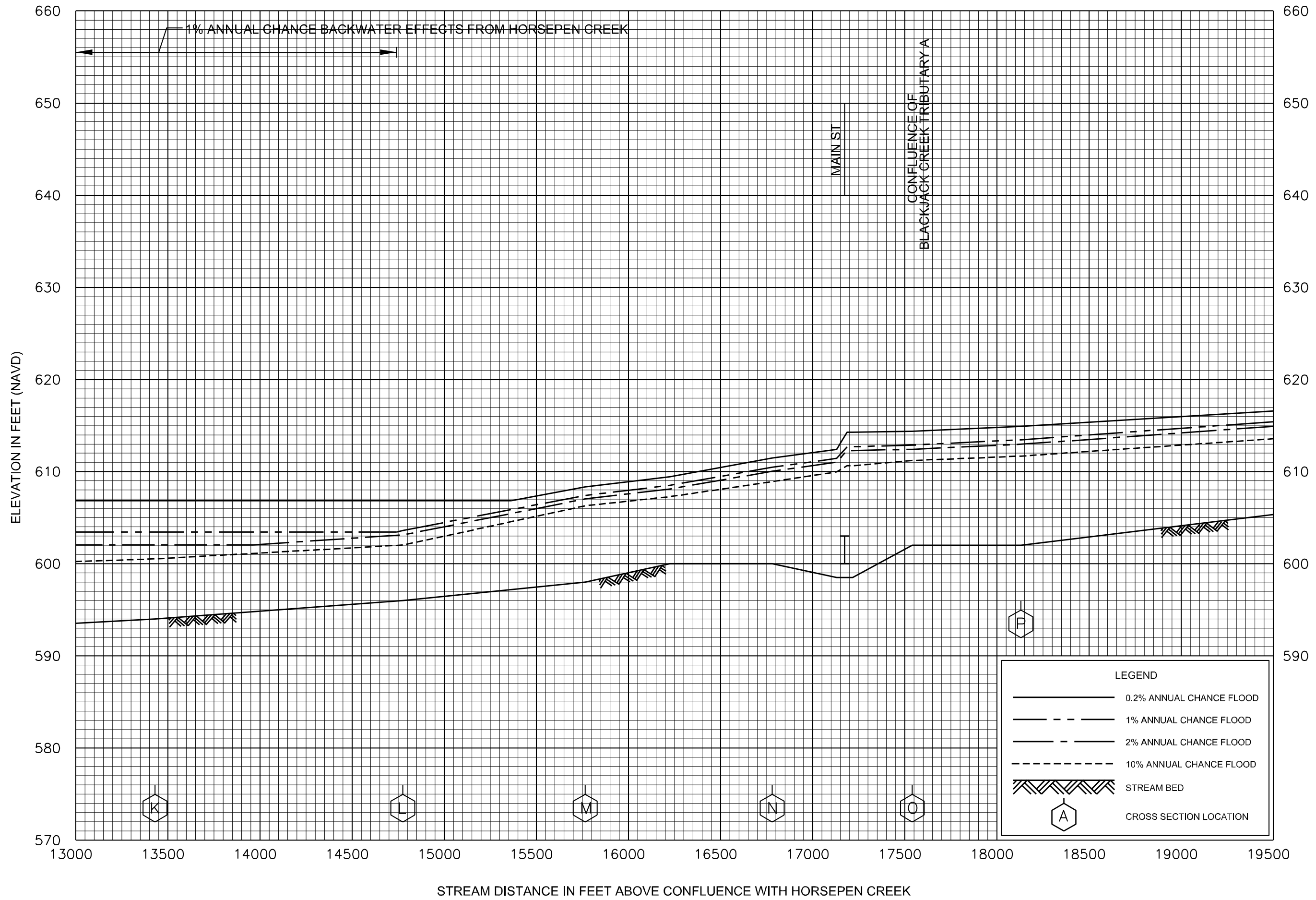




FLOOD PROFILES  
BLACKJACK CREEK

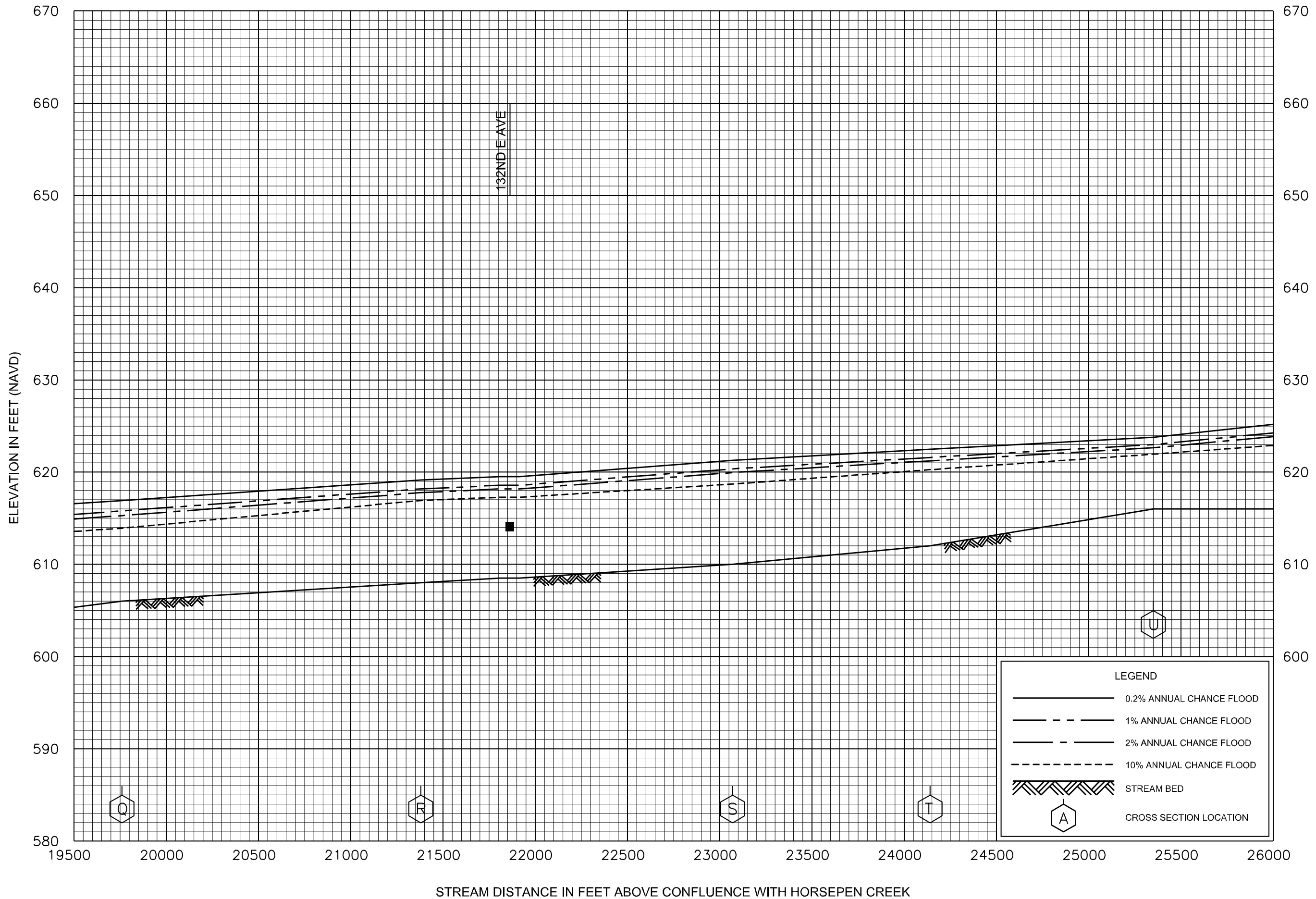
FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

044P



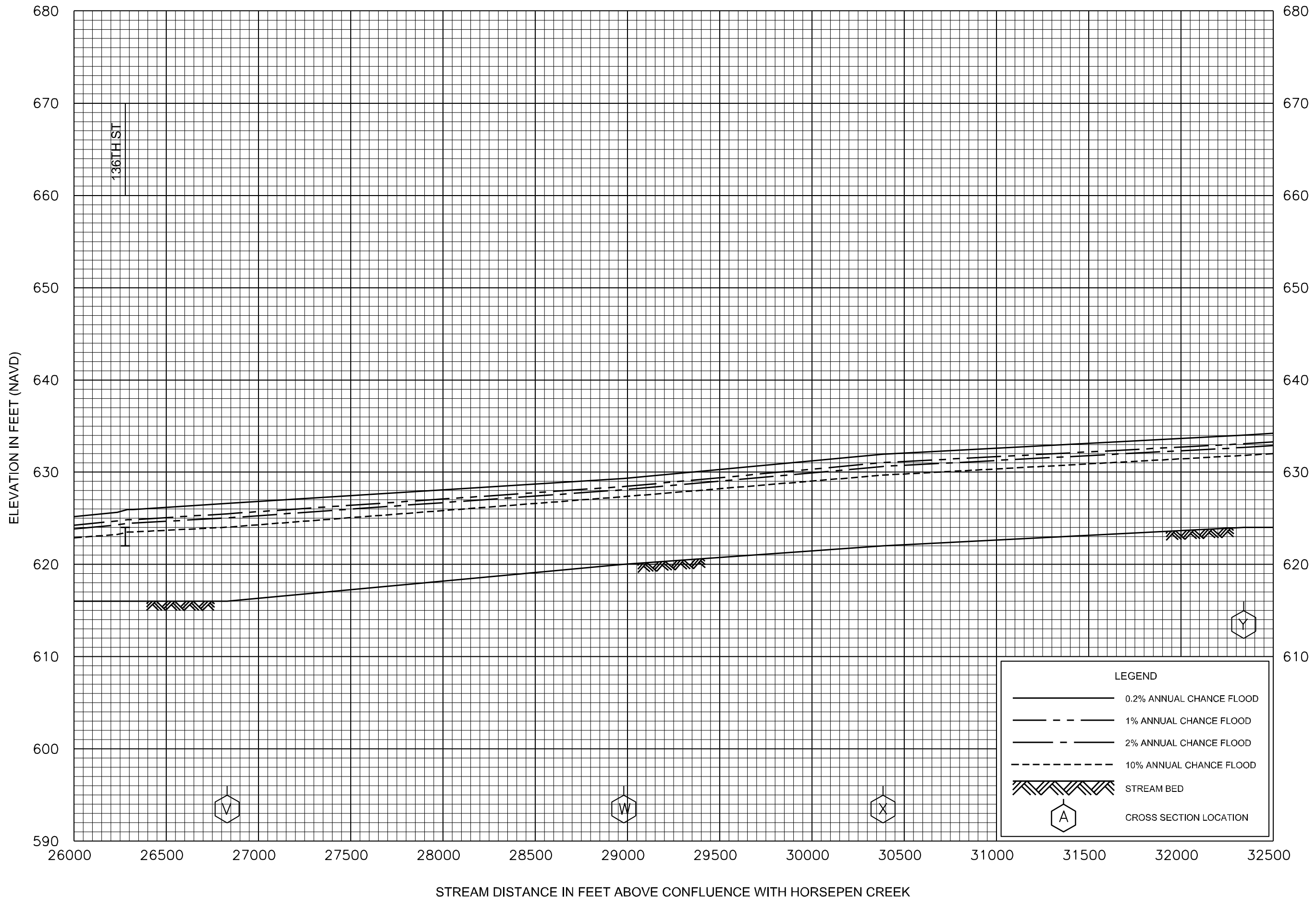
FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

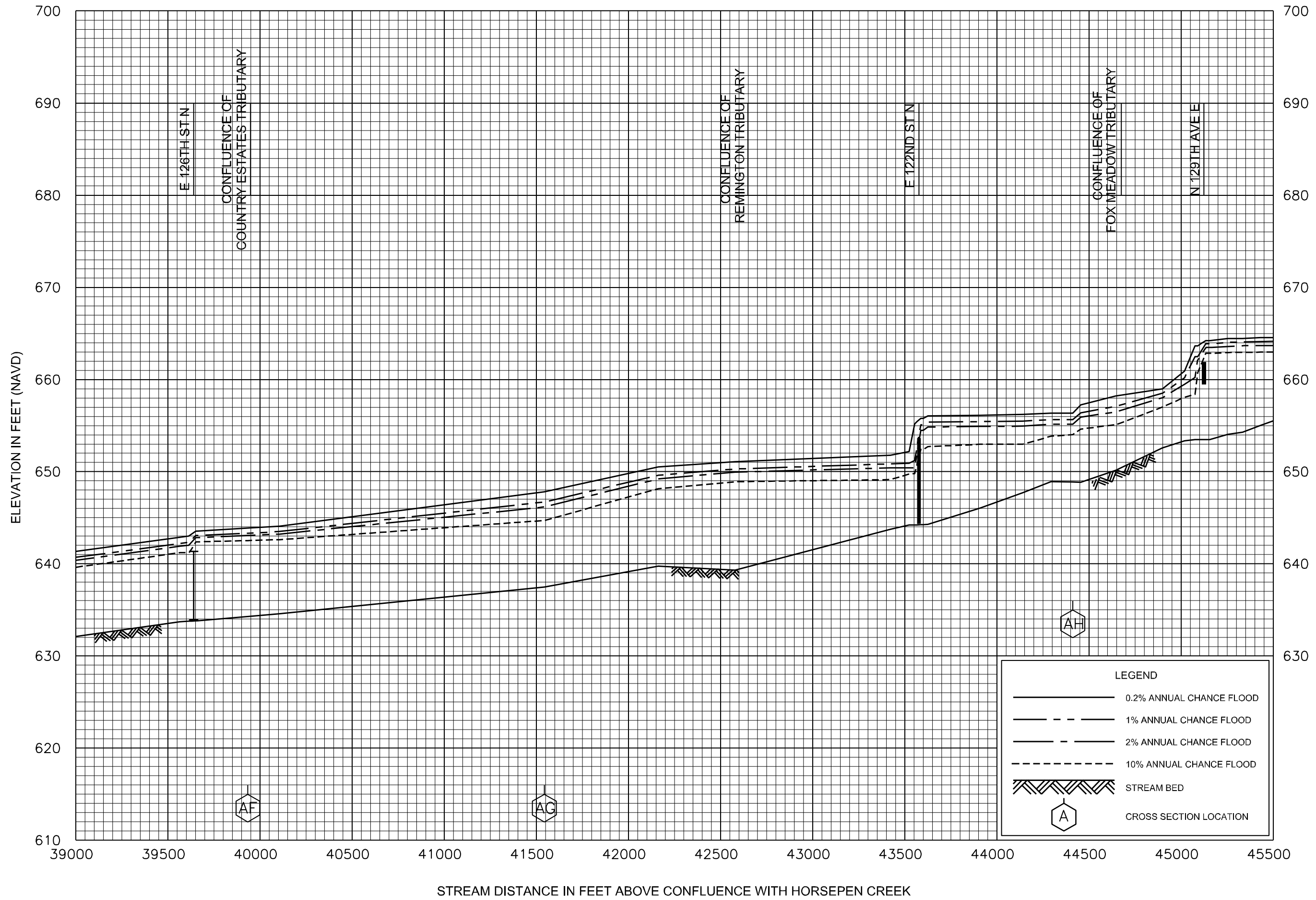


FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS

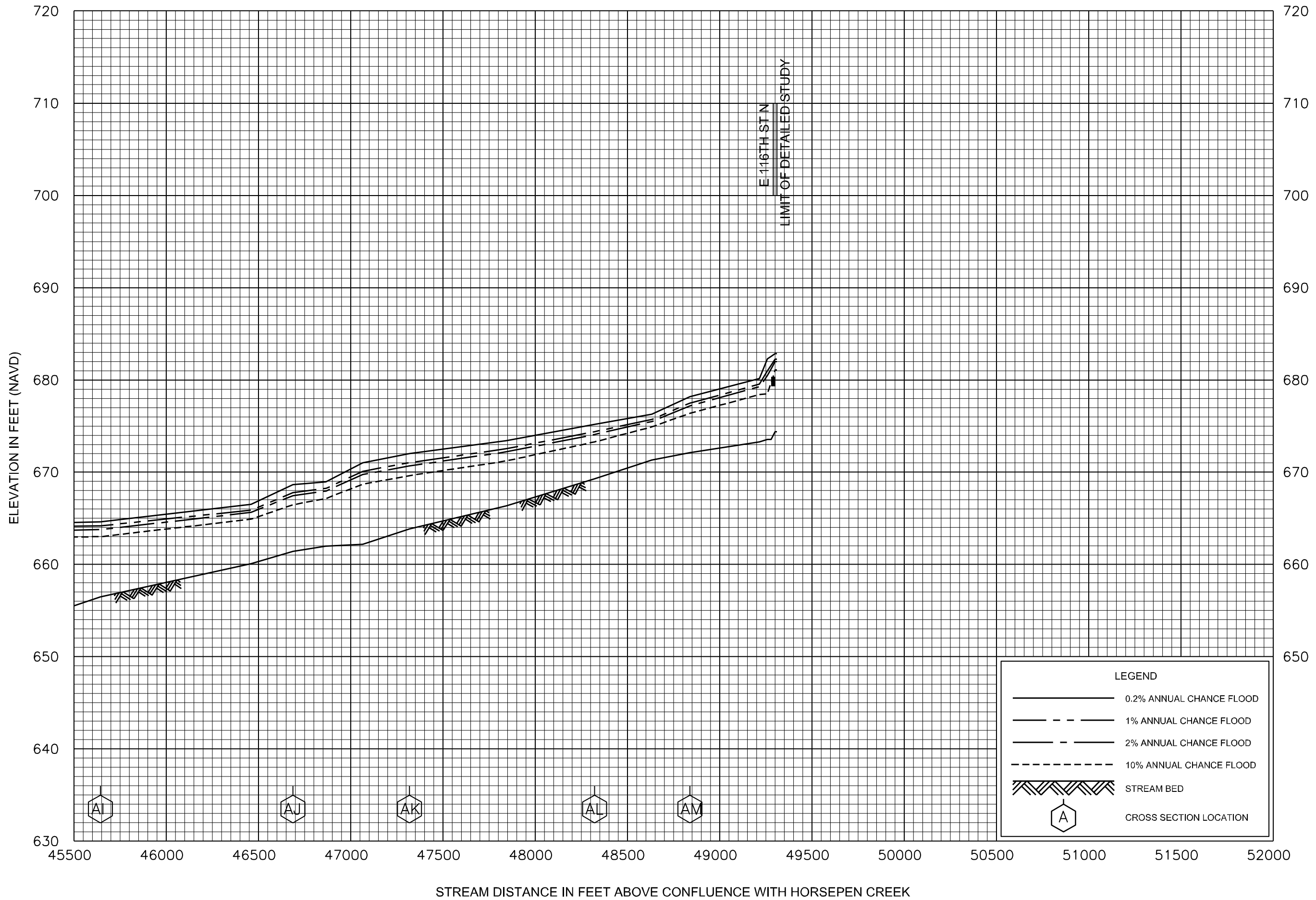
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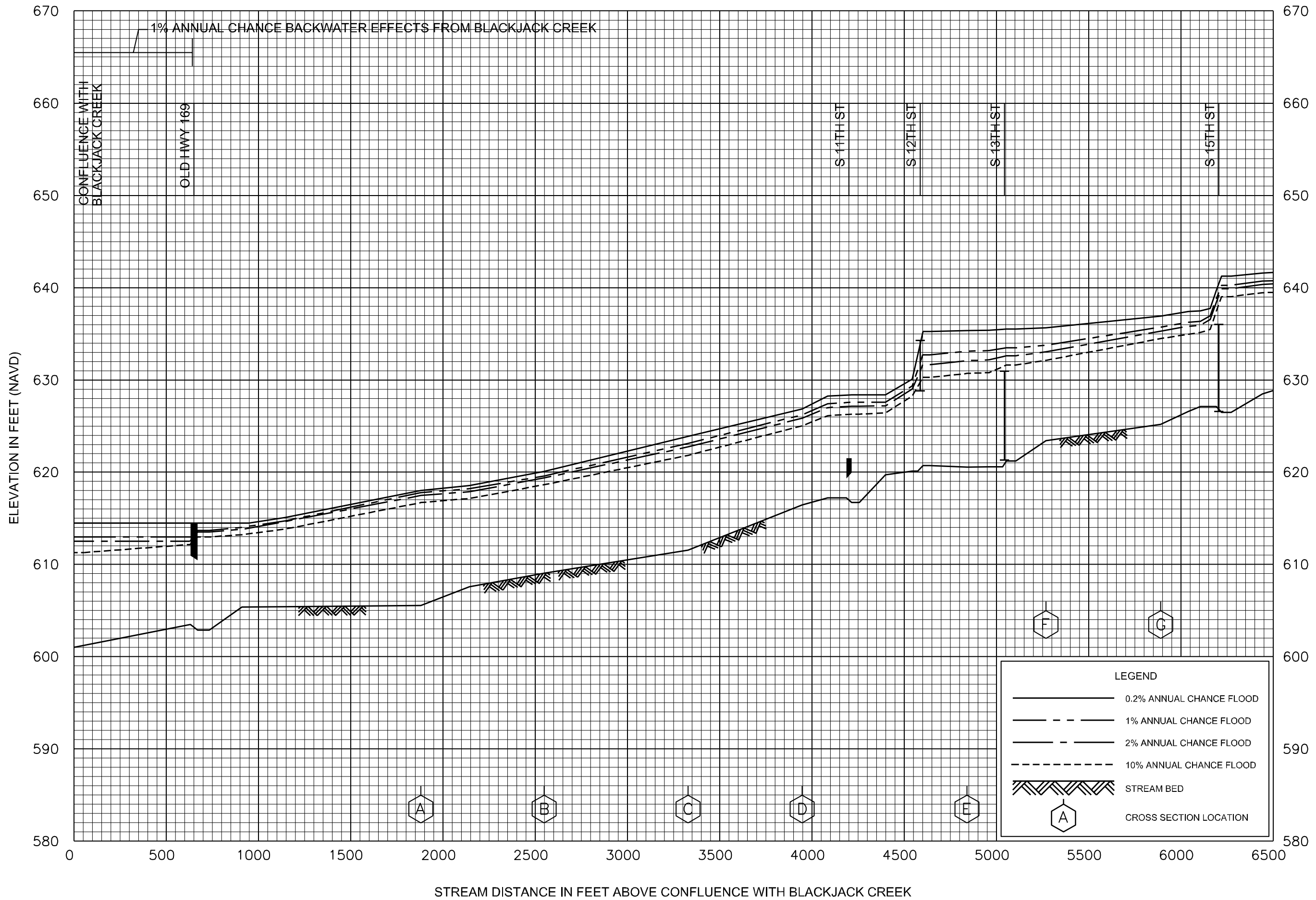
FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES  
BLACKJACK CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
TULSA COUNTY, OK  
AND INCORPORATED AREAS



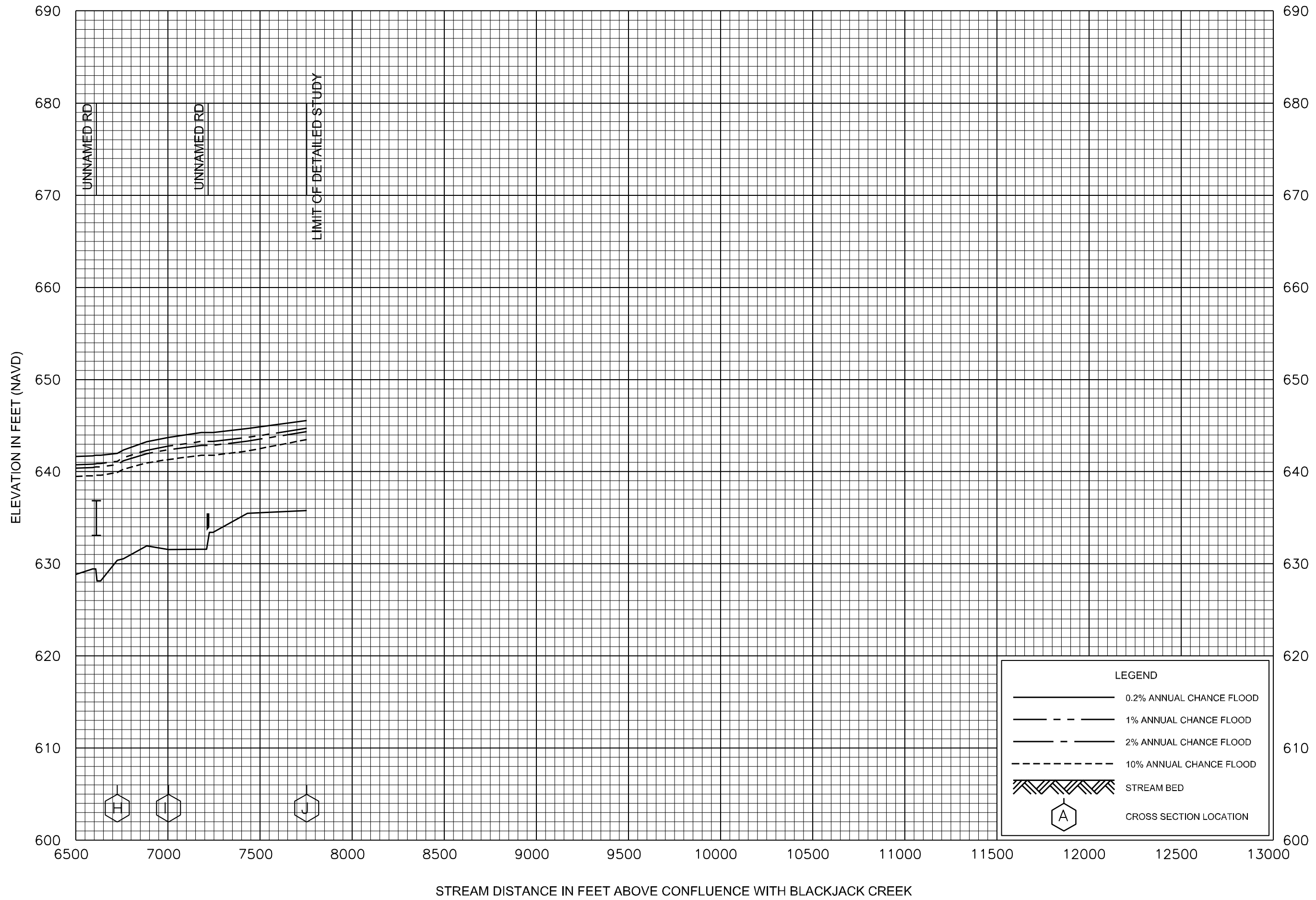
FLOOD PROFILES

BLACKJACK CREEK TRIBUTARY A

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



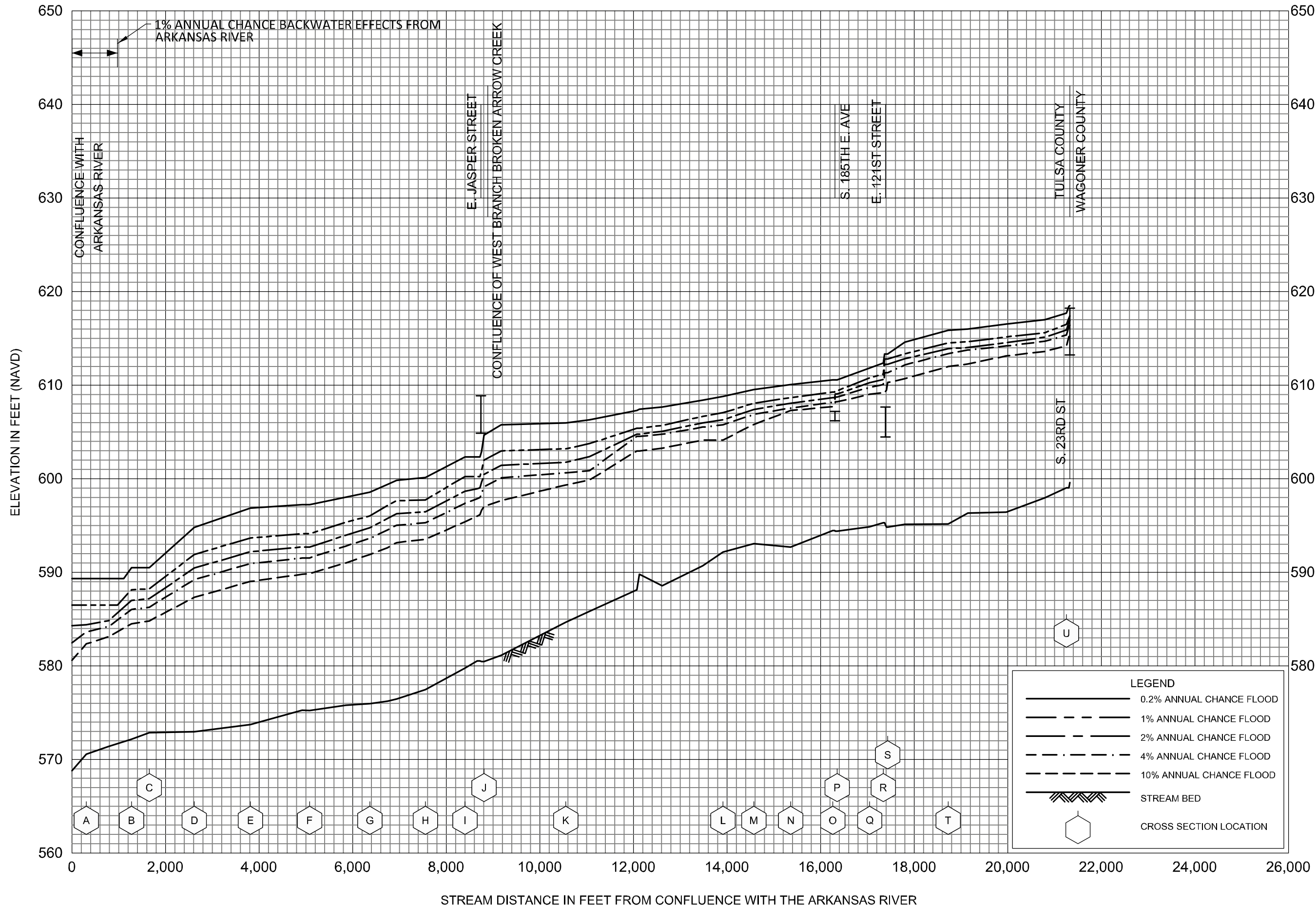


FLOOD PROFILES

BLACKJACK CREEK TRIBUTARY A

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



FLOOD PROFILES

BROKEN ARROW CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TULSA COUNTY, OK  
AND INCORPORATED AREAS



