



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Boulder Boulder County Colorado	NO PROJECT	FLOODWAY HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 080024		
IDENTIFIER	Skunk Creek, Bluebell Canyon Creek, And King's Gulch Floodplain Mapping Update	APPROXIMATE LATITUDE AND LONGITUDE: 40.007, -105.246 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM*	NO.: 08013C0557J DATE: December 18, 2012	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: December 7, 2017	
TYPE: FIRM*	NO.: 08013C0560J DATE: December 18, 2012	PROFILES: 12P, 343P-348P, 452P-475P	
TYPE: FIRM*	NO.: 08013C0576J DATE: December 18, 2012	FLOODWAY DATA TABLE: 6	
TYPE: FIRM*	NO.: 08013C0394K DATE: December 7, 2017	SUMMARY OF DISCHARGES TABLE: 4	
TYPE: FIRM*	NO.: 08013C0413K DATE: December 7, 2017		

Enclosures reflect changes to flooding sources affected by this revision.

* FIRM - Flood Insurance Rate Map

FLOODING SOURCES AND REVISED REACHES

See Page 2 for Additional Flooding Sources

Skunk Creek - From the confluence with Bear Canyon Creek to approximately 250 feet upstream of Cemetery Road.

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Skunk Creek	Floodway	Floodway	YES	YES
	No Floodway	Floodway	YES	NONE
	BFEs*	BFEs	YES	YES
	No BFEs	BFEs	YES	NONE

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

Patrick "Rick" F. Sacbbit, P.E., Branch Chief
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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

OTHER FLOODING SOURCES AFFECTED BY THIS REVISION

FLOODING SOURCES AND REVISED REACHES

Bluebell Canyon Creek - From the confluence with Skunk Creek to the upstream side of Enchanted Mesa Trail.
 King's Gulch - From the confluence with Skunk Creek to approximately 290 feet upstream of Bellevue Drive.
 Skunk Creek - 29th Street Split - From the confluence with Skunk Creek – Euclid Avenue Split to the divergence from Skunk Creek.
 Skunk Creek - 30th Street Split - From the confluence with Skunk Creek to the divergence from Skunk Creek.
 Skunk Creek - 35th Street Split - From the upstream side of Colorado Avenue to the divergence from Skunk Creek.
 Skunk Creek - Apartment Split - From the confluence with Skunk Creek to the divergence from Skunk Creek – 35th Street Split.
 Skunk Creek - Bear Canyon Creek Split - From the confluence with Bear Canyon Creek to the divergence from Skunk Creek.
 Skunk Creek - Baseline Road Split - From the confluence with Skunk Creek – Bear Canyon Creek Split to the divergence from Skunk Creek – Bear Canyon Creek Split.
 Bluebell Canyon Creek - Bluebell Spur - From the upstream side of 16th Street to the divergence from Bluebell Canyon Creek.
 Skunk Creek - Bluebell Avenue Split - From the confluence with Skunk Creek to the divergence from Skunk Creek.
 Skunk Creek - Denton Avenue Split - From the confluence with Skunk Creek – Quinn Street Split to the divergence from Skunk Creek – Euclid Avenue Split.
 Skunk Creek - Echo Place Split - From the confluence with King's Gulch to approximately 430 feet upstream.
 Skunk Creek - Euclid Avenue Split - From the confluence with Skunk Creek to the confluence of Skunk Creek – 29th Street Split.
 Skunk Creek - Madison Avenue Split - From the upstream side of Colorado Avenue to the divergence from Skunk Creek.
 King's Gulch Split Flow - From the confluence with King's Gulch to the divergence from King's Gulch.
 Skunk Creek - Quinn Street Split - From the confluence with Skunk Creek – Euclid Avenue Split to the divergence from Skunk Creek – 30th Street Split.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Skunk Creek	Zone AE	Zone AE	YES	YES
	Zone AO	Zone AE	YES	YES
	Zone A	Zone AE	YES	YES
	Zone AE	Zone AO	YES	YES
	Zone AO	Zone AO	YES	YES
	Zone X (shaded)	Zone AO	YES	YES
	Zone X (unshaded)	Zone AO	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	Bluebell Canyon Creek	No Floodway	Floodway	YES
No BFEs		BFEs	YES	NONE
Zone A		Zone AE	YES	YES
Zone X (unshaded)		Zone AE	YES	NONE
Zone X (unshaded)		Zone X (shaded)	YES	NONE
King's Gulch		No Floodway	Floodway	YES
	No BFEs	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	Skunk Creek - 29th Street Split	No Floodway	Floodway	YES
Depths		BFEs	YES	NONE
No BFEs		BFEs	YES	NONE
Zone AO		Zone AE	YES	YES
Zone AO		Zone X (shaded)	YES	NONE
Zone X (shaded)		Zone AE	YES	NONE
Zone X (unshaded)		Zone AE	YES	NONE
Zone X (shaded)		Zone X (shaded)	YES	NONE
Zone X (unshaded)		Zone X (shaded)	YES	NONE
Skunk Creek - 30th Street Split		No Floodway	Floodway	YES
	Depths	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone AO	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	NONE
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Skunk Creek - 35th Street Split	No Floodway	Floodway	YES	NONE
	BFEs	BFEs	NONE	YES
	Zone AE	Zone AE	NONE	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	Skunk Creek - Apartment Split	No Floodway	Floodway	YES
BFEs		BFEs	YES	YES
Zone AE		Zone AE	NONE	YES
Zone X (unshaded)		Zone X (shaded)	YES	NONE
Skunk Creek - Bear Canyon Creek Split	No Floodway	Floodway	YES	NONE
	BFEs	BFEs	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone AH	Zone AE	YES	YES
	Zone X (shaded)	Zone AE	YES	YES

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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Skunk Creek - Bear Canyon Creek Split	Zone X (unshaded)	Zone AE	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Skunk Creek - Baseline Road Split	No Floodway	Floodway	YES	NONE
	Depths	BFEs	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone AO	Zone AE	YES	NONE
	Zone X (unshaded)	Zone AE	YES	NONE
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Bluebell Canyon Creek - Bluebell Spur	No Floodway	Floodway	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Skunk Creek - Bluebell Avenue Split	No Floodway	Floodway	YES	NONE
	BFEs	BFEs	YES	YES
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Skunk Creek - Denton Avenue Split	No Floodway	Floodway	YES	NONE
	BFEs	BFEs	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone AE	YES	YES
	Zone X (unshaded)	Zone AE	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	NONE
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	No Floodway	Floodway	YES	NONE
	No BFEs	BFEs	YES	NONE
Skunk Creek - Echo Place Split	Zone A	Zone AE	YES	YES
	Zone A	Zone AO	YES	YES
	Zone X (unshaded)	Zone AO	YES	NONE
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	No Floodway	Floodway	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone AE	NONE	YES
Skunk Creek - Euclid Avenue Split	Zone X (unshaded)	Zone AE	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	NONE
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
	No Floodway	Floodway	YES	NONE
	BFEs	BFEs	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
Skunk Creek - Madison Avenue Split	Zone X (shaded)	Zone AE	NONE	YES
	Zone X (shaded)	Zone AO	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	YES
King's Gulch Split Flow	No Floodway	Floodway	YES	NONE
	No BFEs	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Skunk Creek - Quinn Street Split	No Floodway	Floodway	YES	NONE

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

Skunk Creek - Quinn Street Split

BFEs

BFEs

YES

YES

Zone AE

Zone AE

NONE

YES

Zone X (shaded)

Zone X (shaded)

YES

NONE

* BFEs - Base Flood Elevations

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COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

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LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Jeanine D. Petterson
Director, Mitigation Division
Federal Emergency Management Agency, Region VIII
Denver Federal Center, Building 710
P.O. Box 25267
Denver, CO 80225-0267
(303) 235-4830

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Although a portion of the area of revision is shown on the effective FIRM as located within the Unincorporated Areas of Boulder County, this area has been annexed by the City of Boulder.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp

LOCAL NEWSPAPER

Name: *The Daily Camera*

Dates: January 24, 2018 and January 31, 2018

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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Table 4 - Summary of Discharges (Continued)

Peak Discharges (Cubic Feet Per Second)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual Chance</u>
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REVISED DATA

Skunk Creek					
Confluence with Bear Canyon Creek	2.91	438	1,076	1,430	2,211
Just upstream of Discovery Drive	2.38	383	794	1,000	1,600
Just downstream of Colorado Avenue	-- ¹	365	673	824	1,207
Confluence of Skunk Creek – Apartment Split	-- ¹	318	562	693	1,007
Downstream of Divergence of Skunk Creek – 35 th Street Split	-- ¹	377	748	957	1,508
Upstream of Divergence of Skunk Creek – 35 th Street Split	2.22	381	891	1,185	1,956
Confluence of Skunk Creek – Euclid Avenue Split	-- ¹	261	325	364	478
Downstream of Divergence of Skunk Creek – 30 th Street Split	-- ¹	274	706	898	1,431
Upstream of US Highway 36	2.06	169	705	1,003	1,510
Confluence of Bluebell Canyon Creek	1.85	68	201	242	324
Downstream of Divergence of Skunk Creek – Bluebell Avenue Split	-- ¹	49	222	327	556
Downstream of Confluence of King's Gulch	-- ¹	39	104	138	202
Upstream Limit of Study	0.75	14	79	113	177

¹ Data Not Available

REVISED TO
REFLECT LOMR
EFFECTIVE: May 31, 2018

Table 4 - Summary of Discharges (Continued)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>Peak Discharges (Cubic Feet Per Second)</u>			
		<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual- Chance</u>
South Boulder Creek					
Near Eldorado Springs	-- ¹	1,310	2,640	4,340	7,400
At State Highway 93	-- ¹	1,450	3,270	6,200	9,950
At US Highway 36	-- ¹	1,300	3,530	7,240	11,640
At Baseline Road	-- ¹	1,390	3,050	5,610	9,210
At Confluence with Boulder Creek	-- ¹	1,570	3,180	4,980	7,750
Spring Gulch					
At Confluence with St. Vrain Creek	-- ¹	1,950	3,150	3,650	4,200
Steele Lakes Tributary					
At 75th Street	-- ¹	494	1,165	1,512	2,428
Twomile Canyon Creek					
At Confluence with Goose Creek	1.95	136	235	275	355
At Confluence with Twomile Canyon Creek – Split Flow 1	-- ¹	23	41	49	71
Upstream of Grape Avenue/19 th Street	-- ¹	95	219	274	378
At Broadway	1.59	128	253	323	434
Upstream of Juniper Avenue	-- ¹	64	105	136	182
At Confluence with Twomile Canyon Creek – Split Flow 2	-- ¹	74	234	314	462
At Confluence with Twomile Canyon Creek	-- ¹	43	150	208	318

¹ Data Not Available

**REVISED TO
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EFFECTIVE: May 31, 2018**

Table 4 - Summary of Discharges (Continued)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>Peak Discharges (Cubic Feet Per Second)</u>			
		<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual- Chance</u>
- 4 th Split East At Upstream Limit of Detailed Study	1.38	186	533	699	997
Twomile Canyon Creek – 13 th Split At Confluence with Twomile Canyon Creek	-- ¹	50	130	164	228
Bluebell Canyon Creek Confluence with Skunk Creek	0.42	16	100	151	254
Upstream of 22 nd Street	-- ¹	25	144	220	401
Upstream of 20 th Street	-- ¹	20	111	159	250
Approximately 180 feet upstream of 18 th Street	0.41	18	121	177	313
Downstream of Divergence of Bluebell Canyon Creek – Bluebell Spur	0.40	23	151	226	404
Upstream Limit of Detailed Study	0.38	20	145	215	375
Bluebell Canyon Creek – Bluebell Spur At 16 th Street	-- ¹	7	38	54	94
King's Gulch Confluence with Skunk Creek	0.38	7	85	134	243
Upstream of 20 th Street	-- ¹	7	79	113	168
Upstream of 19 th Street	0.33	9	92	133	208

REVISED DATA



¹ Data Not Available

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Table 4 - Summary of Discharges (Continued)

Peak Discharges (Cubic Feet Per Second)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual Chance</u>
Upstream of 18 th Street	-- ¹	9	102	145	245
Confluence of King's Gulch Split Flow	0.30	6	74	119	224
Upstream Limit of Detailed Study	0.25	3	106	170	315
King's Gulch Split Flow					
Confluence with King's Gulch	-- ¹	3	49	79	152
Skunk Creek – 29 th Street Split					
Confluence with Skunk Creek – Euclid Avenue Split	-- ¹	4	60	97	210
Skunk Creek – 30 th Street Split					
Confluence with Skunk Creek	-- ¹	7	245	355	633
At Aurora Avenue	-- ¹	7	362	545	1,032
Skunk Creek – 35 th Street Split					
At Colorado Avenue	-- ¹	16	86	134	305
Divergence of Skunk Creek – Apartment Split	-- ¹	59	186	264	501
Skunk Creek – Apartment Split					
Confluence with Skunk Creek	-- ¹	43	147	204	342

REVISED DATA →

¹ Data Not Available

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Table 4 - Summary of Discharges (Continued)

Peak Discharges (Cubic Feet Per Second)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual Chance</u>
Skunk Creek – Baseline Road Split Confluence with Skunk Creek – Bear Canyon Creek Split	-- ¹	-- ¹	32	99	230
Skunk Creek – Bear Canyon Creek Split Confluence with Bear Canyon Creek At Baseline Road	-- ¹	7	97	235	412
At U.S. Highway 36	-- ¹	-- ¹	60	180	374
Skunk Creek – Bluebell Avenue Split Confluence with Skunk Creek	-- ¹	-- ¹	98	284	608
Skunk Creek – Denton Avenue Split Confluence with Skunk Creek – Quinn Street Split	-- ¹	1	160	303	610
Skunk Creek – Denton Avenue Split Confluence with Skunk Creek – Quinn Street Split	-- ¹	2	98	151	315
Skunk Creek – Echo Place Split Confluence with King's Gulch	-- ¹	10	75	115	205
Skunk Creek – Euclid Avenue Split Confluence with Skunk Creek	-- ¹	65	450	500	500
Confluence of Skunk Creek – Quinn Street Split	-- ¹	10	69	109	209

REVISED DATA

¹ Data Not Available

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Table 4 - Summary of Discharges (Continued)

Peak Discharges (Cubic Feet Per Second)

<u>Flooding Source and Location</u>	<u>Drainage Area (Square Miles)</u>	<u>10-Percent- Annual- Chance</u>	<u>2-Percent- Annual- Chance</u>	<u>1-Percent- Annual- Chance</u>	<u>0.2-Percent- Annual Chance</u>
Upstream of Denton Avenue	-- ¹	4	161	256	536
Skunk Creek – Madison Avenue Split					
At Colorado Avenue	-- ¹	4	96	154	302
Divergence from Skunk Creek	-- ¹	4	143	228	448
Skunk Creek – Quinn Street Split					
Confluence with Skunk Creek – Euclid Avenue Split	-- ¹	39	404	600	700
Confluence of Skunk Creek – Denton Avenue Split	-- ¹	37	306	449	385

REVISED DATA

**REVISED TO
REFLECT LOMR
EFFECTIVE: May 31, 2018**

¹ Data Not Available

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKUNK CREEK								
A	595	110	710	2.0	5248.7	5248.7	5249.2	0.5
B	1,586	80	349	4.1	5252.9	5252.9	5253.3	0.4
C	1,996	70	292	4.9	5255.1	5255.1	5255.5	0.4
D	2,402	75	350	4.1	5257.6	5257.6	5258.1	0.5
E	2,702	70	411	2.4	5259.7	5259.7	5260.2	0.5
F	3,350	50	204	4.9	5262.1	5262.1	5262.5	0.4
G	3,954	70	153	5.4	5276.8	5276.8	5277.1	0.3
H	4,676	161	431	4.4	5287.5	5287.5	5287.6	0.1
I	5,483	31	113	3.2	5293.5	5293.5	5293.9	0.4
J	5,950	27	84	4.3	5300.4	5300.4	5300.4	0.0
K	6,437	29	95	3.8	5308.4	5308.4	5308.4	0.0
L	6,903	50	212	4.2	5317.5	5317.5	5317.7	0.2
M	7,333	50	180	5.0	5327.6	5327.6	5328.0	0.4
N	8,668	70	354	2.8	5361.5	5361.5	5361.7	0.2
O	9,055	54	257	4.2	5367.9	5367.9	5367.9	0.0
P	9,459	74	222	4.5	5375.9	5375.9	5376.0	0.1
Q	9,724	76	154	6.5	5380.4	5380.4	5380.4	0.0
R	10,011	30	165	1.5	5390.6	5390.6	5390.8	0.2
S	10,503	24	67	3.6	5403.0	5403.0	5403.0	0.0
T	10,630	25	78	3.1	5407.2	5407.2	5407.2	0.0
U	11,287	12	42	3.3	5428.0	5428.0	5428.4	0.4
V	11,471	21	45	3.1	5434.4	5434.4	5434.5	0.1
W	11,896	16	18	6.1	5447.7	5447.7	5447.7	0.0

¹ Feet above confluence with Bear Canyon Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
BOULDER COUNTY, CO
AND INCORPORATED AREAS

FLOODWAY DATA

REVISED TO
REFLECT LOMR
EFFECTIVE: May 31, 2018

SKUNK CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BLUEBELL CANYON CREEK								
A	251	28	27	5.6	5393.0	5393.0	5393.1	0.1
B	764	28	27	5.6	5411.7	5411.7	5411.9	0.2
C	1,226	28	35	6.4	5426.1	5426.1	5426.4	0.3
D	1,568	29	26	5.4	5442.3	5442.3	5442.6	0.3
E	2,071	28	31	6.1	5466.5	5466.5	5466.8	0.3
F	2,447	28	31	6.1	5487.6	5487.6	5488.0	0.4
G	2,796	27	29	6.0	5508.7	5508.7	5509.0	0.3
H	3,247	30	31	5.8	5540.6	5540.6	5540.8	0.2
I	3,631	15	27	7.5	5566.0	5566.0	5566.3	0.3
J	4,086	10	31	6.6	5594.0	5594.0	5594.1	0.1
K	4,310	10	24	8.4	5609.0	5609.0	5609.2	0.2
L	4,703	29	50	4.1	5645.3	5645.3	5645.6	0.3
M	4,943	18	48	4.4	5666.3	5666.3	5666.6	0.3
N	5,189	38	59	3.7	5683.3	5683.3	5683.5	0.2
O	5,559	67	52	4.1	5712.0	5712.0	5712.0	0.0
P	5,898	43	59	3.6	5737.0	5737.0	5737.0	0.0
Q	6,280	16	44	4.9	5765.2	5765.2	5765.2	0.0

¹ Feet above confluence with Skunk Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
BOULDER COUNTY, CO
 AND INCORPORATED AREAS

FLOODWAY DATA

**REVISED TO
 REFLECT LOMR
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BLUEBELL CANYON CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BLUEBELL CANYON CREEK - BLUEBELL SPUR								
A	40 ¹	20	16	3.3	5521.0	5521.0	5521.0	0.0
B	314 ¹	13	14	3.9	5541.7	5541.7	5541.8	0.1
KING'S GULCH								
A	245 ²	20	22	6.0	5426.6	5426.6	5426.9	0.3
B	934 ²	30	23	5.0	5451.6	5451.6	5451.7	0.1
C	1,145 ²	31	23	4.9	5462.1	5462.1	5462.3	0.2
D	1,483 ²	32	26	5.1	5477.8	5477.8	5478.0	0.2
E	1,896 ²	14	18	6.5	5496.6	5496.6	5496.6	0.0
F	2,338 ²	12	17	6.9	5527.0	5527.0	5527.0	0.0
G	2,702 ²	6	18	9.7	5545.3	5545.3	5545.5	0.2
H	3,281 ²	14	34	5.0	5579.6	5579.6	5580.0	0.4
I	3,774 ²	20	80	2.1	5614.1	5614.1	5614.6	0.5
J	3,873 ²	8	19	8.9	5616.5	5616.5	5616.8	0.3
KING'S GULCH SPLIT FLOW								
A	189 ³	50	20	4.0	5497.6	5497.6	5498.1	0.5
B	455 ³	28	43	2.0	5512.6	5512.6	5512.8	0.2
C	815 ³	10	15	5.4	5533.4	5533.4	5533.7	0.3

¹ Feet above 16th Street

² Feet above confluence with Skunk Creek

³ Feet above confluence with King's Gulch

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FEDERAL EMERGENCY MANAGEMENT AGENCY
BOULDER COUNTY, CO
AND INCORPORATED AREAS

FLOODWAY DATA

**REVISED TO
REFLECT LOMR
EFFECTIVE: May 31, 2018**

**BLUEBELL CANYON CREEK - BLUEBELL SPUR, KING'S
GULCH, KING'S GULCH SPLIT FLOW**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKUNK CREEK - 29TH STREET SPLIT								
A	94 ¹	38	22	4.4	5305.0	5305.0	5305.1	0.1
B	585 ¹	25	33	3.0	5314.6	5314.6	5315.0	0.4
C	964 ¹	15	16	5.9	5324.0	5324.0	5324.3	0.3
D	1,456 ¹	20	18	5.5	5332.3	5332.3	5332.3	0.0
SKUNK CREEK - 30TH STREET SPLIT								
A	163 ²	37	52	6.8	5300.4	5300.4	5300.8	0.4
B	567 ²	37	52	6.8	5304.1	5304.1	5304.4	0.3
C	970 ²	47	75	7.2	5311.4	5311.4	5311.8	0.4
SKUNK CREEK - 35TH STREET SPLIT								
A	65 ³	38	27	4.9	5280.6	5280.6	5280.8	0.2
B	262 ³	38	43	6.1	5282.1	5282.1	5282.3	0.2
SKUNK CREEK - APARTMENT SPLIT								
A	179 ²	18	32	6.4	5279.5	5279.5	5279.8	0.3
B	396 ²	27	33	6.3	5280.3	5280.3	5280.6	0.3

¹ Feet above confluence with Skunk Creek - Euclid Avenue Split

³ Feet above Colorado Avenue

² Feet above confluence with Skunk Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
BOULDER COUNTY, CO
 AND INCORPORATED AREAS

FLOODWAY DATA

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SKUNK CREEK - 29TH STREET SPLIT, SKUNK CREEK - 30TH STREET SPLIT, SKUNK CREEK - 35TH STREET SPLIT, SKUNK CREEK - APARTMENT SPLIT

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKUNK CREEK - BASELINE ROAD SPLIT								
A	124 ¹	15	17	5.9	5336.6	5336.6	5337.0	0.4
B	452 ¹	40	48	2.0	5341.6	5341.6	5342.0	0.4
C	729 ¹	37	61	1.6	5343.8	5343.8	5344.3	0.5
SKUNK CREEK - BEAR CANYON CREEK SPLIT								
A	556 ²	30	37	6.4	5324.5	5324.5	5324.7	0.2
B	1,170 ²	65	72	3.2	5329.5	5329.5	5329.5	0.0
C	1,862 ²	40	41	5.7	5334.8	5334.8	5335.3	0.5
D	2,603 ²	35	68	2.6	5342.9	5342.9	5343.4	0.5
E	2,869 ²	105	138	2.1	5345.7	5345.7	5346.2	0.5
F	2,990 ²	110	65	4.4	5356.2	5356.2	5356.4	0.2
G	3,640 ²	50	140	2.0	5357.7	5357.7	5358.0	0.3
H	3,830 ²	37	91	3.1	5357.9	5357.9	5358.3	0.4

¹ Feet above confluence with Skunk Creek - Bear Canyon Creek Split

² Feet above confluence with Bear Canyon Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
BOULDER COUNTY, CO
 AND INCORPORATED AREAS

FLOODWAY DATA

REVISED TO
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**SKUNK CREEK - BASELINE ROAD SPLIT, SKUNK
 CREEK - BEAR CANYON CREEK SPLIT**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKUNK CREEK - BLUEBELL AVENUE SPLIT								
A	119 ¹	50	142	2.1	5392.4	5392.4	5392.8	0.4
B	506 ¹	30	44	6.9	5397.6	5397.6	5397.9	0.3
C	849 ¹	28	43	7.1	5407.7	5407.7	5408.1	0.4
SKUNK CREEK - DENTON AVENUE SPLIT								
A	74 ²	30	28	5.5	5295.7	5295.4 ³	5295.6	0.2
B	316 ²	32	28	5.5	5297.6	5297.6	5297.8	0.2
C	567 ²	30	27	5.5	5301.6	5301.6	5301.7	0.1
SKUNK CREEK - ECHO PLACE SPLIT								
A	117 ⁴	25	22	5.3	5435.1	5435.1	5435.3	0.2
B	330 ⁴	37	67	1.7	5441.6	5441.6	5441.9	0.3

¹ Feet above confluence with Skunk Creek

⁴ Feet above confluence with King's Gulch

² Feet above confluence with Skunk Creek - Quinn Street Split

³ Elevation computed without consideration of backwater effects from Skunk Creek - Quinn Street Split

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY
**BOULDER COUNTY, CO
AND INCORPORATED AREAS**

FLOODWAY DATA

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**SKUNK CREEK - BLUEBELL AVENUE SPLIT, SKUNK CREEK -
DENTON AVENUE SPLIT, SKUNK CREEK - ECHO PLACE SPLIT**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SKUNK CREEK - EUCLID AVENUE SPLIT								
A	456 ¹	40	80	1.4	5292.2	5292.2	5292.6	0.4
B	732 ¹	30	22	4.9	5293.9	5293.9	5294.1	0.2
C	1,158 ¹	78	30	3.6	5299.7	5299.7	5299.7	0.0
D	1,596 ¹	56	48	5.3	5304.2	5304.2	5304.3	0.1
SKUNK CREEK - MADISON AVENUE SPLIT								
A	65 ²	23	26	6.0	5282.5	5282.5	5282.9	0.4
B	366 ²	25	34	6.7	5284.2	5284.2	5284.5	0.3
SKUNK CREEK - QUINN STREET SPLIT								
A	74 ³	40	77	7.8	5292.4	5292.4	5292.8	0.4
B	311 ³	40	76	7.9	5294.2	5294.2	5294.5	0.3
C	521 ³	33	60	7.5	5298.6	5298.6	5299.1	0.5

¹ Feet above confluence with Skunk Creek

² Feet above Colorado Avenue

³ Feet above confluence with Skunk Creek - Euclid Avenue Split

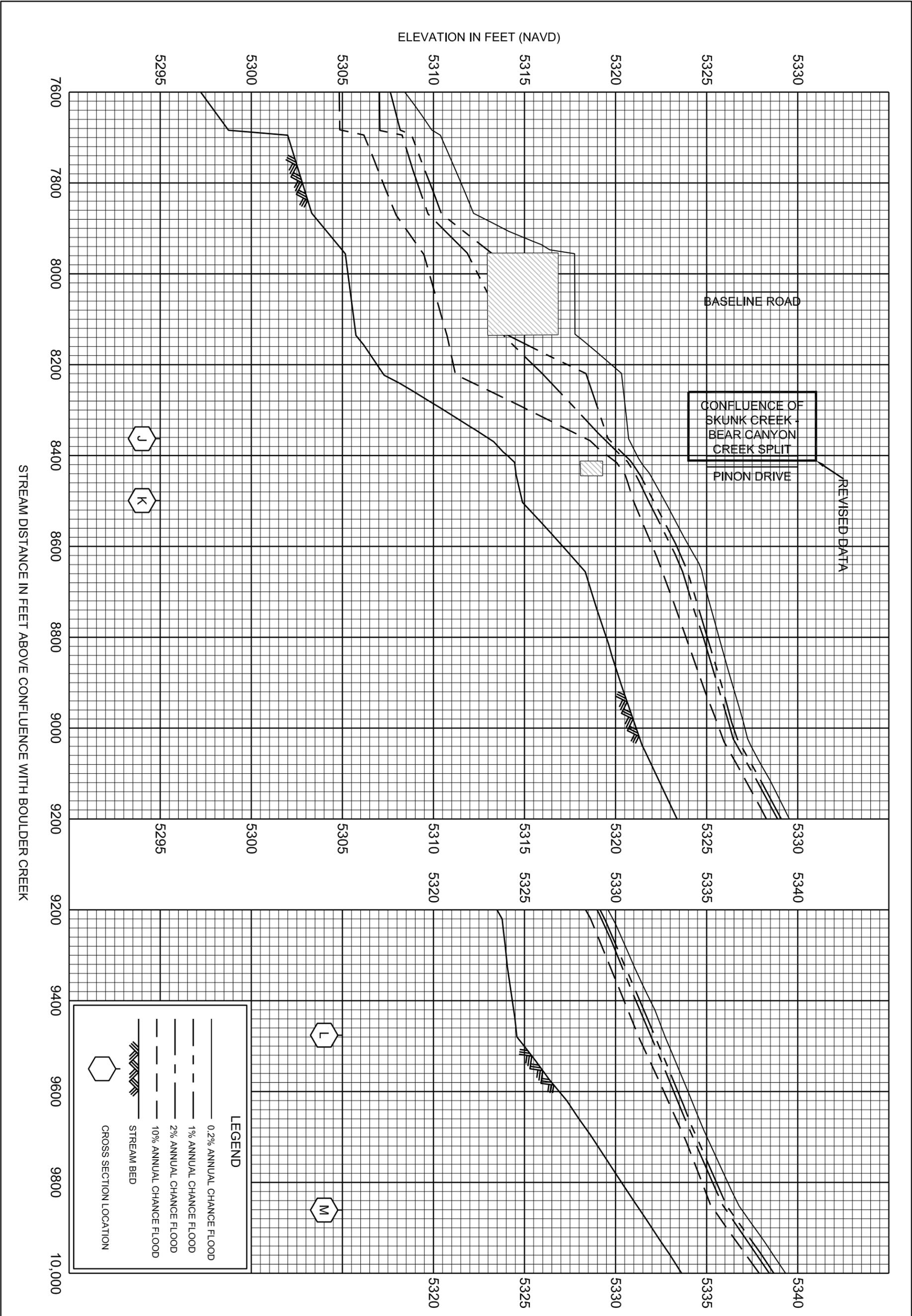
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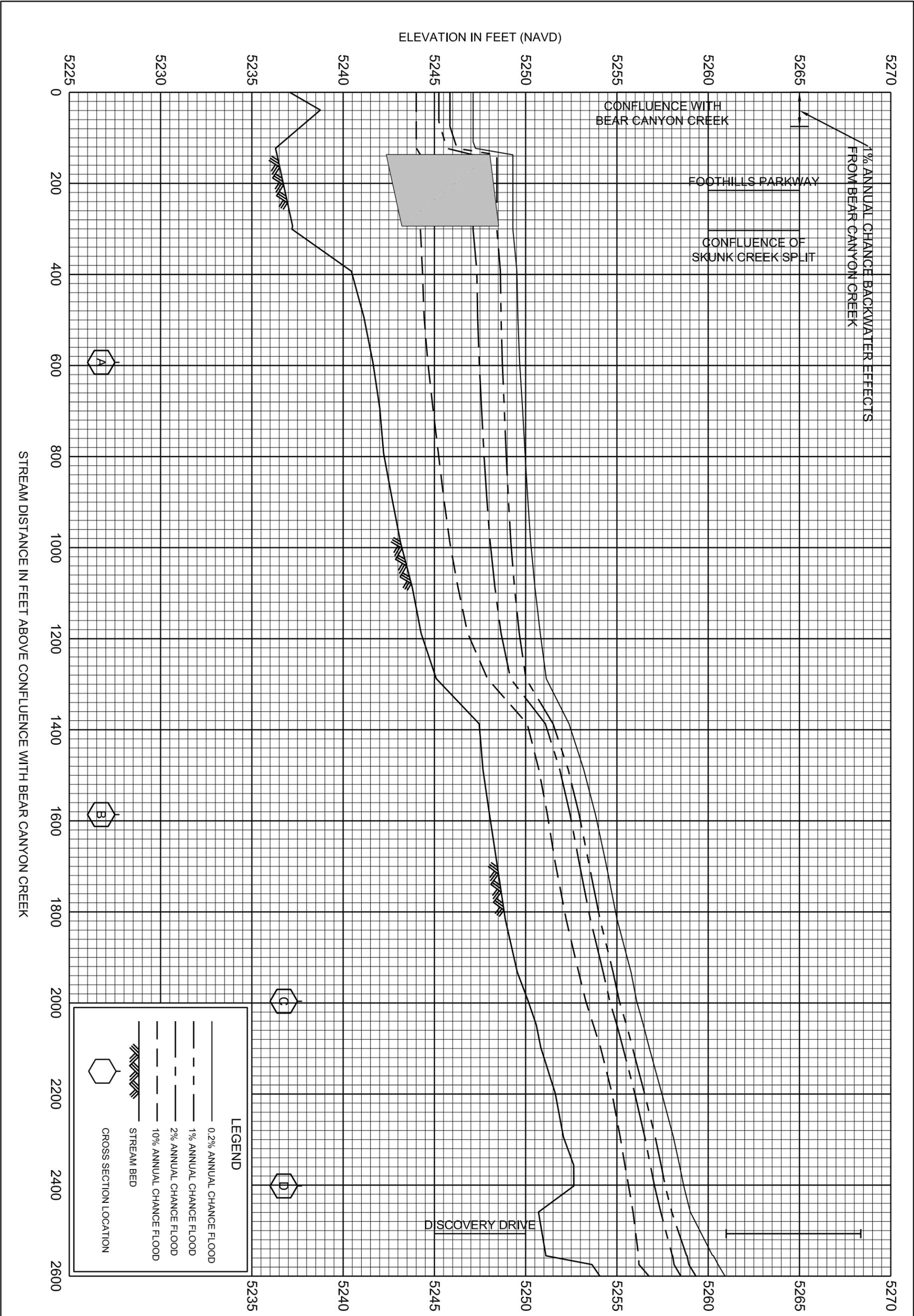
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BOULDER COUNTY, CO
 AND INCORPORATED AREAS

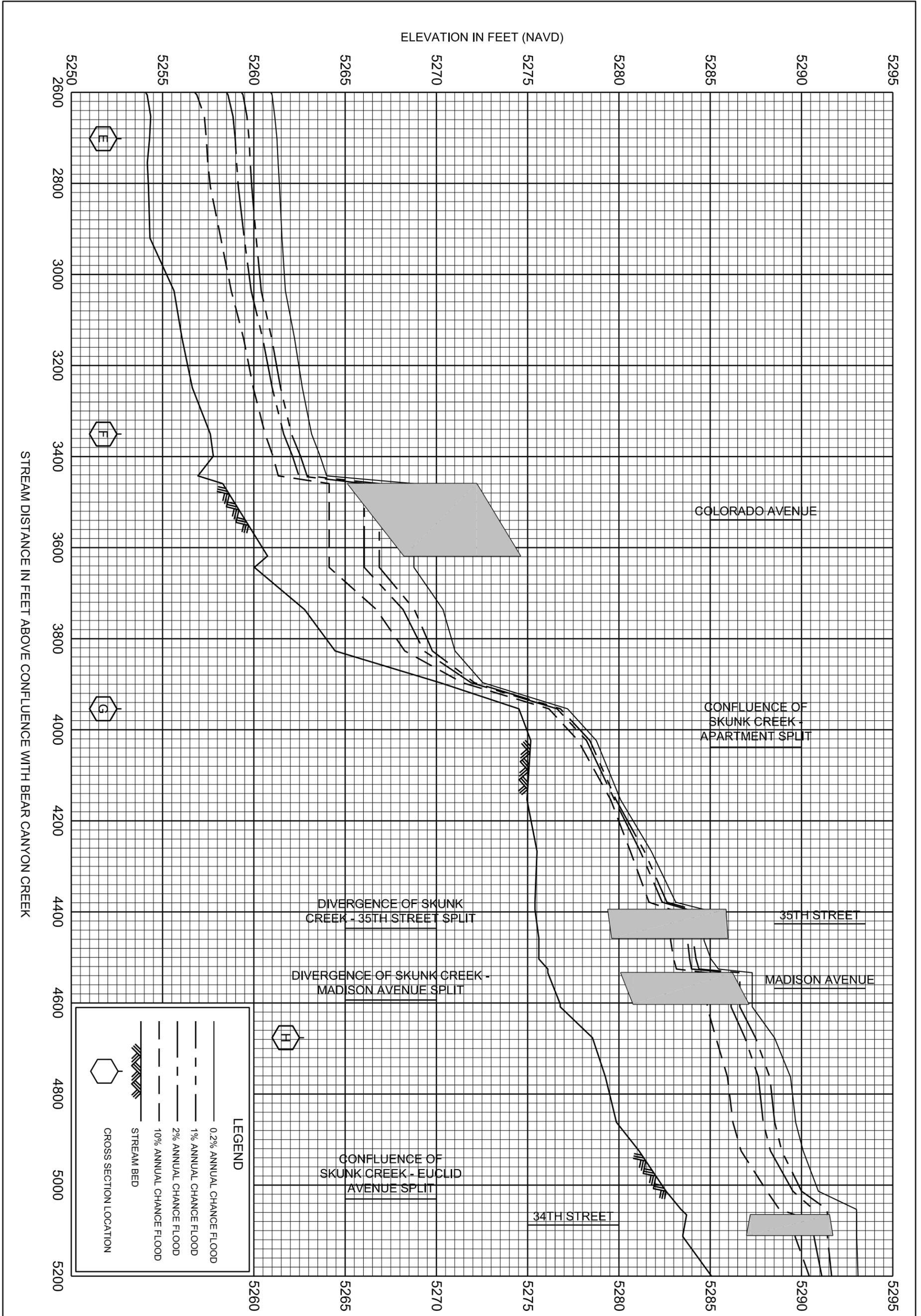
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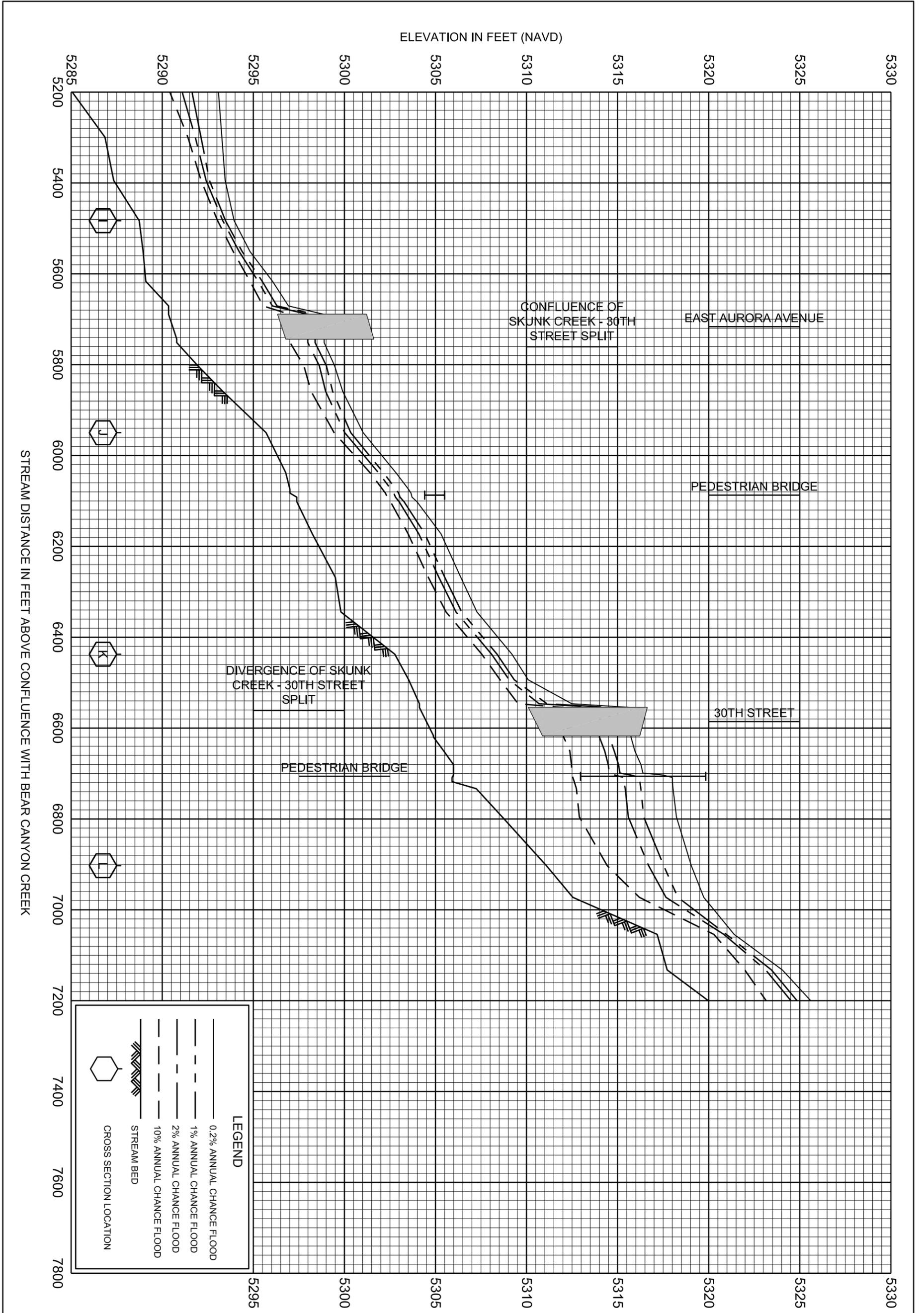
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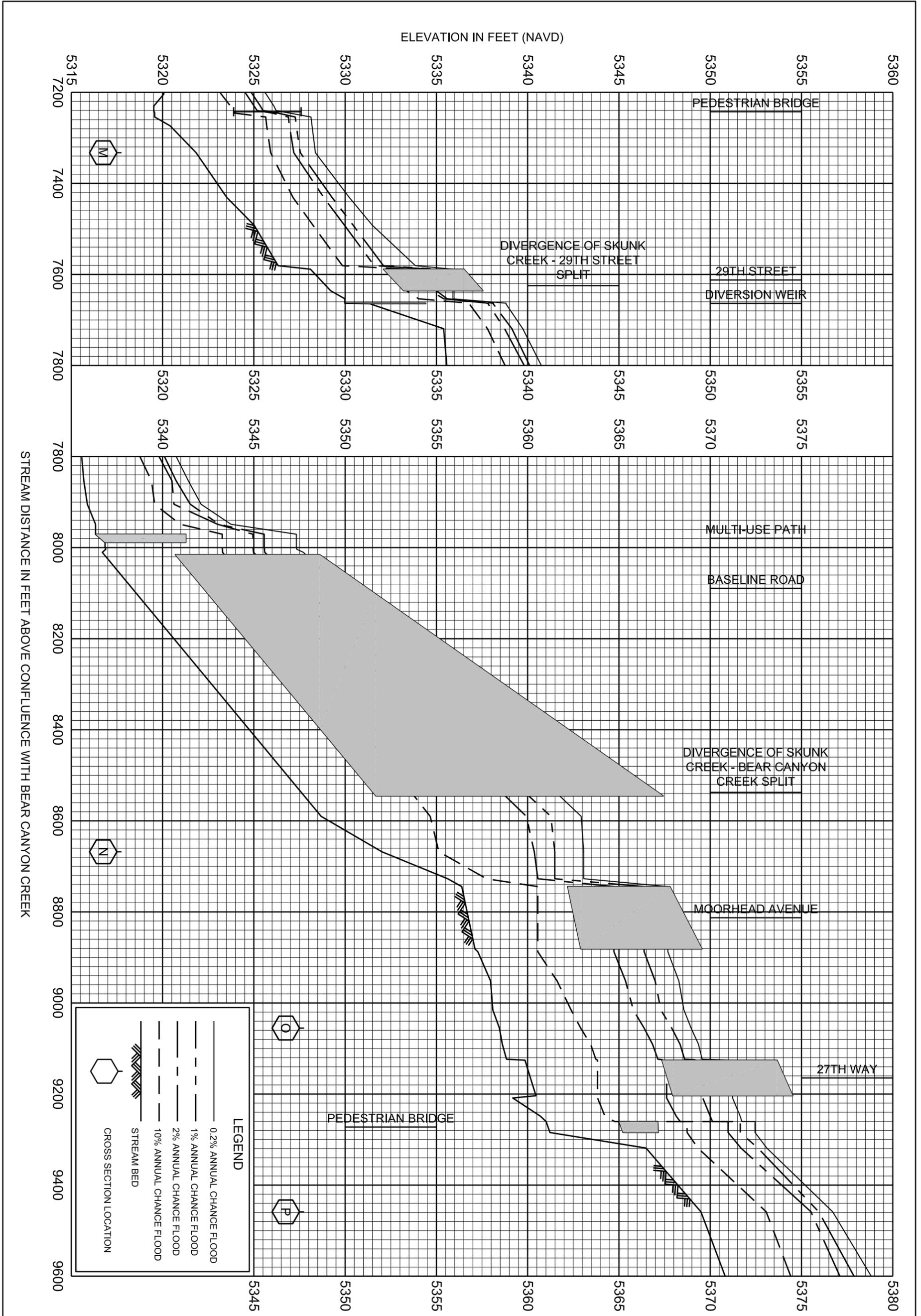
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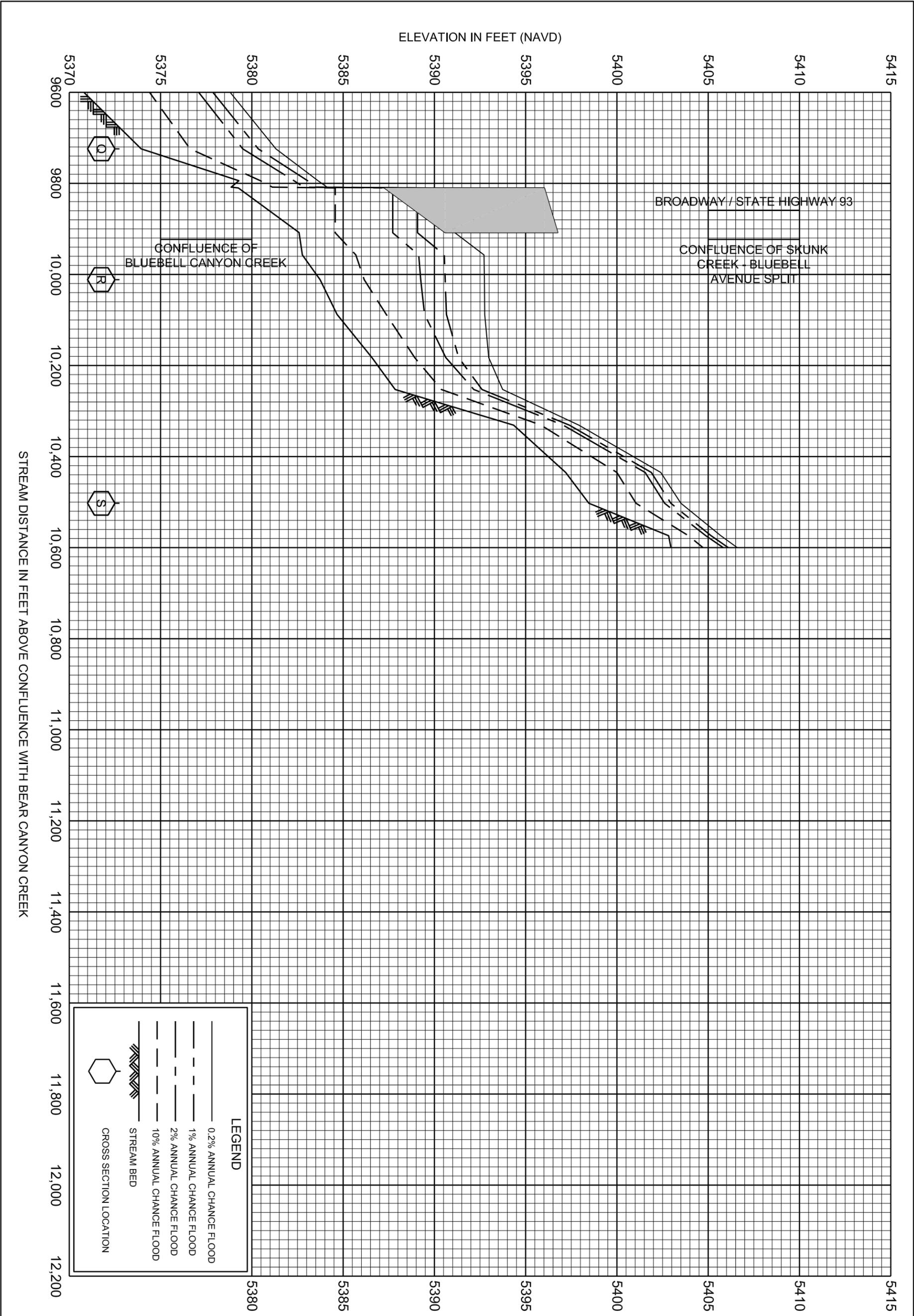


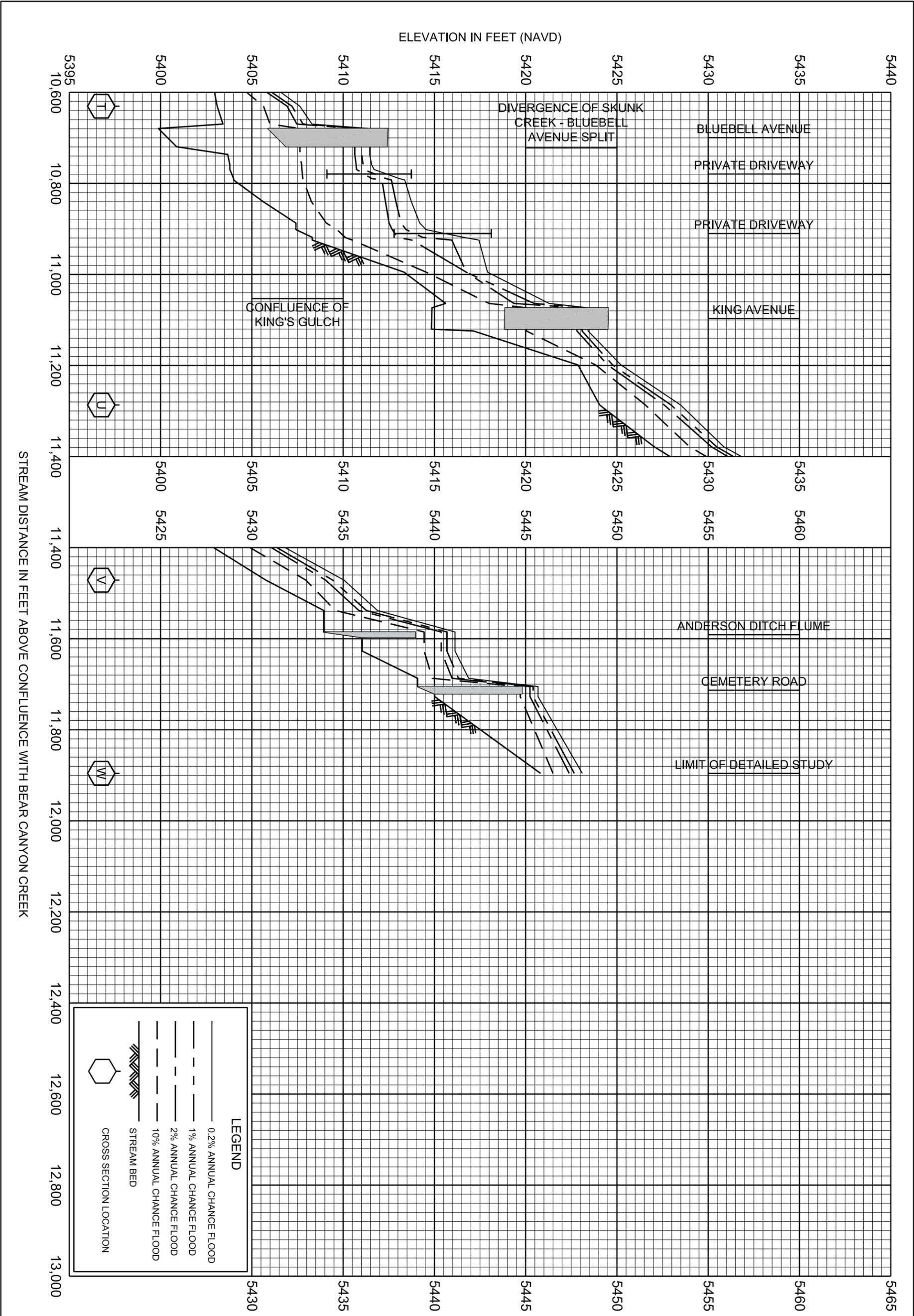


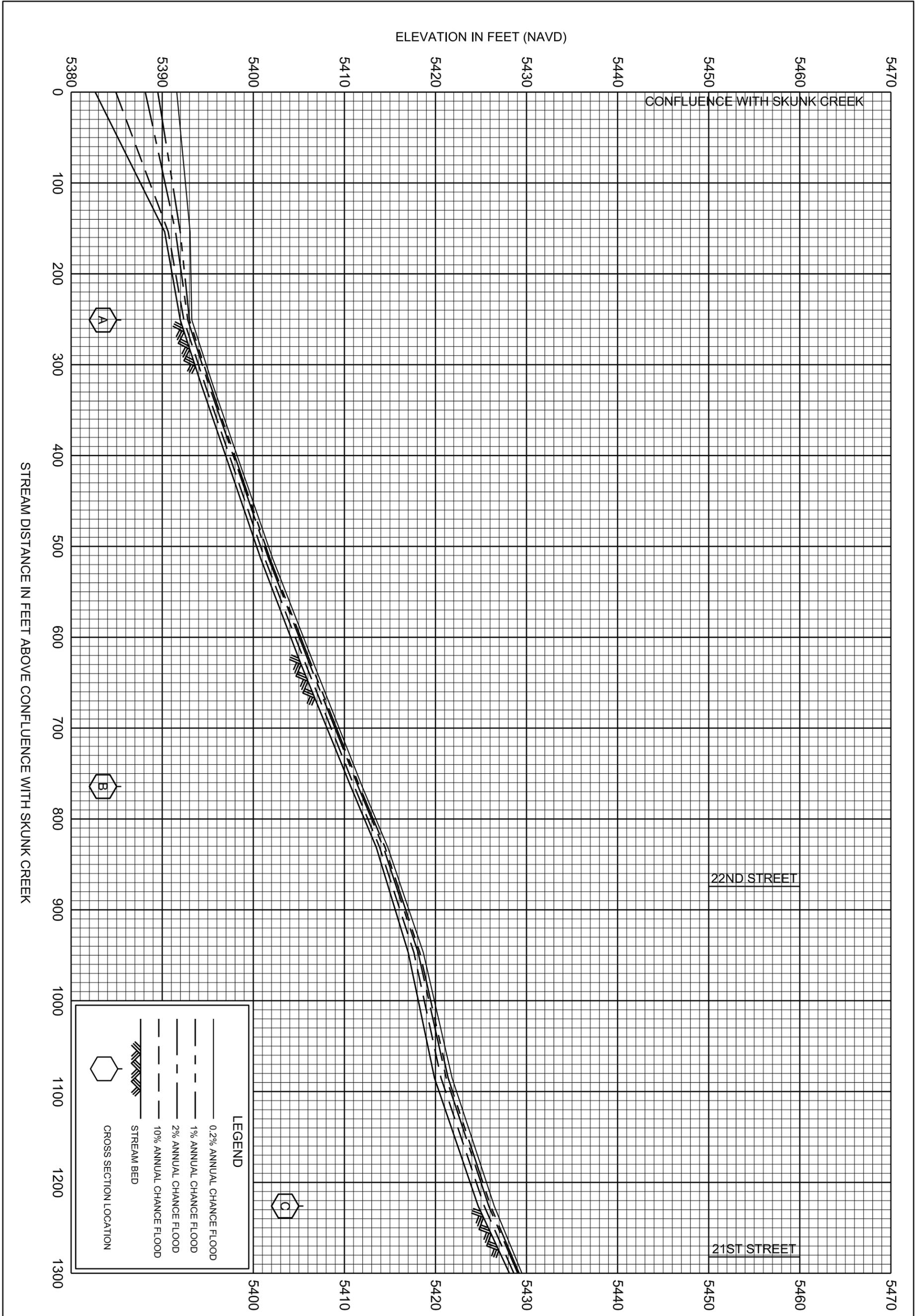


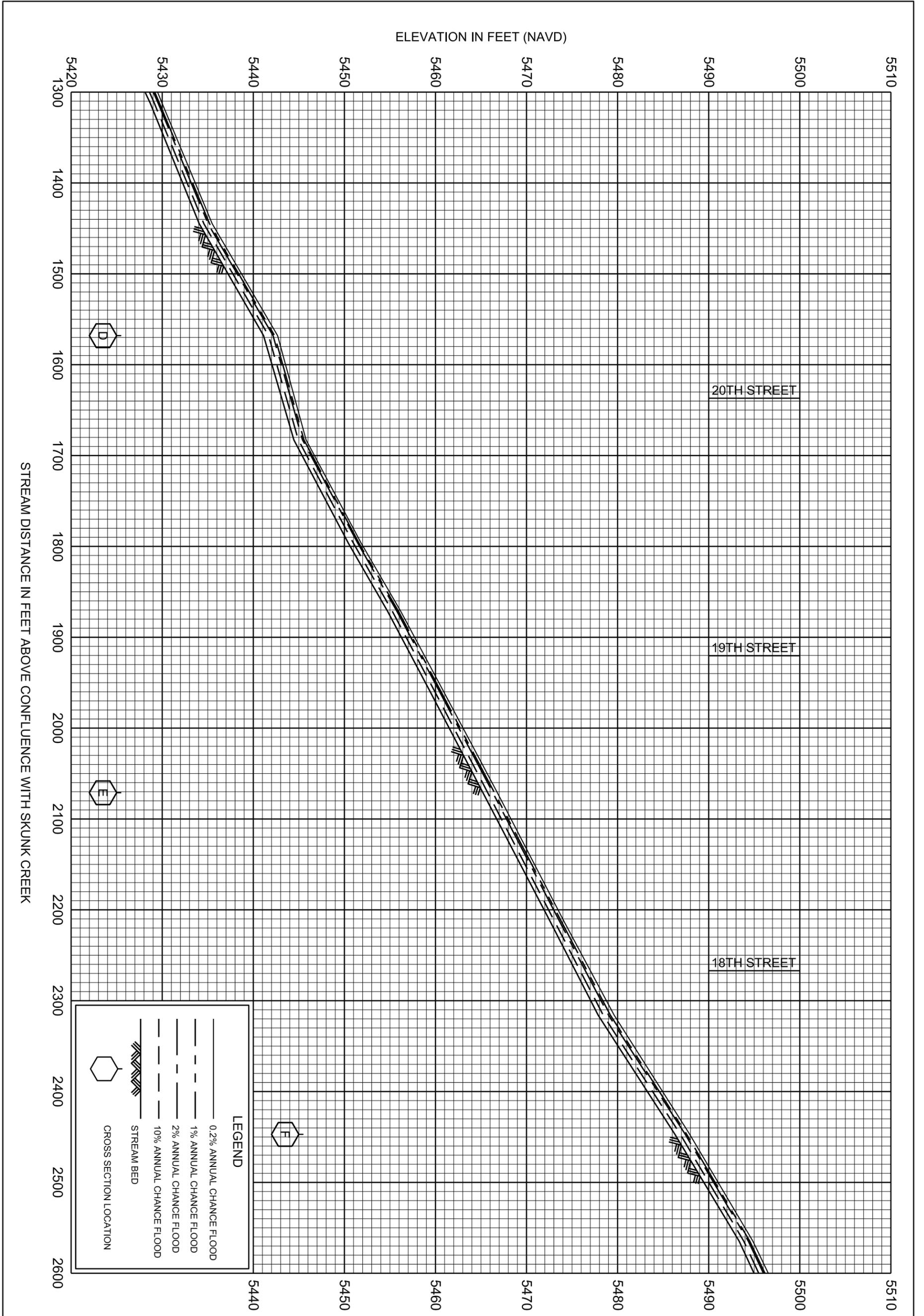


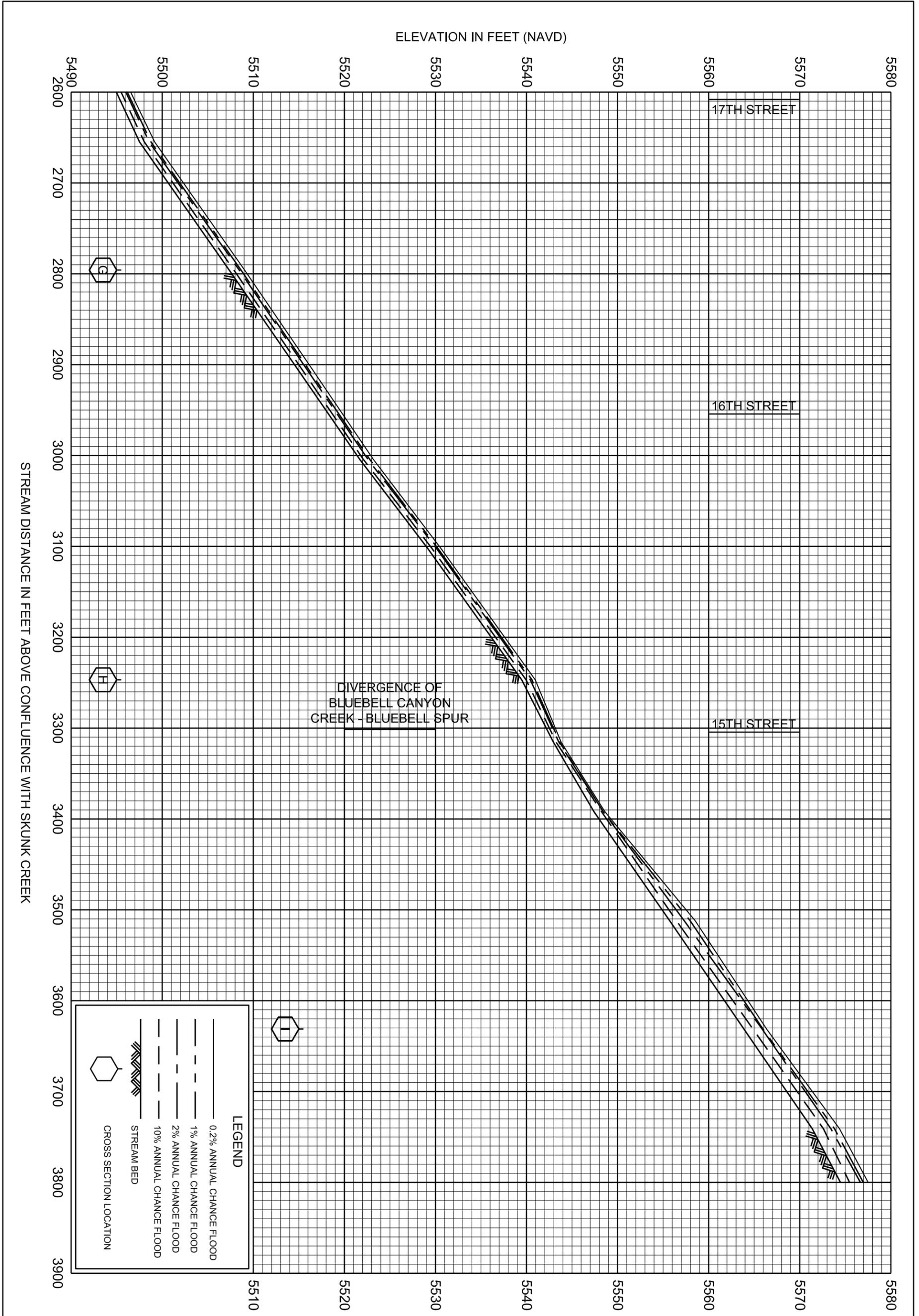






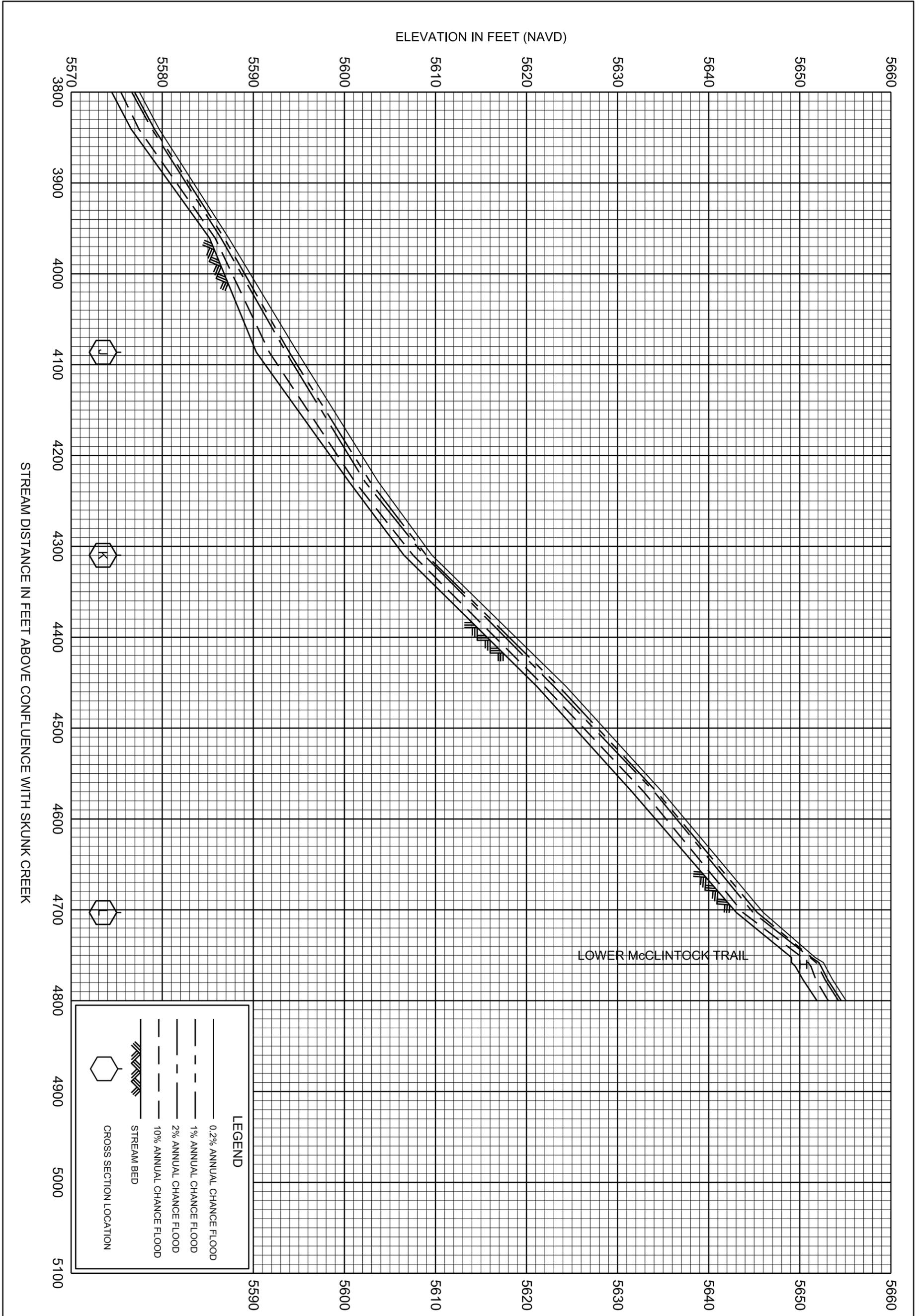


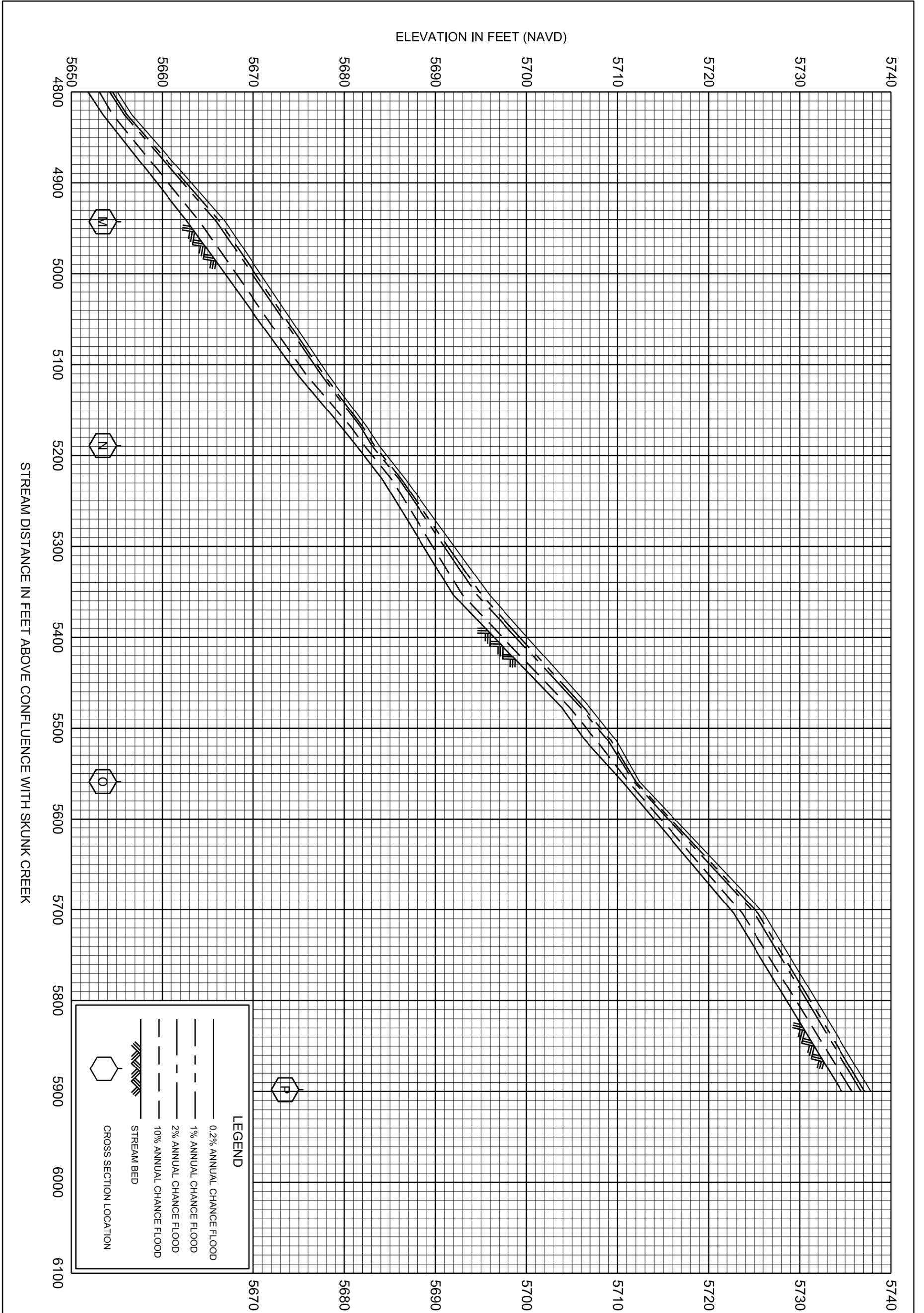


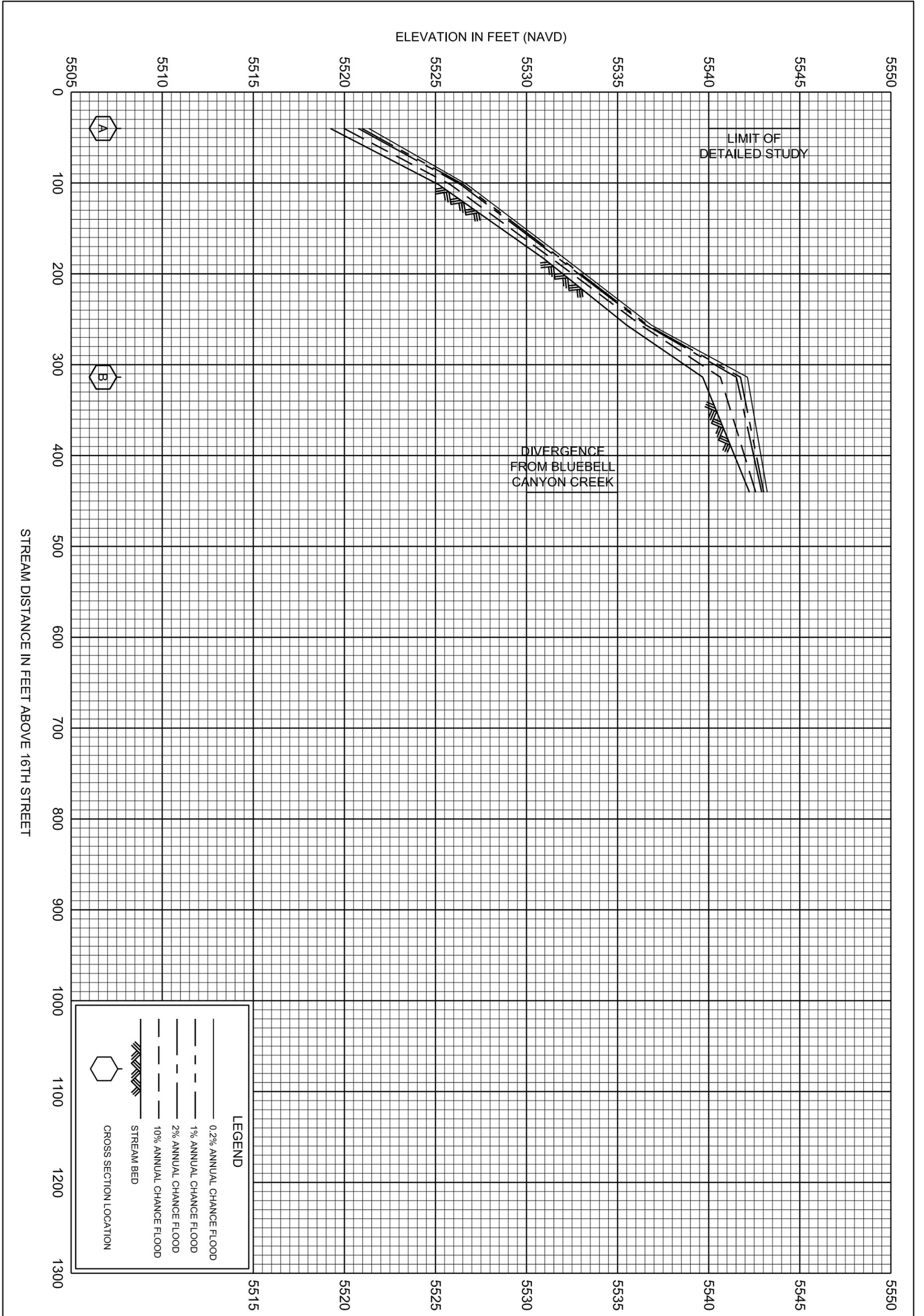


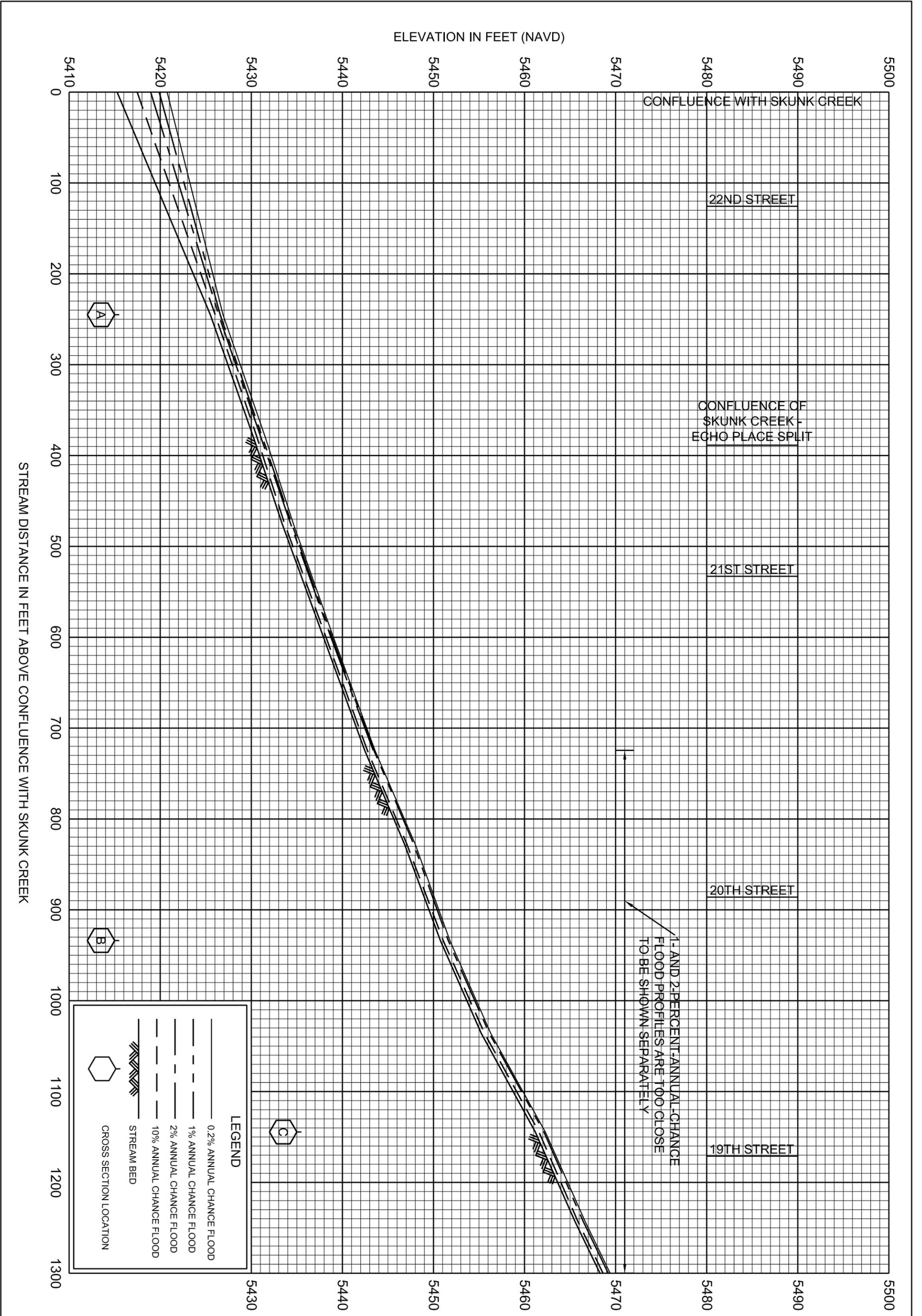
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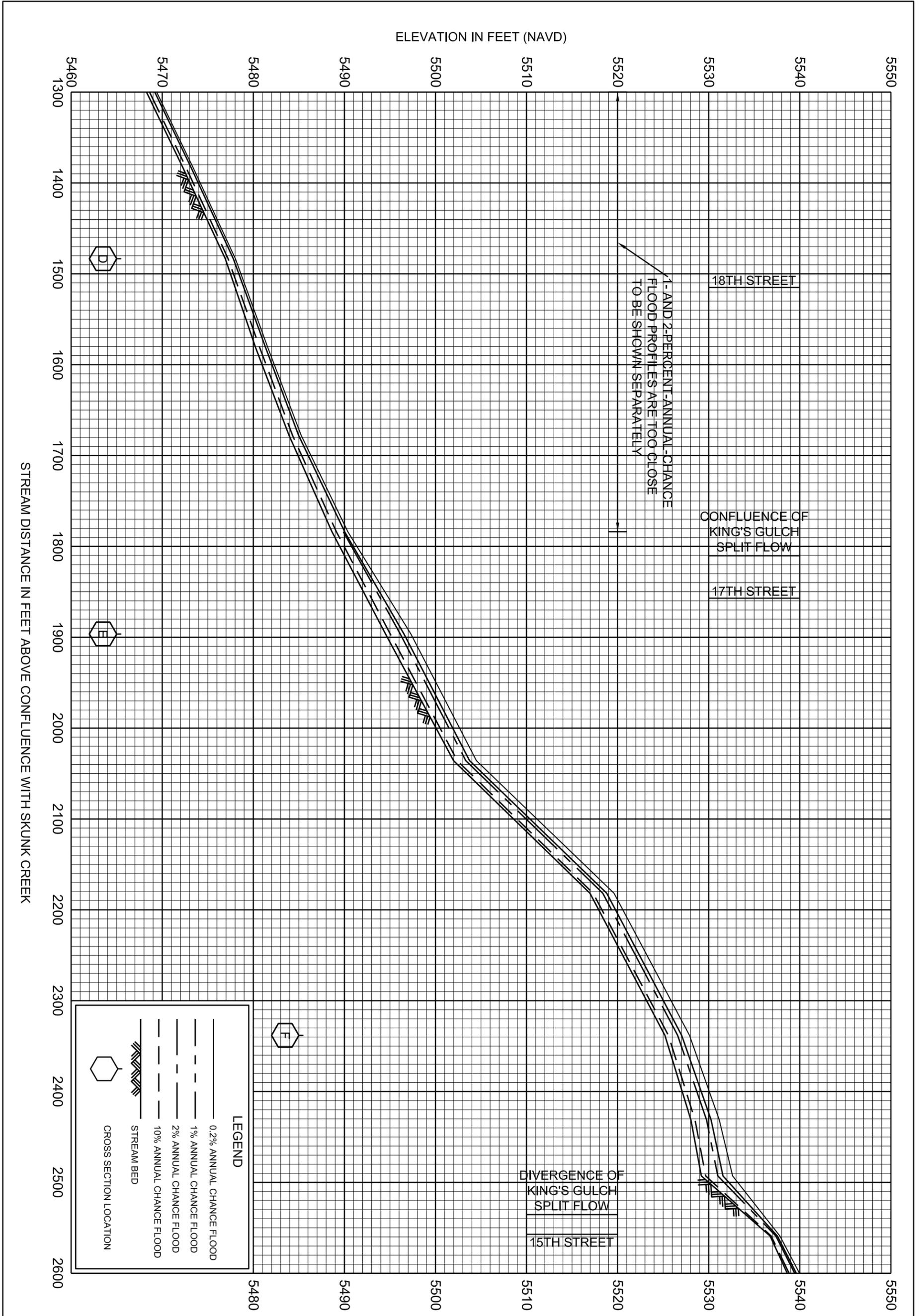
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- - - 1% ANNUAL CHANCE FLOOD
- · · 2% ANNUAL CHANCE FLOOD
- - - 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION



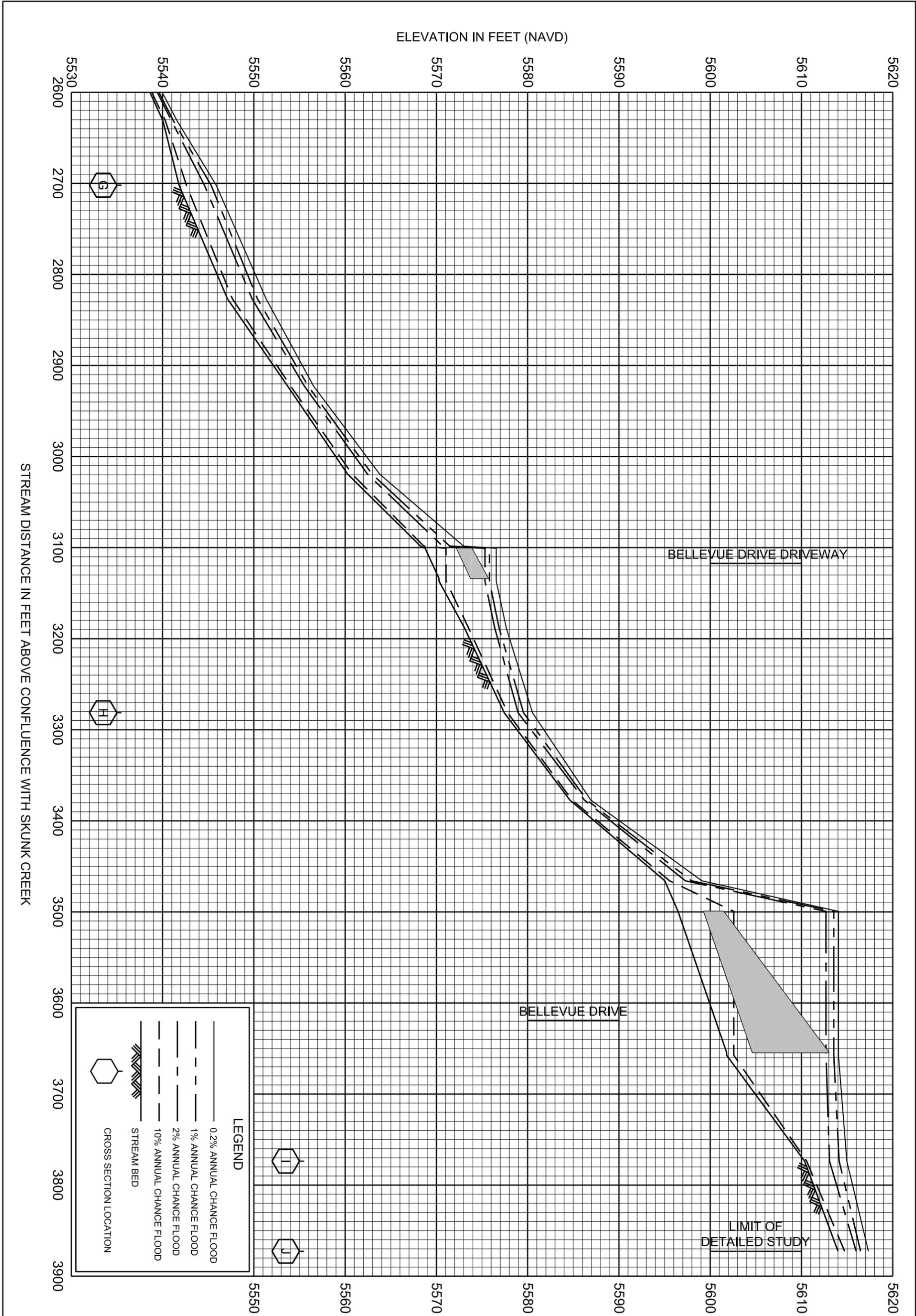


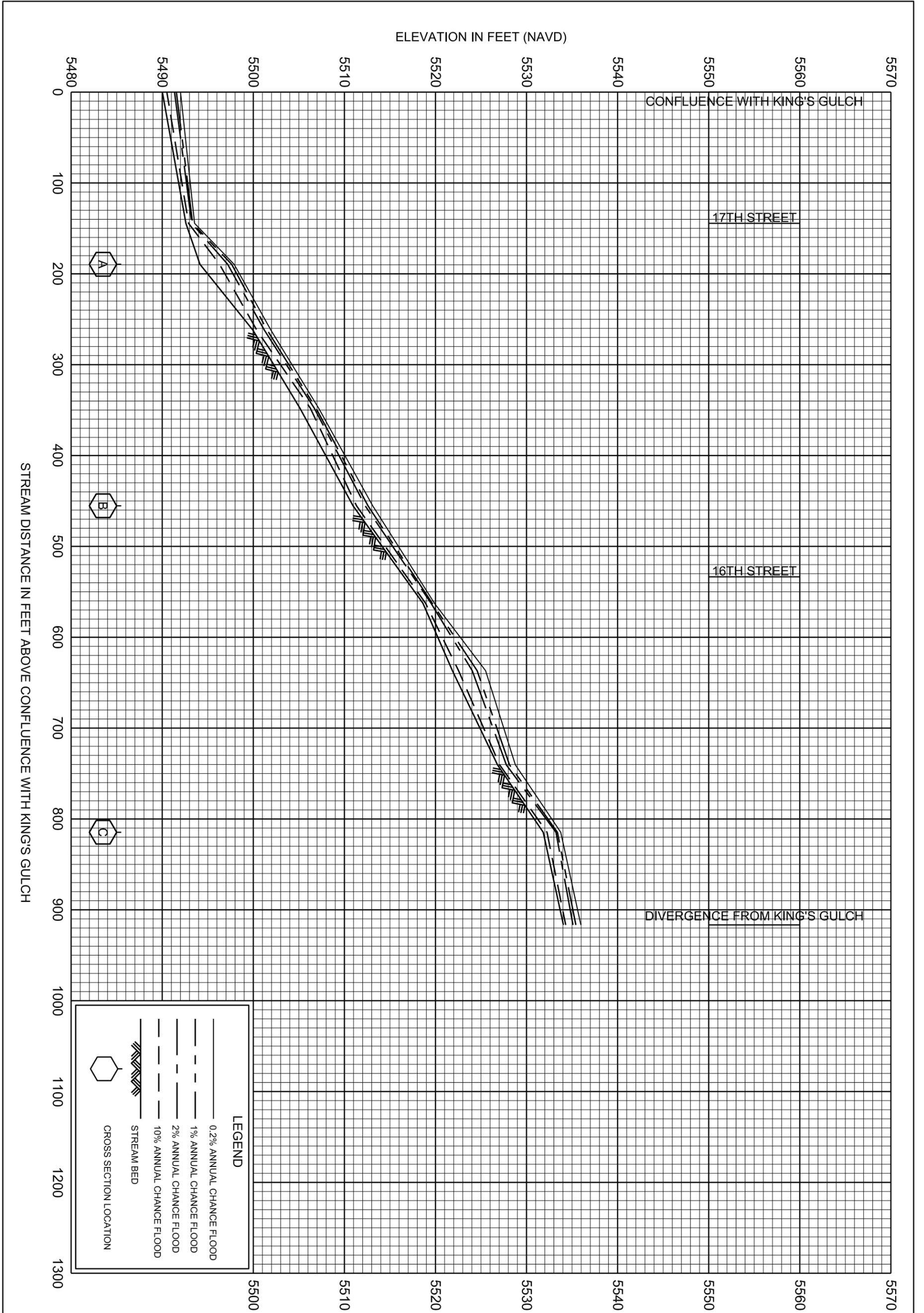






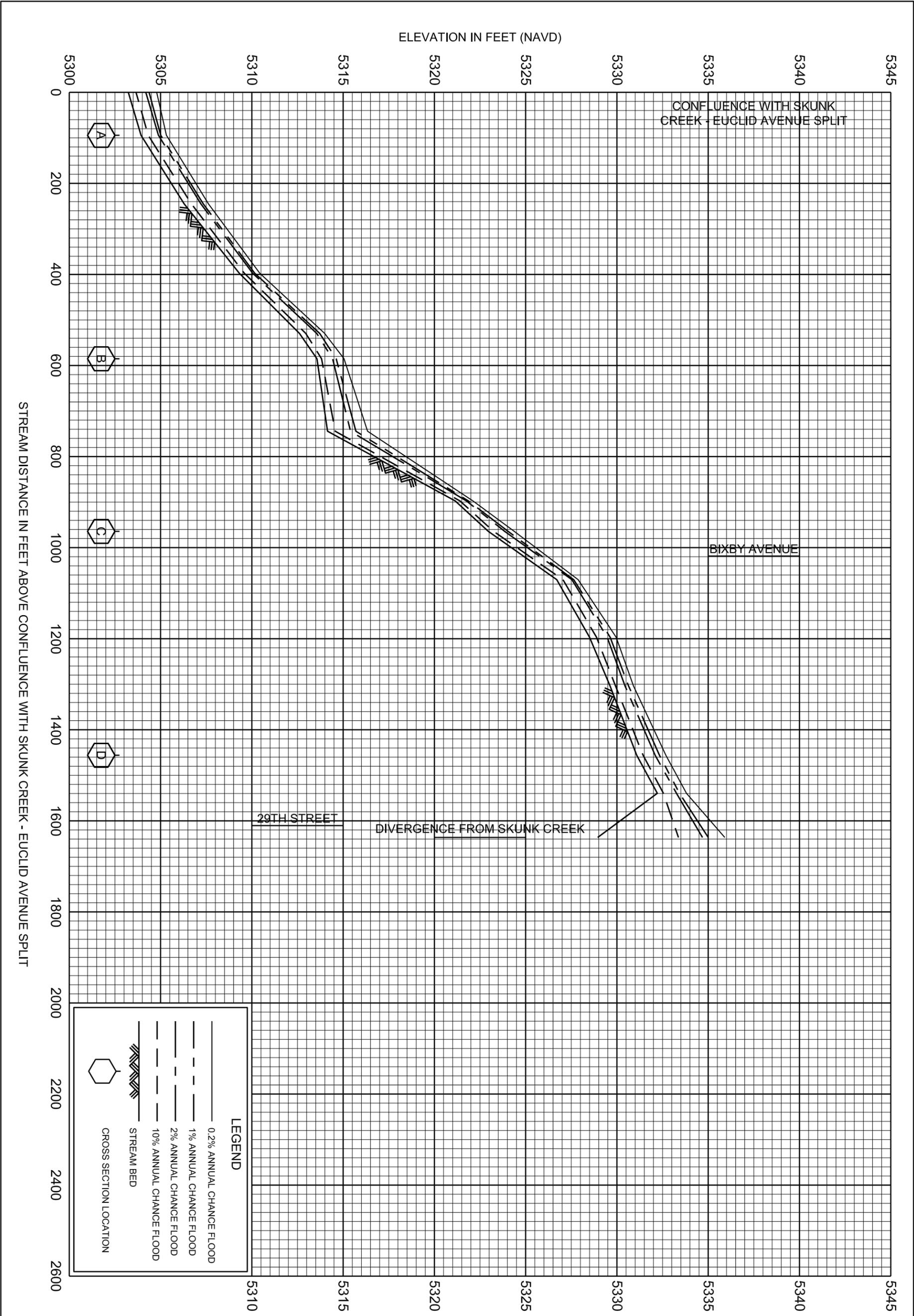
LEGEND	
	0.2% ANNUAL CHANCE FLOOD
	1% ANNUAL CHANCE FLOOD
	2% ANNUAL CHANCE FLOOD
	10% ANNUAL CHANCE FLOOD
	STREAM BED
	CROSS SECTION LOCATION

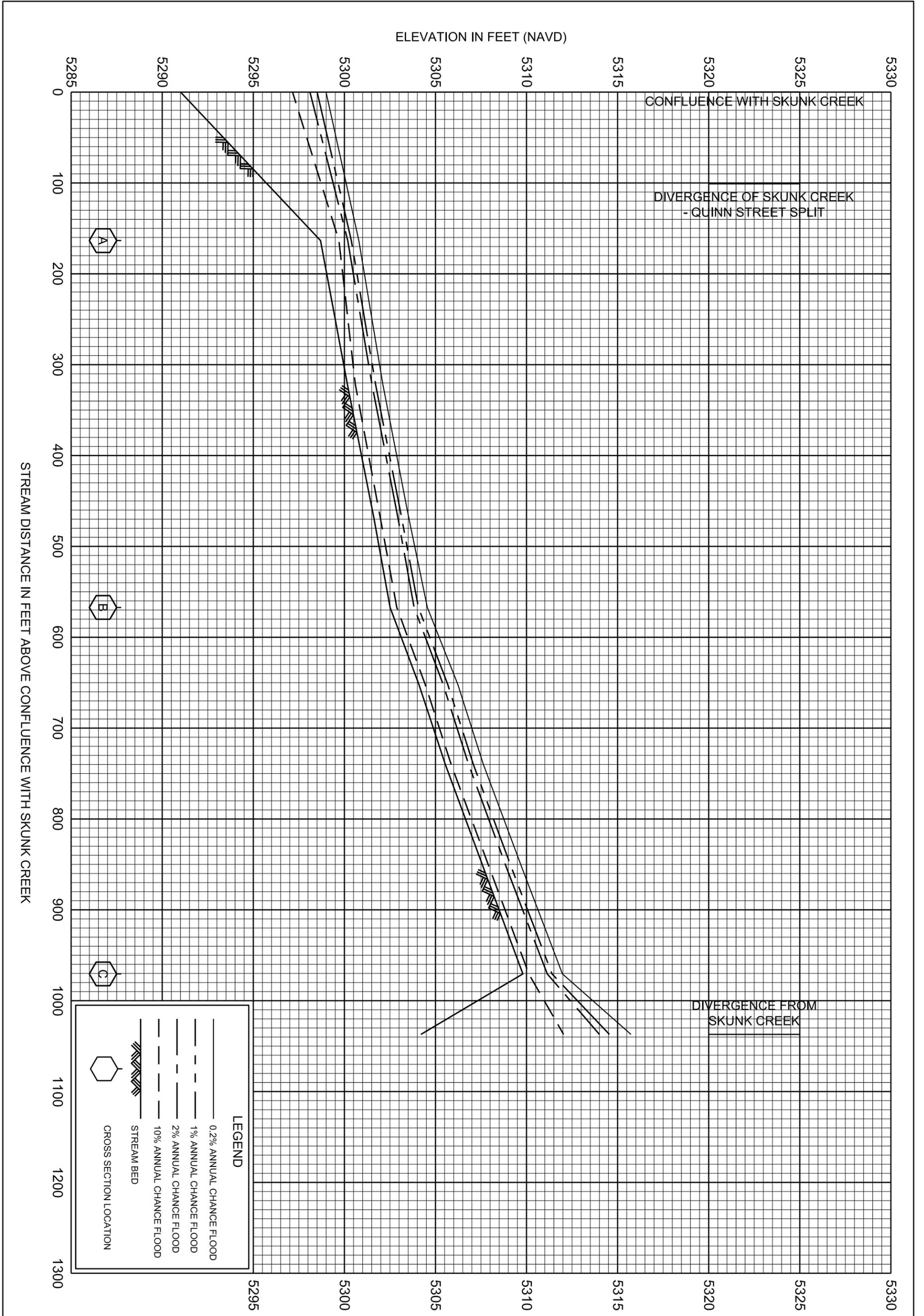


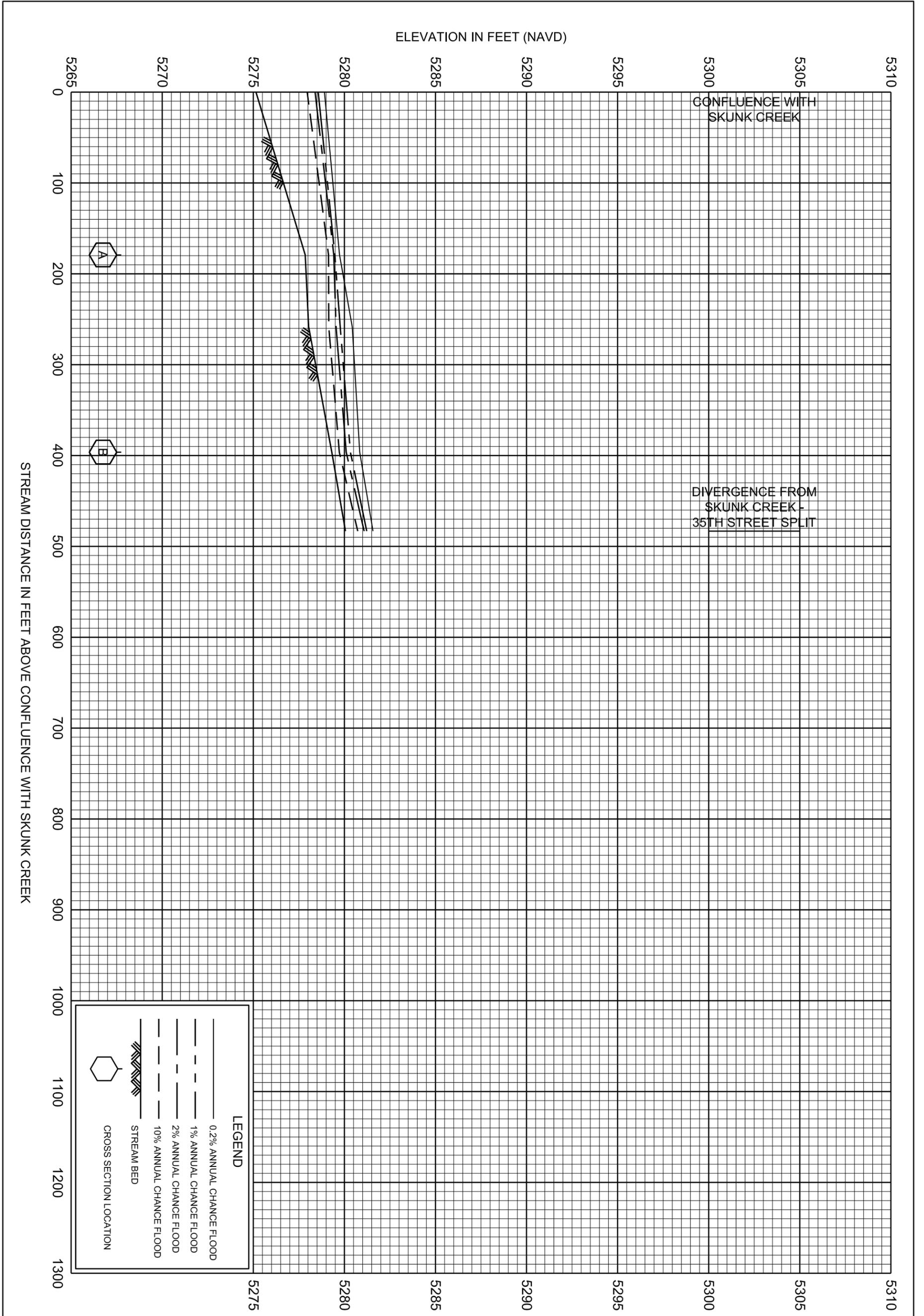


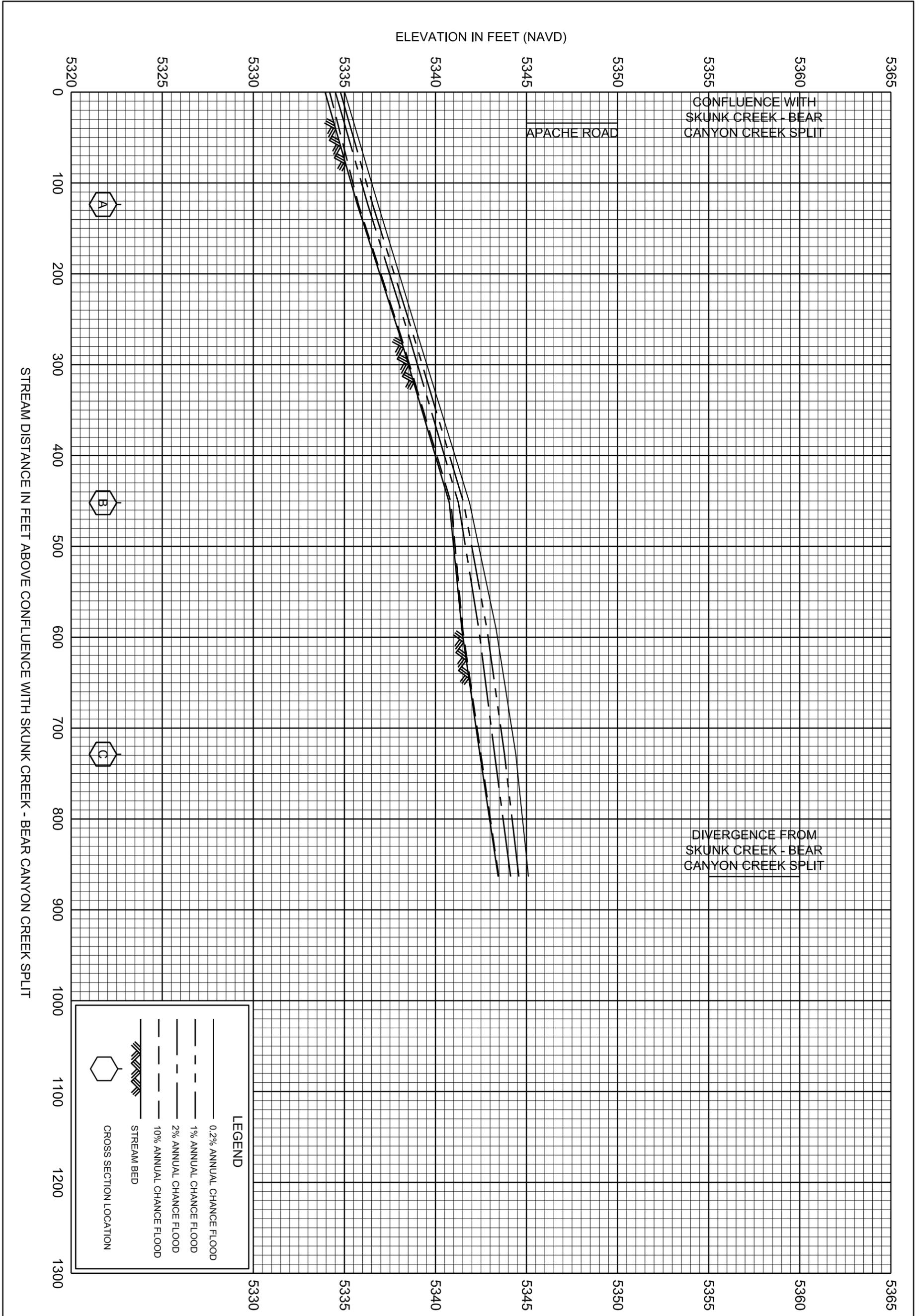
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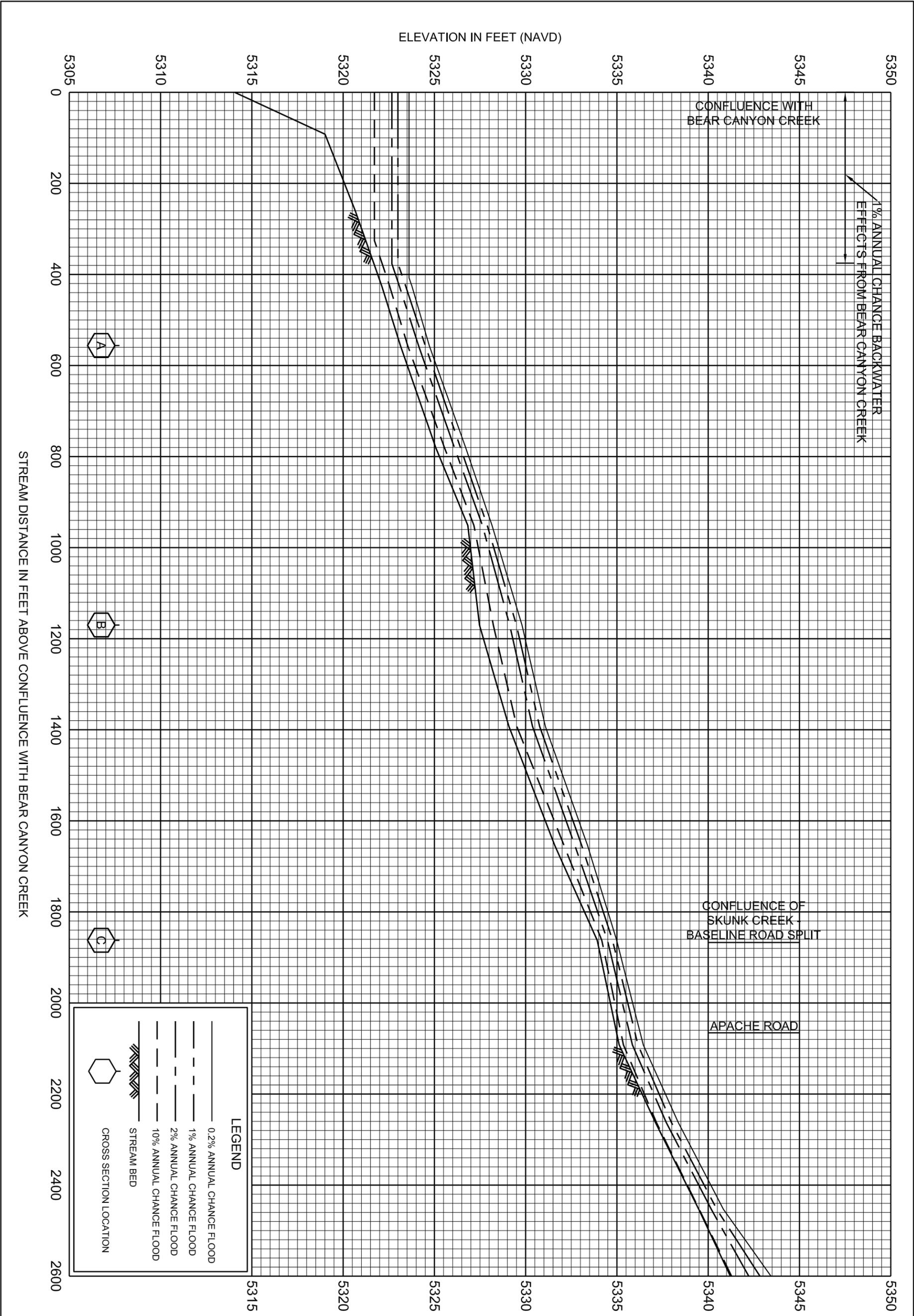
- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - 2% ANNUAL CHANCE FLOOD
- - - 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION

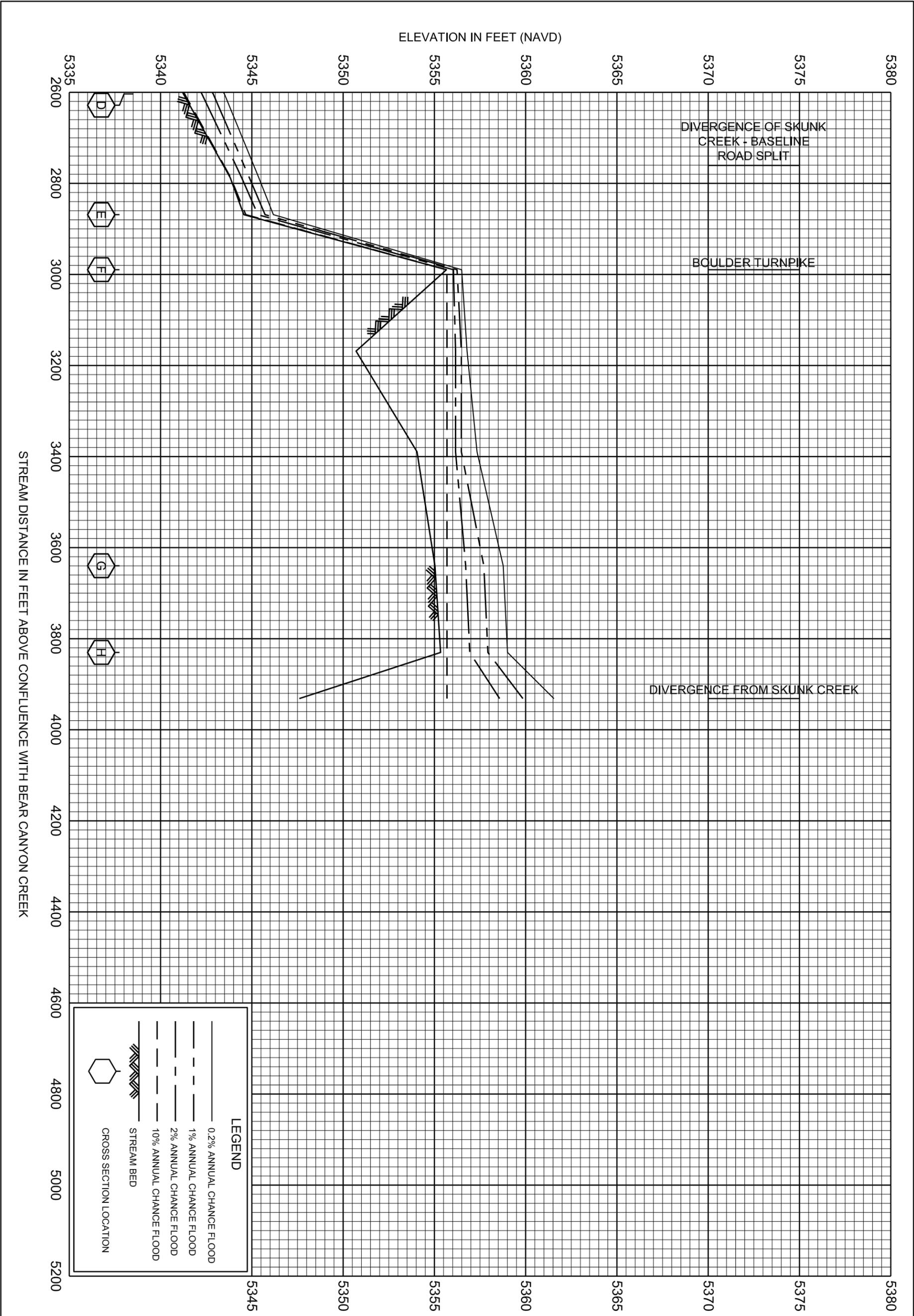


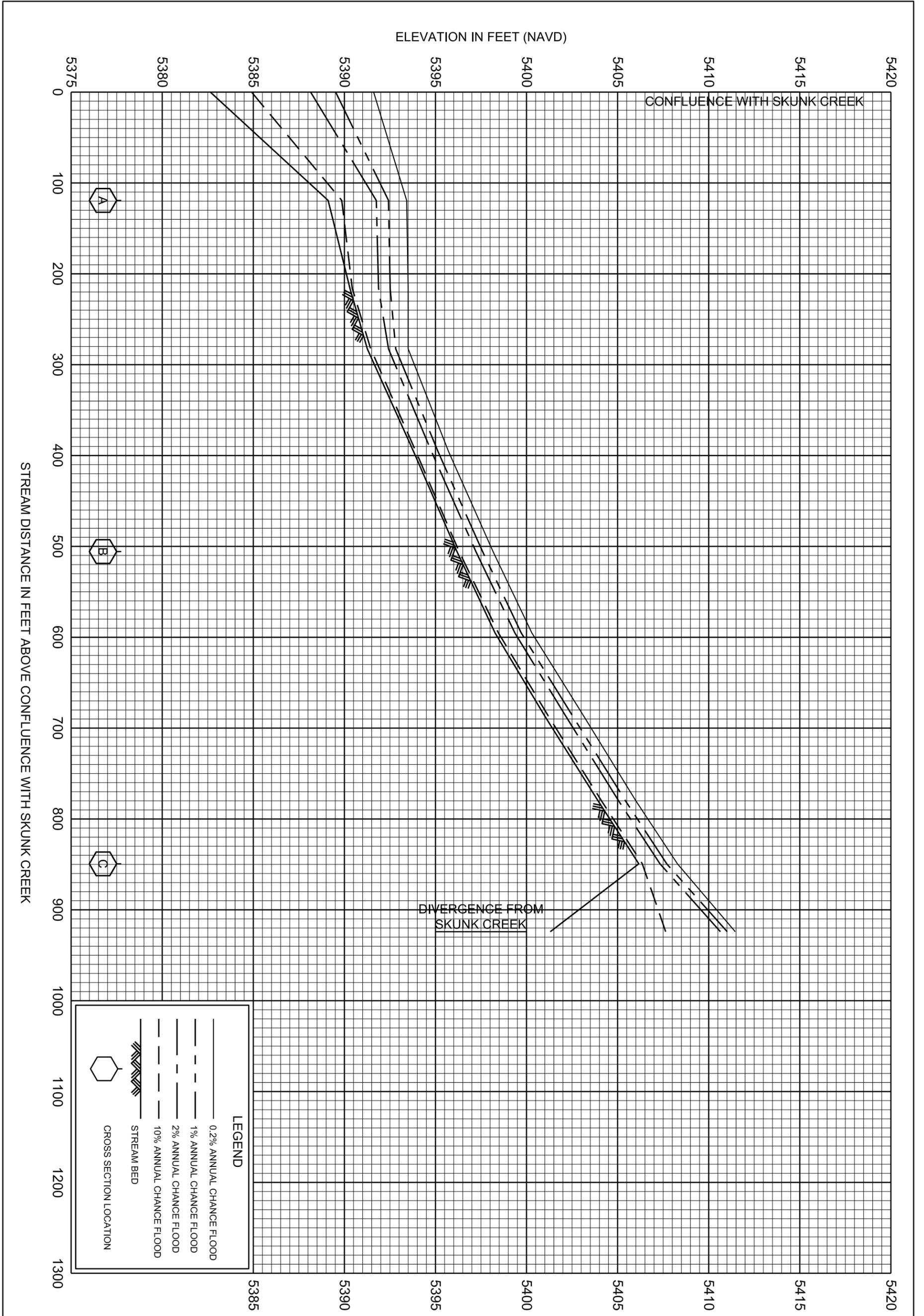


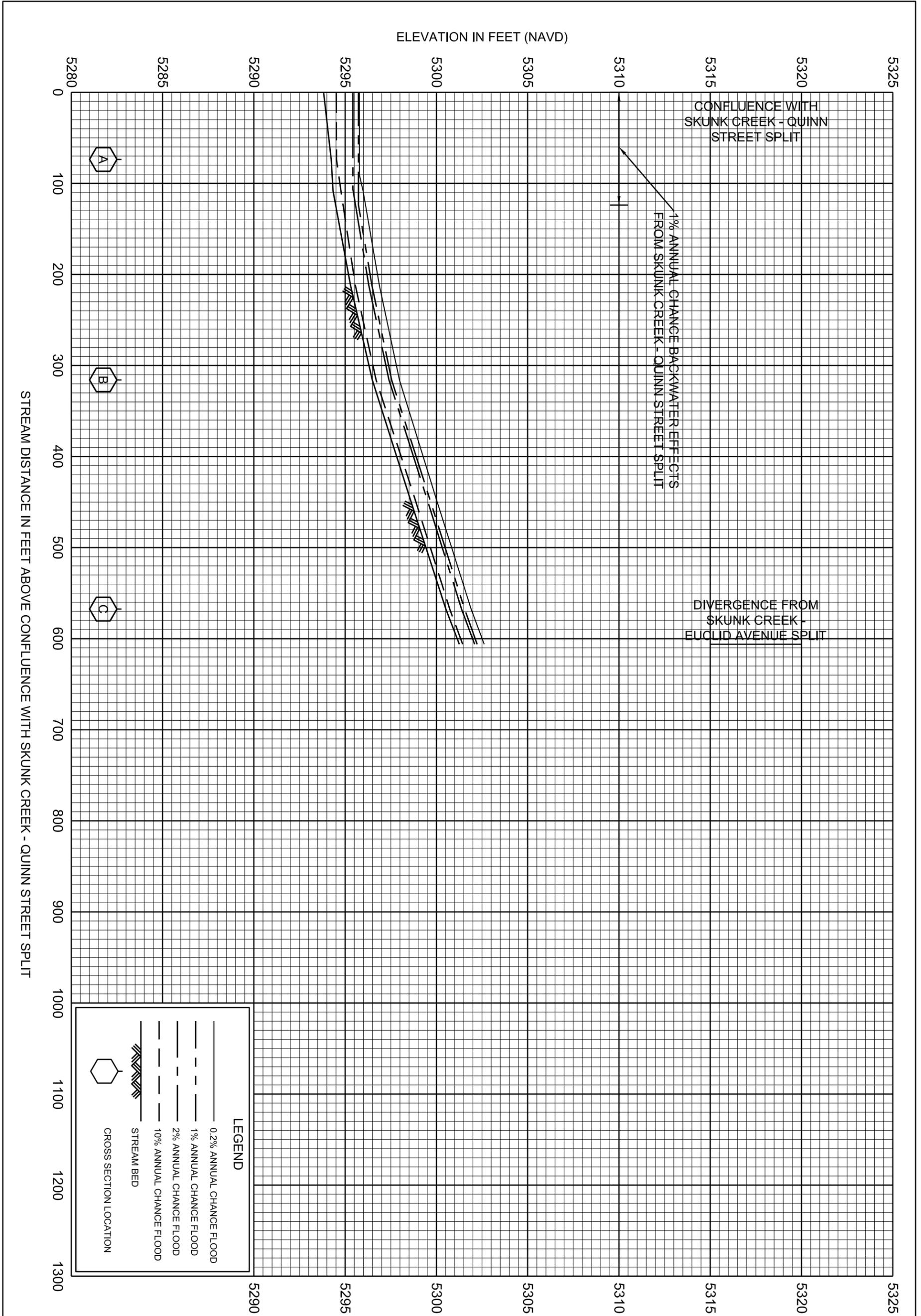


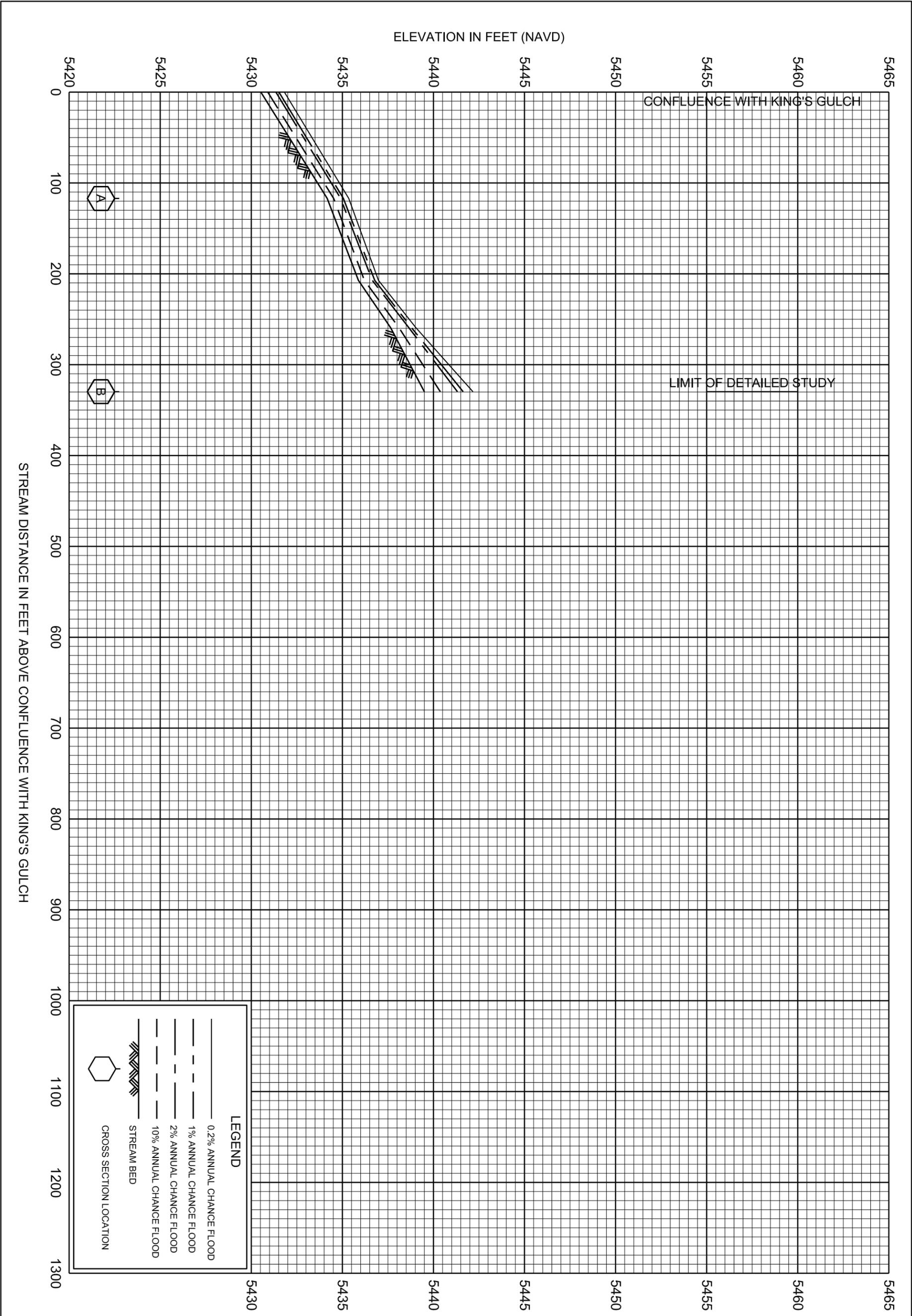






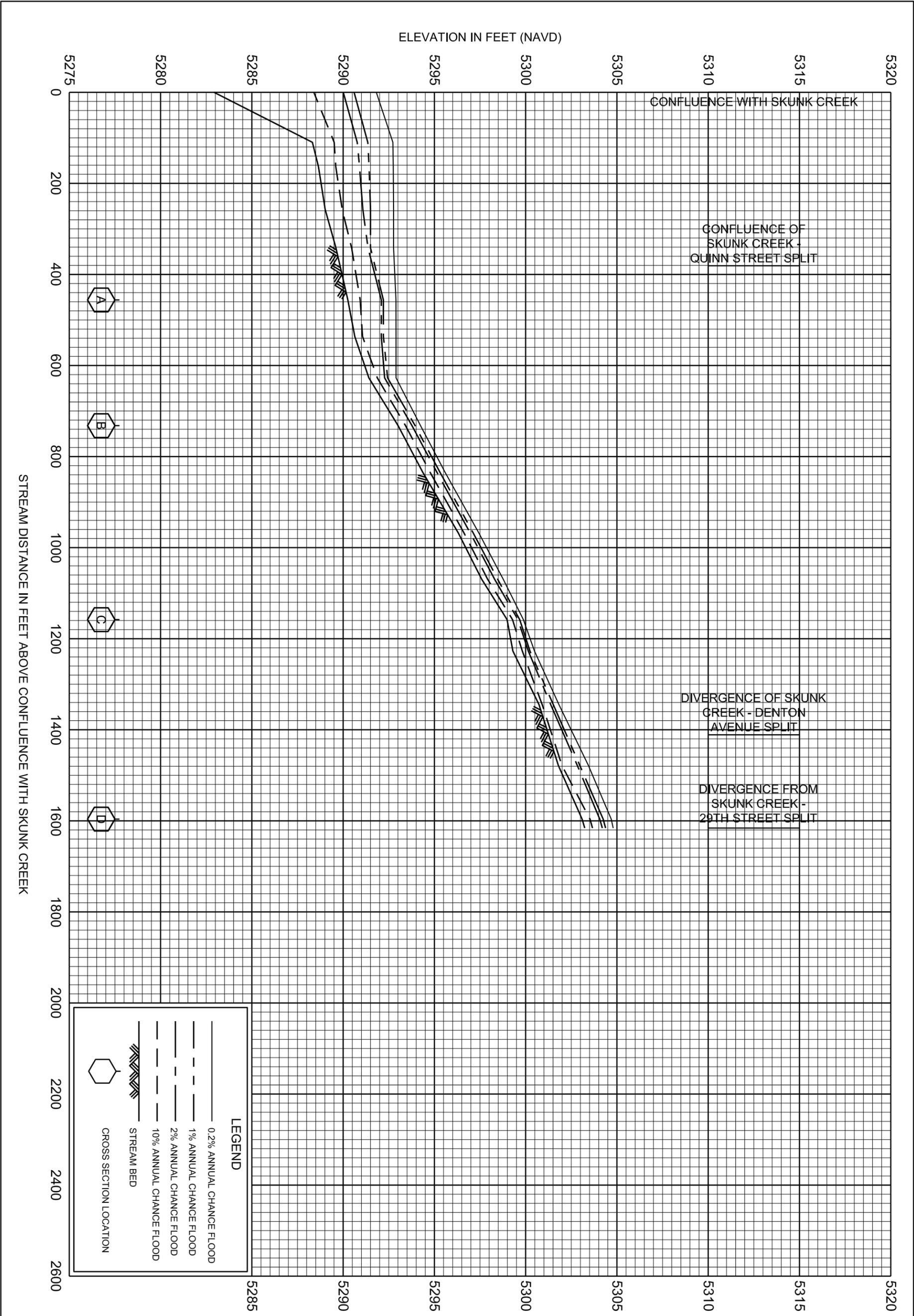


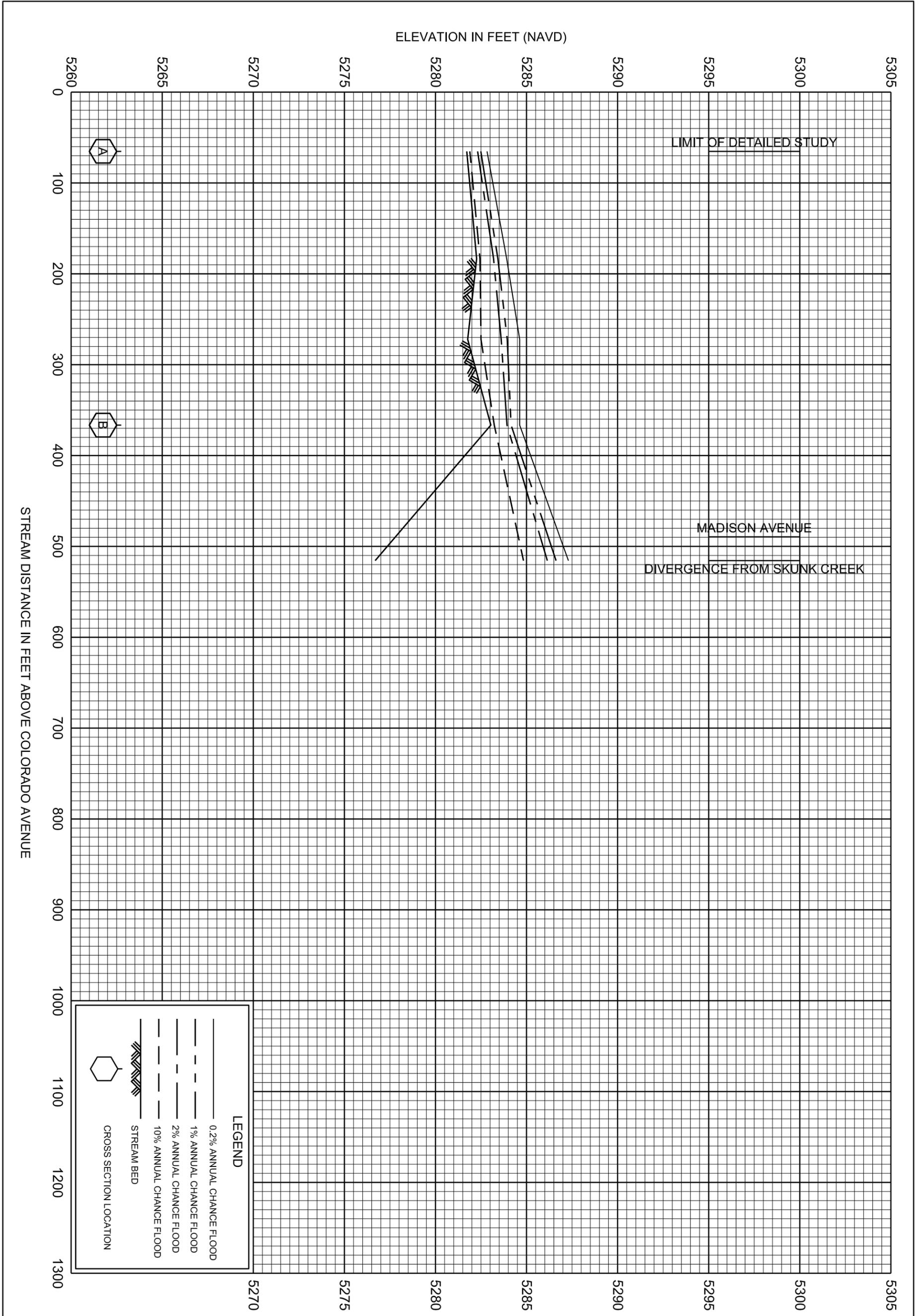


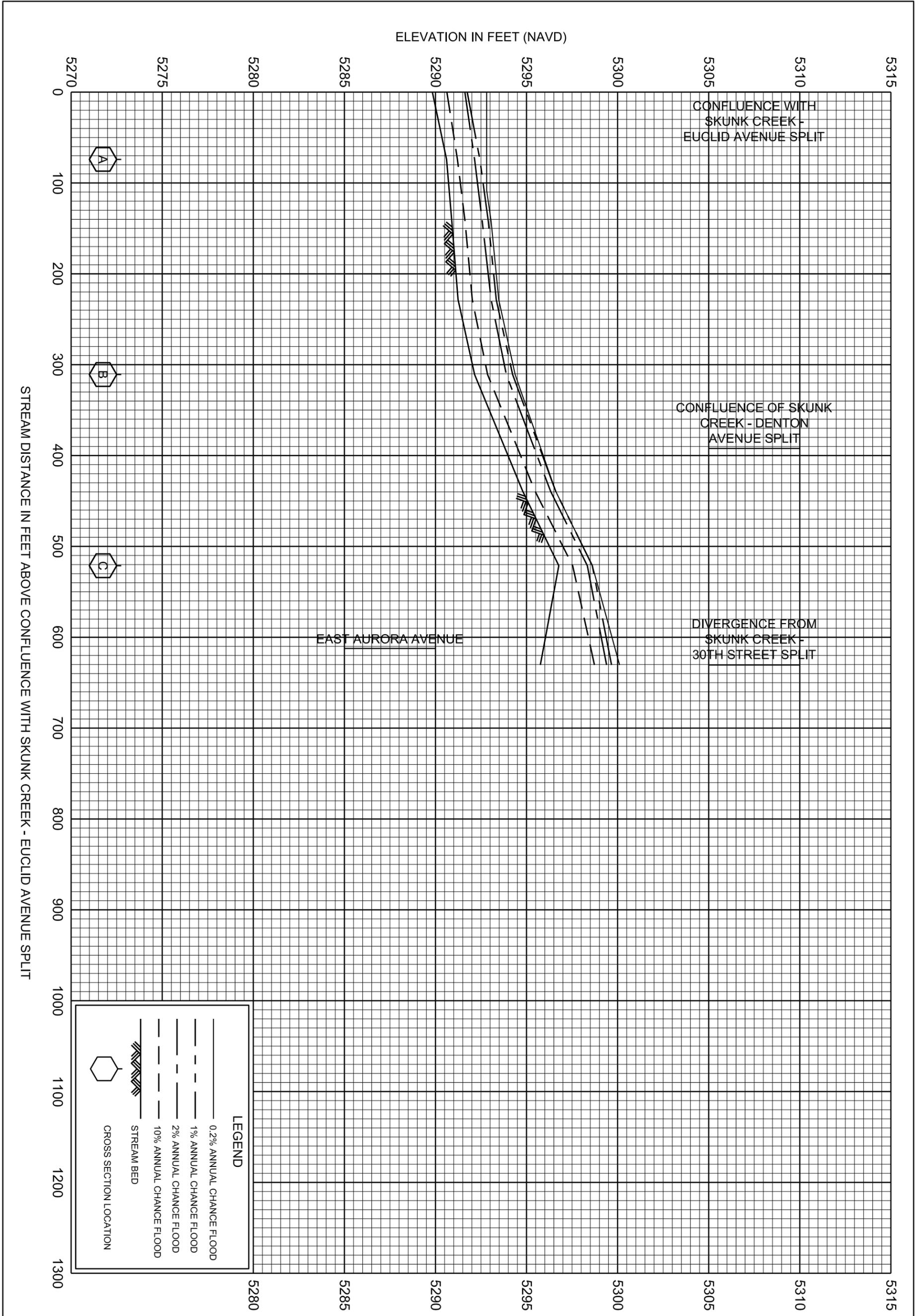


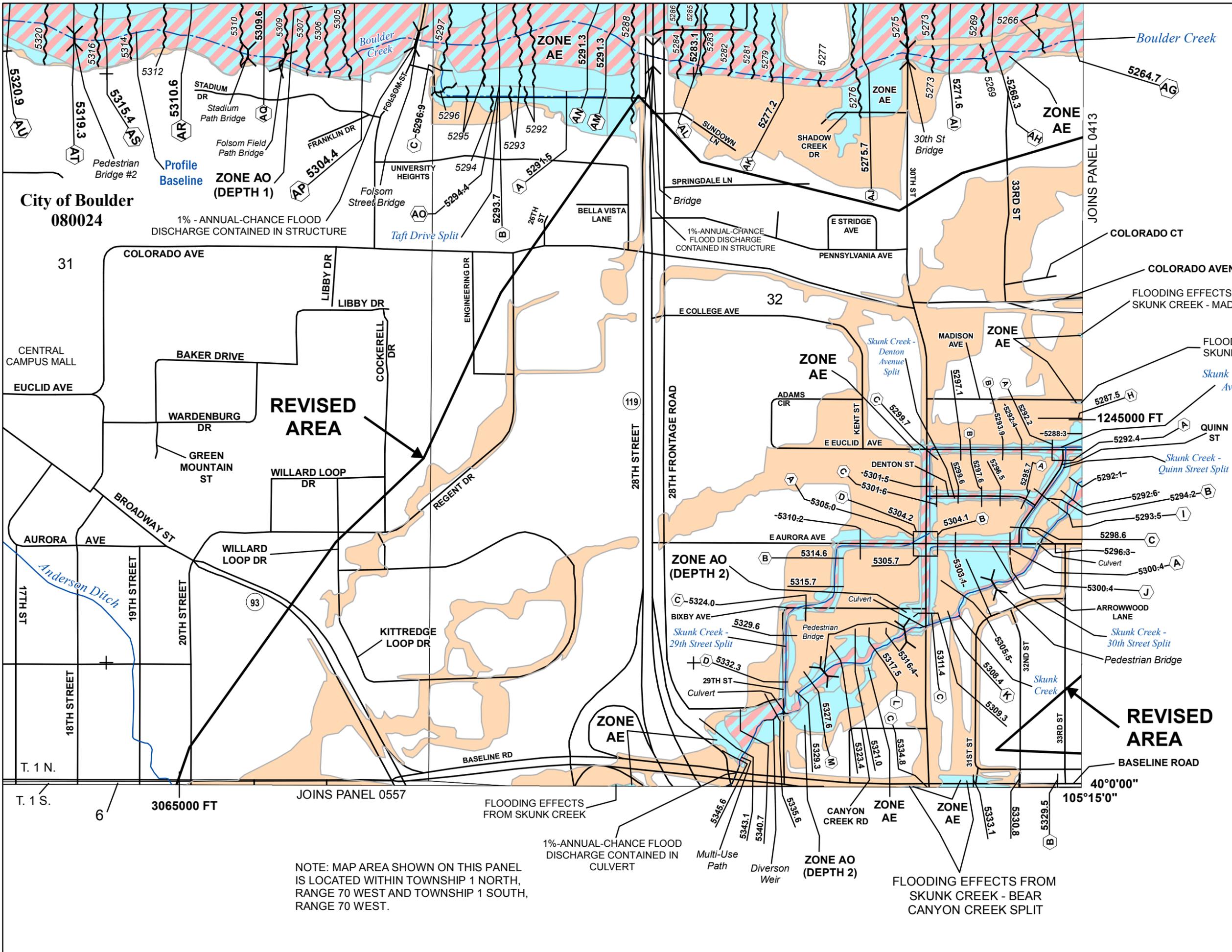
LEGEND

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









City of Boulder
080024

31

CENTRAL CAMPUS MALL
EUCLID AVE

AURORA AVE

T. 1 N.

T. 1 S.

6

3065000 FT

JOINS PANEL 0557

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 70 WEST AND TOWNSHIP 1 SOUTH, RANGE 70 WEST.

1% - ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN STRUCTURE

Profile Baseline
ZONE AO (DEPTH 1)

REVISED AREA

93

WILLARD LOOP DR

JOINS PANEL 0557

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 70 WEST AND TOWNSHIP 1 SOUTH, RANGE 70 WEST.

1% - ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

Multi-Use Path

Diversion Weir

ZONE AO (DEPTH 2)

ZONE AO (DEPTH 2)

Multi-Use Path

Diversion Weir

ZONE AO (DEPTH 2)

ZONE AO (DEPTH 2)

FLOODING EFFECTS FROM SKUNK CREEK - BEAR CANYON CREEK SPLIT

REVISED AREA

BASELINE ROAD

40°0'00"

105°15'0"

3065000 FT

JOINS PANEL 0557

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 70 WEST AND TOWNSHIP 1 SOUTH, RANGE 70 WEST.

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 70 WEST AND TOWNSHIP 1 SOUTH, RANGE 70 WEST.

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway
- 0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes, Zone X

OTHER AREAS OF FLOOD HAZARD

SCALE

Map Projection: Universal Transverse MercatorNAD 1983 UTM Zone 13N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 62.5 125 250 Meters

FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY, COLORADO
And Incorporated Areas

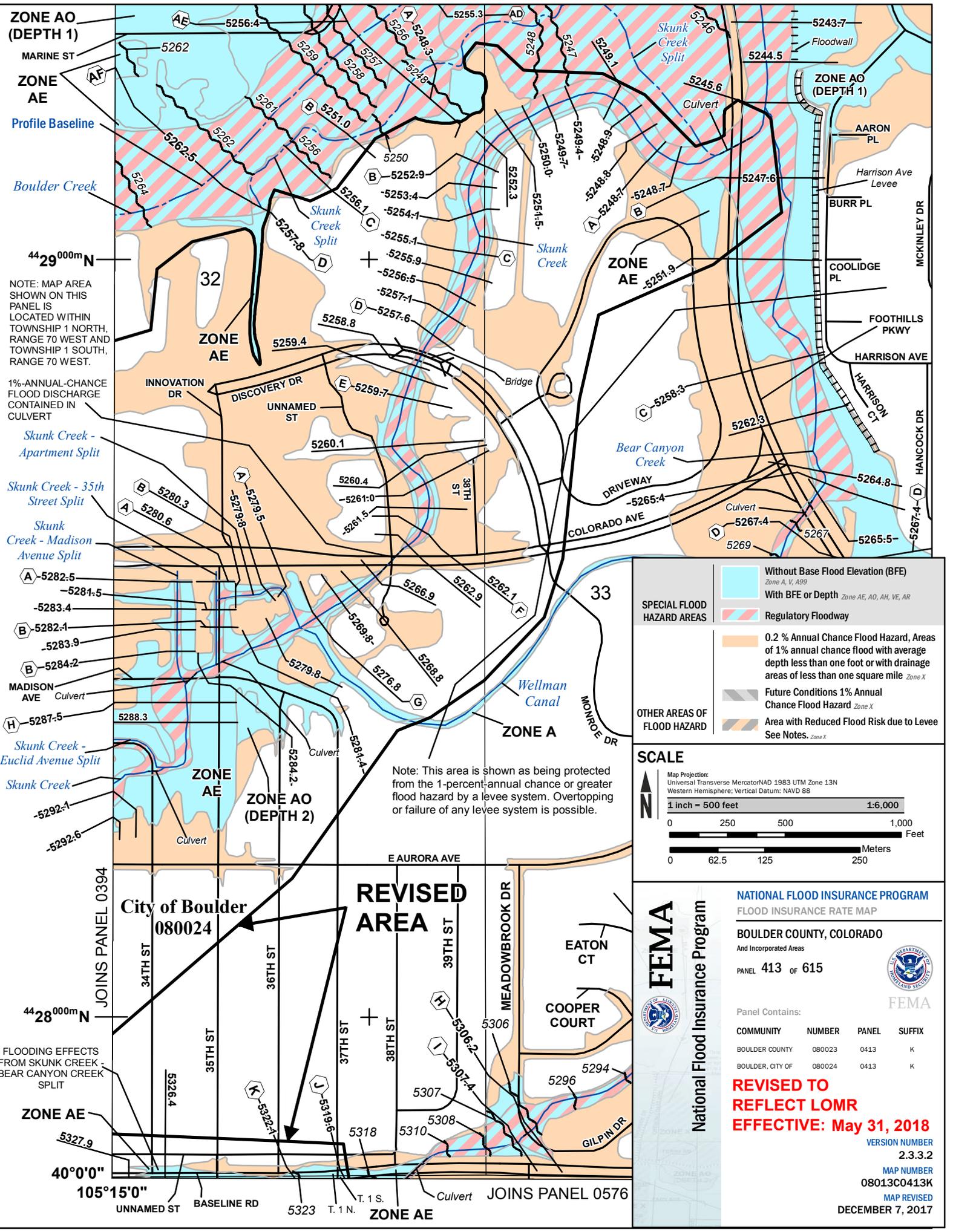
PANEL 394 of 615

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER, CITY OF	080024	0394	K

REVISED TO REFLECT LOMR EFFECTIVE: May 31, 2018

VERSION NUMBER 2.3.3.2
MAP NUMBER 08013C0394K
MAP REVISED DECEMBER 7, 2017



ZONE AO (DEPTH 1)
MARINE ST

ZONE AE
Profile Baseline
Boulder Creek

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 NORTH, RANGE 70 WEST AND TOWNSHIP 1 SOUTH, RANGE 70 WEST.

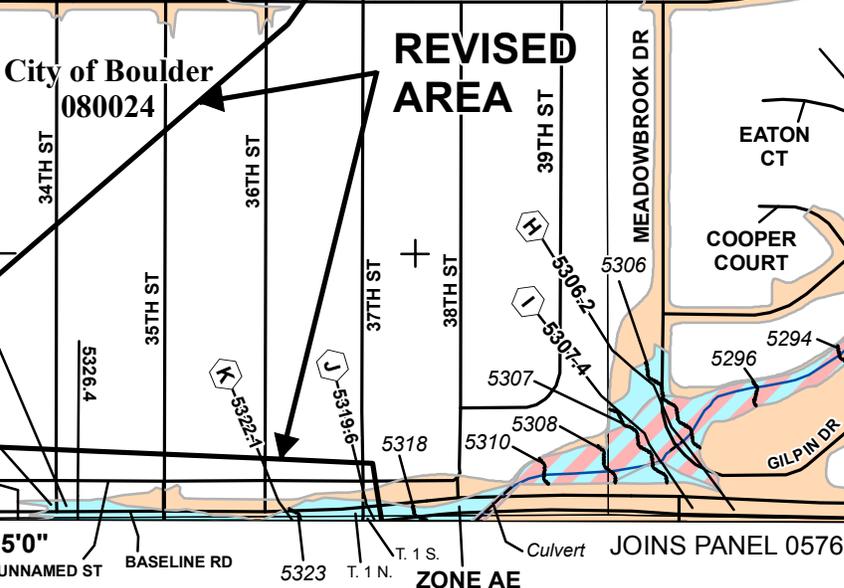
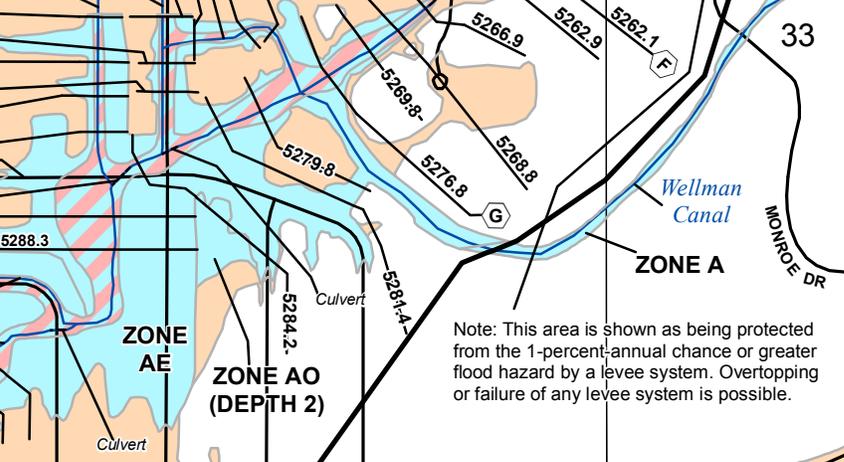
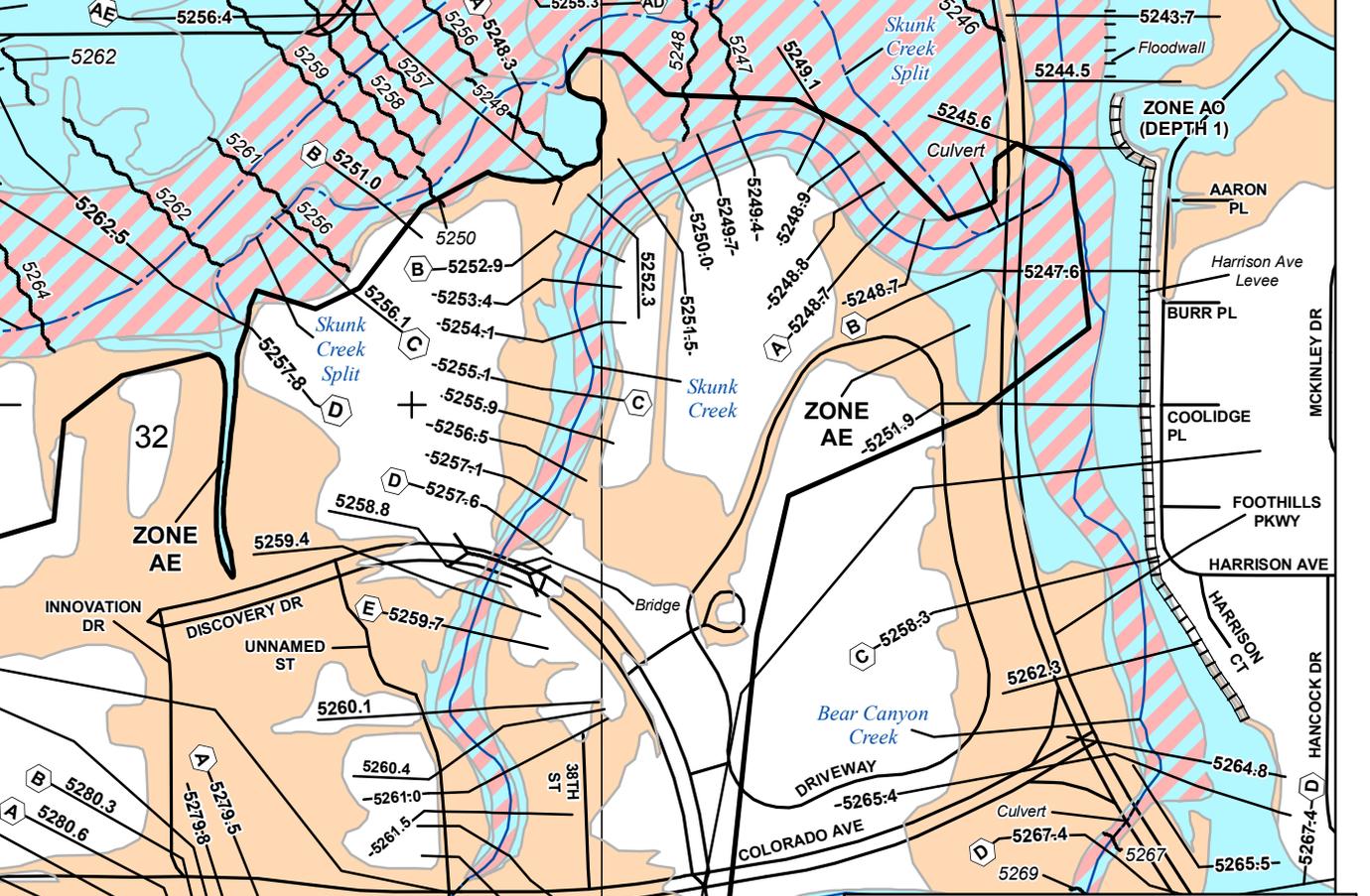
1%-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

Skunk Creek - Apartment Split
Skunk Creek - 35th Street Split
Skunk Creek - Madison Avenue Split

Skunk Creek - Euclid Avenue Split
Skunk Creek

FLOODING EFFECTS FROM SKUNK CREEK BEAR CANYON CREEK SPLIT

ZONE AE



SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes, Zone X

SCALE

Map Projection:
Universal Transverse Mercator/NAD 1983 UTM Zone 13N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 62.5 125 250 Meters

FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY, COLORADO
And Incorporated Areas

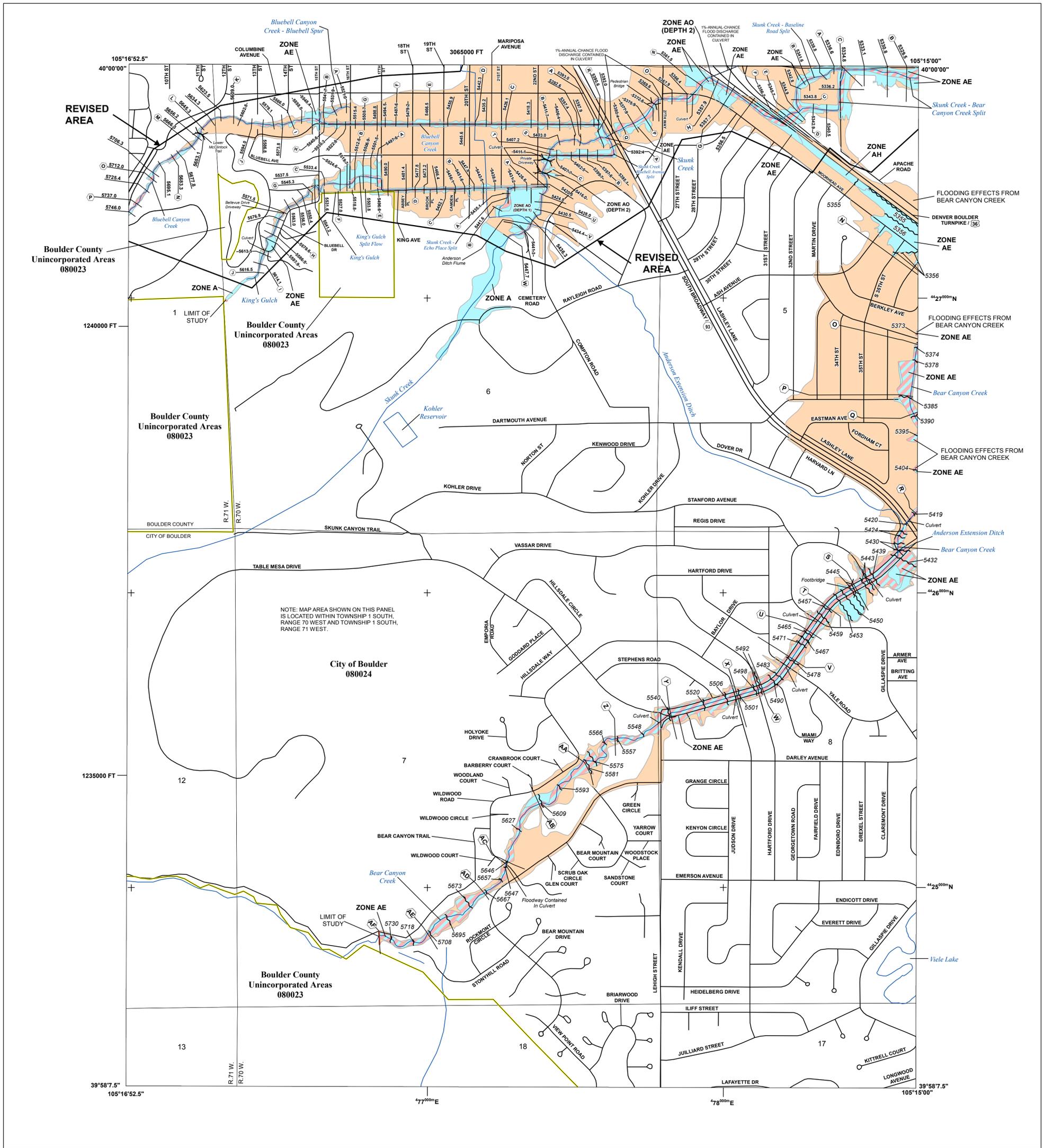
PANEL 413 OF 615

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER COUNTY	080023	0413	K
BOULDER, CITY OF	080024	0413	K

REVISED TO REFLECT LOMR EFFECTIVE: May 31, 2018

VERSION NUMBER 2.3.3.2
MAP NUMBER 08013C0413K
MAP REVISED DECEMBER 7, 2017



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTP://MSC.FEMA.GOV](http://MSC.FEMA.GOV)

	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	NO SCREEN Areas of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert or Storm Sewer
	Accredited or Provisionally Accredited Levee, Dike, or Floodwall
	Non-accredited Levee, Dike or Floodwall
	18.2 Cross Sections with 1% Annual Chance
	Water Surface Elevations (BFE)
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <http://msc.fema.gov>. 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.

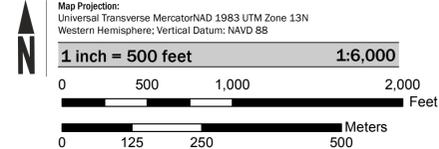
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

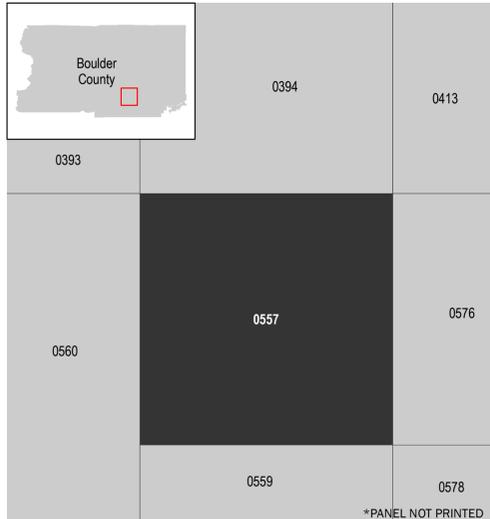
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided by the FEMA Map Service Center and the Boulder Area Spatial Cooperative (BASIC). Additional input was provided by the Town of Erie and the City of Longmont. These data are current as of 2004.

SCALE



PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP
 BOULDER COUNTY, COLORADO

PANEL 557 of 615

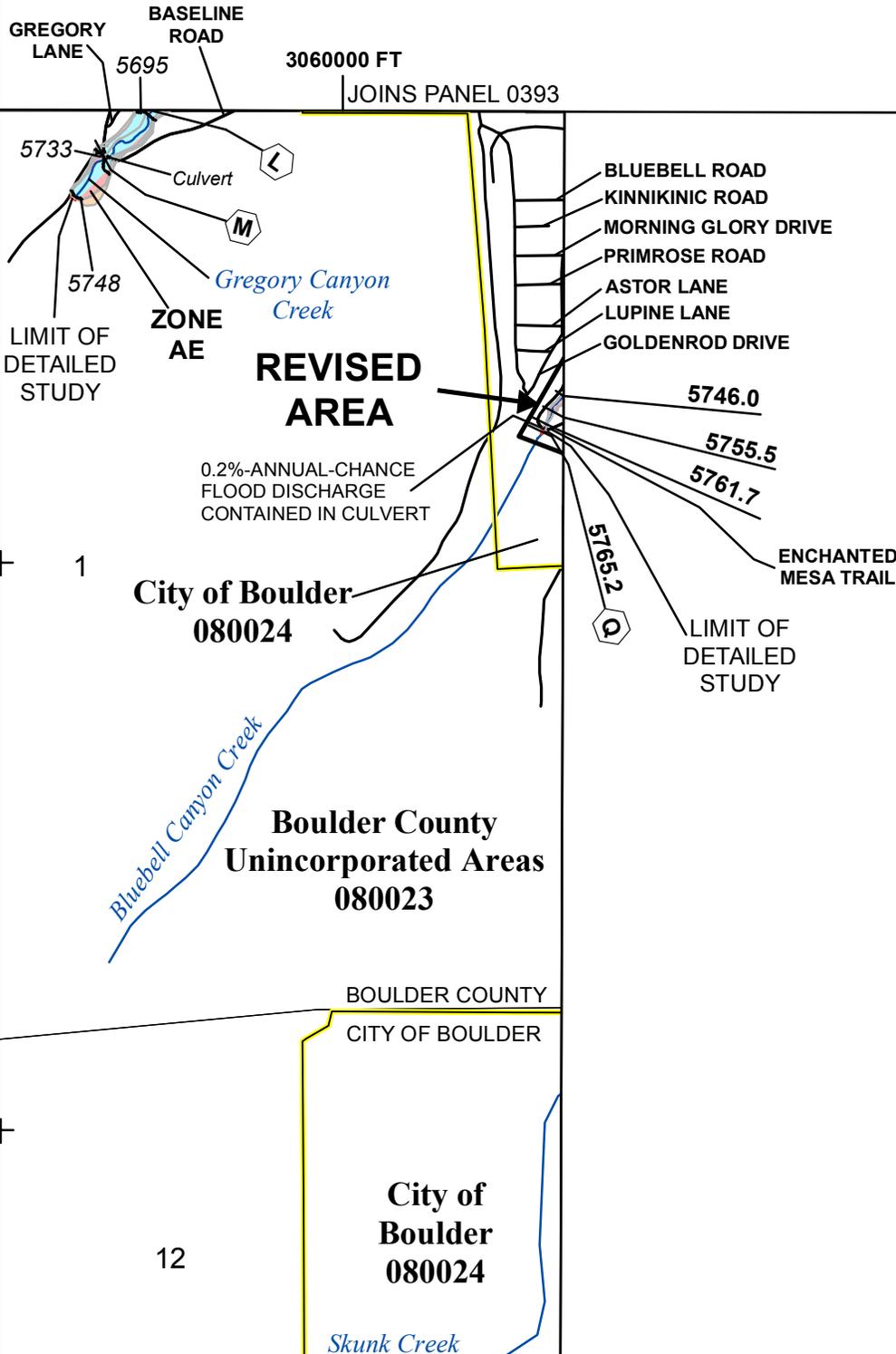
Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER, CITY OF	080024	0557	J
BOULDER COUNTY	080023	0557	J

REVISED TO REFLECT LOMR EFFECTIVE: May 31, 2018

VERSION NUMBER: 2.3.3.2
 MAP NUMBER: 08013C0557J
 MAP REVISED: DECEMBER 12, 2012

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 SOUTH, RANGE 71 WEST.



3060000 FT
JOINS PANEL 0393

3065000 FT
JOINS PANEL 0394

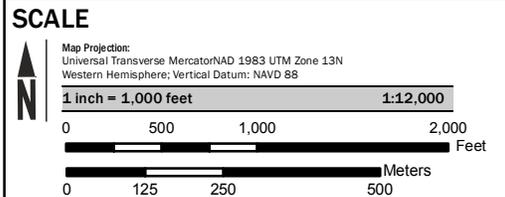
THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 08013C0557

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
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- Area with Reduced Flood Risk due to Levee See Notes, Zone X



FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY, COLORADO
AND INCORPORATED AREAS

PANEL 560 OF 615

Panel Contains:

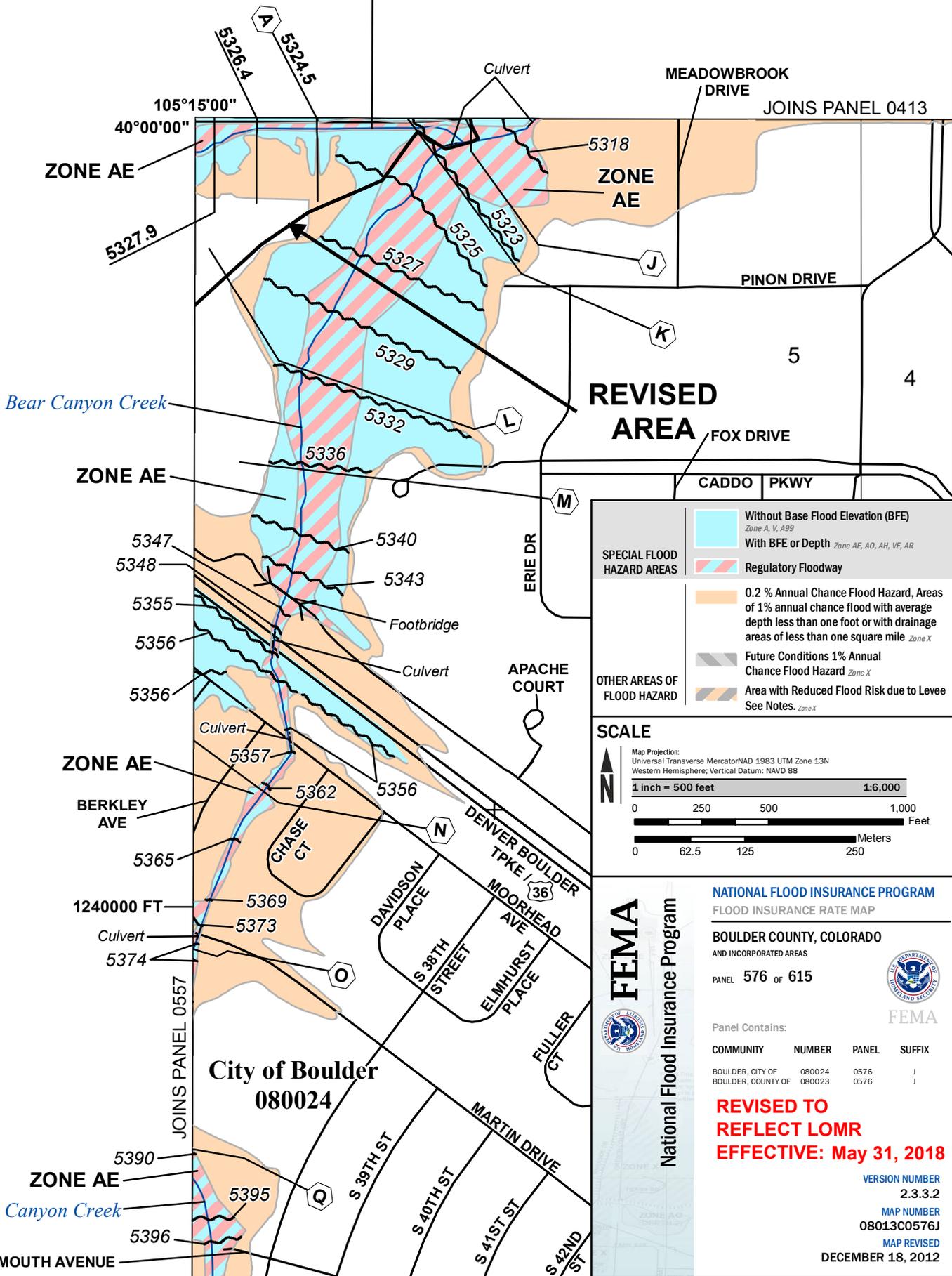
COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER, CITY OF	080024	0560	J
BOULDER, COUNTY OF	080023	0560	J

REVISED TO REFLECT LOMR EFFECTIVE: May 31, 2018

VERSION NUMBER 2.3.3.2
MAP NUMBER 08013C0560J
MAP REVISED DECEMBER 18, 2012

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 SOUTH, RANGE 70 WEST.

Skunk Creek - Bear Canyon Creek Split



SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes, Zone X

SCALE

Map Projection: Universal Transverse Mercator/NAD 1983 UTM Zone 13N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 62.5 125 250 Meters

FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY, COLORADO
AND INCORPORATED AREAS

PANEL 576 of 615

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER, CITY OF	080024	0576	J
BOULDER, COUNTY OF	080023	0576	J

REVISED TO REFLECT LOMR EFFECTIVE: May 31, 2018

VERSION NUMBER 2.3.3.2
MAP NUMBER 08013C0576J
MAP REVISED DECEMBER 18, 2012

City of Boulder 080024

Bear Canyon Creek

DARTMOUTH AVENUE