

FLOOD INSURANCE STUDY



SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

VOLUME 8 OF 11

Community Name	Community Number
SAN DIEGO COUNTY, UNINCORPORATED AREAS	060284
CARLSBAD, CITY OF	060285
CHULA VISTA, CITY OF	065021
CORONADO, CITY OF	060287
DEL MAR, CITY OF	060288
EL CAJON, CITY OF	060289
ENCINITAS, CITY OF	060726
ESCONDIDO, CITY OF	060290
IMPERIAL BEACH, CITY OF	060291
LA MESA, CITY OF	060292
LEMON GROVE, CITY OF	060723
NATIONAL CITY, CITY OF	060293
OCEANSIDE, CITY OF	060294
POWAY, CITY OF	060702
SAN DIEGO, CITY OF	060295
SAN MARCOS, CITY OF	060296
SANTEE, CITY OF	060703
SOLANA BEACH, CITY OF	060725
VISTA, CITY OF	060297



REVISED
4/5/2016



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
06073CV008D

**NOTICE TO
FLOOD INSURANCE STUDY USERS**

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

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

This FIS report was revised on April 5, 2016. Users should refer to Section 10.0, Revisions 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 this report should be aware that the information presented in section 10.0 supersedes information in Sections 1.0 through 9.0 of this FIS report.

Initial Countywide FIS Effective Date: June 19, 1997

Revised Countywide FIS Dates: June 16, 1999
 January 19, 2001
 July 16, 2002
 September 29, 2006
 May 16, 2012
 April 5, 2016

ATTENTION: On FIRM panel 06073C2153G, the salt pond levee has not been demonstrated by the community or levee owner(s) to meet the requirements of Section 65.10 of the NFIP regulations in 44 CFR as it relates to the levee's capacity to provide 1-percent- annual -chance flood protection. The subject areas are identified on FIRM panels (with notes and bounding lines) and in the FIS report as potential areas of flood hazard data changes based on further review.

FEMA has updated the levee analysis and mapping procedures for non-accredited levees. Until such time as FEMA is able to initiate a new flood risk project to apply the new procedures, the flood hazard information on the aforementioned FIRM panel that are affected by the salt pond levee is being added as a snapshot of the prior previously effective information presented on the FIRMs and FIS reports dated June 19, 1997. As indicated above, it is expected that affected flood hazard data within the subject area could be significantly revised. This may result in floodplain boundary changes, 1-percent- annual -chance flood elevation changes, and/or changes to flood hazard zone designations.

The effective FIRM panels (and the FIS report) will again be revised at a later date to update the flood hazard information associated with the salt pond levee when FEMA is able to initiate and complete a new flood risk project to apply the updated levee analysis and mapping procedures.

TABLE OF CONTENTS

Table of Contents – Volumes 1 & 2

	<u>Page</u>
1.0 INTRODUCTION.....	1
1.1 Purpose of Study	1
1.2 Authority and Acknowledgments.....	1
1.3 Coordination	9
2.0 AREA STUDIED.....	12
2.1 Scope of Study	12
2.2 Community Description	22
2.3 Principal Flood Problems	31
2.4 Flood Protection Measures	41
3.0 ENGINEERING METHODS	49
3.1 Hydrologic Analyses	49
3.2 Hydraulic Analyses	97
3.3 Vertical Datum.....	125
4.0 FLOODPLAIN MANAGEMENT APPLICATIONS	129
4.1 Floodplain Boundaries.....	129
4.2 Floodway	131
5.0 INSURANCE APPLICATION	135
6.0 FLOOD INSURANCE RATE MAP.....	136
7.0 OTHER STUDIES	141
8.0 LOCATION OF DATA.....	144
9.0 BIBLIOGRAPHY AND REFERENCES	144
10.0 REVISION DESCRIPTIONS	154
10.1 First Revision (April 5, 2016).....	154

Table of Contents – Volumes 1 & 2 – continued

FIGURES

FIGURE 1 - FLOODWAY SCHEMATIC 134

TABLES

TABLE 1 - CONTACTED AGENCIES 9
TABLE 2 - INITIAL AND FINAL CCO MEEETINGS 11
TABLE 3 - FLOODING SOURCES STUDIED BY DETAILED METHODS 15
TABLE 4 - FLOODING SOURCES STUDIED BY APPROXIMATE METHODS 16
TABLE 5 - LETTERS OF MAP CHANGE 17
TABLE 6 - SUMMARY OF ELEVATIONS 53
TABLE 7 - SUMMARY OF PACIFIC OCEAN WAVE ELEVATIONS 56
TABLE 8 - SUMMARY OF PEAK DISCHARGES 68
TABLE 9 - MANNING'S "N" VALUES 114
TABLE 10 - LIST OF LEVEES REQUIRING FLOOD HAZARD REVISIONS 122
TABLE 11 - LIST OF CERTIFIED AND ACCREDITED LEVEES 124
TABLE 12 – FLOODING SOURCE DATUM SHIFT VALUES 125
TABLE 13 - FLOODWAY DATA See Vol. 3 and 4
TABLE 14 - COMMUNITY MAP HISTORY 137

Table of Contents – Volumes 3 & 4

TABLES

TABLE 13 - FLOODWAY DATA

Table of Contents – Volume 5

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Adobe Creek	01P
Agua Hedionda Creek	02P - 03P
Agua Hedionda Creek (at City of Carlsbad)	04P - 06P
Agua Hedionda Creek (at City of Vista)	07P - 11P
Alvarado Creek	12P - 34P
Beaver Hollow Creek	35P - 39P
Beeler Creek	40P - 46P
Broadway Creek	47P - 49P
Buena Creek	50P - 58P
Buena Vista Creek	59P - 79P
Buena Vista Creek Tributary 1	80P - 81P
Buena Vista Creek Tributary 3	82P - 85P
Calavera Creek	86P
Calavera Creek Split Flow ¹	---
Carmel Valley Creek	88P - 90P

Table of Contents – Volume 6

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Carroll Canyon Creek	91P - 101P
Coleman Creek	102P - 108P
County Ditch Creek	109P - 110P
Deer Springs Creek	111P
Descanso Creek	112P - 114P
Encanto Branch	115P - 118P
Escondido Creek (Above Lake Wohlford)	119P
Escondido Creek (at Encinitas)	120P - 123P
Escondido Creek (at Escondido)	124P - 128P
Escondido Creek (Left Reach)	129P
Eucalyptus Hills Creek (East Branch)	130P
Eucalyptus Hills Creek (West Branch)	131P - 132P
Florida Drive Branch	133P
Forester Creek	134P - 146P
Garrison Creek	147P - 150P
Gonzales Canyon Creek	151P
Gopher Canyon Creek	152P - 155P
Green Valley Creek	156P - 158P
Green Valley Creek Tributary	159P
Harbison Canyon Creek	160P - 166P

¹ Flooding source has been superseded by LOMR #09-09-0276P and has been removed from the FIS.

Table of Contents – Volume 6 continued

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Hatfield Creek	167P - 168P
Home Avenue Branch	169P - 171P
Johnson Canyon Creek	172P - 177P

Table of Contents – Volume 7

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Keys Canyon Creek	178P - 180P
Keys Canyon Creek Tributary 1	181P - 184P
Keys Canyon Creek Tributary 2	185P - 187P
Kit Carson Park Creek	188P - 192P
Lake San Marcos/San Marcos Creek	193P - 194P
Las Chollas Creek	195P - 199P
Las Posas Creek (Upper)	200P
Las Puleta Creek	201P - 202P
Lawson Valley Creek	203P - 208P
Loma Alta Creek	209P - 214P
Los Penasquitos Creek	215P - 223P
Lusardi Creek	224P
McGonigle Canyon Creek	225P - 226P
McGonigle Canyon Creek Tributary A	227P
Mexican Canyon Creek	228P - 231P
Moosa Creek (North Branch)	232P - 234P
Moosa Creek (South Branch)	235P
Murphy Canyon Creek	236P - 238P
Murray Canyon Creek	239P - 244P
Nestor Creek	245P - 250P
North Avenue Tributary	251P
North Branch Poway Creek	252P - 253P
North Tributary to Santa Maria Creek	254P - 255P
Olive Creek	256P - 257P

Table of Contents – Volume 8

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Otay River	258AP - 281P
Pala Mesa Creek	282P - 283P
Paradise Creek	284P - 288P
Paradise Creek Split Flow	289P
Paradise Creek - Valley Road Branch	290P
Pilgrim Creek	291P - 293P

Table of Contents – Volume 8 continued

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Poggi Canyon Creek	294P - 296P
Pomerado Creek	297P
Poway Creek	298P - 305P
Rainbow Creek	306P - 307P
Rainbow Creek (West Branch)	308P
Rattlesnake Creek	309P - 316P
Rattlesnake Creek Split Flow at Heritage Hills	317P - 318P
Rattlesnake Creek Split Flow at Midland Road	319P
Reidy Creek	320P - 324P
Reidy Creek Split Flow	325P
Rice Canyon Creek	326P - 329P
Rincon Avenue Tributary	330P
Rose Canyon Creek	331P - 337P
Samagutuma Creek	338P - 340P
San Clemente Canyon Creek	341P - 343P

Table of Contents – Volume 9

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

San Diego River	344P - 378P
San Dieguito River	379P - 381P
San Elijo Creek	382P
San Luis Rey River (at Oceanside)	383P - 391P
San Marcos Creek	392P - 395P
San Marcos Creek (Below Lake San Marcos)	396P - 397P
San Marcos Creek - Highway 78 Split Flow	398P
San Vincente Creek	399P - 401P
Santa Maria Creek (San Pasqual Valley Area)	402P - 405P
Santa Maria Creek (Santa Maria Valley Area)	406P - 426P

Table of Contents – Volume 10

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Santa Ysabel Creek	427P - 438P
Slaughterhouse Creek	439P - 440P
Soledad Canyon	441P - 445P
South Branch Poway Creek	446P - 447P
South Fork Moosa Canyon Creek	448P - 452P
South Las Chollas Creek	453P - 457P

Table of Contents – Volume 10 continued

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

South Tributary to Santa Maria Creek	458P - 459P
Steele Canyon Creek	460P - 468P
Stevenson Creek	469P
Sweetwater River (Above Reservoir)	470P - 496P
Sweetwater River (At National City)	497P - 501P
Sweetwater River (Descanso Area)	502P - 505P
Switzer Creek	506P

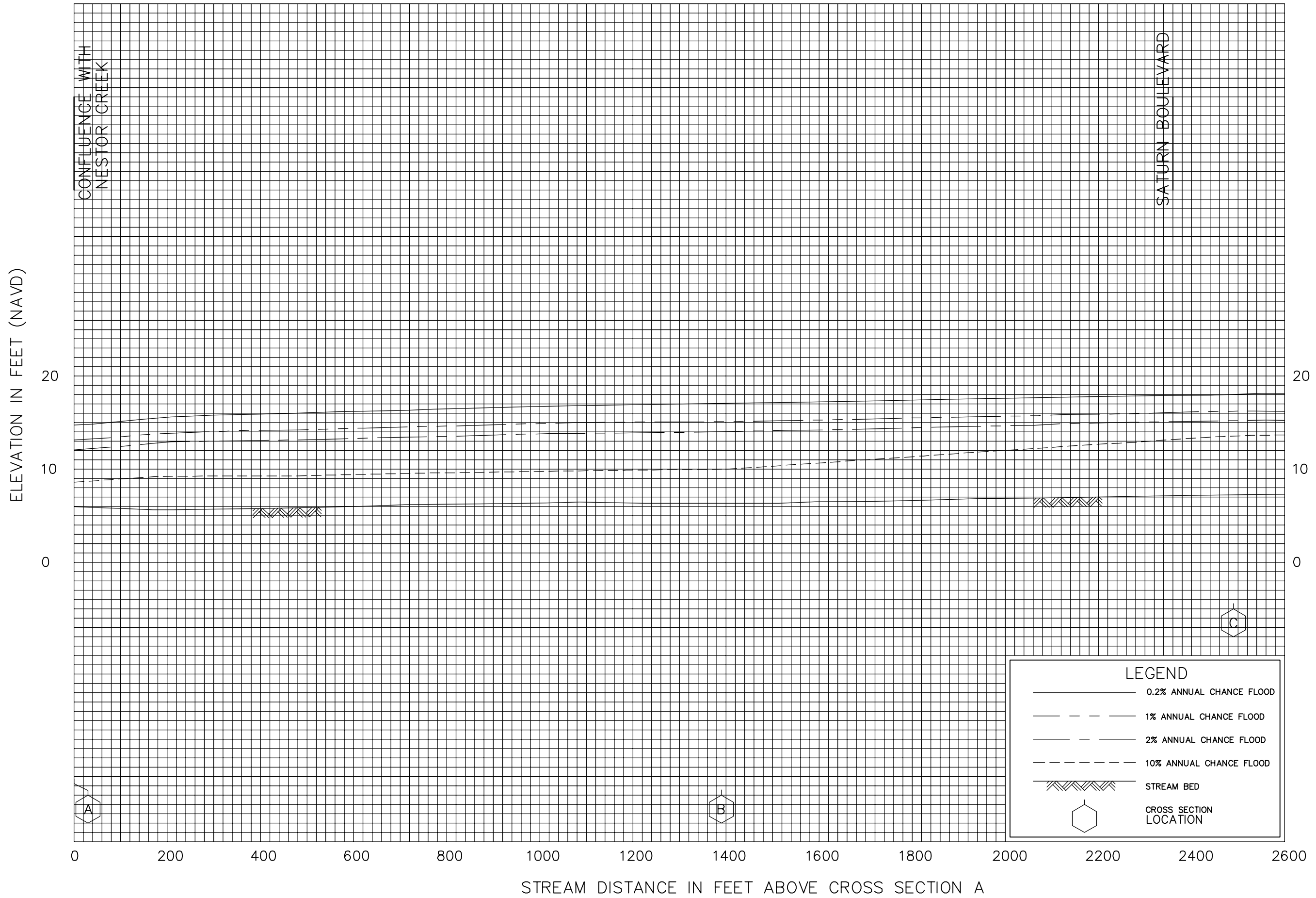
Table of Contents – Volume 11

EXHIBITS

EXHIBIT 1 – FLOOD PROFILES

Tecolote Creek	507P - 520P
Telegraph Canyon Creek	521AP - 540P
Tijuana River	541P – 545P
Tributary of South Tributary to Santa Maria Creek	546P
Tributary to Forester Creek	547P
Tributary to Forester Creek South Branch	548P
Tributary to Sweetwater River	549P - 550P
Twin Oaks Valley Creek	551P - 557P
Unnamed Tributary to San Dieguito River	558P
Wabash Branch	559P
Witch Creek	560P - 562P

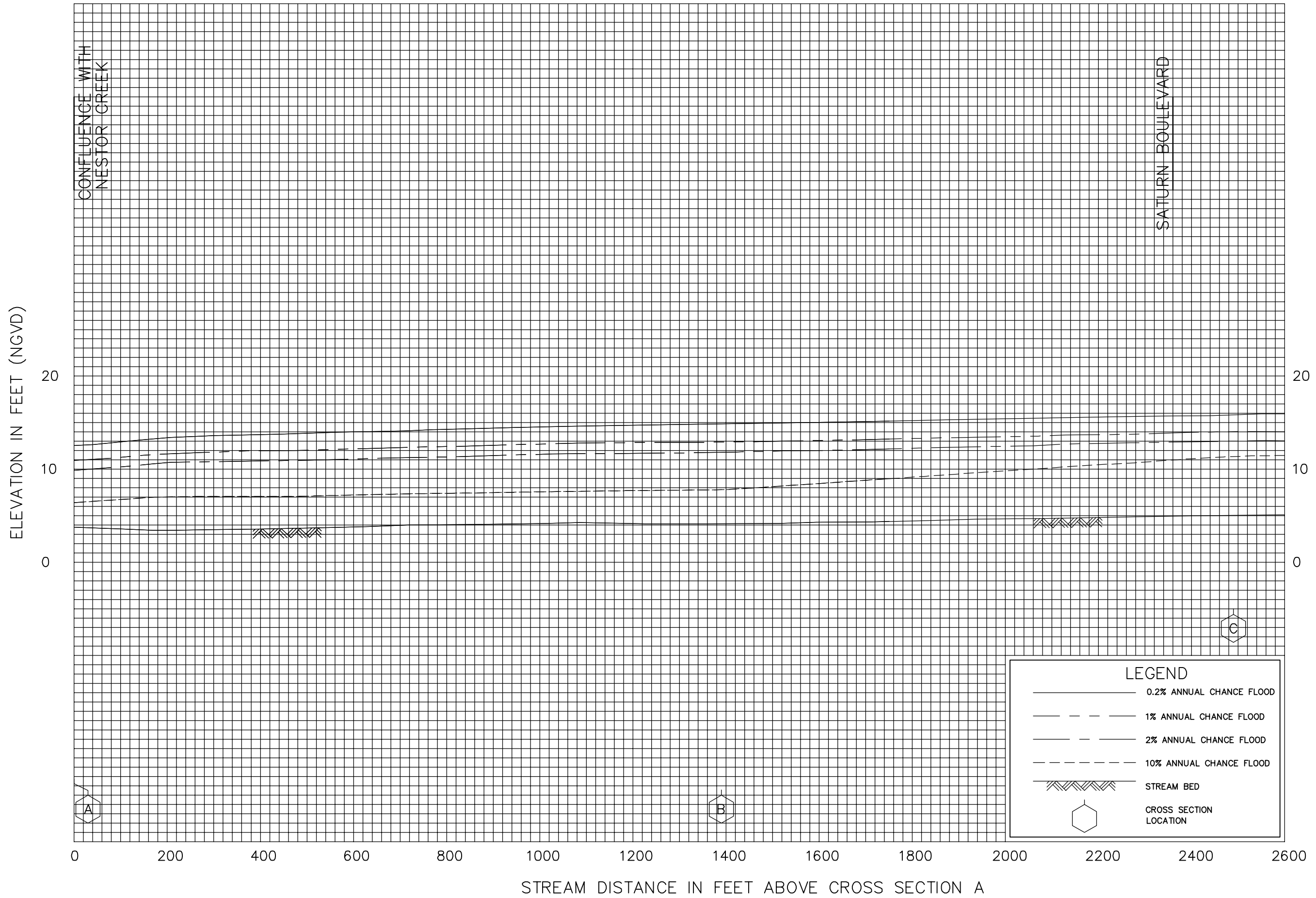
PUBLISHED SEPARATELY: Flood Insurance Rate Map Index
Flood Insurance Rate Map



FLOOD PROFILES

OTAY RIVER

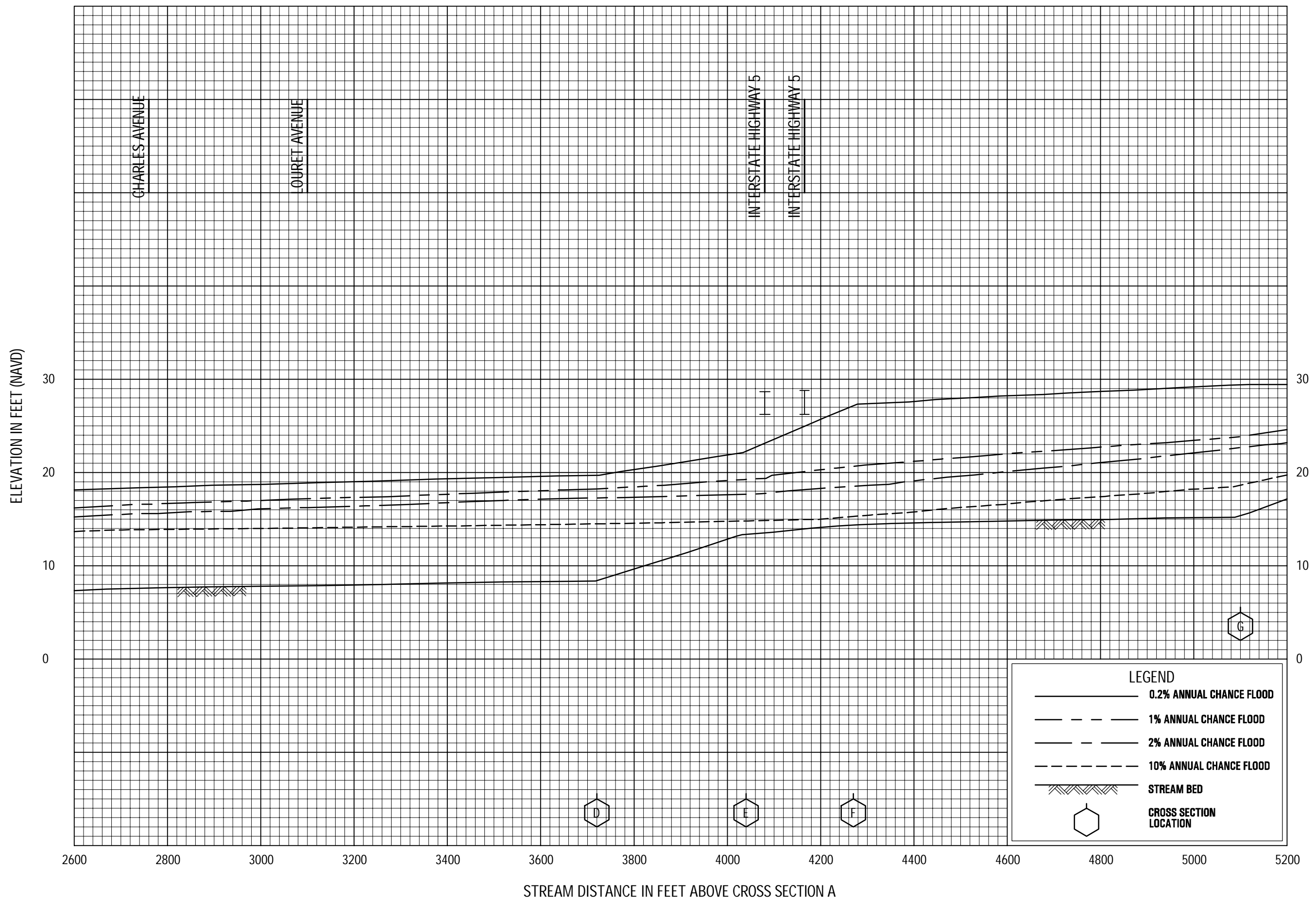
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

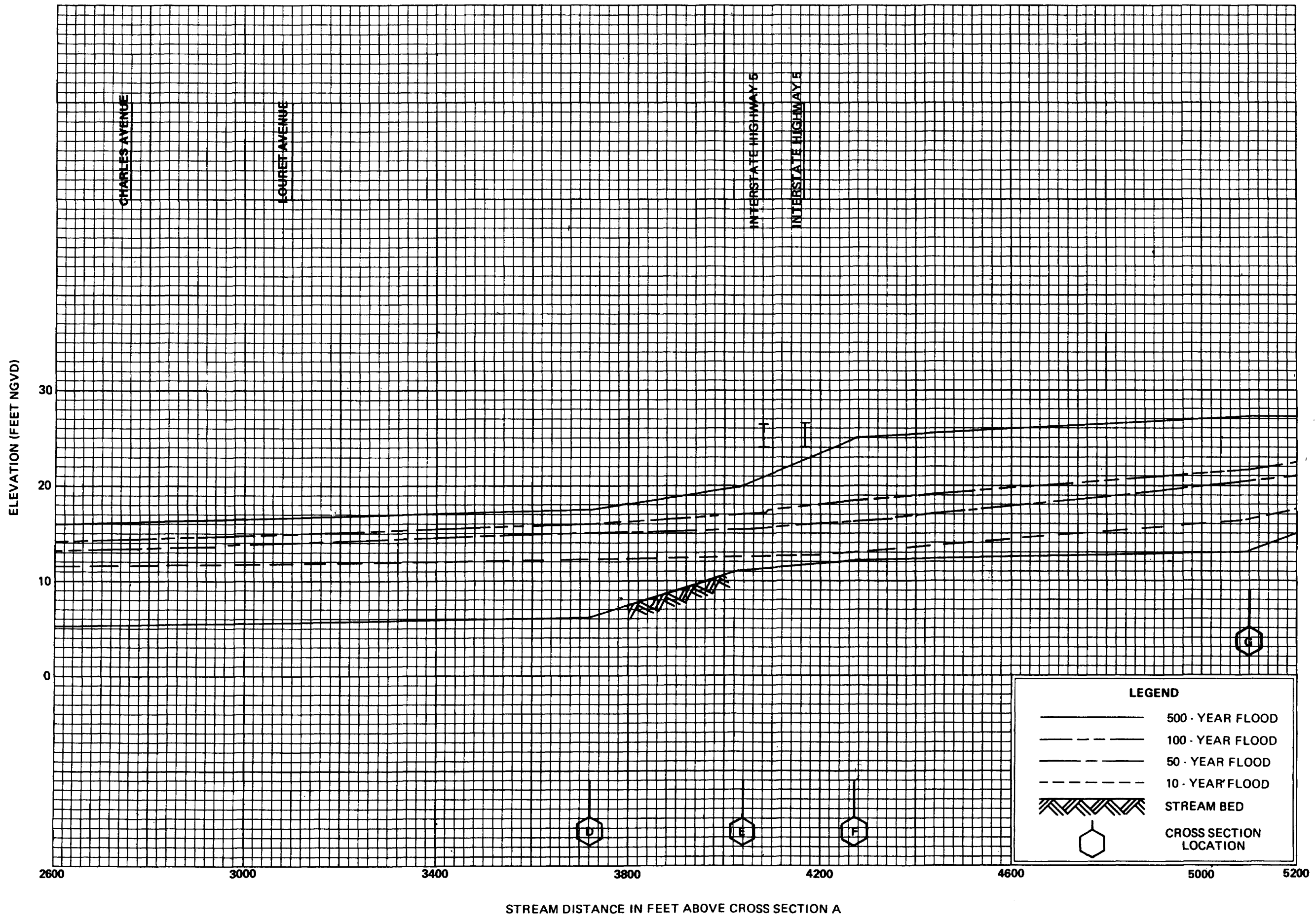
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



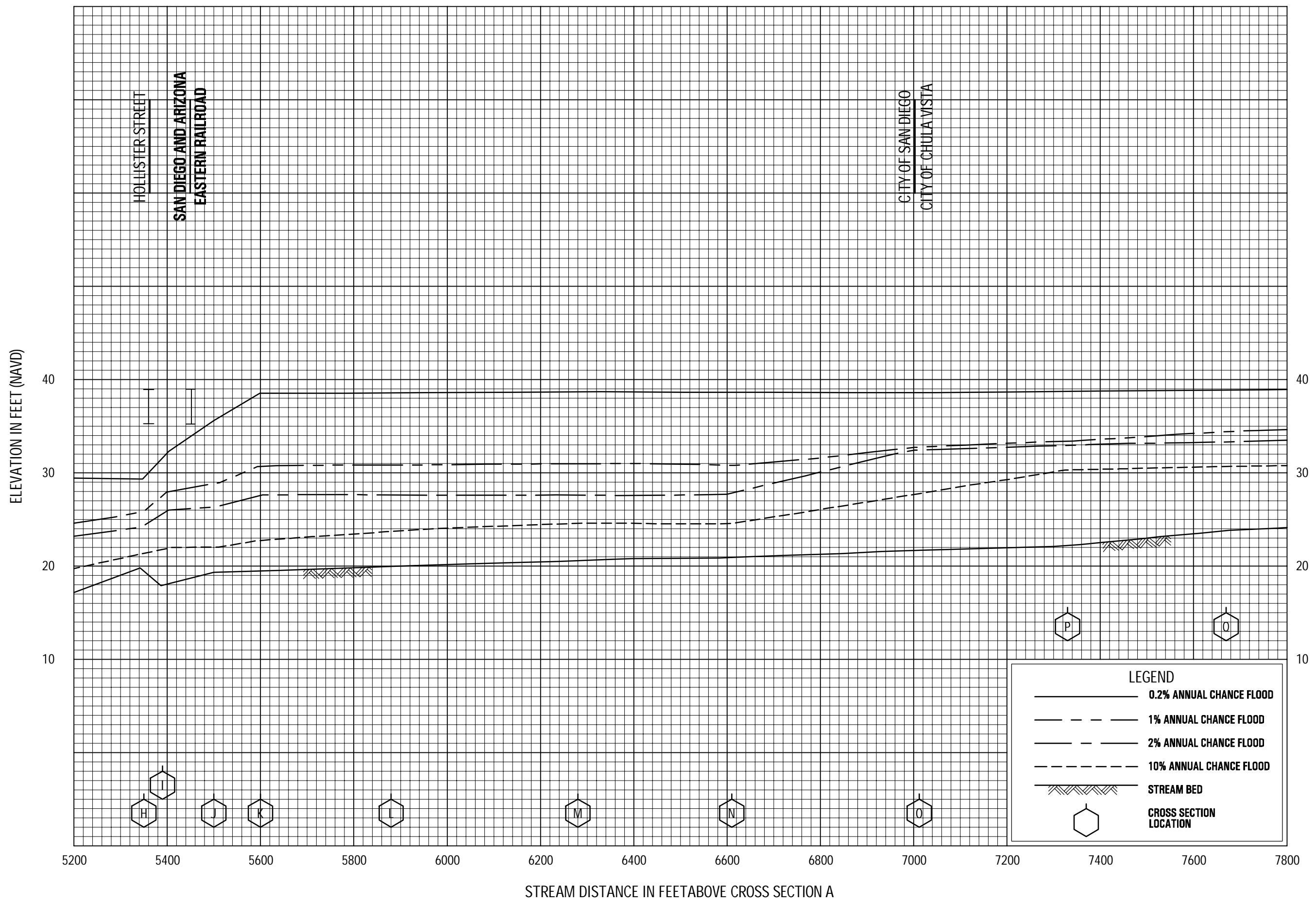
FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

**SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS**

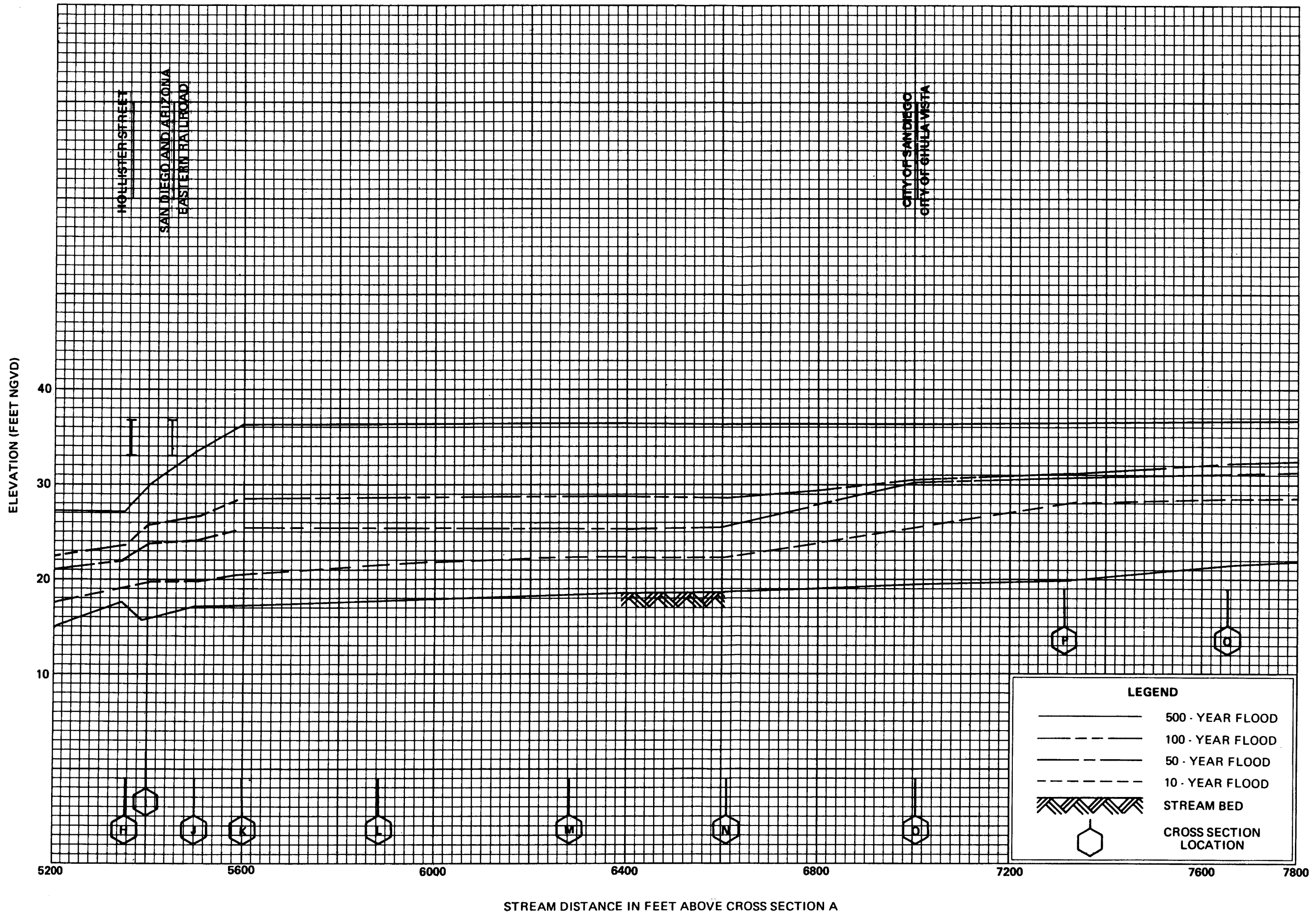
259BP



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

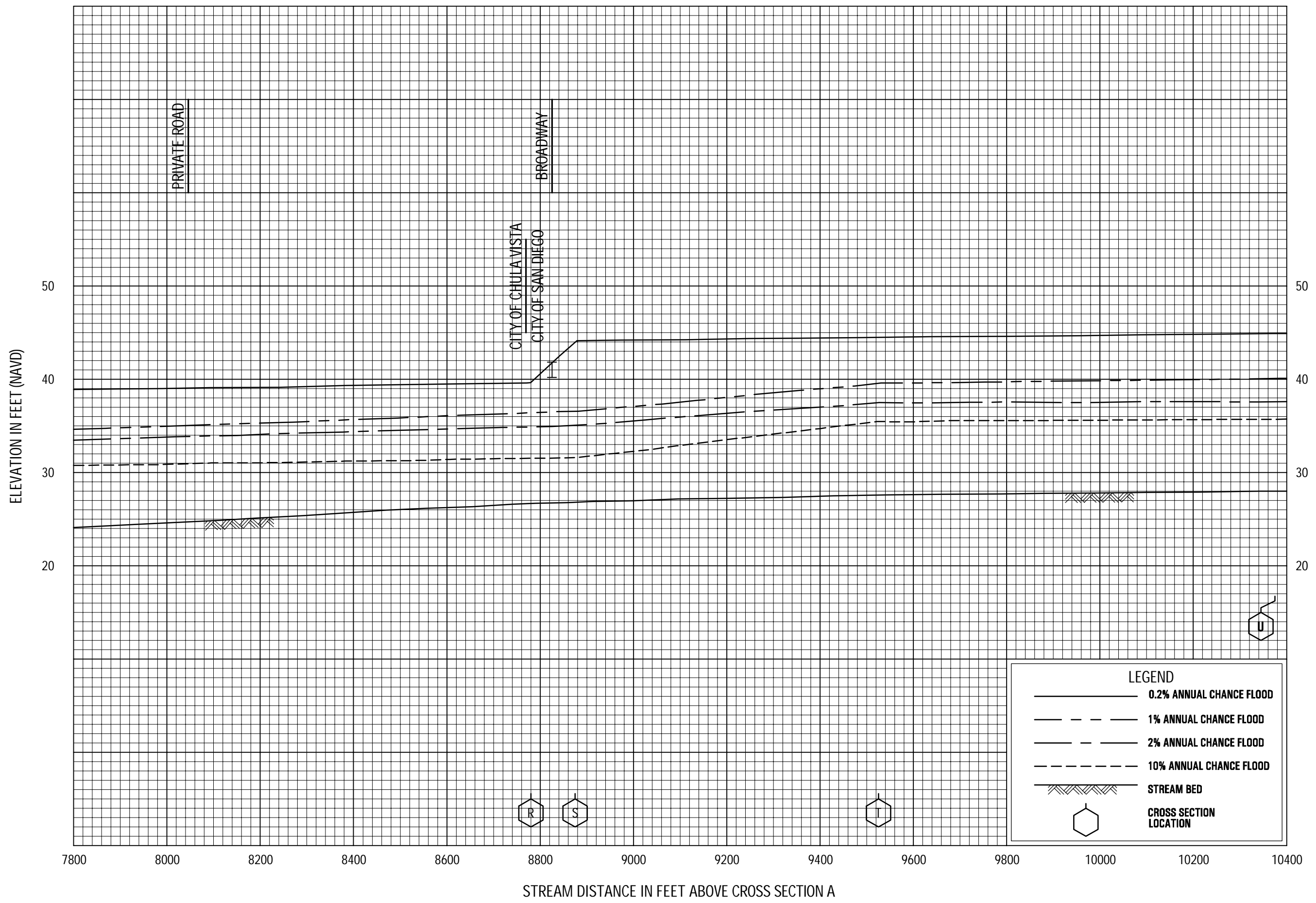


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

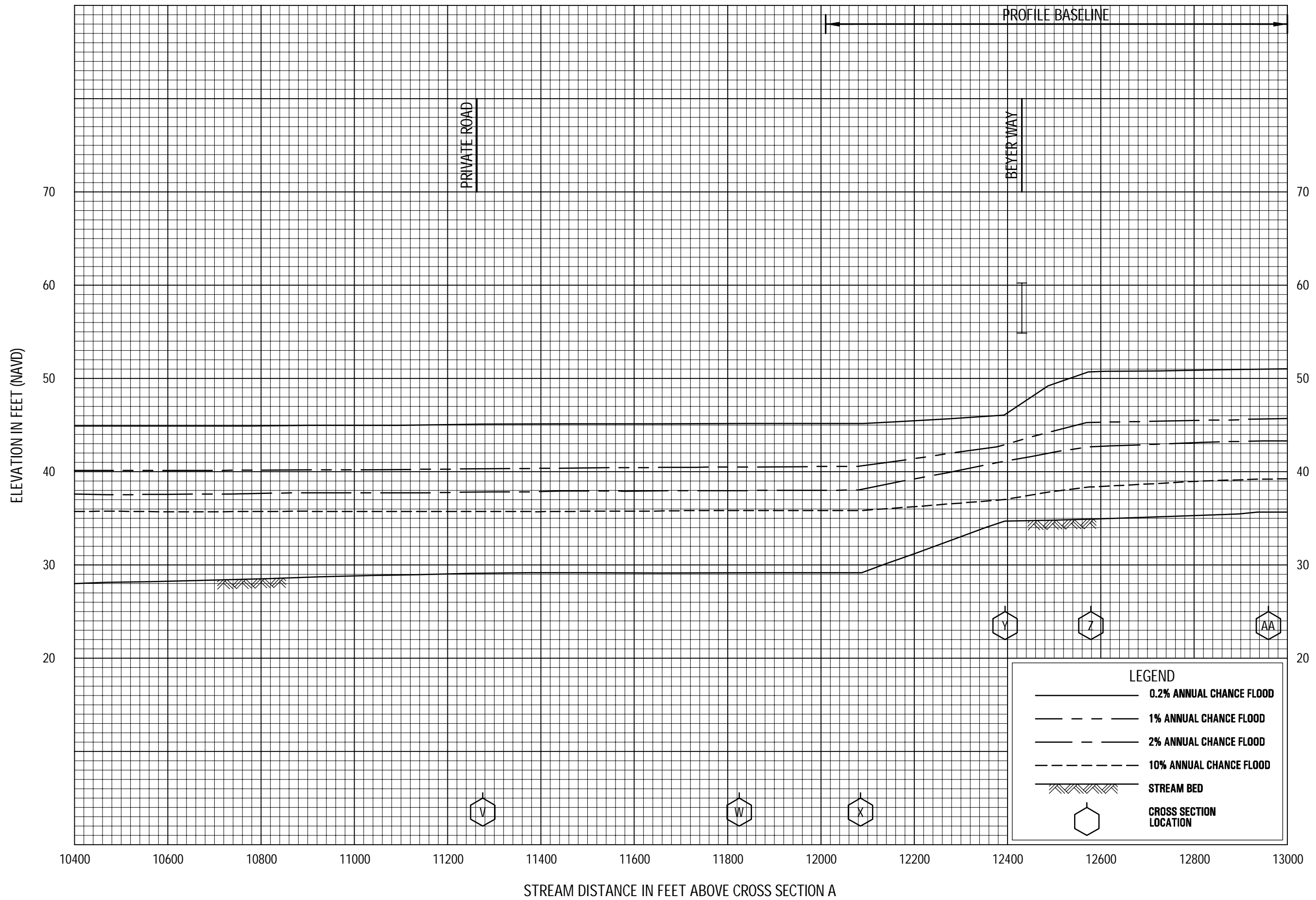
260BP



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

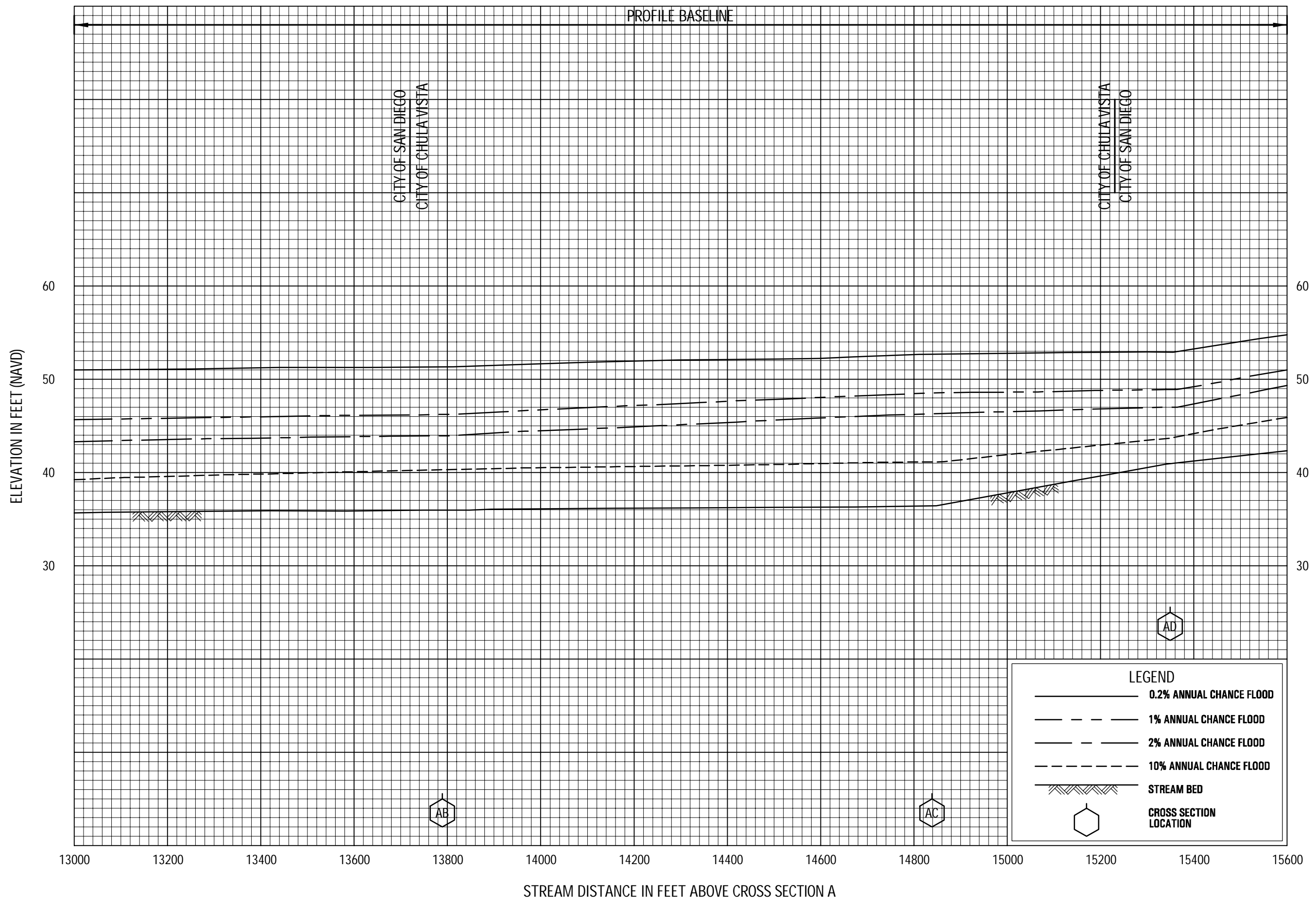


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

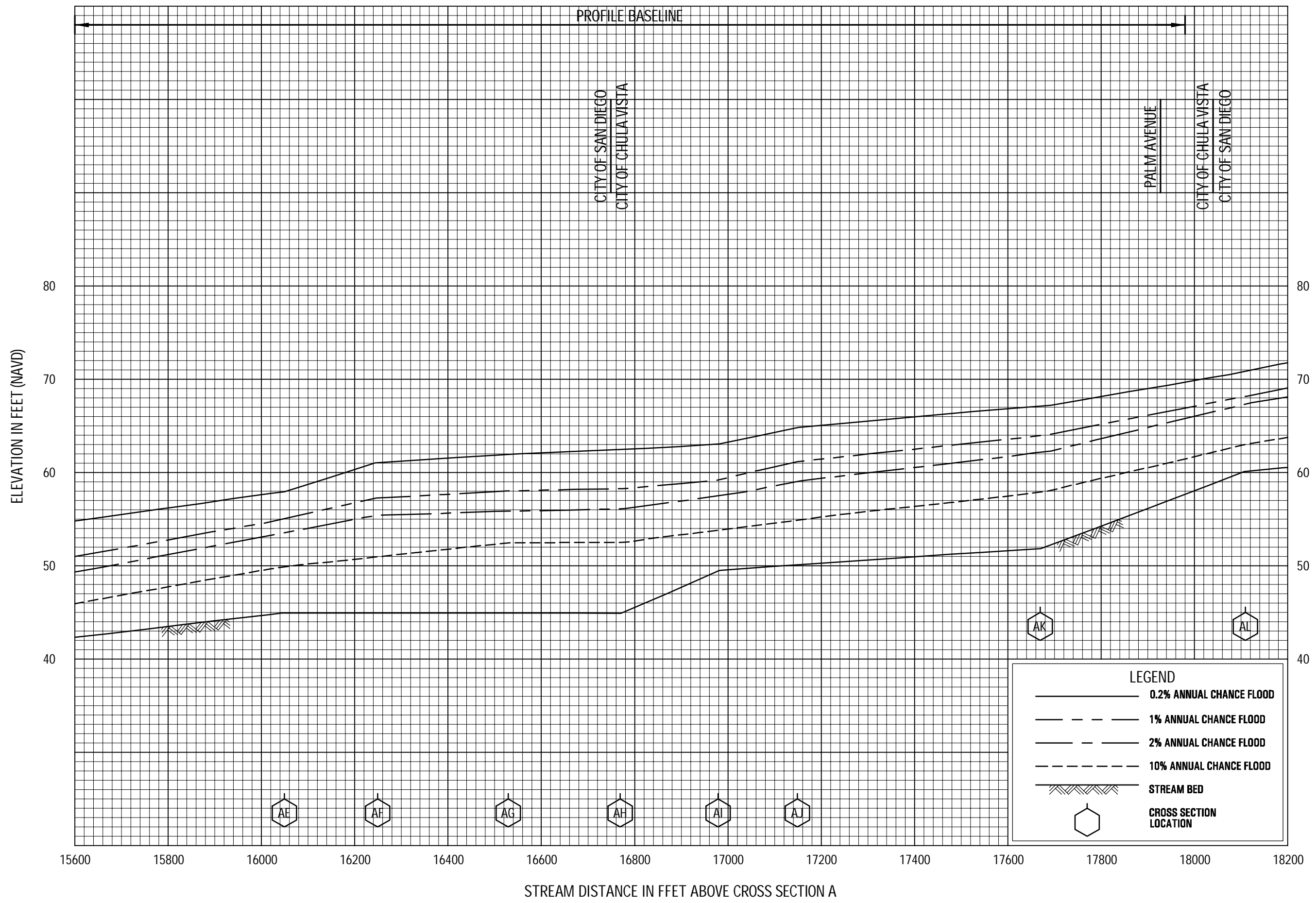
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

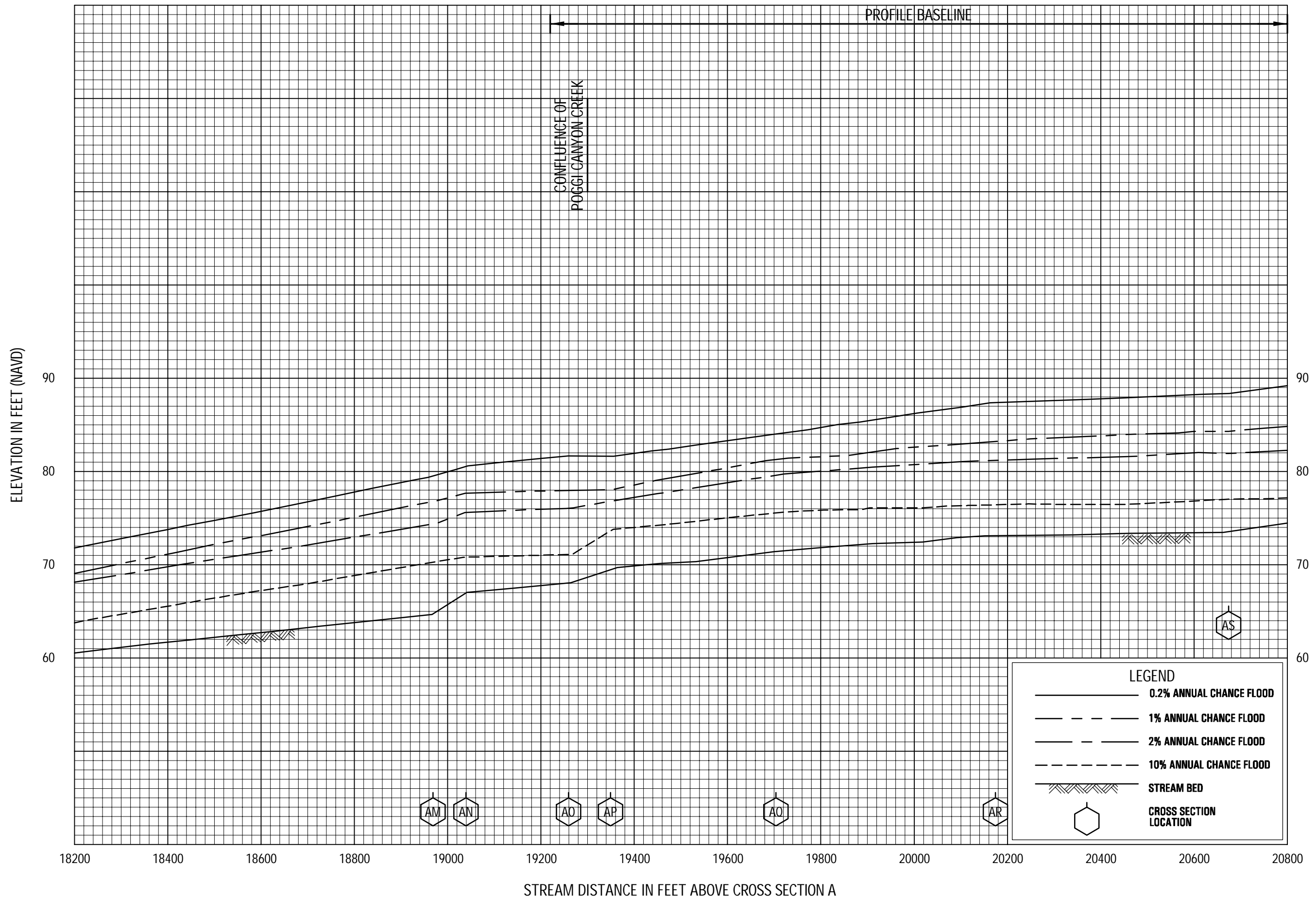
FLOOD PROFILES

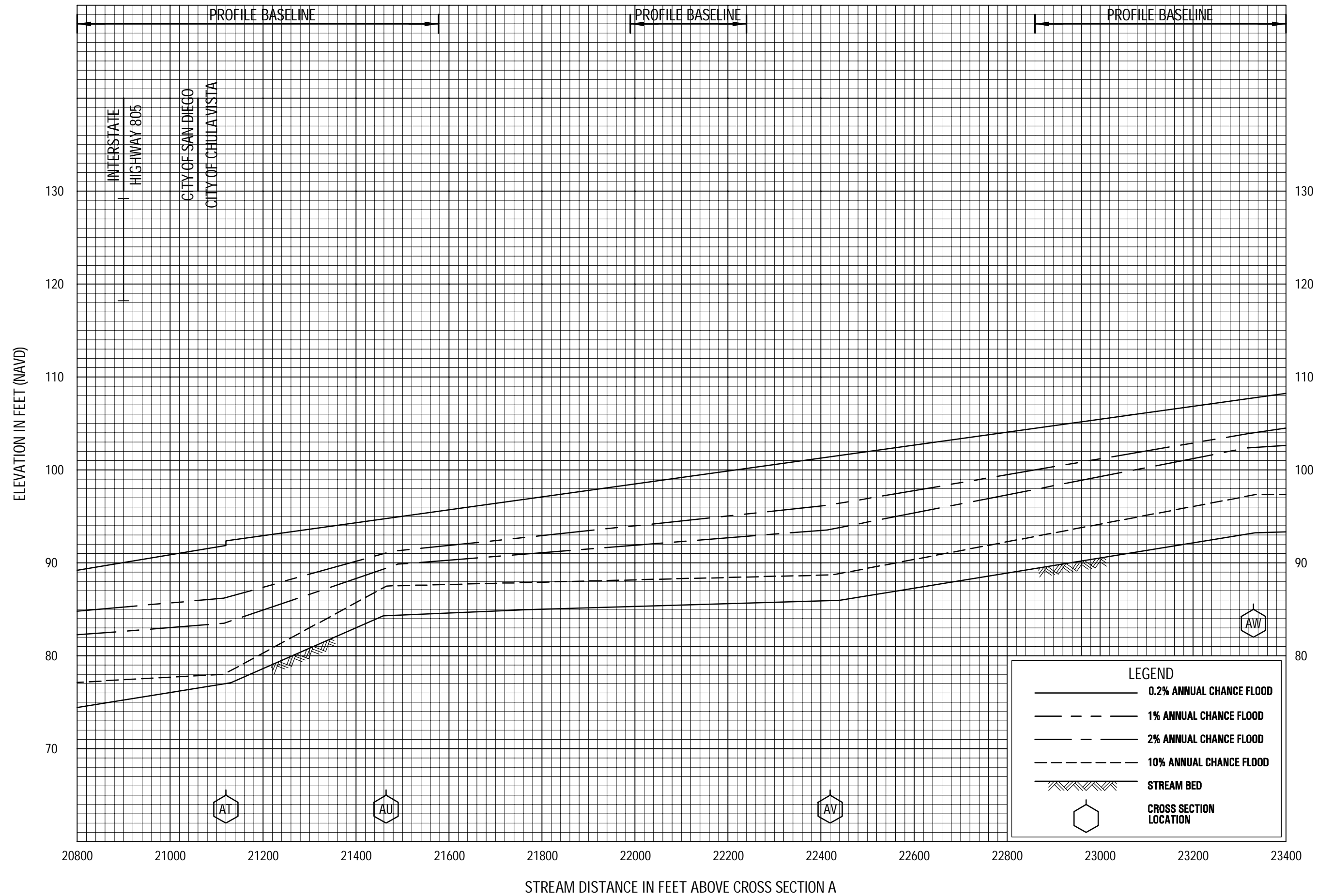
OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

265P





FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

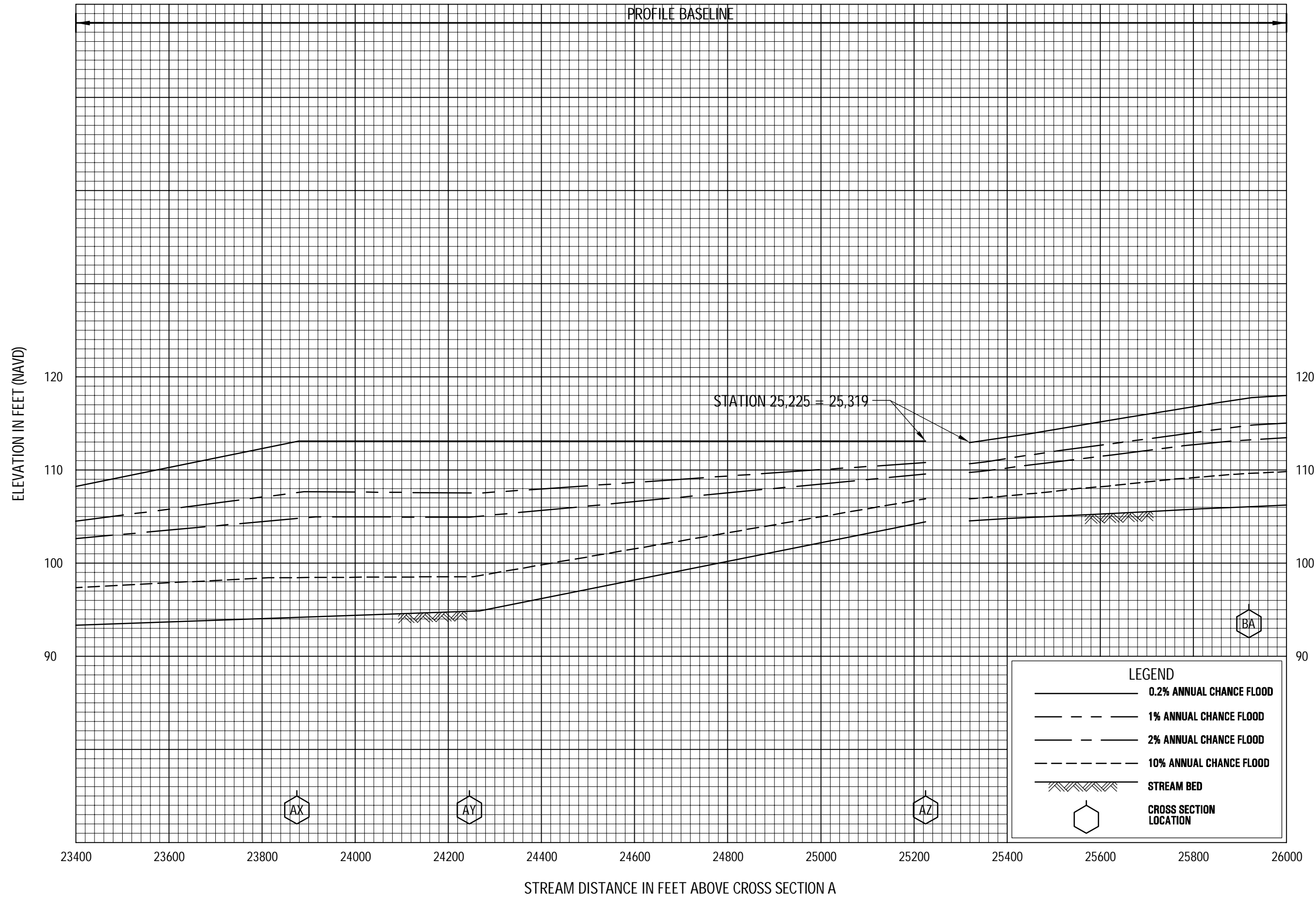
FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

267P



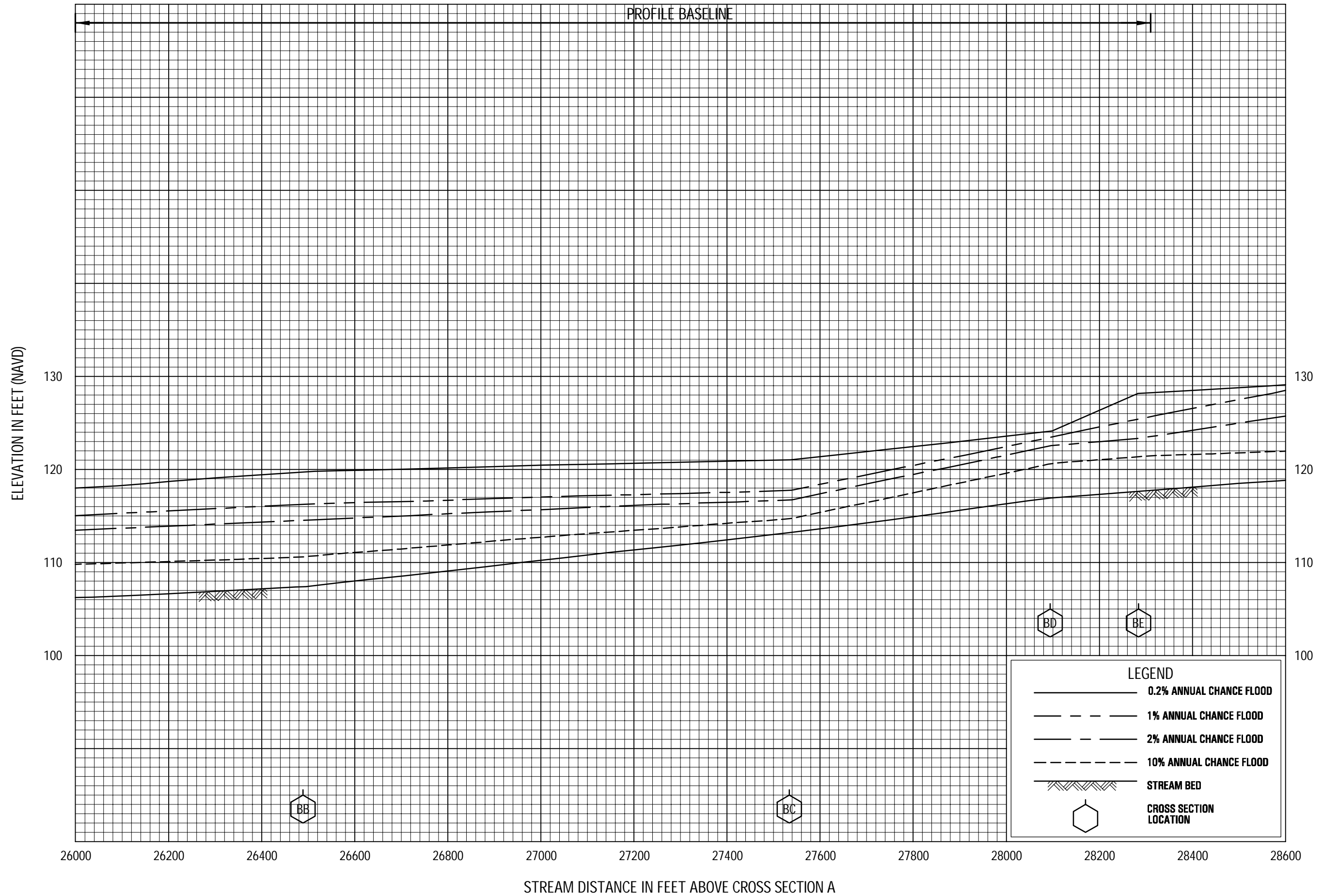
FLOOD PROFILES

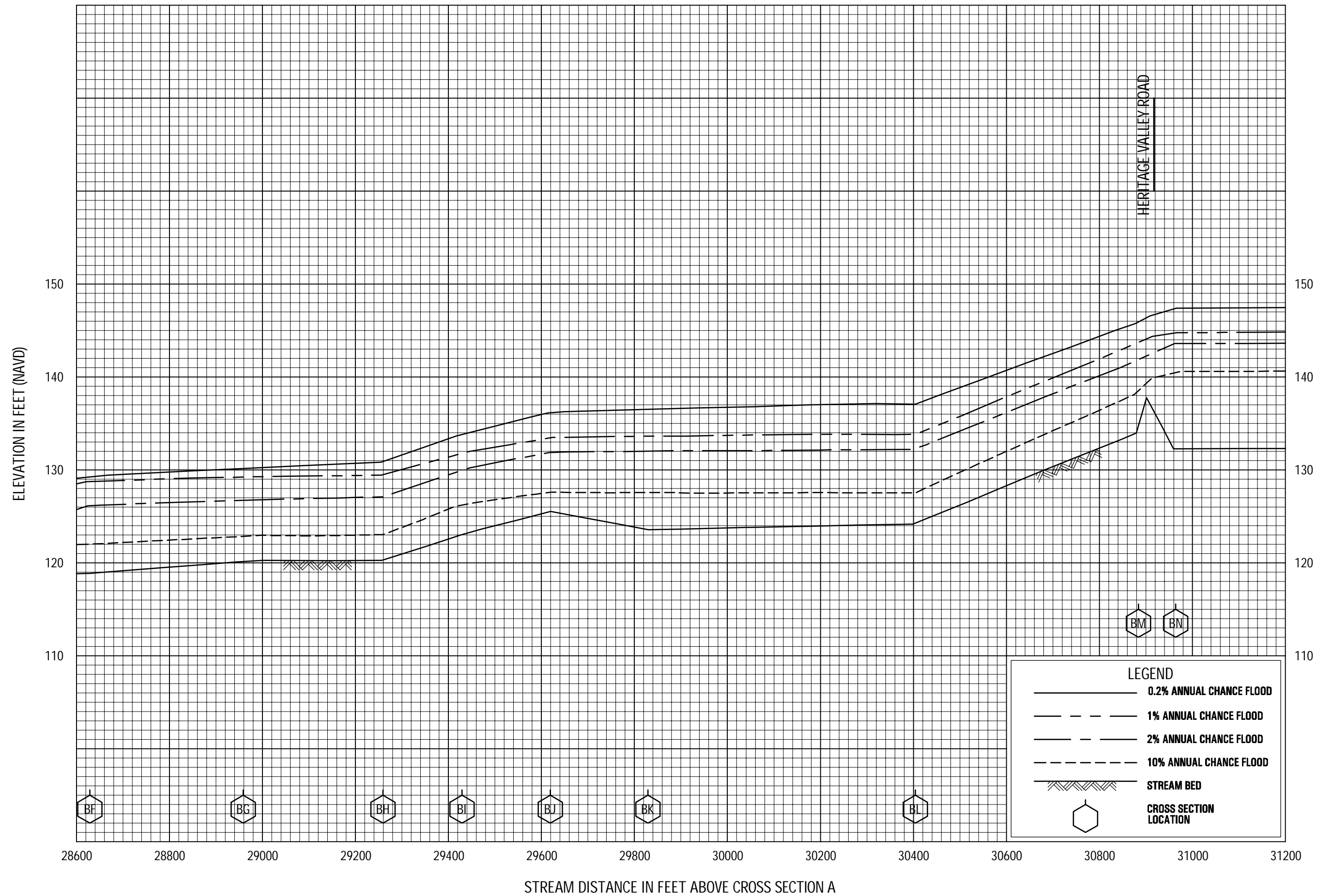
OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

268P

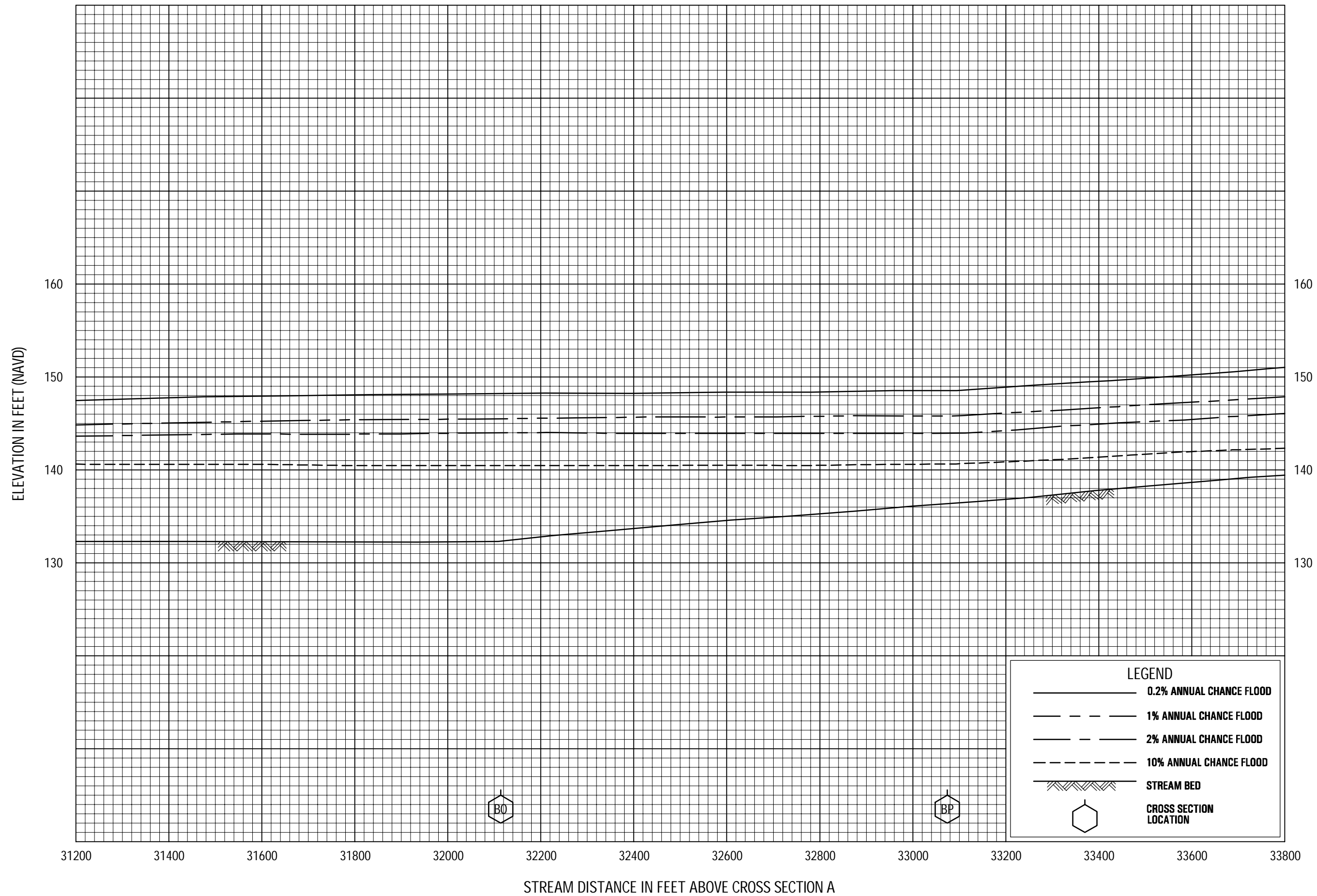




FLOOD PROFILES

OTAY RIVER

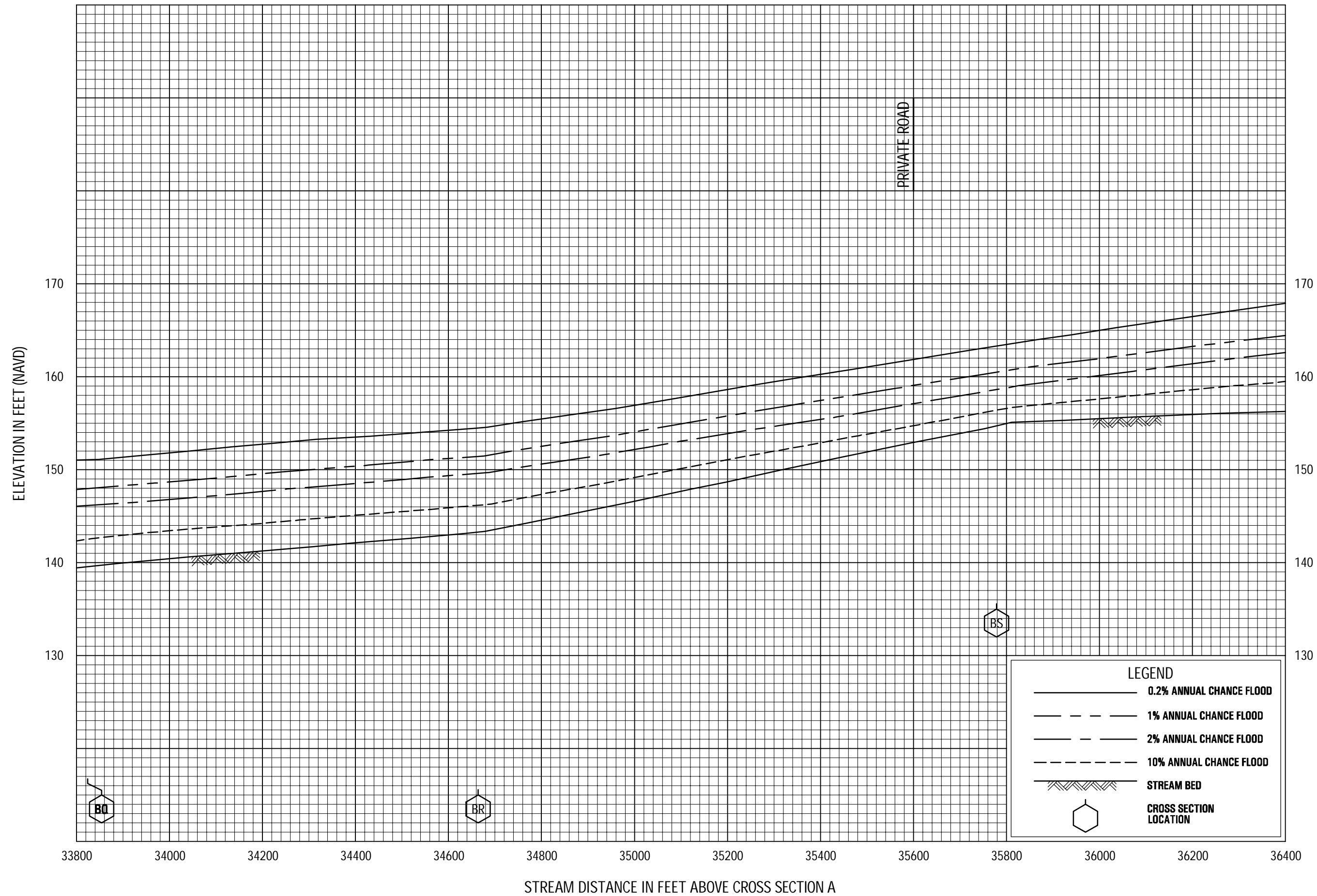
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

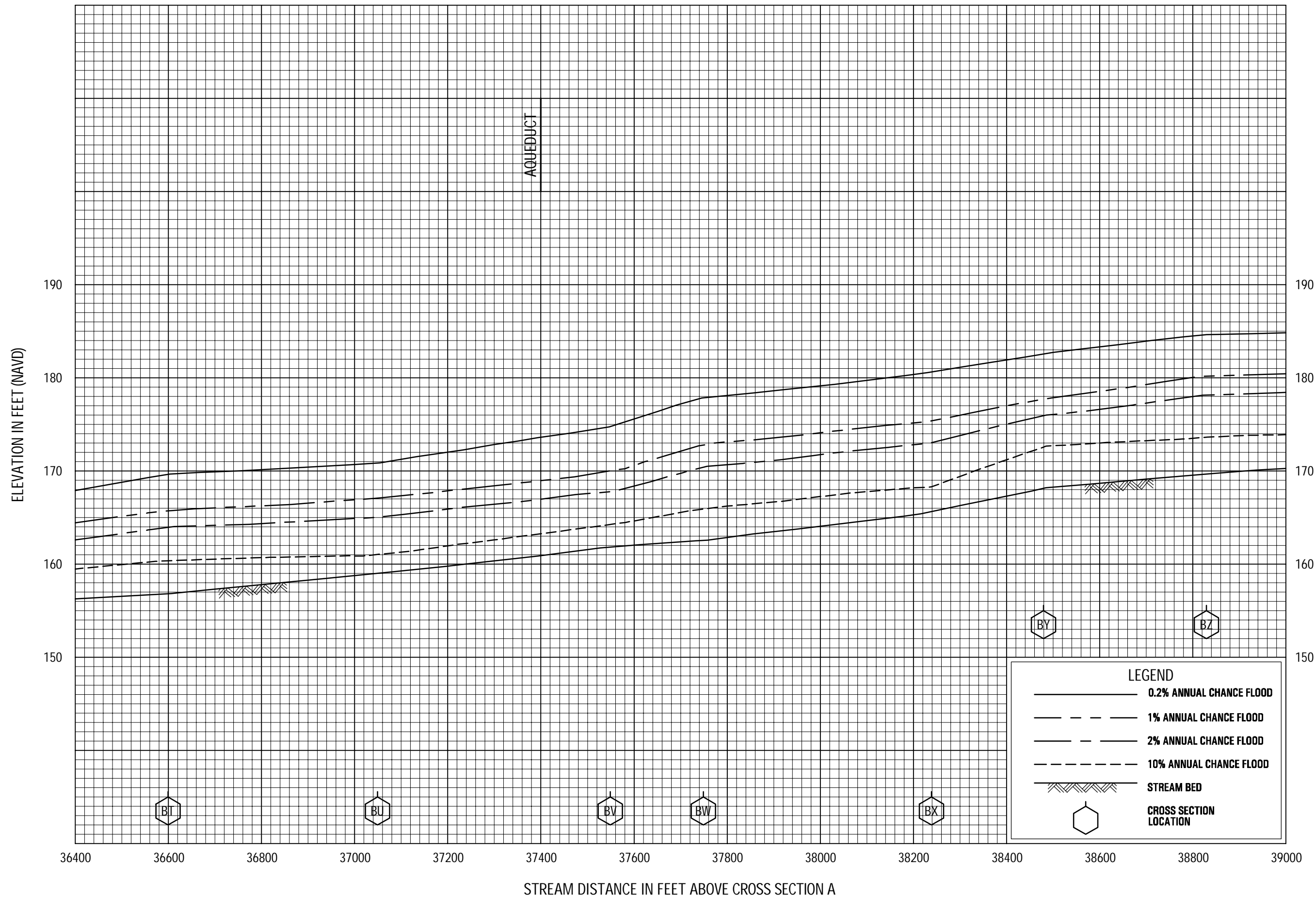


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

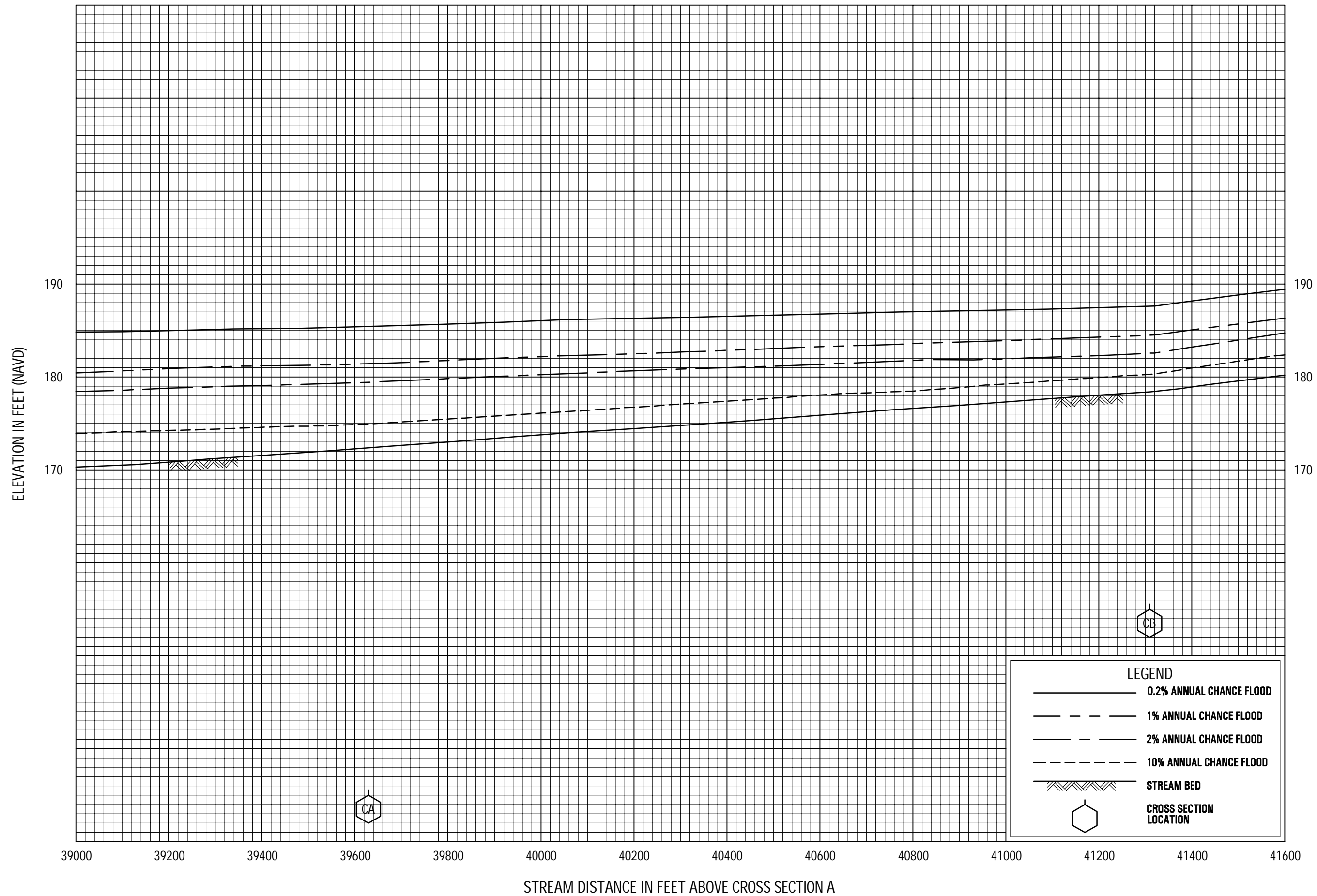


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

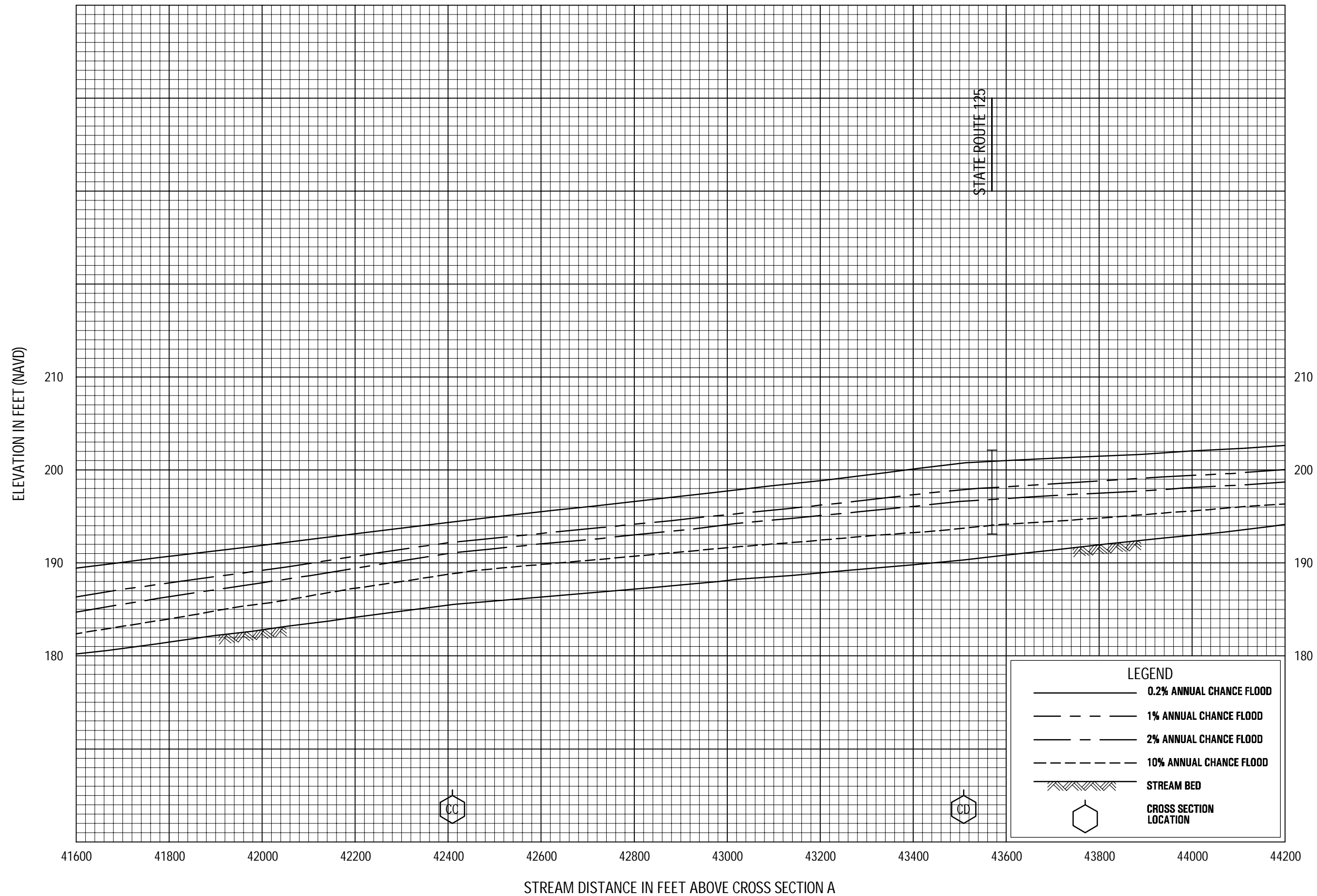


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

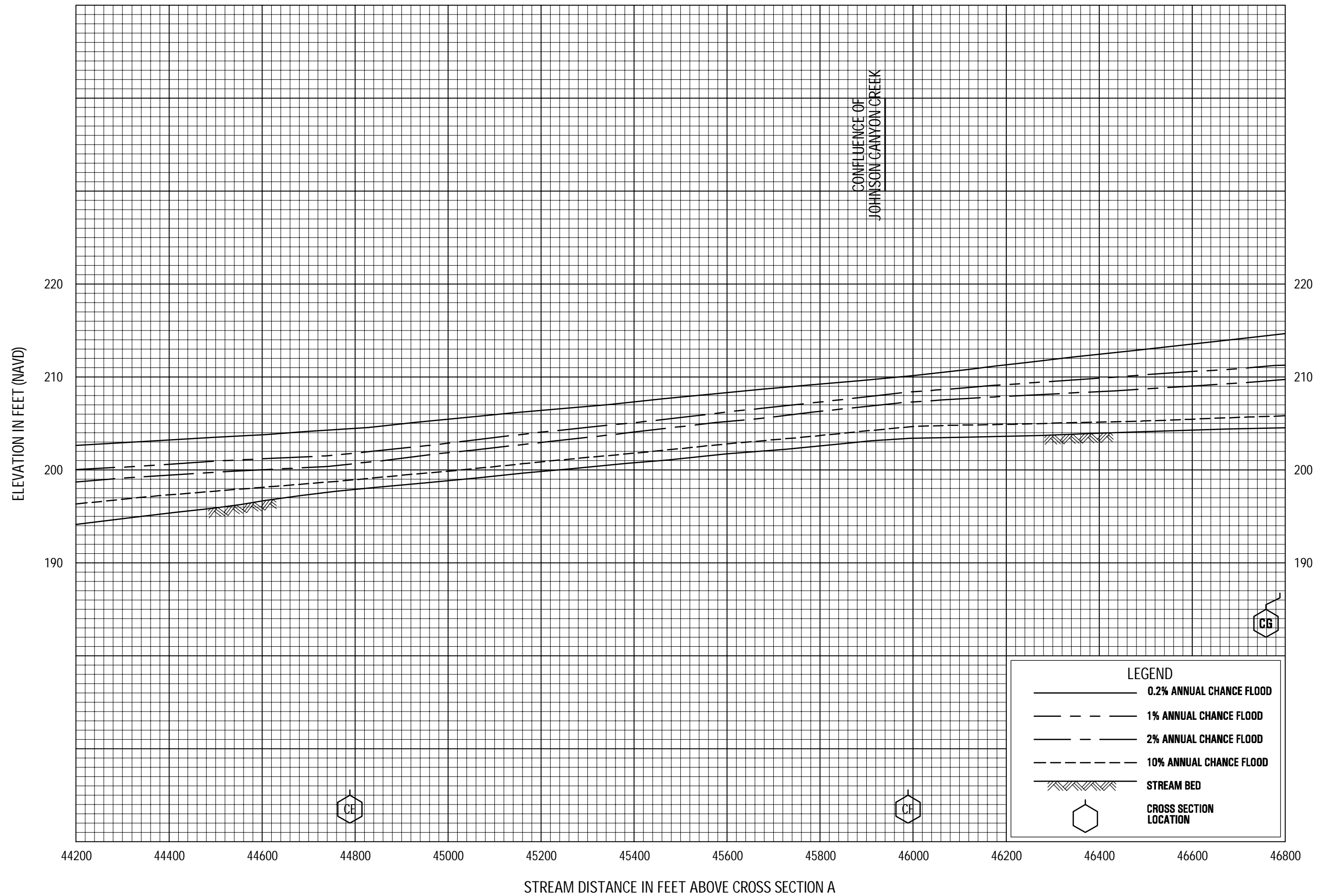
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

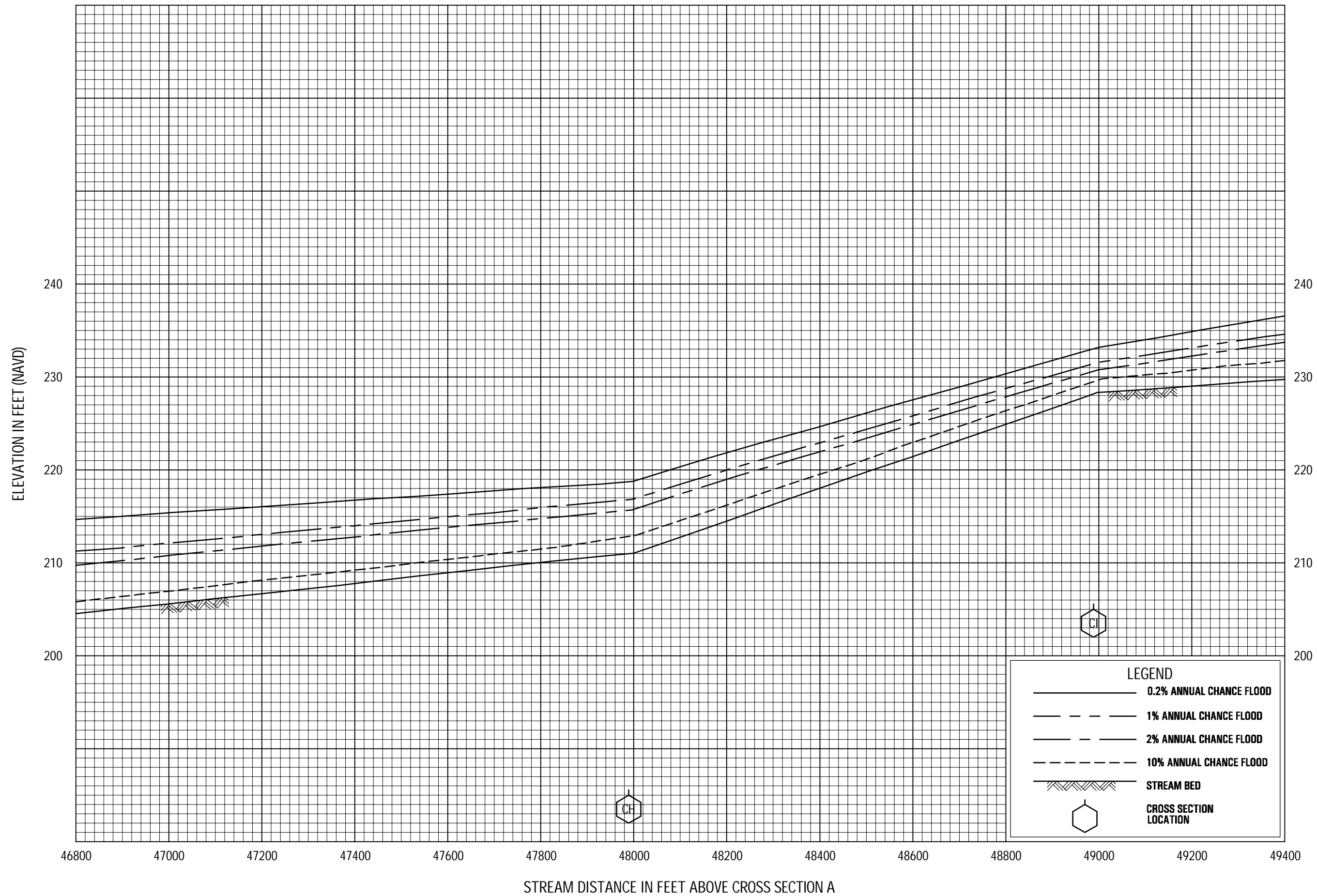
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

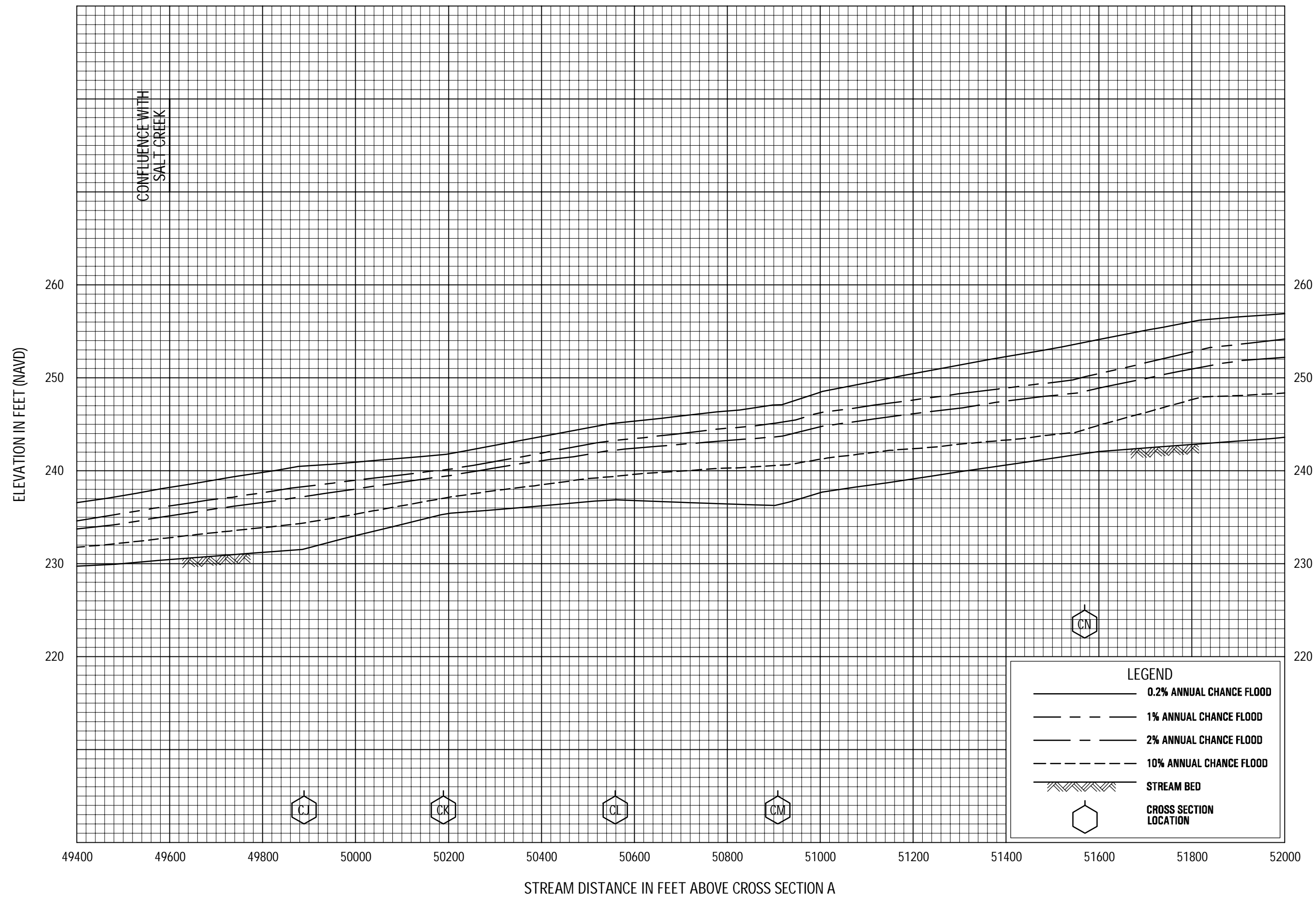
OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES
OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

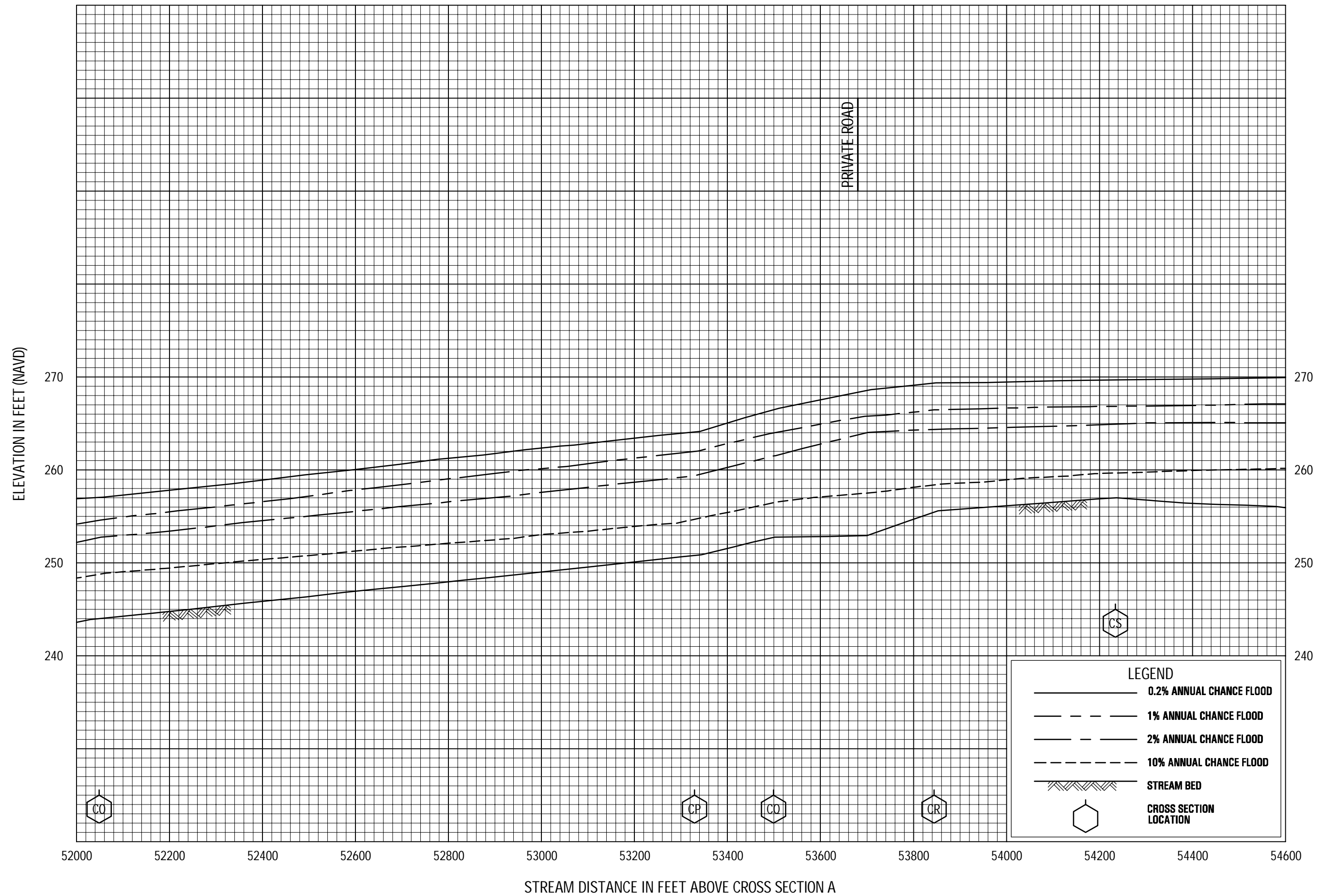
FLOOD PROFILES

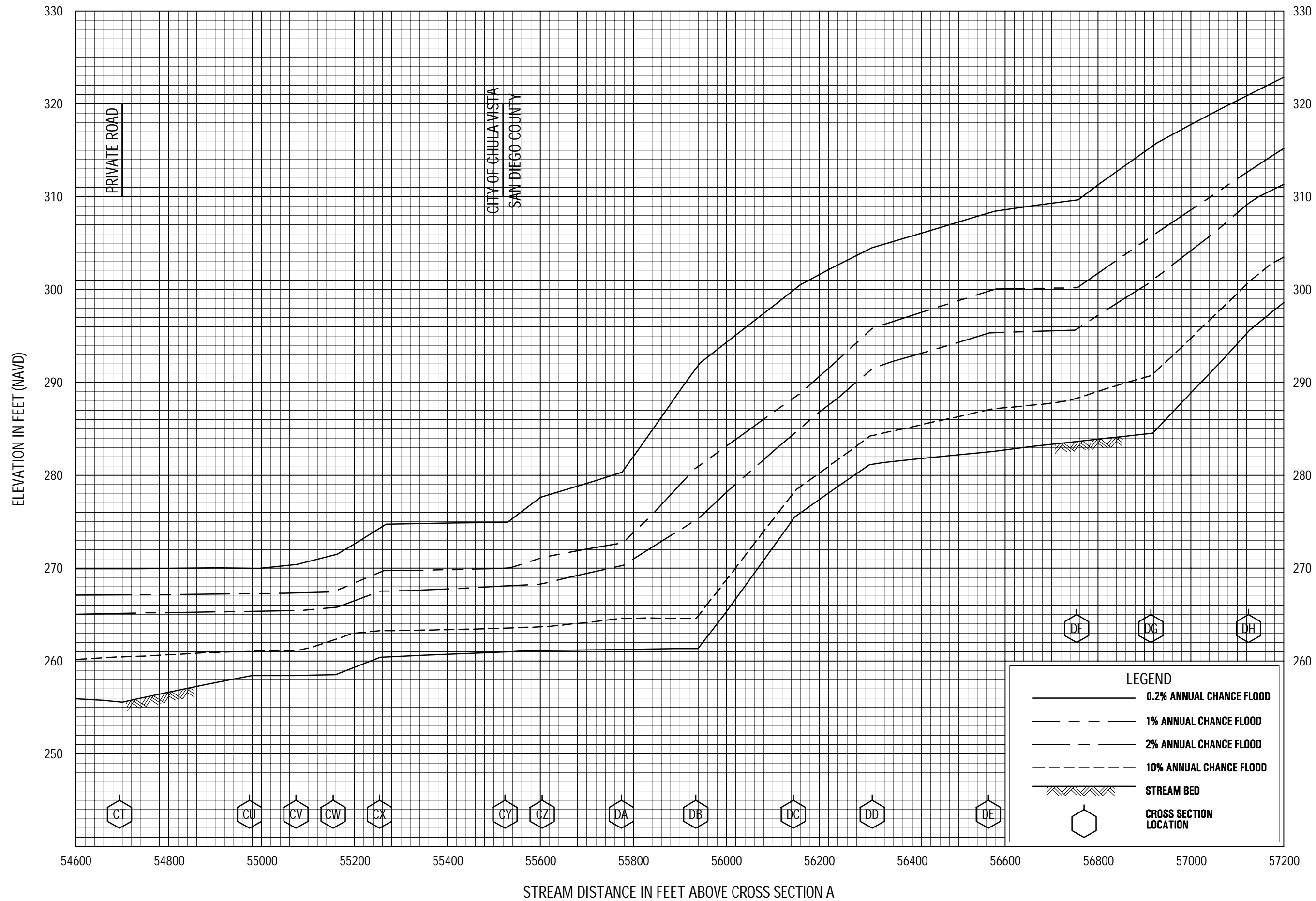
OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

278P

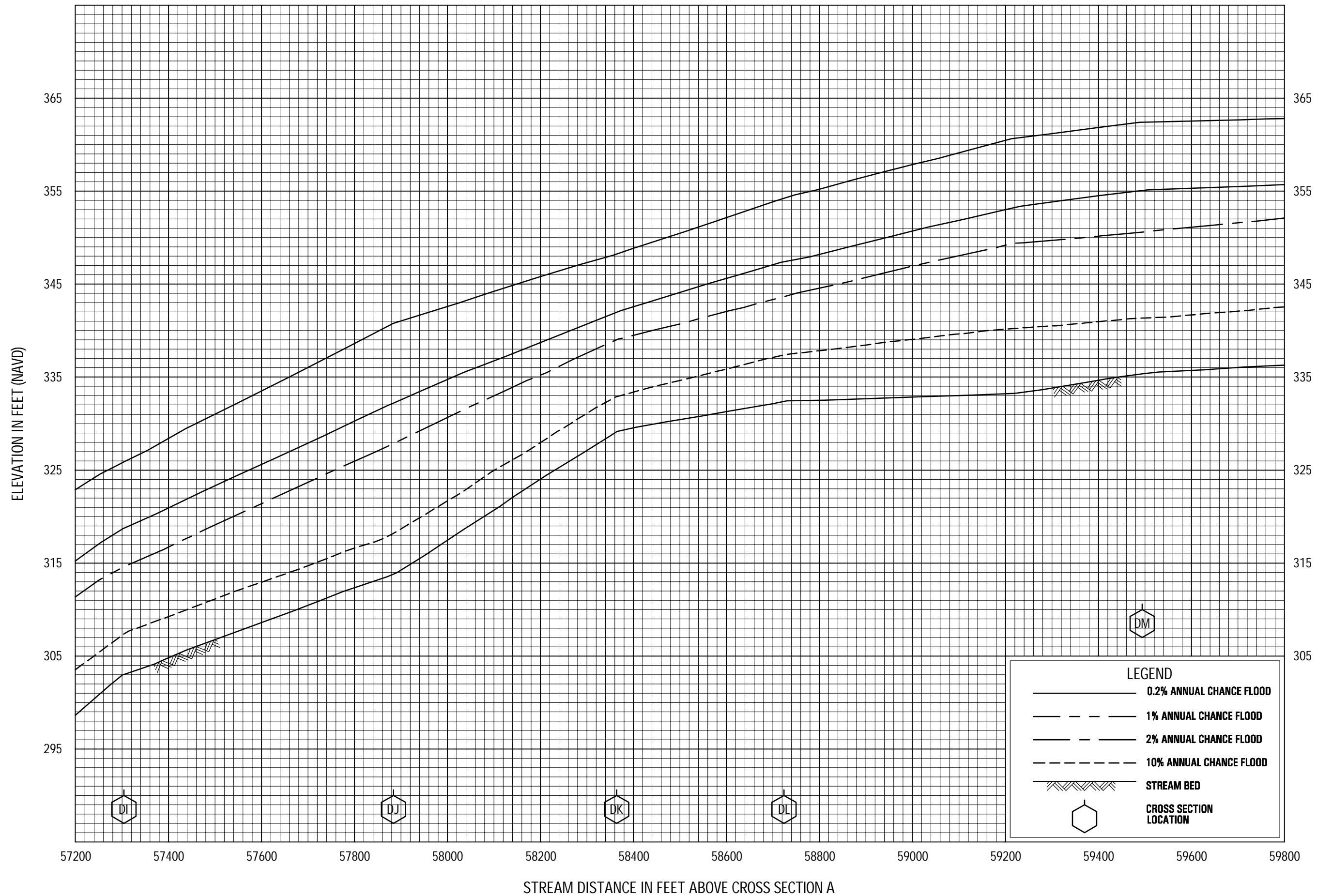




FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

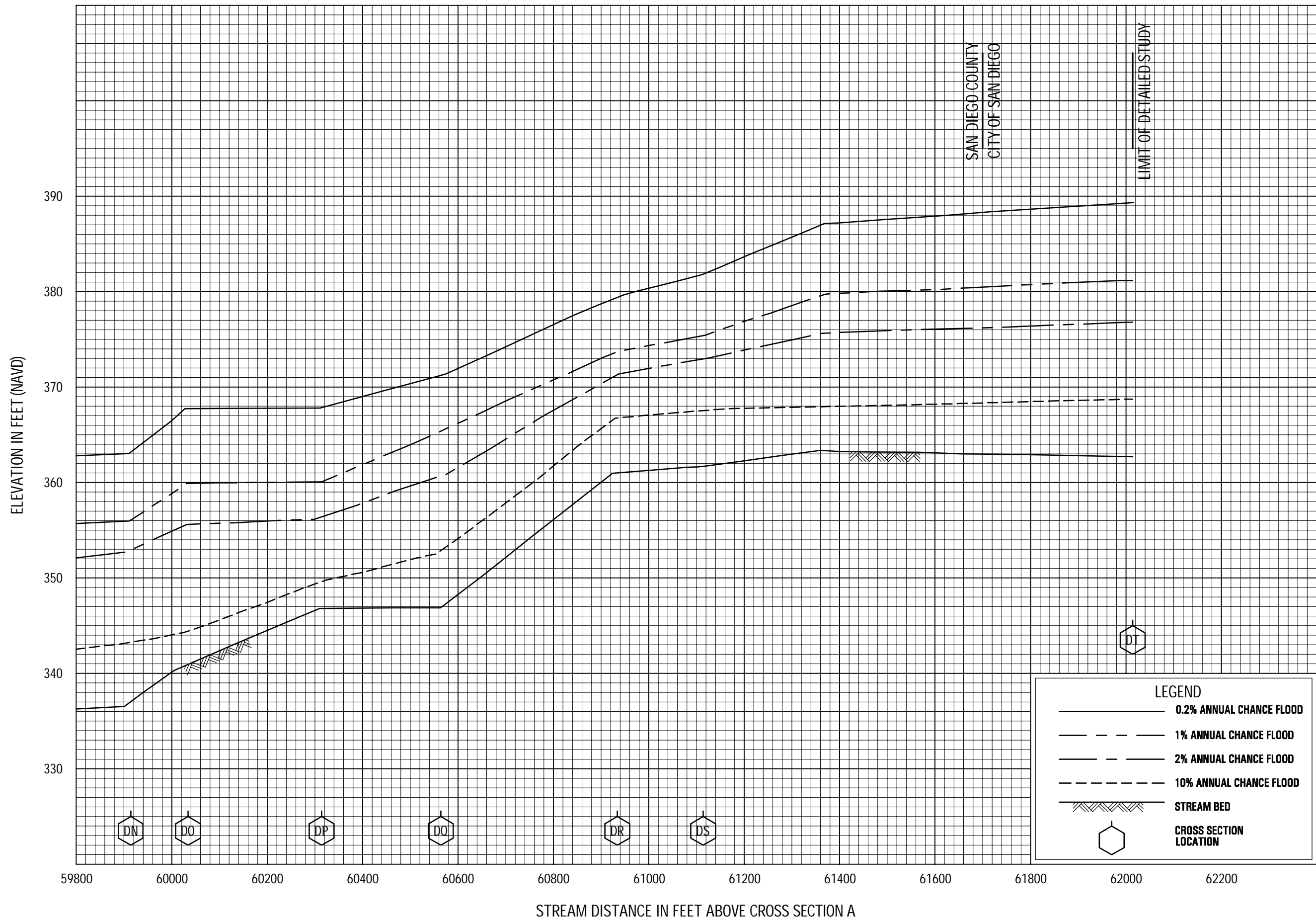


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

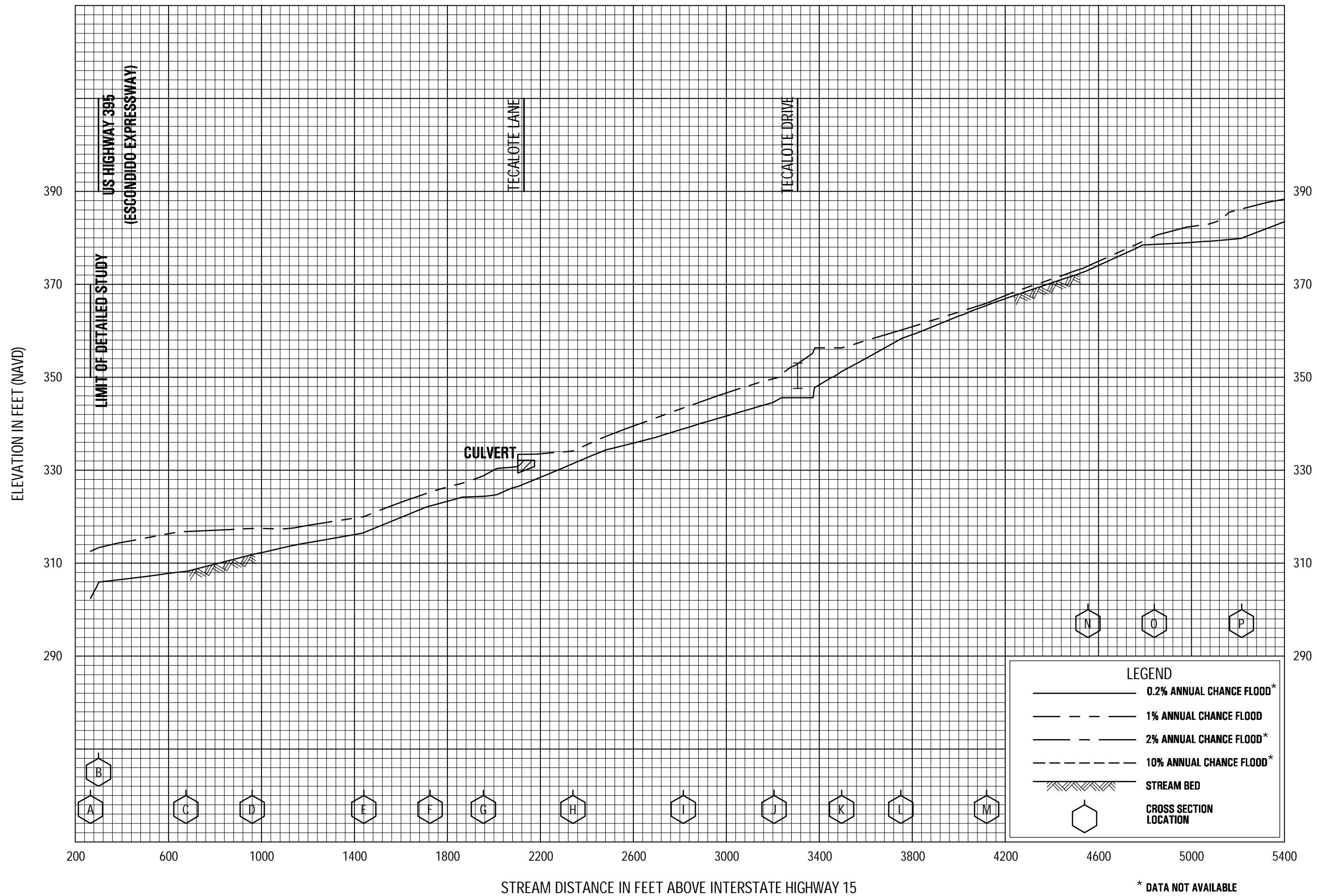


FLOOD PROFILES

OTAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

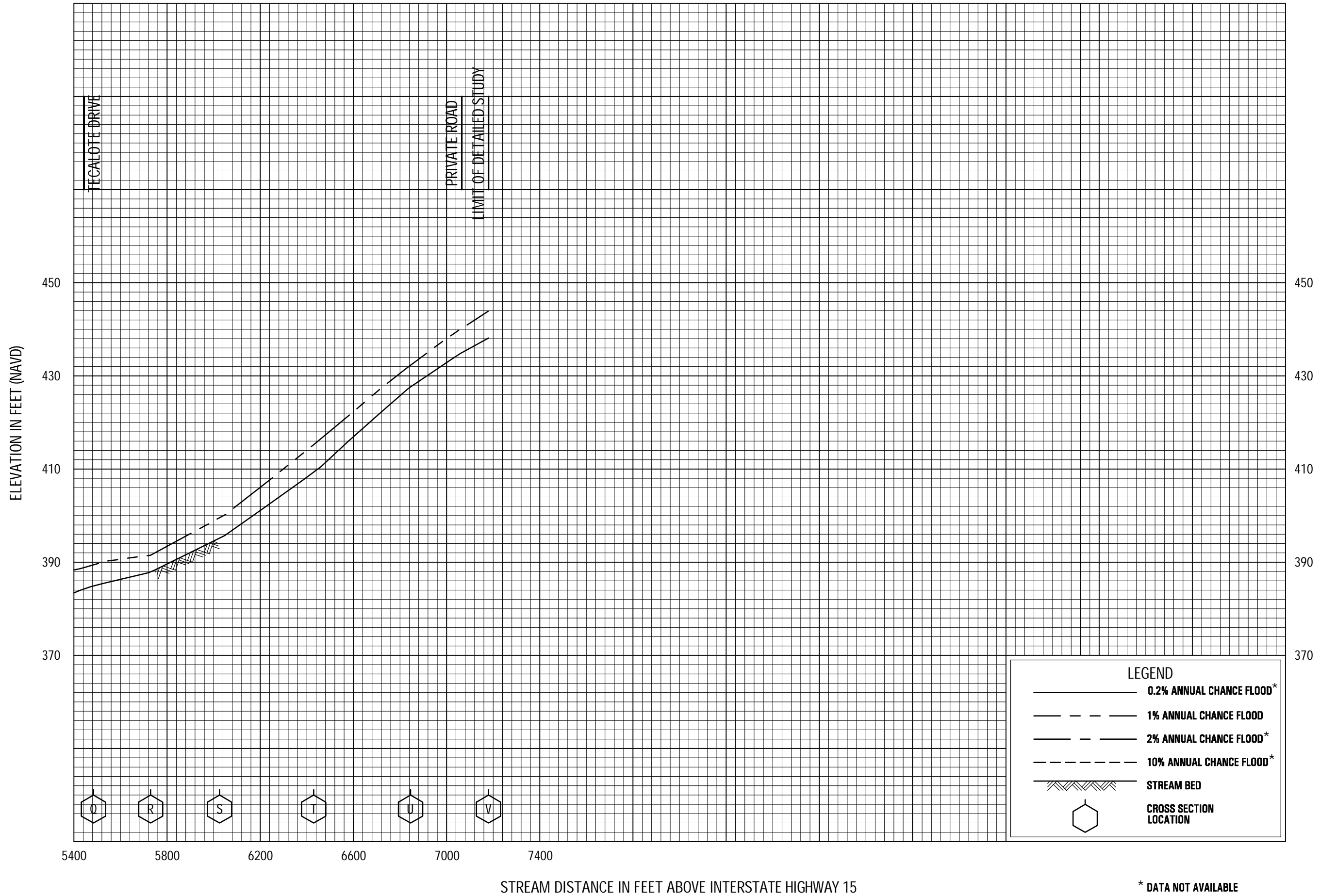


FLOOD PROFILES

PALA MESA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

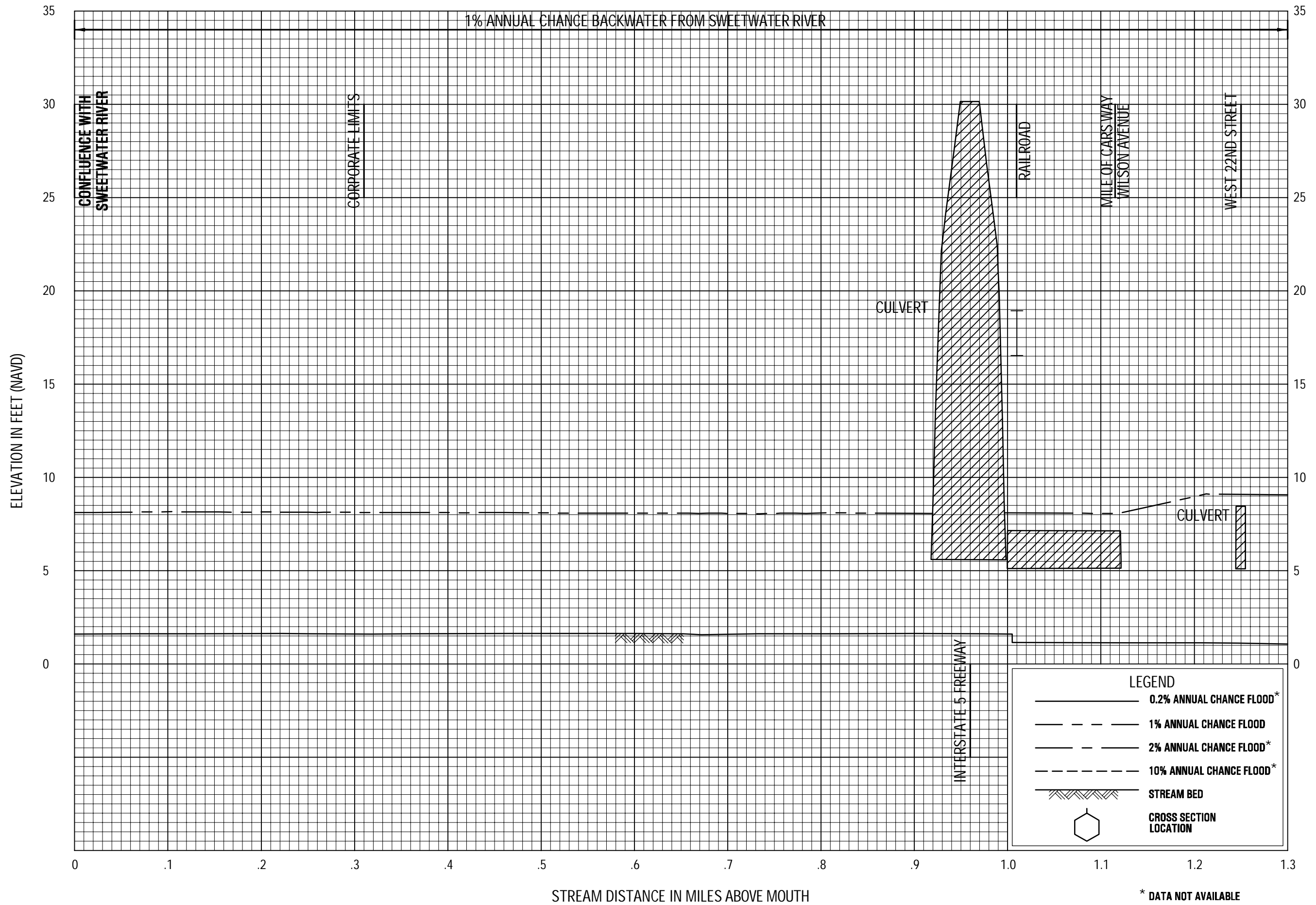


* DATA NOT AVAILABLE

FLOOD PROFILES

PALA MESA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

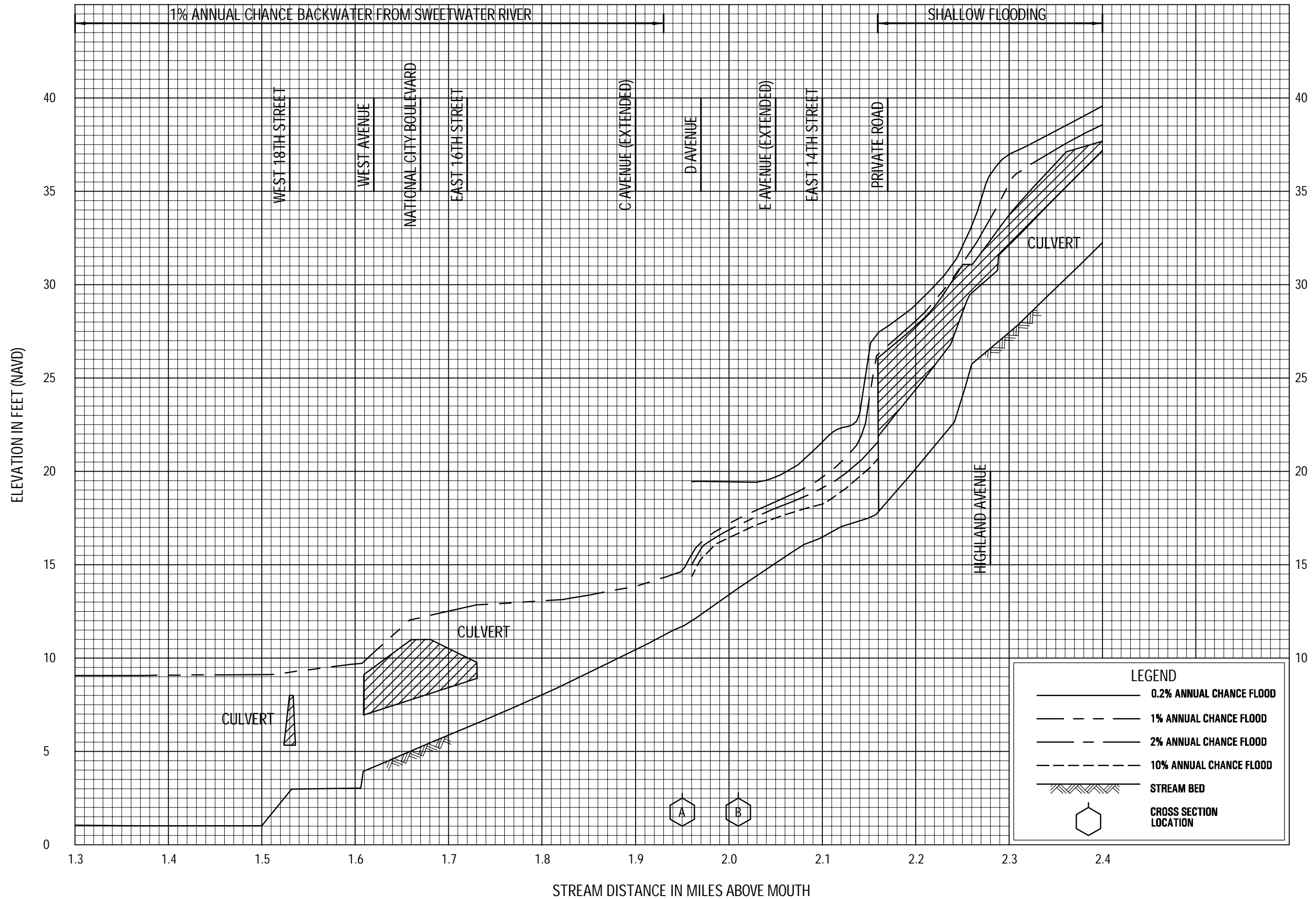


FLOOD PROFILES

PARADISE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

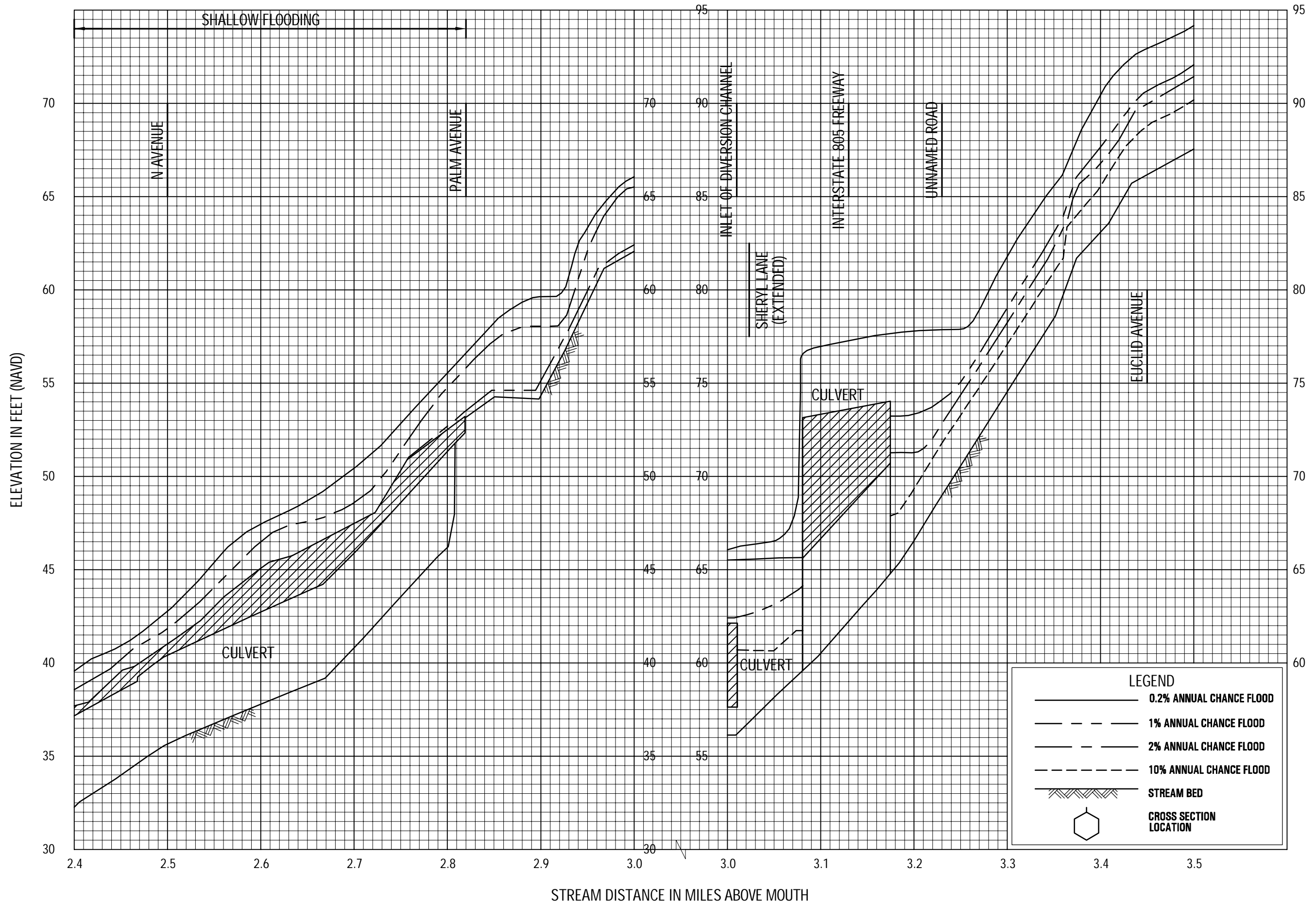
* DATA NOT AVAILABLE



FLOOD PROFILES

PARADISE CREEK

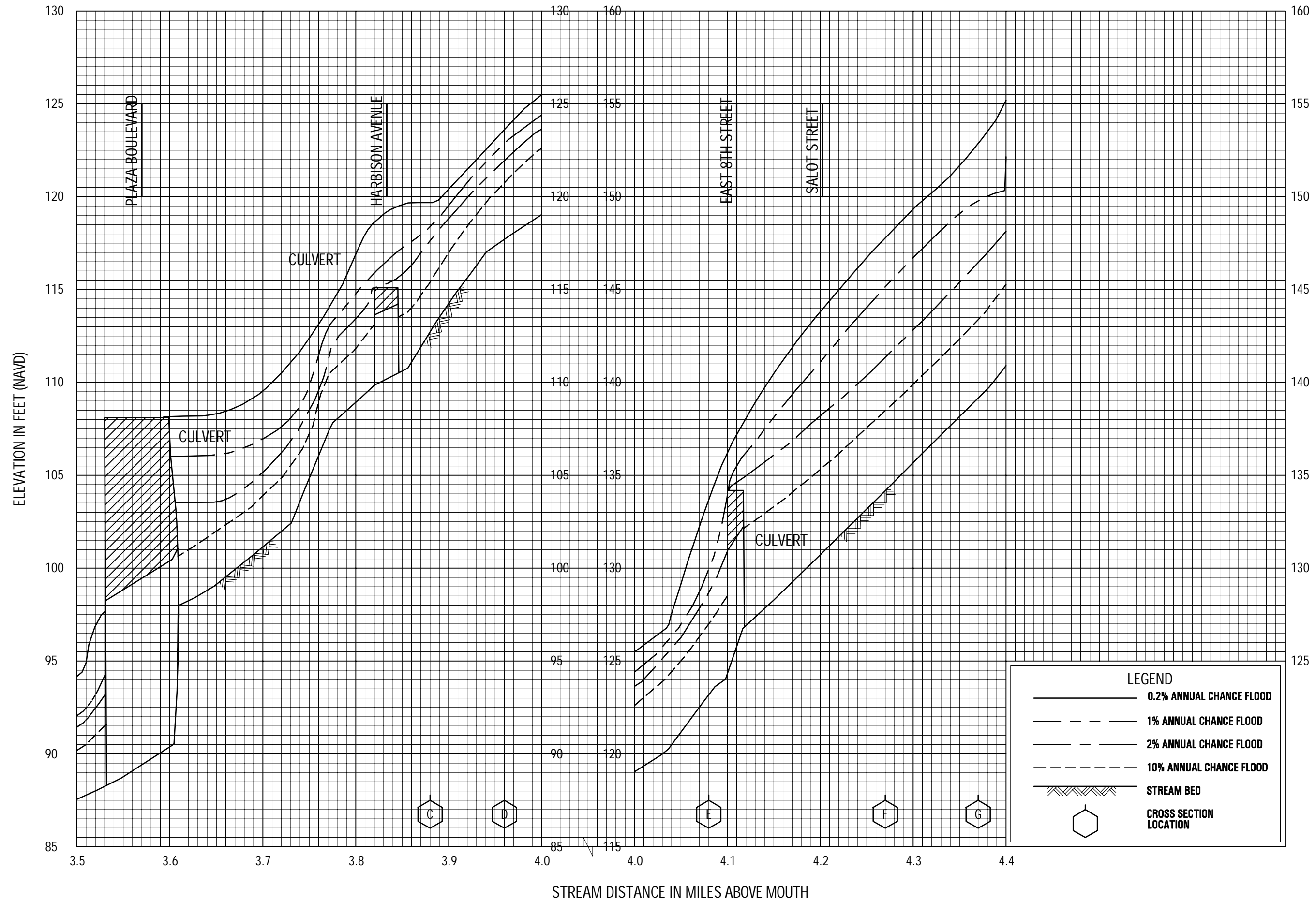
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

PARADISE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

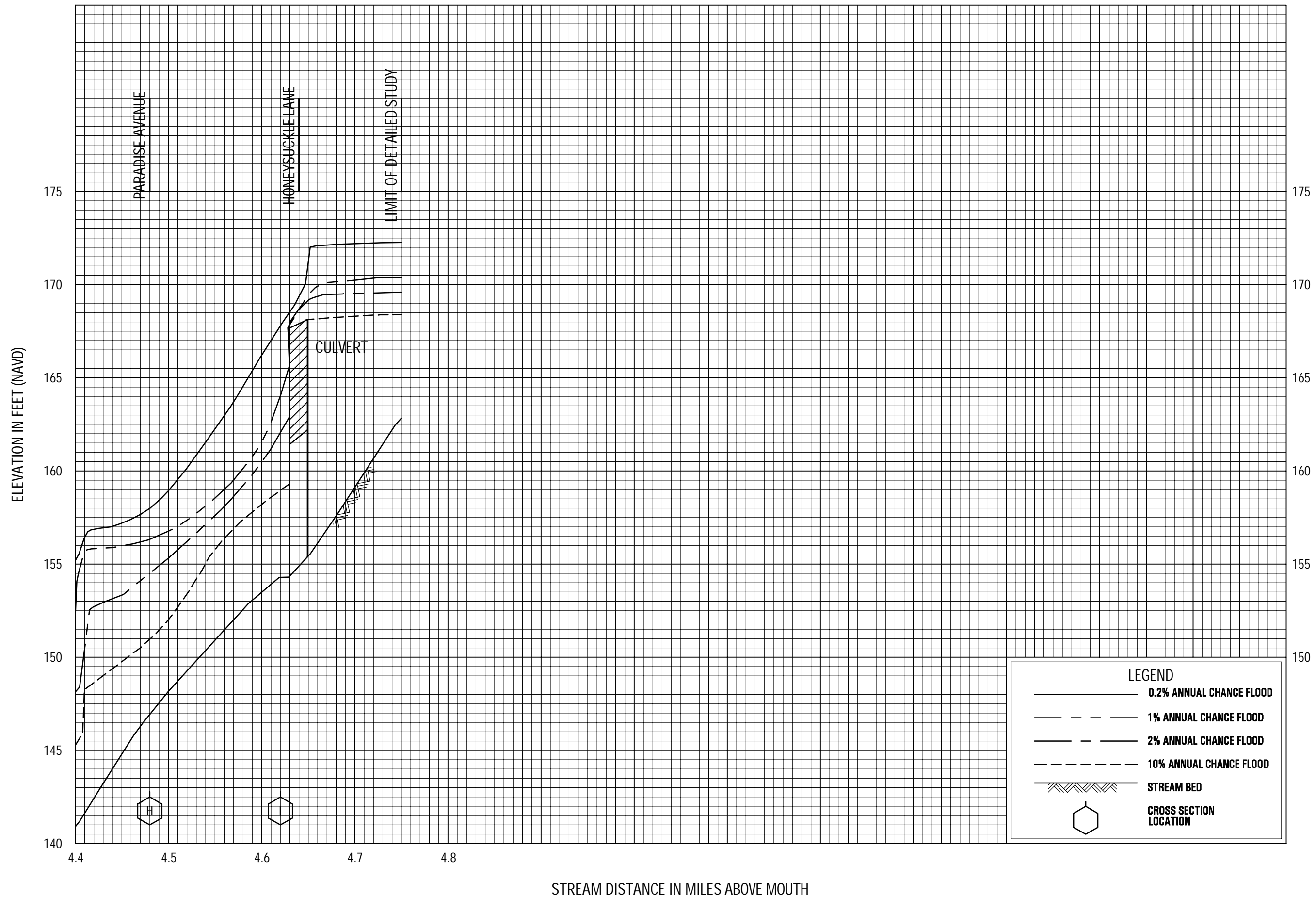


FLOOD PROFILES

PARADISE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

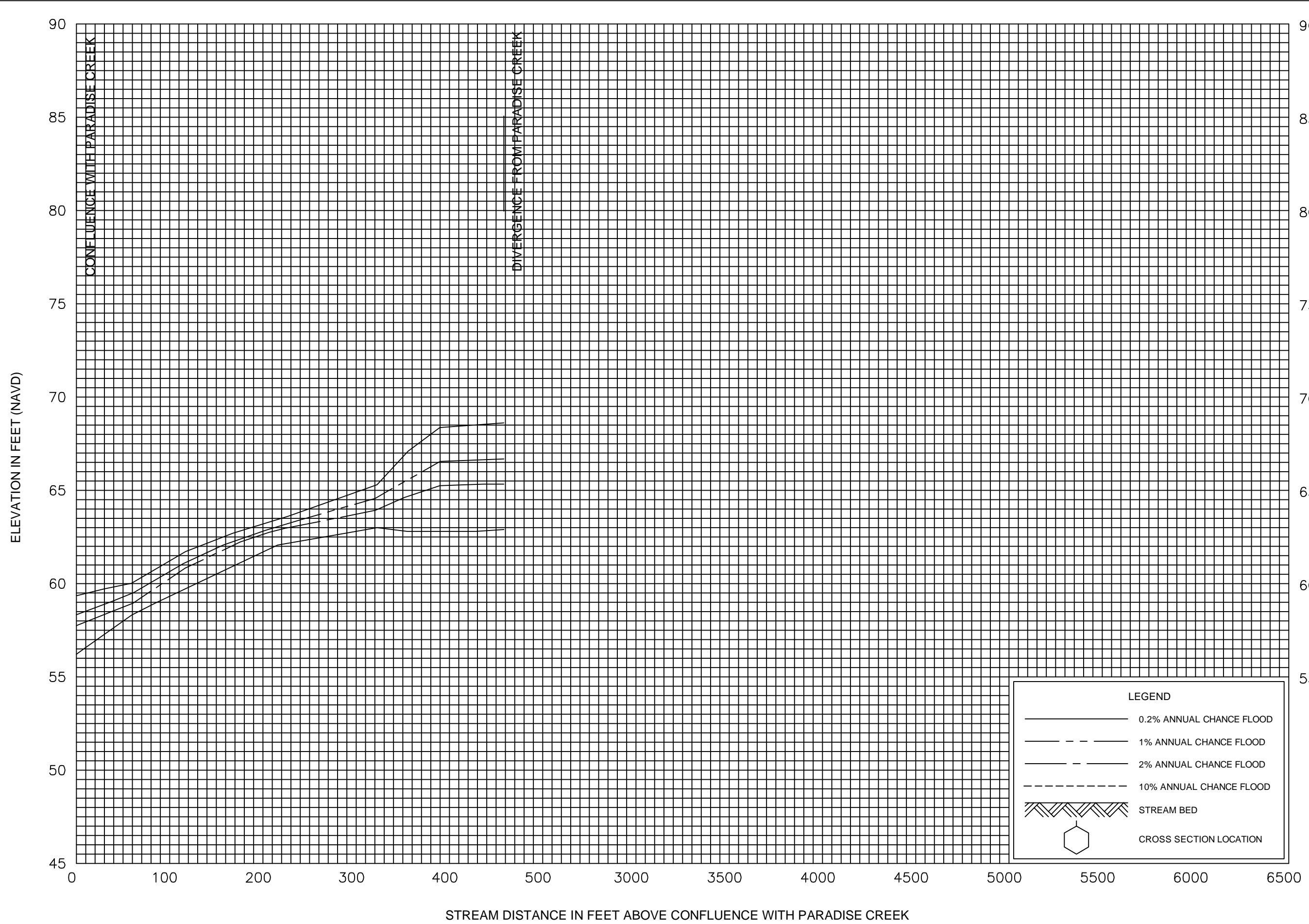
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

PARADISE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

PARADISE CREEK SPLIT FLOW

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

289P

ELEVATION IN FEET (NAVD)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH PARADISE CREEK

*DATA NOT AVAILABLE

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

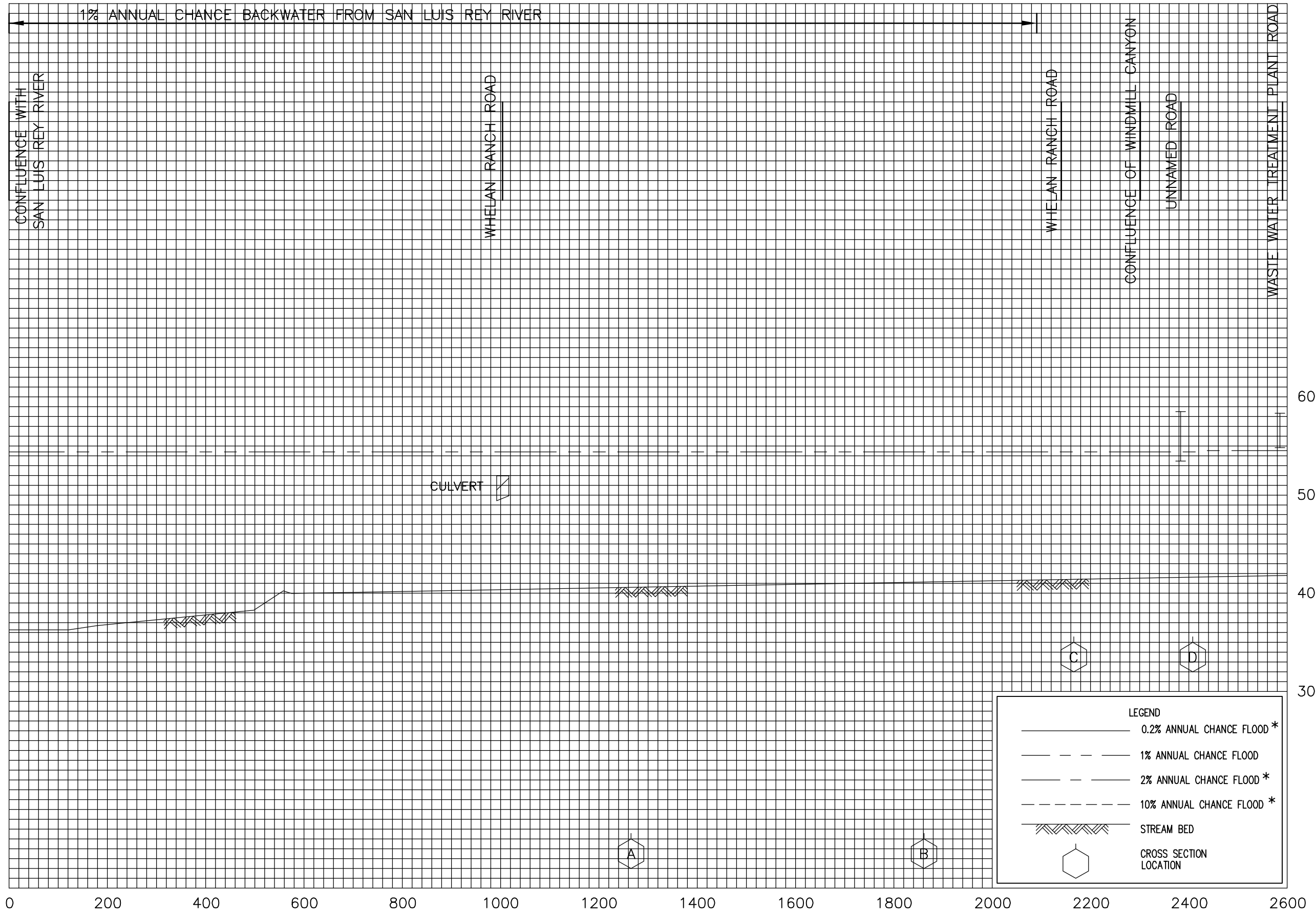
PARADISE CREEK - VALLEY ROAD BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
AND INCORPORATED AREAS

290P

ELEVATION IN FEET (NAVD)



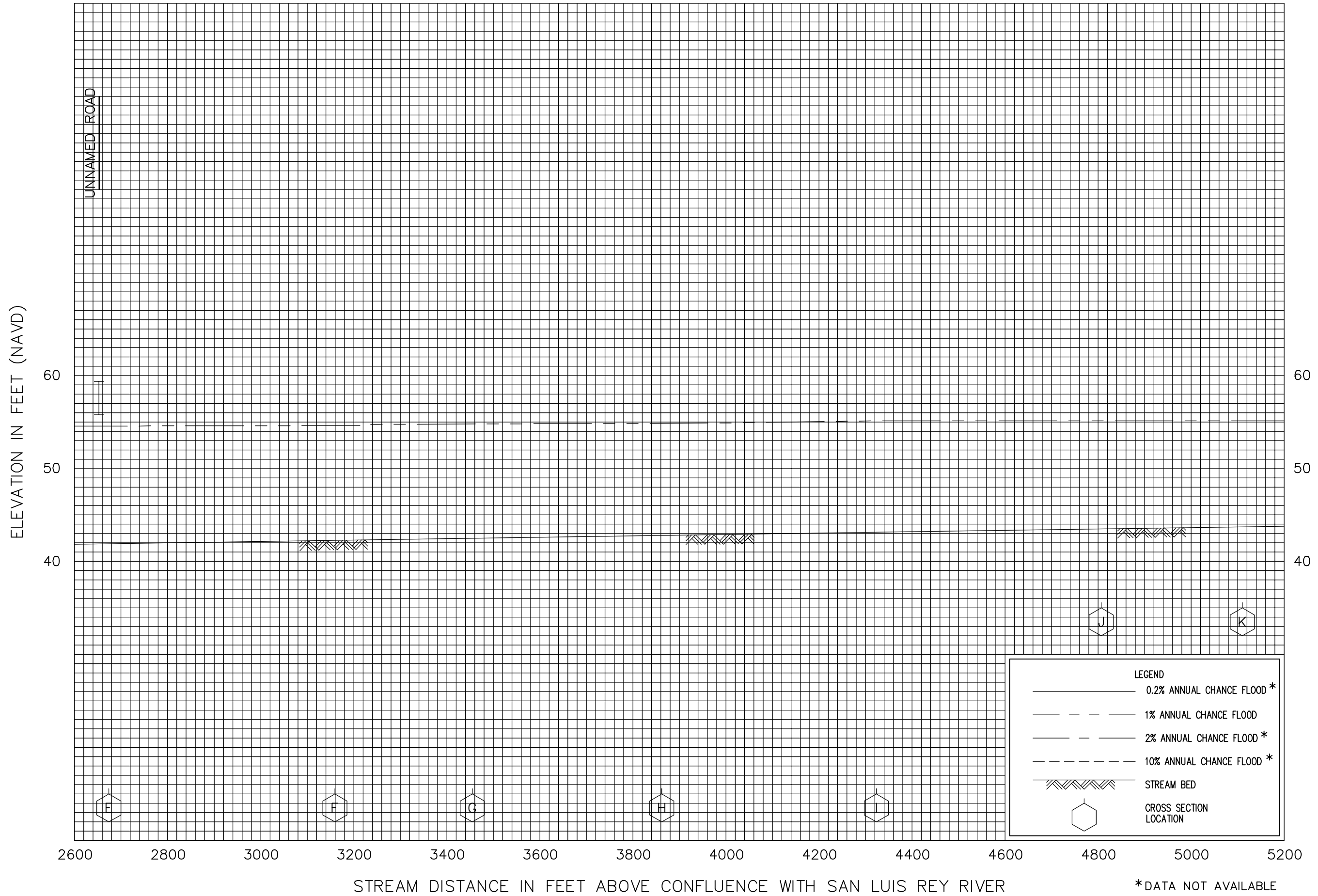
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAN LUIS REY RIVER

* DATA NOT AVAILABLE

FLOOD PROFILES

PILGRIM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



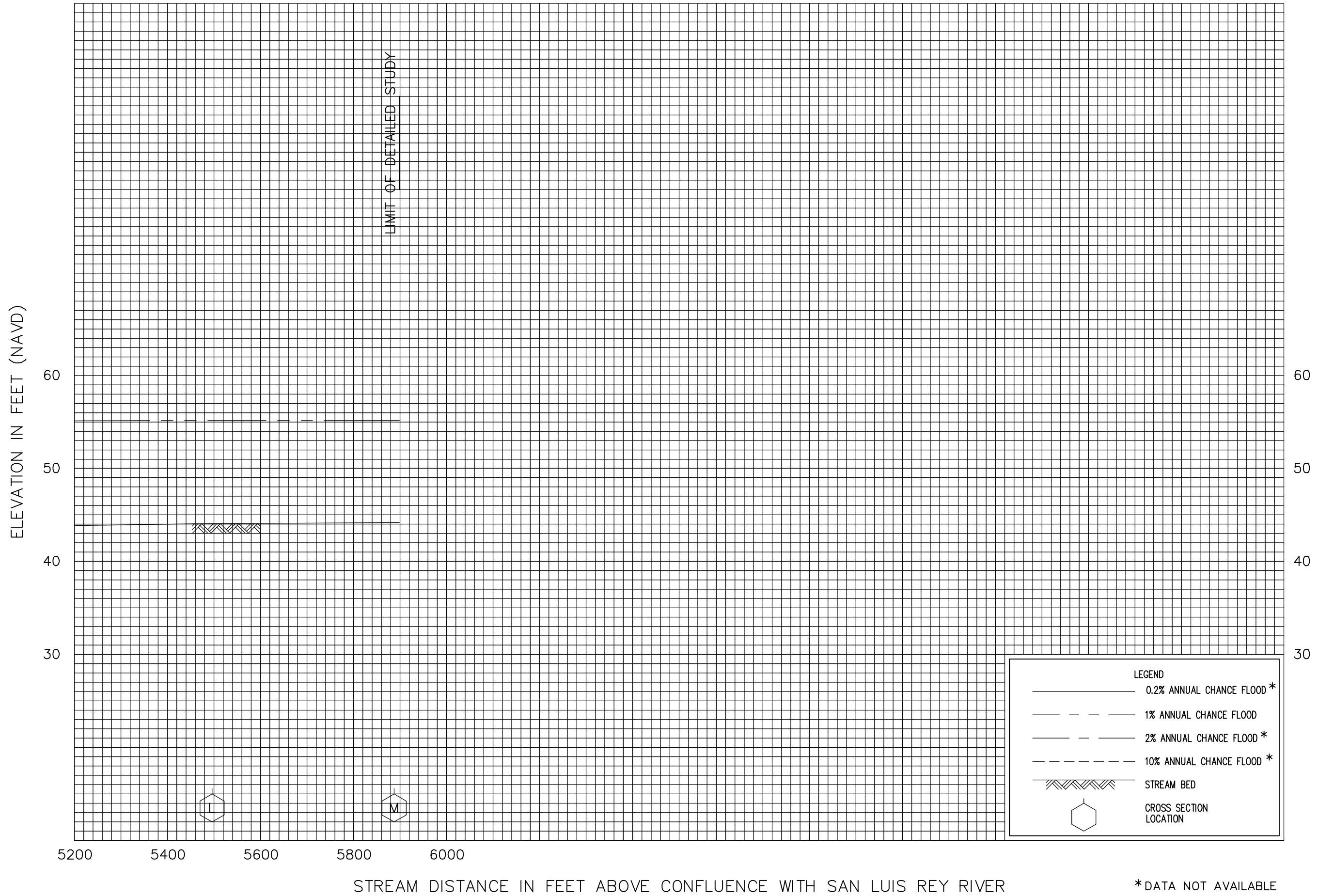
FLOOD PROFILES

PILGRIM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

*DATA NOT AVAILABLE



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SAN LUIS REY RIVER

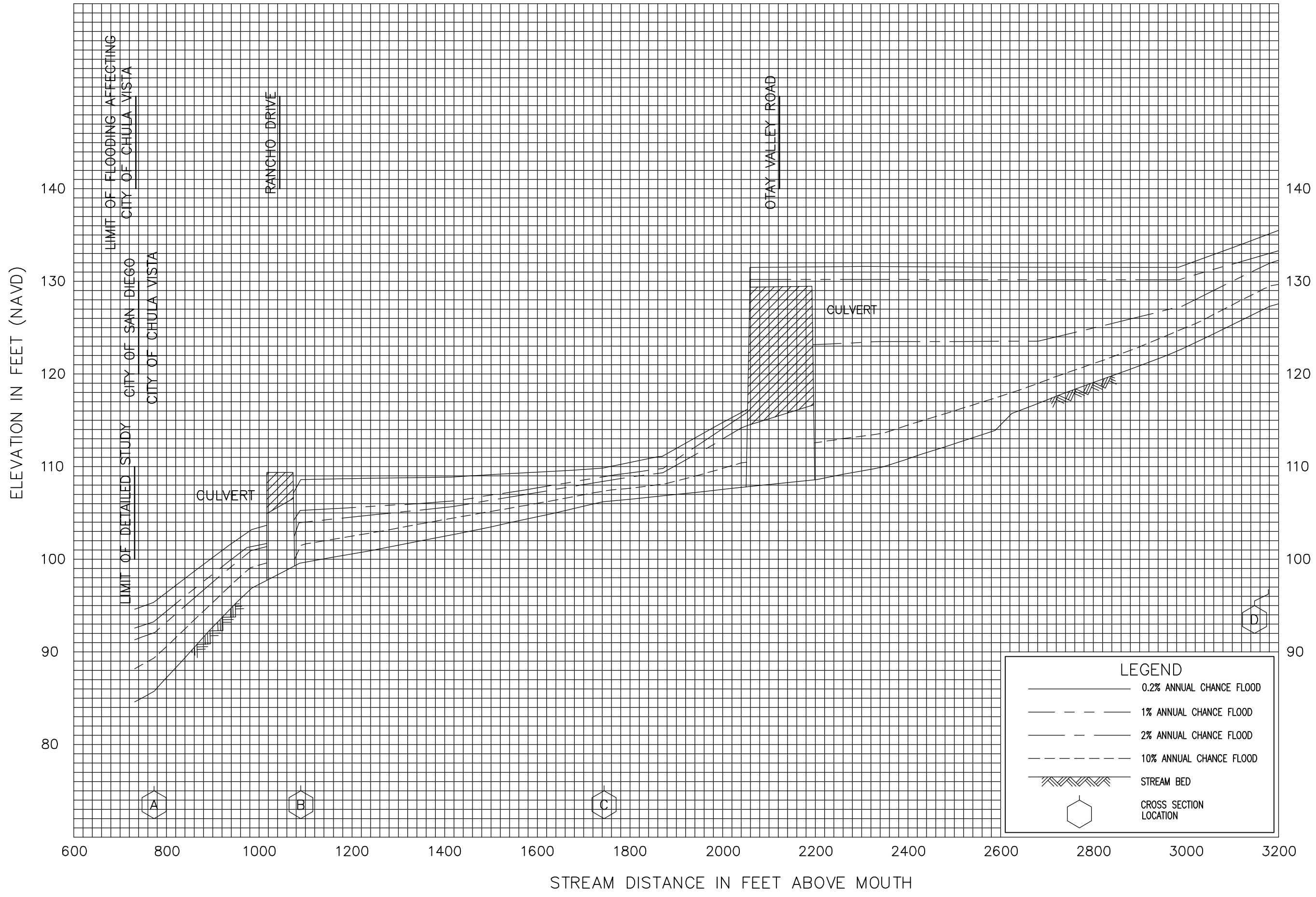
* DATA NOT AVAILABLE

FLOOD PROFILES

PILGRIM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

293P



LEGEND

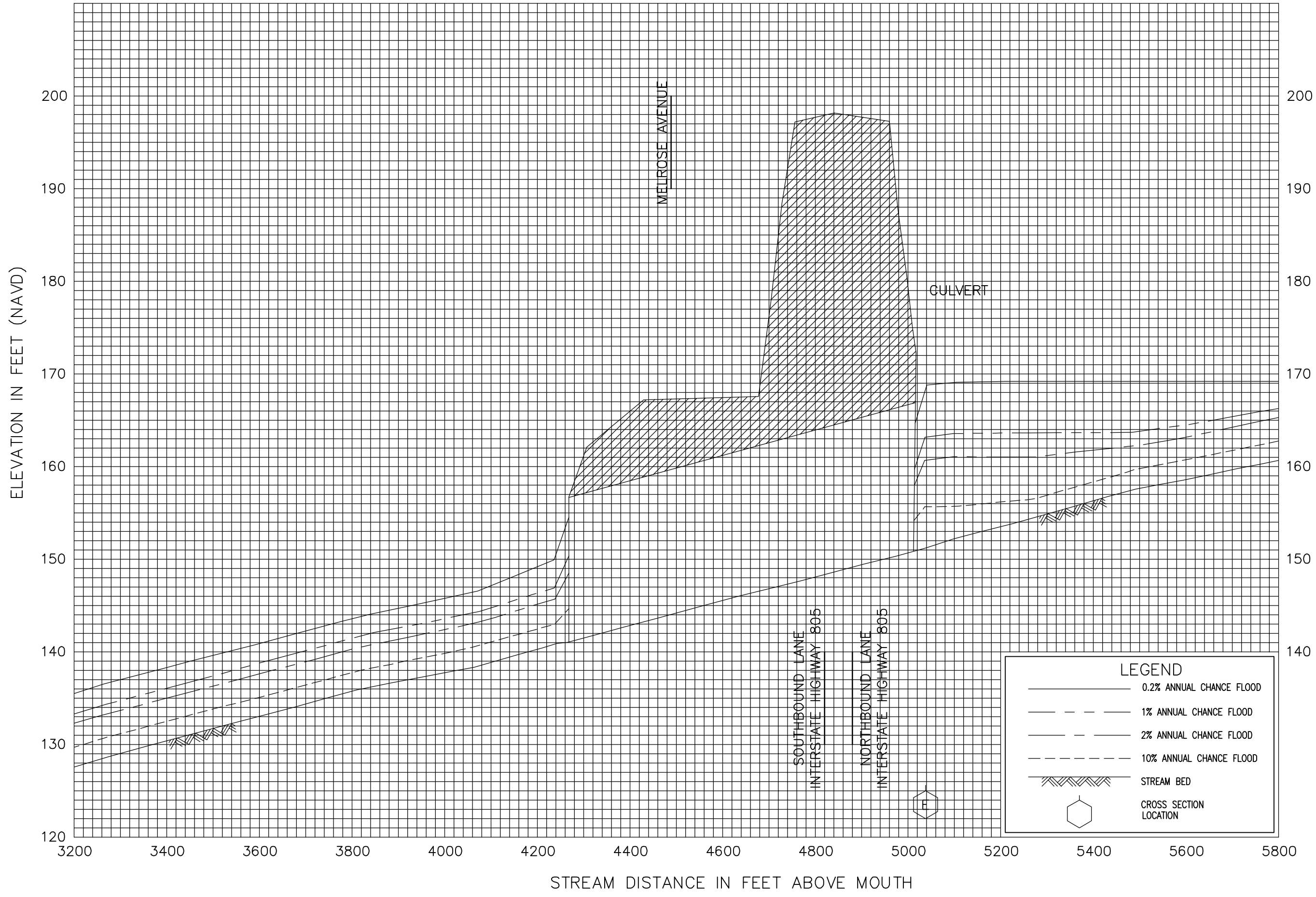
- 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- - - 2% ANNUAL CHANCE FLOOD
- - - 10% ANNUAL CHANCE FLOOD
- ▨ STREAM BED
- ⬡ CROSS SECTION LOCATION

FLOOD PROFILES

POGGI CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

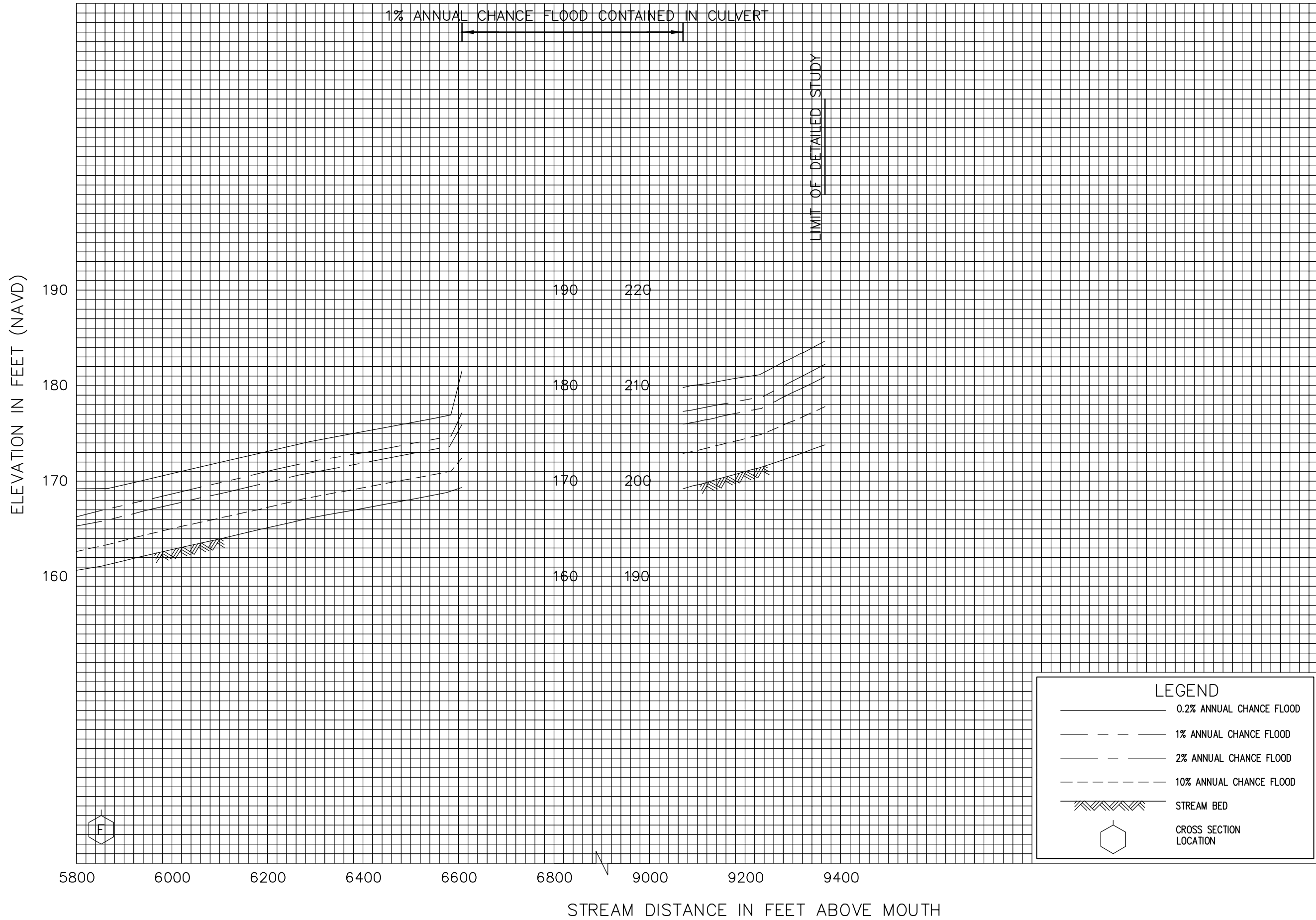


FLOOD PROFILES

POGGI CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

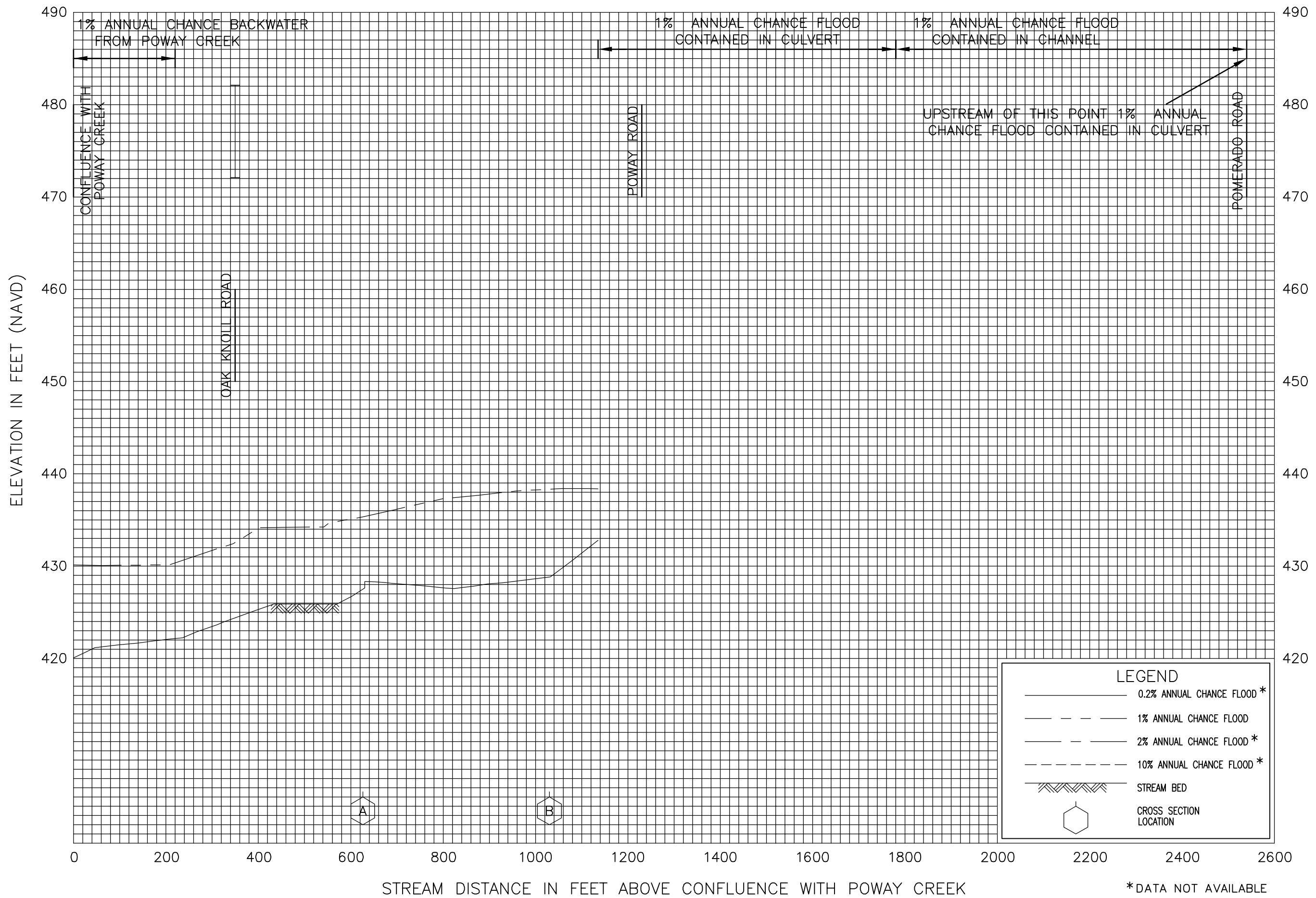


FLOOD PROFILES

POGGI CANYON CREEK

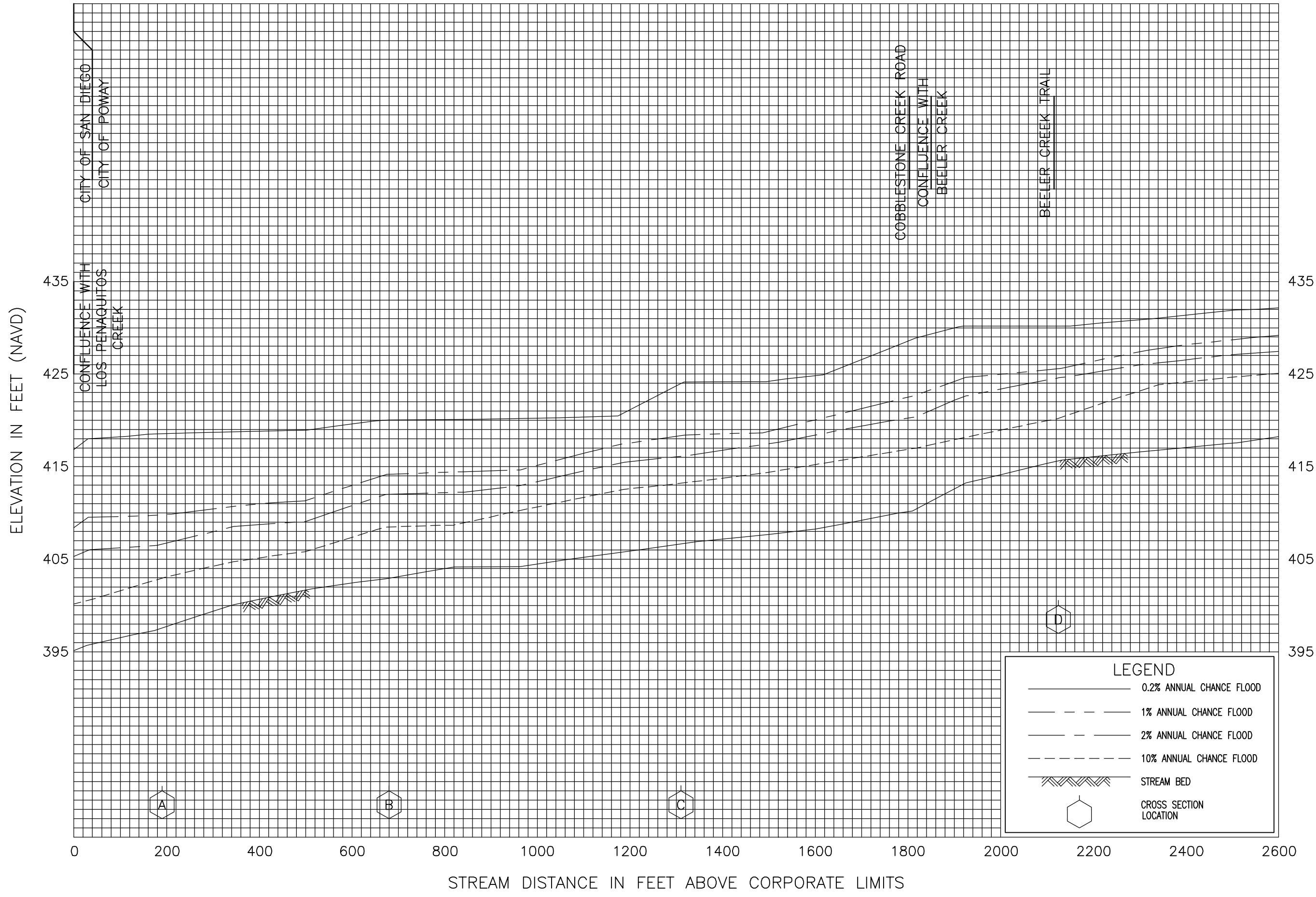
FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



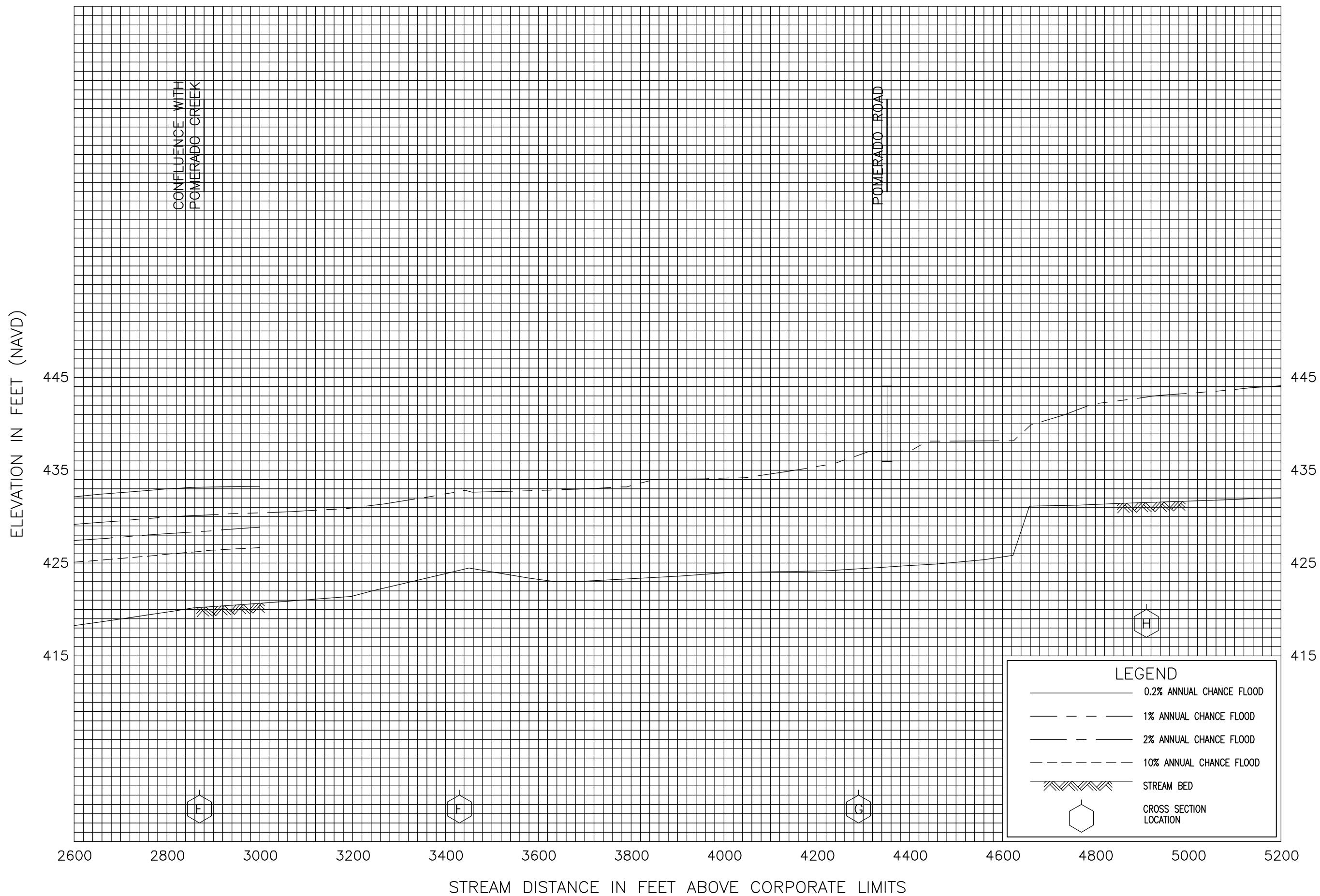
FLOOD PROFILES
POMERADO CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
POWAY CREEK

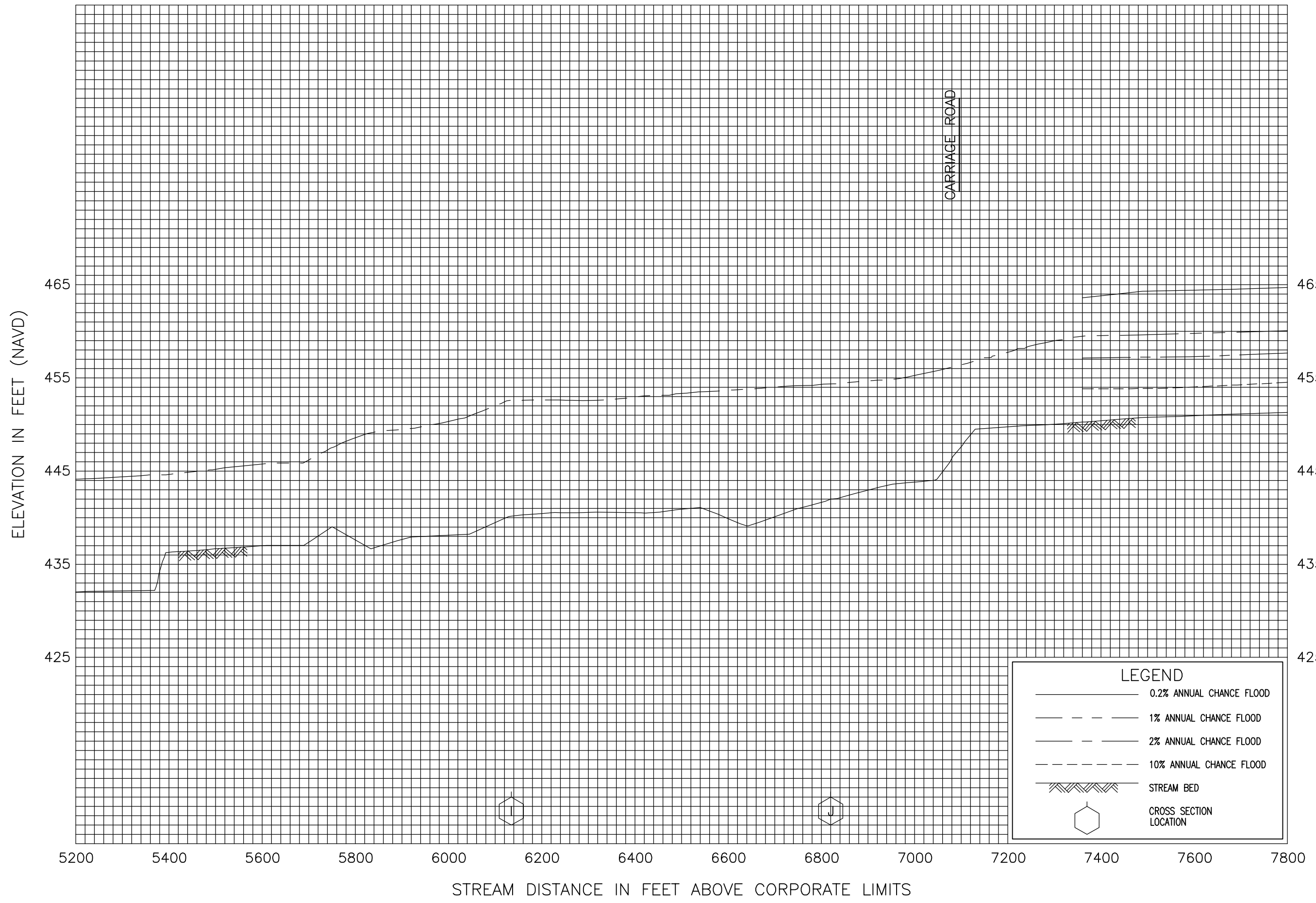
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

POWAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

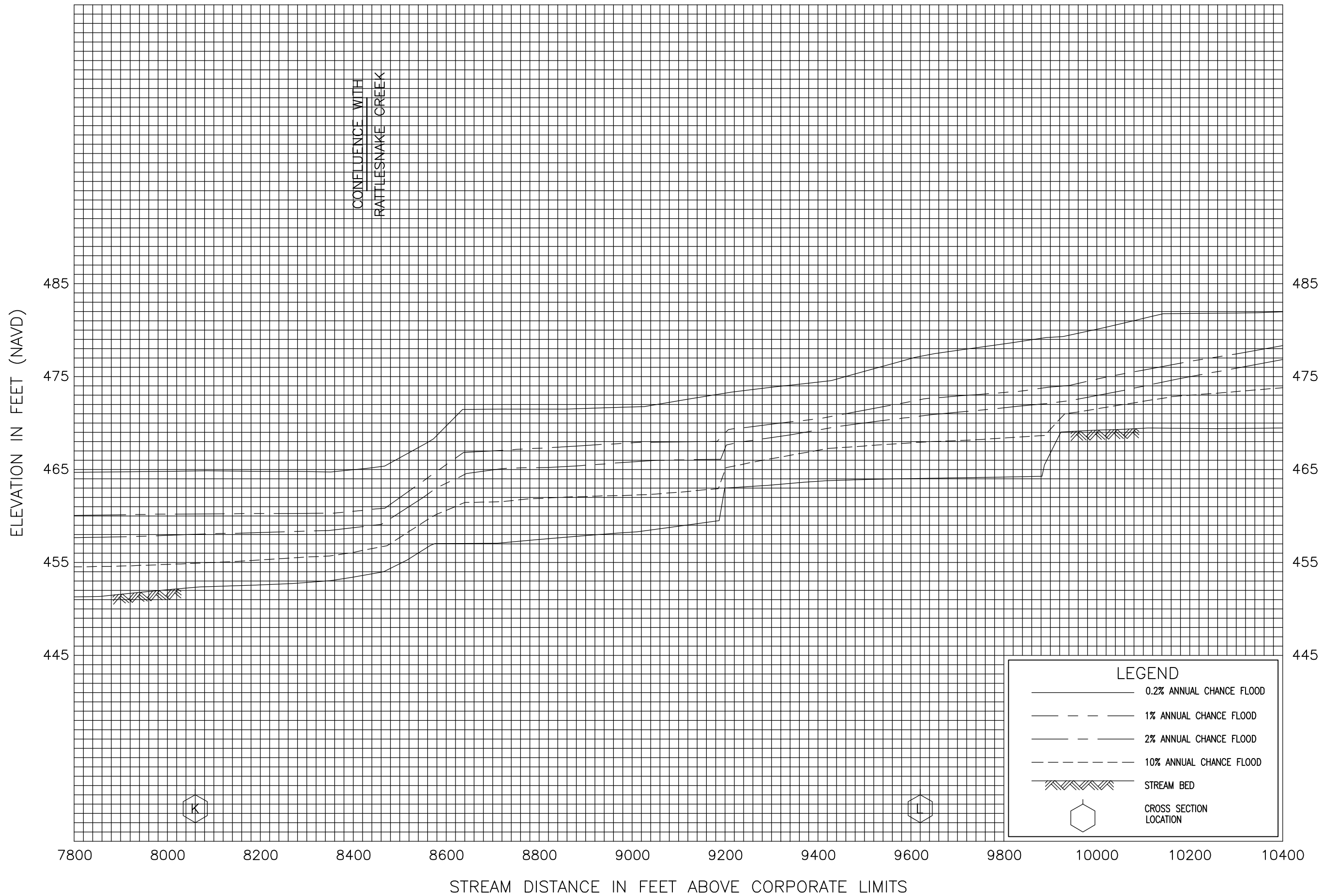


FLOOD PROFILES

POWAY CREEK

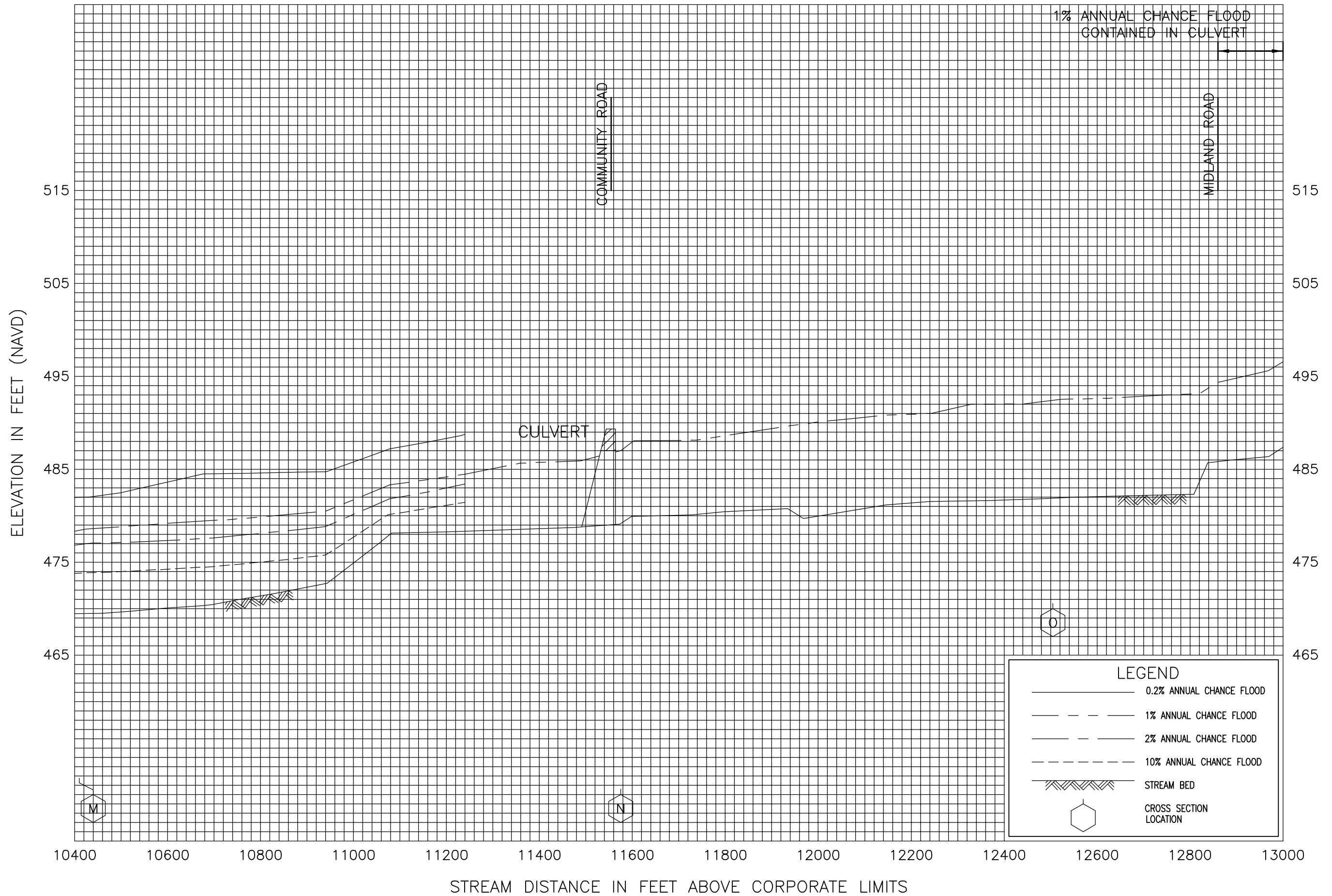
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

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
POWAY CREEK

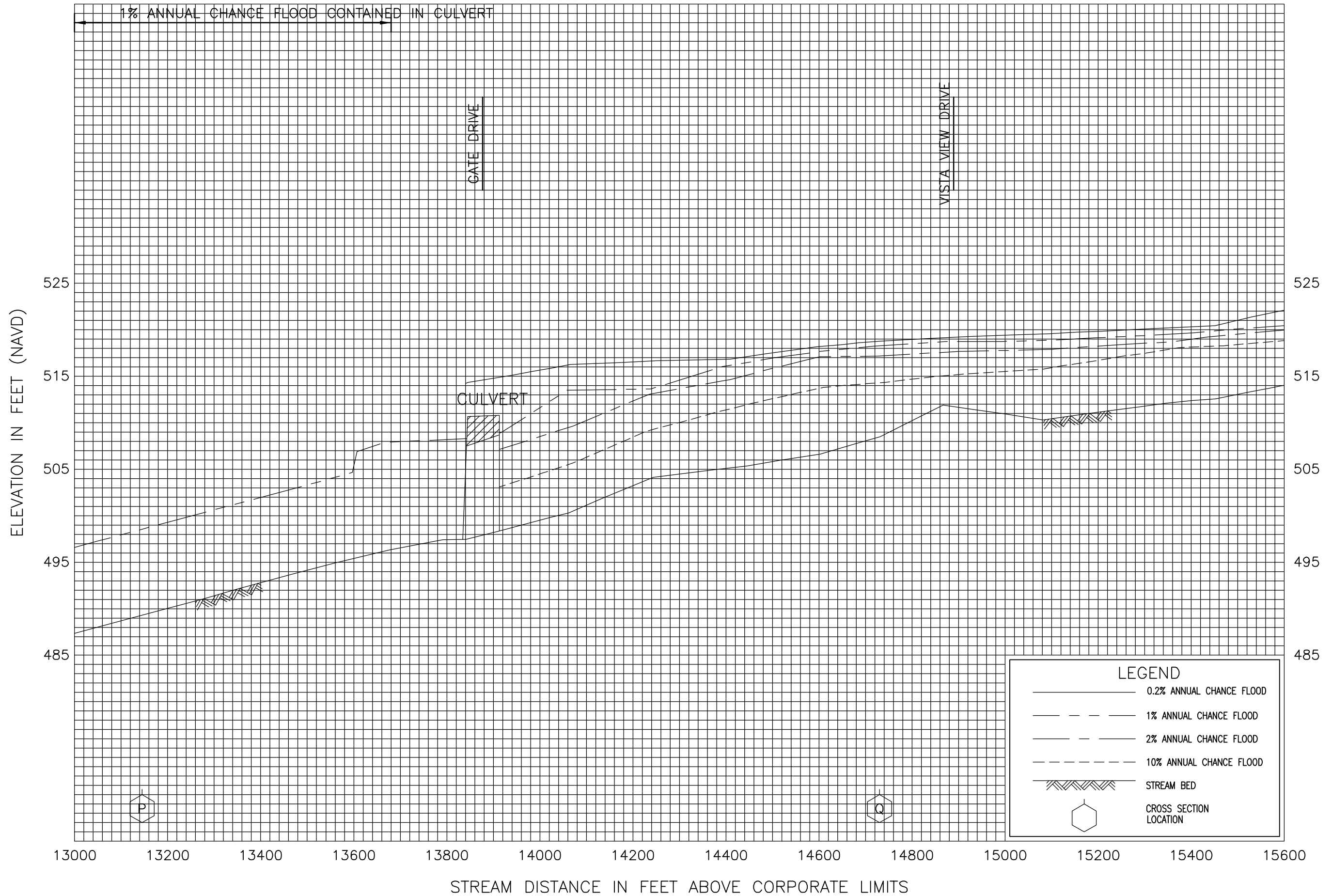
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

POWAY CREEK

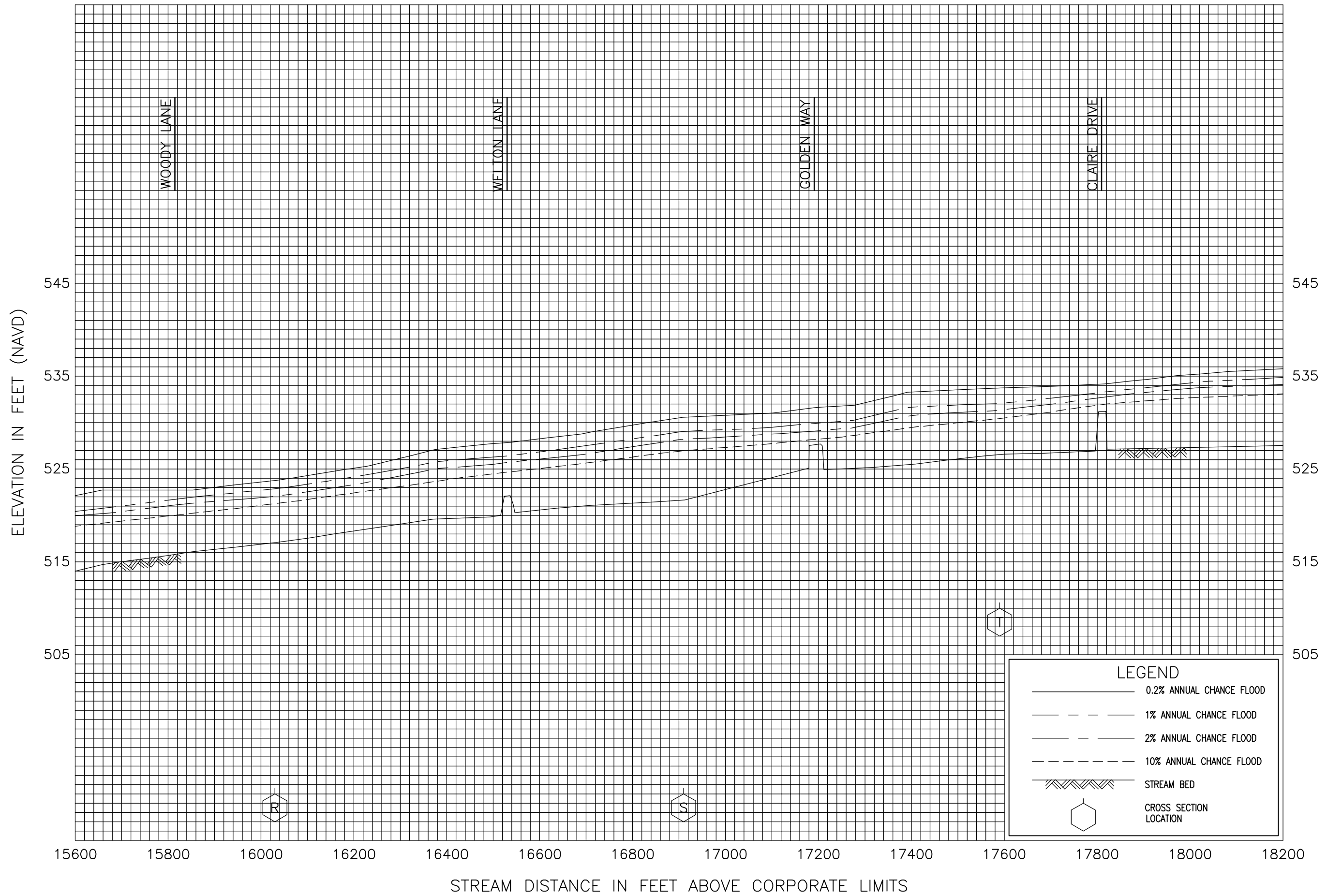
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

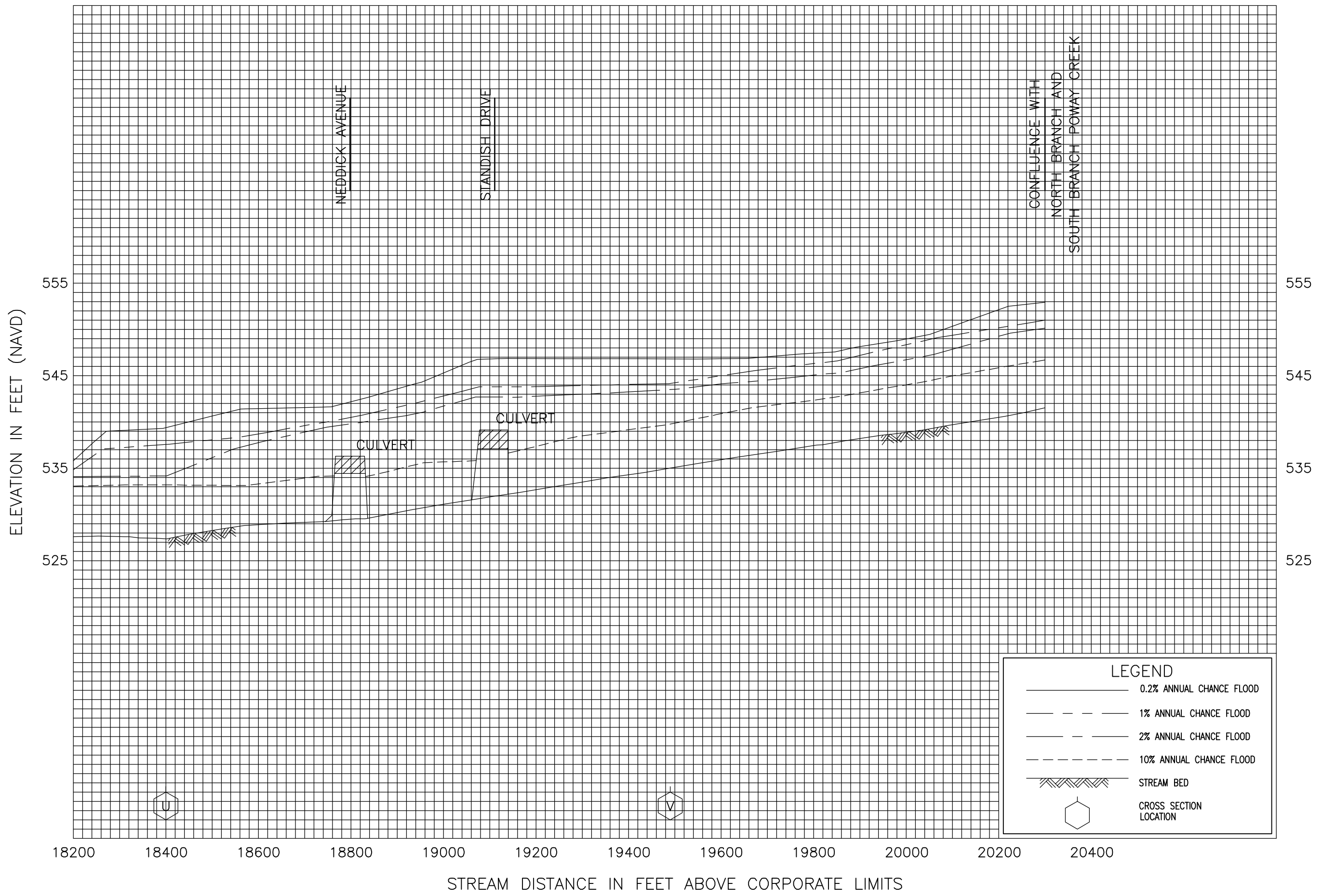
POWAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



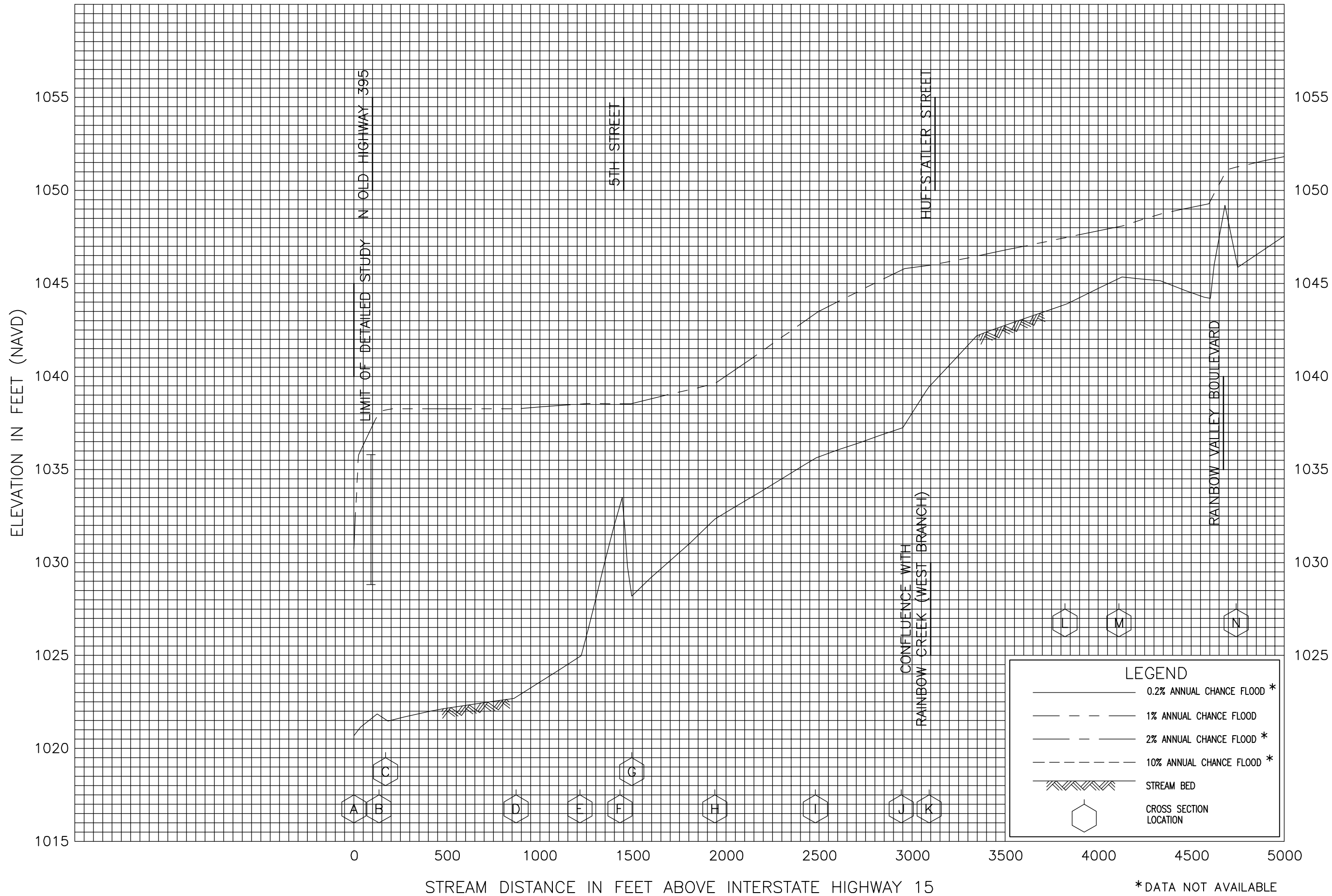
FLOOD PROFILES
POWAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
POWAY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

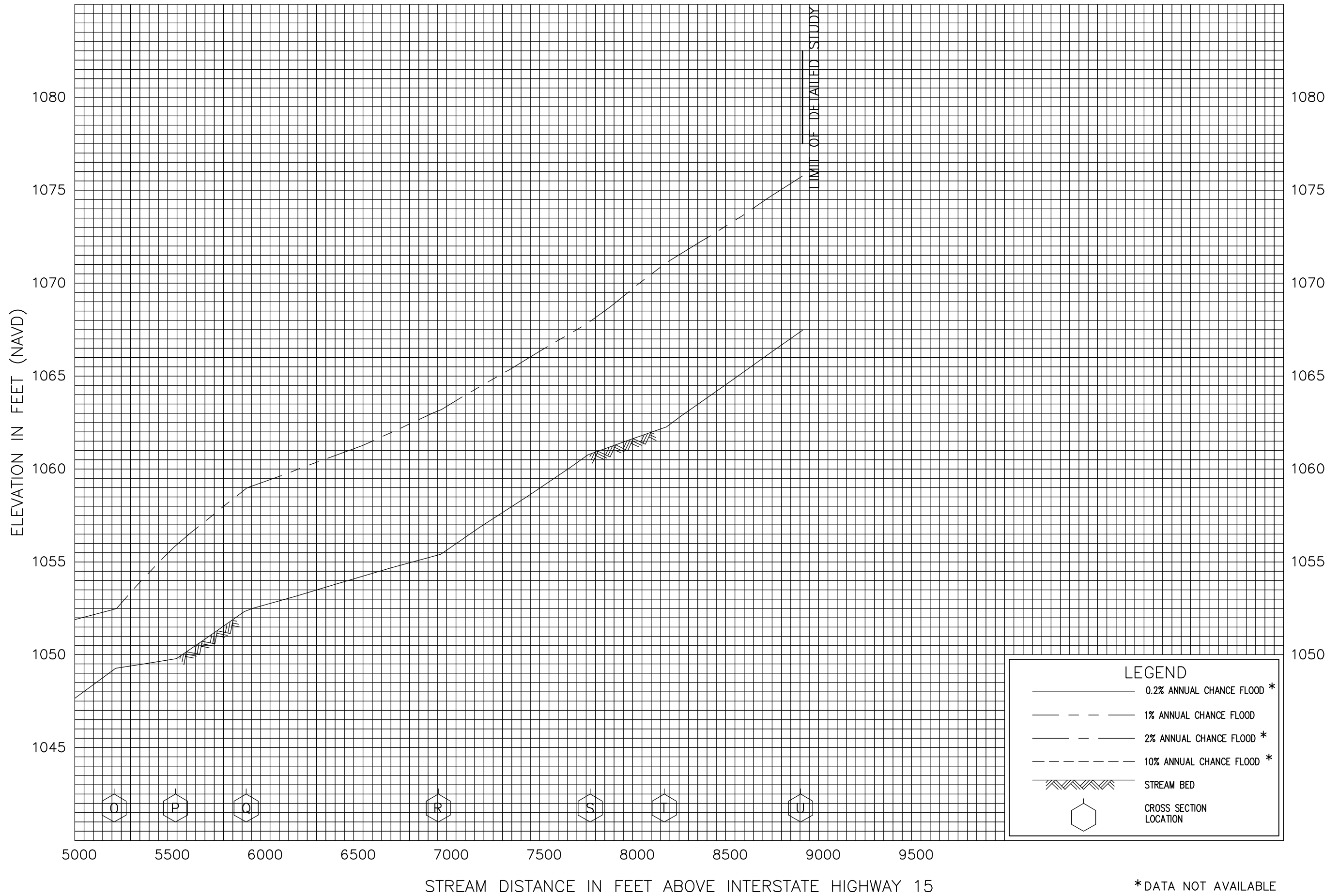


FLOOD PROFILES
RAINBOW CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

306P

* DATA NOT AVAILABLE

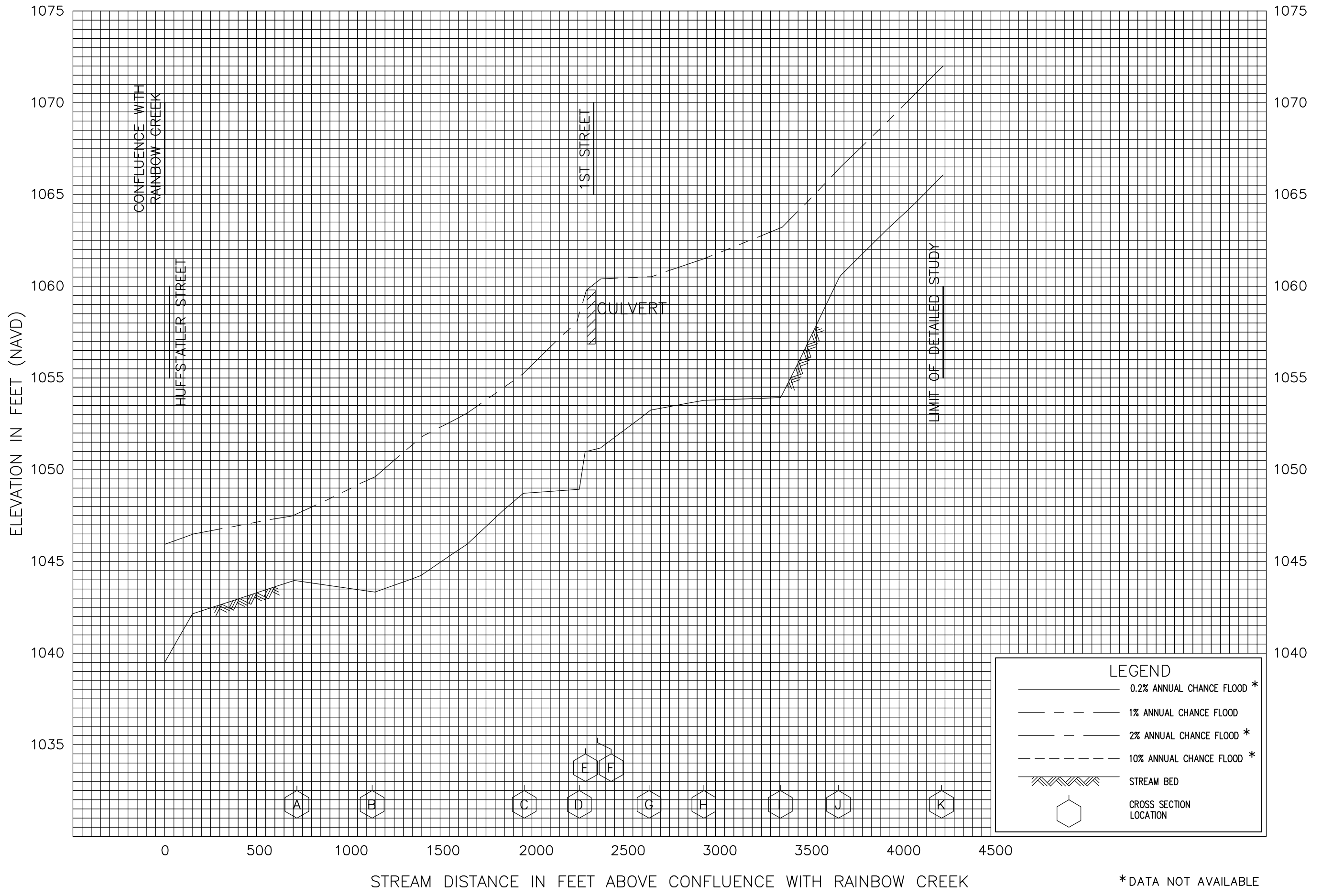


FLOOD PROFILES

RAINBOW CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

*DATA NOT AVAILABLE

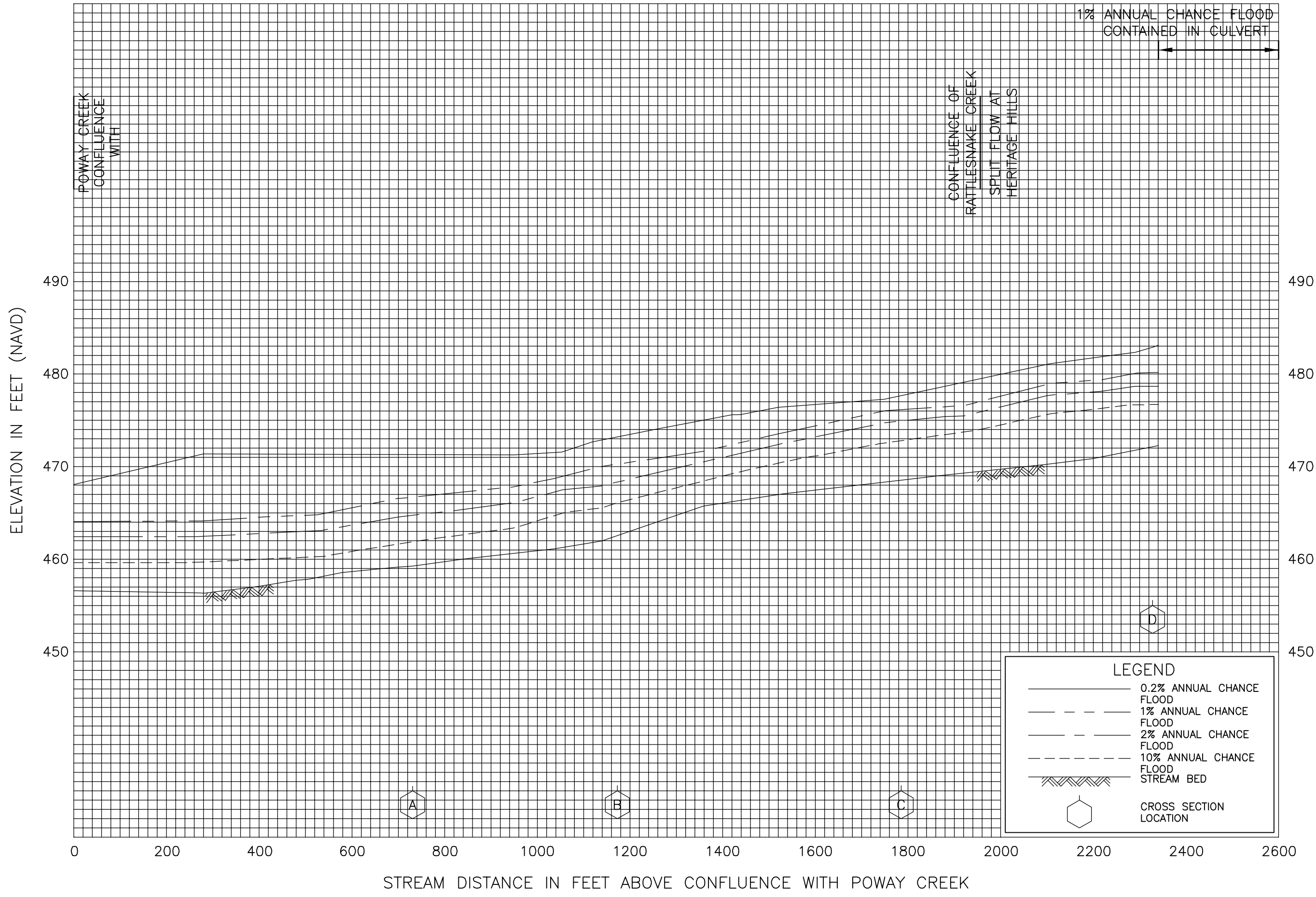


*DATA NOT AVAILABLE

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

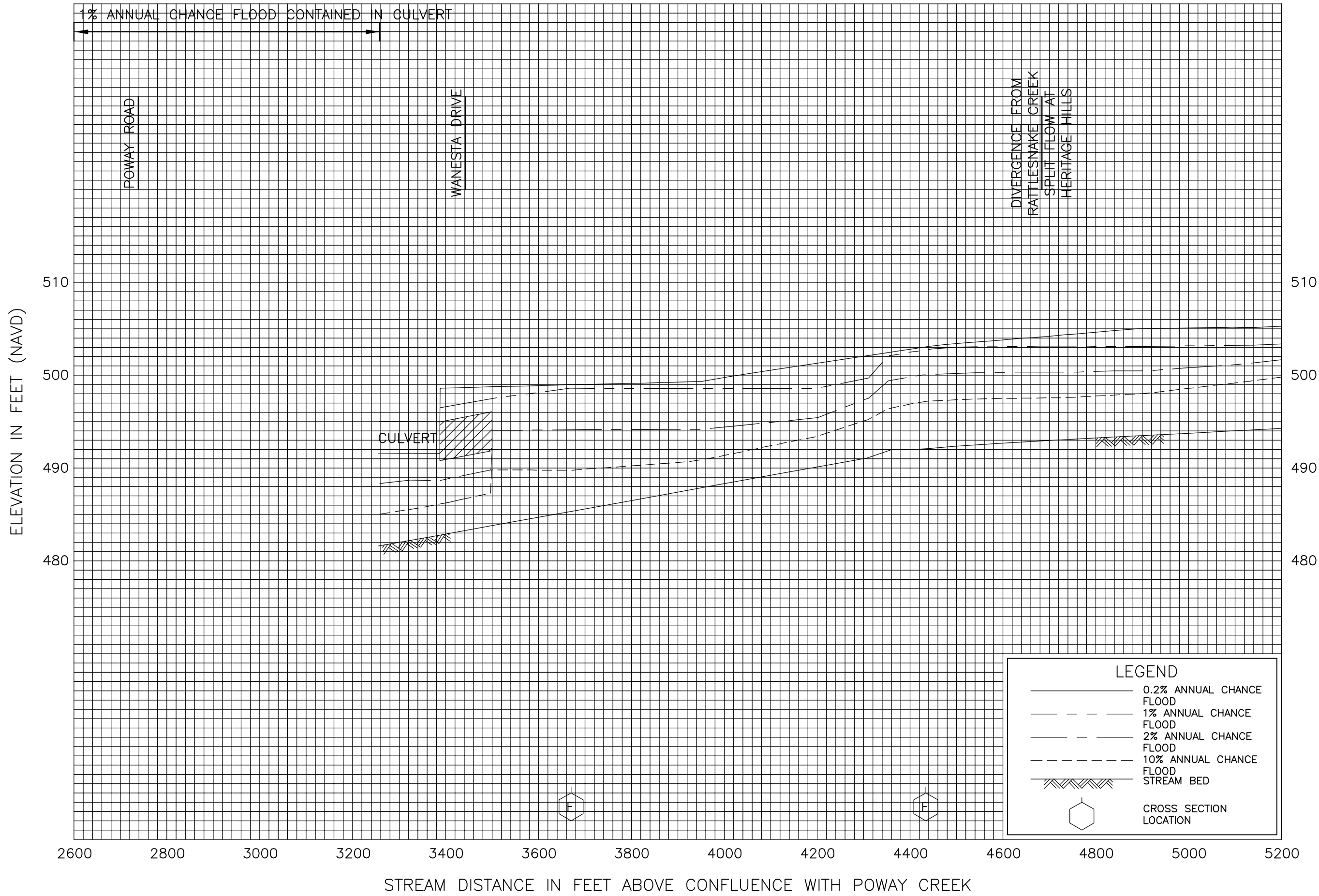
FLOOD PROFILES

RAINBOW CREEK (WEST BRANCH)



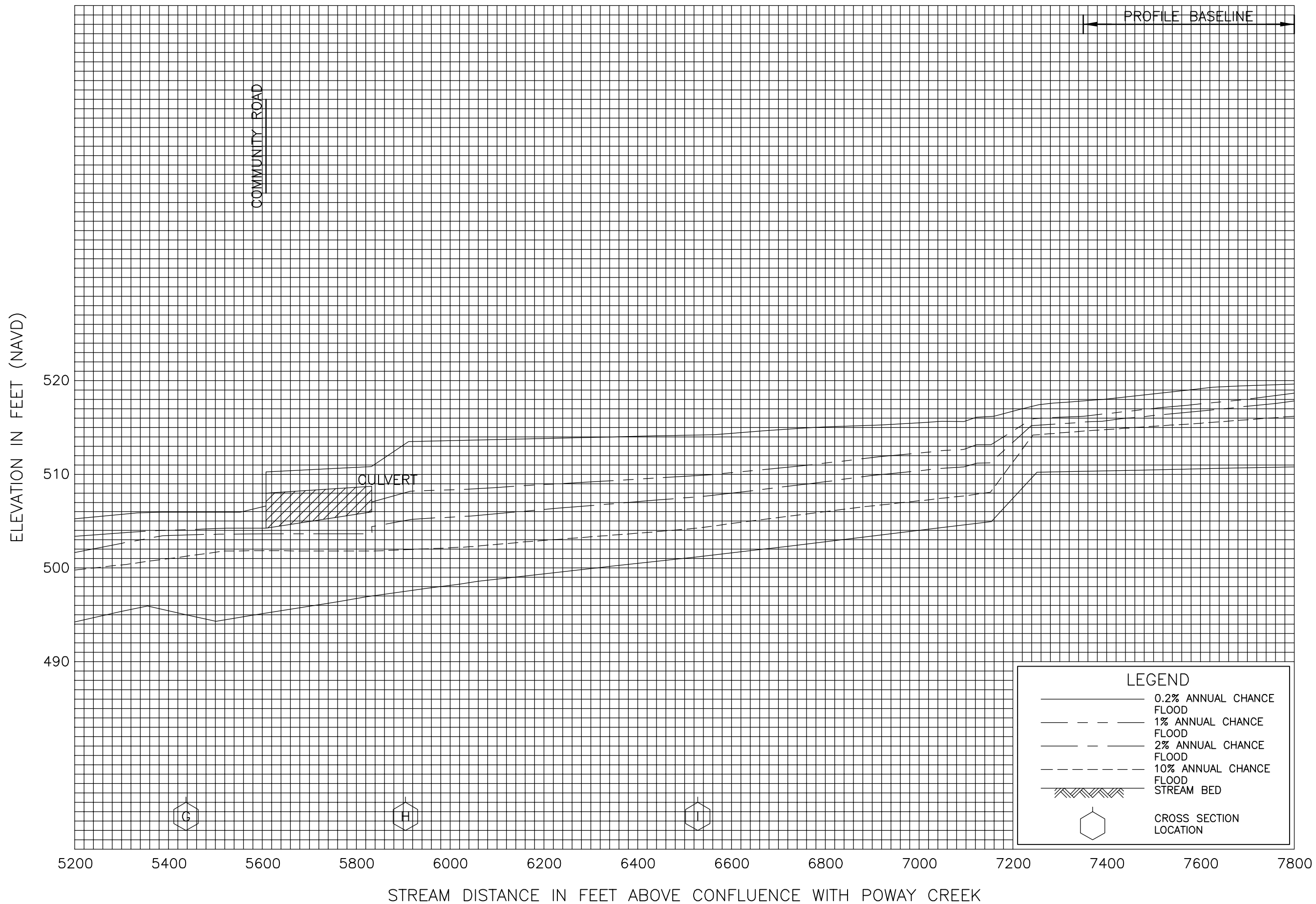
FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



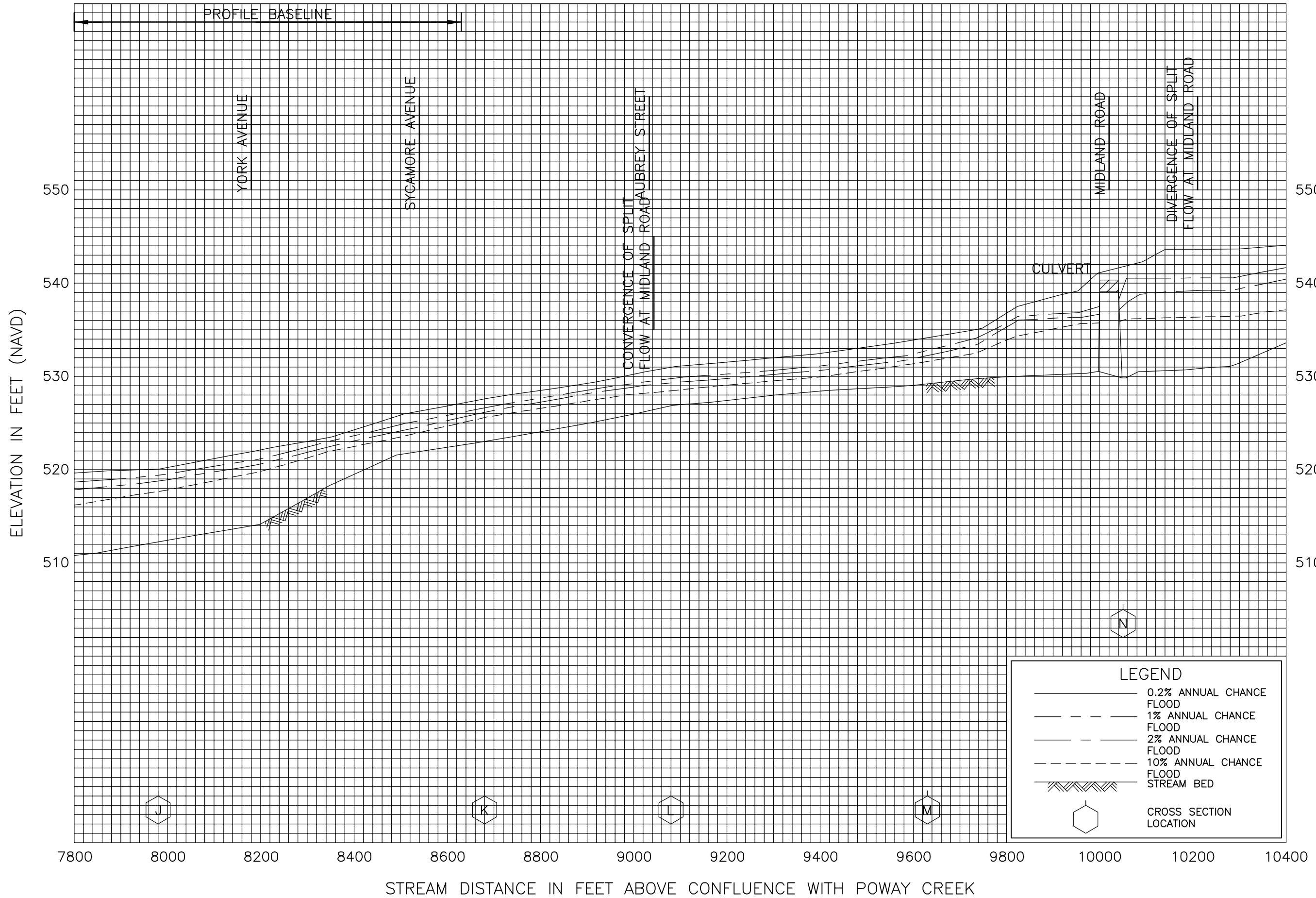
FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



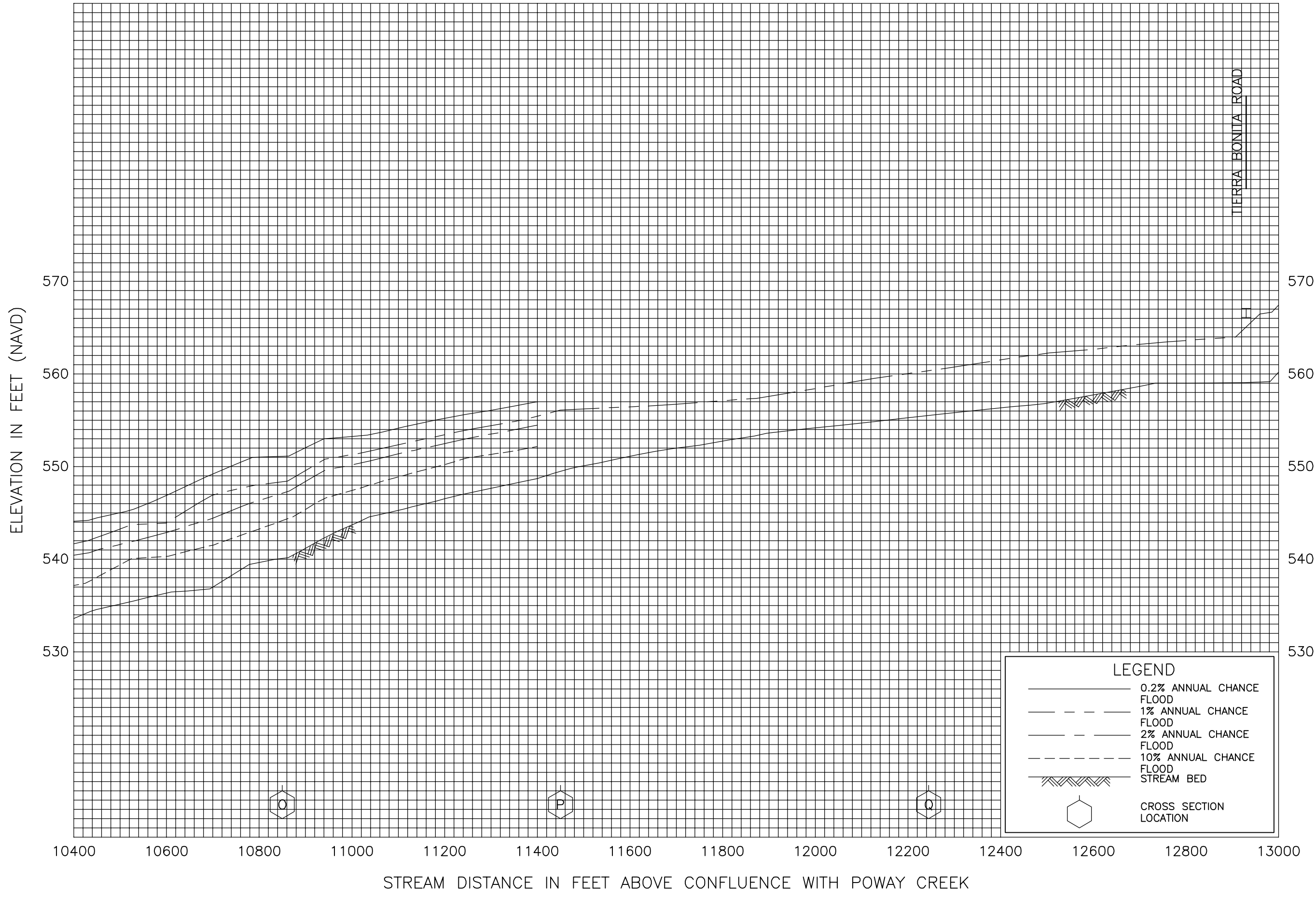
FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



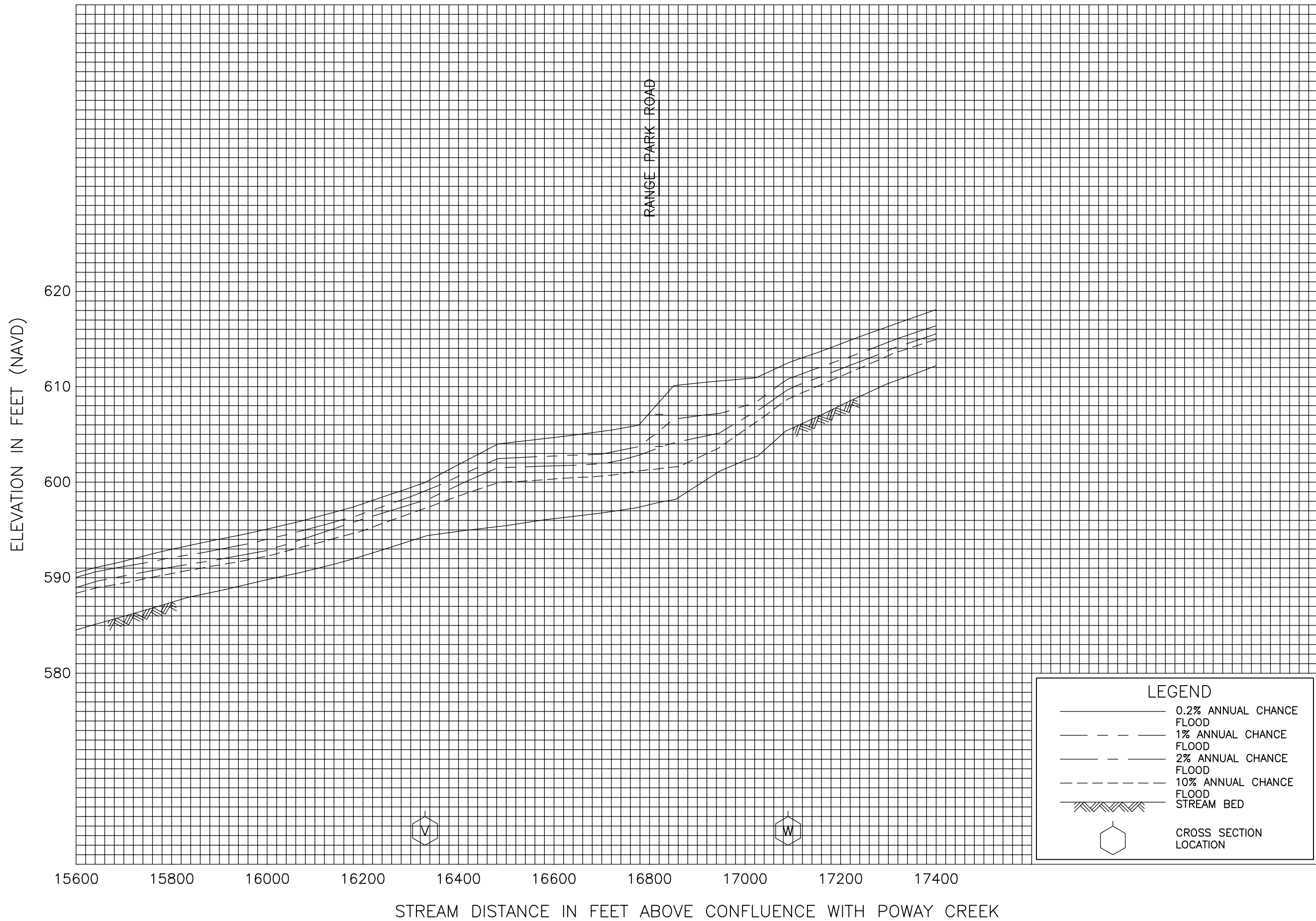
FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)









FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

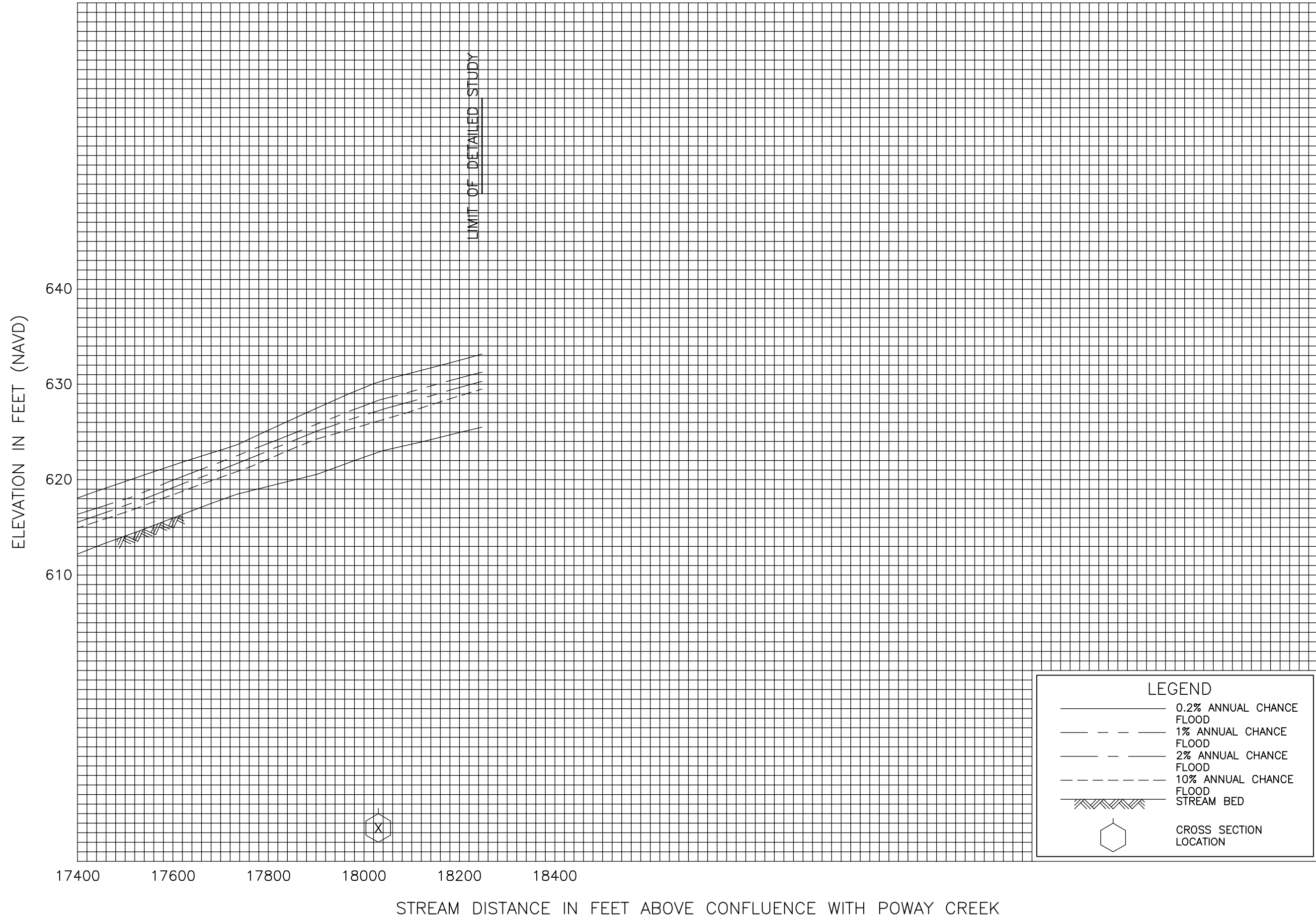


LEGEND

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

FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

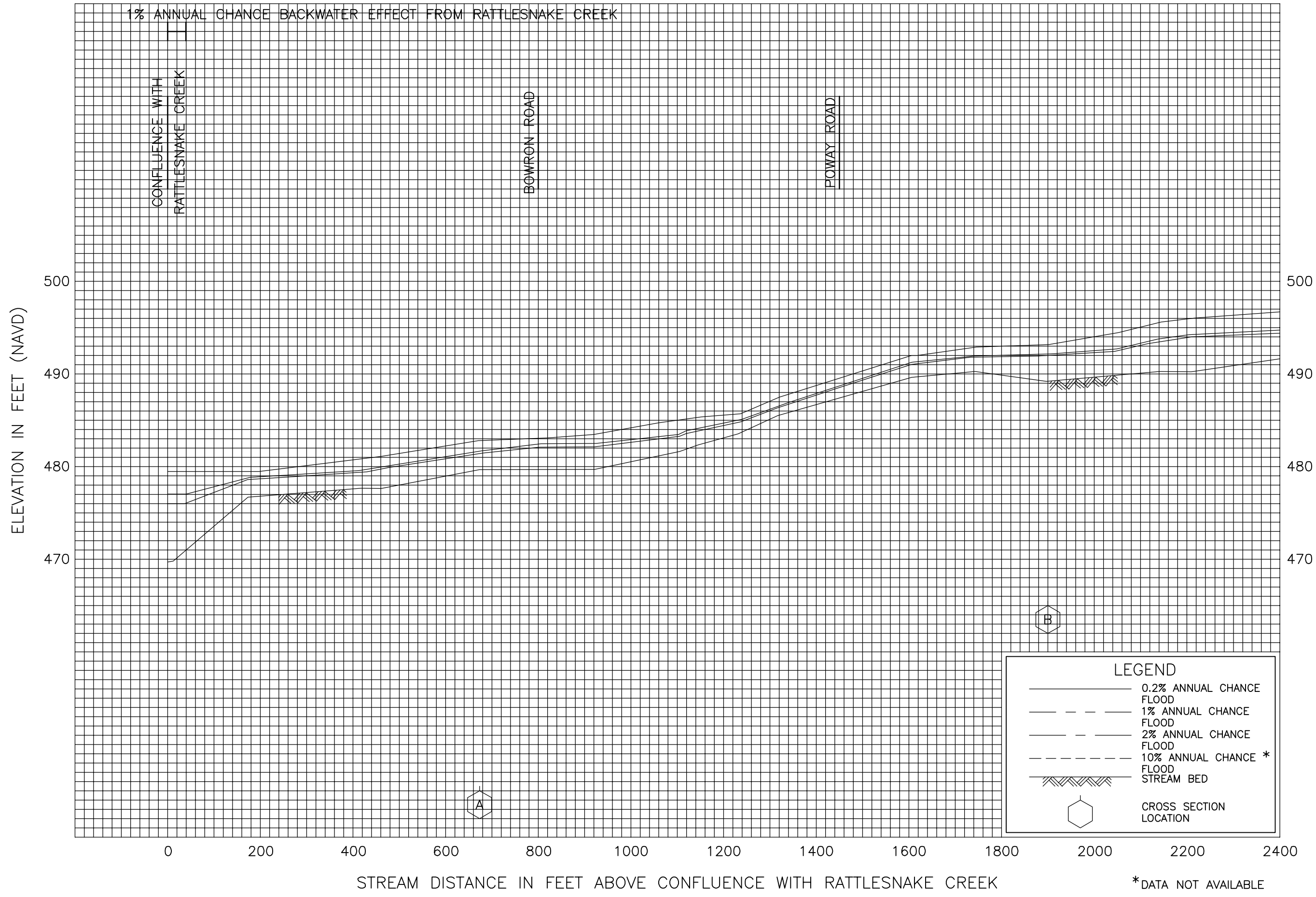


LEGEND

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

FLOOD PROFILES
RATTLESNAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



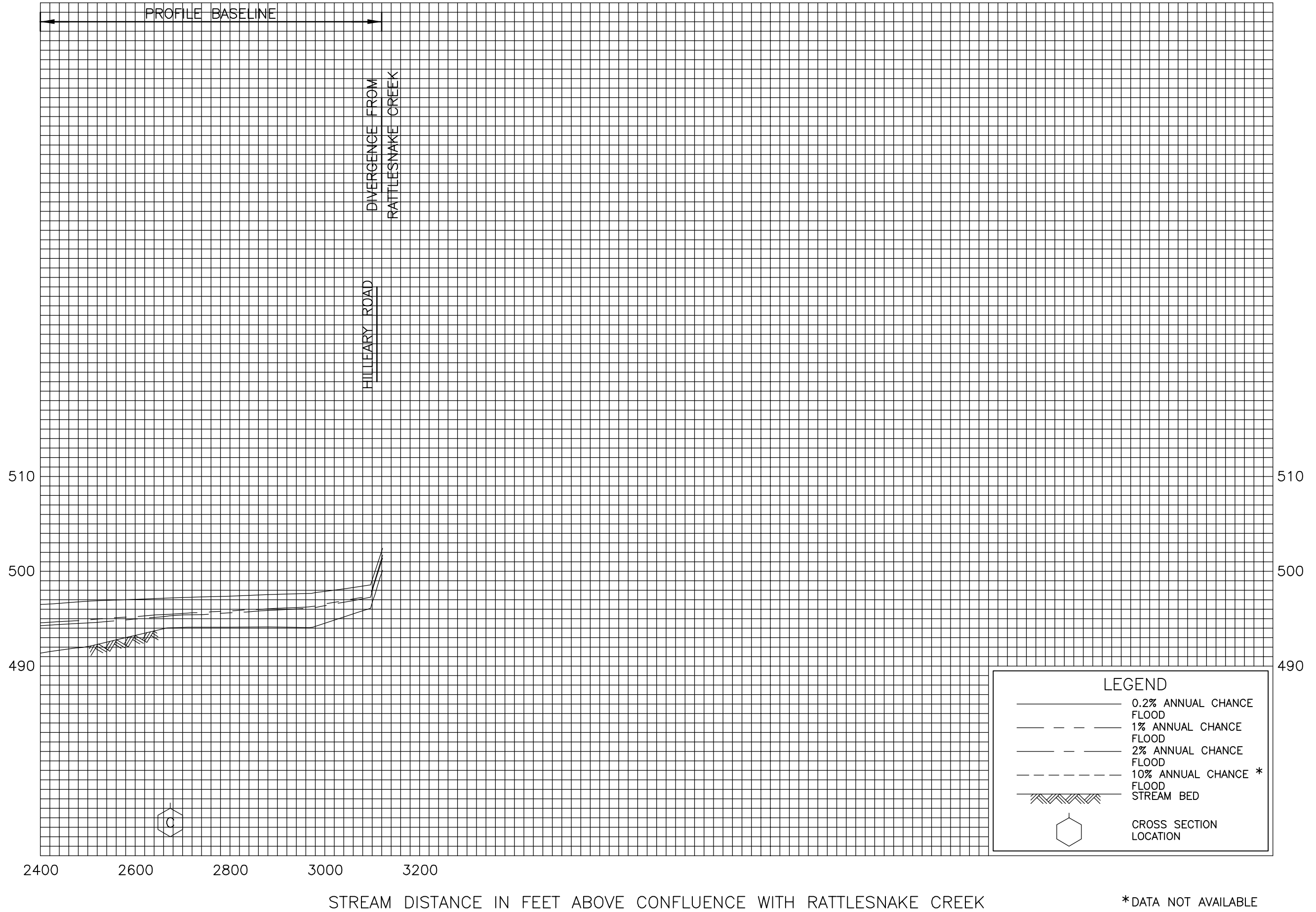
*DATA NOT AVAILABLE

FLOOD PROFILES

RATTLESNAKE CREEK - SPLIT FLOW AT HERITAGE HILLS

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

ELEVATION IN FEET (NAVD)



LEGEND
—— 0.2% ANNUAL CHANCE FLOOD
- - - 1% ANNUAL CHANCE FLOOD
- · - · 2% ANNUAL CHANCE FLOOD
- · - · 10% ANNUAL CHANCE * FLOOD
/ / / / / / / / / / FLOOD STREAM BED
⬡ CROSS SECTION LOCATION

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH RATTLESNAKE CREEK

*DATA NOT AVAILABLE

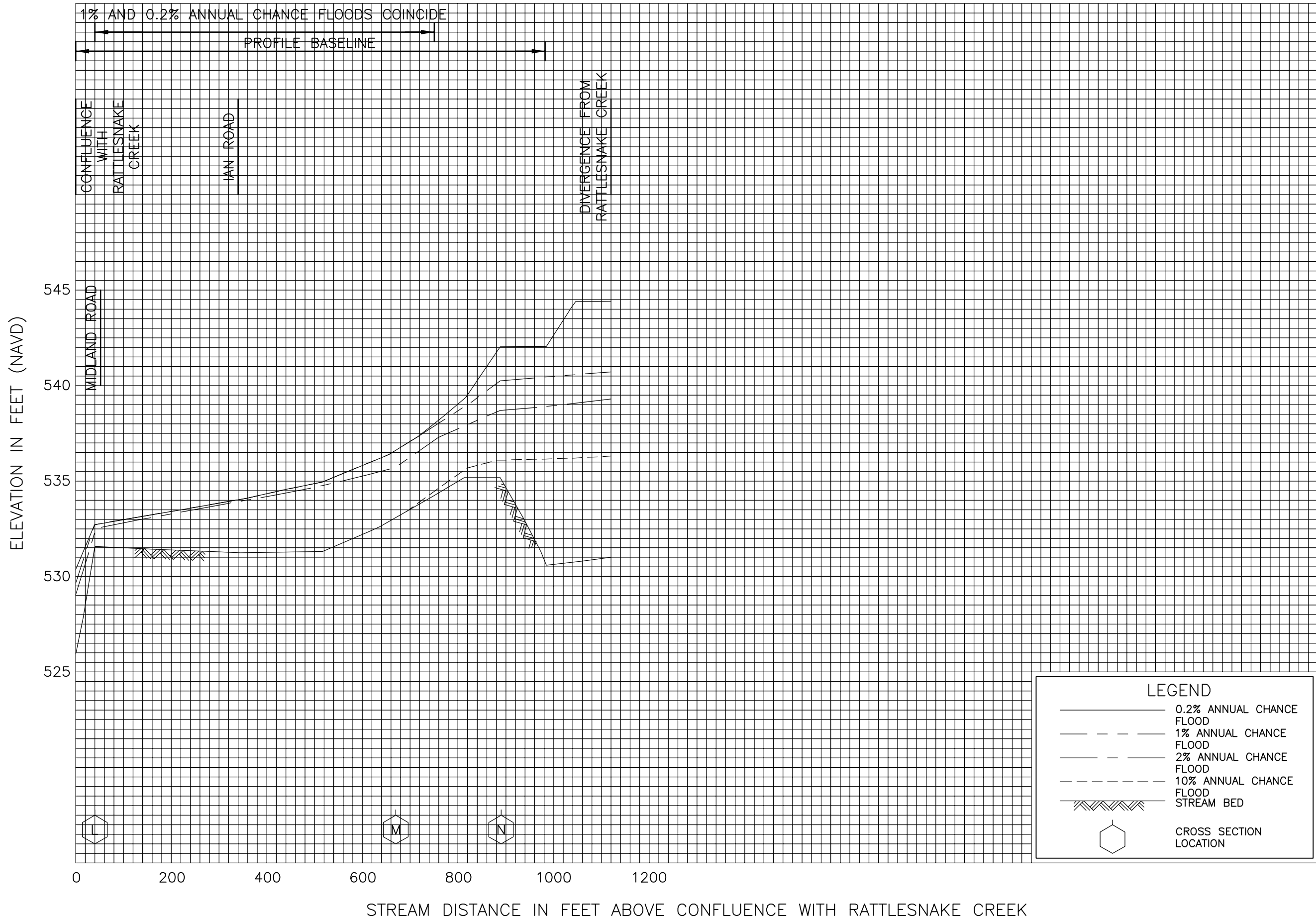
FLOOD PROFILES

RATTLESNAKE CREEK - SPLIT FLOW AT HERITAGE HILLS

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

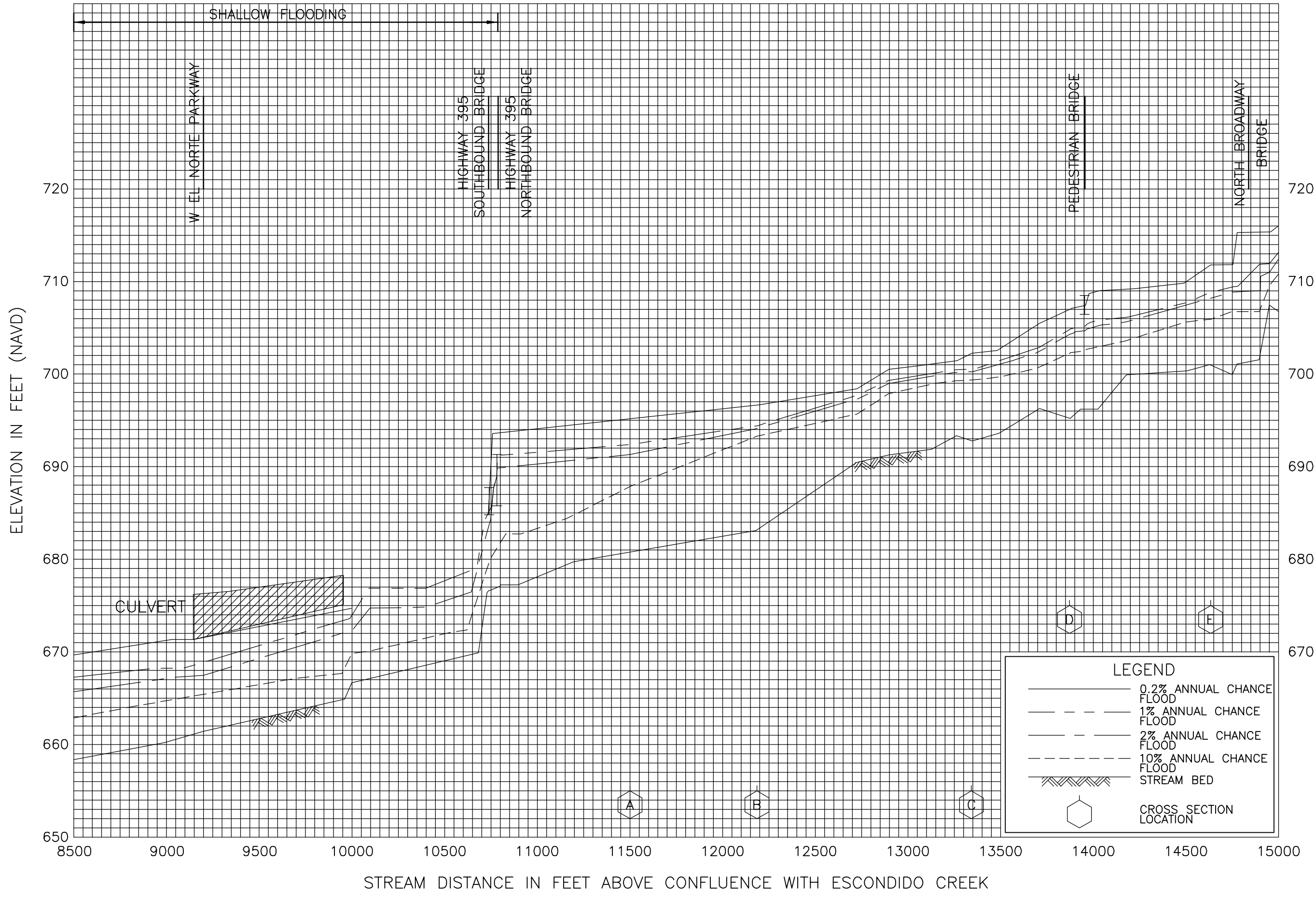
318P



FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)

FLOOD PROFILES

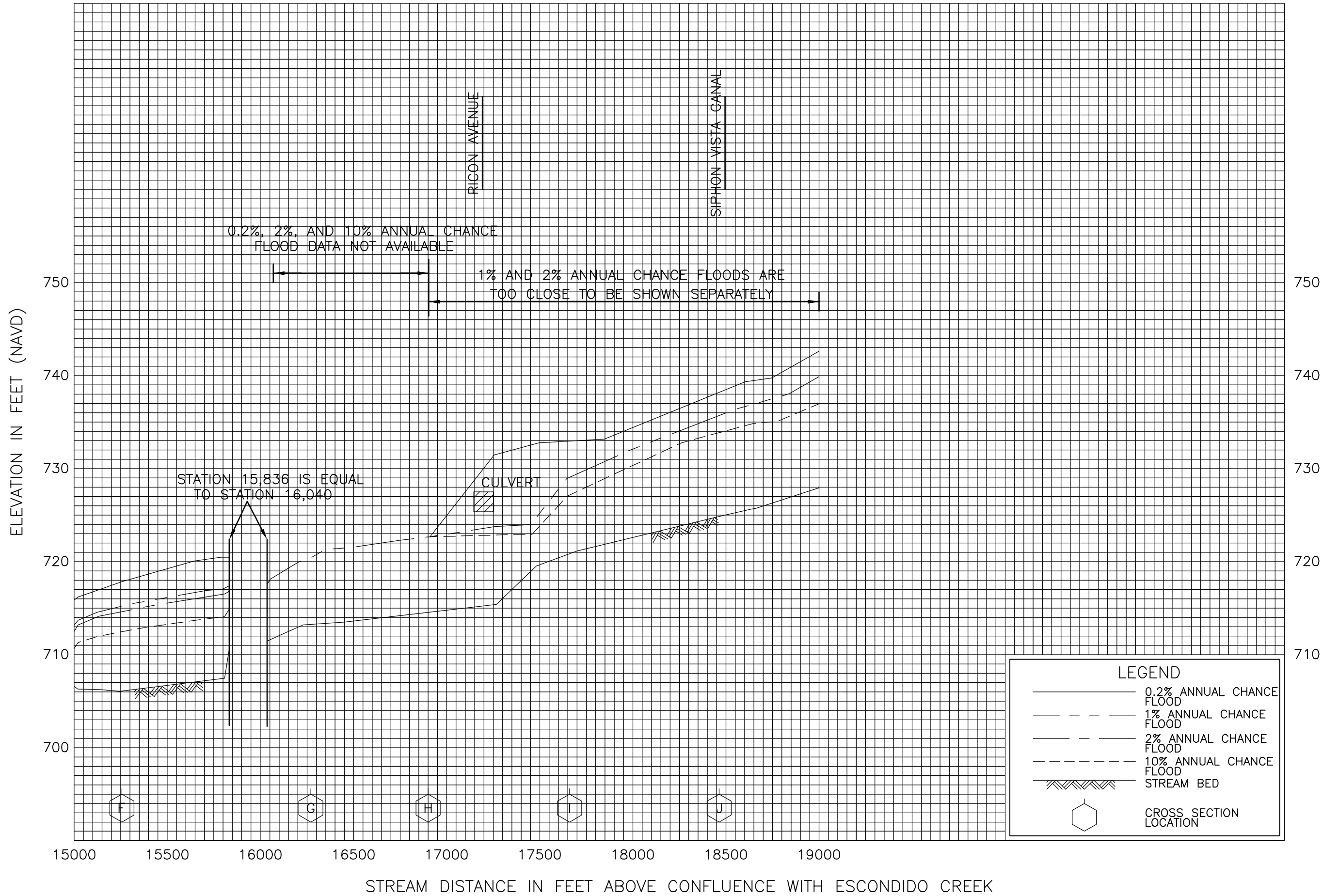
RATTLESNAKE CREEK – SPLIT FLOW AT MIDLAND ROAD



FLOOD PROFILES

REIDY CREEK

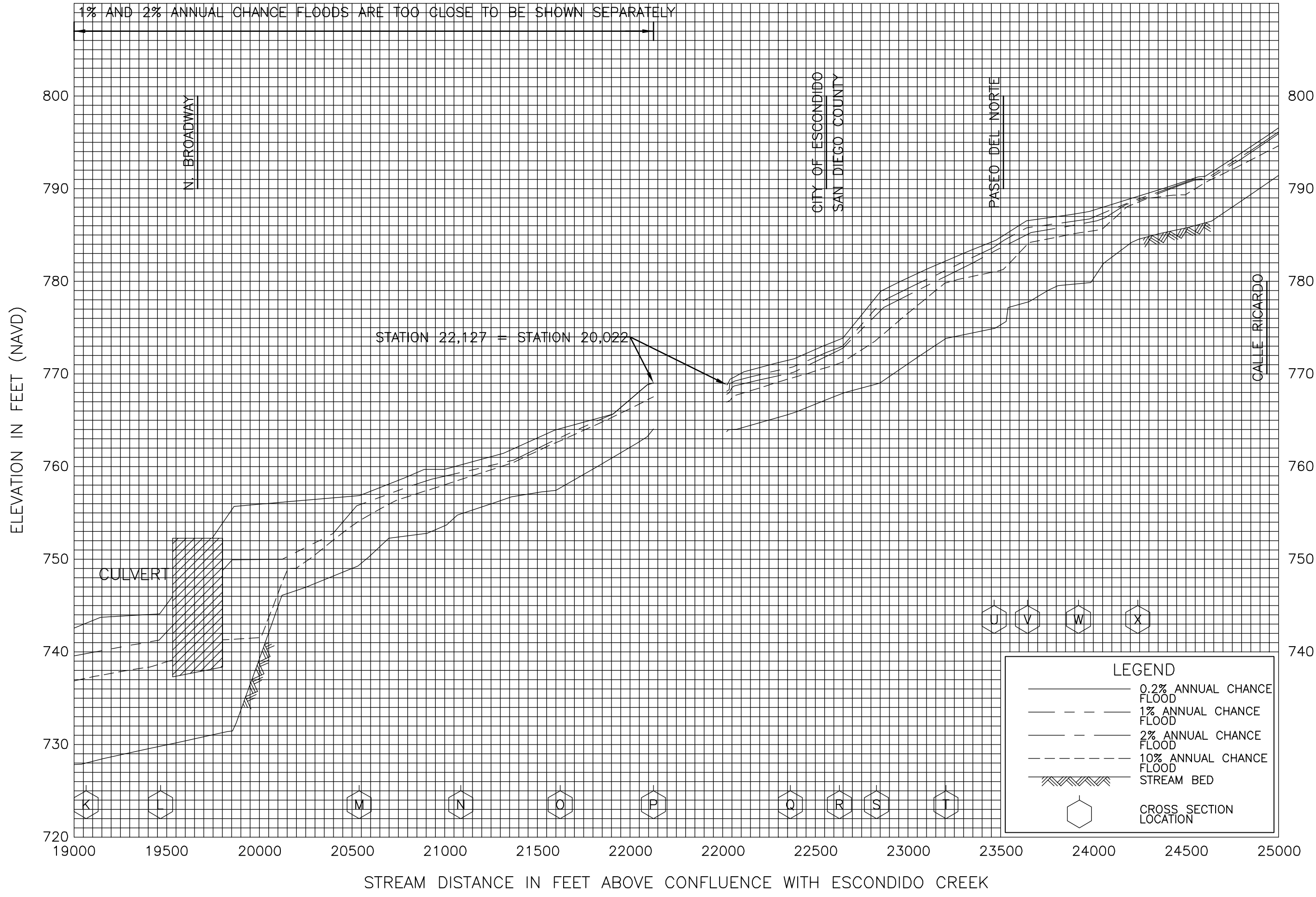
FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



FLOOD PROFILES

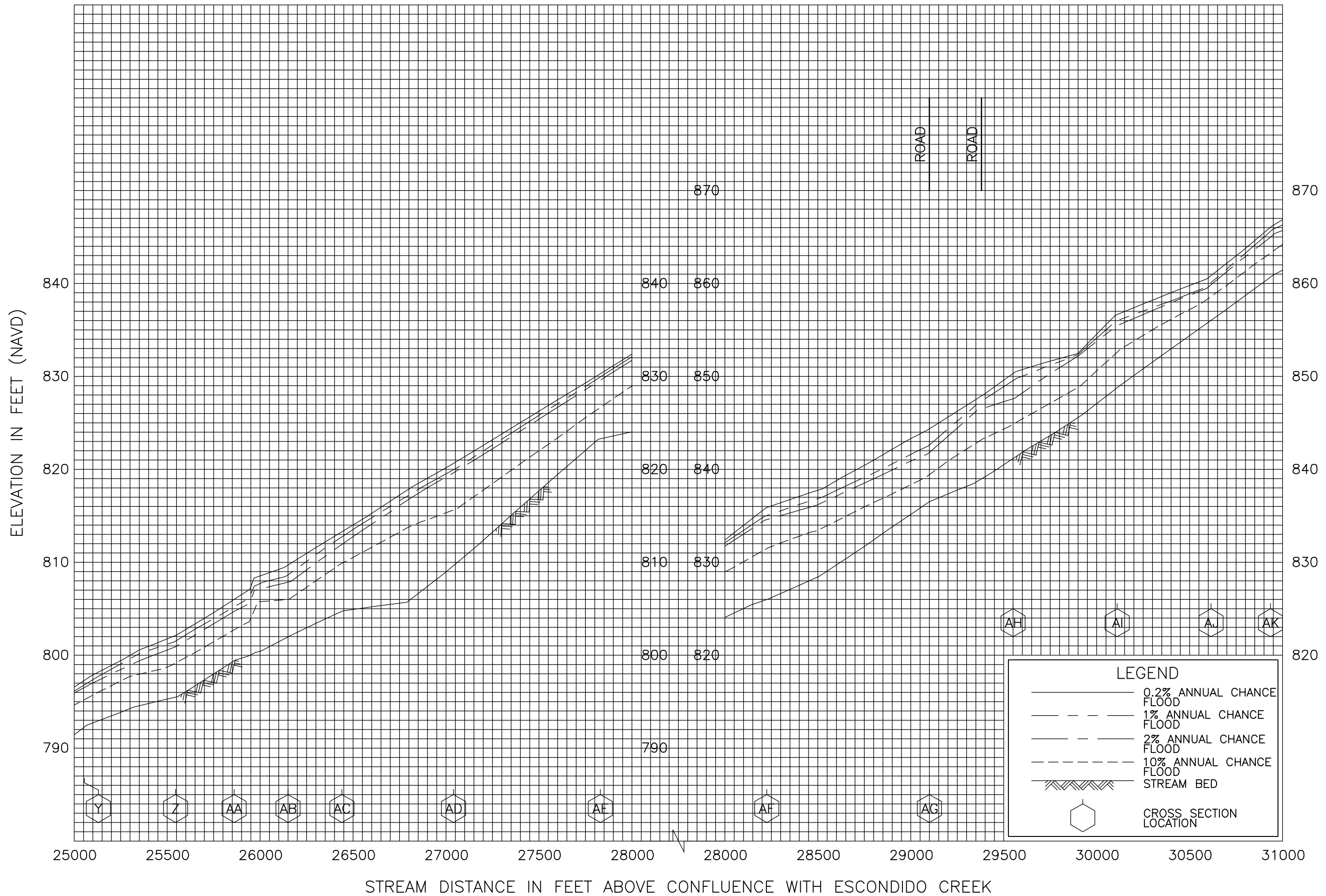
REIDY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



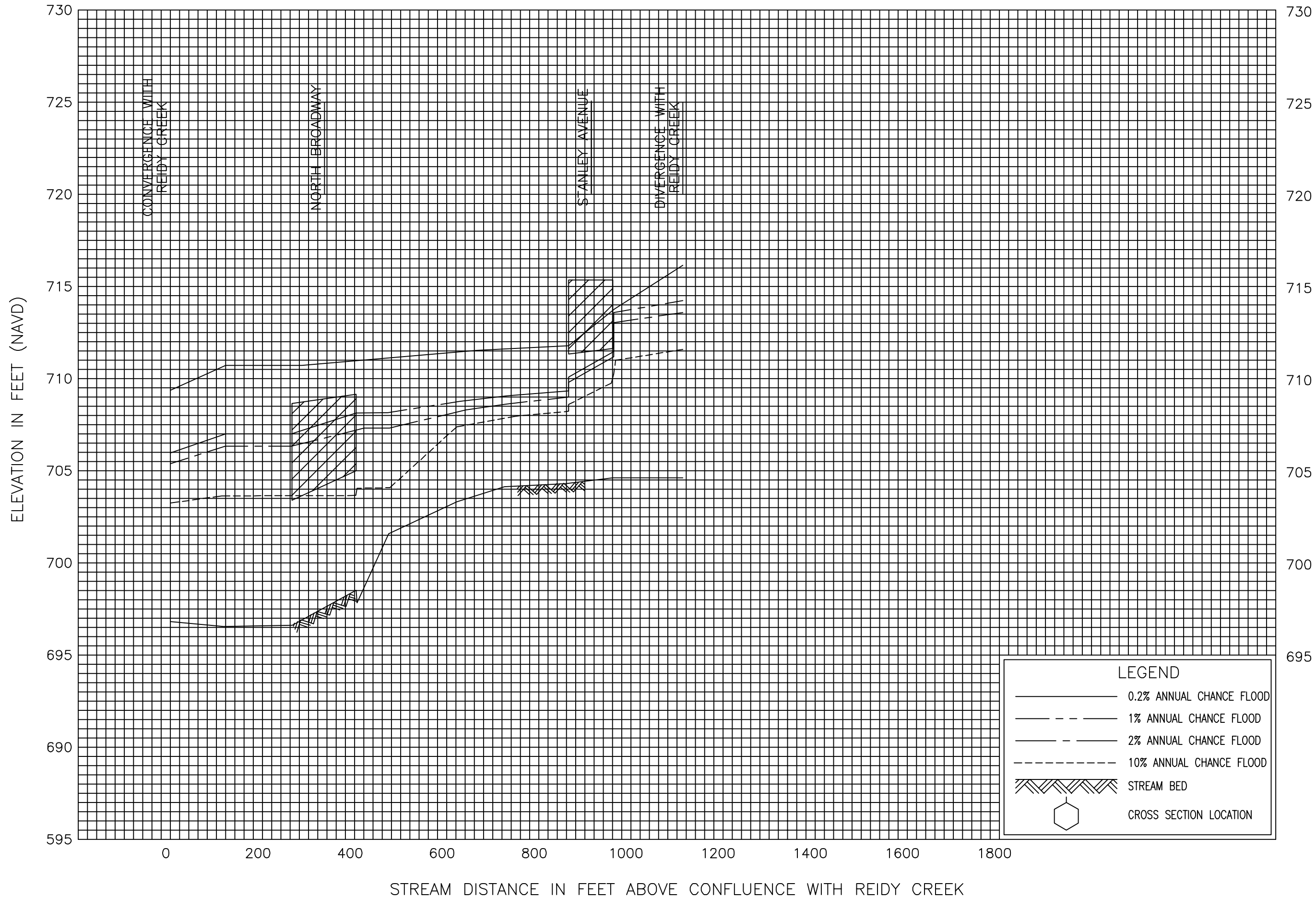
FLOOD PROFILES
REIDY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
REIDY CREEK

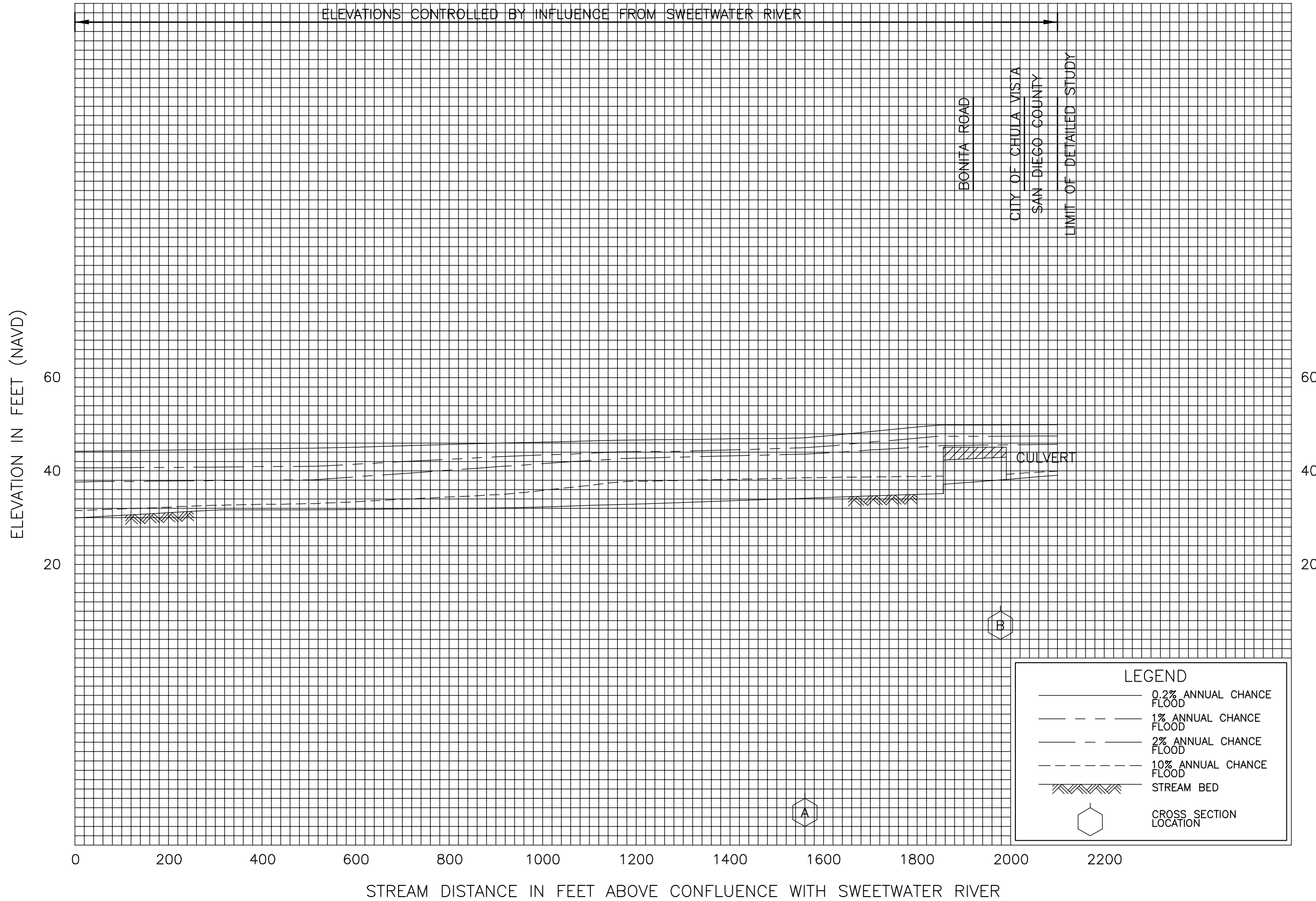
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

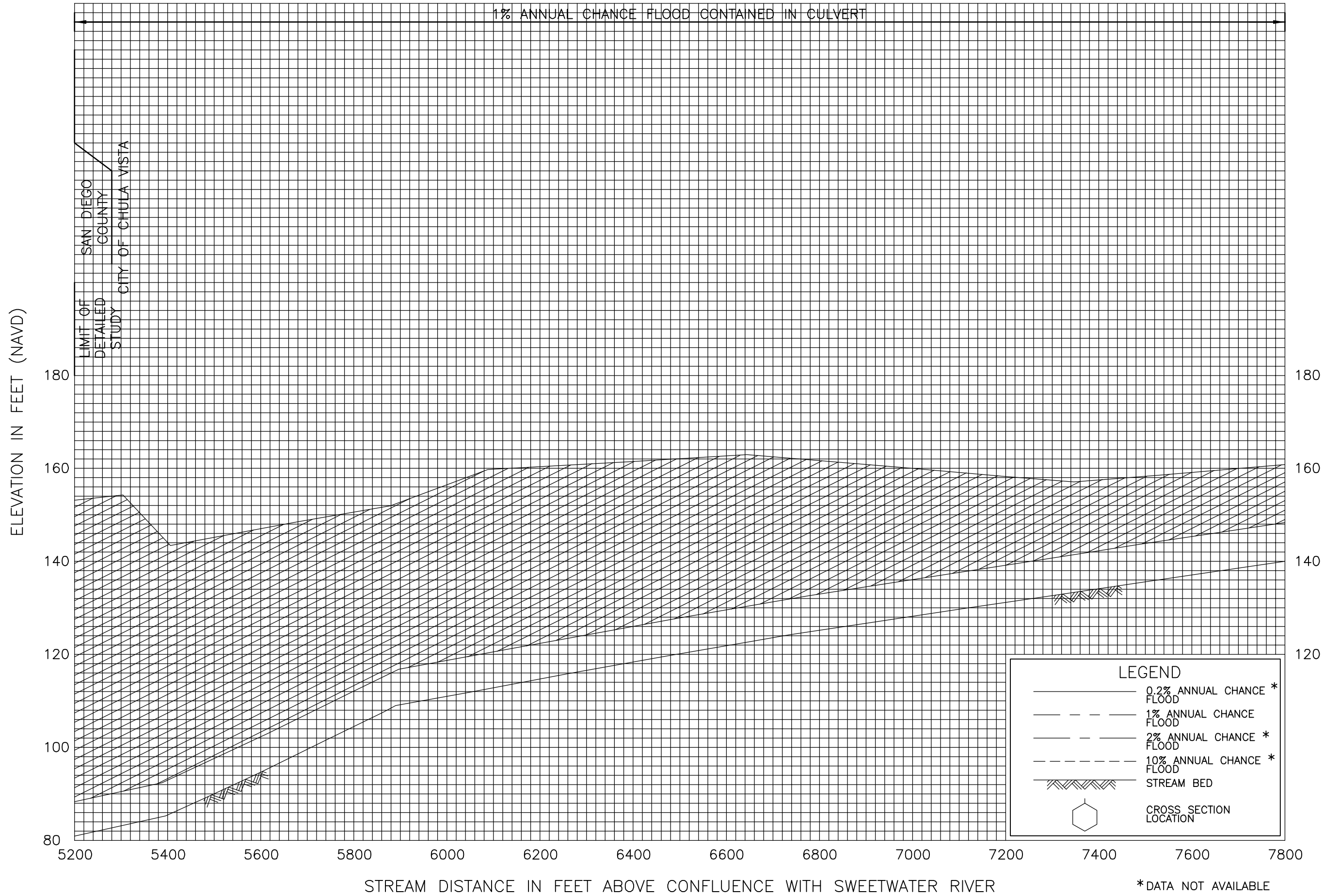
REIDY CREEK SPLIT FLOW

FEDERAL EMERGENCY MANAGEMENT AGENCY
 SAN DIEGO COUNTY, CA
 (AND INCORPORATED AREAS)



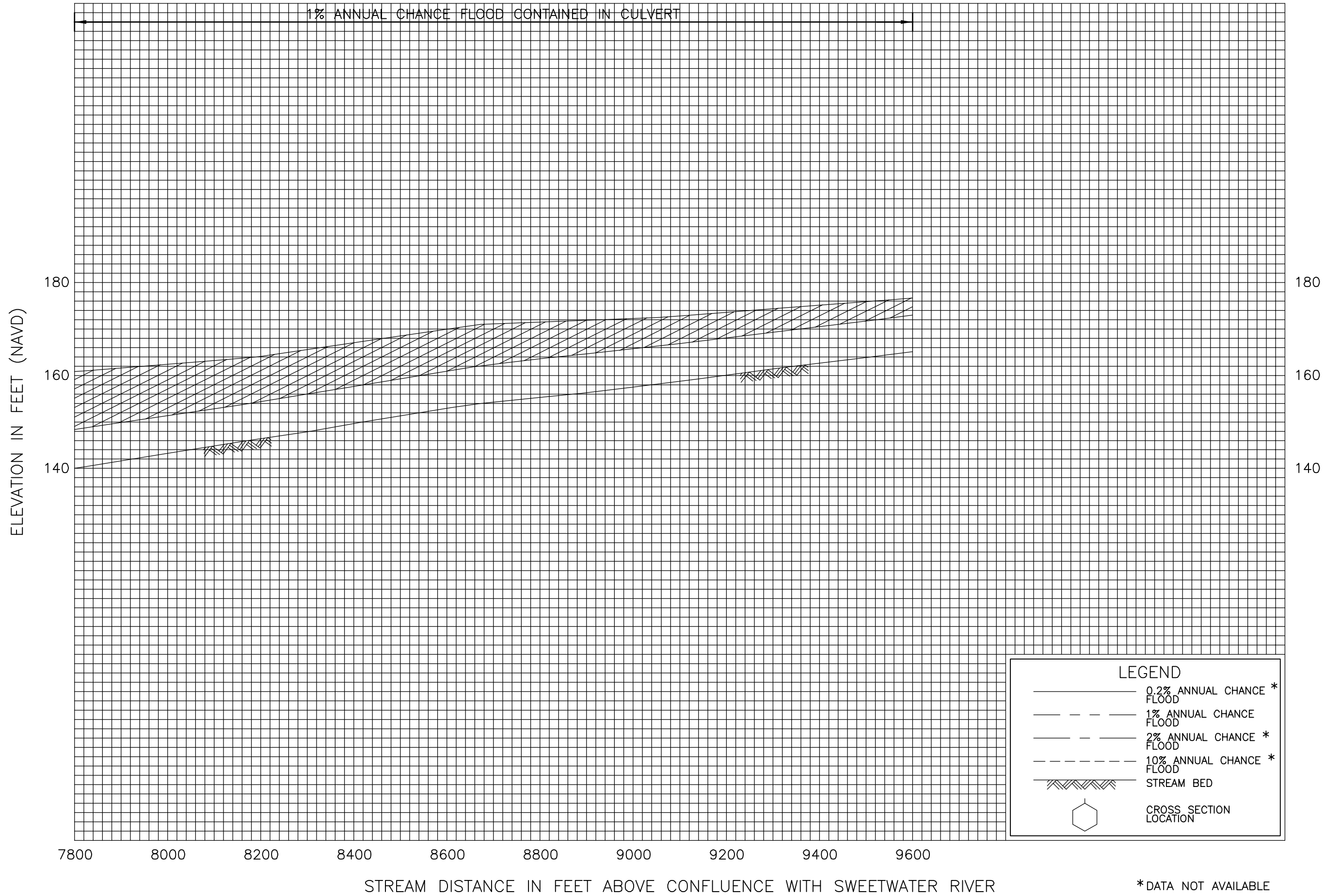
FLOOD PROFILES
RICE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
RICE CANYON CREEK

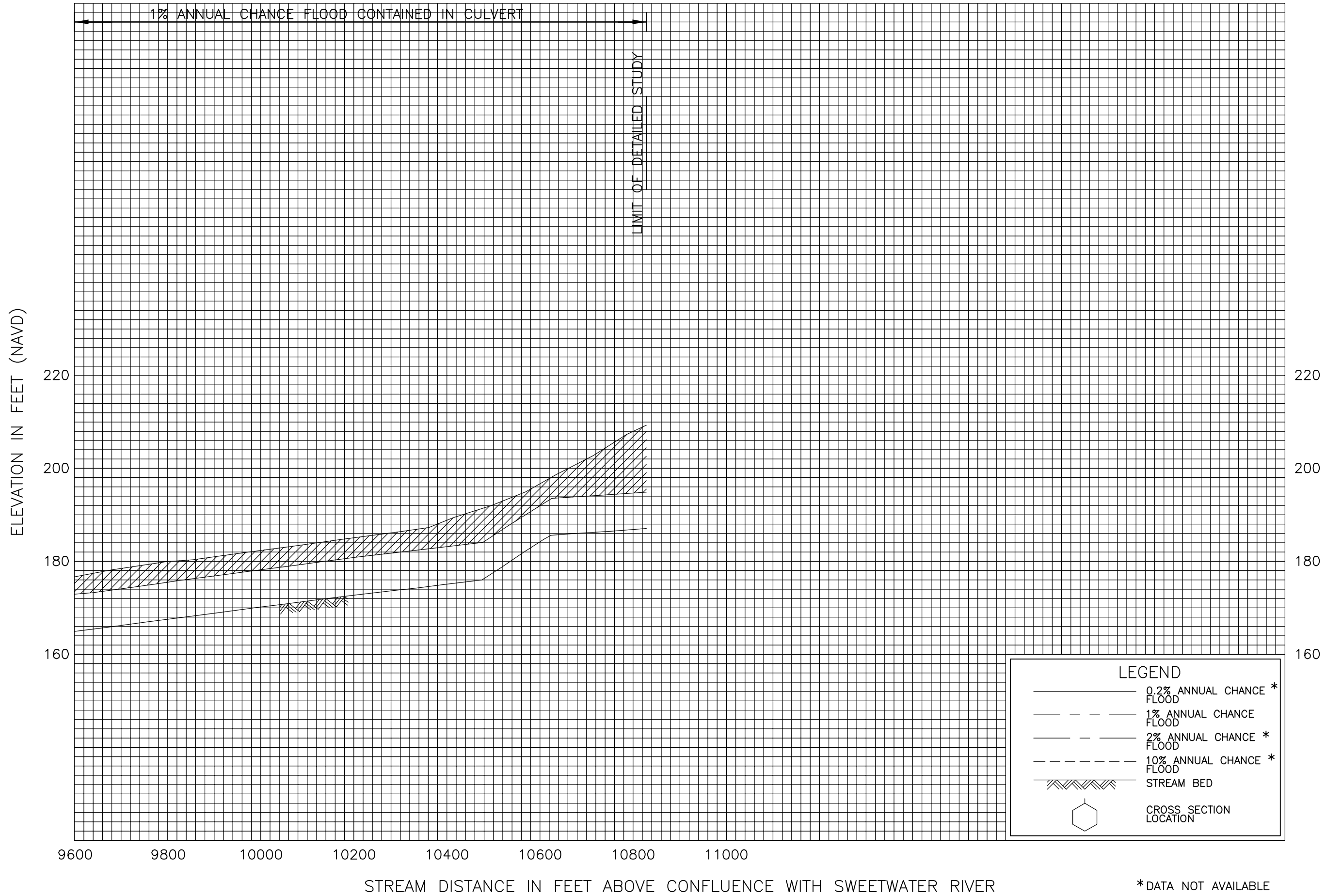
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
RICE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

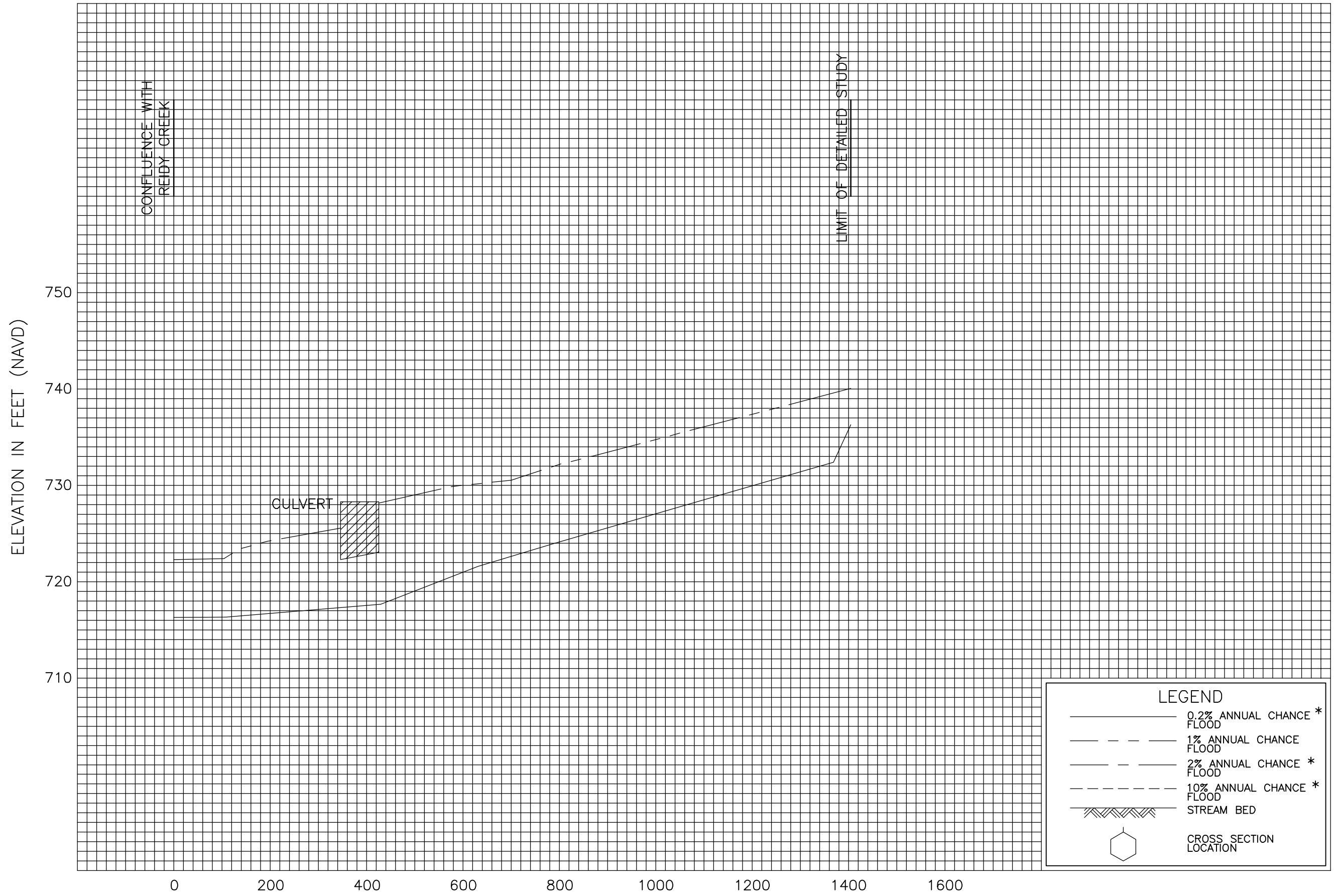
*DATA NOT AVAILABLE



FLOOD PROFILES
RICE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

*DATA NOT AVAILABLE



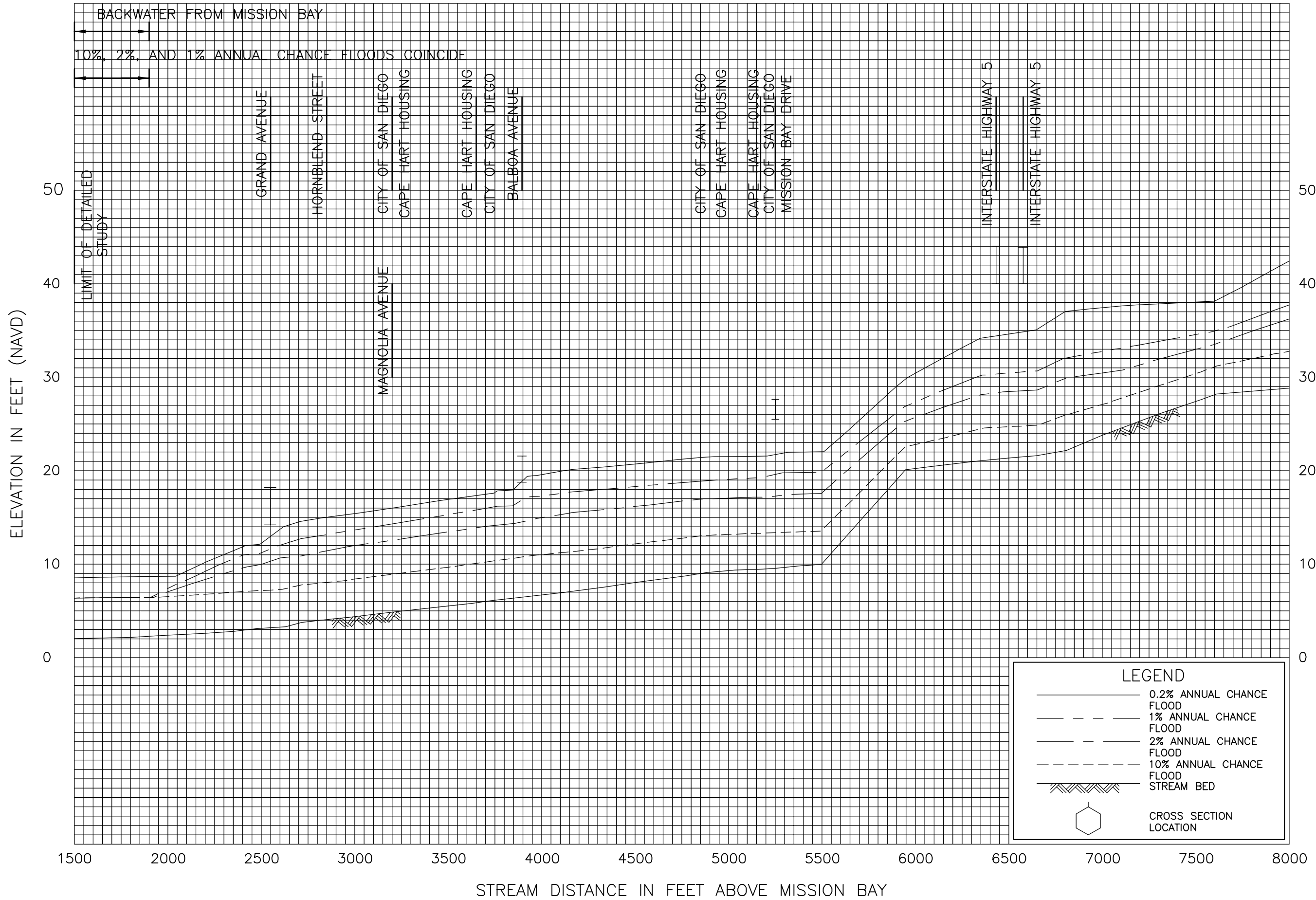
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH REIDY CREEK

* DATA NOT AVAILABLE

FLOOD PROFILES
RINCON AVENUE TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

330P

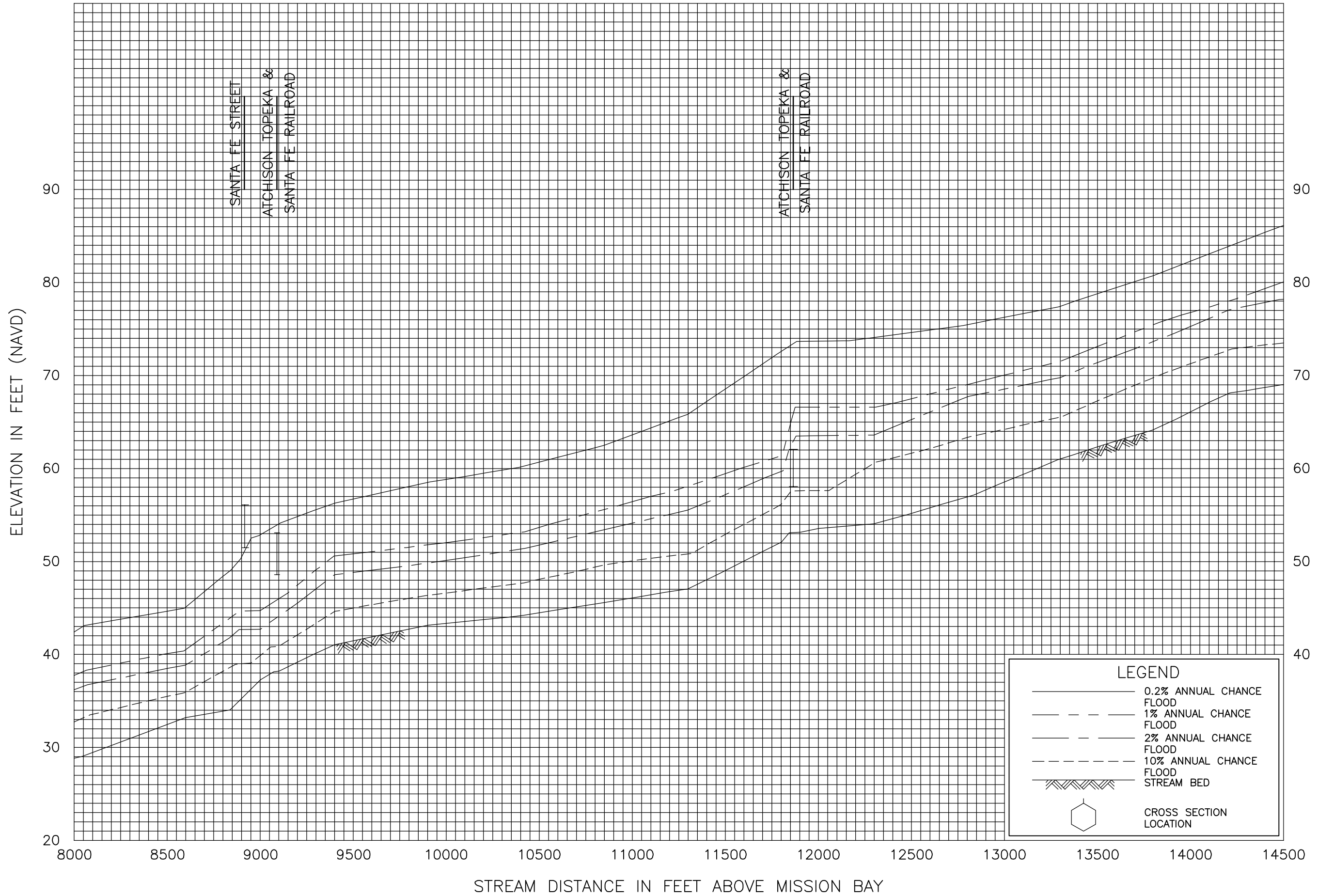


FLOOD PROFILES

ROSE CANYON CREEK

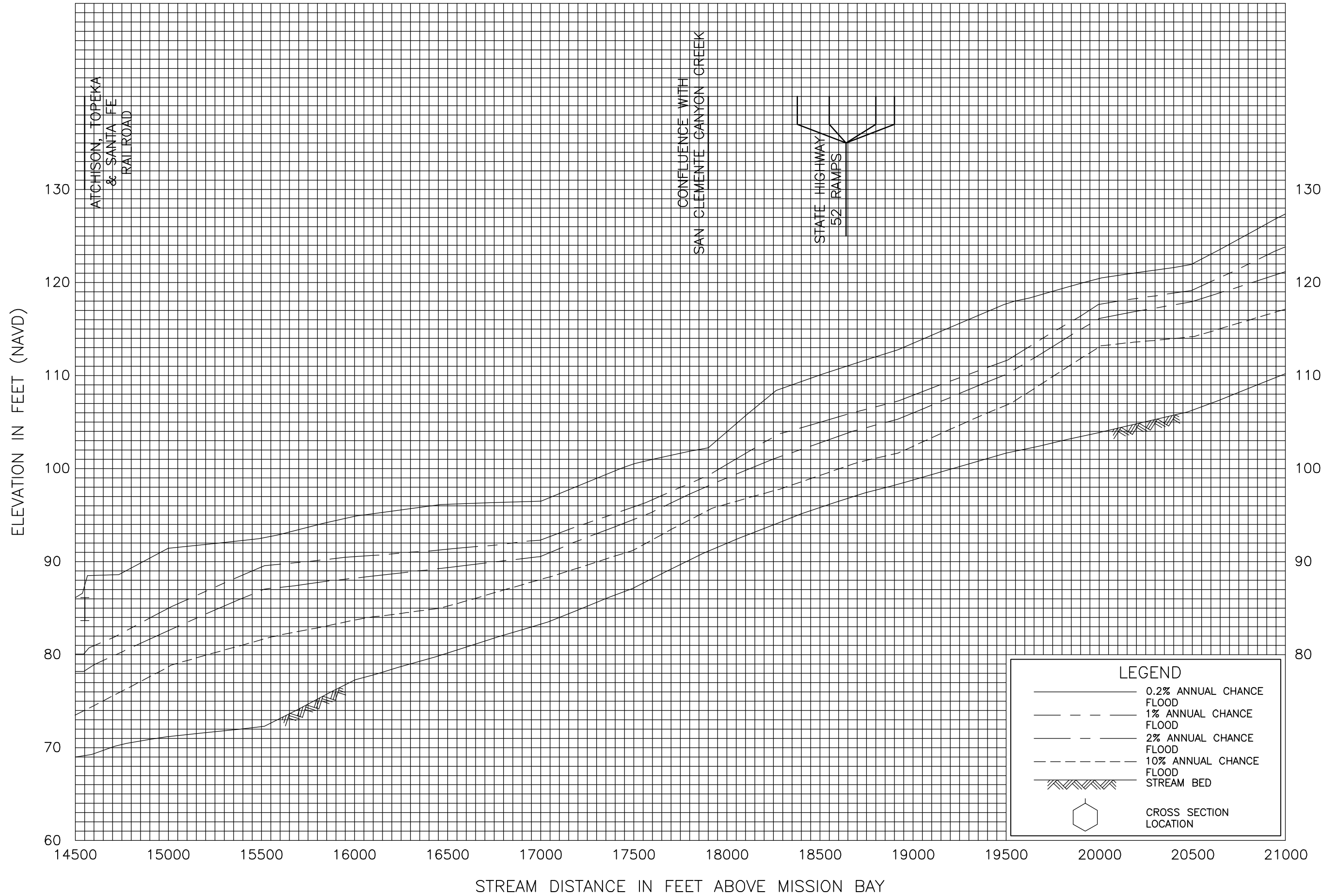
FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



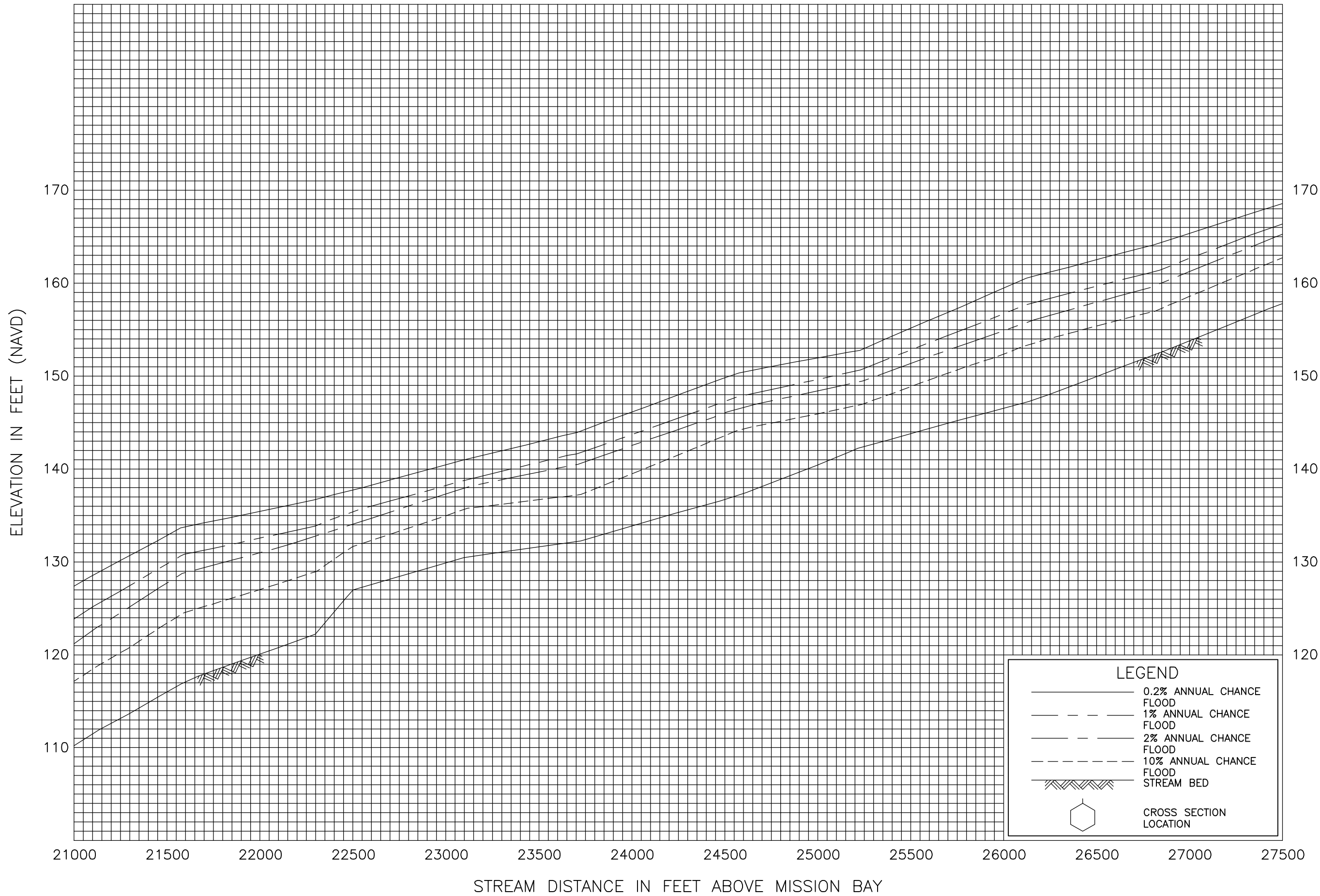
FLOOD PROFILES
ROSE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
ROSE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

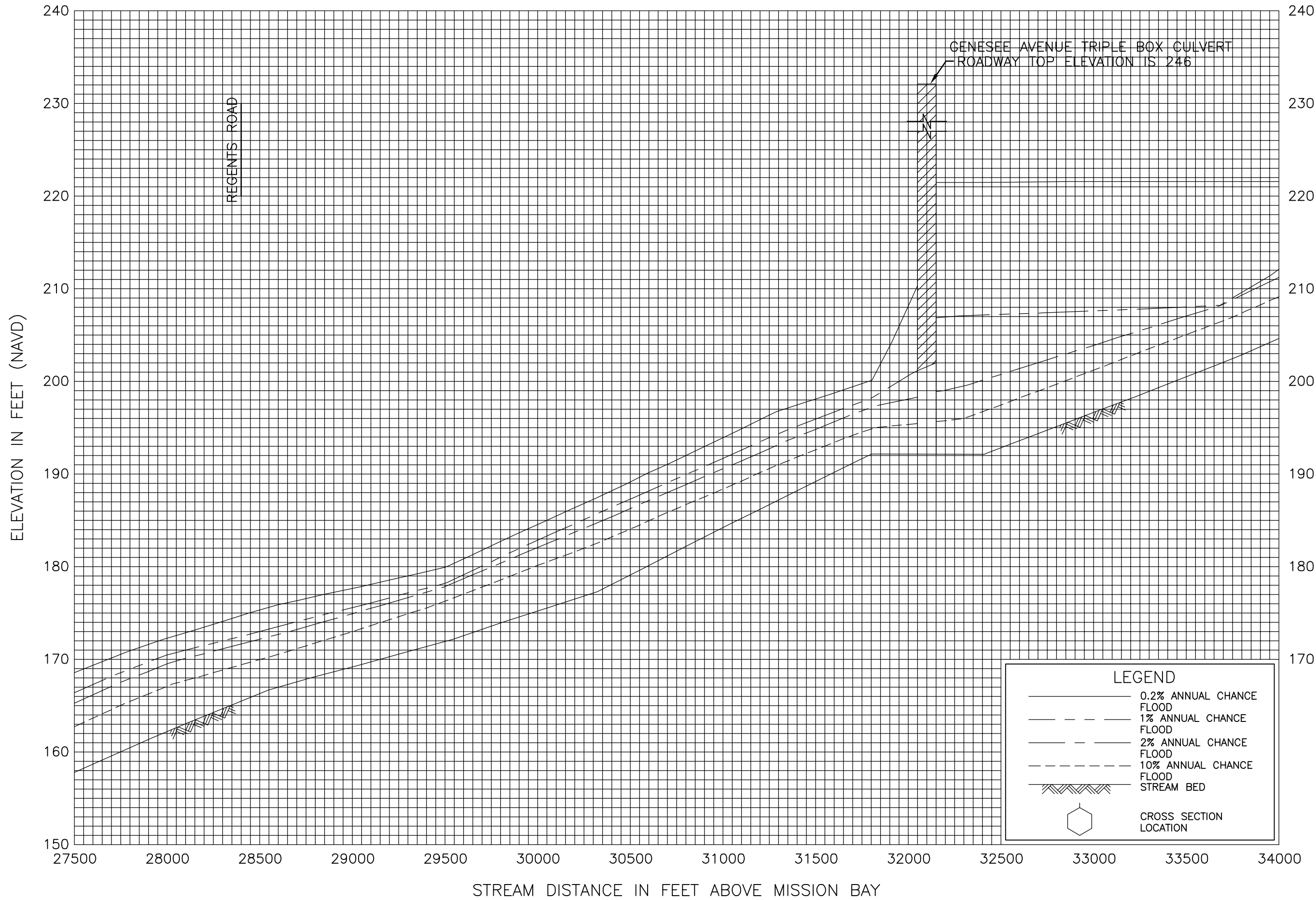


LEGEND

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

FLOOD PROFILES
ROSE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

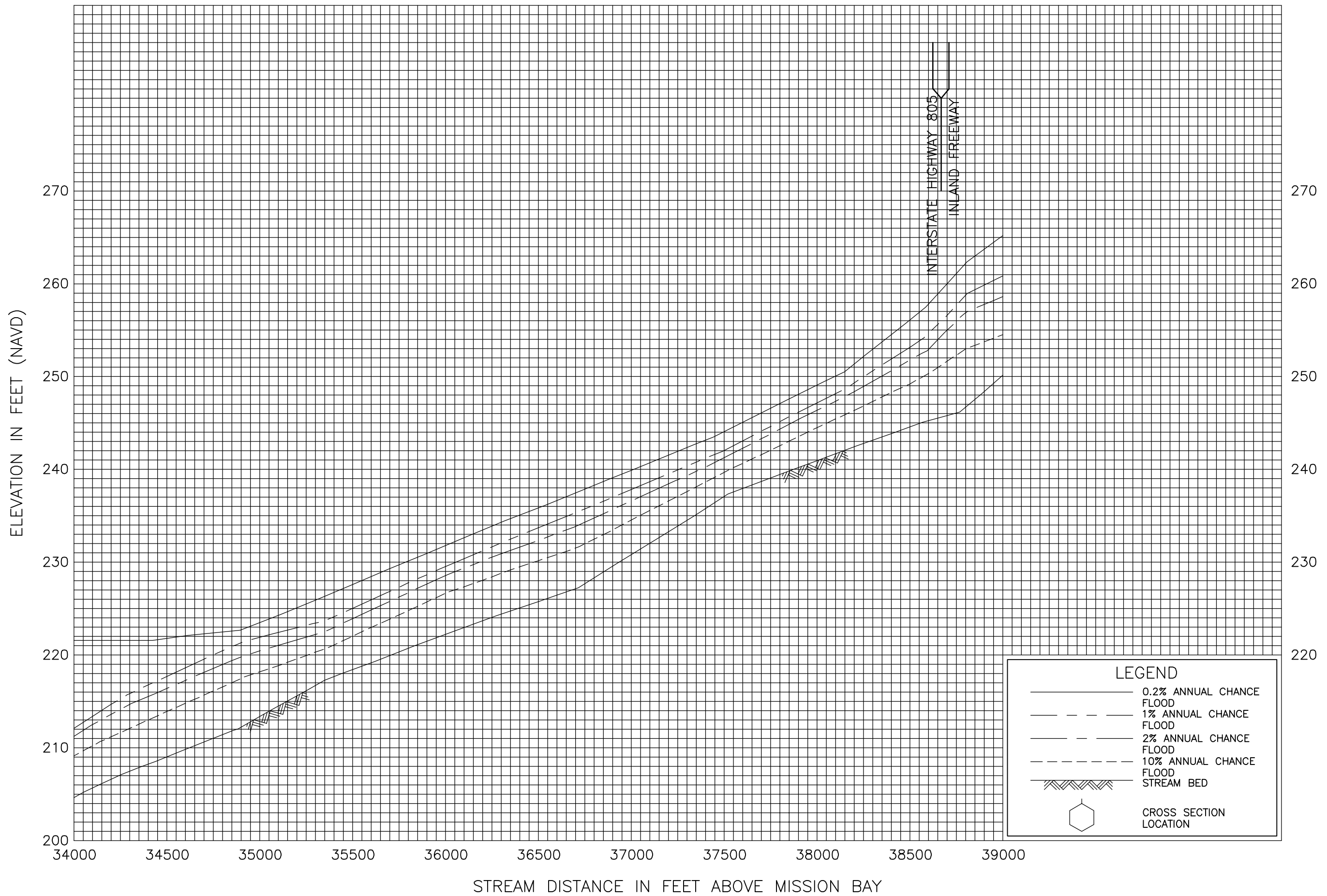


FLOOD PROFILES

ROSE CANYON CREEK

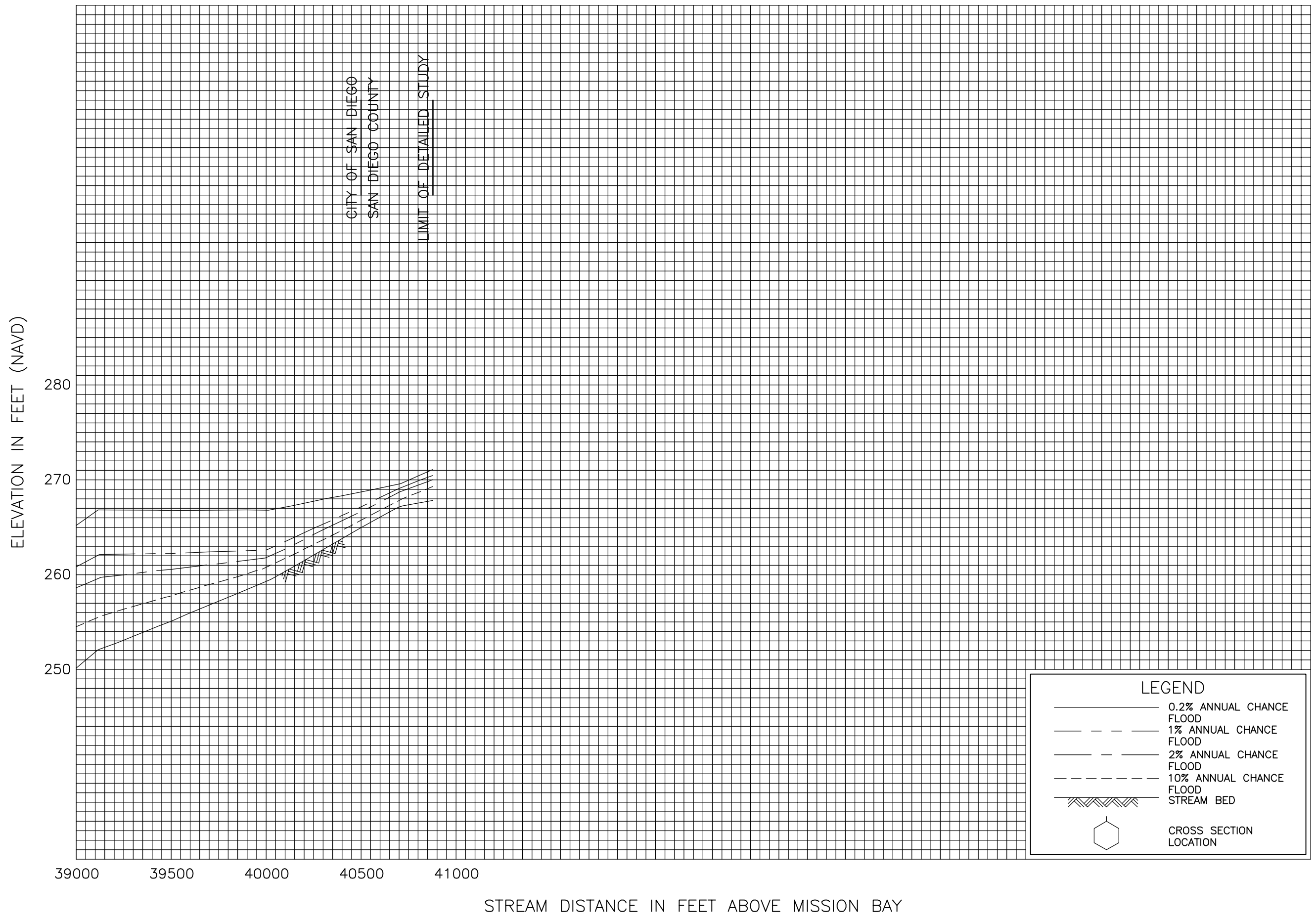
FEDERAL EMERGENCY MANAGEMENT AGENCY







SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
ROSE CANYON CREEK

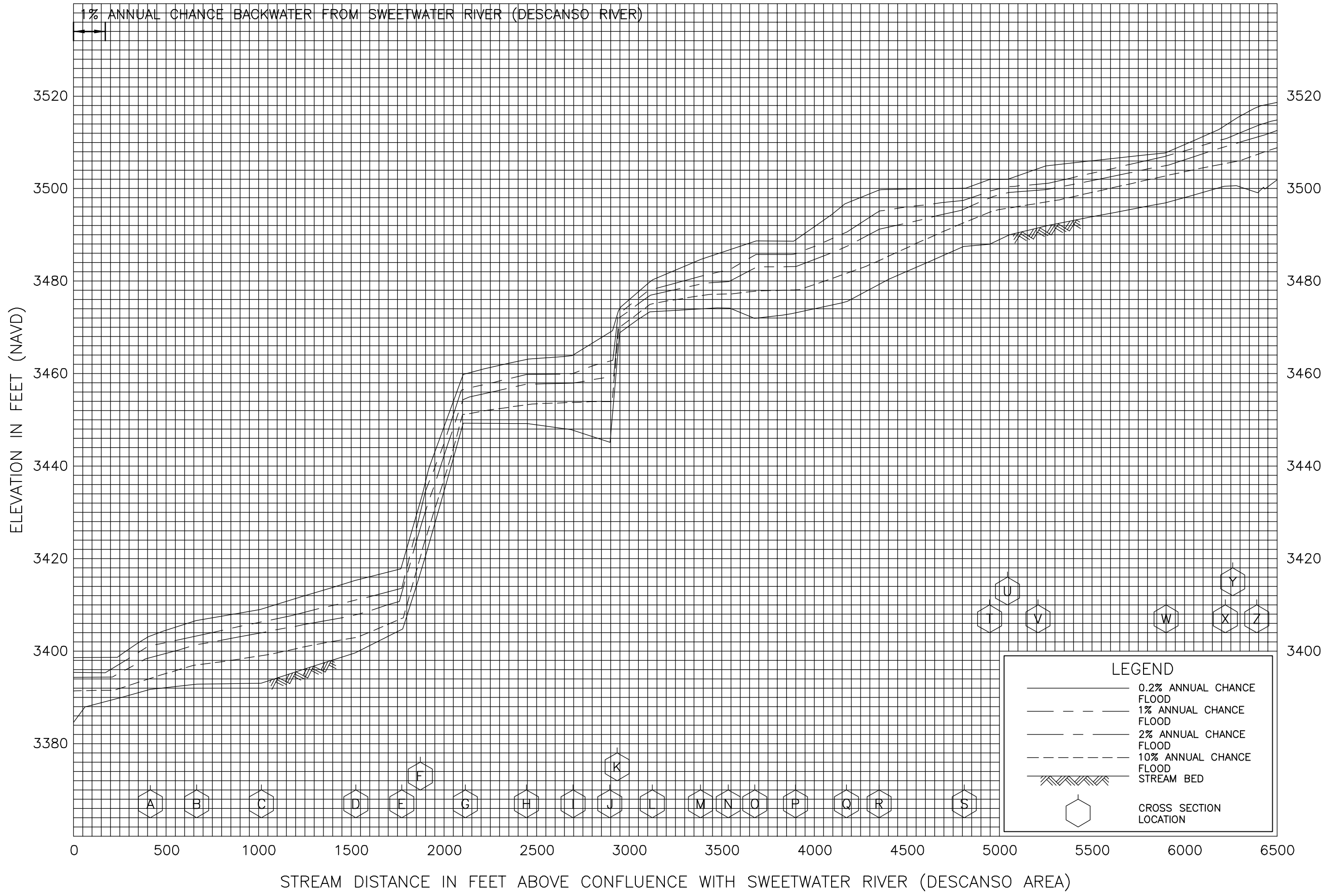
FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



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

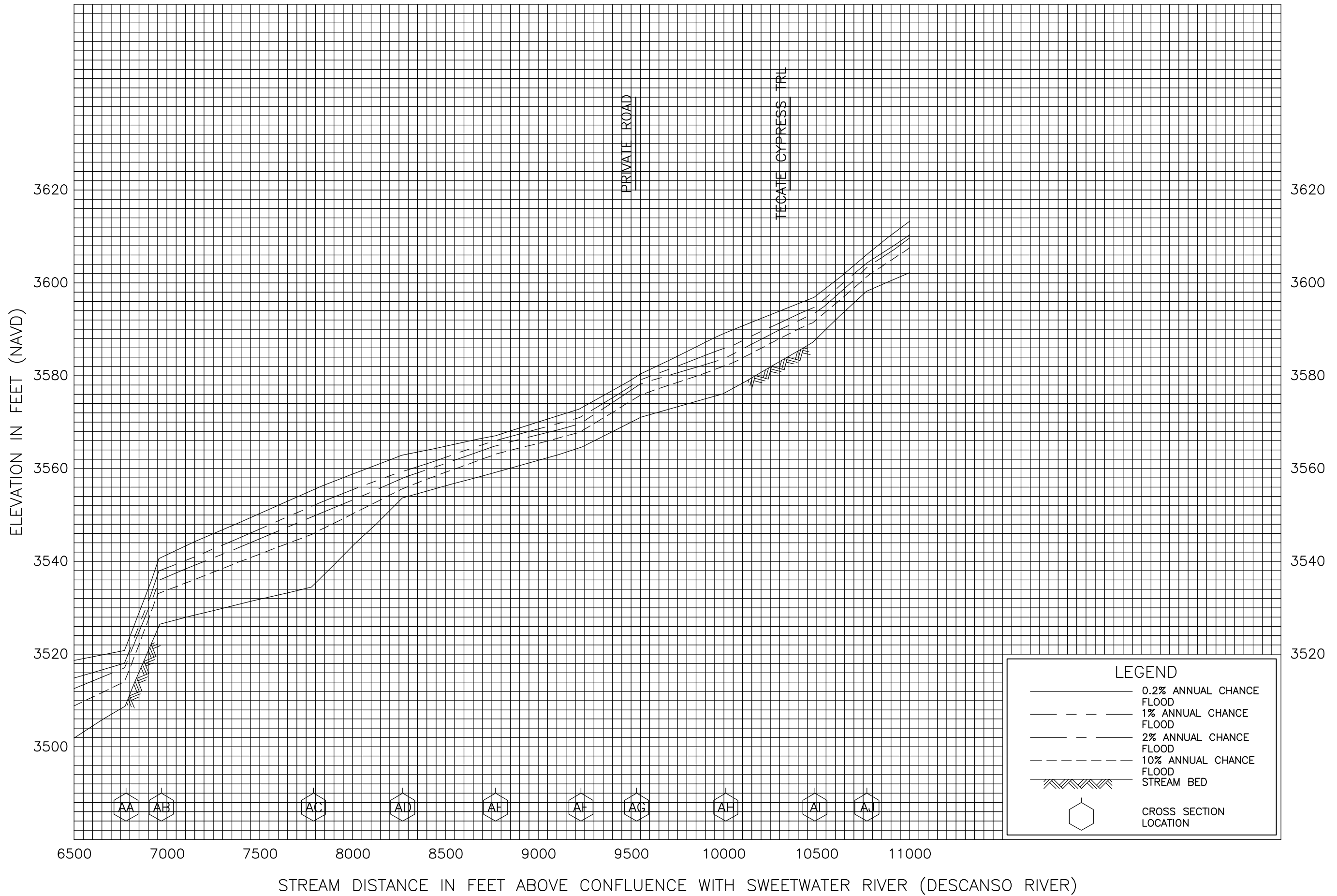
FLOOD PROFILES
ROSE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



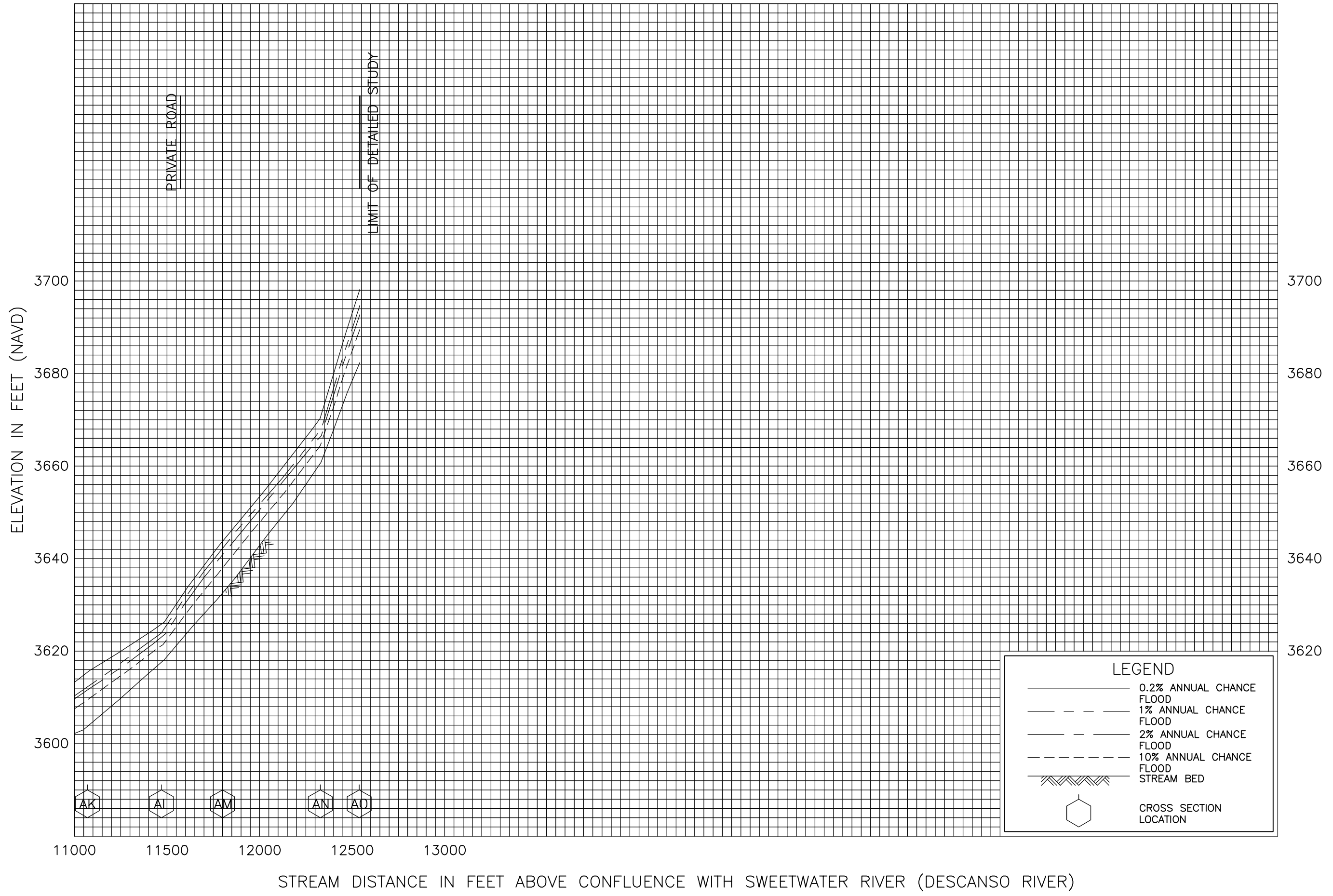
FLOOD PROFILES
SAMAGUTUMA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



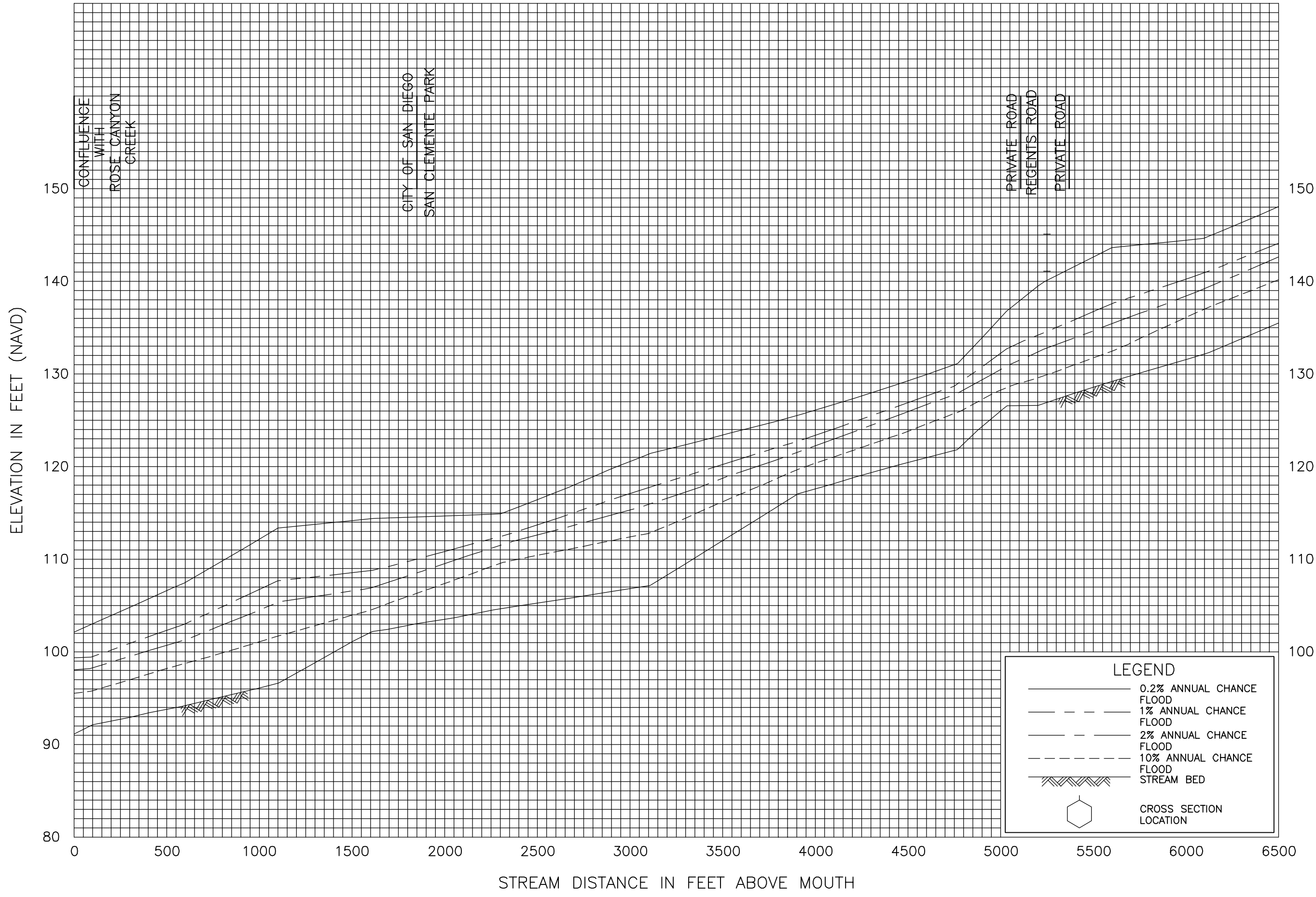
FLOOD PROFILES
SAMAGUTUMA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES
SAMAGUTUMA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

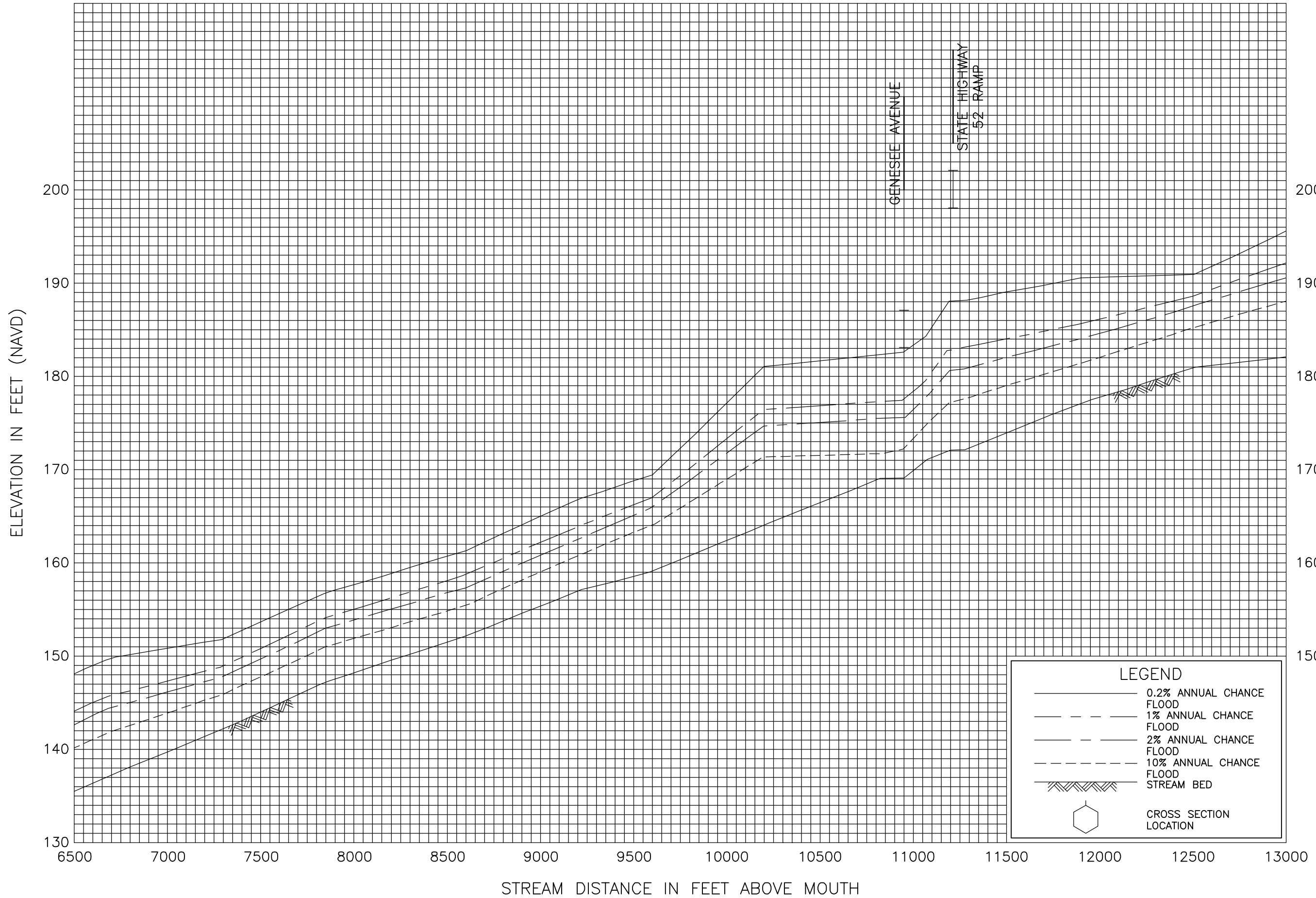


FLOOD PROFILES

SAN CLEMENTE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)

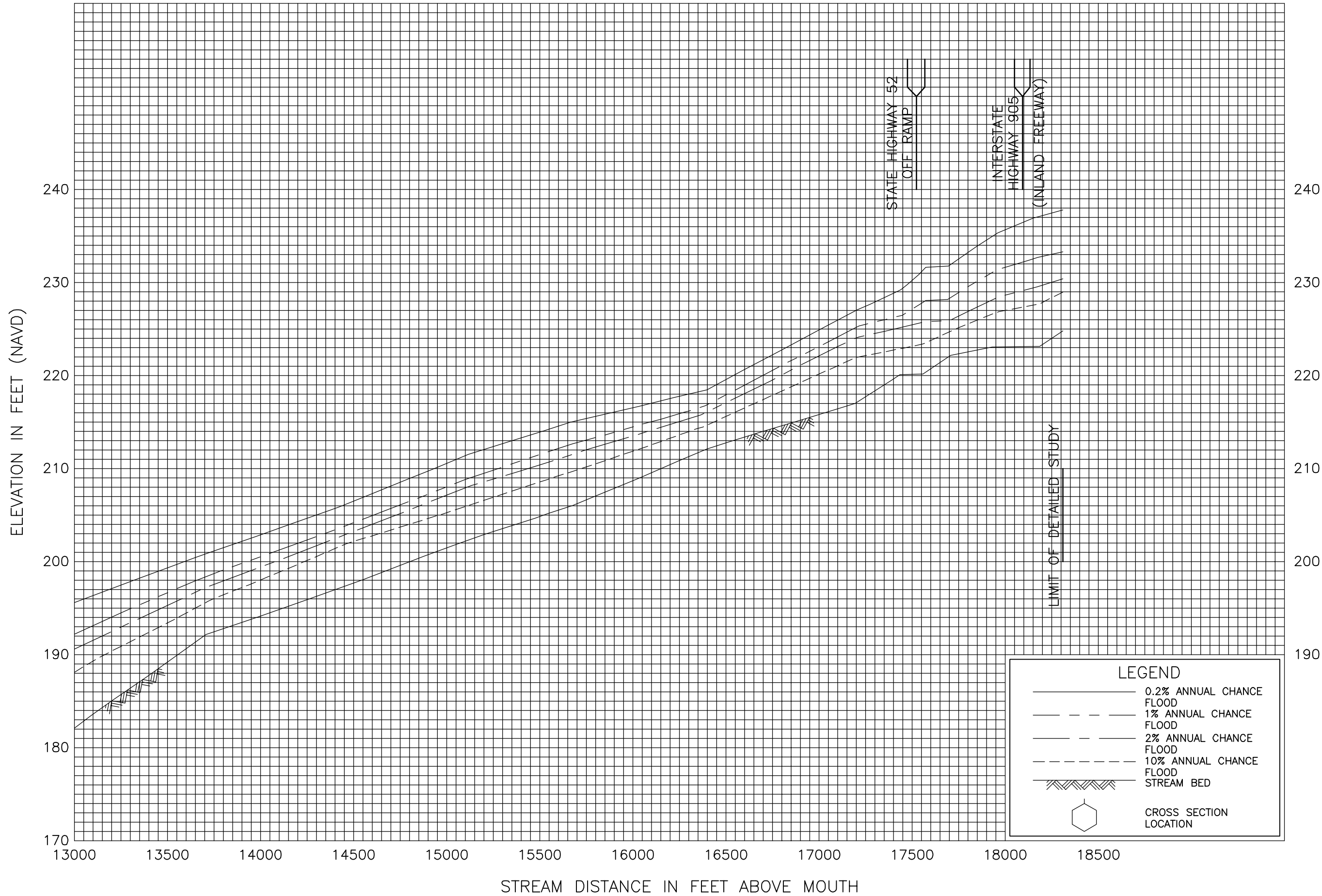


FLOOD PROFILES

SAN CLEMENTE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)



FLOOD PROFILES

SAN CLEMENTE CANYON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN DIEGO COUNTY, CA
(AND INCORPORATED AREAS)