

Follows Conditional Case No.: 19-08-0692R



# Federal Emergency Management Agency

Washington, D.C. 20472

## LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Gallatin County Montana (Unincorporated Areas)	CHANNELIZATION FILL	1D HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 300027		
IDENTIFIER	Meadowlark Ranch Subdivision	APPROXIMATE LATITUDE & LONGITUDE: 45.787, -111.129 SOURCE: Other DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM* NO.: 30031C0595D DATE: September 2, 2011		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 21, 2021  PROFILES: 239P- 243P (NEW) SUMMARY OF DISHCARGES TABLE: 5	

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

Hyalite West Overflow - From the confluence with Thompson Creek to the divergence from Spain Ferris Ditch

### SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Hyalite West Overflow	No BFEs*	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone A	Zone A	NONE	YES

\* 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 Mapping and Insurance 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/flood-insurance>.

Patrick "Rick" F. Sacbbit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration

21-08-0464P

102-I-A-C



**Federal Emergency Management Agency**  
Washington, D.C. 20472

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

**OTHER FLOODING SOURCES AFFECTED BY THIS REVISION**

**FLOODING SOURCES AND REVISED REACHES**

Spain Ferris Ditch - From approximately 2,390 feet upstream of the confluence with East Gallatin River to approximately 970 feet upstream of the divergence of Hyalite West Overflow

**SUMMARY OF REVISIONS**

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Spain Ferris Ditch	No BFEs*	BFEs	YES	NONE
	Zone A	Zone AE	YES	YES
	Zone A	Zone A	YES	YES

\* BFEs - Base Flood Elevations

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 Mapping and Insurance 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/flood-insurance>.

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

**OTHER COMMUNITIES AFFECTED BY THIS REVISION**

**CID Number:** 300105      **Name:** City of Belgrade, Montana

**AFFECTED MAP PANELS**

TYPE: FIRM\*    NO.: 30031C0595D    DATE: September 2, 2011

**AFFECTED PORTIONS OF THE FLOOD INSURANCE STUDY REPORT**

DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 21, 2021  
PROFILES: 240P-242P (NEW)  
SUMMARY OF DISCHARGES TABLE: 5

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 Mapping and Insurance 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/flood-insurance>.

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102-I-A-C



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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### 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.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

#### 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.

This revision has met our criteria for removing an area from the 1-percent-annual-chance floodplain to reflect the placement of fill. However, we encourage you to require that the lowest adjacent grade and lowest floor (including basement) of any structure placed within the subject area be elevated to or above the Base (1-percent-annual-chance) Flood Elevation.

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 Mapping and Insurance 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/flood-insurance>.

A handwritten signature in black ink, appearing to read "Rick F. Sacbibit".

Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



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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 panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Although the proposed area of revision is shown on the effective FIRM as located within the Unincorporated Areas of Gallatin County, portions of this area have been annexed by the City of Belgrade.

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 Mapping and Insurance 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/flood-insurance>.

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Engineering Services Branch  
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Washington, D.C. 20472

**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](https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp)

**LOCAL NEWSPAPER**

Name: *Bozeman Daily Chronicle*

Dates: December 3, 2021 and December 10, 2021

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 Mapping and Insurance 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/flood-insurance>.

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Engineering Services Branch  
Federal Insurance and Mitigation Administration

Table 5. Summary of Discharges

Flooding Source and Location	Drainage Area (Square Miles)	Hydraulic Cross Section	Peak Discharges (cubic Feet per second)				
			10-Percent- Annual Chance	4-Percent- Annual Chance	2-Percent- Annual Chance	1-Percent- Annual Chance	0.2-Percent Annual Chance
	*	755	91	184	273	381	669
	*	1,084	91	179	263	357	598
	*	1,266	37	95	163	230	409
	*	1,419	37	95	162	224	369
At divergence from Nash Spring Creek							
Hyalite West Overflow At Confluence With Thompson Creek	*	*	*	*	*	777	*
I-90 Diversion							
Confluence with Heeb Road West	*	3,667	221	256	293	341	647
Upstream Limit	*	7,829	219	250	281	319	588
I-90 Lateral							
Upstream Limit	*	7,615	2	6	12	23	60
I-90 Lateral							
At divergence for Mill Ditch Diversion	*	3,806	0	33	71	113	220
I-90 Split							
At confluence with East Gallatin River	*	*	21	87	155	222	388
Jefferson River							
At Three Forks	9,600	*	18,300	*	25,000	27,600	34,000
Kagy/Rouse Split							
Approximately 500 feet downstream of Kagy Boulevard	*	556	*	8	25	45	151
At divergence from Golf Course Split	*	1,066	0	8	25	45	155
Lower Black Split							
	*	541	3	8	11	11	30
	*	622	3	7	8	13	23
	*	709	4	17	25	39	44
	*	867	4	17	25	39	44
	*	1,266	4	17	28	39	81

REVISED  
DATA

Table 5. Summary of Discharges

Peak Discharges (cubic Feet per second)

Flooding Source and Location	Drainage Area (Square Miles)	Hydraulic Cross Section	10-Percent-Annual Chance	4-Percent-Annual Chance	2-Percent-Annual Chance	1-Percent-Annual Chance	0.2-Percent Annual Chance
<b>Spain Ferris Ditch</b>							
Downstream of divergence of Hyalite West Overflow	*	*	*	*	*	1,587 <sup>1</sup>	*
Upstream of divergence of Hyalite West Overflow	112	*	*	*	*	2,364	*
<b>Tracy Avenue Split</b>							
At divergence from Figgins Creek	*	840	54	95	137	153	225
<b>Wallace Avenue Split</b>							
At confluence with Bozeman Creek	*	2,786	7 <sup>1</sup>	16 <sup>1</sup>	23 <sup>1</sup>	31 <sup>1</sup>	49 <sup>1</sup>
At Tamarack Street	*	*	14 <sup>1</sup>	25 <sup>1</sup>	33 <sup>1</sup>	41 <sup>1</sup>	60 <sup>1</sup>
At Davis Street	*	3,238	30	68	95	122	188
At Mendenhall Street	*	3,982	11 <sup>1</sup>	24 <sup>1</sup>	34 <sup>1</sup>	45 <sup>1</sup>	74 <sup>1</sup>
At divergence from Church Avenue Split	*	4,826	29	59	85	113	184
<b>West Gallatin River</b>							
Headwaters of Gallatin River	1,100	-121	7,668	8,845	9,667	10,450	12,160
East Overflow Flow Split	1,098	20,324	7,653	8,739	9,491	10,205	11,735
Confluence with Baker Creek	1,097	21,688	7,664	8,766	9,535	10,269	11,859
Flow Split to Baker Creek North I-90	1,097	24,752	7,081	7,942	8,516	9,037	9,961
Flow Split to Baker Creek North I-90	1,096	26,546	7,181	8,105	8,724	9,293	10,321
Flow Split to Baker Creek at I-90	1,079	38,860	7,296	8,276	8,938	9,548	10,655
Flow Split to Baker Creek South I-90	1,075	42,105	7,418	8,424	9,114	9,760	11,124
Flow Split to Baker Creek at North Diversion	1,023	68,398	7,419	8,430	9,126	9,783	11,183
Flow Split to Baker Creek at Moreland Ditch	1,010	75,810	7,454	8,468	9,165	9,824	11,228

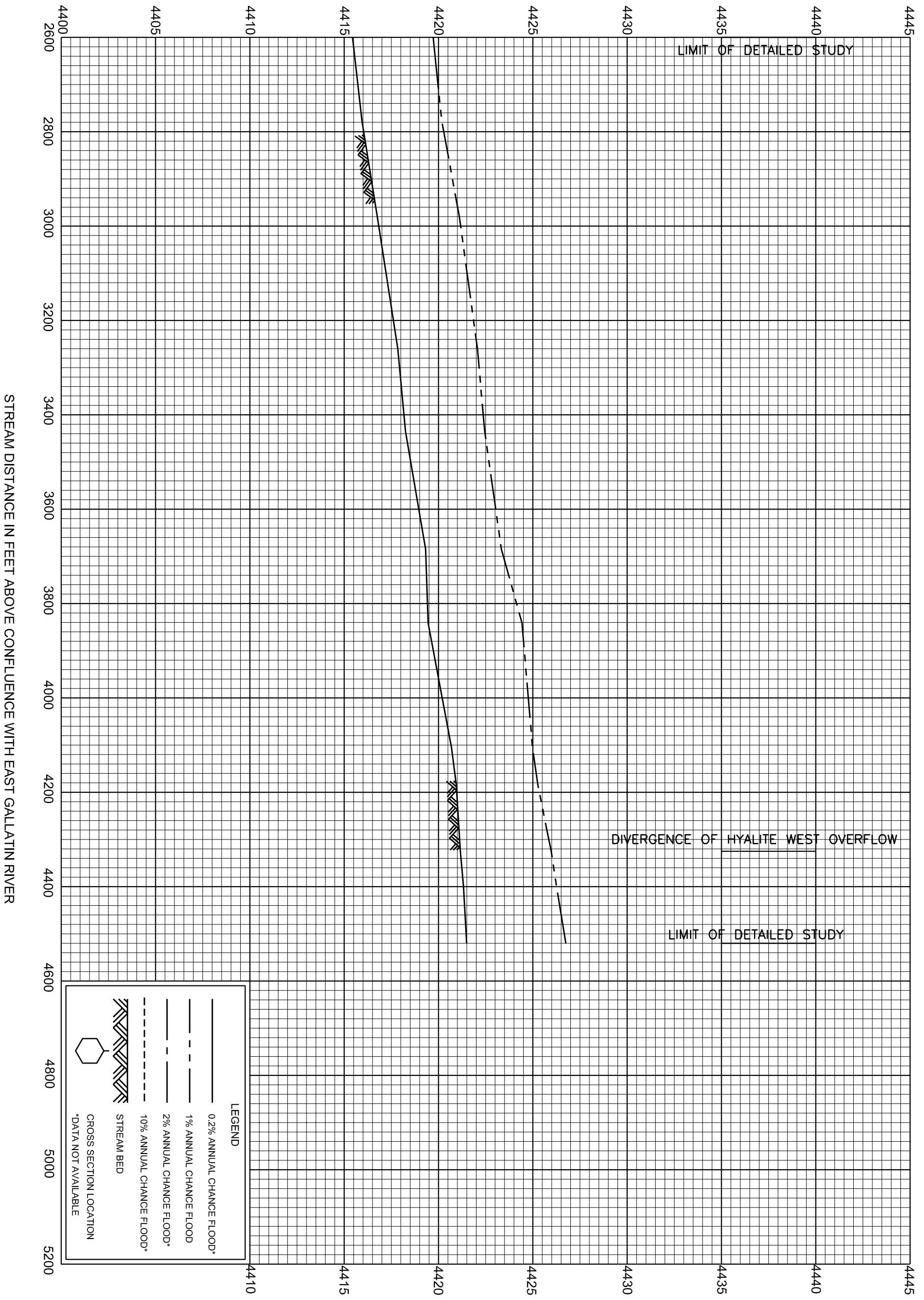
REVISED DATA

<sup>1</sup>Discharge decrease downstream due to flow loss to split

REVISED TO REFLECT LOMR EFFECTIVE: April 11, 2022



ELEVATION IN FEET (NAVD 88)



FEDERAL EMERGENCY MANAGEMENT AGENCY

GALLATIN COUNTY, MT  
AND INCORPORATED AREAS

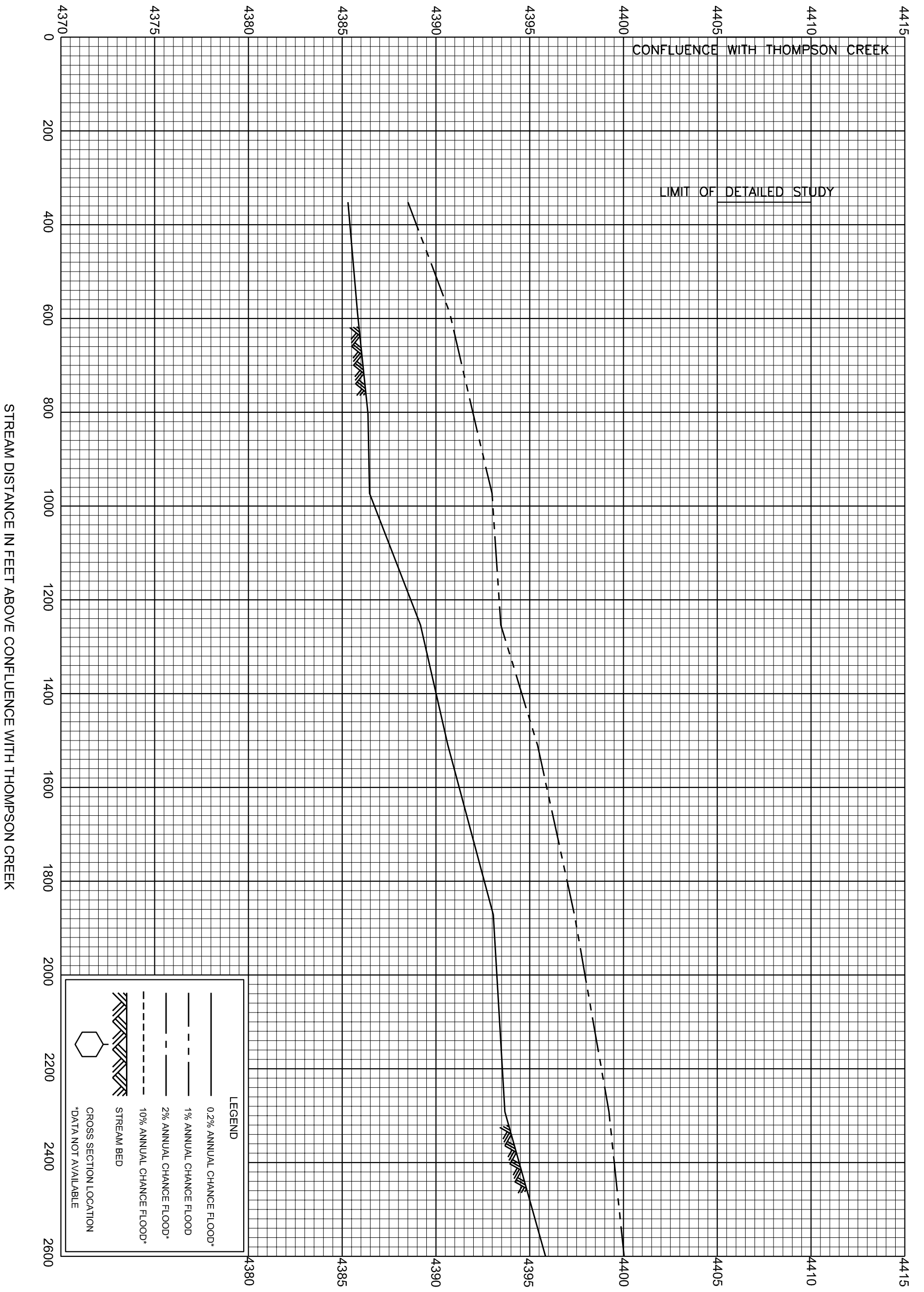
FLOOD PROFILES

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 11, 2022

SPAIN FERRIS DITCH

239P

ELEVATION IN FEET (NAVD 88)



**LEGEND**

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

\* DATA NOT AVAILABLE

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH THOMPSON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GALLATIN COUNTY, MT  
AND INCORPORATED AREAS

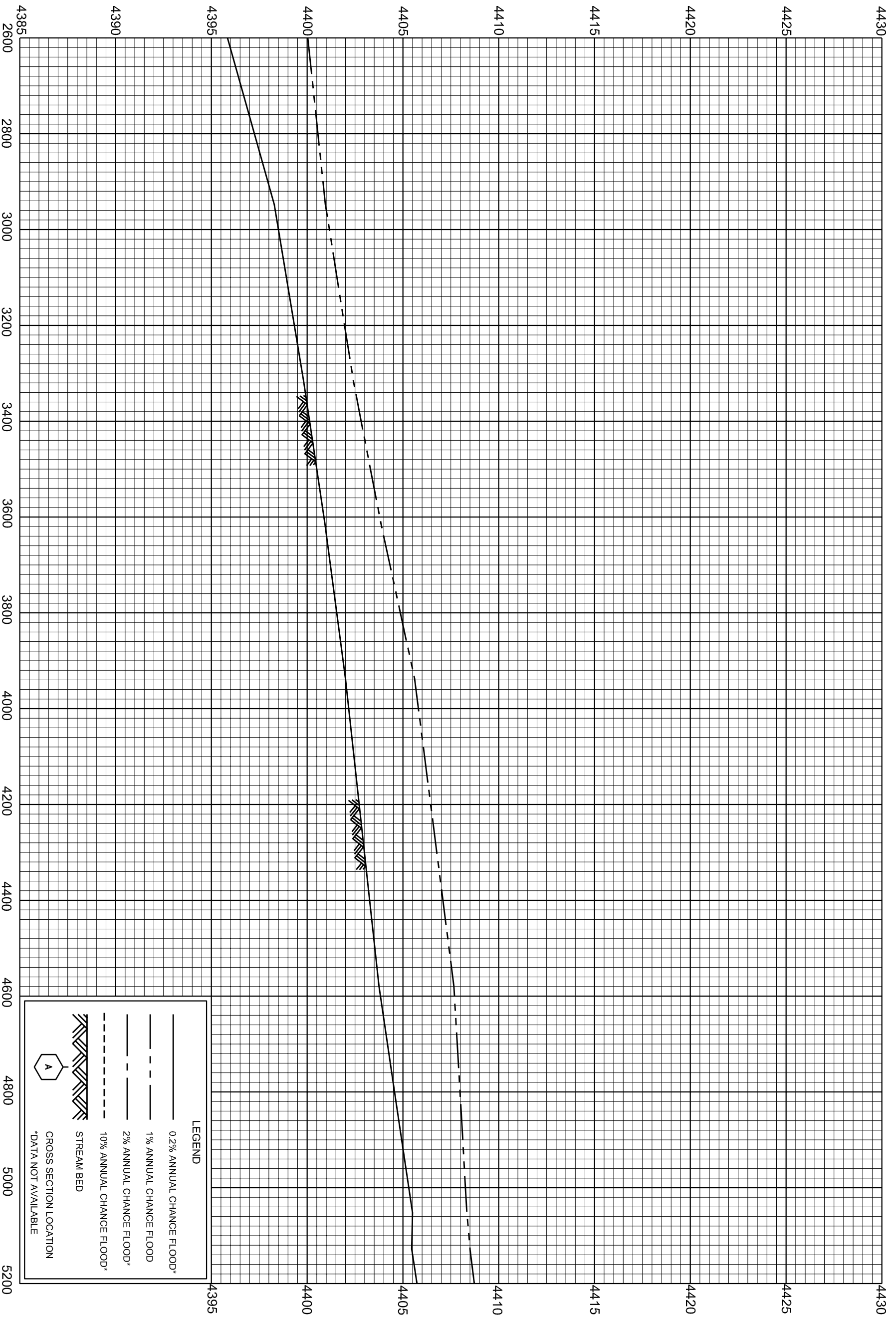
FLOOD PROFILES

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 11, 2022

HYALITE WEST OVERFLOW

240P

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH THOMPSON CREEK

**LEGEND**

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

\* DATA NOT AVAILABLE

FEDERAL EMERGENCY MANAGEMENT AGENCY

**GALLATIN COUNTY, MT**  
AND INCORPORATED AREAS

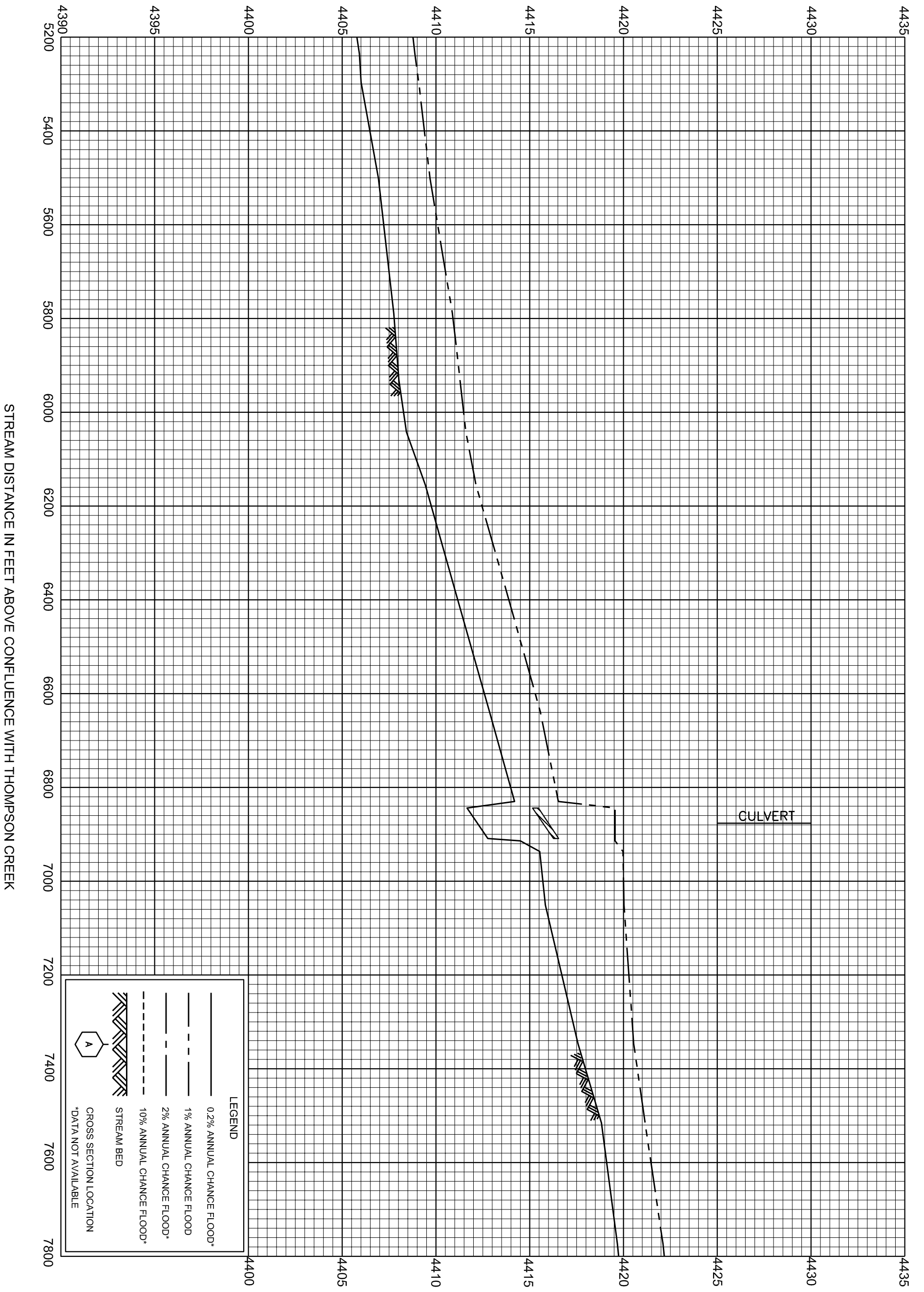
**FLOOD PROFILES**

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 11, 2022

**HYALITE WEST OVERFLOW**

**241P**

ELEVATION IN FEET (NAVD 88)



FEDERAL EMERGENCY MANAGEMENT AGENCY

GALLATIN COUNTY, MT  
AND INCORPORATED AREAS

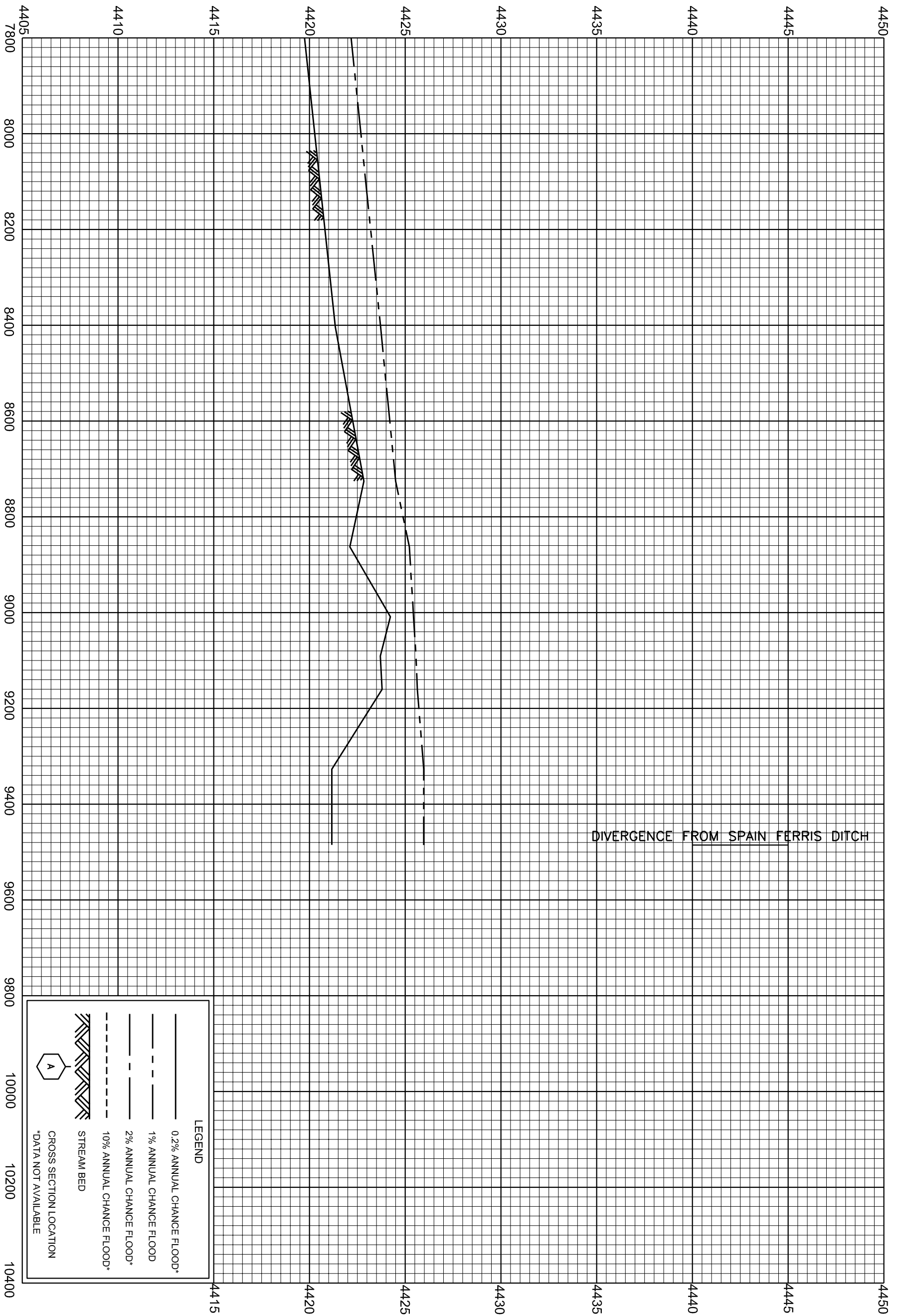
FLOOD PROFILES

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EFFECTIVE: April 11, 2022

HYALITE WEST OVERFLOW

242P

ELEVATION IN FEET (NAVD 88)



STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH THOMPSON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

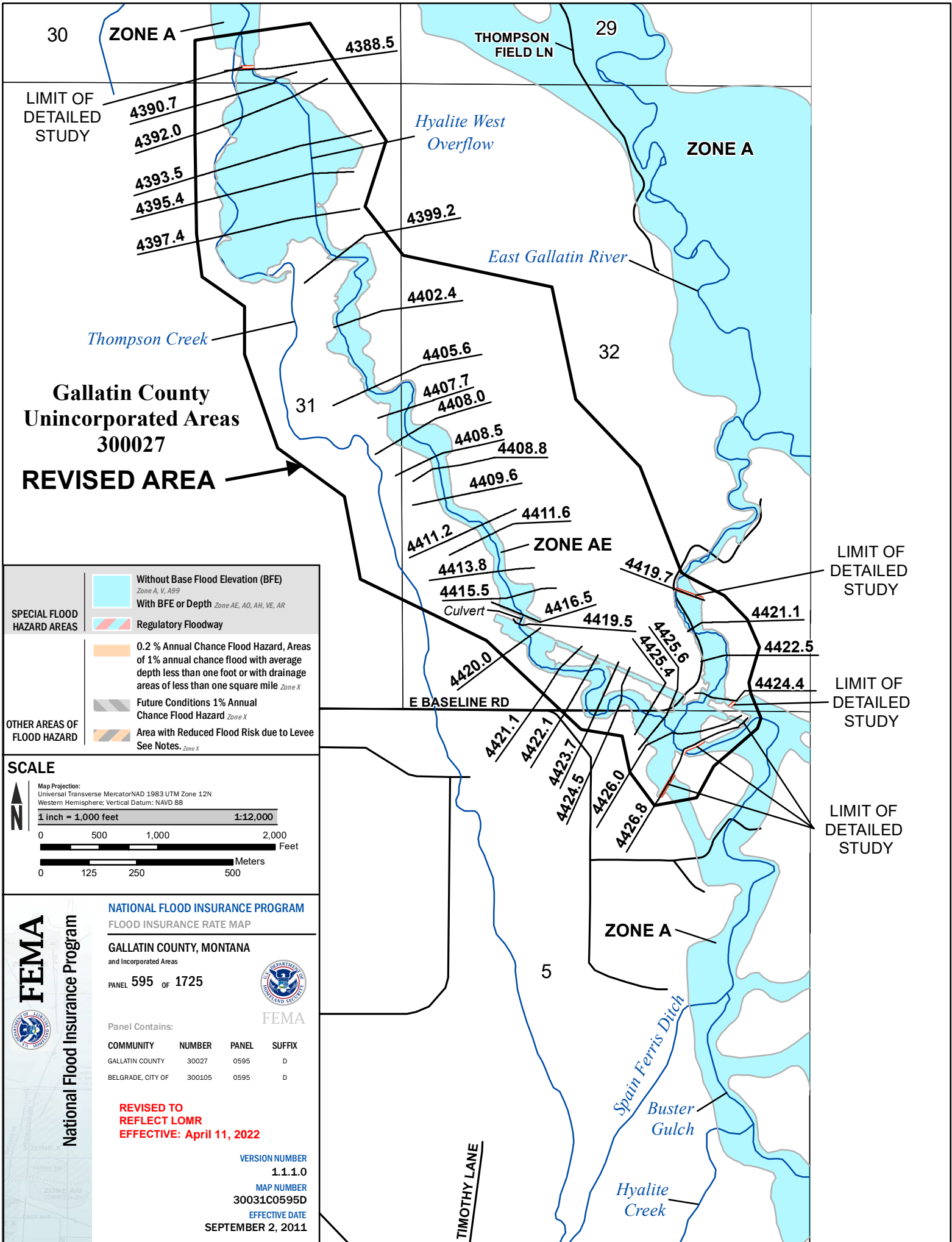
GALLATIN COUNTY, MT  
AND INCORPORATED AREAS

FLOOD PROFILES

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 11, 2022

HYALITE WEST OVERFLOW

243P



**Gallatin County  
Unincorporated Areas  
300027  
REVISED AREA**

**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 MercatorNAD 1983 UTM Zone 12N  
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

**FEMA**  
National Flood Insurance Program

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

**GALLATIN COUNTY, MONTANA**  
and Incorporated Areas

PANEL 595 OF 1725

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
GALLATIN COUNTY	30027	0595	D
BELGRADE, CITY OF	300105	0595	D

**REVISED TO REFLECT LOMR  
EFFECTIVE: April 11, 2022**

VERSION NUMBER 1.1.1.0  
MAP NUMBER 30031C0595D  
EFFECTIVE DATE SEPTEMBER 2, 2011

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY