



# 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 Park City Summit County Utah	CULVERT	HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 490139		
IDENTIFIER	Silver Creek at Bonanza Drive	APPROXIMATE LATITUDE & LONGITUDE: 40.658, -111.503 SOURCE: USGS QUADRANGLE      DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM*      NO.: 49043C0917C      DATE: March 16, 2006 TYPE: FIRM*      NO.: 49043C0919C      DATE: March 16, 2006		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: March 16, 2006 PROFILE(S): 17P - 19P SUMMARY OF DISCHARGES TABLE: 4	

Enclosures reflect changes to flooding sources affected by this revision.

\* FIRM - Flood Insurance Rate Map; \*\* FBFM - Flood Boundary and Floodway Map; \*\*\* FHBM - Flood Hazard Boundary Map

### FLOODING SOURCE(S) & REVISED REACH(ES)

Silver Creek - from approximately 650 feet downstream of Bonanza Drive to approximately 900 feet upstream of Deer Valley Drive  
McLeod Creek Headwaters - from approximately 40 feet downstream of Deer Valley Drive to approximately 70 feet upstream of Silver King Drive

### SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Silver Creek	Zone AE	Zone AE	YES	YES
	BFEs*	BFEs	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
McLeod Creek Headwaters	Zone AO	Zone X (shaded)	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 Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/business/nfip>.

*Erin E. Cobb*

Erin E. Cobb, CFM, Program Specialist  
Engineering Management Branch  
Federal Insurance and Mitigation Administration

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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 base (1-percent-annual-chance) discharges computed in the submitted hydrologic analysis. 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 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 (FMIX) toll free at 1-877-338-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional information about the NFIP is available on our website at <http://www.fema.gov/business/nfip>.

A handwritten signature in cursive script that reads "Erin E. Cobb".

Erin E. Cobb, CFM, Program Specialist  
Engineering Management 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.

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 (FMIX) toll free at 1-877-338-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional information about the NFIP is available on our website at <http://www.fema.gov/business/nfip>.

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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/Scripts/bfe\\_main.asp](https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp).

**LOCAL NEWSPAPER**

Name: *The Park Record*

Dates: February 6, 2013 and February 13, 2013

Within 90 days of the second publication in the local newspaper, a citizen 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 information 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 (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/business/nfip>.

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Engineering Management Branch  
Federal Insurance and Mitigation Administration

Table 4. Summary of Discharges

Flooding Sources and Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second)			
		10 %-Annual- Chance	2 %-Annual- Chance	1 %-Annual- Chance	0.2 %-Annual- Chance
<b>Silver Creek</b>					
At Bonanza Drive	6.93	-	-	283	673
At Confluence of Empire Creek	6.65	70	310	610	2,310
At Confluence of Deer Valley Creek	1.27	30	100	190	650
<b>Empire Creek</b>					
Just Upstream of confluence with Silver Creek	5.19	70	210	450	1,680
Just Upstream of confluence of Ontario Creek	3.16	60	200	440	1,650
Just Downstream of confluence of Walker and Webster Gulch	2.40	40	120	250	1,000
<b>Ontario Creek</b>					
Just Upstream of confluence with Empire Creek	1.84	20	70	140	610
Approximately 3,200 feet Upstream of confluence with Empire Creek	1.56	20	60	120	500
<b>Deer Valley Creek</b>					
Just Upstream of confluence with Silver Creek	1.64	20	80	150	630
Approximately 4,800 feet Upstream of confluence with Silver Creek	0.66	30	80	160	660
<b>Road Canyon Drainage</b>					
At Westwood Road	3.40	-	-	139	-
<b>Kimball Canyon Drainage</b>					
Near Wasatch Way	1.20	-	-	67	-
Just Downstream of unnamed spring near Bitner Ranch Road	2.10	-	-	97	-
<b>McLeod Creek</b>					
At diversion below SR 224	8.60	-	-	190	-
<b>Red Pine Creek</b>					
At SR 224	3.90	-	-	175	-
<b>Willow Draw</b>					
At SR 224	2.60	-	-	126	-
AT I-80	7.10	-	-	225	-
<b>White Pine Creek</b>					
At SR 224	6.10	-	-	240	-

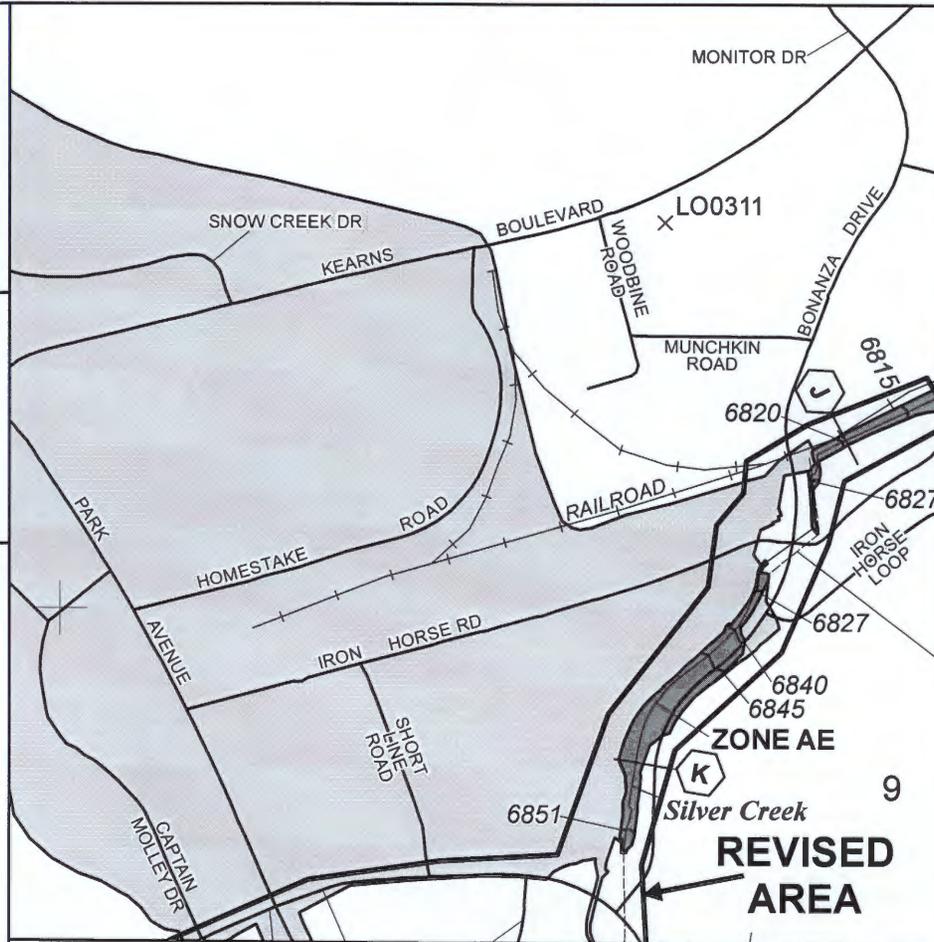
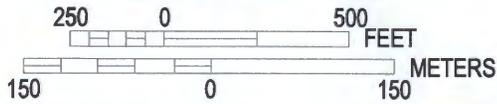
Revised Data →

**REVISED TO  
REFLECT LOMR  
EFFECTIVE: June 13, 2013**

- Legend**
-  1% annual chance (100-Year) Floodplain
  -  1% annual chance (100-Year) Floodway
  -  0.2% annual chance (500-Year) Floodplain



MAP SCALE 1" = 500'



JOINS PANEL 0936  
**ZONE AE**  
 Silver Creek

0.2% ANNUAL CHANCE  
 FLOOD DISCHARGE  
 CONTAINED IN CULVERT

**ZONE AE**  
 Silver Creek  
**REVISED AREA**

40°39'22.5"  
 111°30'00.0"

JOINS PANEL 0919

DEER VALLEY DR  
 SULLIVAN RD  
 EMPIRE AVE  
 0.2% ANNUAL CHANCE  
 FLOOD DISCHARGE  
 CONTAINED IN CULVERT

**CITY OF  
 PARK CITY  
 490139**

**NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED  
 WITHIN TOWNSHIP 1 SOUTH, RANGE 4 EAST AND  
 TOWNSHIP 2 SOUTH, RANGE 4 EAST.**

**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0917C**

**FIRM  
 FLOOD INSURANCE RATE MAP**

**SUMMIT COUNTY,  
 UTAH  
 AND INCORPORATED AREAS**

**PANEL 917 OF 1250**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)  
 CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SUMMIT COUNTY	490134	0917	C
PARK CITY, CITY OF	490139	0917	C

**REVISED TO  
 REFLECT LOMR  
 EFFECTIVE: June 13, 2013**

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



**MAP NUMBER  
 49043C0917C  
 EFFECTIVE DATE  
 MARCH 16, 2006**

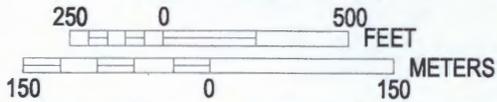
Federal Emergency Management Agency

Legend

-  1% annual chance (100-Year) Floodplain
-  1% annual chance (100-Year) Floodway
-  0.2% annual chance (500-Year) Floodplain



MAP SCALE 1" = 500'



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 2 SOUTH, RANGE 4 EAST.

NFIP

PANEL 0919C

**FIRM**  
FLOOD INSURANCE RATE MAP

SUMMIT COUNTY,  
UTAH  
AND INCORPORATED AREAS

**PANEL 919 OF 1250**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)  
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SUMMIT COUNTY	490134	0919	C
PARK CITY, CITY OF	490139	0919	C

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**EFFECTIVE: June 13, 2013**

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.



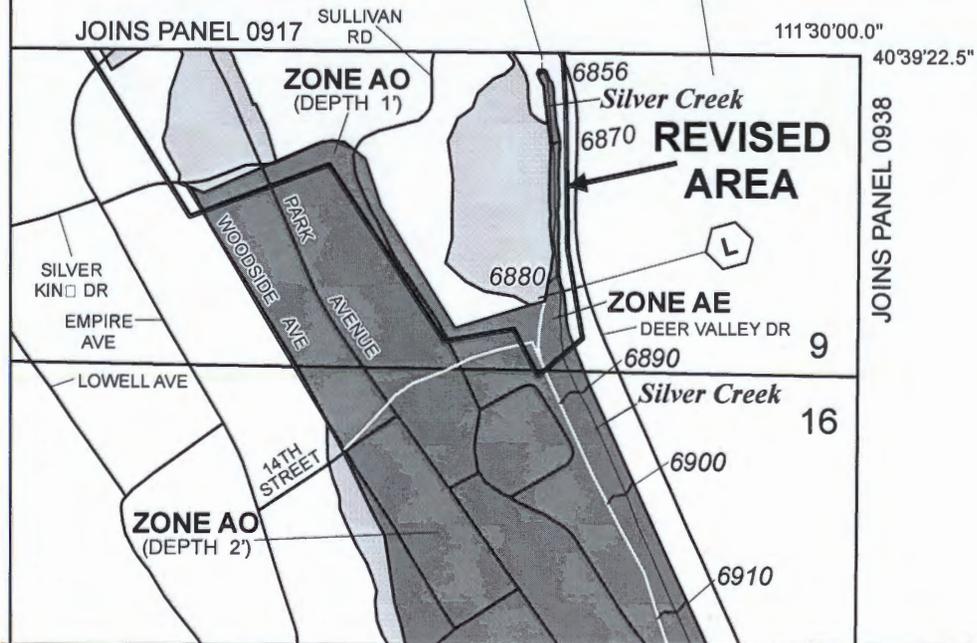
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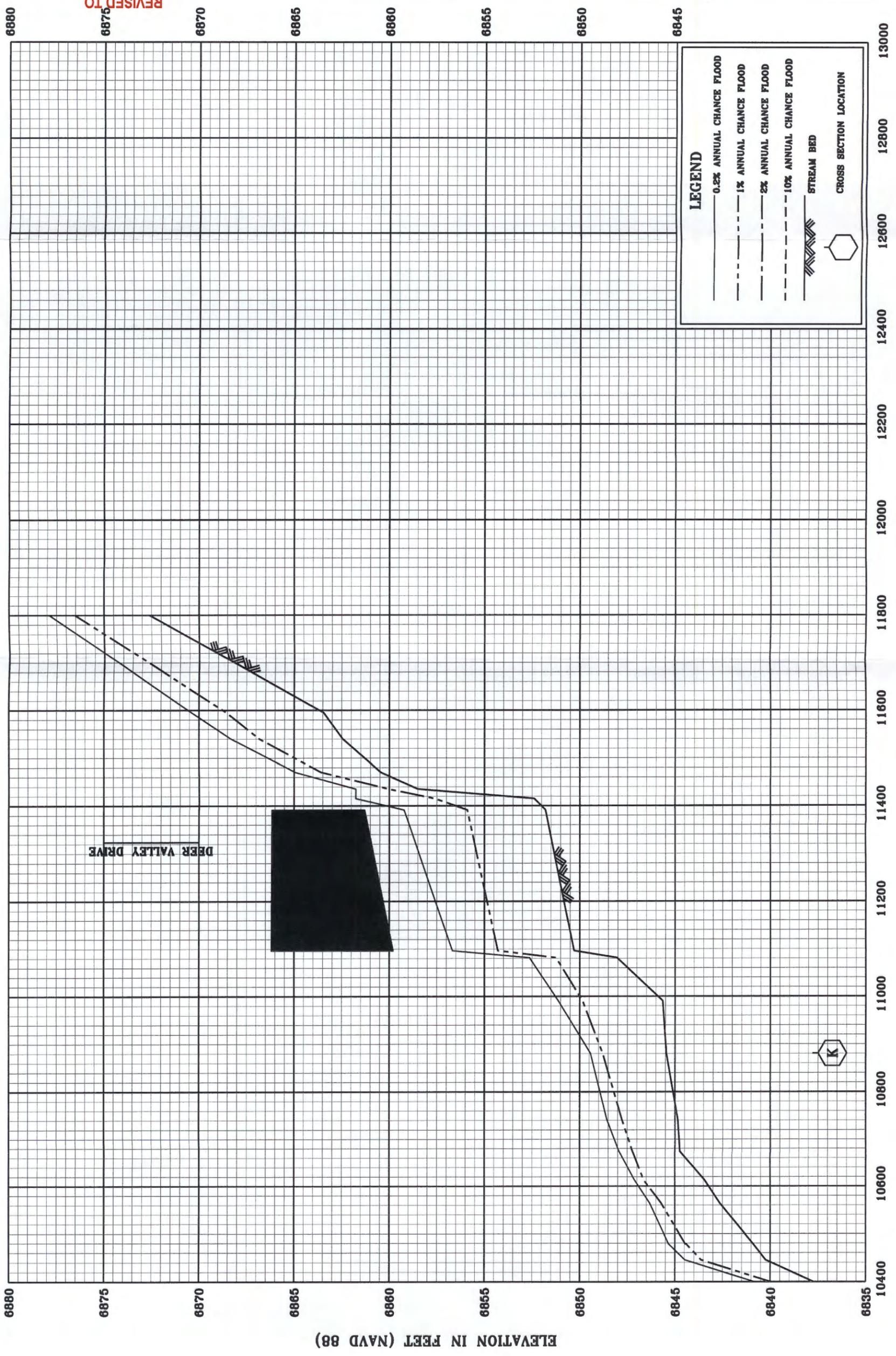
NATIONAL FLOOD INSURANCE PROGRAM

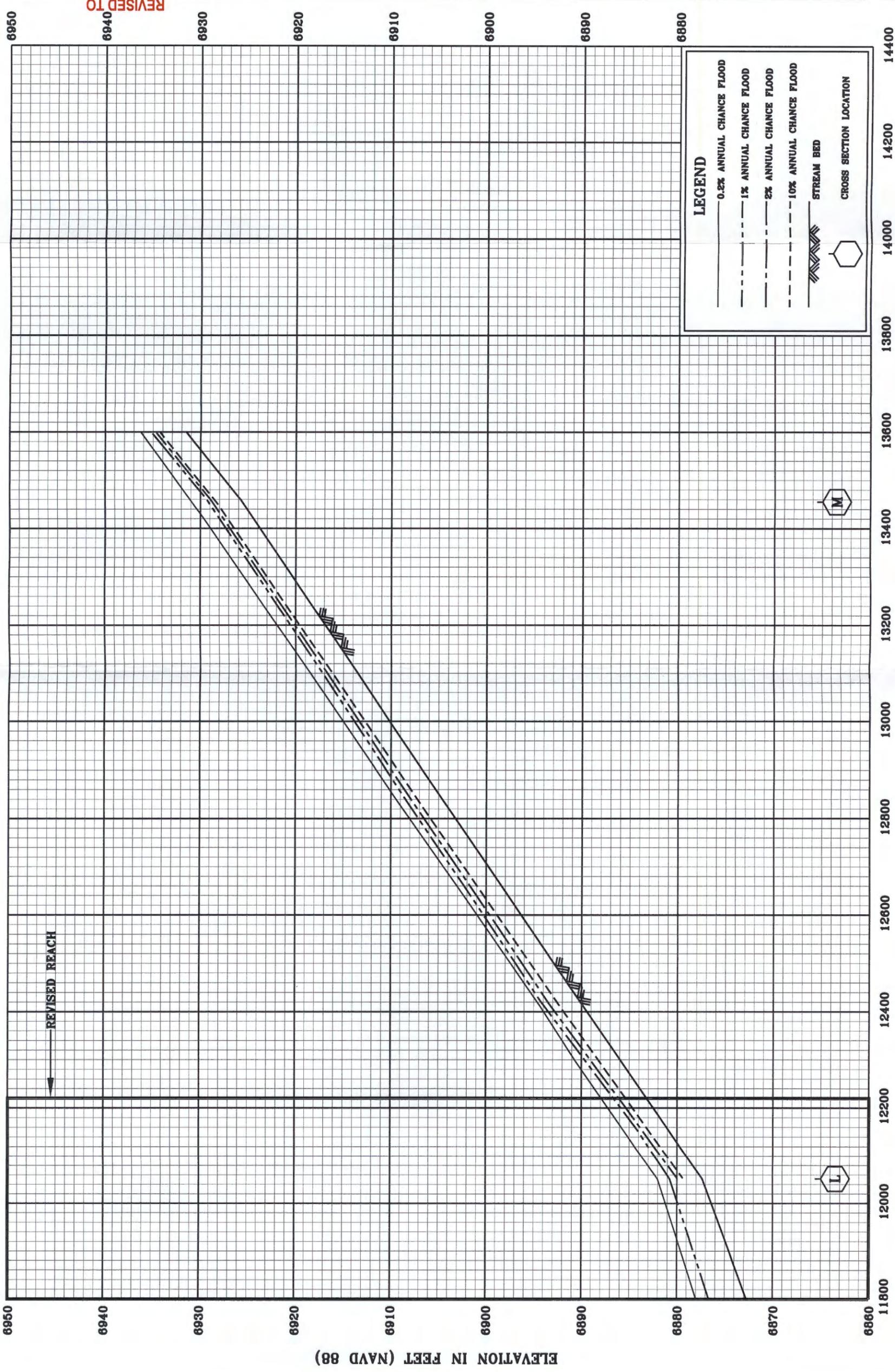
**CITY OF  
PARK CITY**

0.2% ANNUAL CHANCE FLOOD DISCHARGE  
CONTAINED IN CULVERT **490139**









STREAM DISTANCE IN FEET ABOVE RAILROAD

ELEVATION IN FEET (NAVD 88)