DEADMAN WASH
FLOODPLAIN DELINEATION STUDY
FCD 90-65

TECHNICAL DATA NOTEBOOK
HYDRAULIC ANALYSIS

VOLUME 2 OF 2
APPENDICES

PREPARED FOR

FLOOD CONTROL DISTRICT
of
Maricopa County

2801 West Durango Street • Phoenix, Arizona 85009
Telephone (602) 506-1501

PREPARED BY

HNTB

HOWARD NEEDLES TAMMEN & BERGENDOFF
ARCHITECTS ENGINEERS PLANNERS

JULY 1992
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SECTION 4
HYDRAULIC ANALYSIS

VOLUME 2 OF 2
APPENDICES

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Prepared For

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
2801 West Durango Street
Phoenix, Arizona 85009
(602) 506-1501

Prepared By

HOWARD NEEDLES TAMMEN & BERGENDOFF
Two Renaissance Square
40 North Central Avenue
Suite 1100
Phoenix, Arizona 85004
(602) 528-4300

July, 1992
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Registered Professional Engineer (Civil)
CERTIFICATE NO.
20957
BAILANG
SUN
Date Signed 6/6/95
ARIZONA, U. S. A.

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
20957
BAILANG
SUN
Date Signed 6/16/95
ARIZONA, U. S. A.

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APPENDIX A
Manning's n Determination Report

MANNING'S N VALUE DETERMINATION REPORT

DEADMAN WASH FLOODPLAIN DELINEATION STUDY

FOR

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FCD 90-65

Prepared by:

HOWARD NEEDLES TAMMEN & BERGENDOFF
Two Renaissance Square
40 North Central, Suite 1100
Phoenix, Arizona 85004
(602) 528-4300

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Manning's N Value Determination Report

for

Deadman Wash Floodplain Delineation Study

Date: January 31, 1992

Location: Deadman Wash Watershed, Maricopa County, Arizona

Subject: Field Investigations of Floodplain Characteristics

Present: FCDMC: Russ Cruff, Tim Murphy, Afshin Ahouraiyan
HNTB: Dick Wells, Gary Sun

INTRODUCTION

A follow-up reconnaissance field trip was made to observe floodplain characteristics and drainage structures in the study reaches. In addition, the routing channel characteristics for hydrologic analysis were also investigated and discussed. This report summarizes the results of Manning's n value determination for use in backwater analyses of Deadman Wash and its two tributaries - Stream Nos. 4 and 7.

The estimation of Manning's roughness coefficient, n, for the selected study sub-reaches is included with a summary spreadsheet showing the components of the roughness coefficient. A set of photographs for channel and floodplain conditions with a brief description is also provided in this report. Exhibits 1 through 3 are included at the end of this report and present the estimated Manning's n values for the study streams. The comparison with the known resistance of similar sites was made to aid and verify the selected n values.

METHODOLOGY

The determination of Manning's n values in this study was estimated by use of the following materials and references:

A. Aerial Photographs - 1: 9,000 and 1:17,600 contact prints of flight used for topographic mapping.

B. Photographs taken during field reconnaissance trips.

C. Video tapes that were filmed during field reconnaissance trips.

D. References as listed below:

1. Flood Control District of Maricopa County, "Estimated Manning's Roughness Coefficients for Stream Channels and Flood Plains in Maricopa County, Arizona," Prepared by the U.S. Geological Survey, April 1991.

2. U.S. Geological Survey, "Roughness Characteristics of Natural Channels," Water-Supply paper 1849, Third Printing, 1987.

3. U.S. Geological Survey, "Roughness Coefficients for Stream Channels in Arizona, " Open-File Report, 1973.

4. Federal Highway Administration, "Guide for Selecting Manning's Roughness Coefficients for Natural Channels and Flood Plains," Report No. FHWA-TS-84-204, April 1984.

5. V.T. Chow, "Open Channel Hydraulics," McGraw-Hill, 1959.

The procedure outlined in Reference 1 was used to determine the roughness coefficients for channels and floodplains in this study. The total n value was determined by assigning a base n value for the channel or floodplain and applying adjustments for various roughness factors. These roughness factors considered consist of degree of irregularity, effects of obstruction, vegetation, and variations in channel cross section, and degree of meandering (References 4 & 5). The adjustments were made to the base value through addition or multiplying by a factor to arrive at a total value. Photographs of channels and floodplains of known resistance were used to aid in determining of roughness coefficients. These photographs were used for comparison with field situations to help verify selected n values. The estimated n values were also checked against values found within the above references (References 1, 2 & 3).

The total value of Manning's n was computed by:

$$n = (n_b + n_1 + n_2 + n_3 + n_4)\, m$$

Where: n_b = a base value of n for a straight uniform channel;

n_1 = a value for the degree of surface irregularities;

n_2 = a value for the effects of obstruction;

n_3 = a value for vegetation;

n_4 = a value for variations in shape and size of the channel cross section;

and m = a multiplier to correct for meandering of the channel.

Selection of Base n Values

Base values of Manning's n were selected from Table 1 in Reference 1. In general, a base value ranging from 0.035 to 0.050 was assigned to Deadman Wash from the headwater to near Aso Tank, and from Snodgrass Tank to the New River. A base value of 0.030 was used for Deadman Wash between Aso and Snodgrass Tanks to represent coarse sand, gravel, and firm soil. Reference 1 contains the estimation of roughness coefficients for the New River area just northwest of this study area.

Adjustment Factors for Channels and Floodplains

Channel irregularities, obstructions, vegetation, varations, and meandering increase the roughness, and the value for n was adjusted accordingly. For study reaches, some weeds and low-growing brush create obstructions to the channel flow. The vegetation is fairly dense along top of banks, and overflow areas have a medium to dense cover of bushes and trees. No meander adjustment was made to the total n value for this project, because the flow will not be confined to the channel and the overbank flow is expected.

Subdivision of Cross Section

Each cross section was divided into left overflow, channel, and right overflow areas. Subdivision of channel cross sections was not needed for this study because the streams contain well-defined channels with fairly uniform roughness across the cross section.

RESULTS

The Manning's n values required for the floodplain delineation study were determined. The values estimated for the study reaches vary from 0.038 to 0.080 for the channels, and from 0.058 to 0.090 for the floodplains. The n values were estimated for 19 representive reaches with 16 photographs in this report. The results of n values for channels and overflow areas are also shown on Exhibits 1 through 3.

BGS/rjc
NREPORT.RJC

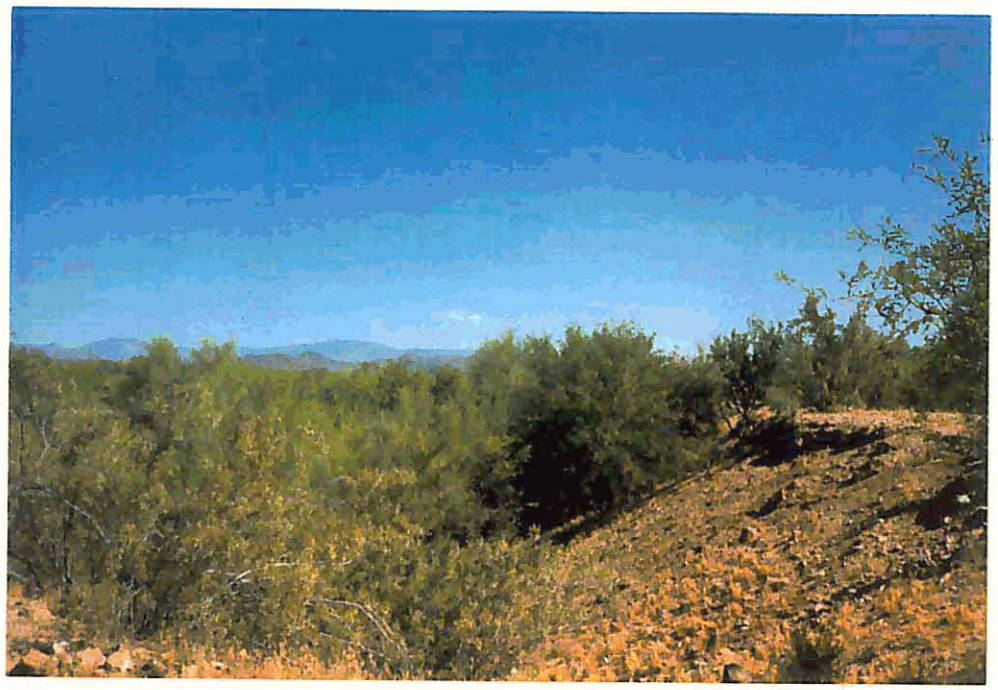

PHOTO NO. 1
Deadman Wash just downstream of Snodgrass Tank. Bed material is cobbles and boulders. Bed and banks have a fairly heavy growth of trees and brush.

PHOTO NO. 2
Deadman Wash at Snodgrass Tank. Bed and banks are lined with grass and small trees.

PHOTO NO. 3
Deadman Wash between Maricopa and Aso Tanks. Bed is mostly coarse sand and gravel with trees and brush along top of banks.

PHOTO NO. 4
Deadman Wash just north of Aso Tank. Bed material is gravel and cobbles. Banks are heavily lined with overhanging trees and brush.

PHOTO NO. 5

Stream No. 12 at Carefree Highway (Looking downstream). Bed is mostly sand and silt. Banks are lined with overhanging trees and brush.

PHOTO NO. 6

Stream No. 12 at split flow location. The man-made dike dividing Deadman Wash from Stream No. 12 is stable. Bed material is coarse gravel and cobbles. Banks have thick growth of brush.

PHOTO NO. 7

Deadman Wash cross culvert (2 - 72" & 2 - 60" RCPs) with some debris at Joy Ranch Road (Looking downstream from upstream end). Bed is mostly coarse gravel at the culvert upstream, and cobbles and boulders at the downstream side. The overhanging tree is almost completely blocking off the 60" RCP on the left.

PHOTO NO. 8

Deadman Wash at the concentration point with DA-10J, approximately 1,000 ft west of I-17. A wide channel (B=80') consists of cobbles and boulders with scattered bushes and overhanging trees.

PHOTO NO. 9

Deadman Wash just downstream of I-17 bridges. Bed material is cobbles and boulders. Both banks are lined with overhanging trees. Backwater pool area resulting from downstream unpaved road crossing.

PHOTO NO. 10

Deadman Wash just upstream of I-17 bridges near the confluence with Stream No. 4 (Looking upstream). Bed is cobbles and large boulders with scattered weeds and bushes. Banks are lined with heavy growth of trees and brush.

PHOTO NO. 11
Stream No. 8 just upstream of I-17 Bridges. Bed consists of cobbles and boulders. banks are lined with brush and small trees.

PHOTO NO. 12
Deadman Wash just upstream of I-17 Bridges. Bed consists of rock and boulders. Bed and banks between I-17 bridges have a dense vegetation. Banks are irregular with bushes and small trees.

PHOTO NO. 13
Stream No. 7 East of I-17 West Rest Area (Looking upstream). Bed consists of boulders and has scattered growth of weeds and bushes. Banks are lined with trees and brush.

PHOTO NO. 14
Stream No. 4 at Irvine Road (Looking upstream). Bed consists of sand and silt with scattered cobbles. banks are irregular with grass, bushes and small trees.

PHOTO NO. 15

Deadman Wash next to Desert Hills Drive where Stream No. 1 joins the wash (Looking downstream). Bed is cobbles and boulders. Banks are lined with overhanging trees and brush.

PHOTO NO. 16

Deadman Wash in Reach 10A - 10B (Looking upstream). Bed consists of angular cobbles and boulders. Banks are irregular with trees and brush growing down to the low waterline.

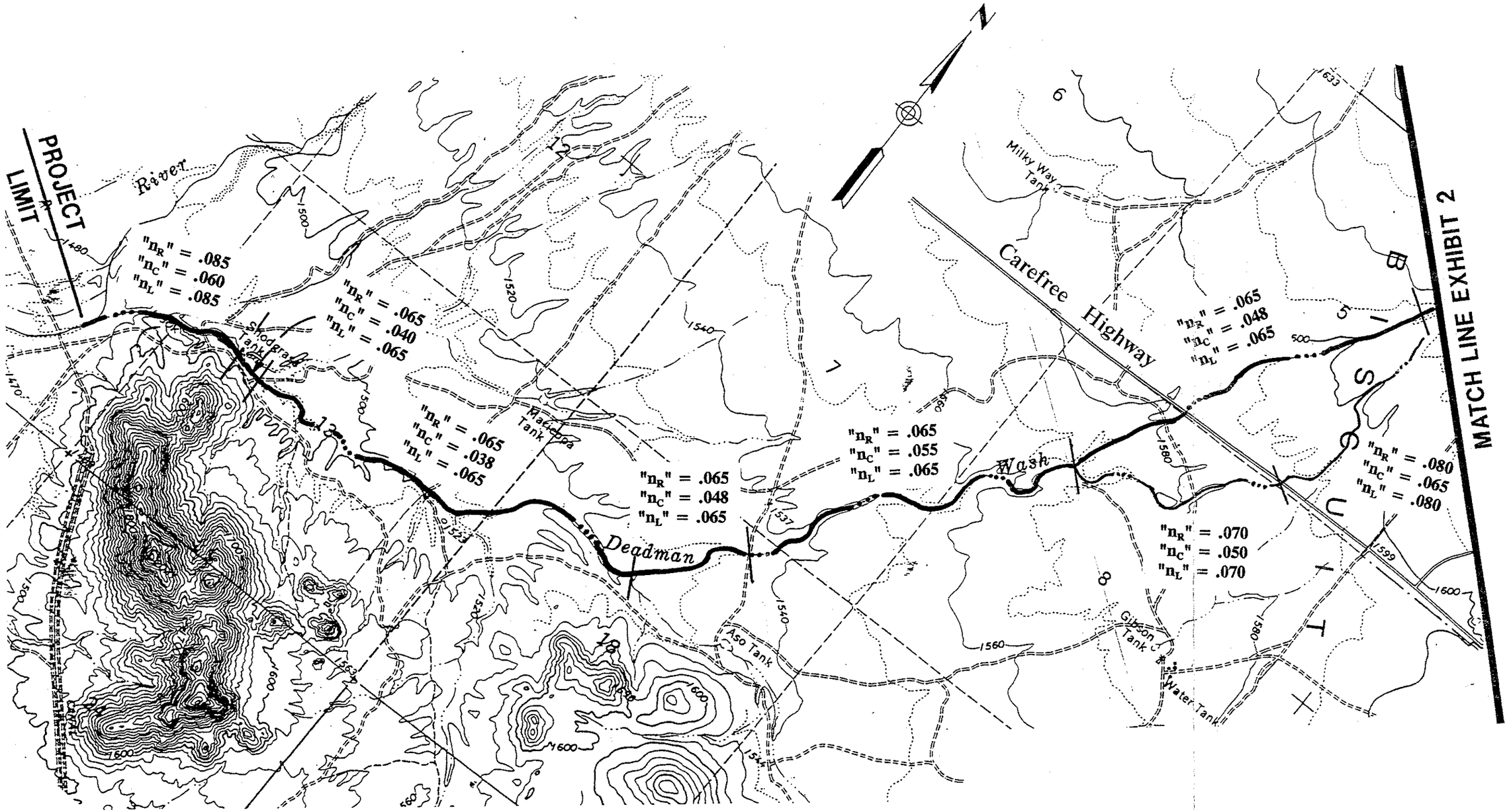

EXHIBIT 1

Manning's n Value
For
Deadman Wash Floodplain Delineation Study

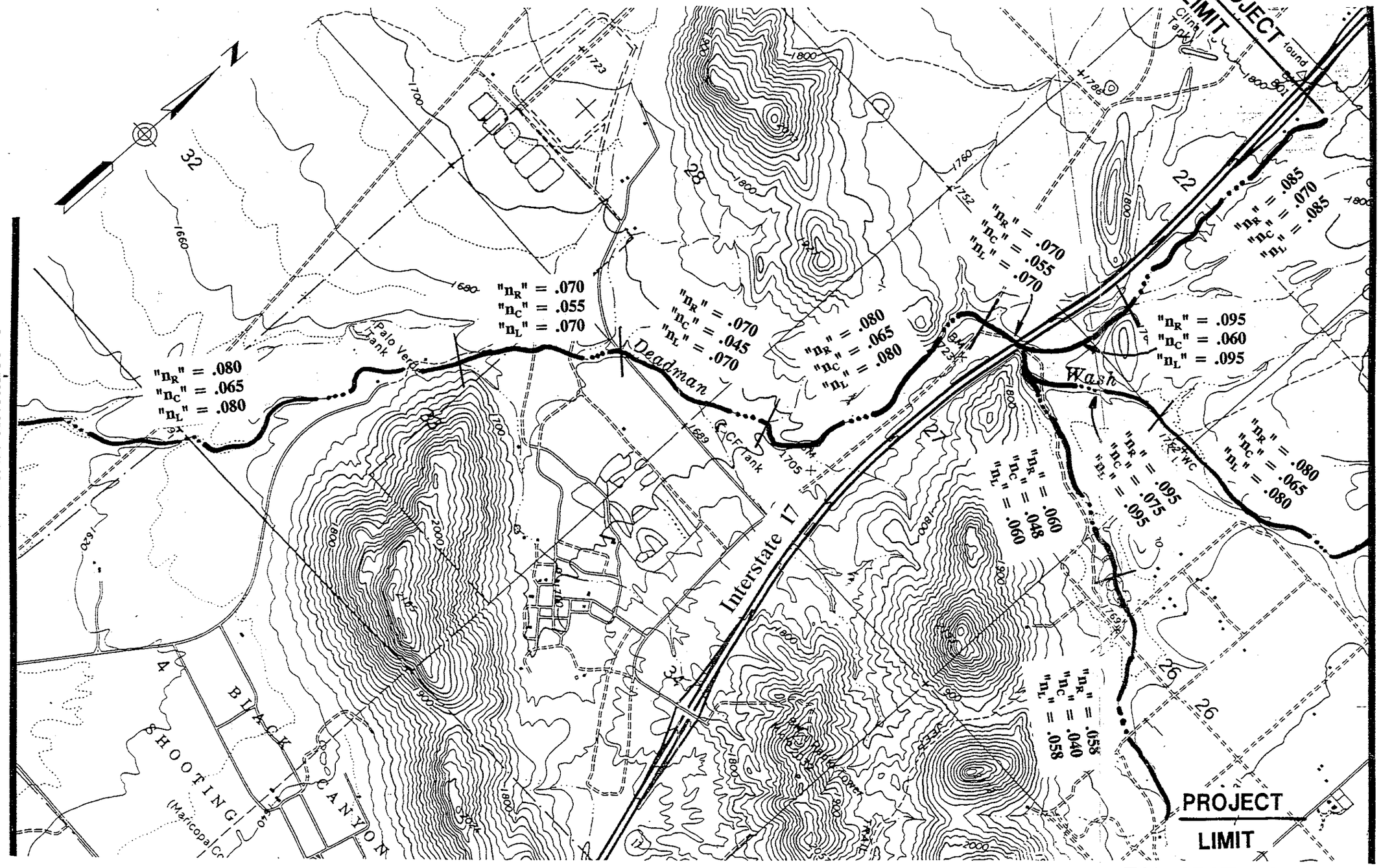

EXHIBIT 2

Manning's n Value
For
Deadman Wash Floodplain Delineation Study

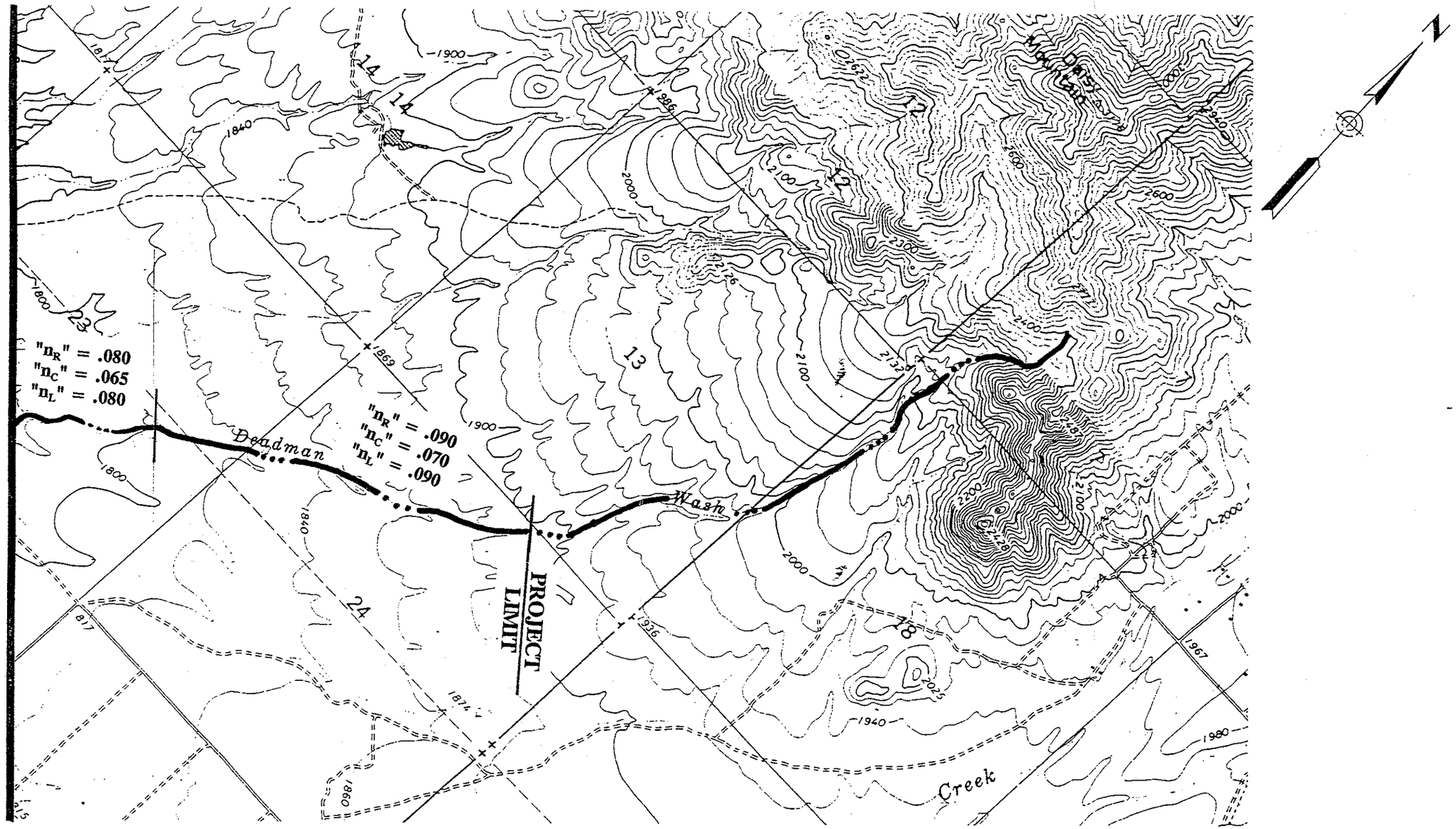

EXHIBIT 3

Manning's n Value
For
Deadman Wash Floodplain Delineation Study

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Adjacent to Snodgrass Tank (R10W – 10X)
Photo No : 1
Section Description : Bed material is cobbles and boulders.
Channel and floodplain have a dense growth of trees and brush.

Channel Conditions		Manning's n	Value	Left Overflow	Channel	Right Overflow
Channel Material	Cobbles	nb	.030 – .050	0.035	0.035	0.035
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005	0.005		0.005
	Moderate		.006 – .010			
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025		0.020	
	Large		.025 – .050	0.035		0.035
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.085	0.060	0.085

NVALUE1.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : At Snodgrass Tank
Photo No : 2
Section Description : Bed and banks are lined with grass and small trees.
Floodplain has a dense growth of trees and brush.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Firm Soil	nb	.025 – .032	0.030	0.030	0.030
	Coarse Sand		.026 – .035			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005			
	Moderate		.006 – .010	0.010	0.010	0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.005		0.005
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
$n = (nb + n1 + n2 + n3 + n4)\ m$				0.065	0.040	0.065

NVALUE2.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Between Maricopa and Aso Tanks
Photo No : 3
Section Description : Bed material is coarse sand and coarse gravel with overhanging trees and brush along the banks. Floodplain has sparse brush and small trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Sand	nb	.026 – .035	0.030	0.030	0.030
	Coarse Gravel		.028			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004		0.003	
	Minor		.005 – .015	0.005		0.005
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.065	0.038	0.065

NVALUE3.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : North of Aso Tank
Photo No : 4
Section Description : Bed material is gravel and cobbles with heavily overhanging trees and brush along the banks. Floodplain has a medium to dense cover of trees and brush.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.030	0.040	0.030
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004		0.003	
	Minor		.005 – .015	0.005		0.005
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.065	0.048	0.065

NVALUE4.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 12
Location : At Carefree Highway
Photo No : 5
Section Description : Bed material is silt, sand and gravel with overhanging trees and brush along the banks. Floodplain has sparse brush and small trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Firm Soil	nb	.025 – .032	0.030	0.030	0.030
	Gravel		.028 – .035			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.010	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.005	
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.070	0.050	0.070

NVALUE5.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 12
Location : At Split Flow Location
Photo No : 6
Section Description : Bed material is gravel and cobbles with low–growing trees and brush. Floodplain has sparse brush and small trees.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material						
	Gravel	nb	.028 – .035			
	Cobble		.030 – .050	0.040	0.040	0.040
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.010	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.010	
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.080	0.065	0.080

NVALUE6.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Cross Culverts at Joy Ranch Road (Downstream Channel)
Photo No : 7
Section Description : Bed material is cobbles and boulders downstream of culverts.
Floodplain has sparse brush and small trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.035	0.050	0.035
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005	0.005		0.005
	Moderate		.006 – .010			
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.070	0.055	0.070

NVALUE7D.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Cross Culverts at Joy Ranch Road (Upstream Channel)
Photo No : 7
Section Description : Bed material is coarse gravel and cobbles upstream of culverts. Floodplain has sparse brush and small trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.035	0.040	0.035
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005	0.005		0.005
	Moderate		.006 – .010			
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.070	0.045	0.070

NVALUE7U.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Approx. 1,000 ft west of I–17
Photo No : 8
Section Description : Bed material is cobbles and boulders with scattered weeds and bushes. Floodplain has sparse brush and small trees.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.050	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005	0.005		0.005
	Moderate		.006 – .010			
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.010	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.005	
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.080	0.065	0.080

NVALUE8.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Just downstream of I–17 bridges
Photo No : 9
Section Description : Bed material is cobbles and boulders with overhanging trees.
Floodplain has sparse brush and small trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.050	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005	0.005	0.005	0.005
	Moderate		.006 – .010			
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010		0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.010		0.010
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.070	0.055	0.070

NVALUE9.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Just upstream of I–17 bridges
Photo No : 10
Section Description : Bed material is cobbles, boulders, and large rock with weeds and brush. Floodplain has a dense cover of trees and brush.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.045	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.015	0.010	0.015
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.025	0.015	0.025
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.095	0.075	0.095

NVALUE10.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 8
Location : Just upstream of I–17 bridges
Photo No : 11
Section Description : Bed material is cobbles and boulders with overhanging brush. Floodplain has a dense cover of trees and brush.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.045	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.015	0.005	0.015
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.005	
	Medium		.010 – .025	0.025		0.025
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.095	0.060	0.095

NVALUE11.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : I–17 bridges
Photo No : 12
Section Description : Bed material is cobbles and boulders with small trees and brush.
A dense cover of trees and brush along the banks.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.045	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.015	0.015	0.015
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010			
	Medium		.010 – .025	0.025	0.015	0.025
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.095	0.080	0.095

NVALUE12.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 7
Location : East of I–17 East Rest Area
Photo No : 13
Section Description : Bed material is cobbles and boulders with weeds and overhanging brush. Floodplain has a dense cover of trees and brush.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Coarse Gravel	nb	.028			
	Cobble		.030 – .050	0.045	0.045	0.045
	Boulder		.040 – .070			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.010	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.010	
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.085	0.070	0.085

NVALUE13.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 4
Location : At Irvine Road
Photo No : 14
Section Description : Bed material is silt, sand and small cobbles with overhanging brush and trees. Floodplain has grass and scattered trees.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Coarse Sand	nb	.026 – .035	0.035	0.035	0.035
	Cobble		.030 – .050			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004	0.003		0.003
	Minor		.005 – .015			
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010	0.010		0.010
	Medium		.010 – .025			
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.058	0.040	0.058

NVALUE14.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Next to Desert Hills Drive (R10E – 10F)
Photo No : 15
Section Description : Bed material is cobbles and boulders with weeds and overhanging brush and trees. Floodplain has a dense cover of trees and brush.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material						
	Cobble	nb	.030 – .050			
	Boulder		.040 – .070	0.050	0.050	0.050
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010	0.010	0.005	0.010
	Medium		.010 – .025			
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.080	0.065	0.080

NVALUE15.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : Reach 10A – 10B
Photo No : 16
Section Description : Bed material is cobbles and boulders with weeds and overhanging brush and trees. Floodplain has a dense cover of trees and brush.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material						
	Cobble	nb	.030 – .050			
	Boulder		.040 – .070	0.050	0.050	0.050
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005			
	Moderate		.006 – .010	0.010	0.010	0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.005	
	Medium		.010 – .025	0.020		0.020
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.090	0.070	0.090

NVALUE16.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Deadman Wash
Location : From 2000' South of Carefree Highway to Split Flow Location
Photo No : N/A
Section Description : Bed material is firm soil, sand and gravel with weeds and brush.
Floodplain has sparse brush and small trees.

Channel Conditions		Manning's n Value		Left Overflow	Channel	Right Overflow
Channel Material	Firm Soil	nb	.025 – .032	0.030	0.030	0.030
	Gravel		.028 – .035			
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005			
	Moderate		.006 – .010	0.010	0.008	0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004			
	Minor		.005 – .015	0.010	0.005	0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010		0.005	
	Medium		.010 – .025	0.015		0.015
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.065	0.048	0.065

NVALUE17.WK3

DETERMINATION OF MANNING'S ROUGHNESS COEFFICIENTS BY FCDMC'S METHOD

Project : Deadman Wash Floodplain Delineation Study
Stream : Stream No. 4
Location : Between I–17 and Unnamed Stock Tank
Photo No : N/A
Section Description : Bed material is gravel and cobbles with overhanging brush.
Floodplain has grass and scattered trees.

Channel Conditions		Manning's	n Value	Left Overflow	Channel	Right Overflow
Channel Material	Gravel	nb	.028 – .035	0.030		0.030
	Cobble		.030 – .050		0.040	
Degree of Irregularity	Smooth	n1	.000			
	Minor		.001 – .005		0.005	
	Moderate		.006 – .010	0.010		0.010
	Severe		.011 – .020			
Effects of Obstruction	Negligible	n2	.000 – .004		0.003	
	Minor		.005 – .015	0.010		0.010
	Appreciable		.020 – .030			
	Severe		.040 – .060			
Vegetation	Small	n3	.002 – .010	0.010		0.010
	Medium		.010 – .025			
	Large		.025 – .050			
	Very Large		.050 – .100			
Variations in Channel Cross Section	Gradual	n4	.000			
	Alternating		.001 – .005			
	Alternating		.010 – .015			
Degree of Meandering	Minor	m	1.00			
	Appreciable		1.15			
	Severe		1.30			
n = (nb + n1 + n2 + n3 + n4) m				0.060	0.048	0.060

NVALUE18.WK3

APPENDIX B
HEC-2 Output

HEC2 S/N: 1126460209 HMVersion: 6.40 Data File: dm1fw.hc2

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    10SEP92    TIME    9:56:03   *
*********************************************
```

```
****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*          (916) 756-1104              *
****************************************
```

```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
```

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:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
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:::::::::::::::::::::::::::::::::::::::::::::
```

==========
H A E S T A D M E T H O D S
==========

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 10SEP92 9:56:03

```
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study
T2      Natural Profile Run for Deadman Wash, SECNO 0.092 to SECNO 3.209
T3      Deadman Wash 100-year Q   Subcritical Flow,    May 1992 (revised 9/92)

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

                2                           -1                                    1482.72

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1                  -1                                      -1                            15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38        43         1         8        42         3         2        26         5        39
     53         4        54       110       200

QT        2      9600      9600
NC                                     .1        .3
NH        5      .085    9947.2     .060   10030.1      .085   10365.6      .060   10419.8      .085
NH   10572.
ET                          9.1                                                          9948     10215
          ************************************************************
          Deadman Wash Floodplain Delineation Study prepared for
          FCDMC by Howard Needles Tammen & Bergendoff (HNTB), 1992.

          This floodplain delineation study begins at the New River,
          and the water surface elevation starts at critical depth.
          The higher water suface elevation in New River was not used
          to start the HEC-2 runs due to the difference in time of peak.

          NC cards were used where majority of flow expected to remain
          in the channel, while NH cards were used for the braided
          channel or at the confluence of washes.

          The first run is the natural profile run, and ET cards (Fields 7 & 8)
          were used in some sections to better model ineffective flow areas.
          The second run is the floodway run using Method 1 with ET cards
          (Fields 9 & 10).
```

The control line on the thalweg of Deadman Wash is
Station 10,000, and all cross section data were stationed
looking downstream.

Cross section numbers indicate in river miles above the mouth.

Q of 9,600 cfs at New River (C10Y) was used.

NH cards were used for SECNO 0.092 through SECNO 0.299.
****

```
X1    0.092       48   9947.2   10030.1        0        0        0
GR   1495.0   9861.4   1494.3    9888.1   1493.6   9909.2   1489.2   9931.7   1483.5   9947.2
GR   1475.3   9958.1   1474.4    9969.2   1473.9   9982.3   1473.9   9993.1   1472.6  10000.0
GR   1472.6  10007.8   1472.7   10011.0   1478.0  10022.7   1479.6  10030.1   1479.9  10043.5
GR   1479.9  10059.8   1480.9   10078.5   1481.1  10100.3   1481.0  10116.7   1481.2  10134.9
GR   1481.4  10149.7   1481.3   10163.9   1481.4  10181.9   1481.1  10194.4   1481.5  10214.4
GR   1481.5  10225.6   1481.1   10242.2   1481.2  10269.9   1481.9  10293.6   1481.6  10319.2
GR   1481.5  10341.0   1481.8   10356.9   1480.9  10365.6   1479.2  10374.2   1478.6  10382.6
GR   1478.7  10387.2   1479.7   10390.2   1479.2  10395.7   1477.9  10400.0   1478.1  10404.2
GR   1480.2  10411.0   1480.9   10419.8   1482.3  10435.5   1482.5  10462.4   1482.5  10494.5
GR   1482.9  10531.7   1483.0   10571.5   1483.1  10572.0

NH       5      .085   9974.0      .060  10052.6      .085  10500.0      .065  10538.0      .085
NH   10840.
ET                      9.1                                                    9974     10296
X1    0.159       32   9974.0   10052.6       340      400      354
GR   1501.2   9937.3   1492.2    9953.1   1482.8   9974.0   1475.5   9981.8   1474.4   9991.3
GR   1474.2  10000.0   1475.8   10010.0   1477.0  10024.3   1478.5  10032.7   1480.9  10043.1
GR   1483.3  10052.6   1483.3   10064.2   1481.6  10081.9   1482.2  10099.6   1482.4  10120.1
GR   1483.1  10135.6   1482.5   10156.1   1482.5  10177.0   1482.8  10193.4   1483.2  10204.5
GR   1484.1  10218.5   1482.6   10233.1   1483.0  10240.1   1482.9  10257.7   1483.1  10289.8
GR   1483.5  10301.8   1485.0   10360.0   1484.0  10500.0   1484.1  10538.0   1486.0  10590.0
GR   1487.0  10650.0   1488.0   10840.0

NH       5      .085   9967.9      .060  10037.3      .085  10106.0      .065  10356.5      .085
NH   10820.
ET                      9.1                                                    9968     10340
X1    0.202       49   9967.9   10037.3       210      240      227
GR   1495.7   9951.0   1483.4    9967.9   1476.4   9982.3   1473.2   9990.6   1472.7   9997.4
GR   1473.1  10000.0   1474.5   10004.2   1478.9  10012.8   1482.0  10024.4   1484.4  10037.3
GR   1484.4  10052.1   1483.8   10066.8   1482.5  10072.0   1482.2  10081.6   1483.6  10092.0
GR   1483.5  10106.0   1481.9   10117.3   1480.3  10128.1   1476.7  10139.1   1475.8  10146.9
GR   1475.5  10156.7   1477.0   10161.3   1481.6  10175.0   1483.7  10183.4   1483.5  10188.8
GR   1480.1  10201.8   1478.9   10209.1   1480.5  10213.9   1482.8  10229.0   1484.1  10244.9
GR   1484.5  10267.9   1483.7   10280.8   1482.0  10289.5   1482.1  10304.7   1479.9  10311.3
GR   1479.0  10315.9   1480.6   10323.1   1482.7  10337.5   1484.6  10356.5   1484.5  10379.2
GR   1484.9  10412.7   1485.0   10443.5   1485.1  10481.5   1485.4  10515.7   1485.5  10555.8
GR   1486.3  10577.1   1487.0   10650.0   1487.8  10740.0   1488.7  10820.0
```

```
NH       5      .085    9970.1      .060   10031.1      .085   10214.4      .060   10267.1      .085
NH   10950.
ET                      9.1                                                          9970     10360
X1   0.299        53    9970.1   10031.1       520       400       512
GR  1499.7    9701.1    1498.1    9730.5    1496.9    9754.1    1496.2    9772.4    1493.2    9802.5
GR  1491.1    9836.3    1489.3    9857.8    1485.1    9876.7    1484.3    9890.5    1484.6    9918.2
GR  1485.0    9944.8    1485.0    9970.1    1484.5    9981.5    1481.8    9988.3    1474.0    9993.9
GR  1473.8   10000.0    1474.3   10006.9    1483.3   10015.9    1485.1   10031.1    1484.0   10043.9
GR  1479.2   10053.6    1480.3   10066.1    1482.3   10080.6    1482.0   10082.8    1484.0   10096.2
GR  1484.3   10117.2    1484.9   10138.4    1483.9   10146.3    1484.9   10170.4    1485.9   10184.6
GR  1485.7   10203.1    1483.5   10214.4    1480.5   10225.2    1478.4   10231.7    1478.8   10242.0
GR  1481.9   10254.5    1484.7   10267.1    1485.9   10286.7    1486.2   10311.4    1486.2   10337.6
GR  1486.1   10368.8    1486.2   10392.8    1485.7   10417.9    1485.5   10434.3    1483.1   10446.6
GR  1484.7   10455.1    1485.7   10472.9    1486.1   10496.0    1486.2   10505.0    1487.0   10800.0
GR  1488.0   10828.0    1489.0   10900.0    1489.6   10950.0

NC     .085      .085      .065        .3        .5
ET                      9.1                                                          9912     10176
          NC card was used, channel = .065 and overbank = .085
          Contraction and expansion coefficients changed to 0.3 and
          0.5 for the dam and dike structures at Snodgrass Tank.
X1   0.382        41    9958.6   10015.2       400       550       438
GR  1492.1    9781.2    1489.1    9807.0    1488.7    9838.6    1488.6    9852.4    1488.2    9869.9
GR  1487.6    9881.8    1485.3    9897.6    1482.2    9909.8    1480.7    9926.6    1481.5    9940.4
GR  1484.0    9951.7    1485.3    9958.6    1482.8    9965.5    1481.8    9980.0    1480.8    9992.8
GR  1479.3   10000.0    1480.5   10007.6    1485.2   10015.2    1487.8   10025.5    1487.9   10046.7
GR  1486.6   10069.7    1485.3   10082.1    1483.2   10095.7    1483.1   10106.6    1484.3   10125.5
GR  1485.5   10148.8    1486.2   10172.8    1486.3   10196.8    1486.5   10217.4    1487.9   10241.4
GR  1488.5   10265.8    1488.6   10292.1    1489.3   10312.8    1489.2   10333.8    1489.4   10363.4
GR  1489.9   10400.6    1490.8   10433.1    1490.9   10465.9    1490.9   10496.3    1492.1   10528.1
GR  1492.5   10560.0

NC     .065      .065      .040
ET                      9.1                                                          9962     10072
          The area of the stock tank (Snodgrass Tank) is ineffective,
          and it's ignored. However, the dam and dike structures act
          as a constriction to the flow.
          NC card was used, channel = .040 and overbank = .065
X1   0.516        80    9828.1   10114.2       680       750       708
GR  1507.2    9207.8    1505.8    9230.3    1503.4    9252.4    1498.7    9271.8    1497.6    9281.0
GR  1498.4    9290.6    1500.5    9298.4    1501.8    9323.6    1501.6    9353.2    1500.5    9391.1
GR  1500.2    9427.1    1501.1    9459.8    1500.7    9484.2    1500.9    9496.9    1500.7    9517.7
GR  1500.6    9520.3    1500.6    9554.9    1500.4    9580.2    1500.3    9623.0    1501.4    9668.8
GR  1501.4    9709.7    1501.2    9754.3    1501.3    9792.3    1500.1    9828.1    1497.9    9858.1
GR  1498.0    9913.8    1497.2    9950.6    1496.0    9959.7    1487.5    9977.9    1485.2   10000.0
GR  1485.8   10027.2    1486.8   10043.6    1491.3   10066.6    1498.5   10077.7    1500.1   10114.2
GR  1500.5   10146.6    1500.8   10177.7    1500.7   10216.3    1499.4   10257.3    1500.6   10299.3
GR  1500.0   10332.7    1499.8   10379.3    1499.7   10431.0    1500.4   10476.0    1501.4   10502.3
GR  1502.0   10526.2    1500.5   10527.7    1501.0   10560.9    1500.7   10591.6    1500.0   10617.6
GR  1500.3   10651.5    1499.7   10692.0    1499.8   10725.7    1500.0   10743.3    1499.0   10755.2
GR  1497.0   10777.6    1495.9   10795.0    1495.7   10815.0    1496.5   10849.1    1497.5   10896.8
GR  1498.1   10946.7    1498.3   10989.5    1498.0   11020.9    1497.6   11052.9    1496.6   11071.7
GR  1496.7   11088.7    1497.7   11117.7    1498.6   11147.7    1498.6   11171.4    1498.9   11205.5
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GR   1499.1   11241.7   1498.9   11270.8   1497.1   11300.9   1496.3   11333.3   1496.3   11374.1
GR   1497.2   11413.7   1496.9   11450.9   1499.7   11489.6   1500.0   11540.6   1500.2   11541.3

QT       2       9670      9670
NC    .065       .065      .038
ET               7.1       9.1                                 9690     10420      9820     10300
         Meandering channel around the tank was straightened for modeling.
         Q changed to 9,670 cfs at C10W (the confluence with Stream No.
         14).  CCHV = 0.3 for abrupt contraction.
         ET card (Fields 7 & 8 ) was used to model ineffective area.
         NC card was used, channel = .038 and overbanks = .065.
X1    0.618        68    9961.3   10051.6    600     490     539
GR   1500.0    9590.0   1496.4    9645.0   1496.1   9673.6   1495.1    9706.2   1496.2    9726.3
GR   1497.9    9750.4   1498.2    9775.2   1497.9   9800.0   1497.4    9820.1   1496.7    9831.4
GR   1495.0    9850.6   1493.9    9879.2   1493.2   9905.1   1492.4    9924.2   1492.9    9943.9
GR   1493.2    9961.3   1492.3    9972.4   1490.8   9983.7   1490.1    9995.7   1489.9   10000.0
GR   1490.5   10011.3   1491.8   10017.3   1493.5  10029.8   1493.7   10051.6   1493.5   10072.4
GR   1493.2   10102.0   1493.1   10134.2   1492.8  10166.9   1492.6   10200.5   1492.6   10233.7
GR   1492.3   10257.9   1492.4   10277.4   1492.2  10303.5   1492.6   10335.6   1493.1   10365.8
GR   1494.1   10389.1   1494.1   10420.1   1493.4  10461.6   1492.8   10502.8   1493.0   10539.0
GR   1492.6   10577.9   1492.7   10616.2   1492.7  10661.3   1492.8   10704.4   1493.3   10746.6
GR   1493.8   10778.5   1495.6   10809.6   1495.9  10854.0   1496.8   10897.3   1496.6   10937.4
GR   1495.9   10958.7   1496.9   10992.7   1497.1  11034.2   1497.8   11081.1   1498.4   11119.0
GR   1498.8   11148.5   1498.5   11191.7   1496.5  11233.4   1495.4   11258.3   1496.0   11294.9
GR   1496.5   11331.5   1496.7   11366.1   1497.0  11403.2   1497.4   11441.2   1497.6   11477.4
GR   1498.7   11509.9   1499.0   11511.3   1499.2  11520.0

NC                                    .1       .3
ET                          9.1                                                      9875     10530
         Contraction and expansion coefficients changed to 0.1 and 0.3.
X1    0.721        79    9989.4   10022.5    400     400     544
GR   1499.5    9788.0   1498.0    9807.3   1498.3   9822.1   1496.7    9838.2   1495.9    9854.4
GR   1495.6    9875.0   1495.9    9884.3   1495.1   9896.1   1495.1    9921.8   1494.7    9944.9
GR   1495.4    9968.0   1496.0    9983.3   1495.0   9989.4   1492.4    9993.1   1492.1    9999.8
GR   1492.2   10000.0   1492.6   10009.6   1494.2  10022.5   1494.4   10035.5   1494.9   10060.3
GR   1495.3   10092.1   1496.1   10120.5   1495.3  10130.4   1494.0   10138.7   1495.2   10148.9
GR   1494.9   10172.3   1494.9   10196.6   1494.7  10234.0   1494.6   10271.8   1494.3   10305.8
GR   1494.1   10328.1   1494.0   10345.3   1494.7  10365.8   1494.5   10398.4   1494.8   10432.3
GR   1495.3   10465.5   1495.1   10499.1   1495.0  10540.3   1494.8   10579.6   1494.8   10614.1
GR   1495.2   10651.1   1495.3   10659.0   1495.3  10680.3   1495.4   10697.8   1494.9   10724.5
GR   1494.8   10762.6   1494.3   10786.7   1494.8  10797.4   1494.6   10813.2   1495.1   10836.1
GR   1495.0   10871.3   1495.9   10897.4   1496.6  10922.8   1496.6   10946.7   1497.2   10973.7
GR   1498.6   10996.4   1498.8   11014.4   1497.9  11041.4   1497.9   11070.3   1498.1   11103.5
GR   1498.1   11136.8   1498.6   11166.9   1500.6  11200.6   1501.4   11215.4   1501.3   11249.2
GR   1500.3   11283.6   1500.6   11322.6   1501.2  11356.1   1501.2   11390.1   1500.9   11417.4
GR   1500.2   11436.4   1499.3   11454.1   1499.3  11463.1   1501.9   11477.9   1501.9   11496.8
GR   1501.3   11523.2   1500.3   11548.6   1499.9  11564.7   1500.6   11577.5

ET                          9.1                                                      9986     10510
X1    0.803        78    9986.3   10025.5    470     285     433
GR   1503.4    9499.6   1503.3    9520.4   1502.7   9546.2   1501.9    9567.8   1500.9    9588.6
GR   1501.4    9611.4   1501.1    9636.2   1500.0   9653.3   1500.9    9678.0   1501.3    9710.2
GR   1500.5    9752.3   1499.1    9789.6   1498.9   9828.3   1498.7    9862.0   1498.9    9892.6
GR   1498.6    9923.8   1498.1    9951.6   1496.8   9971.8   1496.3    9986.3   1494.5    9994.9
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GR	1493.3	9998.8	1493.4	10000.0	1494.3	10013.6	1496.4	10025.5	1496.5	10044.9
GR	1497.0	10080.5	1496.8	10114.6	1497.1	10120.1	1495.9	10157.9	1495.5	10196.2
GR	1494.7	10220.4	1495.0	10244.3	1495.1	10273.3	1495.6	10291.5	1495.6	10310.8
GR	1496.2	10324.6	1497.1	10347.6	1497.0	10372.1	1496.5	10391.2	1496.1	10401.9
GR	1496.0	10419.4	1495.9	10449.3	1496.1	10475.3	1496.7	10505.1	1496.1	10537.0
GR	1496.2	10563.6	1496.5	10585.8	1496.5	10609.9	1496.5	10639.5	1496.2	10672.3
GR	1496.1	10701.4	1495.8	10712.6	1496.5	10730.9	1496.9	10751.0	1496.5	10759.9
GR	1497.2	10774.6	1497.1	10814.9	1498.0	10855.8	1498.1	10896.9	1498.5	10938.3
GR	1499.3	10986.4	1500.0	11010.0	1500.8	11085.7	1500.9	11125.0	1501.4	11135.2
GR	1502.8	11171.0	1502.7	11201.9	1502.1	11227.0	1501.3	11244.7	1501.9	11258.8
GR	1502.8	11276.6	1504.8	11293.8	1505.0	11318.3	1505.0	11335.2	1505.0	11367.9
GR	1505.2	11399.6	1504.9	11419.1	1505.6	11440.6				
ET			9.1						9939	10670
X1	0.909	78	9938.6	10031.2	450	460	560			
GR	1505.8	9553.0	1504.9	9577.7	1504.9	9604.2	1504.7	9632.9	1504.8	9665.0
GR	1504.0	9699.7	1502.4	9727.3	1501.9	9760.6	1501.3	9790.5	1500.8	9812.0
GR	1501.2	9836.2	1500.5	9857.9	1499.7	9881.5	1498.9	9902.2	1500.5	9921.3
GR	1499.5	9938.6	1498.7	9961.3	1499.6	9975.1	1497.5	9984.4	1495.8	9994.5
GR	1495.5	10000.0	1495.8	10010.2	1497.7	10019.3	1499.9	10031.2	1499.3	10059.0
GR	1499.0	10096.0	1498.3	10126.5	1498.3	10154.4	1498.7	10171.9	1498.0	10183.2
GR	1498.7	10194.2	1498.9	10209.9	1498.9	10225.5	1498.3	10256.4	1498.4	10295.4
GR	1497.6	10317.5	1499.0	10335.7	1499.2	10366.3	1498.7	10398.4	1498.5	10436.0
GR	1498.6	10470.1	1498.6	10491.8	1498.5	10522.6	1498.6	10557.2	1498.6	10598.8
GR	1498.6	10633.5	1498.7	10656.7	1498.6	10688.6	1498.3	10724.7	1498.4	10764.6
GR	1498.3	10789.9	1498.6	10800.3	1498.9	10818.8	1498.2	10833.9	1499.1	10856.5
GR	1498.6	10890.7	1498.8	10918.1	1498.8	10951.3	1498.3	10965.7	1499.0	10979.7
GR	1499.8	11019.5	1501.6	11038.7	1501.5	11066.0	1502.6	11096.8	1503.2	11134.9
GR	1503.1	11167.6	1503.2	11202.3	1503.4	11235.3	1502.9	11262.5	1503.8	11290.9
GR	1505.4	11316.4	1506.2	11344.8	1506.2	11371.7	1506.2	11396.9	1506.2	11426.2
GR	1505.8	11457.6	1505.6	11487.3	1506.2	11513.5				
ET			9.1						9983	10620
X1	0.988	74	9993.4	10028.7	410	410	417			
GR	1509.5	9360.3	1508.9	9391.8	1508.0	9438.7	1507.2	9485.8	1506.4	9536.0
GR	1505.2	9571.7	1504.5	9591.2	1504.7	9609.2	1504.7	9644.3	1504.0	9685.6
GR	1502.6	9707.9	1503.0	9737.0	1502.8	9774.7	1502.2	9812.3	1500.8	9845.1
GR	1500.8	9873.6	1500.3	9911.9	1501.1	9938.3	1501.7	9951.9	1501.2	9969.1
GR	1500.9	9983.4	1500.3	9993.4	1497.0	9999.3	1496.4	10000.0	1496.6	10009.4
GR	1497.6	10016.1	1500.9	10028.7	1499.7	10048.4	1499.5	10068.2	1498.2	10072.8
GR	1499.0	10077.9	1499.2	10091.3	1500.7	10109.1	1501.9	10135.2	1500.0	10154.3
GR	1500.2	10180.6	1500.4	10213.0	1500.3	10245.3	1500.3	10284.7	1500.4	10319.2
GR	1500.6	10355.5	1501.5	10395.2	1501.0	10434.0	1501.0	10471.4	1501.2	10511.9
GR	1500.9	10547.6	1501.0	10572.6	1501.4	10598.7	1501.3	10625.7	1501.0	10657.5
GR	1501.0	10683.1	1501.3	10714.7	1501.2	10737.3	1501.3	10766.6	1501.8	10799.7
GR	1502.3	10830.8	1502.0	10857.4	1501.7	10888.8	1501.6	10927.6	1501.8	10953.9
GR	1502.6	10981.5	1503.5	10999.8	1505.9	11014.0	1507.2	11039.6	1507.8	11049.7
GR	1509.0	11094.5	1509.5	11136.9	1509.8	11172.9	1509.8	11209.7	1509.7	11244.2
GR	1510.1	11277.2	1510.4	11308.8	1510.6	11340.4	1510.8	11342.4		

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ET                      9.1                                                     9963      10680
X1    1.079       62   9975.6   10020.6      420       500       480
GR   1509.0   9437.9   1508.5    9484.7   1507.2    9536.2    1507.4    9561.1   1508.1    9575.9
GR   1506.7   9597.7   1506.6    9635.8   1506.6    9683.4    1505.9    9727.3   1505.3    9762.7
GR   1504.3   9785.9   1504.0    9799.5   1502.8    9804.7    1504.2    9817.4   1504.2    9838.7
GR   1503.7   9871.5   1504.4    9885.3   1503.3    9904.9    1503.0    9928.9   1503.5    9947.1
GR   1503.6   9961.1   1502.7    9975.6   1500.0    9984.5    1498.7    9993.6   1498.8   10000.0
GR   1500.1  10008.9   1502.8   10020.6   1502.6   10041.4    1502.3   10065.7   1501.7   10076.4
GR   1499.9  10083.6   1501.3   10092.3   1501.6   10106.4    1502.3   10124.0   1502.1   10146.8
GR   1502.5  10172.7   1502.6   10173.0   1501.7   10193.8    1502.5   10222.2   1502.5   10258.1
GR   1503.2  10290.6   1504.4   10326.1   1503.6   10358.5    1503.7   10396.2   1503.8   10426.7
GR   1503.8  10460.2   1503.6   10497.6   1503.5   10532.0    1503.7   10568.0   1504.6   10609.1
GR   1504.6  10638.9   1503.7   10676.8   1504.2   10721.0    1504.3   10772.1   1503.9   10821.9
GR   1503.7  10869.9   1504.2   10913.1   1505.3   10947.7    1506.6   10980.6   1506.9   11019.6
GR   1506.8  11035.6   1507.7   11046.5

ET                      9.1                                                     9982      10500
X1    1.199       55   9982.3   10022.9      650       630       634
GR   1516.4   9779.8   1515.8    9802.3   1515.8    9827.9    1512.2    9864.0   1511.0    9900.9
GR   1509.8   9933.1   1508.2    9956.1   1505.4    9970.4    1503.6    9982.3   1500.9    9993.4
GR   1500.4  10000.0   1500.3   10004.3   1501.7   10012.7    1504.3   10022.9   1506.1   10033.4
GR   1504.6  10047.4   1505.2   10060.5   1504.9   10072.1    1506.2   10080.8   1504.5   10092.1
GR   1506.4  10105.9   1506.4   10123.3   1505.4   10146.1    1504.4   10170.8   1505.3   10185.6
GR   1505.5  10200.3   1504.5   10208.4   1506.3   10224.0    1506.3   10252.4   1506.7   10286.5
GR   1507.1  10330.2   1506.9   10354.9   1507.0   10389.3    1506.8   10405.9   1506.0   10414.6
GR   1506.4  10427.6   1505.7   10444.9   1506.4   10465.0    1506.4   10486.3   1507.7   10503.2
GR   1508.6  10524.6   1508.5   10538.6   1508.3   10571.6    1507.4   10601.5   1506.4   10623.6
GR   1507.5  10646.1   1508.5   10671.2   1508.2   10693.9    1507.9   10709.2   1509.2   10738.1
GR   1510.1  10771.1   1510.1   10807.3   1510.1   10846.3    1510.4   10893.6   1511.2   10923.1

NH       5      .065   9650.6      .045   9674.7      .065    9964.6      .038  10041.7      .065
NH   11010.
ET                      9.1                                                     9854      10422
          NH cards were used.
X1    1.313       74   9964.6   10041.7      560       450       602
GR   1513.6   9411.0   1511.9    9464.0   1511.9    9504.8    1514.5    9515.1   1511.7    9528.2
GR   1511.8   9553.8   1511.7    9575.1   1510.1    9595.1    1508.8    9608.1   1509.5    9623.8
GR   1510.0   9637.1   1509.6    9646.5   1508.0    9650.6    1506.4    9654.5   1506.2    9660.0
GR   1506.7   9666.4   1508.6    9674.7   1508.7    9683.7    1508.9    9706.5   1509.3    9725.0
GR   1508.7   9737.1   1510.4    9756.9   1511.0    9780.5    1511.1    9792.5   1510.4    9817.4
GR   1509.2   9847.5   1509.1    9864.8   1508.0    9882.2    1505.8    9890.1   1507.9    9900.2
GR   1508.8   9916.6   1509.1    9941.5   1509.4    9964.6    1507.8    9977.6   1505.1    9992.6
GR   1503.7  10000.0   1503.6   10004.9   1505.6   10014.2    1506.3   10022.9   1509.2   10041.7
GR   1509.0  10067.9   1508.3   10088.4   1509.0   10106.0    1508.4   10115.8   1508.9   10129.8
GR   1508.7  10175.5   1508.8   10208.3   1508.9   10239.9    1508.4   10270.5   1508.6   10293.7
GR   1508.9  10308.1   1508.1   10314.4   1508.5   10328.7    1508.4   10346.6   1508.3   10356.7
GR   1508.7  10373.7   1507.9   10385.5   1508.4   10402.8    1508.6   10428.9   1509.4   10452.2
GR   1511.0  10473.8   1511.2   10496.8   1511.1   10529.7    1510.9   10561.8   1509.6   10598.9
GR   1509.9  10634.9   1510.1   10676.1   1510.2   10718.4    1510.2   10758.7   1510.2   10796.8
GR   1510.5  10844.6   1511.6   10875.7   1512.0   10880.0    1513.2   11010.0
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NC     .065       .065       .038
ET                           9.1                                                          9962       10364
          NC card was used, channel = .038 and overbanks = .065.
X1    1.419         58     9971.6    10027.0        570        440        560
GR   1515.6     9384.9     1515.5     9420.7     1515.6     9441.8     1515.2     9476.8     1515.1     9507.9
GR   1514.6     9541.0     1515.3     9566.5     1515.4     9595.5     1515.4     9624.1     1514.4     9648.7
GR   1514.3     9667.5     1515.1     9695.2     1514.9     9725.3     1515.6     9758.1     1515.4     9790.2
GR   1514.7     9818.6     1513.5     9828.0     1514.3     9845.6     1513.7     9864.5     1511.9     9879.5
GR   1511.2     9902.7     1511.8     9930.7     1511.9     9950.2     1510.1     9959.2     1511.3     9971.6
GR   1510.7     9981.0     1506.7     9991.3     1506.3     9999.9     1506.1    10000.0     1507.3    10014.7
GR   1511.8    10027.0     1512.2    10036.9     1512.1    10060.4     1511.9    10090.3     1511.9    10111.2
GR   1511.9    10155.8     1512.5    10195.0     1512.7    10220.3     1512.5    10244.6     1511.7    10271.9
GR   1510.9    10286.9     1510.5    10294.8     1510.4    10307.8     1511.2    10322.8     1511.6    10354.4
GR   1512.6    10386.5     1513.0    10427.3     1512.8    10466.5     1513.0    10501.6     1512.8    10542.4
GR   1513.3    10583.1     1513.3    10620.5     1513.5    10656.0     1514.8    10693.0     1515.1    10733.3
GR   1515.2    10774.1     1515.2    10802.7     1515.5    10812.0

ET                           9.1                                                          9739       10088
X1    1.527         54     9987.8    10021.8        450        550        570
GR   1518.3     9365.5     1518.5     9380.0     1517.3     9401.2     1517.2     9415.2     1516.8     9434.7
GR   1516.4     9456.1     1516.7     9493.0     1518.2     9527.0     1518.8     9557.0     1518.9     9583.9
GR   1518.3     9611.7     1517.7     9635.4     1517.7     9662.6     1517.2     9686.9     1515.1     9704.3
GR   1513.7     9714.8     1514.4     9726.9     1513.7     9737.2     1512.9     9744.8     1513.8     9755.3
GR   1513.8     9776.5     1514.4     9804.2     1514.7     9836.8     1514.5     9877.0     1514.5     9908.2
GR   1515.3     9942.4     1515.9     9965.8     1515.3     9978.8     1513.3     9987.8     1508.0     9995.6
GR   1507.8    10000.0     1507.9    10008.3     1509.5    10013.9     1513.0    10021.8     1514.5    10034.0
GR   1514.0    10049.4     1512.8    10058.0     1512.8    10068.8     1515.2    10087.7     1515.5    10119.0
GR   1516.9    10151.5     1516.5    10189.0     1516.2    10223.8     1517.2    10257.7     1517.0    10298.7
GR   1517.2    10337.8     1517.4    10381.3     1517.6    10424.3     1517.7    10451.5     1517.8    10474.7
GR   1517.9    10508.9     1518.0    10546.6     1518.8    10576.0     1520.1    10605.1

NH         5       .065     9988.4       .038    10025.9       .065    10264.2       .048    10358.0       .065
NH     10608.
ET                           9.1                                                          9702       10158
          NH cards were used for SECNO 1.620 through SECNO 1.811.
X1    1.620         53     9988.4    10025.9        400        510        491
GR   1521.5     9361.5     1521.2     9387.2     1520.6     9424.6     1520.6     9454.2     1517.9     9477.6
GR   1518.0     9510.1     1518.6     9552.9     1518.9     9600.0     1518.5     9642.3     1518.3     9674.4
GR   1517.2     9715.6     1517.5     9733.8     1517.2     9758.4     1517.0     9781.0     1517.5     9802.2
GR   1517.5     9831.0     1517.7     9856.4     1518.1     9887.9     1519.2     9911.7     1519.6     9933.2
GR   1519.4     9957.8     1517.6     9978.6     1515.5     9988.4     1513.6     9997.6     1513.5    10000.0
GR   1514.0    10013.9     1515.2    10025.9     1515.5    10051.9     1514.8    10067.5     1515.7    10077.3
GR   1519.4    10095.0     1521.1    10114.7     1521.6    10132.8     1521.3    10158.3     1520.8    10172.4
GR   1519.8    10209.5     1519.1    10242.6     1517.6    10264.2     1515.9    10281.2     1517.4    10292.0
GR   1517.5    10310.0     1517.6    10333.3     1518.1    10343.0     1516.7    10351.0     1518.1    10358.0
GR   1519.7    10384.6     1520.3    10412.5     1519.9    10449.7     1520.5    10485.7     1521.2    10523.8
GR   1522.5    10560.7     1523.5    10598.9     1523.7    10608.0
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NH       5      .065    9975.4      .038   10031.7      .065   10532.2      .048   10726.2      .065
NH   11017.
ET                       9.1                                                       9740     10424
X1   1.717        77    9975.4   10031.7       470       450       512
GR   1527.8    9302.7   1527.7    9344.7    1527.2    9391.1    1525.6    9444.1    1524.7    9499.4
GR   1524.2    9519.9   1524.6    9551.0    1523.9    9592.5    1522.6    9631.3    1522.2    9665.0
GR   1520.6    9695.1   1521.0    9714.0    1520.4    9733.3    1521.5    9745.6    1520.9    9768.6
GR   1520.5    9793.6   1521.5    9809.2    1522.3    9836.1    1522.7    9856.0    1522.3    9884.9
GR   1523.2    9907.7   1522.4    9939.8    1521.2    9954.9    1520.7    9965.8    1520.5    9975.4
GR   1517.9    9984.4   1515.1    9992.1    1514.8   10000.0    1515.3   10012.7    1517.7   10018.0
GR   1520.1   10031.7   1520.8   10054.5    1520.7   10071.2    1518.9   10080.4    1520.0   10095.7
GR   1521.9   10111.4   1522.2   10133.2    1522.8   10138.9    1522.2   10179.3    1522.0   10219.0
GR   1521.4   10238.4   1522.6   10252.2    1523.3   10281.3    1523.5   10311.3    1522.3   10335.0
GR   1522.2   10351.3   1523.5   10381.7    1524.1   10411.6    1524.8   10447.8    1523.9   10479.3
GR   1524.2   10508.2   1524.2   10532.2    1521.8   10549.2    1520.5   10566.6    1520.6   10590.1
GR   1521.2   10601.0   1520.6   10615.2    1520.4   10631.1    1520.5   10640.3    1519.7   10647.7
GR   1521.5   10660.9   1522.2   10674.9    1521.4   10688.8    1522.4   10705.9    1523.9   10726.2
GR   1524.7   10750.5   1524.7   10780.5    1523.6   10807.2    1522.3   10837.2    1521.7   10857.4
GR   1522.3   10868.5   1521.5   10892.3    1522.8   10918.6    1523.3   10951.6    1524.1   10982.9
GR   1525.1   11016.1   1525.7   11017.0

NH       4      .065    9978.1      .048   10035.9      .065   10741.9      .055   11460.0
ET                       9.1                                                       9740     10670
X1   1.811        81    9978.1   10035.9       630       240       496
GR   1531.3    9392.3   1530.4    9442.9    1529.0    9497.6    1528.6    9545.8    1526.4    9562.0
GR   1527.3    9581.5   1527.5    9617.4    1526.8    9658.1    1525.9    9700.6    1525.5    9731.9
GR   1524.0    9747.2   1524.4    9756.4    1524.6    9770.3    1523.6    9806.6    1523.5    9840.5
GR   1523.6    9858.1   1524.4    9870.3    1523.7    9876.7    1521.3    9887.6    1522.6    9892.4
GR   1523.0    9905.6   1523.4    9936.1    1524.0    9961.3    1524.0    9978.1    1523.1    9985.7
GR   1519.5    9993.2   1517.4    9999.7    1517.2   10000.0    1518.3   10009.3    1522.6   10019.5
GR   1523.8   10035.9   1524.2   10065.1    1524.0   10087.2    1522.6   10097.5    1523.5   10111.5
GR   1523.0   10142.4   1522.3   10165.1    1521.7   10175.4    1522.8   10192.5    1522.6   10205.0
GR   1522.1   10212.6   1524.1   10230.0    1524.1   10252.5    1523.1   10266.0    1523.1   10276.0
GR   1524.7   10296.4   1524.6   10324.7    1524.4   10359.0    1525.0   10389.3    1524.9   10423.4
GR   1524.4   10455.2   1524.1   10471.4    1524.4   10508.8    1525.2   10550.7    1525.7   10588.0
GR   1525.7   10615.7   1524.9   10642.0    1525.5   10671.2    1525.5   10704.0    1525.5   10741.9
GR   1524.4   10776.8   1523.9   10804.1    1523.1   10838.8    1522.7   10874.7    1522.2   10902.3
GR   1522.3   10916.5   1521.6   10925.0    1522.9   10942.1    1522.9   10978.2    1522.9   11000.8
GR   1523.5   11020.3   1523.6   11037.9    1524.6   11072.4    1524.5   11096.0    1524.8   11129.7
GR   1525.1   11170.9   1525.2   11214.0    1525.1   11257.2    1525.1   11279.3    1526.2   11320.0
GR   1528.0   11460.0

QT       2       9570      9570
NC    .065        .065      .048
ET                       9.1                                                       9538     10150
          Q changed to 9,570 cfs at C10U (the confluence with Stream No.
          11).  NC card was used, channel = .048 and overbank = .065
X1   1.909        53    9981.2   10029.0       517       480       517
GR   1532.0    9180.0   1531.1    9260.0    1530.0    9329.9    1527.9    9420.0    1526.8    9473.1
GR   1526.4    9482.6   1526.2    9493.1    1524.0    9502.6    1523.9    9525.3    1524.0    9531.0
GR   1524.2    9603.3   1525.4    9615.0    1525.9    9648.8    1526.7    9695.0    1526.8    9749.8
GR   1526.9    9824.0   1527.9    9883.7    1528.0    9919.1    1526.2    9947.2    1527.0    9967.8
GR   1526.2    9981.2   1519.4    9991.0    1518.5    9999.5    1519.0   10000.0    1521.1   10008.5
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GR	1524.6	10016.3	1524.9	10029.0	1527.1	10060.8	1526.8	10106.9	1527.4	10147.2
GR	1527.8	10178.5	1528.2	10241.6	1528.6	10318.7	1530.9	10391.5	1530.6	10438.2
GR	1530.6	10481.0	1530.9	10534.6	1531.0	10565.8	1531.6	10615.4	1531.8	10670.4
GR	1530.4	10715.3	1528.5	10761.1	1527.9	10813.4	1526.8	10850.1	1525.7	10857.0
GR	1526.4	10866.7	1526.1	10899.8	1525.9	10926.7	1525.8	10937.5	1527.2	10965.8
GR	1528.1	10986.6	1529.6	11014.1	1530.1	11046.4				
ET			9.1						9560	10290
X1	2.004	66	9985.8	10015.2	502	502	502			
GR	1533.8	9011.0	1532.5	9061.0	1532.0	9091.8	1531.8	9150.0	1531.5	9190.0
GR	1531.0	9291.8	1530.2	9348.8	1531.1	9387.1	1531.7	9433.5	1531.2	9478.8
GR	1531.3	9523.1	1532.1	9561.6	1532.4	9585.2	1532.2	9628.7	1532.6	9659.9
GR	1532.8	9682.2	1532.6	9713.0	1531.7	9740.6	1531.2	9762.9	1531.6	9792.8
GR	1531.5	9825.7	1531.5	9862.0	1531.4	9888.5	1531.3	9903.1	1531.8	9924.4
GR	1532.1	9951.1	1532.2	9973.9	1528.1	9985.8	1524.4	9995.4	1523.6	10000.0
GR	1524.5	10007.5	1527.7	10015.2	1527.5	10034.2	1528.7	10057.7	1531.1	10084.2
GR	1531.5	10117.2	1532.1	10148.4	1532.1	10172.7	1530.9	10203.8	1530.6	10231.9
GR	1530.8	10251.6	1531.1	10270.9	1532.3	10295.8	1532.4	10325.2	1532.8	10355.3
GR	1533.0	10382.8	1533.9	10414.1	1533.9	10447.0	1534.0	10487.4	1534.1	10527.1
GR	1534.3	10570.4	1533.4	10604.2	1532.3	10637.7	1532.5	10678.8	1532.0	10717.0
GR	1531.1	10752.8	1531.6	10791.6	1531.3	10818.8	1531.6	10851.4	1531.1	10884.2
GR	1531.7	10926.6	1532.0	10967.8	1532.3	11007.6	1532.7	11047.2	1533.6	11085.6
GR	1534.5	11104.8								
ET			9.1						9630	10320
X1	2.060	64	9972.8	10018.2	370	230	296			
GR	1536.4	9078.4	1535.5	9247.0	1535.5	9295.9	1535.4	9349.4	1535.6	9399.6
GR	1535.5	9444.1	1535.4	9496.4	1535.4	9545.2	1535.4	9588.6	1534.5	9626.6
GR	1534.6	9663.5	1534.4	9697.7	1534.2	9746.5	1533.9	9788.3	1533.9	9835.8
GR	1533.6	9864.9	1534.9	9895.5	1535.1	9925.5	1533.9	9952.7	1531.2	9972.8
GR	1527.9	9983.8	1526.7	9994.9	1525.8	10000.0	1526.6	10007.8	1530.6	10018.2
GR	1532.2	10026.7	1530.9	10039.5	1531.0	10065.2	1531.1	10089.6	1531.1	10122.9
GR	1532.2	10136.1	1533.6	10152.2	1531.7	10169.3	1531.9	10204.3	1532.3	10237.2
GR	1532.6	10273.1	1533.9	10312.5	1534.2	10350.6	1535.2	10390.2	1535.1	10431.0
GR	1535.1	10436.0	1535.5	10470.4	1536.0	10496.1	1534.8	10524.3	1533.6	10554.8
GR	1533.6	10596.6	1533.3	10624.5	1533.1	10650.5	1533.0	10686.2	1532.6	10720.2
GR	1532.1	10731.2	1533.2	10747.3	1532.4	10769.5	1532.2	10774.8	1532.7	10783.7
GR	1532.6	10804.7	1532.8	10836.3	1532.8	10876.3	1533.3	10910.6	1533.4	10949.0
GR	1533.6	10988.9	1534.4	10992.8	1535.5	11053.0	1536.4	11350.0		
ET			9.1						9440	10046
X1	2.142	56	9977.7	10020.2	200	400	433			
GR	1538.0	8902.0	1536.6	9076.3	1536.6	9136.8	1536.6	9200.5	1536.4	9255.1
GR	1535.9	9319.6	1535.7	9371.7	1535.8	9424.0	1536.0	9491.6	1535.8	9541.5
GR	1535.8	9593.4	1535.8	9648.5	1535.4	9701.6	1534.7	9735.1	1534.4	9763.7
GR	1532.5	9795.4	1531.3	9813.4	1531.1	9819.2	1533.2	9836.8	1534.1	9863.8
GR	1534.5	9891.4	1533.8	9914.3	1533.9	9941.3	1534.6	9955.6	1534.8	9970.4
GR	1533.9	9977.7	1528.2	9989.1	1527.6	9993.8	1527.7	10000.0	1529.1	10008.2
GR	1532.2	10020.2	1533.1	10028.8	1532.8	10038.4	1533.1	10055.5	1534.7	10069.1
GR	1536.7	10083.7	1537.0	10103.9	1536.8	10125.7	1536.8	10164.8	1536.7	10196.5
GR	1536.5	10210.0	1537.0	10249.1	1536.6	10287.1	1536.2	10334.8	1536.3	10381.4
GR	1536.3	10437.1	1535.4	10478.8	1536.0	10512.4	1535.8	10525.4	1535.5	10531.4
GR	1536.0	10544.1	1536.1	10573.2	1536.3	10610.5	1536.4	10641.3	1537.2	10683.0
GR	1538.0	10990.0								

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ET                          9.1                                                   9640      10262
X1    2.233        59     9990.8    10016.0       500       450       480
GR   1541.4    8796.0     1540.0     8901.0    1539.8    8951.0    1539.5    9015.0    1539.3    9086.0
GR   1539.2    9186.0     1539.1     9241.0    1539.5    9296.4    1538.9    9354.6    1539.1    9406.6
GR   1538.9    9468.3     1538.8     9521.9    1538.6    9579.7    1538.5    9626.6    1538.5    9682.1
GR   1538.7    9735.3     1538.9     9787.7    1539.0    9833.8    1538.5    9875.3    1537.4    9914.9
GR   1536.6    9950.8     1536.8     9965.3    1536.7    9981.1    1535.1    9990.8    1531.7    9995.9
GR   1531.3   10000.0     1531.8    10006.3    1534.5   10016.0    1537.3   10026.9    1537.4   10032.9
GR   1536.9   10048.0     1536.5    10057.4    1536.8   10077.9    1536.7   10102.4    1536.0   10110.1
GR   1537.0   10121.7     1537.0    10138.2    1537.2   10170.9    1538.1   10204.3    1537.8   10245.6
GR   1537.3   10276.5     1537.2    10283.3    1537.9   10306.0    1538.8   10327.2    1539.2   10340.2
GR   1539.3   10371.5     1539.6    10406.5    1539.9   10449.8    1539.9   10488.7    1540.0   10527.8
GR   1540.1   10556.3     1539.2    10586.7    1538.9   10626.5    1538.6   10672.9    1537.7   10707.0
GR   1537.3   10728.0     1538.6    10742.8    1541.0   10761.9    1541.6   10781.0

NC    .065       .065       .055
ET                          9.1                                                   9730      10320
          NC card was used, channel = .055 and overbanks = .065.
X1    2.326        71     9984.4    10042.2       500       400       491
GR   1544.0    8851.3     1542.9     9133.4    1543.5    9171.4    1543.0    9226.9    1543.0    9281.9
GR   1542.9    9330.1     1543.1     9367.4    1542.6    9413.8    1542.9    9455.9    1543.3    9490.7
GR   1543.7    9525.9     1543.8     9556.3    1543.3    9581.0    1542.3    9602.4    1542.3    9630.0
GR   1542.2    9661.8     1541.8     9690.6    1542.1    9714.7    1541.9    9739.9    1541.2    9757.9
GR   1541.8    9777.7     1540.6     9802.5    1539.8    9822.2    1540.3    9845.8    1540.0    9873.3
GR   1539.8    9886.6     1540.0     9896.4    1538.6    9900.1    1537.7    9902.1    1538.2    9903.7
GR   1540.0    9910.3     1541.0     9935.0    1541.1    9954.7    1541.4    9968.7    1540.8    9984.4
GR   1538.2    9994.5     1536.3    10000.0    1535.7   10010.9    1535.9   10017.4    1538.1   10025.2
GR   1539.1   10042.2     1539.6    10055.5    1539.1   10057.7    1540.7   10065.1    1540.0   10076.1
GR   1540.3   10095.0     1540.1    10124.1    1539.5   10157.1    1539.9   10186.5    1540.7   10226.7
GR   1541.0   10260.6     1541.1    10277.9    1541.5   10307.2    1541.5   10342.5    1541.8   10365.2
GR   1541.7   10403.9     1541.8    10446.4    1542.1   10483.2    1541.6   10523.5    1540.9   10567.1
GR   1540.7   10611.0     1539.8    10642.0    1539.6   10665.2    1541.5   10692.1    1541.5   10711.5
GR   1541.2   10741.9     1540.9    10784.0    1541.2   10818.1    1540.4   10833.3    1542.0   10950.0
GR   1544.0   11170.0

ET                          9.1                                                   9748      10418
X1    2.406        66     9977.3    10018.4       410       410       422
GR   1546.6    9190.5     1546.2     9247.3    1546.0    9319.2    1545.7    9397.9    1545.0    9463.4
GR   1545.3    9512.0     1545.7     9547.0    1545.5    9548.1    1544.1    9594.7    1543.7    9644.9
GR   1543.1    9685.8     1542.1     9705.5    1543.3    9720.2    1542.4    9738.2    1544.0    9767.7
GR   1544.9    9794.9     1544.4     9841.6    1544.1    9885.8    1544.0    9917.4    1544.2    9950.7
GR   1544.1    9969.0     1542.6     9977.3    1537.1    9984.6    1535.5    9991.1    1535.3    9995.8
GR   1536.3   10000.0     1538.5    10008.5    1543.9   10018.4    1544.8   10043.2    1544.8   10072.1
GR   1544.0   10110.2     1543.1    10145.0    1543.5   10179.3    1543.7   10180.7    1543.2   10211.1
GR   1543.7   10229.0     1545.1    10256.4    1544.6   10279.6    1545.1   10306.1    1545.4   10329.2
GR   1544.6   10356.5     1542.8    10380.9    1542.2   10398.7    1541.5   10406.8    1542.4   10418.4
GR   1543.6   10452.4     1543.9    10481.2    1542.9   10498.1    1543.1   10515.7    1544.1   10541.6
GR   1545.9   10562.4     1545.6    10583.3    1544.6   10614.0    1544.5   10641.0    1545.1   10664.1
GR   1544.9   10702.4     1544.8    10742.1    1544.9   10780.4    1545.0   10819.9    1545.0   10849.5
GR   1544.8   10861.6     1545.8    10892.8    1546.0   10925.1    1546.6   10950.7    1546.9   10976.7
GR   1547.0   10976.9
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ET			9.1						9405	10216
X1	2.500	57	9978.9	10023.0	410	500	496			
GR	1550.3	8607.0	1549.3	9050.0	1548.0	9150.0	1546.0	9335.8	1546.6	9366.5
GR	1547.4	9389.4	1547.1	9404.9	1546.8	9426.0	1547.2	9455.6	1547.1	9491.3
GR	1547.0	9517.8	1547.0	9541.5	1547.3	9566.0	1547.9	9593.0	1548.7	9623.7
GR	1548.4	9649.6	1547.7	9680.1	1547.6	9710.3	1547.7	9733.5	1547.7	9760.7
GR	1547.7	9789.1	1547.2	9816.8	1546.2	9837.2	1547.3	9852.7	1547.4	9878.4
GR	1547.4	9900.9	1546.8	9930.6	1546.2	9955.0	1545.9	9963.6	1546.8	9972.3
GR	1545.4	9978.9	1540.8	9989.3	1540.2	9997.1	1540.3	10000.0	1541.2	10003.7
GR	1544.3	10013.4	1546.4	10023.0	1546.7	10048.5	1546.4	10082.1	1547.3	10122.9
GR	1547.8	10155.9	1547.9	10191.4	1547.8	10239.9	1547.6	10292.0	1547.5	10335.1
GR	1547.6	10378.6	1547.5	10424.6	1547.5	10468.2	1547.5	10518.8	1547.8	10566.8
GR	1547.9	10608.8	1547.8	10649.1	1548.0	10660.0	1548.1	10711.8	1548.2	10732.1
GR	1550.0	10870.0	1550.3	10910.0						
ET			9.1						9340	10024
X1	2.595	49	9985.1	10023.7	502	502	502			
GR	1553.5	8993.6	1551.2	9188.1	1550.9	9201.5	1551.5	9238.9	1551.1	9318.7
GR	1551.0	9375.9	1551.0	9438.0	1550.7	9494.1	1551.5	9538.7	1551.7	9579.7
GR	1551.5	9611.9	1550.8	9652.0	1551.0	9694.4	1551.7	9726.3	1551.9	9767.4
GR	1552.2	9806.4	1551.3	9841.8	1550.9	9868.4	1551.6	9891.8	1550.6	9917.9
GR	1548.0	9940.7	1549.1	9956.0	1549.5	9969.6	1549.5	9985.1	1543.1	9992.4
GR	1540.3	9999.6	1540.4	10000.0	1540.7	10008.4	1547.3	10014.8	1549.6	10023.7
GR	1550.1	10041.2	1549.0	10058.6	1549.6	10089.7	1551.3	10121.2	1552.7	10141.4
GR	1552.7	10176.0	1552.7	10218.7	1552.7	10254.0	1552.8	10290.2	1553.3	10329.7
GR	1552.8	10373.4	1552.6	10411.7	1552.6	10466.1	1552.3	10528.8	1552.5	10571.7
GR	1552.7	10613.8	1552.8	10652.1	1552.9	10679.0	1553.5	11029.0		
ET			9.1						9400	10037
X1	2.689	30	9971.4	10037.4	400	550	496			
GR	1556.4	8929.5	1553.2	9155.2	1552.9	9320.3	1552.0	9406.8	1552.2	9558.0
GR	1552.1	9680.1	1551.8	9736.2	1552.4	9767.7	1553.0	9795.3	1552.6	9808.4
GR	1551.9	9887.8	1551.4	9925.4	1551.5	9955.8	1551.6	9971.4	1544.7	9992.1
GR	1543.9	10000.0	1549.0	10008.6	1548.5	10019.9	1547.6	10026.9	1549.2	10037.4
GR	1549.7	10058.7	1549.8	10082.3	1550.0	10097.1	1553.6	10112.2	1554.2	10120.8
GR	1553.8	10139.3	1554.8	10168.8	1555.6	10191.3	1556.4	10207.3	1556.5	10244.8
ET			9.1						9779	10193
X1	2.777	40	9976.8	10029.1	440	420	465			
GR	1557.0	9250.0	1556.0	9293.1	1555.2	9317.8	1556.0	9404.2	1555.9	9463.3
GR	1556.0	9523.5	1556.5	9579.0	1556.4	9617.9	1555.3	9690.4	1555.0	9719.6
GR	1555.4	9760.4	1555.1	9804.8	1555.7	9833.9	1555.4	9858.6	1555.8	9898.2
GR	1557.0	9921.6	1556.9	9939.5	1556.0	9951.7	1555.1	9959.7	1553.9	9976.8
GR	1547.0	9992.6	1546.6	9999.8	1546.3	10000.0	1547.4	10006.2	1552.4	10029.1
GR	1553.5	10047.7	1553.2	10066.0	1553.3	10089.9	1552.8	10114.7	1553.1	10146.7
GR	1553.1	10162.1	1554.6	10198.5	1555.3	10220.6	1554.8	10250.6	1554.3	10275.4
GR	1554.0	10291.8	1554.5	10312.1	1556.2	10337.3	1557.3	10362.8	1558.0	10461.6

ET			9.1						9810	10222
X1	2.872	54	9978.4	10028.8	570	330	502			
GR	1562.4	9412.4	1560.6	9463.4	1559.9	9507.2	1559.8	9536.4	1560.1	9576.5
GR	1559.5	9630.3	1559.1	9659.9	1558.6	9705.4	1558.0	9739.9	1557.1	9766.9
GR	1556.2	9779.5	1556.1	9786.6	1554.3	9792.6	1555.9	9798.5	1557.2	9817.9
GR	1557.3	9826.0	1557.4	9848.4	1558.4	9857.7	1559.5	9870.5	1559.4	9873.1
GR	1559.7	9887.3	1559.1	9896.5	1557.8	9906.6	1554.8	9922.8	1555.4	9931.5
GR	1555.6	9939.6	1556.7	9960.0	1556.3	9978.4	1555.0	9984.0	1549.8	9993.1
GR	1549.6	10000.0	1549.8	10008.2	1555.7	10020.3	1556.1	10028.8	1555.6	10044.0
GR	1556.1	10075.1	1556.3	10103.3	1556.8	10136.4	1557.6	10159.5	1557.4	10170.7
GR	1557.1	10195.8	1556.6	10226.0	1557.4	10257.8	1558.3	10285.7	1559.2	10307.8
GR	1559.3	10322.3	1558.5	10332.5	1558.4	10349.4	1558.5	10392.7	1558.6	10442.1
GR	1559.0	10483.8	1559.9	10534.7	1560.5	10586.7	1561.2	10900.0		

ET			9.1						9600	10039
X1	2.947	41	9971.0	10038.8	320	420	396			
GR	1563.2	9197.5	1563.0	9250.5	1561.7	9316.6	1560.6	9355.0	1560.1	9387.1
GR	1560.1	9413.8	1560.3	9436.1	1559.6	9466.6	1559.0	9497.8	1559.8	9518.3
GR	1560.4	9553.0	1560.7	9580.9	1561.1	9609.7	1560.8	9631.1	1560.0	9647.5
GR	1560.4	9665.1	1560.7	9692.6	1560.7	9727.6	1561.0	9751.7	1561.3	9777.6
GR	1561.0	9799.2	1559.4	9815.6	1559.2	9850.0	1559.0	9852.9	1558.6	9871.5
GR	1558.4	9912.7	1558.0	9938.5	1558.2	9954.4	1559.1	9971.0	1551.6	9994.2
GR	1551.4	10000.0	1551.0	10003.7	1557.6	10018.7	1558.6	10038.8	1561.1	10072.8
GR	1561.1	10116.6	1561.4	10146.4	1563.0	10173.3	1562.5	10214.1	1562.6	10237.6
GR	1564.0	10800.0								

ET			9.1						9618	10065
X1	3.023	60	9969.5	10028.0	290	460	401			
GR	1565.5	9268.2	1565.3	9303.0	1564.7	9335.8	1563.4	9409.2	1563.4	9461.5
GR	1562.3	9496.0	1561.6	9540.3	1561.9	9597.4	1562.3	9635.8	1562.4	9689.0
GR	1562.1	9732.0	1562.3	9763.6	1563.5	9782.8	1563.3	9796.8	1563.1	9838.0
GR	1562.3	9877.3	1561.2	9900.4	1560.1	9914.4	1559.0	9920.3	1559.9	9926.9
GR	1560.6	9942.1	1559.2	9947.1	1561.0	9956.8	1560.4	9969.5	1558.0	9985.3
GR	1555.5	10000.0	1555.1	10005.1	1558.4	10017.7	1559.8	10028.0	1559.8	10049.2
GR	1560.1	10060.2	1556.8	10066.2	1559.6	10076.9	1560.7	10089.9	1562.0	10096.3
GR	1561.7	10112.3	1563.4	10137.4	1564.5	10160.8	1565.3	10177.3	1565.5	10192.9
GR	1562.6	10214.6	1561.7	10222.9	1561.4	10227.3	1562.7	10242.3	1564.3	10267.5
GR	1565.4	10282.8	1565.0	10301.1	1564.6	10311.1	1565.6	10331.5	1566.1	10365.2
GR	1566.5	10413.8	1566.1	10460.4	1566.2	10485.8	1567.0	10512.8	1566.7	10557.3
GR	1566.4	10604.6	1566.1	10663.8	1566.2	10715.2	1566.7	10776.4	1566.8	10803.2

ET			9.1						9976	10327
X1	3.117	57	9976.4	10022.5	360	320	496			
GR	1568.6	9520.0	1568.1	9547.3	1568.1	9569.8	1568.4	9602.0	1568.4	9619.1
GR	1567.9	9645.2	1566.5	9672.4	1566.1	9686.8	1565.9	9701.6	1567.0	9727.0
GR	1567.4	9745.0	1566.3	9776.2	1565.6	9810.5	1565.7	9849.0	1565.7	9887.7
GR	1565.6	9928.2	1565.4	9954.9	1565.2	9976.4	1558.6	9993.9	1557.8	10000.0
GR	1557.9	10007.0	1562.1	10022.5	1563.0	10033.7	1563.5	10054.7	1562.7	10094.5
GR	1563.6	10120.9	1564.4	10150.3	1564.0	10167.2	1564.9	10202.3	1565.9	10218.1
GR	1566.1	10229.7	1565.2	10244.5	1564.0	10268.1	1562.6	10279.8	1562.5	10284.2
GR	1564.1	10291.3	1564.1	10305.3	1563.6	10329.6	1563.4	10345.3	1563.8	10355.7
GR	1566.2	10380.2	1567.0	10392.8	1567.2	10420.6	1566.7	10425.3	1566.0	10471.1
GR	1565.9	10497.2	1566.0	10516.7	1566.7	10550.4	1566.8	10595.1	1567.3	10632.5

GR	1567.8	10683.5	1568.0	10765.7	1568.4	10864.1	1569.0	10904.7	1569.4	10983.6
GR	1570.0	11066.6	1569.7	11087.7						
ET			9.1						9799	10156
X1	3.209	60	9982.4	10017.8	380	270	486			
GR	1572.2	9355.8	1572.4	9413.0	1571.4	9458.5	1570.4	9499.6	1569.7	9531.8
GR	1569.5	9579.9	1569.2	9608.0	1569.2	9626.5	1569.3	9648.5	1568.3	9678.4
GR	1567.2	9708.6	1567.6	9722.5	1568.8	9750.3	1569.0	9760.3	1568.3	9769.4
GR	1565.9	9782.4	1564.5	9789.5	1564.2	9800.7	1565.9	9810.7	1566.0	9832.2
GR	1566.4	9856.7	1566.7	9873.6	1566.2	9896.1	1565.7	9909.0	1566.0	9935.3
GR	1566.2	9947.8	1567.0	9957.4	1567.3	9972.0	1567.1	9982.4	1566.2	9986.1
GR	1559.8	9993.6	1559.1	9999.0	1559.3	10000.0	1559.2	10005.6	1565.6	10012.5
GR	1566.7	10017.8	1566.4	10033.2	1566.6	10059.1	1566.4	10090.5	1566.0	10110.8
GR	1566.2	10131.0	1567.0	10147.5	1569.4	10164.7	1569.8	10178.3	1569.2	10198.7
GR	1569.1	10229.4	1568.0	10254.4	1568.0	10294.4	1568.0	10329.7	1568.2	10368.0
GR	1568.4	10399.7	1568.4	10442.4	1568.9	10498.8	1569.5	10549.7	1569.5	10595.7
GR	1570.0	10633.6	1570.6	10660.7	1571.2	10704.9	1571.3	10745.5	1572.3	10835.9

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO .092
3720 CRITICAL DEPTH ASSUMED

****

Deadman Wash Floodplain Delineation Study prepared for
FCDMC by Howard Needles Tammen & Bergendoff (HNTB), 1992.

This floodplain delineation study begins at the New River,
and the water surface elevation starts at critical depth.
The higher water suface elevation in New River was not used
to start the HEC-2 runs due to the difference in time of peak.

NC cards were used where majority of flow expected to remain
in the channel, while NH cards were used for the braided
channel or at the confluence of washes.

The first run is the natural profile run, and ET cards (Fields 7 & 8)
were used in some sections to better model ineffective flow areas.
The second run is the floodway run using Method 1 with ET cards
(Fields 9 & 10).

The control line on the thalweg of Deadman Wash is
Station 10,000, and all cross section data were stationed
looking downstream.

Cross section numbers indicate in river miles above the mouth.

Q of 9,600 cfs at New River (C10Y) was used.

NH cards were used for SECNO 0.092 through SECNO 0.299.

****

.092	10.13	1482.73	1482.73	1482.72	1484.09	1.37	.00	.00	1483.50
9600.0	.0	6789.8	2810.2	.0	623.7	745.0	.0	.0	1479.60
.00	.00	10.89	3.77	.000	.060	.074	.000	1472.60	9948.23
.013727	0.	0.	0.	0	4	0	.00	567.28	10515.51

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .09 CWSEL= 1482.73

STA=	9948.	10030.	10060.	10117.	10194.	10270.	10374.	10387.	10400.	10411.	10516.
PER Q=	70.7	3.7	3.6	3.1	3.0	3.8	3.8	3.3	3.4	1.5	
AREA=	623.7	85.9	108.6	113.5	109.6	130.6	50.9	46.6	44.2	55.2	
VEL=	10.9	4.2	3.2	2.6	2.6	2.8	7.2	6.8	7.3	2.7	
DEPTH=	7.6	2.9	1.9	1.5	1.5	1.3	3.9	3.6	4.0	.5	

1490 NH CARD USED
*SECNO .159

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.64

.159	12.35	1486.55	1485.25	.00	1487.10	.55	2.93	.08	1482.80
9600.0	28.0	5444.9	4127.1	15.6	722.7	1536.9	16.0	5.5	1483.30
.02	1.79	7.53	2.69	.085	.060	.084	.000	1474.20	9965.66
.005119	340.	354.	400.	3	8	0	.00	657.40	10623.06

FLOW DISTRIBUTION FOR SECNO= .16 CWSEL= 1486.55

STA=	9966.	9974.	10053.	10082.	10120.	10156.	10193.	10233.	10290.	10360.	10500.	10590.	10623.
PER Q=	.3	56.7	3.5	6.0	4.3	4.9	3.6	6.2	4.2	6.0	4.3	.1	
AREA=	15.6	722.7	110.3	169.5	135.8	148.6	126.8	203.6	172.9	287.1	173.1	9.1	
VEL=	1.8	7.5	3.0	3.4	3.0	3.1	2.7	2.9	2.3	2.0	2.4	.5	
DEPTH=	1.9	9.2	3.8	4.4	3.8	4.0	3.2	3.6	2.5	2.1	1.9	.3	

1490 NH CARD USED
*SECNO .202

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.69

.202	14.93	1487.63	1483.70	.00	1487.80	.17	.66	.04	1483.40
9600.0	12.9	2899.6	6687.5	12.2	647.7	2461.7	30.7	9.4	1484.40
.04	1.06	4.48	2.72	.085	.060	.069	.000	1472.70	9962.10
.001797	210.	227.	240.	2	14	0	.00	757.57	10719.68

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .20 CWSEL= 1487.63

STA=	9962.	9968.	10037.	10082.	10117.	10139.	10147.	10157.	10175.	10202.	10214.	10245.	10290.
PER Q=	.1	30.2	3.4	3.8	6.7	4.5	6.2	7.1	4.2	3.9	4.7	3.9	
AREA=	12.2	647.7	173.2	161.6	170.7	88.7	117.3	166.3	139.1	97.3	156.4	163.2	
VEL=	1.1	4.5	1.9	2.3	3.8	4.9	5.1	4.1	2.9	3.8	2.9	2.3	
DEPTH=	2.1	9.3	3.9	4.5	7.8	11.4	12.0	9.1	5.2	8.0	5.0	3.7	

STA=	10290.	10311.	10323.	10357.	10444.	10556.	10720.
PER Q=	4.2	3.7	4.7	3.9	3.7	1.0	
AREA=	128.3	93.9	161.4	249.7	265.7	128.9	
VEL=	3.1	3.8	2.8	1.5	1.3	.8	
DEPTH=	5.9	8.0	4.8	2.9	2.4	.8	

1490 NH CARD USED
*SECNO .299

.299	14.79	1488.59	1485.96	.00	1488.74	.15	.94	.00	1485.00
9600.0	832.2	2262.8	6505.0	387.3	485.4	2588.1	62.9	17.8	1485.10
.08	2.15	4.66	2.51	.085	.060	.077	.000	1473.80	9861.00
.002648	520.	512.	400.	2	12	0	.00	1009.42	10870.42

FLOW DISTRIBUTION FOR SECNO= .30 CWSEL= 1488.59

STA=	9861.	9918.	9970.	10031.	10054.	10066.	10081.	10117.	10170.	10225.	10232.	10242.	10255.
PER Q=	4.4	4.3	23.6	3.4	4.4	3.7	5.0	5.3	6.2	3.3	6.3	5.5	
AREA=	195.7	191.6	485.4	119.5	110.5	105.7	182.3	218.6	213.1	59.4	102.9	103.0	
VEL=	2.1	2.1	4.7	2.7	3.8	3.4	2.6	2.3	2.8	5.4	5.9	5.1	
DEPTH=	3.4	3.7	8.0	5.3	8.8	7.3	5.0	4.1	3.9	9.1	10.0	8.2	

STA=	10255.	10287.	10369.	10434.	10473.	10800.	10870.
PER Q=	4.0	3.4	3.1	3.6	10.2	.4	
AREA=	131.1	201.4	173.8	152.9	670.9	43.0	
VEL=	2.9	1.6	1.7	2.3	1.5	.8	
DEPTH=	4.1	2.5	2.7	4.0	2.1	.6	

CCHV= .300 CEHV= .500
*SECNO .382

NC card was used, channel = .065 and overbank = .085
Contraction and expansion coefficients changed to 0.3 and
0.5 for the dam and dike structures at Snodgrass Tank.

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
.382	10.94	1490.24	1487.65	.00	1490.60	.36	1.75	.10	1485.30
9600.0	2760.0	3180.4	3659.6	666.0	480.4	1164.7	96.3	27.5	1485.20
.11	4.14	6.62	3.14	.085	.065	.085	.000	1479.30	9797.20
.005084	400.	438.	550.	2	11	0	.00	615.68	10412.88

FLOW DISTRIBUTION FOR SECNO= .38 CWSEL= 1490.24

STA=	9797.	9898.	9910.	9927.	9940.	9952.	9959.	10015.	10070.	10096.	10107.	10126.	10149.
PER Q=	4.2	3.5	8.1	7.2	4.1	1.6	33.1	4.2	5.3	3.7	5.6	4.9	
AREA=	189.8	79.2	147.7	126.1	84.6	38.6	480.4	158.0	134.7	77.3	123.6	124.4	
VEL=	2.1	4.2	5.3	5.4	4.7	3.9	6.6	2.6	3.8	4.6	4.4	3.8	
DEPTH=	1.9	6.5	8.8	9.1	7.5	5.6	8.5	2.9	5.2	7.1	6.5	5.3	

STA=	10149.	10173.	10197.	10241.	10401.	10413.
PER Q=	3.7	3.1	4.5	3.1	.0	
AREA=	105.4	95.8	152.1	191.5	2.1	
VEL=	3.3	3.1	2.8	1.5	.4	
DEPTH=	4.4	4.0	3.4	1.2	.2	

*SECNO .516

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

The area of the stock tank (Snodgrass Tank) is ineffective,
and it's ignored. However, the dam and dike structures act
as a constriction to the flow.
NC card was used, channel = .040 and overbank = .065

.516	8.95	1494.15	1493.78	.00	1497.01	2.86	5.16	1.25	1500.10
9600.0	.0	9600.0	.0	.0	707.8	.0	121.2	33.5	1500.10
.12	.00	13.56	.00	.000	.040	.000	.000	1485.20	9963.65
.011172	680.	708.	750.	2	15	0	.00	107.35	10071.00

FLOW DISTRIBUTION FOR SECNO= .52 CWSEL= 1494.15

STA=	9964.	10114.
PER Q=	100.0	
AREA=	707.8	
VEL=	13.6	
DEPTH=	6.6	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .618

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.42

3470 ENCROACHMENT STATIONS= 9690.0 10420.0 TYPE= 1 TARGET= 730.000
Meandering channel around the tank was straightened for modeling.
Q changed to 9,670 cfs at C10W (the confluence with Stream No.
14). CCHV = 0.3 for abrupt contraction.
ET card (Fields 7 & 8) was used to model ineffective area.
NC card was used, channel = .038 and overbanks = .065.

.618	9.01	1498.91	1495.29	.00	1499.05	.14	1.23	.81	1493.20
9670.0	1751.7	2793.1	5125.2	922.6	629.8	2192.5	148.1	38.7	1493.70
.18	1.90	4.43	2.34	.065	.038	.065	.000	1489.90	9690.00
.000971	600.	539.	490.	2	14	0	.00	730.00	10420.00

FLOW DISTRIBUTION FOR SECNO= .62 CWSEL= 1498.91

STA=	9690.	9831.	9879.	9905.	9944.	9961.	10052.	10102.	10134.	10167.	10201.	10234.	10258.
PER Q=	3.2	3.4	3.1	5.9	2.4	28.9	6.3	4.4	4.7	5.2	5.3	4.0	
AREA=	256.2	186.0	138.7	239.8	101.9	629.8	274.7	185.3	194.7	208.5	209.3	156.2	
VEL=	1.2	1.8	2.2	2.4	2.3	4.4	2.2	2.3	2.3	2.4	2.4	2.5	
DEPTH=	1.8	3.9	5.4	6.2	5.9	7.0	5.5	5.8	6.0	6.2	6.3	6.5	

STA=	10258.	10277.	10304.	10336.	10366.	10420.
PER Q=	3.3	4.5	5.4	4.5	5.6	
AREA=	127.8	172.4	208.8	182.8	272.0	
VEL=	2.5	2.5	2.5	2.4	2.0	
DEPTH=	6.6	6.6	6.5	6.1	5.0	

CCHV= .100 CEHV= .300
*SECNO .721

3265 DIVIDED FLOW

Contraction and expansion coefficients changed to 0.1 and 0.3.

.721	7.29	1499.39	1496.66	.00	1499.45	.06	.39	.01	1495.00
9670.0	1068.9	844.4	7756.7	660.0	214.6	4401.5	190.9	48.7	1494.20
.24	1.62	3.93	1.76	.065	.038	.065	.000	1492.10	9789.45
.000869	400.	544.	400.	3	8	0	.00	1401.95	11463.60

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .72 CWSEL= 1499.39

STA=	9789.	9884.	9945.	9989.	10023.	10060.	10121.	10172.	10234.	10272.	10306.	10345.	10398.
PER Q=	3.1	4.8	3.2	8.7	3.7	4.3	4.2	5.4	3.5	3.4	4.4	5.2	
AREA=	219.9	259.7	180.3	214.6	183.6	241.1	226.2	280.6	179.1	167.9	207.5	259.4	
VEL=	1.3	1.8	1.7	3.9	1.9	1.7	1.8	1.9	1.9	2.0	2.0	1.9	
DEPTH=	2.3	4.3	4.1	6.5	4.9	4.0	4.4	4.5	4.7	4.9	5.3	4.9	

STA=	10398.	10432.	10499.	10540.	10580.	10614.	10651.	10698.	10763.	10797.	10836.	10897.	10996.
PER Q=	3.2	5.2	3.3	3.3	3.0	3.0	3.4	5.4	3.4	3.4	4.6	3.3	
AREA=	160.6	284.7	178.7	176.4	158.3	162.3	190.4	286.0	168.4	178.0	255.5	247.3	
VEL=	1.9	1.8	1.8	1.8	1.9	1.8	1.7	1.8	1.9	1.9	1.7	1.3	
DEPTH=	4.7	4.3	4.3	4.5	4.6	4.4	4.1	4.4	4.8	4.6	4.2	2.5	

STA=	10996.	11464.
PER Q=	1.7	
AREA=	209.7	
VEL=	.8	
DEPTH=	.4	

*SECNO .803

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .57

.803	6.46	1499.76	1498.17	.00	1499.92	.16	.44	.03	1496.30
9670.0	412.1	1190.3	8067.5	260.2	200.8	3032.3	222.3	58.3	1496.40
.27	1.58	5.93	2.66	.065	.038	.065	.000	1493.30	9772.09
.002655	470.	433.	285.	1	18	0	.00	1229.72	11001.81

FLOW DISTRIBUTION FOR SECNO= .80 CWSEL= 1499.76

STA=	9772.	9972.	9986.	10026.	10081.	10158.	10196.	10220.	10244.	10273.	10311.	10348.	10391.
PER Q=	3.0	1.2	12.3	4.5	6.1	4.8	3.8	4.1	4.7	5.2	3.4	3.0	
AREA=	213.7	46.5	200.8	171.2	236.0	155.4	112.7	117.3	136.5	160.4	124.7	123.8	
VEL=	1.4	2.6	5.9	2.5	2.5	3.0	3.3	3.4	3.3	3.1	2.7	2.4	
DEPTH=	1.1	3.2	5.1	3.1	3.0	4.1	4.7	4.9	4.7	4.3	3.4	2.8	

STA=	10391.	10449.	10505.	10564.	10610.	10672.	10701.	10731.	10775.	10856.	11002.
PER Q=	6.3	5.6	5.7	4.2	5.7	3.0	3.2	3.3	4.3	2.6	
AREA=	215.7	197.7	203.0	154.1	208.2	105.0	108.6	131.4	195.3	175.2	
VEL=	2.8	2.7	2.7	2.6	2.6	2.8	2.8	2.5	2.1	1.5	
DEPTH=	3.7	3.5	3.5	3.3	3.3	3.6	3.7	3.0	2.4	1.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .909

.909	5.82	1501.32	1500.14	.00	1501.52	.20	1.58	.01	1499.50
9670.0	271.5	1804.4	7594.1	147.4	313.4	2628.4	257.6	71.4	1499.90
.30	1.84	5.76	2.89	.065	.038	.065	.000	1495.50	9789.75
.004316	450.	560.	460.	2	13	0	.00	1245.92	11035.66

FLOW DISTRIBUTION FOR SECNO= .91 CWSEL= 1501.32

STA=	9790.	9939.	10031.	10096.	10154.	10194.	10256.	10295.	10336.	10398.	10436.	10492.	10557.
PER Q=	2.8	18.7	3.1	5.2	3.6	4.7	3.7	4.3	3.9	3.1	4.7	5.5	
AREA=	147.4	313.4	127.8	165.4	115.4	161.1	115.6	128.1	143.7	102.1	153.2	180.8	
VEL=	1.8	5.8	2.4	3.0	3.1	2.8	3.1	3.2	2.6	2.9	2.9	3.0	
DEPTH=	1.0	3.4	2.0	2.8	2.9	2.6	3.0	3.2	2.3	2.7	2.7	2.8	

STA=	10557.	10599.	10657.	10725.	10765.	10800.	10857.	10918.	10966.	11036.
PER Q=	3.4	4.7	5.8	3.8	3.3	4.5	4.5	3.6	3.1	
AREA=	113.0	156.1	188.5	118.3	104.8	149.4	156.0	123.3	125.8	
VEL=	2.9	2.9	3.0	3.1	3.1	2.9	2.8	2.8	2.4	
DEPTH=	2.7	2.7	2.8	3.0	2.9	2.7	2.5	2.6	1.8	

*SECNO .988

.988	6.86	1503.26	1502.61	.00	1503.58	.32	2.02	.04	1500.30
9670.0	1328.8	1628.3	6712.9	474.2	187.3	2160.3	285.4	83.4	1500.90
.33	2.80	8.69	3.11	.065	.038	.065	.000	1496.40	9697.31
.005662	410.	417.	410.	1	8	0	.00	1297.70	10995.01

FLOW DISTRIBUTION FOR SECNO= .99 CWSEL= 1503.26

STA=	9697.	9874.	9912.	9969.	9993.	10029.	10068.	10091.	10135.	10181.	10213.	10245.	10285.
PER Q=	4.5	3.6	3.8	1.9	16.8	5.2	4.7	3.8	4.6	3.5	3.4	4.3	
AREA=	187.7	104.0	124.3	58.3	187.3	131.0	99.9	110.3	127.4	96.1	94.1	116.8	
VEL=	2.3	3.3	2.9	3.1	8.7	3.8	4.5	3.3	3.5	3.6	3.5	3.6	
DEPTH=	1.1	2.7	2.2	2.4	5.3	3.3	4.3	2.5	2.8	3.0	2.9	3.0	

STA=	10285.	10319.	10356.	10434.	10512.	10573.	10658.	10715.	10800.	10928.	10995.
PER Q=	3.7	3.5	4.9	5.2	4.2	4.9	3.7	4.4	3.9	1.6	
AREA=	100.6	100.4	166.1	172.4	136.9	172.8	124.8	161.3	174.5	75.0	
VEL=	3.5	3.4	2.8	2.9	3.0	2.8	2.9	2.6	2.1	2.0	
DEPTH=	2.9	2.8	2.1	2.2	2.3	2.0	2.2	1.9	1.4	1.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 1.079

1.079	7.08	1505.78	1505.17	.00	1506.13	.35	2.54	.01	1502.70
9670.0	1098.4	2108.9	6462.7	428.2	250.2	2154.2	317.0	97.4	1502.80
.37	2.57	8.43	3.00	.065	.038	.065	.000	1498.70	9734.08
.004844	420.	480.	500.	2	10	0	.00	1225.90	10959.98

FLOW DISTRIBUTION FOR SECNO= 1.08 CWSEL= 1505.78

STA=	9734.	9872.	9929.	9976.	10021.	10066.	10084.	10106.	10147.	10173.	10222.	10258.	10291.
PER Q=	4.3	3.5	3.5	21.8	5.2	3.3	4.9	5.9	3.4	7.1	4.3	3.2	
AREA=	187.4	125.1	115.6	250.2	145.2	76.4	106.2	149.2	90.3	181.2	117.9	95.4	
VEL=	2.2	2.7	2.9	8.4	3.5	4.2	4.4	3.8	3.7	3.8	3.5	3.3	
DEPTH=	1.4	2.2	2.5	5.6	3.2	4.3	4.7	3.7	3.5	3.7	3.3	2.9	

STA=	10291.	10359.	10427.	10498.	10568.	10677.	10772.	10870.	10960.
PER Q=	3.2	3.8	3.8	4.3	3.6	3.7	4.4	2.6	
AREA=	128.3	142.6	144.5	155.6	164.5	159.6	179.2	118.1	
VEL=	2.4	2.6	2.6	2.7	2.1	2.3	2.4	2.1	
DEPTH=	1.9	2.1	2.0	2.2	1.5	1.7	1.8	1.3	

*SECNO 1.199

3301 HV CHANGED MORE THAN HVINS

1.199	8.66	1508.96	1508.72	.00	1509.86	.90	3.56	.17	1503.60
9670.0	364.4	3459.1	5846.5	88.1	293.9	1606.6	352.0	112.0	1504.30
.39	4.14	11.77	3.64	.065	.038	.065	.000	1500.30	9945.20
.006632	650.	634.	630.	1	11	0	.00	787.54	10732.73

FLOW DISTRIBUTION FOR SECNO= 1.20 CWSEL= 1508.96

STA=	9945.	9982.	10023.	10047.	10072.	10092.	10123.	10171.	10200.	10224.	10287.	10355.	10406.
PER Q=	3.8	35.8	4.1	4.8	3.1	3.7	7.7	5.3	4.0	5.7	4.3	3.2	
AREA=	88.1	293.9	90.0	98.5	70.4	92.9	170.0	113.1	87.6	159.3	138.3	103.3	
VEL=	4.1	11.8	4.4	4.7	4.3	3.9	4.4	4.6	4.4	3.5	3.0	3.0	
DEPTH=	2.4	7.2	3.7	4.0	3.5	3.0	3.6	3.8	3.7	2.5	2.0	2.0	

STA=	10406.	10445.	10486.	10624.	10733.
PER Q=	4.1	4.3	3.6	2.4	
AREA=	108.4	113.0	152.3	109.4	
VEL=	3.7	3.6	2.3	2.2	
DEPTH=	2.8	2.7	1.1	1.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 1.313

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

NH cards were used.

1.313	8.22	1511.82	1510.78	.00	1512.06	.23	2.13	.07	1509.40
9670.0	2680.9	2600.5	4388.7	1002.1	412.4	1901.1	382.0	123.9	1509.20
.43	2.68	6.31	2.31	.061	.038	.065	.000	1503.60	9527.62
.002825	560.	602.	450.	2	10	0	.00	1350.48	10878.10

FLOW DISTRIBUTION FOR SECNO= 1.31 CWSEL= 1511.82

STA=	9528.	9651.	9666.	9707.	9757.	9865.	9900.	9942.	9965.	10042.	10088.	10130.	10176.
PER Q=	3.2	4.5	4.2	3.1	3.2	4.8	3.5	1.4	26.9	3.5	3.5	3.6	
AREA=	153.8	82.8	132.1	129.6	169.7	146.1	128.5	59.4	412.4	136.4	130.9	138.2	
VEL=	2.0	5.3	3.1	2.3	1.8	3.2	2.6	2.3	6.3	2.5	2.6	2.5	
DEPTH=	1.3	5.2	3.3	2.6	1.6	4.1	3.1	2.6	5.3	2.9	3.2	3.0	

STA=	10176.	10240.	10294.	10329.	10374.	10403.	10452.	10635.	10759.	10878.
PER Q=	5.1	4.8	3.2	4.3	3.1	4.1	3.8	3.8	2.5	
AREA=	194.8	174.2	115.6	152.0	105.1	152.5	233.3	211.4	156.6	
VEL=	2.5	2.7	2.7	2.7	2.9	2.6	1.6	1.7	1.5	
DEPTH=	3.0	3.2	3.3	3.4	3.6	3.1	1.3	1.7	1.3	

*SECNO 1.419

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
NC card was used, channel = .038 and overbanks = .065.

1.419	8.29	1514.39	1514.39	.00	1515.35	.96	2.30	.22	1511.30
9670.0	1281.8	3856.2	4532.0	316.7	331.8	1275.5	411.4	136.2	1511.80
.45	4.05	11.62	3.55	.065	.038	.065	.000	1506.10	9650.33
.008464	570.	560.	440.	0	5	0	.00	880.68	10681.37

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 1.42 CWSEL= 1514.39

STA=	9650.	9903.	9931.	9959.	9972.	10027.	10090.	10156.	10195.	10272.	10295.	10323.	10354.
PER Q=	3.8	3.6	3.5	2.4	39.9	5.7	6.5	3.2	5.2	3.7	5.5	4.3	
AREA=	109.9	81.0	80.1	45.8	331.8	147.8	163.2	85.9	151.4	75.5	105.1	94.5	
VEL=	3.4	4.3	4.2	5.0	11.6	3.7	3.9	3.5	3.3	4.7	5.1	4.4	
DEPTH=	.4	2.9	2.8	3.7	6.0	2.3	2.5	2.2	2.0	3.3	3.8	3.0	

STA=	10354.	10427.	10502.	10583.	10681.
PER Q=	4.7	3.1	3.2	1.8	
AREA=	138.5	110.8	115.4	87.3	
VEL=	3.3	2.7	2.7	2.0	
DEPTH=	1.9	1.5	1.4	.9	

*SECNO 1.527

3265 DIVIDED FLOW

1.527	10.23	1518.03	1517.68	.00	1518.81	.78	3.43	.02	1513.30
9670.0	4225.3	3277.8	2166.9	1201.0	292.5	735.5	436.0	147.7	1513.00
.48	3.52	11.21	2.95	.065	.038	.065	.000	1507.80	9388.28
.005140	450.	570.	550.	2	11	0	.00	1060.34	10547.75

FLOW DISTRIBUTION FOR SECNO= 1.53 CWSEL= 1518.03

STA=	9388.	9704.	9727.	9745.	9777.	9804.	9837.	9877.	9908.	9942.	9988.	10022.	10049.
PER Q=	3.8	3.6	3.5	6.3	4.6	4.4	5.3	4.3	3.9	4.1	33.9	4.7	
AREA=	199.2	86.3	77.0	138.9	108.9	113.5	137.9	110.2	107.1	122.1	292.5	110.5	
VEL=	1.8	4.0	4.3	4.4	4.1	3.8	3.7	3.8	3.5	3.2	11.2	4.1	
DEPTH=	.6	3.8	4.3	4.4	3.9	3.5	3.4	3.5	3.1	2.7	8.6	4.0	

STA=	10049.	10069.	10088.	10152.	10258.	10548.
PER Q=	4.7	3.3	4.3	3.4	2.1	
AREA=	96.3	76.2	143.4	153.6	155.5	
VEL=	4.8	4.1	2.9	2.1	1.3	
DEPTH=	5.0	4.0	2.2	1.4	.5	

1490 NH CARD USED
*SECNO 1.620

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

NH cards were used for SECNO 1.620 through SECNO 1.811.

1.620	7.15	1520.65	1519.92	.00	1521.11	.46	2.27	.03	1515.50
9670.0	3985.1	2251.6	3433.3	1320.0	241.5	858.8	460.0	158.5	1515.20
.50	3.02	9.32	4.00	.065	.038	.057	.000	1513.50	9421.74
.004787	400.	491.	510.	2	17	0	.00	1003.22	10493.64

FLOW DISTRIBUTION FOR SECNO= 1.62 CWSEL= 1520.65

STA=	9422.	9510.	9600.	9674.	9716.	9758.	9781.	9831.	9888.	9979.	9988.	10026.	10052.
PER Q=	3.4	5.1	4.1	4.0	5.1	3.0	5.8	5.4	3.5	1.7	23.3	6.8	
AREA=	121.6	189.7	154.4	119.3	141.1	80.1	162.6	163.9	147.1	40.1	241.5	137.7	
VEL=	2.7	2.6	2.6	3.2	3.5	3.7	3.5	3.2	2.3	4.0	9.3	4.8	
DEPTH=	1.4	2.1	2.1	2.9	3.3	3.5	3.3	2.9	1.6	4.1	6.4	5.3	

STA=	10052.	10068.	10095.	10281.	10310.	10333.	10358.	10494.
PER Q=	4.4	4.5	6.0	5.2	3.4	3.5	1.7	
AREA=	85.7	107.7	177.7	100.7	72.1	75.8	101.4	
VEL=	4.9	4.1	3.3	5.0	4.6	4.5	1.6	
DEPTH=	5.5	3.9	1.0	3.5	3.1	3.1	.7	

1490 NH CARD USED
*SECNO 1.717

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.717	8.71	1523.51	1523.51	.00	1524.37	.87	2.66	.12	1520.50
9670.0	1869.5	4007.3	3793.2	625.7	367.9	1077.9	484.0	169.7	1520.10
.53	2.99	10.89	3.52	.065	.038	.057	.000	1514.80	9604.26
.006591	470.	512.	450.	0	12	0	.00	1111.80	10959.66

FLOW DISTRIBUTION FOR SECNO= 1.72 CWSEL= 1523.51

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9604.	9714.	9746.	9794.	9885.	9975.	10032.	10071.	10096.	10179.	10281.	10567.	10590.
PER Q=	4.8	3.2	4.5	3.5	3.4	41.4	4.6	4.6	3.1	3.1	3.1	3.7	
AREA=	164.1	85.6	123.2	131.4	121.4	367.9	115.7	96.2	118.3	127.8	109.3	69.5	
VEL=	2.8	3.6	3.5	2.6	2.7	10.9	3.8	4.6	2.5	2.3	2.7	5.2	
DEPTH=	1.5	2.7	2.6	1.4	1.3	6.5	2.9	3.9	1.4	1.3	.4	3.0	

STA=	10590.	10615.	10640.	10661.	10837.	10919.	10960.
PER Q=	3.2	4.1	3.5	3.1	3.0	.2	
AREA=	65.4	75.9	63.6	99.4	121.0	15.9	
VEL=	4.8	5.3	5.3	3.0	2.4	1.1	
DEPTH=	2.6	3.0	3.1	.6	1.5	.4	

1490 NH CARD USED
*SECNO 1.811

3301 HV CHANGED MORE THAN HVINS

1.811	8.92	1526.12	1525.07	.00	1526.29	.17	1.85	.07	1524.00
9670.0	1546.1	1574.2	6549.7	610.3	292.0	2430.0	506.4	180.5	1523.80
.56	2.53	5.39	2.70	.065	.048	.059	.000	1517.20	9690.03
.003681	630.	496.	240.	2	13	0	.00	1627.16	11317.19

FLOW DISTRIBUTION FOR SECNO= 1.81 CWSEL= 1526.12

STA=	9690.	9807.	9858.	9906.	9961.	9978.	10036.	10098.	10142.	10175.	10205.	10253.	10325.
PER Q=	3.0	3.6	4.4	4.2	.8	16.3	3.3	3.9	4.2	3.7	3.6	3.7	
AREA=	149.2	132.6	142.6	150.3	35.7	292.0	135.8	131.8	121.3	109.0	126.8	151.4	
VEL=	1.9	2.6	3.0	2.7	2.3	5.4	2.4	2.8	3.3	3.3	2.8	2.4	
DEPTH=	1.3	2.6	3.0	2.7	2.1	5.1	2.2	2.9	3.7	3.7	2.7	2.1	

STA=	10325.	10455.	10551.	10804.	10875.	10902.	10925.	10978.	11020.	11072.	11214.	11317.
PER Q=	3.4	3.1	3.7	7.2	4.1	3.9	7.1	4.7	3.3	3.6	1.3	
AREA=	185.7	155.9	224.5	206.8	101.4	90.5	182.6	129.9	115.1	177.2	84.1	
VEL=	1.8	2.0	1.6	3.4	3.9	4.1	3.7	3.5	2.8	1.9	1.5	
DEPTH=	1.4	1.6	.9	2.9	3.7	4.0	3.4	3.1	2.2	1.3	.8	

*SECNO 1.909

3265 DIVIDED FLOW

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

Q changed to 9,570 cfs at C10U (the confluence with Stream No. 11). NC card was used, channel = .048 and overbank = .065

1.909	9.99	1528.49	1528.10	.00	1529.02	.54	2.63	.11	1526.20
9570.0	4957.3	2789.6	1823.1	1231.6	304.9	613.3	537.6	196.1	1524.90
.59	4.03	9.15	2.97	.065	.048	.065	.000	1518.50	9394.75
.008090	517.	517.	480.	2	9	0	.00	1134.13	10993.73

FLOW DISTRIBUTION FOR SECNO= 1.91 CWSEL= 1528.49

STA=	9395.	9503.	9525.	9603.	9649.	9695.	9824.	9968.	9981.	10029.	10061.	10147.	10867.
PER Q=	4.4	6.1	19.8	6.3	3.7	6.6	4.1	.8	29.1	3.1	3.5	3.6	
AREA=	141.0	103.0	343.2	139.1	101.1	216.9	162.0	25.3	304.9	79.1	126.9	162.7	
VEL=	3.0	5.6	5.5	4.4	3.5	2.9	2.4	3.1	9.1	3.8	2.7	2.1	
DEPTH=	1.3	4.5	4.4	3.1	2.2	1.7	1.1	1.9	6.4	2.5	1.5	.2	

STA=	10867.	10927.	10966.	10994.
PER Q=	5.4	3.1	.3	
AREA=	141.0	84.8	18.8	
VEL=	3.6	3.5	1.7	
DEPTH=	2.4	2.2	.7	

*SECNO 2.004

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.004	9.26	1532.86	1532.86	.00	1533.49	.63	4.38	.03	1528.10
9570.0	3304.9	2490.7	3774.4	1155.9	222.2	1056.2	564.1	212.7	1527.70
.61	2.86	11.21	3.57	.065	.048	.065	.000	1523.60	9047.30
.009419	502.	502.	502.	0	14	0	.00	1748.86	11053.87

FLOW DISTRIBUTION FOR SECNO= 2.00 CWSEL= 1532.86

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9047.	9292.	9349.	9387.	9479.	9562.	9793.	9889.	9986.	10015.	10034.	10058.	10084.
PER Q=	8.0	5.1	3.3	3.9	3.4	3.4	3.7	3.7	26.0	7.0	7.3	3.7	
AREA=	288.5	128.6	84.5	131.3	115.7	155.5	129.5	122.3	222.2	99.9	111.8	78.3	
VEL=	2.7	3.8	3.8	2.8	2.8	2.1	2.7	2.9	11.2	6.7	6.3	4.6	
DEPTH=	1.2	2.3	2.2	1.4	1.4	.7	1.4	1.3	7.6	5.3	4.8	3.0	

STA=	10084.	10204.	10252.	10717.	10792.	10884.	11008.	11054.
PER Q=	3.9	3.9	3.0	3.1	4.0	3.3	.2	
AREA=	144.9	101.7	135.0	105.2	133.5	131.3	14.6	
VEL=	2.6	3.7	2.1	2.8	2.8	2.4	1.1	
DEPTH=	1.2	2.1	.3	1.4	1.4	1.1	.3	

*SECNO 2.060

3265 DIVIDED FLOW

2.060	9.27	1535.07	1534.62	.00	1535.53	.46	2.02	.02	1531.20
9570.0	590.2	2847.7	6132.2	313.1	328.4	1885.6	579.9	222.9	1530.60
.63	1.89	8.67	3.25	.065	.048	.065	.000	1525.80	9602.55
.005840	370.	296.	230.	2	10	0	.00	1288.75	11029.45

FLOW DISTRIBUTION FOR SECNO= 2.06 CWSEL= 1535.07

STA=	9603.	9836.	9973.	10018.	10040.	10065.	10090.	10123.	10169.	10204.	10237.	10273.	10555.
PER Q=	3.0	3.2	29.8	3.2	5.0	4.5	6.1	4.3	4.6	3.7	3.3	3.3	
AREA=	181.3	131.8	328.4	76.2	105.9	98.1	132.2	121.4	114.4	97.7	94.0	152.9	
VEL=	1.6	2.3	8.7	4.1	4.5	4.4	4.4	3.4	3.8	3.6	3.3	2.0	
DEPTH=	.8	1.0	7.2	3.6	4.1	4.0	4.0	2.6	3.3	3.0	2.6	.5	

STA=	10555.	10651.	10720.	10770.	10805.	10876.	10949.	11029.
PER Q=	3.9	4.5	3.9	3.0	5.3	3.8	1.7	
AREA=	155.2	149.3	119.3	88.8	165.7	135.3	79.1	
VEL=	2.4	2.9	3.2	3.2	3.1	2.7	2.1	
DEPTH=	1.6	2.1	2.4	2.5	2.3	1.9	1.0	

*SECNO 2.142

2.142	9.54	1537.14	1536.83	.00	1537.61	.47	2.08	.01	1533.90
9570.0	5039.4	2880.3	1650.4	1597.5	321.0	658.0	599.2	233.5	1532.20
.65	3.15	8.97	2.51	.065	.048	.065	.000	1527.60	9009.75
.006007	200.	433.	400.	2	6	0	.00	1669.84	10679.59

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.14 CWSEL= 1537.14

STA=	9010.	9372.	9492.	9649.	9735.	9795.	9813.	9837.	9864.	9914.	9941.	9978.	10020.
PER Q=	4.1	3.4	4.5	4.1	7.7	5.3	6.8	4.0	5.5	3.6	3.5	30.1	
AREA=	251.9	155.9	204.4	151.3	190.7	94.2	122.1	94.1	146.6	88.7	97.6	321.0	
VEL=	1.6	2.1	2.1	2.6	3.9	5.3	5.3	4.1	3.6	3.9	3.4	9.0	
DEPTH=	.7	1.3	1.3	1.7	3.2	5.2	5.2	3.5	2.9	3.3	2.7	7.6	

STA=	10020.	10038.	10056.	10335.	10512.	10680.
PER Q=	3.9	3.4	3.5	3.8	2.7	
AREA=	78.7	71.6	171.1	189.5	147.2	
VEL=	4.7	4.6	1.9	1.9	1.8	
DEPTH=	4.3	4.2	.6	1.1	.9	

*SECNO 2.233

2.233	8.88	1540.18	1539.84	.00	1540.52	.34	2.90	.01	1535.10
9570.0	3577.0	1740.6	4252.4	1447.9	192.9	1312.4	629.7	253.0	1534.50
.68	2.47	9.02	3.24	.065	.048	.065	.000	1531.30	8887.08
.006066	500.	480.	450.	2	13	0	.00	1868.34	10755.42

FLOW DISTRIBUTION FOR SECNO= 2.23 CWSEL= 1540.18

STA=	8887.	9186.	9407.	9522.	9627.	9735.	9875.	9951.	9981.	9991.	10016.	10048.	10078.
PER Q=	3.1	4.3	3.1	4.1	4.6	4.3	7.4	4.5	2.0	18.2	4.7	4.5	
AREA=	199.2	225.1	144.7	162.6	177.9	189.2	202.9	104.8	41.6	192.9	109.6	105.2	
VEL=	1.5	1.8	2.1	2.4	2.5	2.2	3.5	4.1	4.7	9.0	4.1	4.1	
DEPTH=	.7	1.0	1.3	1.6	1.6	1.4	2.7	3.5	4.3	7.7	3.4	3.5	

STA=	10078.	10102.	10122.	10171.	10246.	10283.	10327.	10673.	10728.	10755.
PER Q=	3.6	3.2	6.1	5.9	3.7	3.2	4.3	4.1	1.2	
AREA=	84.2	72.3	153.5	177.0	101.4	98.7	241.6	125.8	43.1	
VEL=	4.1	4.3	3.8	3.2	3.4	3.1	1.7	3.1	2.7	
DEPTH=	3.4	3.7	3.1	2.4	2.7	2.2	.7	2.3	1.6	

*SECNO 2.326

3265 DIVIDED FLOW

NC card was used, channel = .055 and overbanks = .065.

2.326	7.28	1542.98	1542.26	.00	1543.21	.23	2.68	.01	1540.80
9570.0	2107.6	1953.2	5509.2	724.0	310.3	1883.7	659.7	271.0	1539.10
.72	2.91	6.30	2.92	.065	.055	.065	.000	1535.70	9114.05
.005910	500.	491.	400.	1	17	0	.00	1627.43	11057.30

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.33 CWSEL= 1542.98

STA=	9114.	9778.	9822.	9873.	9900.	9935.	9984.	10042.	10065.	10124.	10157.	10187.	10227.
PER Q=	3.5	3.2	5.4	3.3	4.1	2.5	20.4	3.3	5.9	4.2	3.9	3.8	
AREA=	197.9	98.7	146.7	84.6	104.4	91.5	310.3	79.0	163.0	104.8	96.3	107.6	
VEL=	1.7	3.1	3.6	3.8	3.7	2.7	6.3	4.0	3.5	3.8	3.9	3.4	
DEPTH=	.3	2.2	2.9	3.2	3.0	1.9	5.4	3.4	2.8	3.2	3.3	2.7	

STA=	10227.	10278.	10365.	10524.	10611.	10642.	10665.	10742.	10818.	10950.	11057.
PER Q=	3.1	3.2	3.7	4.9	3.0	3.1	4.1	4.2	6.6	.6	
AREA=	105.4	131.3	182.6	170.7	84.5	76.0	143.3	146.7	240.3	52.3	
VEL=	2.8	2.3	1.9	2.8	3.4	3.9	2.7	2.7	2.6	1.1	
DEPTH=	2.1	1.5	1.2	2.0	2.7	3.3	1.9	1.9	1.8	.5	

*SECNO 2.406

3265 DIVIDED FLOW

2.406	10.44	1545.74	1545.55	.00	1546.24	.51	2.95	.08	1542.60
9570.0	2708.0	2856.5	4005.6	835.6	310.4	1237.5	684.7	285.7	1543.90
.74	3.24	9.20	3.24	.065	.055	.065	.000	1535.30	9388.10
.008808	410.	422.	410.	2	16	0	.00	1489.53	10890.84

FLOW DISTRIBUTION FOR SECNO= 2.41 CWSEL= 1545.74

STA=	9388.	9645.	9686.	9720.	9768.	9886.	9951.	9977.	10018.	10145.	10179.	10229.	10381.
PER Q=	4.9	3.8	5.1	5.5	4.1	3.4	1.7	29.8	5.8	3.4	4.4	4.2	
AREA=	198.5	95.6	106.5	126.8	151.5	107.8	48.9	310.4	188.6	83.6	113.5	161.8	
VEL=	2.3	3.8	4.6	4.1	2.6	3.0	3.3	9.2	2.9	3.9	3.7	2.5	
DEPTH=	.8	2.3	3.1	2.7	1.3	1.7	1.8	7.6	1.5	2.4	2.3	1.1	

STA=	10381.	10407.	10452.	10498.	10542.	10742.	10891.
PER Q=	4.6	6.5	3.6	4.2	3.1	2.1	
AREA=	89.1	137.0	96.7	103.5	152.9	110.7	
VEL=	4.9	4.5	3.5	3.9	2.0	1.8	
DEPTH=	3.4	3.0	2.1	2.4	.8	.7	

*SECNO 2.500

2.500	9.02	1549.22	1548.73	.00	1549.45	.23	3.18	.03	1545.40
9570.0	4686.4	1971.4	2912.2	1713.6	289.0	1213.0	714.2	302.7	1546.40
.78	2.73	6.82	2.40	.065	.055	.065	.000	1540.20	9056.06
.005485	410.	496.	500.	2	13	0	.00	1754.29	10810.35

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.50 CWSEL= 1549.22

STA=	9056.	9336.	9367.	9426.	9491.	9542.	9624.	9761.	9837.	9901.	9955.	9979.	10023.
PER Q=	13.2	3.2	3.8	4.1	3.3	3.0	3.9	4.0	3.6	4.1	2.7	20.6	
AREA=	470.1	89.7	129.3	139.7	110.2	122.8	178.4	143.7	127.4	129.4	72.9	289.0	
VEL=	2.7	3.5	2.8	2.8	2.9	2.3	2.1	2.6	2.7	3.1	3.5	6.8	
DEPTH=	1.7	2.9	2.2	2.1	2.2	1.5	1.3	1.9	2.0	2.4	3.0	6.6	

STA=	10023.	10082.	10123.	10240.	10335.	10425.	10519.	10609.	10732.	10810.
PER Q=	5.4	3.0	3.9	3.6	3.7	4.1	3.1	3.1	.5	
AREA=	157.9	96.7	170.3	151.3	149.6	162.1	133.0	152.1	40.0	
VEL=	3.3	3.0	2.2	2.3	2.4	2.4	2.2	2.0	1.1	
DEPTH=	2.7	2.4	1.5	1.6	1.7	1.7	1.5	1.2	.5	

*SECNO 2.595

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .70

2.595	12.35	1552.65	1552.65	.00	1553.45	.80	3.83	.17	1549.50
9570.0	4642.2	3504.7	1423.0	1335.1	324.8	320.9	744.1	320.2	1549.60
.80	3.48	10.79	4.43	.065	.055	.065	.000	1540.30	9064.75
.011307	502.	502.	502.	2	12	0	.00	1280.65	10605.09

FLOW DISTRIBUTION FOR SECNO= 2.60 CWSEL= 1552.65

STA=	9065.	9239.	9319.	9376.	9438.	9494.	9580.	9694.	9842.	9918.	9941.	9956.	9985.
PER Q=	4.4	3.4	3.2	3.7	3.8	3.5	5.7	3.3	3.9	4.3	4.1	5.3	
AREA=	166.1	108.4	92.0	103.0	101.5	112.9	169.1	132.9	115.1	76.6	62.9	94.6	
VEL=	2.5	3.0	3.3	3.4	3.6	3.0	3.2	2.4	3.2	5.4	6.2	5.3	
DEPTH=	1.0	1.4	1.6	1.7	1.8	1.3	1.5	.9	1.5	3.4	4.1	3.3	

STA=	9985.	10024.	10059.	10090.	10141.	10605.
PER Q=	36.6	5.4	6.0	3.3	.3	
AREA=	324.8	103.2	104.5	82.9	30.3	
VEL=	10.8	5.0	5.5	3.8	.8	
DEPTH=	8.4	3.0	3.4	1.6	.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 2.689

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.24

2.689	11.40	1555.30	1553.72	.00	1555.46	.16	1.95	.06	1551.60
9570.0	5730.5	2475.5	1364.0	2593.5	508.5	458.0	771.8	332.4	1549.20
.84	2.21	4.87	2.98	.065	.055	.065	.000	1543.90	9006.84
.002253	400.	496.	550.	3	13	0	.00	1176.12	10182.96

FLOW DISTRIBUTION FOR SECNO= 2.69 CWSEL= 1555.30

STA=	9007.	9320.	9407.	9558.	9680.	9736.	9795.	9888.	9925.	9956.	9971.	10037.	10059.
PER Q=	9.1	5.6	11.9	9.4	4.8	4.0	6.5	3.7	3.3	1.6	25.9	4.6	
AREA=	528.1	246.8	484.4	385.0	188.1	172.8	275.2	137.4	117.1	58.6	508.5	124.7	
VEL=	1.6	2.2	2.4	2.3	2.4	2.2	2.3	2.6	2.7	2.6	4.9	3.5	
DEPTH=	1.7	2.9	3.2	3.2	3.4	2.9	3.0	3.7	3.9	3.8	7.7	5.9	

STA=	10059.	10082.	10112.	10183.
PER Q=	4.7	4.2	.8	
AREA=	131.1	132.9	69.3	
VEL=	3.4	3.0	1.2	
DEPTH=	5.6	4.4	1.0	

*SECNO 2.777

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .47

2.777	10.39	1556.69	1556.66	.00	1557.49	.80	1.84	.19	1553.90
9570.0	1624.8	3905.1	4040.1	656.8	388.8	853.0	799.4	343.6	1552.40
.86	2.47	10.04	4.74	.065	.055	.065	.000	1546.30	9262.96
.010070	440.	465.	420.	3	13	0	.00	1059.43	10348.88

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.78 CWSEL= 1556.69

STA=	9263.	9404.	9690.	9760.	9834.	9977.	10029.	10048.	10066.	10090.	10115.	10147.	10162.
PER Q=	3.2	3.5	3.4	3.1	3.8	40.8	4.0	3.3	4.5	5.1	6.9	3.1	
AREA=	132.7	185.6	106.4	102.2	129.9	388.8	69.7	61.3	82.4	90.5	120.0	55.4	
VEL=	2.3	1.8	3.0	2.9	2.8	10.0	5.5	5.1	5.2	5.4	5.5	5.4	
DEPTH=	.9	.6	1.5	1.4	.9	7.4	3.7	3.3	3.4	3.6	3.7	3.6	

STA=	10162.	10199.	10251.	10292.	10337.	10349.
PER Q=	5.0	3.0	4.0	3.2	.0	
AREA=	103.7	88.1	95.1	83.7	2.9	
VEL=	4.6	3.3	4.0	3.6	.9	
DEPTH=	2.8	1.7	2.3	1.8	.2	

*SECNO 2.872

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.46

2.872	10.61	1560.21	1559.06	.00	1560.53	.32	2.99	.05	1556.30
9570.0	3025.9	2643.8	3900.4	934.1	381.9	1226.0	822.1	355.2	1556.10
.89	3.24	6.92	3.18	.065	.055	.065	.000	1549.60	9488.13
.004751	570.	502.	330.	3	9	0	.00	1072.97	10561.11

FLOW DISTRIBUTION FOR SECNO= 2.87 CWSEL= 1560.21

STA=	9488.	9740.	9780.	9799.	9826.	9871.	9923.	9940.	9960.	9978.	10029.	10075.	10103.
PER Q=	3.7	4.0	4.0	3.6	3.0	3.2	3.9	3.5	2.7	27.6	8.9	4.7	
AREA=	199.4	116.5	88.9	94.8	101.4	99.6	82.5	82.7	68.2	381.9	201.6	112.9	
VEL=	1.8	3.3	4.4	3.6	2.9	3.1	4.6	4.0	3.8	6.9	4.2	4.0	
DEPTH=	.8	2.9	4.7	3.4	2.3	1.9	4.9	4.1	3.7	7.6	4.4	4.0	

STA=	10103.	10136.	10171.	10226.	10258.	10333.	10442.	10561.
PER Q=	4.7	3.3	6.3	3.6	3.1	4.4	1.8	
AREA=	121.0	99.7	175.5	101.9	125.0	187.4	101.0	
VEL=	3.7	3.2	3.4	3.4	2.4	2.3	1.7	
DEPTH=	3.7	2.9	3.2	3.2	1.7	1.7	.8	

*SECNO 2.947

2.947	11.22	1562.22	1561.70	.00	1562.76	.54	2.17	.07	1559.10
9570.0	5304.1	3815.1	450.9	1451.1	464.1	164.5	841.4	363.1	1558.60
.91	3.66	8.22	2.74	.065	.055	.065	.000	1551.00	9290.04
.007491	320.	396.	420.	3	5	0	.00	870.18	10160.22

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.95 CWSEL= 1562.22

STA=	9290.	9414.	9467.	9498.	9553.	9648.	9728.	9816.	9850.	9872.	9913.	9939.	9954.
PER Q=	4.8	4.0	3.9	4.9	3.9	4.0	3.0	4.2	3.4	7.6	5.4	3.5	
AREA=	164.9	114.4	91.2	131.5	141.9	134.9	117.2	100.5	72.7	153.4	103.8	65.5	
VEL=	2.8	3.3	4.0	3.6	2.6	2.8	2.5	4.0	4.5	4.8	5.0	5.1	
DEPTH=	1.3	2.2	2.9	2.4	1.5	1.7	1.3	2.9	3.4	3.7	4.0	4.1	

STA=	9954.	9971.	10039.	10117.	10160.
PER Q=	2.9	39.9	4.1	.7	
AREA=	59.3	464.1	129.8	34.7	
VEL=	4.6	8.2	3.0	1.8	
DEPTH=	3.6	6.8	1.7	.8	

*SECNO 3.023

3265 DIVIDED FLOW

3.023	9.53	1564.63	1563.66	.00	1564.99	.36	2.21	.02	1560.40
9570.0	4442.5	2871.0	2256.5	1398.6	404.9	567.2	858.8	369.8	1559.80
.93	3.18	7.09	3.98	.065	.055	.065	.000	1555.10	9340.31
.005333	290.	401.	460.	1	13	0	.00	896.33	10311.51

FLOW DISTRIBUTION FOR SECNO= 3.02 CWSEL= 1564.63

STA=	9340.	9496.	9540.	9597.	9636.	9689.	9732.	9783.	9877.	9914.	9927.	9942.	9957.
PER Q=	3.4	4.0	5.8	3.1	3.6	3.2	3.2	3.7	4.8	3.3	3.1	3.2	
AREA=	166.9	118.3	163.9	96.8	120.8	101.9	109.5	151.0	121.9	64.0	66.4	67.4	
VEL=	1.9	3.2	3.4	3.1	2.9	3.0	2.8	2.3	3.7	4.9	4.5	4.5	
DEPTH=	1.1	2.7	2.9	2.5	2.3	2.4	2.2	1.6	3.3	5.1	4.4	4.6	

STA=	9957.	9970.	10028.	10049.	10066.	10077.	10096.	10161.	10268.	10312.
PER Q=	2.2	30.0	5.1	4.5	4.0	3.5	3.2	3.2	.0	
AREA=	49.8	404.9	102.2	88.4	68.7	79.0	112.0	116.2	.7	
VEL=	4.1	7.1	4.8	4.9	5.6	4.3	2.7	2.6	.5	
DEPTH=	3.9	6.9	4.8	5.2	6.4	4.1	1.7	1.1	.0	

*SECNO 3.117

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

3.117	9.31	1567.11	1566.59	.00	1567.72	.61	2.65	.07	1565.20
9570.0	935.5	2955.8	5678.7	350.1	320.6	1250.9	876.8	377.2	1562.10
.95	2.67	9.22	4.54	.065	.055	.065	.000	1557.80	9660.52
.009232	360.	496.	320.	1	9	0	.00	923.60	10618.40

FLOW DISTRIBUTION FOR SECNO= 3.12 CWSEL= 1567.11

STA=	9661.	9849.	9928.	9976.	10023.	10034.	10055.	10095.	10121.	10150.	10202.	10268.	10284.
PER Q=	3.8	3.3	2.7	30.9	3.2	4.6	9.3	6.0	4.5	6.4	4.4	3.8	
AREA=	154.3	113.8	82.0	320.6	51.1	81.1	159.7	104.6	91.5	142.6	120.8	64.7	
VEL=	2.3	2.8	3.1	9.2	6.0	5.4	5.5	5.5	4.7	4.3	3.4	5.6	
DEPTH=	.8	1.4	1.7	7.0	4.6	3.9	4.0	4.0	3.1	2.7	1.8	4.0	

STA=	10284.	10305.	10330.	10345.	10380.	10618.
PER Q=	3.5	4.0	3.1	3.9	2.8	
AREA=	69.2	79.3	56.7	88.3	141.4	
VEL=	4.9	4.8	5.2	4.2	1.9	
DEPTH=	3.3	3.3	3.6	2.5	.6	

*SECNO 3.209

3.209	10.91	1570.01	1569.07	.00	1570.34	.32	2.59	.03	1567.10
9570.0	4273.8	1940.9	3355.3	1107.8	266.3	1079.1	893.6	384.6	1566.70
.97	3.86	7.29	3.11	.065	.055	.065	.000	1559.10	9517.29
.005921	380.	486.	270.	2	9	0	.00	1117.01	10634.30

FLOW DISTRIBUTION FOR SECNO= 3.21 CWSEL= 1570.01

STA=	9517.	9709.	9769.	9790.	9801.	9832.	9857.	9896.	9935.	9957.	9982.	10018.	10059.
PER Q=	3.9	3.1	3.2	3.7	6.7	4.2	5.9	7.7	3.6	2.6	20.3	6.1	
AREA=	177.7	110.4	72.1	63.5	137.1	93.5	138.8	162.0	81.7	71.1	266.3	144.4	
VEL=	2.1	2.7	4.2	5.6	4.7	4.3	4.1	4.5	4.2	3.5	7.3	4.1	
DEPTH=	.9	1.8	3.6	5.7	4.4	3.8	3.5	4.1	3.7	2.8	7.5	3.5	

STA=	10059.	10091.	10111.	10131.	10165.	10294.	10368.	10442.	10634.
PER Q=	4.7	3.5	3.6	3.2	3.9	4.2	3.2	2.8	
AREA=	110.4	77.5	79.1	87.6	160.0	144.5	123.4	152.3	
VEL=	4.1	4.3	4.4	3.5	2.3	2.8	2.5	1.7	
DEPTH=	3.5	3.8	3.9	2.6	1.2	2.0	1.7	.8	

T1 Deadman Wash Floodplain Delineation Study
T2 Floodway Run for Deadman Wash, SECNO 0.092 to SECNO 3.209
T3 Deadman Wash 100-year Q Subcritical Flow, May 1992 (revised 9/92)

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		3			-1				1483.02	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2		-1				-1			15

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

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*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS


CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO  .092
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9948.0   10215.0  TYPE=      1  TARGET=      267.000
        ************************************************************
        Deadman Wash Floodplain Delineation Study prepared for
        FCDMC by Howard Needles Tammen & Bergendoff (HNTB), 1992.

        This floodplain delineation study begins at the New River,
        and the water surface elevation starts at critical depth.
        The higher water suface elevation in New River was not used
        to start the HEC-2 runs due to the difference in time of peak.

        NC cards were used where majority of flow expected to remain
        in the channel, while NH cards were used for the braided
        channel or at the confluence of washes.

        The first run is the natural profile run, and ET cards (Fields 7 & 8)
        were used in some sections to better model ineffective flow areas.
        The second run is the floodway run using Method 1 with ET cards
        (Fields 9 & 10).

        The control line on the thalweg of Deadman Wash is
        Station 10,000, and all cross section data were stationed
        looking downstream.

        Cross section numbers indicate in river miles above the mouth.

        Q of 9,600 cfs at New River (C10Y) was used.

        NH cards were used for SECNO 0.092 through SECNO 0.299.
        ************************************************************
    .092     10.42   1483.02   1483.02   1482.73   1485.08      2.06       .00       .00 100000.00
  9600.0        .0    8069.3    1530.7        .0     647.8     391.6        .0        .0   1479.60
    .00       .00     12.46      3.91      .000      .060      .085      .000   1472.60   9948.00
 .017192        0.        0.        0.         0         4         0       .00    267.00  10215.00
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .09 CWSEL= 1483.02

STA=	9948.	10030.	10060.	10100.	10150.	10214.	10215.
PER Q=	84.1	4.9	3.9	3.4	3.8	.0	
AREA=	647.8	94.7	93.0	92.7	110.3	.9	
VEL=	12.5	5.0	4.0	3.5	3.3	1.3	
DEPTH=	7.9	3.2	2.3	1.9	1.7	1.5	

1490 NH CARD USED
*SECNO .159

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.97

3470 ENCROACHMENT STATIONS= 9974.0 10296.0 TYPE= 1 TARGET= 322.000

.159	13.34	1487.54	1485.03	1486.55	1488.10	.56	2.87	.15	1482.80
9600.0	.0	5798.3	3801.7	.0	800.6	1156.7	13.0	2.6	1483.30
.02	.00	7.24	3.29	.000	.060	.085	.000	1474.20	9974.00
.004446	340.	354.	400.	3	8	0	.00	322.00	10296.00

FLOW DISTRIBUTION FOR SECNO= .16 CWSEL= 1487.54

STA=	9974.	10053.	10082.	10100.	10120.	10156.	10177.	10205.	10233.	10258.	10290.	10296.
PER Q=	60.4	4.8	3.8	3.9	5.9	3.8	4.5	3.6	3.8	4.9	.6	
AREA=	800.6	139.4	99.9	107.5	171.5	105.4	130.7	115.7	114.0	145.8	26.9	
VEL=	7.2	3.3	3.7	3.5	3.3	3.4	3.3	3.0	3.2	3.2	2.2	
DEPTH=	10.2	4.8	5.6	5.2	4.8	5.0	4.8	4.0	4.6	4.5	4.3	

1490 NH CARD USED
*SECNO .202

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.68

3470 ENCROACHMENT STATIONS= 9968.0 10340.0 TYPE= 1 TARGET= 372.000

.202	15.81	1488.51	1483.53	1487.63	1488.71	.20	.58	.04	100000.00
9600.0	.0	3009.1	6590.9	.0	708.5	2021.5	25.7	4.5	1484.40
.04	.00	4.25	3.26	.000	.060	.067	.000	1472.70	9968.00
.001568	210.	227.	240.	2	15	0	.00	372.00	10340.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .20 CWSEL= 1488.51

STA=	9968.	10037.	10082.	10117.	10139.	10147.	10157.	10175.	10202.	10214.	10229.	10268.	10305.
PER Q=	31.3	4.4	4.8	7.5	4.8	6.5	7.8	5.1	4.3	3.5	4.6	6.1	
AREA=	708.5	212.3	193.2	190.0	95.6	126.0	182.4	162.8	108.0	103.5	177.0	204.1	
VEL=	4.2	2.0	2.4	3.8	4.8	5.0	4.1	3.0	3.8	3.2	2.5	2.9	
DEPTH=	10.2	4.8	5.4	8.7	12.3	12.9	10.0	6.1	8.9	6.9	4.6	5.5	

STA=	10305.	10316.	10338.	10340.
PER Q=	3.4	5.8	.2	
AREA=	91.2	161.3	14.2	
VEL=	3.6	3.4	1.3	
DEPTH=	8.1	7.5	5.7	

1490 NH CARD USED
*SECNO .299

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .70

3470 ENCROACHMENT STATIONS= 9970.0 10360.0 TYPE= 1 TARGET= 390.000

.299	15.59	1489.39	1485.81	1488.59	1489.69	.29	.95	.03	1485.00
9600.0	.1	2933.7	6666.2	.4	534.5	1790.5	50.5	8.2	1485.10
.06	.21	5.49	3.72	.085	.060	.075	.000	1473.80	9970.00
.003229	520.	512.	400.	2	13	0	.00	390.00	10360.00

FLOW DISTRIBUTION FOR SECNO= .30 CWSEL= 1489.39

STA=	9970.	9970.	10031.	10054.	10066.	10081.	10096.	10117.	10146.	10170.	10203.	10225.	10232.
PER Q=	.0	30.6	4.7	5.6	4.9	3.6	3.4	4.2	3.6	3.1	5.9	4.2	
AREA=	.4	534.5	137.6	120.6	117.4	101.6	110.1	141.1	120.4	123.2	134.0	64.6	
VEL=	.2	5.5	3.3	4.5	4.0	3.4	3.0	2.8	2.9	2.4	4.2	6.3	
DEPTH=	4.4	8.8	6.1	9.6	8.1	6.5	5.2	4.8	5.0	3.8	6.1	9.9	

STA=	10232.	10242.	10255.	10267.	10311.	10360.
PER Q=	8.0	7.1	3.7	4.0	3.4	
AREA=	111.2	113.1	76.8	162.8	156.0	
VEL=	6.9	6.0	4.6	2.4	2.1	
DEPTH=	10.8	9.0	6.1	3.7	3.2	

```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .300 CEHV=     .500
*SECNO  .382

3470 ENCROACHMENT STATIONS=     9912.0   10176.0  TYPE=      1  TARGET=      264.000
         NC card was used, channel = .065 and overbank = .085
         Contraction and expansion coefficients changed to 0.3 and
         0.5 for the dam and dike structures at Snodgrass Tank.
     .382     11.97   1491.27   1487.81   1490.24   1491.77       .50      1.98       .10   1485.30
   9600.0    2109.6    3846.6    3643.9     426.9     538.4     901.0      74.8      12.1   1485.20
     .09      4.94      7.14      4.04      .085      .065      .085      .000   1479.30   9912.00
  .005085     400.      438.      550.         2        11         0       .00    264.00  10176.00


FLOW DISTRIBUTION FOR SECNO=       .38         CWSEL=   1491.27

STA=    9912.    9927.    9940.    9952.    9959.   10015.   10047.   10070.   10096.   10107.   10126.   10149.   10173.
  PER Q=      6.2      8.5      5.1      2.1     40.1      3.9      3.0      7.1      4.6      7.1      6.6      5.2
   AREA=    144.7    140.3     96.2     45.6    538.4    121.5     92.3    161.3     88.5    143.0    148.3    130.0
    VEL=      4.1      5.8      5.1      4.3      7.1      3.1      3.1      4.2      5.0      4.8      4.3      3.8
  DEPTH=      9.9     10.2      8.5      6.6      9.5      3.9      4.0      6.2      8.1      7.6      6.4      5.4

STA=   10173.   10176.
  PER Q=       .3
   AREA=     16.2
    VEL=      2.0
  DEPTH=      5.1

*SECNO  .516

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9962.0   10072.0  TYPE=      1  TARGET=      110.000
         The area of the stock tank (Snodgrass Tank) is ineffective,
         and it's ignored. However, the dam and dike structures act
         as a constriction to the flow.
         NC card was used, channel = .040 and overbank = .065
     .516      9.68   1494.88   1493.78   1494.15   1497.19      2.31      4.52       .91 100000.00
   9600.0        .0    9600.0        .0        .0     787.0        .0      96.7      15.2 100000.00
     .11       .00     12.20       .00      .000      .040      .000      .000   1485.20   9962.09
  .008129     680.      708.      750.         2        19         0       .00    109.91  10072.00
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .52 CWSEL= 1494.88

STA= 9962. 10114.
PER Q= 100.0
AREA= 787.0
VEL= 12.2
DEPTH= 7.2

*SECNO .618

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.44

3470 *ENCROACHMENT STATIONS= 9820.0 10300.0 TYPE= 1 TARGET= 480.000*
Meandering channel around the tank was straightened for modeling.
Q changed to 9,670 cfs at C10W (the confluence with Stream No.
14). CCHV = 0.3 for abrupt contraction.
ET card (Fields 7 & 8) was used to model ineffective area.
NC card was used, channel = .038 and overbanks = .065.

.618	9.16	1499.06	1495.60	1498.91	1499.30	.24	1.48	.62	1493.20
9670.0	1840.7	3457.6	4371.7	708.0	643.0	1541.5	119.1	18.8	1493.70
.15	2.60	5.38	2.84	.065	.038	.065	.000	1489.90	9820.00
.001389	600.	539.	490.	2	14	0	.00	480.00	10300.00

FLOW DISTRIBUTION FOR SECNO= .62 CWSEL= 1499.06

STA=	9820.	9879.	9905.	9924.	9944.	9961.	10052.	10072.	10102.	10134.	10167.	10201.	10234.
PER Q=	4.7	3.9	3.6	3.8	3.0	35.8	3.1	4.7	5.5	5.9	6.4	6.5	
AREA=	215.7	142.4	119.4	126.1	104.4	643.0	113.4	168.7	190.0	199.5	213.3	214.1	
VEL=	2.1	2.7	2.9	2.9	2.8	5.4	2.6	2.7	2.8	2.8	2.9	3.0	
DEPTH=	3.6	5.5	6.2	6.4	6.0	7.1	5.4	5.7	5.9	6.1	6.3	6.4	

STA=	10234.	10258.	10277.	10300.
PER Q=	5.0	4.1	4.0	
AREA=	159.7	130.6	152.2	
VEL=	3.0	3.0	2.5	
DEPTH=	6.6	6.7	6.7	

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .100 CEHV=     .300
*SECNO  .721

3470 ENCROACHMENT STATIONS=     9875.0   10530.0  TYPE=      1  TARGET=      655.000
         Contraction and expansion coefficients changed to 0.1 and 0.3.
      .721      7.70   1499.80   1497.13   1499.39   1499.97       .17       .67       .01   1495.00
    9670.0    1341.7    1317.4    7010.9     521.4     228.4    2534.9     148.9      24.2   1494.20
       .18      2.57      5.77      2.77      .065      .038      .065      .000   1492.10   9875.00
   .001721      400.      544.      400.         3        11         0       .00    655.00  10530.00


FLOW DISTRIBUTION FOR SECNO=       .72          CWSEL=   1499.80

STA=    9875.    9922.    9945.    9968.    9989.   10023.   10060.   10092.   10130.   10172.   10197.   10234.   10272.
  PER Q=      5.4      3.2      3.0      2.3     13.6      5.9      4.1      3.9      5.9      3.4      5.4      5.7
   AREA=    209.3    113.3    109.8     89.0    228.4    199.3    149.5    157.1    207.0    119.1    187.1    194.8
    VEL=      2.5      2.7      2.7      2.4      5.8      2.9      2.7      2.4      2.7      2.7      2.8      2.8
  DEPTH=      4.5      4.9      4.8      4.2      6.9      5.3      4.7      4.1      4.9      4.9      5.0      5.2

STA=   10272.   10306.   10328.   10345.   10366.   10398.   10432.   10466.   10499.   10530.
  PER Q=      5.5      3.9      3.1      3.4      5.0      5.1      4.4      4.2      3.7
   AREA=    182.0    124.9     98.9    111.8    169.6    174.7    157.8    154.6    146.5
    VEL=      2.9      3.0      3.0      2.9      2.8      2.8      2.7      2.6      2.4
  DEPTH=      5.4      5.6      5.8      5.5      5.2      5.2      4.8      4.6      4.7

*SECNO  .803

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .68


3470 ENCROACHMENT STATIONS=     9986.0   10510.0  TYPE=      1  TARGET=      524.000
      .803      7.17   1500.47   1498.63   1499.76   1500.81       .34       .78       .05   1496.30
    9670.0        .7    1748.5    7920.7       1.2     228.5    2109.6     169.2      28.4   1496.40
       .20       .60      7.65      3.75      .065      .038      .065      .000   1493.30   9986.00
   .003721      470.      433.      285.         2        18         0       .00    524.00  10510.00


FLOW DISTRIBUTION FOR SECNO=       .80          CWSEL=   1500.47
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9986.	9986.	10026.	10081.	10115.	10158.	10196.	10220.	10244.	10273.	10292.	10311.	10348.
PER Q=	.0	18.1	7.4	4.1	6.1	7.5	5.7	6.1	7.0	4.0	3.9	5.6	
AREA=	1.2	228.5	210.1	121.6	169.2	182.5	129.8	134.2	157.0	93.1	93.9	150.7	
VEL=	.6	7.7	3.4	3.3	3.5	3.9	4.3	4.4	4.3	4.1	4.0	3.6	
DEPTH=	4.2	5.8	3.8	3.6	3.9	4.8	5.4	5.6	5.4	5.1	4.9	4.1	

STA=	10348.	10391.	10419.	10449.	10475.	10505.	10510.
PER Q=	5.2	4.7	5.3	4.5	4.4	.4	
AREA=	154.6	121.8	135.0	116.1	121.1	18.7	
VEL=	3.2	3.7	3.8	3.8	3.6	2.3	
DEPTH=	3.5	4.3	4.5	4.5	4.1	3.8	

*SECNO .909

3470 ENCROACHMENT STATIONS= 9939.0 10670.0 TYPE= 1 TARGET= 731.000

.909	6.78	1502.28	1500.62	1501.32	1502.53	.25	1.71	.01	100000.00
9670.0	.0	2382.7	7287.3	.0	401.4	2311.7	196.6	35.2	1499.90
.24	.00	5.94	3.15	.000	.038	.065	.000	1495.50	9939.00
.003413	450.	560.	460.	2	14	0	.00	731.00	10670.00

FLOW DISTRIBUTION FOR SECNO= .91 CWSEL= 1502.28

STA=	9939.	10031.	10096.	10127.	10154.	10183.	10210.	10256.	10295.	10318.	10366.	10398.	10436.
PER Q=	24.6	5.4	3.6	3.8	3.7	3.2	5.4	5.3	3.4	5.4	3.3	4.5	
AREA=	401.4	190.1	110.6	111.0	110.5	97.8	166.3	153.2	94.5	169.6	106.8	138.3	
VEL=	5.9	2.7	3.2	3.4	3.3	3.2	3.1	3.3	3.5	3.1	3.0	3.2	
DEPTH=	4.4	2.9	3.6	4.0	3.8	3.7	3.6	3.9	4.3	3.5	3.3	3.7	

STA=	10436.	10470.	10523.	10557.	10599.	10634.	10670.
PER Q=	4.2	6.4	4.3	5.0	4.2	4.1	
AREA=	127.1	194.6	129.0	153.0	127.6	132.0	
VEL=	3.2	3.2	3.2	3.2	3.2	3.0	
DEPTH=	3.7	3.7	3.7	3.7	3.7	3.6	

*SECNO .988

3470 ENCROACHMENT STATIONS= 9983.0 10620.0 TYPE= 1 TARGET= 637.000

.988	7.52	1503.92	1503.07	1503.26	1504.40	.48	1.80	.07	1500.30
9670.0	129.7	2003.0	7537.3	34.4	210.5	1935.4	219.7	41.6	1500.90
.26	3.77	9.51	3.89	.065	.038	.065	.000	1496.40	9983.00
.005802	410.	417.	410.	2	6	0	.00	637.00	10620.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .99 CWSEL= 1503.92

STA=	9983.	9993.	10029.	10048.	10068.	10091.	10109.	10154.	10181.	10213.	10245.	10285.	10319.
PER Q=	1.3	20.7	3.0	4.1	6.0	3.2	4.4	4.4	5.0	4.9	6.1	5.2	
AREA=	34.4	210.5	71.4	85.6	115.1	70.7	125.2	100.5	117.4	115.4	142.7	123.3	
VEL=	3.8	9.5	4.1	4.6	5.0	4.4	3.4	4.3	4.1	4.1	4.1	4.1	
DEPTH=	3.3	6.0	3.6	4.3	5.0	4.0	2.8	3.8	3.6	3.6	3.6	3.6	

STA=	10319.	10356.	10395.	10434.	10471.	10512.	10548.	10599.	10620.
PER Q=	5.1	4.1	3.6	4.0	4.1	3.7	5.3	1.7	
AREA=	124.2	114.0	103.7	109.3	114.3	102.6	145.4	54.6	
VEL=	4.0	3.5	3.4	3.6	3.5	3.5	3.5	3.0	
DEPTH=	3.4	2.9	2.7	2.9	2.8	2.9	2.8	2.6	

*SECNO 1.079

3470 ENCROACHMENT STATIONS= 9963.0 10680.0 TYPE= 1 TARGET= 717.000

1.079	7.73	1506.43	1505.30	1505.78	1506.84	.40	2.43	.01	1502.70
9670.0	121.1	2361.9	7187.0	42.1	279.2	2129.8	246.1	49.4	1502.80
.29	2.88	8.46	3.37	.065	.038	.065	.000	1498.70	9963.00
.004212	420.	480.	500.	2	9	0	.00	717.00	10680.00

FLOW DISTRIBUTION FOR SECNO= 1.08 CWSEL= 1506.43

STA=	9963.	9976.	10021.	10066.	10084.	10106.	10124.	10147.	10173.	10194.	10222.	10258.	10291.
PER Q=	1.3	24.4	6.6	3.9	5.6	3.3	3.9	4.2	3.6	5.0	5.4	4.2	
AREA=	42.1	279.2	174.3	87.9	121.0	78.9	96.5	107.0	90.2	123.0	141.1	116.4	
VEL=	2.9	8.5	3.7	4.3	4.5	4.0	3.9	3.8	3.9	3.9	3.7	3.5	
DEPTH=	3.3	6.2	3.9	4.9	5.3	4.5	4.2	4.1	4.3	4.3	3.9	3.6	

STA=	10291.	10359.	10396.	10460.	10498.	10532.	10568.	10639.	10680.
PER Q=	4.9	3.2	5.0	3.1	3.1	3.1	3.7	2.5	
AREA=	172.2	104.8	169.9	102.1	99.1	101.9	148.3	95.1	
VEL=	2.8	2.9	2.8	2.9	3.0	3.0	2.4	2.5	
DEPTH=	2.5	2.8	2.7	2.7	2.9	2.8	2.1	2.3	

*SECNO 1.199

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IOC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9982.0 10500.0 TYPE= 1 TARGET= 518.000

1.199	8.96	1509.26	1508.88	1508.96	1510.21	.95	3.21	.16	1503.60
9670.0	1.3	3594.4	6074.3	1.7	306.1	1515.6	277.0	58.3	1504.30
.32	.78	11.74	4.01	.065	.038	.065	.000	1500.30	9982.00
.006256	650.	634.	630.	2	8	0	.00	518.00	10500.00

FLOW DISTRIBUTION FOR SECNO= 1.20 CWSEL= 1509.26

STA=	9982.	9982.	10023.	10047.	10072.	10092.	10123.	10146.	10171.	10186.	10208.	10252.	10287.
PER Q=	.0	37.2	4.5	5.2	3.5	4.3	3.2	5.4	3.3	4.3	6.0	3.5	
AREA=	1.7	306.1	97.3	105.9	76.4	102.3	76.6	107.6	65.2	91.2	144.2	94.0	
VEL=	.8	11.7	4.5	4.8	4.4	4.0	4.1	4.8	4.9	4.6	4.0	3.6	
DEPTH=	5.6	7.5	4.0	4.3	3.8	3.3	3.4	4.4	4.4	4.0	3.3	2.8	

STA=	10287.	10330.	10389.	10428.	10465.	10500.
PER Q=	3.4	4.4	3.8	4.9	3.3	
AREA=	103.0	135.2	103.8	120.0	92.8	
VEL=	3.2	3.1	3.5	3.9	3.4	
DEPTH=	2.4	2.3	2.7	3.2	2.7	

1490 NH CARD USED
*SECNO 1.313

3470 ENCROACHMENT STATIONS= 9854.0 10422.0 TYPE= 1 TARGET= 568.000
NH cards were used.

1.313	8.70	1512.30	1511.08	1511.82	1512.76	.46	2.50	.05	1509.40
9670.0	1445.2	3521.6	4703.1	415.9	449.1	1392.9	299.9	64.3	1509.20
.35	3.48	7.84	3.38	.065	.038	.065	.000	1503.60	9854.00
.003897	560.	602.	450.	2	10	0	.00	568.00	10422.00

FLOW DISTRIBUTION FOR SECNO= 1.31 CWSEL= 1512.30

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9854.	9882.	9900.	9942.	9965.	10042.	10088.	10116.	10176.	10208.	10240.	10271.	10294.
PER Q=	3.2	4.4	5.1	2.2	36.4	5.3	3.5	7.2	4.0	3.7	3.9	3.2	
AREA=	99.5	97.7	148.2	70.5	449.1	158.7	99.5	211.1	116.5	109.0	111.7	88.2	
VEL=	3.2	4.3	3.4	3.0	7.8	3.2	3.4	3.3	3.3	3.3	3.4	3.5	
DEPTH=	3.5	5.4	3.6	3.1	5.8	3.4	3.6	3.5	3.6	3.5	3.7	3.8	

STA=	10294.	10329.	10357.	10386.	10422.
PER Q=	4.7	4.0	4.1	5.1	
AREA=	132.3	108.8	111.8	145.3	
VEL=	3.5	3.5	3.5	3.4	
DEPTH=	3.8	3.9	3.9	4.0	

*SECNO 1.419

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9962.0 10364.0 TYPE= 1 TARGET= 402.000
NC card was used, channel = .038 and overbanks = .065.

1.419	8.74	1514.84	1514.84	1514.39	1516.35	1.51	2.97	.32	1511.30
9670.0	171.2	4723.5	4775.3	38.4	356.5	998.9	320.2	69.5	1511.80
.36	4.46	13.25	4.78	.065	.038	.065	.000	1506.10	9962.00
.010000	570.	560.	440.	0	5	0	.00	402.00	10364.00

FLOW DISTRIBUTION FOR SECNO= 1.42 CWSEL= 1514.84

STA=	9962.	9972.	10027.	10060.	10090.	10156.	10195.	10245.	10272.	10295.	10308.	10323.	10354.
PER Q=	1.8	48.8	4.2	4.0	9.3	4.7	4.5	3.5	4.9	3.6	3.6	5.8	
AREA=	38.4	356.5	91.2	84.8	192.3	103.3	110.9	74.7	85.7	57.0	60.5	108.6	
VEL=	4.5	13.3	4.5	4.6	4.7	4.4	3.9	4.5	5.5	6.1	5.8	5.2	
DEPTH=	4.0	6.4	2.7	2.8	2.9	2.6	2.2	2.7	3.7	4.4	4.0	3.4	

STA=	10354.	10364.
PER Q=	1.2	
AREA=	29.6	
VEL=	4.1	
DEPTH=	3.1	

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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 1.527

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.50


3470 ENCROACHMENT STATIONS=     9739.0   10088.0  TYPE=      1  TARGET=      349.000
     1.527     11.14   1518.94   1517.79   1518.03   1519.84       .90      3.43       .06   1513.30
    9670.0    4472.2    3618.0    1579.8    1093.9     323.6     344.3     338.9      74.0   1513.00
       .38      4.09     11.18      4.59      .065      .038      .065      .000   1507.80   9739.00
   .004473      450.      570.      550.         3        11         0       .00    349.00  10088.00


FLOW DISTRIBUTION FOR SECNO=      1.53          CWSEL=   1518.94

STA=    9739.    9755.    9777.    9804.    9837.    9877.    9908.    9942.    9979.    9988.   10022.   10049.   10069.
  PER Q=      4.0      5.1      6.1      6.1      7.4      5.9      5.6      4.3      1.8     37.4      6.2      5.9
   AREA=     92.0    109.1    134.2    143.3    174.7    138.7    138.3    121.8     41.8    323.6    135.7    114.1
    VEL=      4.2      4.6      4.4      4.1      4.1      4.1      3.9      3.4      4.2     11.2      4.4      5.0
  DEPTH=      5.6      5.1      4.8      4.4      4.3      4.4      4.0      3.3      4.6      9.5      4.9      5.9

STA=   10069.   10088.   10088.
  PER Q=      4.3       .0
   AREA=     93.5      1.1
    VEL=      4.4       .6
  DEPTH=      4.9      3.7

1490 NH CARD USED
*SECNO 1.620

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9702.0   10158.0  TYPE=      1  TARGET=      456.000
          NH cards were used for SECNO 1.620 through SECNO 1.811.
     1.620      7.86   1521.36   1520.62   1520.65   1522.29       .94      2.44       .01   1515.50
    9670.0    4247.8    3143.9    2278.4     984.1     268.3     403.8     356.2      77.8   1515.20
       .40      4.32     11.72      5.64      .065      .038      .065      .000   1513.50   9702.00
   .006571      400.      491.      510.         2        14         0       .00    427.01  10158.00
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 1.62 CWSEL= 1521.36

STA=	9702.	9734.	9758.	9781.	9802.	9831.	9856.	9888.	9933.	9979.	9988.	10026.	10052.
PER Q=	5.7	4.8	4.9	4.3	5.2	4.4	4.8	3.7	3.6	2.5	32.5	9.9	
AREA=	127.1	98.7	96.3	87.2	111.2	95.5	109.0	106.7	105.3	47.2	268.3	156.3	
VEL=	4.4	4.7	4.9	4.8	4.6	4.5	4.2	3.3	3.3	5.2	11.7	6.1	
DEPTH=	4.0	4.0	4.3	4.1	3.9	3.8	3.5	2.4	2.3	4.8	7.2	6.0	

STA=	10052.	10068.	10077.	10095.	10158.
PER Q=	6.3	3.8	3.1	.5	
AREA=	96.9	59.9	67.5	23.3	
VEL=	6.3	6.2	4.5	1.9	
DEPTH=	6.2	6.1	3.8	.4	

1490 NH CARD USED
*SECNO 1.717

3470 ENCROACHMENT STATIONS= 9740.0 10424.0 TYPE= 1 TARGET= 684.000

1.717	9.53	1524.33	1524.16	1523.51	1525.45	1.12	3.10	.05	1520.50
9670.0	2033.2	4786.1	2850.6	583.5	414.5	822.9	375.0	83.8	1520.10
.42	3.48	11.55	3.46	.065	.038	.065	.000	1514.80	9740.00
.006318	470.	512.	450.	2	11	0	.00	683.68	10423.68

FLOW DISTRIBUTION FOR SECNO= 1.72 CWSEL= 1524.33

STA=	9740.	9769.	9794.	9836.	9908.	9966.	9975.	10032.	10055.	10080.	10096.	10133.	10219.
PER Q=	3.4	4.0	4.4	3.4	4.1	1.6	49.5	4.1	4.8	4.0	3.9	5.2	
AREA=	89.3	90.8	117.5	125.6	124.4	35.8	414.5	88.5	101.6	74.7	102.9	173.2	
VEL=	3.7	4.3	3.6	2.6	3.2	4.4	11.5	4.5	4.5	5.2	3.6	2.9	
DEPTH=	3.1	3.6	2.8	1.8	2.1	3.7	7.4	3.9	3.9	4.9	2.7	2.0	

STA=	10219.	10281.	10382.	10424.
PER Q=	3.8	3.5	.2	
AREA=	123.6	141.1	17.4	
VEL=	3.0	2.4	1.1	
DEPTH=	2.0	1.4	.4	

1490 NH CARD USED
*SECNO 1.811

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

3470 ENCROACHMENT STATIONS= 9740.0 10670.0 TYPE= 1 TARGET= 930.000

1.811	9.97	1527.17	1525.67	1526.12	1527.37	.20	1.82	.09	1524.00
9670.0	2498.6	1992.9	5178.5	835.9	352.2	1864.0	397.0	90.7	1523.80
.45	2.99	5.66	2.78	.065	.048	.065	.000	1517.20	9740.00
.003156	630.	496.	240.	2	13	0	.00	930.00	10670.00

FLOW DISTRIBUTION FOR SECNO= 1.81 CWSEL= 1527.17

STA=	9740.	9807.	9841.	9870.	9892.	9936.	9978.	10036.	10087.	10112.	10142.	10165.	10193.
PER Q=	5.3	3.8	3.1	3.4	6.1	4.2	20.6	4.5	3.3	4.0	3.7	5.3	
AREA=	195.9	122.6	102.3	95.9	178.6	140.6	352.2	160.2	97.5	121.0	102.5	137.3	
VEL=	2.6	3.0	2.9	3.4	3.3	2.9	5.7	2.7	3.2	3.2	3.5	3.8	
DEPTH=	2.9	3.6	3.4	4.3	4.1	3.3	6.1	3.1	4.0	3.9	4.5	5.0	

STA=	10193.	10213.	10253.	10296.	10359.	10423.	10471.	10551.	10670.
PER Q=	3.4	4.3	4.8	4.1	3.5	3.2	5.3	4.0	
AREA=	92.4	139.8	155.5	162.7	150.3	127.3	208.3	209.2	
VEL=	3.6	3.0	3.0	2.4	2.3	2.5	2.5	1.9	
DEPTH=	4.6	3.5	3.5	2.6	2.3	2.7	2.6	1.8	

*SECNO 1.909

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .64

3470 ENCROACHMENT STATIONS= 9538.0 10150.0 TYPE= 1 TARGET= 612.000
Q changed to 9,570 cfs at C10U (the confluence with Stream No. 11). NC card was used, channel = .048 and overbank = .065

1.909	10.70	1529.20	1528.61	1528.49	1529.85	.65	2.35	.13	1526.20
9570.0	5273.5	3216.0	1080.5	1247.1	339.1	295.5	425.4	99.5	1524.90
.48	4.23	9.49	3.66	.065	.048	.065	.000	1518.50	9538.00
.007546	517.	517.	480.	2	5	0	.00	612.00	10150.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 1.91 CWSEL= 1529.20

STA=	9538.	9603.	9649.	9695.	9750.	9824.	9884.	9947.	9981.	10029.	10061.	10107.	10150.
PER Q=	19.4	8.7	5.7	5.1	6.4	3.3	3.1	3.5	33.6	4.6	3.7	3.0	
AREA=	332.6	171.6	134.1	134.5	174.6	107.7	103.5	88.5	339.1	101.9	103.9	89.8	
VEL=	5.6	4.8	4.0	3.6	3.5	2.9	2.8	3.8	9.5	4.3	3.4	3.2	
DEPTH=	5.1	3.8	2.9	2.5	2.4	1.8	1.6	2.6	7.1	3.2	2.3	2.1	

*SECNO 2.004
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9560.0 10290.0 TYPE= 1 TARGET= 730.000

2.004	9.90	1533.50	1533.50	1532.86	1534.55	1.05	4.52	.12	1528.10
9570.0	2365.8	3075.0	4129.2	682.6	241.2	775.0	446.0	107.2	1527.70
.50	3.47	12.75	5.33	.065	.048	.065	.000	1523.60	9560.00
.010933	502.	502.	502.	0	9	0	.00	730.00	10290.00

FLOW DISTRIBUTION FOR SECNO= 2.00 CWSEL= 1533.50

STA=	9560.	9660.	9763.	9826.	9889.	9951.	9986.	10015.	10034.	10058.	10084.	10117.	10204.
PER Q=	3.3	3.9	5.1	5.1	4.3	3.1	32.1	9.1	9.7	5.6	3.1	5.4	
AREA=	118.3	125.5	127.0	126.9	114.3	70.6	241.2	112.1	126.9	95.4	72.6	149.3	
VEL=	2.7	3.0	3.8	3.8	3.6	4.2	12.8	7.8	7.4	5.6	4.0	3.5	
DEPTH=	1.2	1.2	2.0	2.0	1.8	2.0	8.2	5.9	5.4	3.6	2.2	1.7	

STA=	10204.	10232.	10271.	10290.
PER Q=	3.8	5.0	1.4	
AREA=	77.3	104.4	37.0	
VEL=	4.7	4.6	3.5	
DEPTH=	2.8	2.7	1.9	

*SECNO 2.060

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.52

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9630.0 10320.0 TYPE= 1 TARGET= 690.000

2.060	10.22	1536.02	1535.14	1535.07	1536.53	.51	1.93	.05	1531.20
9570.0	1540.3	3149.9	4879.8	627.3	371.2	1204.7	458.9	112.3	1530.60
.51	2.46	8.49	4.05	.065	.048	.065	.000	1525.80	9630.00
.004751	370.	296.	230.	2	10	0	.00	690.00	10320.00

FLOW DISTRIBUTION FOR SECNO= 2.06 CWSEL= 1536.02

STA=	9630.	9747.	9836.	9896.	9973.	10018.	10040.	10065.	10090.	10123.	10152.	10204.	10237.
PER Q=	4.1	4.8	3.2	4.0	32.9	4.3	6.3	5.8	7.8	4.3	8.4	5.3	
AREA=	184.1	182.3	119.7	141.1	371.2	96.3	130.1	121.1	163.6	107.7	204.9	128.7	
VEL=	2.1	2.5	2.5	2.7	8.5	4.3	4.6	4.6	4.6	3.8	3.9	3.9	
DEPTH=	1.6	2.0	2.0	1.8	8.2	4.5	5.1	5.0	4.9	3.7	3.9	3.9	

STA=	10237.	10273.	10313.	10320.
PER Q=	4.9	3.5	.4	
AREA=	127.9	108.8	15.6	
VEL=	3.7	3.1	2.2	
DEPTH=	3.6	2.8	2.1	

*SECNO 2.142

3470 ENCROACHMENT STATIONS= 9440.0 10046.0 TYPE= 1 TARGET= 606.000

2.142	10.09	1537.69	1536.79	1537.14	1538.27	.57	1.72	.02	1533.90
9570.0	5871.4	3131.7	566.9	1553.9	344.9	125.6	473.6	116.2	1532.20
.53	3.78	9.08	4.51	.065	.048	.065	.000	1527.60	9440.00
.005592	200.	433.	400.	3	9	0	.00	606.00	10046.00

FLOW DISTRIBUTION FOR SECNO= 2.14 CWSEL= 1537.69

STA=	9440.	9542.	9649.	9702.	9735.	9764.	9795.	9813.	9837.	9864.	9891.	9914.	9941.
PER Q=	4.7	5.6	3.3	3.0	3.5	6.3	6.0	7.8	5.0	3.8	3.4	4.6	
AREA=	181.0	202.8	111.3	88.6	90.0	134.6	104.3	135.3	109.2	93.7	81.2	103.8	
VEL=	2.5	2.6	2.8	3.3	3.7	4.5	5.5	5.5	4.3	3.9	4.0	4.2	
DEPTH=	1.8	1.9	2.1	2.6	3.1	4.2	5.8	5.8	4.0	3.4	3.5	3.8	

STA=	9941.	9970.	9978.	10020.	10038.	10046.
PER Q=	3.7	1.0	32.7	4.6	1.4	
AREA=	93.6	24.4	344.9	89.0	36.7	
VEL=	3.7	3.8	9.1	4.9	3.5	
DEPTH=	3.2	3.3	8.1	4.9	4.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 2.233

3470 ENCROACHMENT STATIONS= 9640.0 10262.0 TYPE= 1 TARGET= 622.000

2.233	9.44	1540.74	1540.13	1540.18	1541.33	.59	3.06	.00	1535.10
9570.0	3393.3	2141.0	4035.7	889.6	206.9	880.4	495.8	123.1	1534.50
.55	3.81	10.35	4.58	.065	.048	.065	.000	1531.30	9640.00
.007258	500.	480.	450.	2	13	0	.00	622.00	10262.00

FLOW DISTRIBUTION FOR SECNO= 2.23 CWSEL= 1540.74

STA=	9640.	9682.	9735.	9788.	9875.	9915.	9951.	9965.	9981.	9991.	10016.	10027.	10048.
PER Q=	3.2	3.9	3.2	5.2	4.5	6.6	3.0	3.2	2.7	22.4	3.0	3.5	
AREA=	94.5	114.1	101.9	165.4	110.6	134.4	58.6	63.1	47.0	206.9	52.8	74.6	
VEL=	3.2	3.2	3.0	3.0	3.9	4.7	4.9	4.9	5.5	10.3	5.5	4.5	
DEPTH=	2.2	2.1	1.9	1.9	2.8	3.7	4.0	4.0	4.8	8.2	4.8	3.5	

STA=	10048.	10078.	10102.	10122.	10138.	10171.	10204.	10246.	10262.
PER Q=	6.3	5.0	4.5	3.0	5.7	4.5	4.7	1.9	
AREA=	121.9	97.8	83.1	61.8	119.2	103.3	115.4	50.5	
VEL=	5.0	4.9	5.1	4.7	4.6	4.1	3.9	3.7	
DEPTH=	4.1	4.0	4.3	3.7	3.6	3.1	2.8	3.1	

*SECNO 2.326

3470 ENCROACHMENT STATIONS= 9730.0 10320.0 TYPE= 1 TARGET= 590.000
NC card was used, channel = .055 and overbanks = .065.

2.326	8.19	1543.89	1542.54	1542.98	1544.26	.37	2.90	.02	1540.80
9570.0	3164.0	2475.5	3930.6	824.2	363.2	978.5	517.4	129.5	1539.10
.58	3.84	6.82	4.02	.065	.055	.065	.000	1535.70	9730.00
.005614	500.	491.	400.	2	13	0	.00	590.00	10320.00

FLOW DISTRIBUTION FOR SECNO= 2.33 CWSEL= 1543.89

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9730.	9778.	9822.	9846.	9873.	9896.	9910.	9935.	9969.	9984.	10042.	10058.	10095.
PER Q=	3.3	5.4	4.0	4.4	4.2	3.5	3.4	3.3	1.6	25.9	3.4	6.0	
AREA=	108.8	139.5	90.7	102.9	92.2	69.6	83.8	93.0	43.8	363.2	70.4	139.2	
VEL=	2.9	3.7	4.2	4.1	4.3	4.9	3.9	3.4	3.4	6.8	4.7	4.1	
DEPTH=	2.3	3.1	3.8	3.7	4.0	5.0	3.4	2.8	2.8	6.3	4.5	3.7	

STA=	10095.	10124.	10157.	10187.	10227.	10261.	10307.	10320.
PER Q=	4.6	6.2	5.7	6.1	3.9	4.3	.9	
AREA=	107.4	135.0	123.2	144.4	103.1	125.1	30.6	
VEL=	4.1	4.4	4.5	4.0	3.6	3.3	2.7	
DEPTH=	3.7	4.1	4.2	3.6	3.0	2.7	2.4	

*SECNO 2.406

3470 ENCROACHMENT STATIONS= 9748.0 10418.0 TYPE= 1 TARGET= 670.000

2.406	11.24	1546.54	1546.17	1545.74	1547.23	.70	2.88	.10	1542.60
9570.0	2029.3	3385.6	4155.2	536.8	343.4	999.5	536.5	135.4	1543.90
.60	3.78	9.86	4.16	.065	.055	.065	.000	1535.30	9748.00
.008841	410.	422.	410.	1	12	0	.00	670.00	10418.00

FLOW DISTRIBUTION FOR SECNO= 2.41 CWSEL= 1546.54

STA=	9748.	9795.	9842.	9886.	9917.	9951.	9977.	10018.	10072.	10110.	10145.	10179.	10211.
PER Q=	4.7	3.0	3.9	3.2	3.3	3.0	35.4	3.7	3.0	4.8	5.5	4.7	
AREA=	117.4	88.2	101.2	78.6	81.2	70.2	343.4	104.5	81.5	104.0	111.1	98.0	
VEL=	3.8	3.3	3.7	3.9	3.9	4.1	9.9	3.4	3.6	4.5	4.7	4.6	
DEPTH=	2.5	1.9	2.3	2.5	2.4	2.6	8.4	1.9	2.1	3.0	3.2	3.1	

STA=	10211.	10256.	10329.	10381.	10399.	10418.
PER Q=	4.8	3.5	4.4	4.1	5.0	
AREA=	113.9	113.7	111.3	71.9	89.5	
VEL=	4.0	2.9	3.8	5.4	5.3	
DEPTH=	2.5	1.6	2.2	4.0	4.6	

*SECNO 2.500

3470 ENCROACHMENT STATIONS= 9405.0 10216.0 TYPE= 1 TARGET= 811.000

2.500	9.88	1550.08	1549.14	1549.22	1550.43	.34	3.16	.04	1545.40
9570.0	5236.4	2401.0	1932.5	1568.1	327.1	558.4	559.2	143.1	1546.40
.63	3.34	7.34	3.46	.065	.055	.065	.000	1540.20	9405.00
.005384	410.	496.	500.	2	13	0	.00	811.00	10216.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 2.50 CWSEL= 1550.08

STA=	9405.	9456.	9491.	9542.	9593.	9680.	9734.	9789.	9837.	9878.	9931.	9955.	9979.
PER Q=	5.7	3.8	5.7	4.7	4.1	4.1	4.2	5.2	4.4	5.3	3.6	4.1	
AREA=	157.2	104.8	153.6	139.0	156.7	130.1	132.6	142.1	122.0	149.1	87.5	93.5	
VEL=	3.4	3.4	3.5	3.3	2.5	3.0	3.0	3.5	3.5	3.4	3.9	4.1	
DEPTH=	3.1	2.9	3.1	2.7	1.8	2.4	2.4	3.0	3.0	2.9	3.6	3.9	

STA=	9979.	10023.	10049.	10082.	10123.	10191.	10216.
PER Q=	25.1	3.7	4.8	5.1	5.1	1.5	
AREA=	327.1	90.2	118.8	132.0	163.0	54.4	
VEL=	7.3	3.9	3.9	3.7	3.0	2.7	
DEPTH=	7.4	3.5	3.5	3.2	2.4	2.2	

*SECNO 2.595

3470 ENCROACHMENT STATIONS= 9340.0 10024.0 TYPE= 1 TARGET= 684.000

2.595	13.01	1553.31	1553.10	1552.65	1554.13	.82	3.56	.14	1549.50
9570.0	5888.1	3680.9	1.1	1444.6	349.8	1.1	583.7	151.7	1549.60
.65	4.08	10.52	.96	.065	.055	.065	.000	1540.30	9340.00
.009742	502.	502.	502.	2	16	0	.00	684.00	10024.00

FLOW DISTRIBUTION FOR SECNO= 2.60 CWSEL= 1553.31

STA=	9340.	9376.	9438.	9494.	9539.	9612.	9652.	9694.	9767.	9842.	9892.	9941.	9956.
PER Q=	3.2	5.9	5.9	3.9	4.2	3.4	4.3	4.2	3.1	4.2	7.7	4.8	
AREA=	81.7	143.2	137.8	98.4	124.9	86.5	102.0	124.3	104.1	106.8	148.9	72.8	
VEL=	3.7	3.9	4.1	3.8	3.2	3.8	4.1	3.2	2.8	3.7	5.0	6.4	
DEPTH=	2.3	2.3	2.5	2.2	1.7	2.2	2.4	1.7	1.4	2.1	3.0	4.8	

STA=	9956.	9970.	9985.	10024.	10024.
PER Q=	3.2	3.4	38.5	.0	
AREA=	54.5	59.0	349.8	1.1	
VEL=	5.7	5.5	10.5	1.0	
DEPTH=	4.0	3.8	9.1	3.7	

*SECNO 2.689

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.88

3470 ENCROACHMENT STATIONS= 9400.0 10037.0 TYPE= 1 TARGET= 637.000

2.689	12.09	1555.99	1554.12	1555.30	1556.22	.23	2.03	.06	1551.60
9570.0	6627.2	2942.8	.0	2230.7	550.8	.0	605.7	157.9	100000.00
.68	2.97	5.34	.00	.065	.055	.000	.000	1543.90	9400.00
.002749	400.	496.	550.	3	13	0	.00	637.00	10037.00

FLOW DISTRIBUTION FOR SECNO= 2.69 CWSEL= 1555.99

STA=	9400.	9407.	9558.	9680.	9736.	9768.	9795.	9808.	9888.	9925.	9956.	9971.	10037.
PER Q=	.6	18.2	14.4	7.2	3.8	2.5	1.1	8.9	5.4	4.7	2.3	30.8	
AREA=	26.9	587.5	468.3	226.4	122.4	90.7	41.7	296.6	163.0	137.9	69.2	550.8	
VEL=	2.2	3.0	2.9	3.0	3.0	2.6	2.6	2.9	3.2	3.3	3.2	5.3	
DEPTH=	4.0	3.9	3.8	4.0	3.9	3.3	3.2	3.7	4.3	4.5	4.4	8.4	

*SECNO 2.777

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .56

3470 ENCROACHMENT STATIONS= 9779.0 10193.0 TYPE= 1 TARGET= 414.000

2.777	11.20	1557.50	1556.84	1556.69	1558.46	.96	2.03	.22	1553.90
9570.0	1230.1	4362.6	3977.3	360.3	430.9	702.9	627.4	163.2	1552.40
.70	3.41	10.12	5.66	.065	.055	.065	.000	1546.30	9779.00
.008922	440.	465.	420.	3	9	0	.00	414.00	10193.00

FLOW DISTRIBUTION FOR SECNO= 2.78 CWSEL= 1557.50

STA=	9779.	9834.	9898.	9977.	10029.	10048.	10066.	10090.	10115.	10147.	10162.	10193.
PER Q=	4.5	4.3	4.0	45.6	5.2	4.4	6.0	6.7	9.0	4.1	6.0	
AREA=	121.0	123.7	115.6	430.9	84.7	76.0	101.7	110.5	145.7	67.8	116.4	
VEL=	3.6	3.3	3.3	10.1	5.9	5.6	5.7	5.8	5.9	5.8	4.9	
DEPTH=	2.2	1.9	1.5	8.2	4.6	4.2	4.3	4.5	4.6	4.4	3.8	

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 2.872

3470 ENCROACHMENT STATIONS=     9810.0   10222.0  TYPE=      1  TARGET=      412.000
    2.872     11.39   1560.99   1559.39   1560.21   1561.50       .51      2.99       .04   1556.30
   9570.0    2560.0    3266.7    3743.3     615.7     421.3     847.3     644.6     167.5   1556.10
      .72      4.16      7.75      4.42      .065      .055      .065      .000   1549.60   9810.00
  .005231      570.      502.      330.         2         9         0       .00    412.00  10222.00


FLOW DISTRIBUTION FOR SECNO=      2.87          CWSEL=   1560.99

STA=    9810.    9848.    9907.    9923.    9940.    9960.    9978.   10029.   10044.   10075.   10103.   10136.   10160.
  PER Q=      5.6      3.5      3.6      5.3      4.9      3.9     34.1      4.0      8.2      6.6      6.8      3.7
   AREA=    143.7    119.3     75.9     95.6     98.6     82.5    421.3     78.1    159.7    135.0    146.8     87.4
    VEL=      3.8      2.8      4.6      5.3      4.7      4.5      7.8      4.9      4.9      4.7      4.5      4.0
  DEPTH=      3.7      2.1      4.7      5.7      4.8      4.5      8.4      5.1      5.1      4.8      4.4      3.8

STA=   10160.   10196.   10222.
  PER Q=      5.5      4.3
   AREA=    132.8    107.5
    VEL=      3.9      3.8
  DEPTH=      3.7      4.1

*SECNO 2.947

3470 ENCROACHMENT STATIONS=     9600.0   10039.0  TYPE=      1  TARGET=      439.000
    2.947     12.07   1563.07   1562.12   1562.22   1563.74       .67      2.20       .05   1559.10
   9570.0    5164.2    4405.3        .6    1188.0     521.1        .9     659.6     171.0   1558.60
      .74      4.35      8.45       .62      .065      .055      .065      .000   1551.00   9600.00
  .006786      320.      396.      420.         2         6         0       .00    439.00  10039.00


FLOW DISTRIBUTION FOR SECNO=      2.95          CWSEL=   1563.07

STA=    9600.    9648.    9693.    9752.    9816.    9850.    9872.    9913.    9939.    9954.    9971.   10039.   10039.
  PER Q=      3.7      4.5      4.7      4.6      6.2      4.7     10.2      7.1      4.5      3.9     46.0       .0
   AREA=    108.6    119.5    136.1    137.9    129.5     90.8    188.0    125.5     78.9     73.3    521.1       .9
    VEL=      3.2      3.6      3.3      3.2      4.6      4.9      5.2      5.4      5.5      5.1      8.5       .6
  DEPTH=      2.3      2.7      2.3      2.2      3.8      4.2      4.6      4.9      5.0      4.4      7.7      4.5
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.023

3470 ENCROACHMENT STATIONS= 9618.0 10065.0 TYPE= 1 TARGET= 447.000

3.023	10.30	1565.40	1564.10	1564.63	1565.97	.57	2.22	.01	1560.40
9570.0	4822.5	3652.4	1095.1	1166.9	450.0	210.1	673.0	174.1	1559.80
.75	4.13	8.12	5.21	.065	.055	.065	.000	1555.10	9618.00
.006068	290.	401.	460.	1	13	0	.00	447.00	10065.00

FLOW DISTRIBUTION FOR SECNO= 3.02 CWSEL= 1565.40

STA=	9618.	9689.	9732.	9764.	9838.	9877.	9900.	9914.	9927.	9942.	9957.	9970.	10028.
PER Q=	8.4	5.4	4.1	5.3	3.8	3.7	3.5	4.4	4.3	4.4	3.1	38.2	
AREA=	218.5	135.1	100.9	166.0	105.8	84.1	66.4	73.7	78.1	78.8	59.6	450.0	
VEL=	3.7	3.8	3.9	3.0	3.4	4.2	5.0	5.8	5.3	5.4	5.0	8.1	
DEPTH=	3.1	3.1	3.2	2.2	2.7	3.6	4.7	5.9	5.1	5.4	4.7	7.7	

STA=	10028.	10049.	10060.	10065.
PER Q=	6.9	3.4	1.0	
AREA=	118.5	59.9	31.7	
VEL=	5.6	5.5	3.2	
DEPTH=	5.6	5.4	6.6	

*SECNO 3.117

3470 ENCROACHMENT STATIONS= 9976.0 10327.0 TYPE= 1 TARGET= 351.000

3.117	10.18	1567.98	1566.73	1567.11	1568.69	.71	2.68	.04	1565.20
9570.0	1.1	3283.0	6285.8	1.1	360.8	1220.6	687.7	177.4	1562.10
.77	1.00	9.10	5.15	.065	.055	.065	.000	1557.80	9976.00
.007687	360.	496.	320.	2	9	0	.00	351.00	10327.00

FLOW DISTRIBUTION FOR SECNO= 3.12 CWSEL= 1567.98

STA=	9976.	9976.	10023.	10034.	10055.	10095.	10121.	10150.	10167.	10202.	10245.	10268.	10280.
PER Q=	.0	34.3	3.9	5.9	11.7	7.6	6.2	3.2	6.0	3.6	3.8	3.2	
AREA=	1.1	360.8	60.8	99.4	194.3	127.6	117.1	63.9	124.0	98.3	79.8	54.8	
VEL=	1.0	9.1	6.2	5.6	5.8	5.7	5.0	4.9	4.6	3.5	4.5	5.6	
DEPTH=	2.8	7.8	5.4	4.7	4.9	4.8	4.0	3.8	3.5	2.3	3.4	4.7	

STA=	10280.	10291.	10327.
PER Q=	3.5	7.0	
AREA=	57.1	143.4	
VEL=	5.8	4.7	
DEPTH=	5.0	4.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.209

3470 ENCROACHMENT STATIONS= 9799.0 10156.0 TYPE= 1 TARGET= 357.000

3.209	11.64	1570.74	1569.22	1570.01	1571.30	.57	2.60	.01	1567.10
9570.0	4237.5	2426.5	2906.0	826.1	291.7	587.8	700.6	180.1	1566.70
.79	5.13	8.32	4.94	.065	.055	.065	.000	1559.10	9799.00
.006823	380.	486.	270.	2	6	0	.00	357.00	10156.00

FLOW DISTRIBUTION FOR SECNO= 3.21 CWSEL= 1570.74

STA=	9799.	9811.	9832.	9857.	9874.	9896.	9909.	9935.	9948.	9972.	9982.	10018.	10033.
PER Q=	3.8	5.8	6.0	3.6	5.0	3.5	7.3	3.2	4.4	1.7	25.4	3.3	
AREA=	67.9	102.9	111.1	70.7	96.4	61.7	128.5	57.9	92.1	36.8	291.7	64.5	
VEL=	5.4	5.4	5.2	4.9	5.0	5.4	5.4	5.2	4.6	4.4	8.3	4.9	
DEPTH=	5.8	4.8	4.5	4.2	4.3	4.8	4.9	4.6	3.8	3.5	8.2	4.2	

STA=	10033.	10059.	10091.	10111.	10131.	10148.	10156.
PER Q=	5.7	6.9	5.0	5.1	3.5	.9	
AREA=	109.7	133.0	92.1	93.6	68.2	26.7	
VEL=	4.9	4.9	5.2	5.3	4.9	3.4	
DEPTH=	4.2	4.2	4.5	4.6	4.1	3.1	

THIS RUN EXECUTED 10SEP92 9:57:23

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Deadman Wash 100-year Q

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	.092	9600.00	1482.73	10.13	1472.60	1484.09	1482.73	10.89	137.27	.00	9948.23	567.28	10515.51
*	.092	9600.00	1483.02	10.42	1472.60	1485.08	1483.02	12.46	171.92	.00	9948.00	267.00	10215.00
*	.159	9600.00	1486.55	12.35	1474.20	1487.10	1485.25	7.53	51.19	354.00	9965.66	657.40	10623.06
*	.159	9600.00	1487.54	13.34	1474.20	1488.10	1485.03	7.24	44.46	354.00	9974.00	322.00	10296.00
*	.202	9600.00	1487.63	14.93	1472.70	1487.80	1483.70	4.48	17.97	227.00	9962.10	757.57	10719.68
*	.202	9600.00	1488.51	15.81	1472.70	1488.71	1483.53	4.25	15.68	227.00	9968.00	372.00	10340.00
	.299	9600.00	1488.59	14.79	1473.80	1488.74	1485.96	4.66	26.48	512.00	9861.00	1009.42	10870.42
*	.299	9600.00	1489.39	15.59	1473.80	1489.69	1485.81	5.49	32.29	512.00	9970.00	390.00	10360.00
	.382	9600.00	1490.24	10.94	1479.30	1490.60	1487.65	6.62	50.84	438.00	9797.20	615.68	10412.88
	.382	9600.00	1491.27	11.97	1479.30	1491.77	1487.81	7.14	50.85	438.00	9912.00	264.00	10176.00
*	.516	9600.00	1494.15	8.95	1485.20	1497.01	1493.78	13.56	111.72	708.00	9963.65	107.35	10071.00
	.516	9600.00	1494.88	9.68	1485.20	1497.19	1493.78	12.20	81.29	708.00	9962.09	109.91	10072.00
*	.618	9670.00	1498.91	9.01	1489.90	1499.05	1495.29	4.43	9.71	539.00	9690.00	730.00	10420.00
*	.618	9670.00	1499.06	9.16	1489.90	1499.30	1495.60	5.38	13.89	539.00	9820.00	480.00	10300.00
	.721	9670.00	1499.39	7.29	1492.10	1499.45	1496.66	3.93	8.69	544.00	9789.45	1401.95	11463.60
	.721	9670.00	1499.80	7.70	1492.10	1499.97	1497.13	5.77	17.21	544.00	9875.00	655.00	10530.00
*	.803	9670.00	1499.76	6.46	1493.30	1499.92	1498.17	5.93	26.55	433.00	9772.09	1229.72	11001.81
*	.803	9670.00	1500.47	7.17	1493.30	1500.81	1498.63	7.65	37.21	433.00	9986.00	524.00	10510.00
	.909	9670.00	1501.32	5.82	1495.50	1501.52	1500.14	5.76	43.16	560.00	9789.75	1245.92	11035.66
	.909	9670.00	1502.28	6.78	1495.50	1502.53	1500.62	5.94	34.13	560.00	9939.00	731.00	10670.00
	.988	9670.00	1503.26	6.86	1496.40	1503.58	1502.61	8.69	56.62	417.00	9697.31	1297.70	10995.01
	.988	9670.00	1503.92	7.52	1496.40	1504.40	1503.07	9.51	58.02	417.00	9983.00	637.00	10620.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	1.079	9670.00	1505.78	7.08	1498.70	1506.13	1505.17	8.43	48.44	480.00	9734.08	1225.90	10959.98
	1.079	9670.00	1506.43	7.73	1498.70	1506.84	1505.30	8.46	42.12	480.00	9963.00	717.00	10680.00
	1.199	9670.00	1508.96	8.66	1500.30	1509.86	1508.72	11.77	66.32	634.00	9945.20	787.54	10732.73
	1.199	9670.00	1509.26	8.96	1500.30	1510.21	1508.88	11.74	62.56	634.00	9982.00	518.00	10500.00
*	1.313	9670.00	1511.82	8.22	1503.60	1512.06	1510.78	6.31	28.25	602.00	9527.62	1350.48	10878.10
	1.313	9670.00	1512.30	8.70	1503.60	1512.76	1511.08	7.84	38.97	602.00	9854.00	568.00	10422.00
*	1.419	9670.00	1514.39	8.29	1506.10	1515.35	1514.39	11.62	84.64	560.00	9650.33	880.68	10681.37
*	1.419	9670.00	1514.84	8.74	1506.10	1516.35	1514.84	13.25	100.00	560.00	9962.00	402.00	10364.00
	1.527	9670.00	1518.03	10.23	1507.80	1518.81	1517.68	11.21	51.40	570.00	9388.28	1060.34	10547.75
*	1.527	9670.00	1518.94	11.14	1507.80	1519.84	1517.79	11.18	44.73	570.00	9739.00	349.00	10088.00
	1.620	9670.00	1520.65	7.15	1513.50	1521.11	1519.92	9.32	47.87	491.00	9421.74	1003.22	10493.64
	1.620	9670.00	1521.36	7.86	1513.50	1522.29	1520.62	11.72	65.71	491.00	9702.00	427.01	10158.00
*	1.717	9670.00	1523.51	8.71	1514.80	1524.37	1523.51	10.89	65.91	512.00	9604.26	1111.80	10959.66
	1.717	9670.00	1524.33	9.53	1514.80	1525.45	1524.16	11.55	63.18	512.00	9740.00	683.68	10423.68
	1.811	9670.00	1526.12	8.92	1517.20	1526.29	1525.07	5.39	36.81	496.00	9690.03	1627.16	11317.19
*	1.811	9670.00	1527.17	9.97	1517.20	1527.37	1525.67	5.66	31.56	496.00	9740.00	930.00	10670.00
*	1.909	9570.00	1528.49	9.99	1518.50	1529.02	1528.10	9.15	80.90	517.00	9394.75	1134.13	10993.73
*	1.909	9570.00	1529.20	10.70	1518.50	1529.85	1528.61	9.49	75.46	517.00	9538.00	612.00	10150.00
*	2.004	9570.00	1532.86	9.26	1523.60	1533.49	1532.86	11.21	94.19	502.00	9047.30	1748.86	11053.87
*	2.004	9570.00	1533.50	9.90	1523.60	1534.55	1533.50	12.75	109.33	502.00	9560.00	730.00	10290.00
	2.060	9570.00	1535.07	9.27	1525.80	1535.53	1534.62	8.67	58.40	296.00	9602.55	1288.75	11029.45
*	2.060	9570.00	1536.02	10.22	1525.80	1536.53	1535.14	8.49	47.51	296.00	9630.00	690.00	10320.00
	2.142	9570.00	1537.14	9.54	1527.60	1537.61	1536.83	8.97	60.07	433.00	9009.75	1669.84	10679.59
	2.142	9570.00	1537.69	10.09	1527.60	1538.27	1536.79	9.08	55.92	433.00	9440.00	606.00	10046.00
	2.233	9570.00	1540.18	8.88	1531.30	1540.52	1539.84	9.02	60.66	480.00	8887.08	1868.34	10755.42
	2.233	9570.00	1540.74	9.44	1531.30	1541.33	1540.13	10.35	72.58	480.00	9640.00	622.00	10262.00
	2.326	9570.00	1542.98	7.28	1535.70	1543.21	1542.26	6.30	59.10	491.00	9114.05	1627.43	11057.30
	2.326	9570.00	1543.89	8.19	1535.70	1544.26	1542.54	6.82	56.14	491.00	9730.00	590.00	10320.00
	2.406	9570.00	1545.74	10.44	1535.30	1546.24	1545.55	9.20	88.08	422.00	9388.10	1489.53	10890.84
	2.406	9570.00	1546.54	11.24	1535.30	1547.23	1546.17	9.86	88.41	422.00	9748.00	670.00	10418.00
	2.500	9570.00	1549.22	9.02	1540.20	1549.45	1548.73	6.82	54.85	496.00	9056.06	1754.29	10810.35
	2.500	9570.00	1550.08	9.88	1540.20	1550.43	1549.14	7.34	53.84	496.00	9405.00	811.00	10216.00
*	2.595	9570.00	1552.65	12.35	1540.30	1553.45	1552.65	10.79	113.07	502.00	9064.75	1280.65	10605.09
	2.595	9570.00	1553.31	13.01	1540.30	1554.13	1553.10	10.52	97.42	502.00	9340.00	684.00	10024.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	2.689	9570.00	1555.30	11.40	1543.90	1555.46	1553.72	4.87	22.53	496.00	9006.84	1176.12	10182.96
*	2.689	9570.00	1555.99	12.09	1543.90	1556.22	1554.12	5.34	27.49	496.00	9400.00	637.00	10037.00
*	2.777	9570.00	1556.69	10.39	1546.30	1557.49	1556.66	10.04	100.70	465.00	9262.96	1059.43	10348.88
*	2.777	9570.00	1557.50	11.20	1546.30	1558.46	1556.84	10.12	89.22	465.00	9779.00	414.00	10193.00
*	2.872	9570.00	1560.21	10.61	1549.60	1560.53	1559.06	6.92	47.51	502.00	9488.13	1072.97	10561.11
	2.872	9570.00	1560.99	11.39	1549.60	1561.50	1559.39	7.75	52.31	502.00	9810.00	412.00	10222.00
	2.947	9570.00	1562.22	11.22	1551.00	1562.76	1561.70	8.22	74.91	396.00	9290.04	870.18	10160.22
	2.947	9570.00	1563.07	12.07	1551.00	1563.74	1562.12	8.45	67.86	396.00	9600.00	439.00	10039.00
	3.023	9570.00	1564.63	9.53	1555.10	1564.99	1563.66	7.09	53.33	401.00	9340.31	896.33	10311.51
	3.023	9570.00	1565.40	10.30	1555.10	1565.97	1564.10	8.12	60.68	401.00	9618.00	447.00	10065.00
	3.117	9570.00	1567.11	9.31	1557.80	1567.72	1566.59	9.22	92.32	496.00	9660.52	923.60	10618.40
	3.117	9570.00	1567.98	10.18	1557.80	1568.69	1566.73	9.10	76.87	496.00	9976.00	351.00	10327.00
	3.209	9570.00	1570.01	10.91	1559.10	1570.34	1569.07	7.29	59.21	486.00	9517.29	1117.01	10634.30
	3.209	9570.00	1570.74	11.64	1559.10	1571.30	1569.22	8.32	68.23	486.00	9799.00	357.00	10156.00

Deadman Wash 100-year Q

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.092	1482.73	.01	1484.09	567.28	.00	6789.83	2810.17	.00	.00	9947.20	10030.10	.00
*	.092	1483.02	.29	1485.08	267.00	.00	8069.29	1530.71	267.00	9948.00	9947.20	10030.10	10215.00
*	.159	1486.55	.00	1487.10	657.40	27.98	5444.94	4127.07	.00	.00	9974.00	10052.60	.00
*	.159	1487.54	.99	1488.10	322.00	.00	5798.27	3801.73	322.00	9974.00	9974.00	10052.60	10296.00
*	.202	1487.63	.00	1487.80	757.57	12.94	2899.57	6687.49	.00	.00	9967.90	10037.30	.00
*	.202	1488.51	.88	1488.71	372.00	.00	3009.14	6590.86	372.00	9968.00	9967.90	10037.30	10340.00
	.299	1488.59	.00	1488.74	1009.42	832.25	2262.76	6504.99	.00	.00	9970.10	10031.10	.00
*	.299	1489.39	.80	1489.69	390.00	.09	2933.69	6666.22	390.00	9970.00	9970.10	10031.10	10360.00
	.382	1490.24	.00	1490.60	615.68	2759.97	3180.39	3659.64	.00	.00	9958.60	10015.20	.00
	.382	1491.27	1.03	1491.77	264.00	2109.56	3846.58	3643.86	264.00	9912.00	9958.60	10015.20	10176.00
*	.516	1494.15	.00	1497.01	107.35	.00	9600.00	.00	.00	.00	9828.10	10114.20	.00
	.516	1494.88	.73	1497.19	109.91	.00	9600.00	.00	110.00	9962.00	9828.10	10114.20	10072.00
*	.618	1498.91	.00	1499.05	730.00	1751.68	2793.14	5125.18	730.00	9690.00	9961.30	10051.60	10420.00
*	.618	1499.06	.15	1499.30	480.00	1840.66	3457.62	4371.72	480.00	9820.00	9961.30	10051.60	10300.00
	.721	1499.39	.00	1499.45	1401.95	1068.85	844.43	7756.72	.00	.00	9989.40	10022.50	.00
	.721	1499.80	.42	1499.97	655.00	1341.70	1317.36	7010.94	655.00	9875.00	9989.40	10022.50	10530.00
*	.803	1499.76	.00	1499.92	1229.72	412.13	1190.33	8067.54	.00	.00	9986.30	10025.50	.00
*	.803	1500.47	.70	1500.81	524.00	.74	1748.53	7920.73	524.00	9986.00	9986.30	10025.50	10510.00
	.909	1501.32	.00	1501.52	1245.92	271.49	1804.41	7594.10	.00	.00	9938.60	10031.20	.00
	.909	1502.28	.96	1502.53	731.00	.00	2382.74	7287.25	731.00	9939.00	9938.60	10031.20	10670.00
	.988	1503.26	.00	1503.58	1297.70	1328.75	1628.34	6712.91	.00	.00	9993.40	10028.70	.00
	.988	1503.92	.66	1504.40	637.00	129.74	2002.97	7537.29	637.00	9983.00	9993.40	10028.70	10620.00
	1.079	1505.78	.00	1506.13	1225.90	1098.39	2108.89	6462.71	.00	.00	9975.60	10020.60	.00
	1.079	1506.43	.65	1506.84	717.00	121.14	2361.90	7186.96	717.00	9963.00	9975.60	10020.60	10680.00
	1.199	1508.96	.00	1509.86	787.54	364.39	3459.12	5846.49	.00	.00	9982.30	10022.90	.00
	1.199	1509.26	.30	1510.21	518.00	1.32	3594.40	6074.28	518.00	9982.00	9982.30	10022.90	10500.00
*	1.313	1511.82	.00	1512.06	1350.48	2680.86	2600.48	4388.65	.00	.00	9964.60	10041.70	.00
	1.313	1512.30	.48	1512.76	568.00	1445.23	3521.65	4703.12	568.00	9854.00	9964.60	10041.70	10422.00
*	1.419	1514.39	.00	1515.35	880.68	1281.75	3856.23	4532.02	.00	.00	9971.60	10027.00	.00
*	1.419	1514.84	.45	1516.35	402.00	171.18	4723.50	4775.31	402.00	9962.00	9971.60	10027.00	10364.00
	1.527	1518.03	.00	1518.81	1060.34	4225.28	3277.81	2166.91	.00	.00	9987.80	10021.80	.00
*	1.527	1518.94	.91	1519.84	349.00	4472.18	3618.00	1579.82	349.00	9739.00	9987.80	10021.80	10088.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.620	1520.65	.00	1521.11	1003.22	3985.11	2251.60	3433.28	.00	.00	9988.40	10025.90	.00
	1.620	1521.36	.71	1522.29	427.01	4247.76	3143.85	2278.39	456.00	9702.00	9988.40	10025.90	10158.00
*	1.717	1523.51	.00	1524.37	1111.80	1869.55	4007.25	3793.20	.00	.00	9975.40	10031.70	.00
	1.717	1524.33	.83	1525.45	683.68	2033.22	4786.14	2850.64	684.00	9740.00	9975.40	10031.70	10424.00
	1.811	1526.12	.00	1526.29	1627.16	1546.08	1574.22	6549.70	.00	.00	9978.10	10035.90	.00
*	1.811	1527.17	1.05	1527.37	930.00	2498.63	1992.90	5178.47	930.00	9740.00	9978.10	10035.90	10670.00
*	1.909	1528.49	.00	1529.02	1134.13	4957.25	2789.61	1823.13	.00	.00	9981.20	10029.00	.00
*	1.909	1529.20	.71	1529.85	612.00	5273.53	3216.00	1080.46	612.00	9538.00	9981.20	10029.00	10150.00
*	2.004	1532.86	.00	1533.49	1748.86	3304.90	2490.71	3774.39	.00	.00	9985.80	10015.20	.00
*	2.004	1533.50	.64	1534.55	730.00	2365.83	3074.98	4129.19	730.00	9560.00	9985.80	10015.20	10290.00
	2.060	1535.07	.00	1535.53	1288.75	590.18	2847.66	6132.16	.00	.00	9972.80	10018.20	.00
*	2.060	1536.02	.95	1536.53	690.00	1540.28	3149.92	4879.80	690.00	9630.00	9972.80	10018.20	10320.00
	2.142	1537.14	.00	1537.61	1669.84	5039.37	2880.27	1650.36	.00	.00	9977.70	10020.20	.00
	2.142	1537.69	.56	1538.27	606.00	5871.39	3131.67	566.94	606.00	9440.00	9977.70	10020.20	10046.00
	2.233	1540.18	.00	1540.52	1868.34	3576.99	1740.61	4252.40	.00	.00	9990.80	10016.00	.00
	2.233	1540.74	.56	1541.33	622.00	3393.32	2140.98	4035.69	622.00	9640.00	9990.80	10016.00	10262.00
	2.326	1542.98	.00	1543.21	1627.43	2107.61	1953.21	5509.18	.00	.00	9984.40	10042.20	.00
	2.326	1543.89	.91	1544.26	590.00	3163.98	2475.46	3930.56	590.00	9730.00	9984.40	10042.20	10320.00
	2.406	1545.74	.00	1546.24	1489.53	2707.96	2856.46	4005.58	.00	.00	9977.30	10018.40	.00
	2.406	1546.54	.80	1547.23	670.00	2029.28	3385.57	4155.15	670.00	9748.00	9977.30	10018.40	10418.00
	2.500	1549.22	.00	1549.45	1754.29	4686.35	1971.41	2912.24	.00	.00	9978.90	10023.00	.00
	2.500	1550.08	.86	1550.43	811.00	5236.42	2401.03	1932.55	811.00	9405.00	9978.90	10023.00	10216.00
*	2.595	1552.65	.00	1553.45	1280.65	4642.24	3504.74	1423.02	.00	.00	9985.10	10023.70	.00
	2.595	1553.31	.65	1554.13	684.00	5888.08	3680.86	1.06	684.00	9340.00	9985.10	10023.70	10024.00
*	2.689	1555.30	.00	1555.46	1176.12	5730.53	2475.49	1363.99	.00	.00	9971.40	10037.40	.00
*	2.689	1555.99	.68	1556.22	637.00	6627.19	2942.81	.00	637.00	9400.00	9971.40	10037.40	10037.00
*	2.777	1556.69	.00	1557.49	1059.43	1624.80	3905.07	4040.12	.00	.00	9976.80	10029.10	.00
*	2.777	1557.50	.81	1558.46	414.00	1230.10	4362.60	3977.30	414.00	9779.00	9976.80	10029.10	10193.00
*	2.872	1560.21	.00	1560.53	1072.97	3025.88	2643.76	3900.36	.00	.00	9978.40	10028.80	.00
	2.872	1560.99	.78	1561.50	412.00	2559.98	3266.71	3743.31	412.00	9810.00	9978.40	10028.80	10222.00
	2.947	1562.22	.00	1562.76	870.18	5304.06	3815.05	450.89	.00	.00	9971.00	10038.80	.00
	2.947	1563.07	.85	1563.74	439.00	5164.17	4405.28	.55	439.00	9600.00	9971.00	10038.80	10039.00
	3.023	1564.63	.00	1564.99	896.33	4442.52	2871.02	2256.46	.00	.00	9969.50	10028.00	.00
	3.023	1565.40	.77	1565.97	447.00	4822.45	3652.43	1095.12	447.00	9618.00	9969.50	10028.00	10065.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
3.117	1567.11	.00	1567.72	923.60	935.50	2955.82	5678.68	.00	.00	9976.40	10022.50	.00
3.117	1567.98	.88	1568.69	351.00	1.11	3283.05	6285.84	351.00	9976.00	9976.40	10022.50	10327.00
3.209	1570.01	.00	1570.34	1117.01	4273.77	1940.92	3355.31	.00	.00	9982.40	10017.80	.00
3.209	1570.74	.72	1571.30	357.00	4237.51	2426.45	2906.04	357.00	9799.00	9982.40	10017.80	10156.00

SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO=	.092	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	.092	PROFILE=	2	CRITICAL DEPTH ASSUMED
WARNING SECNO=	.159	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.159	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.202	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.202	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.299	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.516	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.618	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.618	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.803	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	.803	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	1.313	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=	1.419	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	1.419	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	1.419	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	1.419	PROFILE=	2	MINIMUM SPECIFIC ENERGY
WARNING SECNO=	1.527	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=	1.717	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	1.717	PROFILE=	1	MINIMUM SPECIFIC ENERGY
WARNING SECNO=	1.811	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	1.909	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	1.909	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=	2.004	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	2.004	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	2.004	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	2.004	PROFILE=	2	MINIMUM SPECIFIC ENERGY
WARNING SECNO=	2.060	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	2.595	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	2.689	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	2.689	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	2.777	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	2.777	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 2.872 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.092	267.	1039.	9.2	1483.0	1482.7	.3
.159	322.	1957.	4.9	1487.6	1486.6	1.0
.202	372.	2730.	3.5	1488.5	1487.6	.9
.299	390.	2325.	4.1	1489.4	1488.6	.8
.382	264.	1866.	5.1	1491.2	1490.2	1.0
.516	110.	787.	12.2	1494.9	1494.2	.7
.618	480.	2893.	3.3	1499.1	1498.9	.2
.721	655.	3285.	2.9	1499.8	1499.4	.4
.803	524.	2339.	4.1	1500.5	1499.8	.7
.909	731.	2713.	3.6	1502.3	1501.3	1.0
.988	637.	2180.	4.4	1504.0	1503.3	.7
1.079	717.	2451.	3.9	1506.4	1505.8	.6
1.199	518.	1823.	5.3	1509.3	1509.0	.3
1.313	568.	2258.	4.3	1512.3	1511.8	.5
1.419	402.	1394.	6.9	1514.8	1514.4	.4
1.527	349.	1762.	5.5	1518.9	1518.0	.9
1.620	456.	1656.	5.8	1521.3	1520.6	.7
1.717	684.	1821.	5.3	1524.3	1523.5	.8
1.811	930.	3052.	3.2	1527.1	1526.1	1.0
1.909	612.	1882.	5.1	1529.2	1528.5	.7
2.004	730.	1699.	5.6	1533.5	1532.9	.6
2.060	690.	2203.	4.3	1536.0	1535.1	.9
2.142	606.	2024.	4.7	1537.7	1537.1	.6
2.233	622.	1977.	4.8	1540.8	1540.2	.6
2.326	590.	2166.	4.4	1543.9	1543.0	.9
2.406	670.	1880.	5.1	1546.5	1545.7	.8
2.500	811.	2454.	3.9	1550.1	1549.2	.9
2.595	684.	1796.	5.3	1553.4	1552.7	.7
2.689	637.	2781.	3.4	1556.0	1555.3	.7
2.777	414.	1494.	6.4	1557.5	1556.7	.8
2.872	412.	1884.	5.1	1561.0	1560.2	.8
2.947	439.	1710.	5.6	1563.0	1562.2	.8
3.023	447.	1827.	5.2	1565.4	1564.6	.8
3.117	351.	1582.	6.0	1568.0	1567.1	.9
3.209	357.	1706.	5.6	1570.7	1570.0	.7

Normal program termination

HEC2 S/N: 1126460209 HMVersion: 6.40 Data File: dm2fw.hc2

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    10SEP92    TIME   12:07:46 *
*******************************************
```

```
****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*          (916) 756-1104              *
****************************************
```

```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
```

```
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```

```
============================
H A E S T A D   M E T H O D S
============================
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 10SEP92 12:07:46

```
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study
T2      Natural Profile Run for Deadman Wash, SECNO 3.209 to SECNO 4.662
T3      Deadman Wash 100-year Q   Subcritical Flow,   July 1992 (revised 9/92)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              2                                                          1570.01

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                -1                                   -1                         15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        8       42        3        2       26        5       39
    53        4       54      110      200

QT       2     9570     9570
NC    .065     .065     .055       .1       .3
ET                      9.1                                                     9799     10156
          ************************************************************
          Tributary stream profile calculations were performed to
          solve the flow split ratios through this split reach.

          ET cards (Fields 7 & 8) were used in the natural profile run
          for SECNO 3.347 thru 4.390 to model the image boundary line
          between the Deadman Wash and Stream No. 12.

          Special culvert method was used for the pipe culvert on
          Stream No. 12 across the Carefree Highway.

          The starting water surface elevations were obtained from the
          HEC-2 results for the downstream reach.

          Q is approximately 9,510 cfs to Carefree Highway, and
          9,110 cfs south of the highway.

          ************************************************************
          Q is 9,570 cfs at this section.
```

```
        NC card was used, channel = .055, overbanks = .065.
X1    3.209       60    9982.4   10017.8        0        0        0
GR   1572.2   9355.8    1572.4    9413.0   1571.4   9458.5   1570.4   9499.6   1569.7   9531.8
GR   1569.5   9579.9    1569.2    9608.0   1569.2   9626.5   1569.3   9648.5   1568.3   9678.4
GR   1567.2   9708.6    1567.6    9722.5   1568.8   9750.3   1569.0   9760.3   1568.3   9769.4
GR   1565.9   9782.4    1564.5    9789.5   1564.2   9800.7   1565.9   9810.7   1566.0   9832.2
GR   1566.4   9856.7    1566.7    9873.6   1566.2   9896.1   1565.7   9909.0   1566.0   9935.3
GR   1566.2   9947.8    1567.0    9957.4   1567.3   9972.0   1567.1   9982.4   1566.2   9986.1
GR   1559.8   9993.6    1559.1    9999.0   1559.3  10000.0   1559.2  10005.6   1565.6  10012.5
GR   1566.7  10017.8    1566.4   10033.2   1566.6  10059.1   1566.4  10090.5   1566.0  10110.8
GR   1566.2  10131.0    1567.0   10147.5   1569.4  10164.7   1569.8  10178.3   1569.2  10198.7
GR   1569.1  10229.4    1568.0   10254.4   1568.0  10294.4   1568.0  10329.7   1568.2  10368.0
GR   1568.4  10399.7    1568.4   10442.4   1568.9  10498.8   1569.5  10549.7   1569.5  10595.7
GR   1570.0  10633.6    1570.6   10660.7   1571.2  10704.9   1571.3  10745.5   1572.3  10835.9

QT       2      9110      9110
ET                        9.1                                                     9679     10050
        Q changed to 9,110 cfs (C10T) at the confluence with Stream
        No. 12
X1    3.284       47    9972.4   10043.6      320      440      396
GR   1573.0   9265.0    1570.9    9412.1   1571.4   9449.7   1570.5   9483.4   1569.8   9518.5
GR   1570.1   9546.0    1570.7    9577.1   1570.7   9594.0   1571.1   9617.8   1570.7   9638.9
GR   1570.0   9651.2    1569.5    9677.9   1569.6   9730.3   1569.4   9775.5   1568.7   9796.2
GR   1567.2   9816.3    1566.9    9829.0   1567.5   9848.4   1567.9   9887.9   1568.5   9905.7
GR   1568.6   9931.6    1568.1    9957.5   1568.5   9972.4   1567.7   9981.8   1563.2   9988.5
GR   1562.1  10000.0    1562.4   10006.6   1567.2  10020.2   1569.2  10043.6   1569.6  10061.8
GR   1569.4  10087.6    1569.4   10109.3   1569.7  10144.8   1571.4  10191.5   1572.7  10241.0
GR   1574.1  10278.3    1574.0   10306.6   1573.3  10364.2   1572.0  10441.7   1571.3  10475.1
GR   1571.3  10526.2    1571.9   10559.0   1573.7  10638.8   1574.7  10749.3   1575.4  10861.0
GR   1576.0  10991.8    1576.1   11109.3

QT       2      6200      6200
NC    .065       .065      .048
ET                        7.1       9.1                                   9756.9   11243.4   9756.9     10038
        Q changed to 6,200 cfs for the main channel, 68% of total flow.
X1    3.347       65    9922.8   10038.2      350      200      333
GR   1574.8   9205.8    1574.0    9271.4   1573.4   9285.4   1573.1   9325.0   1573.1   9382.7
GR   1573.3   9435.3    1573.3    9470.1   1573.0   9508.7   1573.0   9543.8   1571.5   9566.0
GR   1570.4   9571.8    1566.4    9584.3   1566.3   9588.0   1569.2   9602.3   1570.7   9619.2
GR   1570.4   9628.9    1570.0    9637.1   1570.9   9673.3   1570.9   9702.1   1570.7   9713.3
GR   1569.4   9721.8    1570.8    9729.1   1570.1   9738.3   1571.1   9756.9   1571.1   9782.1
GR   1570.6   9796.0    1571.3    9809.8   1572.7   9828.3   1572.9   9853.8   1572.8   9856.2
GR   1572.1   9890.7    1570.7    9922.8   1569.7   9960.8   1568.3   9989.0   1566.1   9993.8
GR   1565.6  10000.0    1565.6   10004.6   1568.0  10013.3   1571.2  10027.9   1571.7  10038.2
GR   1571.3  10052.7    1570.9   10065.0   1572.6  10086.2   1573.2  10106.1   1572.5  10155.5
GR   1572.1  10208.9    1572.5   10243.4   1574.3  10294.2   1574.5  10296.7   1574.1  10332.1
GR   1572.8  10410.1    1572.1   10458.0   1571.8  10489.1   1572.3  10530.3   1573.1  10570.7
GR   1574.1  10619.6    1574.9   10679.4   1574.9  10736.5   1575.2  10818.7   1575.8  10901.3
GR   1576.0  11012.2    1576.9   11092.5   1577.3  11163.0   1577.1  11241.4   1577.1  11243.4
```

ET		7.1	9.1				9673.4	11110.7	9700	10090
X1	3.385	77	9946.8	10089.8	215	215	201			
GR	1577.5	8930.9	1576.8	8950.6	1576.6	9008.3	1576.1	9076.7	1576.2	9139.7
GR	1575.5	9192.0	1575.0	9212.3	1575.2	9246.8	1575.4	9276.9	1576.0	9304.0
GR	1575.4	9316.8	1574.3	9338.4	1575.2	9366.3	1575.1	9371.8	1574.0	9410.8
GR	1571.5	9416.4	1572.7	9433.9	1573.5	9457.0	1572.4	9467.3	1571.6	9472.9
GR	1571.1	9479.4	1573.4	9490.2	1574.6	9506.5	1574.6	9524.8	1573.8	9534.5
GR	1569.7	9542.5	1569.7	9546.0	1571.3	9562.3	1572.9	9572.7	1572.5	9593.2
GR	1573.7	9612.8	1574.5	9647.6	1575.1	9673.4	1574.6	9690.2	1573.4	9721.8
GR	1572.8	9761.3	1572.4	9787.2	1573.0	9811.4	1573.1	9846.6	1572.8	9864.2
GR	1571.1	9876.1	1572.2	9892.2	1573.1	9924.7	1573.4	9946.8	1572.6	9959.0
GR	1570.4	9973.8	1569.8	9980.2	1571.3	9989.6	1570.7	9996.8	1568.3	10000.0
GR	1568.2	10006.1	1570.0	10012.4	1570.0	10023.7	1570.5	10042.5	1571.0	10060.3
GR	1574.2	10089.8	1575.0	10109.0	1575.4	10145.3	1574.8	10196.7	1574.0	10229.7
GR	1574.1	10262.7	1574.4	10315.5	1573.9	10339.1	1573.6	10359.4	1573.8	10401.1
GR	1574.8	10434.9	1575.5	10458.1	1576.3	10486.4	1576.1	10516.5	1575.8	10539.0
GR	1576.2	10565.8	1576.7	10631.5	1577.3	10740.2	1577.8	10851.5	1577.7	10957.6
GR	1578.4	11073.4	1578.8	11110.7						
ET		7.1	9.1				9522.6	11221.5	9700	10120
X1	3.481	89	9954.9	10065.6	450	550	507			
GR	1579.6	8610.4	1579.5	8676.1	1579.2	8757.2	1578.8	8823.4	1578.6	8879.7
GR	1578.4	8965.6	1578.0	9040.0	1578.2	9111.4	1578.2	9149.4	1578.7	9154.2
GR	1579.8	9175.3	1578.9	9185.1	1576.7	9198.6	1576.8	9211.4	1577.5	9227.9
GR	1577.0	9239.2	1577.6	9249.7	1576.8	9254.9	1577.4	9263.0	1577.7	9269.1
GR	1577.2	9274.7	1575.5	9279.9	1573.2	9286.3	1571.9	9295.3	1574.9	9308.6
GR	1575.5	9320.4	1578.0	9329.5	1577.6	9332.5	1576.4	9339.3	1576.8	9356.2
GR	1572.7	9362.2	1576.8	9375.0	1576.0	9391.7	1576.4	9413.8	1576.3	9430.5
GR	1575.3	9440.9	1577.1	9461.9	1577.2	9489.2	1577.3	9522.6	1577.1	9556.1
GR	1578.0	9569.6	1577.6	9579.6	1576.8	9594.5	1576.7	9618.6	1576.0	9632.9
GR	1576.7	9650.0	1577.0	9665.8	1576.5	9683.7	1577.1	9714.8	1577.1	9762.3
GR	1577.3	9790.8	1578.0	9806.8	1577.8	9818.8	1577.1	9839.8	1577.5	9862.1
GR	1578.3	9888.8	1578.4	9916.0	1577.9	9936.7	1576.9	9954.9	1573.8	9978.5
GR	1573.9	9987.6	1574.0	9995.0	1572.1	10000.0	1572.9	10005.2	1574.0	10020.9
GR	1575.3	10041.7	1576.6	10065.6	1577.2	10082.6	1577.0	10097.8	1577.6	10133.6
GR	1577.8	10153.2	1576.9	10182.0	1576.7	10207.9	1576.4	10243.7	1576.4	10277.1
GR	1576.4	10292.9	1577.0	10314.7	1577.8	10341.7	1578.9	10372.2	1579.9	10419.7
GR	1580.3	10464.3	1580.8	10509.2	1581.7	10602.0	1582.6	10697.2	1582.8	10787.1
GR	1582.7	10898.3	1582.8	11003.4	1583.4	11123.9	1583.7	11221.5		
ET		7.1	9.1				9285.2	11219.7	9700	10200
X1	3.546	95	9924.5	10034.8	400	300	343			
GR	1582.5	8010.0	1582.0	8060.0	1581.3	8295.1	1580.7	8400.3	1580.1	8493.5
GR	1580.2	8505.1	1581.0	8564.3	1580.9	8577.0	1579.7	8585.1	1576.7	8593.0
GR	1576.1	8598.3	1576.6	8603.5	1580.3	8621.8	1580.2	8650.3	1580.5	8732.8
GR	1580.6	8738.7	1580.1	8822.7	1579.8	8861.9	1580.3	8878.1	1579.2	8888.3
GR	1579.7	8891.9	1578.0	8900.8	1579.5	8910.7	1580.1	8922.5	1579.3	8933.2
GR	1578.2	8941.0	1579.5	8949.9	1578.9	8955.5	1580.5	8970.3	1581.1	9001.8
GR	1580.2	9029.0	1580.5	9064.9	1580.5	9090.8	1580.8	9106.9	1581.2	9120.4
GR	1581.2	9135.5	1580.1	9145.5	1578.2	9159.3	1578.2	9171.5	1578.0	9190.6
GR	1577.6	9203.8	1579.0	9216.8	1580.2	9228.5	1580.2	9246.0	1580.4	9270.1
GR	1579.7	9285.2	1580.3	9326.1	1580.4	9378.0	1580.4	9405.5	1581.5	9416.2
GR	1581.1	9447.7	1580.9	9504.2	1581.0	9517.0	1581.3	9559.4	1581.2	9606.5

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GR   1579.5    9642.9    1578.9    9675.6    1579.8    9702.4    1579.9    9726.5    1580.8    9747.6
GR   1580.6    9775.9    1579.5    9810.0    1578.8    9838.5    1579.3    9862.0    1579.2    9886.9
GR   1579.3    9911.9    1579.1    9924.5    1577.5    9937.8    1576.7    9948.4    1577.4    9954.7
GR   1577.5    9972.9    1577.8    9993.9    1578.2   10000.0    1579.7   10019.9    1580.4   10034.8
GR   1580.1   10071.1    1579.7   10129.6    1579.4   10184.5    1579.5   10227.9    1579.4   10266.9
GR   1580.4   10287.7    1581.3   10318.7    1582.1   10354.2    1583.0   10408.7    1583.0   10476.2
GR   1583.1   10554.0    1584.1   10637.0    1584.4   10708.6    1585.0   10793.5    1585.0   10883.5
GR   1584.3   10966.3    1584.4   11051.0    1584.0   11110.7    1584.2   11188.7    1584.3   11219.7

NC    .016      .016      .016
ET              7.1       9.1                                    8870.7   11307.8     9720     10231
          Downstream (south) side edge of Carefree Highway pavement.
          NC card was used to model the dip section "n" = .016.
X1   3.639       46    9838.3   10230.8       650       440       491
GR   1596.0    7219.3    1595.0    7370.7    1594.4    7511.8    1594.3    7637.2    1593.5    7793.7
GR   1593.0    7896.5    1593.0    7910.3    1593.4    7923.3    1592.7    8017.9    1592.2    8094.5
GR   1591.3    8178.9    1589.9    8347.3    1589.6    8471.3    1589.9    8533.2    1589.1    8758.9
GR   1588.9    8870.7    1588.6    8992.5    1588.3    9123.3    1587.7    9273.0    1587.0    9370.9
GR   1585.3    9513.4    1584.2    9561.1    1584.3    9604.1    1584.1    9664.4    1584.3    9717.0
GR   1584.2    9773.6    1584.4    9838.3    1584.1    9893.6    1583.9    9947.8    1583.9   10000.0
GR   1583.3   10055.1    1583.6   10079.8    1584.0   10144.3    1584.2   10230.8    1584.3   10334.0
GR   1585.1   10470.0    1586.0   10603.9    1586.1   10720.8    1587.0   10871.0    1587.0   10951.3
GR   1586.9   11034.1    1586.5   11111.0    1586.2   11167.6    1586.3   11204.5    1586.1   11280.3
GR   1586.1   11307.8

ET              7.1       9.1                                    8850.0   10812.0     9720     10245
          Upstream (north) side edge of Carefree Highway pavement.
X1   3.648       54    9797.2   10245.0        46        46        46
GR   1596.6    7212.1    1596.7    7285.1    1596.0    7362.4    1595.2    7422.6    1594.3    7496.8
GR   1594.4    7553.8    1594.4    7626.3    1592.9    7671.3    1594.1    7698.5    1594.3    7747.8
GR   1593.5    7797.7    1593.7    7847.4    1593.6    7894.8    1594.1    7926.1    1594.2    7960.7
GR   1593.7    7996.2    1593.2    8092.1    1592.1    8201.4    1591.4    8325.4    1591.4    8473.3
GR   1590.2    8525.0    1590.3    8731.8    1589.9    8924.9    1588.6    9141.3    1588.0    9290.0
GR   1587.1    9353.5    1586.3    9461.3    1585.2    9488.5    1585.6    9536.6    1585.0    9603.9
GR   1585.0    9674.7    1584.6    9706.3    1584.7    9727.4    1584.8    9768.9    1585.4    9797.2
GR   1584.8    9835.5    1584.5    9882.8    1584.9    9937.8    1584.4    9990.7    1584.6   10000.0
GR   1584.4   10040.3    1584.1   10079.4    1584.7   10122.1    1585.1   10160.1    1584.6   10201.4
GR   1585.6   10245.0    1585.9   10289.1    1586.5   10352.2    1586.8   10411.8    1587.1   10492.9
GR   1588.2   10576.3    1588.3   10660.4    1588.1   10745.8    1588.6   10812.0

NC    .065      .065      .048
ET              7.1       9.1                                    8850.0   10812.0     9720     10245
          NC card was used, channel = .048, overbanks = .065.
X1   3.651                                        17        17        17

ET              7.1       9.1                                    8784.0   10656.2     9580     10219
X1   3.710       62    9685.4   10219.0       110       240       312
GR   1591.6    8332.1    1590.5    8398.9    1590.6    8464.0    1590.2    8520.2    1589.8    8621.4
GR   1589.2    8654.5    1589.6    8692.6    1589.2    8715.5    1589.7    8740.7    1591.0    8767.9
GR   1591.0    8784.0    1590.9    8815.9    1590.2    8853.4    1590.0    8887.3    1589.9    8922.4
GR   1589.5    8958.9    1589.4    9006.5    1589.5    9046.2    1588.8    9094.0    1588.5    9142.9
GR   1588.4    9161.3    1587.8    9204.4    1588.2    9261.4    1588.7    9305.0    1588.9    9323.0
GR   1588.6    9333.5    1587.4    9351.2    1586.2    9381.1    1586.2    9399.2    1585.8    9422.6
GR   1585.9    9448.2    1586.4    9461.6    1587.5    9472.7    1588.7    9484.1    1587.9    9497.7
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GR   1587.5    9517.2    1586.4    9534.0    1586.4    9576.7    1586.2    9604.1    1586.4    9622.6
GR   1587.3    9655.5    1588.0    9685.4    1587.8    9733.8    1587.2    9788.9    1586.7    9829.2
GR   1587.1    9877.5    1586.6    9916.6    1586.2    9980.8    1586.1   10000.0    1586.1   10047.5
GR   1586.8   10123.9    1586.5   10165.7    1588.1   10219.0    1589.3   10263.4    1589.7   10316.1
GR   1589.6   10401.7    1590.7   10447.3    1590.6   10495.1    1590.4   10566.0    1591.4   10607.3
GR   1591.5   10653.9    1591.4   10656.2

QT       2       5230       5230
ET               7.1        9.1                                 8826.2   10283.1       9500      10164
         Q changed to 5,230 cfs in the main channel, 55% of total flow.
X1   3.804        56     9891.7   10163.3       400       520       496
GR   1592.8    8331.3    1591.4    8461.0    1590.8    8512.7    1590.8    8572.6    1590.2    8622.2
GR   1589.4    8687.6    1589.9    8726.6    1589.9    8758.6    1590.2    8771.3    1590.6    8786.4
GR   1591.9    8809.5    1591.7    8826.2    1591.8    8860.7    1590.9    8889.2    1590.2    8949.1
GR   1590.7    8956.1    1590.4    8997.6    1591.2    9027.3    1591.1    9048.0    1591.1    9077.8
GR   1591.0    9121.0    1590.4    9168.0    1589.7    9232.6    1589.5    9308.9    1589.9    9359.9
GR   1590.3    9405.0    1589.6    9419.6    1588.5    9432.0    1588.5    9439.3    1589.4    9452.8
GR   1589.0    9471.1    1589.8    9490.9    1589.6    9523.6    1589.5    9566.4    1589.7    9602.7
GR   1589.9    9624.6    1591.0    9644.6    1592.1    9687.9    1591.6    9725.6    1592.0    9779.2
GR   1592.0    9840.7    1591.5    9891.7    1590.7    9923.8    1591.0    9952.8    1590.6    9974.4
GR   1590.0    9987.2    1590.9   10000.0    1590.2   10036.9    1590.7   10076.4    1591.0   10113.2
GR   1591.4   10163.3    1592.4   10196.2    1592.4   10217.0    1593.8   10240.3    1595.4   10275.5
GR   1595.5   10283.1

ET               7.1        9.1                                 9032.5   10197.6       9480      10076
X1   3.881        61     9827.0   10075.8       380       420       407
GR   1596.0    7662.0    1594.8    7792.0    1594.0    7926.0    1592.0    7939.0    1590.5    7944.0
GR   1590.5    7956.0    1592.0    7961.0    1594.0    8160.0    1592.5    8312.0    1594.0    8406.0
GR   1594.4    8481.8    1594.7    8540.0    1594.5    8618.0    1593.8    8642.4    1592.8    8667.7
GR   1592.6    8683.4    1593.2    8704.7    1592.9    8741.7    1592.9    8765.4    1593.1    8816.8
GR   1592.5    8876.0    1592.4    8903.3    1592.5    8952.9    1592.8    8990.1    1593.7    9032.5
GR   1593.9    9090.6    1594.2    9147.3    1594.2    9187.9    1593.8    9214.0    1593.6    9237.2
GR   1593.9    9244.3    1594.4    9262.0    1594.5    9298.0    1593.9    9325.4    1593.1    9341.6
GR   1592.6    9352.5    1592.5    9372.3    1592.3    9390.5    1592.0    9417.8    1592.0    9444.6
GR   1592.4    9470.4    1592.8    9492.4    1593.1    9539.3    1593.0    9602.7    1593.1    9659.8
GR   1593.1    9710.9    1593.4    9760.1    1593.3    9797.6    1593.9    9827.0    1593.5    9861.7
GR   1593.7    9901.8    1593.9    9948.4    1593.8    9983.3    1593.9   10000.0    1593.8   10022.3
GR   1593.8   10040.2    1594.5   10075.8    1595.7   10109.4    1596.5   10141.4    1597.2   10171.5
GR   1597.7   10197.6

ET               7.1        9.1                                 9246.0   10240.7       9520      10048
X1   3.957        83     9870.7   10062.3       400       400       401
GR   1599.0    7650.0    1598.0    7756.0    1596.0    7870.0    1595.9    8003.2    1596.2    8020.1
GR   1595.9    8027.8    1591.5    8038.3    1591.4    8046.2    1595.1    8059.6    1596.6    8069.6
GR   1596.7    8082.7    1596.0    8093.0    1595.9    8101.4    1596.4    8109.7    1596.1    8135.6
GR   1595.8    8175.0    1595.4    8214.9    1595.4    8261.1    1595.3    8300.1    1595.5    8329.3
GR   1595.7    8364.7    1595.8    8388.9    1595.9    8412.3    1596.0    8423.0    1593.8    8431.2
GR   1596.4    8438.6    1595.9    8452.2    1595.5    8474.0    1596.1    8492.8    1597.1    8526.2
GR   1597.4    8563.4    1597.4    8581.7    1596.6    8633.9    1596.3    8692.7    1595.9    8746.9
GR   1596.0    8801.1    1595.9    8855.2    1596.0    8891.7    1596.3    8948.8    1596.3    8979.0
GR   1595.9    9012.0    1595.6    9079.0    1595.2    9122.3    1594.9    9149.8    1595.7    9169.2
GR   1595.8    9200.2    1595.9    9246.0    1596.2    9299.0    1596.0    9351.1    1595.6    9393.2
GR   1595.4    9416.6    1595.6    9440.8    1596.1    9468.8    1596.4    9500.2    1596.5    9519.9
GR   1596.1    9553.6    1596.2    9602.2    1596.0    9639.4    1596.0    9669.5    1596.6    9696.7
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GR	1596.5	9732.4	1596.1	9764.6	1596.3	9786.4	1597.1	9808.7	1597.4	9839.5
GR	1597.3	9870.7	1596.3	9888.9	1596.3	9909.3	1596.3	9936.1	1596.4	9970.6
GR	1595.8	9997.0	1595.5	10000.0	1596.3	10011.3	1595.7	10028.3	1596.7	10043.4
GR	1597.5	10062.3	1597.5	10079.6	1597.7	10100.9	1599.2	10127.8	1600.3	10159.4
GR	1601.2	10188.7	1602.2	10227.1	1602.3	10240.7				
ET		7.1	9.1				9274.4	10312.2	9560	10093
X1	4.019	85	9860.4	10092.8	350	320	327			
GR	1601.1	7874.3	1601.4	7924.5	1600.9	7953.1	1600.6	7982.4	1599.3	8014.6
GR	1598.8	8056.0	1598.6	8083.8	1598.8	8112.9	1598.1	8132.0	1598.2	8146.1
GR	1599.1	8160.6	1598.9	8183.4	1598.6	8199.4	1598.1	8213.5	1597.7	8226.0
GR	1598.8	8237.4	1598.5	8244.7	1594.2	8250.7	1594.4	8260.4	1599.3	8274.2
GR	1599.4	8287.7	1599.4	8308.3	1598.1	8314.4	1598.2	8318.3	1599.5	8326.5
GR	1599.4	8345.8	1599.1	8378.4	1599.2	8416.8	1599.3	8452.2	1599.3	8479.5
GR	1599.1	8509.6	1598.7	8538.3	1598.5	8562.5	1598.4	8580.8	1598.1	8597.0
GR	1596.1	8603.3	1596.7	8610.9	1599.0	8616.8	1598.6	8635.2	1598.8	8673.7
GR	1599.0	8731.8	1598.8	8781.8	1599.2	8845.5	1598.9	8889.7	1598.9	8940.1
GR	1598.9	8968.7	1599.5	9006.6	1599.4	9046.4	1600.2	9079.6	1600.6	9103.4
GR	1600.2	9124.4	1599.1	9143.3	1599.0	9186.4	1598.6	9225.1	1598.3	9274.4
GR	1598.2	9323.9	1598.3	9359.8	1598.0	9406.5	1597.5	9444.8	1597.9	9473.1
GR	1597.8	9507.6	1598.5	9547.3	1598.9	9582.3	1598.6	9608.6	1598.8	9643.3
GR	1599.0	9673.9	1598.8	9694.2	1599.2	9746.2	1599.4	9799.4	1599.5	9828.5
GR	1599.5	9860.4	1599.1	9896.3	1599.0	9945.1	1599.0	9978.6	1598.5	10000.0
GR	1599.0	10020.3	1598.8	10039.6	1598.7	10058.0	1599.7	10092.8	1600.6	10130.6
GR	1600.8	10161.4	1601.7	10201.1	1602.5	10242.2	1603.5	10294.4	1604.2	10312.2
ET		7.1	9.1				9319.9	10422.7	9600	10089
X1	4.058	91	9851.4	10088.7	190	210	206			
GR	1604.0	7770.7	1603.5	7854.1	1603.6	7909.5	1603.3	7970.2	1603.2	8009.2
GR	1602.3	8031.3	1601.9	8057.2	1602.0	8098.1	1601.9	8130.8	1600.8	8161.8
GR	1601.1	8184.4	1600.1	8195.1	1601.2	8207.0	1600.7	8222.8	1600.7	8255.8
GR	1600.7	8297.1	1600.9	8324.9	1600.3	8354.1	1600.4	8377.7	1601.3	8385.3
GR	1600.9	8398.2	1598.1	8406.9	1598.5	8410.9	1601.3	8422.6	1600.9	8435.3
GR	1600.8	8445.7	1601.9	8455.1	1601.0	8464.6	1597.8	8472.8	1598.9	8480.3
GR	1598.9	8486.2	1597.4	8492.6	1597.6	8496.3	1601.5	8515.2	1601.5	8538.4
GR	1600.9	8569.1	1601.0	8611.6	1600.0	8656.6	1600.9	8689.6	1601.0	8698.7
GR	1599.6	8707.6	1600.5	8715.7	1600.4	8739.6	1600.4	8762.1	1598.4	8772.7
GR	1598.9	8776.9	1601.0	8785.7	1600.7	8813.4	1600.8	8882.6	1601.0	8901.8
GR	1600.9	8956.9	1600.9	9016.1	1600.9	9065.1	1601.0	9105.0	1601.0	9139.0
GR	1602.1	9159.2	1601.9	9167.1	1600.9	9185.7	1600.8	9208.6	1600.7	9243.3
GR	1600.8	9276.8	1600.9	9319.9	1600.5	9351.9	1600.0	9381.5	1599.9	9432.4
GR	1599.3	9487.7	1599.5	9543.5	1599.5	9601.5	1600.2	9652.4	1600.6	9696.0
GR	1600.6	9762.7	1600.7	9795.9	1601.1	9851.4	1600.6	9894.4	1600.5	9916.0
GR	1601.0	9949.7	1600.6	9987.3	1600.0	9998.7	1599.8	10000.0	1600.4	10023.8
GR	1600.1	10051.9	1600.0	10073.6	1600.9	10088.7	1602.2	10127.8	1603.5	10172.8
GR	1603.5	10213.2	1603.5	10263.2	1604.1	10305.5	1604.9	10355.1	1605.1	10405.4
GR	1605.6	10422.7								
ET		7.1	9.1				9411.9	10208.0	9670	10091
X1	4.146	74	9883.9	10097.7	440	465	465			
GR	1606.1	8005.2	1605.9	8063.7	1605.2	8127.8	1605.2	8189.8	1604.6	8244.6
GR	1603.2	8296.6	1603.4	8342.5	1602.6	8366.6	1601.5	8390.0	1601.9	8417.4
GR	1602.7	8440.0	1603.7	8467.6	1603.5	8497.0	1603.4	8540.6	1603.5	8581.5
GR	1603.4	8628.2	1603.4	8660.3	1602.6	8691.2	1602.3	8703.8	1602.0	8715.3

GR	1603.8	8726.1	1603.7	8741.0	1604.3	8774.4	1604.2	8797.3	1604.3	8834.7
GR	1603.8	8854.0	1602.8	8860.3	1602.9	8864.6	1603.6	8880.0	1602.9	8890.3
GR	1600.9	8902.7	1600.9	8910.9	1601.9	8918.8	1603.4	8929.1	1603.8	8957.0
GR	1603.4	8980.0	1603.6	9005.5	1603.5	9023.0	1602.2	9031.4	1600.4	9038.8
GR	1600.4	9044.6	1603.6	9053.4	1603.8	9076.1	1604.1	9114.8	1603.6	9162.1
GR	1603.1	9216.8	1603.6	9290.3	1603.5	9345.5	1603.4	9370.2	1604.0	9411.9
GR	1604.4	9447.0	1603.3	9484.6	1602.6	9518.3	1602.9	9564.5	1602.7	9605.1
GR	1602.6	9621.6	1602.7	9677.4	1603.2	9740.1	1603.6	9781.0	1603.6	9837.1
GR	1603.8	9883.9	1603.1	9928.3	1602.6	9937.9	1603.9	9949.7	1602.7	9963.8
GR	1603.7	9983.1	1603.3	10000.0	1603.5	10018.8	1603.3	10051.1	1603.1	10071.2
GR	1605.2	10097.7	1605.4	10121.6	1606.9	10161.0	1608.1	10208.0		
ET		7.1	9.1				9543.8	10299.2	9760	10090
X1	4.197	60	9896.1	10106.9	280	265	269			
GR	1607.8	8410.4	1607.8	8460.6	1608.0	8511.7	1606.6	8563.6	1607.1	8611.7
GR	1606.0	8673.6	1606.3	8715.0	1606.3	8760.1	1605.7	8796.6	1605.9	8813.1
GR	1603.5	8832.8	1602.6	8842.6	1603.2	8860.2	1603.1	8871.9	1604.5	8908.3
GR	1605.9	8948.6	1605.7	8976.9	1605.0	8990.5	1604.6	9008.4	1605.1	9037.7
GR	1605.5	9084.3	1606.1	9121.6	1606.3	9142.8	1604.8	9153.6	1606.5	9159.7
GR	1606.6	9172.1	1605.0	9176.1	1606.5	9183.8	1607.3	9199.1	1606.9	9217.7
GR	1605.7	9223.9	1601.3	9234.0	1601.1	9242.5	1601.3	9251.2	1606.3	9263.6
GR	1606.6	9287.0	1605.8	9300.1	1606.3	9316.4	1605.6	9373.2	1605.6	9428.6
GR	1605.9	9477.5	1605.8	9543.8	1605.3	9614.6	1605.6	9678.4	1606.0	9720.0
GR	1606.1	9761.0	1604.3	9805.8	1604.8	9853.3	1605.2	9896.1	1605.0	9940.3
GR	1604.6	10000.0	1604.3	10040.8	1604.3	10071.8	1604.3	10090.9	1605.2	10106.9
GR	1606.6	10144.5	1608.0	10188.6	1608.3	10240.5	1610.2	10293.6	1609.9	10299.2
ET		7.1	9.1				9687.2	10352.5	9790	10140
X1	4.262	49	9965.0	10108.7	400	300	343			
GR	1612.0	8594.7	1612.6	8675.3	1611.1	8759.5	1611.7	8808.4	1611.3	8864.0
GR	1610.7	8900.0	1611.0	8948.8	1610.2	9006.3	1610.5	9052.6	1608.9	9089.5
GR	1608.4	9138.3	1608.5	9185.9	1607.2	9211.9	1607.7	9242.7	1608.3	9276.2
GR	1608.8	9309.8	1608.9	9349.5	1609.4	9377.8	1603.3	9392.6	1603.0	9400.2
GR	1603.3	9412.7	1609.1	9424.5	1609.2	9436.0	1609.0	9470.2	1608.5	9508.3
GR	1607.8	9568.8	1607.8	9622.6	1608.5	9647.8	1609.0	9687.2	1608.1	9726.1
GR	1608.4	9730.7	1608.6	9770.6	1608.2	9813.7	1608.1	9870.0	1607.5	9926.9
GR	1607.2	9965.0	1605.9	9997.2	1605.7	10000.0	1607.8	10020.4	1608.9	10034.4
GR	1607.6	10054.9	1606.9	10076.0	1607.4	10108.7	1607.2	10137.5	1607.0	10169.8
GR	1608.9	10199.9	1610.6	10257.5	1611.8	10302.6	1612.7	10352.5		
ET		7.1	9.1				9762.7	10431.6	9762.7	10190
	Just downstream of the levee (diversion structure).									
X1	4.333	66	9949.0	10055.2	370	370	375			
GR	1615.2	8781.1	1614.8	8859.4	1614.1	8911.1	1613.7	8972.6	1613.2	9037.9
GR	1612.7	9068.1	1612.2	9090.3	1612.2	9121.6	1611.6	9152.8	1611.4	9197.6
GR	1610.2	9241.6	1610.3	9269.3	1610.5	9306.4	1609.9	9331.6	1609.4	9356.2
GR	1609.4	9370.8	1609.7	9393.8	1609.4	9415.1	1609.6	9422.8	1610.3	9434.1
GR	1610.1	9452.5	1605.0	9467.4	1604.4	9487.3	1610.4	9510.3	1610.5	9530.7
GR	1609.7	9566.9	1609.1	9599.5	1609.6	9624.8	1610.3	9640.9	1611.4	9657.1
GR	1611.4	9678.9	1611.5	9679.8	1611.2	9705.3	1610.7	9733.0	1609.4	9762.7
GR	1609.3	9788.9	1609.2	9831.9	1609.3	9857.1	1609.4	9882.9	1609.3	9910.2
GR	1609.4	9929.2	1609.3	9940.5	1611.4	9949.0	1609.1	9963.3	1608.1	9980.3
GR	1607.9	9993.7	1607.4	10000.0	1607.1	10006.8	1609.9	10019.9	1609.6	10033.7
GR	1608.7	10040.6	1609.6	10055.2	1609.6	10080.2	1609.5	10104.0	1609.3	10130.6

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GR   1609.3   10152.9   1609.1   10175.3   1609.2   10196.0   1609.6   10220.0   1609.8   10244.7
GR   1610.1   10267.6   1611.8   10294.4   1613.2   10326.1   1613.6   10364.5   1614.2   10407.0
GR   1614.6   10431.6

NC    .080      .080      .065
ET               7.1       9.1                                9745.0   10590.2    9870     10263
          NC card was used to change n values, channel = .065,
          overbanks = .080
X1   4.390       68    9952.9   10032.8     290      301      301
GR   1616.3    9071.8   1615.9    9092.0   1615.1    9113.3   1613.7    9123.4   1613.0    9135.4
GR   1612.6    9151.9   1612.7    9166.4   1614.1    9182.3   1614.2    9196.9   1613.6    9224.3
GR   1614.6    9245.2   1614.5    9273.2   1613.5    9306.7   1613.1    9341.9   1612.3    9379.9
GR   1612.3    9411.2   1612.6    9444.8   1613.1    9470.3   1612.6    9488.9   1612.4    9518.8
GR   1611.9    9552.9   1611.2    9585.4   1611.4    9610.3   1611.4    9642.7   1611.4    9658.1
GR   1611.1    9667.8   1607.2    9681.5   1607.6    9699.1   1606.9    9715.4   1608.8    9727.8
GR   1610.1    9736.5   1610.3    9747.8   1610.3    9767.5   1611.6    9785.0   1612.4    9800.1
GR   1612.3    9827.9   1612.1    9858.3   1611.7    9869.3   1611.7    9886.1   1612.6    9904.9
GR   1612.4    9923.4   1611.9    9940.0   1616.0    9952.9   1613.0    9964.9   1611.9    9975.7
GR   1609.3    9985.9   1609.0    9989.2   1608.5   10000.0   1609.2   10009.9   1611.3   10019.8
GR   1612.7   10032.8   1612.5   10062.1   1613.2   10097.6   1613.6   10123.4   1612.3   10146.7
GR   1611.8   10176.5   1612.0   10205.4   1611.9   10234.1   1612.5   10266.7   1612.7   10305.7
GR   1613.8   10334.7   1614.8   10361.7   1615.4   10398.5   1616.7   10450.7   1617.6   10482.7
GR   1619.2   10520.8   1620.1   10565.1   1620.4   10590.2

QT       2       9510      9510
ET                         9.1                                                     9600     10133
          Split flow location.
          Q changed to 9,510 cfs at C10R (split flow starts here).
X1   4.492       52    9967.1   10077.3     500      500      539
GR   1617.9    8967.0   1617.9    9067.2   1617.9    9187.2   1617.8    9250.0   1617.0    9284.4
GR   1616.4    9310.4   1616.0    9332.5   1615.3    9349.3   1613.7    9359.5   1612.9    9367.8
GR   1613.1    9376.1   1613.3    9381.5   1614.7    9389.0   1615.1    9397.8   1615.3    9416.9
GR   1615.2    9434.0   1615.0    9461.0   1614.9    9490.4   1614.5    9519.6   1614.7    9539.1
GR   1615.7    9561.3   1614.8    9580.5   1614.7    9601.8   1615.0    9636.8   1615.0    9669.6
GR   1615.2    9699.9   1614.9    9737.6   1614.5    9779.3   1614.5    9817.1   1614.0    9861.8
GR   1613.3    9888.1   1613.6    9914.4   1614.6    9931.0   1614.5    9949.2   1615.3    9967.1
GR   1610.9    9982.1   1611.6   10000.0   1611.6   10025.5   1610.3   10029.5   1612.5   10040.3
GR   1613.8   10056.6   1614.3   10077.3   1614.7   10109.7   1615.9   10162.8   1617.3   10211.3
GR   1618.6   10273.9   1620.1   10332.2   1620.8   10371.8   1622.0   10412.7   1622.9   10447.7
GR   1623.5   10495.5   1623.8   10506.8

ET                         9.1                                                     9625     10042
X1   4.567       43    9944.0   10041.6     370      396      396
GR   1620.4    8923.3   1619.2    8988.6   1619.3    9028.8   1619.7    9082.1   1619.8    9138.2
GR   1619.8    9218.5   1619.9    9301.5   1620.1    9357.8   1620.3    9393.5   1619.7    9434.1
GR   1618.3    9455.5   1617.4    9469.4   1615.9    9481.5   1616.8    9490.2   1616.5    9505.3
GR   1616.8    9540.6   1617.0    9555.6   1617.4    9580.9   1617.7    9609.8   1617.4    9623.6
GR   1617.4    9649.3   1618.0    9686.8   1618.0    9709.7   1617.2    9730.8   1617.8    9755.2
GR   1617.8    9790.2   1617.5    9814.9   1617.2    9853.3   1616.3    9914.4   1616.3    9944.0
GR   1615.9    9966.2   1613.8    9985.8   1612.3   10000.0   1611.9   10012.9   1615.4   10026.8
GR   1617.7   10041.6   1618.5   10056.3   1618.8   10072.4   1619.2   10085.7   1620.5   10107.6
GR   1621.6   10160.9   1623.4   10246.7   1623.3   10248.2
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NH      5      .080    9966.0     .065   10034.9     .080   10258.4     .065   10315.5     .080
NH  10511.
ET                      9.1                                                     9610     10301
X1  4.662        39    9966.0  10034.9      390      430      502
GR  1624.0    9320.0  1623.0   9450.0   1622.5   9620.2   1622.1   9672.2   1622.0   9714.0
GR  1621.9    9753.1  1621.9   9781.0   1620.2   9814.4   1619.1   9841.4   1618.7   9857.4
GR  1620.0    9883.2  1621.2   9912.3   1621.1   9945.8   1619.6   9966.0   1614.0   9991.3
GR  1614.3   10000.0  1614.1  10008.0   1619.1  10034.9   1620.2  10048.3   1619.5  10069.2
GR  1619.1   10091.2  1620.2  10116.4   1620.4  10138.7   1620.5  10146.8   1619.5  10182.9
GR  1618.8   10214.3  1618.8  10230.5   1619.6  10244.7   1618.7  10258.4   1615.8  10270.5
GR  1616.2   10277.8  1617.9  10291.9   1618.5  10315.5   1619.3  10341.6   1620.6  10369.5
GR  1622.6   10403.7  1623.4  10431.7   1623.9  10477.6   1625.6  10511.0

QT      2       9110    9110
NC   .065       .065    .055
ET                      9.1                                                     9679     10050
X1 -3.284         47    9972.4  10043.6      320      440      396
GR  1573.0    9265.0  1570.9   9412.1   1571.4   9449.7   1570.5   9483.4   1569.8   9518.5
GR  1570.1    9546.0  1570.7   9577.1   1570.7   9594.0   1571.1   9617.8   1570.7   9638.9
GR  1570.0    9651.2  1569.5   9677.9   1569.6   9730.3   1569.4   9775.5   1568.7   9796.2
GR  1567.2    9816.3  1566.9   9829.0   1567.5   9848.4   1567.9   9887.9   1568.5   9905.7
GR  1568.6    9931.6  1568.1   9957.5   1568.5   9972.4   1567.7   9981.8   1563.2   9988.5
GR  1562.1   10000.0  1562.4  10006.6   1567.2  10020.2   1569.2  10043.6   1569.6  10061.8
GR  1569.4   10087.6  1569.4  10109.3   1569.7  10144.8   1571.4  10191.5   1572.7  10241.0
GR  1574.1   10278.3  1574.0  10306.6   1573.3  10364.2   1572.0  10441.7   1571.3  10475.1
GR  1571.3   10526.2  1571.9  10559.0   1573.7  10638.8   1574.7  10749.3   1575.4  10861.0
GR  1576.0   10991.8  1576.1  11109.3

QT      2       2910    2910
NC   .070       .065    .050
ET                 7.1     9.1                                   9205.8    9756.9     9480    9756.9
X1  3.347         65    9571.8   9602.3      350      400      510
GR  1574.8    9205.8  1574.0   9271.4   1573.4   9285.4   1573.1   9325.0   1573.1   9382.7
GR  1573.3    9435.3  1573.3   9470.1   1573.0   9508.7   1573.0   9543.8   1571.5   9566.0
GR  1570.4    9571.8  1566.4   9584.3   1566.3   9588.0   1569.2   9602.3   1570.7   9619.2
GR  1570.4    9628.9  1570.0   9637.1   1570.9   9673.3   1570.9   9702.1   1570.7   9713.3
GR  1569.4    9721.8  1570.8   9729.1   1570.1   9738.3   1571.1   9756.9   1571.1   9782.1
GR  1570.6    9796.0  1571.3   9809.8   1572.7   9828.3   1572.9   9853.8   1572.8   9856.2
GR  1572.1    9890.7  1570.7   9922.8   1569.7   9960.8   1568.3   9989.0   1566.1   9993.8
GR  1565.6   10000.0  1565.6  10004.6   1568.0  10013.3   1571.2  10027.9   1571.7  10038.2
GR  1571.3   10052.7  1570.9  10065.0   1572.6  10086.2   1573.2  10106.1   1572.5  10155.5
GR  1572.1   10208.9  1572.5  10243.4   1574.3  10294.2   1574.5  10296.7   1574.1  10332.1
GR  1572.8   10410.1  1572.1  10458.0   1571.8  10489.1   1572.3  10530.3   1573.1  10570.7
GR  1574.1   10619.6  1574.9  10679.4   1574.9  10736.5   1575.2  10818.7   1575.8  10901.3
GR  1576.0   11012.2  1576.9  11092.5   1577.3  11163.0   1577.1  11241.4   1577.1  11243.4

ET                 7.1     9.1                                   8930.9    9673.4     9460    9673.4
X1  3.385         77    9524.8   9572.7      450      330      396
GR  1577.5    8930.9  1576.8   8950.6   1576.6   9008.3   1576.1   9076.7   1576.2   9139.7
GR  1575.5    9192.0  1575.0   9212.3   1575.2   9246.8   1575.4   9276.9   1576.0   9304.0
GR  1575.4    9316.8  1574.3   9338.4   1575.2   9366.3   1575.1   9371.8   1574.0   9410.8
GR  1571.5    9416.4  1572.7   9433.9   1573.5   9457.0   1572.4   9467.3   1571.6   9472.9
GR  1571.1    9479.4  1573.4   9490.2   1574.6   9506.5   1574.6   9524.8   1573.8   9534.5
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GR	1569.7	9542.5	1569.7	9546.0	1571.3	9562.3	1572.9	9572.7	1572.5	9593.2
GR	1573.7	9612.8	1574.5	9647.6	1575.1	9673.4	1574.6	9690.2	1573.4	9721.8
GR	1572.8	9761.3	1572.4	9787.2	1573.0	9811.4	1573.1	9846.6	1572.8	9864.2
GR	1571.1	9876.1	1572.2	9892.2	1573.1	9924.7	1573.4	9946.8	1572.6	9959.0
GR	1570.4	9973.8	1569.8	9980.2	1571.3	9989.6	1570.7	9996.8	1568.3	10000.0
GR	1568.2	10006.1	1570.0	10012.4	1570.0	10023.7	1570.5	10042.5	1571.0	10060.3
GR	1574.2	10089.8	1575.0	10109.0	1575.4	10145.3	1574.8	10196.7	1574.0	10229.7
GR	1574.1	10262.7	1574.4	10315.5	1573.9	10339.1	1573.6	10359.4	1573.8	10401.1
GR	1574.8	10434.9	1575.5	10458.1	1576.3	10486.4	1576.1	10516.5	1575.8	10539.0
GR	1576.2	10565.8	1576.7	10631.5	1577.3	10740.2	1577.8	10851.5	1577.7	10957.6
GR	1578.4	11073.4	1578.8	11110.7						
ET		7.1	9.1				8610.4	9522.6	9227	9522.6
X1	3.481	89	9279.9	9320.4	310	450	506			
GR	1579.6	8610.4	1579.5	8676.1	1579.2	8757.2	1578.8	8823.4	1578.6	8879.7
GR	1578.4	8965.6	1578.0	9040.0	1578.2	9111.4	1578.2	9149.4	1578.7	9154.2
GR	1579.8	9175.3	1578.9	9185.1	1576.7	9198.6	1576.8	9211.4	1577.5	9227.9
GR	1577.0	9239.2	1577.6	9249.7	1576.8	9254.9	1577.4	9263.0	1577.7	9269.1
GR	1577.2	9274.7	1575.5	9279.9	1573.2	9286.3	1571.9	9295.3	1574.9	9308.6
GR	1575.5	9320.4	1578.0	9329.5	1577.6	9332.5	1576.4	9339.3	1576.8	9356.2
GR	1572.7	9362.2	1576.8	9375.0	1576.0	9391.7	1576.4	9413.8	1576.3	9430.5
GR	1575.3	9440.9	1577.1	9461.9	1577.2	9489.2	1577.3	9522.6	1577.1	9556.1
GR	1578.0	9569.6	1577.6	9579.6	1576.8	9594.5	1576.7	9618.6	1576.0	9632.9
GR	1576.7	9650.0	1577.0	9665.8	1576.5	9683.7	1577.1	9714.8	1577.1	9762.3
GR	1577.3	9790.8	1578.0	9806.8	1577.8	9818.8	1577.1	9839.8	1577.5	9862.1
GR	1578.3	9888.8	1578.4	9916.0	1577.9	9936.7	1576.9	9954.9	1573.8	9978.5
GR	1573.9	9987.6	1574.0	9995.0	1572.1	10000.0	1572.9	10005.2	1574.0	10020.9
GR	1575.3	10041.7	1576.6	10065.6	1577.2	10082.6	1577.0	10097.8	1577.6	10133.6
GR	1577.8	10153.2	1576.9	10182.0	1576.7	10207.9	1576.4	10243.7	1576.4	10277.1
GR	1576.4	10292.9	1577.0	10314.7	1577.8	10341.7	1578.9	10372.2	1579.9	10419.7
GR	1580.3	10464.3	1580.8	10509.2	1581.7	10602.0	1582.6	10697.2	1582.8	10787.1
GR	1582.7	10898.3	1582.8	11003.4	1583.4	11123.9	1583.7	11221.5		
ET		7.1	9.1				8010.0	9285.2	8550	9080
X1	3.546	95	8585.1	8621.8	400	360	502			
GR	1582.5	8010.0	1582.0	8060.0	1581.3	8295.1	1580.7	8400.3	1580.1	8493.5
GR	1580.2	8505.1	1581.0	8564.3	1580.9	8577.0	1579.7	8585.1	1576.7	8593.0
GR	1576.1	8598.3	1576.6	8603.5	1580.3	8621.8	1580.2	8650.3	1580.5	8732.8
GR	1580.6	8738.7	1580.1	8822.7	1579.8	8861.9	1580.3	8878.1	1579.2	8888.3
GR	1579.7	8891.9	1578.0	8900.8	1579.5	8910.7	1580.1	8922.5	1579.3	8933.2
GR	1578.2	8941.0	1579.5	8949.9	1578.9	8955.5	1580.5	8970.3	1581.1	9001.8
GR	1580.2	9029.0	1580.5	9064.9	1580.5	9090.8	1580.8	9106.9	1581.2	9120.4
GR	1581.2	9135.5	1580.1	9145.5	1578.2	9159.3	1578.2	9171.5	1578.0	9190.6
GR	1577.6	9203.8	1579.0	9216.8	1580.2	9228.5	1580.2	9246.0	1580.4	9270.1
GR	1579.7	9285.2	1580.3	9326.1	1580.4	9378.0	1580.4	9405.5	1581.5	9416.2
GR	1581.1	9447.7	1580.9	9504.2	1581.0	9517.0	1581.3	9559.4	1581.2	9606.5
GR	1579.5	9642.9	1578.9	9675.6	1579.8	9702.4	1579.9	9726.5	1580.8	9747.6
GR	1580.6	9775.9	1579.5	9810.0	1578.8	9838.5	1579.3	9862.0	1579.2	9886.9
GR	1579.3	9911.9	1579.1	9924.5	1577.5	9937.8	1576.7	9948.4	1577.4	9954.7
GR	1577.5	9972.9	1577.8	9993.9	1578.2	10000.0	1579.7	10019.9	1580.4	10034.8
GR	1580.1	10071.1	1579.7	10129.6	1579.4	10184.5	1579.5	10227.9	1579.4	10266.9
GR	1580.4	10287.7	1581.3	10318.7	1582.1	10354.2	1583.0	10408.7	1583.0	10476.2
GR	1583.1	10554.0	1584.1	10637.0	1584.4	10708.6	1585.0	10793.5	1585.0	10883.5
GR	1584.3	10966.3	1584.4	11051.0	1584.0	11110.7	1584.2	11188.7	1584.3	11219.7

```
ET                          9.1                                                   9900      10400
        SECNO 0.434, 0.529, and 0.624 are the river miles on Stream No. 12.
X1    0.434       48    9988.4   10077.4       630       300       496
GR   1585.1   9615.8    1584.7    9716.9    1584.1    9766.1    1583.2    9793.6    1582.6    9819.5
GR   1582.9   9834.9    1582.8    9860.9    1581.6    9875.3    1582.1    9893.3    1581.8    9911.5
GR   1583.0   9924.3    1583.0    9965.7    1582.7    9988.4    1578.7    9998.8    1578.8   10000.0
GR   1578.4  10004.2    1578.7   10008.4    1583.3   10020.8    1582.7   10053.6    1580.3   10061.0
GR   1580.3  10064.6    1582.4   10077.4    1582.5   10106.0    1581.9   10137.6    1581.8   10177.6
GR   1581.8  10229.4    1581.3   10261.0    1582.1   10286.5    1582.1   10314.6    1581.7   10337.5
GR   1581.7  10356.5    1582.4   10375.6    1582.3   10406.8    1581.4   10434.8    1581.2   10448.9
GR   1580.8  10466.3    1579.1   10472.9    1580.3   10504.1    1580.6   10536.0    1581.5   10561.3
GR   1582.0  10588.1    1582.1   10619.0    1582.2   10662.7    1582.5   10702.9    1583.1   10748.1
GR   1583.8  10777.2    1584.2   10806.1    1584.6   10845.5

ET                          9.1                                                   9850      10251
X1    0.529       46    9988.8   10022.6       430       500       502
GR   1587.8   9477.5    1587.5    9533.1    1587.3    9574.9    1586.2    9637.1    1586.0    9693.9
GR   1585.3   9742.9    1584.2    9756.9    1585.3    9765.1    1584.9    9784.7    1585.5    9818.1
GR   1585.2   9861.8    1585.8    9915.1    1585.9    9949.8    1585.8    9962.6    1586.4    9974.9
GR   1586.4   9988.8    1582.1    9996.3    1581.6   10000.0    1581.1   10008.5    1586.5   10022.6
GR   1586.4  10036.3    1585.6   10060.9    1586.3   10065.6    1585.8   10080.3    1583.4   10086.1
GR   1583.2  10088.6    1584.4   10097.0    1586.4   10102.7    1586.2   10117.0    1585.5   10135.2
GR   1585.6  10162.1    1586.1   10199.2    1586.0   10242.9    1586.2   10276.2    1586.2   10301.9
GR   1585.7  10335.3    1585.0   10368.2    1584.6   10380.1    1585.0   10397.0    1584.8   10413.6
GR   1585.3  10436.7    1585.7   10463.7    1586.0   10506.5    1586.8   10534.6    1586.9   10564.1
GR   1587.6  10571.3

ET                          9.1                                                   9780      10150
X1    0.624       36    9980.8   10012.6       400       460       502
GR   1591.2   9380.0    1590.0    9580.0    1589.5    9632.1    1588.9    9646.7    1589.4    9663.2
GR   1588.7   9700.9    1587.8    9751.6    1587.7    9779.4    1587.7    9801.2    1588.1    9838.7
GR   1588.4   9872.6    1589.2    9923.6    1589.5    9968.9    1589.5    9980.8    1584.4    9992.2
GR   1584.2   9998.9    1585.0   10000.0    1589.2   10012.6    1589.2   10033.9    1588.4   10063.3
GR   1588.7  10084.3    1588.4   10088.6    1588.6   10101.0    1589.6   10123.3    1589.1   10153.1
GR   1588.6  10195.4    1589.3   10218.1    1589.2   10230.3    1588.4   10245.3    1589.3   10253.3
GR   1589.3  10270.1    1588.9   10313.6    1589.0   10353.6    1590.0   10505.0    1590.4   10540.0
GR   1591.2  10600.0

NC     .016      .016      .050
X1    3.639       51    7923.3    8017.9       540       210       428
X3       10                                    8870.7                 1593.1    1593.1
GR   1596.0   7219.3    1595.0    7370.7    1594.4    7511.8    1594.3    7637.2    1593.5    7793.7
GR   1593.0   7896.5    1593.0    7910.3    1593.4    7923.3    1590.0    7950.0    1586.0    7955.0
GR   1586.0   7959.0    1586.0    7963.0    1590.0    7968.0    1592.7    8017.9    1592.2    8094.5
GR   1591.3   8178.9    1589.9    8347.3    1589.6    8471.3    1589.9    8533.2    1589.1    8758.9
GR   1588.9   8870.7    1588.6    8992.5    1588.3    9123.3    1587.7    9273.0    1587.0    9370.9
GR   1585.3   9513.4    1584.2    9561.1    1584.3    9604.1    1584.1    9664.4    1584.3    9717.0
GR   1584.2   9773.6    1584.4    9838.3    1584.1    9893.6    1583.9    9947.8    1583.9   10000.0
GR   1583.3  10055.1    1583.6   10079.8    1584.0   10144.3    1584.2   10230.8    1584.3   10334.0
GR   1585.1  10470.0    1586.0   10603.9    1586.1   10720.8    1587.0   10871.0    1587.0   10951.3
GR   1586.9  11034.1    1586.5   11111.0    1586.2   11167.6    1586.3   11204.5    1586.1   11280.3
GR   1586.1  11307.8
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SC	1.024	0.8	3.0		5.67		46	2.2	1586.4	1586.0
NC	.016	.016	.050							
X1	3.648	28	7926.1	7960.7	46	46	46			
X2			2		1585.1					
X3	10					8850.0		1593.5	1593.5	
BT	-25	7285.1	1596.7		7362.4	1596.0		7422.6	1595.2	
BT		7496.8	1594.3		7626.3	1594.3		7671.3	1592.9	
BT		7698.5	1594.1		7747.8	1594.3		7797.7	1593.5	
BT		7894.8	1593.6		7926.1	1594.1		7960.7	1594.2	
BT		7996.2	1593.7		8092.1	1593.2		8201.4	1592.1	
BT		8325.4	1591.4		8473.3	1591.4		8525.0	1590.2	
BT		8850.0	1590.0		9235.0	1588.6		9735.0	1585.1	
BT		9975.0	1585.1		10260.0	1585.1		10630.0	1587.1	
BT		10875.0	1588.2							
GR	1596.7	7285.1	1596.0	7362.4	1595.2	7422.6	1594.3	7496.8	1594.3	7626.3
GR	1592.9	7671.3	1594.1	7698.5	1594.3	7747.8	1593.5	7797.7	1593.6	7894.8
GR	1594.1	7926.1	1590.0	7942.0	1586.4	7946.0	1586.4	7954.0	1594.2	7960.7
GR	1593.7	7996.2	1593.2	8092.1	1592.1	8201.4	1591.4	8325.4	1591.4	8473.3
GR	1590.2	8525.0	1590.0	8850.0	1588.0	9235.0	1584.6	9735.0	1584.6	9975.0
GR	1584.6	10260.0	1587.1	10630.0	1588.2	10875.0				
X1	3.651				17	17	17			
X3	10					8850.0				
QT	2	4280	4280							
NC	.080	.065	.065							
ET		7.1	9.1				7662.0	9032.5	7820	8370
X1	3.881	61	7939.0	7961.0	400	170	312			
GR	1596.0	7662.0	1594.8	7792.0	1594.0	7926.0	1592.0	7939.0	1590.5	7944.0
GR	1590.5	7956.0	1592.0	7961.0	1594.0	8160.0	1592.5	8312.0	1594.0	8406.0
GR	1594.4	8481.8	1594.7	8540.0	1594.5	8618.0	1593.8	8642.4	1592.8	8667.7
GR	1592.6	8683.4	1593.2	8704.7	1592.9	8741.7	1592.9	8765.4	1593.1	8816.8
GR	1592.5	8876.0	1592.4	8903.3	1592.5	8952.9	1592.8	8990.1	1593.7	9032.5
GR	1593.9	9090.6	1594.2	9147.3	1594.2	9187.9	1593.8	9214.0	1593.6	9237.2
GR	1593.9	9244.3	1594.4	9262.0	1594.5	9298.0	1593.9	9325.4	1593.1	9341.6
GR	1592.6	9352.5	1592.5	9372.3	1592.3	9390.5	1592.0	9417.8	1592.0	9444.6
GR	1592.4	9470.4	1592.8	9492.4	1593.1	9539.3	1593.0	9602.7	1593.1	9659.8
GR	1593.1	9710.9	1593.4	9760.1	1593.3	9797.6	1593.9	9827.0	1593.5	9861.7
GR	1593.7	9901.8	1593.9	9948.4	1593.8	9983.3	1593.9	10000.0	1593.8	10022.3
GR	1593.8	10040.2	1594.5	10075.8	1595.7	10109.4	1596.5	10141.4	1597.2	10171.5
GR	1597.7	10197.6								
ET		7.1	9.1				7650.0	9246.0	7900	8500
X1	3.957	83	8027.8	8059.6	180	340	195			
GR	1599.0	7650.0	1598.0	7756.0	1596.0	7870.0	1595.9	8003.2	1596.2	8020.1
GR	1595.9	8027.8	1591.5	8038.3	1591.4	8046.2	1595.1	8059.6	1596.6	8069.6
GR	1596.7	8082.7	1596.0	8093.0	1595.9	8101.4	1596.4	8109.7	1596.1	8135.6
GR	1595.8	8175.0	1595.4	8214.9	1595.4	8261.1	1595.3	8300.1	1595.5	8329.3
GR	1595.7	8364.7	1595.8	8388.9	1595.9	8412.3	1596.0	8423.0	1593.8	8431.2
GR	1596.4	8438.6	1595.9	8452.2	1595.5	8474.0	1596.1	8492.8	1597.1	8526.2
GR	1597.4	8563.4	1597.4	8581.7	1596.6	8633.9	1596.3	8692.7	1595.9	8746.9
GR	1596.0	8801.1	1595.9	8855.2	1596.0	8891.7	1596.3	8948.8	1596.3	8979.0
GR	1595.9	9012.0	1595.6	9079.0	1595.2	9122.3	1594.9	9149.8	1595.7	9169.2

GR	1595.8	9200.2	1595.9	9246.0	1596.2	9299.0	1596.0	9351.1	1595.6	9393.2
GR	1595.4	9416.6	1595.6	9440.8	1596.1	9468.8	1596.4	9500.2	1596.5	9519.9
GR	1596.1	9553.6	1596.2	9602.2	1596.0	9639.4	1596.0	9669.5	1596.6	9696.7
GR	1596.5	9732.4	1596.1	9764.6	1596.3	9786.4	1597.1	9808.7	1597.4	9839.5
GR	1597.3	9870.7	1596.3	9888.9	1596.3	9909.3	1596.3	9936.1	1596.4	9970.6
GR	1595.8	9997.0	1595.5	10000.0	1596.3	10011.3	1595.7	10028.3	1596.7	10043.4
GR	1597.5	10062.3	1597.5	10079.6	1597.7	10100.9	1599.2	10127.8	1600.3	10159.4
GR	1601.2	10188.7	1602.2	10227.1	1602.3	10240.7				
ET		7.1	9.1				7874.3	9274.4	8040	8620
X1	4.019	85	8244.7	8274.2	520	400	486			
GR	1601.1	7874.3	1601.4	7924.5	1600.9	7953.1	1600.6	7982.4	1599.3	8014.6
GR	1598.8	8056.0	1598.6	8083.8	1598.8	8112.9	1598.1	8132.0	1598.2	8146.1
GR	1599.1	8160.6	1598.9	8183.4	1598.6	8199.4	1598.1	8213.5	1597.7	8226.0
GR	1598.8	8237.4	1598.5	8244.7	1594.2	8250.7	1594.4	8260.4	1599.3	8274.2
GR	1599.4	8287.7	1599.4	8308.3	1598.1	8314.4	1598.2	8318.3	1599.5	8326.5
GR	1599.4	8345.8	1599.1	8378.4	1599.2	8416.8	1599.3	8452.2	1599.3	8479.5
GR	1599.1	8509.6	1598.7	8538.3	1598.5	8562.5	1598.4	8580.8	1598.1	8597.0
GR	1596.1	8603.3	1596.7	8610.9	1599.0	8616.8	1598.6	8635.2	1598.8	8673.7
GR	1599.0	8731.8	1598.8	8781.8	1599.2	8845.5	1598.9	8889.7	1598.9	8940.1
GR	1598.9	8968.7	1599.5	9006.6	1599.4	9046.4	1600.2	9079.6	1600.6	9103.4
GR	1600.2	9124.4	1599.1	9143.3	1599.0	9186.4	1598.6	9225.1	1598.3	9274.4
GR	1598.2	9323.9	1598.3	9359.8	1598.0	9406.5	1597.5	9444.8	1597.9	9473.1
GR	1597.8	9507.6	1598.5	9547.3	1598.9	9582.3	1598.6	9608.6	1598.8	9643.3
GR	1599.0	9673.9	1598.8	9694.2	1599.2	9746.2	1599.4	9799.4	1599.5	9828.5
GR	1599.5	9860.4	1599.1	9896.3	1599.0	9945.1	1599.0	9978.6	1598.5	10000.0
GR	1599.0	10020.3	1598.8	10039.6	1598.7	10058.0	1599.7	10092.8	1600.6	10130.6
GR	1600.8	10161.4	1601.7	10201.1	1602.5	10242.2	1603.5	10294.4	1604.2	10312.2
ET		7.1	9.1				7770.7	9319.9	8240	8800
X1	4.058	91	8464.6	8515.2	420	280	385			
GR	1604.0	7770.7	1603.5	7854.1	1603.6	7909.5	1603.3	7970.2	1603.2	8009.2
GR	1602.3	8031.3	1601.9	8057.2	1602.0	8098.1	1601.9	8130.8	1600.8	8161.8
GR	1601.1	8184.4	1600.1	8195.1	1601.2	8207.0	1600.7	8222.8	1600.7	8255.8
GR	1600.7	8297.1	1600.9	8324.9	1600.3	8354.1	1600.4	8377.7	1601.3	8385.3
GR	1600.9	8398.2	1598.1	8406.9	1598.5	8410.9	1601.3	8422.6	1600.9	8435.3
GR	1600.8	8445.7	1601.9	8455.1	1601.0	8464.6	1597.8	8472.8	1598.9	8480.3
GR	1598.9	8486.2	1597.4	8492.6	1597.6	8496.3	1601.5	8515.2	1601.5	8538.4
GR	1600.9	8569.1	1601.0	8611.6	1600.0	8656.6	1600.9	8689.6	1601.0	8698.7
GR	1599.6	8707.6	1600.5	8715.7	1600.4	8739.6	1600.4	8762.1	1598.4	8772.7
GR	1598.9	8776.9	1601.0	8785.7	1600.7	8813.4	1600.8	8882.6	1601.0	8901.8
GR	1600.9	8956.9	1600.9	9016.1	1600.9	9065.1	1601.0	9105.0	1601.0	9139.0
GR	1602.1	9159.2	1601.9	9167.1	1600.9	9185.7	1600.8	9208.6	1600.7	9243.3
GR	1600.8	9276.8	1600.9	9319.9	1600.5	9351.9	1600.0	9381.5	1599.9	9432.4
GR	1599.3	9487.7	1599.5	9543.5	1599.5	9601.5	1600.2	9652.4	1600.6	9696.0
GR	1600.6	9762.7	1600.7	9795.9	1601.1	9851.4	1600.6	9894.4	1600.5	9916.0
GR	1601.0	9949.7	1600.6	9987.3	1600.0	9998.7	1599.8	10000.0	1600.4	10023.8
GR	1600.1	10051.9	1600.0	10073.6	1600.9	10088.7	1602.2	10127.8	1603.5	10172.8
GR	1603.5	10213.2	1603.5	10263.2	1604.1	10305.5	1604.9	10355.1	1605.1	10405.4
GR	1605.6	10422.7								

ET		7.1	9.1				8005.2	9411.9	8500	9100
X1	4.146	74	8880.0	8929.1	380	340	396			
GR	1606.1	8005.2	1605.9	8063.7	1605.2	8127.8	1605.2	8189.8	1604.6	8244.6
GR	1603.2	8296.6	1603.4	8342.5	1602.6	8366.6	1601.5	8390.0	1601.9	8417.4
GR	1602.7	8440.0	1603.7	8467.6	1603.5	8497.0	1603.4	8540.6	1603.5	8581.5
GR	1603.4	8628.2	1603.4	8660.3	1602.6	8691.2	1602.3	8703.8	1602.0	8715.3
GR	1603.8	8726.1	1603.7	8741.0	1604.3	8774.4	1604.2	8797.3	1604.3	8834.7
GR	1603.8	8854.0	1602.8	8860.3	1602.9	8864.6	1603.6	8880.0	1602.9	8890.3
GR	1600.9	8902.7	1600.9	8910.9	1601.9	8918.8	1603.4	8929.1	1603.8	8957.0
GR	1603.4	8980.0	1603.6	9005.5	1603.5	9023.0	1602.2	9031.4	1600.4	9038.8
GR	1600.4	9044.6	1603.6	9053.4	1603.8	9076.1	1604.1	9114.8	1603.6	9162.1
GR	1603.1	9216.8	1603.6	9290.3	1603.5	9345.5	1603.4	9370.2	1604.0	9411.9
GR	1604.4	9447.0	1603.3	9484.6	1602.6	9518.3	1602.9	9564.5	1602.7	9605.1
GR	1602.6	9621.6	1602.7	9677.4	1603.2	9740.1	1603.6	9781.0	1603.6	9837.1
GR	1603.8	9883.9	1603.1	9928.3	1602.6	9937.9	1603.9	9949.7	1602.7	9963.8
GR	1603.7	9983.1	1603.3	10000.0	1603.5	10018.8	1603.3	10051.1	1603.1	10071.2
GR	1605.2	10097.7	1605.4	10121.6	1606.9	10161.0	1608.1	10208.0		

ET		7.1	9.1				8410.4	9543.8	8930	9400
X1	4.197	60	9223.9	9263.6	260	400	428			
GR	1607.8	8410.4	1607.8	8460.6	1608.0	8511.7	1606.6	8563.6	1607.1	8611.7
GR	1606.0	8673.6	1606.3	8715.0	1606.3	8760.1	1605.7	8796.6	1605.9	8813.1
GR	1603.5	8832.8	1602.6	8842.6	1603.2	8860.2	1603.1	8871.9	1604.5	8908.3
GR	1605.9	8948.6	1605.7	8976.9	1605.0	8990.5	1604.6	9008.4	1605.1	9037.7
GR	1605.5	9084.3	1606.1	9121.6	1606.3	9142.8	1604.8	9153.6	1606.5	9159.7
GR	1606.6	9172.1	1605.0	9176.1	1606.5	9183.8	1607.3	9199.1	1606.9	9217.7
GR	1605.7	9223.9	1601.3	9234.0	1601.1	9242.5	1601.3	9251.2	1606.3	9263.6
GR	1606.6	9287.0	1605.8	9300.1	1606.3	9316.4	1605.6	9373.2	1605.6	9428.6
GR	1605.9	9477.5	1605.8	9543.8	1605.3	9614.6	1605.6	9678.4	1606.0	9720.0
GR	1606.1	9761.0	1604.3	9805.8	1604.8	9853.3	1605.2	9896.1	1605.0	9940.3
GR	1604.6	10000.0	1604.3	10040.8	1604.3	10071.8	1604.3	10090.9	1605.2	10106.9
GR	1606.6	10144.5	1608.0	10188.6	1608.3	10240.5	1610.2	10293.6	1609.9	10299.2

ET		7.1	9.1				8594.7	9687.2	9200	9560
X1	4.262	49	9377.8	9424.5	500	450	502			
GR	1612.0	8594.7	1612.6	8675.3	1611.1	8759.5	1611.7	8808.4	1611.3	8864.0
GR	1610.7	8900.0	1611.0	8948.8	1610.2	9006.3	1610.5	9052.6	1608.9	9089.5
GR	1608.4	9138.3	1608.5	9185.9	1607.2	9211.9	1607.7	9242.7	1608.3	9276.2
GR	1608.8	9309.8	1608.9	9349.5	1609.4	9377.8	1603.3	9392.6	1603.0	9400.2
GR	1603.3	9412.7	1609.1	9424.5	1609.2	9436.0	1609.0	9470.2	1608.5	9508.3
GR	1607.8	9568.8	1607.8	9622.6	1608.5	9647.8	1609.0	9687.2	1608.1	9726.1
GR	1608.4	9730.7	1608.6	9770.6	1608.2	9813.7	1608.1	9870.0	1607.5	9926.9
GR	1607.2	9965.0	1605.9	9997.2	1605.7	10000.0	1607.8	10020.4	1608.9	10034.4
GR	1607.6	10054.9	1606.9	10076.0	1607.4	10108.7	1607.2	10137.5	1607.0	10169.8
GR	1608.9	10199.9	1610.6	10257.5	1611.8	10302.6	1612.7	10352.5		

ET		7.1	9.1				8781.1	9762.7	9300	9610
X1	4.333	66	9452.5	9510.3	430	360	391			
GR	1615.2	8781.1	1614.8	8859.4	1614.1	8911.1	1613.7	8972.6	1613.2	9037.9
GR	1612.7	9068.1	1612.2	9090.3	1612.2	9121.6	1611.6	9152.8	1611.4	9197.6
GR	1610.2	9241.6	1610.3	9269.3	1610.5	9306.4	1609.9	9331.6	1609.4	9356.2
GR	1609.4	9370.8	1609.7	9393.8	1609.4	9415.1	1609.6	9422.8	1610.3	9434.1
GR	1610.1	9452.5	1605.0	9467.4	1604.4	9487.3	1610.4	9510.3	1610.5	9530.7

GR	1609.7	9566.9	1609.1	9599.5	1609.6	9624.8	1610.3	9640.9	1611.4	9657.1
GR	1611.4	9678.9	1611.5	9679.8	1611.2	9705.3	1610.7	9733.0	1609.4	9762.7
GR	1609.3	9788.9	1609.2	9831.9	1609.3	9857.1	1609.4	9882.9	1609.3	9910.2
GR	1609.4	9929.2	1609.3	9940.5	1611.4	9949.0	1609.1	9963.3	1608.1	9980.3
GR	1607.9	9993.7	1607.4	10000.0	1607.1	10006.8	1609.9	10019.9	1609.6	10033.7
GR	1608.7	10040.6	1609.6	10055.2	1609.6	10080.2	1609.5	10104.0	1609.3	10130.6
GR	1609.3	10152.9	1609.1	10175.3	1609.2	10196.0	1609.6	10220.0	1609.8	10244.7
GR	1610.1	10267.6	1611.8	10294.4	1613.2	10326.1	1613.6	10364.5	1614.2	10407.0
GR	1614.6	10431.6								
ET		7.1	9.1				9071.8	9745.0	9500	9745.0
X1	4.390	68	9667.8	9747.8	330	330	333			
GR	1616.3	9071.8	1615.9	9092.0	1615.1	9113.3	1613.7	9123.4	1613.0	9135.4
GR	1612.6	9151.9	1612.7	9166.4	1614.1	9182.3	1614.2	9196.9	1613.6	9224.3
GR	1614.6	9245.2	1614.5	9273.2	1613.5	9306.7	1613.1	9341.9	1612.3	9379.9
GR	1612.3	9411.2	1612.6	9444.8	1613.1	9470.3	1612.6	9488.9	1612.4	9518.8
GR	1611.9	9552.9	1611.2	9585.4	1611.4	9610.3	1611.4	9642.7	1611.4	9658.1
GR	1611.1	9667.8	1607.2	9681.5	1607.6	9699.1	1606.9	9715.4	1608.8	9727.8
GR	1610.1	9736.5	1610.3	9747.8	1610.3	9767.5	1611.6	9785.0	1612.4	9800.1
GR	1612.3	9827.9	1612.1	9858.3	1611.7	9869.3	1611.7	9886.1	1612.6	9904.9
GR	1612.4	9923.4	1611.9	9940.0	1616.0	9952.9	1613.0	9964.9	1611.9	9975.7
GR	1609.3	9985.9	1609.0	9989.2	1608.5	10000.0	1609.2	10009.9	1611.3	10019.8
GR	1612.7	10032.8	1612.5	10062.1	1613.2	10097.6	1613.6	10123.4	1612.3	10146.7
GR	1611.8	10176.5	1612.0	10205.4	1611.9	10234.1	1612.5	10266.7	1612.7	10305.7
GR	1613.8	10334.7	1614.8	10361.7	1615.4	10398.5	1616.7	10450.7	1617.6	10482.7
GR	1619.2	10520.8	1620.1	10565.1	1620.4	10590.2				

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO 3.209

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Tributary stream profile calculations were performed to
solve the flow split ratios through this split reach.

ET cards (Fields 7 & 8) were used in the natural profile run
for SECNO 3.347 thru 4.390 to model the image boundary line
between the Deadman Wash and Stream No. 12.

Special culvert method was used for the pipe culvert on
Stream No. 12 across the Carefree Highway.

The starting water surface elevations were obtained from the
HEC-2 results for the downstream reach.

Q is approximately 9,510 cfs to Carefree Highway, and
9,110 cfs south of the highway.

**************************************************************
Q is 9,570 cfs at this section.
NC card was used, channel = .055, overbanks = .065.
```

3.209	10.91	1570.01	1569.07	1570.01	1570.33	.32	.00	.00	1567.10
9570.0	4274.0	1944.4	3351.6	1105.2	266.1	1075.7	.0	.0	1566.70
.00	3.87	7.31	3.12	.065	.055	.065	.000	1559.10	9517.54
.005957	0.	0.	0.	0	8	0	.00	1116.51	10634.05

FLOW DISTRIBUTION FOR SECNO= 3.21 CWSEL= 1570.01

STA=	9518.	9709.	9769.	9790.	9801.	9832.	9857.	9896.	9935.	9957.	9982.	10018.	10059.
PER Q=	3.9	3.1	3.2	3.7	6.7	4.2	5.9	7.7	3.6	2.6	20.3	6.1	
AREA=	176.6	110.1	72.0	63.4	136.9	93.3	138.6	161.8	81.6	71.0	266.1	144.2	
VEL=	2.1	2.7	4.2	5.6	4.7	4.3	4.1	4.5	4.2	3.5	7.3	4.1	
DEPTH=	.9	1.8	3.6	5.7	4.3	3.8	3.5	4.1	3.7	2.8	7.5	3.5	

STA=	10059.	10091.	10111.	10131.	10165.	10294.	10368.	10442.	10634.
PER Q=	4.7	3.5	3.6	3.2	3.8	4.2	3.2	2.7	
AREA=	110.2	77.3	79.0	87.4	159.3	144.1	123.0	151.2	
VEL=	4.1	4.3	4.4	3.5	2.3	2.8	2.5	1.7	
DEPTH=	3.5	3.8	3.9	2.6	1.2	2.0	1.7	.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.284

3265 DIVIDED FLOW

Q changed to 9,110 cfs (C10T) at the confluence with Stream No. 12

3.284	9.98	1572.08	1571.05	.00	1572.40	.33	2.07	.00	1568.50
9110.0	5136.0	2899.0	1074.9	1497.1	444.6	413.0	20.3	9.2	1569.20
.02	3.43	6.52	2.60	.065	.055	.065	.000	1562.10	9329.77
.005290	320.	396.	440.	2	14	0	.00	1017.00	10566.77

FLOW DISTRIBUTION FOR SECNO= 3.28 CWSEL= 1572.08

STA=	9330.	9519.	9577.	9678.	9730.	9776.	9816.	9829.	9848.	9888.	9906.	9932.	9958.
PER Q=	3.9	3.1	4.1	4.5	4.0	6.3	3.4	5.0	8.4	3.1	3.9	4.2	
AREA=	188.7	110.5	159.3	132.3	116.4	145.5	63.8	94.6	172.8	69.0	91.3	96.5	
VEL=	1.9	2.6	2.4	3.1	3.1	3.9	4.9	4.8	4.4	4.1	3.9	4.0	
DEPTH=	1.0	1.9	1.6	2.5	2.6	3.6	5.0	4.9	4.4	3.9	3.5	3.7	

STA=	9958.	9972.	10044.	10088.	10145.	10567.
PER Q=	2.5	31.8	4.0	5.1	2.7	
AREA=	56.3	444.6	115.1	147.7	150.2	
VEL=	4.0	6.5	3.2	3.1	1.7	
DEPTH=	3.8	6.2	2.6	2.6	.4	

*SECNO 3.347

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

3470 ENCROACHMENT STATIONS= 9756.9 11243.4 TYPE= 1 TARGET= 1486.500

Q changed to 6,200 cfs for the main channel, 68% of total flow.

3.347	8.18	1573.78	1573.26	.00	1574.28	.50	1.83	.05	1570.70
6200.0	1027.3	3733.3	1439.4	330.1	535.2	602.3	33.7	15.0	1571.70
.04	3.11	6.98	2.39	.065	.048	.065	.000	1565.60	9756.90
.006657	350.	333.	200.	2	13	0	.00	775.55	10604.05

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.35 CWSEL= 1573.78

STA=	9757.	9782.	9810.	9891.	9923.	10038.	10065.	10156.	10209.	10410.	10489.	10530.	10604.
PER Q=	3.7	4.9	3.9	4.1	60.2	3.6	3.9	3.1	3.1	4.9	3.1	1.6	
AREA=	67.6	79.8	106.2	76.5	535.2	66.1	106.7	79.1	103.2	120.8	71.4	55.1	
VEL=	3.4	3.8	2.3	3.3	7.0	3.4	2.3	2.4	1.8	2.5	2.7	1.7	
DEPTH=	2.7	2.9	1.3	2.4	4.6	2.5	1.2	1.5	.5	1.5	1.7	.7	

*SECNO 3.385

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9673.4 11110.7 TYPE= 1 TARGET= 1437.300

3.385	7.00	1575.20	1574.58	.00	1575.63	.43	1.34	.01	1573.40
6200.0	1909.2	3750.9	539.9	591.3	594.8	284.1	40.8	18.7	1574.20
.05	3.23	6.31	1.90	.065	.048	.065	.000	1568.20	9673.40
.006295	215.	201.	215.	2	14	0	.00	739.18	10448.11

FLOW DISTRIBUTION FOR SECNO= 3.38 CWSEL= 1575.20

STA=	9673.	9761.	9787.	9811.	9847.	9876.	9892.	9925.	9947.	10090.	10316.	10401.	10448.
PER Q=	5.3	3.7	3.3	3.7	4.5	3.9	4.5	2.0	60.5	3.6	4.2	.9	
AREA=	126.6	67.3	60.5	75.6	78.2	57.1	82.8	43.1	594.8	134.4	116.6	33.0	
VEL=	2.6	3.4	3.3	3.0	3.5	4.2	3.4	2.8	6.3	1.7	2.3	1.6	
DEPTH=	1.4	2.6	2.5	2.1	2.7	3.5	2.5	1.9	4.2	.6	1.4	.7	

*SECNO 3.481

3470 ENCROACHMENT STATIONS= 9522.6 11221.5 TYPE= 1 TARGET= 1698.900

3.481	6.78	1578.68	1578.28	.00	1579.12	.44	3.49	.00	1576.90
6200.0	1635.8	3120.0	1444.2	600.5	448.9	486.4	57.9	27.7	1576.60
.08	2.72	6.95	2.97	.065	.048	.065	.000	1571.90	9522.60
.007864	450.	507.	550.	3	9	0	.00	843.46	10366.06

FLOW DISTRIBUTION FOR SECNO= 3.48 CWSEL= 1578.68

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9523.	9595.	9633.	9666.	9715.	9762.	9840.	9955.	10066.	10134.	10208.	10244.	10277.
PER Q=	3.8	4.3	3.7	4.7	3.3	3.6	3.1	50.3	4.5	4.6	4.1	4.3	
AREA=	95.6	79.8	68.7	93.0	75.0	93.7	94.7	448.9	103.6	106.1	76.2	76.1	
VEL=	2.5	3.3	3.3	3.1	2.7	2.4	2.0	7.0	2.7	2.7	3.4	3.5	
DEPTH=	1.3	2.1	2.1	1.9	1.6	1.2	.8	4.1	1.5	1.4	2.1	2.3	

STA=	10277.	10315.	10366.
PER Q=	4.3	1.5	
AREA=	79.1	45.2	
VEL=	3.3	2.1	
DEPTH=	2.1	.9	

*SECNO 3.546

3470 ENCROACHMENT STATIONS= 9285.2 11219.7 TYPE= 1 TARGET= 1934.500

3.546	5.48	1581.58	1581.06	.00	1581.88	.30	2.74	.01	1579.10
6200.0	2436.1	2293.0	1471.0	850.3	373.8	491.5	71.2	35.6	1580.40
.10	2.87	6.13	2.99	.065	.048	.065	.000	1576.10	9285.20
.007734	400.	343.	300.	3	13	0	.00	1045.73	10330.93

FLOW DISTRIBUTION FOR SECNO= 3.55 CWSEL= 1581.58

STA=	9285.	9378.	9643.	9676.	9702.	9776.	9839.	9862.	9887.	9912.	9925.	10035.	10130.
PER Q=	5.1	4.6	4.5	3.3	3.6	6.3	3.6	3.3	3.3	1.7	37.0	6.4	
AREA=	128.0	166.2	77.7	59.6	92.2	121.1	59.3	57.9	58.1	29.9	373.8	146.1	
VEL=	2.5	1.7	3.6	3.4	2.4	3.2	3.7	3.5	3.5	3.6	6.1	2.7	
DEPTH=	1.4	.6	2.4	2.2	1.3	1.9	2.5	2.3	2.3	2.4	3.4	1.5	

STA=	10130.	10185.	10228.	10267.	10331.
PER Q=	5.8	4.9	4.4	2.2	
AREA=	111.2	92.2	82.9	59.0	
VEL=	3.2	3.3	3.3	2.3	
DEPTH=	2.0	2.1	2.1	.9	

*SECNO 3.639
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 8870.7 11307.8 TYPE= 1 TARGET= 2437.100
Downstream (south) side edge of Carefree Highway pavement.

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        NC card was used to model the dip section "n" = .016.
    3.639      2.02   1585.32   1585.32       .00   1585.86       .55      2.50       .07   1584.40
   6200.0    1723.6    3559.3     917.1     325.0     547.9     197.3      88.6      48.5   1584.20
      .13      5.30      6.50      4.65      .016      .016      .016      .000   1583.30   9512.04
  .003136      650.      491.      440.         0        22         0       .00    990.14  10502.18


FLOW DISTRIBUTION FOR SECNO=      3.64          CWSEL=   1585.32

STA=    9512.    9561.    9604.    9664.    9717.    9774.    9838.   10231.   10334.   10470.   10502.
  PER Q=      1.6      4.0      6.1      5.3      5.3      5.6     57.4      9.6      5.1       .1
   AREA=     27.0     45.9     67.3     58.7     60.4     65.8    547.9    110.0     83.8      3.5
    VEL=      3.6      5.4      5.6      5.6      5.4      5.3      6.5      5.4      3.8      1.2
  DEPTH=       .6      1.1      1.1      1.1      1.1      1.0      1.4      1.1       .6       .1

*SECNO 3.648
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     8850.0   10812.0  TYPE=      1  TARGET=     1962.000
        Upstream (north) side edge of Carefree Highway pavement.
    3.648      2.05   1586.15   1586.15       .00   1586.75       .60       .14       .02   1585.40
   6200.0    1909.6    4238.1      52.2     346.4     645.9      20.6      89.7      49.5   1585.60
      .13      5.51      6.56      2.54      .016      .016      .016      .000   1584.10   9465.13
  .003063       46.       46.       46.         0         5         0       .00    849.75  10314.88


FLOW DISTRIBUTION FOR SECNO=      3.65          CWSEL=   1586.15

STA=    9465.    9489.    9537.    9604.    9675.    9706.    9727.    9769.    9797.   10245.   10289.   10315.
  PER Q=       .6      2.4      4.2      7.4      4.3      3.4      6.0      2.5     68.4       .8       .1
   AREA=     11.0     35.8     56.9     81.1     42.5     31.5     57.9     29.6    645.9     17.4      3.2
    VEL=      3.1      4.2      4.6      5.6      6.3      6.7      6.4      5.3      6.6      2.8      1.3
  DEPTH=       .5       .7       .8      1.1      1.3      1.5      1.4      1.0      1.4       .4       .1

*SECNO 3.651

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .43


3470 ENCROACHMENT STATIONS=     8850.0   10812.0  TYPE=      1  TARGET=     1962.000
        NC card was used, channel = .048, overbanks = .065.
    3.651      2.34   1586.44   1586.19       .00   1586.87       .43       .10       .02   1585.40
   6200.0    1627.5    4484.6      87.9     444.5     775.5      45.2      90.1      49.8   1585.60
      .13      3.66      5.78      1.94      .065      .048      .065      .000   1584.10   9443.19
  .016781       17.       17.       17.         4         5         0       .00    902.12  10345.31
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.65 CWSEL= 1586.44

STA=	9443.	9489.	9537.	9604.	9675.	9706.	9727.	9769.	9797.	10245.	10289.	10345.
PER Q=	.7	2.4	4.0	6.2	3.4	2.6	4.7	2.2	72.3	1.1	.3	
AREA=	19.8	49.8	76.4	101.6	51.6	37.7	69.9	37.8	775.5	30.2	15.0	
VEL=	2.2	3.0	3.2	3.8	4.1	4.4	4.2	3.6	5.8	2.3	1.2	
DEPTH=	.4	1.0	1.1	1.4	1.6	1.8	1.7	1.3	1.7	.7	.3	

*SECNO 3.710

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.78

3470 ENCROACHMENT STATIONS= 8784.0 10656.2 TYPE= 1 TARGET= 1872.200

3.710	3.08	1588.88	1587.96	.00	1589.05	.17	2.16	.03	1588.00
6200.0	2270.7	3919.3	10.0	854.1	1083.0	11.3	98.6	54.9	1588.10
.15	2.66	3.62	.89	.065	.048	.065	.000	1585.80	9088.54
.005317	110.	312.	240.	3	11	0	.00	1156.82	10247.86

FLOW DISTRIBUTION FOR SECNO= 3.71 CWSEL= 1588.88

STA=	9089.	9381.	9423.	9448.	9484.	9577.	9604.	9656.	9685.	10219.	10248.
PER Q=	5.7	6.2	4.4	3.0	7.4	3.6	5.3	1.1	63.2	.2	
AREA=	202.5	115.9	77.6	66.9	169.2	70.7	114.5	36.8	1083.0	11.3	
VEL=	1.7	3.3	3.5	2.8	2.7	3.1	2.9	1.9	3.6	.9	
DEPTH=	.7	2.8	3.0	1.9	1.8	2.6	2.2	1.2	2.0	.4	

*SECNO 3.804

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .64

3470 ENCROACHMENT STATIONS= 8826.2 10283.1 TYPE= 1 TARGET= 1456.899
Q changed to 5,230 cfs in the main channel, 55% of total flow.

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3.804	3.32	1591.82	1591.18	.00	1591.98	.16	2.93	.00	1591.50
5230.0	4393.2	834.6	2.2	1337.8	278.0	2.9	116.5	66.7	1591.40
.19	3.28	3.00	.77	.065	.048	.065	.000	1588.50	8826.20
.009120	400.	496.	520.	3	9	0	.00	1214.79	10177.12

FLOW DISTRIBUTION FOR SECNO= 3.80 CWSEL= 1591.82

STA=	8826.	8949.	8998.	9121.	9233.	9309.	9360.	9405.	9432.	9453.	9471.	9491.	9524.
PER Q=	4.1	3.1	3.6	9.4	12.0	7.4	4.6	4.5	5.5	3.8	3.6	4.8	
AREA=	91.9	62.3	98.9	167.0	169.4	108.1	77.6	61.6	63.0	47.9	47.9	69.3	
VEL=	2.3	2.6	1.9	2.9	3.7	3.6	3.1	3.9	4.6	4.1	3.9	3.6	
DEPTH=	.7	1.3	.8	1.5	2.2	2.1	1.7	2.3	3.0	2.6	2.4	2.1	

STA=	9524.	9566.	9603.	9645.	9892.	10163.	10177.
PER Q=	7.0	5.7	4.4	.4	16.0	.0	
AREA=	97.2	80.6	71.6	23.5	278.0	2.9	
VEL=	3.8	3.7	3.2	.9	3.0	.8	
DEPTH=	2.3	2.2	1.7	.1	1.0	.2	

*SECNO 3.881

3470 ENCROACHMENT STATIONS= 9032.5 10197.6 TYPE= 1 TARGET= 1165.100

3.881	4.55	1595.05	1594.31	.00	1595.21	.15	3.22	.00	1593.90
5230.0	4262.1	964.2	3.7	1366.2	307.7	4.3	131.1	76.8	1594.50
.22	3.12	3.13	.85	.065	.048	.065	.000	1590.50	9032.50
.007720	380.	407.	420.	4	11	0	.00	1058.85	10091.35

FLOW DISTRIBUTION FOR SECNO= 3.88 CWSEL= 1595.05

STA=	9033.	9091.	9188.	9244.	9342.	9372.	9391.	9418.	9445.	9470.	9492.	9539.	9603.
PER Q=	3.2	3.4	3.0	3.3	5.1	3.6	6.2	6.6	5.7	3.8	6.2	7.8	
AREA=	72.9	91.7	68.3	86.5	73.6	48.3	79.3	81.9	73.7	54.0	98.7	127.1	
VEL=	2.3	1.9	2.3	2.0	3.6	3.9	4.1	4.2	4.0	3.7	3.3	3.2	
DEPTH=	1.3	.9	1.2	.9	2.4	2.7	2.9	3.1	2.9	2.5	2.1	2.0	

STA=	9603.	9660.	9711.	9760.	9798.	9827.	10076.	10091.
PER Q=	7.0	6.0	5.1	3.5	2.1	18.4	.1	
AREA=	114.5	99.9	88.8	64.0	42.8	307.7	4.3	
VEL=	3.2	3.1	3.0	2.9	2.6	3.1	.9	
DEPTH=	2.0	2.0	1.8	1.7	1.5	1.2	.3	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.957

3470 ENCROACHMENT STATIONS= 9246.0 10240.7 TYPE= 1 TARGET= 994.700

3.957	6.74	1598.14	1597.32	.00	1598.32	.18	3.11	.01	1597.30
5230.0	3799.7	1396.9	33.4	1190.4	345.2	24.4	145.9	85.6	1597.50
.26	3.19	4.05	1.37	.065	.048	.065	.000	1591.40	9246.00
.007799	400.	401.	400.	3	14	0	.00	862.82	10108.82

FLOW DISTRIBUTION FOR SECNO= 3.96 CWSEL= 1598.14

STA=	9246.	9299.	9351.	9393.	9417.	9441.	9469.	9500.	9554.	9602.	9639.	9670.	9732.
PER Q=	6.8	6.6	6.7	4.6	4.7	4.3	3.5	5.4	5.9	4.7	4.1	5.9	
AREA=	110.8	106.4	98.6	61.8	63.9	64.2	59.4	95.4	96.8	75.9	64.5	106.9	
VEL=	3.2	3.2	3.6	3.9	3.9	3.5	3.1	3.0	3.2	3.2	3.4	2.9	
DEPTH=	2.1	2.0	2.3	2.6	2.6	2.3	1.9	1.8	2.0	2.0	2.1	1.7	

STA=	9732.	9765.	9809.	9871.	10062.	10109.
PER Q=	3.4	4.1	1.8	26.7	.6	
AREA=	59.3	74.5	52.1	345.2	24.4	
VEL=	3.0	2.9	1.8	4.0	1.4	
DEPTH=	1.8	1.7	.8	1.8	.5	

*SECNO 4.019

3470 ENCROACHMENT STATIONS= 9274.4 10312.2 TYPE= 1 TARGET= 1037.800

4.019	6.45	1600.65	1599.76	.00	1600.81	.17	2.49	.00	1599.50
5230.0	3862.5	1345.0	22.5	1217.0	380.5	19.2	158.5	92.4	1599.70
.29	3.17	3.53	1.17	.065	.048	.065	.000	1594.20	9274.40
.006755	350.	327.	320.	2	14	0	.00	864.09	10138.49

FLOW DISTRIBUTION FOR SECNO= 4.02 CWSEL= 1600.65

STA=	9274.	9324.	9360.	9407.	9445.	9473.	9508.	9547.	9582.	9643.	9694.	9746.	9799.
PER Q=	7.4	5.6	7.7	8.1	6.2	6.9	6.6	3.8	6.6	4.7	4.3	3.2	
AREA=	118.9	86.2	116.8	111.1	83.5	96.6	99.3	68.3	117.7	89.1	85.9	71.9	
VEL=	3.3	3.4	3.5	3.8	3.9	3.7	3.5	2.9	2.9	2.7	2.6	2.3	
DEPTH=	2.4	2.4	2.5	2.9	3.0	2.8	2.5	2.0	1.9	1.8	1.7	1.4	

STA=	9799.	9860.	10093.	10138.
PER Q=	2.9	25.7	.4	
AREA=	71.7	380.5	19.2	
VEL=	2.1	3.5	1.2	
DEPTH=	1.2	1.6	.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.058

3470 ENCROACHMENT STATIONS= 9319.9 10422.7 TYPE= 1 TARGET= 1102.800

4.058	4.71	1602.11	1601.34	.00	1602.32	.20	1.49	.01	1601.10
5230.0	3713.4	1482.8	33.7	1057.7	376.5	22.0	165.3	96.2	1600.90
.30	3.51	3.94	1.53	.065	.048	.065	.000	1597.40	9319.90
.008753	190.	206.	210.	1	17	0	.00	805.21	10125.11

FLOW DISTRIBUTION FOR SECNO= 4.06 CWSEL= 1602.11

STA=	9320.	9382.	9432.	9488.	9544.	9602.	9652.	9696.	9763.	9851.	10089.	10125.
PER Q=	5.7	7.5	10.5	12.0	11.7	8.1	4.4	5.4	5.7	28.4	.6	
AREA=	100.2	110.0	138.8	151.2	151.4	115.1	74.6	100.8	115.7	376.5	22.0	
VEL=	3.0	3.6	4.0	4.2	4.1	3.7	3.1	2.8	2.6	3.9	1.5	
DEPTH=	1.6	2.2	2.5	2.7	2.6	2.3	1.7	1.5	1.3	1.6	.6	

*SECNO 4.146

3470 ENCROACHMENT STATIONS= 9411.9 10208.0 TYPE= 1 TARGET= 796.100

4.146	5.08	1605.48	1604.50	.00	1605.68	.19	3.36	.00	1603.80
5230.0	3466.1	1761.3	2.6	1064.9	437.9	4.5	180.5	104.0	1605.20
.34	3.25	4.02	.58	.065	.048	.065	.000	1600.40	9411.90
.006499	440.	465.	465.	3	9	0	.00	711.88	10123.78

FLOW DISTRIBUTION FOR SECNO= 4.15 CWSEL= 1605.48

STA=	9412.	9485.	9518.	9565.	9605.	9622.	9677.	9740.	9781.	9837.	9884.	10098.	10124.
PER Q=	4.8	5.6	8.7	7.4	3.3	11.2	10.4	4.9	5.7	4.3	33.7	.0	
AREA=	106.4	85.4	126.3	108.9	46.7	158.1	158.8	85.2	105.6	83.4	437.9	4.5	
VEL=	2.4	3.4	3.6	3.6	3.7	3.7	3.4	3.0	2.8	2.7	4.0	.6	
DEPTH=	1.5	2.5	2.7	2.7	2.8	2.8	2.5	2.1	1.9	1.8	2.0	.2	

*SECNO 4.197

3470 ENCROACHMENT STATIONS= 9543.8 10299.2 TYPE= 1 TARGET= 755.400

4.197	6.23	1607.33	1606.54	.00	1607.63	.30	1.92	.03	1605.20
5230.0	2196.2	2889.7	144.1	689.7	560.5	62.2	189.5	108.2	1605.20
.36	3.18	5.16	2.32	.065	.048	.065	.000	1601.10	9543.80
.007531	280.	269.	265.	2	8	0	.00	623.74	10167.54

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.20 CWSEL= 1607.33

STA=	9544.	9615.	9678.	9720.	9761.	9806.	9853.	9896.	10107.	10145.	10168.
PER Q=	6.9	6.9	3.2	2.4	6.0	9.9	6.7	55.3	2.6	.2	
AREA=	126.1	120.0	63.7	52.5	95.5	132.1	99.8	560.5	53.8	8.4	
VEL=	2.9	3.0	2.6	2.3	3.3	3.9	3.5	5.2	2.5	1.0	
DEPTH=	1.8	1.9	1.5	1.3	2.1	2.8	2.3	2.7	1.4	.4	

*SECNO 4.262

3470 ENCROACHMENT STATIONS= 9687.2 10352.5 TYPE= 1 TARGET= 665.300

4.262	7.12	1610.12	1609.36	.00	1610.45	.33	2.81	.01	1607.20
5230.0	1858.3	2356.8	1014.9	556.9	416.6	269.3	200.2	113.2	1607.40
.38	3.34	5.66	3.77	.065	.048	.065	.000	1603.00	9687.20
.008095	400.	343.	300.	3	5	0	.00	554.04	10241.24

FLOW DISTRIBUTION FOR SECNO= 4.26 CWSEL= 1610.12

STA=	9687.	9726.	9731.	9771.	9814.	9870.	9927.	9965.	10109.	10138.	10170.	10200.	10241.
PER Q=	3.2	.5	3.5	4.2	6.9	9.1	8.2	45.1	6.4	8.0	4.3	.7	
AREA=	61.1	8.6	64.6	74.1	110.9	132.0	105.5	416.6	81.2	97.5	65.3	25.2	
VEL=	2.7	3.1	2.8	3.0	3.2	3.6	4.1	5.7	4.1	4.3	3.4	1.5	
DEPTH=	1.6	1.9	1.6	1.7	2.0	2.3	2.8	2.9	2.8	3.0	2.2	.6	

*SECNO 4.333

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

3470 ENCROACHMENT STATIONS= 9762.7 10431.6 TYPE= 1 TARGET= 668.899
Just downstream of the levee (diversion structure).

4.333	7.95	1612.35	1610.92	.00	1612.54	.19	2.08	.01	1611.40
5230.0	1674.1	1683.7	1872.2	555.9	370.7	649.1	212.2	117.8	1609.60
.41	3.01	4.54	2.88	.065	.048	.065	.000	1604.40	9762.70
.004095	370.	375.	370.	2	9	0	.00	544.00	10306.70

FLOW DISTRIBUTION FOR SECNO= 4.33 CWSEL= 1612.35

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9763.	9789.	9832.	9857.	9883.	9910.	9929.	9949.	10055.	10080.	10104.	10131.	10153.
PER Q=	4.2	7.9	4.6	4.5	4.7	3.3	2.7	32.2	3.8	3.7	4.5	4.0	
AREA=	78.4	133.0	77.9	77.2	81.7	56.9	50.8	370.7	68.6	66.5	78.3	67.9	
VEL=	2.8	3.1	3.1	3.0	3.0	3.0	2.8	4.5	2.9	2.9	3.0	3.1	
DEPTH=	3.0	3.1	3.1	3.0	3.0	3.0	2.6	3.5	2.7	2.8	2.9	3.0	

STA=	10153.	10175.	10196.	10220.	10245.	10294.	10307.
PER Q=	4.2	4.0	4.1	3.5	4.0	.0	
AREA=	70.4	66.1	70.6	65.3	92.1	3.3	
VEL=	3.1	3.2	3.0	2.8	2.3	.6	
DEPTH=	3.1	3.2	2.9	2.6	1.9	.3	

*SECNO 4.390

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .55

3470 ENCROACHMENT STATIONS= 9745.0 10590.2 TYPE= 1 TARGET= 845.200
NC card was used to change n values, channel = .065,
overbanks = .080

4.390	7.38	1614.28	1613.62	.00	1614.61	.32	2.02	.04	1616.00
5230.0	1941.1	1603.1	1685.9	486.3	260.6	522.5	221.9	121.7	1612.70
.43	3.99	6.15	3.23	.080	.065	.080	.000	1606.90	9745.00
.013486	290.	301.	301.	2	10	0	.00	590.41	10347.70

FLOW DISTRIBUTION FOR SECNO= 4.39 CWSEL= 1614.28

STA=	9745.	9768.	9785.	9828.	9858.	9886.	9923.	9947.	10033.	10098.	10177.	10205.	10234.
PER Q=	8.8	5.4	5.9	4.3	5.3	4.7	2.8	30.7	5.5	7.1	5.1	4.9	
AREA=	89.6	58.3	88.1	63.3	69.6	73.0	44.3	260.6	100.1	120.3	68.8	66.9	
VEL=	5.1	4.8	3.5	3.5	4.0	3.4	3.3	6.2	2.9	3.1	3.8	3.8	
DEPTH=	4.0	3.3	2.1	2.1	2.5	2.0	1.8	3.6	1.5	1.5	2.4	2.3	

STA=	10234.	10267.	10306.	10348.
PER Q=	4.6	3.8	1.3	
AREA=	67.9	65.6	33.0	
VEL=	3.5	3.1	2.1	
DEPTH=	2.1	1.7	.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.492

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.01

Split flow location.
Q changed to 9,510 cfs at C10R (split flow starts here).

4.492	7.53	1617.83	1616.33	.00	1618.02	.20	3.41	.01	1615.30
9510.0	5836.8	2944.5	728.7	2086.3	598.7	308.0	246.7	130.9	1614.30
.47	2.80	4.92	2.37	.080	.065	.080	.000	1610.30	9233.67
.004913	500.	539.	500.	4	14	0	.00	1002.96	10236.63

FLOW DISTRIBUTION FOR SECNO= 4.49 CWSEL= 1617.83

STA=	9234.	9360.	9382.	9434.	9490.	9539.	9602.	9670.	9738.	9779.	9817.	9862.	9888.
PER Q=	3.1	3.9	4.1	4.3	4.6	4.7	5.5	5.0	3.8	3.8	5.1	3.9	
AREA=	150.6	102.6	148.7	158.2	154.2	173.3	196.9	187.3	130.4	125.7	159.9	109.8	
VEL=	2.0	3.6	2.6	2.6	2.8	2.6	2.7	2.6	2.8	2.9	3.0	3.4	
DEPTH=	1.2	4.7	2.8	2.8	3.2	2.8	2.9	2.8	3.1	3.3	3.6	4.2	

STA=	9888.	9914.	9949.	9967.	10077.	10110.	10163.	10237.
PER Q=	4.2	3.8	1.5	31.0	3.3	3.4	1.0	
AREA=	115.1	121.5	52.4	598.7	107.8	134.1	66.1	
VEL=	3.5	3.0	2.7	4.9	2.9	2.4	1.4	
DEPTH=	4.4	3.5	2.9	5.4	3.3	2.5	.9	

*SECNO 4.567

3265 DIVIDED FLOW

4.567	8.28	1620.18	1619.25	.00	1620.57	.39	2.49	.06	1616.30
9510.0	5595.3	3728.3	186.5	1661.9	545.0	79.0	269.6	140.1	1617.70
.49	3.37	6.84	2.36	.080	.065	.080	.000	1611.90	8935.27
.009137	370.	396.	396.	3	6	0	.00	1137.41	10102.21

FLOW DISTRIBUTION FOR SECNO= 4.57 CWSEL= 1620.18

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

STA=    8935.    9469.    9490.    9541.    9581.    9624.    9687.    9731.    9790.    9853.    9914.    9944.   10042.
  PER Q=      4.0      3.4      7.7      4.9      4.0      5.8      3.5      5.1      6.2      8.9      5.3     39.2
   AREA=    257.9     76.0    177.9    124.6    112.3    164.4    104.4    148.7    171.2    209.6    114.8    545.0
    VEL=      1.5      4.2      4.1      3.8      3.4      3.4      3.2      3.3      3.5      4.0      4.4      6.8
  DEPTH=       .5      3.7      3.5      3.1      2.6      2.6      2.4      2.5      2.7      3.4      3.9      5.6

STA=   10042.   10102.
  PER Q=      2.0
   AREA=     79.0
    VEL=      2.4
  DEPTH=      1.3

1490 NH CARD USED
*SECNO 4.662
     4.662      9.18   1623.18   1621.49       .00   1623.45       .27      2.87       .01   1619.60
    9510.0    1763.8    2857.5    4888.6     785.6     488.8    1391.1     293.8     150.1   1619.10
       .52      2.25      5.85      3.51      .080      .065      .075      .000   1614.00   9426.72
   .004898      390.      502.      430.         2        10         0       .00    997.25  10423.97


FLOW DISTRIBUTION FOR SECNO=      4.66          CWSEL=   1623.18

STA=    9427.    9781.    9841.    9883.    9946.    9966.   10035.   10069.   10116.   10183.   10214.   10245.   10271.
  PER Q=      3.2      4.6      5.8      3.4      1.6     30.0      3.6      5.7      5.8      4.4      4.5      5.8
   AREA=    251.8    166.4    167.3    143.0     57.1    488.8    116.9    174.3    201.1    126.5    127.4    126.9
    VEL=      1.2      2.6      3.3      2.3      2.6      5.8      2.9      3.1      2.7      3.3      3.4      4.3
  DEPTH=       .7      2.8      4.0      2.3      2.8      7.1      3.4      3.7      3.0      4.0      4.2      4.9

STA=   10271.   10278.   10292.   10316.   10342.   10404.   10424.
  PER Q=      3.3      4.8      5.8      4.0      3.7       .0
   AREA=     52.4     86.4    117.5    111.7    144.1      5.9
    VEL=      5.9      5.3      4.7      3.4      2.4       .6
  DEPTH=      7.2      6.1      5.0      4.3      2.3       .3

*SECNO -3.284
START TRIB COMP
    -3.284     3.284  1572.076

3265 DIVIDED FLOW

    -3.284      9.98   1572.08       .00       .00   1572.40       .33      1.94       .94   1568.50
    9110.0    5136.2    2898.6    1075.2    1497.5     444.7     413.2     315.5     158.6   1569.20
       .55      3.43      6.52      2.60      .065      .055      .065      .000   1562.10   9329.73
   .005287      320.      396.      440.         0         0         0       .00   1017.13  10566.80
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= -3.28 CWSEL= 1572.08

STA=	9330.	9519.	9577.	9678.	9730.	9776.	9816.	9829.	9848.	9888.	9906.	9932.	9958.
PER Q=	3.9	3.1	4.1	4.5	4.0	6.3	3.4	5.0	8.4	3.1	3.9	4.2	
AREA=	188.8	110.6	159.4	132.4	116.4	145.6	63.8	94.6	172.8	69.0	91.3	96.5	
VEL=	1.9	2.6	2.4	3.1	3.1	3.9	4.9	4.8	4.4	4.1	3.9	4.0	
DEPTH=	1.0	1.9	1.6	2.5	2.6	3.6	5.0	4.9	4.4	3.9	3.5	3.7	

STA=	9958.	9972.	10044.	10088.	10145.	10567.
PER Q=	2.5	31.8	4.0	5.1	2.7	
AREA=	56.3	444.7	115.2	147.7	150.3	
VEL=	4.0	6.5	3.2	3.1	1.7	
DEPTH=	3.8	6.2	2.6	2.6	.4	

*SECNO 3.347

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .44

3470 ENCROACHMENT STATIONS= 9205.8 9756.9 TYPE= 1 TARGET= 551.101

3.347	8.46	1574.06	1572.44	.00	1574.28	.21	1.86	.01	1570.40
2910.0	358.6	990.2	1561.2	296.3	189.7	554.6	330.9	165.1	1569.20
.58	1.21	5.22	2.81	.070	.050	.065	.000	1565.60	9266.10
.002807	350.	510.	400.	2	17	0	.00	490.80	9756.90

FLOW DISTRIBUTION FOR SECNO= 3.35 CWSEL= 1574.06

STA=	9266.	9383.	9509.	9566.	9572.	9602.	9619.	9629.	9637.	9673.	9702.	9713.	9722.
PER Q=	3.3	3.7	3.8	1.5	34.0	7.4	3.3	3.2	12.8	8.2	3.3	3.6	
AREA=	93.2	107.4	77.7	18.1	189.7	69.5	34.1	31.7	130.9	91.1	36.6	34.1	
VEL=	1.0	1.0	1.4	2.4	5.2	3.1	2.8	3.0	2.9	2.6	2.7	3.0	
DEPTH=	.8	.9	1.4	3.1	6.2	4.1	3.5	3.9	3.6	3.2	3.3	4.0	

STA=	9722.	9738.	9757.
PER Q=	6.2	5.6	
AREA=	62.2	64.4	
VEL=	2.9	2.5	
DEPTH=	3.8	3.5	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.385

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .64

3470 ENCROACHMENT STATIONS= 8930.9 9673.4 TYPE= 1 TARGET= 742.500

3.385	7.42	1575.62	1574.86	.00	1575.92	.30	1.61	.03	1574.60
2910.0	1223.5	1111.4	575.1	417.7	185.9	184.1	339.1	169.6	1572.90
.61	2.93	5.98	3.12	.070	.050	.065	.000	1568.20	9182.48
.006864	450.	396.	330.	1	14	0	.00	466.15	9673.40

FLOW DISTRIBUTION FOR SECNO= 3.38 CWSEL= 1575.62

STA=	9182.	9366.	9416.	9434.	9457.	9467.	9479.	9490.	9525.	9573.	9593.	9613.	9648.
PER Q=	3.5	4.6	8.6	6.5	3.2	7.3	4.9	3.4	38.2	8.0	6.0	4.6	
AREA=	79.3	60.8	61.7	58.4	27.6	48.1	36.5	45.3	185.9	60.0	49.5	53.2	
VEL=	1.3	2.2	4.1	3.3	3.4	4.4	3.9	2.2	6.0	3.9	3.5	2.5	
DEPTH=	.4	1.2	3.5	2.5	2.7	4.0	3.4	1.3	3.9	2.9	2.5	1.5	

STA=	9648.	9673.
PER Q=	1.2	
AREA=	21.3	
VEL=	1.6	
DEPTH=	.8	

*SECNO 3.481

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 8610.4 9522.6 TYPE= 1 TARGET= 912.199

3.481	6.63	1578.53	1578.09	.00	1578.91	.38	2.97	.02	1575.50
2910.0	335.6	1261.9	1312.6	196.5	188.0	413.4	346.5	174.0	1575.50
.63	1.71	6.71	3.18	.070	.050	.065	.000	1571.90	8910.43
.006766	310.	506.	450.	3	10	0	.00	577.34	9522.60

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.48 CWSEL= 1578.53

STA=	8910.	9211.	9250.	9280.	9320.	9356.	9362.	9375.	9392.	9414.	9431.	9441.	9462.
PER Q=	4.7	3.6	3.2	43.4	5.8	3.1	7.3	3.8	5.8	4.0	3.6	5.5	
AREA=	104.6	50.1	41.8	188.0	61.4	22.7	48.4	35.5	51.5	36.4	28.4	48.9	
VEL=	1.3	2.1	2.2	6.7	2.7	4.0	4.4	3.1	3.3	3.2	3.7	3.3	
DEPTH=	.3	1.3	1.4	4.6	1.7	3.8	3.8	2.1	2.3	2.2	2.7	2.3	

STA=	9462.	9489.	9523.
PER Q=	3.0	3.2	
AREA=	37.6	42.7	
VEL=	2.3	2.2	
DEPTH=	1.4	1.3	

*SECNO 3.546

3470 ENCROACHMENT STATIONS= 8010.0 9285.2 TYPE= 1 TARGET= 1275.200

3.546	5.19	1581.29	1580.80	.00	1581.44	.15	2.51	.02	1579.70
2910.0	234.9	642.3	2032.8	181.5	128.2	851.1	355.3	180.9	1580.30
.67	1.29	5.01	2.39	.070	.050	.065	.000	1576.10	8295.85
.005553	400.	502.	360.	2	14	0	.00	989.35	9285.20

FLOW DISTRIBUTION FOR SECNO= 3.55 CWSEL= 1581.29

STA=	8296.	8494.	8585.	8622.	8733.	8823.	8862.	8892.	8911.	8941.	8956.	9029.	9107.
PER Q=	5.0	3.1	22.1	6.2	4.7	3.8	3.2	5.0	4.9	3.4	3.2	3.4	
AREA=	114.6	66.9	128.2	107.8	83.8	52.8	42.6	47.0	54.6	33.5	56.8	65.0	
VEL=	1.3	1.3	5.0	1.7	1.6	2.1	2.2	3.1	2.6	3.0	1.7	1.5	
DEPTH=	.6	.7	3.5	1.0	.9	1.3	1.4	2.5	1.8	2.3	.8	.8	

STA=	9107.	9159.	9172.	9191.	9204.	9217.	9270.	9285.
PER Q=	3.3	4.7	7.8	6.2	4.7	4.2	1.2	
AREA=	41.5	37.8	61.0	46.1	38.9	63.0	18.8	
VEL=	2.3	3.6	3.7	3.9	3.5	2.0	1.8	
DEPTH=	.8	3.1	3.2	3.5	3.0	1.2	1.2	

*SECNO .434

3265 DIVIDED FLOW

SECNO 0.434, 0.529, and 0.624 are the river miles on Stream No. 12.

.434	4.84	1583.24	1582.47	.00	1583.33	.09	1.88	.01	1582.70
2910.0	158.0	468.9	2283.1	118.8	154.1	980.5	365.4	189.7	1582.40
.71	1.33	3.04	2.33	.070	.050	.065	.000	1578.40	9792.49
.004931	630.	496.	300.	3	14	0	.00	957.61	10753.76

FLOW DISTRIBUTION FOR SECNO= .43 CWSEL= 1583.24

STA=	9792.	9893.	9988.	10077.	10178.	10229.	10261.	10315.	10357.	10435.	10466.	10504.	10536.
PER Q=	3.1	2.3	16.1	6.7	5.2	4.2	4.8	4.2	5.5	6.0	16.7	9.7	
AREA=	66.1	52.7	154.1	110.7	74.4	53.3	71.1	59.8	89.1	66.2	132.0	88.9	
VEL=	1.4	1.3	3.0	1.8	2.0	2.3	2.0	2.0	1.8	2.6	3.7	3.2	
DEPTH=	.7	.6	1.8	1.1	1.4	1.7	1.3	1.4	1.1	2.1	3.5	2.8	

STA=	10536.	10561.	10619.	10703.	10754.
PER Q=	5.1	5.1	4.6	.6	
AREA=	55.3	76.5	83.1	20.1	
VEL=	2.7	2.0	1.6	.9	
DEPTH=	2.2	1.3	1.0	.4	

*SECNO .529

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .66

.529	5.50	1586.60	1586.48	.00	1586.89	.30	3.50	.06	1586.40
2910.0	864.7	840.6	1204.6	353.4	119.2	448.4	377.5	200.0	1586.50
.75	2.45	7.05	2.69	.070	.050	.065	.000	1581.10	9614.66
.011405	430.	502.	500.	2	8	0	.00	912.81	10527.47

FLOW DISTRIBUTION FOR SECNO= .53 CWSEL= 1586.60

STA=	9615.	9743.	9757.	9785.	9818.	9862.	9915.	9989.	10023.	10086.	10097.	10162.	10243.
PER Q=	5.0	3.0	4.8	4.5	4.9	4.8	2.6	28.9	3.0	5.4	4.2	3.3	
AREA=	79.1	25.9	44.5	46.7	54.5	58.5	44.3	119.2	39.4	31.7	52.8	51.6	
VEL=	1.8	3.4	3.1	2.8	2.6	2.4	1.7	7.1	2.2	5.0	2.3	1.8	
DEPTH=	.6	1.8	1.6	1.4	1.2	1.1	.6	3.5	.6	2.9	.8	.6	

STA=	10243.	10368.	10397.	10414.	10437.	10507.	10527.
PER Q=	6.7	6.4	3.4	4.0	4.9	.2	
AREA=	89.4	51.8	28.2	35.7	61.6	6.3	
VEL=	2.2	3.6	3.5	3.3	2.3	1.1	
DEPTH=	.7	1.8	1.7	1.5	.9	.3	

*SECNO .624

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

.624	5.99	1590.19	1589.66	.00	1590.33	.14	3.42	.02	1589.50
2910.0	1333.0	626.3	950.7	590.0	121.5	519.9	388.3	209.5	1589.20
.79	2.26	5.16	1.83	.070	.050	.065	.000	1584.20	9548.24
.005471	400.	502.	460.	3	5	0	.00	973.43	10521.67

FLOW DISTRIBUTION FOR SECNO= .62 CWSEL= 1590.19

STA=	9548.	9701.	9752.	9779.	9801.	9839.	9873.	9924.	9981.	10013.	10063.	10089.	10123.
PER Q=	5.0	8.3	6.6	5.4	8.1	5.5	4.8	2.2	21.5	4.2	3.4	3.2	
AREA=	100.6	98.4	67.8	54.3	85.9	65.8	70.9	46.3	121.5	62.0	41.5	45.3	
VEL=	1.4	2.4	2.8	2.9	2.7	2.4	2.0	1.4	5.2	2.0	2.4	2.1	
DEPTH=	.7	1.9	2.4	2.5	2.3	1.9	1.4	.8	3.8	1.2	1.6	1.3	

STA=	10123.	10195.	10245.	10314.	10354.	10505.	10522.
PER Q=	5.3	4.0	4.5	3.3	4.7	.0	
AREA=	81.8	60.5	73.1	49.6	104.5	1.6	
VEL=	1.9	1.9	1.8	2.0	1.3	.4	
DEPTH=	1.1	1.2	1.1	1.2	.7	.1	

*SECNO 3.639

3265 *DIVIDED FLOW*

3280 CROSS SECTION 3.64 EXTENDED 7.00 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 8870.7 TYPE= 1 TARGET= 8870.699

3.639	7.10	1593.10	1593.10	.00	1593.12	.02	.03	.01	1593.40
2910.0	.2	71.0	2838.7	2.6	232.9	2478.8	401.0	216.3	1592.70
.87	.09	.31	1.15	.016	.050	.016	.000	1586.00	7875.84
.000032	540.	428.	210.	0	29	0	.00	982.77	8870.70

FLOW DISTRIBUTION FOR SECNO= 3.64 CWSEL= 1593.10

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	7876.	7914.	8018.	8095.	8179.	8347.	8471.	8533.	8759.	8871.
PER Q=	.0	2.4	.7	2.5	14.0	16.8	8.4	34.5	20.7	
AREA=	2.6	232.9	49.8	114.0	421.1	415.5	207.4	812.6	458.4	
VEL=	.1	.3	.4	.6	1.0	1.2	1.2	1.2	1.3	
DEPTH=	.1	2.5	.7	1.4	2.5	3.4	3.4	3.6	4.1	

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	1	.024	.80	3.00	.00	5.67	.00	46.00	2	2	1586.40	1586.00

CHART 2 - CORRUGATED METAL PIPE CULVERT
SCALE 2 - MITERED TO CONFORM TO SLOPE

5130, EGIC= 2205.66..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 2064.43 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
*SECNO 3.648
5155, 20 TRIALS OF QWEIR NOT ENOUGH; POSSIBLY INVALID
FINAL QWEIR + QCULV = 2888. DOES NOT EQUAL ACTUAL Q = 2910.

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 1593.10
5150, EG OF 1593.10 LESS THAN XEG OF 1593.12

3265 *DIVIDED FLOW*

3280 CROSS SECTION 3.65 EXTENDED 5.73 FEET

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
2205.66	2064.43	.00	2675.	212.	.444	25.2	1585.10	2784.

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3470 ENCROACHMENT STATIONS= .0 8850.0 TYPE= 1 TARGET= 8849.999

3.648	7.53	1593.93	1593.50	.00	1593.95	.02	.00	.00	1594.10
2910.0	24.6	61.0	2824.3	75.1	137.5	2238.7	403.7	217.4	1594.20
.88	.33	.44	1.26	.016	.050	.016	.000	1586.40	7638.20
.000042	46.	46.	46.	20	13	0	.00	1104.83	8850.00

FLOW DISTRIBUTION FOR SECNO= 3.65 CWSEL= 1593.93

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	7638.	7671.	7695.	7798.	7895.	7915.	7961.	8092.	8201.	8325.	8473.	8525.	8850.
PER Q=	.2	.2	.0	.4	.0	2.1	.6	3.4	9.4	14.3	7.1	62.3	
AREA=	17.0	12.0	5.8	36.9	3.4	137.5	47.9	139.9	270.3	374.2	161.8	1244.7	
VEL=	.4	.4	.2	.3	.2	.4	.4	.7	1.0	1.1	1.3	1.5	
DEPTH=	.5	.5	.1	.4	.2	4.1	.4	1.3	2.2	2.5	3.1	3.8	

*SECNO 3.651
3280 CROSS SECTION 3.65 EXTENDED 6.17 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 8850.0 TYPE= 1 TARGET= 8849.999

3.651	7.97	1594.37	1594.37	.00	1594.38	.02	.00	.00	1594.10
2910.0	69.3	55.9	2784.8	193.3	152.4	2623.5	404.8	217.9	1594.20
.89	.36	.37	1.06	.016	.050	.016	.000	1586.40	7491.42
.000026	17.	17.	17.	0	11	0	.00	1358.58	8850.00

FLOW DISTRIBUTION FOR SECNO= 3.65 CWSEL= 1594.37

STA=	7491.	7926.	7961.	8201.	8325.	8473.	8525.	8850.
PER Q=	2.4	1.9	5.8	9.9	14.6	6.9	58.4	
AREA=	193.3	152.4	290.0	324.3	438.6	184.3	1386.2	
VEL=	.4	.4	.6	.9	1.0	1.1	1.2	
DEPTH=	.4	4.4	1.2	2.6	3.0	3.6	4.3	

*SECNO 3.881

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .05

3470 ENCROACHMENT STATIONS= 7662.0 9032.5 TYPE= 1 TARGET= 1370.500

3.881	3.71	1594.21	1593.96	.00	1594.48	.27	.03	.08	1592.00
4280.0	48.2	519.6	3712.3	19.8	74.3	1019.9	413.7	223.8	1592.00
.90	2.43	6.99	3.64	.080	.065	.065	.000	1590.50	7889.42
.018953	400.	312.	170.	2	15	0	.00	962.64	9032.50

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 3.88 CWSEL= 1594.21

STA=	7889.	7939.	7961.	8160.	8312.	8406.	8683.	8742.	8817.	8876.	8903.	8953.	8990.
PER Q=	1.1	12.1	20.3	10.6	6.6	4.1	6.0	8.0	7.8	5.2	9.4	5.8	
AREA=	19.8	74.3	242.5	147.2	91.0	54.6	71.3	93.9	84.0	48.3	87.7	58.3	
VEL=	2.4	7.0	3.6	3.1	3.1	3.2	3.6	3.7	4.0	4.6	4.6	4.2	
DEPTH=	.4	3.4	1.2	1.0	1.0	.2	1.2	1.2	1.4	1.8	1.8	1.6	

STA=	8990.	9032.
PER Q=	2.9	
AREA=	41.1	
VEL=	3.1	
DEPTH=	1.0	

*SECNO 3.957

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.88

3470 ENCROACHMENT STATIONS= 7650.0 9246.0 TYPE= 1 TARGET= 1596.000

3.957	5.87	1597.27	1596.67	.00	1597.37	.10	2.86	.02	1595.90
4280.0	377.8	591.5	3310.8	250.5	137.2	1530.4	424.6	232.4	1595.10
.93	1.51	4.31	2.16	.080	.065	.065	.000	1591.40	7797.92
.005364	180.	195.	340.	6	16	0	.00	1404.14	9246.00

FLOW DISTRIBUTION FOR SECNO= 3.96 CWSEL= 1597.27

STA=	7798.	8003.	8028.	8060.	8136.	8215.	8261.	8300.	8329.	8365.	8412.	8452.	8493.
PER Q=	7.7	1.1	13.8	3.2	6.1	5.1	4.5	3.2	3.2	3.5	3.6	3.2	
AREA=	220.7	29.9	137.2	78.2	118.2	86.1	74.7	54.4	58.9	69.8	64.6	61.6	
VEL=	1.5	1.5	4.3	1.8	2.2	2.5	2.6	2.5	2.4	2.2	2.4	2.2	
DEPTH=	1.1	1.2	4.3	1.0	1.5	1.9	1.9	1.9	1.7	1.5	1.6	1.5	

STA=	8493.	8747.	8801.	8855.	8949.	9079.	9122.	9150.	9200.	9246.
PER Q=	5.3	3.3	3.3	4.9	8.0	4.8	4.0	4.8	3.1	
AREA=	149.3	71.2	71.1	111.6	169.0	80.7	60.9	85.1	64.8	
VEL=	1.5	2.0	2.0	1.9	2.0	2.5	2.8	2.4	2.1	
DEPTH=	.6	1.3	1.3	1.2	1.3	1.9	2.2	1.7	1.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.019

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 7874.3 9274.4 TYPE= 1 TARGET= 1400.101

4.019	5.94	1600.14	1599.71	.00	1600.29	.15	2.91	.02	1598.50
4280.0	805.7	666.4	2807.9	350.9	124.7	1107.2	441.8	245.2	1599.30
.98	2.30	5.34	2.54	.080	.065	.065	.000	1594.20	7993.87
.008809	520.	486.	400.	4	13	0	.00	1232.03	9274.40

FLOW DISTRIBUTION FOR SECNO= 4.02 CWSEL= 1600.14

STA=	7994.	8084.	8132.	8183.	8226.	8245.	8274.	8346.	8417.	8510.	8563.	8597.	8611.
PER Q=	4.2	4.0	4.1	4.6	1.9	15.6	3.3	3.2	3.8	4.5	4.5	5.4	
AREA=	93.6	74.0	75.5	75.4	32.4	124.7	65.8	66.8	82.4	72.7	61.4	47.5	
VEL=	1.9	2.3	2.3	2.6	2.5	5.3	2.2	2.1	2.0	2.7	3.2	4.8	
DEPTH=	1.0	1.5	1.5	1.8	1.7	4.2	.9	.9	.9	1.4	1.8	3.4	

STA=	8611.	8674.	8732.	8782.	8846.	8940.	9007.	9186.	9225.	9274.
PER Q=	6.1	4.2	3.6	4.0	6.1	3.7	4.1	3.1	5.8	
AREA=	93.4	71.9	61.8	72.4	110.4	70.9	94.7	51.7	83.2	
VEL=	2.8	2.5	2.5	2.3	2.4	2.3	1.9	2.6	3.0	
DEPTH=	1.5	1.2	1.2	1.1	1.2	1.1	.5	1.3	1.7	

*SECNO 4.058

3470 ENCROACHMENT STATIONS= 7770.7 9319.9 TYPE= 1 TARGET= 1549.200

4.058	4.92	1602.32	1601.51	.00	1602.41	.09	2.12	.01	1601.00
4280.0	1004.2	614.7	2661.2	561.2	171.2	1211.2	455.0	254.5	1601.50
1.01	1.79	3.59	2.20	.080	.065	.065	.000	1597.40	8030.58
.005013	420.	385.	280.	3	17	0	.00	1289.32	9319.90

FLOW DISTRIBUTION FOR SECNO= 4.06 CWSEL= 1602.32

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	8031.	8195.	8256.	8325.	8378.	8411.	8465.	8515.	8612.	8657.	8690.	8740.	8773.
PER Q=	3.4	4.0	4.6	4.5	3.7	3.2	14.4	4.8	4.7	3.6	5.5	4.9	
AREA=	113.9	95.5	109.8	97.2	67.8	77.0	171.2	112.5	82.3	62.0	94.0	74.5	
VEL=	1.3	1.8	1.8	2.0	2.3	1.8	3.6	1.8	2.4	2.5	2.5	2.8	
DEPTH=	.7	1.6	1.6	1.8	2.0	1.4	3.4	1.2	1.8	1.9	1.9	2.2	

STA=	8773.	8813.	8883.	8957.	9016.	9065.	9139.	9243.	9320.
PER Q=	4.8	5.6	4.9	4.1	3.4	4.6	5.6	5.8	
AREA=	77.4	109.3	103.4	84.6	70.0	100.2	124.3	116.7	
VEL=	2.6	2.2	2.0	2.1	2.1	2.0	1.9	2.1	
DEPTH=	1.9	1.6	1.4	1.4	1.4	1.4	1.2	1.5	

*SECNO 4.146

3470 ENCROACHMENT STATIONS= 8005.2 9411.9 TYPE= 1 TARGET= 1406.700

4.146	4.30	1604.70	1604.01	.00	1604.82	.12	2.40	.01	1603.60
4280.0	2131.5	525.8	1622.7	868.6	127.8	595.3	469.6	264.7	1603.40
1.05	2.45	4.11	2.73	.080	.065	.065	.000	1600.40	8235.83
.009131	380.	396.	340.	3	16	0	.00	1176.07	9411.90

FLOW DISTRIBUTION FOR SECNO= 4.15 CWSEL= 1604.70

STA=	8236.	8343.	8390.	8417.	8440.	8497.	8582.	8660.	8691.	8715.	8835.	8880.	8929.
PER Q=	4.8	7.3	7.1	4.0	3.7	5.1	4.8	3.1	4.3	3.1	2.5	12.3	
AREA=	105.9	102.8	82.1	54.1	73.5	105.3	99.8	52.4	57.6	83.6	51.5	127.8	
VEL=	1.9	3.0	3.7	3.2	2.1	2.1	2.1	2.5	3.2	1.6	2.1	4.1	
DEPTH=	1.0	2.2	3.0	2.4	1.3	1.2	1.3	1.7	2.4	.7	1.1	2.6	

STA=	8929.	8980.	9031.	9045.	9076.	9162.	9217.	9290.	9346.	9412.
PER Q=	3.0	4.1	6.2	3.4	3.0	4.6	6.2	3.5	3.9	
AREA=	55.8	66.1	50.0	46.3	68.9	73.6	98.9	63.3	72.3	
VEL=	2.3	2.6	5.3	3.1	1.9	2.7	2.7	2.4	2.3	
DEPTH=	1.1	1.3	3.8	1.5	.8	1.3	1.3	1.1	1.1	

*SECNO 4.197

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 8410.4 9543.8 TYPE= 1 TARGET= 1133.399

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
4.197	6.09	1607.19	1606.38	.00	1607.34	.15	2.52	.01	1605.70
4280.0	2549.6	904.1	826.4	1031.0	182.5	367.8	481.2	272.6	1606.30
1.08	2.47	4.95	2.25	.080	.065	.065	.000	1601.10	8541.58
.006537	260.	428.	400.	2	11	0	.00	995.26	9543.80

FLOW DISTRIBUTION FOR SECNO= 4.20 CWSEL= 1607.19

STA=	8542.	8760.	8833.	8843.	8860.	8872.	8908.	8949.	8991.	9038.	9084.	9143.	9224.
PER Q=	4.3	5.9	3.7	7.0	4.2	9.8	4.5	3.0	6.9	4.7	3.0	2.5	
AREA=	146.5	115.7	40.6	75.6	47.3	123.5	80.4	64.5	111.5	88.3	73.1	64.0	
VEL=	1.3	2.2	3.9	4.0	3.8	3.4	2.4	2.0	2.7	2.3	1.8	1.7	
DEPTH=	.7	1.6	4.1	4.3	4.0	3.4	2.0	1.5	2.4	1.9	1.2	.8	

STA=	9224.	9264.	9373.	9429.	9478.	9544.
PER Q=	21.1	5.6	5.2	3.9	4.6	
AREA=	182.5	119.7	88.3	70.6	89.1	
VEL=	5.0	2.0	2.5	2.4	2.2	
DEPTH=	4.6	1.1	1.6	1.4	1.3	

*SECNO 4.262

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 8594.7 9687.2 TYPE= 1 TARGET= 1092.500

4.262	7.34	1610.34	1609.58	.00	1610.57	.23	3.20	.02	1609.40
4280.0	1387.8	1397.3	1494.9	584.9	252.6	504.6	497.5	281.8	1609.10
1.12	2.37	5.53	2.96	.080	.065	.065	.000	1603.00	8995.98
.006623	500.	502.	450.	3	8	0	.00	663.46	9687.20

FLOW DISTRIBUTION FOR SECNO= 4.26 CWSEL= 1610.34

STA=	8996.	9138.	9186.	9212.	9243.	9276.	9310.	9378.	9425.	9508.	9569.	9623.	9648.
PER Q=	4.8	4.9	4.2	6.4	4.9	3.1	4.1	32.6	6.4	9.7	11.1	4.1	
AREA=	109.0	90.1	64.8	89.1	78.5	60.3	93.1	252.6	117.0	132.7	136.8	55.3	
VEL=	1.9	2.3	2.8	3.1	2.7	2.2	1.9	5.5	2.3	3.1	3.5	3.1	
DEPTH=	.8	1.9	2.5	2.9	2.3	1.8	1.4	5.4	1.4	2.2	2.5	2.2	

STA=	9648.	9687.
PER Q=	3.6	
AREA=	62.8	
VEL=	2.5	
DEPTH=	1.6	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.333

3470 ENCROACHMENT STATIONS= 8781.1 9762.7 TYPE= 1 TARGET= 981.601

4.333	8.02	1612.42	1611.32	.00	1612.60	.18	2.03	.01	1610.10
4280.0	1333.0	1610.9	1336.1	658.9	341.7	527.4	510.6	288.0	1610.40
1.15	2.02	4.71	2.53	.080	.065	.065	.000	1604.40	9080.46
.004126	430.	391.	360.	2	10	0	.00	682.24	9762.70

FLOW DISTRIBUTION FOR SECNO= 4.33 CWSEL= 1612.42

STA=	9080.	9242.	9306.	9356.	9394.	9415.	9453.	9510.	9567.	9600.	9625.	9657.	9733.
PER Q=	4.2	6.2	6.4	6.3	3.4	4.6	37.6	7.2	7.1	5.6	3.7	3.6	
AREA=	136.9	135.2	124.2	110.2	61.2	91.3	341.7	124.3	98.5	77.7	65.3	91.2	
VEL=	1.3	1.9	2.2	2.4	2.4	2.2	4.7	2.5	3.1	3.1	2.4	1.7	
DEPTH=	.8	2.1	2.5	2.9	2.9	2.4	5.9	2.2	3.0	3.1	2.0	1.2	

STA=	9733.	9763.
PER Q=	4.0	
AREA=	70.4	
VEL=	2.4	
DEPTH=	2.4	

*SECNO 4.390

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9071.8 9745.0 TYPE= 1 TARGET= 673.200

4.390	7.14	1614.04	1613.17	.00	1614.39	.36	1.74	.05	1611.10
4280.0	1684.2	2595.8	.0	719.4	443.8	.0	520.8	292.6	100000.00
1.17	2.34	5.85	.00	.080	.065	.000	.000	1606.90	9120.97
.006865	330.	333.	330.	2	16	0	.00	545.92	9745.00

FLOW DISTRIBUTION FOR SECNO= 4.39 CWSEL= 1614.04

STA=	9121.	9342.	9411.	9470.	9519.	9553.	9585.	9610.	9643.	9668.	9748.
PER Q=	3.2	5.0	3.8	3.1	3.5	5.3	4.8	5.9	4.7	60.6	
AREA=	96.4	105.1	83.6	68.0	64.3	80.8	68.1	85.4	67.6	443.8	
VEL=	1.4	2.1	2.0	1.9	2.3	2.8	3.0	2.9	3.0	5.8	
DEPTH=	.4	1.5	1.4	1.4	1.9	2.5	2.7	2.6	2.7	5.7	

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T1      Deadman Wash Floodplain Delineation Study
T2      Floodway Run for Deadman Wash, SECNO 3.209 to SECNO 4.662
T3      Deadman Wash 100-year Q   Subcritical Flow,   July 1992 (revised 9/92)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              3                                                          1570.74

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     2                 -1                                  -1                         15
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO 3.209

3470 ENCROACHMENT STATIONS= 9799.0 10156.0 TYPE= 1 TARGET= 357.000

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**************************************************************
Tributary stream profile calculations were performed to
solve the flow split ratios through this split reach.

ET cards (Fields 7 & 8) were used in the natural profile run
for SECNO 3.347 thru 4.390 to model the image boundary line
between the Deadman Wash and Stream No. 12.

Special culvert method was used for the pipe culvert on
Stream No. 12 across the Carefree Highway.

The starting water surface elevations were obtained from the
HEC-2 results for the downstream reach.

Q is approximately 9,510 cfs to Carefree Highway, and
9,110 cfs south of the highway.

**************************************************************
Q is 9,570 cfs at this section.
NC card was used, channel = .055, overbanks = .065.
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3.209	11.64	1570.74	1569.21	1570.01	1571.31	.57	.00	.00	1567.10
9570.0	4238.2	2425.1	2906.7	826.9	291.9	588.4	.0	.0	1566.70
.00	5.13	8.31	4.94	.065	.055	.065	.000	1559.10	9799.00
.006803	0.	0.	0.	0	12	0	.00	357.00	10156.00

FLOW DISTRIBUTION FOR SECNO= 3.21 CWSEL= 1570.74

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9799.	9811.	9832.	9857.	9874.	9896.	9909.	9935.	9948.	9972.	9982.	10018.	10033.
PER Q=	3.8	5.8	6.0	3.6	5.0	3.5	7.3	3.2	4.4	1.7	25.3	3.3	
AREA=	68.0	103.0	111.2	70.8	96.5	61.8	128.6	58.0	92.2	36.8	291.9	64.5	
VEL=	5.4	5.4	5.2	4.9	5.0	5.4	5.4	5.2	4.6	4.4	8.3	4.9	
DEPTH=	5.8	4.8	4.5	4.2	4.3	4.8	4.9	4.6	3.8	3.5	8.2	4.2	

STA=	10033.	10059.	10091.	10111.	10131.	10148.	10156.
PER Q=	5.7	6.9	5.0	5.1	3.5	.9	
AREA=	109.8	133.1	92.2	93.7	68.3	26.7	
VEL=	4.9	4.9	5.2	5.2	4.9	3.4	
DEPTH=	4.2	4.2	4.5	4.6	4.1	3.1	

*SECNO 3.284

3470 ENCROACHMENT STATIONS= 9679.0 10050.0 TYPE= 1 TARGET= 371.000
Q changed to 9,110 cfs (C10T) at the confluence with Stream
No. 12

3.284	10.84	1572.94	1571.03	1572.08	1573.40	.45	2.08	.01	1568.50
9110.0	5594.9	3449.0	66.1	1289.7	506.3	23.5	14.5	3.0	1569.20
.02	4.34	6.81	2.82	.065	.055	.065	.000	1562.10	9679.00
.004857	320.	396.	440.	2	14	0	.00	371.00	10050.00

FLOW DISTRIBUTION FOR SECNO= 3.28 CWSEL= 1572.94

STA=	9679.	9730.	9776.	9796.	9816.	9829.	9848.	9888.	9906.	9932.	9958.	9972.	10044.
PER Q=	6.6	6.2	3.5	5.1	4.3	6.2	10.9	4.2	5.3	5.7	3.4	37.9	
AREA=	173.9	155.5	80.5	100.3	74.8	111.4	207.0	84.4	113.7	118.9	69.2	506.3	
VEL=	3.4	3.6	3.9	4.6	5.2	5.1	4.8	4.5	4.3	4.4	4.4	6.8	
DEPTH=	3.4	3.4	3.9	5.0	5.9	5.7	5.2	4.7	4.4	4.6	4.6	7.1	

STA=	10044.	10050.
PER Q=	.7	
AREA=	23.5	
VEL=	2.8	
DEPTH=	3.7	

*SECNO 3.347

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .62

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9756.9 10038.0 TYPE= 1 TARGET= 281.100
Q changed to 6,200 cfs for the main channel, 68% of total flow.

3.347	9.00	1574.60	1573.33	1573.78	1575.24	.65	1.79	.06	1570.70
6200.0	1658.2	4541.8	.0	465.2	628.6	.0	25.9	5.5	100000.00
.03	3.56	7.23	.00	.065	.048	.000	.000	1565.60	9756.90
.005942	350.	333.	200.	2	13	0	.00	281.10	10038.00

FLOW DISTRIBUTION FOR SECNO= 3.35 CWSEL= 1574.60

STA=	9757.	9782.	9796.	9810.	9828.	9854.	9856.	9891.	9923.	10038.
PER Q=	5.3	3.6	3.4	2.6	1.9	.2	3.5	6.3	73.3	
AREA=	88.1	52.1	50.3	48.0	45.8	4.2	74.1	102.6	628.6	
VEL=	3.7	4.2	4.2	3.3	2.6	2.6	2.9	3.8	7.2	
DEPTH=	3.5	3.7	3.6	2.6	1.8	1.7	2.1	3.2	5.5	

*SECNO 3.385

3470 ENCROACHMENT STATIONS= 9700.0 10090.0 TYPE= 1 TARGET= 390.000

3.385	7.71	1575.91	1574.45	1575.20	1576.26	.36	.99	.03	1573.40
6200.0	2315.2	3884.6	.2	752.3	695.9	.3	32.0	7.2	1574.20
.05	3.08	5.58	.46	.065	.048	.065	.000	1568.20	9700.00
.004001	215.	201.	215.	2	18	0	.00	390.00	10090.00

FLOW DISTRIBUTION FOR SECNO= 3.38 CWSEL= 1575.91

STA=	9700.	9722.	9761.	9787.	9811.	9847.	9864.	9876.	9892.	9925.	9947.	10090.	10090.
PER Q=	1.7	5.1	4.4	3.9	4.7	2.5	2.7	4.2	5.4	2.6	62.7	.0	
AREA=	45.6	110.8	85.6	77.6	100.5	52.0	47.1	68.5	105.8	58.7	695.9	.3	
VEL=	2.3	2.9	3.2	3.1	2.9	3.0	3.6	3.8	3.2	2.8	5.6	.5	
DEPTH=	2.1	2.8	3.3	3.2	2.9	3.0	4.0	4.3	3.3	2.7	4.9	1.7	

*SECNO 3.481

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9700.0 10120.0 TYPE= 1 TARGET= 420.000

3.481	7.10	1579.00	1579.00	1578.68	1580.03	1.03	3.23	.20	1576.90
6200.0	1281.5	4506.0	412.5	370.9	484.5	104.9	45.3	11.6	1576.60
.06	3.46	9.30	3.93	.065	.048	.065	.000	1571.90	9700.00
.012719	450.	507.	550.	0	10	0	.00	420.00	10120.00

FLOW DISTRIBUTION FOR SECNO= 3.48 CWSEL= 1579.00

STA=	9700.	9762.	9791.	9840.	9889.	9955.	10066.	10098.	10120.
PER Q=	7.6	3.2	3.5	3.5	2.9	72.7	4.3	2.4	
AREA=	120.5	51.3	67.4	67.3	64.4	484.5	64.6	40.3	
VEL=	3.9	3.8	3.2	3.3	2.8	9.3	4.1	3.7	
DEPTH=	1.9	1.8	1.4	1.4	1.0	4.4	2.0	1.8	

*SECNO 3.546

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.58

3470 ENCROACHMENT STATIONS= 9700.0 10200.0 TYPE= 1 TARGET= 500.000

3.546	6.37	1582.47	1581.30	1581.58	1582.80	.33	2.69	.07	1579.10
6200.0	2065.4	2762.4	1372.2	626.1	473.6	440.2	55.6	15.4	1580.40
.09	3.30	5.83	3.12	.065	.048	.065	.000	1576.10	9700.00
.005102	400.	343.	300.	2	13	0	.00	500.00	10200.00

FLOW DISTRIBUTION FOR SECNO= 3.55 CWSEL= 1582.47

STA=	9700.	9727.	9776.	9810.	9839.	9862.	9887.	9912.	9925.	10035.	10071.	10130.	10185.
PER Q=	3.4	3.9	3.9	5.6	4.8	4.6	4.6	2.4	44.6	3.6	7.5	8.7	
AREA=	69.9	95.3	82.9	94.9	80.6	80.4	80.8	41.3	473.6	81.0	150.9	160.9	
VEL=	3.0	2.5	3.0	3.6	3.7	3.6	3.6	3.6	5.8	2.8	3.1	3.3	
DEPTH=	2.6	1.9	2.4	3.3	3.4	3.2	3.2	3.3	4.3	2.2	2.6	2.9	

STA=	10185.	10200.
PER Q=	2.3	
AREA=	47.5	
VEL=	3.1	
DEPTH=	3.1	

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 3.639

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9720.0   10231.0  TYPE=      1  TARGET=      511.000
         Downstream (south) side edge of Carefree Highway pavement.
         NC card was used to model the dip section "n" = .016.
    3.639      2.36   1585.66   1585.66   1585.32   1586.50       .84      2.08       .15   1584.40
   6200.0    1051.6    5147.9        .5     163.7     682.9        .3      70.2      21.6   1584.20
      .11      6.42      7.54      1.63      .016      .016      .016      .000   1583.30   9720.00
  .003148      650.      491.      440.         0        22         0       .00    511.00  10231.00


FLOW DISTRIBUTION FOR SECNO=      3.64          CWSEL=   1585.66

STA=    9720.    9774.    9838.   10231.   10231.
  PER Q=      7.9      9.1     83.0       .0
   AREA=     75.7     88.0    682.9       .3
    VEL=      6.5      6.4      7.5      1.6
  DEPTH=      1.4      1.4      1.7      1.5

*SECNO 3.648
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9720.0   10245.0  TYPE=      1  TARGET=      525.000
         Upstream (north) side edge of Carefree Highway pavement.
    3.648      2.25   1586.35   1586.35   1586.15   1587.17       .83       .15       .00   1585.40
   6200.0     775.9    5424.1        .0     114.1     737.3        .0      71.1      22.2 100000.00
      .11      6.80      7.36       .00      .016      .016      .000      .000   1584.10   9720.00
  .003234       46.       46.       46.         0        11         0       .00    525.00  10245.00


FLOW DISTRIBUTION FOR SECNO=      3.65          CWSEL=   1586.35

STA=    9720.    9727.    9769.    9797.   10245.
  PER Q=      1.3      7.7      3.5     87.5
   AREA=     12.3     66.4     35.4    737.3
    VEL=      6.5      7.2      6.1      7.4
  DEPTH=      1.7      1.6      1.2      1.6
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.651

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .47

3470 ENCROACHMENT STATIONS= 9720.0 10245.0 TYPE= 1 TARGET= 525.000
NC card was used, channel = .048, overbanks = .065.

3.651	2.67	1586.77	1586.37	1586.44	1587.30	.53	.10	.03	1585.40
6200.0	610.8	5589.2	.0	147.0	928.6	.0	71.5	22.4	100000.00
.11	4.15	6.02	.00	.065	.048	.000	.000	1584.10	9720.00
.014346	17.	17.	17.	5	5	0	.00	525.00	10245.00

FLOW DISTRIBUTION FOR SECNO= 3.65 CWSEL= 1586.77

STA=	9720.	9727.	9769.	9797.	10245.
PER Q=	.9	5.9	3.0	90.1	
AREA=	15.5	84.1	47.4	928.6	
VEL=	3.8	4.4	3.9	6.0	
DEPTH=	2.1	2.0	1.7	2.1	

*SECNO 3.710

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.70

3470 ENCROACHMENT STATIONS= 9580.0 10219.0 TYPE= 1 TARGET= 639.000

3.710	3.57	1589.37	1588.27	1588.88	1589.61	.24	2.27	.03	1588.00
6200.0	791.8	5408.2	.0	265.3	1344.0	.0	80.1	26.1	100000.00
.13	2.98	4.02	.00	.065	.048	.000	.000	1585.80	9580.00
.004946	110.	312.	240.	4	11	0	.00	639.00	10219.00

FLOW DISTRIBUTION FOR SECNO= 3.71 CWSEL= 1589.37

STA=	9580.	9604.	9623.	9656.	9685.	10219.
PER Q=	3.8	3.1	4.0	1.9	87.2	
AREA=	74.3	56.8	82.9	51.4	1344.0	
VEL=	3.1	3.4	3.0	2.3	4.0	
DEPTH=	3.1	3.1	2.5	1.7	2.5	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.804

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3470 ENCROACHMENT STATIONS= 9500.0 10164.0 TYPE= 1 TARGET= 664.000
Q changed to 5,230 cfs in the main channel, 55% of total flow.

3.804	4.14	1592.64	1592.13	1591.82	1592.98	.35	3.34	.03	1591.50
5230.0	2630.2	2598.6	1.3	623.8	499.6	.9	94.7	33.0	1591.40
.16	4.22	5.20	1.50	.065	.048	.065	.000	1588.50	9500.00
.012526	400.	496.	520.	3	8	0	.00	664.00	10164.00

FLOW DISTRIBUTION FOR SECNO= 3.80 CWSEL= 1592.64

STA=	9500.	9524.	9566.	9603.	9625.	9645.	9688.	9726.	9779.	9841.	9892.	10163.	10164.
PER Q=	6.5	13.7	11.3	6.1	3.6	2.4	1.2	1.9	1.4	2.0	49.7	.0	
AREA=	69.9	132.1	110.2	62.1	43.7	47.0	29.6	44.8	39.1	45.2	499.6	.9	
VEL=	4.9	5.4	5.4	5.1	4.3	2.7	2.2	2.3	1.9	2.4	5.2	1.5	
DEPTH=	3.0	3.1	3.0	2.8	2.2	1.1	.8	.8	.6	.9	1.8	1.2	

*SECNO 3.881

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.51

3470 ENCROACHMENT STATIONS= 9480.0 10076.0 TYPE= 1 TARGET= 596.000

3.881	5.43	1595.93	1594.71	1595.05	1596.12	.19	3.12	.02	1593.90
5230.0	3244.8	1985.0	.2	968.4	525.0	.3	106.4	38.6	1594.50
.19	3.35	3.78	.53	.065	.048	.065	.000	1590.50	9480.00
.005511	380.	407.	420.	3	8	0	.00	596.00	10076.00

FLOW DISTRIBUTION FOR SECNO= 3.88 CWSEL= 1595.93

STA=	9480.	9492.	9539.	9603.	9660.	9711.	9760.	9798.	9827.	10076.	10076.
PER Q=	2.4	9.4	12.0	10.8	9.4	8.2	5.9	3.9	38.0	.0	
AREA=	40.2	139.7	182.5	164.4	144.6	131.8	96.7	68.5	525.0	.3	
VEL=	3.2	3.5	3.4	3.4	3.4	3.3	3.2	3.0	3.8	.5	
DEPTH=	3.2	3.0	2.9	2.9	2.8	2.7	2.6	2.3	2.1	1.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.957

3470 ENCROACHMENT STATIONS= 9520.0 10048.0 TYPE= 1 TARGET= 528.000

3.957	7.27	1598.67	1597.80	1598.14	1598.99	.32	2.83	.04	1597.30
5230.0	2966.6	2263.4	.0	776.0	424.8	.0	118.8	43.8	100000.00
.21	3.82	5.33	.00	.065	.048	.000	.000	1591.40	9520.00
.009371	400.	401.	400.	3	11	0	.00	528.00	10048.00

FLOW DISTRIBUTION FOR SECNO= 3.96 CWSEL= 1598.67

STA=	9520.	9554.	9602.	9639.	9670.	9697.	9732.	9765.	9786.	9809.	9840.	9871.	10062.
PER Q=	5.7	9.6	7.6	6.5	4.8	5.3	5.7	4.2	2.9	2.3	2.1	43.3	
AREA=	79.5	122.3	95.5	80.3	64.4	75.6	76.2	53.8	43.8	43.6	41.1	424.8	
VEL=	3.8	4.1	4.1	4.3	3.9	3.6	3.9	4.0	3.5	2.8	2.7	5.3	
DEPTH=	2.4	2.5	2.6	2.7	2.4	2.1	2.4	2.5	2.0	1.4	1.3	2.4	

*SECNO 4.019

3470 ENCROACHMENT STATIONS= 9560.0 10093.0 TYPE= 1 TARGET= 533.000

4.019	7.27	1601.47	1600.49	1600.65	1601.75	.27	2.76	.00	1599.50
5230.0	2514.4	2715.3	.2	724.5	571.1	.4	128.6	48.0	1599.70
.24	3.47	4.75	.61	.065	.048	.065	.000	1594.20	9560.00
.007114	350.	327.	320.	3	14	0	.00	533.00	10093.00

FLOW DISTRIBUTION FOR SECNO= 4.02 CWSEL= 1601.47

STA=	9560.	9582.	9609.	9643.	9674.	9694.	9746.	9799.	9829.	9860.	10093.	10093.
PER Q=	4.0	5.1	7.0	5.4	3.6	8.7	7.1	3.5	3.6	51.9	.0	
AREA=	60.2	71.6	96.2	78.7	52.2	128.5	115.5	58.8	62.9	571.1	.4	
VEL=	3.5	3.8	3.8	3.6	3.6	3.5	3.2	3.1	3.0	4.8	.6	
DEPTH=	2.7	2.7	2.8	2.6	2.6	2.5	2.2	2.0	2.0	2.5	1.8	

*SECNO 4.058

3470 ENCROACHMENT STATIONS= 9600.0 10089.0 TYPE= 1 TARGET= 489.000

4.058	5.55	1602.95	1601.97	1602.11	1603.26	.32	1.50	.01	1601.10
5230.0	2342.9	2886.6	.5	620.2	574.9	.6	134.2	50.3	1600.90
.25	3.78	5.02	.84	.065	.048	.065	.000	1597.40	9600.00
.008088	190.	206.	210.	2	17	0	.00	489.00	10089.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.06 CWSEL= 1602.95

STA=	9600.	9602.	9652.	9696.	9763.	9796.	9851.	10089.	10089.
PER Q=	.2	13.2	8.1	10.9	5.2	7.2	55.2	.0	
AREA=	5.2	157.6	111.0	156.5	76.3	113.6	574.9	.6	
VEL=	2.1	4.4	3.8	3.6	3.6	3.3	5.0	.8	
DEPTH=	3.4	3.1	2.5	2.3	2.3	2.0	2.4	2.0	

*SECNO 4.146

3470 ENCROACHMENT STATIONS= 9670.0 10091.0 TYPE= 1 TARGET= 421.000

4.146	5.83	1606.23	1605.02	1605.48	1606.54	.31	3.28	.00	1603.80
5230.0	2283.3	2946.7	.0	615.6	590.9	.0	146.7	55.0	100000.00
.28	3.71	4.99	.00	.065	.048	.000	.000	1600.40	9670.00
.006486	440.	465.	465.	2	9	0	.00	421.00	10091.00

FLOW DISTRIBUTION FOR SECNO= 4.15 CWSEL= 1606.23

STA=	9670.	9677.	9740.	9781.	9837.	9884.	10098.
PER Q=	1.7	16.1	8.2	10.0	7.8	56.3	
AREA=	26.2	206.3	116.1	148.1	118.9	590.9	
VEL=	3.3	4.1	3.7	3.5	3.4	5.0	
DEPTH=	3.5	3.3	2.8	2.6	2.5	2.9	

*SECNO 4.197

3470 ENCROACHMENT STATIONS= 9760.0 10090.0 TYPE= 1 TARGET= 330.000

4.197	6.87	1607.97	1606.85	1607.33	1608.38	.41	1.81	.03	1605.20
5230.0	1653.0	3577.0	.0	415.7	640.6	.0	153.8	57.4	100000.00
.29	3.98	5.58	.00	.065	.048	.000	.000	1601.10	9760.00
.006780	280.	269.	265.	2	6	0	.00	330.00	10090.00

FLOW DISTRIBUTION FOR SECNO= 4.20 CWSEL= 1607.97

STA=	9760.	9761.	9806.	9853.	9896.	10107.
PER Q=	.1	8.8	13.3	9.5	68.4	
AREA=	1.9	124.2	162.5	127.2	640.6	
VEL=	1.4	3.7	4.3	3.9	5.6	
DEPTH=	1.9	2.8	3.4	3.0	3.3	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.262

3470 ENCROACHMENT STATIONS= 9790.0 10140.0 TYPE= 1 TARGET= 350.000

4.262	7.57	1610.57	1609.60	1610.12	1611.01	.44	2.62	.01	1607.20
5230.0	1842.6	2946.2	441.2	470.6	481.7	102.7	162.7	60.2	1607.40
.31	3.92	6.12	4.30	.065	.048	.065	.000	1603.00	9790.00
.007798	400.	343.	300.	2	10	0	.00	350.00	10140.00

FLOW DISTRIBUTION FOR SECNO= 4.26 CWSEL= 1610.57

STA=	9790.	9814.	9870.	9927.	9965.	10109.	10138.	10140.
PER Q=	3.4	9.5	12.0	10.3	56.3	8.0	.4	
AREA=	53.6	136.4	157.8	122.8	481.7	94.3	8.4	
VEL=	3.3	3.6	4.0	4.4	6.1	4.5	2.6	
DEPTH=	2.3	2.4	2.8	3.2	3.4	3.3	3.4	

*SECNO 4.333

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.45

3470 ENCROACHMENT STATIONS= 9762.7 10190.0 TYPE= 1 TARGET= 427.300
Just downstream of the levee (diversion structure).

4.333	8.34	1612.74	1611.04	1612.35	1612.96	.21	1.93	.02	1611.40
5230.0	1944.7	1905.2	1380.2	628.5	412.1	451.2	173.5	63.5	1609.60
.34	3.09	4.62	3.06	.065	.048	.065	.000	1604.40	9762.70
.003686	370.	375.	370.	2	13	0	.00	427.30	10190.00

FLOW DISTRIBUTION FOR SECNO= 4.33 CWSEL= 1612.74

STA=	9763.	9789.	9832.	9857.	9883.	9910.	9929.	9949.	10055.	10080.	10104.	10131.	10153.
PER Q=	4.9	9.1	5.4	5.2	5.5	3.8	3.2	36.4	4.4	4.3	5.2	4.6	
AREA=	88.6	149.7	87.8	87.3	92.3	64.3	58.5	412.1	78.3	75.7	88.6	76.5	
VEL=	2.9	3.2	3.2	3.1	3.1	3.1	2.9	4.6	3.0	3.0	3.1	3.2	
DEPTH=	3.4	3.5	3.5	3.4	3.4	3.4	3.0	3.9	3.1	3.2	3.3	3.4	

STA=	10153.	10175.	10190.
PER Q=	4.9	2.9	
AREA=	79.1	52.9	
VEL=	3.2	2.8	
DEPTH=	3.5	3.6	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 4.390

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .44

3470 ENCROACHMENT STATIONS= 9870.0 10263.0 TYPE= 1 TARGET= 393.000
NC card was used to change n values, channel = .065,
overbanks = .080

4.390	7.72	1614.62	1614.17	1614.28	1615.19	.57	2.13	.11	1616.00
5230.0	838.2	2208.1	2183.7	185.6	285.8	495.9	181.9	66.3	1612.70
.35	4.52	7.73	4.40	.080	.065	.080	.000	1606.90	9870.00
.019292	290.	301.	301.	2	9	0	.00	383.16	10263.00

FLOW DISTRIBUTION FOR SECNO= 4.39 CWSEL= 1614.62

STA=	9870.	9886.	9905.	9923.	9940.	9949.	10033.	10062.	10098.	10147.	10177.	10205.	10234.
PER Q=	4.2	4.2	3.2	3.7	.7	42.2	4.7	4.5	4.5	7.1	7.6	7.3	
AREA=	47.1	46.5	39.3	41.1	11.7	285.8	59.3	62.9	70.5	76.7	78.7	76.7	
VEL=	4.7	4.7	4.3	4.7	3.1	7.7	4.1	3.8	3.3	4.8	5.0	5.0	
DEPTH=	2.9	2.5	2.1	2.5	1.4	3.8	2.0	1.8	1.4	2.6	2.7	2.7	

STA=	10234.	10263.
PER Q=	6.1	
AREA=	71.0	
VEL=	4.5	
DEPTH=	2.5	

*SECNO 4.492

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.61

3470 ENCROACHMENT STATIONS= 9600.0 10133.0 TYPE= 1 TARGET= 533.000
Split flow location.
Q changed to 9,510 cfs at C10R (split flow starts here).

4.492	8.36	1618.66	1616.62	1617.83	1618.94	.28	3.72	.03	1615.30
9510.0	5077.5	3734.1	698.4	1511.3	690.8	221.0	201.8	71.7	1614.30
.39	3.36	5.41	3.16	.080	.065	.080	.000	1610.30	9600.00
.004903	500.	539.	500.	3	14	0	.00	533.00	10133.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.49 CWSEL= 1618.66

STA=	9600.	9637.	9670.	9700.	9738.	9779.	9817.	9862.	9888.	9914.	9949.	9967.	10077.
PER Q=	4.6	3.9	3.4	4.4	5.7	5.6	7.3	5.3	5.6	5.5	2.2	39.3	
AREA=	140.5	120.1	107.9	136.2	165.2	157.3	197.2	131.8	137.1	150.6	67.3	690.8	
VEL=	3.1	3.1	3.0	3.1	3.3	3.4	3.5	3.8	3.9	3.5	3.1	5.4	
DEPTH=	3.8	3.7	3.6	3.6	4.0	4.2	4.4	5.0	5.2	4.3	3.8	6.3	

STA=	10077.	10110.	10133.
PER Q=	4.8	2.6	
AREA=	134.9	86.2	
VEL=	3.4	2.8	
DEPTH=	4.2	3.7	

*SECNO 4.567

3470 ENCROACHMENT STATIONS= 9625.0 10042.0 TYPE= 1 TARGET= 417.000

4.567	9.06	1620.96	1619.68	1620.18	1621.52	.56	2.50	.08	1616.30
9510.0	4875.7	4633.2	1.2	1158.9	621.4	1.3	220.1	75.8	1617.70
.41	4.21	7.46	.89	.080	.065	.080	.000	1611.90	9625.00
.009112	370.	396.	396.	3	10	0	.00	417.00	10042.00

FLOW DISTRIBUTION FOR SECNO= 4.57 CWSEL= 1620.96

STA=	9625.	9649.	9687.	9710.	9731.	9755.	9790.	9815.	9853.	9914.	9944.	10042.	10042.
PER Q=	3.4	5.0	2.6	3.0	3.6	4.4	3.4	6.1	12.5	7.2	48.7	.0	
AREA=	86.6	122.4	67.9	71.0	84.5	110.7	81.8	138.7	257.4	138.0	621.4	1.3	
VEL=	3.8	3.9	3.7	4.0	4.1	3.8	3.9	4.2	4.6	4.9	7.5	.9	
DEPTH=	3.6	3.3	3.0	3.4	3.5	3.2	3.3	3.6	4.2	4.7	6.4	3.3	

1490 NH CARD USED
*SECNO 4.662

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

3470 ENCROACHMENT STATIONS= 9610.0 10301.0 TYPE= 1 TARGET= 691.000

4.662	9.83	1623.83	1621.54	1623.18	1624.08	.25	2.53	.03	1619.60
9510.0	2296.6	2948.8	4264.6	948.1	533.4	1231.5	242.3	81.1	1619.10
.44	2.42	5.53	3.46	.080	.065	.075	.000	1614.00	9610.00
.003897	390.	502.	430.	2	9	0	.00	691.00	10301.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.66 CWSEL= 1623.83

STA=	9610.	9753.	9814.	9841.	9883.	9946.	9966.	10035.	10069.	10091.	10116.	10183.	10214.
PER Q=	4.2	3.2	3.6	6.6	4.6	2.0	31.0	4.3	3.3	3.3	7.1	5.0	
AREA=	240.5	146.5	112.8	194.4	183.6	70.2	533.4	139.1	99.6	105.3	244.2	146.9	
VEL=	1.6	2.1	3.0	3.2	2.4	2.7	5.5	2.9	3.2	3.0	2.8	3.2	
DEPTH=	1.7	2.4	4.2	4.6	2.9	3.5	7.7	4.1	4.5	4.2	3.7	4.7	

STA=	10214.	10245.	10271.	10278.	10292.	10301.
PER Q=	5.1	6.3	3.4	5.1	1.9	
AREA=	147.2	143.7	57.1	95.6	52.9	
VEL=	3.3	4.2	5.6	5.1	3.3	
DEPTH=	4.8	5.6	7.8	6.8	5.8	

*SECNO -3.284
START TRIB COMP
-3.284 3.284 1572.944

3470 ENCROACHMENT STATIONS= 9679.0 10050.0 TYPE= 1 TARGET= 371.000

-3.284	10.84	1572.94	.00	1572.08	1573.40	.45	1.61	.94	1568.50
9110.0	5595.8	3448.1	66.1	1290.6	506.5	23.5	261.6	85.5	1569.20
.46	4.34	6.81	2.81	.065	.055	.065	.000	1562.10	9679.00
.004848	320.	396.	440.	0	0	0	.00	371.00	10050.00

FLOW DISTRIBUTION FOR SECNO= -3.28 CWSEL= 1572.94

STA=	9679.	9730.	9776.	9796.	9816.	9829.	9848.	9888.	9906.	9932.	9958.	9972.	10044.
PER Q=	6.6	6.2	3.5	5.1	4.3	6.2	10.9	4.2	5.3	5.7	3.4	37.8	
AREA=	174.1	155.7	80.6	100.4	74.9	111.4	207.1	84.4	113.8	119.0	69.2	506.5	
VEL=	3.4	3.6	3.9	4.6	5.2	5.1	4.8	4.5	4.3	4.4	4.4	6.8	
DEPTH=	3.4	3.4	3.9	5.0	5.9	5.7	5.2	4.7	4.4	4.6	4.6	7.1	

STA=	10044.	10050.
PER Q=	.7	
AREA=	23.5	
VEL=	2.8	
DEPTH=	3.7	

*SECNO 3.347

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3470 ENCROACHMENT STATIONS= 9480.0 9756.9 TYPE= 1 TARGET= 276.900

3.347	9.19	1574.79	1572.47	1574.06	1574.95	.16	1.52	.03	1570.40
2910.0	283.1	946.3	1680.6	189.4	211.7	666.3	274.9	88.3	1569.20
.50	1.50	4.47	2.52	.070	.050	.065	.000	1565.60	9480.00
.001778	350.	510.	400.	2	18	0	.00	276.90	9756.90

FLOW DISTRIBUTION FOR SECNO= 3.35 CWSEL= 1574.79

STA=	9480.	9544.	9566.	9572.	9602.	9619.	9629.	9637.	9673.	9702.	9713.	9722.	9729.
PER Q=	4.9	3.2	1.7	32.5	7.7	3.6	3.4	13.8	9.2	3.7	3.7	3.1	
AREA=	110.8	56.3	22.3	211.7	81.7	41.1	37.6	157.0	111.9	44.7	40.3	34.2	
VEL=	1.3	1.7	2.2	4.5	2.7	2.5	2.7	2.6	2.4	2.4	2.7	2.7	
DEPTH=	1.7	2.5	3.8	6.9	4.8	4.2	4.6	4.3	3.9	4.0	4.7	4.7	

STA=	9729.	9738.	9757.
PER Q=	3.5	5.9	
AREA=	39.9	77.9	
VEL=	2.6	2.2	
DEPTH=	4.3	4.2	

*SECNO 3.385

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .43

3470 ENCROACHMENT STATIONS= 9460.0 9673.4 TYPE= 1 TARGET= 213.400

3.385	7.63	1575.83	1575.07	1575.62	1576.37	.53	1.31	.11	1574.60
2910.0	683.5	1430.0	796.5	164.2	195.9	205.1	281.9	90.5	1572.90
.51	4.16	7.30	3.88	.070	.050	.065	.000	1568.20	9460.00
.009544	450.	396.	330.	2	13	0	.00	213.40	9673.40

FLOW DISTRIBUTION FOR SECNO= 3.38 CWSEL= 1575.83

STA=	9460.	9467.	9473.	9479.	9490.	9507.	9525.	9573.	9593.	9613.	9648.	9673.
PER Q=	2.7	3.7	5.6	6.4	3.2	1.9	49.1	10.6	8.0	6.7	2.1	
AREA=	22.2	21.5	29.2	38.7	29.9	22.6	195.9	64.3	53.6	60.4	26.7	
VEL=	3.5	5.0	5.6	4.8	3.1	2.4	7.3	4.8	4.4	3.2	2.2	
DEPTH=	3.0	3.8	4.5	3.6	1.8	1.2	4.1	3.1	2.7	1.7	1.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 3.481

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

3470 ENCROACHMENT STATIONS= 9227.0 9522.6 TYPE= 1 TARGET= 295.600

3.481	7.10	1579.00	1578.04	1578.53	1579.30	.30	2.91	.02	1575.50
2910.0	201.2	1218.9	1489.9	94.6	206.8	507.2	288.8	93.0	1575.50
.55	2.13	5.89	2.94	.070	.050	.065	.000	1571.90	9227.00
.004596	310.	506.	450.	3	14	0	.00	295.60	9522.60

FLOW DISTRIBUTION FOR SECNO= 3.48 CWSEL= 1579.00

STA=	9227.	9255.	9280.	9320.	9339.	9356.	9362.	9375.	9392.	9414.	9431.	9441.	9462.
PER Q=	3.4	3.5	41.9	3.2	3.9	3.1	7.3	4.3	6.5	4.5	3.8	6.2	
AREA=	48.1	46.5	206.8	37.5	40.4	25.5	54.3	43.3	61.7	44.1	33.2	58.6	
VEL=	2.0	2.2	5.9	2.5	2.8	3.6	3.9	2.9	3.1	3.0	3.4	3.1	
DEPTH=	1.7	1.9	5.1	2.0	2.4	4.2	4.2	2.6	2.8	2.6	3.2	2.8	

STA=	9462.	9489.	9523.
PER Q=	4.0	4.3	
AREA=	50.3	58.2	
VEL=	2.3	2.2	
DEPTH=	1.8	1.7	

*SECNO 3.546

3470 ENCROACHMENT STATIONS= 8550.0 9080.0 TYPE= 1 TARGET= 530.000

3.546	5.48	1581.58	1581.26	1581.29	1581.90	.32	2.59	.00	1579.70
2910.0	51.3	934.6	1924.1	28.2	138.8	657.1	296.2	96.6	1580.30
.57	1.82	6.73	2.93	.070	.050	.065	.000	1576.10	8550.00
.009022	400.	502.	360.	3	13	0	.00	530.00	9080.00

FLOW DISTRIBUTION FOR SECNO= 3.55 CWSEL= 1581.58

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	8550.	8585.	8622.	8650.	8733.	8823.	8862.	8888.	8901.	8911.	8933.	8941.	8950.
PER Q=	1.8	32.1	3.4	8.7	9.4	6.6	4.6	4.5	4.2	4.6	3.3	3.5	
AREA=	28.2	138.8	38.0	101.8	109.8	64.1	43.6	32.0	28.1	41.2	22.1	24.3	
VEL=	1.8	6.7	2.6	2.5	2.5	3.0	3.0	4.0	4.3	3.2	4.3	4.2	
DEPTH=	.8	3.8	1.3	1.2	1.2	1.6	1.7	2.6	2.8	1.8	2.8	2.7	

STA=	8950.	8970.	9029.	9065.	9080.
PER Q=	4.9	3.4	3.8	1.2	
AREA=	41.2	50.1	44.3	16.4	
VEL=	3.5	2.0	2.5	2.2	
DEPTH=	2.0	.9	1.2	1.1	

*SECNO .434

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

3470 ENCROACHMENT STATIONS= 9900.0 10400.0 TYPE= 1 TARGET= 500.000
SECNO 0.434, 0.529, and 0.624 are the river miles on Stream No. 12.

.434	5.72	1584.12	1583.18	1583.24	1584.25	.13	2.34	.02	1582.70
2910.0	221.7	871.9	1816.5	123.2	233.0	699.7	304.1	100.8	1582.40
.61	1.80	3.74	2.60	.070	.050	.065	.000	1578.40	9900.00
.004536	630.	496.	300.	3	9	0	.00	500.00	10400.00

FLOW DISTRIBUTION FOR SECNO= .43 CWSEL= 1584.12

STA=	9900.	9924.	9988.	10077.	10106.	10138.	10178.	10229.	10261.	10287.	10315.	10338.	10357.
PER Q=	3.5	4.1	30.0	3.6	5.0	8.3	11.2	8.1	5.9	4.8	4.6	4.4	
AREA=	47.7	75.5	233.0	47.9	60.8	91.0	120.4	81.3	61.8	56.9	50.9	46.1	
VEL=	2.1	1.6	3.7	2.2	2.4	2.7	2.7	2.9	2.8	2.5	2.6	2.8	
DEPTH=	2.0	1.2	2.6	1.7	1.9	2.3	2.3	2.6	2.4	2.0	2.2	2.4	

STA=	10357.	10376.	10400.
PER Q=	3.4	3.2	
AREA=	39.6	43.0	
VEL=	2.5	2.1	
DEPTH=	2.1	1.8	

*SECNO .529

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .62

3470 ENCROACHMENT STATIONS= 9850.0 10251.0 TYPE= 1 TARGET= 401.000

.529	6.16	1587.26	1587.09	1586.60	1587.75	.49	3.39	.11	1586.40
2910.0	647.1	1137.1	1125.8	210.4	141.5	330.8	313.8	105.8	1586.50
.64	3.08	8.04	3.40	.070	.050	.065	.000	1581.10	9850.00
.011782	430.	502.	500.	2	9	0	.00	401.00	10251.00

FLOW DISTRIBUTION FOR SECNO= .53 CWSEL= 1587.26

STA=	9850.	9915.	9950.	9975.	9989.	10023.	10061.	10086.	10097.	10135.	10162.	10199.	10243.
PER Q=	13.5	4.9	3.0	.9	39.1	3.9	4.7	7.7	5.2	5.6	5.6	5.1	
AREA=	117.4	48.8	32.2	11.9	141.5	42.0	39.3	38.9	49.9	45.9	52.2	52.7	
VEL=	3.3	2.9	2.7	2.1	8.0	2.7	3.5	5.8	3.0	3.5	3.1	2.8	
DEPTH=	1.8	1.4	1.3	.9	4.2	1.1	1.6	3.6	1.3	1.7	1.4	1.2	

STA=	10243.	10251.
PER Q=	.9	
AREA=	10.0	
VEL=	2.6	
DEPTH=	1.2	

*SECNO .624

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

3470 ENCROACHMENT STATIONS= 9780.0 10150.0 TYPE= 1 TARGET= 370.000

.624	6.77	1590.97	1590.09	1590.19	1591.20	.23	3.42	.03	1589.50
2910.0	1336.6	834.4	738.9	478.0	146.2	277.5	321.8	109.7	1589.20
.67	2.80	5.71	2.66	.070	.050	.065	.000	1584.20	9780.00
.005234	400.	502.	460.	2	10	0	.00	370.00	10150.00

FLOW DISTRIBUTION FOR SECNO= .62 CWSEL= 1590.97

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9780.	9801.	9839.	9873.	9924.	9969.	9981.	10013.	10034.	10063.	10084.	10101.	10123.
PER Q=	7.3	12.8	9.5	9.8	5.3	1.2	28.7	3.1	6.1	5.2	4.2	3.6	
AREA=	69.3	115.1	92.2	110.6	73.3	17.5	146.2	37.7	63.8	50.8	41.0	41.7	
VEL=	3.1	3.2	3.0	2.6	2.1	2.0	5.7	2.4	2.8	3.0	3.0	2.5	
DEPTH=	3.3	3.1	2.7	2.2	1.6	1.5	4.6	1.8	2.2	2.4	2.5	1.9	

STA=	10123.	10150.
PER Q=	3.2	
AREA=	42.5	
VEL=	2.2	
DEPTH=	1.6	

*SECNO 3.639

3265 DIVIDED FLOW

3280 CROSS SECTION 3.64 EXTENDED 7.01 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= .0 8870.7 TYPE= 1 TARGET= 8870.699

3.639	7.11	1593.11	1593.11	1593.10	1593.13	.02	.04	.02	1593.40
2910.0	.3	71.1	2838.7	2.8	233.3	2482.7	333.3	114.2	1592.70
.75	.10	.30	1.14	.016	.050	.016	.000	1586.00	7874.89
.000032	540.	428.	210.	0	16	0	.00	983.91	8870.70

FLOW DISTRIBUTION FOR SECNO= 3.64 CWSEL= 1593.11

STA=	7875.	7914.	8018.	8095.	8179.	8347.	8471.	8533.	8759.	8871.
PER Q=	.0	2.4	.7	2.5	14.0	16.8	8.4	34.5	20.7	
AREA=	2.8	233.3	50.2	114.4	421.9	416.0	207.7	813.7	458.9	
VEL=	.1	.3	.4	.6	1.0	1.2	1.2	1.2	1.3	
DEPTH=	.1	2.5	.7	1.4	2.5	3.4	3.4	3.6	4.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	1	.024	.80	3.00	.00	5.67	.00	46.00	2	2	1586.40	1586.00

CHART 2 - CORRUGATED METAL PIPE CULVERT
SCALE 2 - MITERED TO CONFORM TO SLOPE

5130, EGIC= 2205.66..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 2064.44 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
*SECNO 3.648

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 1593.11
5150, EG OF 1593.11 LESS THAN XEG OF 1593.13

3265 DIVIDED FLOW

3280 CROSS SECTION 3.65 EXTENDED 5.73 FEET

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
2205.66	2064.44	.00	2677.	212.	.443	25.2	1585.10	2785.

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF
3693 PROBABLE MINIMUM SPECIFIC ENERGY

3470 ENCROACHMENT STATIONS= .0 8850.0 TYPE= 1 TARGET= 8849.999

3.648	7.53	1593.93	1593.50	1593.93	1593.96	.02	.00	.00	1594.10
2910.0	25.0	60.9	2824.0	76.1	137.6	2243.2	336.1	115.3	1594.20
.76	.33	.44	1.26	.016	.050	.016	.000	1586.40	7638.04
.000041	46.	46.	46.	20	11	0	.00	1106.14	8850.00

FLOW DISTRIBUTION FOR SECNO= 3.65 CWSEL= 1593.93

STA=	7638.	7671.	7695.	7798.	7895.	7916.	7961.	8092.	8201.	8325.	8473.	8525.	8850.
PER Q=	.2	.2	.0	.4	.0	2.1	.6	3.4	9.4	14.3	7.1	62.2	
AREA=	17.2	12.1	5.9	37.4	3.5	137.6	48.5	140.4	270.9	374.9	162.1	1246.4	
VEL=	.4	.4	.2	.3	.2	.4	.4	.7	1.0	1.1	1.3	1.5	
DEPTH=	.5	.5	.1	.4	.2	4.1	.4	1.3	2.2	2.5	3.1	3.8	

*SECNO 3.651
3280 CROSS SECTION 3.65 EXTENDED 6.17 FEET

7185 MINIMUM SPECIFIC ENERGY

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=        .0    8850.0  TYPE=      1  TARGET=     8849.999
    3.651      7.97   1594.37   1594.37   1594.37   1594.39       .02       .00       .00   1594.10
   2910.0      70.1      55.8    2784.1     195.6     152.6    2628.3     337.1     115.8   1594.20
      .77       .36       .37      1.06      .016      .050      .016      .000   1586.40   7490.97
  .000025       17.       17.       17.         0        11         0       .00   1359.03   8850.00


FLOW DISTRIBUTION FOR SECNO=      3.65          CWSEL=   1594.37

STA=    7491.    7926.    7961.    8201.    8325.    8473.    8525.    8850.
  PER Q=      2.4      1.9      5.8      9.9     14.6      6.9     58.3
   AREA=    195.6    152.6    291.3    325.0    439.4    184.6   1388.0
    VEL=       .4       .4       .6       .9      1.0      1.1      1.2
  DEPTH=       .4      4.4      1.2      2.6      3.0      3.6      4.3

*SECNO 3.881

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     7820.0    8370.0  TYPE=      1  TARGET=      550.000
    3.881      4.06   1594.56   1594.56   1594.21   1595.23       .68       .03       .20   1592.00
   4280.0     132.4     825.0    3322.6      46.5      81.8     602.0     345.4     121.0   1592.00
      .77      2.85     10.08      5.52      .080      .065      .065      .000   1590.50   7832.29
  .034673      400.      312.      170.         0        11         0       .00    537.71   8370.00


FLOW DISTRIBUTION FOR SECNO=      3.88          CWSEL=   1594.56

STA=    7832.    7926.    7939.    7961.    8160.    8312.    8370.
  PER Q=       .9      2.2     19.3     41.5     23.7     12.4
   AREA=     26.2     20.3     81.8    310.4    199.1     92.6
    VEL=      1.5      4.6     10.1      5.7      5.1      5.7
  DEPTH=       .3      1.6      3.7      1.6      1.3      1.6

*SECNO 3.957
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.74

3470 ENCROACHMENT STATIONS= 7900.0 8500.0 TYPE= 1 TARGET= 600.000

3.957	6.72	1598.12	1597.05	1597.27	1598.27	.15	2.98	.05	1595.90
4280.0	579.0	744.3	2956.6	276.7	164.5	1053.4	353.1	124.9	1595.10
.80	2.09	4.52	2.81	.080	.065	.065	.000	1591.40	7900.00
.004631	180.	195.	340.	6	12	0	.00	600.00	8500.00

FLOW DISTRIBUTION FOR SECNO= 3.96 CWSEL= 1598.12

STA=	7900.	8003.	8028.	8060.	8093.	8136.	8175.	8215.	8261.	8300.	8329.	8365.	8389.
PER Q=	11.1	2.5	17.4	3.3	4.7	5.2	6.8	8.9	7.8	5.6	6.0	3.7	
AREA=	225.7	51.1	164.5	60.4	83.2	85.7	100.8	125.9	108.2	79.6	89.4	57.5	
VEL=	2.1	2.1	4.5	2.3	2.4	2.6	2.9	3.0	3.1	3.0	2.9	2.8	
DEPTH=	2.2	2.1	5.2	1.8	2.0	2.2	2.5	2.7	2.8	2.7	2.5	2.4	

STA=	8389.	8412.	8431.	8452.	8474.	8500.
PER Q=	3.3	3.5	3.2	3.5	3.5	
AREA=	53.2	49.7	49.3	52.9	57.5	
VEL=	2.7	3.0	2.8	2.8	2.6	
DEPTH=	2.3	2.6	2.3	2.4	2.2	

*SECNO 4.019

3470 ENCROACHMENT STATIONS= 8040.0 8620.0 TYPE= 1 TARGET= 580.000

4.019	6.59	1600.79	1600.08	1600.14	1601.02	.23	2.72	.02	1598.50
4280.0	1315.6	834.4	2130.0	450.0	143.9	638.7	366.9	130.9	1599.30
.83	2.92	5.80	3.34	.080	.065	.065	.000	1594.20	8040.00
.008574	520.	486.	400.	5	13	0	.00	580.00	8620.00

FLOW DISTRIBUTION FOR SECNO= 4.02 CWSEL= 1600.79

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	8040.	8084.	8113.	8132.	8161.	8199.	8226.	8245.	8274.	8314.	8346.	8378.	8417.
PER Q=	5.5	4.0	3.2	4.9	4.5	5.4	3.2	19.5	4.0	3.7	3.3	4.3	
AREA=	88.2	60.7	44.6	68.2	73.3	70.4	44.5	143.9	60.4	52.0	50.1	62.8	
VEL=	2.7	2.8	3.0	3.1	2.6	3.3	3.1	5.8	2.8	3.1	2.8	2.9	
DEPTH=	2.0	2.1	2.3	2.4	1.9	2.6	2.4	4.9	1.5	1.7	1.5	1.6	

STA=	8417.	8452.	8510.	8538.	8563.	8581.	8597.	8611.	8620.
PER Q=	3.6	5.8	4.1	4.4	3.7	3.8	7.1	2.0	
AREA=	54.4	88.3	54.1	52.9	42.8	41.1	56.6	23.2	
VEL=	2.8	2.8	3.2	3.6	3.7	3.9	5.3	3.7	
DEPTH=	1.5	1.5	1.9	2.2	2.3	2.5	4.1	2.5	

*SECNO 4.058

3470 ENCROACHMENT STATIONS= 8240.0 8800.0 TYPE= 1 TARGET= 560.000

4.058	5.69	1603.09	1601.85	1602.32	1603.24	.15	2.21	.01	1601.00
4280.0	1324.9	861.4	2093.7	548.4	209.7	698.5	377.6	135.3	1601.50
.87	2.42	4.11	3.00	.080	.065	.065	.000	1597.40	8240.00
.005009	420.	385.	280.	2	18	0	.00	560.00	8800.00

FLOW DISTRIBUTION FOR SECNO= 4.06 CWSEL= 1603.09

STA=	8240.	8297.	8325.	8354.	8378.	8407.	8423.	8455.	8465.	8515.	8569.	8612.	8657.
PER Q=	7.3	3.4	4.1	3.9	4.3	4.1	3.2	.7	20.1	5.3	5.7	8.3	
AREA=	136.5	63.7	72.7	64.7	73.9	56.5	64.9	15.6	209.7	94.9	90.9	116.5	
VEL=	2.3	2.3	2.4	2.6	2.5	3.1	2.1	1.8	4.1	2.4	2.7	3.1	
DEPTH=	2.4	2.3	2.5	2.7	2.5	3.6	2.0	1.6	4.1	1.8	2.1	2.6	

STA=	8657.	8690.	8708.	8740.	8762.	8773.	8786.	8800.
PER Q=	6.3	3.1	6.5	4.4	3.5	4.1	1.8	
AREA=	87.1	44.3	87.7	60.5	39.1	46.3	31.0	
VEL=	3.1	3.0	3.2	3.1	3.8	3.8	2.5	
DEPTH=	2.6	2.5	2.7	2.7	3.7	3.6	2.2	

*SECNO 4.146

3470 ENCROACHMENT STATIONS= 8500.0 9100.0 TYPE= 1 TARGET= 600.000

4.146	5.06	1605.46	1604.56	1604.70	1605.66	.20	2.40	.02	1603.60
4280.0	2075.4	797.6	1406.9	735.6	165.2	367.4	389.0	140.2	1603.40
.89	2.82	4.83	3.83	.080	.065	.065	.000	1600.40	8500.00
.008941	380.	396.	340.	2	16	0	.00	600.00	9100.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.15 CWSEL= 1605.46

STA=	8500.	8541.	8582.	8628.	8660.	8691.	8704.	8715.	8741.	8797.	8854.	8880.	8929.
PER Q=	5.2	5.4	6.1	4.4	5.7	3.2	3.5	3.6	3.9	3.5	4.2	18.6	
AREA=	81.6	82.1	93.7	66.0	75.9	37.9	38.0	53.0	76.3	72.3	58.8	165.2	
VEL=	2.7	2.8	2.8	2.8	3.2	3.7	3.9	2.9	2.2	2.1	3.0	4.8	
DEPTH=	2.0	2.0	2.0	2.1	2.5	3.0	3.3	2.1	1.4	1.3	2.3	3.4	

STA=	8929.	8957.	8980.	9006.	9031.	9039.	9045.	9053.	9100.
PER Q=	4.0	3.3	3.9	4.7	3.9	4.4	3.4	5.4	
AREA=	51.8	42.7	49.9	55.3	30.8	29.3	30.4	77.3	
VEL=	3.3	3.3	3.4	3.6	5.5	6.4	4.7	3.0	
DEPTH=	1.9	1.9	2.0	2.1	4.2	5.1	3.5	1.7	

*SECNO 4.197

3470 ENCROACHMENT STATIONS= 8930.0 9400.0 TYPE= 1 TARGET= 470.000

4.197	7.03	1608.13	1607.18	1607.19	1608.39	.26	2.71	.02	1605.70
4280.0	2062.2	1292.6	925.2	706.4	219.7	290.2	398.2	144.0	1606.30
.92	2.92	5.88	3.19	.080	.065	.065	.000	1601.10	8930.00
.007201	260.	428.	400.	2	11	0	.00	470.00	9400.00

FLOW DISTRIBUTION FOR SECNO= 4.20 CWSEL= 1608.13

STA=	8930.	8977.	9008.	9038.	9084.	9122.	9154.	9184.	9224.	9264.	9300.	9373.	9400.
PER Q=	7.2	7.6	7.8	9.7	5.6	4.3	3.7	2.1	30.2	4.3	11.9	5.4	
AREA=	113.5	97.4	96.1	131.9	86.9	68.8	62.4	49.4	219.7	64.6	157.8	67.8	
VEL=	2.7	3.4	3.5	3.2	2.8	2.6	2.6	1.9	5.9	2.8	3.2	3.4	
DEPTH=	2.4	3.1	3.3	2.8	2.3	2.2	2.1	1.2	5.5	1.8	2.2	2.5	

*SECNO 4.262

3470 ENCROACHMENT STATIONS= 9200.0 9560.0 TYPE= 1 TARGET= 360.000

4.262	8.24	1611.24	1609.99	1610.34	1611.52	.28	3.13	.01	1609.40
4280.0	1478.3	1676.5	1125.2	513.9	294.4	349.0	411.5	148.6	1609.10
.95	2.88	5.69	3.22	.080	.065	.065	.000	1603.00	9200.00
.005722	500.	502.	450.	3	5	0	.00	360.00	9560.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.26 CWSEL= 1611.24

STA=	9200.	9212.	9243.	9276.	9310.	9350.	9378.	9425.	9436.	9470.	9508.	9560.
PER Q=	3.0	9.3	7.8	5.7	5.6	3.2	39.2	1.6	4.9	7.0	12.8	
AREA=	44.5	116.7	108.5	90.3	94.8	59.1	294.4	24.0	73.1	94.8	157.0	
VEL=	2.9	3.4	3.1	2.7	2.5	2.3	5.7	2.8	2.9	3.2	3.5	
DEPTH=	3.7	3.8	3.2	2.7	2.4	2.1	6.3	2.1	2.1	2.5	3.0	

*SECNO 4.333

3470 ENCROACHMENT STATIONS= 9300.0 9610.0 TYPE= 1 TARGET= 310.000

4.333	8.75	1613.15	1611.32	1612.42	1613.39	.24	1.87	.00	1610.10
4280.0	1333.1	1914.2	1032.8	510.5	383.9	329.3	422.4	151.7	1610.40
.98	2.61	4.99	3.14	.080	.065	.065	.000	1604.40	9300.00
.003953	430.	391.	360.	3	9	0	.00	310.00	9610.00

FLOW DISTRIBUTION FOR SECNO= 4.33 CWSEL= 1613.15

STA=	9300.	9332.	9356.	9371.	9394.	9415.	9434.	9453.	9510.	9531.	9567.	9600.	9610.
PER Q=	4.9	5.4	3.6	5.3	4.9	4.0	3.0	44.7	3.6	7.8	9.9	2.8	
AREA=	91.4	86.1	54.8	82.8	76.7	64.3	54.3	383.9	55.1	110.5	122.3	41.4	
VEL=	2.3	2.7	2.8	2.7	2.7	2.6	2.4	5.0	2.8	3.0	3.5	2.9	
DEPTH=	2.9	3.5	3.8	3.6	3.6	3.4	3.0	6.6	2.7	3.1	3.8	3.9	

*SECNO 4.390

3470 ENCROACHMENT STATIONS= 9500.0 9745.0 TYPE= 1 TARGET= 245.000

4.390	7.73	1614.63	1612.96	1614.04	1615.02	.38	1.58	.04	1611.10
4280.0	1463.8	2816.2	.0	496.2	489.9	.0	430.8	153.8	100000.00
1.00	2.95	5.75	.00	.080	.065	.000	.000	1606.90	9500.00
.005867	330.	333.	330.	2	19	0	.00	245.00	9745.00

FLOW DISTRIBUTION FOR SECNO= 4.39 CWSEL= 1614.63

STA=	9500.	9519.	9553.	9585.	9610.	9643.	9658.	9668.	9748.
PER Q=	2.1	5.2	7.1	6.2	7.6	3.6	2.5	65.8	
AREA=	40.8	84.7	100.2	83.0	104.8	49.8	32.8	489.9	
VEL=	2.2	2.6	3.0	3.2	3.1	3.1	3.2	5.7	
DEPTH=	2.2	2.5	3.1	3.3	3.2	3.2	3.4	6.3	

THIS RUN EXECUTED 10SEP92 12:09:11

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Deadman Wash 100-year Q

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	3.209	9570.00	1570.01	10.91	1559.10	1570.33	1569.07	7.31	59.57	.00	9517.54	1116.51	10634.05
	3.209	9570.00	1570.74	11.64	1559.10	1571.31	1569.21	8.31	68.03	.00	9799.00	357.00	10156.00
	3.284	9110.00	1572.08	9.98	1562.10	1572.40	1571.05	6.52	52.90	396.00	9329.77	1017.00	10566.77
	3.284	9110.00	1572.94	10.84	1562.10	1573.40	1571.03	6.81	48.57	396.00	9679.00	371.00	10050.00
*	3.347	6200.00	1573.78	8.18	1565.60	1574.28	1573.26	6.98	66.57	333.00	9756.90	775.55	10604.05
*	3.347	6200.00	1574.60	9.00	1565.60	1575.24	1573.33	7.23	59.42	333.00	9756.90	281.10	10038.00
	3.385	6200.00	1575.20	7.00	1568.20	1575.63	1574.58	6.31	62.95	201.00	9673.40	739.18	10448.11
	3.385	6200.00	1575.91	7.71	1568.20	1576.26	1574.45	5.58	40.01	201.00	9700.00	390.00	10090.00
	3.481	6200.00	1578.68	6.78	1571.90	1579.12	1578.28	6.95	78.64	507.00	9522.60	843.46	10366.06
*	3.481	6200.00	1579.00	7.10	1571.90	1580.03	1579.00	9.30	127.19	507.00	9700.00	420.00	10120.00
	3.546	6200.00	1581.58	5.48	1576.10	1581.88	1581.06	6.13	77.34	343.00	9285.20	1045.73	10330.93
*	3.546	6200.00	1582.47	6.37	1576.10	1582.80	1581.30	5.83	51.02	343.00	9700.00	500.00	10200.00
*	3.639	6200.00	1585.32	2.02	1583.30	1585.86	1585.32	6.50	31.36	491.00	9512.04	990.14	10502.18
*	3.639	6200.00	1585.66	2.36	1583.30	1586.50	1585.66	7.54	31.48	491.00	9720.00	511.00	10231.00
*	3.648	6200.00	1586.15	2.05	1584.10	1586.75	1586.15	6.56	30.63	46.00	9465.13	849.75	10314.88
*	3.648	6200.00	1586.35	2.25	1584.10	1587.17	1586.35	7.36	32.34	46.00	9720.00	525.00	10245.00
*	3.651	6200.00	1586.44	2.34	1584.10	1586.87	1586.19	5.78	167.81	17.00	9443.19	902.12	10345.31
*	3.651	6200.00	1586.77	2.67	1584.10	1587.30	1586.37	6.02	143.46	17.00	9720.00	525.00	10245.00
*	3.710	6200.00	1588.88	3.08	1585.80	1589.05	1587.96	3.62	53.17	312.00	9088.54	1156.82	10247.86
*	3.710	6200.00	1589.37	3.57	1585.80	1589.61	1588.27	4.02	49.46	312.00	9580.00	639.00	10219.00
*	3.804	5230.00	1591.82	3.32	1588.50	1591.98	1591.18	3.00	91.20	496.00	8826.20	1214.79	10177.12
*	3.804	5230.00	1592.64	4.14	1588.50	1592.98	1592.13	5.20	125.26	496.00	9500.00	664.00	10164.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	3.881	5230.00	1595.05	4.55	1590.50	1595.21	1594.31	3.13	77.20	407.00	9032.50	1058.85	10091.35
*	3.881	5230.00	1595.93	5.43	1590.50	1596.12	1594.71	3.78	55.11	407.00	9480.00	596.00	10076.00
	3.957	5230.00	1598.14	6.74	1591.40	1598.32	1597.32	4.05	77.99	401.00	9246.00	862.82	10108.82
	3.957	5230.00	1598.67	7.27	1591.40	1598.99	1597.80	5.33	93.71	401.00	9520.00	528.00	10048.00
	4.019	5230.00	1600.65	6.45	1594.20	1600.81	1599.76	3.53	67.55	327.00	9274.40	864.09	10138.49
	4.019	5230.00	1601.47	7.27	1594.20	1601.75	1600.49	4.75	71.14	327.00	9560.00	533.00	10093.00
	4.058	5230.00	1602.11	4.71	1597.40	1602.32	1601.34	3.94	87.53	206.00	9319.90	805.21	10125.11
	4.058	5230.00	1602.95	5.55	1597.40	1603.26	1601.97	5.02	80.88	206.00	9600.00	489.00	10089.00
	4.146	5230.00	1605.48	5.08	1600.40	1605.68	1604.50	4.02	64.99	465.00	9411.90	711.88	10123.78
	4.146	5230.00	1606.23	5.83	1600.40	1606.54	1605.02	4.99	64.86	465.00	9670.00	421.00	10091.00
	4.197	5230.00	1607.33	6.23	1601.10	1607.63	1606.54	5.16	75.31	269.00	9543.80	623.74	10167.54
	4.197	5230.00	1607.97	6.87	1601.10	1608.38	1606.85	5.58	67.80	269.00	9760.00	330.00	10090.00
	4.262	5230.00	1610.12	7.12	1603.00	1610.45	1609.36	5.66	80.95	343.00	9687.20	554.04	10241.24
	4.262	5230.00	1610.57	7.57	1603.00	1611.01	1609.60	6.12	77.98	343.00	9790.00	350.00	10140.00
*	4.333	5230.00	1612.35	7.95	1604.40	1612.54	1610.92	4.54	40.95	375.00	9762.70	544.00	10306.70
*	4.333	5230.00	1612.74	8.34	1604.40	1612.96	1611.04	4.62	36.86	375.00	9762.70	427.30	10190.00
*	4.390	5230.00	1614.28	7.38	1606.90	1614.61	1613.62	6.15	134.86	301.00	9745.00	590.41	10347.70
*	4.390	5230.00	1614.62	7.72	1606.90	1615.19	1614.17	7.73	192.92	301.00	9870.00	383.16	10263.00
*	4.492	9510.00	1617.83	7.53	1610.30	1618.02	1616.33	4.92	49.13	539.00	9233.67	1002.96	10236.63
*	4.492	9510.00	1618.66	8.36	1610.30	1618.94	1616.62	5.41	49.03	539.00	9600.00	533.00	10133.00
	4.567	9510.00	1620.18	8.28	1611.90	1620.57	1619.25	6.84	91.37	396.00	8935.27	1137.41	10102.21
	4.567	9510.00	1620.96	9.06	1611.90	1621.52	1619.68	7.46	91.12	396.00	9625.00	417.00	10042.00
	4.662	9510.00	1623.18	9.18	1614.00	1623.45	1621.49	5.85	48.98	502.00	9426.72	997.25	10423.97
*	4.662	9510.00	1623.83	9.83	1614.00	1624.08	1621.54	5.53	38.97	502.00	9610.00	691.00	10301.00
	-3.284	9110.00	1572.08	9.98	1562.10	1572.40	.00	6.52	52.87	396.00	9329.73	1017.13	10566.80
	-3.284	9110.00	1572.94	10.84	1562.10	1573.40	.00	6.81	48.48	396.00	9679.00	371.00	10050.00
*	3.347	2910.00	1574.06	8.46	1565.60	1574.28	1572.44	5.22	28.07	510.00	9266.10	490.80	9756.90
*	3.347	2910.00	1574.79	9.19	1565.60	1574.95	1572.47	4.47	17.78	510.00	9480.00	276.90	9756.90
*	3.385	2910.00	1575.62	7.42	1568.20	1575.92	1574.86	5.98	68.64	396.00	9182.48	466.15	9673.40
*	3.385	2910.00	1575.83	7.63	1568.20	1576.37	1575.07	7.30	95.44	396.00	9460.00	213.40	9673.40
	3.481	2910.00	1578.53	6.63	1571.90	1578.91	1578.09	6.71	67.66	506.00	8910.43	577.34	9522.60
*	3.481	2910.00	1579.00	7.10	1571.90	1579.30	1578.04	5.89	45.96	506.00	9227.00	295.60	9522.60
	3.546	2910.00	1581.29	5.19	1576.10	1581.44	1580.80	5.01	55.53	502.00	8295.85	989.35	9285.20
	3.546	2910.00	1581.58	5.48	1576.10	1581.90	1581.26	6.73	90.22	502.00	8550.00	530.00	9080.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	.434	2910.00	1583.24	4.84	1578.40	1583.33	1582.47	3.04	49.31	496.00	9792.49	957.61	10753.76
*	.434	2910.00	1584.12	5.72	1578.40	1584.25	1583.18	3.74	45.36	496.00	9900.00	500.00	10400.00
*	.529	2910.00	1586.60	5.50	1581.10	1586.89	1586.48	7.05	114.05	502.00	9614.66	912.81	10527.47
*	.529	2910.00	1587.26	6.16	1581.10	1587.75	1587.09	8.04	117.82	502.00	9850.00	401.00	10251.00
*	.624	2910.00	1590.19	5.99	1584.20	1590.33	1589.66	5.16	54.71	502.00	9548.24	973.43	10521.67
*	.624	2910.00	1590.97	6.77	1584.20	1591.20	1590.09	5.71	52.34	502.00	9780.00	370.00	10150.00
*	3.639	2910.00	1593.10	7.10	1586.00	1593.12	1593.10	.31	.32	428.00	7875.84	982.77	8870.70
*	3.639	2910.00	1593.11	7.11	1586.00	1593.13	1593.11	.30	.32	428.00	7874.89	983.91	8870.70
*	3.648	2910.00	1593.93	7.53	1586.40	1593.95	1593.50	.44	.42	46.00	7638.20	1104.83	8850.00
*	3.648	2910.00	1593.93	7.53	1586.40	1593.96	1593.50	.44	.41	46.00	7638.04	1106.14	8850.00
*	3.651	2910.00	1594.37	7.97	1586.40	1594.38	1594.37	.37	.26	17.00	7491.42	1358.58	8850.00
*	3.651	2910.00	1594.37	7.97	1586.40	1594.39	1594.37	.37	.25	17.00	7490.97	1359.03	8850.00
*	3.881	4280.00	1594.21	3.71	1590.50	1594.48	1593.96	6.99	189.53	312.00	7889.42	962.64	9032.50
*	3.881	4280.00	1594.56	4.06	1590.50	1595.23	1594.56	10.08	346.73	312.00	7832.29	537.71	8370.00
*	3.957	4280.00	1597.27	5.87	1591.40	1597.37	1596.67	4.31	53.64	195.00	7797.92	1404.14	9246.00
*	3.957	4280.00	1598.12	6.72	1591.40	1598.27	1597.05	4.52	46.31	195.00	7900.00	600.00	8500.00
	4.019	4280.00	1600.14	5.94	1594.20	1600.29	1599.71	5.34	88.09	486.00	7993.87	1232.03	9274.40
	4.019	4280.00	1600.79	6.59	1594.20	1601.02	1600.08	5.80	85.74	486.00	8040.00	580.00	8620.00
	4.058	4280.00	1602.32	4.92	1597.40	1602.41	1601.51	3.59	50.13	385.00	8030.58	1289.32	9319.90
	4.058	4280.00	1603.09	5.69	1597.40	1603.24	1601.85	4.11	50.09	385.00	8240.00	560.00	8800.00
	4.146	4280.00	1604.70	4.30	1600.40	1604.82	1604.01	4.11	91.31	396.00	8235.83	1176.07	9411.90
	4.146	4280.00	1605.46	5.06	1600.40	1605.66	1604.56	4.83	89.41	396.00	8500.00	600.00	9100.00
	4.197	4280.00	1607.19	6.09	1601.10	1607.34	1606.38	4.95	65.37	428.00	8541.58	995.26	9543.80
	4.197	4280.00	1608.13	7.03	1601.10	1608.39	1607.18	5.88	72.01	428.00	8930.00	470.00	9400.00
	4.262	4280.00	1610.34	7.34	1603.00	1610.57	1609.58	5.53	66.23	502.00	8995.98	663.46	9687.20
	4.262	4280.00	1611.24	8.24	1603.00	1611.52	1609.99	5.69	57.22	502.00	9200.00	360.00	9560.00
	4.333	4280.00	1612.42	8.02	1604.40	1612.60	1611.32	4.71	41.26	391.00	9080.46	682.24	9762.70
	4.333	4280.00	1613.15	8.75	1604.40	1613.39	1611.32	4.99	39.53	391.00	9300.00	310.00	9610.00
	4.390	4280.00	1614.04	7.14	1606.90	1614.39	1613.17	5.85	68.65	333.00	9120.97	545.92	9745.00
	4.390	4280.00	1614.63	7.73	1606.90	1615.02	1612.96	5.75	58.67	333.00	9500.00	245.00	9745.00

Deadman Wash 100-year Q

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	3.209	1570.01	.00	1570.33	1116.51	4273.99	1944.39	3351.62	.00	.00	9982.40	10017.80	.00
	3.209	1570.74	.73	1571.31	357.00	4238.18	2425.07	2906.75	357.00	9799.00	9982.40	10017.80	10156.00
	3.284	1572.08	.00	1572.40	1017.00	5136.05	2899.04	1074.91	.00	.00	9972.40	10043.60	.00
	3.284	1572.94	.87	1573.40	371.00	5594.85	3449.01	66.13	371.00	9679.00	9972.40	10043.60	10050.00
*	3.347	1573.78	.00	1574.28	775.55	1027.30	3733.34	1439.36	1486.50	9756.90	9922.80	10038.20	11243.40
*	3.347	1574.60	.81	1575.24	281.10	1658.20	4541.80	.00	281.10	9756.90	9922.80	10038.20	10038.00
	3.385	1575.20	.00	1575.63	739.18	1909.16	3750.90	539.94	1437.30	9673.40	9946.80	10089.80	11110.70
	3.385	1575.91	.71	1576.26	390.00	2315.24	3884.61	.16	390.00	9700.00	9946.80	10089.80	10090.00
	3.481	1578.68	.00	1579.12	843.46	1635.81	3120.01	1444.18	1698.90	9522.60	9954.90	10065.60	11221.50
*	3.481	1579.00	.32	1580.03	420.00	1281.49	4506.01	412.50	420.00	9700.00	9954.90	10065.60	10120.00
	3.546	1581.58	.00	1581.88	1045.73	2436.07	2292.96	1470.97	1934.50	9285.20	9924.50	10034.80	11219.70
*	3.546	1582.47	.89	1582.80	500.00	2065.39	2762.43	1372.18	500.00	9700.00	9924.50	10034.80	10200.00
*	3.639	1585.32	.00	1585.86	990.14	1723.62	3559.28	917.09	2437.10	8870.70	9838.30	10230.80	11307.80
*	3.639	1585.66	.34	1586.50	511.00	1051.61	5147.92	.47	511.00	9720.00	9838.30	10230.80	10231.00
*	3.648	1586.15	.00	1586.75	849.75	1909.65	4238.12	52.23	1962.00	8850.00	9797.20	10245.00	10812.00
*	3.648	1586.35	.20	1587.17	525.00	775.87	5424.13	.00	525.00	9720.00	9797.20	10245.00	10245.00
*	3.651	1586.44	.00	1586.87	902.12	1627.54	4484.59	87.87	1962.00	8850.00	9797.20	10245.00	10812.00
*	3.651	1586.77	.33	1587.30	525.00	610.79	5589.21	.00	525.00	9720.00	9797.20	10245.00	10245.00
*	3.710	1588.88	.00	1589.05	1156.82	2270.72	3919.27	10.01	1872.20	8784.00	9685.40	10219.00	10656.20
*	3.710	1589.37	.48	1589.61	639.00	791.80	5408.20	.00	639.00	9580.00	9685.40	10219.00	10219.00
*	3.804	1591.82	.00	1591.98	1214.79	4393.17	834.59	2.24	1456.90	8826.20	9891.70	10163.30	10283.10
*	3.804	1592.64	.82	1592.98	664.00	2630.15	2598.57	1.28	664.00	9500.00	9891.70	10163.30	10164.00
	3.881	1595.05	.00	1595.21	1058.85	4262.09	964.21	3.69	1165.10	9032.50	9827.00	10075.80	10197.60
*	3.881	1595.93	.87	1596.12	596.00	3244.83	1985.02	.15	596.00	9480.00	9827.00	10075.80	10076.00
	3.957	1598.14	.00	1598.32	862.82	3799.73	1396.85	33.41	994.70	9246.00	9870.70	10062.30	10240.70
	3.957	1598.67	.53	1598.99	528.00	2966.57	2263.43	.00	528.00	9520.00	9870.70	10062.30	10048.00
	4.019	1600.65	.00	1600.81	864.09	3862.46	1345.04	22.50	1037.80	9274.40	9860.40	10092.80	10312.20
	4.019	1601.47	.82	1601.75	533.00	2514.44	2715.35	.22	533.00	9560.00	9860.40	10092.80	10093.00
	4.058	1602.11	.00	1602.32	805.21	3713.45	1482.84	33.71	1102.80	9319.90	9851.40	10088.70	10422.70
	4.058	1602.95	.84	1603.26	489.00	2342.89	2886.60	.51	489.00	9600.00	9851.40	10088.70	10089.00
	4.146	1605.48	.00	1605.68	711.88	3466.09	1761.31	2.60	796.10	9411.90	9883.90	10097.70	10208.00
	4.146	1606.23	.75	1606.54	421.00	2283.32	2946.68	.00	421.00	9670.00	9883.90	10097.70	10091.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.197	1607.33	.00	1607.63	623.74	2196.19	2889.72	144.09	755.40	9543.80	9896.10	10106.90	10299.20
	4.197	1607.97	.64	1608.38	330.00	1653.00	3577.00	.00	330.00	9760.00	9896.10	10106.90	10090.00
	4.262	1610.12	.00	1610.45	554.04	1858.31	2356.76	1014.93	665.30	9687.20	9965.00	10108.70	10352.50
	4.262	1610.57	.45	1611.01	350.00	1842.59	2946.20	441.20	350.00	9790.00	9965.00	10108.70	10140.00
*	4.333	1612.35	.00	1612.54	544.00	1674.09	1683.70	1872.22	668.90	9762.70	9949.00	10055.20	10431.60
*	4.333	1612.74	.39	1612.96	427.30	1944.66	1905.15	1380.19	427.30	9762.70	9949.00	10055.20	10190.00
*	4.390	1614.28	.00	1614.61	590.41	1941.05	1603.05	1685.89	845.20	9745.00	9952.90	10032.80	10590.20
*	4.390	1614.62	.34	1615.19	383.16	838.21	2208.11	2183.67	393.00	9870.00	9952.90	10032.80	10263.00
*	4.492	1617.83	.00	1618.02	1002.96	5836.81	2944.49	728.70	.00	.00	9967.10	10077.30	.00
*	4.492	1618.66	.83	1618.94	533.00	5077.50	3734.12	698.38	533.00	9600.00	9967.10	10077.30	10133.00
	4.567	1620.18	.00	1620.57	1137.41	5595.25	3728.27	186.48	.00	.00	9944.00	10041.60	.00
	4.567	1620.96	.78	1621.52	417.00	4875.65	4633.19	1.16	417.00	9625.00	9944.00	10041.60	10042.00
	4.662	1623.18	.00	1623.45	997.25	1763.85	2857.52	4888.63	.00	.00	9966.00	10034.90	.00
*	4.662	1623.83	.65	1624.08	691.00	2296.56	2948.79	4264.65	691.00	9610.00	9966.00	10034.90	10301.00
	-3.284	1572.08	.00	1572.40	1017.13	5136.25	2898.59	1075.16	.00	.00	9972.40	10043.60	.00
	-3.284	1572.94	.87	1573.40	371.00	5595.75	3448.10	66.15	371.00	9679.00	9972.40	10043.60	10050.00
*	3.347	1574.06	.00	1574.28	490.80	358.58	990.17	1561.25	551.10	9205.80	9571.80	9602.30	9756.90
*	3.347	1574.79	.72	1574.95	276.90	283.13	946.31	1680.55	276.90	9480.00	9571.80	9602.30	9756.90
*	3.385	1575.62	.00	1575.92	466.15	1223.50	1111.37	575.13	742.50	8930.90	9524.80	9572.70	9673.40
*	3.385	1575.83	.22	1576.37	213.40	683.55	1429.99	796.45	213.40	9460.00	9524.80	9572.70	9673.40
	3.481	1578.53	.00	1578.91	577.34	335.55	1261.87	1312.58	912.20	8610.40	9279.90	9320.40	9522.60
*	3.481	1579.00	.47	1579.30	295.60	201.17	1218.91	1489.92	295.60	9227.00	9279.90	9320.40	9522.60
	3.546	1581.29	.00	1581.44	989.35	234.92	642.31	2032.76	1275.20	8010.00	8585.10	8621.80	9285.20
	3.546	1581.58	.29	1581.90	530.00	51.28	934.59	1924.13	530.00	8550.00	8585.10	8621.80	9080.00
	.434	1583.24	.00	1583.33	957.61	157.96	468.94	2283.10	.00	.00	9988.40	10077.40	.00
*	.434	1584.12	.89	1584.25	500.00	221.65	871.86	1816.48	500.00	9900.00	9988.40	10077.40	10400.00
*	.529	1586.60	.00	1586.89	912.81	864.73	840.64	1204.63	.00	.00	9988.80	10022.60	.00
*	.529	1587.26	.66	1587.75	401.00	647.09	1137.09	1125.82	401.00	9850.00	9988.80	10022.60	10251.00
*	.624	1590.19	.00	1590.33	973.43	1332.97	626.35	950.68	.00	.00	9980.80	10012.60	.00
*	.624	1590.97	.78	1591.20	370.00	1336.62	834.44	738.94	370.00	9780.00	9980.80	10012.60	10150.00
*	3.639	1593.10	.00	1593.12	982.77	.24	71.05	2838.71	8870.70	.00	7923.30	8017.90	8870.70
*	3.639	1593.11	.00	1593.13	983.91	.27	71.07	2838.66	8870.70	.00	7923.30	8017.90	8870.70
*	3.648	1593.93	.00	1593.95	1104.83	24.63	61.02	2824.35	8850.00	.00	7926.10	7960.70	8850.00
*	3.648	1593.93	.01	1593.96	1106.14	25.04	60.94	2824.02	8850.00	.00	7926.10	7960.70	8850.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	3.651	1594.37	.00	1594.38	1358.58	69.30	55.87	2784.84	8850.00	.00	7926.10	7960.70	8850.00
*	3.651	1594.37	.01	1594.39	1359.03	70.08	55.82	2784.11	8850.00	.00	7926.10	7960.70	8850.00
*	3.881	1594.21	.00	1594.48	962.64	48.18	519.56	3712.25	1370.50	7662.00	7939.00	7961.00	9032.50
*	3.881	1594.56	.35	1595.23	537.71	132.37	824.99	3322.64	550.00	7820.00	7939.00	7961.00	8370.00
*	3.957	1597.27	.00	1597.37	1404.14	377.77	591.48	3310.75	1596.00	7650.00	8027.80	8059.60	9246.00
*	3.957	1598.12	.85	1598.27	600.00	579.04	744.34	2956.61	600.00	7900.00	8027.80	8059.60	8500.00
	4.019	1600.14	.00	1600.29	1232.03	805.65	666.40	2807.95	1400.10	7874.30	8244.70	8274.20	9274.40
	4.019	1600.79	.65	1601.02	580.00	1315.61	834.36	2130.03	580.00	8040.00	8244.70	8274.20	8620.00
	4.058	1602.32	.00	1602.41	1289.32	1004.18	614.65	2661.16	1549.20	7770.70	8464.60	8515.20	9319.90
	4.058	1603.09	.76	1603.24	560.00	1324.86	861.42	2093.72	560.00	8240.00	8464.60	8515.20	8800.00
	4.146	1604.70	.00	1604.82	1176.07	2131.49	525.80	1622.71	1406.70	8005.20	8880.00	8929.10	9411.90
	4.146	1605.46	.76	1605.66	600.00	2075.44	797.62	1406.94	600.00	8500.00	8880.00	8929.10	9100.00
	4.197	1607.19	.00	1607.34	995.26	2549.59	904.05	826.36	1133.40	8410.40	9223.90	9263.60	9543.80
	4.197	1608.13	.94	1608.39	470.00	2062.19	1292.60	925.21	470.00	8930.00	9223.90	9263.60	9400.00
	4.262	1610.34	.00	1610.57	663.46	1387.78	1397.33	1494.88	1092.50	8594.70	9377.80	9424.50	9687.20
	4.262	1611.24	.90	1611.52	360.00	1478.34	1676.47	1125.19	360.00	9200.00	9377.80	9424.50	9560.00
	4.333	1612.42	.00	1612.60	682.24	1333.05	1610.85	1336.10	981.60	8781.10	9452.50	9510.30	9762.70
	4.333	1613.15	.73	1613.39	310.00	1333.06	1914.18	1032.76	310.00	9300.00	9452.50	9510.30	9610.00
	4.390	1614.04	.00	1614.39	545.92	1684.24	2595.76	.00	673.20	9071.80	9667.80	9747.80	9745.00
	4.390	1614.63	.60	1615.02	245.00	1463.78	2816.22	.00	245.00	9500.00	9667.80	9747.80	9745.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=     3.347  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.347  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.481  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.481  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.546  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.639  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.639  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.639  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.639  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.648  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.648  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.648  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.648  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.651  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.651  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.710  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.710  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.804  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.804  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.881  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.333  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.333  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.390  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.390  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.492  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.492  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.662  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.347  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.347  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.385  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.385  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.481  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .434  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .529  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=      .529  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .624  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .624  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.639  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.639  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.639  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.639  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     3.648  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.648  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=     3.648  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     3.648  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.648  PROFILE=  2  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=     3.648  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     3.651  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.651  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.651  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.651  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.881  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     3.881  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.881  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.957  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.957  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
3.209	357.	1707.	5.6	1570.7	1570.0	.7
3.284	371.	1819.	5.0	1573.0	1572.1	.9
3.347	281.	1094.	5.7	1574.6	1573.8	.8
3.385	390.	1449.	4.3	1575.9	1575.2	.7
3.481	420.	960.	6.5	1579.0	1578.7	.3
3.546	500.	1540.	4.0	1582.5	1581.6	.9
3.639	511.	847.	7.3	1585.6	1585.3	.3
3.648	525.	851.	7.3	1586.3	1586.1	.2
3.651	525.	1076.	5.8	1586.7	1586.4	.3
3.710	639.	1609.	3.9	1589.4	1588.9	.5
3.804	664.	1124.	4.7	1592.6	1591.8	.8
3.881	596.	1494.	3.5	1596.0	1595.1	.9
3.957	528.	1201.	4.4	1598.6	1598.1	.5
4.019	533.	1296.	4.0	1601.4	1600.6	.8
4.058	489.	1196.	4.4	1602.9	1602.1	.8
4.146	421.	1206.	4.3	1606.2	1605.5	.7
4.197	330.	1056.	5.0	1607.9	1607.3	.6
4.262	350.	1055.	5.0	1610.5	1610.1	.4
4.333	427.	1492.	3.5	1612.7	1612.3	.4
4.390	393.	967.	5.4	1614.6	1614.3	.3
4.492	533.	2423.	3.9	1618.6	1617.8	.8
4.567	417.	1782.	5.3	1621.0	1620.2	.8
4.662	691.	2713.	3.5	1623.8	1623.2	.6
-3.284	371.	1821.	5.0	1573.0	1572.1	.9
3.347	277.	1067.	2.7	1574.8	1574.1	.7
3.385	213.	565.	5.1	1575.8	1575.6	.2
3.481	296.	809.	3.6	1579.0	1578.5	.5
3.546	530.	824.	3.5	1581.6	1581.3	.3
.434	500.	1056.	2.8	1584.1	1583.2	.9
.529	401.	683.	4.3	1587.3	1586.6	.7
.624	370.	902.	3.2	1591.0	1590.2	.8
3.639	996.	2719.	1.1	1593.1	1593.1	.0
3.648	1212.	2457.	1.2	1593.9	1593.9	.0
3.651	1359.	2976.	1.0	1594.4	1594.4	.0
3.881	538.	730.	5.9	1594.5	1594.2	.3
3.957	600.	1495.	2.9	1598.2	1597.3	.9
4.019	580.	1233.	3.5	1600.8	1600.1	.7
4.058	560.	1457.	2.9	1603.1	1602.3	.8
4.146	600.	1268.	3.4	1605.5	1604.7	.8
4.197	470.	1216.	3.5	1608.1	1607.2	.9
4.262	360.	1157.	3.7	1611.2	1610.3	.9
4.333	310.	1224.	3.5	1613.1	1612.4	.7

FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	------- FLOODWAY ------- WIDTH	SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
4.390	245.	986.	4.3	1614.6	1614.0	.6

Normal program termination

HEC2 S/N: 1126460209 HMVersion: 6.40 Data File: dm3fw.hc2

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    10SEP92    TIME   13:17:00 *
*******************************************
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****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*          (916) 756-1104              *
****************************************
```

```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
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:::::::::::::::::::::::::::::::::::::::::::::
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============================
H A E S T A D   M E T H O D S
============================
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 10SEP92 13:17:00

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study
T2      Natural Profile Run for Deadman Wash, SECNO 4.662 to SECNO 6.021
T3      Deadman Wash 100-year Q   Subcritical Flow,   June 1992 (revised 9/92)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              2                                                          1623.18

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                -1                                   -1                         15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        8       42        3        2       26        5       39
    53        4       54      110      200

QT       2     9510     9510
NC                                  .1       .3
NH       5     .080   9966.0     .065  10034.9     .080  10258.4     .065  10315.5     .080
NH   10511.
ET                      9.1                                                   9610     10301
         NH cards were used for SECNO 4.662 to SECNO 5.552.
X1   4.662       39   9966.0  10034.9        0        0        0
GR  1624.0   9320.0  1623.0   9450.0   1622.5   9620.2   1622.1   9672.2   1622.0   9714.0
GR  1621.9   9753.1  1621.9   9781.0   1620.2   9814.4   1619.1   9841.4   1618.7   9857.4
GR  1620.0   9883.2  1621.2   9912.3   1621.1   9945.8   1619.6   9966.0   1614.0   9991.3
GR  1614.3  10000.0  1614.1  10008.0   1619.1  10034.9   1620.2  10048.3   1619.5  10069.2
GR  1619.1  10091.2  1620.2  10116.4   1620.4  10138.7   1620.5  10146.8   1619.5  10182.9
GR  1618.8  10214.3  1618.8  10230.5   1619.6  10244.7   1618.7  10258.4   1615.8  10270.5
GR  1616.2  10277.8  1617.9  10291.9   1618.5  10315.5   1619.3  10341.6   1620.6  10369.5
GR  1622.6  10403.7  1623.4  10431.7   1623.9  10477.6   1625.6  10511.0

NH       5     .080   9984.2     .065  10022.8     .085  10553.5     .065  10630.3     .085
NH   10752.
ET                      9.1                                                   9700     10480
X1   4.756       44   9984.2  10022.8       520      470      496
GR  1626.0   9450.0  1625.4   9793.3   1624.4   9826.1   1623.8   9882.6   1624.0   9914.4
GR  1623.5   9940.4  1623.5   9963.0   1623.2   9977.2   1621.4   9984.2   1616.9   9991.7
GR  1616.7  10000.0  1616.3  10012.9   1619.9  10022.8   1618.9  10035.9   1619.0  10049.5
GR  1619.9  10061.8  1621.7  10072.3   1621.7  10087.0   1621.9  10116.7   1621.8  10130.0
GR  1622.4  10136.6  1622.5  10151.9   1622.9  10173.8   1624.6  10199.9   1624.4  10253.4
GR  1624.5  10291.1  1624.6  10306.9   1624.2  10357.5   1623.1  10426.5   1622.2  10492.2
GR  1622.1  10527.2  1621.0  10553.5   1619.9  10575.3   1620.0  10586.4   1619.4  10592.6
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GR   1618.4   10598.6   1618.4   10600.6   1619.4   10603.9   1620.1   10615.6   1624.5   10630.3
GR   1626.3   10641.5   1627.4   10671.0   1628.5   10710.7   1629.7   10752.0

NH       5      .080   9975.2      .065  10033.8      .085  10690.2      .065  10711.3      .085
NH   10892.
ET                      9.1                                                    9590    10420
X1    4.850       57   9975.2   10033.8       520       480       496
GR   1629.2   9322.9   1629.5    9439.8   1628.8    9595.7   1628.4    9677.5   1627.7    9729.3
GR   1628.0   9763.6   1627.9    9814.9   1627.6    9840.9   1627.0    9855.3   1627.2    9865.0
GR   1627.7   9877.6   1628.0    9898.3   1627.7    9921.8   1626.8    9941.8   1625.1    9962.0
GR   1623.3   9975.2   1622.7    9982.5   1620.5    9985.9   1619.7    9996.3   1619.1   10000.0
GR   1618.6  10011.9   1623.7   10033.8   1624.5   10042.8   1625.0   10059.2   1625.3   10087.8
GR   1626.2  10134.0   1626.8   10162.4   1627.7   10186.2   1628.5   10226.9   1629.3   10267.1
GR   1629.3  10291.8   1628.2   10309.1   1628.1   10332.0   1628.7   10385.3   1630.2   10435.7
GR   1630.4  10461.1   1629.8   10495.2   1629.4   10537.6   1628.7   10576.3   1628.7   10605.5
GR   1627.5  10628.2   1624.4   10649.6   1624.7   10662.6   1625.0   10676.1   1625.8   10690.2
GR   1621.9  10698.2   1621.7   10702.6   1625.1   10711.3   1624.5   10727.7   1624.3   10750.6
GR   1624.7  10764.0   1625.0   10772.0   1627.8   10781.8   1630.0   10798.2   1631.8   10823.1
GR   1632.7  10864.6   1633.3   10892.0

NH       5      .080   9972.2      .065  10034.4      .085  10708.5      .065  10741.8      .085
NH   10974.
ET                      9.1                                                    9865    10550
X1    4.943       58   9972.2   10034.4       500       430       491
GR   1634.3   9222.3   1634.6    9283.4   1635.0    9349.0   1634.9    9411.0   1634.8    9471.7
GR   1634.8   9544.2   1634.0    9620.3   1633.9    9678.5   1633.5    9722.1   1632.9    9776.0
GR   1632.4   9814.3   1632.6    9855.5   1631.4    9878.3   1629.7    9909.7   1627.2    9950.8
GR   1626.5   9962.2   1626.8    9972.2   1623.8    9986.9   1623.1   10000.0   1623.3   10010.9
GR   1625.1  10019.6   1626.9   10034.4   1627.7   10045.7   1627.5   10062.0   1628.9   10081.3
GR   1628.8  10108.9   1628.5   10125.1   1628.9   10154.0   1629.4   10185.2   1630.0   10210.6
GR   1630.1  10259.2   1630.3   10302.4   1630.5   10351.9   1630.9   10402.5   1631.3   10429.0
GR   1631.4  10468.7   1631.0   10511.3   1631.0   10547.1   1630.2   10585.2   1629.8   10623.0
GR   1628.8  10660.8   1628.0   10682.3   1627.0   10697.7   1626.9   10701.3   1627.4   10708.5
GR   1624.3  10721.2   1624.2   10726.4   1624.4   10730.5   1626.7   10741.8   1627.8   10756.4
GR   1627.9  10773.5   1628.2   10791.6   1629.7   10817.3   1631.1   10845.5   1633.4   10878.9
GR   1635.3  10912.2   1637.1   10947.5   1638.1   10974.0

NH       5      .080   9985.0      .065  10024.4      .085  11002.9      .065  11032.4      .085
NH   11327.
ET                      9.1                                                    9826    10900
X1    5.034       72   9985.0   10024.4       420       540       480
GR   1636.3   9165.7   1636.5    9319.4   1636.2    9430.7   1636.6    9517.8   1636.4    9624.1
GR   1636.7   9695.6   1636.5    9768.2   1635.5    9839.3   1634.9    9878.5   1635.0    9915.4
GR   1635.0   9916.8   1635.0    9948.5   1633.8    9974.1   1633.1    9985.0   1631.0    9989.3
GR   1625.2   9996.8   1624.6    9999.1   1625.2   10000.0   1626.2   10006.6   1632.0   10024.4
GR   1632.5  10070.9   1632.5   10090.4   1631.9   10102.7   1630.5   10110.6   1631.6   10122.3
GR   1632.1  10161.2   1632.2   10179.1   1633.6   10205.9   1634.7   10231.4   1635.6   10257.6
GR   1635.1  10291.6   1635.0   10347.8   1635.7   10372.5   1635.3   10392.9   1634.8   10413.4
GR   1635.1  10465.4   1635.3   10510.6   1635.1   10558.2   1634.7   10599.8   1633.7   10628.6
GR   1633.5  10654.2   1634.8   10666.4   1637.0   10689.6   1637.2   10709.0   1637.6   10735.3
GR   1637.7  10737.0   1636.8   10773.4   1635.5   10802.1   1634.6   10815.8   1634.6   10827.9
GR   1634.3  10861.7   1633.9   10893.7   1633.5   10927.5   1633.8   10953.7   1633.4   10977.2
GR   1632.9  10991.8   1631.6   11002.9   1629.2   11013.2   1629.1   11018.9   1630.3   11032.4
GR   1633.2  11061.8   1633.8   11070.1   1635.1   11098.0   1635.9   11119.2   1636.1   11143.6
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GR	1635.6	11170.8	1635.9	11204.4	1636.1	11249.8	1636.6	11263.6	1638.9	11283.4
GR	1640.1	11315.7	1641.0	11327.0						
NH	5	.080	9972.9	.065	10058.7	.085	11063.0	.065	11158.0	.085
NH	11450.									
ET			9.1						9838	11000
X1	5.113	53	9972.9	10058.7	417	320	417			
GR	1639.3	9237.1	1639.5	9283.4	1639.8	9360.1	1639.9	9424.2	1640.2	9479.8
GR	1640.5	9534.3	1640.5	9593.1	1640.3	9646.1	1639.3	9717.9	1639.2	9781.3
GR	1638.6	9821.9	1638.2	9849.6	1638.0	9872.4	1637.4	9887.0	1637.2	9894.9
GR	1637.0	9913.6	1635.6	9922.2	1635.4	9938.8	1635.4	9959.6	1635.2	9972.9
GR	1632.0	9983.1	1630.8	9994.6	1630.3	10000.0	1630.3	10019.7	1630.2	10036.2
GR	1635.4	10058.7	1636.2	10111.4	1636.7	10161.5	1637.5	10251.9	1637.8	10327.6
GR	1638.0	10400.0	1638.5	10404.6	1638.7	10426.2	1638.0	10460.2	1637.5	10500.0
GR	1636.2	10554.2	1636.0	10600.5	1636.0	10665.8	1638.0	10705.1	1638.5	10765.0
GR	1638.0	10880.0	1636.0	10896.0	1634.0	11063.0	1632.0	11110.0	1632.0	11120.0
GR	1634.0	11158.0	1636.0	11180.0	1638.2	11342.0	1639.8	11361.0	1640.0	11378.0
GR	1642.0	11408.0	1643.5	11414.9	1644.7	11450.0				
NH	5	.080	9983.6	.065	10060.4	.085	11215.2	.070	11265.5	.085
NH	11438.									
ET			9.1						9847	11120
X1	5.189	78	9983.6	10060.4	410	340	401			
GR	1643.0	9201.6	1643.4	9305.2	1644.2	9376.2	1644.2	9430.3	1643.9	9497.2
GR	1643.2	9537.7	1643.4	9584.5	1643.2	9633.2	1643.6	9693.3	1643.5	9733.0
GR	1642.6	9776.4	1641.9	9818.3	1641.2	9838.8	1640.3	9851.7	1639.8	9865.0
GR	1638.1	9879.5	1638.2	9888.8	1639.9	9905.7	1640.9	9916.4	1641.0	9932.3
GR	1640.8	9952.1	1641.0	9952.6	1640.9	9972.2	1639.2	9983.6	1637.5	9990.8
GR	1631.7	9996.9	1632.1	10000.0	1632.8	10027.1	1635.4	10035.8	1636.4	10049.1
GR	1638.8	10060.4	1639.0	10087.6	1639.1	10131.2	1639.8	10197.8	1639.8	10240.0
GR	1639.8	10294.5	1640.5	10351.4	1641.5	10399.7	1641.8	10436.3	1641.0	10483.8
GR	1640.1	10542.1	1639.6	10564.7	1639.9	10588.8	1637.1	10598.5	1637.6	10608.1
GR	1639.2	10621.6	1639.4	10645.7	1640.9	10661.4	1641.9	10687.3	1642.1	10739.4
GR	1642.6	10793.8	1642.3	10830.3	1641.9	10880.2	1641.5	10923.1	1640.9	10942.2
GR	1639.6	10963.0	1638.7	10980.2	1638.4	10992.4	1639.0	11012.8	1639.1	11038.1
GR	1639.0	11065.7	1639.1	11094.6	1638.0	11128.1	1637.0	11154.5	1637.3	11178.6
GR	1636.9	11196.5	1636.8	11206.2	1637.2	11215.2	1635.0	11223.7	1635.0	11228.6
GR	1636.4	11238.9	1637.3	11265.5	1638.7	11285.4	1640.0	11302.0	1640.4	11325.8
GR	1641.6	11359.5	1643.4	11393.3	1644.8	11438.0				
NH	5	.080	9958.9	.065	10031.3	.085	10804.2	.070	10874.6	.085
NH	11117.									
ET			9.1						9650	10750
X1	5.284	78	9958.9	10031.3	310	250	502			
GR	1647.8	8895.1	1647.6	9004.6	1647.1	9077.3	1647.3	9128.8	1646.7	9172.8
GR	1645.5	9274.5	1644.5	9345.3	1644.3	9357.7	1644.6	9390.2	1644.6	9421.9
GR	1644.3	9441.8	1643.1	9458.7	1642.6	9478.9	1641.6	9525.2	1640.5	9534.2
GR	1641.1	9539.2	1641.1	9548.1	1641.8	9560.9	1642.1	9570.0	1643.6	9588.8
GR	1644.0	9618.5	1643.6	9658.5	1642.6	9705.2	1642.0	9763.4	1641.4	9796.5
GR	1641.0	9814.0	1639.7	9825.2	1637.6	9830.1	1640.6	9846.7	1641.1	9870.7
GR	1641.3	9906.6	1641.5	9937.1	1641.3	9958.9	1639.9	9972.4	1637.1	9991.6
GR	1636.8	10000.0	1636.1	10009.6	1636.2	10015.4	1639.5	10021.8	1641.7	10031.3
GR	1642.1	10045.2	1642.4	10058.2	1641.6	10088.3	1640.6	10100.7	1638.6	10109.4
GR	1638.9	10115.7	1639.9	10123.6	1641.4	10132.7	1641.9	10148.1	1642.3	10175.8

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GR   1641.5   10198.3   1640.6   10229.2   1640.6   10262.6   1642.1   10308.7   1642.8   10368.4
GR   1643.5   10411.7   1643.1   10456.2   1643.4   10508.4   1642.5   10562.8   1641.8   10600.7
GR   1641.0   10624.7   1640.6   10667.1   1640.5   10727.1   1640.0   10776.1   1639.8   10804.2
GR   1638.9   10820.1   1638.2   10834.5   1638.3   10836.5   1638.9   10855.8   1639.1   10874.6
GR   1639.2   10892.5   1639.1   10915.0   1640.3   10948.8   1641.7   10978.1   1643.3   11025.9
GR   1645.5   11060.5   1648.0   11106.6   1648.2   11117.0

NH       5      .080   9970.8      .065  10018.8      .085  10777.0      .070  10895.6      .085
NH   11048.
ET                      9.1                                                     9770     10570
X1   5.379       68   9970.8   10018.8       400       590       502
GR   1649.7   9103.0   1649.2    9133.8   1649.4    9167.6   1649.4    9187.1   1648.1    9191.7
GR   1648.0   9234.2   1647.7    9275.2   1648.0    9312.4   1647.1    9337.3   1646.2    9352.1
GR   1647.0   9367.8   1647.5    9388.2   1646.6    9420.7   1645.8    9449.5   1645.8    9471.0
GR   1645.8   9505.1   1645.7    9522.4   1645.2    9562.7   1645.1    9583.9   1645.7    9606.9
GR   1645.8   9641.0   1645.7    9664.5   1644.1    9686.6   1644.4    9704.5   1643.5    9713.7
GR   1644.4   9720.7   1644.0    9751.0   1644.9    9773.6   1644.2    9820.7   1643.6    9852.0
GR   1644.4   9900.1   1645.0    9936.9   1645.4    9953.7   1645.3    9970.8   1636.9    9987.8
GR   1637.2   9996.3   1637.4   10000.0   1637.7   10004.6   1643.7   10018.8   1644.1   10032.6
GR   1644.3  10066.8   1644.0   10080.4   1644.6   10099.7   1645.0   10135.9   1644.9   10173.9
GR   1645.0  10217.8   1645.5   10258.4   1646.8   10315.0   1647.9   10350.6   1647.1   10373.3
GR   1646.8  10423.8   1646.4   10479.1   1646.4   10527.5   1647.3   10572.7   1646.7   10602.6
GR   1646.7  10652.7   1645.4   10717.8   1644.4   10777.0   1643.8   10813.9   1644.1   10834.7
GR   1643.6  10858.2   1645.3   10895.6   1645.9   10924.1   1647.0   10938.1   1647.7   10972.9
GR   1648.6  11007.3   1649.5   11036.2   1650.6   11048.0

NH       5      .080   9975.0      .065  10027.2      .085  10735.3      .070  10877.4      .085
NH   10964.
ET                      9.1                                                     9800     10620
X1   5.473       53   9975.0   10027.2       530       480       496
GR   1654.2   9394.6   1653.4    9413.0   1653.3    9436.9   1651.8    9465.6   1651.1    9495.7
GR   1649.8   9528.6   1649.6    9566.6   1649.5    9607.9   1649.6    9645.1   1649.3    9687.7
GR   1649.3   9717.3   1649.6    9754.4   1649.4    9778.6   1648.9    9811.4   1649.1    9831.4
GR   1650.0   9857.8   1649.7    9887.2   1649.6    9919.3   1649.1    9951.2   1648.8    9962.9
GR   1645.7   9975.0   1642.5    9984.3   1641.5    9991.1   1641.0   10000.0   1641.0   10008.5
GR   1642.9  10018.9   1646.7   10027.2   1647.4   10051.4   1647.9   10099.2   1648.4   10154.8
GR   1648.8  10205.9   1648.6   10278.8   1648.7   10327.0   1649.2   10374.1   1649.9   10432.6
GR   1650.6  10465.3   1650.4   10493.9   1649.9   10513.8   1649.8   10548.2   1649.5   10599.7
GR   1649.3  10634.3   1648.6   10675.7   1648.4   10708.9   1648.0   10735.3   1647.2   10746.7
GR   1647.1  10765.7   1647.2   10784.8   1646.7   10804.3   1647.1   10837.9   1647.7   10857.1
GR   1649.1  10877.4   1652.6   10924.9   1654.1   10964.0

NH       5      .080   9977.0      .065  10034.2      .085  10571.4      .070  10783.0      .085
NH   10992.
ET                      9.1                                                     9830     10607
          The effect of Palo Verde Tank is ignored.
X1   5.552       56   9977.0   10034.2       540       250       417
GR   1659.8   9443.3   1658.4    9453.6   1656.8    9492.5   1655.0    9522.9   1655.7    9549.1
GR   1655.7   9590.7   1655.7    9631.2   1654.7    9660.0   1652.9    9689.8   1652.4    9731.8
GR   1652.3   9760.6   1653.0    9778.3   1653.3    9822.5   1652.9    9847.7   1652.7    9869.4
GR   1651.2   9882.2   1651.2    9896.4   1652.2    9908.9   1650.8    9925.7   1649.6    9965.7
GR   1647.7   9977.0   1647.1    9994.9   1646.1   10000.0   1645.6   10007.4   1645.5   10015.1
GR   1646.8  10022.4   1648.8   10034.2   1650.4   10063.7   1650.5   10070.0   1649.7   10103.8
GR   1651.5  10115.8   1651.0   10140.6   1651.3   10182.9   1651.8   10237.9   1651.0   10290.0
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GR   1651.1   10353.1   1651.7   10389.0   1651.3   10420.5   1651.2   10512.9   1650.6   10571.4
GR   1649.7   10606.1   1649.3   10626.6   1649.2   10659.2   1649.2   10679.1   1649.8   10695.8
GR   1649.6   10720.6   1649.8   10750.5   1649.8   10761.9   1650.9   10783.0   1650.7   10809.2
GR   1650.8   10839.7   1652.7   10865.6   1655.1   10901.7   1656.9   10932.6   1659.8   10971.8
GR   1660.1   10992.0

NC    .080      .080      .065
ET                        9.1                                                     9899     10597
          NC card was used, channel = .065, overbanks = .080.
X1   5.646        54    9983.2   10023.7       270       480       496
GR   1659.4    9496.4   1658.1    9532.1   1656.6    9578.0   1656.1    9615.0   1654.1    9748.8
GR   1653.1    9797.6   1652.8    9879.1   1652.8    9884.0   1652.9    9914.7   1651.7    9928.0
GR   1650.2    9940.6   1650.8    9955.4   1651.5    9968.8   1651.1    9983.2   1647.3    9994.8
GR   1647.3   10000.0   1648.0   10011.9   1651.3   10023.7   1651.1   10036.0   1648.6   10047.3
GR   1649.7   10062.6   1652.2   10086.6   1652.4   10109.2   1651.5   10122.8   1649.9   10141.6
GR   1650.2   10146.8   1651.6   10161.5   1651.2   10172.3   1649.8   10196.3   1650.3   10206.5
GR   1651.9   10224.9   1652.0   10243.7   1651.7   10274.3   1651.5   10302.4   1652.3   10333.0
GR   1652.6   10350.5   1653.8   10369.3   1655.4   10388.6   1655.7   10415.9   1656.0   10445.2
GR   1656.2   10476.4   1654.9   10495.2   1653.0   10519.0   1652.3   10547.6   1652.0   10565.0
GR   1652.7   10606.1   1653.1   10644.3   1653.6   10694.6   1654.2   10750.0   1653.8   10780.0
GR   1654.0   10794.8   1654.6   10818.4   1657.1   10849.3   1659.9   10893.1

ET                        9.1                                                     9960     10540
X1   5.741        41    9961.4   10023.6       520       480       502
GR   1673.8    9845.8   1673.6    9858.9   1672.5    9874.3   1669.7    9890.5   1664.4    9918.6
GR   1659.0    9939.1   1657.8    9948.4   1655.3    9961.4   1650.5    9984.7   1649.4    9997.8
GR   1649.3   10000.0   1650.0   10017.1   1654.0   10023.6   1654.2   10042.1   1653.7   10061.3
GR   1654.7   10084.8   1654.6   10101.9   1654.7   10124.7   1654.7   10137.9   1654.2   10155.0
GR   1654.5   10179.0   1655.4   10200.4   1656.3   10226.4   1656.4   10245.5   1655.7   10271.2
GR   1655.8   10303.6   1655.9   10351.5   1656.3   10379.7   1656.8   10417.1   1657.1   10444.3
GR   1657.0   10487.0   1656.8   10530.5   1656.4   10574.1   1655.9   10618.6   1656.0   10653.7
GR   1656.7   10701.8   1657.7   10745.6   1657.2   10774.7   1657.9   10829.5   1658.7   10885.3
GR   1659.1   10898.8

ET                        9.1                                                     9928     10484
X1   5.835        37    9973.6   10029.5       496       450       496
GR   1668.5    9828.6   1665.3    9858.1   1662.8    9870.7   1657.9    9884.5   1657.5    9893.8
GR   1656.5    9913.2   1656.5    9930.6   1657.1    9939.8   1658.6    9950.8   1659.0    9963.3
GR   1658.7    9973.6   1654.9    9985.4   1651.7    9990.0   1652.5   10000.0   1652.5   10013.5
GR   1657.7   10029.5   1658.0   10040.5   1657.5   10052.9   1657.4   10086.0   1658.1   10117.0
GR   1658.4   10165.4   1659.0   10212.3   1659.9   10258.2   1659.9   10298.4   1660.3   10350.2
GR   1659.7   10421.3   1659.8   10502.7   1659.6   10562.7   1660.2   10626.8   1660.0   10665.9
GR   1661.4   10698.7   1661.8   10736.3   1661.8   10783.8   1661.9   10821.2   1662.1   10839.1
GR   1663.6   10866.0   1665.2   10894.5

QT       2       9480      9480
NH       5       .070    9778.8      .055    9800.9      .070    9964.7      .055   10039.8      .070
NH   10901.
ET                        9.1                                                     9820     10250
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          Q changed to 9,480 cfs at C10P.
          NH cards were used.
X1    5.928       48   9964.7  10039.8      500      440      491
GR   1667.7   9748.1   1661.4   9768.2   1660.1   9778.8   1657.1   9783.3   1656.8   9791.4
GR   1659.5   9800.9   1659.9   9807.3   1660.5   9821.5   1660.3   9834.5   1659.6   9840.8
GR   1659.9   9846.3   1661.4   9857.9   1661.5   9877.3   1662.0   9884.2   1662.2   9907.0
GR   1661.0   9927.2   1659.7   9945.5   1659.6   9955.7   1660.6   9964.7   1655.4   9985.8
GR   1652.8  10000.0   1652.6  10006.8   1653.9  10017.6   1658.8  10026.1   1659.8  10039.8
GR   1661.5  10054.3   1661.8  10070.8   1661.8  10092.9   1662.6  10128.5   1662.8  10159.2
GR   1662.8  10209.9   1662.8  10262.9   1662.7  10309.4   1662.7  10359.7   1662.9  10421.3
GR   1663.3  10455.8   1662.9  10496.3   1662.4  10536.9   1663.2  10574.8   1664.0  10628.6
GR   1664.2  10678.1   1664.1  10703.7   1665.1  10731.5   1665.2  10764.5   1665.1  10817.5
GR   1665.4  10853.5   1665.7  10876.5   1667.1  10901.0

NC    .070      .070     .055
ET                       9.1                                                   9754     10021
          NC card was used, channel = .055, overbanks = .070.
X1    6.021       61   9971.7  10021.5      480      580      491
GR   1667.6   9158.1   1667.0   9196.2   1667.0   9209.4   1667.1   9228.8   1664.4   9234.4
GR   1666.5   9241.3   1666.9   9262.0   1667.3   9279.6   1665.8   9282.9   1666.0   9284.9
GR   1666.9   9288.8   1666.9   9311.3   1666.5   9344.9   1666.5   9388.2   1666.8   9425.0
GR   1667.9   9463.4   1667.5   9490.2   1667.3   9504.2   1668.0   9539.5   1668.4   9546.4
GR   1668.0   9574.3   1667.3   9629.7   1666.1   9670.2   1664.7   9708.8   1664.2   9722.8
GR   1665.2   9746.2   1664.9   9760.5   1662.7   9769.9   1662.0   9780.5   1663.0   9782.8
GR   1664.4   9790.1   1665.0   9807.9   1665.5   9843.7   1664.6   9873.7   1663.8   9912.7
GR   1663.0   9940.6   1664.3   9952.0   1664.3   9971.7   1658.6   9986.5   1658.0  10000.0
GR   1658.0  10009.8   1667.9  10021.5   1668.5  10040.0   1669.4  10064.7   1669.2  10101.5
GR   1669.8  10158.4   1670.0  10213.1   1670.0  10273.7   1669.9  10320.6   1670.4  10359.9
GR   1670.1  10403.5   1670.1  10481.9   1670.0  10556.6   1670.1  10607.8   1670.9  10656.7
GR   1671.9  10736.0   1672.7  10770.9   1672.9  10811.1   1673.0  10841.2   1673.0  10863.6
GR   1674.3  10893.4
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 4.662
NH cards were used for SECNO 4.662 to SECNO 5.552.

4.662	9.18	1623.18	1621.48	1623.18	1623.45	.27	.00	.00	1619.60
9510.0	1764.5	2857.0	4888.5	786.1	488.8	1391.5	.0	.0	1619.10
.00	2.24	5.84	3.51	.080	.065	.075	.000	1614.00	9426.59
.004894	0.	0.	0.	0	13	0	.00	997.41	10424.00

FLOW DISTRIBUTION FOR SECNO= 4.66 CWSEL= 1623.18

STA=	9427.	9781.	9841.	9883.	9946.	9966.	10035.	10069.	10116.	10183.	10214.	10245.	10271.
PER Q=	3.2	4.6	5.8	3.4	1.6	30.0	3.6	5.7	5.8	4.4	4.5	5.8	
AREA=	252.1	166.5	167.3	143.1	57.2	488.8	116.9	174.3	201.1	126.5	127.5	127.0	
VEL=	1.2	2.6	3.3	2.3	2.6	5.8	2.9	3.1	2.7	3.3	3.4	4.3	
DEPTH=	.7	2.8	4.0	2.3	2.8	7.1	3.4	3.7	3.0	4.0	4.2	4.9	

STA=	10271.	10278.	10292.	10316.	10342.	10404.	10424.
PER Q=	3.3	4.8	5.8	4.0	3.7	.0	
AREA=	52.4	86.4	117.5	111.7	144.2	5.9	
VEL=	5.9	5.3	4.7	3.4	2.4	.6	
DEPTH=	7.2	6.1	5.0	4.3	2.3	.3	

1490 NH CARD USED
*SECNO 4.756

4.756	9.40	1625.70	1624.06	.00	1626.00	.30	2.54	.01	1621.40
9510.0	708.7	2141.6	6659.7	353.5	316.5	1900.1	29.1	11.4	1619.90
.03	2.00	6.77	3.51	.080	.065	.078	.000	1616.30	9627.62
.005646	520.	496.	470.	1	9	0	.00	1010.08	10637.70

FLOW DISTRIBUTION FOR SECNO= 4.76 CWSEL= 1625.70

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9628.	9914.	9977.	9984.	10023.	10036.	10050.	10062.	10087.	10117.	10152.	10253.	10427.
PER Q=	3.4	3.2	.8	22.5	3.9	4.5	3.6	4.1	3.9	4.0	3.9	5.2	
AREA=	196.6	133.1	23.7	316.5	82.4	91.7	76.7	110.0	115.5	124.3	179.7	270.7	
VEL=	1.7	2.3	3.1	6.8	4.5	4.7	4.4	3.5	3.2	3.1	2.1	1.8	
DEPTH=	.7	2.1	3.4	8.2	6.3	6.7	6.2	4.4	3.9	3.5	1.8	1.6	

STA=	10427.	10492.	10527.	10554.	10575.	10586.	10599.	10616.	10638.
PER Q=	5.8	4.0	3.9	6.2	3.7	4.8	6.5	2.0	
AREA=	199.7	123.9	108.9	114.2	63.7	77.9	106.5	54.2	
VEL=	2.8	3.1	3.4	5.2	5.5	5.9	5.8	3.5	
DEPTH=	3.0	3.5	4.1	5.2	5.7	6.4	6.3	2.5	

1490 NH CARD USED
*SECNO 4.850

3265 DIVIDED FLOW

4.850	10.24	1628.84	1627.81	.00	1629.41	.58	3.33	.08	1623.30
9510.0	1014.9	4024.9	4470.2	419.2	480.2	1182.1	55.3	22.6	1623.70
.06	2.42	8.38	3.78	.080	.065	.082	.000	1618.60	9587.49
.008387	520.	496.	480.	2	5	0	.00	967.96	10789.53

FLOW DISTRIBUTION FOR SECNO= 4.85 CWSEL= 1628.84

STA=	9587.	9855.	9962.	9975.	10034.	10059.	10088.	10134.	10227.	10663.	10690.	10703.	10711.
PER Q=	3.2	4.5	3.0	42.3	4.9	4.2	5.1	3.2	5.3	4.1	4.9	3.1	
AREA=	190.0	168.0	61.2	480.2	109.7	105.4	142.6	134.1	184.1	102.3	70.9	47.3	
VEL=	1.6	2.5	4.7	8.4	4.3	3.8	3.4	2.3	2.7	3.8	6.6	6.2	
DEPTH=	.7	1.6	4.6	8.2	4.3	3.7	3.1	1.4	.4	3.7	5.7	5.4	

STA=	10711.	10751.	10772.	10790.
PER Q=	7.4	4.0	.8	
AREA=	167.8	90.0	27.9	
VEL=	4.2	4.2	2.6	
DEPTH=	4.3	4.2	1.6	

1490 NH CARD USED
*SECNO 4.943

4.943	8.95	1632.05	1630.33	.00	1632.30	.26	2.86	.03	1626.80
9510.0	971.8	2811.7	5726.5	312.3	466.2	2054.8	80.8	32.8	1626.90
.09	3.11	6.03	2.79	.080	.065	.081	.000	1623.10	9865.96
.004809	500.	491.	430.	2	13	0	.00	993.33	10859.29

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.94 CWSEL= 1632.05

STA=	9866.	9951.	9972.	10034.	10062.	10109.	10154.	10211.	10302.	10469.	10623.	10682.	10701.
PER Q=	5.6	4.7	29.6	4.4	4.8	4.3	3.7	3.5	3.1	3.4	5.0	3.1	
AREA=	199.0	113.3	466.2	126.2	162.6	151.9	150.1	177.1	202.9	206.5	182.4	88.4	
VEL=	2.7	3.9	6.0	3.3	2.8	2.7	2.3	1.9	1.5	1.6	2.6	3.4	
DEPTH=	2.3	5.3	7.5	4.6	3.5	3.4	2.7	1.9	1.2	1.3	3.1	4.7	

STA=	10701.	10721.	10731.	10742.	10774.	10817.	10859.
PER Q=	5.6	4.7	4.2	4.9	4.5	.9	
AREA=	114.0	72.3	73.4	141.9	152.1	53.1	
VEL=	4.7	6.2	5.4	3.3	2.8	1.6	
DEPTH=	5.7	7.8	6.5	4.5	3.5	1.3	

1490 NH CARD USED
*SECNO 5.034

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .62

5.034	11.03	1635.63	1635.08	.00	1636.16	.53	3.77	.08	1633.10
9510.0	250.6	2610.7	6648.7	118.8	288.0	1654.5	110.0	45.7	1632.00
.12	2.11	9.06	4.02	.080	.065	.081	.000	1624.60	9829.97
.012494	420.	480.	540.	2	11	0	.00	1157.34	11174.30

FLOW DISTRIBUTION FOR SECNO= 5.03 CWSEL= 1635.63

STA=	9830.	9985.	10024.	10071.	10103.	10122.	10161.	10206.	10558.	10654.	10894.	10954.	11003.
PER Q=	2.6	27.5	7.3	4.7	5.0	7.3	5.9	3.0	3.3	3.2	3.8	4.7	
AREA=	118.8	288.0	157.2	103.3	88.6	147.1	135.5	189.8	123.6	131.3	117.2	121.5	
VEL=	2.1	9.1	4.4	4.3	5.3	4.7	4.1	1.5	2.5	2.3	3.1	3.7	
DEPTH=	.8	7.3	3.4	3.2	4.5	3.8	3.0	.5	1.3	.5	2.0	2.5	

STA=	11003.	11013.	11019.	11032.	11062.	11174.
PER Q=	4.3	3.5	7.0	5.8	1.4	
AREA=	53.9	36.9	80.1	114.1	54.5	
VEL=	7.6	8.9	8.4	4.8	2.4	
DEPTH=	5.2	6.5	5.9	3.9	.5	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 5.113

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.71

5.113	8.18	1638.38	1636.75	.00	1638.60	.22	2.41	.03	1635.20
9510.0	474.8	3170.2	5865.0	219.5	590.8	2289.3	130.3	55.7	1635.40
.15	2.16	5.37	2.56	.080	.065	.077	.000	1630.20	9836.63
.004282	417.	417.	320.	2	14	0	.00	1430.31	11344.22

FLOW DISTRIBUTION FOR SECNO= 5.11 CWSEL= 1638.38

STA=	9837.	9960.	9973.	10059.	10111.	10252.	10601.	10666.	11063.	11110.	11120.	11158.	11342.
PER Q=	3.9	1.1	33.3	3.1	3.5	4.6	3.3	16.6	12.2	3.5	9.9	5.0	
AREA=	178.5	41.1	590.8	136.3	213.4	310.0	155.9	668.6	253.2	63.9	204.7	283.1	
VEL=	2.1	2.6	5.4	2.2	1.5	1.4	2.0	2.4	4.6	5.2	4.6	1.7	
DEPTH=	1.5	3.1	6.9	2.6	1.5	.9	2.4	1.7	5.4	6.4	5.4	1.5	

STA=	11342.	11344.
PER Q=	.0	
AREA=	.2	
VEL=	.2	
DEPTH=	.1	

1490 NH CARD USED
*SECNO 5.189

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .56

5.189	8.98	1640.68	1640.18	.00	1641.27	.59	2.56	.11	1639.20
9510.0	285.2	3911.0	5313.8	96.5	460.1	1417.0	151.1	65.4	1638.80
.16	2.95	8.50	3.75	.080	.065	.081	.000	1631.70	9846.19
.013421	410.	401.	340.	2	8	0	.00	997.63	11333.79

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.19 CWSEL= 1640.68

STA=	9846.	9984.	10060.	10131.	10295.	10608.	10980.	11038.	11128.	11155.	11179.	11197.	11215.
PER Q=	3.0	41.1	3.6	3.7	3.6	3.0	3.5	5.3	3.9	4.2	3.2	3.6	
AREA=	96.5	460.1	119.8	167.8	136.9	108.7	107.9	163.9	84.1	85.2	64.2	70.4	
VEL=	3.0	8.5	2.9	2.1	2.5	2.7	3.1	3.0	4.4	4.7	4.7	4.9	
DEPTH=	.7	6.0	1.7	1.0	.4	.3	1.9	1.8	3.2	3.5	3.6	3.8	

STA=	11215.	11229.	11239.	11266.	11334.
PER Q=	5.0	3.9	6.5	2.9	
AREA=	66.8	51.3	102.0	88.2	
VEL=	7.1	7.1	6.0	3.1	
DEPTH=	5.0	5.0	3.8	1.3	

1490 NH CARD USED
*SECNO 5.284

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.69

5.284	7.53	1643.63	1642.14	.00	1643.77	.14	2.46	.04	1641.30
9510.0	1826.5	1730.6	5952.9	823.9	373.9	2280.5	169.8	73.4	1641.70
.20	2.22	4.63	2.61	.080	.065	.081	.000	1636.10	9451.17
.004706	310.	502.	250.	2	18	0	.00	1516.31	11031.16

FLOW DISTRIBUTION FOR SECNO= 5.28 CWSEL= 1643.63

STA=	9451.	9561.	9797.	9830.	9871.	9937.	9959.	10031.	10109.	10148.	10229.	10309.	10625.
PER Q=	3.6	3.3	3.0	4.5	3.7	1.1	18.2	3.4	3.5	3.3	5.0	3.8	
AREA=	176.9	196.8	103.8	142.1	155.5	48.7	373.9	157.8	121.9	161.4	206.7	273.8	
VEL=	1.9	1.6	2.8	3.0	2.2	2.2	4.6	2.1	2.8	2.0	2.3	1.3	
DEPTH=	1.6	.8	3.1	3.5	2.3	2.2	5.2	2.0	3.2	2.0	2.6	.9	

STA=	10625.	10667.	10727.	10776.	10804.	10835.	10856.	10875.	10915.	10949.	11031.
PER Q=	3.0	4.9	4.7	3.2	6.1	4.9	3.7	6.2	4.2	2.6	
AREA=	120.2	185.1	165.8	104.9	141.3	107.9	87.1	181.2	133.0	132.3	
VEL=	2.4	2.5	2.7	2.9	4.1	4.3	4.0	3.3	3.0	1.9	
DEPTH=	2.8	3.1	3.4	3.7	4.7	5.1	4.6	4.5	3.9	1.6	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 5.379

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

5.379	9.97	1646.87	1646.43	.00	1647.28	.41	3.43	.08	1645.30
9510.0	3190.5	2844.5	3475.0	1048.0	347.5	1148.3	205.8	90.9	1643.70
.23	3.04	8.18	3.03	.080	.065	.079	.000	1636.90	9341.06
.009972	400.	502.	590.	3	11	0	.00	1412.44	10936.46

FLOW DISTRIBUTION FOR SECNO= 5.38 CWSEL= 1646.87

STA=	9341.	9563.	9665.	9705.	9751.	9821.	9852.	9900.	9954.	9971.	10019.	10067.	10100.
PER Q=	3.4	3.2	3.1	4.9	5.7	3.7	5.4	3.4	.7	29.9	4.8	3.0	
AREA=	165.1	134.9	90.5	128.3	164.1	93.0	138.1	108.0	26.0	347.5	132.4	86.6	
VEL=	2.0	2.3	3.2	3.6	3.3	3.8	3.7	3.0	2.5	8.2	3.4	3.3	
DEPTH=	.7	1.3	2.3	2.8	2.4	3.0	2.9	2.0	1.5	7.2	2.8	2.6	

STA=	10100.	10174.	10258.	10777.	10814.	10858.	10896.	10936.
PER Q=	4.3	4.1	5.3	4.5	6.1	3.6	.8	
AREA=	148.0	150.2	264.3	102.3	131.8	90.6	42.2	
VEL=	2.8	2.6	1.9	4.2	4.4	3.8	1.9	
DEPTH=	2.0	1.8	.5	2.8	3.0	2.4	1.0	

1490 NH CARD USED
*SECNO 5.473

5.473	9.82	1650.82	1650.22	.00	1651.17	.34	3.88	.01	1645.70
9510.0	1237.6	3156.9	5115.4	646.2	433.5	1855.8	237.1	107.0	1646.70
.26	1.92	7.28	2.76	.080	.065	.079	.000	1641.00	9502.68
.006282	530.	496.	480.	3	13	0	.00	1398.12	10900.80

FLOW DISTRIBUTION FOR SECNO= 5.47 CWSEL= 1650.82

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9503.	9688.	9811.	9951.	9975.	10027.	10051.	10099.	10155.	10279.	10374.	10600.	10709.
PER Q=	3.8	3.7	3.5	2.0	33.2	3.2	4.8	4.2	6.5	4.5	3.1	4.6	
AREA=	214.5	183.0	183.5	65.2	433.5	91.3	151.7	148.7	268.5	193.1	210.0	204.0	
VEL=	1.7	1.9	1.8	3.0	7.3	3.4	3.0	2.7	2.3	2.2	1.4	2.1	
DEPTH=	1.2	1.5	1.3	2.7	8.3	3.8	3.2	2.7	2.2	2.0	.9	1.9	

STA=	10709.	10747.	10785.	10804.	10838.	10877.	10901.
PER Q=	3.3	5.9	3.3	5.8	4.2	.3	
AREA=	106.0	140.0	75.5	131.9	115.0	20.2	
VEL=	3.0	4.0	4.1	4.2	3.5	1.3	
DEPTH=	2.8	3.7	3.9	3.9	2.9	.9	

1490 NH CARD USED
*SECNO 5.552

3265 DIVIDED FLOW

The effect of Palo Verde Tank is ignored.

5.552	7.63	1653.13	1652.26	.00	1653.42	.28	2.24	.01	1647.70
9510.0	855.4	2413.8	6240.9	318.0	362.1	2010.7	258.0	117.0	1648.80
.28	2.69	6.67	3.10	.080	.065	.078	.000	1645.50	9685.94
.007327	540.	417.	250.	3	18	0	.00	1151.02	10872.11

FLOW DISTRIBUTION FOR SECNO= 5.55 CWSEL= 1653.13

STA=	9686.	9966.	9977.	10034.	10064.	10104.	10183.	10290.	10353.	10513.	10571.	10606.	10627.
PER Q=	6.7	2.3	25.4	3.8	3.9	4.1	3.9	3.4	6.7	3.5	4.1	3.4	
AREA=	267.3	50.7	362.1	104.2	119.4	161.0	177.3	131.4	287.6	130.6	103.5	74.5	
VEL=	2.4	4.3	6.7	3.5	3.1	2.4	2.1	2.4	2.2	2.6	3.8	4.3	
DEPTH=	1.0	4.5	6.3	3.5	3.0	2.0	1.7	2.1	1.8	2.2	3.0	3.6	

STA=	10627.	10659.	10679.	10721.	10751.	10783.	10840.	10872.
PER Q=	6.0	3.7	6.4	4.5	3.8	3.7	.7	
AREA=	126.6	78.3	145.8	102.6	96.7	133.8	37.2	
VEL=	4.5	4.5	4.2	4.1	3.8	2.7	1.8	
DEPTH=	3.9	3.9	3.5	3.4	3.0	2.4	1.1	

*SECNO 5.646

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

NC card was used, channel = .065, overbanks = .080.

5.646	8.32	1655.62	1653.73	.00	1655.78	.16	2.35	.01	1651.10
9510.0	1912.3	1447.9	6149.8	794.8	283.2	2240.6	288.5	128.0	1651.30
.32	2.41	5.11	2.74	.080	.065	.080	.000	1647.30	9646.79
.003872	270.	496.	480.	2	9	0	.00	1108.61	10831.07

FLOW DISTRIBUTION FOR SECNO= 5.65 CWSEL= 1655.62

STA=	9647.	9879.	9928.	9955.	9983.	10024.	10047.	10063.	10087.	10123.	10142.	10162.	10196.
PER Q=	7.8	3.6	4.7	4.0	15.2	4.3	4.2	3.8	3.5	3.2	3.5	5.9	
AREA=	394.6	143.2	134.8	122.2	283.2	119.7	99.1	112.2	125.1	92.6	98.4	168.6	
VEL=	1.9	2.4	3.3	3.1	5.1	3.4	4.0	3.2	2.6	3.3	3.4	3.3	
DEPTH=	1.7	2.9	4.9	4.4	7.0	5.1	6.5	4.7	3.5	4.9	4.9	4.8	

STA=	10196.	10225.	10274.	10302.	10333.	10519.	10565.	10606.	10695.	10818.	10831.
PER Q=	4.9	5.4	3.5	3.3	3.4	3.8	3.6	4.9	3.4	.1	
AREA=	140.1	184.6	113.1	114.0	166.9	145.5	134.6	218.5	201.1	6.5	
VEL=	3.3	2.8	2.9	2.8	1.9	2.5	2.5	2.1	1.6	.7	
DEPTH=	4.9	3.7	4.0	3.7	.9	3.2	3.3	2.5	1.6	.5	

*SECNO 5.741

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .63

5.741	8.93	1658.23	1657.60	.00	1658.73	.50	2.84	.10	1655.30
9510.0	56.1	3570.5	5883.4	22.6	439.4	1727.9	319.4	139.3	1654.00
.35	2.49	8.13	3.40	.080	.065	.080	.000	1649.30	9945.07
.009656	520.	502.	480.	2	5	0	.00	907.47	10852.53

FLOW DISTRIBUTION FOR SECNO= 5.74 CWSEL= 1658.23

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9945.	9961.	10024.	10042.	10061.	10085.	10125.	10155.	10179.	10226.	10304.	10352.	10417.
PER Q=	.6	37.5	3.8	4.2	4.6	6.4	5.1	4.4	5.1	5.7	3.9	3.6	
AREA=	22.6	439.4	76.4	82.2	94.7	142.9	111.2	93.1	132.1	172.3	114.0	122.9	
VEL=	2.5	8.1	4.7	4.8	4.6	4.3	4.3	4.5	3.7	3.1	3.3	2.8	
DEPTH=	1.4	7.1	4.1	4.3	4.0	3.6	3.7	3.9	2.8	2.2	2.4	1.9	

STA=	10417.	10531.	10619.	10702.	10853.
PER Q=	3.2	4.8	5.3	1.8	
AREA=	143.1	163.6	170.5	108.9	
VEL=	2.1	2.8	3.0	1.6	
DEPTH=	1.3	1.9	2.0	.7	

*SECNO 5.835

5.835	10.26	1661.96	1660.84	.00	1662.29	.33	3.55	.02	1658.70
9510.0	1625.0	2974.0	4911.0	418.2	436.8	1730.0	344.8	149.0	1657.70
.38	3.89	6.81	2.84	.080	.065	.080	.000	1651.70	9873.07
.006059	496.	496.	450.	3	9	0	.00	953.45	10826.52

FLOW DISTRIBUTION FOR SECNO= 5.84 CWSEL= 1661.96

STA=	9873.	9913.	9931.	9951.	9974.	10030.	10053.	10086.	10117.	10165.	10212.	10258.	10350.
PER Q=	6.4	4.5	3.9	2.3	31.3	3.8	6.2	5.2	6.5	5.1	3.2	4.3	
AREA=	159.0	95.0	92.7	71.5	436.8	97.4	149.3	130.5	179.5	152.9	115.2	179.1	
VEL=	3.8	4.5	4.0	3.1	6.8	3.7	3.9	3.8	3.5	3.2	2.7	2.3	
DEPTH=	4.0	5.5	4.6	3.1	7.8	4.2	4.5	4.2	3.7	3.3	2.5	1.9	

STA=	10350.	10421.	10503.	10563.	10627.	10827.
PER Q=	3.3	4.6	3.5	3.2	2.6	
AREA=	139.3	179.9	135.6	132.0	139.4	
VEL=	2.3	2.5	2.5	2.3	1.7	
DEPTH=	2.0	2.2	2.3	2.1	.7	

1490 NH CARD USED
*SECNO 5.928
Q changed to 9,480 cfs at C10P.
NH cards were used.

5.928	11.74	1664.34	1663.31	.00	1664.82	.48	2.48	.04	1660.60
9480.0	3013.7	4470.6	1995.7	771.4	615.2	969.7	371.2	158.9	1659.80
.41	3.91	7.27	2.06	.066	.055	.070	.000	1652.60	9758.82
.004561	500.	491.	440.	3	8	0	.00	951.59	10710.41

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.93 CWSEL= 1664.34

STA=	9759.	9783.	9791.	9801.	9822.	9841.	9877.	9927.	9956.	9965.	10040.	10071.	10129.
PER Q=	3.0	4.4	3.7	3.5	3.1	4.3	3.5	4.8	1.5	47.2	3.2	3.5	
AREA=	77.7	59.9	58.8	88.5	78.9	124.2	124.4	120.9	38.2	615.2	97.9	132.4	
VEL=	3.7	6.9	6.0	3.8	3.7	3.3	2.6	3.8	3.7	7.3	3.1	2.5	
DEPTH=	3.2	7.4	6.2	4.3	4.1	3.4	2.5	4.2	4.2	8.2	3.2	2.3	

STA=	10129.	10263.	10360.	10496.	10629.	10710.
PER Q=	4.3	3.3	3.5	3.1	.1	
AREA=	210.2	156.5	188.0	166.9	17.6	
VEL=	1.9	2.0	1.8	1.8	.5	
DEPTH=	1.6	1.6	1.4	1.3	.2	

*SECNO 6.021

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
NC card was used, channel = .055, overbanks = .070.

6.021	9.56	1667.56	1667.56	.00	1668.55	.99	3.57	.15	1664.30
9480.0	5479.7	4000.3	.0	1188.5	363.1	.0	393.9	169.0	1667.90
.43	4.61	11.02	.00	.070	.055	.000	.000	1658.00	9160.64
.013088	480.	491.	580.	0	14	0	.00	733.98	10021.10

FLOW DISTRIBUTION FOR SECNO= 6.02 CWSEL= 1667.56

STA=	9161.	9345.	9670.	9709.	9746.	9770.	9781.	9808.	9844.	9874.	9913.	9941.	9972.
PER Q=	3.2	3.0	3.6	5.8	3.8	4.2	5.2	3.7	3.6	7.5	7.7	6.4	
AREA=	132.6	131.0	83.4	110.5	71.2	55.2	90.7	82.7	75.3	131.0	116.1	108.8	
VEL=	2.3	2.2	4.1	5.0	5.1	7.3	5.4	4.2	4.5	5.4	6.3	5.6	
DEPTH=	.7	.4	2.2	3.0	3.0	5.2	3.3	2.3	2.5	3.4	4.2	3.5	

STA=	9972.	10022.
PER Q=	42.2	
AREA=	363.1	
VEL=	11.0	
DEPTH=	7.4	

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T1      Deadman Wash Floodplain Delineation Study
T2      Floodway Run for Deadman Wash, SECNO 4.662 to SECNO 6.021
T3      Deadman Wash 100-year Q   Subcritical Flow,   June 1992 (revised 9/92)

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

              3                                                                   1623.83

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     2                  -1                                      -1                            15
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO 4.662

3470 ENCROACHMENT STATIONS= 9610.0 10301.0 TYPE= 1 TARGET= 691.000
NH cards were used for SECNO 4.662 to SECNO 5.552.

4.662	9.83	1623.83	1621.77	1623.18	1624.08	.25	.00	.00	1619.60
9510.0	2297.7	2947.8	4264.5	949.0	533.6	1232.1	.0	.0	1619.10
.00	2.42	5.52	3.46	.080	.065	.075	.000	1614.00	9610.00
.003890	0.	0.	0.	0	13	0	.00	691.00	10301.00

FLOW DISTRIBUTION FOR SECNO= 4.66 CWSEL= 1623.83

STA=	9610.	9753.	9814.	9841.	9883.	9946.	9966.	10035.	10069.	10091.	10116.	10183.	10214.
PER Q=	4.2	3.3	3.6	6.6	4.6	2.0	31.0	4.3	3.3	3.3	7.1	5.0	
AREA=	240.9	146.7	112.9	194.5	183.8	70.3	533.6	139.2	99.7	105.3	244.4	146.9	
VEL=	1.6	2.1	3.0	3.2	2.4	2.7	5.5	2.9	3.2	3.0	2.8	3.2	
DEPTH=	1.7	2.4	4.2	4.7	2.9	3.5	7.7	4.1	4.5	4.2	3.7	4.7	

STA=	10214.	10245.	10271.	10278.	10292.	10301.
PER Q=	5.1	6.3	3.4	5.1	1.9	
AREA=	147.2	143.7	57.2	95.6	52.9	
VEL=	3.3	4.2	5.6	5.1	3.3	
DEPTH=	4.8	5.6	7.8	6.8	5.8	

1490 NH CARD USED
*SECNO 4.756

3470 ENCROACHMENT STATIONS= 9700.0 10480.0 TYPE= 1 TARGET= 780.000

4.756	9.96	1626.26	1625.12	1625.70	1626.69	.43	2.56	.05	1621.40
9510.0	1363.0	2753.7	5393.3	511.8	338.6	1471.3	28.3	8.3	1619.90
.03	2.66	8.13	3.67	.080	.065	.085	.000	1616.30	9700.00
.007451	520.	496.	470.	2	9	0	.00	780.00	10480.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 4.76 CWSEL= 1626.26

STA=	9700.	9883.	9940.	9977.	9984.	10023.	10036.	10050.	10062.	10087.	10117.	10137.	10174.
PER Q=	5.4	4.3	3.5	1.1	29.0	5.1	5.9	4.8	5.7	5.7	3.6	5.1	
AREA=	239.8	140.5	103.8	27.7	338.6	89.9	99.4	83.8	124.4	132.5	86.2	136.4	
VEL=	2.1	2.9	3.2	3.9	8.1	5.4	5.7	5.4	4.4	4.1	4.0	3.6	
DEPTH=	1.3	2.4	2.8	4.0	8.8	6.9	7.3	6.8	4.9	4.5	4.3	3.7	

STA=	10174.	10253.	10358.	10427.	10480.
PER Q=	4.1	4.5	5.4	6.6	
AREA=	159.9	189.7	180.3	188.8	
VEL=	2.4	2.3	2.9	3.3	
DEPTH=	2.0	1.8	2.6	3.5	

1490 NH CARD USED
*SECNO 4.850

3470 ENCROACHMENT STATIONS= 9590.0 10420.0 TYPE= 1 TARGET= 830.000

4.850	11.19	1629.79	1629.00	1628.84	1630.38	.60	3.64	.05	1623.30
9510.0	2200.9	4505.9	2803.3	784.4	535.7	871.4	53.9	17.5	1623.70
.05	2.81	8.41	3.22	.080	.065	.085	.000	1618.60	9590.00
.007297	520.	496.	480.	2	8	0	.00	830.00	10420.00

FLOW DISTRIBUTION FOR SECNO= 4.85 CWSEL= 1629.79

STA=	9590.	9729.	9815.	9865.	9922.	9962.	9975.	10034.	10059.	10088.	10134.	10162.	10227.
PER Q=	4.1	4.1	3.4	3.1	4.7	3.8	47.4	6.4	5.8	7.4	3.2	3.3	
AREA=	192.3	160.5	114.7	115.0	128.2	73.7	535.7	133.7	132.6	186.4	93.3	128.9	
VEL=	2.0	2.4	2.8	2.5	3.5	5.0	8.4	4.5	4.2	3.8	3.3	2.4	
DEPTH=	1.4	1.9	2.3	2.0	3.2	5.6	9.1	5.3	4.6	4.0	3.3	2.0	

STA=	10227.	10385.	10420.
PER Q=	3.2	.2	
AREA=	176.7	19.7	
VEL=	1.7	1.0	
DEPTH=	1.1	.6	

1490 NH CARD USED
*SECNO 4.943

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9865.0 10550.0 TYPE= 1 TARGET= 685.000

4.943	9.87	1632.97	1631.49	1632.05	1633.35	.38	2.95	.02	1626.80
9510.0	1525.8	3634.7	4349.4	411.2	523.6	1523.6	78.5	25.5	1626.90
.08	3.71	6.94	2.85	.080	.065	.085	.000	1623.10	9865.00
.005456	500.	491.	430.	2	13	0	.00	685.00	10550.00

FLOW DISTRIBUTION FOR SECNO= 4.94 CWSEL= 1632.97

STA=	9865.	9951.	9962.	9972.	10034.	10062.	10081.	10109.	10154.	10185.	10259.	10302.	10352.
PER Q=	9.6	3.4	3.1	38.2	6.4	3.5	4.0	6.9	4.0	6.4	3.2	3.2	
AREA=	278.2	69.8	63.2	523.6	151.7	92.1	113.8	193.5	119.3	225.2	119.8	127.3	
VEL=	3.3	4.6	4.7	6.9	4.0	3.7	3.3	3.4	3.2	2.7	2.5	2.4	
DEPTH=	3.2	6.1	6.3	8.4	5.5	4.8	4.1	4.3	3.8	3.0	2.8	2.6	

STA=	10352.	10429.	10547.	10550.
PER Q=	3.7	4.2	.1	
AREA=	164.6	210.6	5.8	
VEL=	2.2	1.9	1.4	
DEPTH=	2.1	1.8	2.0	

1490 NH CARD USED
*SECNO 5.034

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9826.0 10900.0 TYPE= 1 TARGET= 1074.000

5.034	11.91	1636.51	1635.89	1635.63	1636.97	.46	3.59	.02	1633.10
9510.0	681.9	2766.5	6061.7	258.3	322.6	1759.6	106.8	35.4	1632.00
.11	2.64	8.58	3.44	.080	.065	.085	.000	1624.60	9826.00
.009614	420.	480.	540.	2	8	0	.00	978.60	10900.00

FLOW DISTRIBUTION FOR SECNO= 5.03 CWSEL= 1636.51

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9826.	9949.	9985.	10024.	10071.	10090.	10111.	10122.	10161.	10179.	10206.	10292.	10413.
PER Q=	4.1	3.0	29.1	9.4	3.6	4.8	3.6	9.1	3.8	4.1	3.5	3.5	
AREA=	171.0	87.3	322.6	198.0	78.2	94.9	63.9	181.2	78.0	96.7	135.2	161.1	
VEL=	2.3	3.3	8.6	4.5	4.3	4.8	5.3	4.8	4.6	4.0	2.5	2.1	
DEPTH=	1.4	2.4	8.2	4.3	4.0	4.7	5.5	4.7	4.4	3.6	1.6	1.3	

STA=	10413.	10511.	10600.	10654.	10862.	10900.
PER Q=	3.2	3.0	4.8	4.4	3.0	
AREA=	140.2	129.2	141.0	168.1	93.8	
VEL=	2.2	2.2	3.3	2.5	3.0	
DEPTH=	1.4	1.4	2.6	.8	2.4	

1490 NH CARD USED
*SECNO 5.113

3470 ENCROACHMENT STATIONS= 9838.0 11000.0 TYPE= 1 TARGET= 1162.000

5.113	8.96	1639.16	1638.09	1638.38	1639.48	.32	2.50	.01	1635.20
9510.0	873.7	4161.1	4475.2	323.2	656.7	1945.9	127.9	43.7	1635.40
.13	2.70	6.34	2.30	.080	.065	.085	.000	1630.20	9838.00
.005184	417.	417.	320.	1	20	0	.00	1162.00	11000.00

FLOW DISTRIBUTION FOR SECNO= 5.11 CWSEL= 1639.16

STA=	9838.	9939.	9973.	10059.	10111.	10162.	10252.	10400.	10554.	10601.	10666.	10880.	11000.
PER Q=	4.8	4.4	43.8	5.2	3.5	4.0	3.4	4.3	3.9	5.9	3.8	13.0	
AREA=	193.8	129.4	656.7	176.9	135.6	185.9	204.9	224.5	141.5	206.1	243.2	427.5	
VEL=	2.3	3.3	6.3	2.8	2.4	2.0	1.6	1.8	2.7	2.7	1.5	2.9	
DEPTH=	1.9	3.8	7.7	3.4	2.7	2.1	1.4	1.5	3.1	3.2	1.1	3.6	

1490 NH CARD USED
*SECNO 5.189

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9847.0 11120.0 TYPE= 1 TARGET= 1273.000

5.189	9.95	1641.65	1641.22	1640.68	1642.22	.57	2.66	.07	1639.20
9510.0	644.9	4419.6	4445.5	214.1	534.2	1465.4	149.2	52.5	1638.80
.15	3.01	8.27	3.03	.080	.065	.085	.000	1631.70	9847.00
.010418	410.	401.	340.	2	9	0	.00	1019.38	11120.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 5.19 CWSEL= 1641.65

STA=	9847.	9889.	9984.	10060.	10131.	10198.	10295.	10542.	10599.	10622.	10963.	11013.	11066.
PER Q=	3.7	3.1	46.5	6.8	4.6	5.1	3.9	3.6	3.8	3.3	5.3	4.9	
AREA=	98.5	115.6	534.2	188.1	146.5	178.8	194.6	117.0	85.1	126.3	141.0	137.5	
VEL=	3.6	2.5	8.3	3.4	3.0	2.7	1.9	3.0	4.3	2.5	3.6	3.4	
DEPTH=	2.4	1.2	7.0	2.7	2.2	1.8	.8	2.1	3.7	.4	2.8	2.6	

STA=	11066.	11120.
PER Q=	5.3	
AREA=	150.5	
VEL=	3.4	
DEPTH=	2.8	

1490 NH CARD USED
*SECNO 5.284

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.46

3470 ENCROACHMENT STATIONS= 9650.0 10750.0 TYPE= 1 TARGET= 1100.000

5.284	8.37	1644.47	1643.00	1643.63	1644.65	.18	2.39	.04	1641.30
9510.0	2440.3	2261.3	4808.4	875.0	434.4	1902.1	168.3	59.4	1641.70
.18	2.79	5.20	2.53	.080	.065	.085	.000	1636.10	9650.00
.004872	310.	502.	250.	2	18	0	.00	1100.00	10750.00

FLOW DISTRIBUTION FOR SECNO= 5.28 CWSEL= 1644.47

STA=	9650.	9763.	9814.	9847.	9907.	9959.	10031.	10088.	10116.	10148.	10229.	10263.	10309.
PER Q=	4.0	4.2	6.5	6.3	4.6	23.8	3.2	4.2	3.7	6.0	4.1	3.9	
AREA=	197.4	148.9	163.8	204.3	160.6	434.4	139.0	120.2	118.3	229.2	129.3	143.9	
VEL=	1.9	2.7	3.8	2.9	2.7	5.2	2.2	3.3	3.0	2.5	3.0	2.6	
DEPTH=	1.7	2.9	5.0	3.4	3.1	6.0	2.4	4.4	3.6	2.8	3.9	3.1	

STA=	10309.	10412.	10563.	10625.	10667.	10727.	10750.
PER Q=	3.4	3.1	4.0	4.8	7.5	2.7	
AREA=	177.8	198.5	161.6	155.6	235.2	93.6	
VEL=	1.8	1.5	2.3	2.9	3.0	2.8	
DEPTH=	1.7	1.3	2.6	3.7	3.9	4.1	

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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


1490 NH CARD USED
*SECNO 5.379

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .68


3470 ENCROACHMENT STATIONS=     9770.0   10570.0  TYPE=      1  TARGET=      800.000
     5.379     10.81   1647.71   1647.09   1646.87   1648.30       .60      3.53       .13   1645.30
    9510.0    2719.4    3497.4    3293.1     649.2     387.5    1023.3     199.9      70.9   1643.70
       .21      4.19      9.02      3.22      .080      .065      .085      .000   1636.90   9770.00
   .010484      400.      502.      590.         2        11         0       .00    788.16  10570.00


FLOW DISTRIBUTION FOR SECNO=      5.38         CWSEL=   1647.71

STA=    9770.    9821.    9852.    9900.    9937.    9971.   10019.   10067.   10100.   10136.   10174.   10218.   10258.
  PER Q=      6.7      5.8      8.5      4.6      3.0     36.8      7.6      4.9      4.0      3.9      4.5      3.4
   AREA=    159.0    119.1    178.2    110.6     82.4    387.5    172.4    114.1    105.2    104.7    120.9     99.7
    VEL=      4.0      4.6      4.6      4.0      3.4      9.0      4.2      4.1      3.6      3.5      3.5      3.3
  DEPTH=      3.1      3.8      3.7      3.0      2.4      8.1      3.6      3.5      2.9      2.8      2.8      2.5

STA=   10258.   10424.   10570.
  PER Q=      3.0      3.3
   AREA=    144.6    161.8
    VEL=      2.0      1.9
  DEPTH=       .9      1.1

1490 NH CARD USED
*SECNO 5.473

3470 ENCROACHMENT STATIONS=     9800.0   10620.0  TYPE=      1  TARGET=      820.000
     5.473     10.76   1651.76   1650.89   1650.82   1652.19       .43      3.87       .02   1645.70
    9510.0    1167.5    3692.8    4649.6     433.8     482.5    1647.5     226.1      80.0   1646.70
       .24      2.69      7.65      2.82      .080      .065      .085      .000   1641.00   9800.00
   .006017      530.      496.      480.         2         9         0       .00    820.00  10620.00


FLOW DISTRIBUTION FOR SECNO=      5.47         CWSEL=   1651.76
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9800.	9858.	9919.	9963.	9975.	10027.	10051.	10099.	10155.	10206.	10279.	10327.	10374.
PER Q=	4.0	3.0	3.1	2.2	38.8	4.6	7.2	6.7	5.0	6.7	4.6	3.8	
AREA=	145.3	124.0	109.9	54.6	482.5	114.0	196.6	200.8	161.6	223.2	150.0	132.5	
VEL=	2.6	2.3	2.7	3.9	7.7	3.8	3.5	3.2	2.9	2.9	2.9	2.7	
DEPTH=	2.5	2.0	2.5	4.5	9.2	4.7	4.1	3.6	3.2	3.1	3.1	2.8	

STA=	10374.	10433.	10548.	10620.
PER Q=	3.1	3.6	3.6	
AREA=	129.4	183.4	155.9	
VEL=	2.3	1.9	2.2	
DEPTH=	2.2	1.6	2.2	

1490 NH CARD USED
*SECNO 5.552

3470 ENCROACHMENT STATIONS= 9830.0 10607.0 TYPE= 1 TARGET= 777.000
The effect of Palo Verde Tank is ignored.

5.552	8.54	1654.04	1652.95	1653.13	1654.37	.33	2.17	.01	1647.70
9510.0	1304.6	2860.3	5345.1	398.2	414.0	1738.2	245.3	85.9	1648.80
.26	3.28	6.91	3.08	.080	.065	.083	.000	1645.50	9830.00
.006582	540.	417.	250.	3	18	0	.00	777.00	10607.00

FLOW DISTRIBUTION FOR SECNO= 5.55 CWSEL= 1654.04

STA=	9830.	9909.	9966.	9977.	10034.	10064.	10104.	10141.	10183.	10238.	10290.	10353.	10421.
PER Q=	3.6	7.2	2.9	30.1	5.3	5.7	3.4	3.7	3.8	3.9	5.8	4.9	
AREA=	141.0	196.3	60.9	414.0	131.0	155.8	110.5	122.3	137.0	137.6	188.7	174.8	
VEL=	2.4	3.5	4.6	6.9	3.8	3.5	3.0	2.9	2.6	2.7	2.9	2.7	
DEPTH=	1.8	3.5	5.4	7.2	4.4	3.9	3.0	2.9	2.5	2.6	3.0	2.6	

STA=	10421.	10513.	10571.	10606.	10607.
PER Q=	7.6	5.9	6.0	.1	
AREA=	257.9	183.7	135.0	3.9	
VEL=	2.8	3.0	4.3	1.4	
DEPTH=	2.8	3.1	3.9	4.3	

*SECNO 5.646

3470 ENCROACHMENT STATIONS= 9899.0 10597.0 TYPE= 1 TARGET= 698.000
NC card was used, channel = .065, overbanks = .080.

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
5.646	9.03	1656.33	1653.77	1655.62	1656.52	.19	2.14	.01	1651.10
9510.0	1269.4	1622.0	6618.6	403.7	311.8	2167.0	273.4	93.5	1651.30
.30	3.14	5.20	3.05	.080	.065	.080	.000	1647.30	9899.00
.003529	270.	496.	480.	2	14	0	.00	698.00	10597.00

FLOW DISTRIBUTION FOR SECNO= 5.65 CWSEL= 1656.33

STA=	9899.	9941.	9955.	9983.	10024.	10047.	10063.	10087.	10123.	10142.	10162.	10196.	10225.
PER Q=	5.2	3.2	4.9	17.1	5.1	4.7	4.6	4.5	3.9	4.1	7.0	5.9	
AREA=	175.6	86.3	141.8	311.8	136.3	109.8	129.1	150.6	105.8	112.5	193.1	160.3	
VEL=	2.8	3.6	3.3	5.2	3.5	4.1	3.4	2.9	3.5	3.5	3.5	3.5	
DEPTH=	4.2	5.8	5.1	7.7	5.8	7.2	5.4	4.2	5.6	5.7	5.6	5.6	

STA=	10225.	10274.	10302.	10333.	10369.	10548.	10597.
PER Q=	6.9	4.3	4.2	3.4	5.1	5.7	
AREA=	219.4	132.9	135.5	126.7	252.4	202.5	
VEL=	3.0	3.1	3.0	2.6	1.9	2.7	
DEPTH=	4.4	4.7	4.4	3.5	1.4	4.1	

*SECNO 5.741

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .64

3470 ENCROACHMENT STATIONS= 9960.0 10540.0 TYPE= 1 TARGET= 580.000

5.741	9.37	1658.67	1657.74	1658.23	1659.19	.53	2.57	.10	1655.30
9510.0	7.8	3733.0	5769.2	4.5	466.6	1524.8	300.7	100.6	1654.00
.32	1.73	8.00	3.78	.080	.065	.080	.000	1649.30	9960.00
.008640	520.	502.	480.	2	10	0	.00	580.00	10540.00

FLOW DISTRIBUTION FOR SECNO= 5.74 CWSEL= 1658.67

STA=	9960.	9961.	10024.	10042.	10061.	10085.	10102.	10125.	10155.	10179.	10200.	10246.	10304.
PER Q=	.1	39.3	4.2	4.6	5.2	3.2	4.2	5.8	5.0	3.5	4.1	5.8	
AREA=	4.5	466.6	84.5	90.6	105.0	68.7	91.6	124.5	103.6	79.6	117.5	161.8	
VEL=	1.7	8.0	4.8	4.9	4.7	4.4	4.4	4.4	4.6	4.1	3.3	3.4	
DEPTH=	3.2	7.5	4.6	4.7	4.5	4.0	4.0	4.1	4.3	3.7	2.6	2.8	

STA=	10304.	10352.	10417.	10531.	10540.
PER Q=	4.9	4.8	5.0	.4	
AREA=	135.0	151.6	192.7	18.2	
VEL=	3.4	3.0	2.5	2.3	
DEPTH=	2.8	2.3	1.7	1.9	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 5.835

3470 ENCROACHMENT STATIONS= 9928.0 10484.0 TYPE= 1 TARGET= 556.000

5.835	10.68	1662.38	1661.13	1661.96	1662.84	.46	3.64	.01	1658.70
9510.0	790.3	3487.7	5231.9	197.7	460.4	1474.5	322.6	106.5	1657.70
.35	4.00	7.58	3.55	.080	.065	.080	.000	1651.70	9928.00
.006991	496.	496.	450.	3	5	0	.00	556.00	10484.00

FLOW DISTRIBUTION FOR SECNO= 5.84 CWSEL= 1662.38

STA=	9928.	9940.	9963.	9974.	10030.	10053.	10086.	10117.	10165.	10212.	10258.	10350.	10421.
PER Q=	3.0	3.9	1.4	36.7	4.8	7.7	6.5	8.4	6.7	4.5	6.3	4.9	
AREA=	66.6	94.6	36.4	460.4	107.3	163.2	143.6	200.0	172.7	134.6	218.0	169.4	
VEL=	4.3	3.9	3.6	7.6	4.3	4.5	4.3	4.0	3.7	3.2	2.8	2.8	
DEPTH=	5.6	4.0	3.5	8.2	4.6	4.9	4.6	4.1	3.7	2.9	2.4	2.4	

STA=	10421.	10484.
PER Q=	5.0	
AREA=	165.7	
VEL=	2.9	
DEPTH=	2.6	

1490 NH CARD USED
*SECNO 5.928

3470 ENCROACHMENT STATIONS= 9820.0 10250.0 TYPE= 1 TARGET= 430.000
Q changed to 9,480 cfs at C10P.
NH cards were used.

5.928	12.44	1665.04	1663.65	1664.34	1665.72	.67	2.81	.06	1660.60
9480.0	2341.4	5426.9	1711.7	594.1	668.0	568.6	343.8	111.7	1659.80
.37	3.94	8.12	3.01	.070	.055	.070	.000	1652.60	9820.00
.005106	500.	491.	440.	3	8	0	.00	430.00	10250.00

FLOW DISTRIBUTION FOR SECNO= 5.93 CWSEL= 1665.04

STA=	9820.	9841.	9858.	9884.	9927.	9946.	9965.	10040.	10071.	10129.	10210.	10250.
PER Q=	4.3	3.6	3.4	4.7	3.8	4.8	57.2	4.7	5.8	5.2	2.4	
AREA=	99.4	80.1	92.5	136.7	85.9	99.5	668.0	119.7	173.0	185.8	90.0	
VEL=	4.1	4.2	3.5	3.3	4.2	4.5	8.1	3.8	3.2	2.6	2.5	
DEPTH=	4.8	4.7	3.5	3.2	4.7	5.2	8.9	3.9	3.0	2.3	2.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.021

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3470 ENCROACHMENT STATIONS= 9754.0 10021.0 TYPE= 1 TARGET= 267.000
NC card was used, channel = .055, overbanks = .070.

6.021	10.34	1668.34	1667.63	1667.56	1669.46	1.12	3.61	.14	1664.30
9480.0	5122.9	4357.1	.0	882.2	401.7	.0	361.8	115.8	100000.00
.39	5.81	10.85	.00	.070	.055	.000	.000	1658.00	9754.00
.011295	480.	491.	580.	2	14	0	.00	267.00	10021.00

FLOW DISTRIBUTION FOR SECNO= 6.02 CWSEL= 1668.34

STA=	9754.	9761.	9770.	9781.	9783.	9790.	9808.	9844.	9874.	9913.	9941.	9952.	9972.
PER Q=	.9	2.7	5.0	1.0	2.2	3.7	5.6	5.2	9.9	9.5	3.6	4.8	
AREA=	21.9	42.7	63.5	13.4	33.9	64.8	110.7	98.8	161.5	137.9	53.5	79.6	
VEL=	3.9	6.1	7.4	6.9	6.2	5.3	4.8	5.0	5.8	6.5	6.3	5.7	
DEPTH=	3.4	4.5	6.0	5.8	4.6	3.6	3.1	3.3	4.1	4.9	4.7	4.0	

STA=	9972.	10022.
PER Q=	46.0	
AREA=	401.7	
VEL=	10.8	
DEPTH=	8.1	

THIS RUN EXECUTED 10SEP92 13:17:39

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Deadman Wash 100-year Q

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	4.662	9510.00	1623.18	9.18	1614.00	1623.45	1621.48	5.84	48.94	.00	9426.59	997.41	10424.00
	4.662	9510.00	1623.83	9.83	1614.00	1624.08	1621.77	5.52	38.90	.00	9610.00	691.00	10301.00
	4.756	9510.00	1625.70	9.40	1616.30	1626.00	1624.06	6.77	56.46	496.00	9627.62	1010.08	10637.70
	4.756	9510.00	1626.26	9.96	1616.30	1626.69	1625.12	8.13	74.51	496.00	9700.00	780.00	10480.00
	4.850	9510.00	1628.84	10.24	1618.60	1629.41	1627.81	8.38	83.87	496.00	9587.49	967.96	10789.53
	4.850	9510.00	1629.79	11.19	1618.60	1630.38	1629.00	8.41	72.97	496.00	9590.00	830.00	10420.00
	4.943	9510.00	1632.05	8.95	1623.10	1632.30	1630.33	6.03	48.09	491.00	9865.96	993.33	10859.29
	4.943	9510.00	1632.97	9.87	1623.10	1633.35	1631.49	6.94	54.56	491.00	9865.00	685.00	10550.00
*	5.034	9510.00	1635.63	11.03	1624.60	1636.16	1635.08	9.06	124.94	480.00	9829.97	1157.34	11174.30
	5.034	9510.00	1636.51	11.91	1624.60	1636.97	1635.89	8.58	96.14	480.00	9826.00	978.60	10900.00
*	5.113	9510.00	1638.38	8.18	1630.20	1638.60	1636.75	5.37	42.82	417.00	9836.63	1430.31	11344.22
	5.113	9510.00	1639.16	8.96	1630.20	1639.48	1638.09	6.34	51.84	417.00	9838.00	1162.00	11000.00
*	5.189	9510.00	1640.68	8.98	1631.70	1641.27	1640.18	8.50	134.21	401.00	9846.19	997.63	11333.79
	5.189	9510.00	1641.65	9.95	1631.70	1642.22	1641.22	8.27	104.18	401.00	9847.00	1019.38	11120.00
*	5.284	9510.00	1643.63	7.53	1636.10	1643.77	1642.14	4.63	47.06	502.00	9451.17	1516.31	11031.16
*	5.284	9510.00	1644.47	8.37	1636.10	1644.65	1643.00	5.20	48.72	502.00	9650.00	1100.00	10750.00
*	5.379	9510.00	1646.87	9.97	1636.90	1647.28	1646.43	8.18	99.72	502.00	9341.06	1412.44	10936.46
*	5.379	9510.00	1647.71	10.81	1636.90	1648.30	1647.09	9.02	104.84	502.00	9770.00	788.16	10570.00
	5.473	9510.00	1650.82	9.82	1641.00	1651.17	1650.22	7.28	62.82	496.00	9502.68	1398.12	10900.80
	5.473	9510.00	1651.76	10.76	1641.00	1652.19	1650.89	7.65	60.17	496.00	9800.00	820.00	10620.00
	5.552	9510.00	1653.13	7.63	1645.50	1653.42	1652.26	6.67	73.27	417.00	9685.94	1151.02	10872.11
	5.552	9510.00	1654.04	8.54	1645.50	1654.37	1652.95	6.91	65.82	417.00	9830.00	777.00	10607.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	5.646	9510.00	1655.62	8.32	1647.30	1655.78	1653.73	5.11	38.72	496.00	9646.79	1108.61	10831.07
	5.646	9510.00	1656.33	9.03	1647.30	1656.52	1653.77	5.20	35.29	496.00	9899.00	698.00	10597.00
*	5.741	9510.00	1658.23	8.93	1649.30	1658.73	1657.60	8.13	96.56	502.00	9945.07	907.47	10852.53
*	5.741	9510.00	1658.67	9.37	1649.30	1659.19	1657.74	8.00	86.40	502.00	9960.00	580.00	10540.00
	5.835	9510.00	1661.96	10.26	1651.70	1662.29	1660.84	6.81	60.59	496.00	9873.07	953.45	10826.52
	5.835	9510.00	1662.38	10.68	1651.70	1662.84	1661.13	7.58	69.91	496.00	9928.00	556.00	10484.00
	5.928	9480.00	1664.34	11.74	1652.60	1664.82	1663.31	7.27	45.61	491.00	9758.82	951.59	10710.41
	5.928	9480.00	1665.04	12.44	1652.60	1665.72	1663.65	8.12	51.06	491.00	9820.00	430.00	10250.00
*	6.021	9480.00	1667.56	9.56	1658.00	1668.55	1667.56	11.02	130.88	491.00	9160.64	733.98	10021.10
*	6.021	9480.00	1668.34	10.34	1658.00	1669.46	1667.63	10.85	112.95	491.00	9754.00	267.00	10021.00

Deadman Wash 100-year Q

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.662	1623.18	.00	1623.45	997.41	1764.47	2856.98	4888.54	.00	.00	9966.00	10034.90	.00
	4.662	1623.83	.65	1624.08	691.00	2297.73	2947.78	4264.50	691.00	9610.00	9966.00	10034.90	10301.00
	4.756	1625.70	.00	1626.00	1010.08	708.65	2141.63	6659.72	.00	.00	9984.20	10022.80	.00
	4.756	1626.26	.56	1626.69	780.00	1363.03	2753.68	5393.29	780.00	9700.00	9984.20	10022.80	10480.00
	4.850	1628.84	.00	1629.41	967.96	1014.93	4024.86	4470.21	.00	.00	9975.20	10033.80	.00
	4.850	1629.79	.95	1630.38	830.00	2200.89	4505.85	2803.25	830.00	9590.00	9975.20	10033.80	10420.00
	4.943	1632.05	.00	1632.30	993.33	971.75	2811.74	5726.50	.00	.00	9972.20	10034.40	.00
	4.943	1632.97	.92	1633.35	685.00	1525.83	3634.73	4349.44	685.00	9865.00	9972.20	10034.40	10550.00
*	5.034	1635.63	.00	1636.16	1157.34	250.60	2610.65	6648.75	.00	.00	9985.00	10024.40	.00
	5.034	1636.51	.88	1636.97	978.60	681.87	2766.45	6061.68	1074.00	9826.00	9985.00	10024.40	10900.00
*	5.113	1638.38	.00	1638.60	1430.31	474.81	3170.23	5864.97	.00	.00	9972.90	10058.70	.00
	5.113	1639.16	.78	1639.48	1162.00	873.69	4161.13	4475.18	1162.00	9838.00	9972.90	10058.70	11000.00
*	5.189	1640.68	.00	1641.27	997.63	285.17	3911.03	5313.80	.00	.00	9983.60	10060.40	.00
	5.189	1641.65	.97	1642.22	1019.38	644.93	4419.57	4445.50	1273.00	9847.00	9983.60	10060.40	11120.00
*	5.284	1643.63	.00	1643.77	1516.31	1826.46	1730.63	5952.91	.00	.00	9958.90	10031.30	.00
*	5.284	1644.47	.84	1644.65	1100.00	2440.33	2261.27	4808.40	1100.00	9650.00	9958.90	10031.30	10750.00
*	5.379	1646.87	.00	1647.28	1412.44	3190.50	2844.48	3475.02	.00	.00	9970.80	10018.80	.00
*	5.379	1647.71	.83	1648.30	788.16	2719.44	3497.45	3293.11	800.00	9770.00	9970.80	10018.80	10570.00
	5.473	1650.82	.00	1651.17	1398.12	1237.63	3156.94	5115.43	.00	.00	9975.00	10027.20	.00
	5.473	1651.76	.94	1652.19	820.00	1167.52	3692.83	4649.64	820.00	9800.00	9975.00	10027.20	10620.00
	5.552	1653.13	.00	1653.42	1151.02	855.38	2413.76	6240.87	.00	.00	9977.00	10034.20	.00
	5.552	1654.04	.91	1654.37	777.00	1304.60	2860.34	5345.06	777.00	9830.00	9977.00	10034.20	10607.00
	5.646	1655.62	.00	1655.78	1108.61	1912.30	1447.87	6149.83	.00	.00	9983.20	10023.70	.00
	5.646	1656.33	.71	1656.52	698.00	1269.39	1622.01	6618.60	698.00	9899.00	9983.20	10023.70	10597.00
*	5.741	1658.23	.00	1658.73	907.47	56.14	3570.48	5883.38	.00	.00	9961.40	10023.60	.00
*	5.741	1658.67	.44	1659.19	580.00	7.82	3733.01	5769.17	580.00	9960.00	9961.40	10023.60	10540.00
	5.835	1661.96	.00	1662.29	953.45	1625.01	2973.99	4911.00	.00	.00	9973.60	10029.50	.00
	5.835	1662.38	.42	1662.84	556.00	790.33	3487.73	5231.93	556.00	9928.00	9973.60	10029.50	10484.00
	5.928	1664.34	.00	1664.82	951.59	3013.69	4470.59	1995.72	.00	.00	9964.70	10039.80	.00
	5.928	1665.04	.70	1665.72	430.00	2341.44	5426.89	1711.67	430.00	9820.00	9964.70	10039.80	10250.00
*	6.021	1667.56	.00	1668.55	733.98	5479.70	4000.30	.00	.00	.00	9971.70	10021.50	.00
*	6.021	1668.34	.78	1669.46	267.00	5122.87	4357.13	.00	267.00	9754.00	9971.70	10021.50	10021.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=     5.034  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.113  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.189  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.284  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.284  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.379  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.379  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.741  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.741  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     6.021  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     6.021  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=     6.021  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
4.662	691.	2715.	3.5	1623.8	1623.2	.6
4.756	780.	2322.	4.1	1626.3	1625.7	.6
4.850	830.	2192.	4.3	1629.7	1628.8	.9
4.943	685.	2458.	3.9	1632.9	1632.0	.9
5.034	1074.	2341.	4.1	1636.5	1635.6	.9
5.113	1162.	2926.	3.3	1639.2	1638.4	.8
5.189	1273.	2214.	4.3	1641.7	1640.7	1.0
5.284	1100.	3212.	3.0	1644.4	1643.6	.8
5.379	800.	2060.	4.6	1647.7	1646.9	.8
5.473	820.	2564.	3.7	1651.7	1650.8	.9
5.552	777.	2550.	3.7	1654.0	1653.1	.9
5.646	698.	2883.	3.3	1656.3	1655.6	.7
5.741	580.	1996.	4.8	1658.6	1658.2	.4
5.835	556.	2133.	4.5	1662.4	1662.0	.4
5.928	430.	1831.	5.2	1665.0	1664.3	.7
6.021	267.	1284.	7.4	1668.4	1667.6	.8

Normal program termination

HEC2 S/N: 1363001034 HMVersion: 6.52 Data File: DM4-FEMA.hc2

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    16DEC94    TIME    3:47:02 *
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****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*          (916) 756-1104              *
****************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
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:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
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:::::::::::::::::::::::::::::::::::::::::::::
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============================
H A E S T A D   M E T H O D S
============================
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37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 16DEC94 3:47:02

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study, Model: DM4-FEMA.hc2
T2      Natural Profile Run for Deadman Wash, SECNO 6.021 to SECNO 10.544
T3      Deadman Wash 100-year Q   Subcritical Flow,   July 1992 (revised 11/92)
T4      FEMA Comments to Ignore Joy Ranch Road Structure, dated 6/13/94
T5      Sections No. 6.362, 6.363, 6.371, 6.372, 6.467, 6.558 and the
T6      SC coding were replaced by Fema new Sections No. 6.423 and 6.539.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

              2                                                                   1667.56

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1                  -1                                      -1                            15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38        43        1         8         42        3         2         26        5         39
    53        4         54        110       200

QT      2       9480      9480
NC    .070      .070      .055       .1        .3
ET                        9.1                                                                9754      10021
          NC card was used - channel = 0.055, overbanks = 0.070.
X1    6.021       61      9971.7    10021.5       0         0         0
GR   1667.6    9158.1    1667.0    9196.2    1667.0    9209.4    1667.1    9228.8    1664.4    9234.4
GR   1666.5    9241.3    1666.9    9262.0    1667.3    9279.6    1665.8    9282.9    1666.0    9284.9
GR   1666.9    9288.8    1666.9    9311.3    1666.5    9344.9    1666.5    9388.2    1666.8    9425.0
GR   1667.9    9463.4    1667.5    9490.2    1667.3    9504.2    1668.0    9539.5    1668.4    9546.4
GR   1668.0    9574.3    1667.3    9629.7    1666.1    9670.2    1664.7    9708.8    1664.2    9722.8
GR   1665.2    9746.2    1664.9    9760.5    1662.7    9769.9    1662.0    9780.5    1663.0    9782.8
GR   1664.4    9790.1    1665.0    9807.9    1665.5    9843.7    1664.6    9873.7    1663.8    9912.7
GR   1663.0    9940.6    1664.3    9952.0    1664.3    9971.7    1658.6    9986.5    1658.0   10000.0
GR   1658.0   10009.8    1667.9   10021.5    1668.5   10040.0    1669.4   10064.7    1669.2   10101.5
GR   1669.8   10158.4    1670.0   10213.1    1670.0   10273.7    1669.9   10320.6    1670.4   10359.9
GR   1670.1   10403.5    1670.1   10481.9    1670.0   10556.6    1670.1   10607.8    1670.9   10656.7
GR   1671.9   10736.0    1672.7   10770.9    1672.9   10811.1    1673.0   10841.2    1673.0   10863.6
GR   1674.3   10893.4
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ET                          9.1                                                   9650      10060
X1    6.108        53     9959.2    10046.2       380       420       459
GR   1672.5    9208.6     1671.0     9324.7    1669.8    9397.4    1669.9    9433.6    1669.8    9488.5
GR   1669.7    9557.0     1669.7     9609.6    1669.0    9650.5    1667.6    9674.8    1667.7    9706.8
GR   1667.7    9728.3     1667.8     9750.2    1665.3    9760.8    1666.2    9772.1    1667.4    9789.9
GR   1669.4    9815.7     1670.4     9836.3    1669.8    9860.8    1669.7    9897.4    1668.5    9940.0
GR   1668.0    9959.2     1665.1     9972.7    1665.0    9983.5    1661.4    9994.4    1661.9   10000.0
GR   1662.5   10016.7     1666.2    10031.5    1668.2   10046.2    1667.5   10068.6    1667.1   10092.9
GR   1667.8   10107.1     1669.8    10122.6    1671.3   10136.7    1671.5   10166.5    1672.9   10204.4
GR   1673.2   10237.1     1673.3    10245.4    1673.3   10287.6    1673.6   10344.8    1673.5   10391.7
GR   1673.5   10445.5     1673.2    10486.3    1673.6   10536.5    1673.8   10571.7    1673.2   10596.9
GR   1673.2   10626.2     1673.3    10678.8    1672.6   10730.2    1672.8   10755.1    1673.7   10763.9
GR   1675.4   10796.3     1676.8    10836.9    1677.0   10837.4

ET                          9.1                                                   9520      10100
X1    6.205        49     9973.4    10040.3       310       512       512
GR   1675.1    9152.4     1672.3     9217.6    1672.0    9284.6    1671.6    9326.0    1671.0    9360.6
GR   1670.9    9388.2     1671.3     9436.5    1670.9    9480.8    1670.6    9530.1    1670.5    9550.9
GR   1668.9    9559.0     1668.2     9567.4    1670.4    9575.3    1670.1    9613.2    1670.8    9639.0
GR   1671.5    9672.7     1672.4     9695.8    1672.3    9705.2    1669.7    9734.1    1672.0    9745.5
GR   1673.1    9772.1     1673.3     9808.8    1672.7    9831.5    1673.2    9866.3    1672.9    9902.3
GR   1672.5    9941.5     1672.6     9967.4    1671.8    9973.4    1667.0    9988.5    1667.0   10000.0
GR   1667.9   10012.9     1668.1    10029.1    1671.7   10040.3    1670.9   10054.7    1670.1   10067.9
GR   1671.4   10091.9     1672.8    10102.0    1671.4   10116.1    1670.1   10127.7    1671.4   10136.3
GR   1673.0   10146.4     1675.3    10162.6    1675.2   10180.2    1676.2   10228.5    1677.3   10264.1
GR   1677.4   10299.7     1678.3    10333.9    1680.2   10393.2    1680.4   10399.4

QT        2       9680       9680
NC                                       .3        .5
ET                          9.1                                                   9600      10084
          Q changed to 9,680 cfs at C10M (Joy Ranch Road).
X1    6.280        61     9986.5    10040.3       660       340       396
GR   1678.8    9217.2     1677.8     9271.9    1677.7    9283.5    1677.1    9294.4    1676.9    9304.5
GR   1677.6    9330.0     1678.1     9350.9    1677.7    9369.3    1677.9    9393.5    1678.0    9416.0
GR   1677.2    9437.7     1678.2     9453.7    1677.5    9470.6    1678.0    9496.1    1677.4    9511.5
GR   1675.3    9518.2     1676.3     9530.1    1674.4    9539.0    1675.9    9546.6    1675.9    9560.1
GR   1676.4    9609.3     1676.6     9646.5    1676.6    9667.7    1676.2    9674.9    1675.5    9680.3
GR   1676.9    9688.1     1677.0     9703.5    1676.4    9733.3    1676.3    9764.1    1676.0    9799.9
GR   1675.3    9826.6     1676.0     9852.0    1676.6    9886.9    1676.6    9916.1    1676.4    9943.1
GR   1676.1    9965.8     1675.7     9986.5    1668.8   10000.0    1668.1   10006.3    1669.0   10017.4
GR   1671.7   10025.1     1673.4    10040.3    1674.1   10057.5    1673.8   10066.7    1673.0   10073.1
GR   1674.0   10085.4     1675.8    10091.7    1676.1   10106.5    1675.2   10125.7    1675.2   10131.8
GR   1672.3   10134.8     1674.3    10139.3    1674.5   10155.7    1676.8   10186.3    1678.8   10215.9
GR   1679.0   10255.8     1679.7    10301.3    1680.3   10364.5    1680.6   10417.9    1681.7   10508.9
GR   1682.3   10531.5

ET                          9.1                                                   9480      10190
          FEMA section #1 by ignoring Joy Ranch Road pipe structure.
X1    6.328        35       9968       10040       265       235       253
X3       10
GR    1682      8864     1680.9        8982      1680      9158    1679.8      9200      1680      9208
GR  1680.7      9230       1680        9265    1679.1      9290      1680      9322      1680      9358
GR    1678      9505     1677.8        9507      1678      9518      1679      9600      1678      9675
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GR     1678       9730     1677.8      9745       1678       9758     1678.5      9780       1678      9800
GR   1677.1       9832       1678      9960       1678       9968       1676      9973       1674      9978
GR     1672       9982     1671.6     10000       1672      10023       1674     10032       1676     10040
GR     1677      10095       1676     10155       1678      10195       1680     10268       1682     10340

ET                            9.1                                                            9470     10080
          FEMA section #2 by ignoring Joy Ranch Road pipe structure.
X1    6.423         31       9980     10072        540        330        502
X3       10
GR     1684       8860     1682.8      9090       1682       9195       1681      9235       1682      9280
GR     1683       9350       1682      9470     1680.8       9550       1680      9630     1679.2      9637
GR     1680       9645     1682.3      9660     1681.2       9720       1682      9775     1682.3      9792
GR     1682       9810     1681.2      9830       1682       9850       1683      9920       1682      9980
GR     1680       9982       1676      9990     1674.2      10000       1676     10018       1678     10025
GR   1678.2      10050       1680     10065       1682      10072       1684     10100       1686     10140
GR   1687.5      10370

ET                            9.1                                                            9500     10080
          FEMA section #3 by ignoring Joy Ranch Road pipe structure.
X1    6.539         21       9972     10028        400        600        612
X3       10
GR     1688       9016       1686      9148       1684       9448     1683.4      9465       1684      9490
GR     1685       9590     1684.6      9620     1685.9       9645     1684.7      9670       1686      9740
GR     1686       9912       1684      9972       1682       9975       1680      9982     1678.6     10000
GR     1680      10015       1682     10020       1684      10028       1686     10075       1688     10135
GR     1690      10193

ET                            9.1                                                            9750     10112
X1    6.654         42     9975.9   10035.7        595        570        607
GR   1692.2     9278.0     1690.7     9560.7     1689.2     9579.8     1689.7     9589.1     1690.4     9613.1
GR   1690.2     9646.3     1689.7     9660.7     1687.6     9665.1     1688.1     9669.6     1689.5     9677.2
GR   1689.2     9687.1     1688.9     9705.1     1689.7     9730.2     1690.1     9753.0     1689.1     9776.1
GR   1687.8     9786.5     1688.7     9793.3     1687.2     9802.3     1688.0     9809.1     1687.7     9816.8
GR   1685.9     9819.2     1685.9     9821.8     1688.0     9829.6     1687.7     9838.4     1688.6     9856.2
GR   1689.1     9895.7     1689.1     9927.9     1689.9     9959.5     1689.9     9975.9     1681.6     9986.6
GR   1681.9     9991.8     1682.2    10000.0     1682.1    10013.2     1685.3    10024.5     1689.1    10035.7
GR   1688.8    10050.6     1687.5    10065.3     1687.5    10078.8     1688.2    10097.0     1689.4    10122.2
GR   1693.5    10171.6     1693.8    10197.3

QT       2        9770       9770
NC    .080        .080       .065
ET                            9.1                                                            9700     10100
          The area of the stock tank (CF Tank) is ineffective,
          GR cards were modified to ignore it.
          Q changed to 9,770 cfs at C10L (CF Tank).
X1    6.751         35     9961.2    10040.5        485        500        512
GR   1696.0     9288.0     1694.0     9482.0     1693.8     9490.0     1693.7     9520.0     1694.0     9530.0
GR   1692.0     9794.2     1691.8     9811.4     1692.0     9834.5     1690.7     9850.0     1692.9     9855.4
GR   1693.2     9861.0     1690.5     9870.8     1687.4     9883.7     1687.7     9887.3     1690.6     9897.3
GR   1690.4     9910.7     1691.8     9926.5     1692.7     9938.1     1693.4     9954.3     1693.5     9961.2
GR   1691.7     9970.5     1691.4     9975.5     1687.7     9985.8     1686.8     9991.8     1685.9    10000.0
GR   1685.4    10010.2     1692.3    10026.2     1692.4    10040.5     1692.6    10072.2     1691.5    10101.7
GR   1691.6    10108.3     1688.9    10112.8     1690.7    10119.6     1693.1    10137.6     1698.0    10190.0
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									9558	10100
ET			9.1							
X1	6.849	46	9965.3	10018.9	370	520	517			
GR	1699.4	9096.4	1698.0	9160.0	1698.5	9190.0	1698.0	9230.0	1697.0	9360.0
GR	1695.9	9502.9	1695.7	9521.6	1695.2	9548.0	1694.2	9583.7	1694.2	9607.2
GR	1694.2	9613.6	1693.7	9618.9	1694.7	9626.4	1694.4	9654.9	1694.8	9700.4
GR	1695.6	9738.6	1696.3	9767.5	1696.5	9826.0	1696.1	9863.6	1696.0	9895.4
GR	1695.4	9927.1	1695.9	9951.5	1695.6	9965.3	1691.2	9981.0	1690.9	9993.2
GR	1690.8	10000.0	1690.8	10005.2	1694.3	10018.9	1694.3	10038.5	1694.1	10040.9
GR	1695.5	10057.4	1695.4	10068.5	1694.0	10084.3	1693.5	10093.9	1693.6	10099.8
GR	1696.2	10106.2	1697.0	10122.9	1697.6	10149.9	1697.5	10167.5	1694.6	10175.2
GR	1696.7	10193.3	1696.9	10215.1	1697.3	10260.2	1697.4	10282.3	1698.8	10306.8
GR	1699.4	10310.3								

									9840	10320
ET			9.1							
X1	6.945	48	9967.9	10019.3	695	375	507			
GR	1703.8	9495.0	1702.6	9546.5	1701.1	9590.1	1700.5	9620.3	1700.1	9651.4
GR	1700.3	9672.4	1700.5	9710.4	1700.4	9750.7	1699.6	9785.2	1699.3	9814.7
GR	1699.8	9839.7	1699.2	9864.0	1698.6	9876.6	1698.7	9893.4	1698.2	9900.6
GR	1698.8	9918.6	1698.6	9934.5	1698.9	9956.1	1699.1	9967.9	1698.4	9976.1
GR	1690.9	9987.4	1692.0	9997.4	1692.3	10000.0	1693.0	10006.3	1700.2	10019.3
GR	1699.7	10029.7	1698.8	10058.5	1698.7	10123.7	1698.7	10183.9	1698.9	10216.8
GR	1699.0	10229.2	1699.0	10235.0	1697.6	10241.2	1699.0	10247.9	1699.5	10257.3
GR	1698.7	10267.8	1695.6	10276.7	1696.3	10290.9	1697.6	10310.1	1697.4	10330.0
GR	1698.8	10348.1	1698.7	10360.2	1698.0	10366.6	1699.3	10382.8	1700.9	10427.8
GR	1702.1	10477.7	1702.2	10492.6	1703.0	10600.0				

									9940	10320
ET			9.1							

The depressed area in the unnamed stock tank is ignored,
GR cards were modified.

X1	7.042	55	9969.3	10027.6	650	360	512			
GR	1707.5	9546.2	1705.9	9557.3	1708.3	9567.6	1706.0	9576.1	1705.8	9611.1
GR	1706.6	9628.3	1705.7	9640.0	1705.3	9679.8	1703.9	9721.4	1703.1	9762.3
GR	1702.6	9790.0	1703.2	9815.4	1701.7	9857.1	1701.3	9896.5	1701.3	9918.5
GR	1701.5	9943.9	1701.8	9969.3	1697.6	9983.0	1693.3	9985.9	1693.5	9991.8
GR	1697.6	10000.0	1698.7	10011.6	1699.7	10027.6	1699.7	10044.0	1698.9	10053.8
GR	1700.7	10064.5	1700.7	10072.8	1700.7	10079.3	1700.7	10081.7	1701.7	10095.8
GR	1702.6	10105.2	1701.6	10134.1	1701.0	10163.1	1700.6	10203.4	1700.7	10234.8
GR	1700.8	10254.8	1699.8	10261.6	1698.4	10265.8	1700.7	10272.8	1701.2	10283.0
GR	1700.8	10291.5	1698.8	10298.0	1698.9	10301.9	1700.3	10308.7	1700.7	10316.7
GR	1699.5	10323.2	1699.5	10327.2	1700.9	10335.0	1700.8	10350.6	1701.7	10395.5
GR	1702.1	10426.6	1703.4	10460.0	1705.4	10507.0	1706.9	10539.7	1706.8	10541.0

									9790	10162
ET			9.1							

The area in the pond is ignored, GR cards were modified.

X1	7.133	45	9957.8	10162.4	430	440	480			
GR	1709.5	9424.7	1709.0	9461.5	1707.4	9496.7	1707.2	9530.3	1706.4	9557.1
GR	1705.7	9567.5	1706.2	9592.6	1708.1	9608.0	1705.0	9626.2	1704.6	9652.5
GR	1703.6	9675.7	1703.5	9701.1	1703.0	9729.2	1703.0	9743.8	1703.7	9752.6
GR	1704.1	9763.8	1704.1	9774.6	1704.1	9797.7	1704.1	9824.1	1704.1	9854.4
GR	1704.1	9881.6	1704.1	9905.5	1704.1	9920.6	1704.1	9925.9	1704.1	9936.7
GR	1704.1	9945.0	1703.4	9957.8	1701.4	9970.5	1697.5	9980.7	1697.8	10000.0
GR	1698.0	10026.2	1697.9	10052.7	1698.0	10069.4	1698.6	10086.4	1702.8	10097.9
GR	1703.1	10110.4	1702.9	10132.8	1702.8	10149.0	1705.1	10162.4	1706.0	10176.2

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GR   1705.5    10192.6    1705.6    10201.2    1707.5    10223.6    1709.1    10249.5    1709.3    10254.7

ET                        9.1                                                              9870      10210
          The area in the pond is ignored, GR cards were modified.
X1    7.228        38    9872.2    10206.6     502       502       502
GR   1710.9    9535.1    1710.3     9574.5    1709.6     9617.6    1709.3     9635.5    1707.8     9643.3
GR   1708.9    9650.2    1707.4     9657.3    1708.4     9687.5    1707.2     9697.7    1704.3     9714.5
GR   1704.3    9724.7    1704.3     9734.7    1704.3     9751.8    1704.3     9762.7    1704.3     9788.8
GR   1704.3    9804.7    1704.3     9812.2    1704.3     9817.3    1704.3     9831.4    1704.4     9849.4
GR   1704.7    9872.2    1703.0     9891.4    1700.7     9904.0    1701.7     9920.2    1701.5     9960.3
GR   1701.3   10000.0    1701.8    10058.5    1701.3    10101.1    1701.6    10154.4    1702.6    10178.4
GR   1703.0   10192.4    1706.1    10206.6    1706.9    10217.9    1706.1    10231.1    1705.5    10240.6
GR   1707.0   10250.5    1708.5    10262.7    1712.8    10278.7

ET                        9.1                                                              9870      10050
X1    7.323        44    9984.8    10031.3     540       450       502
GR   1717.1    9690.9    1716.0     9701.7    1715.7     9726.5    1714.5     9734.1    1715.3     9744.6
GR   1715.6    9769.6    1713.9     9797.3    1711.8     9814.6    1709.9     9824.8    1709.9     9831.8
GR   1710.2    9849.2    1705.9     9864.5    1705.3     9869.6    1706.9     9877.6    1707.0     9894.1
GR   1707.0    9913.4    1705.5     9925.2    1704.8     9935.4    1705.0     9943.6    1708.8     9952.6
GR   1710.1    9964.9    1710.4     9978.3    1709.8     9984.8    1705.6     9988.0    1703.7     9990.7
GR   1704.0   10000.0    1704.4    10011.5    1704.3    10020.1    1706.4    10031.3    1706.8    10047.1
GR   1707.3   10059.8    1709.5    10074.3    1710.4    10090.1    1710.5    10113.2    1710.6    10135.4
GR   1712.1   10161.5    1712.2    10190.0    1710.9    10214.7    1711.3    10239.1    1710.1    10252.2
GR   1711.1   10263.7    1711.8    10269.7    1711.4    10302.3    1714.8    10326.4

ET                        9.1                                                              9820      10040
X1    7.417        30    9972.3    10036.8     490       500       496
GR   1719.0    9650.0    1716.5     9693.0    1716.8     9710.5    1716.2     9727.4    1714.9     9747.4
GR   1714.4    9765.9    1714.9     9791.7    1713.5     9814.6    1709.6     9828.7    1709.0     9840.9
GR   1708.9    9859.7    1708.9     9882.6    1708.9     9892.6    1710.7     9911.7    1711.5     9929.5
GR   1712.4    9955.6    1712.5     9972.3    1706.6     9984.7    1707.3     9999.1    1707.4    10000.0
GR   1707.8   10015.8    1708.0    10024.0    1712.6    10036.8    1713.1    10050.9    1713.7    10069.6
GR   1714.0   10080.0    1716.7    10086.5    1717.9    10096.7    1719.4    10109.4    1719.1    10111.1

ET                        9.1                                                              9760      10045
X1    7.513        37    9972.8    10053.5     550       507       507
GR   1724.4    9526.1    1722.8     9533.3    1722.4     9550.7    1721.2     9581.5    1720.3     9593.1
GR   1720.6    9625.6    1721.2     9650.3    1720.6     9666.6    1718.5     9671.4    1716.8     9680.2
GR   1717.2    9688.7    1720.3     9691.0    1720.5     9698.9    1719.9     9707.9    1716.8     9717.9
GR   1715.5    9725.6    1716.6     9744.0    1716.6     9773.7    1716.5     9794.8    1718.6     9810.5
GR   1719.2    9828.6    1720.2     9860.4    1720.1     9871.3    1720.3     9882.2    1720.0     9896.6
GR   1719.5    9917.7    1718.9     9940.8    1717.6     9958.1    1716.8     9972.8    1713.1     9984.6
GR   1710.9    9993.9    1711.0    10000.0    1711.5    10011.8    1712.2    10026.0    1713.6    10033.3
GR   1725.5   10053.5    1731.1    10067.4

QT        2       9980      9980
ET                        9.1                                                              9570      10034
          Q changed to  9,980 cfs at C10J (just 1,050' west of I-17).
X1    7.587        52    9952.4    10033.7     290       391       391
GR   1728.0    9318.0    1724.0     9367.5    1723.0     9386.0    1723.6     9404.2    1722.5     9417.9
GR   1722.0    9429.9    1722.4     9435.7    1723.8     9450.5    1724.6     9470.1    1724.6     9491.0
GR   1724.3    9510.7    1723.5     9525.0    1722.7     9536.0    1723.0     9552.3    1722.3     9570.8
GR   1723.5    9583.3    1722.7     9601.8    1722.4     9626.9    1721.8     9641.0    1718.8     9651.8
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GR   1717.4    9655.3    1717.6    9659.6    1719.0    9669.7    1718.5    9684.2    1718.7    9691.5
GR   1722.1    9701.0    1722.3    9706.2    1718.4    9715.0    1720.0    9720.6    1722.6    9734.3
GR   1723.2    9748.3    1724.0    9765.7    1723.9    9792.2    1724.1    9814.1    1723.5    9845.2
GR   1722.6    9877.0    1722.1    9902.9    1721.3    9915.8    1721.8    9938.7    1721.1    9952.4
GR   1718.4    9966.0    1717.9    9982.6    1716.6    9992.0    1715.6   10000.0    1715.9   10006.7
GR   1717.9   10018.3    1723.2   10033.7    1726.1   10050.0    1727.7   10067.8    1728.8   10095.4
GR   1730.8   10126.0    1730.8   10129.3

NC    .070      .070      .055
ET                        9.1                                                          9650      10045
X1   7.663        48    9974.3   10044.2       280       430       401
GR   1729.0    9470.0    1729.2    9486.5    1726.7    9505.5    1725.4    9518.2    1724.6    9523.9
GR   1723.9    9540.7    1723.3    9560.3    1723.8    9572.7    1722.7    9587.7    1723.2    9596.1
GR   1724.9    9612.5    1725.5    9641.1    1725.6    9656.0    1725.7    9686.1    1724.7    9713.7
GR   1724.5    9741.9    1724.2    9761.3    1723.7    9787.3    1723.3    9812.2    1723.0    9831.5
GR   1723.3    9846.0    1723.3    9856.1    1721.9    9859.8    1723.2    9866.3    1723.5    9881.5
GR   1725.0    9891.1    1725.3    9906.9    1725.2    9908.2    1725.6    9927.0    1724.5    9945.2
GR   1723.4    9960.9    1722.7    9974.3    1719.6    9985.7    1718.8    9993.5    1718.4   10000.0
GR   1718.8   10015.0    1719.4   10029.4    1722.9   10044.2    1723.2   10063.4    1724.4   10088.8
GR   1724.4   10112.2    1725.9   10133.6    1727.3   10154.8    1727.8   10195.9    1728.7   10224.1
GR   1727.4   10229.6    1729.6   10250.8    1729.4   10259.5

QT       2       9440      9440
NC                                     .6        .8
ET                        9.1                                                          9790      10108
          NC card was used - channel = .055, overbanks = .070.
          Contraction and expansion values changed to .6 and .8
          for I-17 southbound and northbound bridges.
          Q changed to 9,440 cfs at C10H (I-17 bridges).
X1   7.738        31    9967.8   10032.3       370       410       396
GR   1731.0    9680.0    1727.9    9740.9    1725.4    9769.9    1725.2    9798.2    1725.7    9837.9
GR   1726.9    9873.3    1727.3    9904.1    1728.5    9934.4    1727.6    9957.7    1725.8    9967.8
GR   1720.8    9980.9    1720.2    9992.9    1718.8   10000.0    1718.8   10007.1    1720.5   10014.2
GR   1725.6   10032.3    1726.8   10042.0    1725.6   10059.3    1726.4   10078.7    1725.9   10095.9
GR   1726.5   10107.9    1726.4   10121.4    1726.3   10146.2    1727.0   10170.2    1728.6   10194.0
GR   1728.9   10234.2    1729.4   10275.6    1729.8   10316.2    1730.4   10370.2    1730.6   10428.8
GR   1730.6   10434.6

NC    .095      .095      .080
ET                        9.1                                                          9950      10075
          NC card was used - channel = .080, overbanks = .095 for
          dense vegetation.
X1   7.766        22    9949.6   10075.6       110       160       148
GR   1732.0    9701.6    1732.0    9737.1    1731.6    9812.3    1731.0    9890.0    1731.1    9936.4
GR   1729.1    9949.6    1725.0    9968.1    1719.8    9990.7    1719.1   10000.0    1719.3   10021.1
GR   1721.1   10052.5    1729.0   10075.6    1733.3   10087.6    1732.6   10106.0    1732.3   10155.5
GR   1733.0   10223.7    1734.6   10297.7    1734.8   10395.8    1735.5   10464.4    1736.5   10577.2
GR   1738.1   10664.6    1737.7   10679.7
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NC                          .013
ET                          9.1                                                                  9936      10064
        Downstream face of the I-17 southbound bridge.
        NC card was used to change XNCH to .013.
        Special bridge method was used to determine the class of low flow.
        4-Span Bridge, Bridge Opening is 128 ft, total pier width is 12 ft,
        L = 45 ft (Incl. 100% clogging factor).
X1   7.769        8     9936.0   10064.0        17        17        17
X3      10                                                            1734.0    1734.0
GR  1735.3     9815.0   1733.0    9936.0    1720.8   9936.01    1720.8   9962.0    1719.5    9966.0
GR  1719.5   10063.99   1732.8   10064.0    1736.8   10410.0

SB    0.90       1.6      2.6                 128        12      1543              1719.7    1719.5
ET                          9.1                                                                  9936      10064
        Upstream face of the I-17 southbound bridge.
X1   7.778       10     9936.0   10064.0        45        45        45
X2                           1    1733.0    1735.1
X3      10                                                            1734.1    1734.1
BT      -7     9815.0   1735.3              9936.0    1735.2    1733.0   9962.0    1735.2    1733.0
BT            9966.0    1735.1    1732.9   10034.0    1735.3    1733.0  10064.0    1735.2    1732.8
BT           10410.0    1736.8
GR  1735.3     9815.0   1733.0    9936.0    1722.0   9936.01    1722.0   9962.0    1719.7    9966.0
GR  1719.7    10034.0   1719.8   10038.0    1719.8   10063.99   1732.8  10064.0    1736.8   10410.0

NC                          .080
ET                          9.1                                                                  9927      10079
        Cross section between two bridges, NC card was used to change
        XNCH = .080.
X1   7.785       30     9914.5   10085.1        38        38        38
GR  1750.8     9303.1   1750.6    9339.8    1749.2    9399.0    1748.5   9438.4    1747.4    9476.3
GR  1747.5     9511.0   1746.6    9559.9    1745.3    9615.2    1742.5   9650.9    1740.4    9689.0
GR  1738.3     9721.2   1736.7    9763.1    1736.7    9800.5    1736.5   9839.0    1734.9    9873.0
GR  1734.3     9898.9   1734.7    9914.5    1733.6    9924.1    1728.2   9936.3    1722.4    9962.5
GR  1722.3     9979.6   1720.6    9993.7    1720.9   10000.0    1721.9  10015.8    1721.9   10030.8
GR  1722.3    10052.6   1722.4   10064.0    1730.3   10074.4    1734.4  10085.1    1734.5   10101.5

NC                          .013
ET                          9.1                                                                  9939      10061
        Downstream face of the I-17 northbound bridge.
        NC card was used to change XNCH to .013.
        Special bridge method was used to determine the class of low flow.
        4-Span Bridge, Bridge Opening is 122 ft, total pier width is 12 ft,
        L = 44 ft (Incl. 100% clogging factor).
X1   7.792       12     9939.0   10061.01       35        35        35
X3      10                                                            1738.6    1738.6
GR  1739.5     9935.0   1738.2    9939.0   1722.92   9939.01   1722.92   9964.0   1722.17    9968.0
GR  1722.2     9998.0   1722.22   10002.0  1722.22   10032.0   1722.99  10036.0   1722.99   10061.0
GR  1737.8    10061.01  1739.2   10066.0
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SB    0.90       1.6       2.6                 122        12      1646                1722.94    1722.22
ET                          9.1                                                        9939      10061
        Upstream face of the I-17 northbound bridge.
X1    7.800        12      9939   10061.01       44        44        44
X2                          1     1737.9     1739.2
X3       10                                                          1738.7     1738.7
BT      -10      9820    1739.7                9939    1739.4    1738.2   9964.01    1739.4    1738.20
BT               9968    1739.4   1738.07   9998.01    1739.2   1738.07     10000    1739.2
BT              10002    1739.2   1737.86  10032.01    1739.2   1737.86  10061.01    1739.2     1737.8
BT              10265    1739.2
GR   1739.5    9935.0    1738.2    9939.0   1724.02   9939.01   1724.02    9964.0   1723.82     9968.0
GR   1723.8    9998.0   1722.94   10002.0   1722.94   10032.0   1723.74   10036.0   1723.74    10061.0
GR   1737.8  10061.01    1739.0   10066.0

NC    .095      .095      .075        .3        .5
ET               7.1       9.1                                                   10163.9      9950      10160
        The confluence with Stream No. 7 & 8.
        The depressed area on right overbank is ineffective,
        GR cards were modified to ignore it. ET card was used for contraction.
        NC card was used - channel = .075, overbanks = .095.
        Contraction and expansion values changed to .3 and .5
X1   7.812        26    9949.4   10163.9       64        64        64
GR   1750.9    9868.8    1749.3    9880.1   1742.6    9901.1    1741.4    9915.1   1739.6     9928.1
GR   1731.1    9949.4    1727.7    9963.3   1724.7    9989.8    1723.2   10000.0   1723.3    10008.2
GR   1725.2   10017.8    1725.8   10031.9   1725.3   10042.8    1724.0   10055.3   1724.0    10059.9
GR   1725.5   10071.7    1724.0   10084.9   1725.6   10094.7    1724.8   10106.5   1723.4    10116.4
GR   1723.2   10122.8    1723.4   10129.1   1729.9   10144.3    1732.8   10163.9   1734.0    10187.5
GR   1736.0   10700.0

NC                                     .1        .3
NH       5      .095    9973.5      .075   10089.0      .095   10471.1      .060  10520.5      .095
NH   10994.
ET               7.1       9.1                                                   10600      9974      10520
        Contraction and expansion values changed to .1 and .3
        NH cards were used for SECNO 7.872 to SECNO 8.016.
        ET card (Fields 7 & 8) was used for bridge contraction.
X1   7.872        48    9973.5   10089.0      280       330       317
GR   1751.8    9916.8    1745.4    9939.6   1739.4    9957.0    1732.6    9973.5   1727.9     9989.4
GR   1727.0    9995.4    1725.7   10000.0   1726.0   10010.8    1729.7   10029.2   1729.6    10043.9
GR   1728.7   10054.5    1731.6   10089.0   1731.3   10105.2    1731.3   10130.4   1730.9    10170.8
GR   1730.8   10201.5    1730.3   10227.0   1732.4   10253.3    1732.7   10269.0   1732.9    10289.4
GR   1733.8   10314.8    1733.0   10330.4   1732.4   10345.9    1732.0   10379.0   1731.3    10412.7
GR   1731.4   10439.3    1731.0   10461.2   1731.3   10471.1    1728.0   10477.6   1726.7    10487.1
GR   1726.6   10493.5    1727.1   10500.6   1729.0   10507.9    1732.5   10520.5   1732.6    10539.7
GR   1731.4   10551.5    1730.0   10562.0   1731.8   10574.0    1730.5   10582.2   1730.0    10589.2
GR   1732.2   10593.9    1732.8   10600.2   1731.5   10613.6    1732.8   10627.7   1733.3    10660.4
GR   1733.1   10673.8    1734.0   10928.8   1736.2   10994.0
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NH      5      .095    9986.8     .075   10028.9     .095   10380.7     .060   10448.1     .095
NH  10940.
ET             7.1       9.1                                          10525      9850     10450
X1  7.921        55    9986.8   10028.9       310       120       259
GR  1759.6   9650.0    1749.3    9702.3    1741.8    9738.0    1737.5    9763.2    1734.9    9787.2
GR  1732.1   9814.7    1732.2    9830.7    1732.1    9853.6    1731.3    9865.9    1731.6    9875.1
GR  1732.3   9891.3    1732.4    9915.0    1731.8    9941.4    1732.7    9964.7    1732.2    9974.7
GR  1730.6   9986.8    1728.1    9996.5    1727.9   10000.0    1727.7   10007.4    1729.8   10016.6
GR  1732.3  10028.9    1732.4   10042.8    1732.0   10065.9    1731.4   10096.3    1732.0   10119.0
GR  1732.0  10143.9    1731.2   10167.6    1732.8   10185.1    1733.5   10202.5    1733.8   10227.9
GR  1733.7  10228.8    1733.6   10250.8    1731.9   10283.7    1731.9   10329.7    1733.2   10362.6
GR  1732.9  10380.7    1729.8   10391.4    1727.5   10407.6    1726.4   10417.6    1726.5   10426.3
GR  1728.7  10435.1    1731.6   10448.1    1732.7   10464.7    1732.2   10476.8    1730.1   10491.0
GR  1732.2  10505.5    1729.9   10516.3    1732.8   10527.8    1731.7   10546.6    1732.9   10559.0
GR  1733.2  10588.7    1733.2   10616.0    1734.0   10875.0    1736.0   10915.0    1737.0   10940.0

QT      2      6220      6220
NH      4      .095    9391.3     .080    9980.6     .075   10017.4     .095   10307.4
ET                       9.1                                                      9850     10100
        Q changed to 6,220 cfs at the confluence with Stream No. 4.
        Contraction and expansion values changed to .1 and .3
X1  8.016        40    9980.6   10017.4       510       470       502
GR  1744.3   9367.4    1742.0    9391.3    1739.6    9412.2    1738.9    9414.4    1739.2    9430.5
GR  1737.9   9444.3    1736.7    9456.2    1737.0    9464.3    1737.0    9489.3    1736.7    9526.9
GR  1736.7   9558.5    1736.6    9576.0    1736.6    9604.2    1737.0    9630.8    1737.7    9661.0
GR  1738.5   9692.6    1738.5    9723.3    1739.2    9769.4    1739.0    9779.2    1739.2    9803.5
GR  1739.2   9830.7    1738.1    9858.0    1735.7    9882.6    1735.0    9901.8    1734.2    9922.9
GR  1734.2   9946.2    1734.6    9962.7    1734.9    9980.6    1730.1    9996.7    1729.9   10000.0
GR  1730.2  10010.6    1734.9   10017.4    1735.2   10026.5    1734.6   10047.7    1735.7   10079.8
GR  1736.1  10135.5    1736.6   10184.6    1737.9   10224.0    1741.9   10269.1    1743.2   10307.4

NC    .095     .095      .075
ET                       9.1                                                      9760     10045
        Q is 6,220 cfs at the confluence with Stream No. 4.
        NC card was used - channel = .075, overbanks = .095
X1  8.111        25    9982.1   10012.7       502       502       502
GR  1747.4   9517.4    1745.1    9563.0    1742.8    9604.9    1741.9    9655.2    1741.5    9701.4
GR  1740.2   9758.2    1738.4    9794.0    1738.6    9818.9    1739.2    9848.0    1739.2    9882.1
GR  1737.9   9913.3    1736.3    9948.2    1737.3    9974.0    1736.6    9982.1    1733.4    9992.2
GR  1732.2   9996.2    1732.2   10000.0    1732.9   10005.6    1736.6   10012.7    1737.1   10034.4
GR  1737.7  10052.1    1741.0   10070.6    1743.3   10102.9    1744.8   10142.7    1745.8   10149.0

ET                       9.1                                                      9750     10036
X1  8.187        19    9967.4   10036.8       401       401       401
GR  1751.7   9509.3    1748.4    9555.5    1744.4    9602.1    1743.4    9631.3    1742.7    9641.2
GR  1743.2   9661.2    1742.4    9726.9    1742.5    9779.6    1742.7    9833.8    1742.3    9885.5
GR  1741.3   9935.2    1741.5    9967.4    1738.6    9988.3    1737.3   10000.0    1736.7   10009.8
GR  1739.0  10022.4    1743.0   10036.8    1747.1   10061.2    1748.7   10079.6
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ET                          9.1                                                   9800      10170
X1    8.278        38     9974.9   10034.2       430       510       480
GR   1759.6    9431.0     1759.0    9475.4    1757.0    9520.3    1754.5    9548.2    1751.3    9595.2
GR   1749.5    9624.4     1748.6    9652.4    1746.8    9682.4    1746.0    9706.7    1745.6    9720.4
GR   1746.4    9748.4     1746.1    9794.4    1746.4    9834.6    1746.5    9869.9    1747.0    9900.8
GR   1747.1    9934.4     1745.8    9953.8    1746.3    9968.5    1744.9    9974.9    1740.9    9985.9
GR   1739.4    9999.1     1739.2   10000.0    1740.8   10008.5    1742.6   10018.1    1745.6   10034.2
GR   1745.6   10047.3     1742.5   10061.1    1744.0   10077.3    1745.6   10101.4    1746.2   10143.9
GR   1746.7   10164.0     1746.3   10211.5    1746.0   10261.8    1747.2   10303.7    1748.3   10350.4
GR   1749.0   10390.8     1749.5   10401.7    1750.5   10420.0

QT       2       4480       4480
NC    .080       .080       .065
ET                          9.1                                                   9920      10150
          Q changed to 4,480 cfs at the confluence with Stream No. 3.
          NC card was used - channel = .065, overbanks = .080
X1    8.373        30     9956.0   10019.8       510       480       502
GR   1763.9    9459.5     1761.6    9510.5    1758.4    9561.0    1754.3    9613.2    1751.8    9660.0
GR   1751.2    9691.7     1752.1    9720.5    1752.4    9767.3    1752.9    9825.8    1752.5    9866.4
GR   1751.3    9892.2     1749.1    9906.4    1749.0    9930.0    1748.5    9956.0    1747.0    9978.7
GR   1746.3    9989.9     1745.3    9997.8    1744.8   10000.0    1745.6   10007.2    1749.0   10019.8
GR   1749.9   10053.1     1749.8   10089.5    1748.8   10105.8    1749.8   10129.7    1750.3   10173.5
GR   1750.3   10215.9     1750.3   10269.3    1751.6   10315.8    1752.6   10363.6    1753.9   10390.4

QT       2       3650       3650
ET                          9.1                                                   9870      10140
          Q changed to 3,650 cfs at the confluence with Stream No. 2.
X1    8.485        28     9975.8   10043.0       500       600       591
GR   1760.4    9559.1     1759.2    9578.1    1757.9    9585.5    1760.2    9614.7    1759.6    9650.1
GR   1758.4    9714.6     1756.6    9799.1    1755.2    9867.6    1754.5    9919.1    1754.9    9958.9
GR   1754.1    9975.8     1752.0    9986.1    1750.4    9993.8    1750.3   10000.0    1750.4   10005.8
GR   1752.2   10017.0     1754.9   10043.0    1754.2   10071.1    1752.4   10084.7    1753.8   10112.0
GR   1755.9   10155.5     1756.8   10192.9    1756.1   10225.8    1755.5   10248.5    1757.4   10292.1
GR   1758.9   10345.7     1760.4   10394.0    1761.5   10410.2

NH       5       .080     9971.5       .065   10026.5       .080   10269.4       .070   10311.4       .080
NH   10720.
ET                          9.1                                                   9970      10350
          NH cards were used from SECNO 8.574 to SECNO 9.304.
X1    8.574        27     9971.5   10026.5       500       400       470
GR   1776.4    9697.0     1775.9    9787.6    1774.7    9860.0    1771.9    9908.8    1764.2    9945.8
GR   1758.2    9971.5     1755.7    9980.1    1755.2    9991.0    1755.7   10000.0    1756.6   10012.3
GR   1760.0   10026.5     1759.8   10070.7    1760.1   10082.0    1758.7   10124.3    1757.7   10148.2
GR   1760.2   10190.5     1759.8   10237.5    1758.0   10269.4    1755.9   10281.3    1757.9   10311.4
GR   1758.9   10350.2     1758.9   10390.8    1758.2   10433.7    1758.1   10465.8    1758.9   10516.7
GR   1760.0   10539.7     1764.0   10720.0

NH       5       .080     9992.3       .065   10016.2       .080   10444.8       .070   10456.2       .080
NH   10780.
ET                          9.1                                                   9960      10400
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X1   8.670      36   9992.3  10016.2     507     480     507
GR  1775.3  9881.1   1770.7   9909.5  1763.7  9934.9  1761.1  9953.3  1761.4  9967.4
GR  1761.1  9983.5   1760.0   9992.3  1757.9  9998.8  1757.1 10000.0  1758.4 10009.0
GR  1761.0 10016.2   1762.1  10044.2  1764.0 10066.9  1763.9 10086.7  1763.7 10126.7
GR  1762.7 10172.1   1761.3  10202.2  1763.0 10227.1  1763.0 10273.4  1763.4 10312.3
GR  1762.5 10348.5   1761.8  10374.7  1762.1 10406.3  1761.7 10437.9  1761.3 10444.8
GR  1759.6 10447.6   1759.6  10449.9  1761.8 10456.2  1760.2 10481.6  1761.3 10505.4
GR  1761.8 10540.2   1762.0  10583.4  1762.6 10613.1  1763.1 10637.7  1764.3 10760.0
GR  1766.0 10780.0

NH      5     .080   9988.5      .065 10017.7     .080 10217.8     .070 10245.6     .080
NH  11032.
ET                     9.1                                                 9980     10400
X1   8.763      27   9988.5  10017.7     510     440     491
GR  1778.9  9880.2   1771.1   9919.2  1766.0  9942.1  1766.3  9974.7  1765.2  9988.5
GR  1763.0  9996.1   1761.0  10000.0  1761.0 10000.0  1762.4 10009.4  1764.3 10017.7
GR  1765.1 10038.1   1765.2  10067.1  1766.2 10087.7  1767.2 10111.7  1767.5 10111.8
GR  1765.3 10159.4   1764.0  10192.3  1763.9 10217.8  1762.6 10225.8  1762.6 10233.7
GR  1765.2 10245.6   1765.3  10278.7  1766.4 10314.2  1766.3 10323.0  1767.7 10533.0
GR  1768.0 10928.0   1772.0  11032.0

NH      5     .080   9992.8      .065 10029.0     .080 10292.6     .070 10321.1     .080
NH  10706.
ET                     9.1                                                 9880     10110
X1   8.853      28   9992.8  10029.0     440     520     475
GR  1774.4  9839.7   1770.6   9876.7  1768.7  9910.8  1769.0  9941.8  1768.5  9969.3
GR  1767.8  9992.8   1767.4   9999.1  1766.0 10000.0  1766.9 10012.0  1769.2 10029.0
GR  1769.4 10058.1   1769.7  10107.3  1772.0 10179.0  1772.6 10207.5  1772.1 10253.4
GR  1770.6 10278.6   1769.5  10292.6  1767.7 10302.7  1770.3 10321.1  1770.4 10350.9
GR  1771.1 10376.0   1771.2  10404.9  1770.9 10458.8  1768.7 10500.8  1769.9 10537.9
GR  1770.6 10568.2   1771.0  10606.0  1773.0 10706.0

NH      5     .080   9982.1      .065 10019.9     .080 10619.4     .070 10642.6     .080
NH  10920.
ET                     9.1                                                 9982     10300
X1   8.939      36   9982.1  10019.9     440     430     454
GR  1787.6  9817.0   1785.5   9854.7  1783.2  9904.8  1781.1  9942.1  1778.4  9964.3
GR  1772.8  9982.1   1769.0   9995.8  1768.1 10000.0  1769.0 10006.0  1771.9 10019.9
GR  1772.1 10057.6   1773.5  10100.0  1773.5 10151.1  1774.7 10196.1  1773.8 10236.8
GR  1773.1 10277.4   1774.0  10313.7  1775.3 10355.6  1774.7 10403.6  1774.7 10452.0
GR  1774.5 10489.6   1774.0  10506.9  1774.8 10540.2  1775.2 10576.0  1774.9 10597.6
GR  1773.2 10607.9   1773.8  10619.4  1772.8 10627.5  1773.8 10642.6  1773.2 10686.7
GR  1774.1 10731.5   1774.6  10797.8  1774.1 10857.7  1774.4 10888.1  1775.2 10904.5
GR  1776.5 10920.0

QT      2      2770      2770
NH      5     .080   9981.1      .065 10035.6     .080 10502.8     .070 10521.9     .080
NH  10733.
ET                     9.1                                                 9980     10300
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        Q changed to 2,770 cfs at the confluence with Stream No. 1.
X1    9.021       35    9981.1   10035.6       510       310       433
GR   1782.4   9438.9    1782.9    9504.6    1781.4    9566.3    1781.5    9635.0    1781.0    9710.3
GR   1781.9   9777.5    1782.8    9844.2    1783.2    9907.1    1782.3    9954.4    1776.9    9981.1
GR   1774.1   9995.9    1774.0   10000.0    1775.7   10017.9    1776.9   10035.6    1776.1   10101.5
GR   1777.7  10145.6    1777.1   10182.4    1777.0   10206.9    1777.8   10243.3    1777.8   10275.6
GR   1778.0  10309.4    1779.1   10345.4    1778.3   10390.1    1778.7   10434.6    1777.7   10483.3
GR   1776.2  10502.8    1773.9   10510.7    1775.5   10521.9    1777.9   10551.2    1776.9   10581.1
GR   1777.7  10618.2    1776.9   10652.3    1776.2   10671.6    1780.4   10709.8    1780.7   10733.0

NH       5      .080    9980.5      .065   10026.5      .080   10454.2      .070   10473.1      .080
NH   10611.
ET               7.1       9.1                                 9824.3   10611.0      9845     10250
        ET card (Fields 7 & 8) was used to model the ineffective flow area
        on left overbank.
X1    9.114       37    9980.5   10026.5       400       470       491
GR   1787.1   9406.3    1785.4    9464.0    1783.6    9507.9    1782.2    9524.4    1783.4    9547.7
GR   1782.6   9592.7    1781.6    9636.2    1781.4    9684.6    1781.3    9728.9    1782.5    9774.8
GR   1783.1   9824.3    1782.7    9844.8    1782.3    9898.3    1781.2    9946.1    1780.6    9980.5
GR   1778.0   9990.8    1777.5    9994.7    1779.9   10000.0    1782.1   10026.5    1782.1   10075.4
GR   1782.2  10120.0    1782.6   10142.2    1783.9   10169.2    1783.5   10194.4    1783.6   10240.4
GR   1783.6  10287.5    1782.7   10317.3    1783.4   10354.6    1783.4   10401.0    1783.9   10439.5
GR   1784.0  10454.2    1782.7   10459.4    1783.9   10473.1    1783.6   10509.6    1783.7   10531.6
GR   1784.7  10574.0    1785.2   10611.0

NH       5      .080    9989.4      .065   10025.7      .080   10467.2      .070   10489.5      .080
NH   10710.
ET                       9.1                                                       9974     10350
X1    9.210       33    9974.3   10025.7       530       400       507
GR   1795.4   9587.8    1794.4    9667.2    1792.5    9733.3    1791.3    9778.0    1787.9    9806.1
GR   1788.2   9841.7    1788.3    9898.2    1788.4    9947.2    1788.0    9974.3    1787.4    9989.4
GR   1785.4   9996.9    1786.0   10000.0    1787.9   10025.7    1789.0   10053.0    1787.8   10122.2
GR   1786.3  10198.0    1786.6   10246.2    1787.0   10284.6    1786.6   10331.3    1786.9   10369.4
GR   1786.7  10417.4    1786.9   10435.8    1786.9   10446.8    1786.9   10467.2    1785.4   10482.7
GR   1785.5  10489.5    1786.6   10510.7    1786.2   10546.1    1784.6   10562.2    1786.3   10588.1
GR   1786.2  10598.2    1789.0   10698.0    1790.0   10710.0

NH       5      .080    9958.9      .065   10014.7      .080   10247.3      .070   10310.5      .080
NH   10580.
ET                       9.1                                                       9720     10100
X1    9.304       36    9958.9   10014.7       430       580       496
GR   1796.6   9487.1    1796.2    9541.9    1795.3    9596.4    1794.5    9642.3    1793.9    9681.1
GR   1791.5   9692.7    1792.8    9714.0    1792.2    9738.4    1791.5    9743.9    1793.7    9765.7
GR   1794.4   9795.5    1794.8    9833.8    1794.4    9880.6    1793.2    9926.7    1793.6    9958.9
GR   1792.4   9988.4    1791.0    9994.3    1792.4   10000.0    1793.7   10014.7    1794.8   10047.1
GR   1794.9  10085.7    1794.2   10143.3    1796.1   10189.7    1796.2   10204.6    1794.8   10247.3
GR   1793.7  10286.1    1791.8   10293.2    1794.4   10310.5    1794.6   10357.0    1794.5   10403.8
GR   1794.4  10430.8    1792.6   10442.0    1794.9   10458.5    1794.1   10499.3    1795.2   10550.0
GR   1796.2  10580.0
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NC     .080       .080       .065
ET                           9.1                                                    9790       10020
          NC card was used - channel = .065, overbanks = .080
X1    9.400         29     9982.5    10026.6        500        507        507
GR   1804.0     9610.0     1801.5     9662.7     1799.2     9705.7     1798.7     9752.0     1799.1     9788.2
GR   1799.6     9826.7     1800.4     9867.5     1800.4     9909.7     1800.0     9946.1     1799.4     9967.8
GR   1800.0     9982.5     1799.1     9992.7     1797.8     9997.0     1798.1    10000.0     1799.5    10007.1
GR   1800.4    10026.6     1800.1    10067.4     1800.3    10107.1     1800.6    10154.8     1802.2    10204.0
GR   1802.3    10267.0     1802.1    10332.9     1802.4    10392.4     1802.5    10439.1     1801.7    10477.2
GR   1803.2    10491.7     1803.5    10524.8     1804.0    10587.3     1803.9    10595.0

NC     .090       .090       .070
ET                           9.1                                                    9840       10050
          NC card was used - channel = .070, overbanks = .090
X1    9.492         22     9990.1    10022.2        400        540        486
GR   1808.1     9596.6     1807.7     9663.0     1806.7     9742.6     1806.4     9807.3     1804.7     9845.2
GR   1804.0     9863.4     1803.6     9871.0     1805.3     9889.8     1805.2     9925.8     1805.0     9943.8
GR   1806.1     9965.5     1805.7     9990.1     1803.9     9999.1     1803.7    10000.0     1804.6    10008.2
GR   1805.1    10022.2     1805.2    10068.0     1806.8    10130.2     1807.8    10177.3     1810.1    10221.3
GR   1812.0    10258.3     1811.6    10261.6

QT        2        1840       1840
ET                           9.1                                                    9920       10080
          Q changed to 1,840 cfs at future 29th Avenue.
X1    9.586         21     9978.6    10033.7        550        450        496
GR   1814.8     9526.5     1814.8     9575.7     1815.1     9612.7     1815.0     9686.3     1814.5     9772.3
GR   1813.6     9831.8     1811.4     9894.5     1811.8     9954.2     1811.7     9978.6     1810.7     9985.0
GR   1808.6     9993.8     1808.4    10000.0     1810.0    10008.0     1811.3    10033.7     1811.6    10080.8
GR   1813.3    10137.0     1814.9    10195.7     1814.0    10244.3     1813.4    10286.7     1815.3    10334.0
GR   1817.4    10342.2

ET                           9.1                                                    9930       10100
X1    9.682         27     9932.9    10020.5        480        510        507
GR   1822.0     9455.7     1821.8     9543.5     1823.0     9630.3     1822.5     9707.5     1821.5     9787.4
GR   1821.3     9860.1     1819.6     9909.7     1818.0     9932.9     1817.0     9945.1     1818.6     9967.8
GR   1818.3     9990.0     1817.0    10000.0     1818.7    10020.5     1818.9    10064.1     1818.8    10087.5
GR   1817.6    10097.8     1819.1    10117.7     1818.4    10144.3     1817.9    10157.7     1816.2    10160.5
GR   1816.6    10169.2     1818.2    10184.2     1818.8    10217.6     1820.4    10278.1     1821.8    10321.9
GR   1823.2    10366.2     1823.5    10422.6

ET                           9.1                                                    9960       10170
X1    9.776         33     9966.0    10015.6        490        480        496
GR   1829.7     9454.7     1830.0     9528.4     1830.0     9607.6     1830.4     9670.6     1829.4     9738.2
GR   1827.2     9780.7     1826.2     9808.6     1826.3     9842.0     1826.7     9860.1     1826.1     9866.6
GR   1827.6     9891.0     1827.7     9934.4     1827.1     9966.0     1825.3     9990.0     1824.8    10000.0
GR   1826.4    10015.6     1827.2    10047.0     1826.4    10072.7     1824.6    10080.4     1824.7    10088.1
GR   1826.3    10101.3     1826.2    10118.7     1824.2    10122.2     1827.4    10134.7     1826.5    10148.9
GR   1824.4    10156.8     1824.0    10163.2     1826.2    10191.1     1826.4    10232.6     1826.2    10269.9
GR   1828.7    10331.7     1830.4    10406.8     1832.3    10460.2
```

ET			9.1						9988	10180
X1	9.872	26	9988.4	10010.5	510	480	507			
GR	1840.3	9315.3	1840.0	9420.8	1838.6	9558.6	1835.5	9676.3	1835.0	9747.6
GR	1835.3	9826.3	1836.2	9906.7	1836.1	9951.6	1835.0	9974.2	1832.5	9988.4
GR	1829.7	9995.2	1829.8	10000.0	1831.0	10010.5	1833.7	10024.9	1833.8	10077.1
GR	1833.9	10128.5	1832.3	10164.3	1831.0	10181.2	1833.2	10218.6	1834.1	10253.2
GR	1833.8	10276.5	1832.1	10291.4	1833.3	10308.6	1831.9	10316.4	1833.8	10335.2
GR	1835.9	10379.0								
ET			9.1						9991	10100
X1	9.966	19	9988.7	10021.8	470	520	496			
GR	1845.3	9578.0	1844.0	9649.8	1843.1	9698.5	1844.1	9769.0	1844.4	9846.2
GR	1845.0	9916.1	1845.5	9938.2	1845.2	9974.9	1843.7	9988.7	1836.6	10000.0
GR	1837.0	10007.0	1840.2	10021.8	1841.6	10065.2	1841.1	10101.4	1840.9	10134.7
GR	1841.5	10183.5	1843.5	10239.2	1845.4	10294.5	1846.0	10336.0		
ET			9.1						9900	10032
X1	10.058	19	9976.2	10038.5	490	440	486			
GR	1854.5	9495.1	1853.4	9568.9	1853.7	9637.1	1853.2	9691.8	1850.8	9725.0
GR	1849.1	9747.9	1850.6	9789.1	1850.2	9813.3	1847.6	9828.5	1849.3	9852.5
GR	1849.9	9909.1	1849.9	9946.4	1849.5	9976.2	1846.9	9992.8	1845.7	10000.0
GR	1847.1	10011.7	1852.0	10038.5	1853.8	10086.9	1853.1	10111.7		
ET			9.1						9880	10060
X1	10.151	17	9881.6	10062.3	440	500	491			
GR	1856.8	9578.9	1856.4	9630.1	1855.4	9701.5	1854.8	9771.7	1855.1	9832.0
GR	1854.8	9881.6	1852.8	9902.8	1853.0	9943.8	1853.5	9979.3	1853.1	10000.0
GR	1853.8	10021.6	1852.3	10041.6	1853.6	10062.3	1858.6	10095.9	1861.3	10123.9
GR	1863.0	10180.0	1863.0	10208.9						
ET			9.1						9970	10080
X1	10.230	17	9980.0	10015.3	460	340	417			
GR	1866.9	9769.5	1864.9	9822.4	1861.7	9871.6	1861.1	9902.0	1860.7	9923.4
GR	1861.0	9947.9	1860.5	9971.6	1859.5	9980.0	1858.0	9986.7	1857.3	9996.4
GR	1856.8	10000.0	1860.0	10015.3	1861.6	10033.8	1860.7	10068.7	1860.6	10121.0
GR	1861.6	10178.5	1863.3	10201.0						
ET			9.1						9930	10020
X1	10.325	20	9950.0	10014.5	470	550	502			
GR	1873.3	9718.6	1872.1	9754.2	1871.5	9795.8	1872.1	9833.0	1872.0	9873.8
GR	1871.0	9910.6	1870.4	9936.4	1869.5	9950.0	1868.4	9953.4	1866.9	9964.3
GR	1867.6	9974.6	1868.9	9986.9	1869.2	9996.5	1867.6	10000.0	1870.7	10014.5
GR	1871.7	10039.0	1869.4	10062.1	1874.2	10096.2	1876.9	10149.6	1877.8	10153.4
ET			9.1						9985	10055
X1	10.419	17	9987.1	10034.2	510	420	496			
GR	1884.0	9717.6	1885.0	9777.5	1885.5	9855.0	1884.2	9913.2	1883.2	9947.7
GR	1880.0	9960.4	1878.9	9987.1	1877.3	9996.2	1876.1	10000.0	1877.9	10011.4
GR	1878.8	10034.2	1879.3	10058.6	1880.5	10094.4	1880.1	10133.9	1881.0	10169.3
GR	1883.2	10210.6	1884.0	10211.5						

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QT        2       1020       1020
ET                            9.1                                                                    9954       10015
          The upstream study limit on Deadman Wash at future 22nd Avenue.
          Q changed to 1,020 cfs at future 22nd Avenue.
X1   10.544         14     9969.4    10009.1        650        650        660
GR   1898.7     9789.3     1896.6     9834.8     1893.8     9863.7     1894.1     9900.8     1891.9     9920.5
GR   1893.0     9940.8     1892.2     9969.4     1890.2     9985.2     1889.3     9999.2     1889.7    10000.0
GR   1891.1    10009.1     1892.9    10032.3     1896.4    10056.7     1898.3    10062.8
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= 0.100 CEHV= 0.300
*SECNO 6.021

3265 DIVIDED FLOW

NC card was used - channel = 0.055, overbanks = 0.070.

6.021	9.56	1667.56	1667.42	1667.56	1668.55	0.99	0.00	0.00	1664.30
9480.0	5479.8	4000.2	0.0	1188.6	363.1	0.0	0.0	0.0	1667.90
0.00	4.61	11.02	0.00	0.070	0.055	0.000	0.000	1658.00	9160.63
0.013086	0.	0.	0.	0	4	0	0.00	734.01	10021.10

FLOW DISTRIBUTION FOR SECNO= 6.02 CWSEL= 1667.56

STA=	9161.	9345.	9670.	9709.	9746.	9770.	9781.	9808.	9844.	9874.	9913.	9941.	9972.
PER Q=	3.2	3.0	3.6	5.8	3.8	4.2	5.2	3.7	3.6	7.5	7.7	6.4	
AREA=	132.6	131.0	83.4	110.5	71.2	55.2	90.7	82.7	75.3	131.0	116.1	108.8	
VEL=	2.3	2.2	4.1	5.0	5.1	7.3	5.4	4.2	4.5	5.4	6.3	5.6	
DEPTH=	0.7	0.4	2.2	3.0	3.0	5.2	3.3	2.3	2.5	3.4	4.2	3.5	

STA=	9972.	10022.
PER Q=	42.2	
AREA=	363.1	
VEL=	11.0	
DEPTH=	7.4	

*SECNO 6.108

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.59

6.108	10.03	1671.43	1670.46	0.00	1671.85	0.41	3.24	0.06	1668.00
9480.0	4251.2	4190.4	1038.4	1445.4	601.4	292.8	18.0	7.2	1668.20
0.02	2.94	6.97	3.55	0.070	0.055	0.070	0.000	1661.40	9290.48
0.005167	380.	459.	420.	1	10	0	0.00	867.40	10157.88

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.11 CWSEL= 1671.43

STA=	9290.	9489.	9610.	9675.	9707.	9728.	9750.	9772.	9790.	9836.	9940.	9959.	10046.
PER Q=	4.5	4.8	4.9	4.8	3.1	3.1	5.7	3.7	3.3	4.9	2.1	44.2	
AREA=	228.4	207.5	161.9	121.3	80.5	80.9	116.2	82.6	110.3	194.6	61.3	601.4	
VEL=	1.9	2.2	2.9	3.7	3.7	3.6	4.6	4.2	2.9	2.4	3.3	7.0	
DEPTH=	1.2	1.7	2.5	3.8	3.7	3.7	5.3	4.6	2.4	1.9	3.2	6.9	

STA=	10046.	10069.	10093.	10123.	10158.
PER Q=	3.0	4.2	3.5	0.2	
AREA=	80.5	100.7	97.6	14.1	
VEL=	3.6	3.9	3.4	1.3	
DEPTH=	3.6	4.1	3.3	0.4	

*SECNO 6.205

6.205	6.92	1673.92	1673.01	0.00	1674.25	0.33	2.40	0.01	1671.80
9480.0	5894.1	2586.3	999.7	1757.5	372.3	287.5	38.5	14.6	1671.70
0.05	3.35	6.95	3.48	0.070	0.055	0.070	0.000	1667.00	9179.86
0.006884	310.	512.	512.	3	14	0	0.00	973.03	10152.89

FLOW DISTRIBUTION FOR SECNO= 6.20 CWSEL= 1673.92

STA=	9180.	9285.	9361.	9388.	9437.	9481.	9530.	9559.	9575.	9613.	9639.	9673.	9734.
PER Q=	3.7	5.9	3.1	5.1	4.6	6.3	4.6	4.4	6.2	3.8	3.4	4.9	
AREA=	149.2	178.5	82.0	136.2	125.0	156.3	104.3	81.6	139.1	89.5	93.4	144.7	
VEL=	2.4	3.1	3.6	3.5	3.5	3.8	4.2	5.1	4.2	4.0	3.5	3.2	
DEPTH=	1.4	2.3	3.0	2.8	2.8	3.2	3.6	5.0	3.7	3.5	2.8	2.4	

STA=	9734.	9866.	9973.	10040.	10068.	10092.	10136.	10153.
PER Q=	3.6	2.6	27.3	3.2	3.0	3.8	0.5	
AREA=	152.6	125.0	372.3	82.9	76.1	108.1	20.4	
VEL=	2.2	2.0	6.9	3.7	3.8	3.3	2.3	
DEPTH=	1.2	1.2	5.6	3.0	3.2	2.4	1.2	

CCHV= 0.300 CEHV= 0.500
*SECNO 6.280

3265 DIVIDED FLOW

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

Q changed to 9,680 cfs at C10M (Joy Ranch Road).

6.280	9.98	1678.08	1678.00	0.00	1678.92	0.84	4.41	0.26	1675.70
9680.0	3164.7	4016.0	2499.3	976.4	388.5	495.3	65.7	27.7	1673.40
0.07	3.24	10.34	5.05	0.070	0.055	0.070	0.000	1668.10	9256.78
0.011082	660.	396.	340.	2	15	0	0.00	941.38	10205.19

FLOW DISTRIBUTION FOR SECNO= 6.28 CWSEL= 1678.08

STA=	9257.	9539.	9609.	9675.	9764.	9827.	9887.	9966.	9987.	10040.	10058.	10073.	10085.
PER Q=	4.0	5.6	3.2	4.4	5.2	4.7	4.1	1.7	41.5	4.6	4.2	3.6	
AREA=	160.3	146.4	102.0	138.2	133.7	123.6	127.1	45.1	388.5	74.4	67.9	56.3	
VEL=	2.4	3.7	3.0	3.0	3.7	3.7	3.1	3.8	10.3	5.9	6.0	6.1	
DEPTH=	0.6	2.1	1.6	1.5	2.1	2.1	1.6	2.2	7.2	4.3	4.4	4.6	

STA=	10085.	10126.	10156.	10186.	10205.
PER Q=	4.1	6.1	3.1	0.2	
AREA=	98.1	112.3	74.2	12.1	
VEL=	4.1	5.3	4.0	1.7	
DEPTH=	2.4	3.7	2.4	0.6	

*SECNO 6.328

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.52

FEMA section #1 by ignoring Joy Ranch Road pipe structure.

6.328	8.85	1680.45	1679.64	0.00	1680.83	0.38	1.77	0.14	1678.00
9680.0	3540.2	3808.4	2331.3	1454.2	539.3	700.8	79.1	34.0	1676.00
0.09	2.43	7.06	3.33	0.070	0.055	0.070	0.000	1671.60	9070.78
0.004809	265.	253.	235.	2	14	0	0.00	1192.61	10284.06

FLOW DISTRIBUTION FOR SECNO= 6.33 CWSEL= 1680.45

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9071.	9505.	9600.	9675.	9730.	9780.	9832.	9960.	9968.	10040.	10095.	10155.	10195.
PER Q=	5.4	4.7	3.5	3.7	3.3	4.0	11.5	0.5	39.3	8.2	9.0	4.8	
AREA=	334.6	192.7	146.0	134.5	119.6	136.6	370.7	19.6	539.3	217.0	236.8	137.8	
VEL=	1.6	2.4	2.3	2.7	2.6	2.8	3.0	2.7	7.1	3.7	3.7	3.4	
DEPTH=	0.8	2.0	1.9	2.4	2.4	2.6	2.9	2.4	7.5	3.9	3.9	3.4	

STA=	10195.	10284.
PER Q=	2.1	
AREA=	109.1	
VEL=	1.8	
DEPTH=	1.2	

*SECNO 6.423

FEMA section #2 by ignoring Joy Ranch Road pipe structure.

6.423	9.37	1683.57	1683.36	0.00	1684.20	0.63	3.25	0.12	1682.00
9680.0	4925.2	4724.4	30.5	1573.6	555.2	17.4	106.8	47.9	1682.00
0.11	3.13	8.51	1.75	0.070	0.055	0.070	0.000	1674.20	8941.21
0.009380	540.	502.	330.	2	9	0	0.00	1152.85	10094.07

FLOW DISTRIBUTION FOR SECNO= 6.42 CWSEL= 1683.57

STA=	8941.	9195.	9280.	9470.	9550.	9630.	9645.	9720.	9775.	9850.	9980.	10072.	10094.
PER Q=	3.6	6.1	4.6	6.2	11.7	3.2	4.9	3.6	4.0	3.1	48.8	0.3	
AREA=	181.3	176.5	204.5	174.1	254.1	59.6	146.0	108.7	129.0	139.9	555.2	17.4	
VEL=	1.9	3.3	2.2	3.5	4.4	5.1	3.2	3.2	3.0	2.2	8.5	1.8	
DEPTH=	0.7	2.1	1.1	2.2	3.2	4.0	1.9	2.0	1.7	1.1	6.0	0.8	

*SECNO 6.539

FEMA section #3 by ignoring Joy Ranch Road pipe structure.

6.539	8.93	1687.53	1686.90	0.00	1687.91	0.38	3.64	0.07	1684.00
9680.0	6207.1	3058.0	414.9	2069.5	400.2	154.7	131.5	58.7	1684.00
0.14	3.00	7.64	2.68	0.070	0.055	0.070	0.000	1678.60	9046.51
0.006037	400.	612.	600.	2	13	0	0.00	1074.62	10121.13

FLOW DISTRIBUTION FOR SECNO= 6.54 CWSEL= 1687.53

STA=	9047.	9448.	9490.	9590.	9645.	9740.	9912.	9972.	10028.	10075.	10121.
PER Q=	25.3	6.7	10.9	4.4	6.0	6.0	4.8	31.6	3.8	0.5	
AREA=	839.3	161.2	303.8	139.3	209.1	264.5	152.3	400.2	119.3	35.5	
VEL=	2.9	4.0	3.5	3.1	2.8	2.2	3.1	7.6	3.1	1.4	
DEPTH=	2.1	3.8	3.0	2.5	2.2	1.5	2.5	7.1	2.5	0.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.654

6.654	10.05	1691.65	1691.13	0.00	1692.38	0.73	4.29	0.18	1689.90
9680.0	4014.8	4304.8	1360.4	1109.9	458.6	319.5	162.3	71.3	1689.10
0.17	3.62	9.39	4.26	0.070	0.055	0.070	0.000	1681.60	9381.14
0.008689	595.	607.	570.	2	8	0	0.00	768.21	10149.34

FLOW DISTRIBUTION FOR SECNO= 6.65 CWSEL= 1691.65

STA=	9381.	9613.	9670.	9705.	9753.	9787.	9809.	9822.	9838.	9896.	9928.	9976.	10036.
PER Q=	3.8	3.2	3.5	3.3	3.0	4.1	3.0	3.7	7.4	3.1	3.2	44.5	
AREA=	177.0	99.8	91.3	99.0	80.7	84.0	55.9	70.1	173.1	82.2	96.8	458.6	
VEL=	2.1	3.1	3.7	3.2	3.6	4.7	5.2	5.1	4.2	3.7	3.2	9.4	
DEPTH=	0.8	1.8	2.6	2.1	2.4	3.7	4.4	4.2	3.0	2.6	2.0	7.7	

STA=	10036.	10065.	10097.	10149.
PER Q=	4.0	6.4	3.6	
AREA=	91.8	125.3	102.5	
VEL=	4.2	5.0	3.4	
DEPTH=	3.1	4.0	2.0	

*SECNO 6.751

The area of the stock tank (CF Tank) is ineffective,
GR cards were modified to ignore it.
Q changed to 9,770 cfs at C10L (CF Tank).

6.751	10.37	1695.77	1694.10	0.00	1696.05	0.28	3.53	0.14	1693.50
9770.0	5369.2	2998.8	1402.0	1706.3	505.8	414.3	187.8	80.4	1692.40
0.20	3.15	5.93	3.38	0.080	0.065	0.080	0.000	1685.40	9310.44
0.005915	485.	512.	500.	3	12	0	0.00	855.70	10166.14

FLOW DISTRIBUTION FOR SECNO= 6.75 CWSEL= 1695.77

STA=	9310.	9520.	9794.	9835.	9855.	9884.	9897.	9911.	9927.	9961.	10041.	10072.	10102.
PER Q=	3.8	21.5	5.6	3.4	6.3	5.1	3.1	3.0	3.0	30.7	3.3	3.8	
AREA=	227.2	750.7	155.9	89.9	141.6	95.8	70.6	73.8	100.9	505.8	103.6	109.7	
VEL=	1.6	2.8	3.5	3.7	4.4	5.2	4.3	4.0	2.9	5.9	3.1	3.4	
DEPTH=	1.1	2.7	3.9	4.3	5.0	7.0	5.3	4.7	2.9	6.4	3.3	3.7	

STA=	10102.	10120.	10166.
PER Q=	4.0	3.2	
AREA=	93.3	107.7	
VEL=	4.2	2.9	
DEPTH=	5.2	2.3	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.849

6.849	7.71	1698.51	1697.39	0.00	1698.76	0.25	2.71	0.01	1695.60
9770.0	5645.0	2188.5	1936.5	1880.6	345.4	637.5	214.4	89.9	1694.30
0.23	3.00	6.34	3.04	0.080	0.065	0.080	0.000	1690.80	9136.55
0.006573	370.	517.	520.	1	17	0	0.00	1165.28	10301.83

FLOW DISTRIBUTION FOR SECNO= 6.85 CWSEL= 1698.51

STA=	9137.	9503.	9548.	9584.	9607.	9626.	9655.	9700.	9739.	9826.	9895.	9952.	9965.
PER Q=	9.6	4.2	5.1	4.1	3.5	4.4	6.8	4.3	5.3	4.4	4.9	1.2	
AREA=	452.0	131.7	136.2	101.4	84.2	113.0	178.2	126.7	198.0	161.8	159.2	38.2	
VEL=	2.1	3.1	3.7	4.0	4.0	3.8	3.7	3.3	2.6	2.7	3.0	3.0	
DEPTH=	1.2	2.9	3.8	4.3	4.4	4.0	3.9	3.3	2.3	2.3	2.8	2.8	

STA=	9965.	10019.	10039.	10069.	10094.	10150.	10215.	10302.
PER Q=	22.4	3.3	3.8	4.3	3.5	3.2	1.8	
AREA=	345.4	82.6	105.7	106.1	117.3	125.3	100.5	
VEL=	6.3	3.9	3.5	3.9	2.9	2.5	1.7	
DEPTH=	6.4	4.2	3.5	4.2	2.1	1.9	1.2	

*SECNO 6.945

6.945	11.13	1702.03	1700.84	0.00	1702.33	0.29	3.54	0.02	1699.10
9770.0	2439.3	2445.7	4885.0	886.0	371.9	1407.2	249.4	103.5	1700.20
0.27	2.75	6.58	3.47	0.080	0.065	0.080	0.000	1690.90	9562.80
0.006573	695.	507.	375.	2	12	0	0.00	912.37	10475.17

FLOW DISTRIBUTION FOR SECNO= 6.95 CWSEL= 1702.03

STA=	9563.	9710.	9785.	9840.	9877.	9919.	9956.	9968.	10019.	10124.	10184.	10217.	10248.
PER Q=	4.2	3.1	4.0	3.1	5.2	4.3	1.2	25.0	10.3	6.9	3.6	3.6	
AREA=	205.2	134.4	138.6	101.3	146.5	124.1	35.9	371.9	316.5	201.0	106.6	104.2	
VEL=	2.0	2.2	2.8	3.0	3.5	3.3	3.2	6.6	3.2	3.4	3.3	3.4	
DEPTH=	1.4	1.8	2.5	2.7	3.5	3.3	3.0	7.2	3.0	3.3	3.2	3.3	

STA=	10248.	10277.	10291.	10310.	10330.	10360.	10428.	10475.
PER Q=	3.6	4.4	4.4	3.8	4.1	4.9	0.3	
AREA=	100.6	86.5	97.7	90.3	111.1	165.8	27.0	
VEL=	3.5	5.0	4.4	4.1	3.6	2.9	1.0	
DEPTH=	3.5	6.1	5.1	4.5	3.7	2.5	0.6	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IOC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.042

The depressed area in the unnamed stock tank is ignored,
GR cards were modified.

7.042	11.51	1704.81	1703.17	0.00	1705.07	0.25	2.73	0.01	1701.80
9770.0	1696.9	2396.3	5676.8	641.4	407.4	1672.3	278.1	113.1	1699.70
0.30	2.65	5.88	3.39	0.080	0.065	0.080	0.000	1693.30	9694.38
0.005410	650.	512.	360.	2	13	0	0.00	798.74	10493.12

FLOW DISTRIBUTION FOR SECNO= 7.04 CWSEL= 1704.81

STA=	9694.	9815.	9897.	9944.	9969.	10028.	10044.	10065.	10096.	10163.	10203.	10235.	10262.
PER Q=	3.2	6.5	5.2	2.4	24.5	3.5	4.5	4.2	6.1	5.7	4.7	4.1	
AREA=	168.6	228.8	163.8	80.2	407.4	83.8	107.6	121.6	205.1	161.6	130.6	111.8	
VEL=	1.9	2.8	3.1	2.9	5.9	4.1	4.1	3.4	2.9	3.4	3.5	3.5	
DEPTH=	1.4	2.8	3.5	3.2	7.0	5.1	5.2	3.9	3.0	4.0	4.2	4.2	

STA=	10262.	10283.	10302.	10323.	10351.	10396.	10460.	10493.
PER Q=	3.9	3.5	3.9	4.4	5.2	4.1	0.3	
AREA=	100.2	88.2	100.5	119.0	159.8	159.3	23.3	
VEL=	3.8	3.8	3.8	3.6	3.2	2.5	1.1	
DEPTH=	4.7	4.7	4.7	4.3	3.6	2.5	0.7	

*SECNO 7.133

3265 DIVIDED FLOW

The area in the pond is ignored, GR cards were modified.

7.133	9.41	1706.91	1704.65	0.00	1707.24	0.33	2.13	0.04	1703.40
9770.0	2450.3	7243.1	76.6	1025.3	1392.7	58.9	305.0	120.5	1705.10
0.33	2.39	5.20	1.30	0.080	0.065	0.080	0.000	1697.50	9540.47
0.004059	430.	480.	440.	2	14	0	0.00	659.19	10216.48

FLOW DISTRIBUTION FOR SECNO= 7.13 CWSEL= 1706.91

STA=	9540.	9676.	9729.	9764.	9824.	9882.	9937.	9958.	10162.	10216.
PER Q=	3.2	5.2	3.4	4.1	3.9	3.7	1.6	74.1	0.8	
AREA=	169.2	187.5	121.7	168.6	160.8	154.1	63.5	1392.7	58.9	
VEL=	1.8	2.7	2.8	2.3	2.3	2.3	2.5	5.2	1.3	
DEPTH=	1.3	3.5	3.5	2.8	2.8	2.8	3.0	6.8	1.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.228

3265 *DIVIDED FLOW*

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

The area in the pond is ignored, GR cards were modified.

7.228	7.81	1708.51	1704.96	0.00	1708.69	0.18	1.40	0.05	1704.70
9770.0	1523.9	8099.9	146.1	734.8	2220.6	106.5	336.9	127.8	1706.10
0.37	2.07	3.65	1.37	0.080	0.065	0.080	0.000	1700.70	9639.62
0.002045	502.	502.	502.	3	14	0	0.00	618.80	10262.73

FLOW DISTRIBUTION FOR SECNO= 7.23 CWSEL= 1708.51

STA=	9640.	9752.	9789.	9831.	9872.	10207.	10263.
PER Q=	4.5	3.5	4.0	3.6	82.9	1.5	
AREA=	234.7	155.7	179.3	165.1	2220.6	106.5	
VEL=	1.9	2.2	2.2	2.1	3.6	1.4	
DEPTH=	2.1	4.2	4.2	4.0	6.6	1.9	

*SECNO 7.323

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.323	7.43	1711.13	1711.13	0.00	1712.74	1.61	2.61	0.71	1709.80
9770.0	4439.8	3882.6	1447.6	542.2	298.8	226.3	361.1	133.6	1706.40
0.39	8.19	12.99	6.40	0.080	0.065	0.080	0.000	1703.70	9818.21
0.029303	540.	502.	450.	0	11	0	0.00	367.51	10263.94

FLOW DISTRIBUTION FOR SECNO= 7.32 CWSEL= 1711.13

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9818.	9865.	9878.	9894.	9913.	9925.	9935.	9944.	9953.	9985.	10031.	10047.	10060.
PER Q=	4.2	6.6	5.8	6.7	5.4	6.5	5.6	3.1	1.5	39.7	6.4	4.3	
AREA=	78.5	68.4	68.9	79.7	57.6	61.0	51.1	38.0	39.1	298.8	71.5	51.8	
VEL=	5.3	9.5	8.2	8.2	9.1	10.5	10.8	7.9	3.8	13.0	8.7	8.1	
DEPTH=	1.7	5.2	4.2	4.1	4.9	6.0	6.2	4.2	1.2	6.4	4.5	4.1	

STA=	10060.	10090.	10264.
PER Q=	3.2	1.0	
AREA=	58.2	44.8	
VEL=	5.3	2.1	
DEPTH=	1.9	0.3	

*SECNO 7.417

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.55

7.417	10.68	1717.28	1714.00	0.00	1717.69	0.40	4.59	0.36	1712.50
9770.0	5526.6	3685.6	557.8	1333.8	572.7	184.6	379.0	138.0	1712.60
0.42	4.14	6.44	3.02	0.080	0.065	0.080	0.000	1706.60	9679.60
0.004504	490.	496.	500.	5	5	0	0.00	411.82	10091.42

FLOW DISTRIBUTION FOR SECNO= 7.42 CWSEL= 1717.28

STA=	9680.	9792.	9829.	9841.	9860.	9883.	9893.	9912.	9930.	9956.	9972.	10037.	10070.
PER Q=	3.7	5.1	5.0	8.2	10.1	4.4	7.0	4.7	5.4	2.9	37.7	4.4	
AREA=	180.4	151.3	97.3	156.6	191.9	83.8	142.8	110.0	139.1	80.6	572.7	135.0	
VEL=	2.0	3.3	5.0	5.1	5.1	5.1	4.8	4.2	3.8	3.6	6.4	3.2	
DEPTH=	1.6	4.1	8.0	8.3	8.4	8.4	7.5	6.2	5.3	4.8	8.9	4.1	

STA=	10070.	10091.
PER Q=	1.3	
AREA=	49.6	
VEL=	2.5	
DEPTH=	2.3	

*SECNO 7.513

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.54

7.513	9.96	1720.86	1720.47	0.00	1722.09	1.22	3.99	0.41	1716.80
9770.0	3824.4	5945.6	0.0	778.4	557.1	0.0	399.9	143.2	1725.50
0.43	4.91	10.67	0.00	0.080	0.065	0.000	0.000	1710.90	9585.83
0.015252	550.	507.	507.	4	12	0	0.00	436.83	10045.63

FLOW DISTRIBUTION FOR SECNO= 7.51 CWSEL= 1720.86

STA=	9586.	9689.	9726.	9744.	9774.	9795.	9829.	9941.	9973.	10054.
PER Q=	3.7	3.7	5.9	7.8	5.7	4.0	3.3	5.0	60.9	
AREA=	85.3	75.9	88.6	126.6	91.0	87.6	124.3	99.1	557.1	
VEL=	4.2	4.8	6.5	6.0	6.1	4.5	2.6	4.9	10.7	
DEPTH=	0.8	2.1	4.8	4.3	4.3	2.6	1.1	3.1	7.6	

*SECNO 7.587

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.48

Q changed to 9,980 cfs at C10J (just 1,050' west of I-17).

7.587	9.74	1725.34	1723.90	0.00	1725.78	0.45	3.46	0.23	1721.10
9980.0	5813.9	4145.2	20.9	1619.6	580.8	12.8	413.1	147.2	1723.20
0.45	3.59	7.14	1.64	0.080	0.065	0.080	0.000	1715.60	9350.98
0.007254	290.	391.	391.	3	9	0	0.00	694.72	10045.70

FLOW DISTRIBUTION FOR SECNO= 7.59 CWSEL= 1725.34

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9351.	9430.	9536.	9583.	9627.	9652.	9660.	9670.	9684.	9701.	9721.	9748.	9877.
PER Q=	4.0	3.4	3.6	3.3	4.1	3.5	4.1	5.3	4.8	4.2	3.2	5.0	
AREA=	150.3	151.4	120.6	111.2	100.0	59.0	71.1	95.5	96.0	94.5	89.4	216.5	
VEL=	2.6	2.3	3.0	3.0	4.0	6.0	5.8	5.6	5.0	4.5	3.5	2.3	
DEPTH=	1.9	1.4	2.5	2.6	4.0	7.6	7.0	6.6	5.7	4.8	3.2	1.7	

STA=	9877.	9916.	9939.	9952.	10034.	10046.
PER Q=	4.3	3.3	2.1	41.5	0.2	
AREA=	124.2	86.7	53.2	580.8	12.8	
VEL=	3.5	3.8	3.9	7.1	1.6	
DEPTH=	3.2	3.8	3.9	7.1	1.1	

*SECNO 7.663

7.663	8.99	1727.39	1726.32	0.00	1727.85	0.46	2.06	0.01	1722.70
9980.0	4910.1	4031.6	1038.3	1444.0	535.8	309.5	429.7	152.0	1722.90
0.47	3.40	7.53	3.35	0.070	0.055	0.070	0.000	1718.40	9500.25
0.005220	280.	401.	430.	4	14	0	0.00	661.97	10162.23

FLOW DISTRIBUTION FOR SECNO= 7.66 CWSEL= 1727.39

STA=	9500.	9560.	9588.	9613.	9686.	9742.	9787.	9812.	9832.	9856.	9882.	9945.	9974.
PER Q=	5.2	4.3	3.4	3.4	4.0	5.0	3.7	3.3	4.1	4.5	4.1	4.3	
AREA=	159.5	109.7	92.1	142.5	139.1	148.4	96.9	81.8	102.8	110.6	148.3	112.2	
VEL=	3.3	3.9	3.7	2.4	2.8	3.4	3.8	4.0	4.0	4.1	2.7	3.8	
DEPTH=	2.7	4.0	3.7	1.9	2.5	3.3	3.9	4.2	4.2	4.4	2.3	3.9	

STA=	9974.	10044.	10063.	10089.	10134.	10162.
PER Q=	40.4	3.4	3.3	3.5	0.2	
AREA=	535.8	83.3	91.2	117.9	17.1	
VEL=	7.5	4.1	3.6	3.0	1.3	
DEPTH=	7.7	4.3	3.6	2.6	0.6	

CCHV= 0.600 CEHV= 0.800
*SECNO 7.738

NC card was used - channel = .055, overbanks = .070.
Contraction and expansion values changed to .6 and .8
for I-17 southbound and northbound bridges.
Q changed to 9,440 cfs at C10H (I-17 bridges).

7.738	10.83	1729.63	1728.83	0.00	1730.35	0.72	2.29	0.21	1725.80
9440.0	2719.6	4728.9	1991.5	719.0	531.3	561.4	447.8	157.5	1725.60
0.49	3.78	8.90	3.55	0.070	0.055	0.070	0.000	1718.80	9706.91
0.006792	370.	396.	410.	2	8	0	0.00	592.07	10298.98

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.74 CWSEL= 1729.63

STA=	9707.	9770.	9798.	9838.	9873.	9934.	9968.	10032.	10059.	10079.	10108.	10146.	10194.
PER Q=	3.8	6.0	8.0	4.9	4.1	2.0	50.1	3.9	3.1	4.3	5.0	4.0	
AREA=	115.8	122.5	166.0	117.9	130.4	66.4	531.3	92.6	70.4	101.0	124.3	115.1	
VEL=	3.1	4.6	4.5	3.9	3.0	2.9	8.9	4.0	4.1	4.0	3.8	3.2	
DEPTH=	1.8	4.3	4.2	3.3	2.1	2.0	8.2	3.4	3.6	3.5	3.2	2.4	

STA=	10194.	10299.
PER Q=	0.8	
AREA=	58.0	
VEL=	1.4	
DEPTH=	0.6	

*SECNO 7.766

NC card was used - channel = .080, overbanks = .095 for dense vegetation.

7.766	11.75	1730.85	1727.59	0.00	1732.02	1.17	1.31	0.36	1729.10
9440.0	16.2	9416.1	7.7	10.1	1081.3	4.8	452.5	158.7	1729.00
0.49	1.61	8.71	1.61	0.095	0.080	0.095	0.000	1719.10	9938.06
0.012830	110.	148.	160.	2	15	0	0.00	142.70	10080.76

FLOW DISTRIBUTION FOR SECNO= 7.77 CWSEL= 1730.85

STA=	9938.	9950.	10076.	10081.
PER Q=	0.2	99.7	0.1	
AREA=	10.1	1081.3	4.8	
VEL=	1.6	8.7	1.6	
DEPTH=	0.9	8.6	0.9	

*SECNO 7.769

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 9.90

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1734.00 ELREA= 1734.00

Downstream face of the I-17 southbound bridge.
NC card was used to change XNCH to .013.
Special bridge method was used to determine the class of low flow.
4-Span Bridge, Bridge Opening is 128 ft, total pier width is 12 ft,
L = 45 ft (Incl. 100% clogging factor).

7.769	12.30	1731.80	1725.27	0.00	1732.39	0.58	0.01	0.35	1733.00
9440.0	0.0	9440.0	0.0	0.0	1539.0	0.0	453.0	158.7	1732.80
0.49	0.00	6.13	0.00	0.000	0.013	0.000	0.000	1719.50	9936.00
0.000131	17.	17.	17.	2	8	0	0.00	128.00	10064.00

FLOW DISTRIBUTION FOR SECNO= 7.77 CWSEL= 1731.80

STA= 9936. 10064.
PER Q= 100.0
AREA= 1539.0
VEL= 6.1
DEPTH= 12.0

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.90	1.60	2.60	0.00	128.00	12.00	1543.00	0.00	1719.70	1719.50

*SECNO 7.778
CLASS A LOW FLOW

3420 BRIDGE W.S.= 1731.76 BRIDGE VELOCITY= 6.69 CALCULATED CHANNEL AREA= 1399.

EGPRS	EGLWC	H3	QWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
0.00	1732.50	0.08	0.	9440.	1543.	1543.	1733.00	1735.10	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1734.10 ELREA= 1734.10

Upstream face of the I-17 southbound bridge.

7.778	12.18	1731.88	0.00	0.00	1732.50	0.62	0.12	0.00	1733.00
9440.0	0.0	9440.0	0.0	0.0	1491.5	0.0	454.6	158.9	1732.80
0.50	0.00	6.33	0.00	0.000	0.013	0.000	0.000	1719.70	9936.00
0.000144	45.	45.	45.	0	0	0	0.00	128.00	10064.00

FLOW DISTRIBUTION FOR SECNO= 7.78 CWSEL= 1731.88

STA= 9936. 10064.
PER Q= 100.0
AREA= 1491.5
VEL= 6.3
DEPTH= 11.7

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.785

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.12

Cross section between two bridges, NC card was used to change
XNCH = .080.

7.785	11.25	1731.85	1728.00	0.00	1732.72	0.87	0.02	0.20	1734.70
9440.0	0.0	9440.0	0.0	0.0	1260.6	0.0	455.8	159.0	1734.40
0.50	0.00	7.49	0.00	0.000	0.080	0.000	0.000	1720.60	9928.06
0.009925	38.	38.	38.	2	14	0	0.00	150.37	10078.43

FLOW DISTRIBUTION FOR SECNO= 7.78 CWSEL= 1731.85

STA= 9928. 10085.
PER Q= 100.0
AREA= 1260.6
VEL= 7.5
DEPTH= 8.4

*SECNO 7.792

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.53

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1738.60 ELREA= 1738.60

Downstream face of the I-17 northbound bridge.
NC card was used to change XNCH to .013.
Special bridge method was used to determine the class of low flow.
4-Span Bridge, Bridge Opening is 122 ft, total pier width is 12 ft,
L = 44 ft (Incl. 100% clogging factor).

7.792	9.67	1731.84	1728.22	0.00	1732.91	1.07	0.03	0.16	1738.20
9440.0	0.0	9440.0	0.0	0.0	1134.9	0.0	456.7	159.1	1737.80
0.50	0.00	8.32	0.00	0.000	0.013	0.000	0.000	1722.17	9939.00
0.000325	35.	35.	35.	2	11	0	0.00	122.00	10061.01

FLOW DISTRIBUTION FOR SECNO= 7.79 CWSEL= 1731.84

STA= 9939. 10061.
PER Q= 100.0
AREA= 1134.9
VEL= 8.3
DEPTH= 9.3

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.90	1.60	2.60	0.00	122.00	12.00	1646.00	0.00	1722.94	1722.22

*SECNO 7.800
CLASS A LOW FLOW

3420 BRIDGE W.S.= 1731.86 BRIDGE VELOCITY= 9.25 CALCULATED CHANNEL AREA= 981.

EGPRS	EGLWC	H3	QWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
0.00	1733.39	0.27	0.	9440.	1646.	1646.	1737.90	1739.20	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1738.70 ELREA= 1738.70

Upstream face of the I-17 northbound bridge.

7.800	9.17	1732.11	0.00	0.00	1733.39	1.28	0.48	0.00	1738.20
9440.0	0.0	9440.0	0.0	0.0	1038.5	0.0	457.8	159.2	1737.80
0.50	0.00	9.09	0.00	0.000	0.013	0.000	0.000	1722.94	9939.00
0.000431	44.	44.	44.	0	0	0	0.00	122.00	10061.01

FLOW DISTRIBUTION FOR SECNO= 7.80 CWSEL= 1732.11

STA= 9939. 10061.
PER Q= 100.0
AREA= 1038.5
VEL= 9.1
DEPTH= 8.5

CCHV= 0.300 CEHV= 0.500
*SECNO 7.812

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.25

The confluence with Stream No. 7 & 8.
The depressed area on right overbank is ineffective,

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        GR cards were modified to ignore it. ET card was used for contraction.
        NC card was used - channel = .075, overbanks = .095.
        Contraction and expansion values changed to .3 and .5
    7.812      9.91   1733.11   1729.34      0.00   1733.68      0.57      0.07      0.22   1731.10
   9440.0       6.2    9433.8       0.0       5.1    1562.2       0.0     459.8     159.5   1732.80
     0.50      1.23      6.04      0.00     0.095     0.075     0.000     0.000   1723.20   9944.36
 0.006714       64.       64.       64.         3        14         0      0.00    219.54  10163.90


FLOW DISTRIBUTION FOR SECNO=      7.81          CWSEL=   1733.11

STA=    9944.    9949.   10164.
  PER Q=      0.1     99.9
   AREA=      5.1   1562.2
    VEL=      1.2      6.0
  DEPTH=      1.0      7.3

CCHV=    0.100 CEHV=    0.300
1490 NH CARD USED
*SECNO 7.872
        Contraction and expansion values changed to .1 and .3
        NH cards were used for SECNO 7.872 to SECNO 8.016.
        ET card (Fields 7 & 8) was used for bridge contraction.
    7.872      9.56   1735.26   1732.78      0.00   1735.46      0.21      1.75      0.04   1732.60
   9440.0      10.3    3281.0    6148.7       8.6     728.6    1967.4     475.6     162.6   1731.60
     0.53      1.20      4.50      3.13     0.095     0.075     0.083     0.000   1725.70   9967.05
 0.004507      280.      317.      330.         3        14         0      0.00    626.85  10593.90


FLOW DISTRIBUTION FOR SECNO=      7.87          CWSEL=   1735.26

STA=    9967.    9974.   10089.   10130.   10171.   10202.   10227.   10269.   10346.   10413.   10461.   10478.   10487.
  PER Q=      0.1     34.8      4.4      4.8      4.0      3.7      3.7      3.2      5.5      5.4      3.0      5.2
   AREA=      8.6    728.6    161.4    167.9    135.3    120.0    145.2    167.1    222.7    192.7     77.1     75.1
    VEL=      1.2      4.5      2.6      2.7      2.8      2.9      2.4      1.8      2.4      2.6      3.7      6.6
  DEPTH=      1.3      6.3      3.9      4.2      4.4      4.7      3.5      2.2      3.3      4.0      4.7      7.9

STA=   10487.   10494.   10501.   10508.   10540.   10574.   10594.
  PER Q=      4.1      4.3      3.4      3.8      3.9      2.5
   AREA=     55.1     59.7     52.6    108.7    138.5     88.3
    VEL=      7.0      6.9      6.1      3.3      2.7      2.7
  DEPTH=      8.6      8.4      7.2      3.4      4.0      4.4

1490 NH CARD USED
*SECNO 7.921
    7.921      9.61   1736.01   1733.56      0.00   1736.17      0.16      0.70      0.01   1730.60
   9440.0    1749.2    1190.2    6500.6     754.2     281.1    2062.0     486.9     165.2   1732.30
     0.54      2.32      4.23      3.15     0.095     0.075     0.080     0.000   1726.40   9776.97
 0.003725      310.      259.      120.         2        13         0      0.00    739.33  10516.30
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.92 CWSEL= 1736.01

STA=	9777.	9854.	9891.	9941.	9987.	10029.	10066.	10096.	10144.	10185.	10251.	10330.	10381.
PER Q=	5.1	4.3	4.7	4.5	12.6	3.4	3.5	5.2	4.6	3.1	7.3	3.7	
AREA=	224.7	160.7	189.9	178.9	281.1	138.8	131.0	197.6	174.6	163.5	296.2	167.3	
VEL=	2.1	2.5	2.3	2.4	4.2	2.3	2.5	2.5	2.5	1.8	2.3	2.1	
DEPTH=	2.9	4.3	3.8	3.9	6.7	3.8	4.3	4.2	4.2	2.5	3.8	3.3	

STA=	10381.	10408.	10418.	10426.	10435.	10448.	10491.	10516.
PER Q=	9.3	6.3	6.0	4.8	3.9	4.6	3.2	
AREA=	169.0	90.6	83.2	74.0	76.2	176.1	124.0	
VEL=	5.2	6.5	6.8	6.1	4.8	2.5	2.4	
DEPTH=	6.3	9.1	9.6	8.4	5.9	4.1	4.9	

1490 NH CARD USED
*SECNO 8.016

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.39

Q changed to 6,220 cfs at the confluence with Stream No. 4.
Contraction and expansion values changed to .1 and .3

8.016	8.57	1738.47	1737.69	0.00	1738.83	0.36	2.60	0.06	1734.90
6220.0	2810.1	1815.4	1594.5	774.7	253.8	512.0	512.8	173.0	1734.90
0.57	3.63	7.15	3.11	0.080	0.075	0.095	0.000	1729.90	9438.17
0.010712	510.	502.	470.	2	14	0	0.00	635.38	10230.51

FLOW DISTRIBUTION FOR SECNO= 8.02 CWSEL= 1738.47

STA=	9438.	9527.	9576.	9631.	9902.	9923.	9946.	9963.	9981.	10017.	10048.	10080.	10136.
PER Q=	5.2	4.0	4.4	6.9	6.2	8.1	5.3	5.0	29.2	6.5	6.2	7.0	
AREA=	127.1	88.1	97.5	146.6	81.8	99.7	67.3	66.7	253.8	107.0	106.8	143.5	
VEL=	2.5	2.8	2.8	2.9	4.7	5.1	4.9	4.6	7.2	3.8	3.6	3.0	
DEPTH=	1.4	1.8	1.8	0.5	3.9	4.3	4.1	3.7	6.9	3.5	3.3	2.6	

STA=	10136.	10185.	10231.
PER Q=	4.5	1.5	
AREA=	104.4	50.2	
VEL=	2.7	1.8	
DEPTH=	2.1	1.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 8.111

Q is 6,220 cfs at the confluence with Stream No. 4.

NC card was used - channel = .075, overbanks = .095

8.111	10.41	1742.60	1740.67	0.00	1742.90	0.30	4.06	0.01	1736.60
6220.0	3464.7	1730.1	1025.2	1113.9	267.6	295.3	531.3	179.4	1736.60
0.61	3.11	6.46	3.47	0.095	0.075	0.095	0.000	1732.20	9615.82
0.006327	502.	502.	502.	3	6	0	0.00	477.31	10093.13

FLOW DISTRIBUTION FOR SECNO= 8.11 CWSEL= 1742.60

STA=	9616.	9758.	9794.	9819.	9848.	9882.	9913.	9948.	9974.	9982.	10013.	10034.	10052.
PER Q=	3.8	5.2	5.2	5.2	5.3	6.4	12.0	9.7	2.9	27.8	8.0	5.5	
AREA=	155.3	118.3	102.2	107.8	116.1	126.5	192.1	149.8	45.8	267.6	124.9	92.1	
VEL=	1.5	2.8	3.2	3.0	2.8	3.2	3.9	4.0	3.9	6.5	4.0	3.7	
DEPTH=	1.1	3.3	4.1	3.7	3.4	4.1	5.5	5.8	5.7	8.7	5.8	5.2	

STA=	10052.	10093.
PER Q=	2.9	
AREA=	78.3	
VEL=	2.3	
DEPTH=	1.9	

*SECNO 8.187

8.187	8.81	1745.51	1744.21	0.00	1745.87	0.36	2.95	0.02	1741.50
6220.0	3366.4	2822.4	31.2	1096.7	447.0	18.7	546.2	183.7	1743.00
0.63	3.07	6.31	1.67	0.095	0.075	0.095	0.000	1736.70	9589.24
0.008645	401.	401.	401.	2	13	0	0.00	462.46	10051.70

FLOW DISTRIBUTION FOR SECNO= 8.19 CWSEL= 1745.51

STA=	9589.	9602.	9631.	9641.	9661.	9727.	9780.	9834.	9886.	9935.	9967.	10037.	10052.
PER Q=	0.1	1.5	1.0	2.2	8.1	7.9	7.5	7.6	10.3	7.9	45.4	0.5	
AREA=	7.1	46.8	24.3	51.1	177.6	160.9	157.4	155.3	184.1	132.1	447.0	18.7	
VEL=	1.0	2.0	2.6	2.7	2.8	3.1	3.0	3.0	3.5	3.7	6.3	1.7	
DEPTH=	0.6	1.6	2.5	2.6	2.7	3.1	2.9	3.0	3.7	4.1	6.4	1.3	

*SECNO 8.278

8.278	9.72	1748.92	1747.61	0.00	1749.14	0.22	3.26	0.01	1744.90
6220.0	1714.1	2236.7	2269.2	781.8	413.3	896.3	565.6	190.1	1745.60
0.67	2.19	5.41	2.53	0.095	0.075	0.095	0.000	1739.20	9642.51
0.005783	430.	480.	510.	2	10	0	0.00	743.56	10386.07

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.28 CWSEL= 1748.92

STA=	9643.	9720.	9748.	9794.	9835.	9870.	9934.	9969.	9975.	10034.	10061.	10077.	10101.
PER Q=	4.7	3.2	4.5	3.9	3.0	4.0	3.3	0.9	36.0	5.5	5.6	4.9	
AREA=	142.0	81.7	122.7	107.3	87.1	129.8	90.0	21.2	413.3	110.6	91.8	99.2	
VEL=	2.1	2.4	2.3	2.3	2.2	1.9	2.3	2.6	5.4	3.1	3.8	3.1	
DEPTH=	1.8	2.9	2.7	2.7	2.5	2.0	2.6	3.3	7.0	4.1	5.7	4.1	

STA=	10101.	10144.	10212.	10262.	10304.	10386.
PER Q=	5.1	5.7	5.2	3.3	1.3	
AREA=	128.3	164.5	139.2	97.1	65.6	
VEL=	2.5	2.2	2.3	2.1	1.2	
DEPTH=	3.0	2.4	2.8	2.3	0.8	

*SECNO 8.373

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.61

Q changed to 4,480 cfs at the confluence with Stream No. 3.
NC card was used - channel = .065, overbanks = .080

8.373	7.32	1752.12	1751.33	0.00	1752.46	0.35	3.29	0.04	1748.50
4480.0	700.6	2089.1	1690.3	228.2	336.2	609.5	584.1	197.3	1749.00
0.70	3.07	6.21	2.77	0.080	0.065	0.080	0.000	1744.80	9654.08
0.008167	510.	502.	480.	2	18	0	0.00	534.75	10340.47

FLOW DISTRIBUTION FOR SECNO= 8.37 CWSEL= 1752.12

STA=	9654.	9930.	9956.	10020.	10053.	10090.	10106.	10130.	10174.	10216.	10269.	10340.
PER Q=	8.3	7.4	46.6	6.4	5.3	3.4	5.0	5.5	4.3	5.4	2.3	
AREA=	140.6	87.5	336.2	88.8	82.5	45.9	67.3	90.5	77.0	97.0	60.6	
VEL=	2.6	3.8	6.2	3.2	2.9	3.3	3.3	2.7	2.5	2.5	1.7	
DEPTH=	0.5	3.4	5.3	2.7	2.3	2.8	2.8	2.1	1.8	1.8	0.9	

*SECNO 8.485

Q changed to 3,650 cfs at the confluence with Stream No. 2.

8.485	6.57	1756.87	1756.02	0.00	1757.18	0.30	4.71	0.00	1754.10
3650.0	751.2	1760.2	1138.6	299.0	310.1	384.1	598.4	204.0	1754.90
0.74	2.51	5.68	2.96	0.080	0.065	0.080	0.000	1750.30	9786.34
0.008132	500.	591.	600.	4	14	0	0.00	493.64	10279.98

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.48 CWSEL= 1756.87

STA=	9786.	9868.	9919.	9959.	9976.	10043.	10071.	10085.	10112.	10156.	10280.
PER Q=	3.0	7.6	6.7	3.3	48.2	5.2	5.2	11.4	6.4	2.9	
AREA=	68.3	104.1	86.4	40.1	310.1	65.2	48.6	103.0	87.9	79.3	
VEL=	1.6	2.7	2.8	3.0	5.7	2.9	3.9	4.1	2.7	1.3	
DEPTH=	0.8	2.0	2.2	2.4	4.6	2.3	3.6	3.8	2.0	0.6	

1490 NH CARD USED
*SECNO 8.574
NH cards were used from SECNO 8.574 to SECNO 9.304.

8.574	5.36	1760.56	1759.73	0.00	1760.77	0.21	3.58	0.01	1758.20
3650.0	21.9	1127.4	2500.6	11.9	218.8	892.1	608.9	209.3	1760.00
0.77	1.84	5.15	2.80	0.080	0.065	0.077	0.000	1755.20	9961.41
0.008212	500.	470.	400.	2	18	0	0.00	603.35	10564.76

FLOW DISTRIBUTION FOR SECNO= 8.57 CWSEL= 1760.56

STA=	9961.	9972.	10027.	10124.	10148.	10191.	10269.	10281.	10311.	10350.	10391.	10434.	10466.
PER Q=	0.6	30.9	3.7	4.6	4.3	4.2	5.3	13.7	6.4	4.3	6.3	6.4	
AREA=	11.9	218.8	84.7	56.3	67.9	79.0	42.9	110.0	83.6	67.2	86.1	77.2	
VEL=	1.8	5.2	1.6	3.0	2.3	2.0	4.5	4.6	2.8	2.4	2.7	3.0	
DEPTH=	1.2	4.0	0.9	2.4	1.6	1.0	3.6	3.7	2.2	1.7	2.0	2.4	

STA=	10466.	10517.	10565.
PER Q=	7.8	1.4	
AREA=	104.6	32.4	
VEL=	2.7	1.6	
DEPTH=	2.1	0.7	

1490 NH CARD USED
*SECNO 8.670

8.670	6.96	1764.06	1763.11	0.00	1764.22	0.16	3.45	0.01	1760.00
3650.0	414.4	694.7	2540.9	147.3	129.6	1096.5	622.8	217.1	1761.00
0.82	2.81	5.36	2.32	0.080	0.065	0.079	0.000	1757.10	9933.55
0.006138	507.	507.	480.	3	11	0	0.00	803.26	10736.81

FLOW DISTRIBUTION FOR SECNO= 8.67 CWSEL= 1764.06

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9934.	9967.	9984.	9992.	10016.	10044.	10202.	10273.	10375.	10406.	10438.	10450.	10482.
PER Q=	4.9	3.6	2.8	19.0	5.2	6.6	5.0	6.1	4.4	4.6	3.6	8.7	
AREA=	70.8	45.4	31.0	129.6	70.6	138.5	97.5	124.9	67.1	68.7	38.2	99.3	
VEL=	2.5	2.9	3.4	5.4	2.7	1.7	1.9	1.8	2.4	2.4	3.4	3.2	
DEPTH=	2.1	2.8	3.5	5.4	2.5	0.9	1.4	1.2	2.1	2.2	3.2	3.1	

STA=	10482.	10505.	10540.	10583.	10613.	10737.
PER Q=	7.0	6.5	6.3	3.1	2.6	
AREA=	79.1	87.8	93.9	52.6	78.3	
VEL=	3.2	2.7	2.4	2.1	1.2	
DEPTH=	3.3	2.5	2.2	1.8	0.6	

1490 NH CARD USED
*SECNO 8.763

8.763	6.51	1767.51	1766.80	0.00	1767.78	0.27	3.53	0.03	1765.20
3650.0	174.7	852.7	2622.6	73.7	136.5	789.8	635.1	224.2	1764.30
0.85	2.37	6.24	3.32	0.080	0.065	0.078	0.000	1761.00	9935.32
0.010028	510.	491.	440.	0	10	0	0.00	569.19	10504.51

FLOW DISTRIBUTION FOR SECNO= 8.76 CWSEL= 1767.51

STA=	9935.	9989.	10018.	10038.	10067.	10112.	10192.	10218.	10226.	10234.	10246.	10279.	10314.
PER Q=	4.8	23.4	5.8	6.2	3.7	12.5	10.8	5.2	6.5	5.8	6.6	4.2	
AREA=	73.7	136.5	57.3	68.4	56.7	146.9	90.8	34.1	38.8	43.0	74.8	58.9	
VEL=	2.4	6.2	3.7	3.3	2.4	3.1	4.3	5.5	6.1	4.9	3.2	2.6	
DEPTH=	1.4	4.7	2.8	2.4	1.3	1.8	3.6	4.3	4.9	3.6	2.3	1.7	

STA=	10314.	10505.
PER Q=	4.6	
AREA=	120.0	
VEL=	1.4	
DEPTH=	0.6	

1490 NH CARD USED
*SECNO 8.853

3265 DIVIDED FLOW

8.853	5.77	1771.77	1770.78	0.00	1771.94	0.17	4.15	0.01	1767.80
3650.0	1065.9	796.3	1787.7	337.4	157.8	762.0	648.0	231.5	1769.20
0.89	3.16	5.05	2.35	0.080	0.065	0.078	0.000	1766.00	9865.33
0.007080	440.	475.	520.	4	13	0	0.00	691.87	10644.40

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.85 CWSEL= 1771.77

STA=	9865.	9911.	9942.	9969.	9993.	10029.	10058.	10107.	10279.	10303.	10321.	10376.	10501.
PER Q=	5.3	7.9	7.4	8.6	21.8	5.6	7.9	3.3	4.8	4.9	3.4	7.4	
AREA=	78.9	90.5	83.0	85.0	157.8	71.8	109.1	78.1	56.1	50.9	67.8	139.2	
VEL=	2.4	3.2	3.3	3.7	5.0	2.9	2.7	1.5	3.1	3.5	1.8	1.9	
DEPTH=	1.7	2.9	3.0	3.6	4.4	2.5	2.2	0.5	2.3	2.8	1.2	1.1	

STA=	10501.	10538.	10606.	10644.
PER Q=	7.2	4.1	0.3	
AREA=	91.6	82.6	14.7	
VEL=	2.9	1.8	0.8	
DEPTH=	2.5	1.2	0.4	

1490 NH CARD USED
*SECNO 8.939

3265 DIVIDED FLOW

8.939	7.09	1775.19	1774.81	0.00	1775.45	0.26	3.49	0.03	1772.80
3650.0	17.5	1215.0	2417.5	9.1	192.4	1017.0	660.4	239.5	1771.90
0.93	1.92	6.31	2.38	0.080	0.065	0.079	0.000	1768.10	9974.50
0.009009	440.	454.	430.	3	12	0	0.00	916.29	10904.33

FLOW DISTRIBUTION FOR SECNO= 8.94 CWSEL= 1775.19

STA=	9974.	9982.	10020.	10058.	10100.	10151.	10237.	10277.	10314.	10507.	10619.	10643.	10687.
PER Q=	0.5	33.3	12.6	8.8	5.9	4.3	4.9	4.0	3.2	3.2	3.7	5.1	
AREA=	9.1	192.4	120.3	101.4	86.4	87.4	70.7	59.6	94.9	67.5	43.9	74.6	
VEL=	1.9	6.3	3.8	3.2	2.5	1.8	2.6	2.5	1.2	1.7	3.1	2.5	
DEPTH=	1.2	5.1	3.2	2.4	1.7	1.0	1.7	1.6	0.5	0.6	1.9	1.7	

STA=	10687.	10732.	10858.	10904.
PER Q=	4.5	4.6	1.5	
AREA=	69.1	106.2	35.0	
VEL=	2.4	1.6	1.6	
DEPTH=	1.5	0.8	0.8	

1490 NH CARD USED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.021

3265 DIVIDED FLOW

Q changed to 2,770 cfs at the confluence with Stream No. 1.

9.021	4.65	1778.55	1777.92	0.00	1778.73	0.18	3.27	0.01	1776.90
2770.0	10.8	816.0	1943.3	6.7	169.6	745.9	668.6	245.2	1776.90
0.96	1.60	4.81	2.61	0.080	0.065	0.078	0.000	1773.90	9972.94
0.009832	510.	433.	310.	0	11	0	0.00	647.26	10692.97

FLOW DISTRIBUTION FOR SECNO= 9.02 CWSEL= 1778.55

STA=	9973.	9981.	10036.	10102.	10146.	10182.	10207.	10243.	10483.	10511.	10522.	10551.	10618.
PER Q=	0.4	29.5	14.5	6.8	3.1	3.2	3.1	3.3	7.5	8.0	5.4	6.1	
AREA=	6.7	169.6	135.1	72.8	42.3	36.7	41.9	73.9	58.8	43.1	54.2	80.7	
VEL=	1.6	4.8	3.0	2.6	2.0	2.4	2.0	1.2	3.6	5.1	2.8	2.1	
DEPTH=	0.8	3.1	2.0	1.6	1.1	1.5	1.1	0.3	2.1	3.8	1.8	1.2	

STA=	10618.	10652.	10672.	10693.
PER Q=	3.3	4.1	1.9	
AREA=	42.6	38.6	25.1	
VEL=	2.1	2.9	2.0	
DEPTH=	1.2	2.0	1.2	

1490 NH CARD USED
*SECNO 9.114

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9824.3 10611.0 TYPE= 1 TARGET= 786.700
ET card (Fields 7 & 8) was used to model the ineffective flow area
on left overbank.

9.114	6.28	1783.78	1783.33	0.00	1784.11	0.33	5.34	0.04	1780.60
2770.0	984.3	1072.8	712.9	283.2	170.4	306.4	677.5	252.2	1782.10
0.99	3.48	6.29	2.33	0.080	0.065	0.080	0.000	1777.50	9824.30
0.013592	400.	491.	470.	4	11	0	0.00	661.19	10535.16

FLOW DISTRIBUTION FOR SECNO= 9.11 CWSEL= 1783.78

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9824.	9898.	9946.	9981.	10027.	10075.	10120.	10167.	10355.	10535.
PER Q=	7.6	12.2	15.7	38.7	9.1	7.9	3.8	3.4	1.5	
AREA=	86.8	97.2	99.2	170.4	82.3	72.9	45.3	68.2	37.7	
VEL=	2.4	3.5	4.4	6.3	3.1	3.0	2.3	1.4	1.1	
DEPTH=	1.2	2.0	2.9	3.7	1.7	1.6	1.0	0.4	0.2	

1490 NH CARD USED
*SECNO 9.210

3265 DIVIDED FLOW

9.210	3.88	1788.48	1787.51	0.00	1788.58	0.10	4.44	0.02	1788.00
2770.0	31.6	199.0	2539.4	44.4	75.6	1021.7	687.0	259.7	1787.90
1.04	0.71	2.63	2.49	0.080	0.063	0.079	0.000	1784.60	9801.27
0.007544	530.	507.	400.	5	13	0	0.00	835.85	10679.63

FLOW DISTRIBUTION FOR SECNO= 9.21 CWSEL= 1788.48

STA=	9801.	9974.	9989.	10026.	10198.	10246.	10285.	10331.	10369.	10417.	10447.	10483.	10511.
PER Q=	1.1	0.6	6.6	8.5	9.2	5.3	6.5	5.6	6.7	3.9	6.8	8.3	
AREA=	44.4	11.8	63.7	126.5	98.1	64.7	78.7	66.1	80.9	48.4	68.5	72.2	
VEL=	0.7	1.4	2.9	1.9	2.6	2.3	2.3	2.3	2.3	2.3	2.7	3.2	
DEPTH=	0.3	0.8	1.8	0.7	2.0	1.7	1.7	1.7	1.7	1.6	1.9	2.6	

STA=	10511.	10546.	10562.	10588.	10680.
PER Q=	7.0	6.1	9.6	8.2	
AREA=	73.8	49.7	78.6	115.6	
VEL=	2.6	3.4	3.4	2.0	
DEPTH=	2.1	3.1	3.0	1.3	

1490 NH CARD USED
*SECNO 9.304

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.56

9.304	3.85	1794.85	1794.61	0.00	1795.14	0.29	6.51	0.06	1793.60
2770.0	1530.7	682.8	556.5	374.3	117.6	212.7	698.4	269.6	1793.70
1.07	4.09	5.81	2.62	0.080	0.065	0.075	0.000	1791.00	9622.22
0.024125	430.	496.	580.	3	11	0	0.00	798.69	10533.87

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EQ	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.30 CWSEL= 1794.85

STA=	9622.	9693.	9714.	9738.	9744.	9766.	9881.	9927.	9959.	10015.	10286.	10311.	10442.
PER Q=	6.4	11.6	10.6	3.6	8.7	3.0	5.2	6.2	24.6	4.5	8.0	4.0	
AREA=	53.7	57.5	57.3	16.5	49.0	45.1	48.4	46.7	117.6	65.8	45.2	56.2	
VEL=	3.3	5.6	5.1	6.0	4.9	1.9	3.0	3.7	5.8	1.9	4.9	2.0	
DEPTH=	0.8	2.7	2.3	3.0	2.3	0.4	1.0	1.5	2.1	0.2	1.9	0.4	

STA=	10442.	10534.
PER Q=	3.5	
AREA=	45.5	
VEL=	2.1	
DEPTH=	0.5	

*SECNO 9.400

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.68

NC card was used - channel = .065, overbanks = .080

9.400	3.99	1801.79	1800.90	0.00	1801.93	0.13	6.77	0.02	1800.00
2770.0	1914.8	400.5	454.7	660.0	106.0	212.7	708.1	277.3	1800.40
1.12	2.90	3.78	2.14	0.080	0.065	0.080	0.000	1797.80	9656.49
0.008576	500.	507.	507.	6	14	0	0.00	540.46	10478.11

FLOW DISTRIBUTION FOR SECNO= 9.40 CWSEL= 1801.79

STA=	9656.	9706.	9752.	9788.	9827.	9868.	9910.	9946.	9968.	9983.	10027.	10067.	10107.
PER Q=	4.9	16.4	13.2	10.6	6.7	4.6	4.9	4.6	3.1	14.5	5.2	5.4	
AREA=	63.0	131.7	104.8	94.1	73.2	58.8	58.0	45.5	30.8	106.0	63.0	63.3	
VEL=	2.2	3.5	3.5	3.1	2.5	2.1	2.3	2.8	2.8	3.8	2.3	2.3	
DEPTH=	1.3	2.8	2.9	2.4	1.8	1.4	1.6	2.1	2.1	2.4	1.5	1.6	

STA=	10107.	10155.	10478.
PER Q=	4.9	1.0	
AREA=	64.1	22.2	
VEL=	2.1	1.2	
DEPTH=	1.3	0.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.492

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.65

NC card was used - channel = .070, overbanks = .090

9.492	3.69	1807.29	1806.71	0.00	1807.56	0.26	5.59	0.04	1805.70
2770.0	1657.2	497.2	615.6	445.6	85.4	183.8	716.7	282.4	1805.10
1.15	3.72	5.82	3.35	0.090	0.070	0.090	0.000	1803.60	9695.71
0.020596	400.	486.	540.	4	16	0	0.00	457.53	10153.23

FLOW DISTRIBUTION FOR SECNO= 9.49 CWSEL= 1807.29

STA=	9696.	9807.	9845.	9863.	9871.	9890.	9926.	9944.	9966.	9990.	10022.	10068.	10130.
PER Q=	3.9	8.1	9.4	5.2	9.1	10.1	5.7	4.7	3.6	17.9	13.9	8.1	
AREA=	61.6	65.9	53.5	26.5	53.4	73.4	39.4	37.7	34.2	85.4	98.0	80.2	
VEL=	1.7	3.4	4.9	5.4	4.7	3.8	4.0	3.4	2.9	5.8	3.9	2.8	
DEPTH=	0.6	1.7	2.9	3.5	2.8	2.0	2.2	1.7	1.4	2.7	2.1	1.3	

STA=	10130.	10153.
PER Q=	0.2	
AREA=	5.6	
VEL=	0.9	
DEPTH=	0.2	

*SECNO 9.586

3265 DIVIDED FLOW

Q changed to 1,840 cfs at future 29th Avenue.

9.586	5.41	1813.81	1812.75	0.00	1813.98	0.17	6.42	0.01	1811.70
1840.0	560.3	869.8	409.9	265.0	204.0	199.6	724.8	287.3	1811.30
1.20	2.11	4.26	2.05	0.090	0.070	0.090	0.000	1808.40	9818.25
0.007125	550.	496.	450.	4	11	0	0.00	375.97	10296.78

FLOW DISTRIBUTION FOR SECNO= 9.59 CWSEL= 1813.81

STA=	9818.	9832.	9895.	9954.	9979.	10034.	10081.	10137.	10156.	10287.	10297.
PER Q=	0.0	7.4	16.9	6.1	47.3	14.9	7.1	0.1	0.2	0.1	
AREA=	1.4	81.8	131.6	50.1	204.0	110.9	76.1	4.7	5.8	2.0	
VEL=	0.3	1.7	2.4	2.3	4.3	2.5	1.7	0.6	0.5	0.5	
DEPTH=	0.1	1.3	2.2	2.1	3.7	2.4	1.4	0.3	0.0	0.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.682

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.54

9.682	3.57	1819.77	1819.31	0.00	1820.04	0.26	6.03	0.03	1818.00
1840.0	56.9	807.3	975.8	23.0	162.5	290.3	731.4	291.5	1818.70
1.23	2.48	4.97	3.36	0.090	0.070	0.090	0.000	1816.20	9904.67
0.024132	480.	507.	510.	4	14	0	0.00	349.69	10254.36

FLOW DISTRIBUTION FOR SECNO= 9.68 CWSEL= 1819.77

STA=	9905.	9933.	10021.	10064.	10098.	10118.	10144.	10158.	10169.	10184.	10218.	10254.
PER Q=	3.1	43.9	5.8	5.9	5.0	3.8	4.2	11.1	8.8	7.0	1.5	
AREA=	23.0	162.5	42.4	37.8	28.3	27.2	21.7	37.0	35.6	42.5	17.9	
VEL=	2.5	5.0	2.5	2.9	3.2	2.6	3.5	5.5	4.5	3.0	1.6	
DEPTH=	0.8	1.9	1.0	1.1	1.4	1.0	1.6	3.2	2.4	1.3	0.5	

*SECNO 9.776

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.45

9.776	3.76	1827.76	1827.01	0.00	1827.87	0.12	7.82	0.01	1827.10
1840.0	287.2	350.4	1202.4	152.1	98.0	456.2	738.0	296.4	1826.40
1.28	1.89	3.58	2.64	0.090	0.070	0.090	0.000	1824.00	9769.98
0.011495	490.	496.	480.	6	10	0	0.00	538.37	10308.34

FLOW DISTRIBUTION FOR SECNO= 9.78 CWSEL= 1827.76

STA=	9770.	9809.	9842.	9867.	9966.	10016.	10073.	10088.	10101.	10119.	10135.	10157.	10163.
PER Q=	3.1	6.4	3.6	2.6	19.0	5.1	7.7	4.9	3.3	5.1	3.9	5.1	
AREA=	32.4	50.3	31.5	37.9	98.0	54.5	41.3	29.8	26.2	33.4	29.6	22.8	
VEL=	1.7	2.3	2.1	1.3	3.6	1.7	3.4	3.0	2.3	2.8	2.4	4.1	
DEPTH=	0.8	1.5	1.3	0.4	2.0	1.0	2.7	2.3	1.5	2.1	1.3	3.6	

STA=	10163.	10191.	10233.	10270.	10308.
PER Q=	13.6	7.5	6.7	2.4	
AREA=	74.1	60.4	54.3	29.9	
VEL=	3.4	2.3	2.3	1.5	
DEPTH=	2.7	1.5	1.5	0.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.872

9.872	4.73	1834.43	1834.09	0.00	1834.76	0.33	6.82	0.06	1832.50
1840.0	22.1	597.9	1220.0	10.6	87.4	414.4	744.8	301.5	1831.00
1.31	2.09	6.84	2.94	0.090	0.070	0.090	0.000	1829.70	9977.45
0.017245	510.	507.	480.	4	11	0	0.00	370.85	10348.30

FLOW DISTRIBUTION FOR SECNO= 9.87 CWSEL= 1834.43

STA=	9977.	9988.	10011.	10025.	10077.	10164.	10181.	10219.	10277.	10291.	10309.	10335.	10348.
PER Q=	1.2	32.5	5.7	3.2	9.2	10.9	18.0	3.5	3.4	5.0	7.2	0.2
AREA=	10.6	87.4	29.9	35.4	77.2	46.9	87.1	38.1	22.0	29.7	43.9	4.1
VEL=	2.1	6.8	3.5	1.7	2.2	4.3	3.8	1.7	2.8	3.1	3.0	1.0
DEPTH=	1.0	4.0	2.1	0.7	0.9	2.8	2.3	0.7	1.5	1.7	1.7	0.3

*SECNO 9.966

9.966	6.26	1842.86	1842.51	0.00	1843.29	0.43	8.50	0.03	1843.70
1840.0	0.0	933.2	906.8	0.0	136.6	308.4	750.5	305.1	1840.20
1.34	0.00	6.83	2.94	0.000	0.070	0.090	0.000	1836.60	9990.04
0.016144	470.	496.	520.	4	8	0	0.00	231.33	10221.37

FLOW DISTRIBUTION FOR SECNO= 9.97 CWSEL= 1842.86

STA=	9990.	10022.	10065.	10101.	10135.	10184.	10221.
PER Q=	50.7	15.2	8.2	10.7	12.9	2.3	
AREA=	136.6	85.1	54.7	61.9	81.0	25.8	
VEL=	6.8	3.3	2.8	3.2	2.9	1.6	
DEPTH=	4.3	2.0	1.5	1.9	1.7	0.7	

*SECNO 10.058

10.058	5.20	1850.90	1850.47	0.00	1851.23	0.33	7.93	0.01	1849.50
1840.0	855.8	984.2	0.0	313.9	170.3	0.0	755.5	308.0	1852.00
1.37	2.73	5.78	0.00	0.090	0.070	0.000	0.000	1845.70	9723.57
0.017240	490.	486.	440.	4	13	0	0.00	308.93	10032.50

FLOW DISTRIBUTION FOR SECNO= 10.06 CWSEL= 1850.90

STA=	9724.	9748.	9789.	9813.	9829.	9853.	9909.	9946.	9976.	10039.
PER Q=	2.5	5.3	0.9	5.6	12.6	10.4	4.4	4.8	53.5	
AREA=	21.8	43.4	12.2	30.5	58.9	73.8	37.4	35.9	170.3	
VEL=	2.1	2.2	1.4	3.4	3.9	2.6	2.2	2.5	5.8	
DEPTH=	0.9	1.1	0.5	2.0	2.5	1.3	1.0	1.2	3.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 10.151

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.62

10.151	3.59	1855.89	1854.70	0.00	1856.05	0.15	4.79	0.02	1854.80
1840.0	201.8	1612.5	25.7	167.9	485.1	17.7	761.7	311.8	1853.60
1.41	1.20	3.32	1.46	0.090	0.070	0.090	0.000	1852.30	9666.33
0.006583	440.	491.	500.	5	13	0	0.00	411.38	10077.71

FLOW DISTRIBUTION FOR SECNO= 10.15 CWSEL= 1855.89

STA=	9666.	9702.	9772.	9832.	9882.	10062.	10078.
PER Q=	0.2	3.5	4.0	3.3	87.6	1.4	
AREA=	8.7	55.6	56.8	46.8	485.1	17.7	
VEL=	0.5	1.1	1.3	1.3	3.3	1.5	
DEPTH=	0.2	0.8	0.9	0.9	2.7	1.1	

*SECNO 10.230
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

10.230	5.20	1862.00	1862.00	0.00	1862.58	0.58	4.56	0.13	1859.50
1840.0	320.8	1059.3	459.9	117.1	136.9	175.4	767.0	315.3	1860.00
1.44	2.74	7.74	2.62	0.090	0.070	0.090	0.000	1856.80	9866.98
0.022268	460.	417.	340.	0	13	0	0.00	316.83	10183.80

FLOW DISTRIBUTION FOR SECNO= 10.23 CWSEL= 1862.00

STA=	9867.	9872.	9902.	9923.	9948.	9972.	9980.	10015.	10034.	10069.	10121.	10179.	10184.
PER Q=	0.0	1.7	3.4	4.1	4.6	3.6	57.6	3.4	3.6	11.6	6.5	0.0	
AREA=	0.7	18.3	23.6	28.2	29.6	16.8	136.9	22.2	29.7	70.6	51.8	1.1	
VEL=	0.7	1.8	2.6	2.7	2.9	3.9	7.7	2.8	2.2	3.0	2.3	0.8	
DEPTH=	0.2	0.6	1.1	1.2	1.3	2.0	3.9	1.2	0.9	1.4	0.9	0.2	

*SECNO 10.325

3265 DIVIDED FLOW

10.325	5.02	1871.92	1871.32	0.00	1872.45	0.53	9.86	0.01	1869.50
1840.0	196.0	1473.9	170.1	84.6	229.5	71.4	771.7	318.6	1870.70
1.46	2.32	6.42	2.38	0.090	0.070	0.090	0.000	1866.90	9767.11
0.017207	470.	502.	550.	4	11	0	0.00	257.34	10079.96

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 10.32 CWSEL= 1871.92

STA=	9767.	9796.	9821.	9911.	9936.	9950.	10015.	10039.	10062.	10080.
PER Q=	0.2	0.2	1.1	4.2	4.9	80.1	1.6	4.5	3.1	
AREA=	5.9	5.3	15.4	31.3	26.7	229.5	17.5	31.5	22.4	
VEL=	0.8	0.8	1.3	2.5	3.4	6.4	1.7	2.7	2.5	
DEPTH=	0.2	0.2	0.2	1.2	2.0	3.6	0.7	1.4	1.3	

*SECNO 10.419

10.419	5.16	1881.26	1881.06	0.00	1881.81	0.55	9.36	0.00	1878.90
1840.0	182.1	1144.5	513.4	51.7	161.3	167.2	775.9	321.2	1878.80
1.48	3.52	7.10	3.07	0.090	0.070	0.090	0.000	1876.10	9955.37
0.021937	510.	496.	420.	2	6	0	0.00	218.93	10174.30

FLOW DISTRIBUTION FOR SECNO= 10.42 CWSEL= 1881.26

STA=	9955.	9960.	9987.	10034.	10059.	10094.	10134.	10169.	10174.
PER Q=	0.3	9.6	62.2	12.2	8.0	5.0	2.7	0.0	
AREA=	3.2	48.5	161.3	54.1	48.9	38.2	25.4	0.7	
VEL=	1.8	3.6	7.1	4.2	3.0	2.4	2.0	0.6	
DEPTH=	0.6	1.8	3.4	2.2	1.4	1.0	0.7	0.1	

*SECNO 10.544

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.68

The upstream study limit on Deadman Wash at future 22nd Avenue.
Q changed to 1,020 cfs at future 22nd Avenue.

10.544	4.46	1893.76	1893.24	0.00	1894.14	0.38	12.31	0.02	1892.20
1020.0	165.1	734.0	120.9	75.2	130.5	43.4	780.6	323.9	1891.10
1.52	2.20	5.62	2.79	0.090	0.070	0.090	0.000	1889.30	9903.86
0.014527	650.	660.	650.	4	16	0	0.00	134.43	10038.29

FLOW DISTRIBUTION FOR SECNO= 10.54 CWSEL= 1893.76

STA=	9904.	9921.	9941.	9969.	10009.	10032.	10038.
PER Q=	2.9	6.2	7.1	72.0	11.6	0.3	
AREA=	15.5	26.6	33.1	130.5	40.8	2.6	
VEL=	1.9	2.4	2.2	5.6	2.9	1.1	
DEPTH=	0.9	1.3	1.2	3.3	1.8	0.4	

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T1      Deadman Wash Floodplain Delineation Study
T2      Floodway Run for Deadman Wash, SECNO 6.021 to SECNO 10.544
T3      Deadman Wash 100-year Q   Subcritical Flow,   July 1992 (revised 7/94)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

                3                                                          1668.34

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

      2                 -1                                 -1                          15
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= 0.100 CEHV= 0.300
*SECNO 6.021

3470 ENCROACHMENT STATIONS= 9754.0 10021.0 TYPE= 1 TARGET= 267.000
NC card was used - channel = 0.055, overbanks = 0.070.

6.021	10.34	1668.34	1667.63	1667.56	1669.46	1.12	0.00	0.00	1664.30
9480.0	5122.0	4358.0	0.0	881.8	401.6	0.0	0.0	0.0	100000.00
0.00	5.81	10.85	0.00	0.070	0.055	0.000	0.000	1658.00	9754.00
0.011308	0.	0.	0.	0	9	0	0.00	267.00	10021.00

FLOW DISTRIBUTION FOR SECNO= 6.02 CWSEL= 1668.34

STA=	9754.	9761.	9770.	9781.	9783.	9790.	9808.	9844.	9874.	9913.	9941.	9952.	9972.
PER Q=	0.9	2.7	5.0	1.0	2.2	3.6	5.6	5.2	9.9	9.5	3.6	4.8	
AREA=	21.9	42.7	63.5	13.4	33.9	64.8	110.6	98.7	161.5	137.8	53.5	79.6	
VEL=	3.9	6.1	7.4	6.9	6.2	5.3	4.8	5.0	5.8	6.5	6.3	5.7	
DEPTH=	3.4	4.5	6.0	5.8	4.6	3.6	3.1	3.3	4.1	4.9	4.7	4.0	

STA=	9972.	10022.
PER Q=	46.0	
AREA=	401.6	
VEL=	10.9	
DEPTH=	8.1	

*SECNO 6.108

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.46

3470 ENCROACHMENT STATIONS= 9650.0 10060.0 TYPE= 1 TARGET= 410.000

6.108	10.69	1672.09	1670.56	1671.43	1672.66	0.57	3.14	0.06	1668.00
9480.0	4347.7	4944.4	187.9	1126.7	658.1	56.7	14.6	3.1	1668.20
0.02	3.86	7.51	3.31	0.070	0.055	0.070	0.000	1661.40	9650.00
0.005327	380.	459.	420.	3	10	0	0.00	410.00	10060.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.11 CWSEL= 1672.09

STA=	9650.	9675.	9707.	9728.	9750.	9772.	9790.	9816.	9897.	9940.	9959.	10046.	10060.
PER Q=	3.7	6.3	4.1	4.1	7.0	4.7	3.7	5.0	4.3	3.0	52.2	2.0	
AREA=	93.7	142.2	94.5	95.1	130.4	94.2	95.3	179.8	127.5	73.8	658.1	56.7	
VEL=	3.7	4.2	4.2	4.1	5.1	4.7	3.7	2.6	3.2	3.8	7.5	3.3	
DEPTH=	3.8	4.4	4.4	4.3	6.0	5.3	3.7	2.2	3.0	3.8	7.6	4.1	

*SECNO 6.205

3470 ENCROACHMENT STATIONS= 9520.0 10100.0 TYPE= 1 TARGET= 580.000

6.205	7.70	1674.70	1673.58	1673.92	1675.19	0.49	2.52	0.01	1671.80
9480.0	5240.8	3288.1	951.1	1317.5	424.5	221.5	31.3	7.1	1671.70
0.04	3.98	7.75	4.29	0.070	0.055	0.070	0.000	1667.00	9520.00
0.007183	310.	512.	512.	3	14	0	0.00	580.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 6.20 CWSEL= 1674.70

STA=	9520.	9551.	9567.	9613.	9639.	9673.	9705.	9734.	9772.	9866.	9942.	9973.	10040.
PER Q=	5.8	5.5	11.1	5.5	5.3	3.1	4.8	3.8	4.1	3.9	2.3	34.7	
AREA=	127.5	92.2	211.4	109.7	119.7	85.7	107.0	101.1	154.7	137.9	70.7	424.5	
VEL=	4.3	5.7	5.0	4.7	4.2	3.4	4.3	3.6	2.5	2.7	3.1	7.7	
DEPTH=	4.1	5.6	4.6	4.3	3.6	2.6	3.7	2.7	1.6	1.8	2.2	6.3	

STA=	10040.	10068.	10092.	10100.
PER Q=	4.8	4.5	0.7	
AREA=	104.4	94.8	22.2	
VEL=	4.4	4.5	3.0	
DEPTH=	3.8	4.0	2.7	

CCHV= 0.300 CEHV= 0.500
*SECNO 6.280

3470 ENCROACHMENT STATIONS= 9600.0 10084.0 TYPE= 1 TARGET= 484.000
Q changed to 9,680 cfs at C10M (Joy Ranch Road).

6.280	10.71	1678.81	1678.45	1678.08	1679.78	0.97	4.35	0.24	1675.70
9680.0	3839.7	4497.3	1343.1	970.1	428.1	225.0	54.3	14.4	1673.40
0.06	3.96	10.50	5.97	0.070	0.055	0.070	0.000	1668.10	9600.00
0.010058	660.	396.	340.	2	12	0	0.00	484.00	10084.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.28 CWSEL= 1678.81

STA=	9600.	9647.	9680.	9733.	9764.	9800.	9827.	9852.	9887.	9943.	9987.	10040.	10058.
PER Q=	4.1	3.2	4.1	3.0	4.0	4.0	3.8	3.6	4.8	5.1	46.5	5.6	
AREA=	108.9	80.3	112.0	75.8	95.3	84.4	80.3	87.7	127.0	118.4	428.1	87.1	
VEL=	3.6	3.8	3.5	3.9	4.1	4.6	4.6	3.9	3.7	4.2	10.5	6.3	
DEPTH=	2.3	2.4	2.1	2.5	2.7	3.2	3.2	2.5	2.3	2.7	8.0	5.1	

STA=	10058.	10073.	10084.
PER Q=	5.2	3.1	
AREA=	79.4	58.5	
VEL=	6.3	5.1	
DEPTH=	5.1	5.4	

*SECNO 6.328

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.72

3470 ENCROACHMENT STATIONS= 9480.0 10190.0 TYPE= 1 TARGET= 710.000
FEMA section #1 by ignoring Joy Ranch Road pipe structure.

6.328	9.45	1681.05	1679.49	1680.45	1681.36	0.31	1.38	0.20	1678.00
9680.0	3822.6	3639.6	2217.8	1472.4	583.0	669.7	67.0	18.0	1676.00
0.08	2.60	6.24	3.31	0.070	0.055	0.070	0.000	1671.60	9480.00
0.003388	265.	253.	235.	2	16	0	0.00	710.00	10190.00

FLOW DISTRIBUTION FOR SECNO= 6.33 CWSEL= 1681.05

STA=	9480.	9600.	9675.	9730.	9780.	9832.	9960.	9968.	10040.	10095.	10155.	10190.
PER Q=	7.9	4.6	4.5	4.0	4.7	13.2	0.7	37.6	8.8	9.6	4.6	
AREA=	322.3	191.4	167.9	149.9	168.1	448.3	24.4	583.0	250.4	273.1	146.2	
VEL=	2.4	2.3	2.6	2.6	2.7	2.8	2.6	6.2	3.4	3.4	3.0	
DEPTH=	2.7	2.6	3.1	3.0	3.2	3.5	3.1	8.1	4.6	4.6	4.2	

*SECNO 6.423

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.53

3470 ENCROACHMENT STATIONS= 9470.0 10080.0 TYPE= 1 TARGET= 610.000
FEMA section #2 by ignoring Joy Ranch Road pipe structure.

6.423	9.43	1683.63	1683.49	1683.57	1684.57	0.94	2.89	0.32	1682.00
9680.0	4194.0	5457.9	28.2	1038.4	560.1	10.7	91.8	25.7	1682.00
0.10	4.04	9.74	2.62	0.070	0.055	0.070	0.000	1674.20	9470.00
0.012160	540.	502.	330.	2	6	0	0.00	610.00	10080.00

FLOW DISTRIBUTION FOR SECNO= 6.42 CWSEL= 1683.63

STA=	9470.	9550.	9630.	9645.	9720.	9775.	9830.	9920.	9980.	10072.	10080.
PER Q=	7.3	13.6	3.7	5.8	4.3	3.2	3.6	1.8	56.4	0.3	
AREA=	178.3	258.3	60.4	149.9	111.6	92.4	119.6	67.7	560.1	10.7	
VEL=	3.9	5.1	5.9	3.7	3.8	3.4	2.9	2.5	9.7	2.6	
DEPTH=	2.2	3.2	4.0	2.0	2.0	1.7	1.3	1.1	6.1	1.3	

*SECNO 6.539

3470 ENCROACHMENT STATIONS= 9500.0 10080.0 TYPE= 1 TARGET= 580.000
FEMA section #3 by ignoring Joy Ranch Road pipe structure.

6.539	9.84	1688.44	1687.59	1687.53	1688.99	0.55	4.31	0.12	1684.00
9680.0	5244.0	3791.4	644.6	1459.1	450.6	173.4	111.6	31.7	1684.00
0.12	3.59	8.41	3.72	0.070	0.055	0.070	0.000	1678.60	9500.00
0.006248	400.	612.	600.	3	10	0	0.00	580.00	10080.00

FLOW DISTRIBUTION FOR SECNO= 6.54 CWSEL= 1688.44

STA=	9500.	9590.	9620.	9645.	9670.	9740.	9912.	9972.	10028.	10075.	10080.
PER Q=	14.5	4.5	3.0	2.9	7.9	13.2	8.1	39.2	6.4	0.3	
AREA=	349.9	109.1	79.7	78.5	216.2	419.4	206.3	450.6	161.6	11.8	
VEL=	4.0	4.0	3.6	3.6	3.6	3.0	3.8	8.4	3.8	2.3	
DEPTH=	3.9	3.6	3.2	3.1	3.1	2.4	3.4	8.0	3.4	2.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 6.654

3470 ENCROACHMENT STATIONS= 9750.0 10112.0 TYPE= 1 TARGET= 362.000

6.654	10.78	1692.38	1691.35	1691.65	1693.17	0.79	4.06	0.12	1689.90
9680.0	3560.0	4627.9	1492.1	812.1	502.1	319.0	137.0	38.1	1689.10
0.15	4.38	9.22	4.68	0.070	0.055	0.070	0.000	1681.60	9750.00
0.007421	595.	607.	570.	3	6	0	0.00	362.00	10112.00

FLOW DISTRIBUTION FOR SECNO= 6.65 CWSEL= 1692.38

STA=	9750.	9787.	9802.	9817.	9830.	9856.	9896.	9928.	9960.	9976.	10036.	10065.	10079.
PER Q=	4.5	3.4	3.5	4.2	5.8	6.1	4.4	3.5	1.4	47.8	5.3	3.6	
AREA=	112.0	68.0	67.4	72.6	115.2	139.5	105.6	91.0	40.7	502.1	113.3	65.9	
VEL=	3.9	4.8	5.1	5.6	4.9	4.2	4.0	3.7	3.4	9.2	4.5	5.3	
DEPTH=	3.1	4.3	4.6	5.7	4.3	3.5	3.3	2.9	2.5	8.4	3.8	4.9	

STA=	10079.	10097.	10112.
PER Q=	4.3	2.3	
AREA=	82.5	57.4	
VEL=	5.0	3.9	
DEPTH=	4.5	3.8	

*SECNO 6.751

3470 ENCROACHMENT STATIONS= 9700.0 10100.0 TYPE= 1 TARGET= 400.000

The area of the stock tank (CF Tank) is ineffective,
GR cards were modified to ignore it.
Q changed to 9,770 cfs at C10L (CF Tank).

6.751	10.96	1696.36	1694.38	1695.77	1696.80	0.44	3.52	0.11	1693.50
9770.0	5181.0	3702.4	886.7	1203.9	552.5	241.2	157.6	42.4	1692.40
0.17	4.30	6.70	3.68	0.080	0.065	0.080	0.000	1685.40	9700.00
0.006714	485.	512.	500.	2	10	0	0.00	400.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 6.75 CWSEL= 1696.36

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9700.	9794.	9811.	9835.	9850.	9871.	9884.	9897.	9911.	9927.	9954.	9961.	10041.
PER Q=	14.4	3.2	4.3	3.5	3.5	5.6	6.2	4.0	3.9	3.8	0.6	37.9	
AREA=	377.0	76.7	103.0	77.6	87.3	95.6	103.8	78.5	83.1	101.3	20.1	552.5	
VEL=	3.7	4.1	4.1	4.4	3.9	5.7	5.8	4.9	4.6	3.6	3.1	6.7	
DEPTH=	4.0	4.5	4.5	5.0	4.2	7.4	7.6	5.9	5.3	3.6	2.9	7.0	

STA=	10041.	10072.	10100.
PER Q=	4.7	4.4	
AREA=	122.3	118.9	
VEL=	3.7	3.6	
DEPTH=	3.9	4.3	

*SECNO 6.849

3470 ENCROACHMENT STATIONS= 9558.0 10100.0 TYPE= 1 TARGET= 542.000

6.849	8.47	1699.27	1697.45	1698.51	1699.61	0.33	2.78	0.03	1695.60
9770.0	5658.3	2527.9	1583.8	1569.7	385.9	385.9	178.7	46.9	1694.30
0.20	3.60	6.55	4.10	0.080	0.065	0.080	0.000	1690.80	9558.00
0.006062	370.	517.	520.	2	14	0	0.00	542.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 6.85 CWSEL= 1699.27

STA=	9558.	9584.	9607.	9626.	9655.	9700.	9739.	9768.	9826.	9864.	9895.	9927.	9952.
PER Q=	4.5	5.2	4.3	5.6	8.8	5.9	3.2	5.0	3.4	3.3	3.9	3.1	
AREA=	121.1	119.2	98.7	134.5	212.5	155.5	96.0	167.9	111.7	102.4	113.2	88.4	
VEL=	3.7	4.3	4.3	4.1	4.0	3.7	3.2	2.9	3.0	3.2	3.4	3.4	
DEPTH=	4.7	5.1	5.1	4.7	4.7	4.1	3.3	2.9	3.0	3.2	3.6	3.6	

STA=	9952.	9965.	10019.	10039.	10057.	10084.	10100.	10100.
PER Q=	1.7	25.9	4.2	3.5	4.5	4.0	0.0	
AREA=	48.6	385.9	97.4	85.9	114.6	86.8	1.1	
VEL=	3.3	6.6	4.2	4.0	3.8	4.6	0.5	
DEPTH=	3.5	7.2	5.0	4.5	4.3	5.6	5.6	

*SECNO 6.945

3470 ENCROACHMENT STATIONS= 9840.0 10320.0 TYPE= 1 TARGET= 480.000

6.945	11.79	1702.69	1701.02	1702.03	1703.09	0.40	3.45	0.04	1699.10
9770.0	1838.7	2888.0	5043.3	490.1	405.3	1252.7	206.8	53.4	1700.20
0.23	3.75	7.13	4.03	0.080	0.065	0.080	0.000	1690.90	9840.00
0.006883	695.	507.	375.	1	12	0	0.00	480.00	10320.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 6.95 CWSEL= 1702.69

STA=	9840.	9877.	9901.	9919.	9956.	9968.	10019.	10059.	10124.	10184.	10217.	10241.	10268.
PER Q=	4.3	4.0	3.1	5.9	1.6	29.6	4.4	10.1	9.5	5.0	3.7	3.8	
AREA=	124.3	98.4	75.4	148.5	43.5	405.3	127.5	256.8	240.1	127.9	95.0	99.4	
VEL=	3.3	3.9	4.0	3.9	3.7	7.1	3.4	3.8	3.9	3.8	3.8	3.7	
DEPTH=	3.4	4.1	4.2	4.0	3.7	7.9	3.3	3.9	4.0	3.9	3.9	3.7	

STA=	10268.	10291.	10310.	10320.
PER Q=	7.7	5.6	1.8	
AREA=	145.0	110.2	50.9	
VEL=	5.2	4.9	3.5	
DEPTH=	6.3	5.7	5.1	

*SECNO 7.042

3470 ENCROACHMENT STATIONS= 9940.0 10320.0 TYPE= 1 TARGET= 380.000
The depressed area in the unnamed stock tank is ignored,
GR cards were modified.

7.042	12.32	1705.62	1703.48	1704.81	1706.05	0.44	2.95	0.02	1701.80
9770.0	416.1	3152.1	6201.7	116.7	454.2	1429.7	227.5	57.7	1699.70
0.26	3.56	6.94	4.34	0.080	0.065	0.080	0.000	1693.30	9940.00
0.006514	650.	512.	360.	2	9	0	0.00	380.00	10320.00

FLOW DISTRIBUTION FOR SECNO= 7.04 CWSEL= 1705.62

STA=	9940.	9969.	10028.	10044.	10054.	10065.	10079.	10096.	10134.	10163.	10203.	10235.	10255.
PER Q=	4.3	32.3	4.9	3.2	3.1	3.2	3.1	4.7	5.1	8.5	7.0	4.3	
AREA=	116.7	454.2	97.0	61.9	62.2	72.7	74.0	134.1	125.1	193.9	155.8	97.2	
VEL=	3.6	6.9	4.9	5.1	4.8	4.3	4.1	3.5	4.0	4.3	4.4	4.3	
DEPTH=	4.0	7.8	5.9	6.3	5.8	4.9	4.5	3.5	4.3	4.8	5.0	4.9	

STA=	10255.	10266.	10283.	10298.	10309.	10320.
PER Q=	3.1	4.1	3.5	3.5	2.3	
AREA=	63.5	90.0	77.0	67.3	58.1	
VEL=	4.8	4.5	4.4	5.1	3.8	
DEPTH=	5.8	5.2	5.1	6.3	5.1	

*SECNO 7.133

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9790.0 10162.0 TYPE= 1 TARGET= 372.000
The area in the pond is ignored, GR cards were modified.

7.133	10.33	1707.83	1704.53	1706.91	1708.19	0.36	2.12	0.02	1703.40
9770.0	1633.4	8136.6	0.0	630.9	1583.3	0.0	249.6	61.6	100000.00
0.28	2.59	5.14	0.00	0.080	0.065	0.000	0.000	1697.50	9790.00
0.003392	430.	480.	440.	3	14	0	0.00	372.00	10162.00

FLOW DISTRIBUTION FOR SECNO= 7.13 CWSEL= 1707.83

STA=	9790.	9798.	9824.	9854.	9882.	9906.	9921.	9926.	9937.	9945.	9958.	10162.
PER Q=	0.6	2.6	3.0	2.7	2.4	1.5	0.5	1.1	0.8	1.5	83.3	
AREA=	28.7	98.5	113.1	101.5	89.2	56.4	19.8	40.3	31.0	52.3	1583.3	
VEL=	2.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.8	5.1	
DEPTH=	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.1	7.8	

*SECNO 7.228

3470 ENCROACHMENT STATIONS= 9870.0 10210.0 TYPE= 1 TARGET= 340.000
The area in the pond is ignored, GR cards were modified.

7.228	8.59	1709.29	1704.80	1708.51	1709.53	0.24	1.30	0.04	1704.70
9770.0	11.1	9746.7	12.2	10.1	2481.9	10.4	276.8	65.7	1706.10
0.32	1.09	3.93	1.17	0.080	0.065	0.080	0.000	1700.70	9870.00
0.002044	502.	502.	502.	3	18	0	0.00	340.00	10210.00

FLOW DISTRIBUTION FOR SECNO= 7.23 CWSEL= 1709.29

STA=	9870.	9872.	10207.	10210.
PER Q=	0.1	99.8	0.1	
AREA=	10.1	2481.9	10.4	
VEL=	1.1	3.9	1.2	
DEPTH=	4.6	7.4	3.1	

*SECNO 7.323

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9870.0 10050.0 TYPE= 1 TARGET= 180.000

7.323	7.62	1711.32	1711.32	1711.13	1713.69	2.37	2.72	1.07	1709.80
9770.0	4368.8	4583.8	817.4	455.2	307.7	87.5	296.2	68.7	1706.40
0.33	9.60	14.90	9.34	0.080	0.065	0.080	0.000	1703.70	9870.00
0.037030	540.	502.	450.	0	15	0	0.00	180.00	10050.00

FLOW DISTRIBUTION FOR SECNO= 7.32 CWSEL= 1711.32

STA=	9870.	9894.	9913.	9925.	9935.	9944.	9953.	9985.	10031.	10047.	10050.
PER Q=	10.0	8.1	6.4	7.7	6.7	3.7	2.1	46.9	7.7	0.7	
AREA=	111.5	83.4	59.8	62.9	52.6	39.8	45.2	307.7	74.6	12.9	
VEL=	8.7	9.5	10.5	12.0	12.3	9.1	4.6	14.9	10.1	5.2	
DEPTH=	4.6	4.3	5.1	6.2	6.4	4.4	1.4	6.6	4.7	4.5	

*SECNO 7.417

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.05

3470 ENCROACHMENT STATIONS= 9820.0 10040.0 TYPE= 1 TARGET= 220.000

7.417	11.65	1718.25	1713.88	1717.28	1718.72	0.47	4.46	0.57	1712.50
9770.0	5616.1	4120.1	33.8	1205.9	635.1	17.9	311.5	71.0	1712.60
0.36	4.66	6.49	1.89	0.080	0.065	0.080	0.000	1706.60	9820.00
0.003986	490.	496.	500.	6	11	0	0.00	220.00	10040.00

FLOW DISTRIBUTION FOR SECNO= 7.42 CWSEL= 1718.25

STA=	9820.	9829.	9841.	9860.	9883.	9893.	9912.	9930.	9956.	9972.	10037.	10040.
PER Q=	2.0	5.6	9.3	11.4	5.0	8.0	5.7	6.7	3.8	42.2	0.3	
AREA=	64.8	109.2	174.8	214.0	93.5	161.3	127.2	164.4	96.8	635.1	17.9	
VEL=	3.1	5.1	5.2	5.2	5.2	4.9	4.3	4.0	3.8	6.5	1.9	
DEPTH=	7.4	8.9	9.3	9.3	9.3	8.4	7.1	6.3	5.8	9.8	5.6	

*SECNO 7.513

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.50

3470 ENCROACHMENT STATIONS= 9760.0 10045.0 TYPE= 1 TARGET= 285.000

7.513	10.54	1721.44	1721.06	1720.86	1722.98	1.54	3.73	0.54	1716.80
9770.0	2922.1	6847.9	0.0	583.0	598.6	0.0	330.1	74.1	100000.00
0.37	5.01	11.44	0.00	0.080	0.065	0.000	0.000	1710.90	9760.00
0.015983	550.	507.	507.	4	12	0	0.00	285.00	10045.00

FLOW DISTRIBUTION FOR SECNO= 7.51 CWSEL= 1721.44

STA=	9760.	9774.	9795.	9811.	9829.	9860.	9871.	9882.	9897.	9918.	9941.	9958.	9973.
PER Q=	3.7	7.1	3.6	2.1	1.9	0.4	0.4	0.5	1.2	2.1	2.9	3.9	
AREA=	66.3	103.2	61.1	46.0	55.3	14.1	13.5	18.6	35.7	51.8	55.2	62.3	
VEL=	5.5	6.8	5.8	4.4	3.4	2.8	2.7	2.8	3.3	4.0	5.1	6.1	
DEPTH=	4.8	4.9	3.9	2.5	1.7	1.3	1.2	1.3	1.7	2.2	3.2	4.2	

STA=	9973.	10054.
PER Q=	70.1	
AREA=	598.6	
VEL=	11.4	
DEPTH=	8.3	

*SECNO 7.587

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.69

3470 ENCROACHMENT STATIONS= 9570.0 10034.0 TYPE= 1 TARGET= 464.000

Q changed to 9,980 cfs at C10J (just 1,050' west of I-17).

7.587	10.40	1726.00	1723.93	1725.34	1726.44	0.44	3.13	0.33	1721.10
9980.0	5669.2	4310.3	0.5	1485.7	635.2	0.8	342.6	76.8	1723.20
0.39	3.82	6.79	0.59	0.080	0.065	0.080	0.000	1715.60	9570.00
0.005822	290.	391.	391.	3	16	0	0.00	464.00	10034.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.59 CWSEL= 1726.00

STA=	9570.	9627.	9652.	9660.	9670.	9684.	9701.	9721.	9748.	9814.	9877.	9903.	9939.
PER Q=	5.6	4.7	3.6	4.3	5.6	5.2	4.7	3.9	3.3	4.4	3.2	6.0	
AREA=	182.1	116.6	64.2	77.8	105.2	107.3	107.6	107.9	140.1	162.4	94.6	157.5	
VEL=	3.0	4.0	5.7	5.5	5.3	4.8	4.3	3.6	2.4	2.7	3.4	3.8	
DEPTH=	3.2	4.7	8.2	7.7	7.3	6.4	5.5	3.9	2.1	2.6	3.7	4.4	

STA=	9939.	9952.	10034.	10034.
PER Q=	2.4	43.2	0.0	
AREA=	62.4	635.2	0.8	
VEL=	3.9	6.8	0.6	
DEPTH=	4.6	7.8	2.8	

*SECNO 7.663

3470 ENCROACHMENT STATIONS= 9650.0 10045.0 TYPE= 1 TARGET= 395.000

7.663	9.52	1727.92	1726.84	1727.39	1728.67	0.74	2.07	0.15	1722.70
9980.0	4927.1	5047.5	5.4	1177.9	573.4	4.0	356.7	79.7	1722.90
0.40	4.18	8.80	1.34	0.070	0.055	0.070	0.000	1718.40	9650.00
0.006527	280.	401.	430.	3	14	0	0.00	395.00	10045.00

FLOW DISTRIBUTION FOR SECNO= 7.66 CWSEL= 1727.92

STA=	9650.	9714.	9742.	9787.	9812.	9832.	9846.	9860.	9882.	9908.	9945.	9974.	10044.
PER Q=	4.9	3.6	7.3	5.1	4.5	3.4	3.2	5.1	3.0	3.3	5.9	50.6	
AREA=	158.0	93.9	172.9	110.3	92.2	69.3	66.5	104.5	82.7	99.9	127.8	573.4	
VEL=	3.1	3.8	4.2	4.6	4.9	4.9	4.8	4.9	3.7	3.3	4.6	8.8	
DEPTH=	2.5	3.3	3.8	4.4	4.8	4.8	4.8	4.8	3.1	2.7	4.4	8.2	

STA=	10044.	10045.
PER Q=	0.1	
AREA=	4.0	
VEL=	1.3	
DEPTH=	5.0	

CCHV= 0.600 CEHV= 0.800
*SECNO 7.738

3470 ENCROACHMENT STATIONS= 9790.0 10108.0 TYPE= 1 TARGET= 318.000

```
        NC card was used - channel = .055, overbanks = .070.
        Contraction and expansion values changed to .6 and .8
        for I-17 southbound and northbound bridges.
        Q changed to 9,440 cfs at C10H (I-17 bridges).
   7.738     11.60   1730.40   1729.07   1729.63   1731.25      0.85      2.50      0.09   1725.80
  9440.0    2685.9    5319.0    1435.1     653.5     580.9     322.6     371.3      82.8   1725.60
    0.42      4.11      9.16      4.45     0.070     0.055     0.070     0.000   1718.80   9790.00
0.006381      370.      396.      410.         2         8         0      0.00    318.00  10108.00


FLOW DISTRIBUTION FOR SECNO=      7.74          CWSEL=   1730.40

STA=    9790.    9838.    9873.    9904.    9958.    9968.   10032.   10059.   10079.   10096.   10108.
  PER Q=    11.9      6.7      4.0      4.2      1.6     56.3      5.3      4.1      3.4      2.4
   AREA=   238.9    145.1    101.6    130.5     37.4    580.9    113.4     85.4     73.1     50.8
    VEL=     4.7      4.3      3.8      3.1      4.0      9.2      4.4      4.6      4.4      4.4
  DEPTH=     5.0      4.1      3.3      2.4      3.7      9.0      4.2      4.4      4.2      4.2

*SECNO 7.766

3470 ENCROACHMENT STATIONS=     9950.0   10075.0  TYPE=      1  TARGET=      125.000
        NC card was used - channel = .080, overbanks = .095 for
        dense vegetation.
   7.766     12.42   1731.52   1727.61   1730.85   1732.55      1.02      1.16      0.13 100000.00
  9440.0       0.0    9440.0       0.0       0.0    1163.9       0.0     375.6      83.5 100000.00
    0.42      0.00      8.11      0.00     0.000     0.080     0.000     0.000   1719.10   9950.00
0.010532      110.      148.      160.         2        15         0      0.00    125.00  10075.00


FLOW DISTRIBUTION FOR SECNO=      7.77          CWSEL=   1731.52

STA=    9950.   10076.
  PER Q=    100.0
   AREA=   1163.9
    VEL=      8.1
  DEPTH=      9.3

*SECNO 7.769

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  9.56


3470 ENCROACHMENT STATIONS=     9936.0   10064.0  TYPE=      1  TARGET=      128.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1734.00 ELREA=      1734.00

        Downstream face of the I-17 southbound bridge.
```

NC card was used to change XNCH to .013.
Special bridge method was used to determine the class of low flow.
4-Span Bridge, Bridge Opening is 128 ft, total pier width is 12 ft,
L = 45 ft (Incl. 100% clogging factor).

7.769	12.80	1732.30	1725.29	1731.80	1732.84	0.54	0.01	0.29	1733.00
9440.0	0.0	9440.0	0.0	0.0	1602.8	0.0	376.2	83.6	100000.00
0.43	0.00	5.89	0.00	0.000	0.013	0.000	0.000	1719.50	9936.00
0.000115	17.	17.	17.	2	14	0	0.00	127.99	10063.99

FLOW DISTRIBUTION FOR SECNO= 7.77 CWSEL= 1732.30

STA= 9936. 10064.
PER Q= 100.0
AREA= 1602.8
VEL= 5.9
DEPTH= 12.5

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.90	1.60	2.60	0.00	128.00	12.00	1543.00	0.00	1719.70	1719.50

*SECNO 7.778
CLASS A LOW FLOW

3420 BRIDGE W.S.= 1732.28 BRIDGE VELOCITY= 6.42 CALCULATED CHANNEL AREA= 1459.

EGPRS	EGLWC	H3	QWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
0.00	1732.94	0.07	0.	9440.	1543.	1543.	1733.00	1735.10	0.

3470 ENCROACHMENT STATIONS= 9936.0 10064.0 TYPE= 1 TARGET= 128.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1734.10 ELREA= 1734.10

Upstream face of the I-17 southbound bridge.

7.778	12.67	1732.37	0.00	1731.88	1732.94	0.57	0.10	0.00	1733.00
9440.0	0.0	9440.0	0.0	0.0	1554.4	0.0	377.8	83.7	100000.00
0.43	0.00	6.07	0.00	0.000	0.013	0.000	0.000	1719.70	9936.00
0.000127	45.	45.	45.	0	0	0	0.00	127.99	10063.99

FLOW DISTRIBUTION FOR SECNO= 7.78 CWSEL= 1732.37

STA= 9936. 10064.
PER Q= 100.0
AREA= 1554.4
VEL= 6.1
DEPTH= 12.1

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 7.785

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.12

3470 ENCROACHMENT STATIONS= 9927.0 10079.0 TYPE= 1 TARGET= 152.000

Cross section between two bridges, NC card was used to change XNCH = .080.

7.785	11.74	1732.34	1728.03	1731.85	1733.12	0.78	0.02	0.16	100000.00
9440.0	0.0	9440.0	0.0	0.0	1336.2	0.0	379.1	83.8	100000.00
0.43	0.00	7.07	0.00	0.000	0.080	0.000	0.000	1720.60	9927.00
0.008321	38.	38.	38.	2	11	0	0.00	152.00	10079.00

FLOW DISTRIBUTION FOR SECNO= 7.78 CWSEL= 1732.34

STA= 9927. 10085.
PER Q= 100.0
AREA= 1336.2
VEL= 7.1
DEPTH= 8.8

*SECNO 7.792

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.49

3470 ENCROACHMENT STATIONS= 9939.0 10061.0 TYPE= 1 TARGET= 122.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1738.60 ELREA= 1738.60

Downstream face of the I-17 northbound bridge.
NC card was used to change XNCH to .013.
Special bridge method was used to determine the class of low flow.
4-Span Bridge, Bridge Opening is 122 ft, total pier width is 12 ft,
L = 44 ft (Incl. 100% clogging factor).

7.792	10.16	1732.33	1728.22	1731.84	1733.30	0.97	0.03	0.15	1738.20
9440.0	0.0	9440.0	0.0	0.0	1195.3	0.0	380.1	83.9	100000.00
0.43	0.00	7.90	0.00	0.000	0.013	0.000	0.000	1722.17	9939.00
0.000276	35.	35.	35.	2	11	0	0.00	122.00	10061.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.79 CWSEL= 1732.33

STA= 9939. 10061.
PER Q= 100.0
AREA= 1195.3
VEL= 7.9
DEPTH= 9.8

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	0.90	1.60	2.60	0.00	122.00	12.00	1646.00	0.00	1722.94	1722.22

*SECNO 7.800
CLASS A LOW FLOW

3420 BRIDGE W.S.= 1732.41 BRIDGE VELOCITY= 8.73 CALCULATED CHANNEL AREA= 1042.

EGPRS	EGLWC	H3	QWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
0.00	1733.71	0.22	0.	9440.	1646.	1646.	1737.90	1739.20	0.

3470 ENCROACHMENT STATIONS= 9939.0 10061.0 TYPE= 1 TARGET= 122.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1738.70 ELREA= 1738.70

Upstream face of the I-17 northbound bridge.

7.800	9.61	1732.55	0.00	1732.11	1733.71	1.16	0.41	0.00	1738.20
9440.0	0.0	9440.0	0.0	0.0	1092.3	0.0	381.2	84.0	100000.00
0.43	0.00	8.64	0.00	0.000	0.013	0.000	0.000	1722.94	9939.00
0.000368	44.	44.	44.	0	0	0	0.00	122.00	10061.00

FLOW DISTRIBUTION FOR SECNO= 7.80 CWSEL= 1732.55

STA= 9939. 10061.
PER Q= 100.0
AREA= 1092.3
VEL= 8.6
DEPTH= 9.0

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=    0.300 CEHV=    0.500
*SECNO 7.812

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  0.25


3470 ENCROACHMENT STATIONS=     9950.0   10160.0  TYPE=      1  TARGET=      210.000
          The confluence with Stream No. 7 & 8.
          The depressed area on right overbank is ineffective,
          GR cards were modified to ignore it. ET card was used for contraction.
          NC card was used - channel = .075, overbanks = .095.
          Contraction and expansion values changed to .3 and .5
    7.812     10.24   1733.44   1729.33   1733.11   1733.96      0.52      0.06      0.19 100000.00
   9440.0       0.0    9440.0       0.0       0.0    1627.5       0.0     383.2      84.3 100000.00
     0.43      0.00      5.80      0.00     0.000     0.075     0.000     0.000   1723.20   9950.00
 0.005823       64.       64.       64.         3        14         0      0.00    210.00  10160.00


FLOW DISTRIBUTION FOR SECNO=      7.81          CWSEL=   1733.44

STA=    9950.   10164.
  PER Q=    100.0
   AREA=   1627.5
    VEL=      5.8
  DEPTH=      7.7

CCHV=    0.100 CEHV=    0.300
1490 NH CARD USED
*SECNO 7.872

3470 ENCROACHMENT STATIONS=     9974.0   10520.0  TYPE=      1  TARGET=      546.000
          Contraction and expansion values changed to .1 and .3
          NH cards were used for SECNO 7.872 to SECNO 8.016.
          ET card (Fields 7 & 8) was used for bridge contraction.
    7.872      9.75   1735.45   1732.93   1735.26   1735.68      0.24      1.69      0.03 100000.00
   9440.0       0.0    3486.1    5953.9       0.0     749.0    1768.7     398.6      87.1   1731.60
     0.46      0.00      4.65      3.37     0.000     0.075     0.082     0.000   1725.70   9974.00
 0.004772       280.      317.      330.         3        14         0      0.00    546.00  10520.00
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.87 CWSEL= 1735.45

STA=	9974.	10089.	10130.	10171.	10202.	10227.	10253.	10315.	10379.	10413.	10439.	10471.	10487.
PER Q=	36.9	5.0	5.4	4.5	4.1	3.1	3.2	4.2	3.6	3.2	4.1	7.6	
AREA=	749.0	169.2	175.5	141.1	124.8	107.7	152.6	181.9	127.9	108.9	135.5	114.6	
VEL=	4.7	2.8	2.9	3.0	3.1	2.8	2.0	2.2	2.6	2.8	2.8	6.3	
DEPTH=	6.5	4.1	4.3	4.6	4.9	4.1	2.5	2.8	3.8	4.1	4.3	7.2	

STA=	10487.	10494.	10501.	10508.	10520.
PER Q=	4.3	4.6	3.6	2.5	
AREA=	56.3	61.0	54.0	57.6	
VEL=	7.3	7.2	6.4	4.1	
DEPTH=	8.8	8.6	7.4	4.8	

1490 NH CARD USED
*SECNO 7.921

3470 ENCROACHMENT STATIONS= 9850.0 10450.0 TYPE= 1 TARGET= 600.000

7.921	9.85	1736.25	1733.75	1736.01	1736.44	0.20	0.76	0.00	1730.60
9440.0	1503.7	1333.8	6602.5	575.9	291.1	1869.9	408.7	89.2	1732.30
0.47	2.61	4.58	3.53	0.095	0.075	0.078	0.000	1726.40	9850.00
0.004165	310.	259.	120.	2	13	0	0.00	600.00	10450.00

FLOW DISTRIBUTION FOR SECNO= 7.92 CWSEL= 1736.25

STA=	9850.	9875.	9915.	9941.	9975.	9987.	10029.	10066.	10096.	10119.	10168.	10203.	10284.
PER Q=	3.2	4.4	3.0	3.5	1.8	14.1	4.0	4.1	3.0	6.2	3.3	5.4	
AREA=	114.9	161.9	109.4	131.0	58.6	291.1	147.6	138.2	103.2	215.8	128.1	240.2	
VEL=	2.6	2.6	2.6	2.5	2.9	4.6	2.5	2.8	2.8	2.7	2.4	2.1	
DEPTH=	4.6	4.1	4.1	3.9	4.8	6.9	4.0	4.5	4.5	4.4	3.7	3.0	

STA=	10284.	10330.	10363.	10391.	10408.	10418.	10426.	10435.	10448.	10450.
PER Q=	5.7	3.1	3.8	8.0	6.9	6.6	5.3	4.4	0.1	
AREA=	199.9	121.6	110.2	123.0	92.9	85.2	76.1	79.2	8.7	
VEL=	2.7	2.4	3.3	6.1	7.0	7.3	6.6	5.2	1.2	
DEPTH=	4.3	3.7	3.8	7.6	9.3	9.8	8.6	6.1	4.6	

1490 NH CARD USED
*SECNO 8.016

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.36

3470 ENCROACHMENT STATIONS= 9850.0 10100.0 TYPE= 1 TARGET= 250.000
Q changed to 6,220 cfs at the confluence with Stream No. 4.
Contraction and expansion values changed to .1 and .3

8.016	9.04	1738.94	1737.80	1738.47	1739.60	0.66	3.02	0.14	1734.90
6220.0	2609.3	2283.1	1327.6	477.1	271.0	307.1	429.9	94.0	1734.90
0.49	5.47	8.42	4.32	0.080	0.075	0.095	0.000	1729.90	9850.00
0.013615	510.	502.	470.	2	14	0	0.00	250.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 8.02 CWSEL= 1738.94

STA=	9850.	9902.	9923.	9946.	9963.	9981.	10017.	10048.	10080.	10100.
PER Q=	8.6	8.5	10.9	7.2	6.8	36.7	9.0	8.7	3.7	
AREA=	124.8	91.7	110.6	75.0	75.1	271.0	121.2	121.8	64.1	
VEL=	4.3	5.8	6.1	5.9	5.6	8.4	4.6	4.4	3.6	
DEPTH=	2.4	4.3	4.7	4.5	4.2	7.4	4.0	3.8	3.2	

*SECNO 8.111

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.62

3470 ENCROACHMENT STATIONS= 9760.0 10045.0 TYPE= 1 TARGET= 285.000
Q is 6,220 cfs at the confluence with Stream No. 4.
NC card was used - channel = .075, overbanks = .095

8.111	11.12	1743.32	1740.72	1742.60	1743.61	0.29	3.98	0.04	1736.60
6220.0	3710.6	1783.1	726.2	1112.5	289.4	204.3	445.2	97.1	1736.60
0.53	3.34	6.16	3.55	0.095	0.075	0.095	0.000	1732.20	9760.00
0.005176	502.	502.	502.	2	10	0	0.00	285.00	10045.00

FLOW DISTRIBUTION FOR SECNO= 8.11 CWSEL= 1743.32

STA=	9760.	9794.	9819.	9848.	9882.	9913.	9948.	9974.	9982.	10013.	10034.	10045.
PER Q=	6.0	6.2	6.3	6.5	7.6	13.3	10.6	3.2	28.7	8.8	2.9	
AREA=	138.1	120.0	128.5	140.4	148.7	217.0	168.1	51.6	289.4	140.3	64.0	
VEL=	2.7	3.2	3.0	2.9	3.2	3.8	3.9	3.9	6.2	3.9	2.8	
DEPTH=	4.1	4.8	4.4	4.1	4.8	6.2	6.5	6.4	9.5	6.5	6.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 8.187

3470 ENCROACHMENT STATIONS= 9750.0 10036.0 TYPE= 1 TARGET= 286.000

8.187	9.25	1743.95	1744.39	1745.51	1746.42	0.47	2.75	0.05	1741.50
6220.0	3004.9	3215.1	0.0	815.3	475.4	0.0	458.6	99.7	100000.00
0.55	3.69	6.76	0.00	0.095	0.075	0.000	0.000	1736.70	9750.00
0.009541	401.	401.	401.	3	18	0	0.00	286.00	10036.00

FLOW DISTRIBUTION FOR SECNO= 8.19 CWSEL= 1745.95

STA=	9750.	9780.	9834.	9886.	9935.	9967.	10037.
PER Q=	5.4	10.0	10.0	13.1	9.9	51.7	
AREA=	102.9	181.5	178.3	206.2	146.5	475.4	
VEL=	3.3	3.4	3.5	3.9	4.2	6.8	
DEPTH=	3.5	3.3	3.4	4.1	4.5	6.9	

*SECNO 8.278

3470 ENCROACHMENT STATIONS= 9800.0 10170.0 TYPE= 1 TARGET= 370.000

8.278	10.46	1749.66	1747.86	1748.92	1750.00	0.33	3.57	0.01	1744.90
6220.0	1450.9	2756.4	2012.8	550.6	457.6	594.6	473.9	103.1	1745.60
0.58	2.64	6.02	3.38	0.095	0.075	0.095	0.000	1739.20	9800.00
0.006252	430.	480.	510.	2	10	0	0.00	370.00	10170.00

FLOW DISTRIBUTION FOR SECNO= 8.28 CWSEL= 1749.66

STA=	9800.	9835.	9870.	9901.	9934.	9969.	9975.	10034.	10061.	10077.	10101.	10144.	10170.
PER Q=	4.9	4.9	3.7	3.3	5.2	1.3	44.3	7.5	7.1	6.7	7.7	3.4	
AREA=	117.5	113.5	90.1	87.9	115.5	26.0	457.6	130.8	103.9	117.3	160.1	82.6	
VEL=	2.6	2.7	2.5	2.3	2.8	3.1	6.0	3.6	4.3	3.5	3.0	2.5	
DEPTH=	3.4	3.2	2.9	2.6	3.4	4.1	7.7	4.9	6.4	4.9	3.8	3.2	

*SECNO 8.373

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.67

3470 ENCROACHMENT STATIONS= 9920.0 10150.0 TYPE= 1 TARGET= 230.000
Q changed to 4,480 cfs at the confluence with Stream No. 3.

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        NC card was used - channel = .065, overbanks = .080
    8.373      8.08   1752.88   1751.31   1752.12   1753.31      0.43      3.29      0.03   1748.50
   4480.0     553.9    2450.4    1475.7     145.7     384.5     427.5     488.5     106.5   1749.00
     0.60      3.80      6.37      3.45     0.080     0.065     0.080     0.000   1744.80   9920.00
 0.007189      510.      502.      480.         2        14         0      0.00    230.00  10150.00


FLOW DISTRIBUTION FOR SECNO=      8.37          CWSEL=   1752.88

STA=    9920.    9930.    9956.   10020.   10053.   10090.   10106.   10130.   10150.
  PER Q=      2.7      9.7     54.7      9.1      8.1      4.8      7.0      4.0
   AREA=     38.5    107.2    384.5    113.9    110.0     58.2     85.4     60.0
    VEL=      3.1      4.0      6.4      3.6      3.3      3.7      3.7      3.0
  DEPTH=      3.9      4.1      6.0      3.4      3.0      3.6      3.6      3.0

*SECNO 8.485

3470 ENCROACHMENT STATIONS=     9870.0   10140.0  TYPE=      1  TARGET=      270.000
        Q changed to 3,650 cfs at the confluence with Stream No. 2.
    8.485      6.87   1757.17   1755.91   1756.87   1757.49      0.32      4.16      0.01   1754.10
   3650.0     727.7    1835.4    1086.9     257.7     329.9     312.4     500.7     109.8   1754.90
     0.64      2.82      5.56      3.48     0.080     0.065     0.080     0.000   1750.30   9870.00
 0.007193      500.      591.      600.         3        18         0      0.00    270.00  10140.00


FLOW DISTRIBUTION FOR SECNO=      8.48          CWSEL=   1757.17

STA=    9870.    9919.    9959.    9976.   10043.   10071.   10085.   10112.   10140.
  PER Q=      8.5      7.7      3.7     50.3      6.0      5.6     12.2      6.0
   AREA=    114.5     98.2     45.1    329.9     73.5     52.6    111.0     75.3
    VEL=      2.7      2.9      3.0      5.6      3.0      3.9      4.0      2.9
  DEPTH=      2.3      2.5      2.7      4.9      2.6      3.9      4.1      2.7

1490 NH CARD USED
*SECNO 8.574

3470 ENCROACHMENT STATIONS=     9970.0   10350.0  TYPE=      1  TARGET=      380.000
        NH cards were used from SECNO 8.574 to SECNO 9.304.
    8.574      5.70   1760.90   1760.02   1760.56   1761.24      0.34      3.74      0.00   1758.20
   3650.0       6.9    1436.3    2206.8       3.8     237.6     634.2     509.6     113.0   1760.00
     0.67      1.84      6.05      3.48     0.080     0.065     0.076     0.000   1755.20   9970.00
 0.010140      500.      470.      400.         3        16         0      0.00    380.00  10350.00


FLOW DISTRIBUTION FOR SECNO=      8.57          CWSEL=   1760.90
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9970.	9972.	10027.	10124.	10148.	10191.	10269.	10281.	10311.	10350.
PER Q=	0.2	39.4	7.0	6.4	6.6	7.2	6.8	17.7	8.8	
AREA=	3.8	237.6	118.0	64.4	82.3	105.8	47.0	120.3	96.4	
VEL=	1.8	6.0	2.2	3.6	2.9	2.5	5.3	5.4	3.3	
DEPTH=	2.5	4.3	1.2	2.7	1.9	1.3	3.9	4.0	2.5	

1490 NH CARD USED
*SECNO 8.670

3470 ENCROACHMENT STATIONS= 9960.0 10400.0 TYPE= 1 TARGET= 440.000

8.670	7.89	1764.99	1764.08	1764.06	1765.24	0.25	4.00	0.01	1760.00
3650.0	455.3	942.0	2252.7	126.5	151.6	839.5	520.8	117.6	1761.00
0.70	3.60	6.21	2.68	0.080	0.065	0.080	0.000	1757.10	9960.00
0.006691	507.	507.	480.	3	12	0	0.00	440.00	10400.00

FLOW DISTRIBUTION FOR SECNO= 8.67 CWSEL= 1764.99

STA=	9960.	9984.	9992.	10016.	10044.	10087.	10172.	10202.	10227.	10273.	10312.	10349.	10375.
PER Q=	8.1	4.4	25.8	9.1	3.7	7.2	7.8	5.9	6.1	4.3	5.0	6.2	
AREA=	87.4	39.1	151.6	96.4	64.8	129.1	90.1	70.8	92.3	69.8	74.0	74.5	
VEL=	3.4	4.1	6.2	3.5	2.1	2.0	3.2	3.0	2.4	2.2	2.4	3.0	
DEPTH=	3.7	4.4	6.3	3.4	1.5	1.5	3.0	2.8	2.0	1.8	2.0	2.8	

STA=	10375.	10400.
PER Q=	6.4	
AREA=	77.7	
VEL=	3.0	
DEPTH=	3.1	

1490 NH CARD USED
*SECNO 8.763

3470 ENCROACHMENT STATIONS= 9980.0 10400.0 TYPE= 1 TARGET= 420.000

8.763	6.99	1767.99	1766.68	1767.51	1768.19	0.20	2.95	0.00	1765.20
3650.0	47.9	791.1	2811.0	20.9	150.6	937.9	532.3	122.0	1764.30
0.74	2.29	5.25	3.00	0.080	0.065	0.078	0.000	1761.00	9980.00
0.006222	510.	491.	440.	3	13	0	0.00	420.00	10400.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 8.76 CWSEL= 1767.99

STA=	9980.	9989.	10018.	10038.	10067.	10088.	10159.	10192.	10218.	10226.	10234.	10246.	10279.
PER Q=	1.3	21.7	6.0	6.6	3.3	5.6	9.9	10.5	4.9	6.0	5.6	7.1	
AREA=	20.9	150.6	67.2	82.4	47.2	106.9	110.0	103.1	37.9	42.6	48.7	90.8	
VEL=	2.3	5.3	3.2	2.9	2.5	1.9	3.3	3.7	4.7	5.1	4.2	2.9	
DEPTH=	2.5	5.2	3.3	2.8	2.3	1.5	3.3	4.0	4.7	5.4	4.1	2.7	

STA=	10279.	10314.	10400.
PER Q=	5.1	6.4	
AREA=	76.1	125.0	
VEL=	2.4	1.9	
DEPTH=	2.1	1.5	

1490 NH CARD USED
*SECNO 8.853

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.70

3470 ENCROACHMENT STATIONS= 9880.0 10110.0 TYPE= 1 TARGET= 230.000

8.853	6.05	1772.05	1771.11	1771.77	1772.50	0.45	4.23	0.08	1767.80
3650.0	1639.1	1189.4	821.5	358.1	168.0	209.0	542.8	125.7	1769.20
0.77	4.58	7.08	3.93	0.080	0.065	0.080	0.000	1766.00	9880.00
0.012841	440.	475.	520.	3	14	0	0.00	230.00	10110.00

FLOW DISTRIBUTION FOR SECNO= 8.85 CWSEL= 1772.05

STA=	9880.	9911.	9942.	9969.	9993.	10029.	10058.	10107.	10110.
PER Q=	7.8	12.4	11.6	13.1	32.6	9.0	13.0	0.4	
AREA=	76.7	99.1	90.7	91.6	168.0	80.0	122.9	6.2	
VEL=	3.7	4.6	4.7	5.2	7.1	4.1	3.9	2.4	
DEPTH=	2.5	3.2	3.3	3.9	4.6	2.7	2.5	2.3	

1490 NH CARD USED
*SECNO 8.939

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9982.0 10300.0 TYPE= 1 TARGET= 318.000

8.939	8.01	1776.11	1774.96	1775.19	1776.40	0.29	3.88	0.02	1772.80
3650.0	0.1	1353.4	2296.5	0.3	227.3	765.4	551.5	128.4	1771.90
0.80	0.31	5.95	3.00	0.080	0.065	0.080	0.000	1768.10	9982.00
0.006419	440.	454.	430.	2	8	0	0.00	318.00	10300.00

FLOW DISTRIBUTION FOR SECNO= 8.94 CWSEL= 1776.11

STA=	9982.	9982.	10020.	10058.	10100.	10151.	10196.	10237.	10277.	10300.
PER Q=	0.0	37.1	16.2	12.7	10.3	5.9	4.7	8.5	4.6	
AREA=	0.3	227.3	155.1	140.5	133.5	90.6	75.8	108.1	61.8	
VEL=	0.3	6.0	3.8	3.3	2.8	2.4	2.3	2.9	2.7	
DEPTH=	3.3	6.0	4.1	3.3	2.6	2.0	1.9	2.7	2.7	

1490 NH CARD USED
*SECNO 9.021

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.55

3470 ENCROACHMENT STATIONS= 9980.0 10300.0 TYPE= 1 TARGET= 320.000
Q changed to 2,770 cfs at the confluence with Stream No. 1.

9.021	5.15	1779.05	1778.40	1778.55	1779.36	0.32	2.95	0.01	1776.90
2770.0	3.7	1154.9	1611.4	2.2	196.3	498.6	558.1	130.8	1776.90
0.82	1.66	5.88	3.23	0.080	0.065	0.080	0.000	1773.90	9980.00
0.012118	510.	433.	310.	2	11	0	0.00	320.00	10300.00

FLOW DISTRIBUTION FOR SECNO= 9.02 CWSEL= 1779.05

STA=	9980.	9981.	10036.	10102.	10146.	10182.	10207.	10243.	10276.	10300.
PER Q=	0.1	41.7	23.0	11.5	6.2	5.7	6.1	3.4	2.3	
AREA=	2.2	196.3	167.3	94.3	60.3	48.7	59.6	40.0	28.5	
VEL=	1.7	5.9	3.8	3.4	2.8	3.2	2.8	2.4	2.2	
DEPTH=	2.0	3.6	2.5	2.1	1.6	2.0	1.6	1.2	1.2	

1490 NH CARD USED
*SECNO 9.114

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 9845.0 10250.0 TYPE= 1 TARGET= 405.000
ET card (Fields 7 & 8) was used to model the ineffective flow area
on left overbank.

9.114	6.61	1784.11	1783.33	1783.78	1784.38	0.27	5.01	0.00	1780.60
2770.0	1012.6	1038.4	718.9	309.0	185.4	287.7	566.0	134.7	1782.10
0.85	3.28	5.60	2.50	0.080	0.065	0.080	0.000	1777.50	9845.00
0.009619	400.	491.	470.	5	12	0	0.00	405.00	10250.00

FLOW DISTRIBUTION FOR SECNO= 9.11 CWSEL= 1784.11

STA=	9845.	9898.	9946.	9981.	10027.	10075.	10120.	10142.	10250.
PER Q=	7.6	13.1	15.8	37.5	10.3	9.0	3.6	3.1	
AREA=	85.8	112.8	110.4	185.4	98.3	87.4	37.9	64.1	
VEL=	2.5	3.2	4.0	5.6	2.9	2.9	2.6	1.3	
DEPTH=	1.6	2.4	3.2	4.0	2.0	2.0	1.7	0.6	

1490 NH CARD USED
*SECNO 9.210

3470 ENCROACHMENT STATIONS= 9974.0 10350.0 TYPE= 1 TARGET= 376.000

9.210	4.62	1789.22	1788.32	1788.48	1789.44	0.22	5.06	0.01	1788.00
2770.0	0.3	499.7	2270.0	0.4	113.9	632.9	573.8	138.6	1787.90
0.89	0.82	4.39	3.59	0.080	0.066	0.080	0.000	1784.60	9974.00
0.013084	530.	507.	400.	2	11	0	0.00	376.00	10350.00

FLOW DISTRIBUTION FOR SECNO= 9.21 CWSEL= 1789.22

STA=	9974.	9974.	9989.	10026.	10053.	10122.	10198.	10246.	10285.	10331.	10350.
PER Q=	0.0	2.4	15.7	1.4	3.9	21.3	20.3	12.9	15.7	6.3	
AREA=	0.4	23.1	90.8	21.3	57.5	165.3	134.0	93.4	113.5	47.8	
VEL=	0.8	2.8	4.8	1.8	1.9	3.6	4.2	3.8	3.8	3.7	
DEPTH=	1.2	1.5	2.5	0.8	0.8	2.2	2.8	2.4	2.4	2.6	

1490 NH CARD USED
*SECNO 9.304

3470 ENCROACHMENT STATIONS= 9720.0 10100.0 TYPE= 1 TARGET= 380.000

9.304	4.77	1795.77	1795.02	1794.85	1796.03	0.26	6.58	0.01	1793.60
2770.0	1638.7	899.6	231.7	470.5	169.0	98.6	582.6	143.1	1793.70
0.92	3.48	5.32	2.35	0.080	0.065	0.080	0.000	1791.00	9720.00
0.012495	430.	496.	580.	5	9	0	0.00	380.00	10100.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.30 CWSEL= 1795.77

STA=	9720.	9738.	9744.	9766.	9796.	9834.	9881.	9927.	9959.	10015.	10047.	10100.
PER Q=	9.3	4.0	11.1	5.5	3.7	4.6	10.7	10.2	32.5	4.9	3.5	
AREA=	61.6	21.6	69.1	51.3	44.9	54.8	90.9	76.4	169.0	49.3	49.3	
VEL=	4.2	5.1	4.5	3.0	2.3	2.3	3.3	3.7	5.3	2.7	2.0	
DEPTH=	3.3	3.9	3.2	1.7	1.2	1.2	2.0	2.4	3.0	1.5	0.9	

*SECNO 9.400

3470 ENCROACHMENT STATIONS= 9790.0 10020.0 TYPE= 1 TARGET= 230.000
NC card was used - channel = .065, overbanks = .080

9.400	4.70	1802.50	1801.62	1801.79	1802.84	0.34	6.79	0.02	1800.00
2770.0	2059.7	710.3	0.0	492.0	122.4	0.0	590.4	146.6	100000.00
0.95	4.19	5.80	0.00	0.080	0.065	0.000	0.000	1797.80	9790.00
0.014656	500.	507.	507.	4	14	0	0.00	230.00	10020.00

FLOW DISTRIBUTION FOR SECNO= 9.40 CWSEL= 1802.50

STA=	9790.	9827.	9868.	9910.	9946.	9968.	9983.	10027.
PER Q=	18.9	15.3	11.8	11.9	9.8	6.6	25.6	
AREA=	115.3	102.1	88.7	83.8	60.8	41.2	122.4	
VEL=	4.5	4.1	3.7	3.9	4.5	4.5	5.8	
DEPTH=	3.1	2.5	2.1	2.3	2.8	2.8	3.3	

*SECNO 9.492

3470 ENCROACHMENT STATIONS= 9840.0 10050.0 TYPE= 1 TARGET= 210.000
NC card was used - channel = .070, overbanks = .090

9.492	4.62	1808.22	1806.81	1807.29	1808.50	0.28	5.66	0.01	1805.70
2770.0	1837.4	625.3	307.3	471.0	115.4	85.9	596.7	148.7	1805.10
0.98	3.90	5.42	3.58	0.090	0.070	0.090	0.000	1803.60	9840.00
0.011964	400.	486.	540.	4	19	0	0.00	210.00	10050.00

FLOW DISTRIBUTION FOR SECNO= 9.49 CWSEL= 1808.22

STA=	9840.	9845.	9863.	9871.	9890.	9926.	9944.	9966.	9990.	10022.	10050.
PER Q=	1.9	11.3	5.9	11.2	14.4	7.8	7.3	6.5	22.6	11.1	
AREA=	17.7	70.5	33.6	70.9	107.0	56.2	58.0	57.1	115.4	85.9	
VEL=	2.9	4.5	4.9	4.4	3.7	3.9	3.5	3.2	5.4	3.6	
DEPTH=	3.4	3.9	4.4	3.8	3.0	3.1	2.7	2.3	3.6	3.1	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.586

3470 ENCROACHMENT STATIONS= 9920.0 10080.0 TYPE= 1 TARGET= 160.000
Q changed to 1,840 cfs at future 29th Avenue.

9.586	5.56	1813.96	1812.95	1813.81	1814.28	0.31	5.76	0.01	1811.70
1840.0	369.7	1121.0	349.2	132.0	212.8	116.5	603.4	150.9	1811.30
1.01	2.80	5.27	3.00	0.090	0.070	0.090	0.000	1808.40	9920.00
0.010286	550.	496.	450.	4	6	0	0.00	160.00	10080.00

FLOW DISTRIBUTION FOR SECNO= 9.59 CWSEL= 1813.96

STA=	9920.	9954.	9979.	10034.	10080.
PER Q=	11.7	8.4	60.9	19.0	
AREA=	77.9	54.0	212.8	116.5	
VEL=	2.8	2.8	5.3	3.0	
DEPTH=	2.3	2.2	3.9	2.5	

*SECNO 9.682

3470 ENCROACHMENT STATIONS= 9930.0 10100.0 TYPE= 1 TARGET= 170.000

9.682	4.42	1820.62	1819.98	1819.77	1821.01	0.38	6.71	0.02	1818.00
1840.0	20.0	1306.4	513.6	7.3	237.5	152.9	608.4	152.8	1818.70
1.04	2.73	5.50	3.36	0.090	0.070	0.090	0.000	1816.20	9930.00
0.017823	480.	507.	510.	4	18	0	0.00	170.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 9.68 CWSEL= 1820.62

STA=	9930.	9933.	10021.	10064.	10088.	10098.	10100.
PER Q=	1.1	71.0	14.3	7.3	5.4	0.9	
AREA=	7.3	237.5	79.7	41.6	25.0	6.5	
VEL=	2.7	5.5	3.3	3.2	4.0	2.6	
DEPTH=	2.5	2.7	1.8	1.8	2.4	2.9	

*SECNO 9.776

3470 ENCROACHMENT STATIONS= 9960.0 10170.0 TYPE= 1 TARGET= 210.000

9.776	4.36	1828.36	1827.33	1827.76	1828.59	0.23	7.57	0.01	1827.10
1840.0	14.0	594.0	1232.0	7.2	127.9	354.3	613.3	155.0	1826.40
1.08	1.94	4.65	3.48	0.090	0.070	0.090	0.000	1824.00	9960.00
0.013603	490.	496.	480.	5	19	0	0.00	210.00	10170.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 9.78 CWSEL= 1828.36

STA=	9960.	9966.	10016.	10047.	10073.	10080.	10088.	10101.	10119.	10135.	10157.	10163.	10170.
PER Q=	0.8	32.3	6.9	5.6	4.6	7.2	7.9	6.3	8.4	7.4	7.2	5.5	
AREA=	7.2	127.9	48.9	40.0	22.0	28.5	37.7	36.7	43.0	43.0	26.6	27.8	
VEL=	1.9	4.6	2.6	2.6	3.8	4.6	3.9	3.2	3.6	3.2	5.0	3.7	
DEPTH=	1.2	2.6	1.6	1.6	2.9	3.7	2.9	2.1	2.7	1.9	4.2	4.1	

*SECNO 9.872

3470 ENCROACHMENT STATIONS= 9988.0 10180.0 TYPE= 1 TARGET= 192.000

9.872	5.57	1835.27	1834.73	1834.43	1835.71	0.44	7.06	0.06	1832.50
1840.0	1.1	774.5	1064.4	1.1	105.9	327.3	618.5	157.2	1831.00
1.11	1.02	7.32	3.25	0.090	0.070	0.090	0.000	1829.70	9988.00
0.015260	510.	507.	480.	4	11	0	0.00	192.00	10180.00

FLOW DISTRIBUTION FOR SECNO= 9.87 CWSEL= 1835.27

STA=	9988.	9988.	10011.	10025.	10077.	10129.	10164.	10180.
PER Q=	0.1	42.1	9.4	11.6	10.2	14.4	12.4	
AREA=	1.1	105.9	42.0	79.1	72.7	77.5	56.0	
VEL=	1.0	7.3	4.1	2.7	2.6	3.4	4.1	
DEPTH=	2.7	4.8	2.9	1.5	1.4	2.2	3.6	

*SECNO 9.966

3470 ENCROACHMENT STATIONS= 9991.0 10100.0 TYPE= 1 TARGET= 109.000

9.966	6.79	1843.39	1842.77	1842.86	1844.05	0.66	8.27	0.06	100000.00
1840.0	0.0	1168.9	671.1	0.0	152.7	178.9	623.0	159.0	1840.20
1.13	0.00	7.65	3.75	0.000	0.070	0.090	0.000	1836.60	9991.00
0.017474	470.	496.	520.	4	8	0	0.00	109.00	10100.00

FLOW DISTRIBUTION FOR SECNO= 9.97 CWSEL= 1843.39

STA=	9991.	10022.	10065.	10100.
PER Q=	63.5	23.6	12.9	
AREA=	152.7	108.1	70.7	
VEL=	7.7	4.0	3.4	
DEPTH=	5.0	2.5	2.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 10.058

3470 ENCROACHMENT STATIONS= 9900.0 10032.0 TYPE= 1 TARGET= 132.000

10.058	5.96	1851.66	1851.08	1850.90	1852.20	0.54	8.14	0.01	1849.50
1840.0	445.9	1394.1	0.0	140.8	212.7	0.0	626.7	160.3	100000.00
1.15	3.17	6.55	0.00	0.090	0.070	0.000	0.000	1845.70	9900.00
0.016608	490.	486.	440.	4	14	0	0.00	132.00	10032.00

FLOW DISTRIBUTION FOR SECNO= 10.06 CWSEL= 1851.66

STA=	9900.	9909.	9946.	9976.	10039.
PER Q=	2.5	11.1	10.6	75.8	
AREA=	16.5	65.8	58.5	212.7	
VEL=	2.8	3.1	3.3	6.6	
DEPTH=	1.8	1.8	2.0	3.8	

*SECNO 10.151

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.75

3470 ENCROACHMENT STATIONS= 9880.0 10060.0 TYPE= 1 TARGET= 180.000

10.151	4.03	1856.33	1854.68	1855.89	1856.49	0.17	4.25	0.04	1854.80
1840.0	2.5	1837.5	0.0	2.4	557.0	0.0	631.8	162.0	100000.00
1.19	1.03	3.30	0.00	0.090	0.070	0.000	0.000	1852.30	9880.00
0.005413	440.	491.	500.	3	18	0	0.00	180.00	10060.00

FLOW DISTRIBUTION FOR SECNO= 10.15 CWSEL= 1856.33

STA=	9880.	9882.	10062.
PER Q=	0.1	99.9	
AREA=	2.4	557.0	
VEL=	1.0	3.3	
DEPTH=	1.5	3.1	

*SECNO 10.230

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9970.0 10080.0 TYPE= 1 TARGET= 110.000

10.230	5.53	1862.33	1862.33	1862.00	1863.49	1.16	4.43	0.30	1859.50
1840.0	106.5	1424.9	308.6	22.4	148.4	87.8	635.6	163.3	1860.00
1.21	4.75	9.60	3.52	0.090	0.070	0.090	0.000	1856.80	9970.00
0.030799	460.	417.	340.	0	11	0	0.00	110.00	10080.00

FLOW DISTRIBUTION FOR SECNO= 10.23 CWSEL= 1862.33

STA=	9970.	9972.	9980.	10015.	10034.	10069.	10080.
PER Q=	0.4	5.4	77.4	5.9	7.2	3.7	
AREA=	2.9	19.5	148.4	28.2	41.0	18.5	
VEL=	2.6	5.1	9.6	3.8	3.2	3.7	
DEPTH=	1.8	2.3	4.2	1.5	1.2	1.6	

*SECNO 10.325

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.55

3470 ENCROACHMENT STATIONS= 9930.0 10020.0 TYPE= 1 TARGET= 90.000

10.325	5.64	1872.54	1871.28	1871.92	1873.08	0.55	9.54	0.06	1869.50
1840.0	156.8	1661.8	21.4	48.4	269.6	9.5	639.0	164.5	1870.70
1.23	3.24	6.16	2.26	0.090	0.070	0.090	0.000	1866.90	9930.00
0.012789	470.	502.	550.	4	15	0	0.00	90.00	10020.00

FLOW DISTRIBUTION FOR SECNO= 10.32 CWSEL= 1872.54

STA=	9930.	9936.	9950.	10015.	10020.
PER Q=	1.8	6.7	90.3	1.2	
AREA=	13.2	35.2	269.6	9.5	
VEL=	2.5	3.5	6.2	2.3	
DEPTH=	2.1	2.6	4.2	1.7	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 10.419

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 0.64

3470 ENCROACHMENT STATIONS= 9985.0 10055.0 TYPE= 1 TARGET= 70.000

10.419	5.43	1881.53	1881.10	1881.26	1882.64	1.11	9.39	0.17	1878.90
1840.0	17.7	1556.8	265.4	5.4	173.7	52.3	642.2	165.4	1878.80
1.25	3.26	8.96	5.07	0.090	0.070	0.090	0.000	1876.10	9985.00
0.031709	510.	496.	420.	4	15	0	0.00	70.00	10055.00

FLOW DISTRIBUTION FOR SECNO= 10.42 CWSEL= 1881.53

STA=	9985.	9987.	10034.	10055.
PER Q=	1.0	84.6	14.4	
AREA=	5.4	173.7	52.3	
VEL=	3.3	9.0	5.1	
DEPTH=	2.6	3.7	2.5	

*SECNO 10.544

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9954.0 10015.0 TYPE= 1 TARGET= 61.000
The upstream study limit on Deadman Wash at future 22nd Avenue.
Q changed to 1,020 cfs at future 22nd Avenue.

10.544	5.36	1894.66	1893.15	1893.76	1895.05	0.39	12.33	0.07	1892.20
1020.0	87.0	880.4	52.6	34.6	166.3	19.7	645.6	166.4	1891.10
1.28	2.52	5.29	2.68	0.090	0.070	0.090	0.000	1889.30	9954.00
0.009318	650.	660.	650.	5	19	0	0.00	61.00	10015.00

FLOW DISTRIBUTION FOR SECNO= 10.54 CWSEL= 1894.66

STA=	9954.	9969.	10009.	10015.
PER Q=	8.5	86.3	5.2	
AREA=	34.6	166.3	19.7	
VEL=	2.5	5.3	2.7	
DEPTH=	2.2	4.2	3.3	

THIS RUN EXECUTED 16DEC94 3:47:05

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Deadman Wash 100-year Q

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	6.021	9480.00	1667.56	9.56	1658.00	1668.55	1667.42	11.02	130.86	0.00	9160.63	734.01	10021.10
	6.021	9480.00	1668.34	10.34	1658.00	1669.46	1667.63	10.85	113.08	0.00	9754.00	267.00	10021.00
*	6.108	9480.00	1671.43	10.03	1661.40	1671.85	1670.46	6.97	51.67	459.00	9290.48	867.40	10157.88
*	6.108	9480.00	1672.09	10.69	1661.40	1672.66	1670.56	7.51	53.27	459.00	9650.00	410.00	10060.00
	6.205	9480.00	1673.92	6.92	1667.00	1674.25	1673.01	6.95	68.84	512.00	9179.86	973.03	10152.89
	6.205	9480.00	1674.70	7.70	1667.00	1675.19	1673.58	7.75	71.83	512.00	9520.00	580.00	10100.00
	6.280	9680.00	1678.08	9.98	1668.10	1678.92	1678.00	10.34	110.82	396.00	9256.78	941.38	10205.1[illegible]
	6.280	9680.00	1678.81	10.71	1668.10	1679.78	1678.45	10.50	100.58	396.00	9600.00	484.00	10084[illegible]
*	6.328	9680.00	1680.45	8.85	1671.60	1680.83	1679.64	7.06	48.09	253.00	9070.78	1192.61	10284.06
*	6.328	9680.00	1681.05	9.45	1671.60	1681.36	1679.49	6.24	33.88	253.00	9480.00	710.00	10190.00
	6.423	9680.00	1683.57	9.37	1674.20	1684.20	1683.36	8.51	93.80	502.00	8941.21	1152.85	10094.07
*	6.423	9680.00	1683.63	9.43	1674.20	1684.57	1683.49	9.74	121.60	502.00	9470.00	610.00	10080.00
	6.539	9680.00	1687.53	8.93	1678.60	1687.91	1686.90	7.64	60.37	612.00	9046.51	1074.62	10121.13
	6.539	9680.00	1688.44	9.84	1678.60	1688.99	1687.59	8.41	62.48	612.00	9500.00	580.00	10080.00
	6.654	9680.00	1691.65	10.05	1681.60	1692.38	1691.13	9.39	86.89	607.00	9381.14	768.21	10149.34
	6.654	9680.00	1692.38	10.78	1681.60	1693.17	1691.35	9.22	74.21	607.00	9750.00	362.00	10112.00
	6.751	9770.00	1695.77	10.37	1685.40	1696.05	1694.10	5.93	59.15	512.00	9310.44	855.70	10166.14
	6.751	9770.00	1696.36	10.96	1685.40	1696.80	1694.38	6.70	67.14	512.00	9700.00	400.00	10100.00
	6.849	9770.00	1698.51	7.71	1690.80	1698.76	1697.39	6.34	65.73	517.00	9136.55	1165.28	10301.83
	6.849	9770.00	1699.27	8.47	1690.80	1699.61	1697.45	6.55	60.62	517.00	9558.00	542.00	10100.00
	6.945	9770.00	1702.03	11.13	1690.90	1702.33	1700.84	6.58	65.73	507.00	9562.80	912.37	10475.17
	6.945	9770.00	1702.69	11.79	1690.90	1703.09	1701.02	7.13	68.83	507.00	9840.00	480.00	10320.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	7.042	9770.00	1704.81	11.51	1693.30	1705.07	1703.17	5.88	54.10	512.00	9694.38	798.74	10493.12
	7.042	9770.00	1705.62	12.32	1693.30	1706.05	1703.48	6.94	65.14	512.00	9940.00	380.00	10320.00
	7.133	9770.00	1706.91	9.41	1697.50	1707.24	1704.65	5.20	40.59	480.00	9540.47	659.19	10216.48
	7.133	9770.00	1707.83	10.33	1697.50	1708.19	1704.53	5.14	33.92	480.00	9790.00	372.00	10162.00
*	7.228	9770.00	1708.51	7.81	1700.70	1708.69	1704.96	3.65	20.45	502.00	9639.62	618.80	10262.73
	7.228	9770.00	1709.29	8.59	1700.70	1709.53	1704.80	3.93	20.44	502.00	9870.00	340.00	10210.00
*	7.323	9770.00	1711.13	7.43	1703.70	1712.74	1711.13	12.99	293.03	502.00	9818.21	367.51	10263.94
*	7.323	9770.00	1711.32	7.62	1703.70	1713.69	1711.32	14.90	370.30	502.00	9870.00	180.00	10050.00
*	7.417	9770.00	1717.28	10.68	1706.60	1717.69	1714.00	6.44	45.04	496.00	9679.60	411.82	10091.42
*	7.417	9770.00	1718.25	11.65	1706.60	1718.72	1713.88	6.49	39.86	496.00	9820.00	220.00	10040.00
*	7.513	9770.00	1720.86	9.96	1710.90	1722.09	1720.47	10.67	152.52	507.00	9585.83	436.83	10045.63
*	7.513	9770.00	1721.44	10.54	1710.90	1722.98	1721.06	11.44	159.83	507.00	9760.00	285.00	10045.00
*	7.587	9980.00	1725.34	9.74	1715.60	1725.78	1723.90	7.14	72.54	391.00	9350.98	694.72	10045.70
*	7.587	9980.00	1726.00	10.40	1715.60	1726.44	1723.93	6.79	58.22	391.00	9570.00	464.00	10034.00
	7.663	9980.00	1727.39	8.99	1718.40	1727.85	1726.32	7.53	52.20	401.00	9500.25	661.97	10162.23
	7.663	9980.00	1727.92	9.52	1718.40	1728.67	1726.84	8.80	65.27	401.00	9650.00	395.00	10045.00
	7.738	9440.00	1729.63	10.83	1718.80	1730.35	1728.83	8.90	67.92	396.00	9706.91	592.07	10298.98
	7.738	9440.00	1730.40	11.60	1718.80	1731.25	1729.07	9.16	63.81	396.00	9790.00	318.00	10108.00
	7.766	9440.00	1730.85	11.75	1719.10	1732.02	1727.59	8.71	128.30	148.00	9938.06	142.70	10080.76
	7.766	9440.00	1731.52	12.42	1719.10	1732.55	1727.61	8.11	105.32	148.00	9950.00	125.00	10075.00
*	7.769	9440.00	1731.80	12.30	1719.50	1732.39	1725.27	6.13	1.31	17.00	9936.00	128.00	10064.00
*	7.769	9440.00	1732.30	12.80	1719.50	1732.84	1725.29	5.89	1.15	17.00	9936.00	127.99	10063.99
	7.778	9440.00	1731.88	12.18	1719.70	1732.50	0.00	6.33	1.44	45.00	9936.00	128.00	10064.00
	7.778	9440.00	1732.37	12.67	1719.70	1732.94	0.00	6.07	1.27	45.00	9936.00	127.99	10063.99
*	7.785	9440.00	1731.85	11.25	1720.60	1732.72	1728.00	7.49	99.25	38.00	9928.06	150.37	10078.43
*	7.785	9440.00	1732.34	11.74	1720.60	1733.12	1728.03	7.07	83.21	38.00	9927.00	152.00	10079.00
*	7.792	9440.00	1731.84	9.67	1722.17	1732.91	1728.22	8.32	3.25	35.00	9939.00	122.00	10061.01
*	7.792	9440.00	1732.33	10.16	1722.17	1733.30	1728.22	7.90	2.76	35.00	9939.00	122.00	10061.00
	7.800	9440.00	1732.11	9.17	1722.94	1733.39	0.00	9.09	4.31	44.00	9939.00	122.00	10061.01
	7.800	9440.00	1732.55	9.61	1722.94	1733.71	0.00	8.64	3.68	44.00	9939.00	122.00	10061.00
*	7.812	9440.00	1733.11	9.91	1723.20	1733.68	1729.34	6.04	67.14	64.00	9944.36	219.54	10163.90
*	7.812	9440.00	1733.44	10.24	1723.20	1733.96	1729.33	5.80	58.23	64.00	9950.00	210.00	10160.00
	7.872	9440.00	1735.26	9.56	1725.70	1735.46	1732.78	4.50	45.07	317.00	9967.05	626.85	10593.90
	7.872	9440.00	1735.45	9.75	1725.70	1735.68	1732.93	4.65	47.72	317.00	9974.00	546.00	10520.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
	7.921	9440.00	1736.01	9.61	1726.40	1736.17	1733.56	4.23	37.25	259.00	9776.97	739.33	10516.30
	7.921	9440.00	1736.25	9.85	1726.40	1736.44	1733.75	4.58	41.65	259.00	9850.00	600.00	10450.00
*	8.016	6220.00	1738.47	8.57	1729.90	1738.83	1737.69	7.15	107.12	502.00	9438.17	635.38	10230.51
*	8.016	6220.00	1738.94	9.04	1729.90	1739.60	1737.80	8.42	136.15	502.00	9850.00	250.00	10100.00
	8.111	6220.00	1742.60	10.41	1732.20	1742.90	1740.67	6.46	63.27	502.00	9615.82	477.31	10093.13
*	8.111	6220.00	1743.32	11.12	1732.20	1743.61	1740.72	6.16	51.76	502.00	9760.00	285.00	10045.00
	8.187	6220.00	1745.51	8.81	1736.70	1745.87	1744.21	6.31	86.45	401.00	9589.24	462.46	10051.70
	8.187	6220.00	1745.95	9.25	1736.70	1746.42	1744.39	6.76	95.41	401.00	9750.00	286.00	10036.00
	8.278	6220.00	1748.92	9.72	1739.20	1749.14	1747.61	5.41	57.83	480.00	9642.51	743.56	10386.07
	8.278	6220.00	1749.66	10.46	1739.20	1750.00	1747.86	6.02	62.52	480.00	9800.00	370.00	10170.00
*	8.373	4480.00	1752.12	7.32	1744.80	1752.46	1751.33	6.21	81.67	502.00	9654.08	534.75	10340.47
*	8.373	4480.00	1752.88	8.08	1744.80	1753.31	1751.31	6.37	71.89	502.00	9920.00	230.00	10150.00
	8.485	3650.00	1756.87	6.57	1750.30	1757.18	1756.02	5.68	81.32	591.00	9786.34	493.64	10279.98
	8.485	3650.00	1757.17	6.87	1750.30	1757.49	1755.91	5.56	71.93	591.00	9870.00	270.00	10140.00
	8.574	3650.00	1760.56	5.36	1755.20	1760.77	1759.73	5.15	82.12	470.00	9961.41	603.35	10564.76
	8.574	3650.00	1760.90	5.70	1755.20	1761.24	1760.02	6.05	101.40	470.00	9970.00	380.00	10350.00
	8.670	3650.00	1764.06	6.96	1757.10	1764.22	1763.11	5.36	61.38	507.00	9933.55	803.26	10736.81
	8.670	3650.00	1764.99	7.89	1757.10	1765.24	1764.08	6.21	66.91	507.00	9960.00	440.00	10400.00
	8.763	3650.00	1767.51	6.51	1761.00	1767.78	1766.80	6.24	100.28	491.00	9935.32	569.19	10504.[illegible]
	8.763	3650.00	1767.99	6.99	1761.00	1768.19	1766.68	5.25	62.22	491.00	9980.00	420.00	10400.[illegible]
	8.853	3650.00	1771.77	5.77	1766.00	1771.94	1770.78	5.05	70.80	475.00	9865.33	691.87	10644.40
*	8.853	3650.00	1772.05	6.05	1766.00	1772.50	1771.11	7.08	128.41	475.00	9880.00	230.00	10110.00
	8.939	3650.00	1775.19	7.09	1768.10	1775.45	1774.81	6.31	90.09	454.00	9974.50	916.29	10904.33
*	8.939	3650.00	1776.11	8.01	1768.10	1776.40	1774.96	5.95	64.19	454.00	9982.00	318.00	10300.00
	9.021	2770.00	1778.55	4.65	1773.90	1778.73	1777.92	4.81	98.32	433.00	9972.94	647.26	10692.97
*	9.021	2770.00	1779.05	5.15	1773.90	1779.36	1778.40	5.88	121.18	433.00	9980.00	320.00	10300.00
	9.114	2770.00	1783.78	6.28	1777.50	1784.11	1783.33	6.29	135.92	491.00	9824.30	661.19	10535.16
	9.114	2770.00	1784.11	6.61	1777.50	1784.38	1783.33	5.60	96.19	491.00	9845.00	405.00	10250.00
	9.210	2770.00	1788.48	3.88	1784.60	1788.58	1787.51	2.63	75.44	507.00	9801.27	835.85	10679.63
	9.210	2770.00	1789.22	4.62	1784.60	1789.44	1788.32	4.39	130.84	507.00	9974.00	376.00	10350.00
*	9.304	2770.00	1794.85	3.85	1791.00	1795.14	1794.61	5.81	241.25	496.00	9622.22	798.69	10533.87
	9.304	2770.00	1795.77	4.77	1791.00	1796.03	1795.02	5.32	124.95	496.00	9720.00	380.00	10100.00
*	9.400	2770.00	1801.79	3.99	1797.80	1801.93	1800.90	3.78	85.76	507.00	9656.49	540.46	10478.11
	9.400	2770.00	1802.50	4.70	1797.80	1802.84	1801.62	5.80	146.56	507.00	9790.00	230.00	10020.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	9.492	2770.00	1807.29	3.69	1803.60	1807.56	1806.71	5.82	205.96	486.00	9695.71	457.53	10153.23
	9.492	2770.00	1808.22	4.62	1803.60	1808.50	1806.81	5.42	119.64	486.00	9840.00	210.00	10050.00
	9.586	1840.00	1813.81	5.41	1808.40	1813.98	1812.75	4.26	71.25	496.00	9818.25	375.97	10296.78
	9.586	1840.00	1813.96	5.56	1808.40	1814.28	1812.95	5.27	102.86	496.00	9920.00	160.00	10080.00
*	9.682	1840.00	1819.77	3.57	1816.20	1820.04	1819.31	4.97	241.32	507.00	9904.67	349.69	10254.36
	9.682	1840.00	1820.62	4.42	1816.20	1821.01	1819.98	5.50	178.23	507.00	9930.00	170.00	10100.00
*	9.776	1840.00	1827.76	3.76	1824.00	1827.87	1827.01	3.58	114.95	496.00	9769.98	538.37	10308.34
	9.776	1840.00	1828.36	4.36	1824.00	1828.59	1827.33	4.65	136.03	496.00	9960.00	210.00	10170.00
	9.872	1840.00	1834.43	4.73	1829.70	1834.76	1834.09	6.84	172.45	507.00	9977.45	370.85	10348.30
	9.872	1840.00	1835.27	5.57	1829.70	1835.71	1834.73	7.32	152.60	507.00	9988.00	192.00	10180.00
	9.966	1840.00	1842.86	6.26	1836.60	1843.29	1842.51	6.83	161.44	496.00	9990.04	231.33	10221.37
	9.966	1840.00	1843.39	6.79	1836.60	1844.05	1842.77	7.65	174.74	496.00	9991.00	109.00	10100.00
	10.058	1840.00	1850.90	5.20	1845.70	1851.23	1850.47	5.78	172.40	486.00	9723.57	308.93	10032.50
	10.058	1840.00	1851.66	5.96	1845.70	1852.20	1851.08	6.55	166.08	486.00	9900.00	132.00	10032.00
*	10.151	1840.00	1855.89	3.59	1852.30	1856.05	1854.70	3.32	65.83	491.00	9666.33	411.38	10077.71
*	10.151	1840.00	1856.33	4.03	1852.30	1856.49	1854.68	3.30	54.13	491.00	9880.00	180.00	10060.00
*	10.230	1840.00	1862.00	5.20	1856.80	1862.58	1862.00	7.74	222.68	417.00	9866.98	316.83	10183.80
*	10.230	1840.00	1862.33	5.53	1856.80	1863.49	1862.33	9.60	307.99	417.00	9970.00	110.00	10080.00
	10.325	1840.00	1871.92	5.02	1866.90	1872.45	1871.32	6.42	172.07	502.00	9767.11	257.34	10079.96
*	10.325	1840.00	1872.54	5.64	1866.90	1873.08	1871.28	6.16	127.89	502.00	9930.00	90.00	10020.00
	10.419	1840.00	1881.26	5.16	1876.10	1881.81	1881.06	7.10	219.37	496.00	9955.37	218.93	10174.30
*	10.419	1840.00	1881.53	5.43	1876.10	1882.64	1881.10	8.96	317.09	496.00	9985.00	70.00	10055.00
*	10.544	1020.00	1893.76	4.46	1889.30	1894.14	1893.24	5.62	145.27	660.00	9903.86	134.43	10038.29
	10.544	1020.00	1894.66	5.36	1889.30	1895.05	1893.15	5.29	93.18	660.00	9954.00	61.00	10015.00

Deadman Wash 100-year Q

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	6.021	1667.56	0.00	1668.55	734.01	5479.81	4000.19	0.00	0.00	0.00	9971.70	10021.50	0.00
	6.021	1668.34	0.78	1669.46	267.00	5121.98	4358.02	0.00	267.00	9754.00	9971.70	10021.50	10021.00
*	6.108	1671.43	0.00	1671.85	867.40	4251.22	4190.37	1038.41	0.00	0.00	9959.20	10046.20	0.00
*	6.108	1672.09	0.66	1672.66	410.00	4347.68	4944.40	187.92	410.00	9650.00	9959.20	10046.20	10060.00
	6.205	1673.92	0.00	1674.25	973.03	5894.05	2586.29	999.65	0.00	0.00	9973.40	10040.30	0.00
	6.205	1674.70	0.78	1675.19	580.00	5240.78	3288.11	951.10	580.00	9520.00	9973.40	10040.30	10100.00
	6.280	1678.08	0.00	1678.92	941.38	3164.74	4016.00	2499.26	0.00	0.00	9986.50	10040.30	0.00
	6.280	1678.81	0.74	1679.78	484.00	3839.69	4497.26	1343.06	484.00	9600.00	9986.50	10040.30	10084.00
*	6.328	1680.45	0.00	1680.83	1192.61	3540.24	3808.42	2331.33	0.00	0.00	9968.00	10040.00	0.00
*	6.328	1681.05	0.61	1681.36	710.00	3822.55	3639.61	2217.84	710.00	9480.00	9968.00	10040.00	10190.00
	6.423	1683.57	0.00	1684.20	1152.85	4925.18	4724.36	30.46	0.00	0.00	9980.00	10072.00	0.00
*	6.423	1683.63	0.05	1684.57	610.00	4193.96	5457.89	28.15	610.00	9470.00	9980.00	10072.00	10080.00
	6.539	1687.53	0.00	1687.91	1074.62	6207.12	3058.00	414.88	0.00	0.00	9972.00	10028.00	0.00
	6.539	1688.44	0.91	1688.99	580.00	5244.04	3791.39	644.57	580.00	9500.00	9972.00	10028.00	10080.00
	6.654	1691.65	0.00	1692.38	768.21	4014.81	4304.80	1360.39	0.00	0.00	9975.90	10035.70	0.00
	6.654	1692.38	0.73	1693.17	362.00	3560.05	4627.86	1492.09	362.00	9750.00	9975.90	10035.70	10112
	6.751	1695.77	0.00	1696.05	855.70	5369.21	2998.83	1401.96	0.00	0.00	9961.20	10040.50	0.00
	6.751	1696.36	0.59	1696.80	400.00	5180.97	3702.36	886.66	400.00	9700.00	9961.20	10040.50	10100.00
	6.849	1698.51	0.00	1698.76	1165.28	5644.96	2188.55	1936.49	0.00	0.00	9965.30	10018.90	0.00
	6.849	1699.27	0.76	1699.61	542.00	5658.31	2527.85	1583.84	542.00	9558.00	9965.30	10018.90	10100.00
	6.945	1702.03	0.00	1702.33	912.37	2439.34	2445.65	4885.01	0.00	0.00	9967.90	10019.30	0.00
	6.945	1702.69	0.65	1703.09	480.00	1838.70	2888.03	5043.27	480.00	9840.00	9967.90	10019.30	10320.00
	7.042	1704.81	0.00	1705.07	798.74	1696.90	2396.27	5676.83	0.00	0.00	9969.30	10027.60	0.00
	7.042	1705.62	0.81	1706.05	380.00	416.14	3152.14	6201.72	380.00	9940.00	9969.30	10027.60	10320.00
	7.133	1706.91	0.00	1707.24	659.19	2450.25	7243.15	76.60	0.00	0.00	9957.80	10162.40	0.00
	7.133	1707.83	0.93	1708.19	372.00	1633.44	8136.56	0.00	372.00	9790.00	9957.80	10162.40	10162.00
*	7.228	1708.51	0.00	1708.69	618.80	1523.94	8099.91	146.15	0.00	0.00	9872.20	10206.60	0.00
	7.228	1709.29	0.78	1709.53	340.00	11.07	9746.73	12.19	340.00	9870.00	9872.20	10206.60	10210.00
*	7.323	1711.13	0.00	1712.74	367.51	4439.84	3882.60	1447.56	0.00	0.00	9984.80	10031.30	0.00
*	7.323	1711.32	0.19	1713.69	180.00	4368.79	4583.81	817.40	180.00	9870.00	9984.80	10031.30	10050.00
*	7.417	1717.28	0.00	1717.69	411.82	5526.58	3685.61	557.82	0.00	0.00	9972.30	10036.80	0.00
*	7.417	1718.25	0.96	1718.72	220.00	5616.12	4120.06	33.82	220.00	9820.00	9972.30	10036.80	10040.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	7.513	1720.86	0.00	1722.09	436.83	3824.38	5945.62	0.00	0.00	0.00	9972.80	10053.50	0.00
*	7.513	1721.44	0.58	1722.98	285.00	2922.06	6847.94	0.00	285.00	9760.00	9972.80	10053.50	10045.00
*	7.587	1725.34	0.00	1725.78	694.72	5813.88	4145.18	20.94	0.00	0.00	9952.40	10033.70	0.00
*	7.587	1726.00	0.67	1726.44	464.00	5669.18	4310.33	0.49	464.00	9570.00	9952.40	10033.70	10034.00
	7.663	1727.39	0.00	1727.85	661.97	4910.09	4031.61	1038.30	0.00	0.00	9974.30	10044.20	0.00
	7.663	1727.92	0.53	1728.67	395.00	4927.13	5047.50	5.37	395.00	9650.00	9974.30	10044.20	10045.00
	7.738	1729.63	0.00	1730.35	592.07	2719.59	4728.87	1991.54	0.00	0.00	9967.80	10032.30	0.00
	7.738	1730.40	0.77	1731.25	318.00	2685.86	5319.04	1435.10	318.00	9790.00	9967.80	10032.30	10108.00
	7.766	1730.85	0.00	1732.02	142.70	16.22	9416.08	7.70	0.00	0.00	9949.60	10075.60	0.00
	7.766	1731.52	0.68	1732.55	125.00	0.00	9440.00	0.00	125.00	9950.00	9949.60	10075.60	10075.00
*	7.769	1731.80	0.00	1732.39	128.00	0.00	9440.00	0.00	0.00	0.00	9936.00	10064.00	0.00
*	7.769	1732.30	0.50	1732.84	127.99	0.00	9440.00	0.00	128.00	9936.00	9936.00	10064.00	10064.00
	7.778	1731.88	0.00	1732.50	128.00	0.00	9440.00	0.00	0.00	0.00	9936.00	10064.00	0.00
	7.778	1732.37	0.49	1732.94	127.99	0.00	9440.00	0.00	128.00	9936.00	9936.00	10064.00	10064.00
*	7.785	1731.85	0.00	1732.72	150.37	0.00	9440.00	0.00	0.00	0.00	9914.50	10085.10	0.00
*	7.785	1732.34	0.50	1733.12	152.00	0.00	9440.00	0.00	152.00	9927.00	9914.50	10085.10	10079.00
*	7.792	1731.84	0.00	1732.91	122.00	0.00	9440.00	0.00	0.00	0.00	9939.00	10061.01	0.00
*	7.792	1732.33	0.50	1733.30	122.00	0.00	9440.00	0.00	122.00	9939.00	9939.00	10061.01	10061.00
	7.800	1732.11	0.00	1733.39	122.00	0.00	9440.00	0.00	0.00	0.00	9939.00	10061.01	0.00
	7.800	1732.55	0.44	1733.71	122.00	0.00	9440.00	0.00	122.00	9939.00	9939.00	10061.01	10061.00
*	7.812	1733.11	0.00	1733.68	219.54	6.22	9433.78	0.00	10163.90	0.00	9949.40	10163.90	10163.90
*	7.812	1733.44	0.33	1733.96	210.00	0.00	9440.00	0.00	210.00	9950.00	9949.40	10163.90	10160.00
	7.872	1735.26	0.00	1735.46	626.85	10.31	3280.99	6148.70	10600.00	0.00	9973.50	10089.00	10600.00
	7.872	1735.45	0.19	1735.68	546.00	0.00	3486.15	5953.85	546.00	9974.00	9973.50	10089.00	10520.00
	7.921	1736.01	0.00	1736.17	739.33	1749.20	1190.24	6500.57	10525.00	0.00	9986.80	10028.90	10525.00
	7.921	1736.25	0.24	1736.44	600.00	1503.74	1333.80	6602.45	600.00	9850.00	9986.80	10028.90	10450.00
*	8.016	1738.47	0.00	1738.83	635.38	2810.13	1815.39	1594.47	0.00	0.00	9980.60	10017.40	0.00
*	8.016	1738.94	0.47	1739.60	250.00	2609.32	2283.12	1327.56	250.00	9850.00	9980.60	10017.40	10100.00
	8.111	1742.60	0.00	1742.90	477.31	3464.67	1730.12	1025.21	0.00	0.00	9982.10	10012.70	0.00
*	8.111	1743.32	0.71	1743.61	285.00	3710.64	1783.14	726.22	285.00	9760.00	9982.10	10012.70	10045.00
	8.187	1745.51	0.00	1745.87	462.46	3366.39	2822.39	31.22	0.00	0.00	9967.40	10036.80	0.00
	8.187	1745.95	0.44	1746.42	286.00	3004.91	3215.09	0.00	286.00	9750.00	9967.40	10036.80	10036.00
	8.278	1748.92	0.00	1749.14	743.56	1714.14	2236.68	2269.17	0.00	0.00	9974.90	10034.20	0.0
	8.278	1749.66	0.75	1750.00	370.00	1450.87	2756.36	2012.77	370.00	9800.00	9974.90	10034.20	10170.0

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	8.373	1752.12	0.00	1752.46	534.75	700.57	2089.12	1690.31	0.00	0.00	9956.00	10019.80	0.00
*	8.373	1752.88	0.76	1753.31	230.00	553.86	2450.42	1475.73	230.00	9920.00	9956.00	10019.80	10150.00
	8.485	1756.87	0.00	1757.18	493.64	751.16	1760.24	1138.60	0.00	0.00	9975.80	10043.00	0.00
	8.485	1757.17	0.30	1757.49	270.00	727.68	1835.38	1086.94	270.00	9870.00	9975.80	10043.00	10140.00
	8.574	1760.56	0.00	1760.77	603.35	21.93	1127.43	2500.64	0.00	0.00	9971.50	10026.50	0.00
	8.574	1760.90	0.34	1761.24	380.00	6.95	1436.28	2206.77	380.00	9970.00	9971.50	10026.50	10350.00
	8.670	1764.06	0.00	1764.22	803.26	414.43	694.65	2540.92	0.00	0.00	9992.30	10016.20	0.00
	8.670	1764.99	0.93	1765.24	440.00	455.25	942.00	2252.74	440.00	9960.00	9992.30	10016.20	10400.00
	8.763	1767.51	0.00	1767.78	569.19	174.72	852.69	2622.59	0.00	0.00	9988.50	10017.70	0.00
	8.763	1767.99	0.48	1768.19	420.00	47.86	791.12	2811.01	420.00	9980.00	9988.50	10017.70	10400.00
	8.853	1771.77	0.00	1771.94	691.87	1065.93	796.33	1787.74	0.00	0.00	9992.80	10029.00	0.00
*	8.853	1772.05	0.28	1772.50	230.00	1639.13	1189.42	821.45	230.00	9880.00	9992.80	10029.00	10110.00
	8.939	1775.19	0.00	1775.45	916.29	17.49	1215.00	2417.51	0.00	0.00	9982.10	10019.90	0.00
*	8.939	1776.11	0.92	1776.40	318.00	0.10	1353.36	2296.53	318.00	9982.00	9982.10	10019.90	10300.00
	9.021	1778.55	0.00	1778.73	647.26	10.76	815.96	1943.28	0.00	0.00	9981.10	10035.60	0.00
*	9.021	1779.05	0.49	1779.36	320.00	3.71	1154.94	1611.36	320.00	9980.00	9981.10	10035.60	10300.00
	9.114	1783.78	0.00	1784.11	661.19	984.29	1072.83	712.89	786.70	9824.30	9980.50	10026.50	10611.00
	9.114	1784.11	0.32	1784.38	405.00	1012.65	1038.41	718.94	405.00	9845.00	9980.50	10026.50	10250.00
	9.210	1788.48	0.00	1788.58	835.85	31.63	199.00	2539.37	0.00	0.00	9974.30	10025.70	0
	9.210	1789.22	0.74	1789.44	376.00	0.30	499.69	2270.00	376.00	9974.00	9974.30	10025.70	10350.00
*	9.304	1794.85	0.00	1795.14	798.69	1530.73	682.80	556.47	0.00	0.00	9958.90	10014.70	0.00
	9.304	1795.77	0.92	1796.03	380.00	1638.74	899.59	231.67	380.00	9720.00	9958.90	10014.70	10100.00
*	9.400	1801.79	0.00	1801.93	540.46	1914.81	400.51	454.68	0.00	0.00	9982.50	10026.60	0.00
	9.400	1802.50	0.71	1802.84	230.00	2059.68	710.32	0.00	230.00	9790.00	9982.50	10026.60	10020.00
*	9.492	1807.29	0.00	1807.56	457.53	1657.20	497.19	615.61	0.00	0.00	9990.10	10022.20	0.00
	9.492	1808.22	0.93	1808.50	210.00	1837.40	625.33	307.27	210.00	9840.00	9990.10	10022.20	10050.00
	9.586	1813.81	0.00	1813.98	375.97	560.30	869.79	409.91	0.00	0.00	9978.60	10033.70	0.00
	9.586	1813.96	0.15	1814.28	160.00	369.73	1121.05	349.23	160.00	9920.00	9978.60	10033.70	10080.00
*	9.682	1819.77	0.00	1820.04	349.69	56.90	807.26	975.84	0.00	0.00	9932.90	10020.50	0.00
	9.682	1820.62	0.85	1821.01	170.00	19.99	1306.40	513.61	170.00	9930.00	9932.90	10020.50	10100.00
*	9.776	1827.76	0.00	1827.87	538.37	287.24	350.41	1202.35	0.00	0.00	9966.00	10015.60	0.00
	9.776	1828.36	0.60	1828.59	210.00	13.95	594.04	1232.01	210.00	9960.00	9966.00	10015.60	10170.00
	9.872	1834.43	0.00	1834.76	370.85	22.11	597.89	1220.00	0.00	0.00	9988.40	10010.50	0.00
	9.872	1835.27	0.83	1835.71	192.00	1.11	774.51	1064.37	192.00	9988.00	9988.40	10010.50	10180.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	9.966	1842.86	0.00	1843.29	231.33	0.00	933.23	906.76	0.00	0.00	9988.70	10021.80	0.00
	9.966	1843.39	0.53	1844.05	109.00	0.00	1168.88	671.12	109.00	9991.00	9988.70	10021.80	10100.00
	10.058	1850.90	0.00	1851.23	308.93	855.85	984.15	0.00	0.00	0.00	9976.20	10038.50	0.00
	10.058	1851.66	0.76	1852.20	132.00	445.94	1394.05	0.00	132.00	9900.00	9976.20	10038.50	10032.00
*	10.151	1855.89	0.00	1856.05	411.38	201.79	1612.48	25.72	0.00	0.00	9881.60	10062.30	0.00
*	10.151	1856.33	0.43	1856.49	180.00	2.51	1837.49	0.00	180.00	9880.00	9881.60	10062.30	10060.00
*	10.230	1862.00	0.00	1862.58	316.83	320.82	1059.31	459.87	0.00	0.00	9980.00	10015.30	0.00
*	10.230	1862.33	0.33	1863.49	110.00	106.48	1424.88	308.64	110.00	9970.00	9980.00	10015.30	10080.00
	10.325	1871.92	0.00	1872.45	257.34	196.00	1473.86	170.14	0.00	0.00	9950.00	10014.50	0.00
*	10.325	1872.54	0.62	1873.08	90.00	156.81	1661.76	21.42	90.00	9930.00	9950.00	10014.50	10020.00
	10.419	1881.26	0.00	1881.81	218.93	182.09	1144.51	513.39	0.00	0.00	9987.10	10034.20	0.00
*	10.419	1881.53	0.27	1882.64	70.00	17.72	1556.83	265.45	70.00	9985.00	9987.10	10034.20	10055.00
*	10.544	1893.76	0.00	1894.14	134.43	165.09	733.96	120.95	0.00	0.00	9969.40	10009.10	0.00
	10.544	1894.66	0.90	1895.05	61.00	86.96	880.39	52.65	61.00	9954.00	9969.40	10009.10	10015.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     6.108  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.108  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.328  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.328  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.423  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.228  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     7.323  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     7.323  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     7.323  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     7.323  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     7.417  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.417  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.513  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.513  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.587  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.587  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.769  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.769  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.785  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.785  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.792  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.792  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.812  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.812  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.016  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     8.016  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.111  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.373  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     8.373  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.853  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     8.939  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     9.021  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     9.304  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     9.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     9.492  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     9.682  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     9.776  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    10.151  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    10.151  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    10.230  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    10.230  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    10.230  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    10.230  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    10.325  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    10.419  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    10.544  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
6.021	267.	1283.	7.4	1668.4	1667.6	0.8
6.108	410.	1842.	5.1	1672.1	1671.4	0.7
6.205	580.	1964.	4.8	1674.7	1673.9	0.8
6.280	484.	1623.	6.0	1678.8	1678.1	0.7
6.328	710.	2725.	3.6	1681.0	1680.4	0.6
6.423	610.	1609.	6.0	1683.7	1683.6	0.1
6.539	580.	2083.	4.6	1688.4	1687.5	0.9
6.654	362.	1633.	5.9	1692.3	1691.6	0.7
6.751	400.	1998.	4.9	1696.4	1695.8	0.6
6.849	542.	2341.	4.2	1699.3	1698.5	0.8
6.945	480.	2148.	4.5	1702.7	1702.0	0.7
7.042	380.	2001.	4.9	1705.6	1704.8	0.8
7.133	372.	2214.	4.4	1707.8	1706.9	0.9
7.228	340.	2502.	3.9	1709.3	1708.5	0.8
7.323	180.	850.	11.5	1711.3	1711.1	0.2
7.417	220.	1859.	5.3	1718.3	1717.3	1.0
7.513	285.	1182.	8.3	1721.5	1720.9	0.6
7.587	464.	2122.	4.7	1726.0	1725.3	0.7
7.663	395.	1755.	5.7	1727.9	1727.4	0.5
7.738	318.	1557.	6.1	1730.4	1729.6	0.8
7.766	125.	1164.	8.1	1731.5	1730.8	0.7
7.769	128.	1603.	5.9	1732.3	1731.8	0.5
7.778	128.	1554.	6.1	1732.4	1731.9	0.5
7.785	152.	1336.	7.1	1732.3	1731.8	0.5
7.792	122.	1195.	7.9	1732.3	1731.8	0.5
7.800	122.	1092.	8.6	1732.5	1732.1	0.4
7.812	210.	1627.	5.8	1733.4	1733.1	0.3
7.872	546.	2518.	3.7	1735.5	1735.3	0.2
7.921	600.	2737.	3.4	1736.2	1736.0	0.2
8.016	250.	1055.	5.9	1739.0	1738.5	0.5
8.111	285.	1606.	3.9	1743.3	1742.6	0.7
8.187	286.	1291.	4.8	1745.9	1745.5	0.4
8.278	370.	1603.	3.9	1749.6	1748.9	0.7
8.373	230.	958.	4.7	1752.9	1752.1	0.8
8.485	270.	900.	4.1	1757.2	1756.9	0.3
8.574	380.	876.	4.2	1760.9	1760.6	0.3
8.670	440.	1118.	3.3	1765.0	1764.1	0.9
8.763	420.	1109.	3.3	1768.0	1767.5	0.5
8.853	230.	735.	5.0	1772.1	1771.8	0.3
8.939	318.	993.	3.7	1776.1	1775.2	0.9
9.021	320.	697.	4.0	1779.1	1778.6	0.5
9.114	405.	782.	3.5	1784.1	1783.8	0.3

FLOODWAY DATA, Deadman Wash 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
9.210	376.	747.	3.7	1789.2	1788.5	0.7
9.304	380.	738.	3.8	1795.8	1794.9	0.9
9.400	230.	614.	4.5	1802.5	1801.8	0.7
9.492	210.	672.	4.1	1808.2	1807.3	0.9
9.586	160.	461.	4.0	1814.0	1813.8	0.2
9.682	170.	398.	4.6	1820.7	1819.8	0.9
9.776	210.	489.	3.8	1828.4	1827.8	0.6
9.872	192.	434.	4.2	1835.2	1834.4	0.8
9.966	109.	332.	5.5	1843.4	1842.9	0.5
10.058	132.	354.	5.2	1851.7	1850.9	0.8
10.151	180.	559.	3.3	1856.3	1855.9	0.4
10.230	110.	259.	7.1	1862.3	1862.0	0.3
10.325	90.	327.	5.6	1872.5	1871.9	0.6
10.419	70.	231.	7.9	1881.6	1881.3	0.3
10.544	61.	221.	4.6	1894.7	1893.8	0.9

HEC2 S/N: 1126460209 HMVersion: 6.40 Data File: strm4fw.hc2

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    10SEP92    TIME   15:18:44 *
*******************************************
```

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***************************************
*  U.S. ARMY CORPS OF ENGINEERS       *
*  HYDROLOGIC ENGINEERING CENTER      *
*  609 SECOND STREET, SUITE D         *
*  DAVIS, CALIFORNIA 95616-4687       *
*          (916) 756-1104             *
***************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
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:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```

==========
H A E S T A D M E T H O D S
==========

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 10SEP92 15:18:44

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study
T2      Natural Profile Run for Deadman Wash Tributary: Stream No. 4
T3      Stream No. 4 100-year Q   Subcritical Flow,   July 1992 (revised 9/92)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              2                          -1                                1730.66

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                -1                                   -1                          15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       43        1        8       42        3        2       26        5       39
    53        4       54      110      200

QT       2     1760     1760
NC    .095     .095     .075      .1       .3
ET                      9.1                                                      9981     10077
         Deadman Wash Section 7.872 is at the confluence with Stream No. 4,
         and has been renamed to Section 0.000; Q is 1,760 cfs.
         The water surface elevation starts at critical depth.
         NH cards were used for SECNO 0.000 to SECNO 0.145
         ET card was used for bridge contraction.
X1   0.000       15   9973.5  10089.0        0        0        0
GR  1751.8   9916.8   1745.4   9939.6   1739.4   9957.0   1732.6   9973.5   1727.9   9989.4
GR  1727.0   9995.4   1725.7  10000.0   1726.0  10010.8   1729.7  10029.2   1729.6  10043.9
GR  1728.7  10054.5   1731.6  10089.0   1731.3  10105.2   1731.3  10130.4   1730.9  10170.8

NH       5    .095   9853.6    .075   9891.3    .095   9986.8    .075  10028.9    .095
NH   10228.
ET              7.1      9.1                                        10028.9     9860    10020
         Deadman Wash Section 7.921 has been renamed to Section 0.054
X1   0.054       30   9853.6   9891.3      310      250      283
GR  1759.6   9650.0   1749.3   9702.3   1741.8   9738.0   1737.5   9763.2   1734.9   9787.2
GR  1732.1   9814.7   1732.2   9830.7   1732.1   9853.6   1731.3   9865.9   1731.6   9875.1
GR  1732.3   9891.3   1732.4   9915.0   1731.8   9941.4   1732.7   9964.7   1732.2   9974.7
GR  1730.6   9986.8   1728.1   9996.5   1727.9  10000.0   1727.7  10007.4   1729.8  10016.6
GR  1732.3  10028.9   1732.4  10042.8   1732.0  10065.9   1731.4  10096.3   1732.0  10119.0
GR  1732.0  10143.9   1731.2  10167.6   1732.8  10185.1   1733.5  10202.5   1733.8  10228.0
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NH      5      .095    9412.2     .060    9444.3     .048    9464.3     .060    9661.0     .080
NH   9803.5
ET                      9.1                                                       9450      9570
        Deadman Wash Section 8.016 has been renamed to Section 0.145
X1   0.145       20    9444.3    9464.3     480      480      480
GR   1744.3   9367.4   1742.0    9391.3   1739.6   9412.2   1738.9   9414.4   1739.2   9430.5
GR   1737.9   9444.3   1736.7    9456.2   1737.0   9464.3   1737.0   9489.3   1736.7   9526.9
GR   1736.7   9558.5   1736.6    9576.0   1736.6   9604.2   1737.0   9630.8   1737.7   9661.0
GR   1738.5   9692.6   1738.5    9723.3   1739.2   9769.4   1739.0   9779.2   1739.2   9803.5

NC    .060     .060     .048
ET                      9.1                                                       9945     10065
        NC card was used - channel = .048, overbanks = .060
        Q changed to 1,760 cfs just upstream of the confluence.
X1   0.231       18    9984.9   10030.6     440      475      455
GR   1746.8   9803.6   1744.8    9851.3   1742.3   9891.8   1740.6   9908.8   1740.3   9925.5
GR   1740.8   9936.7   1739.5    9962.8   1739.5   9984.9   1738.6   9996.6   1737.4  10000.0
GR   1738.8  10010.9   1739.2   10030.6   1739.3  10055.3   1740.9  10093.3   1743.1  10130.7
GR   1745.3  10166.1   1747.7   10204.9   1749.8  10246.4

ET                      9.1                                                       9995     10175
X1   0.327       29   10142.2   10167.0     490      495      507
GR   1751.5   9906.4   1749.4    9933.1   1747.6   9952.7   1746.7   9970.3   1746.0   9986.4
GR   1745.5   9991.5   1743.1    9998.9   1743.2  10000.0   1744.7  10008.9   1744.5  10028.0
GR   1744.5  10055.0   1744.3   10080.1   1743.8  10108.9   1744.1  10126.9   1743.8  10142.2
GR   1742.4  10151.9   1741.0   10157.1   1743.3  10167.0   1743.9  10187.9   1744.7  10221.4
GR   1746.3  10253.3   1747.6   10285.0   1746.9  10311.0   1745.6  10328.5   1747.9  10372.6
GR   1751.0  10417.6   1753.7   10456.4   1755.8  10490.0   1755.9  10515.7

ET                      9.1                                                       9984     10190
X1   0.423       32    9984.6   10024.8     507      430      507
GR   1758.8   9776.1   1758.1    9811.1   1753.9   9861.8   1752.3   9901.6   1751.0   9925.0
GR   1750.5   9937.1   1750.5    9952.8   1751.1   9960.6   1750.3   9974.8   1750.0   9984.6
GR   1747.7   9995.3   1747.4   10000.0   1748.6  10010.4   1749.4  10024.8   1749.4  10060.7
GR   1748.7  10101.2   1748.3   10132.7   1747.7  10159.8   1747.4  10161.8   1747.6  10190.1
GR   1748.4  10221.8   1748.2   10251.3   1748.3  10282.2   1748.6  10303.3   1748.1  10311.4
GR   1748.9  10326.0   1750.1   10345.9   1753.4  10367.1   1755.0  10391.9   1755.8  10426.7
GR   1756.9  10466.6   1757.5   10510.0

ET                      9.1                                                       9970     10055
X1   0.520       19    9977.2   10050.7     480      560      512
GR   1764.0   9714.5   1762.8    9744.8   1759.5   9805.6   1756.2   9834.9   1755.1   9851.5
GR   1755.1   9870.8   1754.5    9891.5   1754.6   9924.8   1754.6   9957.4   1753.3   9977.2
GR   1751.9   9987.5   1751.4    9994.2   1750.9  10000.0   1752.1  10015.5   1753.5  10050.7
GR   1753.9  10098.4   1756.3   10157.5   1759.6  10226.7   1763.8  10286.2

ET                      9.1                                                       9925     10030
        The unnamed stock tank is ignored.  No cross section was taken.
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          GR cards were modified to ignore the dike structure.
X1    0.592        15    9987.7   10025.3       385       350       380
GR   1766.2    9601.3    1765.6    9660.6    1763.8    9719.6    1762.9    9764.1    1762.8    9811.3
GR   1762.7    9861.8    1762.7    9912.7    1762.6    9951.8    1762.6    9974.1    1762.6    9987.7
GR   1759.4    9998.8    1758.4   10000.0    1761.6   10025.3    1763.8   10064.9    1766.8   10092.7

QT       2      1660      1660
NC    .058      .058      .040
ET                        9.1                                                          9835     10040
          NC card was used - channel = .040, overbanks = .058.
          Q changed to 1,660 cfs at the unnamed stock tank.
X1    0.782        23    9999.5   10027.5       930       950      1003
GR   1771.1    9532.1    1768.7    9618.6    1767.6    9650.9    1767.4    9665.2    1766.0    9713.0
GR   1765.4    9771.5    1765.4    9817.7    1764.9    9868.1    1764.6    9903.4    1763.3    9919.6
GR   1764.1    9933.5    1764.5    9955.3    1764.6    9986.9    1764.6    9999.5    1763.6   10000.0
GR   1764.0   10011.9    1764.5   10027.5    1764.7   10075.7    1766.0   10122.0    1768.8   10167.7
GR   1769.8   10217.6    1769.7   10271.9    1771.2   10293.8

ET                        9.1                                                          9940     10060
X1    0.876        21    9991.3   10019.1       400       560       496
GR   1770.9    9664.3    1770.2    9683.0    1769.2    9731.5    1769.1    9739.7    1769.3    9756.3
GR   1769.0    9807.9    1767.5    9819.4    1767.6    9835.9    1767.6    9864.9    1768.7    9884.6
GR   1768.2    9945.0    1767.2    9973.6    1767.0    9991.3    1764.7   10000.0    1766.9   10019.1
GR   1768.1   10041.7    1767.9   10099.8    1768.2   10171.4    1768.8   10227.8    1770.6   10307.6
GR   1771.5   10343.4

ET                        9.1                                                          9960     10060
X1    0.971        13    9992.0   10024.0       495       505       502
GR   1775.1    9714.2    1773.2    9800.0    1771.7    9878.6    1770.9    9941.8    1769.8    9975.8
GR   1768.9    9992.0    1767.5   10000.0    1769.2   10024.0    1770.6   10068.8    1771.5   10103.1
GR   1771.7   10177.0    1775.1   10247.9    1776.7   10276.9

ET                        9.1                                                          9922     10022
X1    1.072        15    9924.6    9986.0       550       480       528
GR   1780.5    9737.6    1779.8    9798.5    1777.6    9869.5    1775.0    9924.6    1774.0    9951.2
GR   1774.9    9986.0    1775.2   10017.3    1775.4   10039.7    1774.6   10055.6    1774.8   10076.8
GR   1774.2   10082.0    1776.5   10102.0    1777.9   10151.5    1779.4   10217.5    1780.8   10262.3

ET                        9.1                                                          9875     10010
X1    1.172        21    9879.5    9985.7       520       490       528
GR   1782.0    9615.0    1780.1    9700.7    1779.9    9798.3    1778.6    9854.8    1777.9    9879.5
GR   1777.0    9917.2    1777.4    9970.2    1777.9    9985.7    1777.8   10008.9    1777.9   10046.6
GR   1777.1   10054.9    1777.6   10070.9    1779.1   10084.5    1778.6   10103.1    1777.4   10115.0
GR   1779.1   10150.8    1779.7   10223.4    1780.4   10286.6    1782.2   10353.6    1782.9   10381.1
GR   1785.3   10395.2

ET                        9.1                                                          9850     10030
X1    1.272        21    9850.1   10026.0       530       490       502
GR   1788.2    9428.1    1786.5    9472.3    1786.8    9531.1    1786.2    9608.2    1783.9    9691.1
GR   1783.0    9724.3    1782.7    9786.2    1781.6    9850.1    1780.4    9883.9    1780.0    9915.3
GR   1779.1    9930.0    1780.3    9951.0    1779.4    9962.5    1780.2    9984.2    1779.2   10000.0
GR   1781.3   10026.0    1783.1   10076.8    1784.4   10133.9    1784.9   10197.3    1785.4   10260.4
GR   1787.7   10326.8
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ET                          9.1                                                          9920      10040
X1    1.367        19     9969.2    10000.0       490       502       502
GR   1787.7    9638.5     1786.1     9667.9    1785.4    9712.0    1784.3    9770.8    1783.6    9790.6
GR   1784.1    9822.0     1783.2     9844.8    1783.0    9871.1    1782.3    9903.7    1782.1    9943.0
GR   1781.7    9969.2     1780.0     9973.8    1780.8    9987.8    1782.7   10000.0    1782.1   10038.7
GR   1783.8   10093.0     1785.1    10153.6    1786.6   10219.9    1787.8   10248.4

ET                          9.1                                                          9880      10015
          The upstream study limit at future 29th Avenue alignment.
X1    1.436        17     9943.8    10000.0       360       360       364
GR   1787.5    9633.6     1785.7     9704.0    1785.7    9750.4    1784.4    9837.0    1783.6    9893.4
GR   1783.2    9943.8     1782.5     9970.4    1783.7   10000.0    1783.6   10036.1    1784.4   10078.9
GR   1784.9   10123.6     1785.0    10176.1    1785.5   10228.2    1786.2   10273.6    1787.2   10319.8
GR   1788.0   10371.1     1789.1    10410.2
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO .000
3720 CRITICAL DEPTH ASSUMED
Deadman Wash Section 7.872 is at the confluence with Stream No. 4,
and has been renamed to Section 0.000; Q is 1,760 cfs.
The water surface elevation starts at critical depth.
NH cards were used for SECNO 0.000 to SECNO 0.145
ET card was used for bridge contraction.

.000	4.95	1730.65	1730.65	1730.66	1731.76	1.11	.00	.00	1732.60
1760.0	.0	1760.0	.0	.0	208.1	.0	.0	.0	1731.60
.00	.00	8.46	.00	.000	.075	.000	.000	1725.70	9980.10
.067366	0.	0.	0.	0	4	0	.00	97.57	10077.67

FLOW DISTRIBUTION FOR SECNO= .00 CWSEL= 1730.65

STA= 9980. 10089.
PER Q= 100.0
AREA= 208.1
VEL= 8.5
DEPTH= 2.1

1490 NH CARD USED
*SECNO .054

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.08

Deadman Wash Section 7.921 has been renamed to Section 0.054

.054	6.90	1734.60	1732.82	.00	1734.71	.11	2.85	.10	1732.10
1760.0	208.2	273.1	1278.7	126.1	107.6	456.3	2.8	1.1	1732.30
.03	1.65	2.54	2.80	.095	.075	.082	.000	1727.70	9790.13
.004057	310.	283.	250.	6	8	0	.00	238.77	10028.90

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .05 CWSEL= 1734.60

STA=	9790.	9831.	9854.	9891.	9915.	9941.	9965.	9987.	9997.	10000.	10007.	10017.	10029.
PER Q=	6.0	5.8	15.5	5.2	6.9	5.5	6.8	10.8	5.8	13.0	12.3	6.4	
AREA=	70.0	56.1	107.6	53.4	66.0	54.8	60.3	50.9	23.1	50.3	53.8	43.7	
VEL=	1.5	1.8	2.5	1.7	1.8	1.8	2.0	3.7	4.4	4.5	4.0	2.6	
DEPTH=	1.7	2.5	2.9	2.3	2.5	2.4	2.7	5.3	6.6	6.8	5.9	3.6	

1490 NH CARD USED
*SECNO .145

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .39

Deadman Wash Section 8.016 has been renamed to Section 0.145

.145	1.78	1738.38	1738.16	.00	1738.81	.43	4.00	.10	1737.90
1760.0	1.9	146.8	1611.3	1.2	25.2	307.6	8.4	3.7	1737.00
.05	1.54	5.82	5.24	.060	.048	.060	.000	1736.60	9439.22
.026048	480.	480.	480.	5	17	0	.00	248.60	9687.82

FLOW DISTRIBUTION FOR SECNO= .14 CWSEL= 1738.38

STA=	9439.	9444.	9464.	9489.	9527.	9559.	9576.	9604.	9631.	9661.	9688.
PER Q=	.1	8.3	9.7	17.3	17.0	9.9	16.7	12.9	7.2	.8	
AREA=	1.2	25.2	34.5	57.5	53.1	30.3	50.2	42.0	31.1	9.1	
VEL=	1.5	5.8	5.0	5.3	5.6	5.8	5.9	5.4	4.1	1.5	
DEPTH=	.2	1.3	1.4	1.5	1.7	1.7	1.8	1.6	1.0	.3	

*SECNO .231

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.60

NC card was used - channel = .048, overbanks = .060
Q changed to 1,760 cfs just upstream of the confluence.

.231	4.98	1742.38	1741.22	.00	1742.58	.20	3.74	.02	1739.50
1760.0	496.0	757.1	506.8	189.9	166.8	182.1	13.1	6.3	1739.20
.09	2.61	4.54	2.78	.060	.048	.060	.000	1737.40	9890.59
.003860	440.	455.	475.	4	20	0	.00	227.77	10118.37

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .23 CWSEL= 1742.38

STA=	9891.	9909.	9926.	9937.	9963.	9985.	10031.	10055.	10093.	10118.
PER Q=	1.3	4.3	2.7	8.6	11.2	43.0	14.4	13.1	1.3	
AREA=	15.7	32.1	20.4	58.1	63.5	166.8	77.2	86.4	18.5	
VEL=	1.5	2.4	2.3	2.6	3.1	4.5	3.3	2.7	1.3	
DEPTH=	.9	1.9	1.8	2.2	2.9	3.7	3.1	2.3	.7	

*SECNO .327

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

.327	4.56	1745.56	1745.43	.00	1746.08	.51	3.41	.09	1743.80
1760.0	763.0	631.9	365.1	201.3	78.0	91.4	18.2	9.0	1743.30
.12	3.79	8.10	3.99	.060	.048	.060	.000	1741.00	9990.77
.015309	490.	507.	495.	3	9	0	.00	248.02	10238.78

FLOW DISTRIBUTION FOR SECNO= .33 CWSEL= 1745.56

STA=	9991.	10009.	10028.	10055.	10080.	10109.	10127.	10142.	10167.	10188.	10221.	10239.
PER Q=	6.1	3.2	5.3	5.7	10.1	7.0	6.0	35.9	11.3	8.7	.8	
AREA=	26.5	18.6	28.9	29.4	43.8	29.2	24.8	78.0	41.2	42.6	7.6	
VEL=	4.1	3.0	3.2	3.4	4.1	4.2	4.2	8.1	4.8	3.6	1.8	
DEPTH=	1.5	1.0	1.1	1.2	1.5	1.6	1.6	3.1	2.0	1.3	.4	

*SECNO .423

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.61

.423	2.77	1750.17	1749.32	.00	1750.30	.13	4.19	.04	1750.00
1760.0	.2	216.9	1542.9	.5	65.9	537.6	23.4	12.2	1749.40
.16	.37	3.29	2.87	.060	.048	.060	.000	1747.40	9979.02
.005917	507.	507.	430.	2	15	0	.00	367.34	10346.36

FLOW DISTRIBUTION FOR SECNO= .42 CWSEL= 1750.17

STA=	9979.	9985.	10025.	10101.	10133.	10160.	10190.	10222.	10251.	10282.	10303.	10326.	10346.
PER Q=	.0	12.3	7.8	8.0	10.7	16.8	12.5	9.1	9.9	5.6	6.1	1.1	
AREA=	.5	65.9	73.1	52.6	58.8	80.8	68.8	55.2	59.4	36.3	39.1	13.4	
VEL=	.4	3.3	1.9	2.7	3.2	3.7	3.2	2.9	2.9	2.7	2.7	1.5	
DEPTH=	.1	1.6	1.0	1.7	2.2	2.7	2.2	1.9	1.9	1.7	1.7	.7	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .520

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.520	4.01	1754.91	1754.91	.00	1755.63	.72	4.85	.18	1753.30
1760.0	93.8	1438.3	227.9	44.2	194.7	70.4	29.0	16.0	1753.50
.18	2.12	7.39	3.24	.060	.048	.060	.000	1750.90	9877.30
.015596	480.	512.	560.	0	11	0	.00	246.01	10123.31

FLOW DISTRIBUTION FOR SECNO= .52 CWSEL= 1754.91

STA=	9877.	9892.	9925.	9957.	9977.	10051.	10098.	10123.
PER Q=	.2	1.1	.8	3.3	81.7	11.5	1.4	
AREA=	2.9	12.0	10.2	19.0	194.7	57.8	12.6	
VEL=	1.1	1.6	1.4	3.0	7.4	3.5	2.0	
DEPTH=	.2	.4	.3	1.0	2.6	1.2	.5	

*SECNO .592
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
The unnamed stock tank is ignored. No cross section was taken.
GR cards were modified to ignore the dike structure.

.592	5.28	1763.68	1763.68	.00	1764.30	.62	5.43	.01	1762.60
1760.0	623.4	1022.7	113.9	230.1	128.6	38.9	32.1	18.5	1761.60
.20	2.71	7.95	2.93	.060	.048	.060	.000	1758.40	9725.53
.013270	385.	380.	350.	0	15	0	.00	337.21	10062.74

FLOW DISTRIBUTION FOR SECNO= .59 CWSEL= 1763.68

STA=	9726.	9764.	9811.	9862.	9913.	9952.	9974.	9988.	10025.	10063.
PER Q=	1.3	5.6	7.3	8.0	6.7	4.1	2.5	58.1	6.5	
AREA=	15.0	39.2	47.0	49.9	40.3	24.1	14.7	128.6	38.9	
VEL=	1.5	2.5	2.7	2.8	2.9	3.0	3.0	8.0	2.9	
DEPTH=	.4	.8	.9	1.0	1.0	1.1	1.1	3.4	1.0	

*SECNO .782

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.06

NC card was used - channel = .040, overbanks = .058.
Q changed to 1,660 cfs at the unnamed stock tank.

.782	3.92	1767.22	1765.76	.00	1767.27	.05	2.91	.06	1764.60
1660.0	1067.0	247.8	345.3	672.7	88.6	225.0	47.1	27.2	1764.50
.35	1.59	2.80	1.53	.058	.040	.058	.000	1763.30	9671.36
.001258	930.	1003.	950.	6	13	0	.00	470.54	10141.90

FLOW DISTRIBUTION FOR SECNO= .78 CWSEL= 1767.22

STA=	9671.	9772.	9818.	9868.	9903.	9920.	9934.	9955.	9987.	10000.	10028.	10076.	10122.
PER Q=	7.4	6.9	9.3	8.7	6.4	6.2	7.1	8.9	3.4	14.9	13.1	7.2	
AREA=	114.3	84.1	104.3	87.2	53.0	48.9	63.6	84.4	33.0	88.6	126.3	86.6	
VEL=	1.1	1.4	1.5	1.7	2.0	2.1	1.9	1.7	1.7	2.8	1.7	1.4	
DEPTH=	1.1	1.8	2.1	2.5	3.3	3.5	2.9	2.7	2.6	3.2	2.6	1.9	

STA=	10122.	10142.
PER Q=	.5	
AREA=	12.1	
VEL=	.7	
DEPTH=	.6	

*SECNO .876
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

.876	4.23	1768.93	1768.93	.00	1769.42	.49	1.29	.13	1767.00
1660.0	529.5	696.6	433.8	181.8	86.7	174.8	54.6	32.0	1766.90
.38	2.91	8.04	2.48	.058	.040	.058	.000	1764.70	9808.41
.010480	400.	496.	560.	0	8	0	.00	425.33	10233.74

FLOW DISTRIBUTION FOR SECNO= .88 CWSEL= 1768.93

STA=	9808.	9836.	9865.	9945.	9974.	9991.	10019.	10042.	10100.	10171.	10234.
PER Q=	5.5	7.4	4.9	6.4	7.7	42.0	6.5	8.2	9.2	2.2	
AREA=	30.7	38.7	44.7	35.3	32.5	86.7	32.4	54.3	63.3	24.9	
VEL=	3.0	3.2	1.8	3.0	3.9	8.0	3.3	2.5	2.4	1.5	
DEPTH=	1.1	1.3	.6	1.2	1.8	3.1	1.4	.9	.9	.4	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .971

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.58

.971	4.78	1772.28	1771.77	.00	1772.58	.30	3.14	.02	1768.90
1660.0	437.0	761.1	462.0	184.0	127.0	202.7	60.1	36.4	1769.20
.41	2.37	5.99	2.28	.058	.040	.058	.000	1767.50	9848.15
.004173	495.	502.	505.	4	5	0	.00	340.96	10189.12

FLOW DISTRIBUTION FOR SECNO= .97 CWSEL= 1772.28

STA=	9848.	9879.	9942.	9976.	9992.	10024.	10069.	10103.	10177.	10189.
PER Q=	.4	6.1	10.1	9.7	45.8	19.0	4.8	3.9	.2	
AREA=	8.8	62.0	65.7	47.5	127.0	106.7	42.2	50.3	3.5	
VEL=	.7	1.6	2.6	3.4	6.0	3.0	1.9	1.3	.7	
DEPTH=	.3	1.0	1.9	2.9	4.0	2.4	1.2	.7	.3	

*SECNO 1.072
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.072	2.33	1776.33	1776.33	.00	1777.05	.72	4.12	.13	1775.00
1660.0	53.7	936.0	670.4	18.9	114.3	148.5	64.8	39.6	1774.90
.44	2.85	8.19	4.51	.058	.040	.058	.000	1774.00	9896.33
.021200	550.	528.	480.	0	8	0	.00	204.23	10100.56

FLOW DISTRIBUTION FOR SECNO= 1.07 CWSEL= 1776.33

STA=	9896.	9925.	9986.	10017.	10040.	10056.	10077.	10082.	10101.
PER Q=	3.2	56.4	10.7	5.3	5.8	10.8	3.2	4.6	
AREA=	18.9	114.3	40.2	23.2	21.2	34.6	9.5	19.8	
VEL=	2.8	8.2	4.4	3.8	4.5	5.2	5.6	3.9	
DEPTH=	.7	1.9	1.3	1.0	1.3	1.6	1.8	1.1	

*SECNO 1.172

3301 HV CHANGED MORE THAN HVINS

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.88

1.172	2.87	1779.87	1778.87	.00	1779.99	.13	2.88	.06	1777.90
1660.0	104.7	926.1	629.2	75.0	267.0	338.0	70.4	43.3	1777.90
.49	1.40	3.47	1.86	.058	.040	.058	.000	1777.00	9799.66
.002549	520.	528.	490.	6	16	0	.00	438.98	10238.64

FLOW DISTRIBUTION FOR SECNO= 1.17 CWSEL= 1779.87

STA=	9800.	9880.	9986.	10009.	10047.	10071.	10103.	10151.	10239.
PER Q=	6.3	55.8	5.8	9.5	8.5	3.6	8.8	1.6	
AREA=	75.0	267.0	46.8	76.1	60.0	39.6	80.2	35.3	
VEL=	1.4	3.5	2.1	2.1	2.4	1.5	1.8	.8	
DEPTH=	.9	2.5	2.0	2.0	2.5	1.2	1.7	.4	

*SECNO 1.272

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .51

1.272	2.79	1781.89	1781.52	.00	1782.33	.44	2.24	.09	1781.60
1660.0	1.6	1652.9	5.4	2.4	308.8	4.8	76.1	47.1	1781.30
.51	.69	5.35	1.12	.058	.040	.058	.000	1779.10	9833.50
.009817	530.	502.	490.	4	15	0	.00	209.03	10042.53

FLOW DISTRIBUTION FOR SECNO= 1.27 CWSEL= 1781.89

STA=	9833.	9850.	10026.	10043.
PER Q=	.1	99.6	.3	
AREA=	2.4	308.8	4.8	
VEL=	.7	5.4	1.1	
DEPTH=	.1	1.8	.3	

*SECNO 1.367

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.83

1.367	4.64	1784.64	1783.75	.00	1784.80	.16	2.44	.03	1781.70
1660.0	731.8	527.9	400.3	338.3	112.2	195.6	81.6	50.4	1782.70
.56	2.16	4.70	2.05	.058	.040	.058	.000	1780.00	9752.35
.002920	490.	502.	502.	3	14	0	.00	380.04	10132.40

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 1.37 CWSEL= 1784.64

STA=	9752.	9771.	9791.	9822.	9845.	9871.	9904.	9943.	9969.	10000.	10039.	10093.	10132.
PER Q=	.1	.9	1.8	1.9	4.5	8.6	14.5	11.8	31.8	12.4	10.9	.8	
AREA=	3.2	13.8	25.0	22.7	40.6	65.0	96.1	71.9	112.2	86.9	92.0	16.6	
VEL=	.4	1.1	1.2	1.4	1.9	2.2	2.5	2.7	4.7	2.4	2.0	.8	
DEPTH=	.2	.7	.8	1.0	1.5	2.0	2.4	2.7	3.6	2.2	1.7	.4	

*SECNO 1.436

The upstream study limit at future 29th Avenue alignment.

1.436	3.24	1785.74	1784.94	.00	1785.87	.13	1.07	.00	1783.20
1660.0	561.8	623.9	474.4	279.5	155.4	269.4	87.2	54.2	1783.70
.60	2.01	4.01	1.76	.058	.040	.058	.000	1782.50	9702.14
.003008	360.	364.	360.	3	11	0	.00	542.12	10244.26

FLOW DISTRIBUTION FOR SECNO= 1.44 CWSEL= 1785.74

STA=	9702.	9750.	9837.	9893.	9944.	10000.	10036.	10079.	10124.	10176.	10228.	10244.
PER Q=	.0	4.0	12.1	17.7	37.6	10.5	9.2	4.4	3.0	1.4	.0	
AREA=	2.2	60.4	98.6	118.3	155.4	75.7	74.8	49.1	41.9	25.9	2.0	
VEL=	.2	1.1	2.0	2.5	4.0	2.3	2.0	1.5	1.2	.9	.3	
DEPTH=	.0	.7	1.7	2.3	2.8	2.1	1.7	1.1	.8	.5	.1	

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T1      Deadman Wash Floodplain Delineation Study
T2      Floodway Run for Deadman Wash Tributary: Stream No. 4
T3      Stream No. 4 100-year Q  Subcritical Flow,  July 1992 (revised 9/92)

J1  ICHECK   INQ     NINV    IDIR    STRT    METRIC  HVINS   Q       WSEL    FQ

             3                                                       1731.66

J2  NPROF    IPLOT   PRFVS   XSECV   XSECH   FN      ALLDC   IBW     CHNIM   ITRACE

     2               -1                              -1                      15
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS



CCHV=     .100 CEHV=     .300
*SECNO  .000
3280 CROSS SECTION       .00 EXTENDED       .76 FEET


3470 ENCROACHMENT STATIONS=     9981.0   10077.0  TYPE=      1  TARGET=       96.000
         Deadman Wash Section 7.872 is at the confluence with Stream No. 4,
         and has been renamed to Section 0.000; Q is 1,760 cfs.
         The water surface elevation starts at critical depth.
         NH cards were used for SECNO 0.000 to SECNO 0.145
         ET card was used for bridge contraction.
     .000      5.96   1731.66   1730.71   1730.65   1732.18       .52       .00       .00 100000.00
   1760.0        .0    1760.0        .0        .0     305.2        .0        .0        .0 100000.00
     .00       .00      5.77       .00      .000      .075      .000      .000   1725.70   9981.00
  .018997        0.        0.        0.         0         9         0       .00     96.00  10077.00


FLOW DISTRIBUTION FOR SECNO=       .00          CWSEL=   1731.66

STA=    9981.   10089.
  PER Q=    100.0
   AREA=    305.2
    VEL=      5.8
  DEPTH=      3.2

1490 NH CARD USED
*SECNO  .054
3280 CROSS SECTION       .05 EXTENDED       .87 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.79


3470 ENCROACHMENT STATIONS=     9860.0   10020.0  TYPE=      1  TARGET=      160.000
         Deadman Wash Section 7.921 has been renamed to Section 0.054
     .054      6.97   1734.67   1732.96   1734.60   1734.84       .17      2.63       .03 100000.00
   1760.0        .0     272.9    1487.1        .0      92.4     436.3       2.5        .8   1732.30
     .02       .00      2.95      3.41      .000      .075      .082      .000   1727.70   9860.00
  .005940      310.      283.      250.         4         9         0       .00    160.00  10020.00
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=      .05         CWSEL=   1734.67

STA=    9860.    9891.    9915.    9941.    9965.    9975.    9987.    9997.   10000.   10007.   10017.   10020.
  PER Q=     15.5      6.6      8.7      6.9      2.6      5.9     13.3      7.2     15.9     15.2      2.1
   AREA=     92.4     54.9     67.8     56.3     22.2     39.5     51.6     23.3     50.8     54.4     15.4
    VEL=      3.0      2.1      2.3      2.2      2.0      2.6      4.6      5.4      5.5      4.9      2.4
  DEPTH=      3.0      2.3      2.6      2.4      2.2      3.3      5.3      6.7      6.9      5.9      4.5

1490 NH CARD USED
*SECNO  .145

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .54


3470 ENCROACHMENT STATIONS=     9450.0    9570.0  TYPE=      1  TARGET=      120.000
         Deadman Wash Section 8.016 has been renamed to Section 0.145
      .145      2.57   1739.17   1738.71   1738.38   1739.78       .61      4.81       .13 100000.00
    1760.0        .0     225.4    1534.6        .0      32.2     248.8       7.0       2.3   1737.00
       .04       .00      6.99      6.17      .000      .048      .060      .000   1736.60   9450.00
   .020364      480.      480.      480.         3        17         0       .00    120.00   9570.00


FLOW DISTRIBUTION FOR SECNO=      .14         CWSEL=   1739.17

STA=    9450.    9464.    9489.    9527.    9559.    9570.
  PER Q=     12.8     18.3     30.8     28.7      9.4
   AREA=     32.2     54.4     87.4     78.2     28.8
    VEL=      7.0      5.9      6.2      6.5      5.7
  DEPTH=      2.3      2.2      2.3      2.5      2.5

*SECNO  .231

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.35


3470 ENCROACHMENT STATIONS=     9945.0   10065.0  TYPE=      1  TARGET=      120.000
         NC card was used - channel = .048, overbanks = .060
         Q changed to 1,760 cfs just upstream of the confluence.
      .231      5.52   1742.92   1741.23   1742.38   1743.19       .27      3.38       .03   1739.50
    1760.0     408.8     933.5     417.7     128.5     191.6     123.7      10.9       3.6   1739.20
       .07      3.18      4.87      3.38      .060      .048      .060      .000   1737.40   9945.00
   .003696      440.      455.      475.         3        14         0       .00    120.00  10065.00
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .23 CWSEL= 1742.92

STA=	9945.	9963.	9985.	10031.	10055.	10065.
PER Q=	8.6	14.7	53.0	18.4	5.3	
AREA=	52.9	75.5	191.6	90.6	33.1	
VEL=	2.8	3.4	4.9	3.6	2.8	
DEPTH=	3.0	3.4	4.2	3.7	3.4	

*SECNO .327

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3470 ENCROACHMENT STATIONS= 9995.0 10175.0 TYPE= 1 TARGET= 180.000

.327	4.88	1745.88	1745.59	1745.56	1746.43	.55	3.15	.08	1743.80
1760.0	985.9	687.6	86.5	244.9	85.7	19.7	15.4	5.3	1743.30
.10	4.03	8.02	4.38	.060	.048	.060	.000	1741.00	9995.00
.013225	490.	507.	495.	3	9	0	.00	180.00	10175.00

FLOW DISTRIBUTION FOR SECNO= .33 CWSEL= 1745.88

STA=	9995.	9999.	10000.	10009.	10028.	10055.	10080.	10109.	10127.	10142.	10167.	10175.
PER Q=	1.8	.9	4.3	4.7	7.5	7.8	12.8	8.7	7.4	39.1	4.9	
AREA=	8.4	3.0	17.2	24.5	37.4	37.2	52.8	34.8	29.6	85.7	19.7	
VEL=	3.7	5.6	4.4	3.4	3.5	3.7	4.3	4.4	4.4	8.0	4.4	
DEPTH=	2.2	2.7	1.9	1.3	1.4	1.5	1.8	1.9	1.9	3.5	2.5	

*SECNO .423

3470 ENCROACHMENT STATIONS= 9984.0 10190.0 TYPE= 1 TARGET= 206.000

.423	3.38	1750.78	1749.87	1750.17	1751.01	.24	4.56	.03	1750.00
1760.0	.5	407.4	1352.1	.5	90.5	366.0	19.7	7.4	1749.40
.13	1.03	4.50	3.69	.060	.048	.060	.000	1747.40	9984.00
.007260	507.	507.	430.	4	8	0	.00	206.00	10190.00

FLOW DISTRIBUTION FOR SECNO= .42 CWSEL= 1750.78

STA=	9984.	9985.	10025.	10061.	10101.	10133.	10160.	10162.	10190.
PER Q=	.0	23.1	7.4	12.1	14.9	17.9	1.7	22.8	
AREA=	.5	90.5	49.6	70.1	71.9	75.4	6.5	92.6	
VEL=	1.0	4.5	2.6	3.0	3.7	4.2	4.6	4.3	
DEPTH=	.8	2.3	1.4	1.7	2.3	2.8	3.2	3.3	

```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO  .520

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9970.0   10055.0  TYPE=      1  TARGET=       85.000
      .520      4.46   1755.36   1754.82   1754.91   1756.18       .82      4.99       .18   1753.30
    1760.0      47.9    1685.8      26.3      13.1     227.8       7.9      24.1       9.2   1753.50
       .15      3.64      7.40      3.31      .060      .048      .060      .000   1750.90   9970.00
   .012692      480.      512.      560.         3        11         0       .00     85.00  10055.00


FLOW DISTRIBUTION FOR SECNO=       .52          CWSEL=   1755.36

STA=    9970.    9977.   10051.   10055.
  PER Q=      2.7     95.8      1.5
   AREA=     13.1    227.8      7.9
    VEL=      3.6      7.4      3.3
  DEPTH=      1.8      3.1      1.8

*SECNO  .592
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9925.0   10030.0  TYPE=      1  TARGET=      105.000
          The unnamed stock tank is ignored.  No cross section was taken.
          GR cards were modified to ignore the dike structure.
      .592      5.64   1764.04   1764.04   1763.68   1765.19      1.14      5.49       .10   1762.60
    1760.0     358.3    1354.7      47.1      89.6     142.3      10.9      26.2      10.0   1761.60
       .17      4.00      9.52      4.33      .060      .048      .060      .000   1758.40   9925.00
   .016617      385.      380.      350.         0        11         0       .00    105.00  10030.00


FLOW DISTRIBUTION FOR SECNO=       .59          CWSEL=   1764.04

STA=    9925.    9952.    9974.    9988.   10025.   10030.
  PER Q=      8.3      7.5      4.6     77.0      2.7
   AREA=     37.8     32.2     19.6    142.3     10.9
    VEL=      3.9      4.1      4.1      9.5      4.3
  DEPTH=      1.4      1.4      1.4      3.8      2.3
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .782

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.55

3470 ENCROACHMENT STATIONS= 9835.0 10040.0 TYPE= 1 TARGET= 205.000
NC card was used - channel = .040, overbanks = .058.
Q changed to 1,660 cfs at the unnamed stock tank.

.782	4.83	1768.13	1765.81	1767.22	1768.22	.09	2.93	.11	1764.60
1660.0	1216.3	365.1	78.6	591.8	114.2	45.1	37.1	13.4	1764.50
.28	2.06	3.20	1.74	.058	.040	.058	.000	1763.30	9835.00
.001172	930.	1003.	950.	5	18	0	.00	205.00	10040.00

FLOW DISTRIBUTION FOR SECNO= .78 CWSEL= 1768.13

STA=	9835.	9868.	9903.	9920.	9934.	9955.	9987.	10000.	10028.	10040.
PER Q=	10.7	14.2	9.3	8.8	10.8	14.0	5.5	22.0	4.7	
AREA=	101.6	119.4	67.8	61.6	83.6	113.2	44.5	114.2	45.1	
VEL=	1.8	2.0	2.3	2.4	2.1	2.1	2.0	3.2	1.7	
DEPTH=	3.1	3.4	4.2	4.4	3.8	3.6	3.5	4.1	3.6	

*SECNO .876

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9940.0 10060.0 TYPE= 1 TARGET= 120.000

.876	4.75	1769.45	1769.45	1768.93	1770.37	.92	1.24	.25	1767.00
1660.0	426.1	957.9	275.9	98.0	101.1	69.5	42.2	15.1	1766.90
.30	4.35	9.47	3.97	.058	.040	.058	.000	1764.70	9940.00
.011854	400.	496.	560.	0	6	0	.00	120.00	10060.00

FLOW DISTRIBUTION FOR SECNO= .88 CWSEL= 1769.45

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

STA=	9940.	9945.	9974.	9991.	10019.	10042.	10060.
PER Q=	1.0	12.3	12.4	57.7	11.6	5.0	
AREA=	6.2	50.2	41.7	101.1	44.2	25.3	
VEL=	2.8	4.1	4.9	9.5	4.4	3.3	
DEPTH=	1.2	1.8	2.4	3.6	2.0	1.4	

*SECNO .971

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.82

3470 ENCROACHMENT STATIONS= 9960.0 10060.0 TYPE= 1 TARGET= 100.000

.971	5.51	1773.01	1771.61	1772.28	1773.42	.41	3.00	.05	1768.90
1660.0	349.0	935.7	375.3	106.0	150.3	116.9	45.9	16.3	1769.20
.33	3.29	6.22	3.21	.058	.040	.058	.000	1767.50	9960.00
.003595	495.	502.	505.	4	15	0	.00	100.00	10060.00

FLOW DISTRIBUTION FOR SECNO= .97 CWSEL= 1773.01

STA=	9960.	9976.	9992.	10024.	10060.
PER Q=	8.0	13.0	56.4	22.6	
AREA=	46.7	59.3	150.3	116.9	
VEL=	2.8	3.6	6.2	3.2	
DEPTH=	3.0	3.7	4.7	3.2	

*SECNO 1.072

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9922.0 10022.0 TYPE= 1 TARGET= 100.000

1.072	2.86	1776.86	1776.86	1776.33	1777.94	1.08	3.60	.20	1775.00
1660.0	17.1	1320.1	322.8	4.7	146.5	64.3	49.4	17.5	1774.90
.35	3.66	9.01	5.02	.058	.040	.058	.000	1774.00	9922.00
.018473	550.	528.	480.	0	11	0	.00	100.00	10022.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 1.07 CWSEL= 1776.86

STA=	9922.	9925.	9986.	10017.	10022.
PER Q=	1.0	79.5	17.6	1.8	
AREA=	4.7	146.5	56.6	7.7	
VEL=	3.7	9.0	5.2	4.0	
DEPTH=	1.8	2.4	1.8	1.6	

*SECNO 1.172

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.66

3470 ENCROACHMENT STATIONS= 9875.0 10010.0 TYPE= 1 TARGET= 135.000

1.172	3.64	1780.64	1779.18	1779.87	1780.90	.25	2.88	.08	1777.90
1660.0	22.4	1465.8	171.8	12.1	349.5	68.0	53.2	18.9	1777.90
.38	1.86	4.19	2.53	.058	.040	.058	.000	1777.00	9875.00
.002604	520.	528.	490.	6	15	0	.00	135.00	10010.00

FLOW DISTRIBUTION FOR SECNO= 1.17 CWSEL= 1780.64

STA=	9875.	9880.	9986.	10009.	10010.
PER Q=	1.4	88.3	10.1	.2	
AREA=	12.1	349.5	64.9	3.1	
VEL=	1.9	4.2	2.6	1.1	
DEPTH=	2.7	3.3	2.8	2.8	

*SECNO 1.272

3470 ENCROACHMENT STATIONS= 9850.0 10030.0 TYPE= 1 TARGET= 180.000

1.272	3.23	1782.33	1781.53	1781.89	1782.61	.28	1.70	.01	1781.60
1660.0	.0	1654.3	5.7	.1	387.6	3.9	58.0	20.7	1781.30
.42	.02	4.27	1.48	.058	.040	.058	.000	1779.10	9850.00
.004610	530.	502.	490.	4	14	0	.00	180.00	10030.00

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

FLOW DISTRIBUTION FOR SECNO=      1.27         CWSEL=   1782.33

STA=    9850.   10026.   10030.
  PER Q=     99.7       .3
   AREA=    387.6      3.9
    VEL=      4.3      1.5
  DEPTH=      2.2      1.0

*SECNO 1.367

3470 ENCROACHMENT STATIONS=     9920.0   10040.0  TYPE=      1  TARGET=      120.000
     1.367      4.80   1784.80   1783.96   1784.64   1785.26       .46      2.60       .05   1781.70
    1660.0     518.5     806.3     335.2     137.0     117.1      96.6      62.2      22.4   1782.70
       .44      3.79      6.88      3.47      .058      .040      .058      .000   1780.00   9920.00
   .005901      490.      502.      502.         2        11         0       .00    120.00  10040.00


FLOW DISTRIBUTION FOR SECNO=      1.37         CWSEL=   1784.80

STA=    9920.    9943.    9969.   10000.   10039.   10040.
  PER Q=     12.9     18.4     48.6     19.8       .4
   AREA=     60.9     76.1    117.1     93.1      3.5
    VEL=      3.5      4.0      6.9      3.5      1.8
  DEPTH=      2.6      2.9      3.8      2.4      2.7

*SECNO 1.436

3470 ENCROACHMENT STATIONS=     9880.0   10015.0  TYPE=      1  TARGET=      135.000
          The upstream study limit at future 29th Avenue alignment.
     1.436      4.04   1786.54   1785.10   1785.74   1786.80       .27      1.52       .02   1783.20
    1660.0     582.5     967.4     110.1     196.0     199.7      42.8      65.5      23.5   1783.70
       .47      2.97      4.85      2.57      .058      .040      .058      .000   1782.50   9880.00
   .003141      360.      364.      360.         2        11         0       .00    135.00  10015.00


FLOW DISTRIBUTION FOR SECNO=      1.44         CWSEL=   1786.54

STA=    9880.    9893.    9944.   10000.   10015.
  PER Q=      5.8     29.3     58.3      6.6
   AREA=     38.0    158.0    199.7     42.8
    VEL=      2.5      3.1      4.8      2.6
  DEPTH=      2.8      3.1      3.6      2.9
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THIS RUN EXECUTED 10SEP92 15:19:01

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Stream No. 4 100-year Q

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	.000	1760.00	1730.65	4.95	1725.70	1731.76	1730.65	8.46	673.66	.00	9980.10	97.57	10077.67
	.000	1760.00	1731.66	5.96	1725.70	1732.18	1730.71	5.77	189.97	.00	9981.00	96.00	10077.00
*	.054	1760.00	1734.60	6.90	1727.70	1734.71	1732.82	2.54	40.57	283.00	9790.13	238.77	10028.90
*	.054	1760.00	1734.67	6.97	1727.70	1734.84	1732.96	2.95	59.40	283.00	9860.00	160.00	10020.00
*	.145	1760.00	1738.38	1.78	1736.60	1738.81	1738.16	5.82	260.48	480.00	9439.22	248.60	9687.82
*	.145	1760.00	1739.17	2.57	1736.60	1739.78	1738.71	6.99	203.64	480.00	9450.00	120.00	9570.00
*	.231	1760.00	1742.38	4.98	1737.40	1742.58	1741.22	4.54	38.60	455.00	9890.59	227.77	10118.37
*	.231	1760.00	1742.92	5.52	1737.40	1743.19	1741.23	4.87	36.96	455.00	9945.00	120.00	10065.00
*	.327	1760.00	1745.56	4.56	1741.00	1746.08	1745.43	8.10	153.09	507.00	9990.77	248.02	10238.78
*	.327	1760.00	1745.88	4.88	1741.00	1746.43	1745.59	8.02	132.25	507.00	9995.00	180.00	10175.00
*	.423	1760.00	1750.17	2.77	1747.40	1750.30	1749.32	3.29	59.17	507.00	9979.02	367.34	10346.36
	.423	1760.00	1750.78	3.38	1747.40	1751.01	1749.87	4.50	72.60	507.00	9984.00	206.00	10190.00
*	.520	1760.00	1754.91	4.01	1750.90	1755.63	1754.91	7.39	155.96	512.00	9877.30	246.01	10123.31
	.520	1760.00	1755.36	4.46	1750.90	1756.18	1754.82	7.40	126.92	512.00	9970.00	85.00	10055.00
*	.592	1760.00	1763.68	5.28	1758.40	1764.30	1763.68	7.95	132.70	380.00	9725.53	337.21	10062.74
*	.592	1760.00	1764.04	5.64	1758.40	1765.19	1764.04	9.52	166.17	380.00	9925.00	105.00	10030.00
*	.782	1660.00	1767.22	3.92	1763.30	1767.27	1765.76	2.80	12.58	1003.00	9671.36	470.54	10141.90
*	.782	1660.00	1768.13	4.83	1763.30	1768.22	1765.81	3.20	11.72	1003.00	9835.00	205.00	10040.00
*	.876	1660.00	1768.93	4.23	1764.70	1769.42	1768.93	8.04	104.80	496.00	9808.41	425.33	10233.74
*	.876	1660.00	1769.45	4.75	1764.70	1770.37	1769.45	9.47	118.54	496.00	9940.00	120.00	10060.00
*	.971	1660.00	1772.28	4.78	1767.50	1772.58	1771.77	5.99	41.73	502.00	9848.15	340.96	10189.12
*	.971	1660.00	1773.01	5.51	1767.50	1773.42	1771.61	6.22	35.95	502.00	9960.00	100.00	10060.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	1.072	1660.00	1776.33	2.33	1774.00	1777.05	1776.33	8.19	212.00	528.00	9896.33	204.23	10100.56
*	1.072	1660.00	1776.86	2.86	1774.00	1777.94	1776.86	9.01	184.73	528.00	9922.00	100.00	10022.00
*	1.172	1660.00	1779.87	2.87	1777.00	1779.99	1778.87	3.47	25.49	528.00	9799.66	438.98	10238.64
*	1.172	1660.00	1780.64	3.64	1777.00	1780.90	1779.18	4.19	26.04	528.00	9875.00	135.00	10010.00
*	1.272	1660.00	1781.89	2.79	1779.10	1782.33	1781.52	5.35	98.17	502.00	9833.50	209.03	10042.53
	1.272	1660.00	1782.33	3.23	1779.10	1782.61	1781.53	4.27	46.10	502.00	9850.00	180.00	10030.00
*	1.367	1660.00	1784.64	4.64	1780.00	1784.80	1783.75	4.70	29.20	502.00	9752.35	380.04	10132.40
	1.367	1660.00	1784.80	4.80	1780.00	1785.26	1783.96	6.88	59.01	502.00	9920.00	120.00	10040.00
	1.436	1660.00	1785.74	3.24	1782.50	1785.87	1784.94	4.01	30.08	364.00	9702.14	542.12	10244.26
	1.436	1660.00	1786.54	4.04	1782.50	1786.80	1785.10	4.85	31.41	364.00	9880.00	135.00	10015.00

Stream No. 4 100-year Q

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.000	1730.65	-.01	1731.76	97.57	.00	1760.00	.00	.00	.00	9973.50	10089.00	.00
	.000	1731.66	1.01	1732.18	96.00	.00	1760.00	.00	96.00	9981.00	9973.50	10089.00	10077.00
*	.054	1734.60	.00	1734.71	238.77	208.15	273.15	1278.70	10028.90	.00	9853.60	9891.30	10028.90
*	.054	1734.67	.07	1734.84	160.00	.00	272.86	1487.14	160.00	9860.00	9853.60	9891.30	10020.00
*	.145	1738.38	.00	1738.81	248.60	1.87	146.79	1611.34	.00	.00	9444.30	9464.30	.00
*	.145	1739.17	.79	1739.78	120.00	.00	225.37	1534.63	120.00	9450.00	9444.30	9464.30	9570.00
*	.231	1742.38	.00	1742.58	227.77	496.01	757.14	506.84	.00	.00	9984.90	10030.60	.00
*	.231	1742.92	.54	1743.19	120.00	408.77	933.51	417.72	120.00	9945.00	9984.90	10030.60	10065.00
*	.327	1745.56	.00	1746.08	248.02	762.95	631.91	365.13	.00	.00	10142.20	10167.00	.00
*	.327	1745.88	.32	1746.43	180.00	985.91	687.59	86.50	180.00	9995.00	10142.20	10167.00	10175.00
*	.423	1750.17	.00	1750.30	367.34	.18	216.89	1542.93	.00	.00	9984.60	10024.80	.00
	.423	1750.78	.61	1751.01	206.00	.48	407.38	1352.15	206.00	9984.00	9984.60	10024.80	10190.00
*	.520	1754.91	.00	1755.63	246.01	93.79	1438.33	227.88	.00	.00	9977.20	10050.70	.00
	.520	1755.36	.45	1756.18	85.00	47.91	1685.82	26.27	85.00	9970.00	9977.20	10050.70	10055.00
*	.592	1763.68	.00	1764.30	337.21	623.40	1022.68	113.93	.00	.00	9987.70	10025.30	.00
*	.592	1764.04	.36	1765.19	105.00	358.26	1354.68	47.05	105.00	9925.00	9987.70	10025.30	10030.00
*	.782	1767.22	.00	1767.27	470.54	1066.95	247.78	345.27	.00	.00	9999.50	10027.50	.00
*	.782	1768.13	.92	1768.22	205.00	1216.30	365.06	78.63	205.00	9835.00	9999.50	10027.50	10040.00
*	.876	1768.93	.00	1769.42	425.33	529.51	696.65	433.85	.00	.00	9991.30	10019.10	.00
*	.876	1769.45	.52	1770.37	120.00	426.13	957.94	275.92	120.00	9940.00	9991.30	10019.10	10060.00
*	.971	1772.28	.00	1772.58	340.96	436.95	761.07	461.98	.00	.00	9992.00	10024.00	.00
*	.971	1773.01	.73	1773.42	100.00	348.99	935.70	375.31	100.00	9960.00	9992.00	10024.00	10060.00
*	1.072	1776.33	.00	1777.05	204.23	53.66	935.95	670.39	.00	.00	9924.60	9986.00	.00
*	1.072	1776.86	.52	1777.94	100.00	17.08	1320.11	322.81	100.00	9922.00	9924.60	9986.00	10022.00
*	1.172	1779.87	.00	1779.99	438.98	104.70	926.06	629.24	.00	.00	9879.50	9985.70	.00
*	1.172	1780.64	.78	1780.90	135.00	22.43	1465.81	171.76	135.00	9875.00	9879.50	9985.70	10010.00
*	1.272	1781.89	.00	1782.33	209.03	1.65	1652.94	5.42	.00	.00	9850.10	10026.00	.00
	1.272	1782.33	.44	1782.61	180.00	.00	1654.29	5.71	180.00	9850.00	9850.10	10026.00	10030.00
*	1.367	1784.64	.00	1784.80	380.04	731.78	527.91	400.30	.00	.00	9969.20	10000.00	.00
	1.367	1784.80	.15	1785.26	120.00	518.53	806.30	335.17	120.00	9920.00	9969.20	10000.00	10040.00
	1.436	1785.74	.00	1785.87	542.12	561.79	623.86	474.35	.00	.00	9943.80	10000.00	.00
	1.436	1786.54	.79	1786.80	135.00	582.49	967.42	110.09	135.00	9880.00	9943.80	10000.00	10015.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=      .000  PROFILE=  1  CRITICAL DEPTH ASSUMED

WARNING SECNO=      .054  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .054  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .145  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .145  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .231  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .231  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .327  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .327  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .423  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .520  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .520  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      .592  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .592  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .592  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .592  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .782  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .782  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .876  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .876  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .876  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .876  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .971  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .971  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.072  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.072  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     1.072  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     1.072  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     1.172  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.172  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.272  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.367  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

FLOODWAY DATA, Stream No. 4 100-year Q
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.000	96.	305.	5.8	1731.6	1730.6	1.0
.054	160.	529.	3.3	1734.7	1734.6	.1
.145	120.	281.	6.3	1739.2	1738.4	.8
.231	120.	444.	4.0	1742.9	1742.4	.5
.327	180.	350.	5.0	1745.9	1745.6	.3
.423	206.	457.	3.9	1750.8	1750.2	.6
.520	85.	249.	7.1	1755.3	1754.9	.4
.592	105.	243.	7.2	1764.1	1763.7	.4
.782	205.	751.	2.2	1768.1	1767.2	.9
.876	120.	269.	6.2	1769.4	1768.9	.5
.971	100.	373.	4.4	1773.0	1772.3	.7
1.072	100.	215.	7.7	1776.8	1776.3	.5
1.172	135.	430.	3.9	1780.7	1779.9	.8
1.272	180.	392.	4.2	1782.3	1781.9	.4
1.367	120.	351.	4.7	1784.8	1784.6	.2
1.436	135.	438.	3.8	1786.5	1785.7	.8

Normal program termination

HEC2 S/N: 1126460209 HMVersion: 6.40 Data File: strm7fw.hc2

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    10SEP92    TIME   15:30:17   *
*********************************************
```

```
***************************************
*  U.S. ARMY CORPS OF ENGINEERS       *
*  HYDROLOGIC ENGINEERING CENTER      *
*  609 SECOND STREET, SUITE D         *
*  DAVIS, CALIFORNIA 95616-4687       *
*          (916) 756-1104             *
***************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
```

```
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::   FULL MICRO-COMPUTER IMPLEMENTATION   :::
:::                                       :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```

```
============================
H A E S T A D   M E T H O D S
============================
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS RUN EXECUTED 10SEP92 15:30:17

```
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T1      Deadman Wash Floodplain Delineation Study
T2      Natural Profile Run for Deadman Wash Tributaries: Stream No. 7 and 8
T3      Stream No. 7 & 8,  Q100   Subcritical Flow,   July 1992 (revised 9/92)

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

              2                             -1                                    1727.47

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1                  -1                                      -1                            15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38        43         1         8        42         3         2        26         5        39
    53         4        54       110       200

QT       2      4300      4300
NC    .095      .095      .075       .3        .5
ET                         9.1                                                                 9966      10138
         Deadman Wash Section 7.812 is at the confluence with Stream No. 7 & 8
         and has been renamed to Section 0.025.
         Q changed to 4,300 cfs at the confluence with Stream No. 7 and 8
         The water surface elevation starts at critical depth.
         NC card was used - channel = .075, overbanks = .095.
         Contraction and expansion values changed to .3 and .5
X1   0.025        26    9949.4   10163.9         0         0         0
GR  1750.9    9868.8    1749.3    9880.1    1742.6    9901.1    1741.4    9915.1    1739.6    9928.1
GR  1731.1    9949.4    1727.7    9963.3    1724.7    9989.8    1723.2   10000.0    1723.3   10008.2
GR  1725.2   10017.8    1725.8   10031.9    1725.3   10042.8    1724.0   10055.3    1724.0   10059.9
GR  1725.5   10071.7    1724.0   10084.9    1725.6   10094.7    1724.8   10106.5    1723.4   10116.4
GR  1723.2   10122.8    1723.4   10129.1    1729.9   10144.3    1732.8   10163.9    1734.0   10187.5
GR  1736.0   10700.0

NC                                    .1        .3
NH       5      .095    9973.5      .075   10089.0      .095   10471.1      .060   10520.5      .095
NH  10870.
ET                7.1       9.1                                   10290.   10870.0     10440     10615
         Deadman Wash Section 7.872 has been renamed to Section 0.075
```

```
        Contraction and expansion values changed to .1 and .3
        NH cards were used for SECNO 0.075 to SECNO 0.080
        ET cards (Fields 7 & 8) were used for SECNO 0.075 to SECNO 0.080
        to model ineffective area.
X1    0.075       48  10471.1  10520.5      350      200      264
GR   1751.8   9916.8   1745.4   9939.6   1739.4   9957.0   1732.6   9973.5   1727.9   9989.4
GR   1727.0   9995.4   1725.7  10000.0   1726.0  10010.8   1729.7  10029.2   1729.6  10043.9
GR   1728.7  10054.5   1731.6  10089.0   1731.3  10105.2   1731.3  10130.4   1730.9  10170.8
GR   1730.8  10201.5   1730.3  10227.0   1732.4  10253.3   1732.7  10269.0   1732.9  10289.4
GR   1733.8  10314.8   1733.0  10330.4   1732.4  10345.9   1732.0  10379.0   1731.3  10412.7
GR   1731.4  10439.3   1731.0  10461.2   1731.3  10471.1   1728.0  10477.6   1726.7  10487.1
GR   1726.6  10493.5   1727.1  10500.6   1729.0  10507.9   1732.5  10520.5   1732.6  10539.7
GR   1731.4  10551.5   1730.0  10562.0   1731.8  10574.0   1730.5  10582.2   1730.0  10589.2
GR   1732.2  10593.9   1732.8  10600.2   1731.5  10613.6   1732.8  10627.7   1733.3  10660.4
GR   1733.1  10673.8   1734.0  10770.0   1736.2  10870.0

NH       5      .095   9986.8      .075  10028.9      .095  10380.7      .060  10448.1      .095
NH   10820.
ET              7.1      9.1                                10220.   10820.0    10370    10560
X1   0.080       54  10380.7  10448.1       26       26       26
GR   1759.6   9650.0   1749.3   9702.3   1741.8   9738.0   1737.5   9763.2   1734.9   9787.2
GR   1732.1   9814.7   1732.2   9830.7   1732.1   9853.6   1731.3   9865.9   1731.6   9875.1
GR   1732.3   9891.3   1732.4   9915.0   1731.8   9941.4   1732.7   9964.7   1732.2   9974.7
GR   1730.6   9986.8   1728.1   9996.5   1727.9  10000.0   1727.7  10007.4   1729.8  10016.6
GR   1732.3  10028.9   1732.4  10042.8   1732.0  10065.9   1731.4  10096.3   1732.0  10119.0
GR   1732.0  10143.9   1731.2  10167.6   1732.8  10185.1   1733.5  10202.5   1733.8  10227.9
GR   1733.7  10228.8   1733.6  10250.8   1731.9  10283.7   1731.9  10329.7   1733.2  10362.6
GR   1732.9  10380.7   1729.8  10391.4   1727.5  10407.6   1726.4  10417.6   1726.5  10426.3
GR   1728.7  10435.1   1731.6  10448.1   1732.7  10464.7   1732.2  10476.8   1730.1  10491.0
GR   1732.2  10505.5   1729.9  10516.3   1732.8  10527.8   1731.7  10546.6   1732.9  10559.0
GR   1733.2  10588.7   1733.2  10616.0   1734.0  10730.0   1736.0  10820.0

NC     .095      .095      .060
ET                        9.1                                                    9980    10180
        NC card was used - channel = .060, overbanks = .095
X1   0.170       25   9983.0  10018.9      540      430      475
GR   1746.4   9839.5   1743.7   9891.7   1736.9   9927.0   1735.8   9962.4   1734.4   9983.0
GR   1728.6   9988.8   1727.2   9995.3   1727.5  10000.0   1733.6  10018.9   1734.5  10067.9
GR   1734.1  10137.0   1733.7  10188.3   1735.0  10237.0   1736.7  10286.6   1736.1  10328.9
GR   1734.9  10343.6   1733.5  10351.4   1735.5  10360.9   1736.1  10372.8   1733.7  10380.7
GR   1735.5  10399.7   1734.9  10424.1   1735.9  10439.4   1739.4  10457.4   1739.4  10459.0

ET                        9.1                                                    9982    10160
X1   0.266       28   9979.6  10046.3      510      500      507
GR   1750.3   9949.2   1742.2   9979.6   1734.5   9991.5   1734.0  10000.0   1734.8  10021.6
GR   1737.2  10046.3   1738.8  10080.9   1739.8  10107.8   1738.2  10138.5   1739.9  10178.3
GR   1739.0  10197.5   1740.3  10235.5   1740.4  10273.2   1740.6  10298.3   1738.3  10304.8
GR   1739.9  10315.5   1743.1  10321.5   1742.9  10333.3   1739.0  10339.1   1739.1  10348.8
GR   1740.0  10356.2   1739.0  10373.0   1739.4  10384.4   1742.3  10403.2   1744.4  10415.4
GR   1744.8  10428.7   1744.8  10439.9   1744.8  10452.0
```

```
NH       5      .090    9978.7      .070   10032.1      .085   10119.3      .070   10150.0      .085
NH   10352.
ET                       9.1                                                          9970     10150
          NH cards were used for SECNO 0.323 to SECNO 0.403
X1   0.323        24    9978.7   10032.1       301       320       301
GR  1760.4    9880.4    1748.1    9904.1    1739.8    9920.2    1739.3    9926.6    1740.5    9951.1
GR  1741.4    9978.7    1738.4    9990.2    1737.8   10000.0    1739.0   10015.4    1740.9   10032.1
GR  1740.7   10067.1    1741.2   10085.7    1740.8   10119.3    1737.1   10126.2    1736.6   10131.8
GR  1740.2   10150.0    1740.6   10182.7    1742.4   10229.0    1744.2   10272.7    1744.8   10295.9
GR  1747.3   10315.9    1749.2   10324.8    1750.1   10336.5    1750.2   10352.0

NH       5      .085    9808.5      .070   10015.2      .085   10244.0      .070   10314.0      .085
NH   10490.
ET                       9.1                                                          9870     10300
          Just downstream of the confluence of Stream No. 7 and 8.
X1   0.403        41    9808.5   10035.5       480       300       422
GR  1747.8    9553.8    1745.4    9609.2    1746.1    9650.7    1746.1    9687.8    1745.8    9717.9
GR  1745.6    9756.0    1742.9    9794.8    1745.0    9808.5    1741.1    9826.4    1739.8    9861.4
GR  1739.2    9891.5    1739.1    9923.8    1739.7    9937.5    1740.1    9952.6    1739.8    9975.1
GR  1739.8    9990.7    1738.8    9998.1    1740.3   10000.0    1742.0   10015.2    1744.0   10035.5
GR  1744.3   10078.3    1745.5   10109.3    1745.4   10147.4    1744.9   10201.0    1743.1   10244.0
GR  1741.6   10279.8    1740.7   10293.0    1744.3   10314.0    1748.7   10339.1    1751.2   10364.9
GR  1751.6   10377.4    1750.0   10386.1    1752.2   10397.9    1752.7   10410.1    1753.1   10424.8
GR  1753.1   10438.8    1752.4   10445.7    1750.5   10452.3    1759.7   10466.7    1762.6   10483.9
GR  1762.5   10490.0

QT       2       3170       3170
NC    .085       .085       .070
ET                       9.1                                                          9903     10149
          Q changed to 3,170 cfs just upstream of the confluence.
          NC card was used - channel = .070, overbanks = .085.
X1   0.482        22    9985.8   10106.3       390       420       417
GR  1754.0    9846.9    1753.0    9860.0    1752.0    9874.0    1752.0    9900.0    1748.9    9907.3
GR  1747.3    9921.0    1749.3    9940.8    1749.8    9969.1    1750.2    9985.8    1746.2    9996.6
GR  1746.2   10000.0    1749.2   10017.3    1749.0   10041.9    1747.7   10071.5    1750.2   10106.3
GR  1750.0   10140.2    1752.0   10164.4    1757.0   10188.5    1757.1   10193.7    1757.3   10205.3
GR  1758.0   10217.6    1758.0   10231.0

ET                       9.1                                                          9945     10135
X1   0.591        18    9947.6   10038.2       560       560       576
GR  1760.2    9638.9    1759.2    9725.7    1758.9    9758.8    1756.9    9844.6    1757.5    9900.8
GR  1757.1    9947.6    1753.9    9972.8    1752.8    9992.8    1751.2   10000.0    1753.8   10015.1
GR  1755.9   10038.2    1755.2   10089.1    1754.3   10108.1    1755.9   10126.4    1757.6   10144.0
GR  1761.4   10164.5    1761.5   10169.7    1761.7   10181.0

ET                       9.1                                                          9920     10100
X1   0.700        23    9989.6   10111.0       525       576       576
GR  1772.3    9684.2    1772.5    9732.4    1770.6    9747.4    1763.2    9767.6    1763.6    9788.4
GR  1761.4    9805.8    1759.9    9821.9    1760.7    9856.0    1760.0    9885.7    1760.3    9918.6
GR  1760.2    9953.4    1760.1    9989.6    1759.5   10000.0    1760.2   10026.7    1757.7   10085.2
GR  1761.8   10111.0    1761.7   10128.8    1761.9   10154.1    1762.9   10173.0    1765.9   10191.0
GR  1767.2   10200.4    1767.9   10211.5    1767.9   10224.5
```

```
ET                          9.1                                                          9940      10070
X1    0.805        25     9947.1   10039.5       545       554       554
GR   1780.8    9644.6     1780.4    9728.9    1778.6    9795.4    1774.1    9834.0    1771.1    9880.1
GR   1770.7    9921.5     1769.6    9947.1    1766.0    9963.5    1764.8    9980.7    1764.8    9999.2
GR   1764.7   10000.0     1766.6   10019.9    1769.0   10039.5    1769.2   10072.7    1768.8   10114.1
GR   1769.0   10135.1     1768.7   10155.4    1769.7   10171.0    1773.3   10194.3    1773.6   10206.6
GR   1773.6   10219.5     1773.8   10231.7    1771.5   10247.1    1770.7   10262.2    1771.5   10279.6

ET                          9.1                                                          9986      10250
X1    0.903        23     9980.6   10068.5       485       420       517
GR   1786.1    9780.9     1786.1    9862.2    1786.0    9921.3    1785.4    9955.6    1783.9    9980.6
GR   1769.9    9990.5     1768.9   10000.0    1771.6   10016.8    1775.0   10037.0    1771.6   10049.4
GR   1775.3   10068.5     1775.0   10094.8    1774.4   10139.9    1774.4   10188.5    1774.1   10236.9
GR   1774.1   10289.9     1773.5   10327.7    1771.8   10340.2    1771.2   10354.8    1773.6   10373.3
GR   1775.9   10395.0     1777.6   10402.0    1778.4   10404.5

ET                          9.1                                                          9900      10036
          The upstream study limit at I-17 East Rest Area.
X1    1.002        27     9993.7   10036.1       450       520       523
GR   1788.4    9615.0     1786.5    9679.5    1783.6    9721.4    1782.1    9757.7    1782.1    9794.7
GR   1781.8    9829.9     1779.7    9873.7    1779.3    9917.9    1780.0    9952.0    1780.1    9976.2
GR   1778.9    9993.7     1774.4   10000.0    1773.5   10007.4    1776.8   10014.8    1779.5   10036.1
GR   1781.0   10086.4     1781.5   10122.1    1782.1   10154.9    1785.8   10174.7    1786.0   10189.9
GR   1785.8   10204.4     1782.5   10221.4    1785.3   10243.2    1786.0   10254.7    1786.1   10268.5
GR   1786.1   10281.1     1786.0   10291.1
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .300 CEHV= .500
*SECNO .025
3720 CRITICAL DEPTH ASSUMED
Deadman Wash Section 7.812 is at the confluence with Stream No. 7 & 8
and has been renamed to Section 0.025.
Q changed to 4,300 cfs at the confluence with Stream No. 7 and 8
The water surface elevation starts at critical depth.
NC card was used - channel = .075, overbanks = .095.
Contraction and expansion values changed to .3 and .5

.025	4.26	1727.46	1727.46	1727.47	1728.82	1.35	.00	.00	1731.10
4300.0	.0	4300.0	.0	.0	460.3	.0	.0	.0	1732.80
.00	.00	9.34	.00	.000	.075	.000	.000	1723.20	9965.41
.061207	0.	0.	0.	0	4	0	.00	173.19	10138.60

FLOW DISTRIBUTION FOR SECNO= .03 CWSEL= 1727.46

STA= 9965. 10164.
PER Q= 100.0
AREA= 460.3
VEL= 9.3
DEPTH= 2.7

CCHV= .100 CEHV= .300
1490 NH CARD USED
*SECNO .075

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.35

3470 ENCROACHMENT STATIONS= 10290.0 10870.0 TYPE= 1 TARGET= 580.000
Deadman Wash Section 7.872 has been renamed to Section 0.075
Contraction and expansion values changed to .1 and .3
NH cards were used for SECNO 0.075 to SECNO 0.080

ET cards (Fields 7 & 8) were used for SECNO 0.075 to SECNO 0.080
to model ineffective area.

.075	8.44	1734.14	1733.66	.00	1734.74	.60	5.85	.08	1731.30
4300.0	1063.0	2277.4	959.6	368.0	280.2	365.2	4.6	2.0	1732.50
.01	2.89	8.13	2.63	.095	.060	.095	.000	1725.70	10290.00
.011118	350.	264.	200.	5	11	0	.00	485.99	10775.99

FLOW DISTRIBUTION FOR SECNO= .08 CWSEL= 1734.14

STA=	10290.	10379.	10413.	10439.	10461.	10471.	10521.	10552.	10562.	10574.	10589.	10614.	10660.
PER Q=	5.8	5.9	5.6	5.0	2.3	53.0	3.2	3.1	3.2	4.5	3.2	3.1	
AREA=	116.7	83.6	74.0	64.2	29.5	280.2	55.5	36.0	38.8	51.6	51.1	63.3	
VEL=	2.2	3.0	3.3	3.4	3.4	8.1	2.5	3.7	3.6	3.7	2.7	2.1	
DEPTH=	1.3	2.5	2.8	2.9	3.0	5.7	1.8	3.4	3.2	3.4	2.1	1.4	

STA=	10660.	10776.
PER Q=	2.0	
AREA=	68.9	
VEL=	1.2	
DEPTH=	.6	

1490 NH CARD USED
*SECNO .080

3470 ENCROACHMENT STATIONS= 10220.0 10820.0 TYPE= 1 TARGET= 600.000

.080	8.15	1734.55	1733.67	.00	1734.98	.43	.22	.02	1732.90
4300.0	627.8	2597.9	1074.3	300.6	394.5	504.5	5.2	2.3	1731.60
.01	2.09	6.59	2.13	.095	.060	.095	.000	1726.40	10220.00
.006868	26.	26.	26.	3	9	0	.00	534.66	10754.66

FLOW DISTRIBUTION FOR SECNO= .08 CWSEL= 1734.55

STA=	10220.	10284.	10330.	10363.	10381.	10448.	10477.	10491.	10506.	10528.	10559.	10616.	10730.
PER Q=	3.4	7.0	3.1	1.1	60.4	3.4	3.3	3.3	4.9	3.7	3.1	3.1	
AREA=	85.9	121.8	65.7	27.1	394.5	65.2	48.3	49.3	74.6	71.1	81.3	108.1	
VEL=	1.7	2.5	2.1	1.7	6.6	2.2	2.9	2.9	2.9	2.2	1.6	1.3	
DEPTH=	1.3	2.6	2.0	1.5	5.9	2.3	3.4	3.4	3.3	2.3	1.4	.9	

STA=	10730.	10755.
PER Q=	.1	
AREA=	6.8	
VEL=	.5	
DEPTH=	.3	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .170

NC card was used - channel = .060, overbanks = .095

.170	10.21	1737.41	1736.32	.00	1737.71	.30	2.72	.01	1734.40
4300.0	135.9	1749.9	2414.2	85.6	272.9	1091.0	19.1	7.8	1733.60
.05	1.59	6.41	2.21	.095	.060	.095	.000	1727.20	9924.37
.005079	540.	475.	430.	3	8	0	.00	522.78	10447.15

FLOW DISTRIBUTION FOR SECNO= .17 CWSEL= 1737.41

STA=	9924.	9983.	10019.	10068.	10137.	10188.	10237.	10329.	10361.	10400.	10439.	10447.
PER Q=	3.2	40.7	9.6	11.9	10.8	8.1	3.8	3.9	4.3	3.6	.1	
AREA=	85.6	272.9	164.5	214.7	179.9	148.9	119.8	80.7	92.3	84.5	5.8	
VEL=	1.6	6.4	2.5	2.4	2.6	2.3	1.4	2.1	2.0	1.8	.9	
DEPTH=	1.5	7.6	3.4	3.1	3.5	3.1	1.3	2.5	2.4	2.1	.8	

*SECNO .266

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .63

.266	6.92	1740.92	1740.63	.00	1741.74	.82	3.88	.15	1742.20
4300.0	.0	2994.2	1305.8	.0	351.0	498.8	32.4	13.1	1737.20
.07	.00	8.53	2.62	.000	.060	.095	.000	1734.00	9981.58
.012981	510.	507.	500.	2	14	0	.00	393.86	10394.26

FLOW DISTRIBUTION FOR SECNO= .27 CWSEL= 1740.92

STA=	9982.	10046.	10081.	10139.	10178.	10236.	10349.	10394.
PER Q=	69.6	8.6	6.3	4.7	3.9	3.8	3.2	
AREA=	351.0	101.1	102.6	74.5	76.5	83.0	61.1	
VEL=	8.5	3.6	2.6	2.7	2.2	2.0	2.2	
DEPTH=	5.4	2.9	1.8	1.9	1.3	.7	1.3	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO .323

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.53

NH cards were used for SECNO 0.323 to SECNO 0.403

.323	7.50	1744.10	1742.17	.00	1744.30	.20	2.50	.06	1741.40
4300.0	690.1	1202.5	2407.4	237.1	264.4	735.5	39.9	15.8	1740.90
.09	2.91	4.55	3.27	.090	.070	.079	.000	1736.60	9911.85
.005515	301.	301.	320.	2	14	0	.00	358.51	10270.37

FLOW DISTRIBUTION FOR SECNO= .32 CWSEL= 1744.10

STA=	9912.	9927.	9951.	9979.	10032.	10067.	10086.	10119.	10126.	10132.	10150.	10183.	10229.
PER Q=	3.1	7.6	5.3	28.0	7.7	3.8	6.7	3.6	5.6	12.0	8.8	6.9	
AREA=	47.1	103.0	87.0	264.4	115.6	58.7	104.3	35.6	40.6	103.8	121.1	120.6	
VEL=	2.8	3.2	2.6	4.5	2.9	2.8	2.8	4.3	5.9	5.0	3.1	2.5	
DEPTH=	3.2	4.2	3.2	5.0	3.3	3.2	3.1	5.2	7.3	5.7	3.7	2.6	

STA=	10229.	10270.
PER Q=	1.0	
AREA=	35.2	
VEL=	1.2	
DEPTH=	.9	

1490 NH CARD USED
*SECNO .403

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.55

Just downstream of the confluence of Stream No. 7 and 8.

.403	6.69	1745.49	1742.40	.00	1745.61	.13	1.31	.01	1745.00
4300.0	72.0	3542.5	685.5	70.0	1161.5	397.8	52.4	19.7	1744.00
.13	1.03	3.05	1.72	.085	.069	.073	.000	1738.80	9606.97
.002310	480.	422.	300.	3	11	0	.00	569.84	10320.83

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .40 CWSEL= 1745.49

STA=	9607.	9809.	10015.	10036.	10244.	10280.	10293.	10314.	10321.
PER Q=	1.7	80.6	1.8	3.5	5.7	3.6	3.1	.1	
AREA=	70.0	1110.8	50.7	160.8	112.6	57.4	62.9	4.1	
VEL=	1.0	3.1	1.5	.9	2.2	2.7	2.1	.6	
DEPTH=	.3	5.4	2.5	.8	3.1	4.3	3.0	.6	

*SECNO .482

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
Q changed to 3,170 cfs just upstream of the confluence.
NC card was used - channel = .070, overbanks = .085.

.482	4.61	1750.81	1750.81	.00	1751.68	.87	2.14	.22	1750.20
3170.0	847.5	2240.2	82.3	140.5	277.6	28.2	62.2	23.6	1750.20
.15	6.03	8.07	2.92	.085	.070	.085	.000	1746.20	9902.80
.048072	390.	417.	420.	0	18	0	.00	247.24	10150.03

FLOW DISTRIBUTION FOR SECNO= .48 CWSEL= 1750.81

STA=	9903.	9907.	9921.	9941.	9969.	9986.	10106.	10140.	10150.
PER Q=	.5	8.7	11.1	5.0	1.4	70.7	2.3	.3	
AREA=	4.3	37.2	49.7	35.7	13.6	277.6	24.2	4.0	
VEL=	3.5	7.4	7.1	4.5	3.3	8.1	3.1	2.1	
DEPTH=	1.0	2.7	2.5	1.3	.8	2.3	.7	.4	

*SECNO .591

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.91

.591	7.50	1758.70	1756.92	.00	1758.92	.22	7.17	.06	1757.10
3170.0	340.8	1849.6	979.6	220.1	418.9	339.4	71.5	27.7	1755.90
.19	1.55	4.42	2.89	.085	.070	.085	.000	1751.20	9767.18
.005678	560.	576.	560.	7	11	0	.00	382.78	10149.96

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .59 CWSEL= 1758.70

STA=	9767.	9845.	9901.	9948.	10038.	10089.	10108.	10126.	10144.	10150.
PER Q=	2.7	4.6	3.4	58.3	14.4	7.8	6.4	2.2	.1	
AREA=	69.9	84.6	65.7	418.9	160.6	75.1	66.0	34.4	3.3	
VEL=	1.2	1.7	1.7	4.4	2.8	3.3	3.1	2.1	.9	
DEPTH=	.9	1.5	1.4	4.6	3.2	4.0	3.6	2.0	.6	

*SECNO .700

.700	4.98	1762.68	1761.52	.00	1762.91	.23	3.98	.00	1760.10
3170.0	1328.4	1776.9	64.8	447.9	398.7	44.3	83.5	32.4	1761.80
.23	2.97	4.46	1.46	.085	.070	.085	.000	1757.70	9795.72
.009067	525.	576.	576.	6	11	0	.00	373.03	10168.75

FLOW DISTRIBUTION FOR SECNO= .70 CWSEL= 1762.68

STA=	9796.	9806.	9822.	9856.	9886.	9919.	9953.	9990.	10111.	10129.	10154.	10169.
PER Q=	.2	2.7	7.6	6.4	8.1	8.0	8.9	56.1	.8	1.1	.2	
AREA=	6.4	32.6	81.0	69.1	83.1	84.4	91.4	398.7	16.5	22.1	5.7	
VEL=	1.2	2.7	3.0	2.9	3.1	3.0	3.1	4.5	1.6	1.5	.9	
DEPTH=	.6	2.0	2.4	2.3	2.5	2.4	2.5	3.3	.9	.9	.4	

*SECNO .805

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

.805	5.31	1770.01	1769.84	.00	1770.92	.91	7.81	.20	1769.60
3170.0	1.9	2799.1	369.0	2.0	346.5	132.3	92.2	36.3	1769.00
.25	.97	8.08	2.79	.085	.070	.085	.000	1764.70	9937.48
.025088	545.	554.	554.	2	8	0	.00	235.55	10173.03

FLOW DISTRIBUTION FOR SECNO= .81 CWSEL= 1770.01

STA=	9937.	9947.	10040.	10073.	10114.	10135.	10155.	10171.	10173.
PER Q=	.1	88.3	2.5	3.7	2.2	2.3	1.0	.0	
AREA=	2.0	346.5	30.3	42.0	23.4	23.6	12.7	.3	
VEL=	1.0	8.1	2.6	2.8	3.0	3.1	2.4	.8	
DEPTH=	.2	3.8	.9	1.0	1.1	1.2	.8	.2	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .903

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.99

.903	7.36	1776.26	1774.93	.00	1776.43	.17	5.44	.07	1783.90
3170.0	.0	1360.6	1809.4	.0	330.7	714.0	100.3	39.6	1775.30
.29	.00	4.11	2.53	.000	.070	.085	.000	1768.90	9986.00
.006349	485.	517.	420.	6	8	0	.00	410.48	10396.49

FLOW DISTRIBUTION FOR SECNO= .90 CWSEL= 1776.26

STA=	9986.	10069.	10095.	10140.	10189.	10237.	10290.	10328.	10340.	10355.	10373.	10395.	10396.
PER Q=	42.9	1.4	4.2	6.0	6.8	8.4	7.4	4.6	8.6	7.7	1.9	.0	
AREA=	330.7	29.2	70.4	90.4	97.3	114.5	93.0	45.1	69.5	71.4	32.8	.3	
VEL=	4.1	1.5	1.9	2.1	2.2	2.3	2.5	3.3	3.9	3.4	1.8	.4	
DEPTH=	4.0	1.1	1.6	1.9	2.0	2.2	2.5	3.6	4.8	3.9	1.5	.2	

*SECNO 1.002

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

The upstream study limit at I-17 East Rest Area.

1.002	8.01	1781.51	1781.47	.00	1782.42	.92	5.77	.22	1778.90
3170.0	1033.9	1919.7	216.4	256.6	205.1	72.5	109.5	43.6	1779.50
.31	4.03	9.36	2.99	.085	.070	.085	.000	1773.50	9836.00
.025548	450.	523.	520.	3	8	0	.00	286.53	10122.53

FLOW DISTRIBUTION FOR SECNO= 1.00 CWSEL= 1781.51

STA=	9836.	9874.	9918.	9952.	9976.	9994.	10036.	10086.	10122.
PER Q=	2.8	12.5	8.4	4.0	4.9	60.6	6.5	.3	
AREA=	34.1	88.7	63.3	35.3	35.1	205.1	63.3	9.2	
VEL=	2.6	4.4	4.2	3.6	4.4	9.4	3.3	1.1	
DEPTH=	.9	2.0	1.9	1.5	2.0	4.8	1.3	.3	

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T1      Deadman Wash Floodplain Delineation Study
T2      Floodway Run for Deadman Wash Tributaries: Stream No. 7 and 8
T3      Stream No. 7 & 8,  Q100   Subcritical Flow,   July 1992 (revised 9/92)

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              3                                                          1728.00

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     2                 -1                                  -1                         15
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS


CCHV=     .300 CEHV=     .500
*SECNO  .025

3470 ENCROACHMENT STATIONS=     9966.0   10138.0  TYPE=      1  TARGET=      172.000
         Deadman Wash Section 7.812 is at the confluence with Stream No. 7 & 8
         and has been renamed to Section 0.025.
         Q changed to 4,300 cfs at the confluence with Stream No. 7 and 8
         The water surface elevation starts at critical depth.
         NC card was used - channel = .075, overbanks = .095.
         Contraction and expansion values changed to .3 and .5
     .025      4.80   1728.00   1727.45   1727.46   1728.94       .94       .00       .00 100000.00
   4300.0        .0    4300.0        .0        .0     552.9        .0        .0        .0 100000.00
     .00       .00      7.78       .00      .000      .075      .000      .000   1723.20   9966.00
  .033268        0.        0.        0.         0        14         0       .00    172.00  10138.00


FLOW DISTRIBUTION FOR SECNO=       .03          CWSEL=   1728.00

STA=    9966.   10164.
  PER Q=    100.0
   AREA=    552.9
    VEL=      7.8
  DEPTH=      3.2

CCHV=     .100 CEHV=     .300
1490 NH CARD USED
*SECNO  .075

3470 ENCROACHMENT STATIONS=    10440.0   10615.0  TYPE=      1  TARGET=      175.000
         Deadman Wash Section 7.872 has been renamed to Section 0.075
         Contraction and expansion values changed to .1 and .3
         NH cards were used for SECNO 0.075 to SECNO 0.080
         ET cards (Fields 7 & 8) were used for SECNO 0.075 to SECNO 0.080
         to model ineffective area.
     .075      8.43   1734.13   1733.82   1734.14   1735.40      1.26      6.36       .10   1731.30
   4300.0     382.3    2950.0     967.7      91.8     280.2     236.6       3.4       1.0   1732.50
     .01      4.16     10.53      4.09      .095      .060      .095      .000   1725.70  10440.00
  .018657      350.      264.      200.         4        14         0       .00    175.00  10615.00
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .08 CWSEL= 1734.13

STA=	10440.	10461.	10471.	10521.	10552.	10562.	10574.	10589.	10614.	10615.
PER Q=	5.9	3.0	68.6	4.1	4.0	4.2	5.8	4.2	.2	
AREA=	62.3	29.5	280.2	55.5	36.0	38.8	51.6	51.1	3.6	
VEL=	4.0	4.4	10.5	3.2	4.8	4.6	4.9	3.5	2.0	
DEPTH=	2.9	3.0	5.7	1.8	3.4	3.2	3.4	2.1	2.6	

1490 NH CARD USED
*SECNO .080

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.60

3470 ENCROACHMENT STATIONS= 10370.0 10560.0 TYPE= 1 TARGET= 190.000

.080	8.72	1735.12	1733.62	1734.55	1735.75	.63	.29	.06	1732.90
4300.0	45.1	3129.0	1125.9	22.9	433.5	374.8	3.9	1.1	1731.60
.01	1.97	7.22	3.00	.095	.060	.095	.000	1726.40	10370.00
.007274	26.	26.	26.	2	12	0	.00	190.00	10560.00

FLOW DISTRIBUTION FOR SECNO= .08 CWSEL= 1735.12

STA=	10370.	10381.	10448.	10465.	10491.	10506.	10516.	10528.	10547.	10560.
PER Q=	1.0	72.8	3.2	6.3	4.5	3.4	3.2	3.4	2.2	
AREA=	22.9	433.5	49.4	88.9	57.7	44.0	43.4	54.1	37.3	
VEL=	2.0	7.2	2.8	3.1	3.3	3.4	3.2	2.7	2.6	
DEPTH=	2.1	6.4	3.0	3.4	4.0	4.1	3.8	2.9	2.8	

*SECNO .170

3470 ENCROACHMENT STATIONS= 9980.0 10180.0 TYPE= 1 TARGET= 200.000
NC card was used - channel = .060, overbanks = .095

.170	11.05	1738.25	1736.45	1737.41	1738.76	.52	3.01	.01	1734.40
4300.0	19.2	2255.4	2025.4	11.3	303.3	665.0	13.2	3.1	1733.60
.03	1.71	7.44	3.05	.095	.060	.095	.000	1727.20	9980.00
.005933	540.	475.	430.	3	8	0	.00	200.00	10180.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= .17 CWSEL= 1738.25

STA=	9980.	9983.	10019.	10068.	10137.	10180.
PER Q=	.4	52.5	15.0	19.1	12.9	
AREA=	11.3	303.3	206.0	273.2	185.8	
VEL=	1.7	7.4	3.1	3.0	3.0	
DEPTH=	3.8	8.4	4.2	4.0	4.3	

*SECNO .266

3470 ENCROACHMENT STATIONS= 9982.0 10160.0 TYPE= 1 TARGET= 178.000

.266	7.77	1741.77	1740.54	1740.92	1742.52	.76	3.69	.07	100000.00
4300.0	.0	3193.1	1106.9	.0	405.4	348.7	23.2	5.3	1737.20
.05	.00	7.88	3.17	.000	.060	.095	.000	1734.00	9982.00
.009239	510.	507.	500.	2	11	0	.00	178.00	10160.00

FLOW DISTRIBUTION FOR SECNO= .27 CWSEL= 1741.77

STA=	9982.	10046.	10081.	10108.	10139.	10160.
PER Q=	74.3	11.0	4.2	5.9	4.6	
AREA=	405.4	130.4	66.4	85.0	66.9	
VEL=	7.9	3.6	2.7	3.0	3.0	
DEPTH=	6.3	3.8	2.5	2.8	3.1	

1490 NH CARD USED
*SECNO .323

3470 ENCROACHMENT STATIONS= 9970.0 10150.0 TYPE= 1 TARGET= 180.000
NH cards were used for SECNO 0.323 to SECNO 0.403

.323	8.17	1744.77	1742.67	1744.10	1745.17	.41	2.61	.03	1741.40
4300.0	81.1	1758.7	2460.2	30.5	299.5	536.1	29.0	6.6	1740.90
.07	2.66	5.87	4.59	.090	.070	.078	.000	1736.60	9970.00
.007786	301.	301.	320.	2	14	0	.00	180.00	10150.00

FLOW DISTRIBUTION FOR SECNO= .32 CWSEL= 1744.77

STA=	9970.	9979.	10032.	10067.	10086.	10119.	10126.	10132.	10150.
PER Q=	1.9	40.9	12.5	6.2	11.0	5.2	7.6	14.8	
AREA=	30.5	299.5	138.6	70.9	126.4	40.1	44.3	115.8	
VEL=	2.7	5.9	3.9	3.8	3.7	5.6	7.4	5.5	
DEPTH=	3.5	5.6	4.0	3.8	3.8	5.8	7.9	6.4	

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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


1490 NH CARD USED
*SECNO  .403

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.95


3470 ENCROACHMENT STATIONS=     9870.0   10300.0  TYPE=      1  TARGET=      430.000
         Just downstream of the confluence of Stream No. 7 and 8.
      .403      7.61   1746.42   1742.73   1745.49   1746.54       .12      1.34       .03 100000.00
    4300.0        .0    3244.4    1055.6        .0    1044.2     604.4      39.6       9.0   1744.00
       .11       .00      3.11      1.75      .000      .072      .076      .000   1738.80   9870.00
   .002055      480.      422.      300.         3        14         0       .00    430.00  10300.00


FLOW DISTRIBUTION FOR SECNO=       .40          CWSEL=   1746.42

STA=    9870.   10036.   10078.   10109.   10147.   10201.   10244.   10280.   10293.   10300.
  PER Q=     75.5      3.1      1.1       .7      1.5      3.5      8.3      4.7      1.7
   AREA=   1044.2     97.2     47.1     37.0     68.1    104.1    145.7     69.6     35.8
    VEL=      3.1      1.4      1.0       .8       .9      1.4      2.5      2.9      2.0
  DEPTH=      6.3      2.3      1.5      1.0      1.3      2.4      4.1      5.3      5.1

*SECNO  .482

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9903.0   10149.0  TYPE=      1  TARGET=      246.000
         Q changed to 3,170 cfs just upstream of the confluence.
         NC card was used - channel = .070, overbanks = .085.
      .482      4.53   1750.73   1750.73   1750.81   1751.68       .95      1.97       .25   1750.20
    3170.0     843.7    2254.8      71.5     133.9     267.9      24.7      49.5      12.2   1750.20
       .12      6.30      8.42      2.90      .085      .070      .085      .000   1746.20   9903.00
   .054807      390.      417.      420.         0        14         0       .00    246.00  10149.00


FLOW DISTRIBUTION FOR SECNO=       .48          CWSEL=   1750.73

STA=    9903.    9907.    9921.    9941.    9969.    9986.   10106.   10140.   10149.
  PER Q=       .5      8.8     11.2      4.8      1.3     71.1      2.0       .2
   AREA=      4.0     36.1     48.2     33.5     12.2    267.9     21.4      3.2
    VEL=      3.7      7.8      7.4      4.6      3.3      8.4      3.0      2.1
  DEPTH=       .9      2.6      2.4      1.2       .7      2.2       .6       .4
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .591

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.08

3470 ENCROACHMENT STATIONS= 9945.0 10135.0 TYPE= 1 TARGET= 190.000

.591	7.80	1759.00	1756.93	1758.70	1759.27	.27	7.52	.07	1757.10
3170.0	6.9	2065.9	1097.2	4.9	445.3	350.5	57.6	15.1	1755.90
.16	1.41	4.64	3.13	.085	.070	.085	.000	1751.20	9945.00
.005776	560.	576.	560.	4	11	0	.00	190.00	10135.00

FLOW DISTRIBUTION FOR SECNO= .59 CWSEL= 1759.00

STA=	9945.	9948.	10038.	10089.	10108.	10126.	10135.
PER Q=	.2	65.2	16.8	8.9	7.4	1.6	
AREA=	4.9	445.3	175.4	80.7	71.3	23.1	
VEL=	1.4	4.6	3.0	3.5	3.3	2.2	
DEPTH=	1.9	4.9	3.4	4.2	3.9	2.7	

*SECNO .700

3470 ENCROACHMENT STATIONS= 9920.0 10100.0 TYPE= 1 TARGET= 180.000

.700	5.55	1763.25	1761.81	1762.68	1763.64	.39	4.34	.04	1760.10
3170.0	782.3	2387.7	.0	212.6	443.2	.0	67.1	17.5	100000.00
.19	3.68	5.39	.00	.085	.070	.000	.000	1757.70	9920.00
.010519	525.	576.	576.	5	11	0	.00	180.00	10100.00

FLOW DISTRIBUTION FOR SECNO= .70 CWSEL= 1763.25

STA=	9920.	9953.	9990.	10111.
PER Q=	11.2	13.5	75.3	
AREA=	100.3	112.3	443.2	
VEL=	3.5	3.8	5.4	
DEPTH=	3.0	3.1	4.0	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO .805

3470 ENCROACHMENT STATIONS= 9940.0 10070.0 TYPE= 1 TARGET= 130.000

.805	5.84	1770.54	1769.69	1770.01	1771.42	.87	7.63	.14	1769.60
3170.0	10.9	3026.7	132.4	5.6	395.5	44.3	74.0	19.4	1769.00
.21	1.94	7.65	2.99	.085	.070	.085	.000	1764.70	9940.00
.018886	545.	554.	554.	4	11	0	.00	130.00	10070.00

FLOW DISTRIBUTION FOR SECNO= .81 CWSEL= 1770.54

STA=	9940.	9947.	10040.	10070.
PER Q=	.3	95.5	4.2	
AREA=	5.6	395.5	44.3	
VEL=	1.9	7.7	3.0	
DEPTH=	.8	4.3	1.5	

*SECNO .903

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.55

3470 ENCROACHMENT STATIONS= 9986.0 10250.0 TYPE= 1 TARGET= 264.000

.903	8.04	1776.94	1775.61	1776.26	1777.23	.29	5.75	.06	100000.00
3170.0	.0	1950.2	1219.8	.0	386.6	438.6	81.0	21.5	1775.30
.25	.00	5.05	2.78	.000	.070	.085	.000	1768.90	9986.00
.007831	485.	517.	420.	4	11	0	.00	264.00	10250.00

FLOW DISTRIBUTION FOR SECNO= .90 CWSEL= 1776.94

STA=	9986.	10069.	10095.	10140.	10189.	10237.	10250.
PER Q=	61.5	3.4	8.4	11.2	12.3	3.2	
AREA=	386.6	47.0	100.9	123.3	130.1	37.2	
VEL=	5.0	2.3	2.6	2.9	3.0	2.7	
DEPTH=	4.7	1.8	2.2	2.5	2.7	2.8	

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 1.002

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .66

3470 ENCROACHMENT STATIONS= 9900.0 10036.0 TYPE= 1 TARGET= 136.000

The upstream study limit at I-17 East Rest Area.

1.002	8.87	1782.37	1781.69	1781.51	1783.19	.82	5.81	.16	1778.90
3170.0	1132.5	2037.5	.0	252.8	241.5	.0	88.7	23.9	100000.00
.27	4.48	8.44	.00	.085	.070	.000	.000	1773.50	9900.00
.018102	450.	523.	520.	3	5	0	.00	136.00	10036.00

FLOW DISTRIBUTION FOR SECNO= 1.00 CWSEL= 1782.37

STA=	9900.	9918.	9952.	9976.	9994.	10036.
PER Q=	7.5	13.4	7.3	7.5	64.3	
AREA=	53.5	92.8	56.2	50.3	241.5	
VEL=	4.4	4.6	4.1	4.7	8.4	
DEPTH=	3.0	2.7	2.3	2.9	5.7	

THIS RUN EXECUTED 10SEP92 15:30:34

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Stream No. 7 & 8, Q100

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	.025	4300.00	1727.46	4.26	1723.20	1728.82	1727.46	9.34	612.07	.00	9965.41	173.19	10138.60
	.025	4300.00	1728.00	4.80	1723.20	1728.94	1727.45	7.78	332.68	.00	9966.00	172.00	10138.00
*	.075	4300.00	1734.14	8.44	1725.70	1734.74	1733.66	8.13	111.18	264.00	10290.00	485.99	10775.99
	.075	4300.00	1734.13	8.43	1725.70	1735.40	1733.82	10.53	186.57	264.00	10440.00	175.00	10615.00
	.080	4300.00	1734.55	8.15	1726.40	1734.98	1733.67	6.59	68.68	26.00	10220.00	534.66	10754.66
*	.080	4300.00	1735.12	8.72	1726.40	1735.75	1733.62	7.22	72.74	26.00	10370.00	190.00	10560.00
	.170	4300.00	1737.41	10.21	1727.20	1737.71	1736.32	6.41	50.79	475.00	9924.37	522.78	10447.15
	.170	4300.00	1738.25	11.05	1727.20	1738.76	1736.45	7.44	59.33	475.00	9980.00	200.00	10180.00
*	.266	4300.00	1740.92	6.92	1734.00	1741.74	1740.63	8.53	129.81	507.00	9981.58	393.86	10394.26
	.266	4300.00	1741.77	7.77	1734.00	1742.52	1740.54	7.88	92.39	507.00	9982.00	178.00	10160.00
*	.323	4300.00	1744.10	7.50	1736.60	1744.30	1742.17	4.55	55.15	301.00	9911.85	358.51	10270.37
	.323	4300.00	1744.77	8.17	1736.60	1745.17	1742.67	5.87	77.86	301.00	9970.00	180.00	10150.00
*	.403	4300.00	1745.49	6.69	1738.80	1745.61	1742.40	3.05	23.10	422.00	9606.97	569.84	10320.83
*	.403	4300.00	1746.42	7.61	1738.80	1746.54	1742.73	3.11	20.55	422.00	9870.00	430.00	10300.00
*	.482	3170.00	1750.81	4.61	1746.20	1751.68	1750.81	8.07	480.72	417.00	9902.80	247.24	10150.03
*	.482	3170.00	1750.73	4.53	1746.20	1751.68	1750.73	8.42	548.07	417.00	9903.00	246.00	10149.00
*	.591	3170.00	1758.70	7.50	1751.20	1758.92	1756.92	4.42	56.78	576.00	9767.18	382.78	10149.96
*	.591	3170.00	1759.00	7.80	1751.20	1759.27	1756.93	4.64	57.76	576.00	9945.00	190.00	10135.00
	.700	3170.00	1762.68	4.98	1757.70	1762.91	1761.52	4.46	90.67	576.00	9795.72	373.03	10168.75
	.700	3170.00	1763.25	5.55	1757.70	1763.64	1761.81	5.39	105.19	576.00	9920.00	180.00	10100.00
*	.805	3170.00	1770.01	5.31	1764.70	1770.92	1769.84	8.08	250.88	554.00	9937.48	235.55	10173.03
	.805	3170.00	1770.54	5.84	1764.70	1771.42	1769.69	7.65	188.86	554.00	9940.00	130.00	10070.00

	SECNO	Q	CWSEL	DEPTH	ELMIN	EG	CRIWS	VCH	10*KS	XLCH	SSTA	TOPWID	ENDST
*	.903	3170.00	1776.26	7.36	1768.90	1776.43	1774.93	4.11	63.49	517.00	9986.00	410.48	10396.49
*	.903	3170.00	1776.94	8.04	1768.90	1777.23	1775.61	5.05	78.31	517.00	9986.00	264.00	10250.00
*	1.002	3170.00	1781.51	8.01	1773.50	1782.42	1781.47	9.36	255.48	523.00	9836.00	286.53	10122.53
*	1.002	3170.00	1782.37	8.87	1773.50	1783.19	1781.69	8.44	181.02	523.00	9900.00	136.00	10036.00

Stream No. 7 & 8, Q100

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	.025	1727.46	-.01	1728.82	173.19	.00	4300.00	.00	.00	.00	9949.40	10163.90	.00
	.025	1728.00	.54	1728.94	172.00	.00	4300.00	.00	172.00	9966.00	9949.40	10163.90	10138.00
*	.075	1734.14	.00	1734.74	485.99	1063.02	2277.37	959.61	580.00	10290.00	10471.10	10520.50	10870.00
	.075	1734.13	-.01	1735.40	175.00	382.31	2949.96	967.73	175.00	10440.00	10471.10	10520.50	10615.00
	.080	1734.55	.00	1734.98	534.66	627.77	2597.88	1074.35	600.00	10220.00	10380.70	10448.10	10820.00
*	.080	1735.12	.57	1735.75	190.00	45.08	3129.00	1125.92	190.00	10370.00	10380.70	10448.10	10560.00
	.170	1737.41	.00	1737.71	522.78	135.88	1749.95	2414.17	.00	.00	9983.00	10018.90	.00
	.170	1738.25	.84	1738.76	200.00	19.25	2255.38	2025.37	200.00	9980.00	9983.00	10018.90	10180.00
*	.266	1740.92	.00	1741.74	393.86	.00	2994.23	1305.77	.00	.00	9979.60	10046.30	.00
	.266	1741.77	.85	1742.52	178.00	.00	3193.13	1106.87	178.00	9982.00	9979.60	10046.30	10160.00
*	.323	1744.10	.00	1744.30	358.51	690.08	1202.49	2407.44	.00	.00	9978.70	10032.10	.00
	.323	1744.77	.67	1745.17	180.00	81.08	1758.67	2460.24	180.00	9970.00	9978.70	10032.10	10150.00
*	.403	1745.49	.00	1745.61	569.84	72.02	3542.46	685.52	.00	.00	9808.50	10035.50	.00
*	.403	1746.42	.93	1746.54	430.00	.00	3244.45	1055.55	430.00	9870.00	9808.50	10035.50	10300.00
*	.482	1750.81	.00	1751.68	247.24	847.50	2240.23	82.26	.00	.00	9985.80	10106.30	.00
*	.482	1750.73	-.08	1751.68	246.00	843.70	2254.84	71.46	246.00	9903.00	9985.80	10106.30	10149.00
*	.591	1758.70	.00	1758.92	382.78	340.77	1849.61	979.62	.00	.00	9947.60	10038.20	.00
*	.591	1759.00	.30	1759.27	190.00	6.92	2065.88	1097.19	190.00	9945.00	9947.60	10038.20	10135.00
	.700	1762.68	.00	1762.91	373.03	1328.35	1776.89	64.76	.00	.00	9989.60	10111.00	.00
	.700	1763.25	.58	1763.64	180.00	782.31	2387.69	.00	180.00	9920.00	9989.60	10111.00	10100.00
*	.805	1770.01	.00	1770.92	235.55	1.92	2799.08	369.00	.00	.00	9947.10	10039.50	.00
	.805	1770.54	.53	1771.42	130.00	10.88	3026.72	132.40	130.00	9940.00	9947.10	10039.50	10070.00
*	.903	1776.26	.00	1776.43	410.48	.00	1360.64	1809.36	.00	.00	9980.60	10068.50	.00
*	.903	1776.94	.68	1777.23	264.00	.00	1950.25	1219.75	264.00	9986.00	9980.60	10068.50	10250.00
*	1.002	1781.51	.00	1782.42	286.53	1033.91	1919.73	216.36	.00	.00	9993.70	10036.10	.00
*	1.002	1782.37	.86	1783.19	136.00	1132.49	2037.50	.00	136.00	9900.00	9993.70	10036.10	10036.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=      .025  PROFILE=  1  CRITICAL DEPTH ASSUMED

WARNING SECNO=      .075  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .266  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .323  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .403  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .403  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      .482  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .482  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .482  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .482  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      .591  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .591  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .805  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .903  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .903  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.002  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.002  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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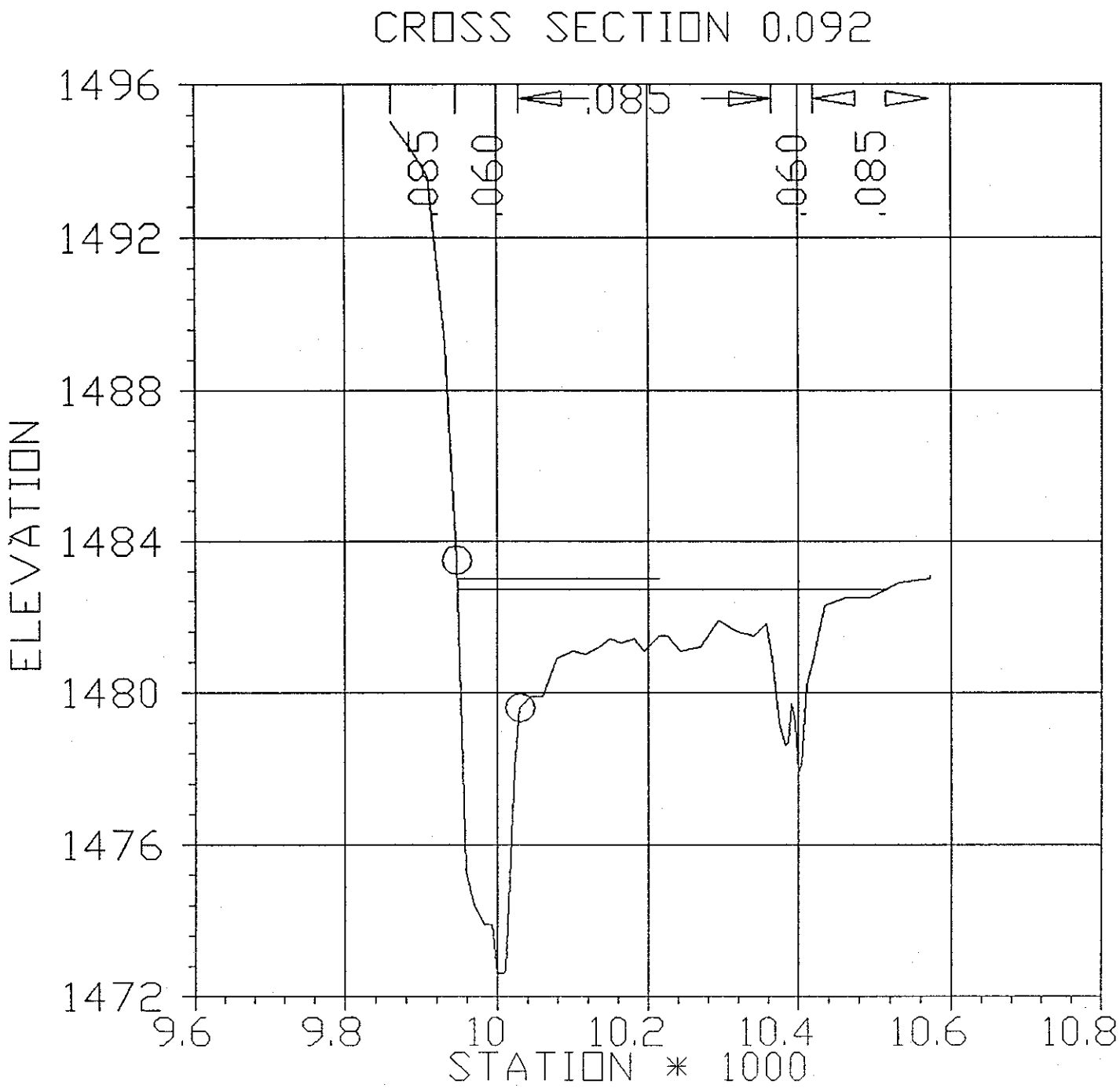
FLOODWAY DATA, Stream No. 7 & 8, Q100
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.025	172.	553.	7.8	1728.0	1727.5	.5
.075	175.	609.	7.1	1734.1	1734.1	.0
.080	190.	831.	5.2	1735.1	1734.5	.6
.170	200.	980.	4.4	1738.2	1737.4	.8
.266	178.	754.	5.7	1741.7	1740.9	.8
.323	180.	866.	5.0	1744.8	1744.1	.7
.403	430.	1649.	2.6	1746.4	1745.5	.9
.482	246.	426.	7.4	1750.7	1750.8	-.1
.591	190.	801.	4.0	1759.0	1758.7	.3
.700	180.	656.	4.8	1763.3	1762.7	.6
.805	130.	445.	7.1	1770.5	1770.0	.5
.903	264.	825.	3.8	1777.0	1776.3	.7
1.002	136.	494.	6.4	1782.4	1781.5	.9

Normal program termination

APPENDIX C
Cross Section Plots



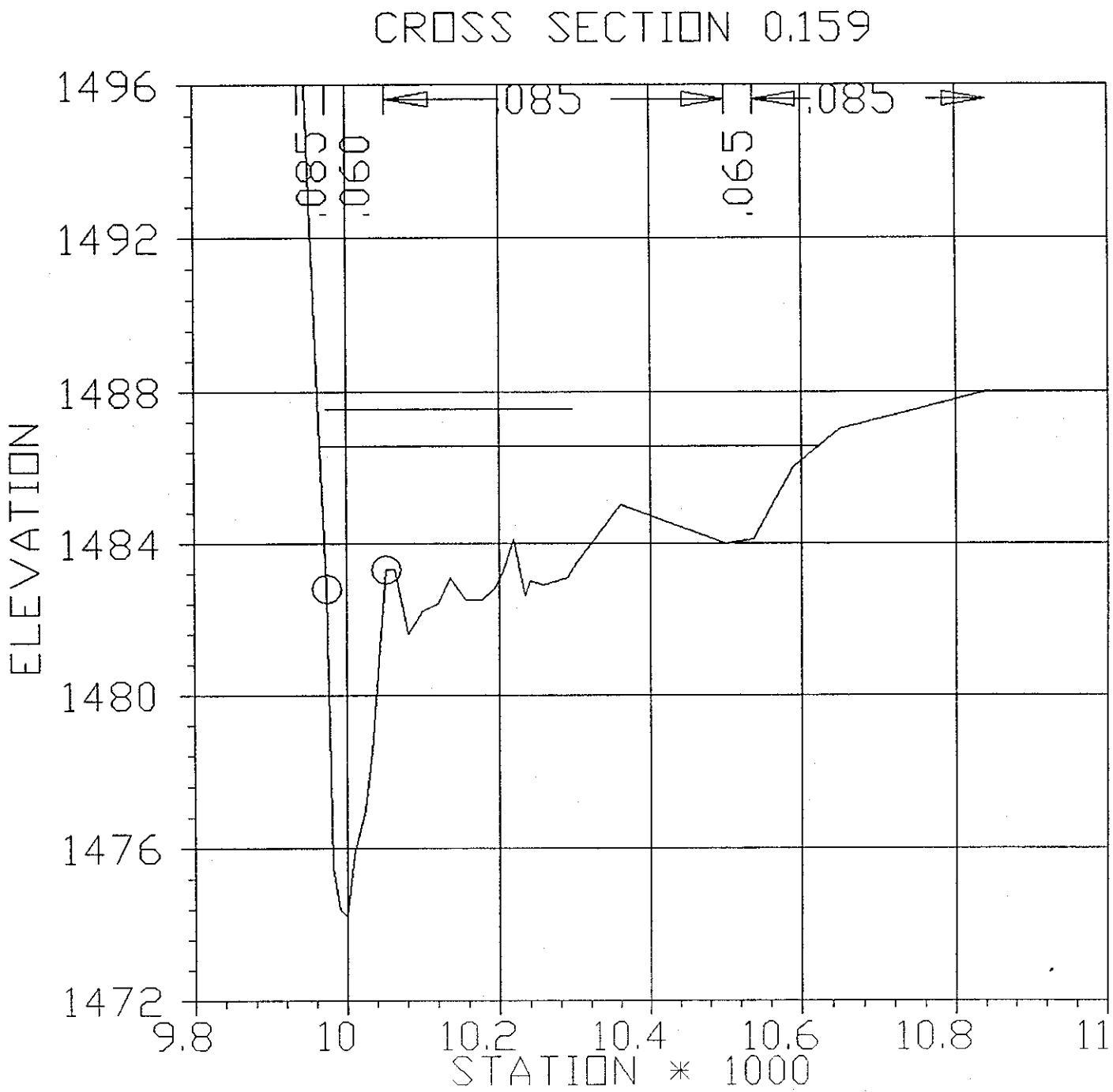
CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HNTB

HOWARD NEEDLES TAMMEN & BERGENDOFF
ARCHITECTS ENGINEERS PLANNERS



CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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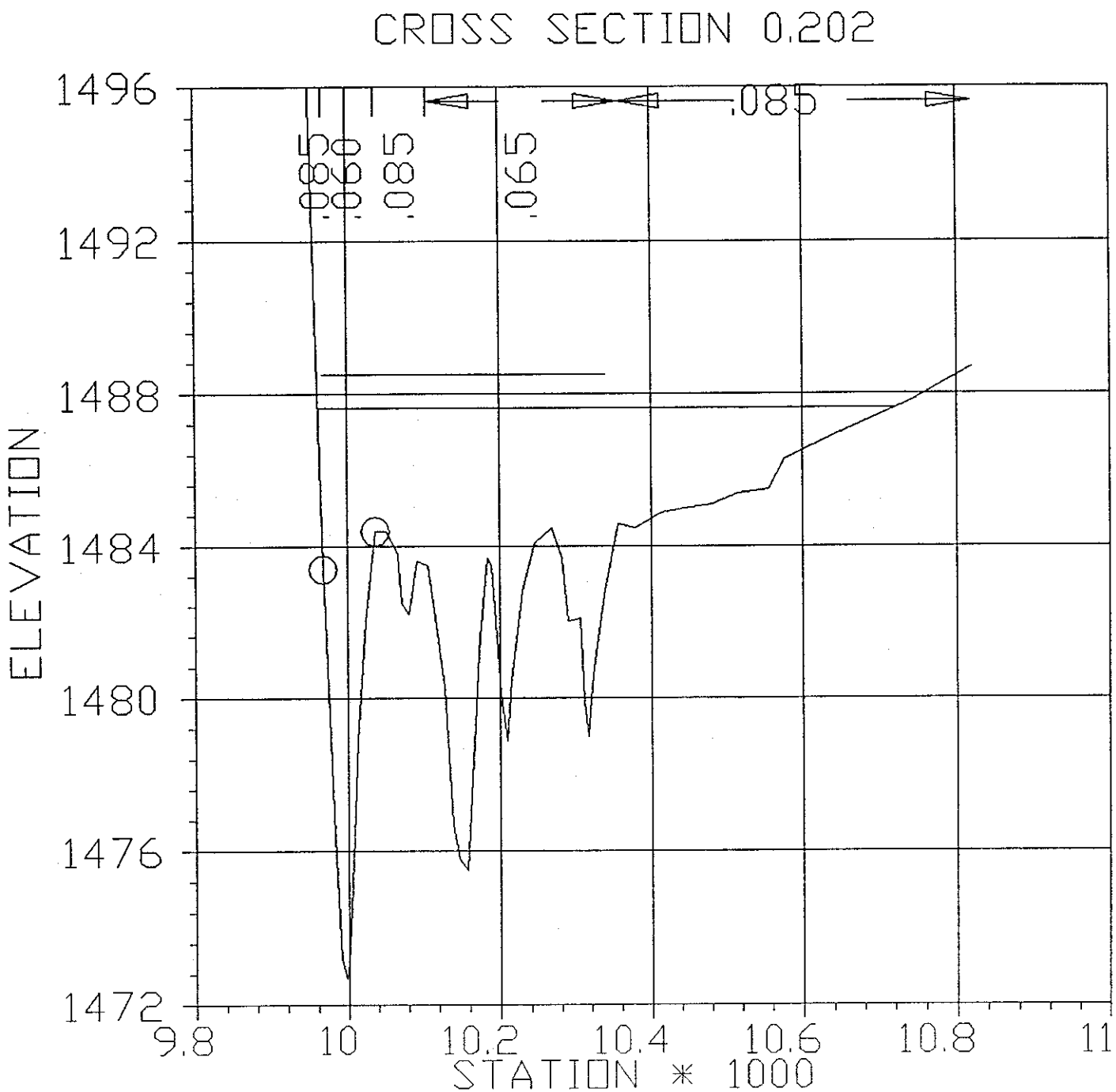

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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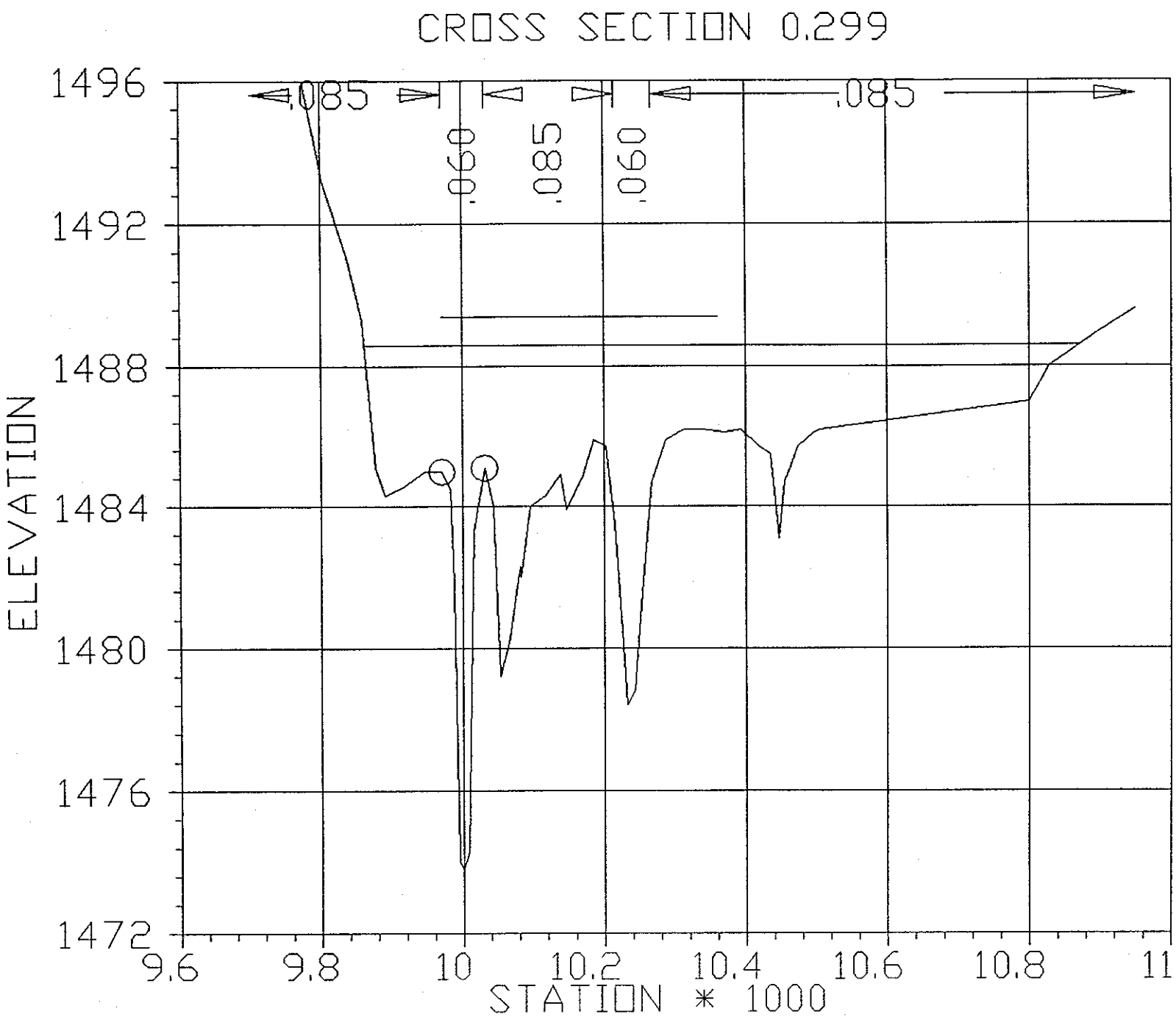

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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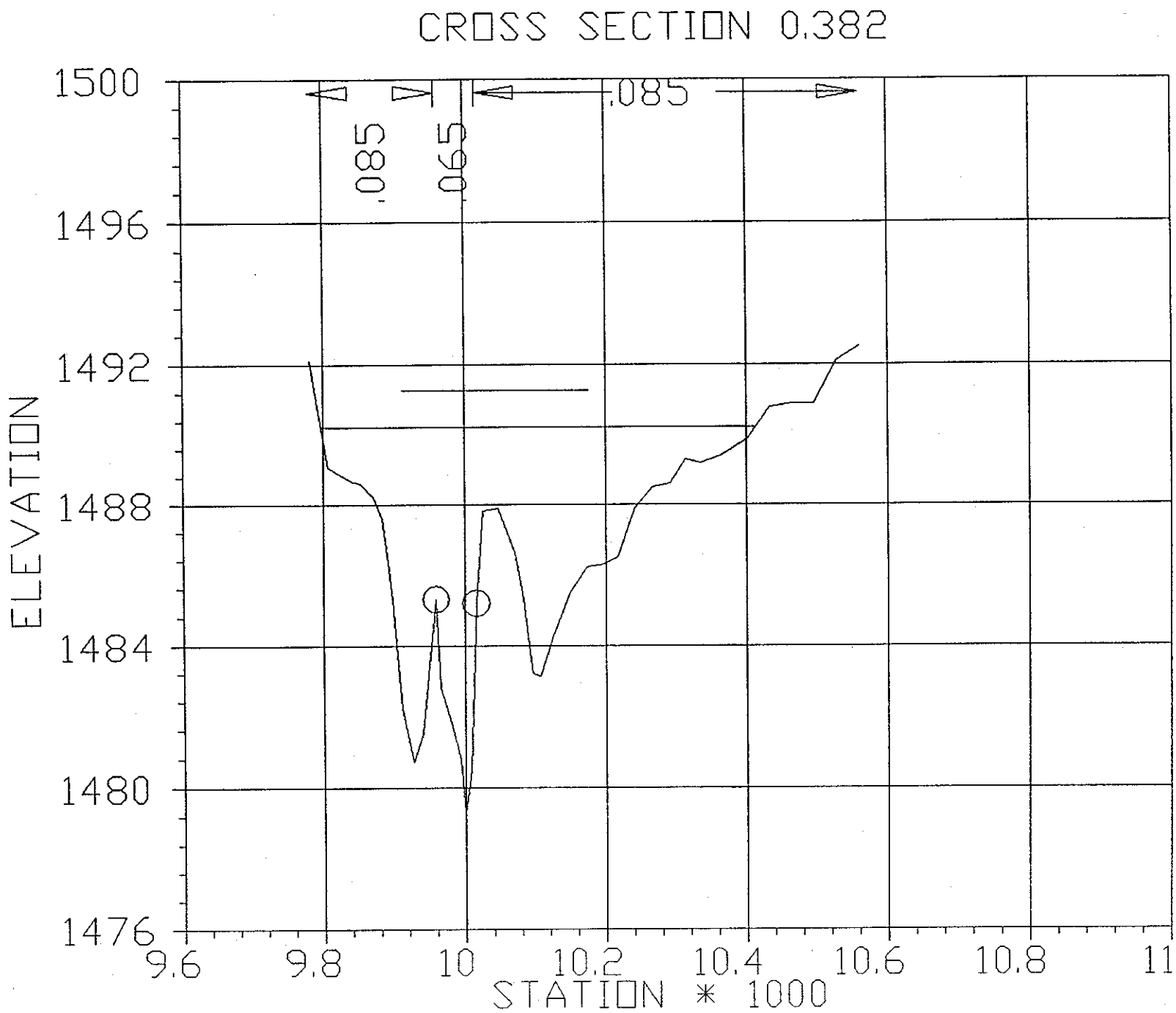

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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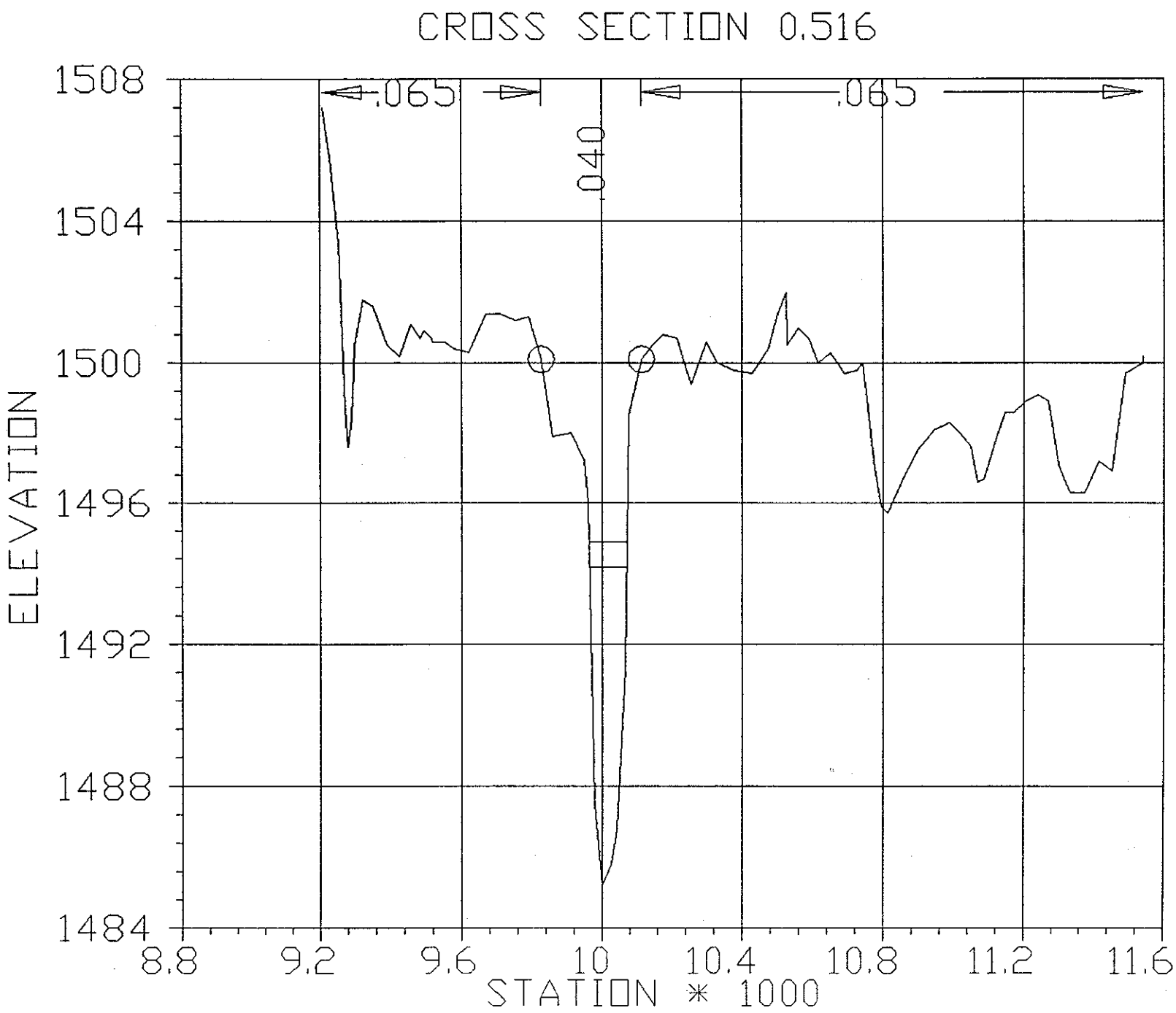

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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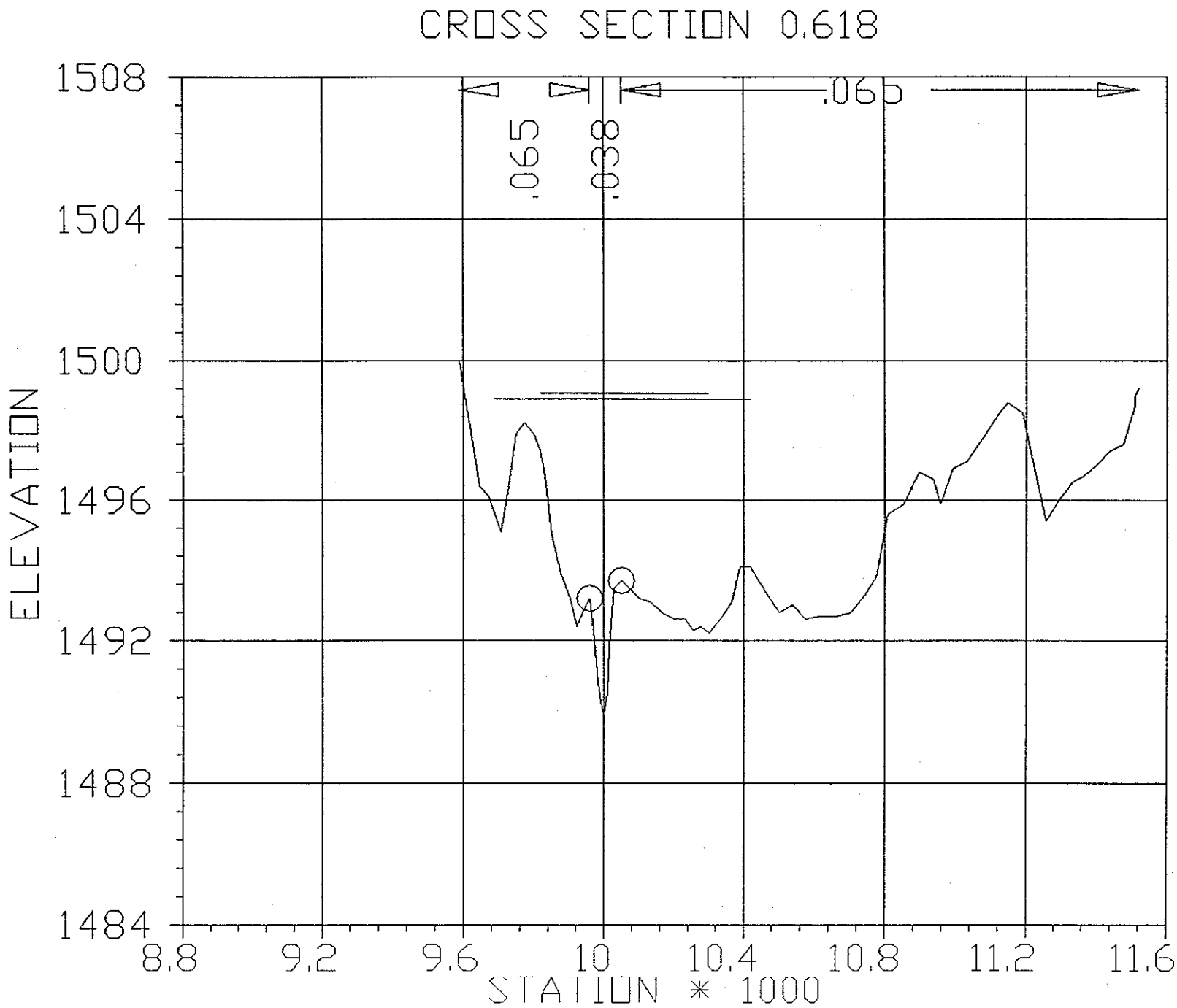

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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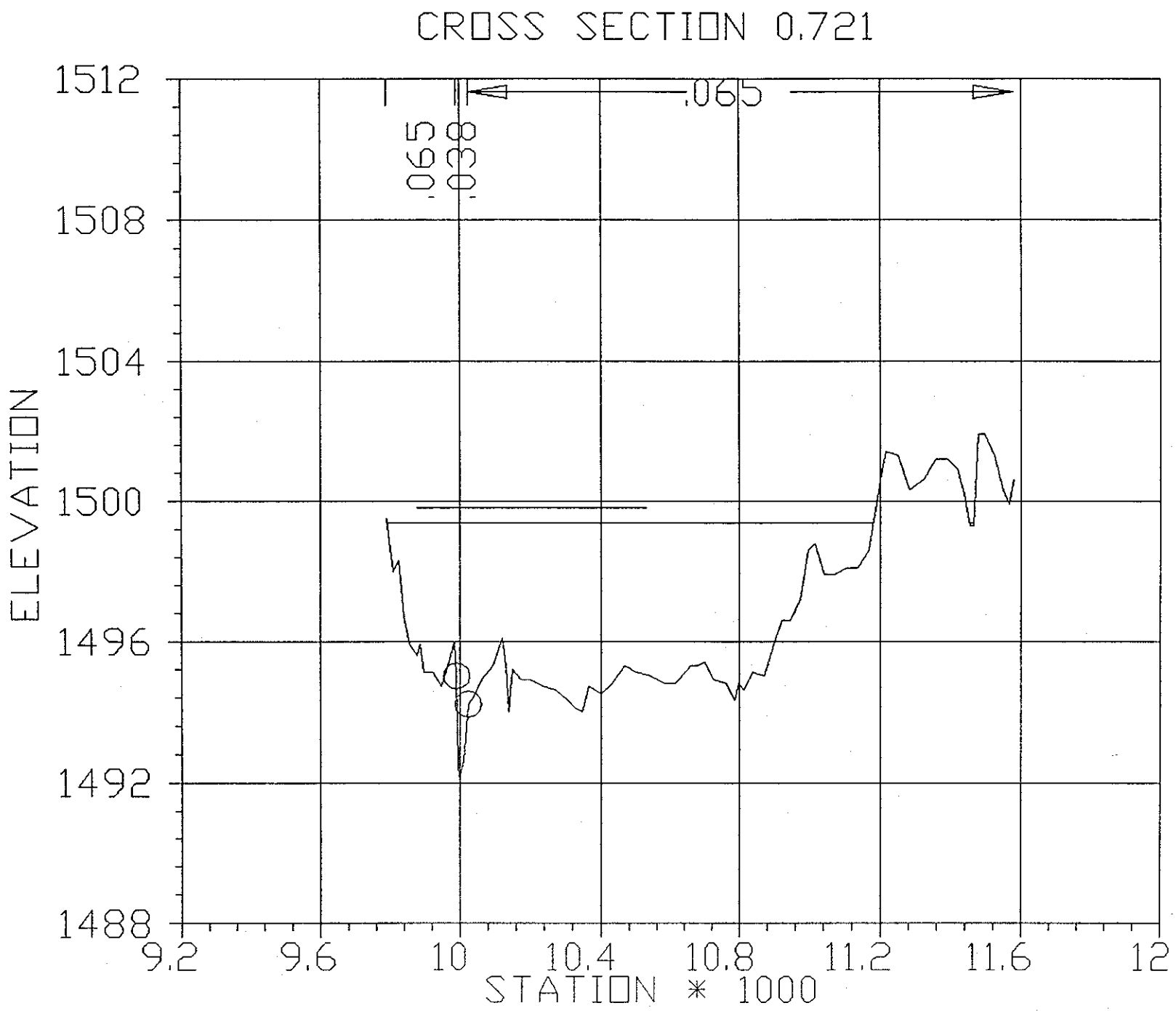

CROSS SECTION PLOT

DEADMAN WASH

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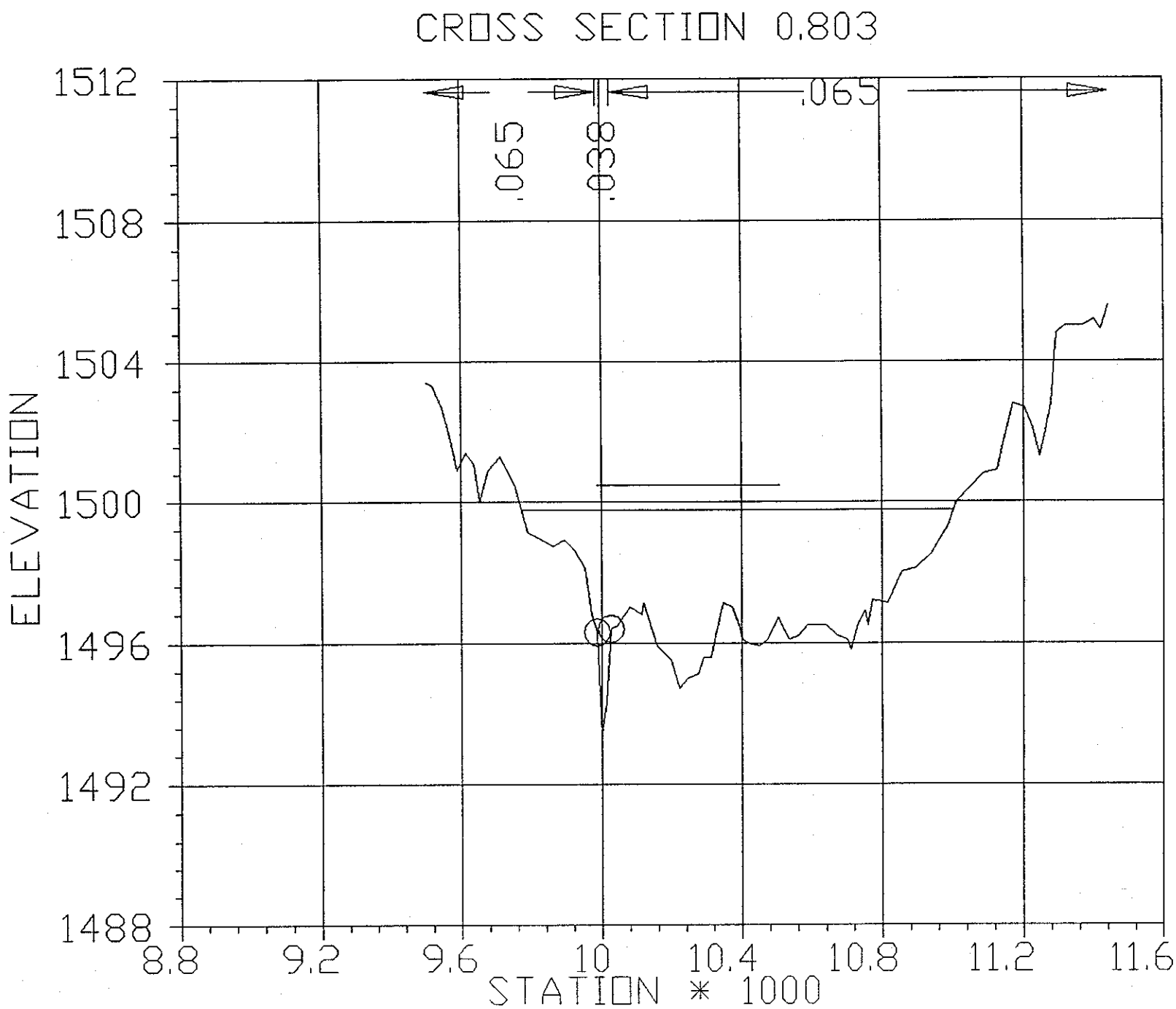

CROSS SECTION PLOT

DEADMAN WASH

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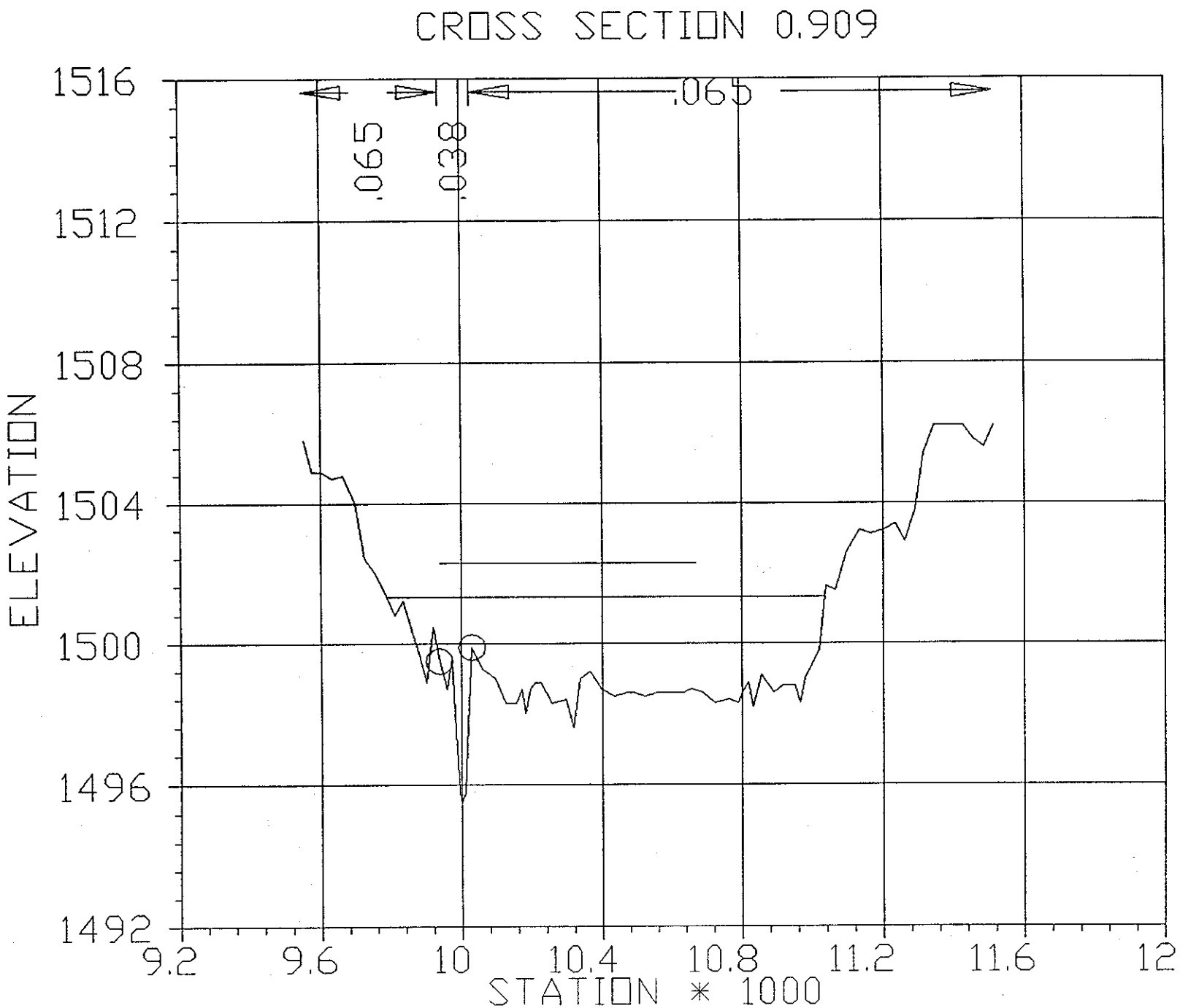

CROSS SECTION PLOT

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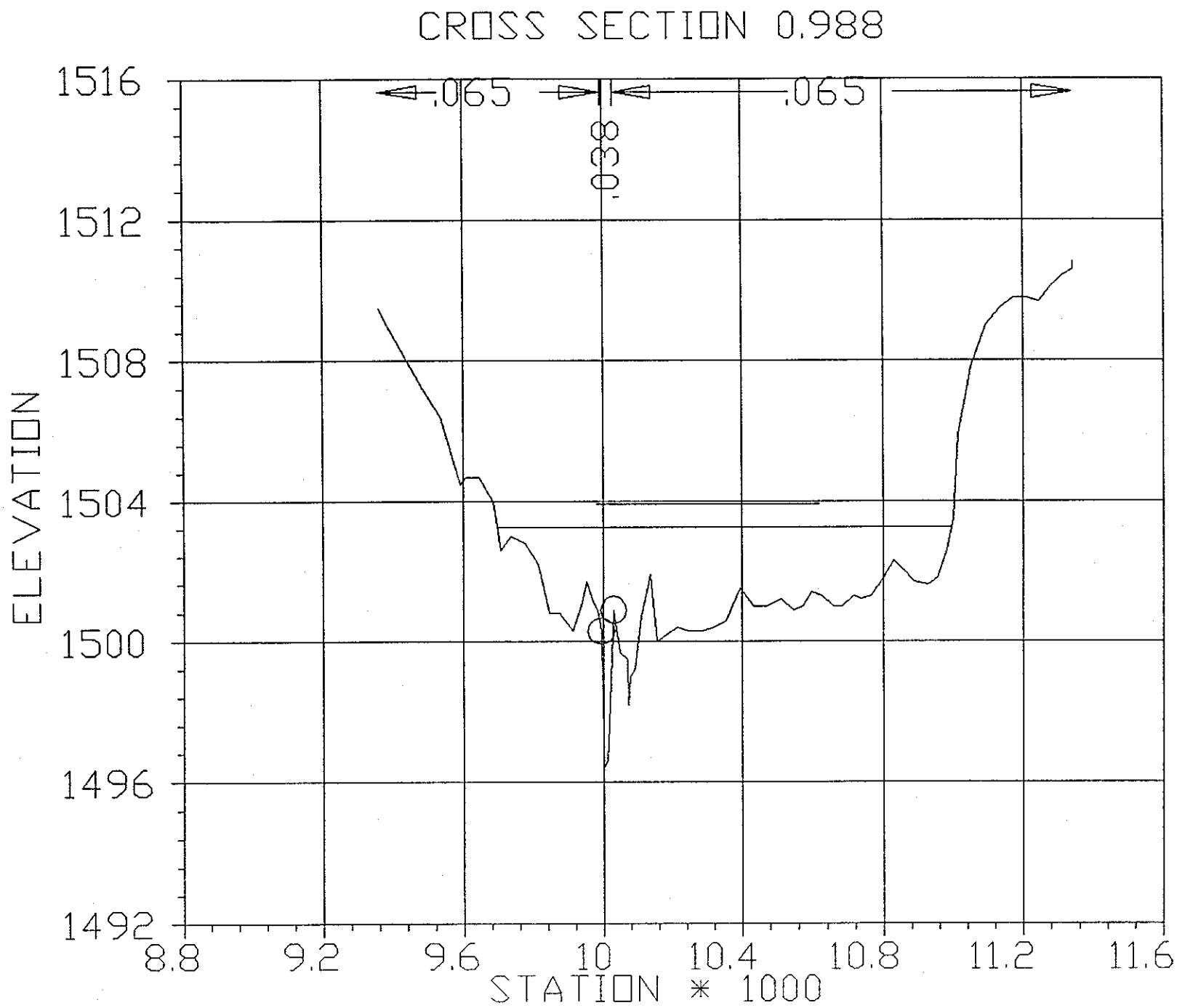

CROSS SECTION PLOT

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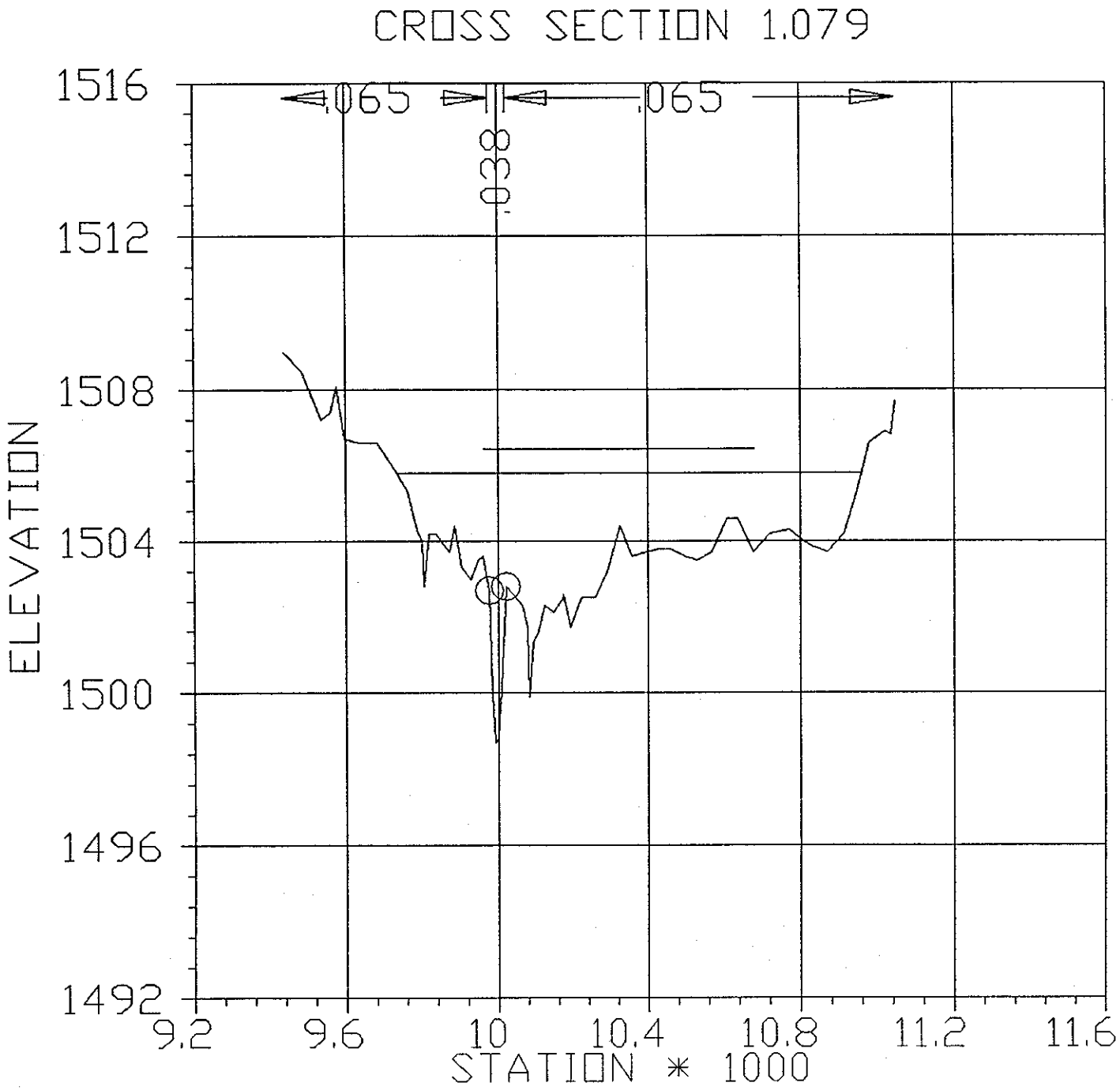

CROSS SECTION PLOT

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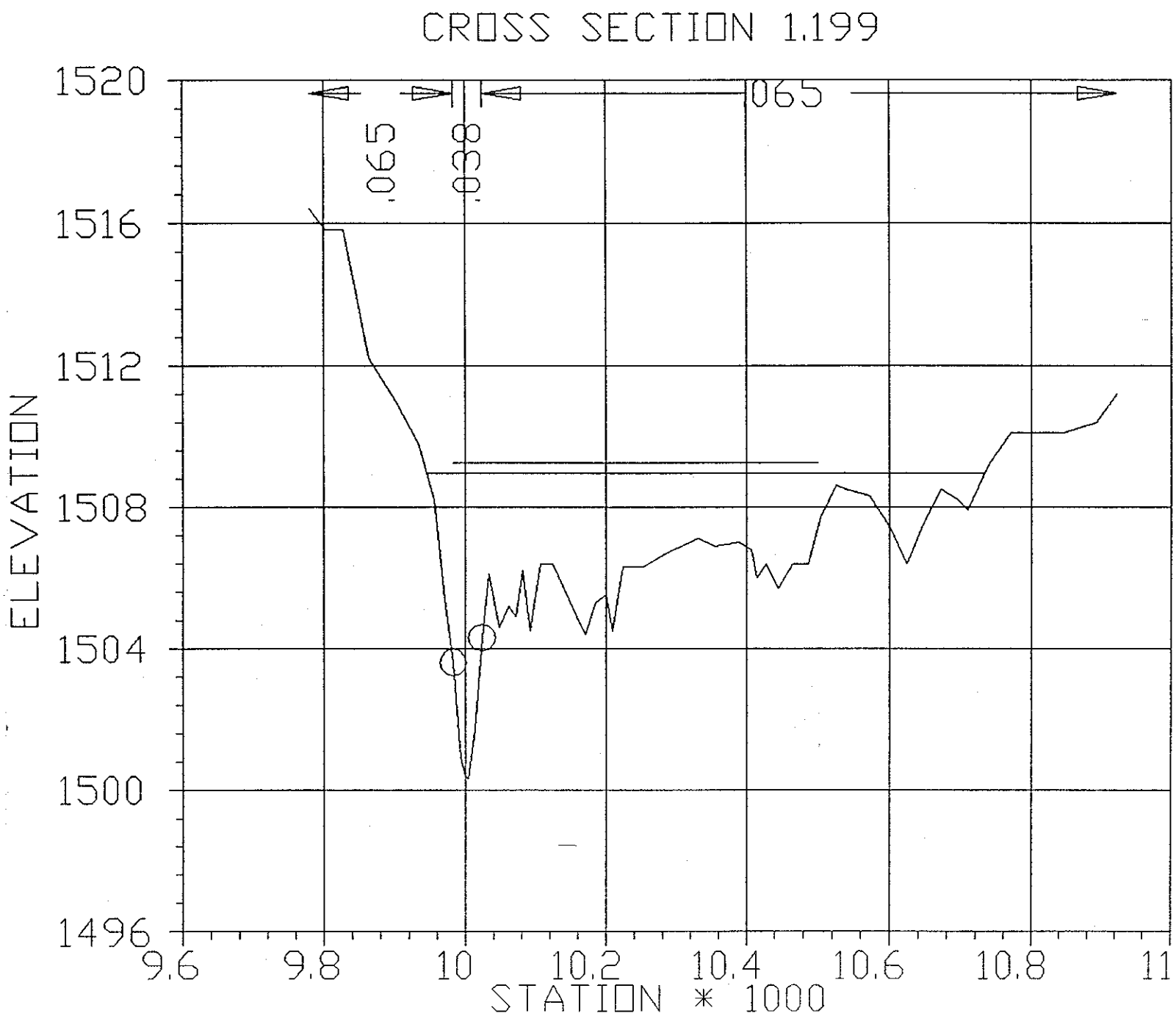

CROSS SECTION PLOT

DEADMAN WASH

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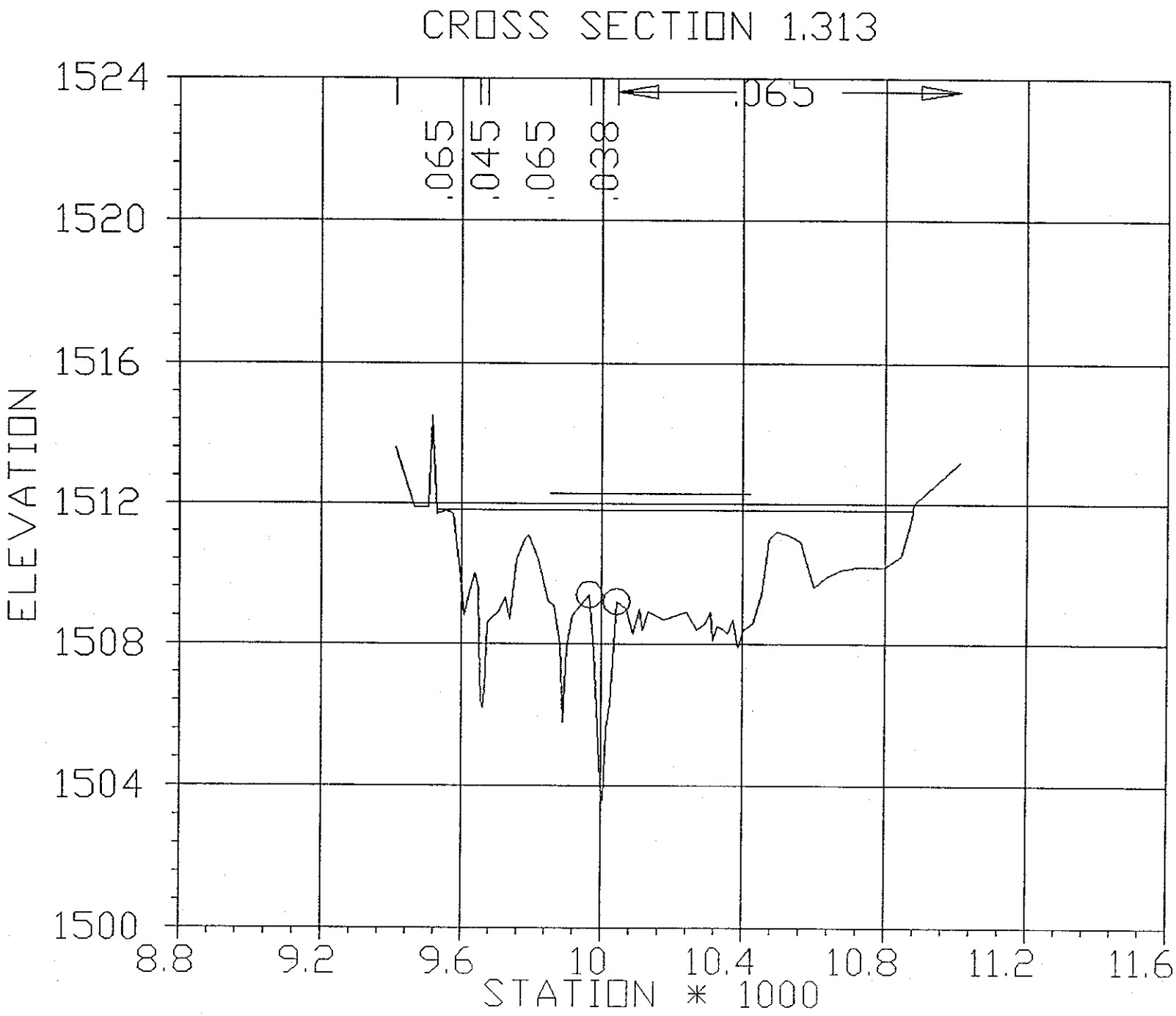

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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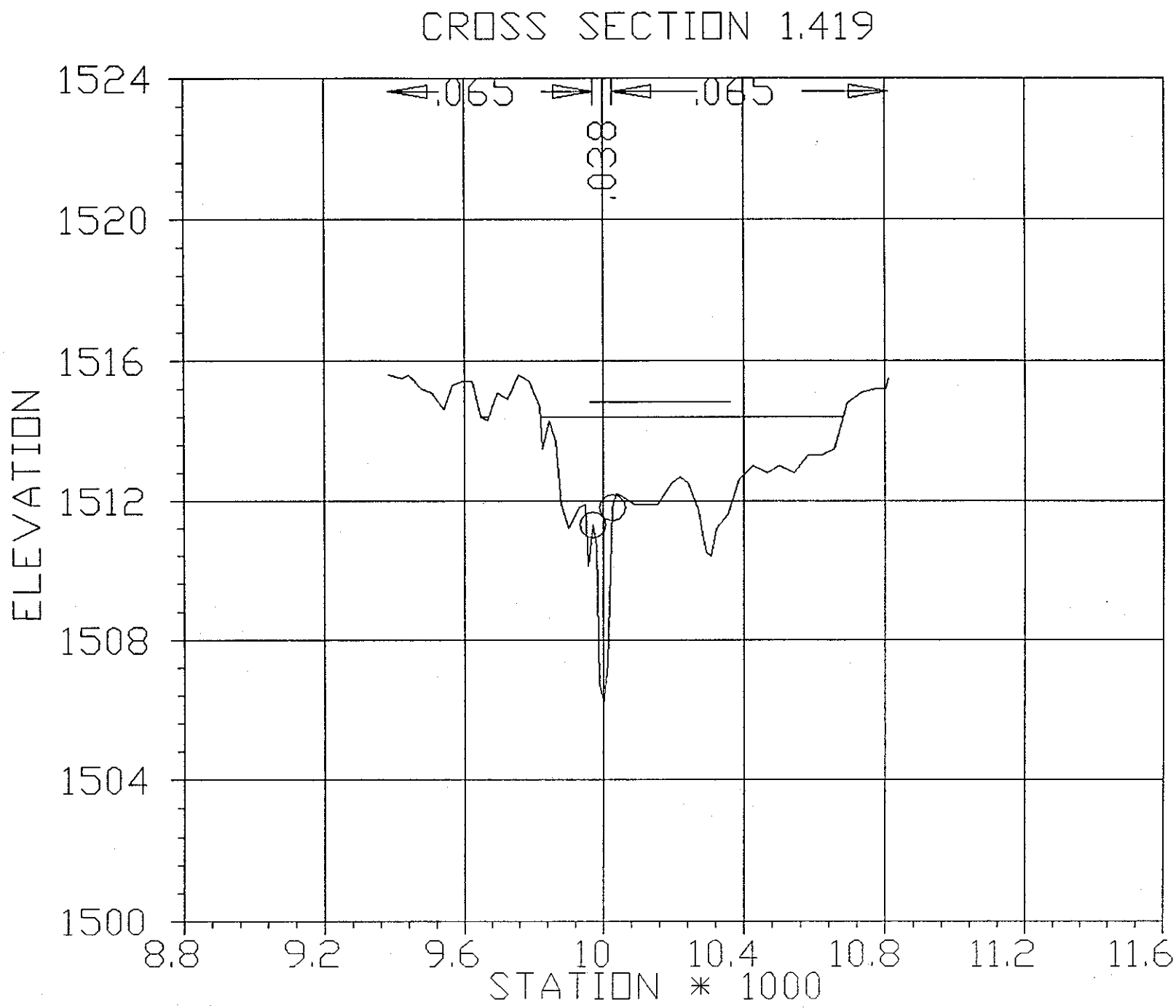

CROSS SECTION PLOT

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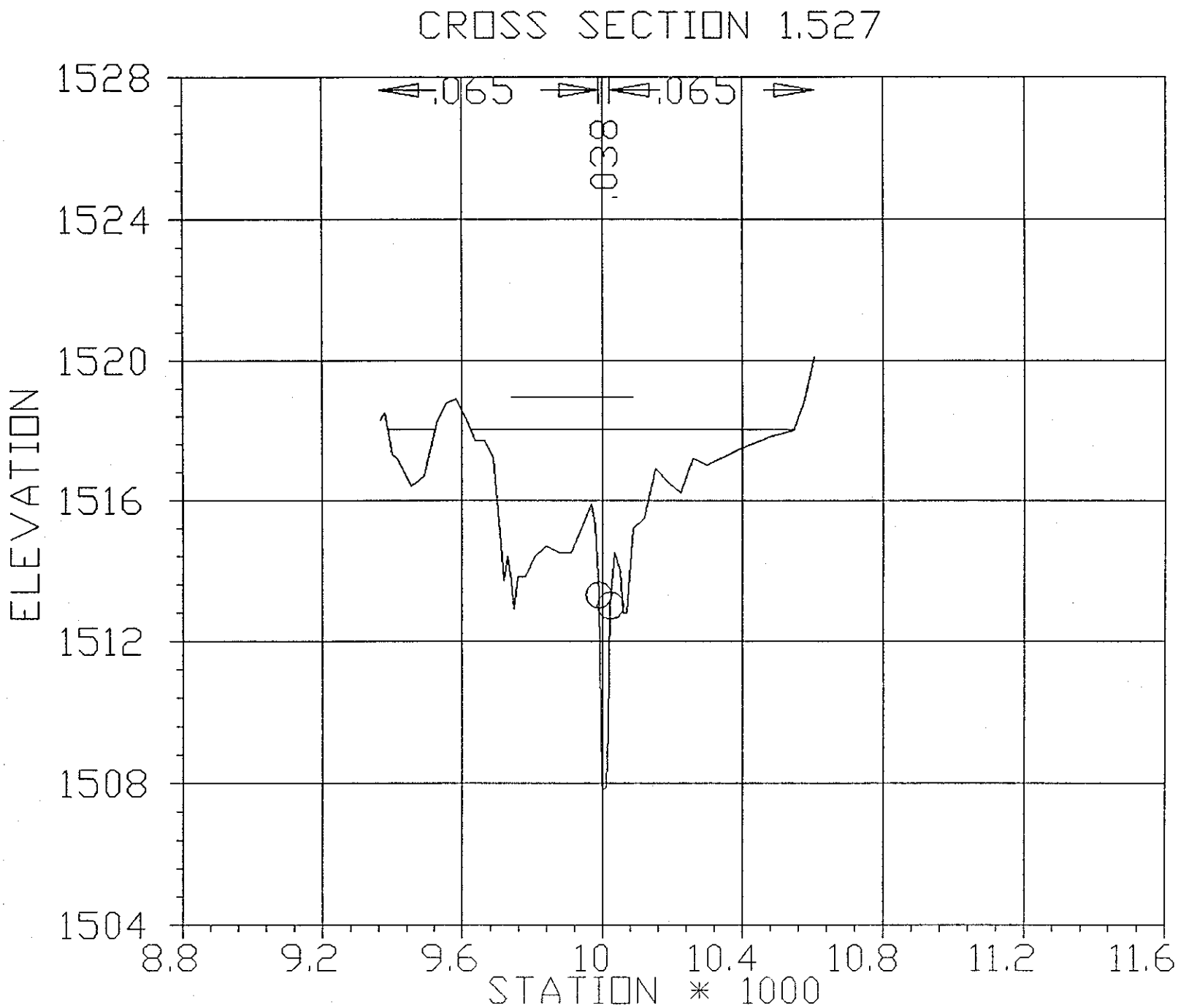

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DEADMAN WASH

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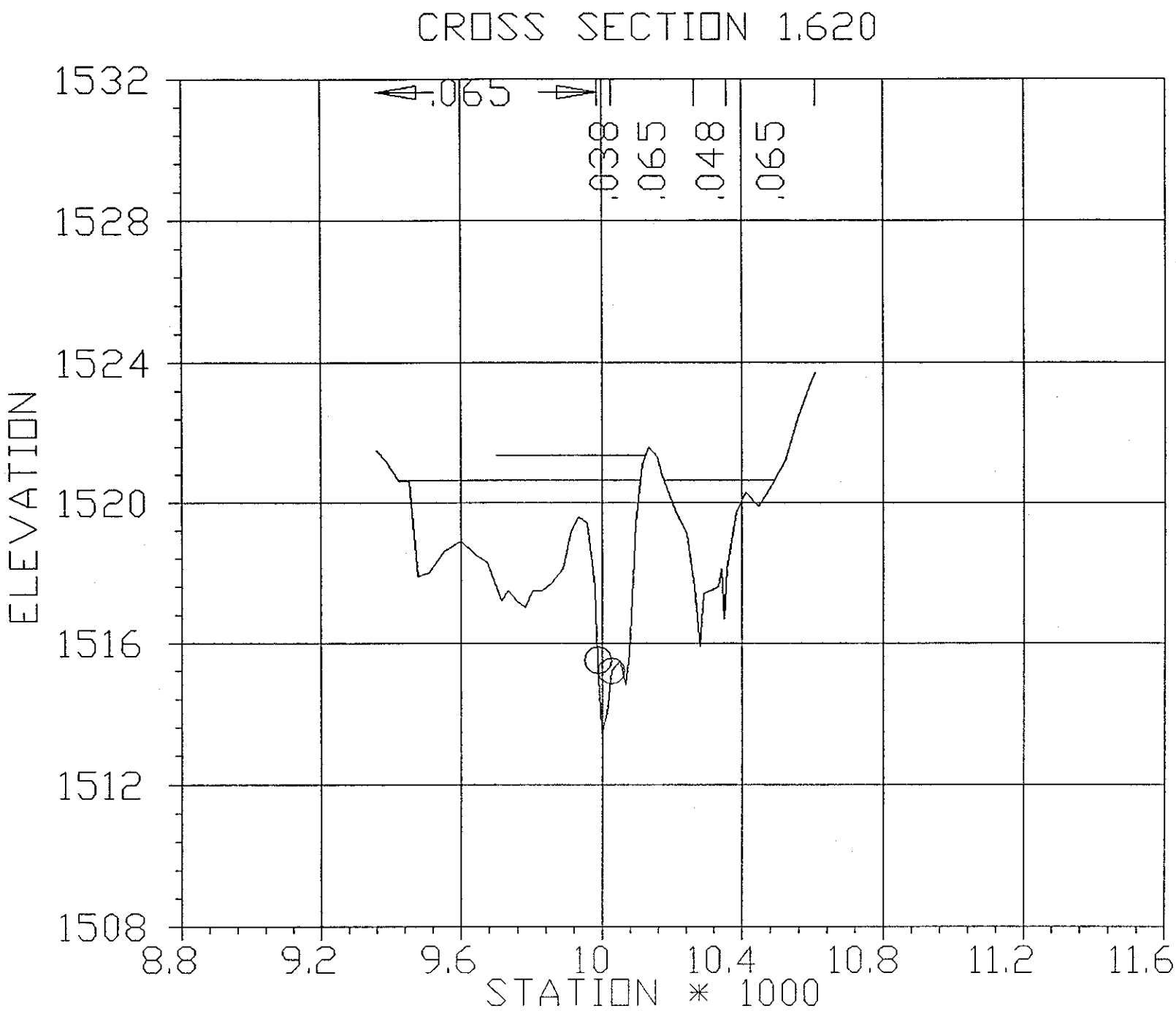

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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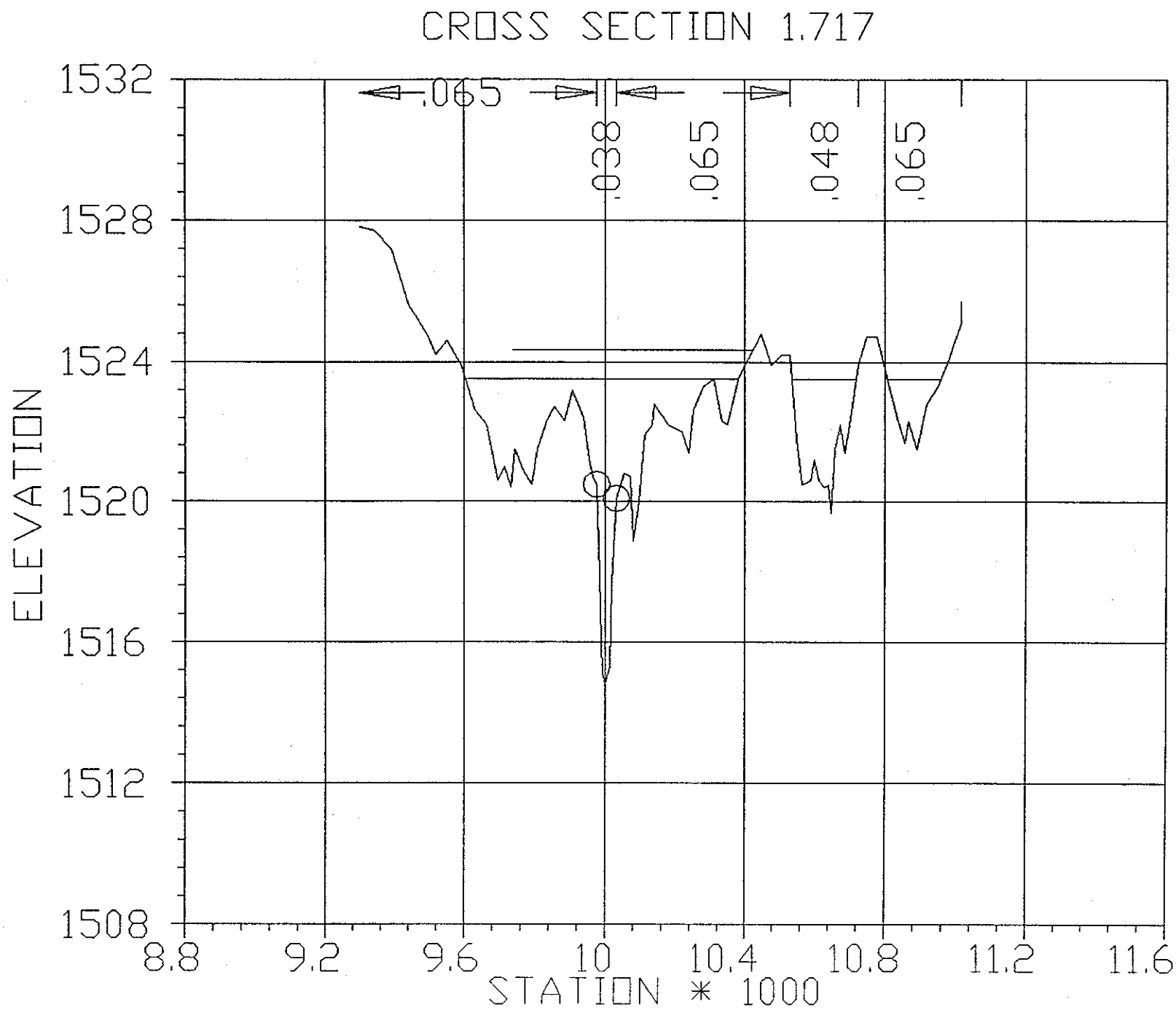

CROSS SECTION PLOT

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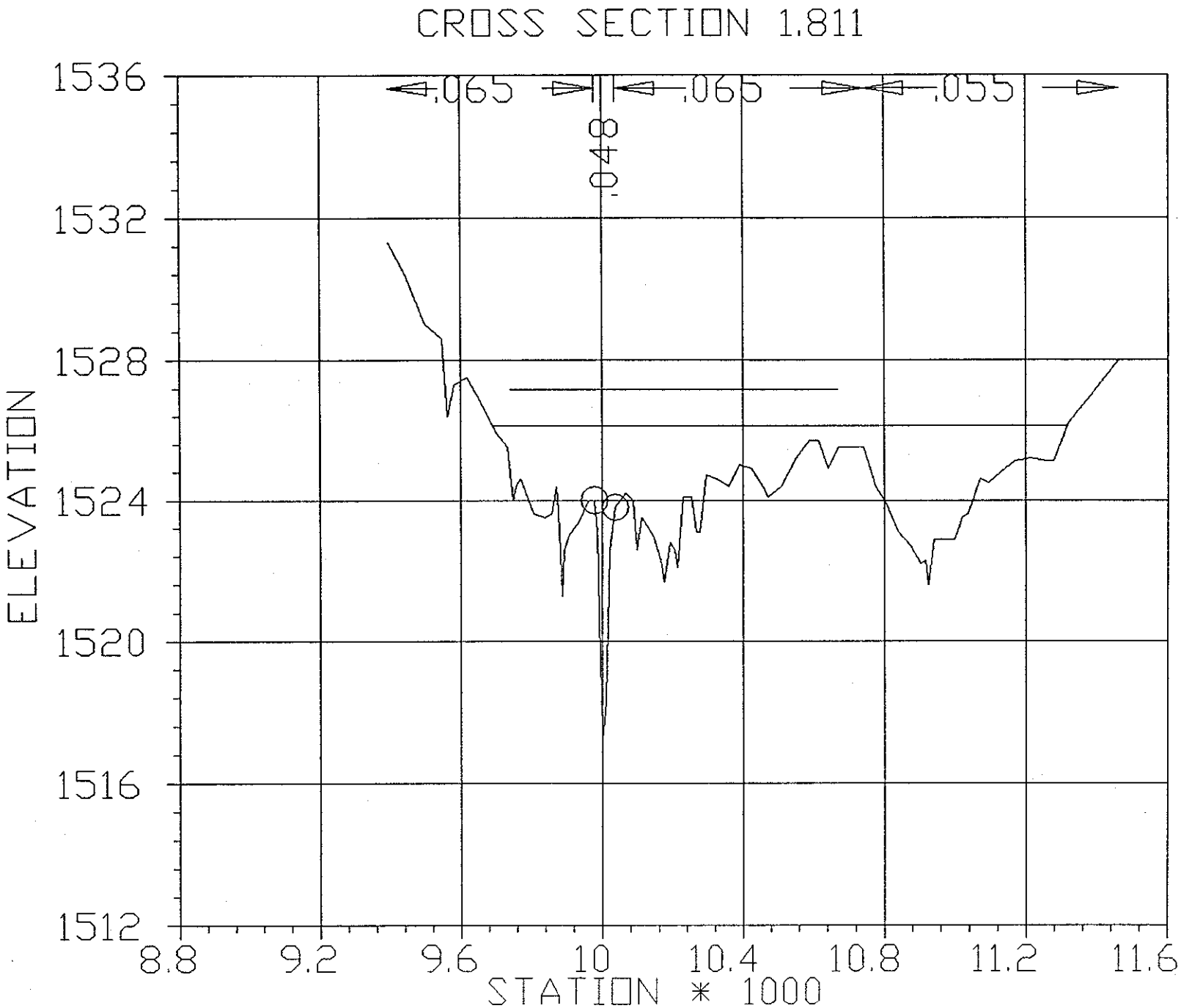

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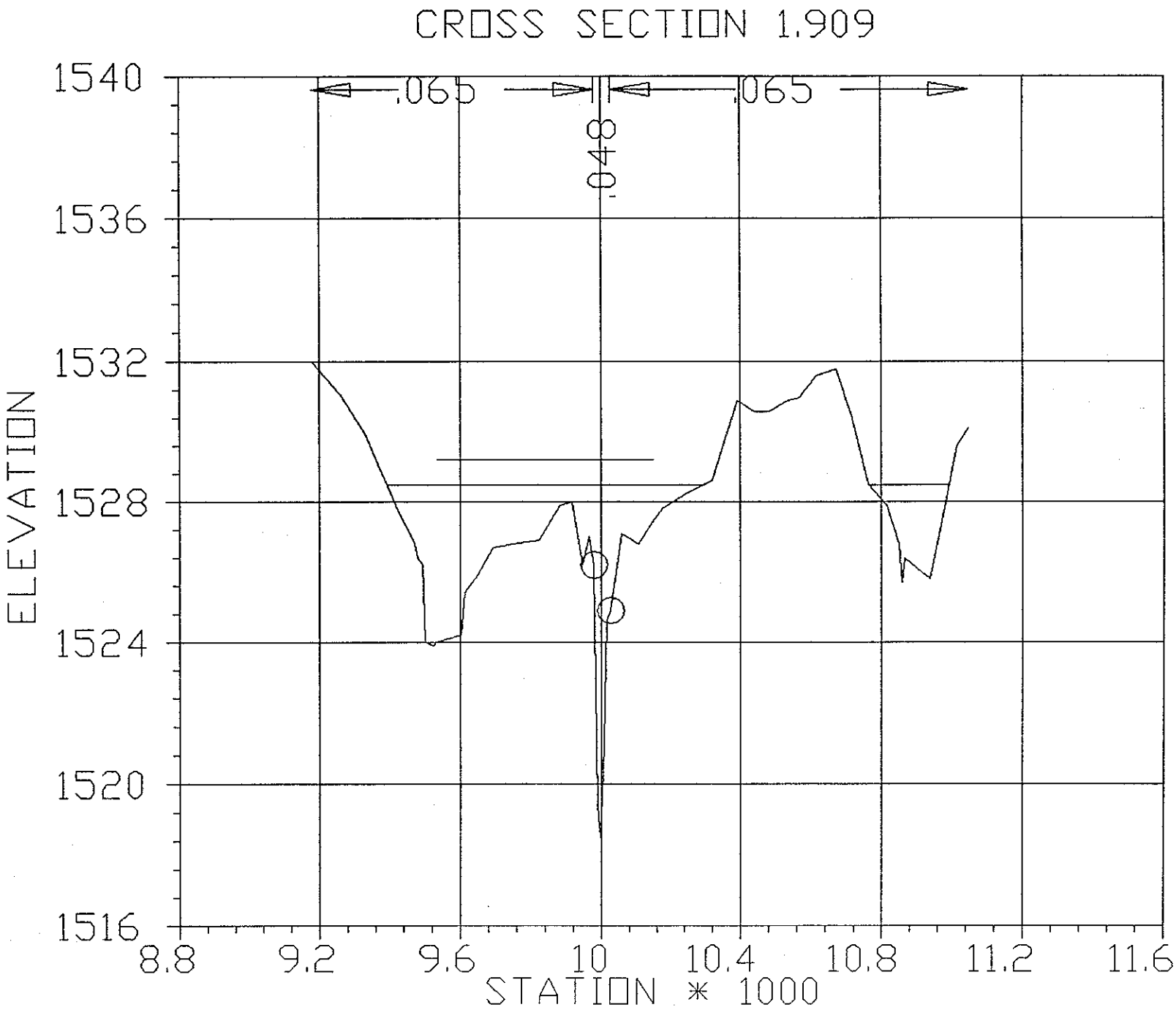

CROSS SECTION PLOT

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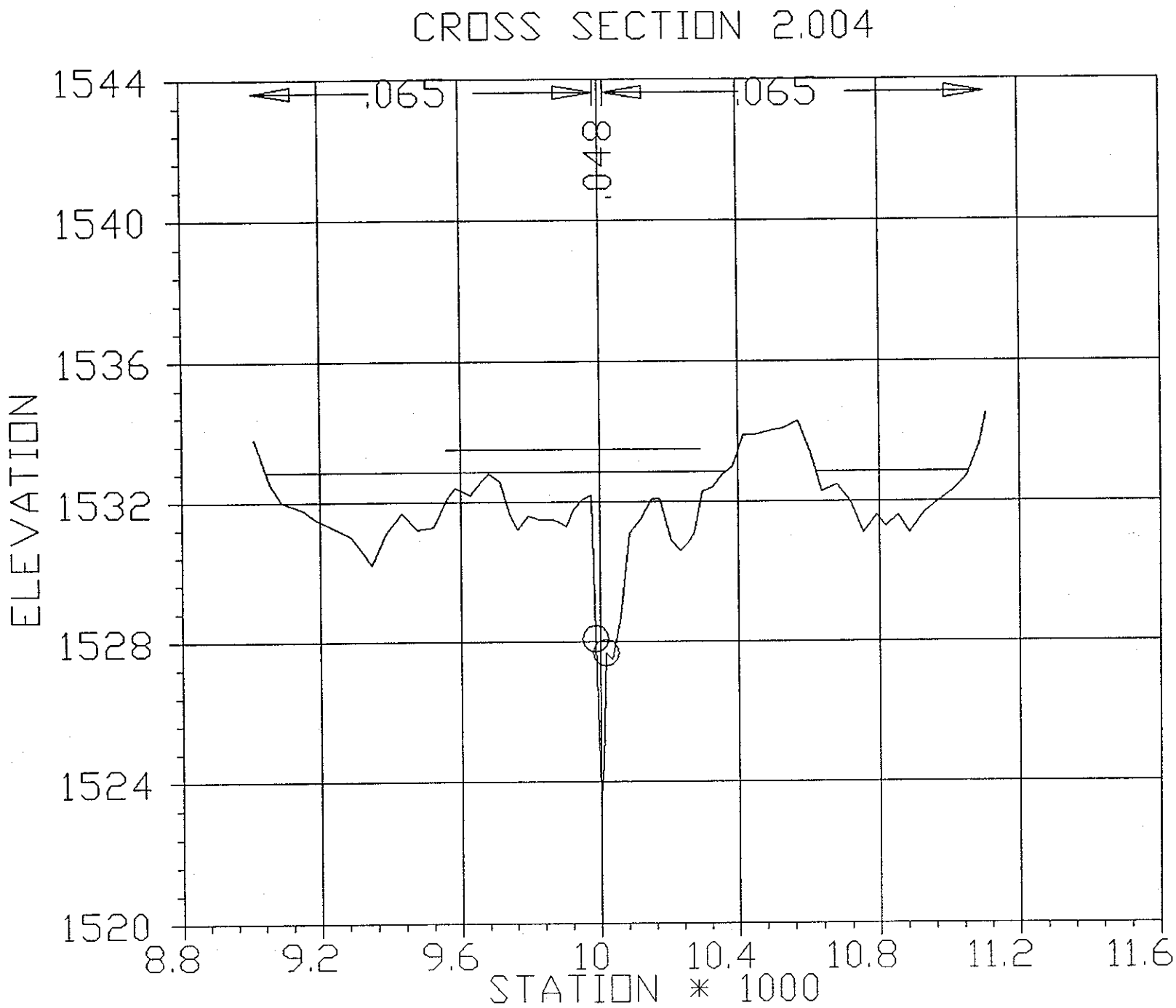

CROSS SECTION PLOT

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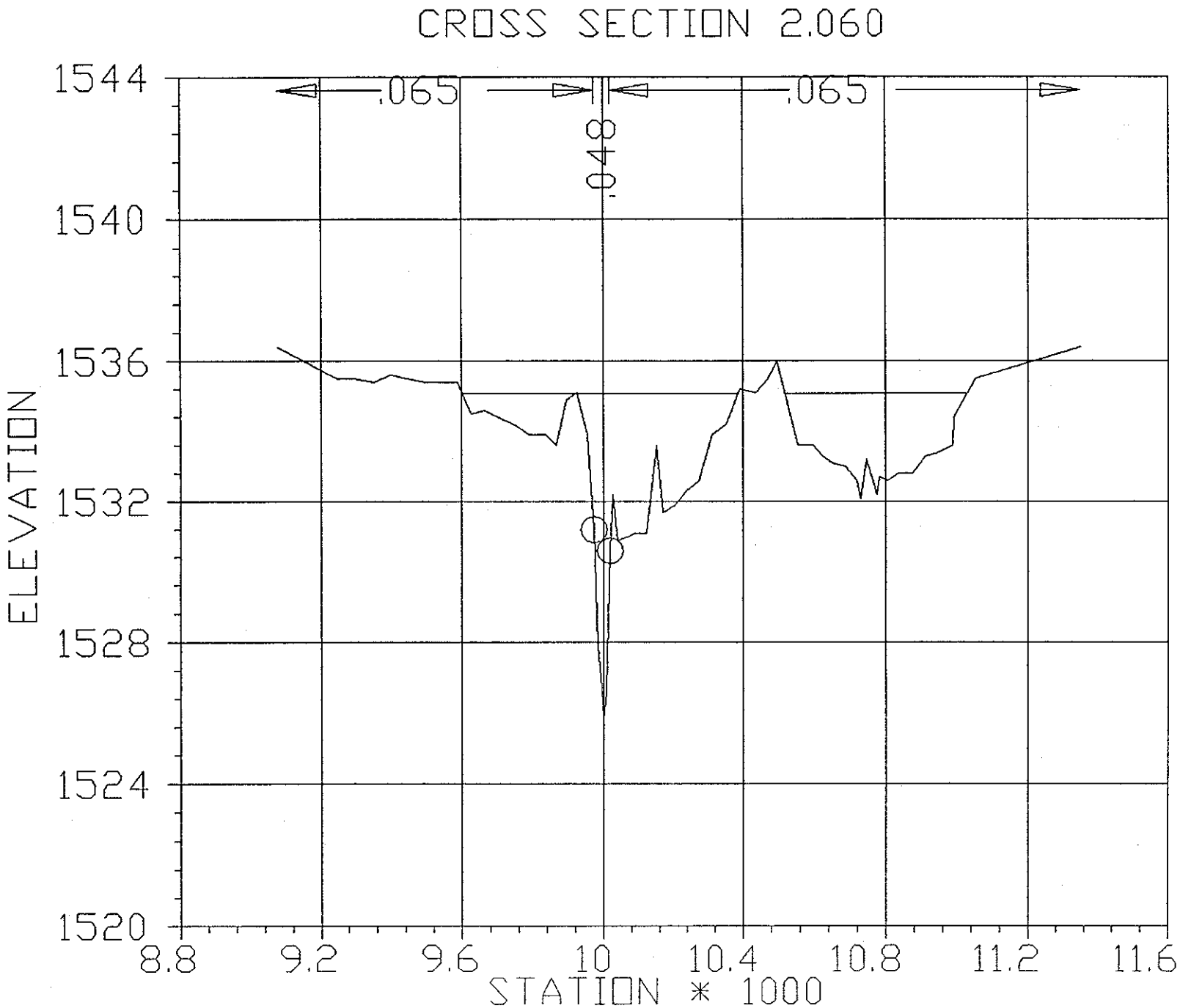

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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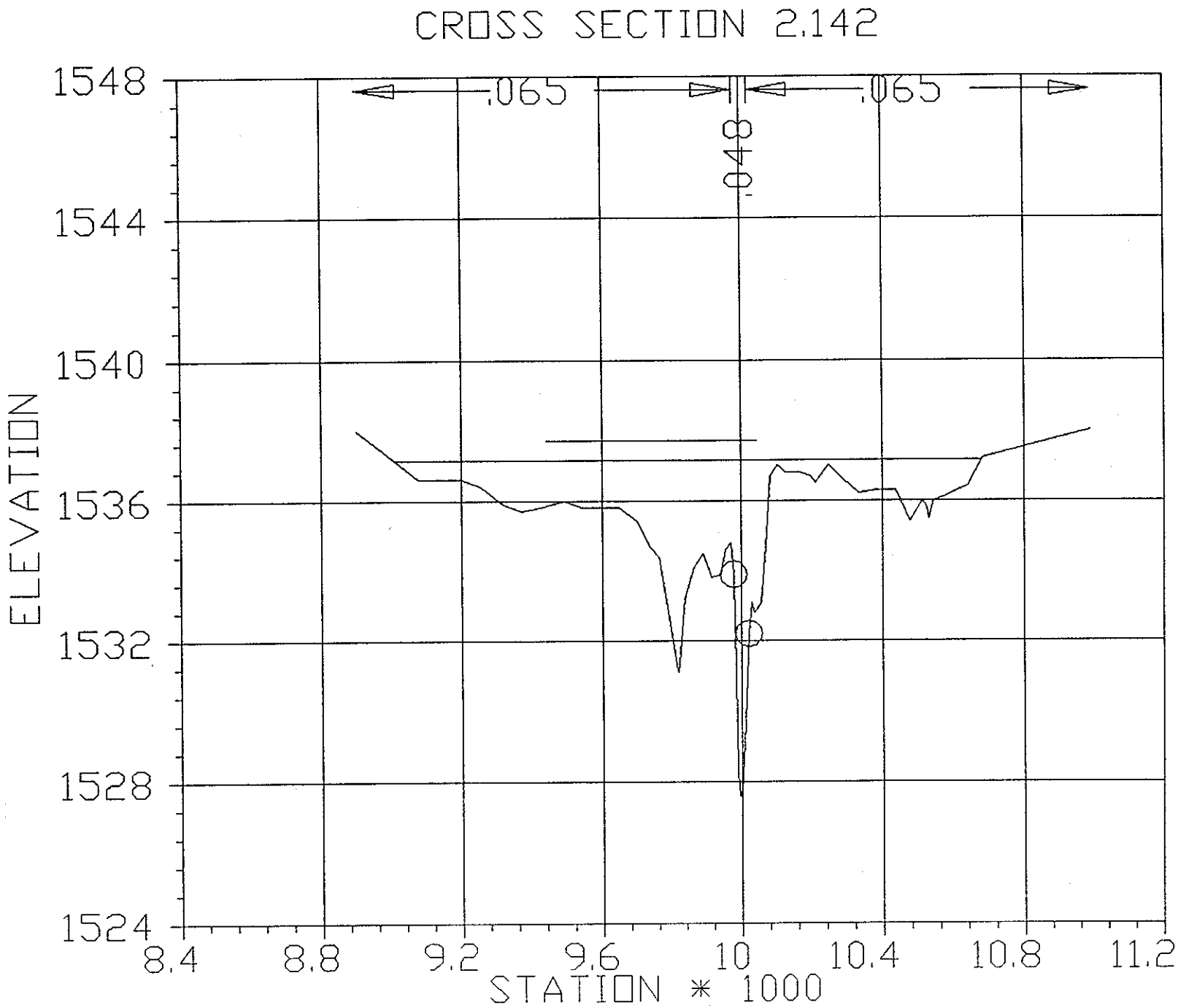

CROSS SECTION PLOT

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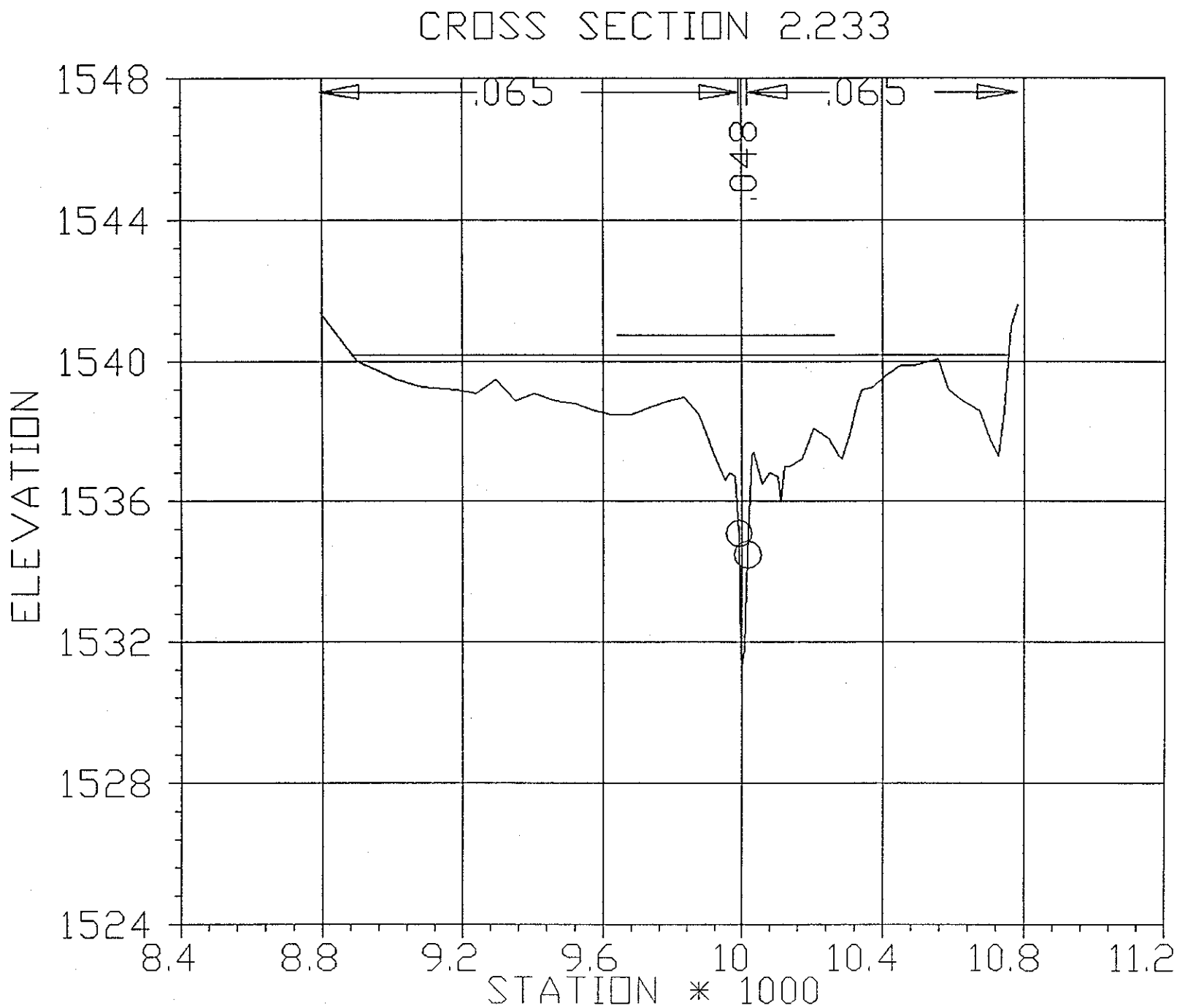

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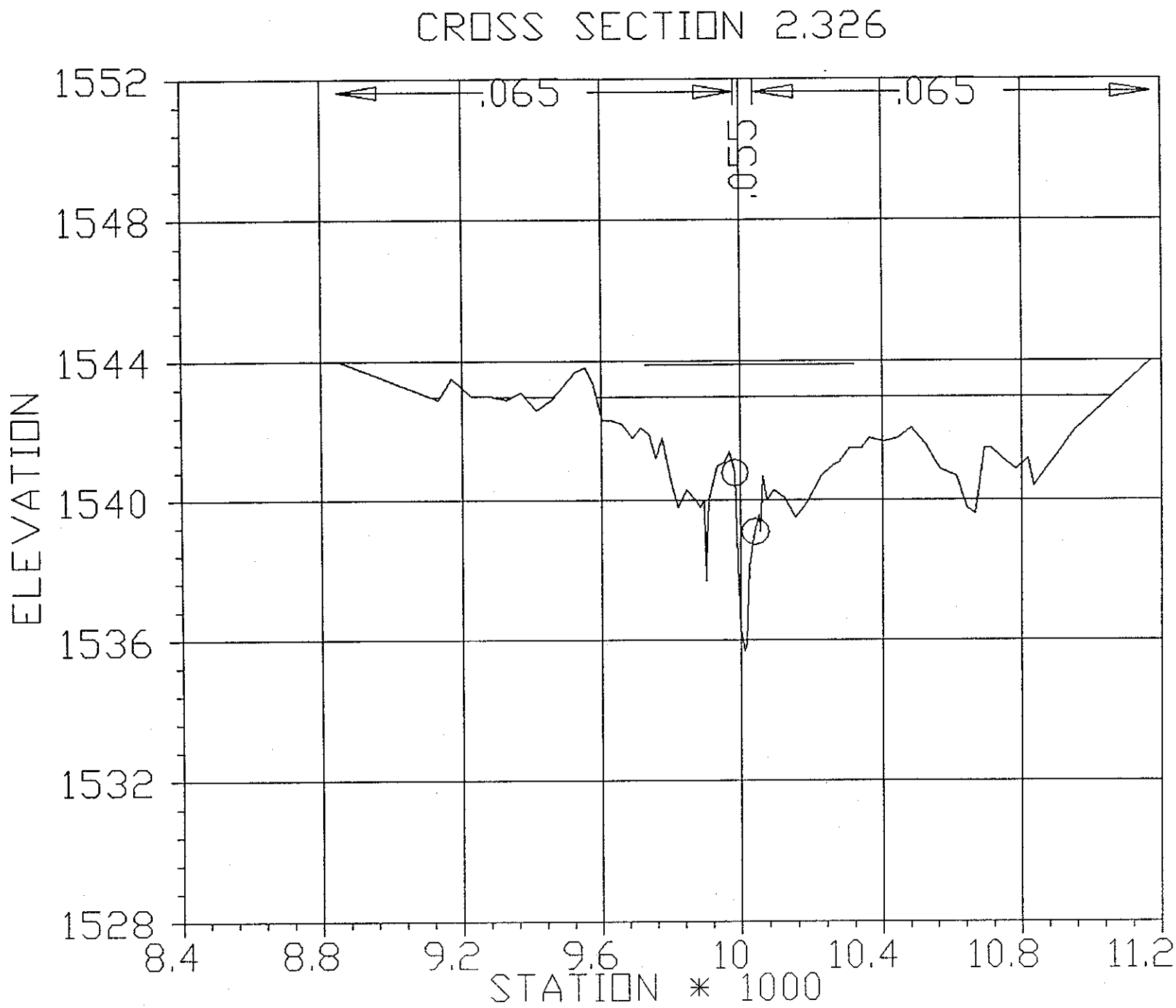

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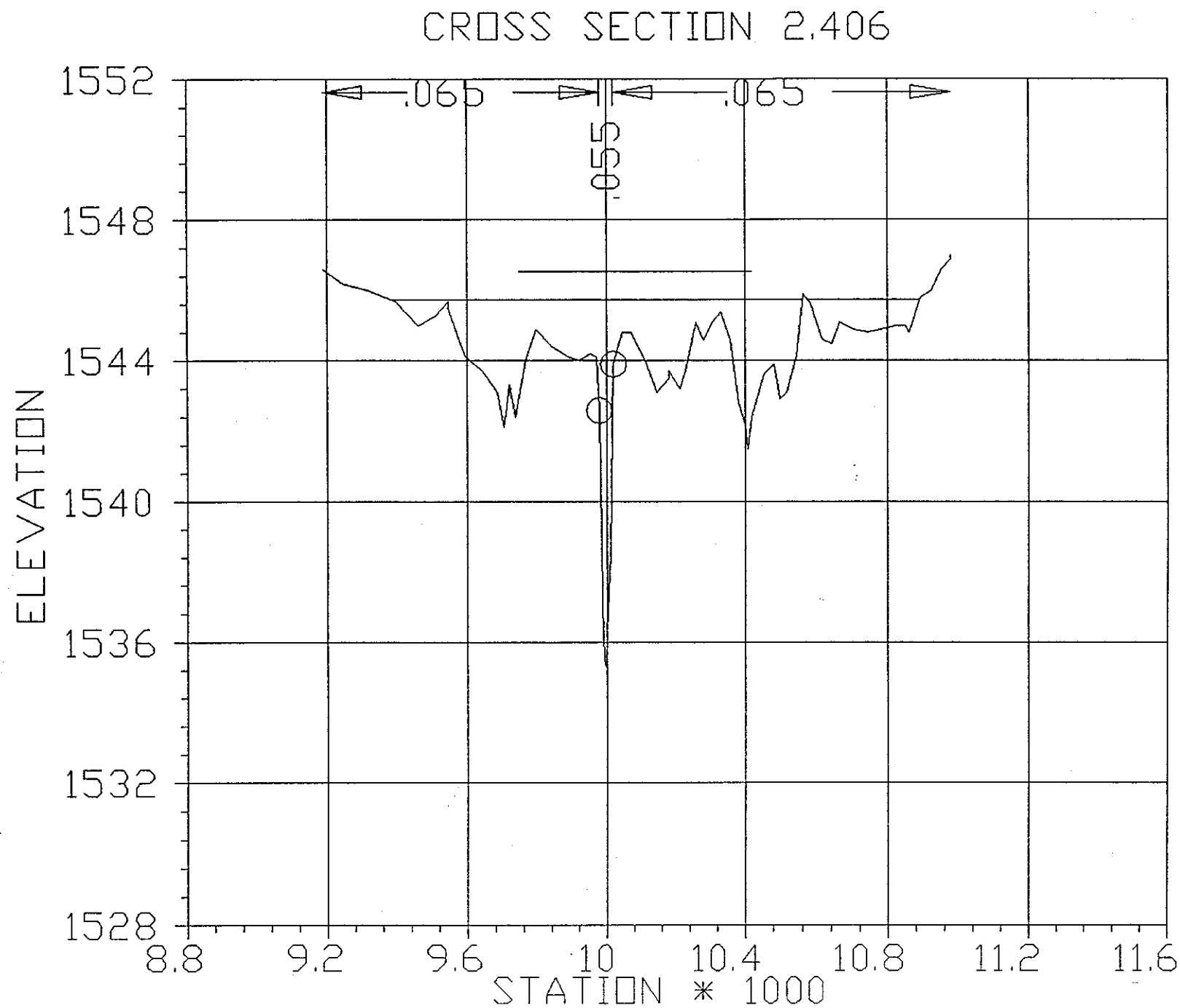

CROSS SECTION PLOT

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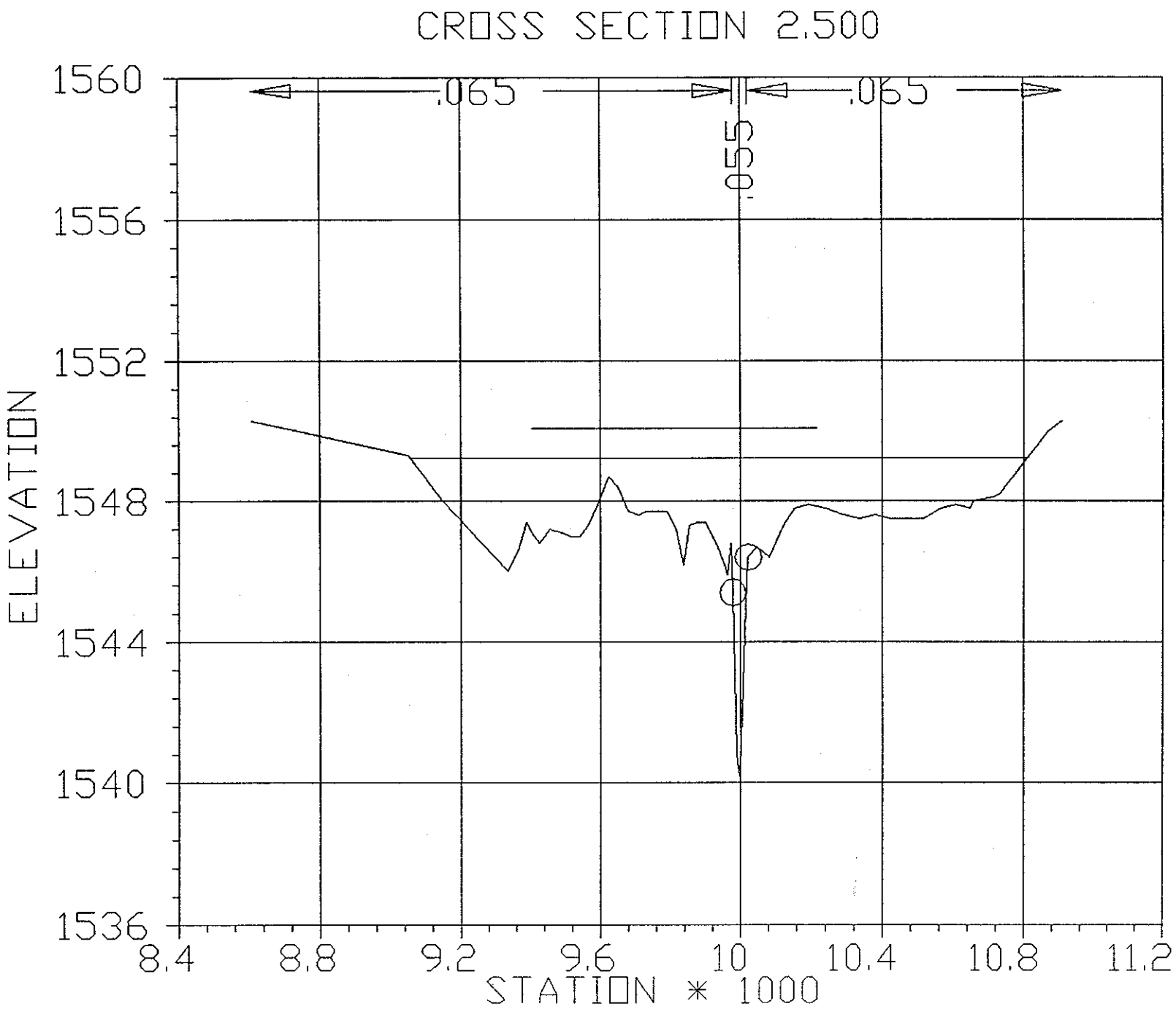

CROSS SECTION PLOT

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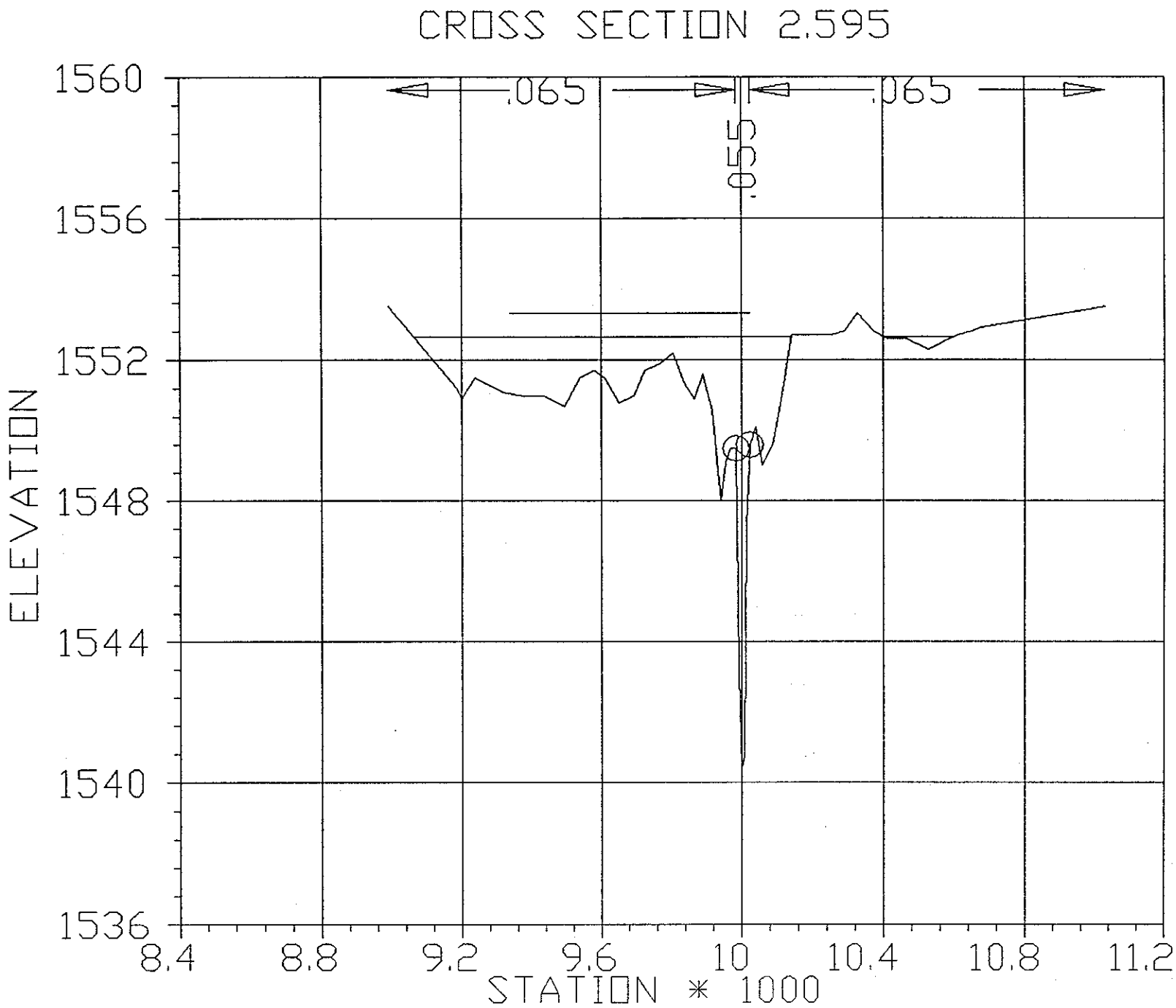

CROSS SECTION PLOT

DEADMAN WASH

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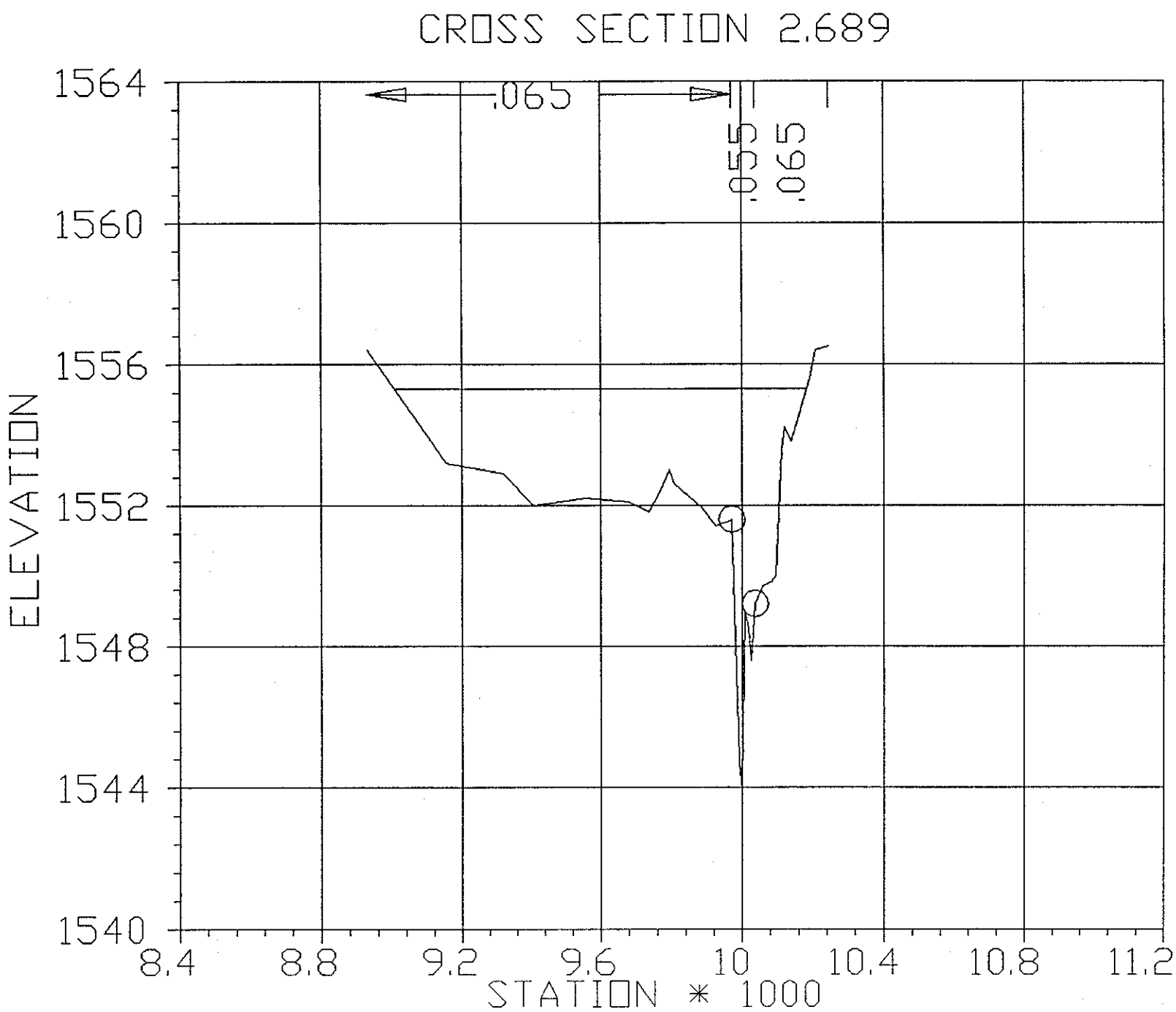

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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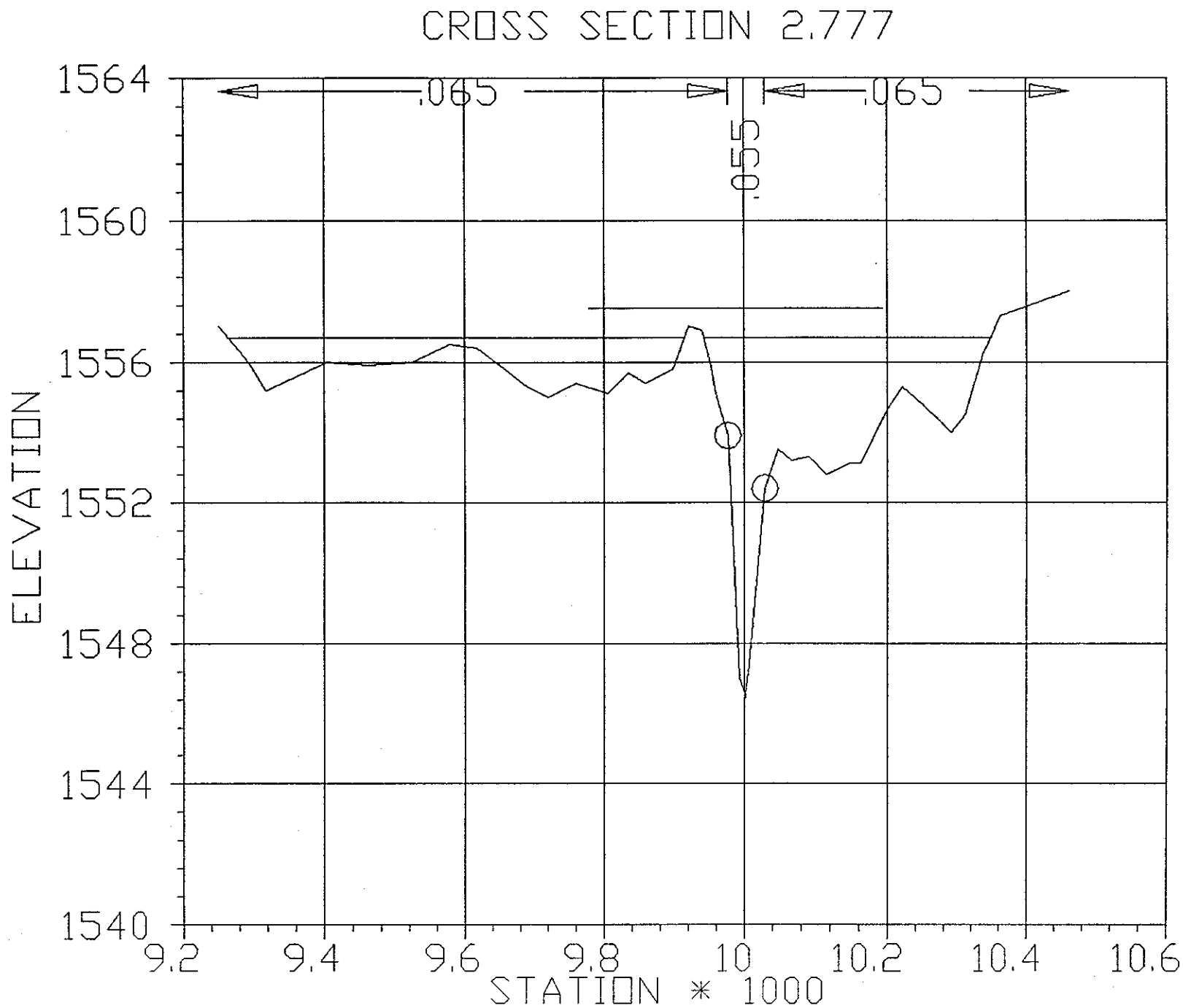

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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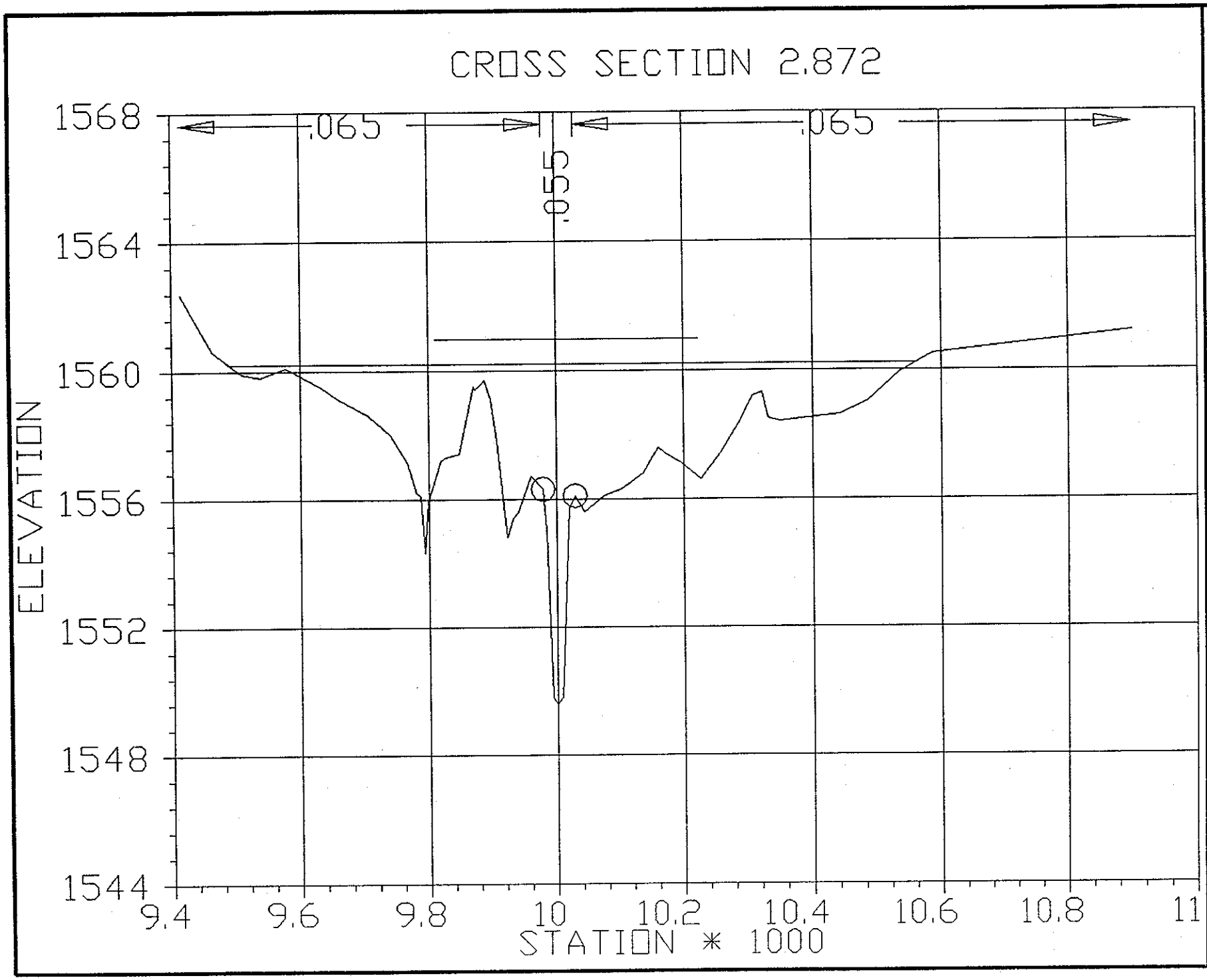

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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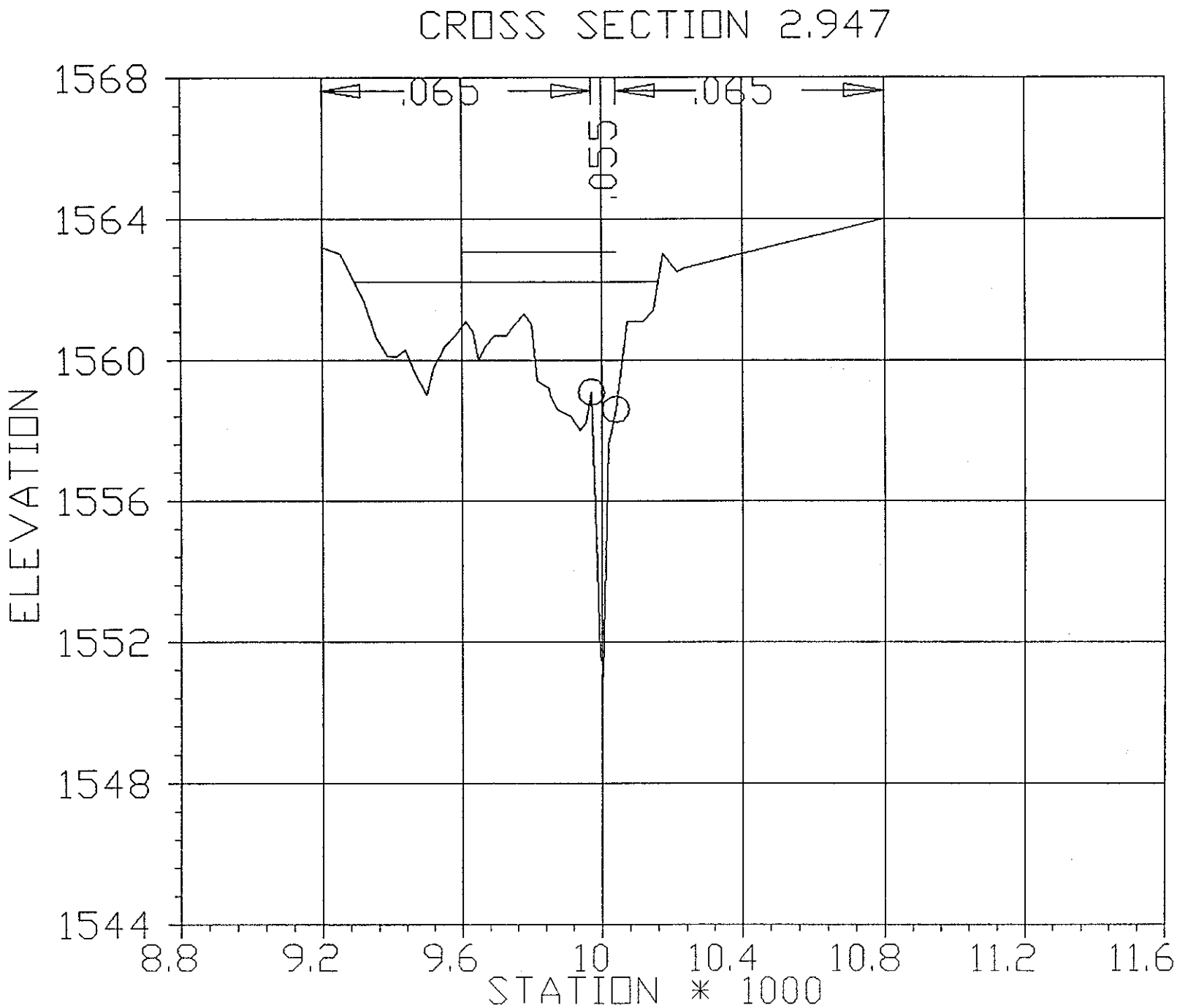

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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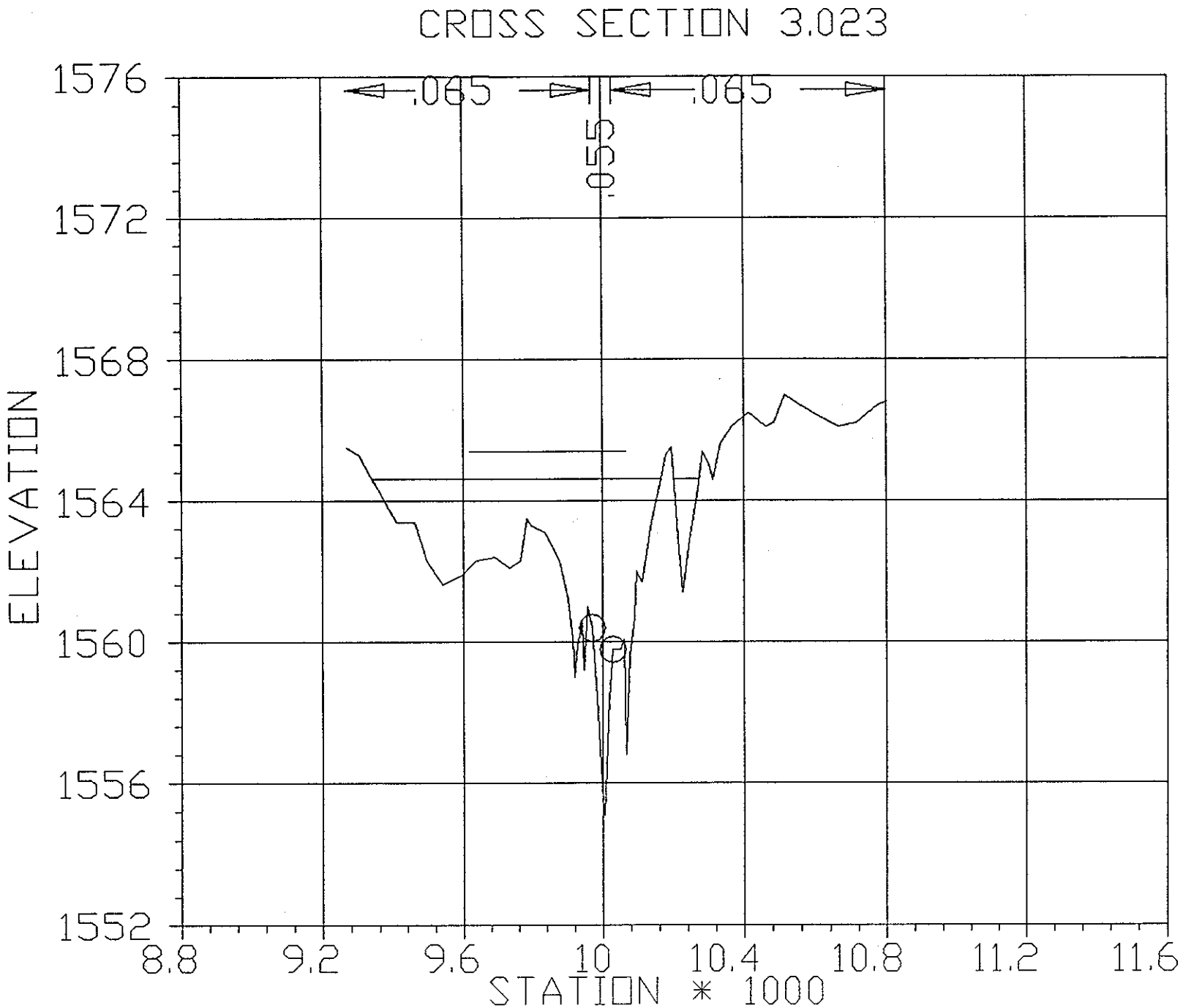

CROSS SECTION PLOT

DEADMAN WASH

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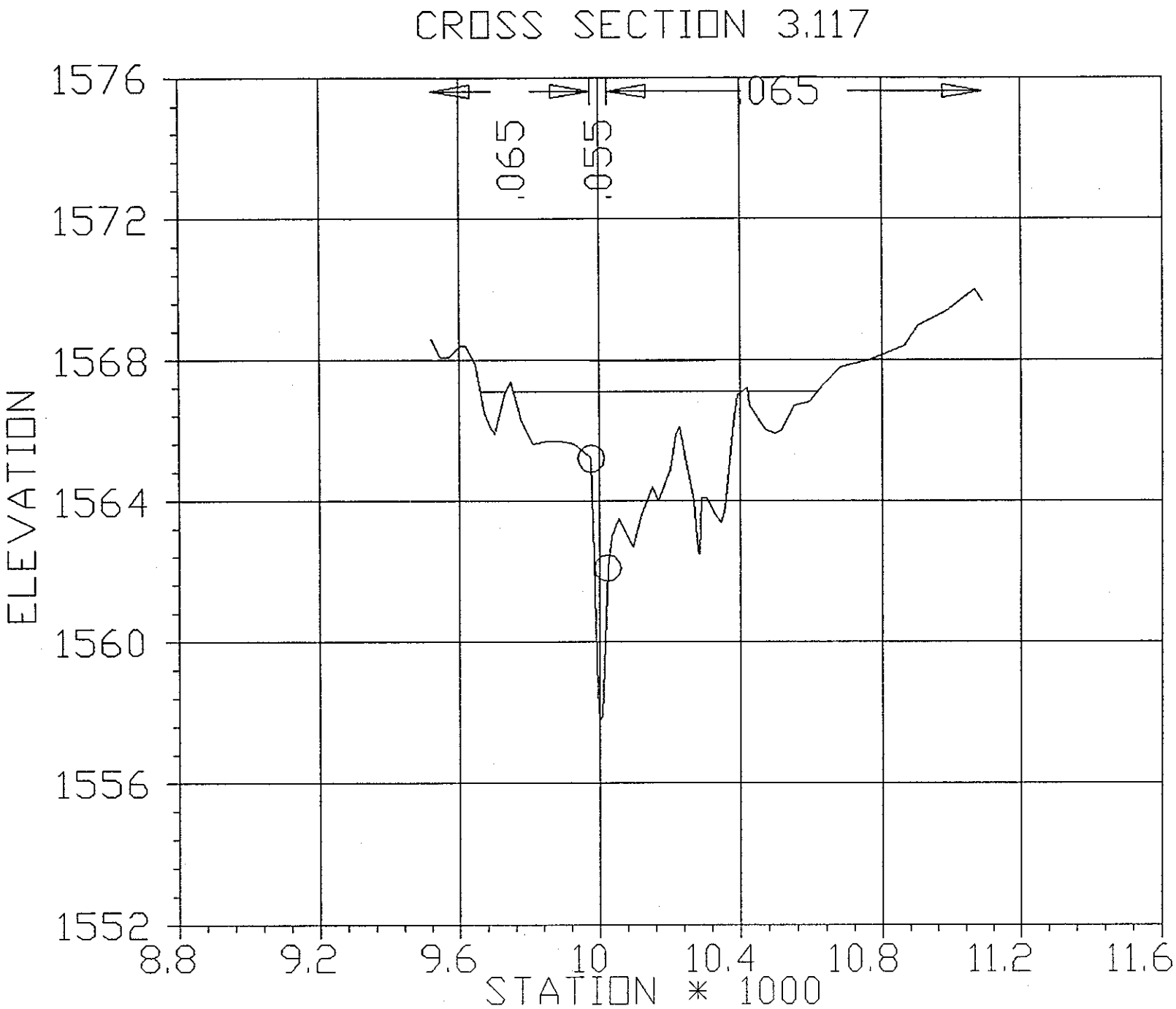

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HNTB

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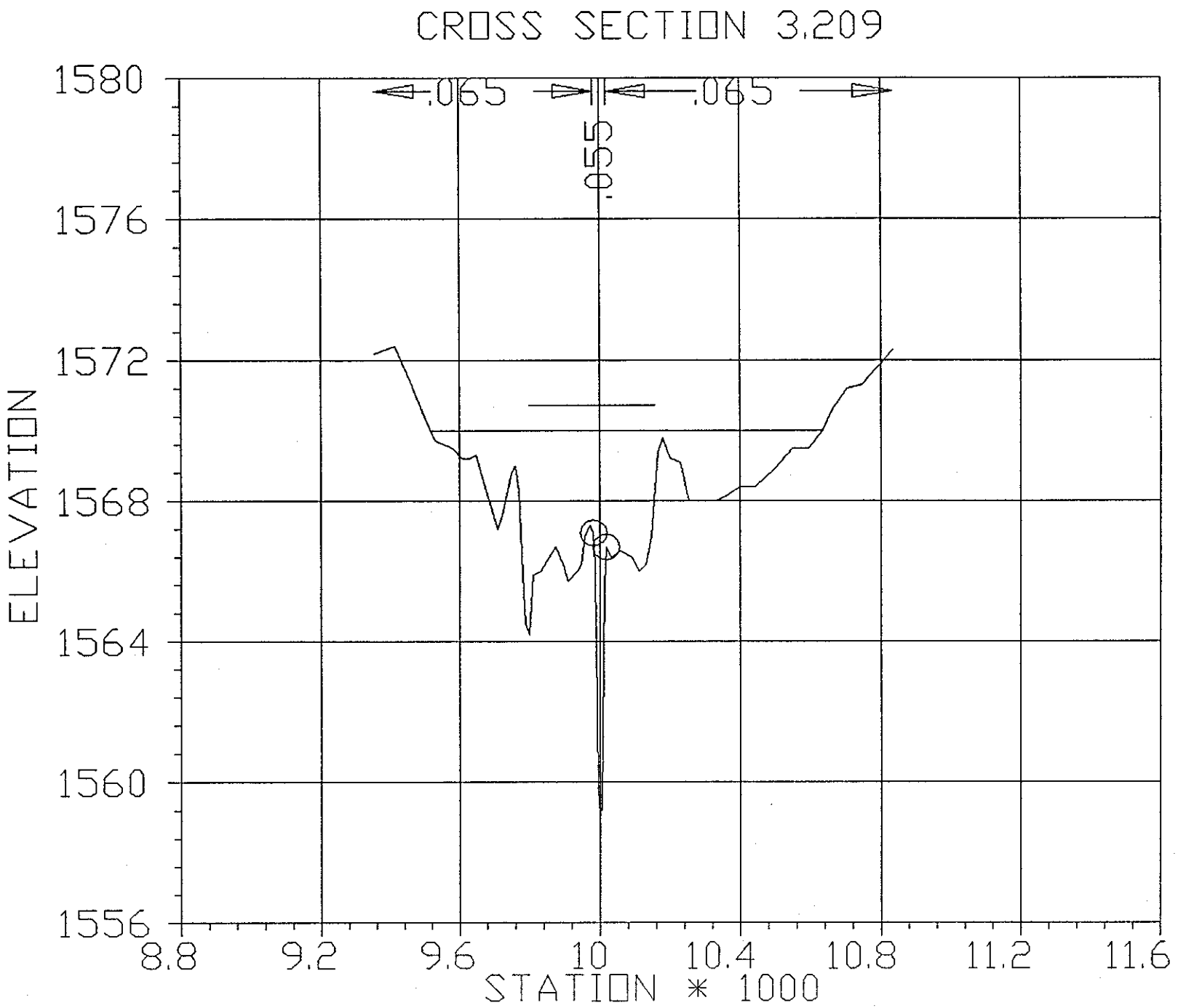

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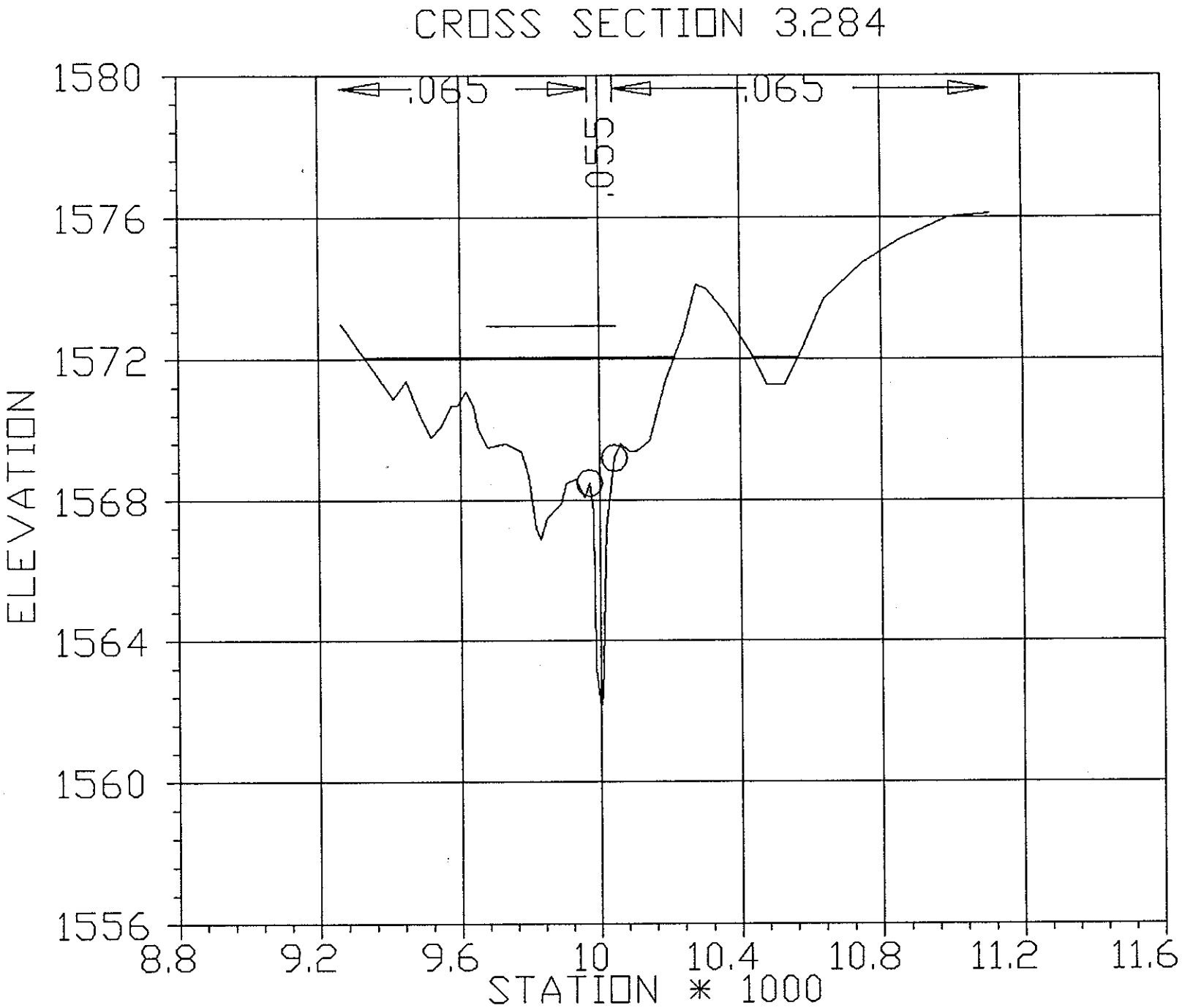

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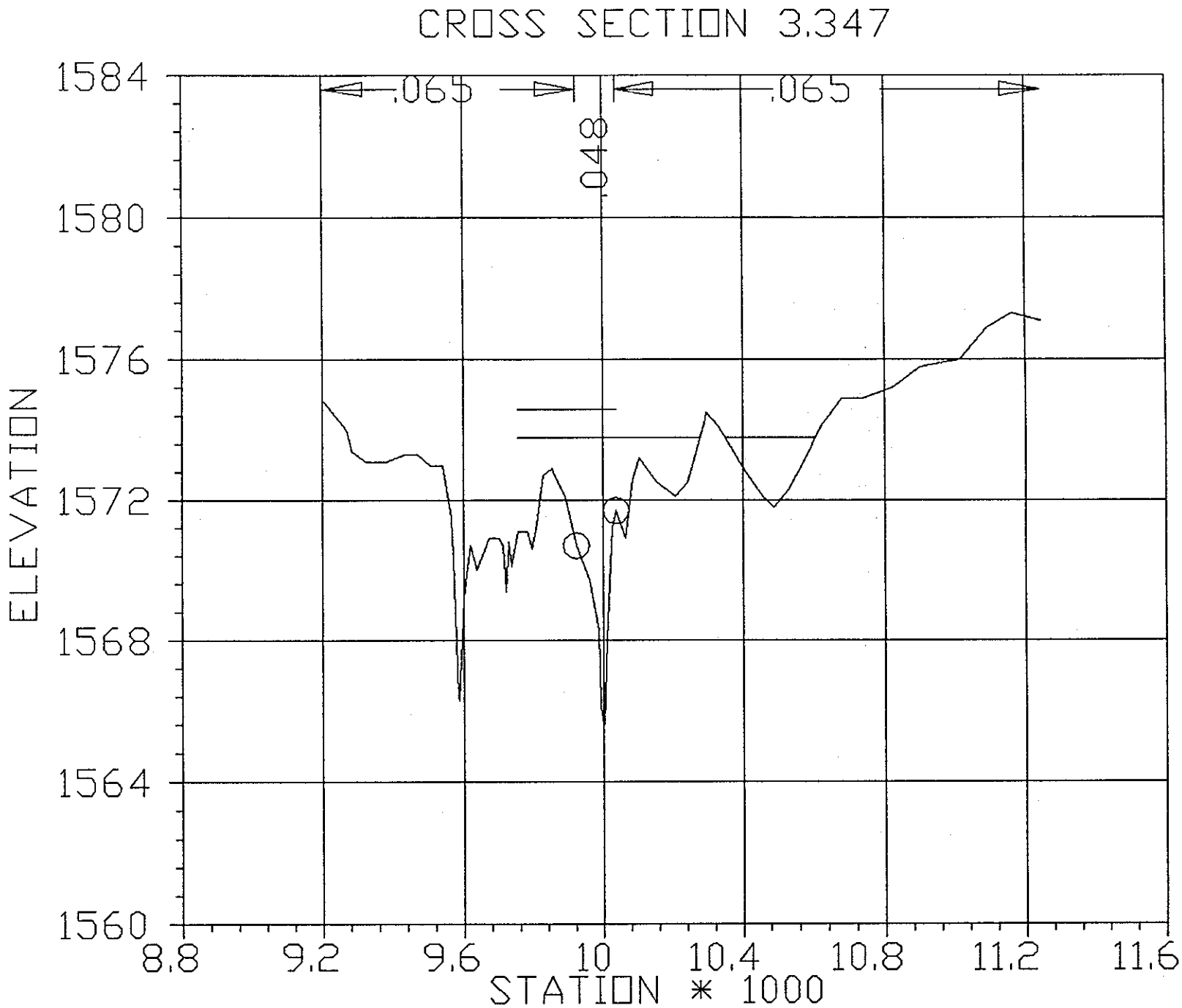

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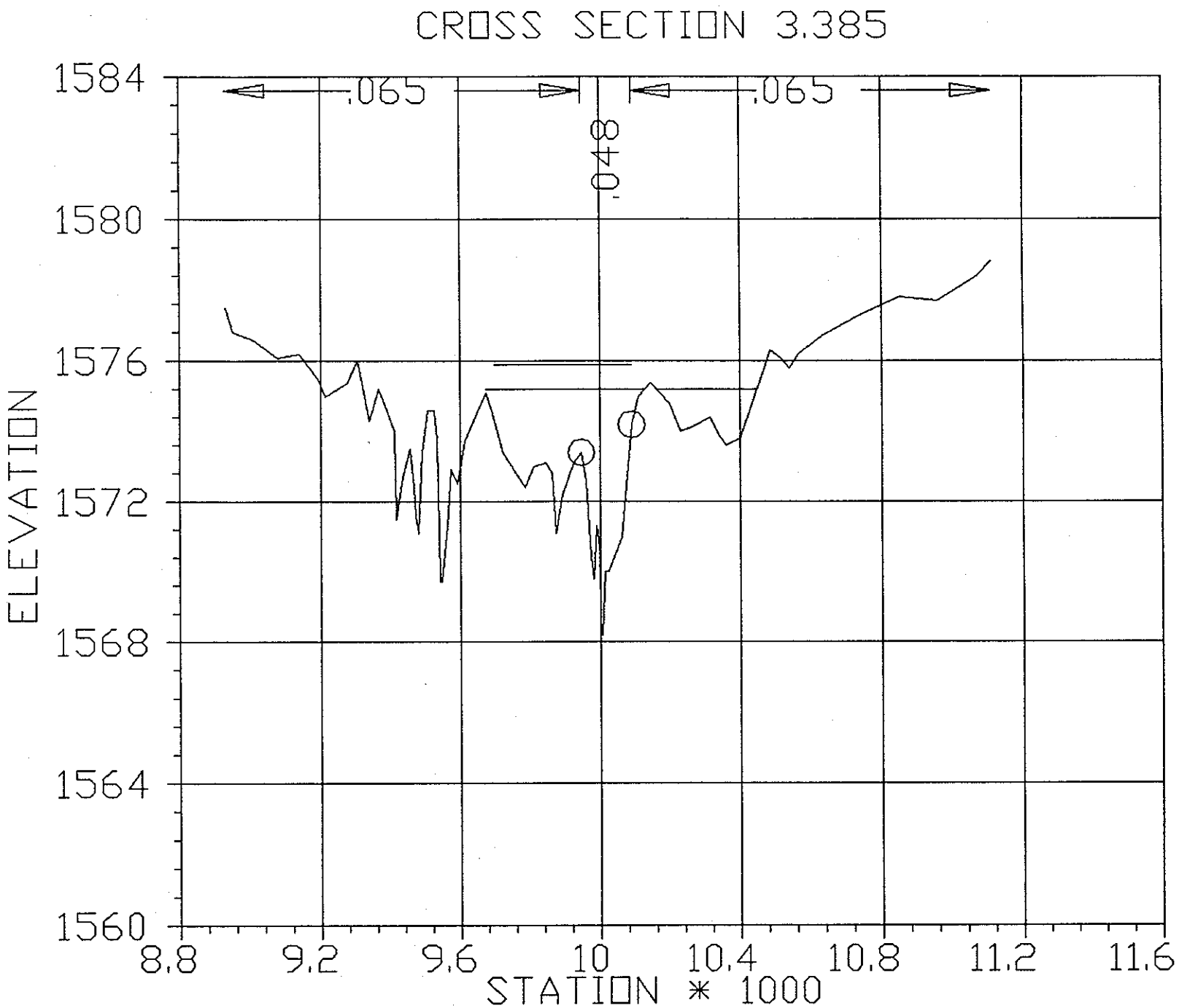

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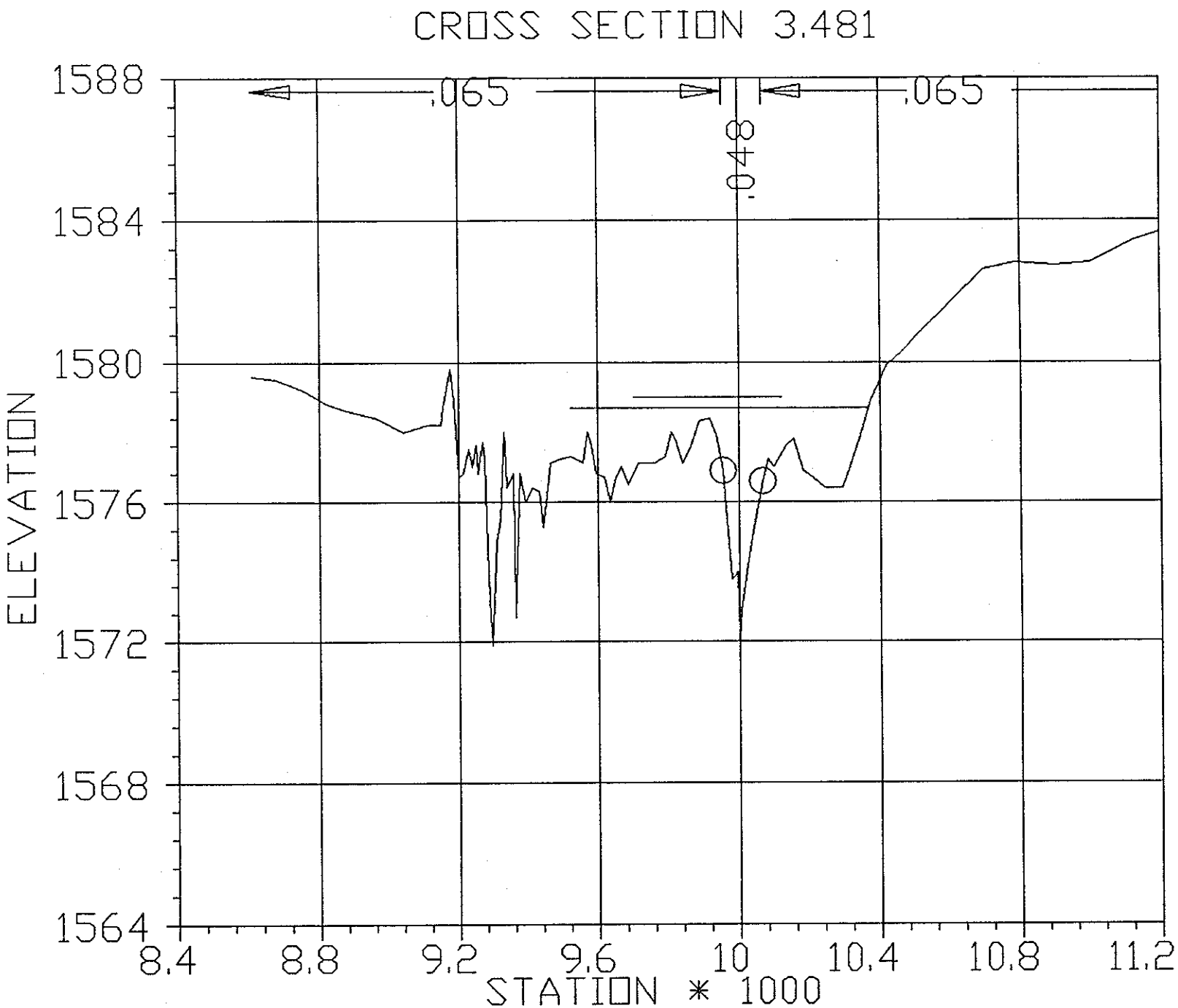

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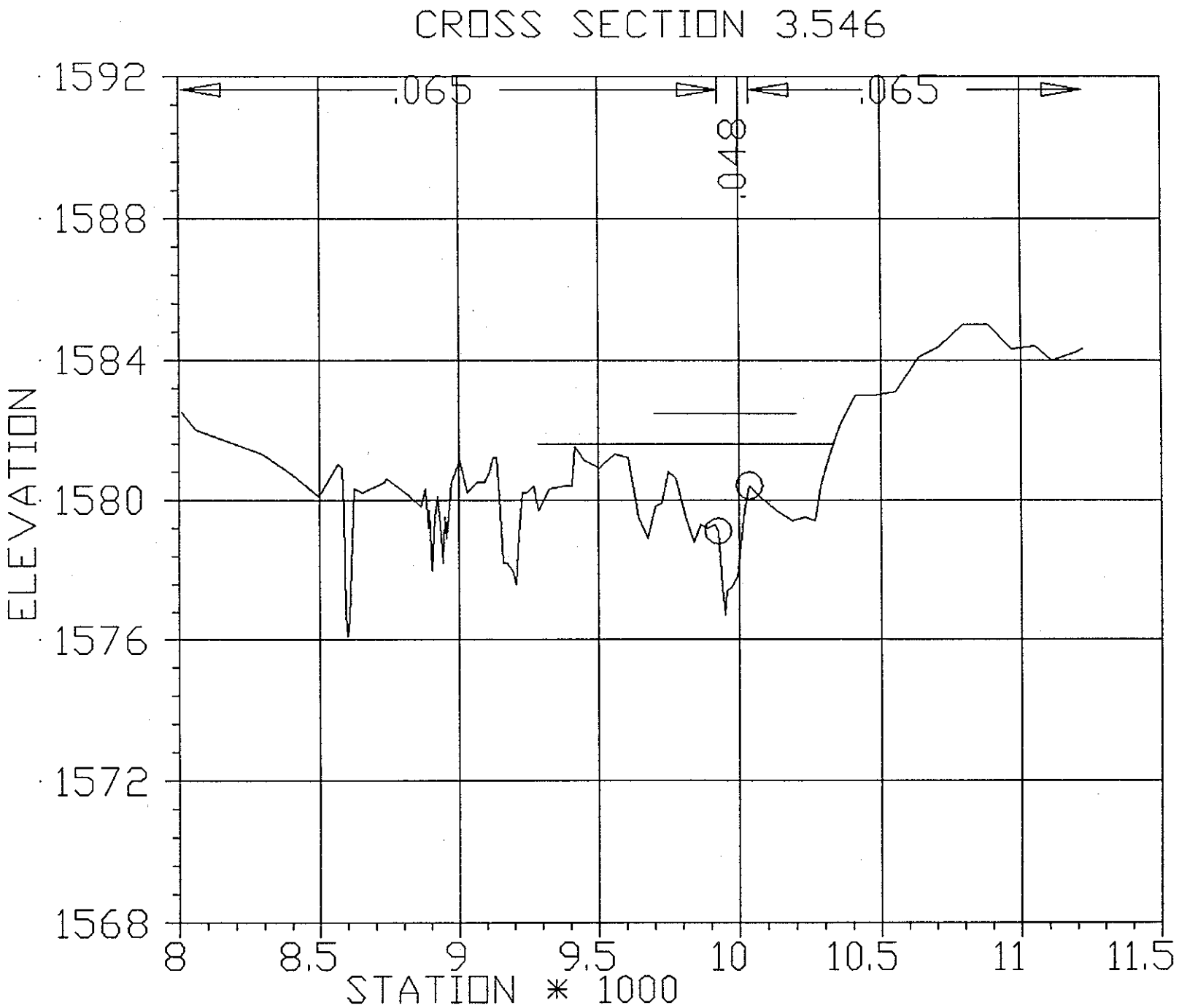

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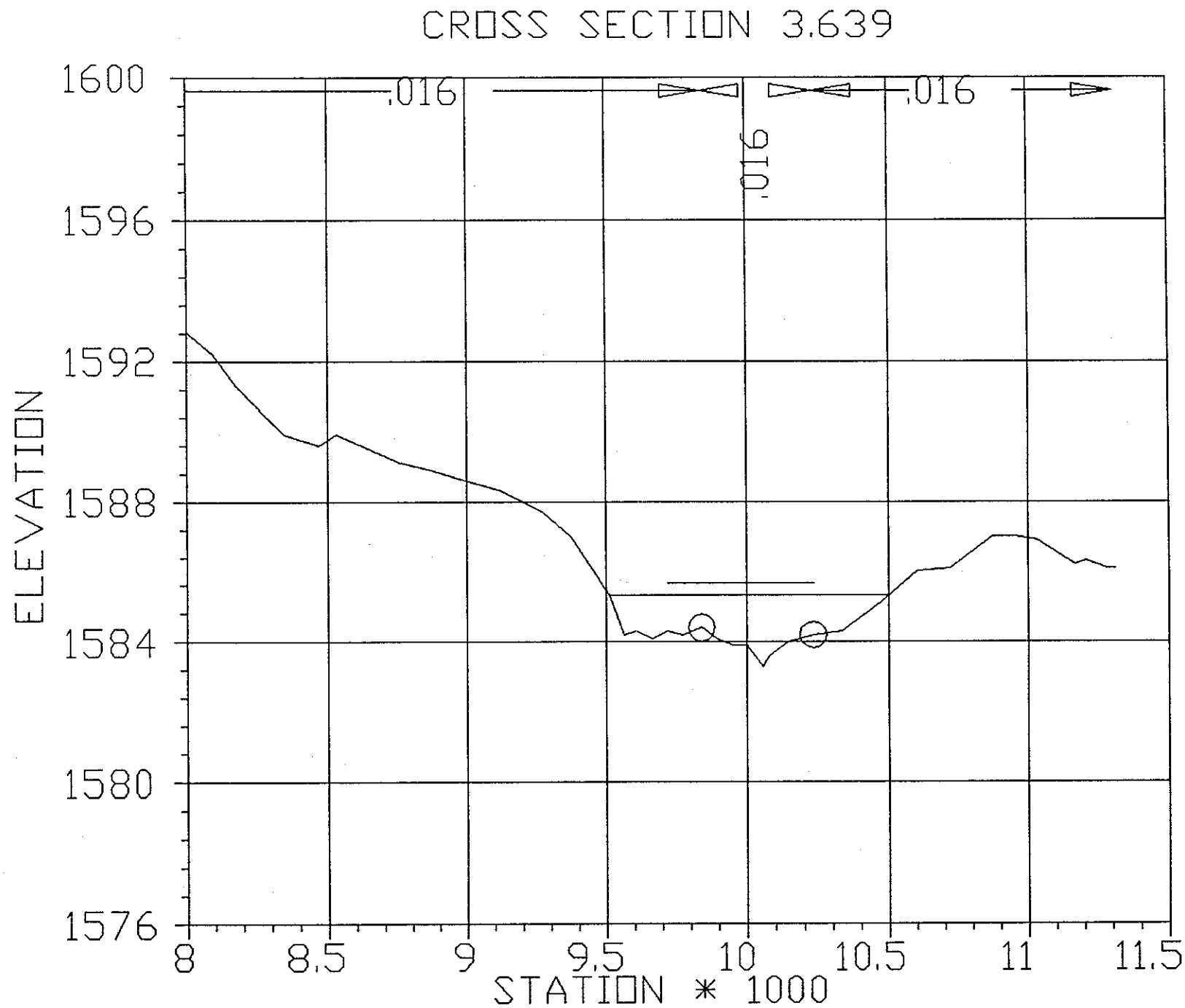

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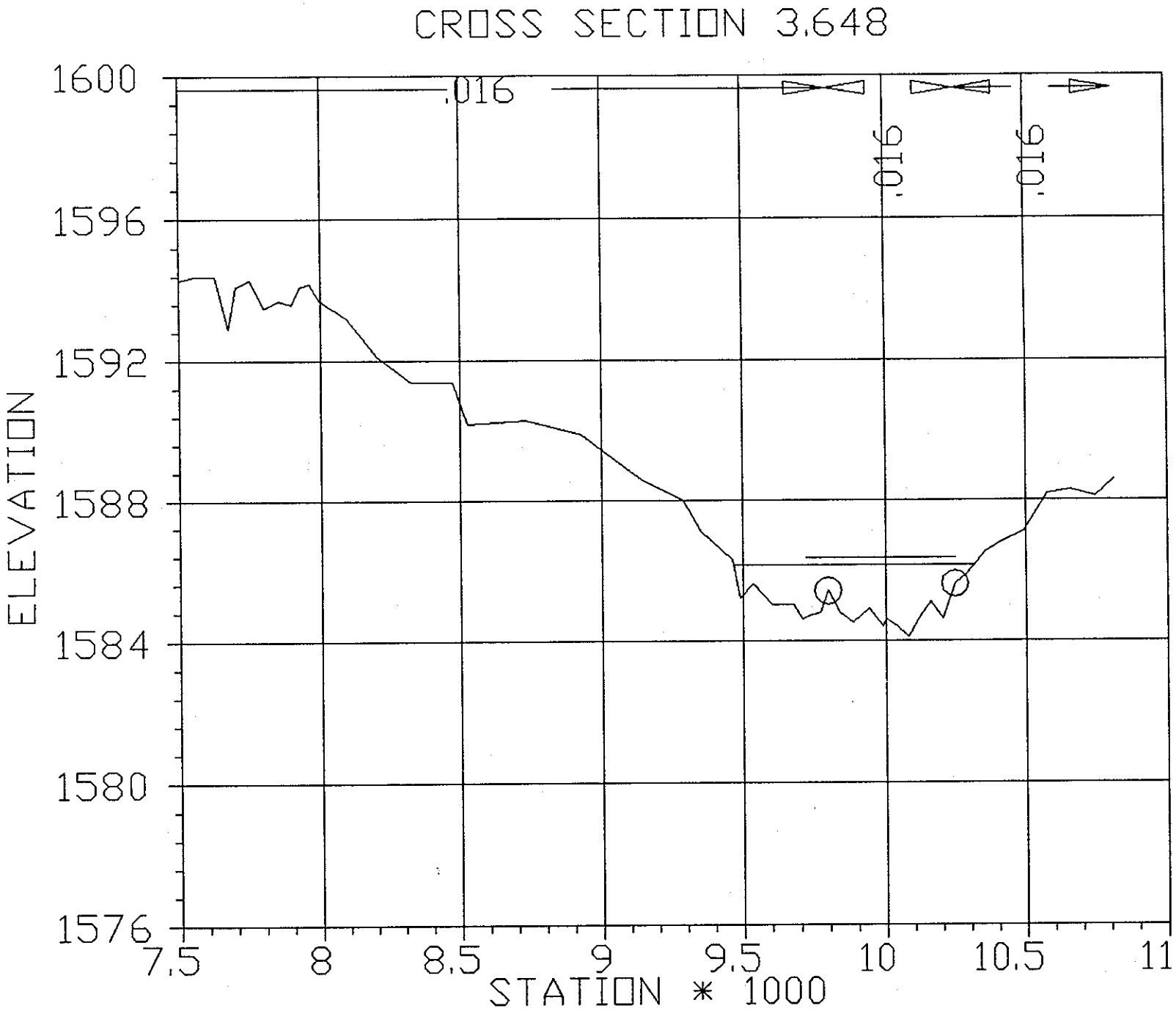

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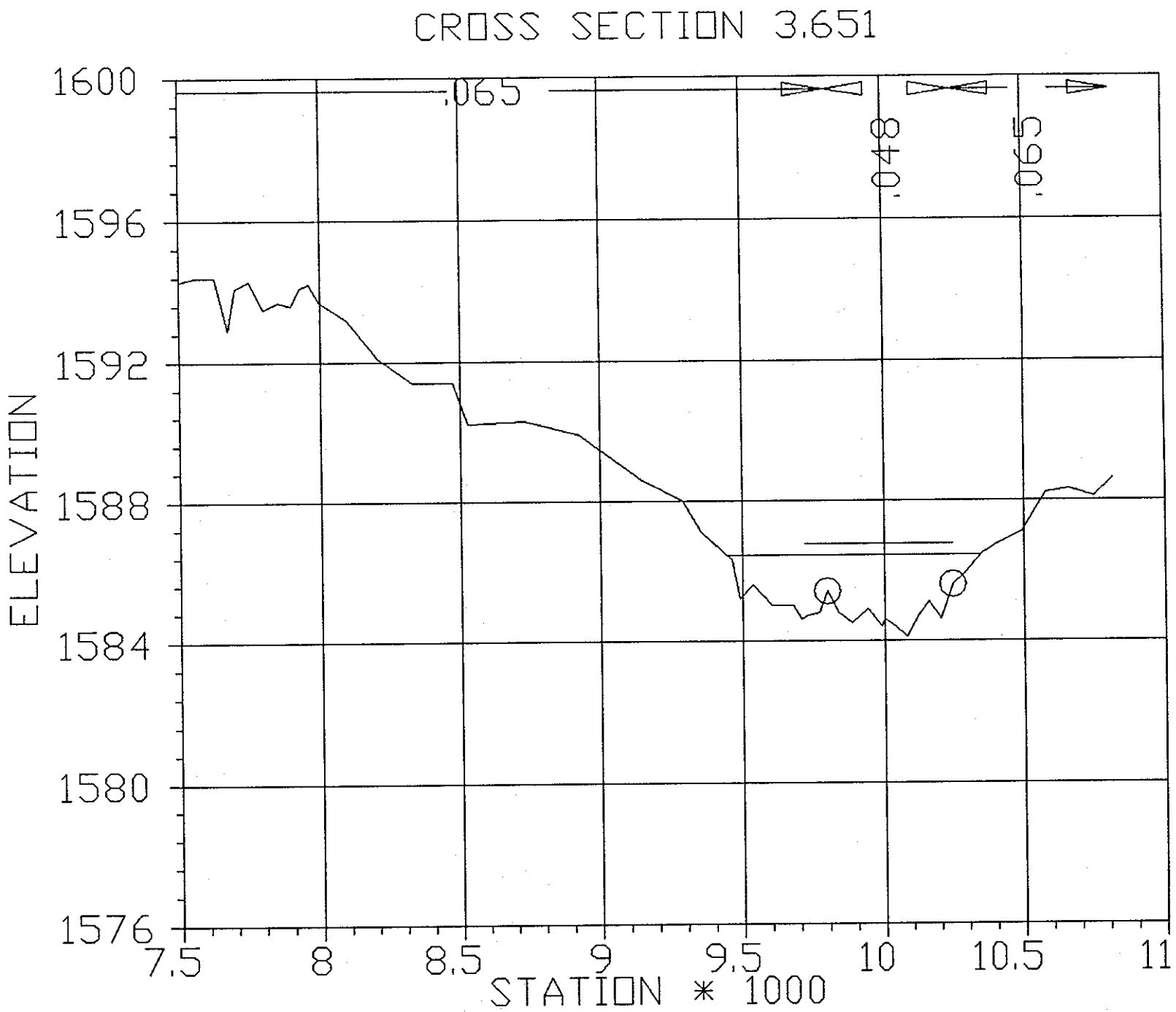

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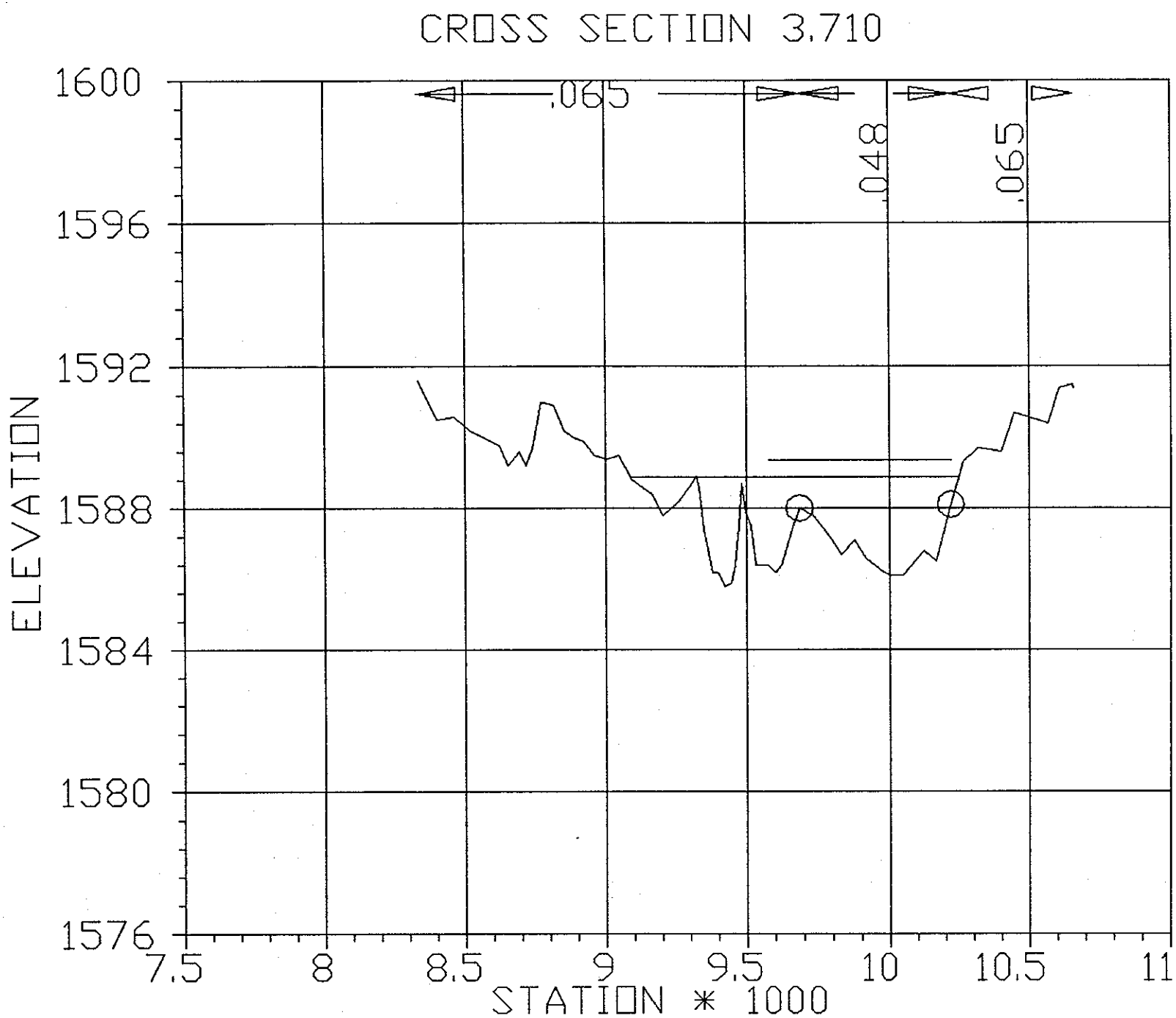

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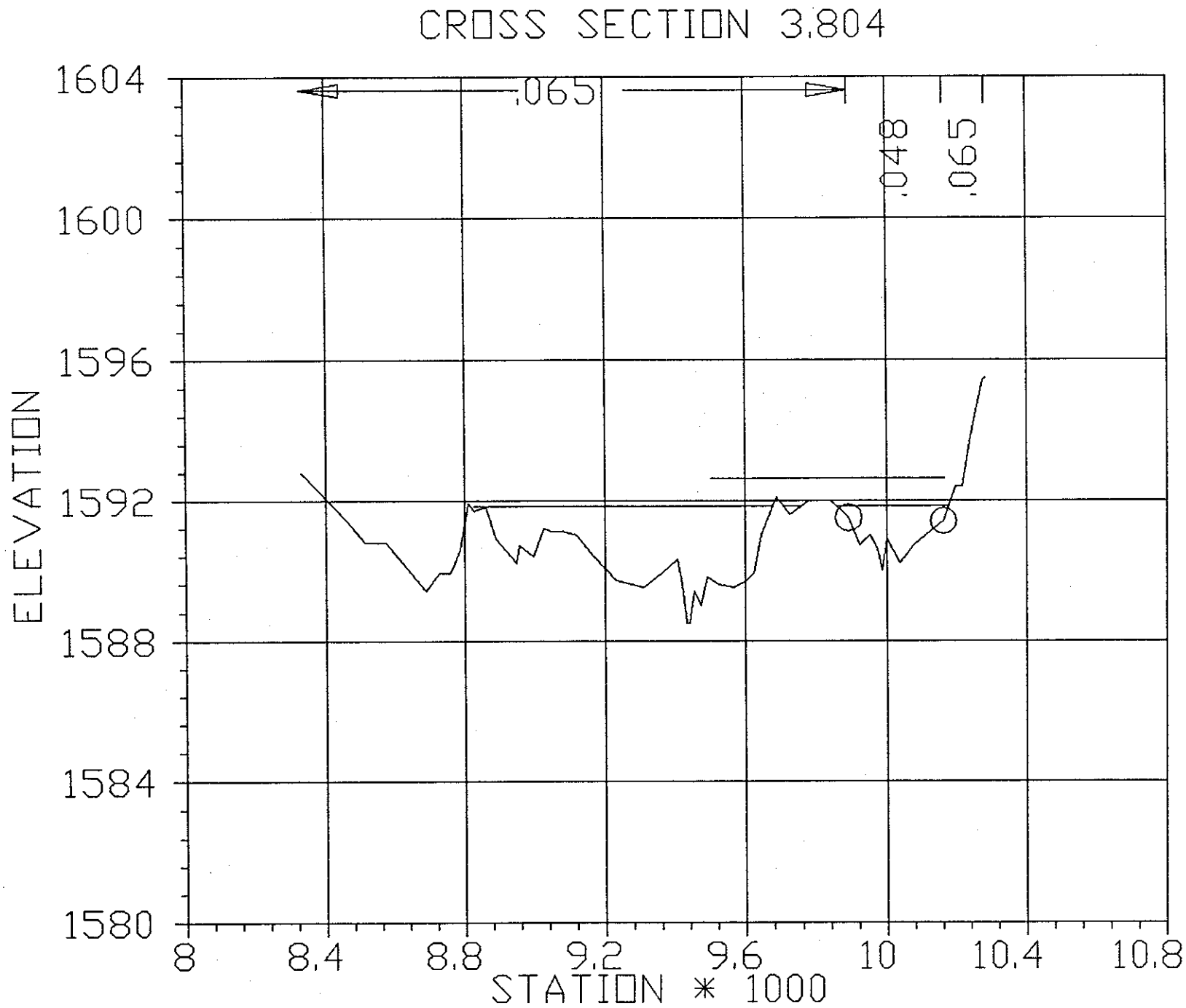

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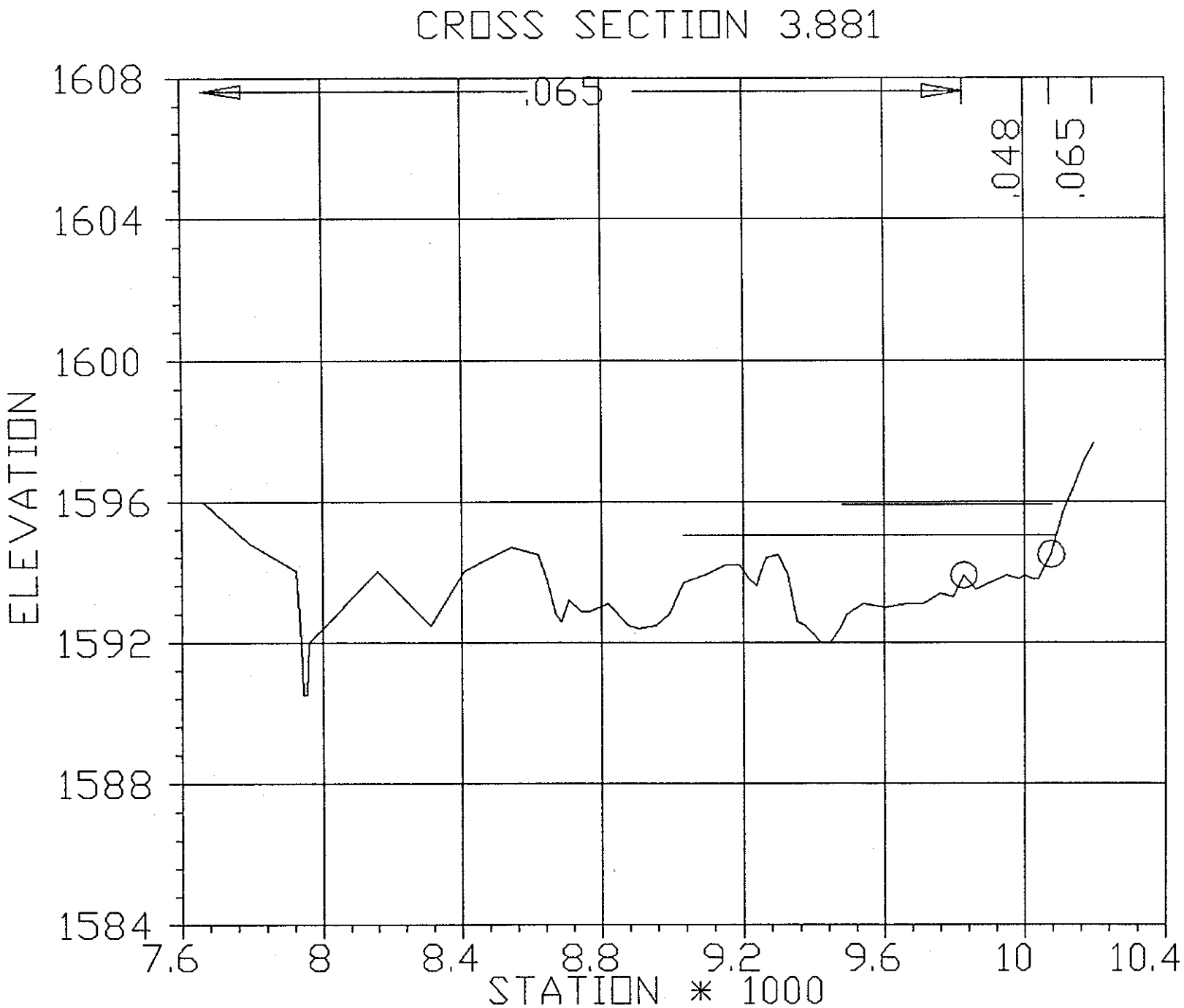

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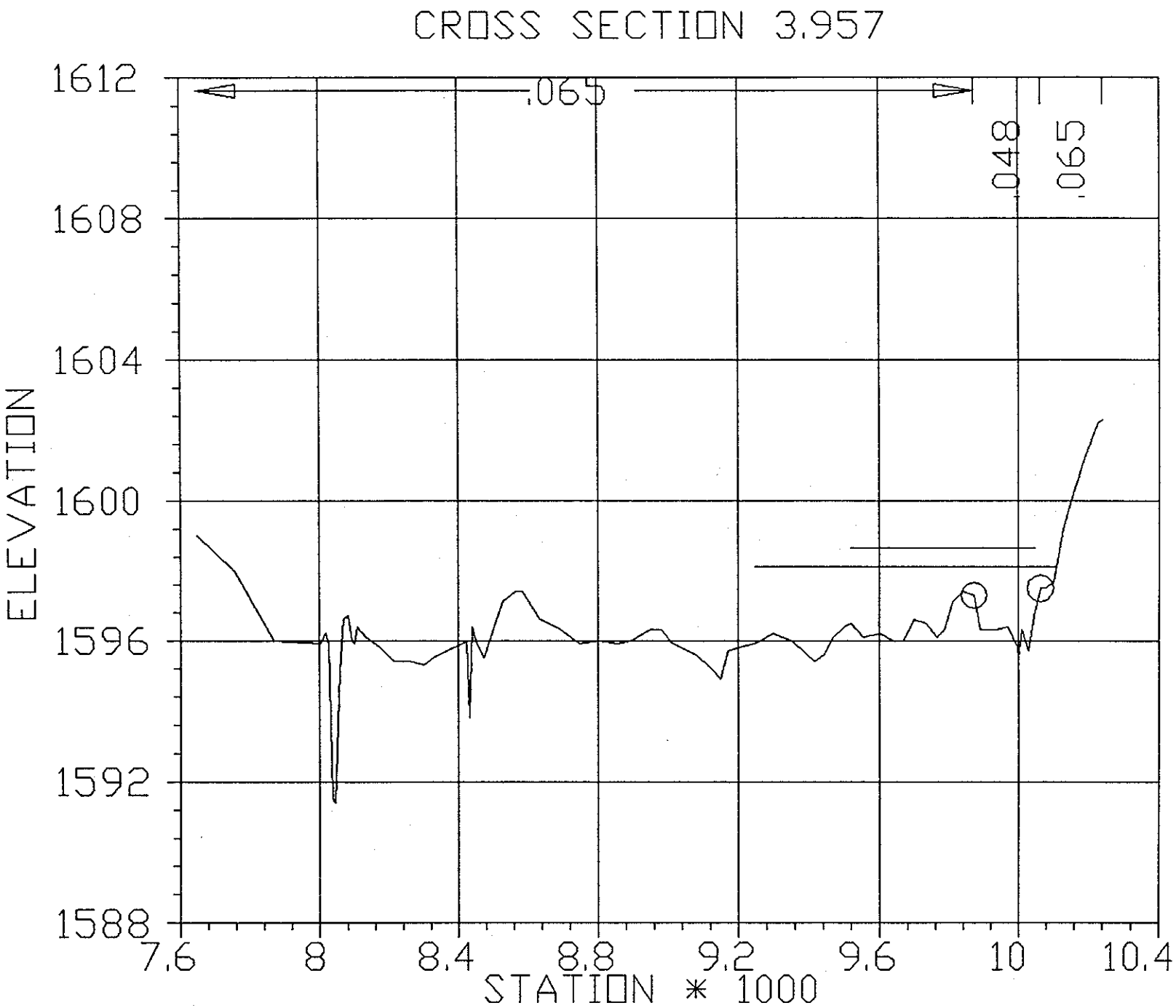

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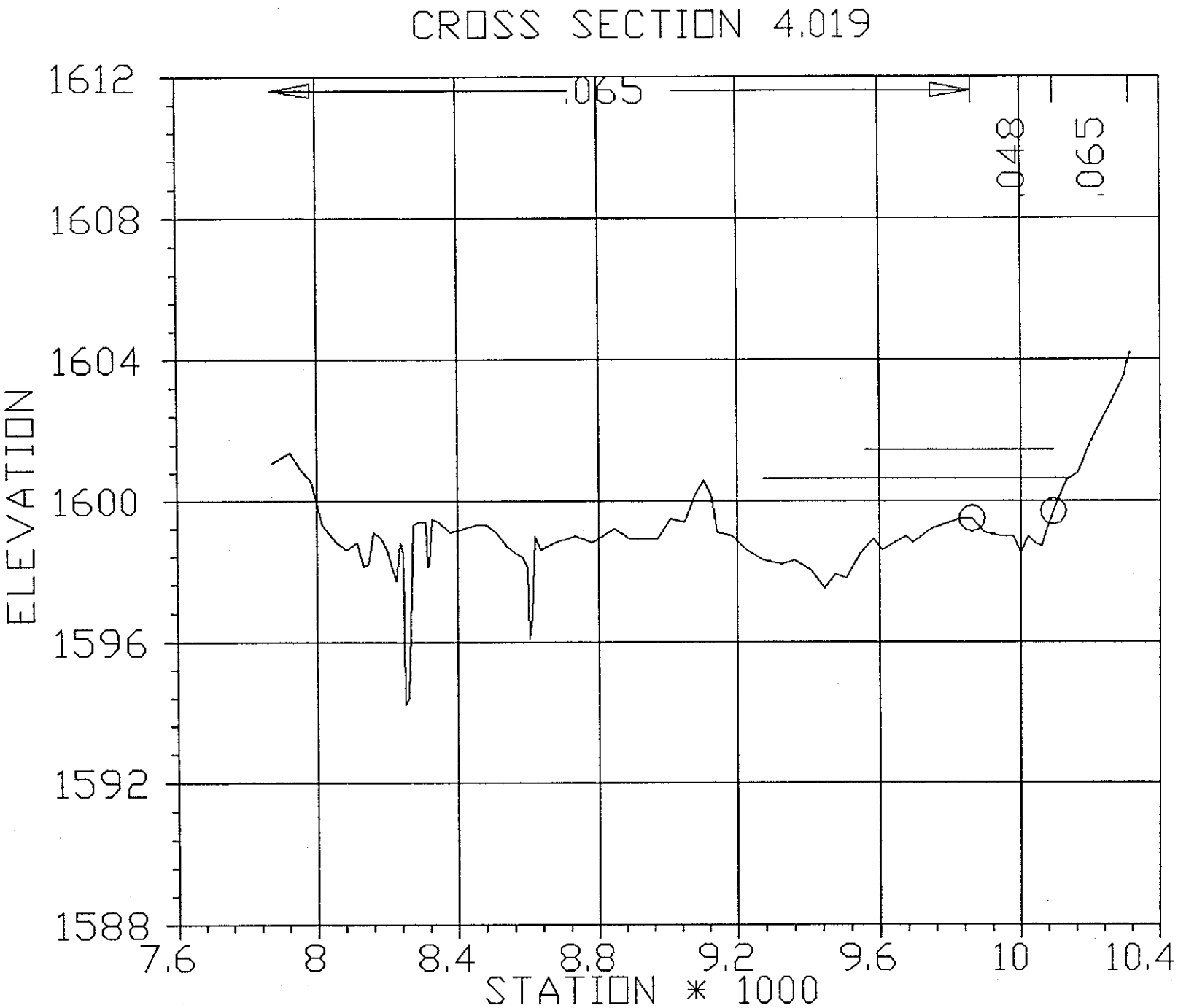

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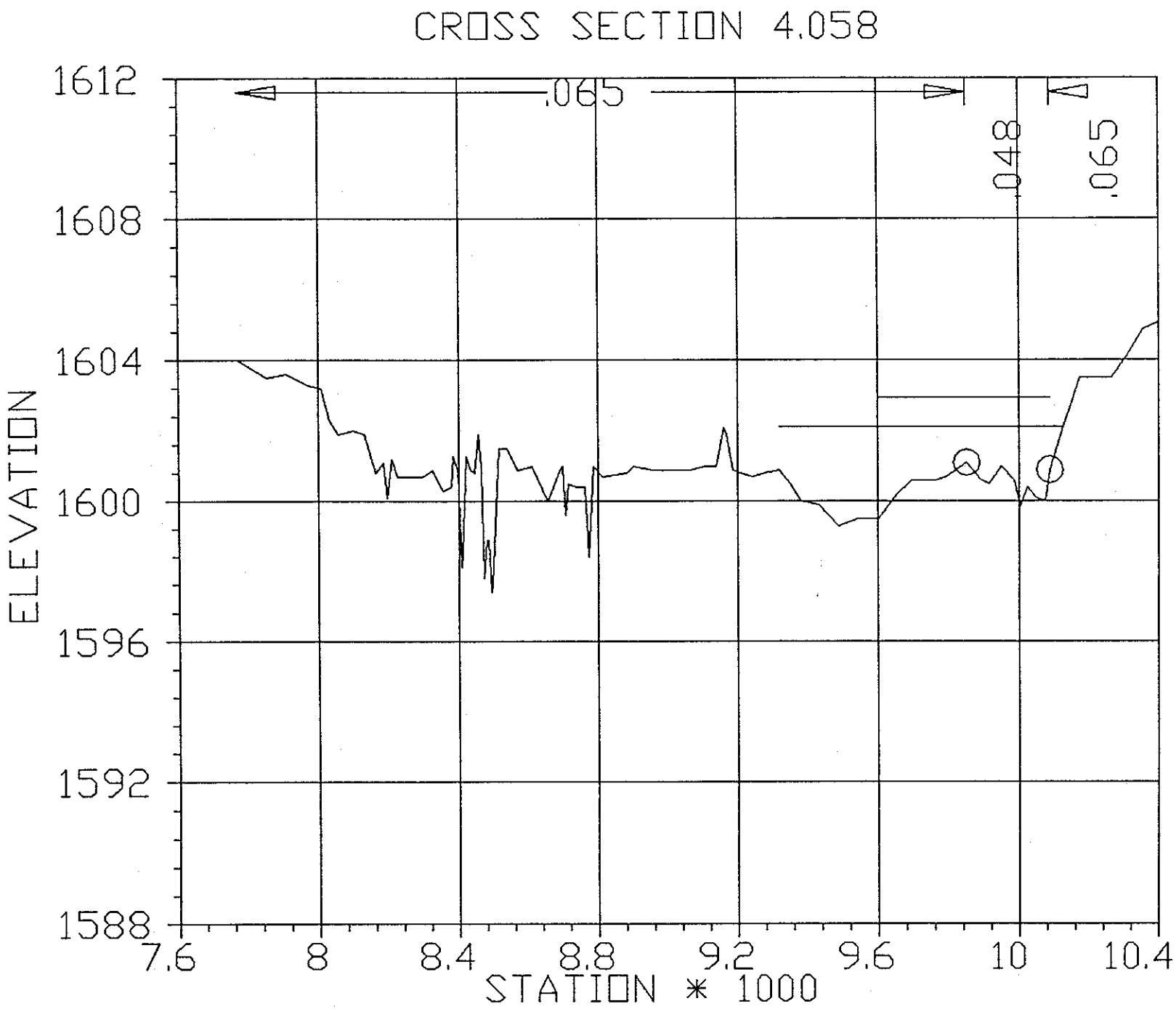

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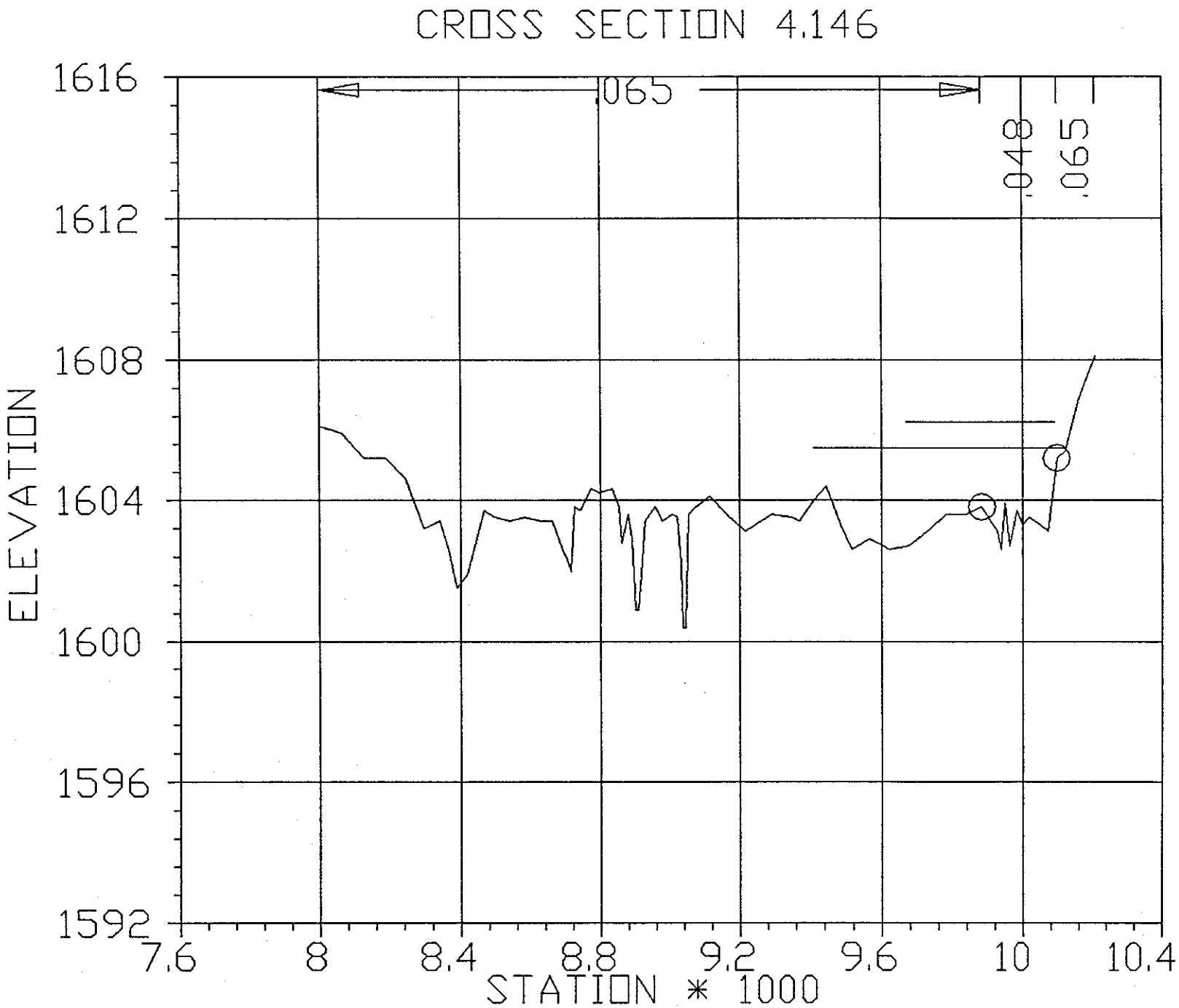

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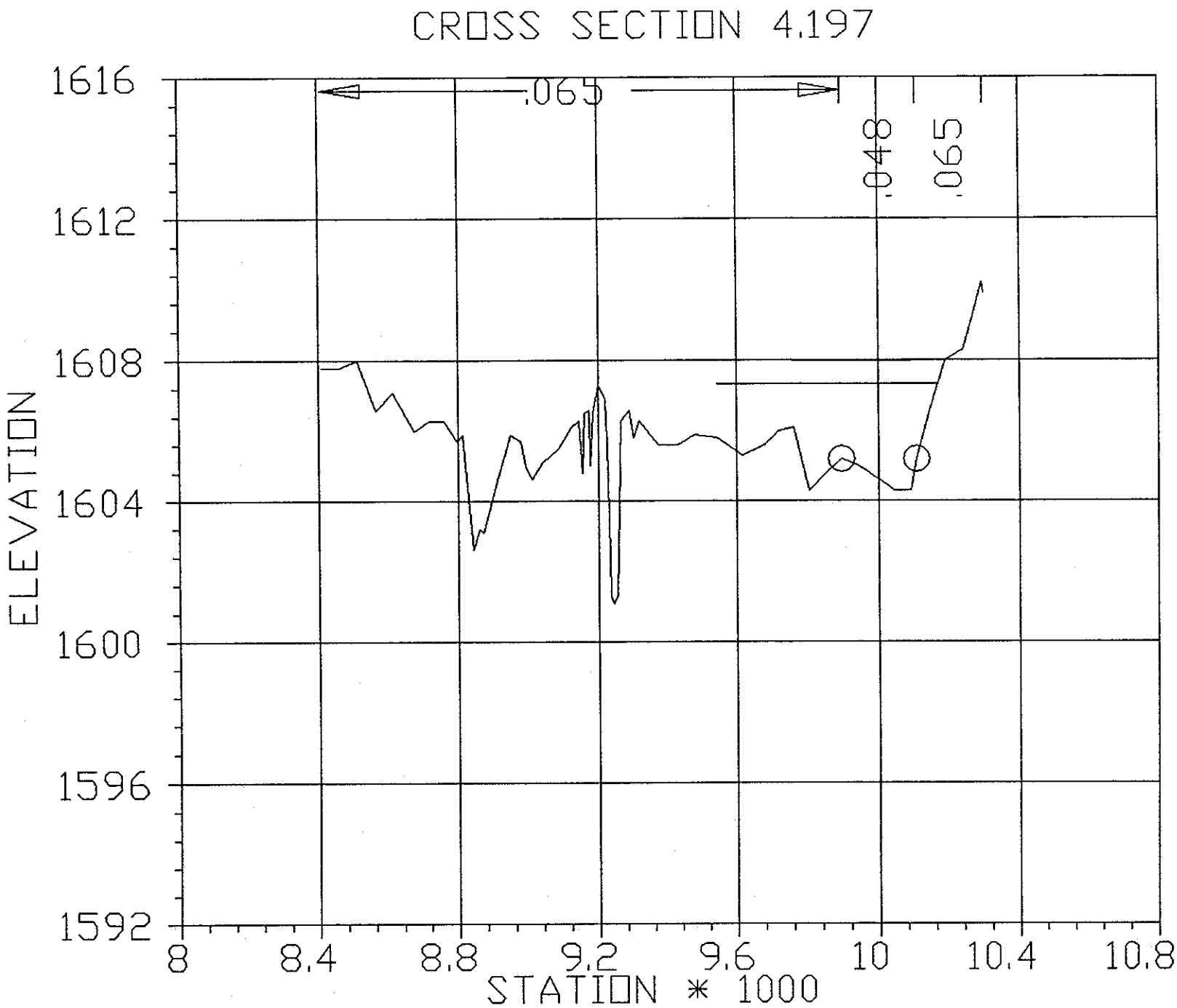

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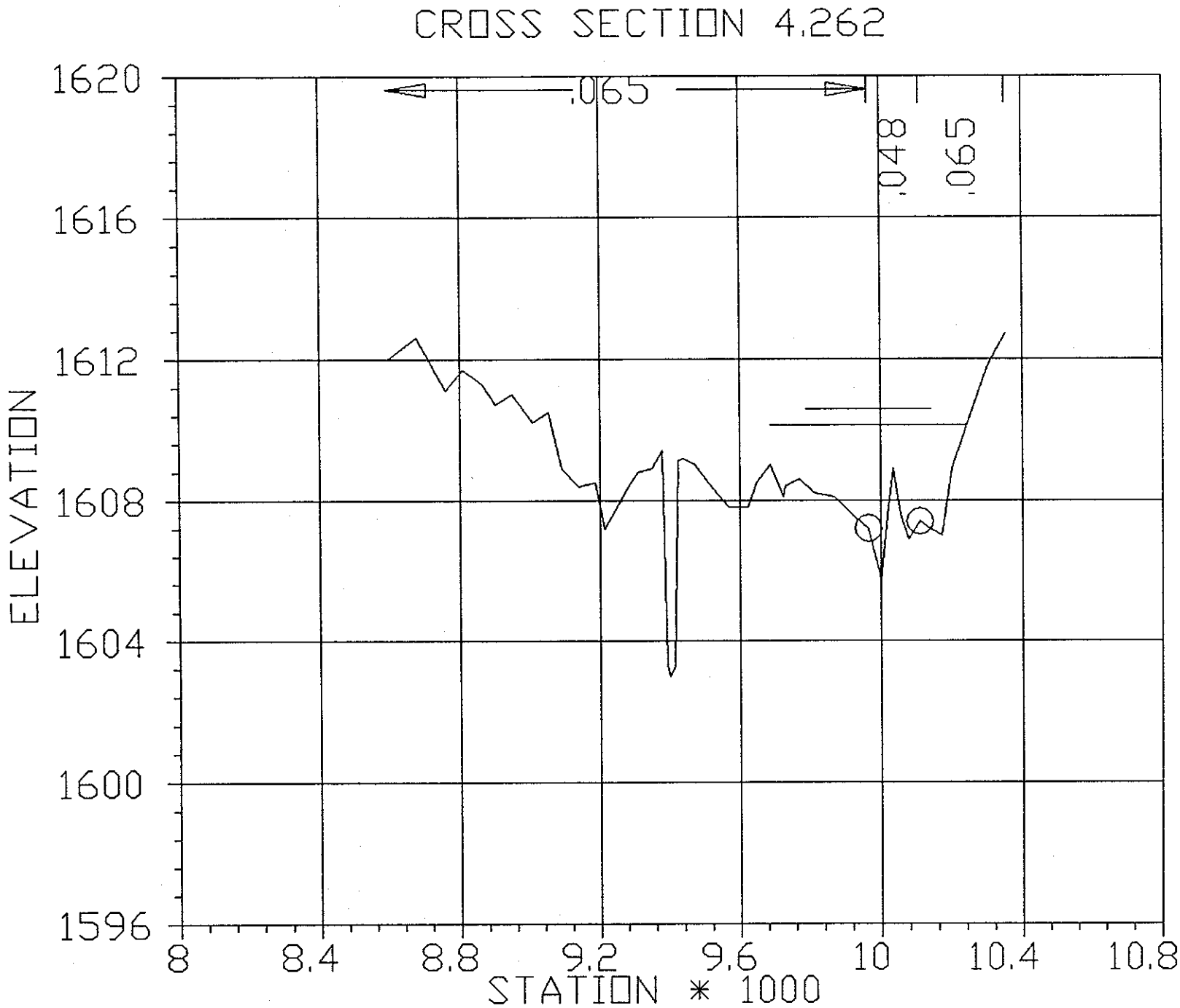

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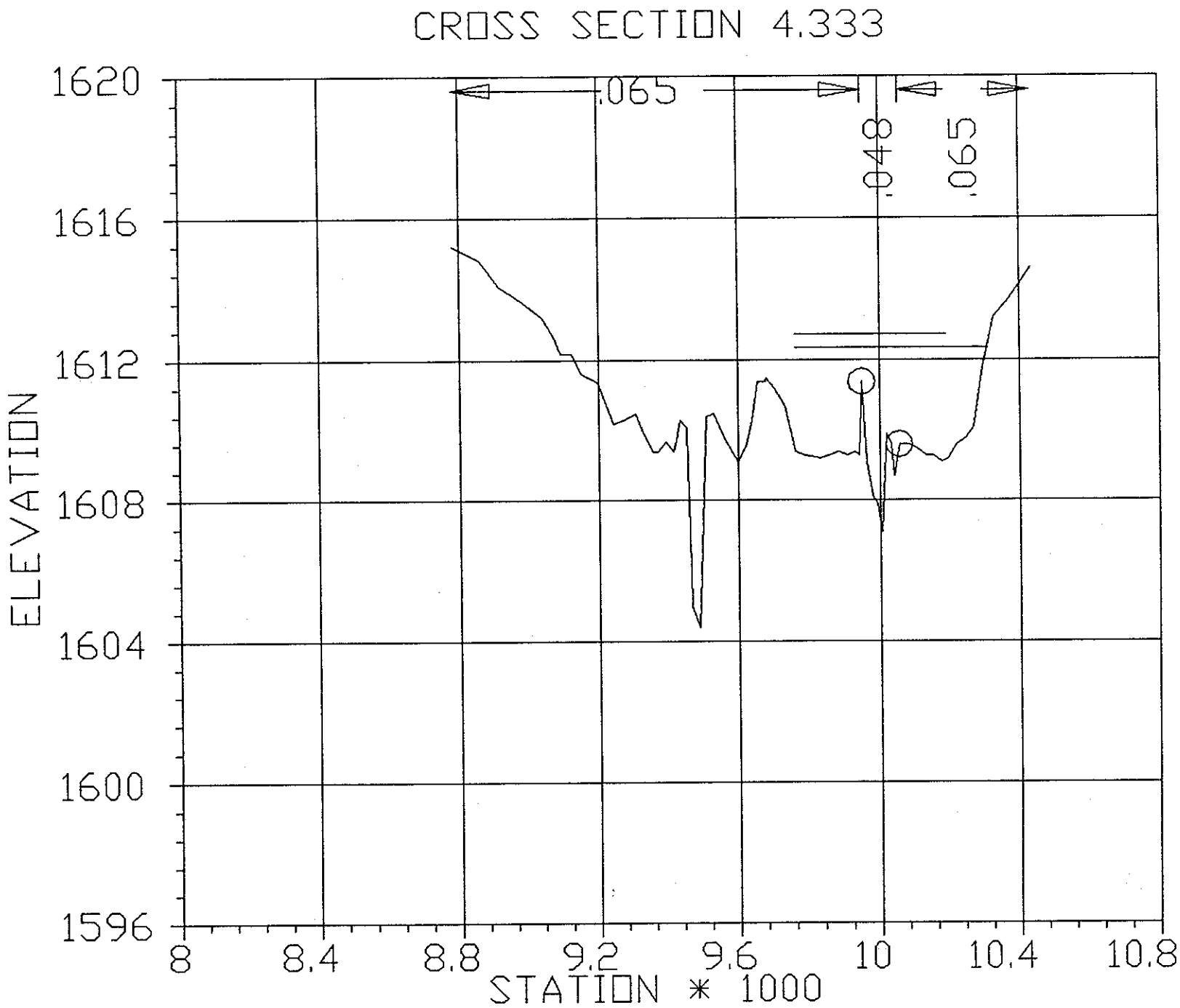

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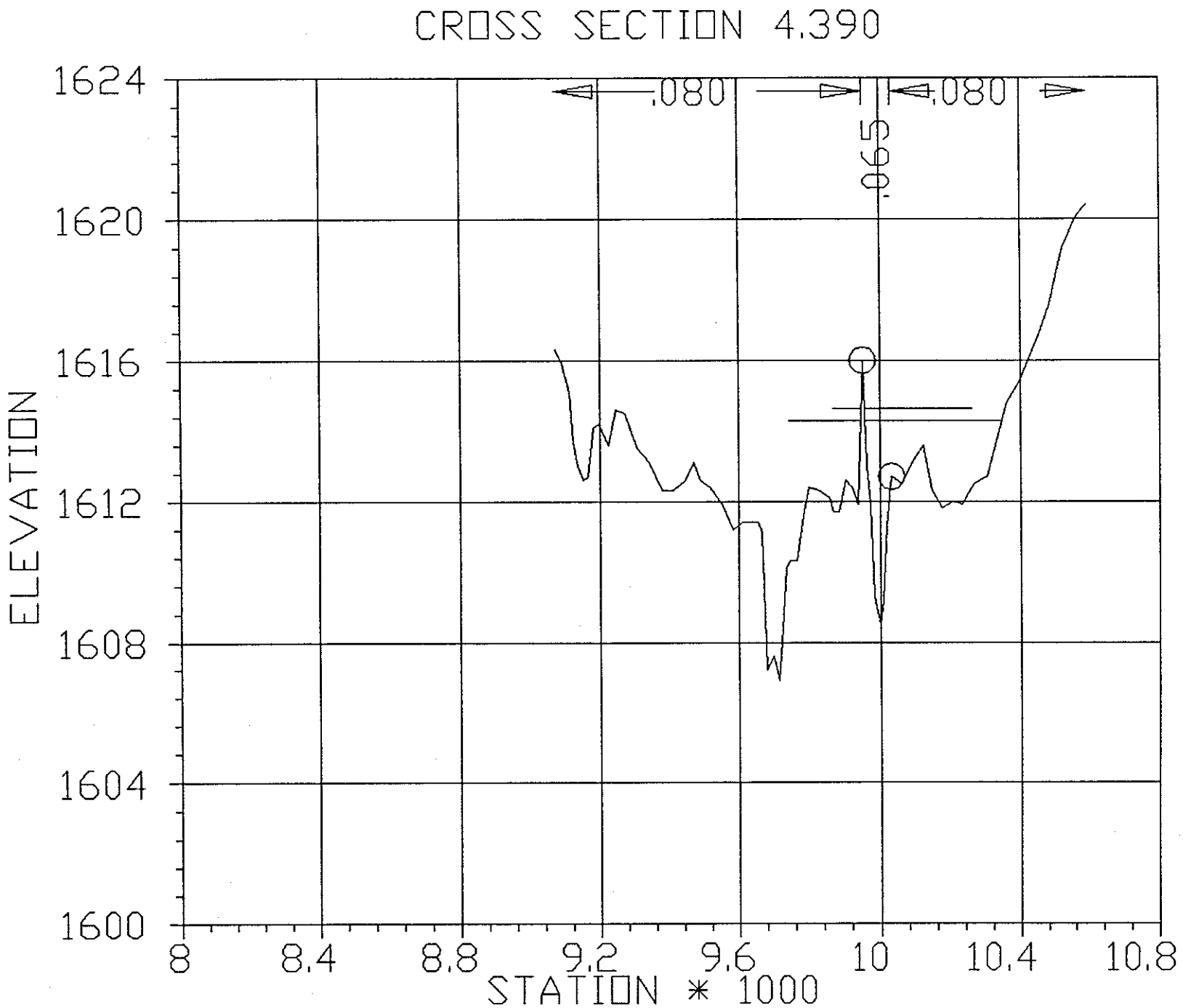

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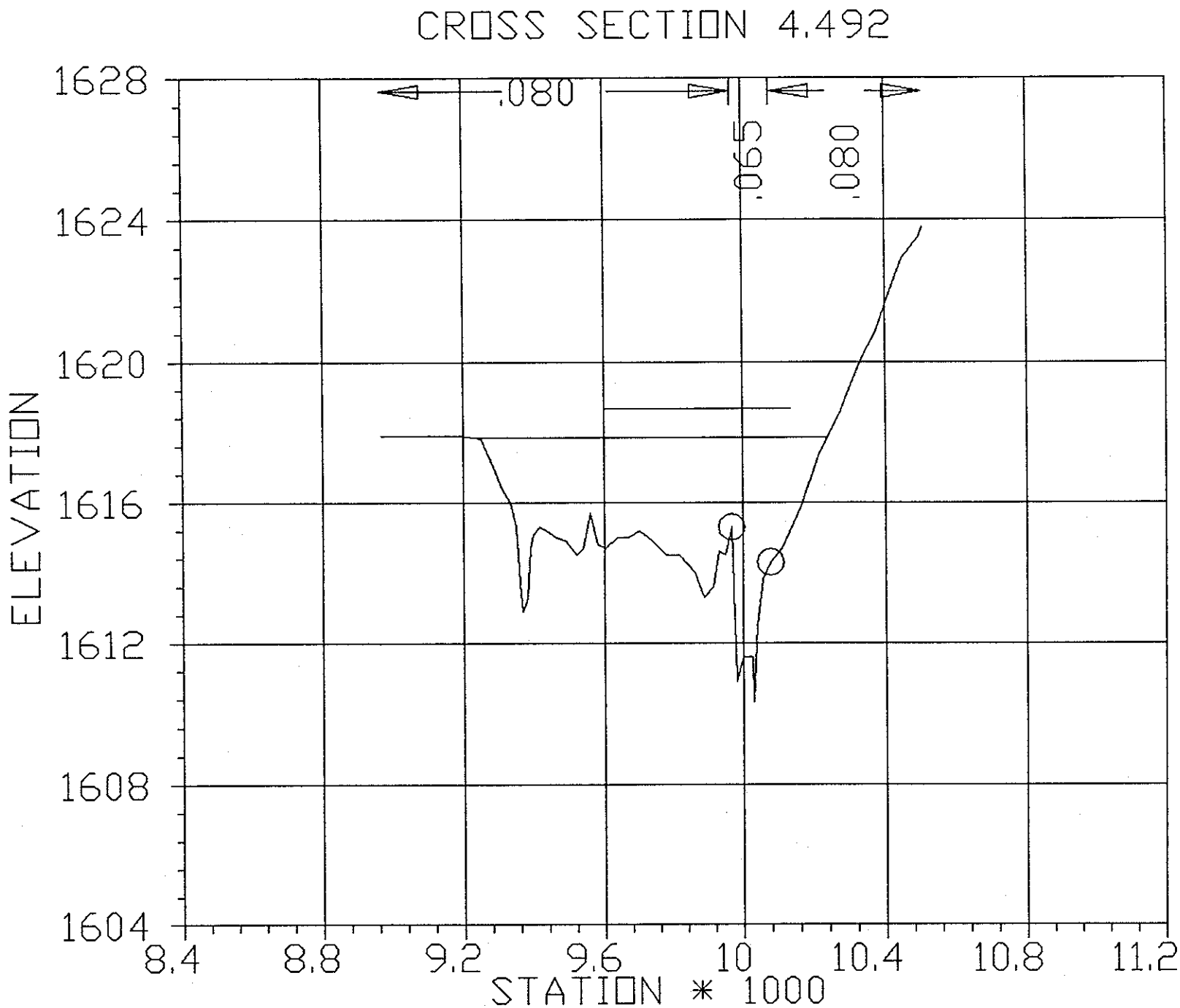

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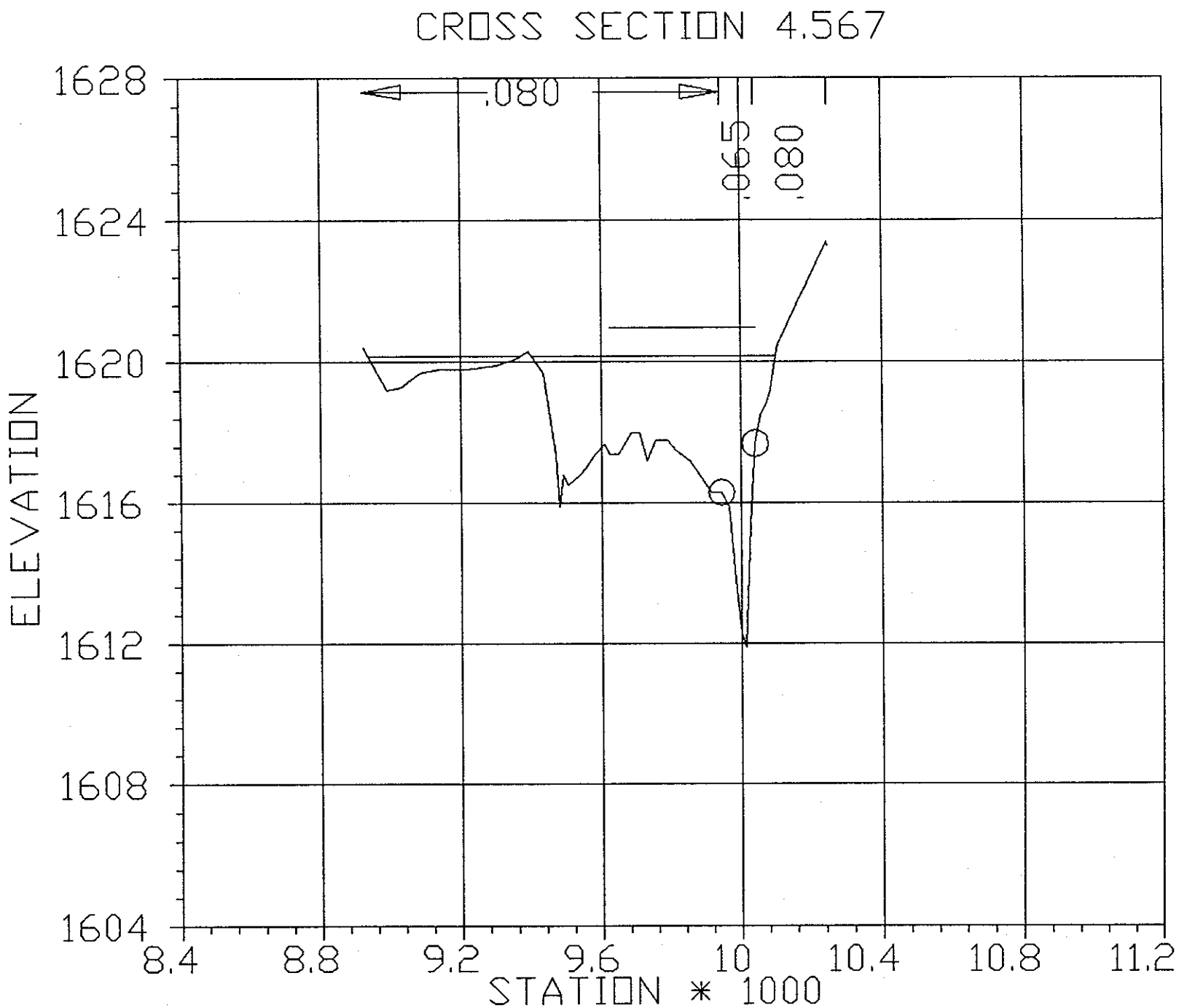

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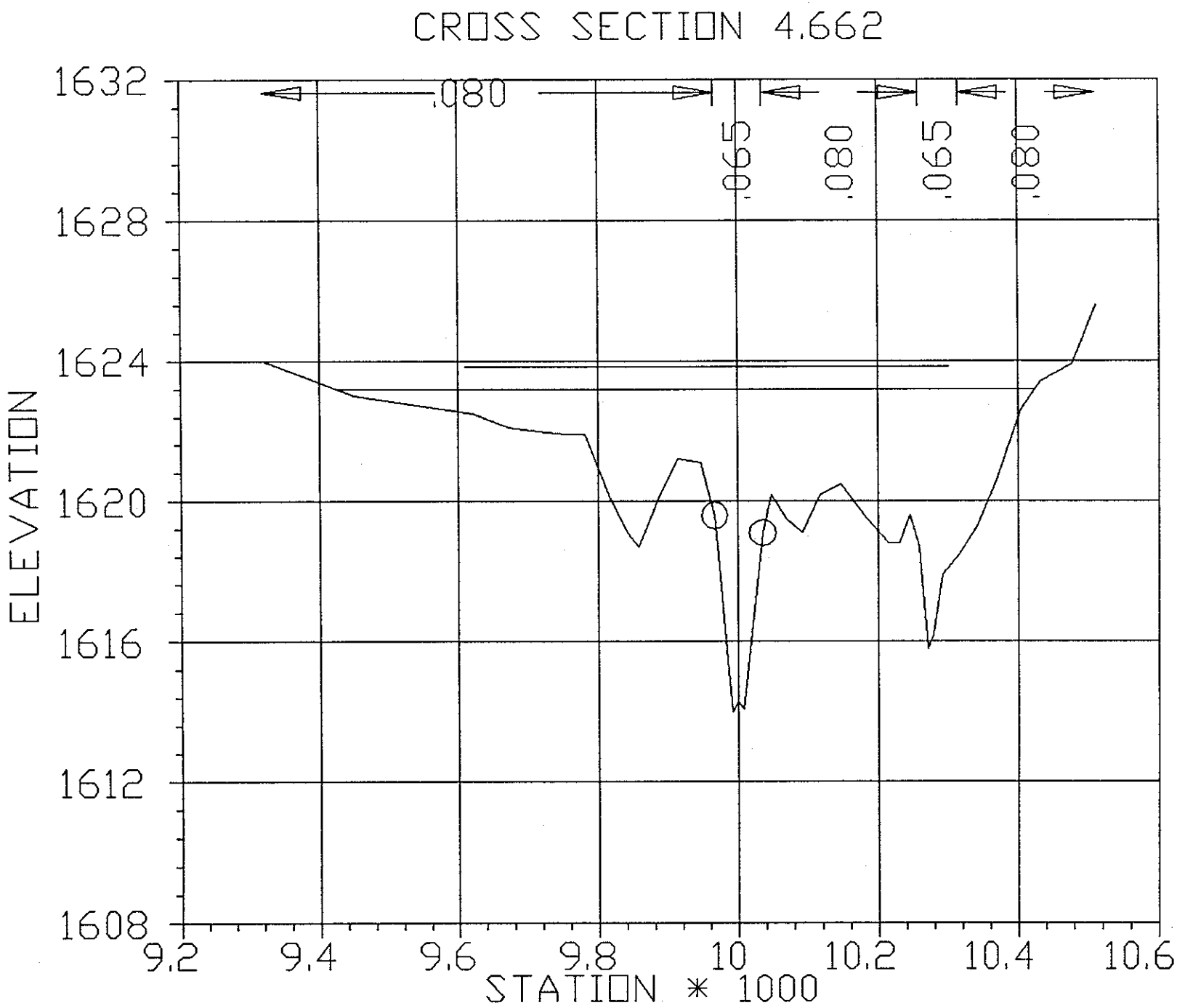

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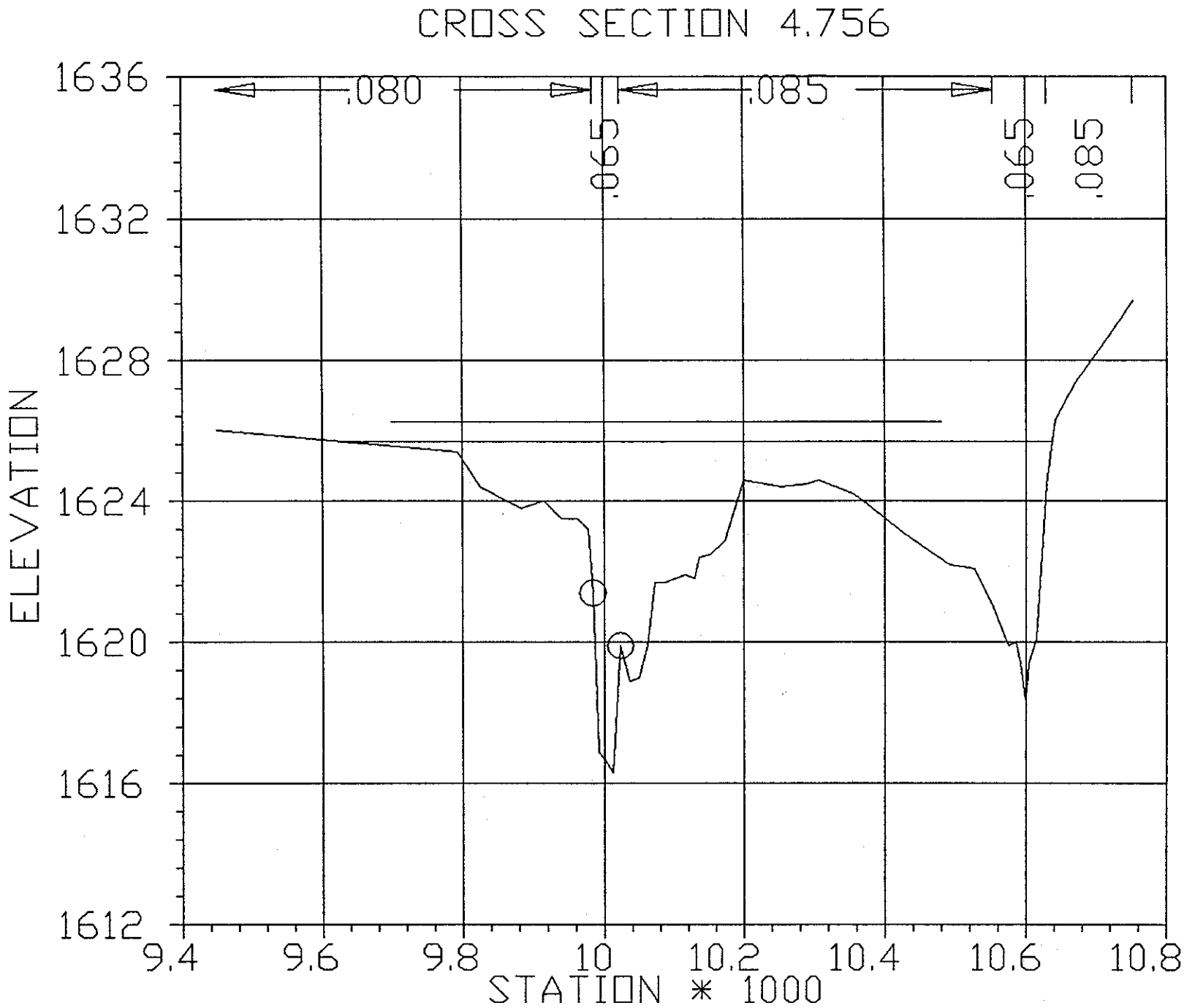

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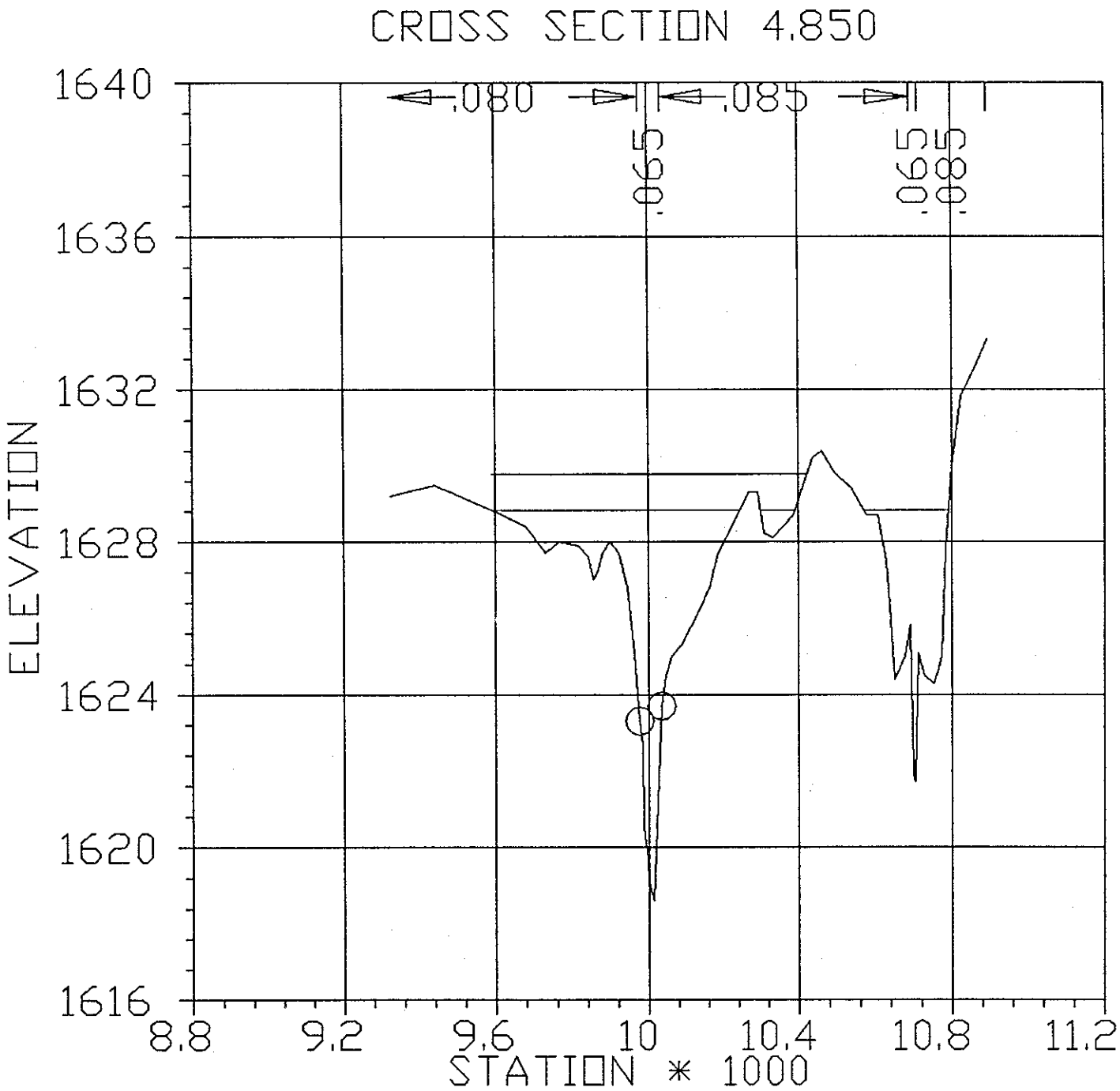

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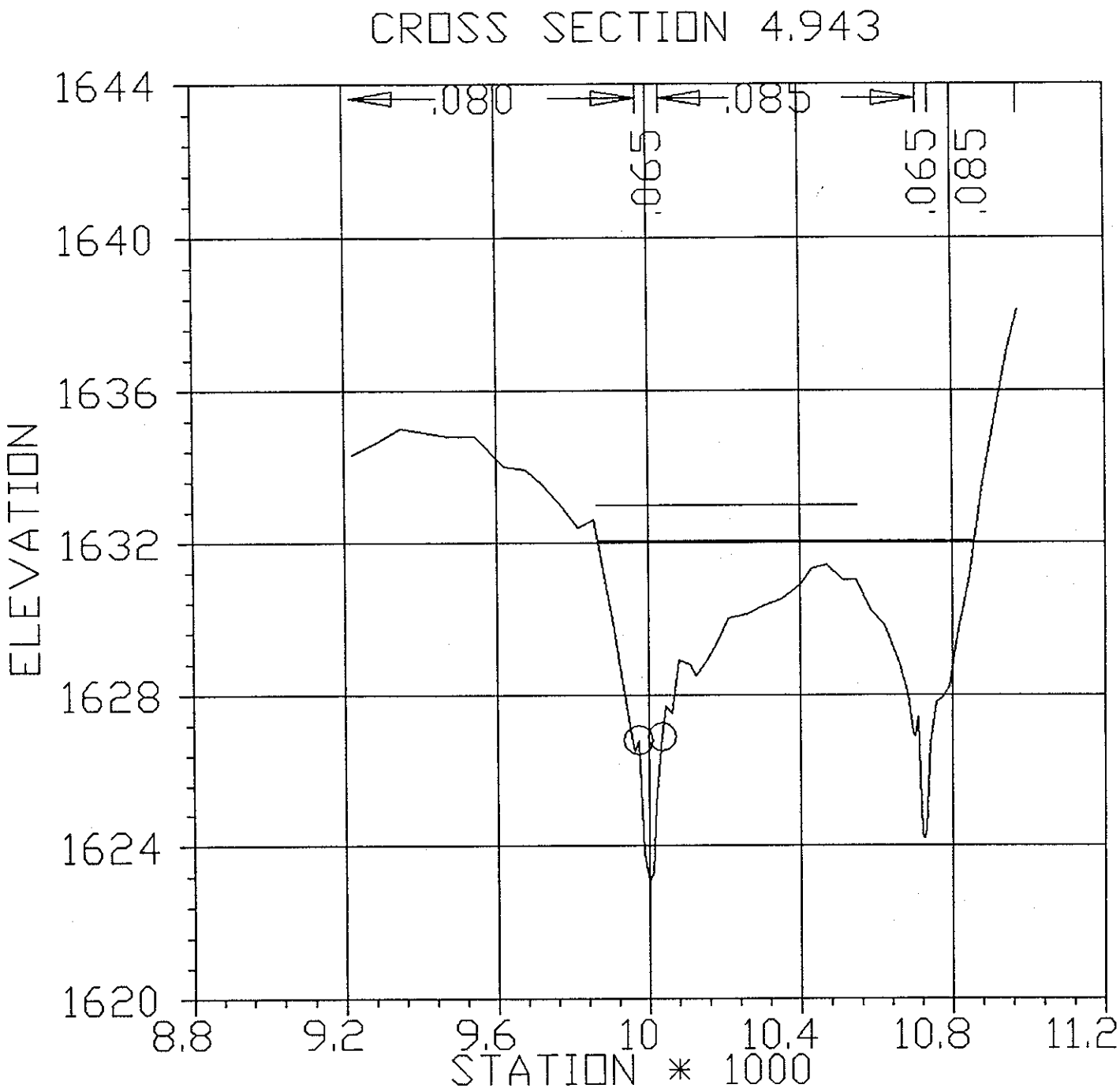

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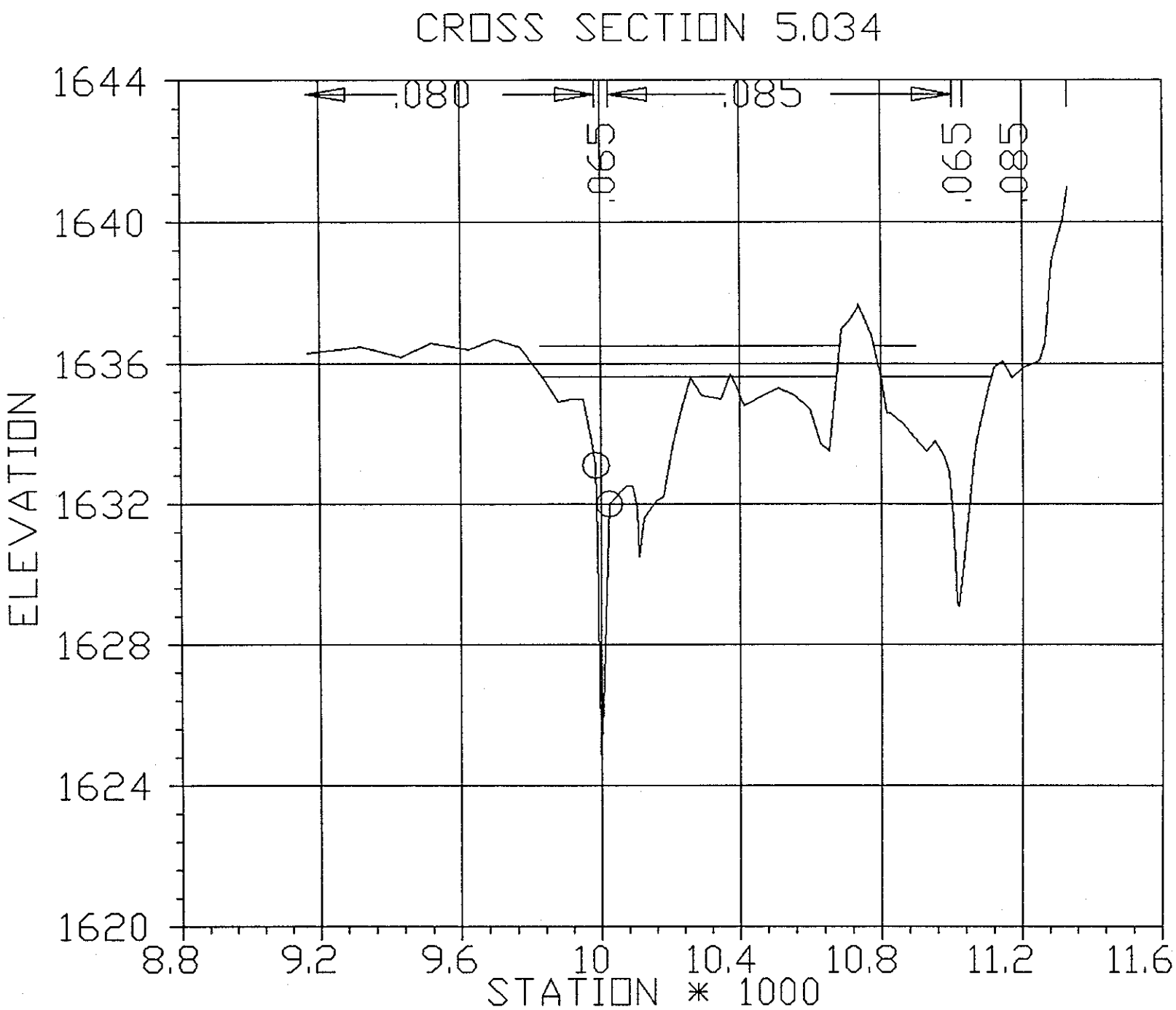

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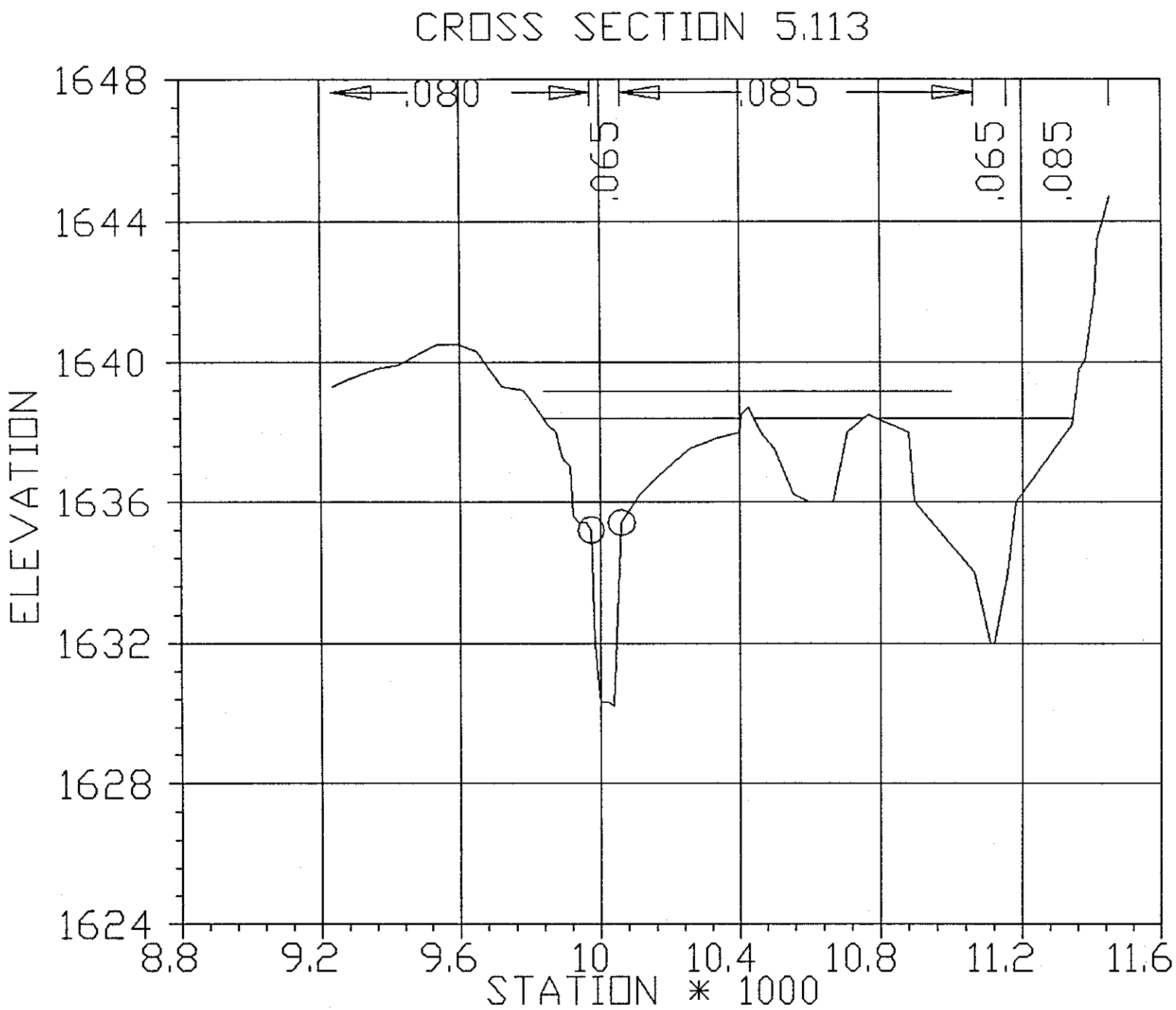

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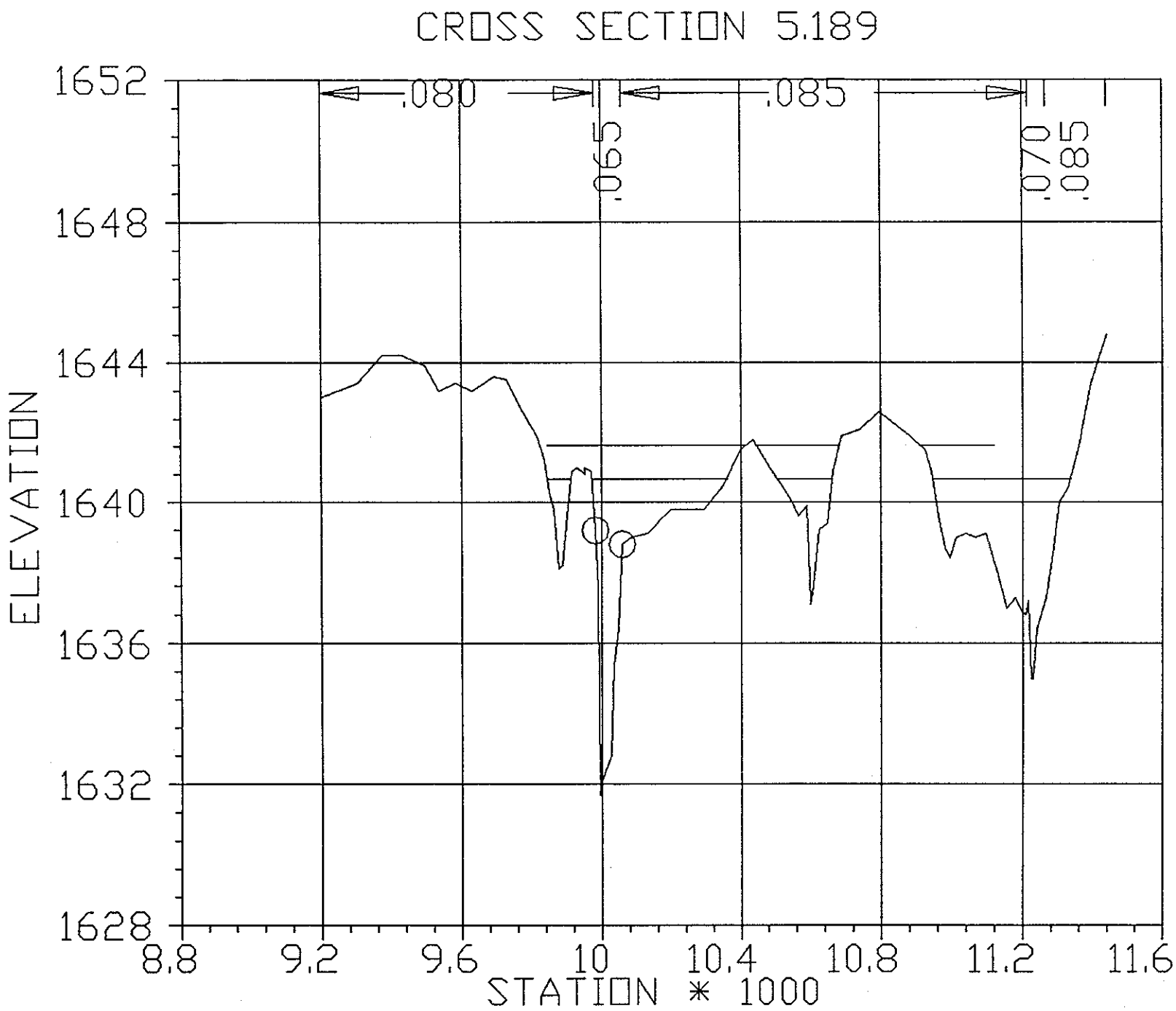

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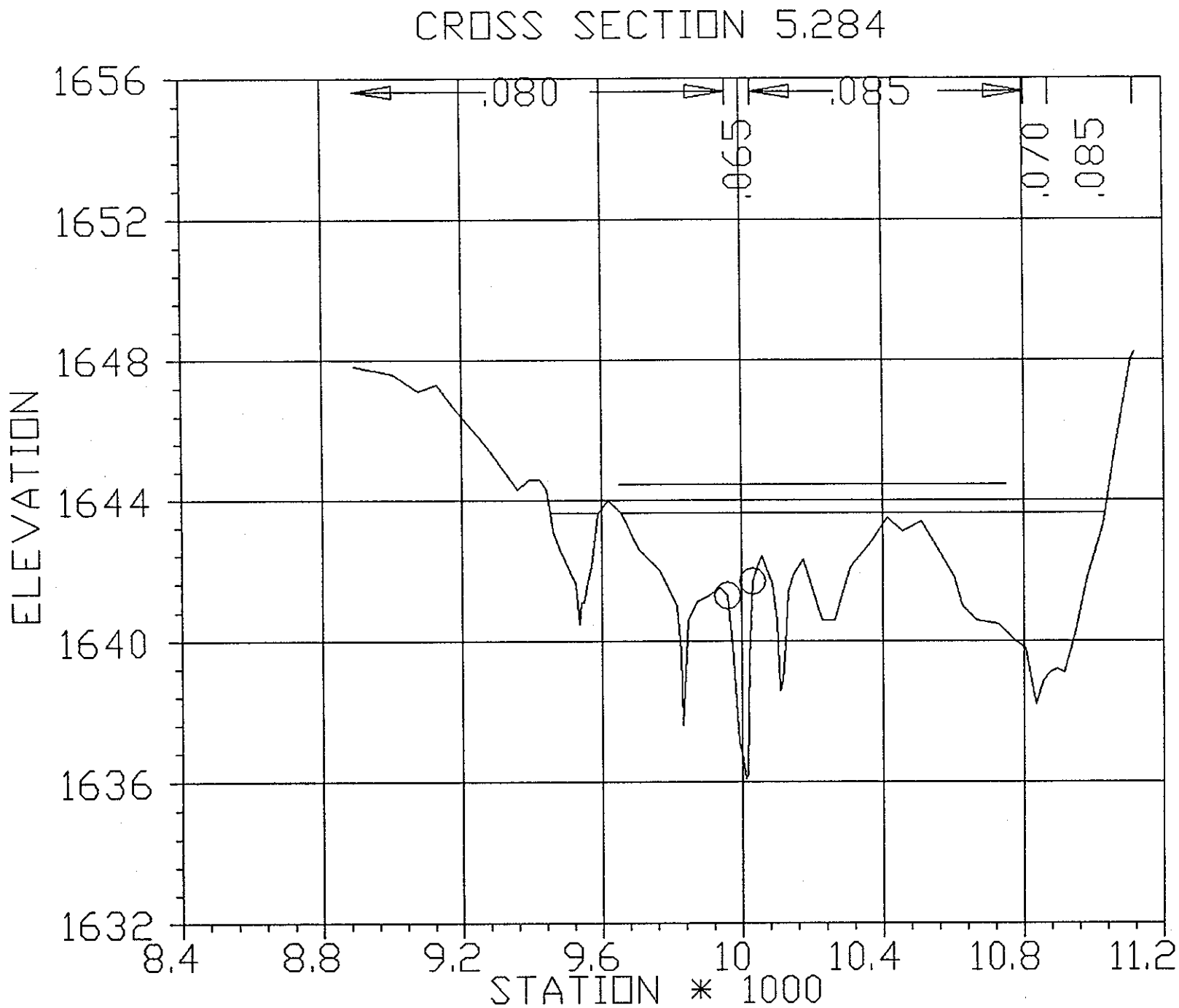

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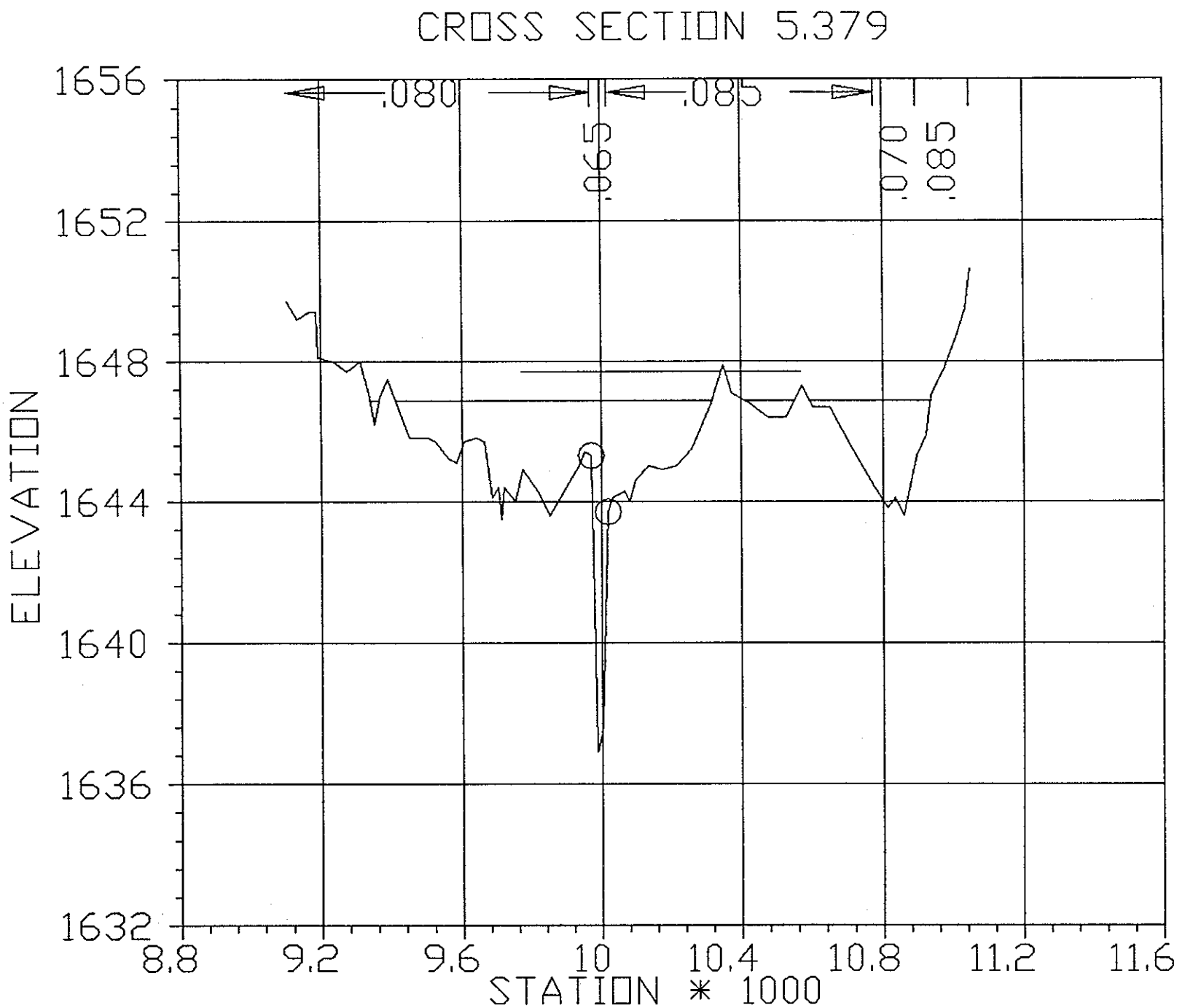

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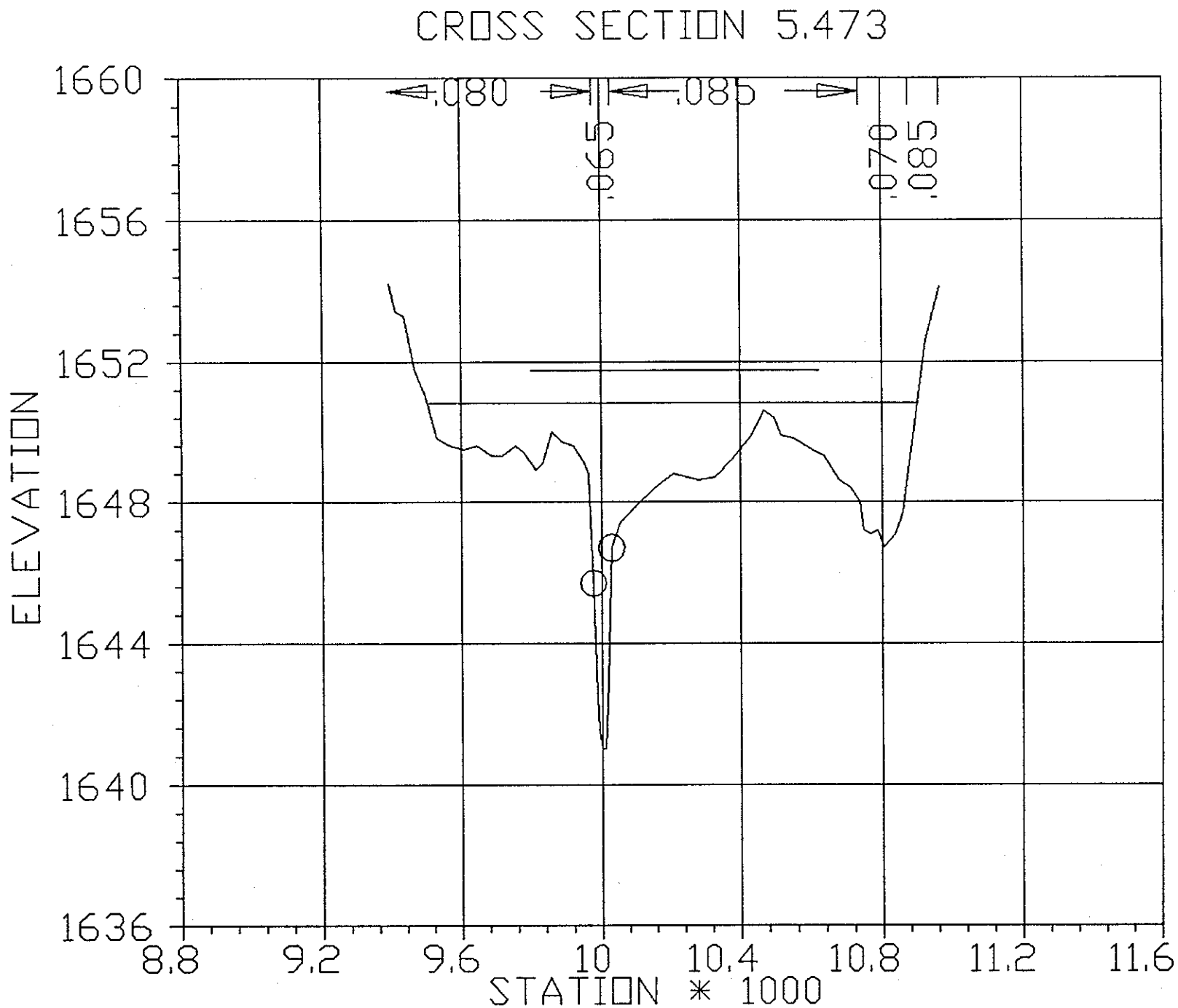

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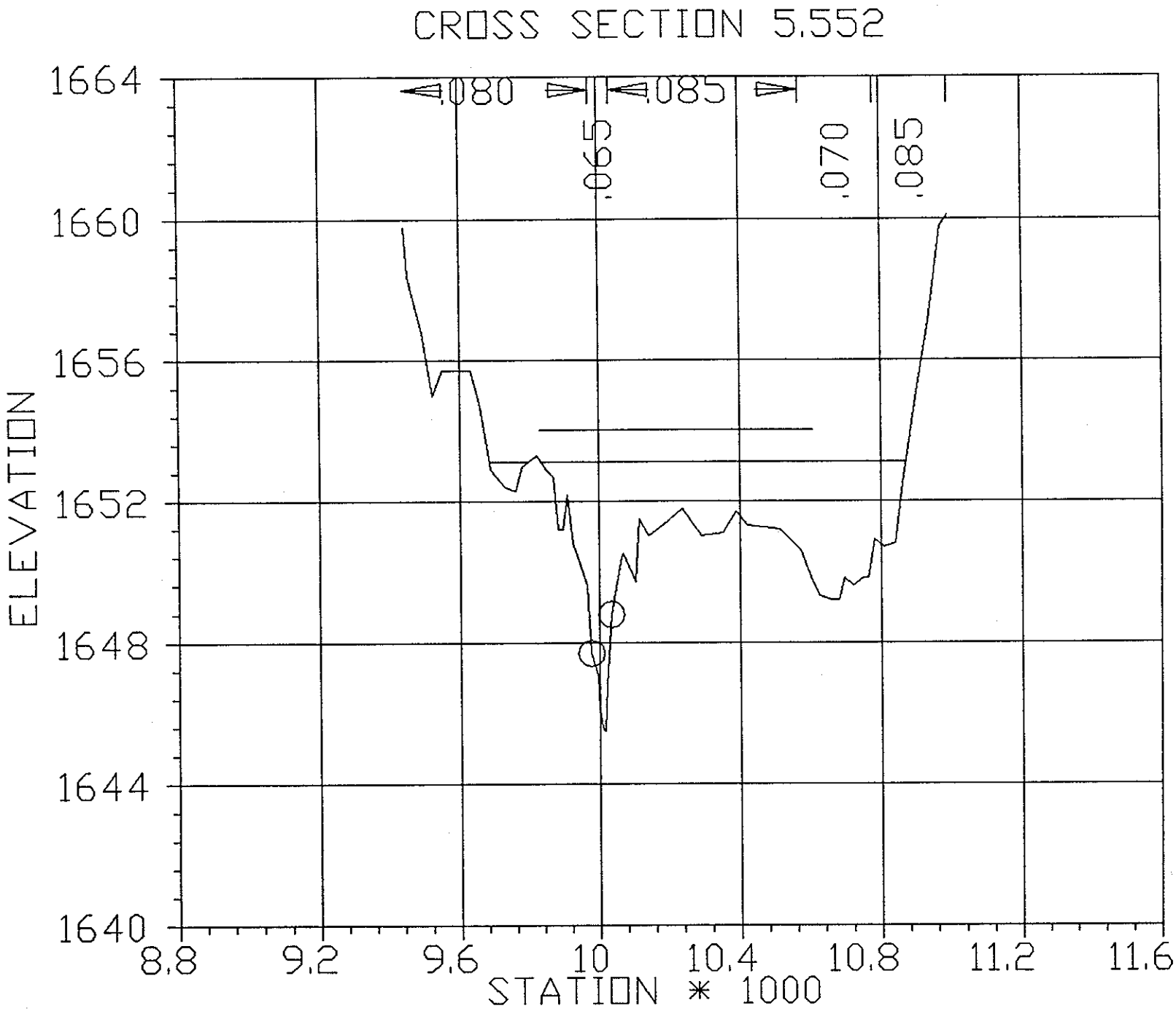

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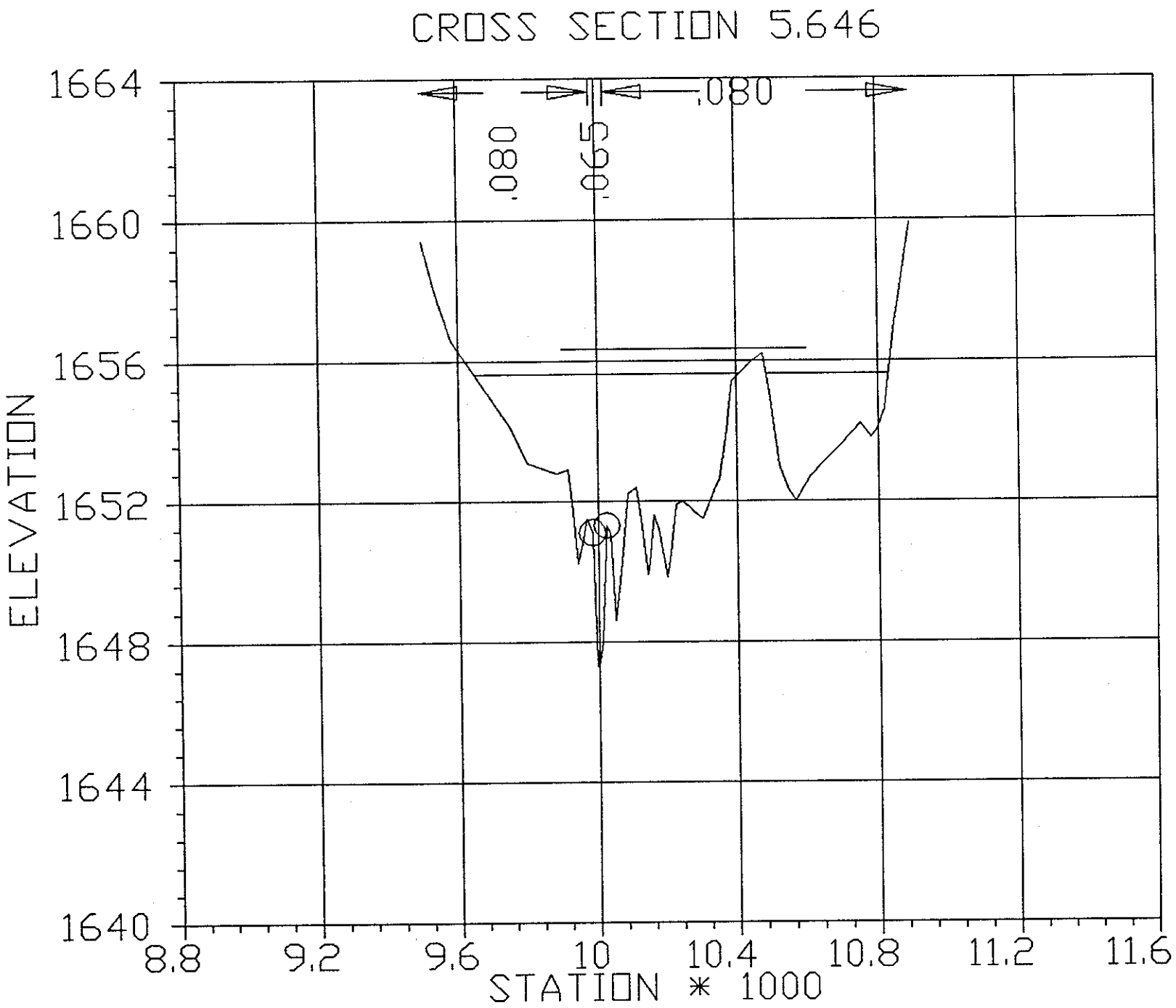

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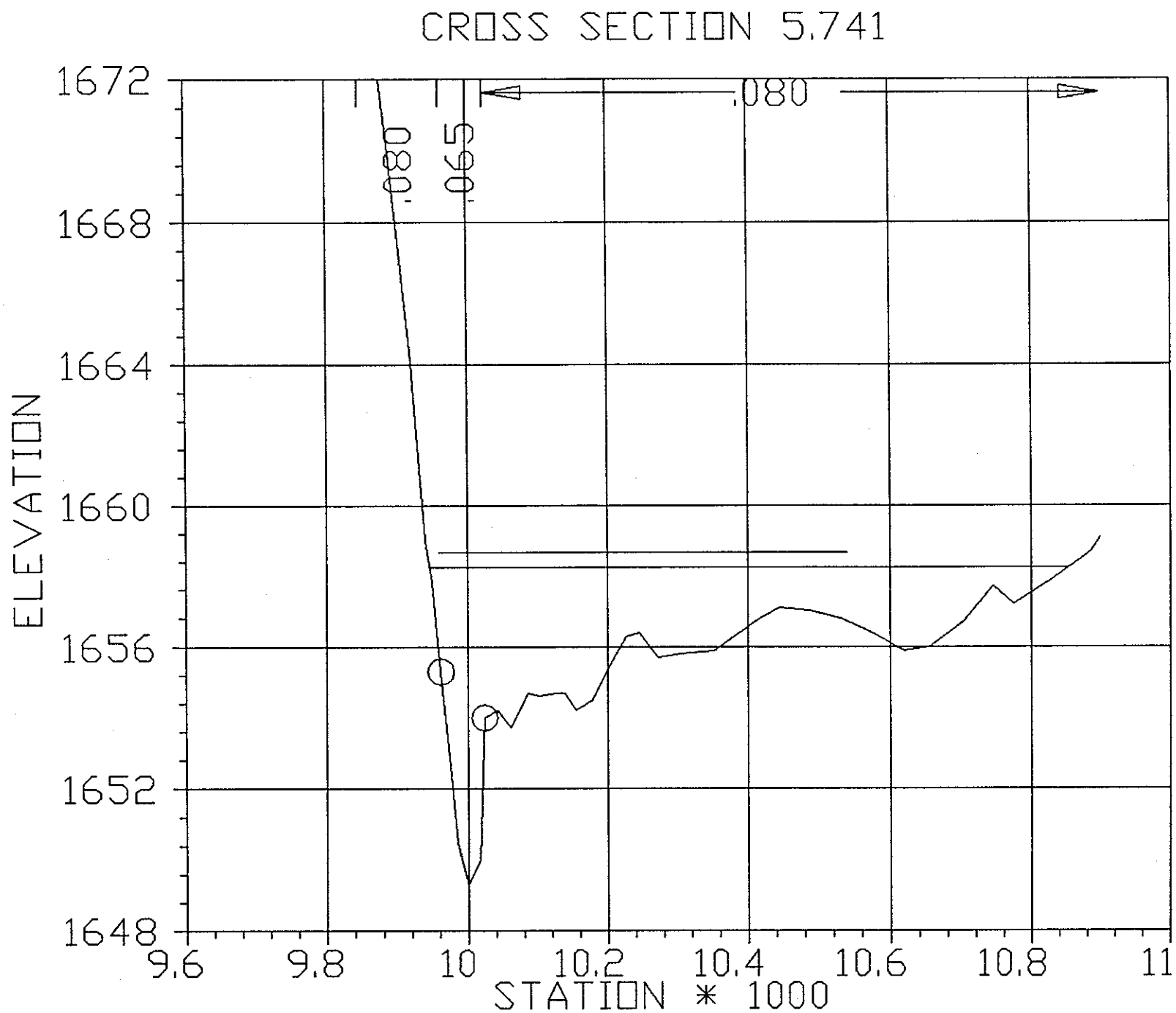

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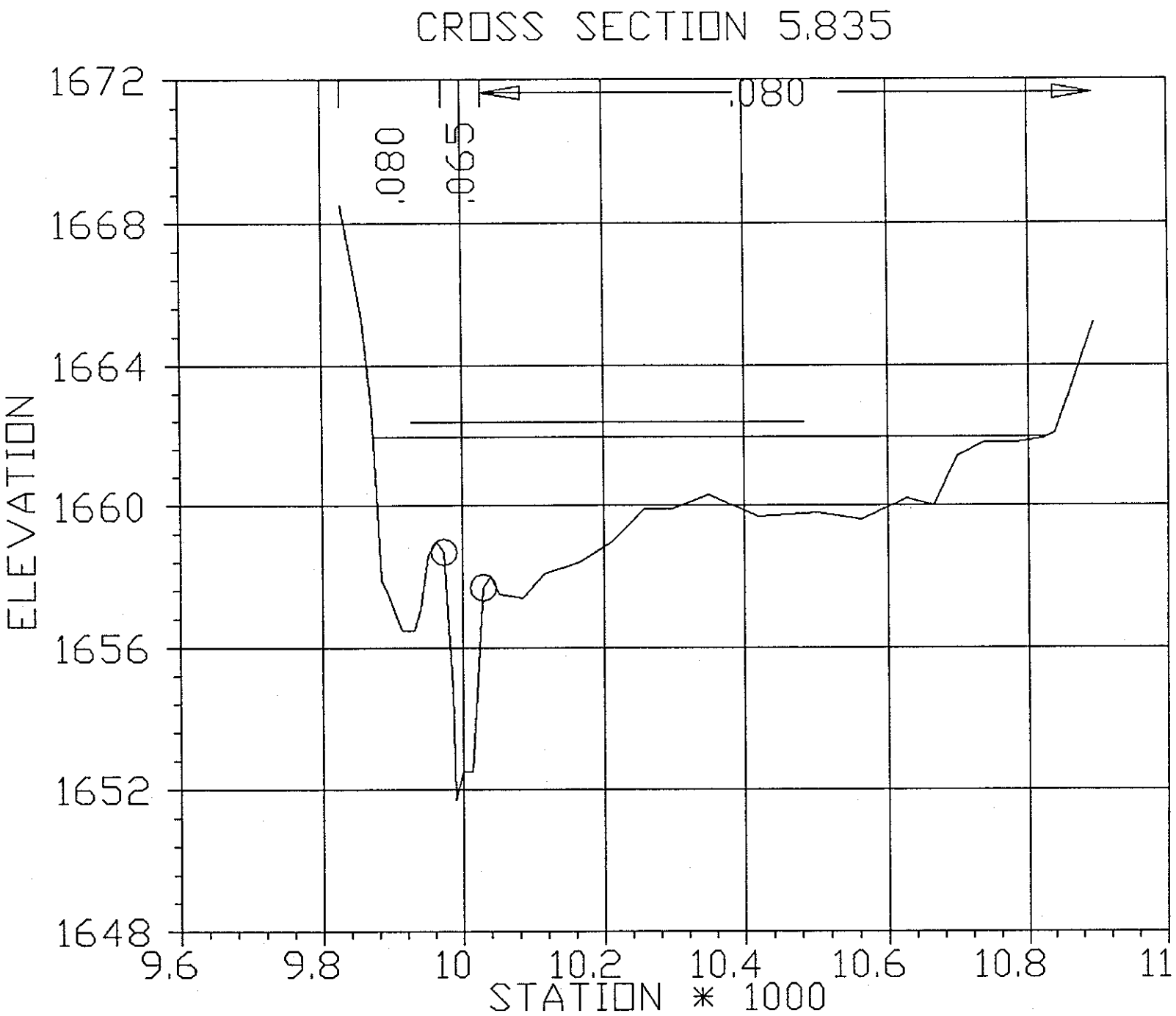

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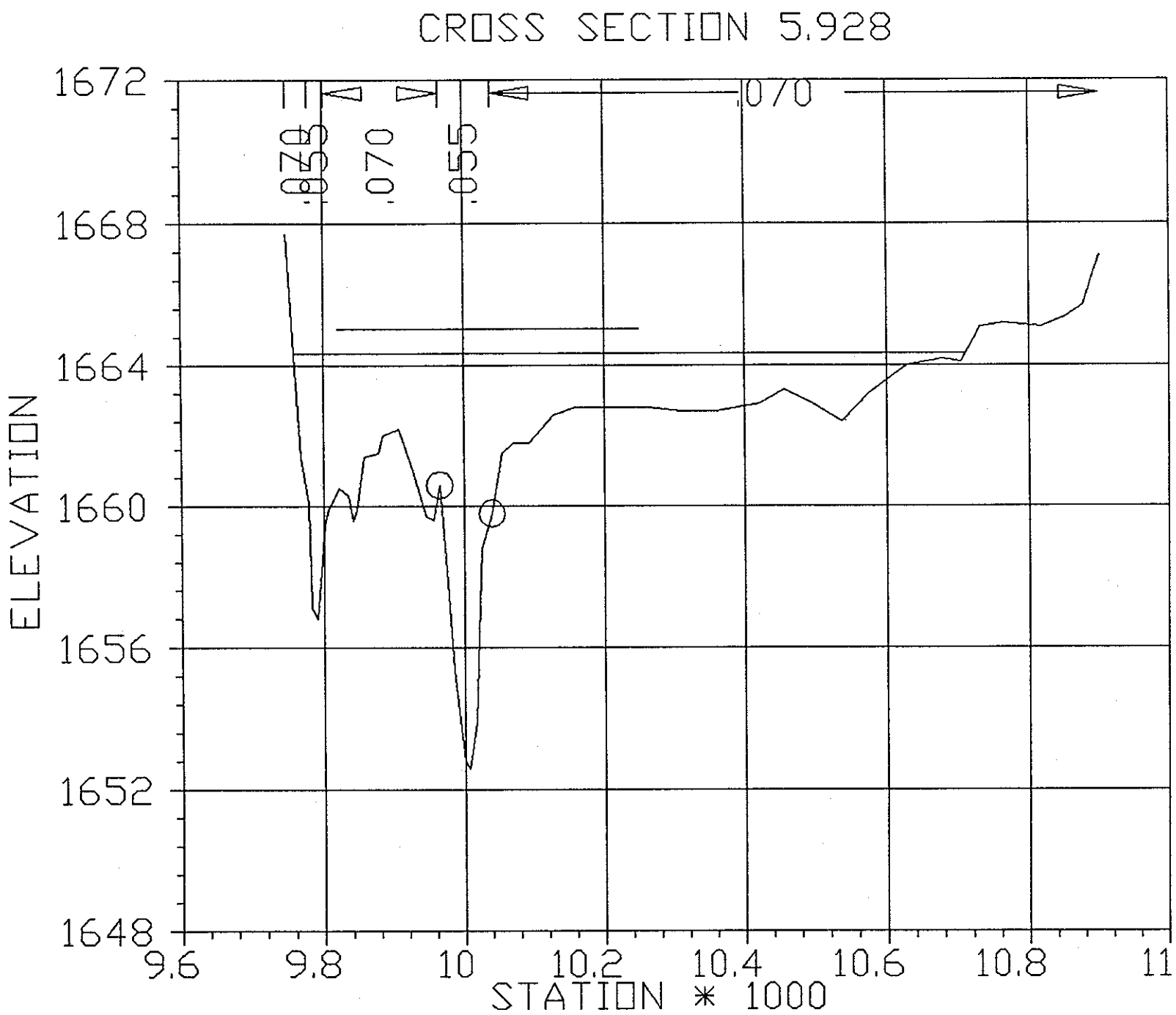

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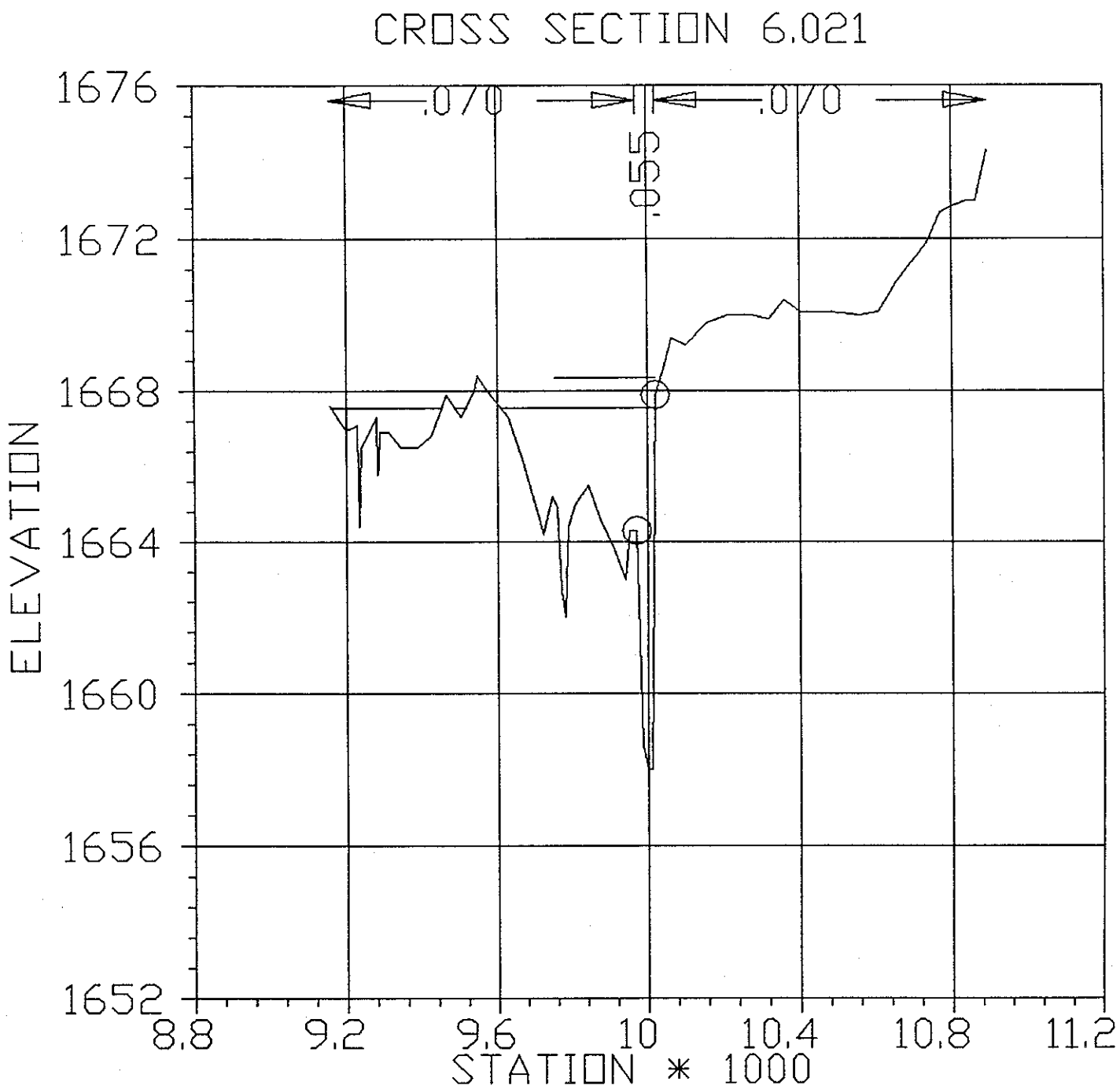

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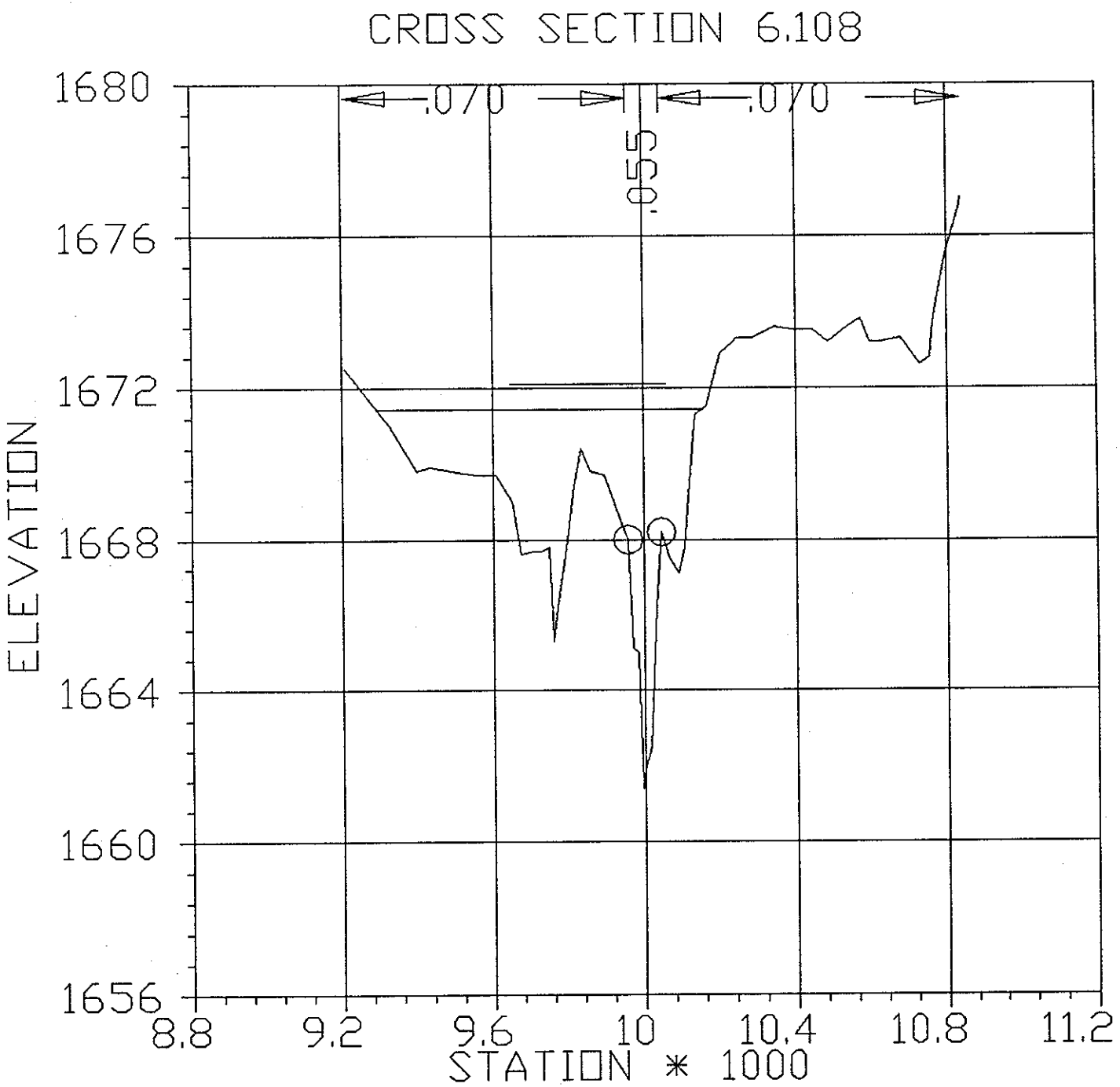

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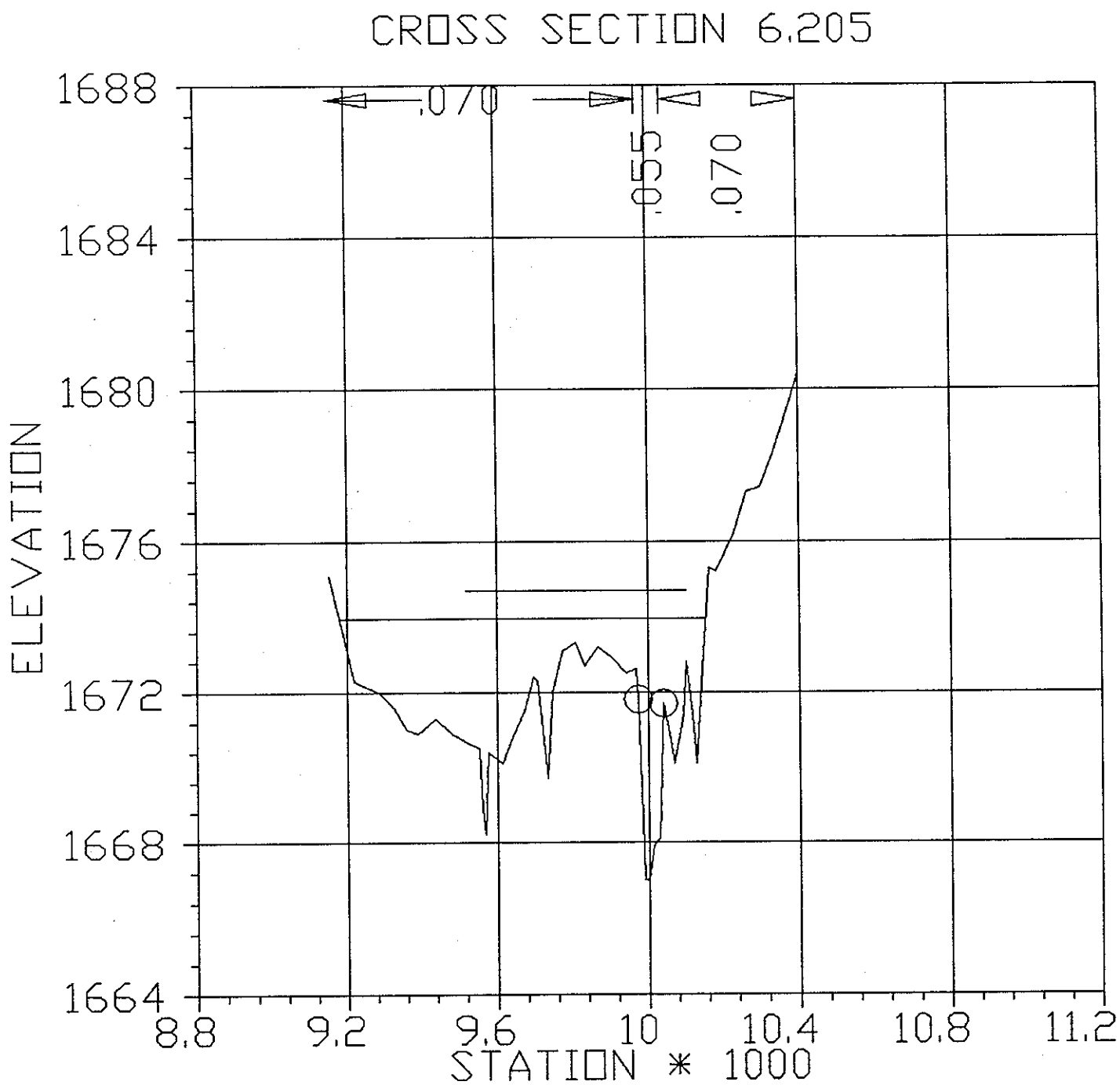

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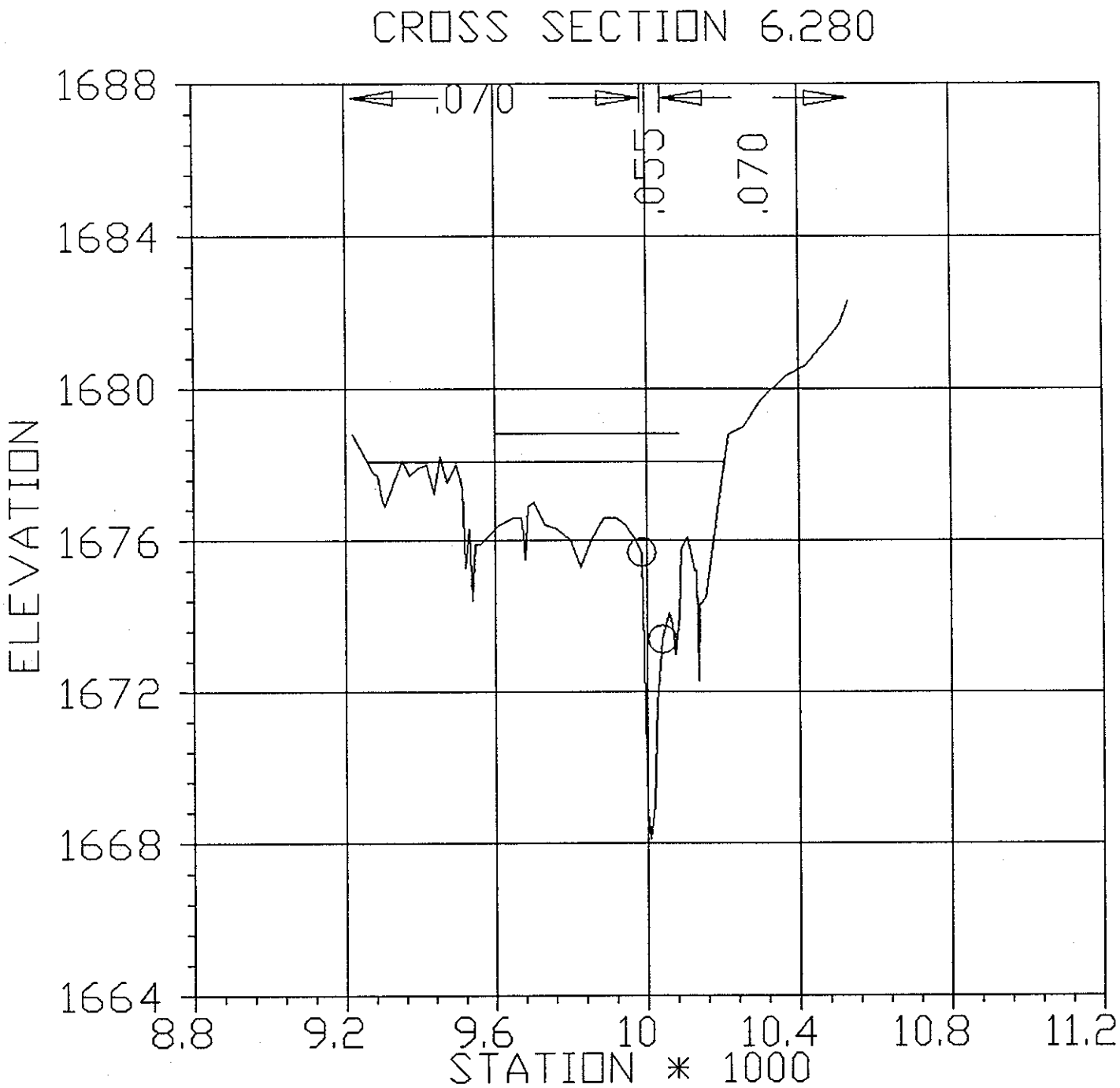

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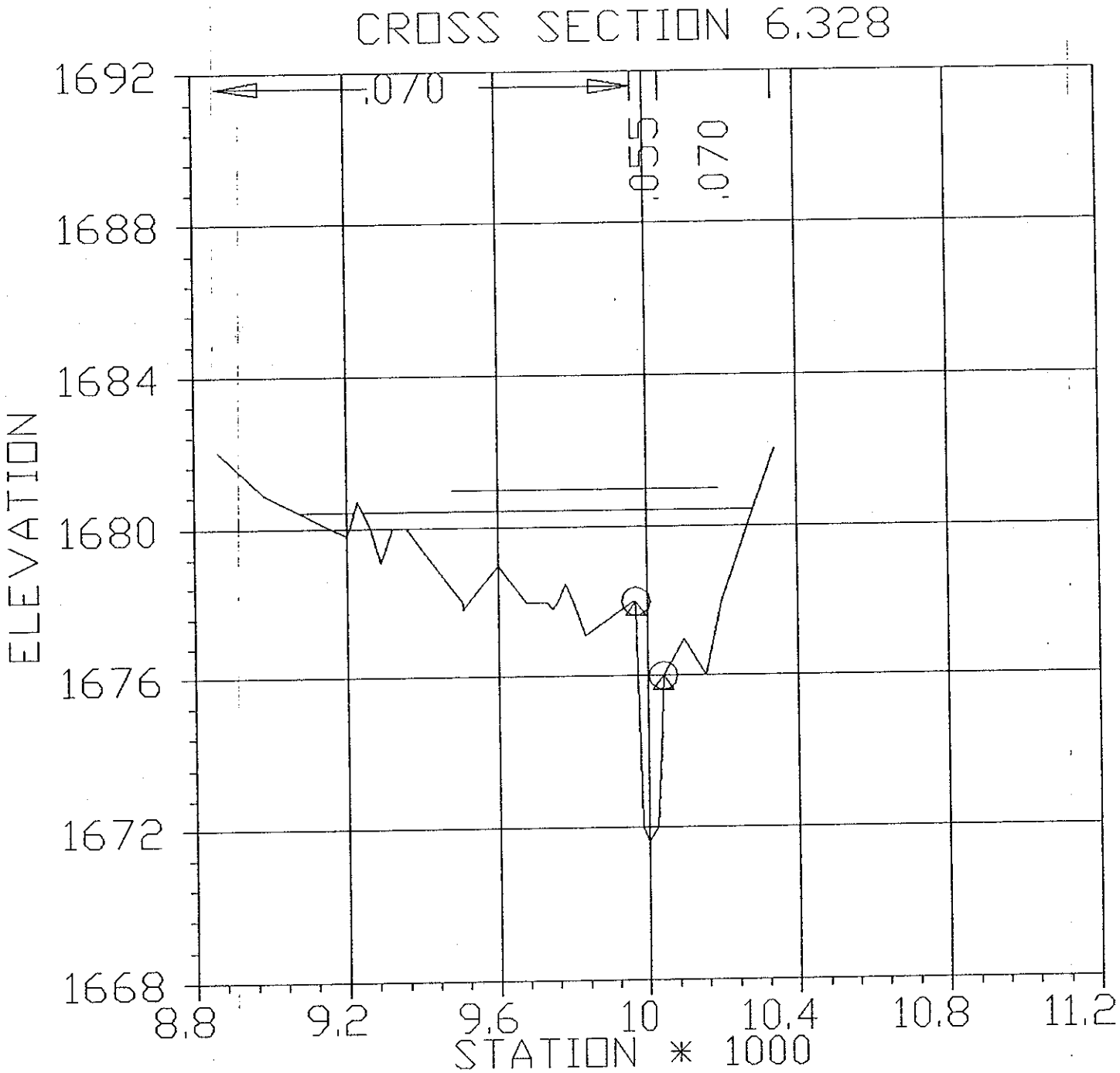

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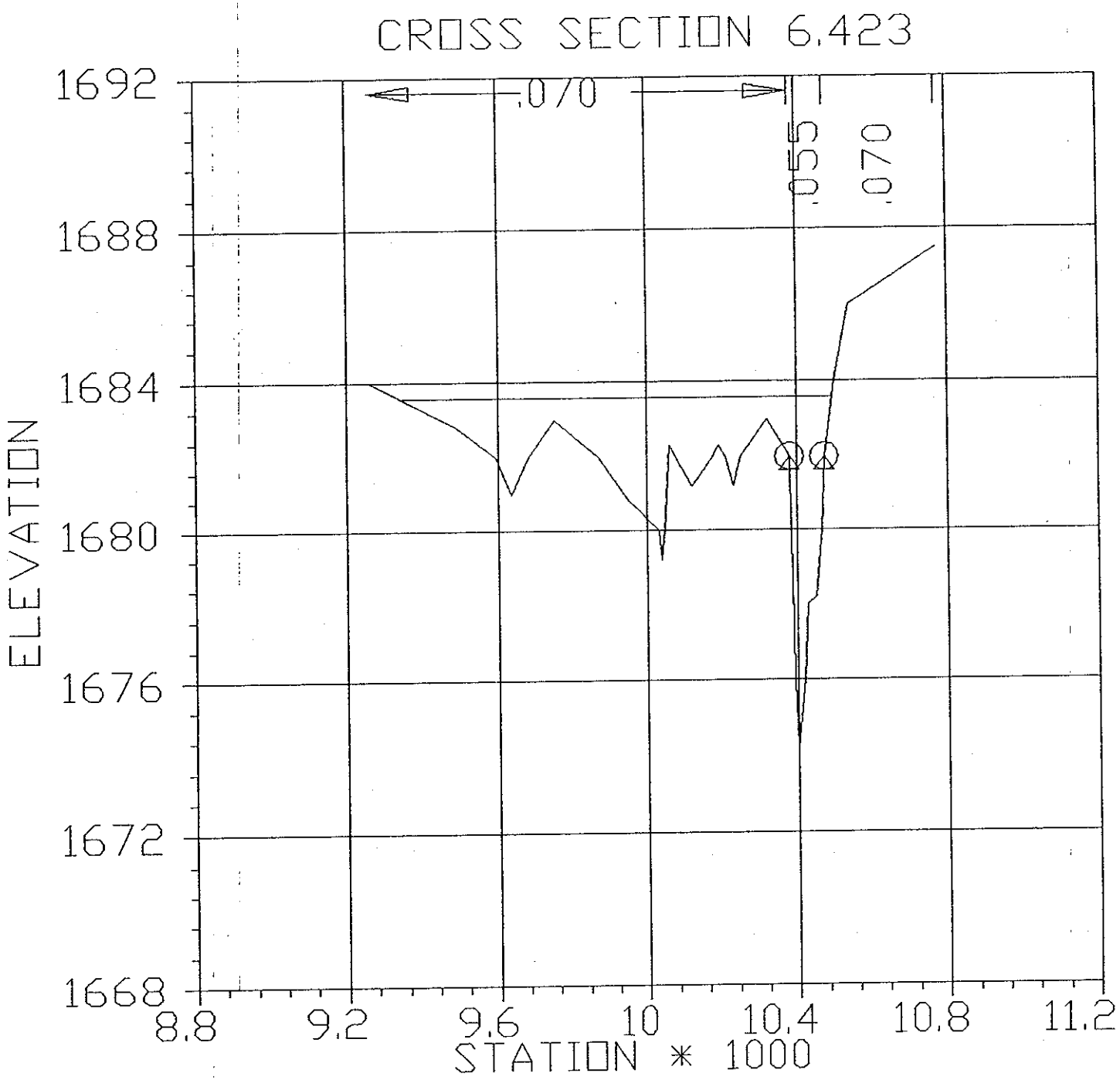

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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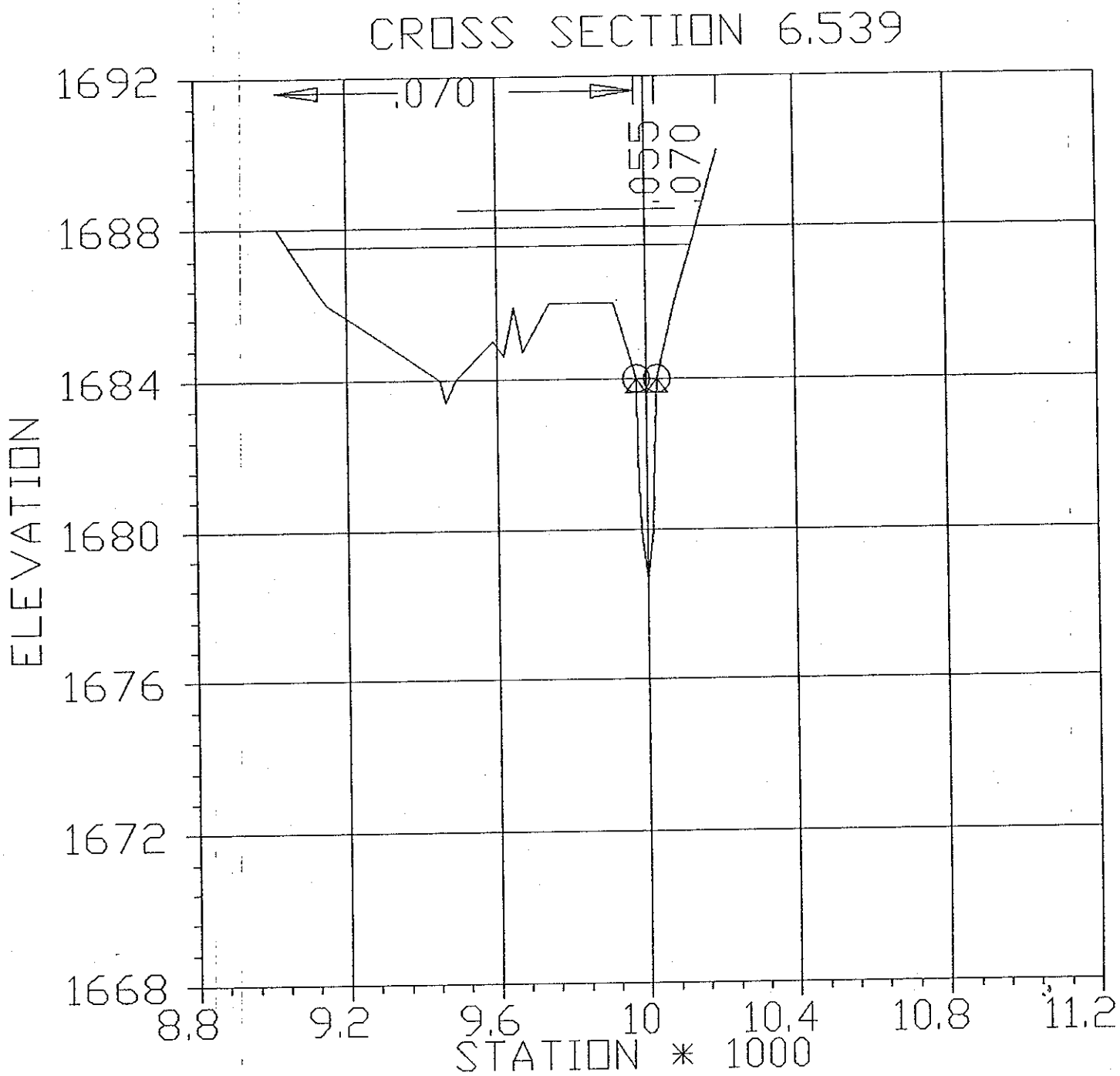

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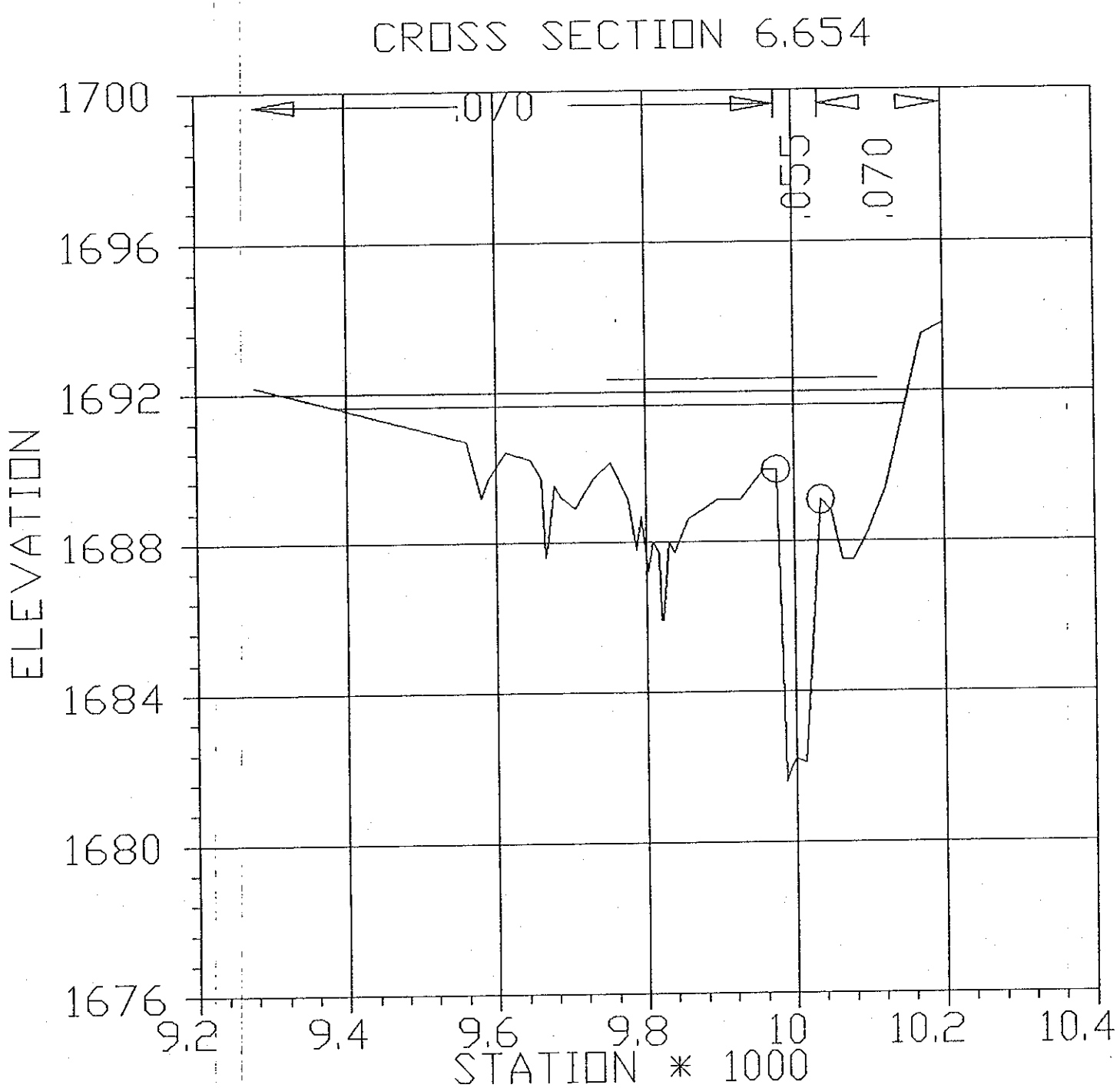

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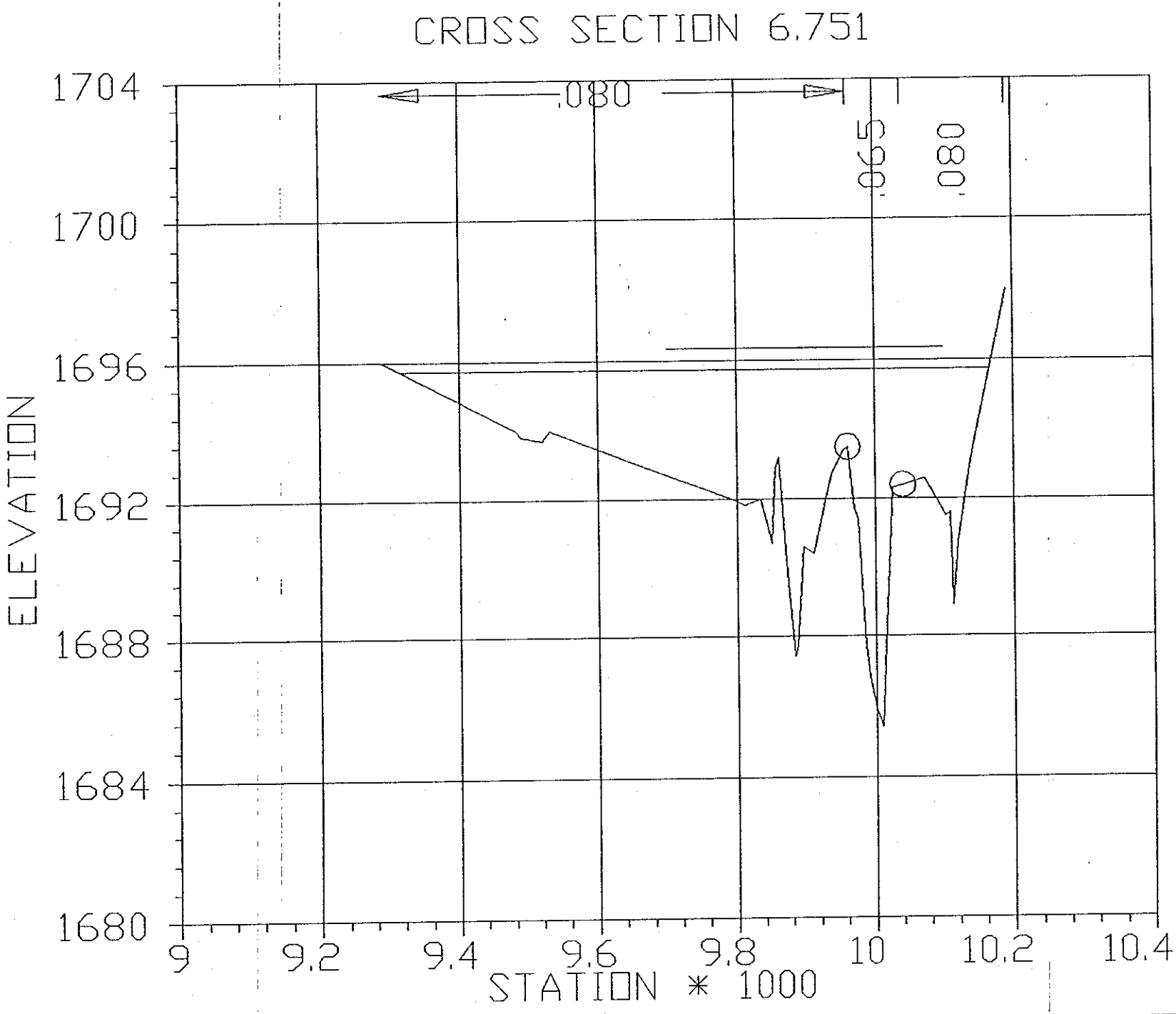

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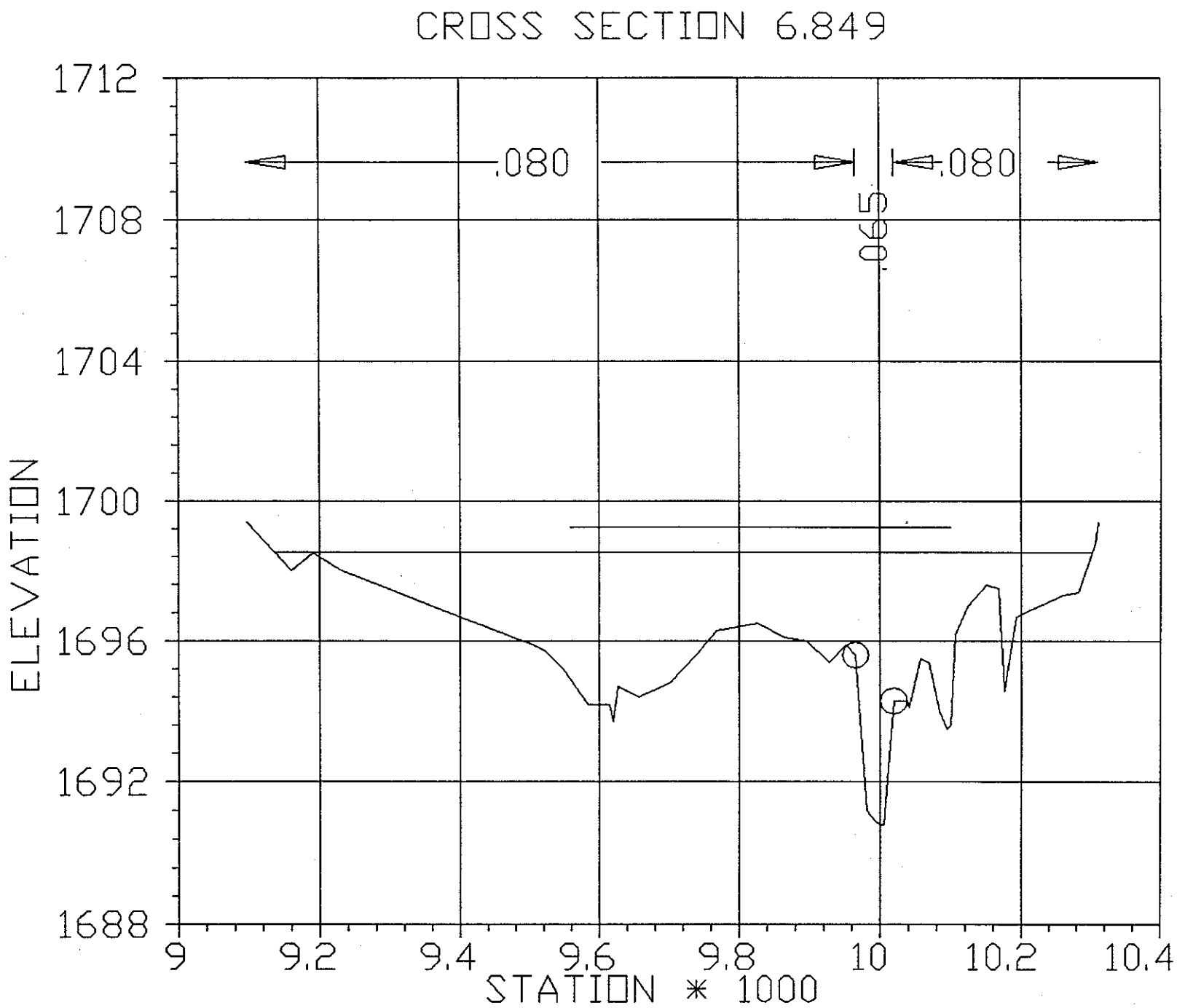

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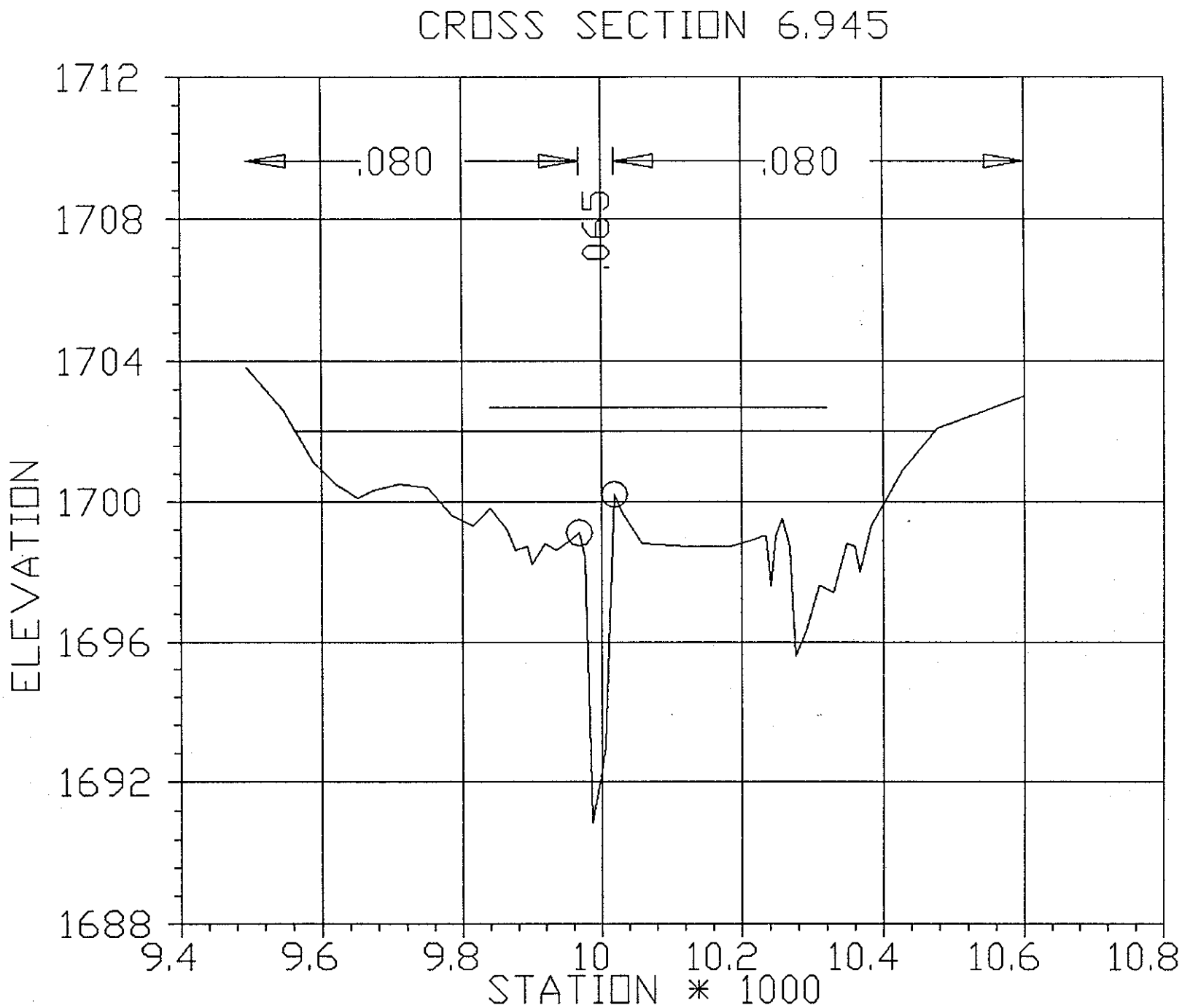

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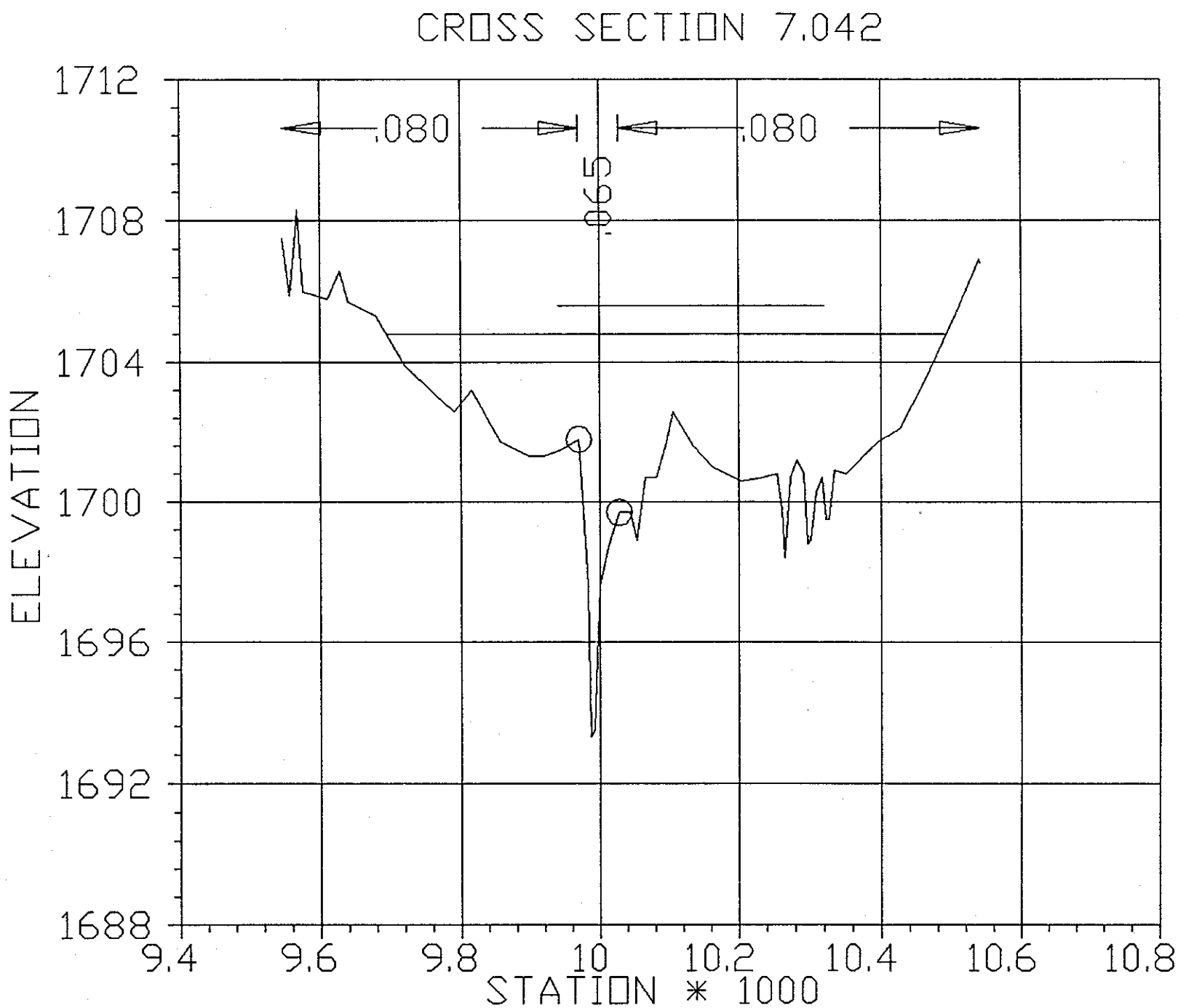

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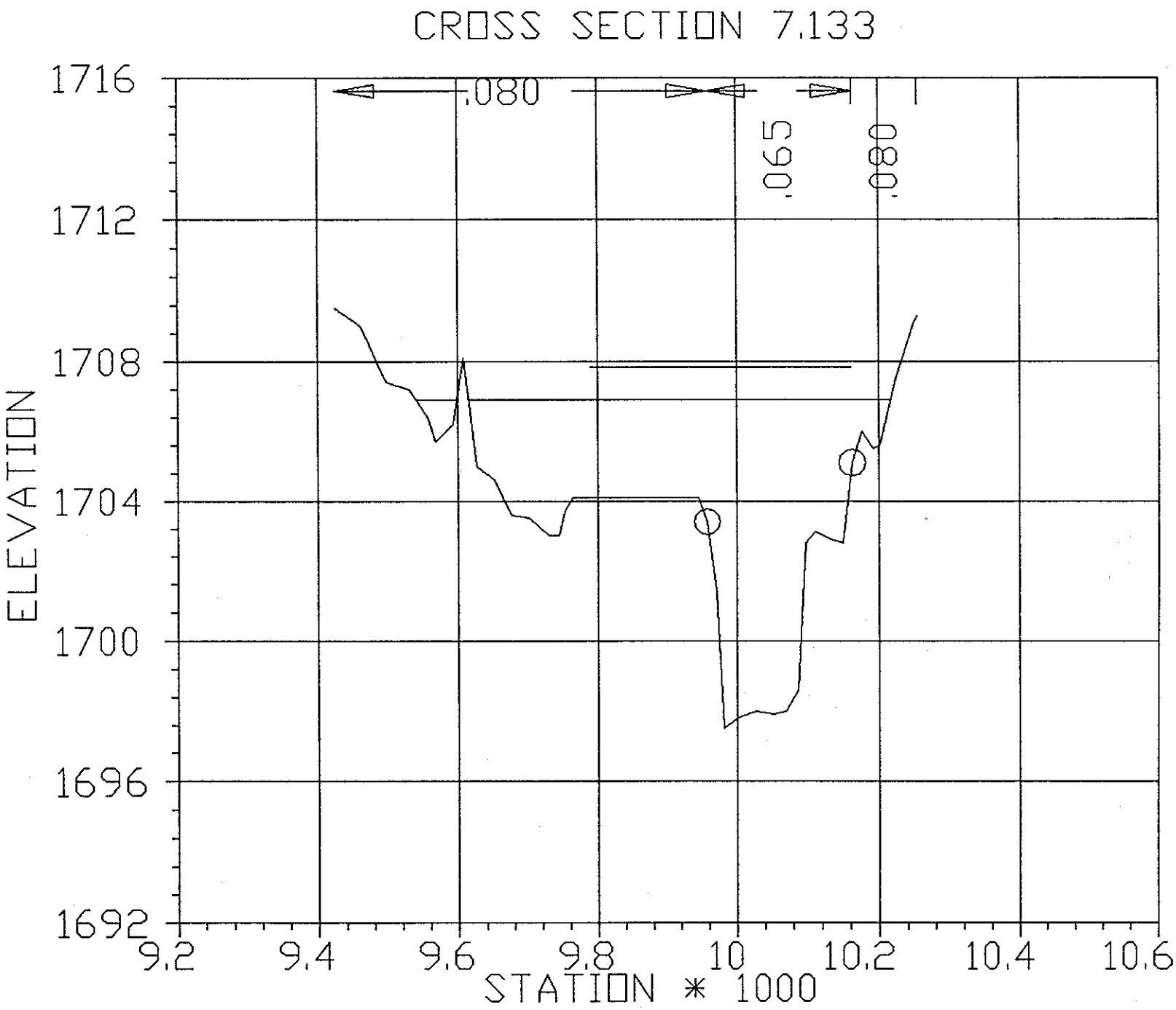

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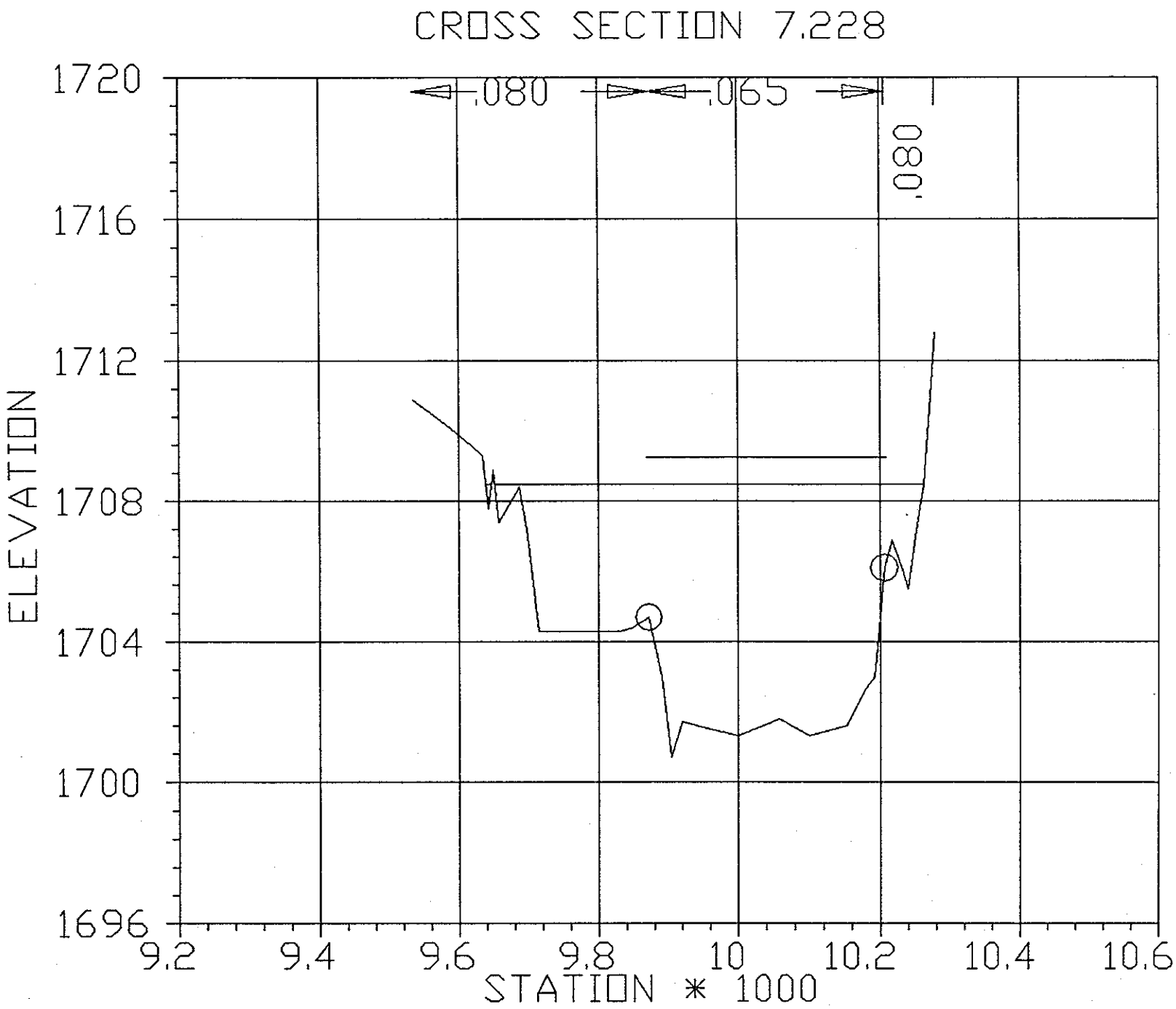

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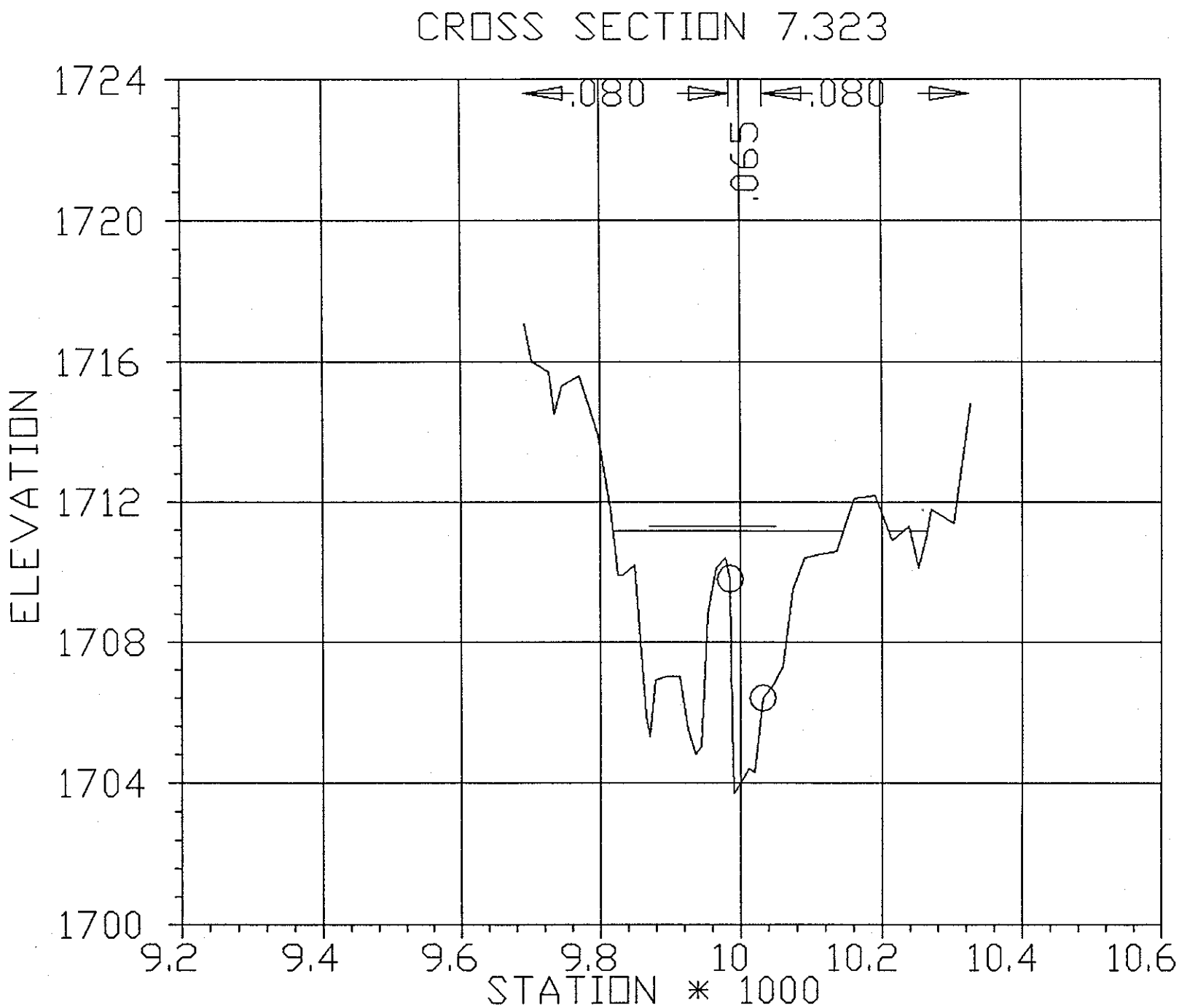

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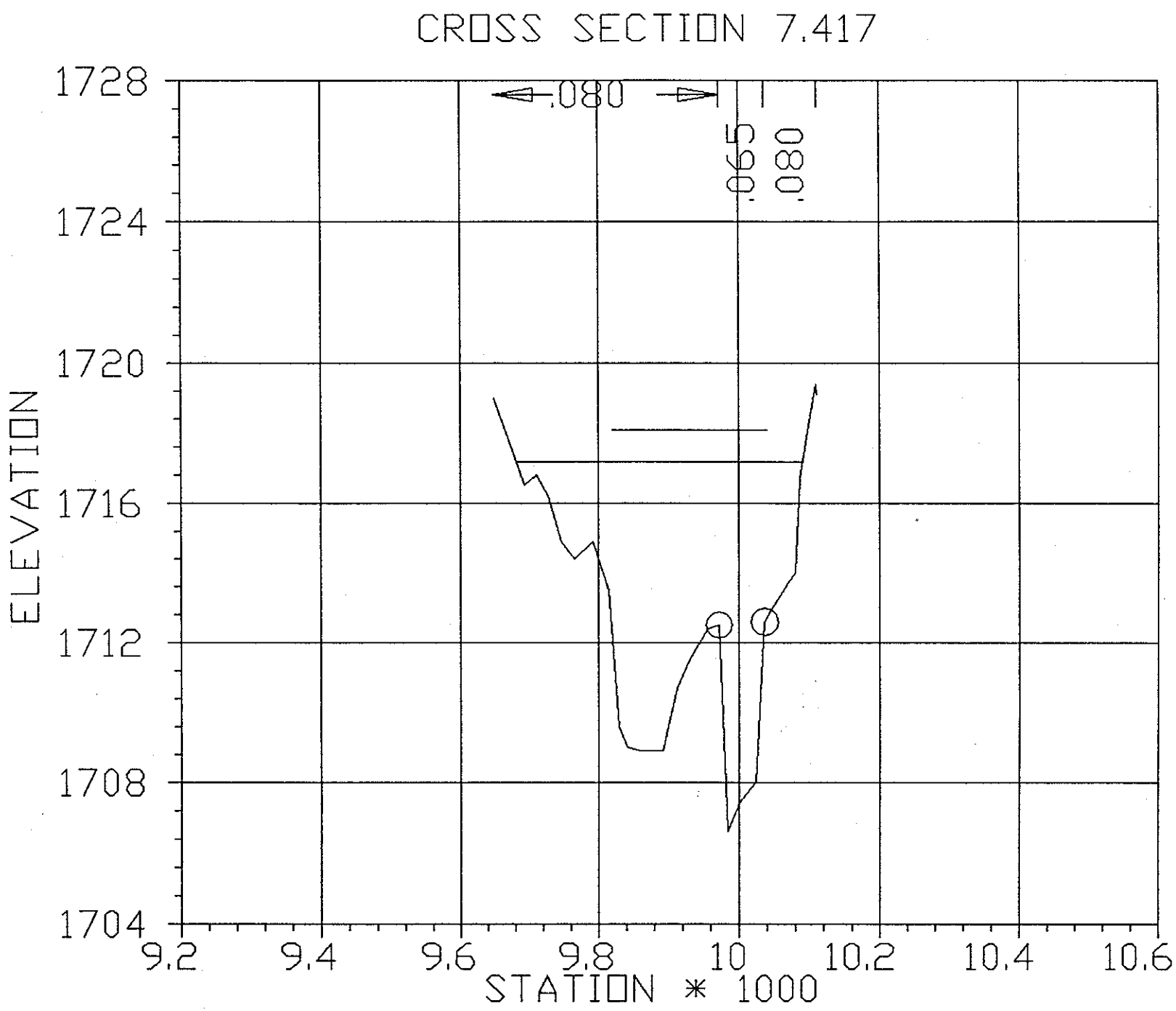

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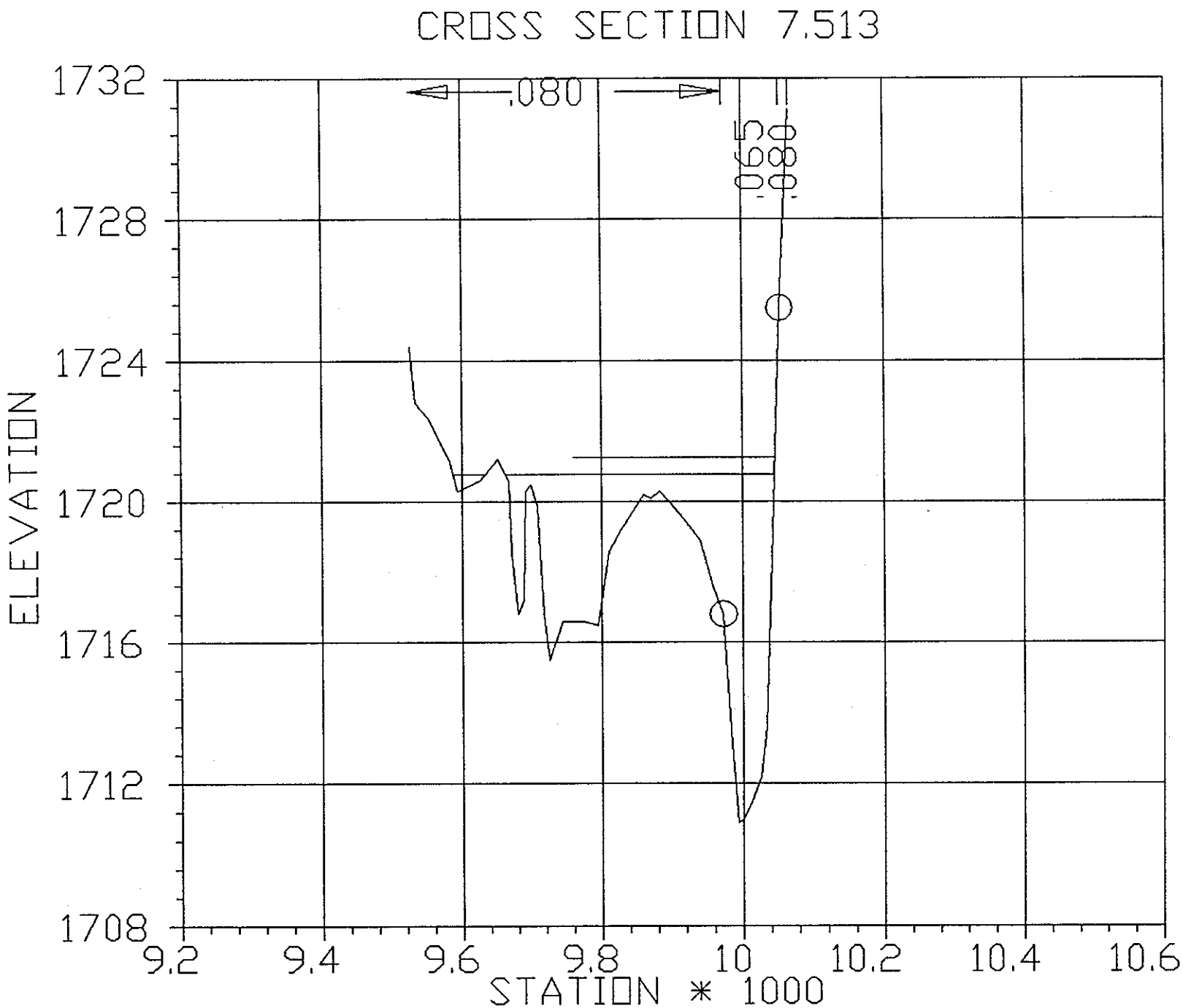

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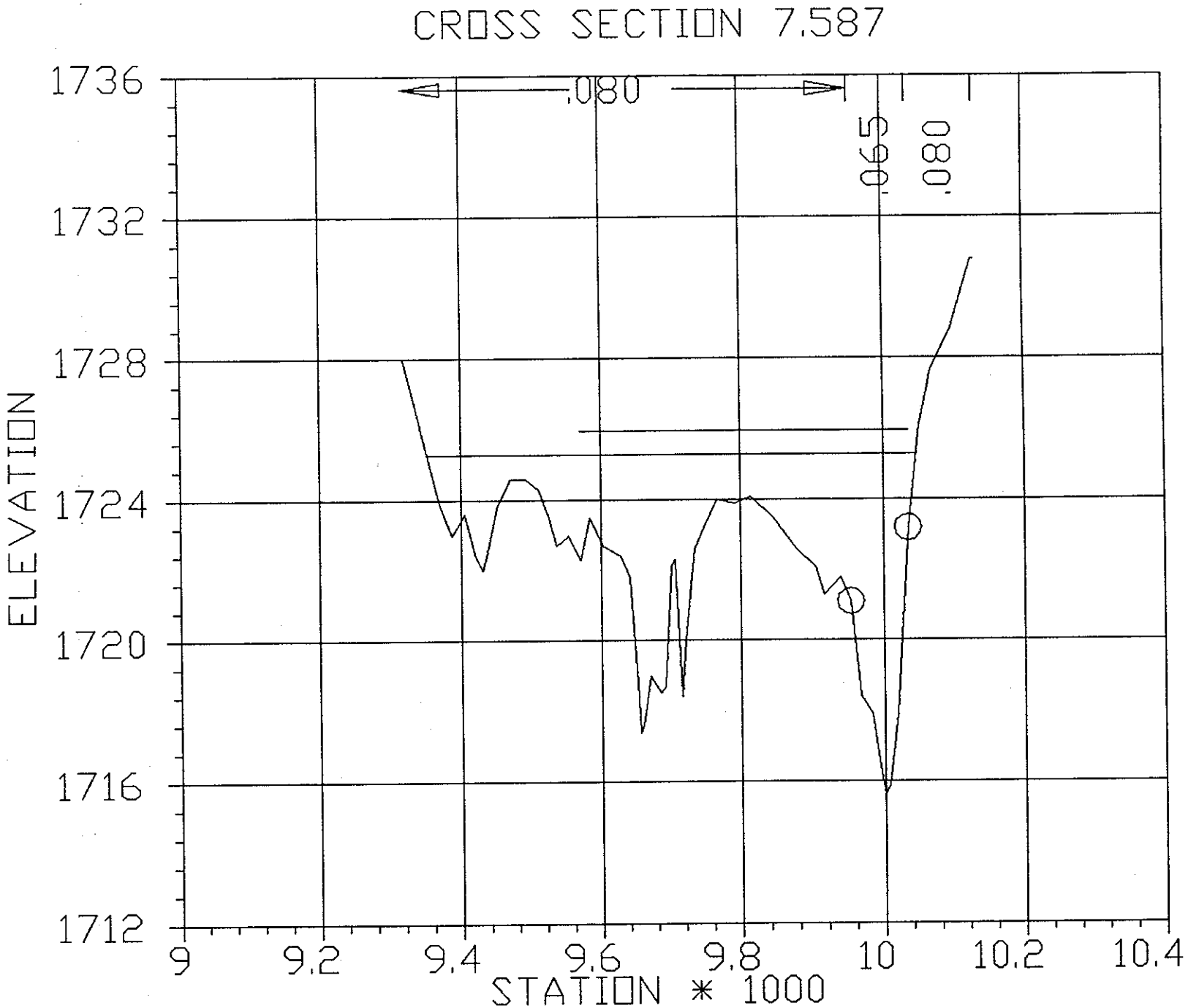

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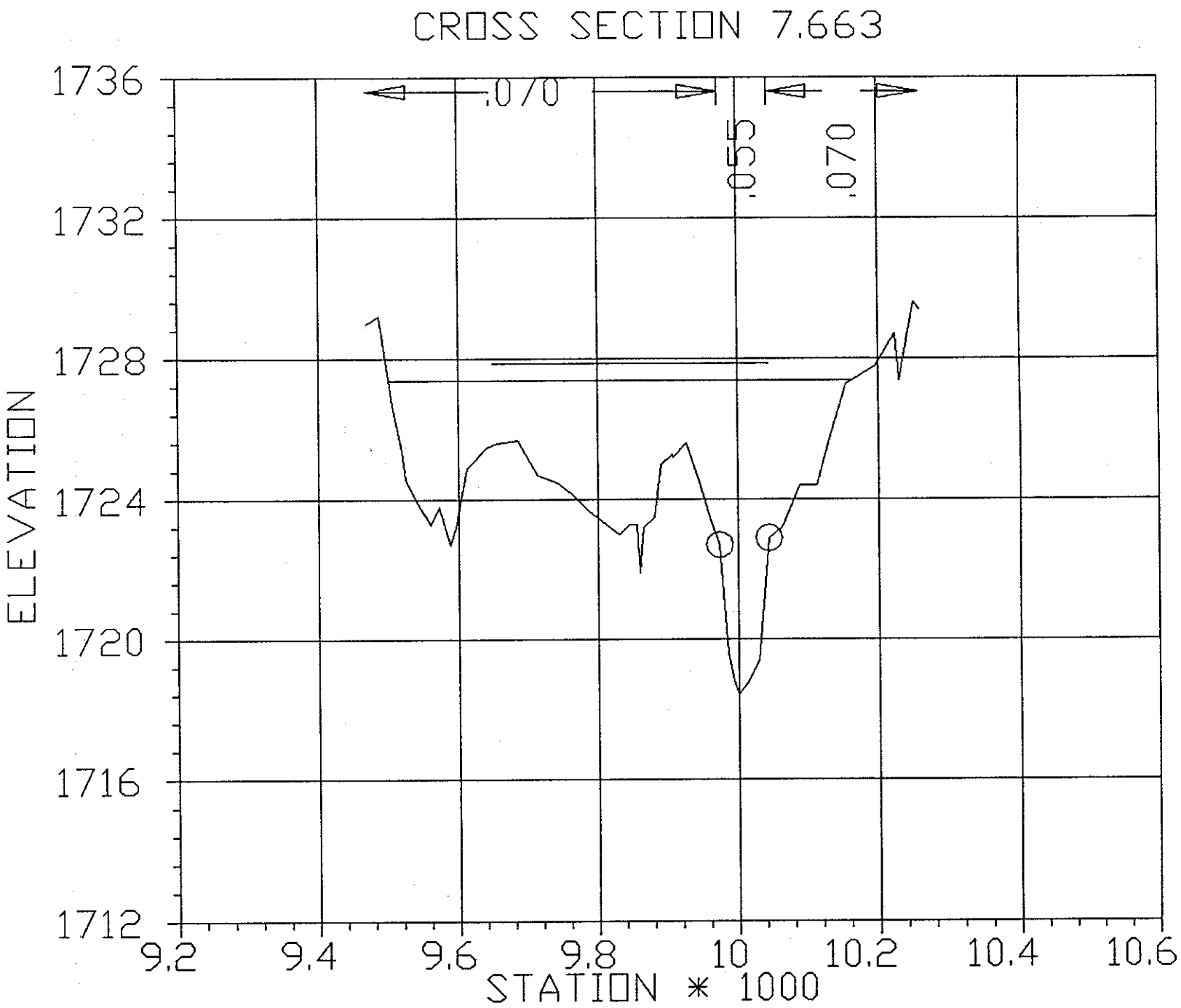

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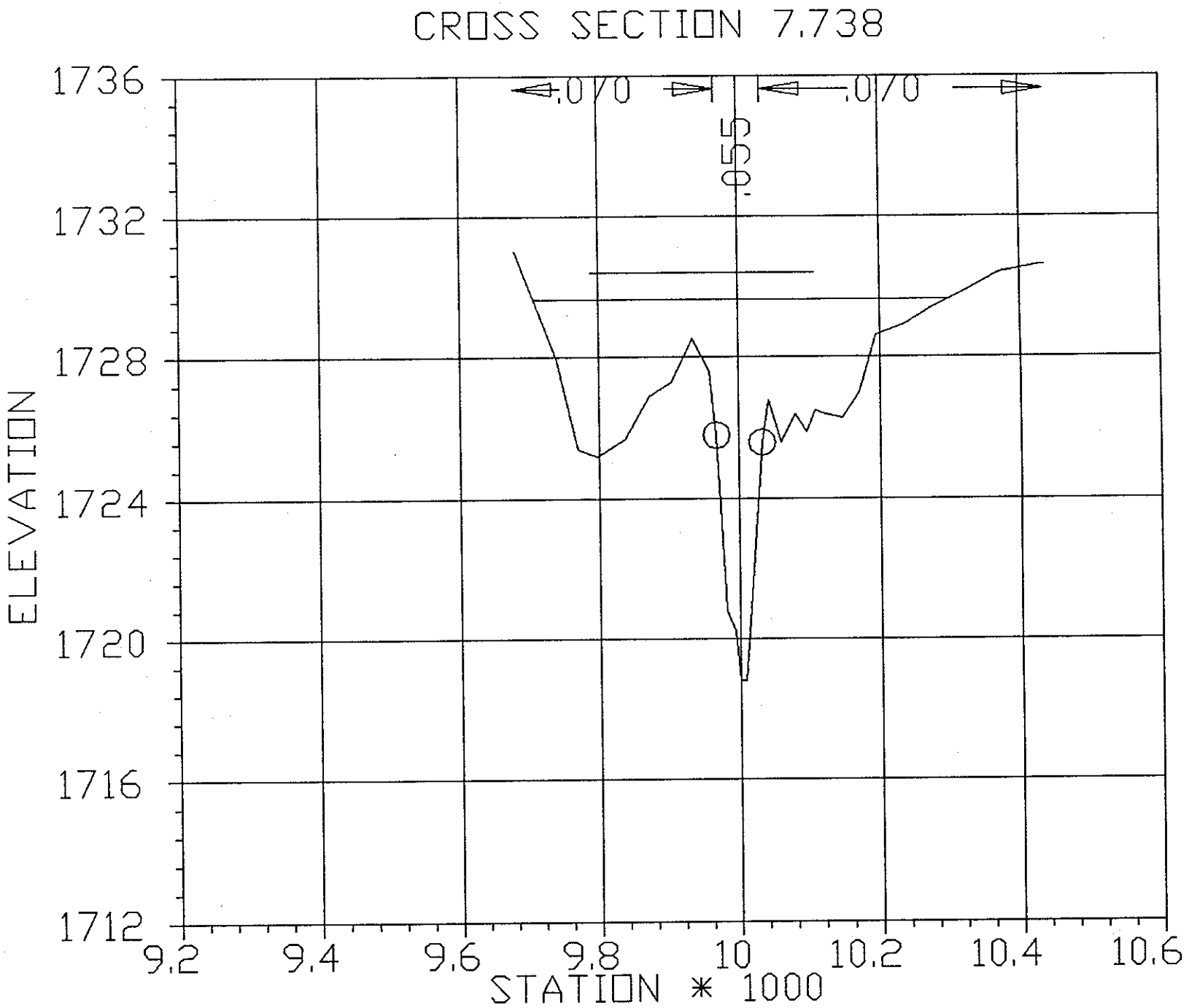

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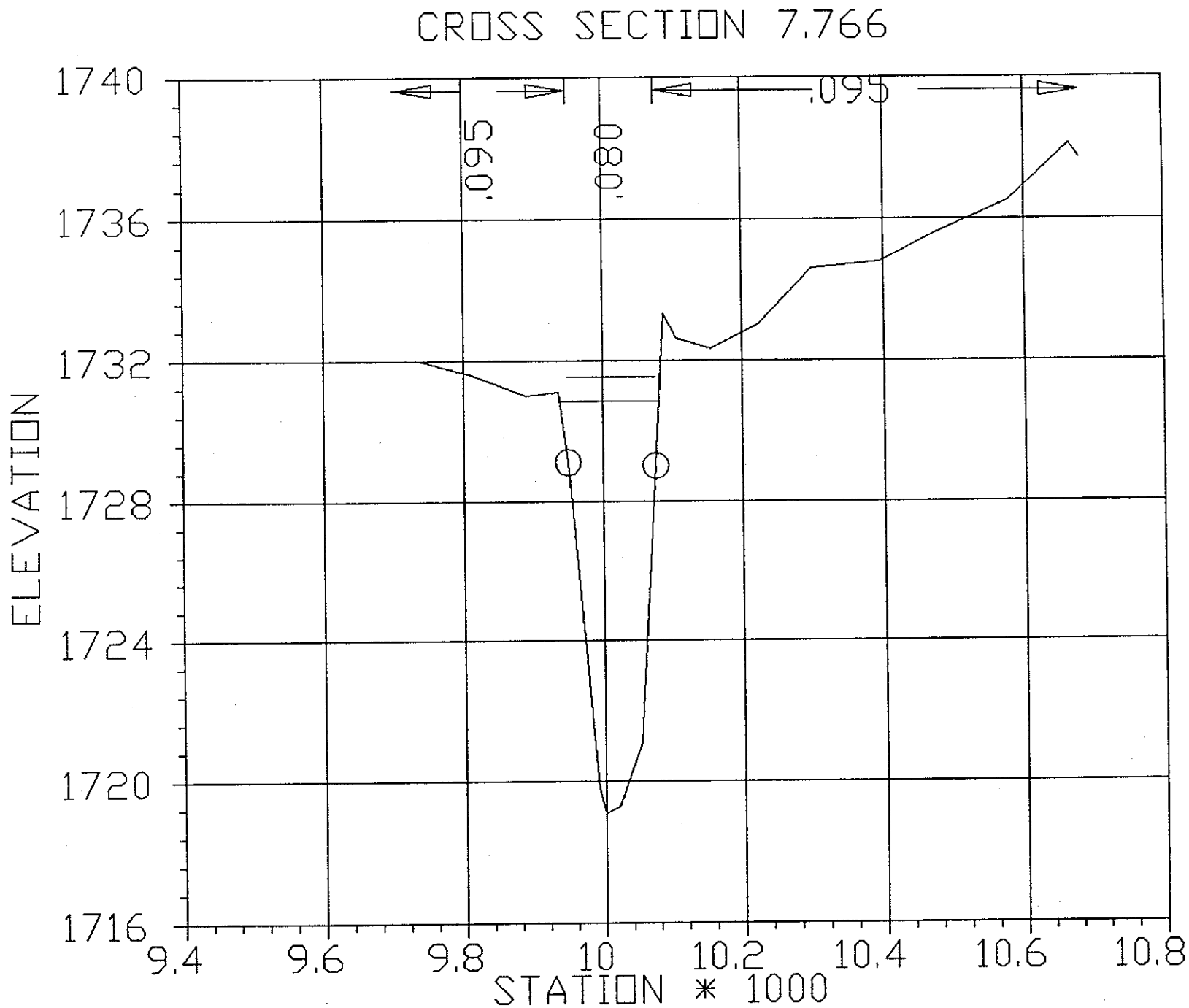

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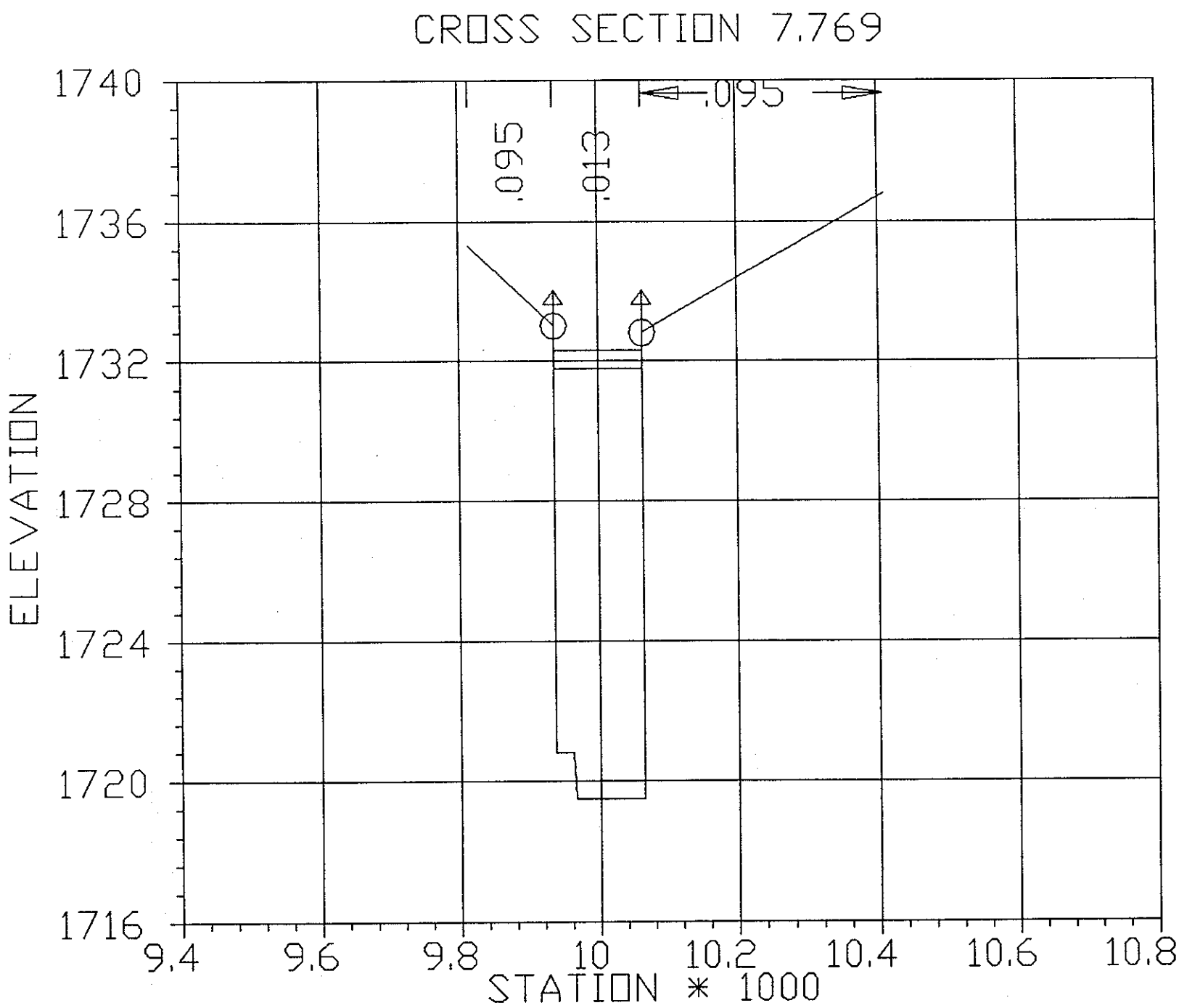

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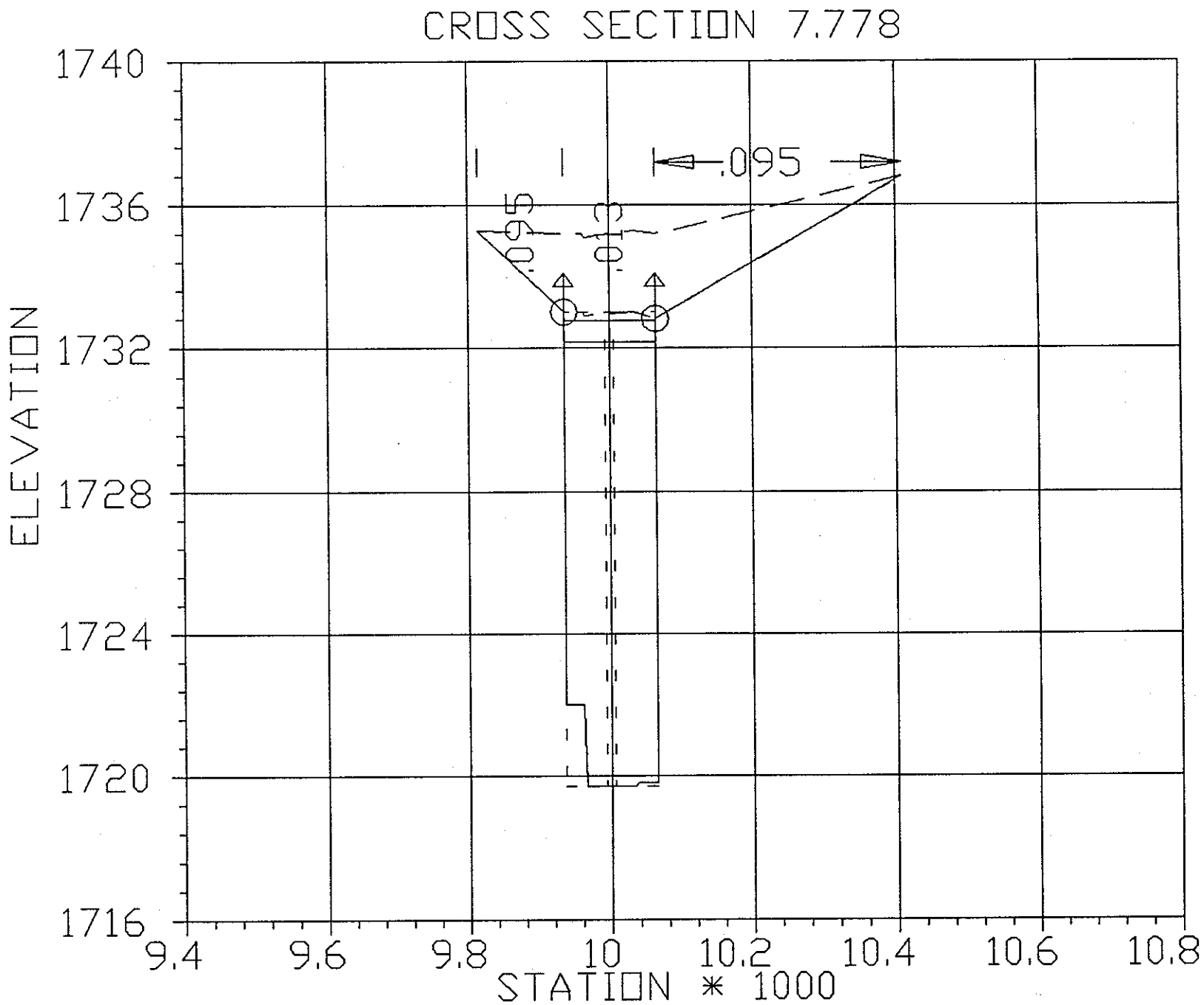

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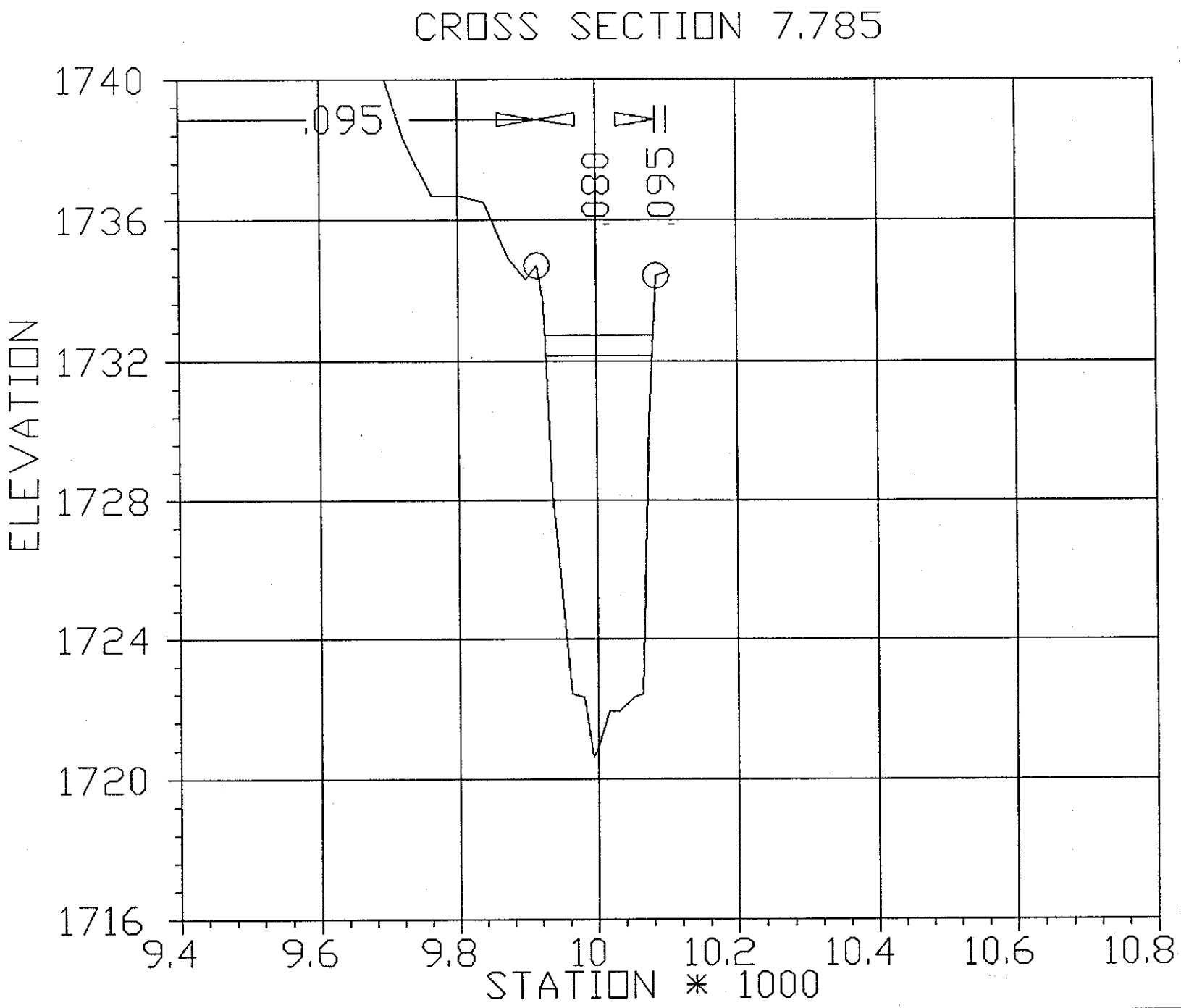

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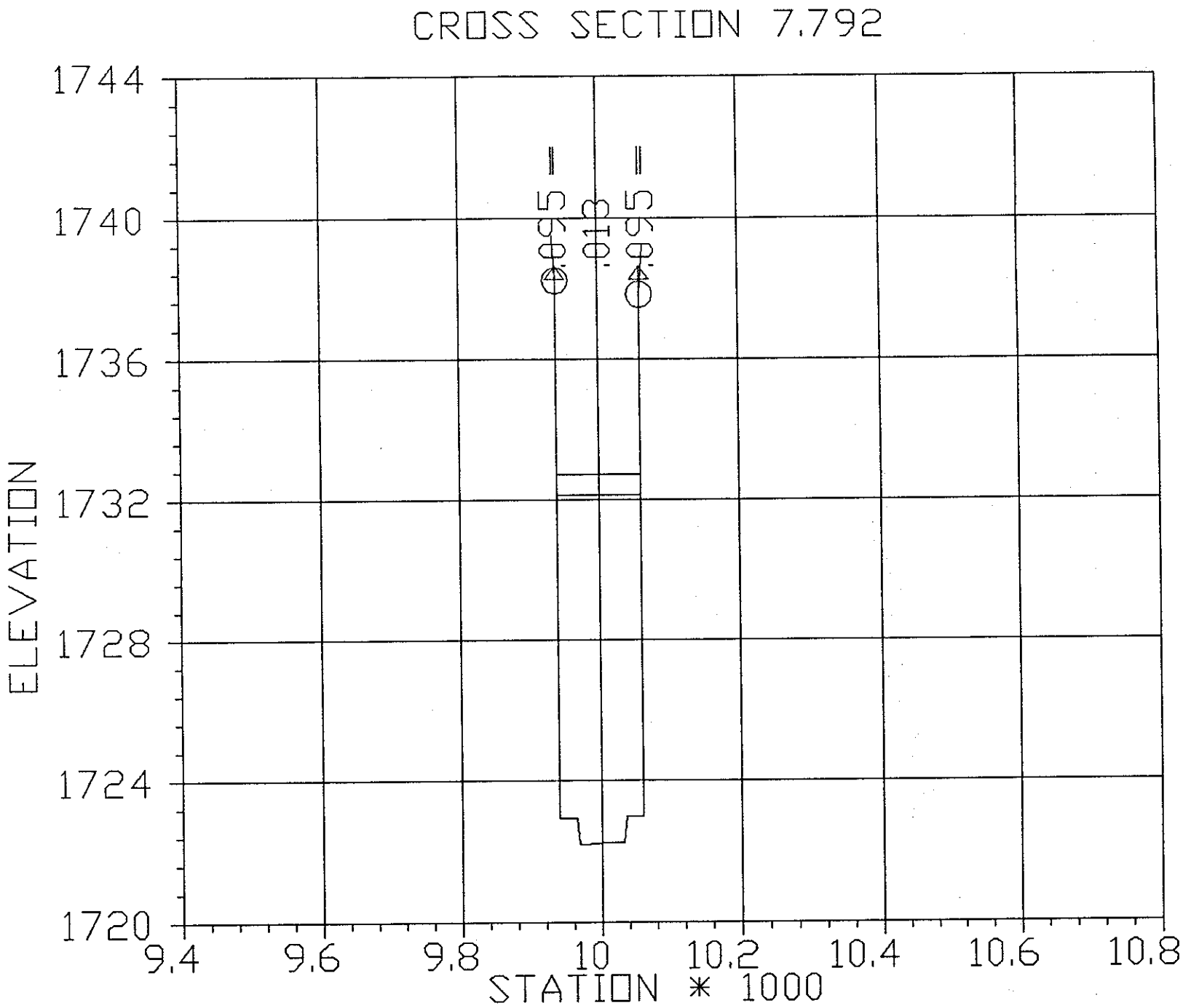

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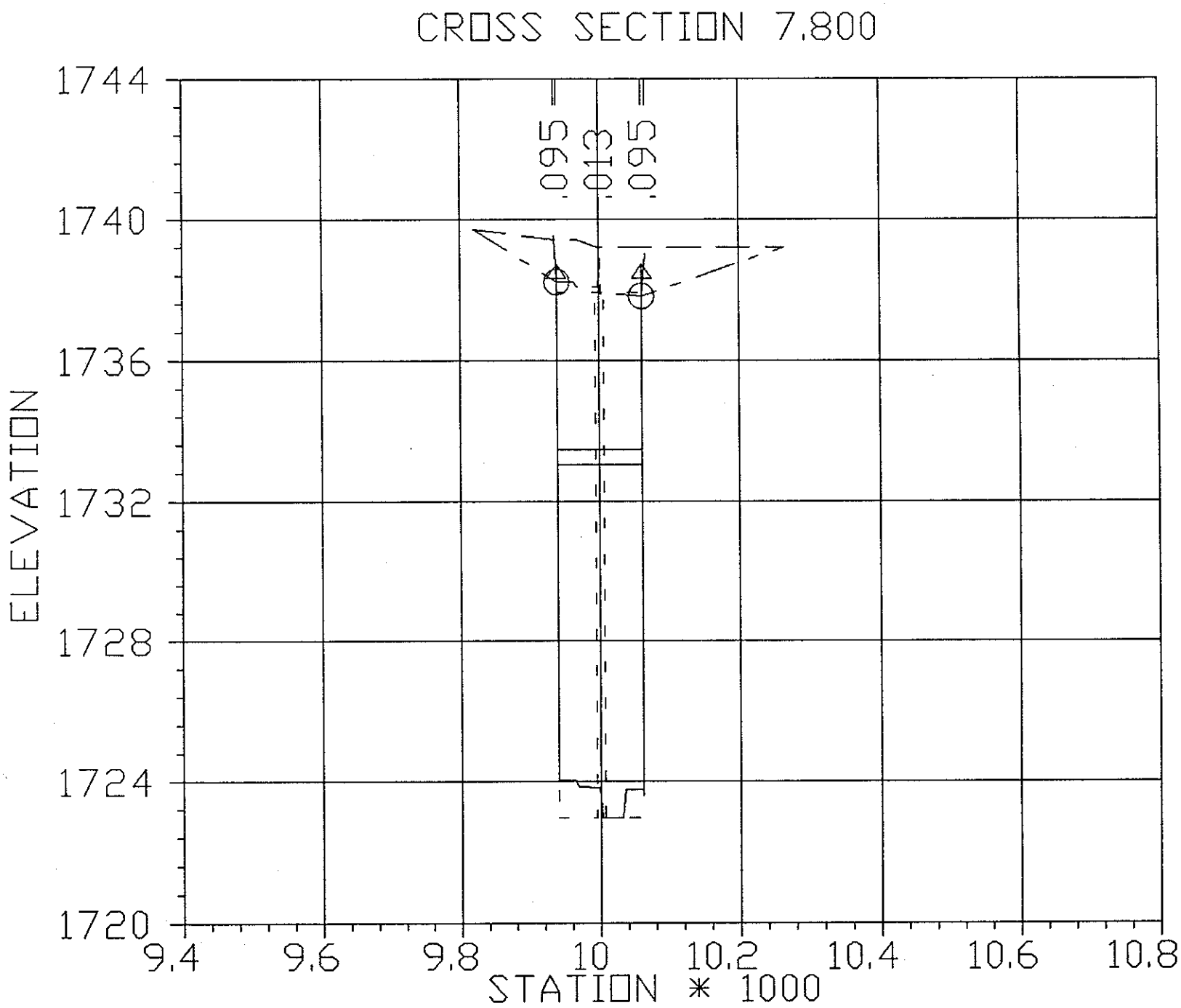

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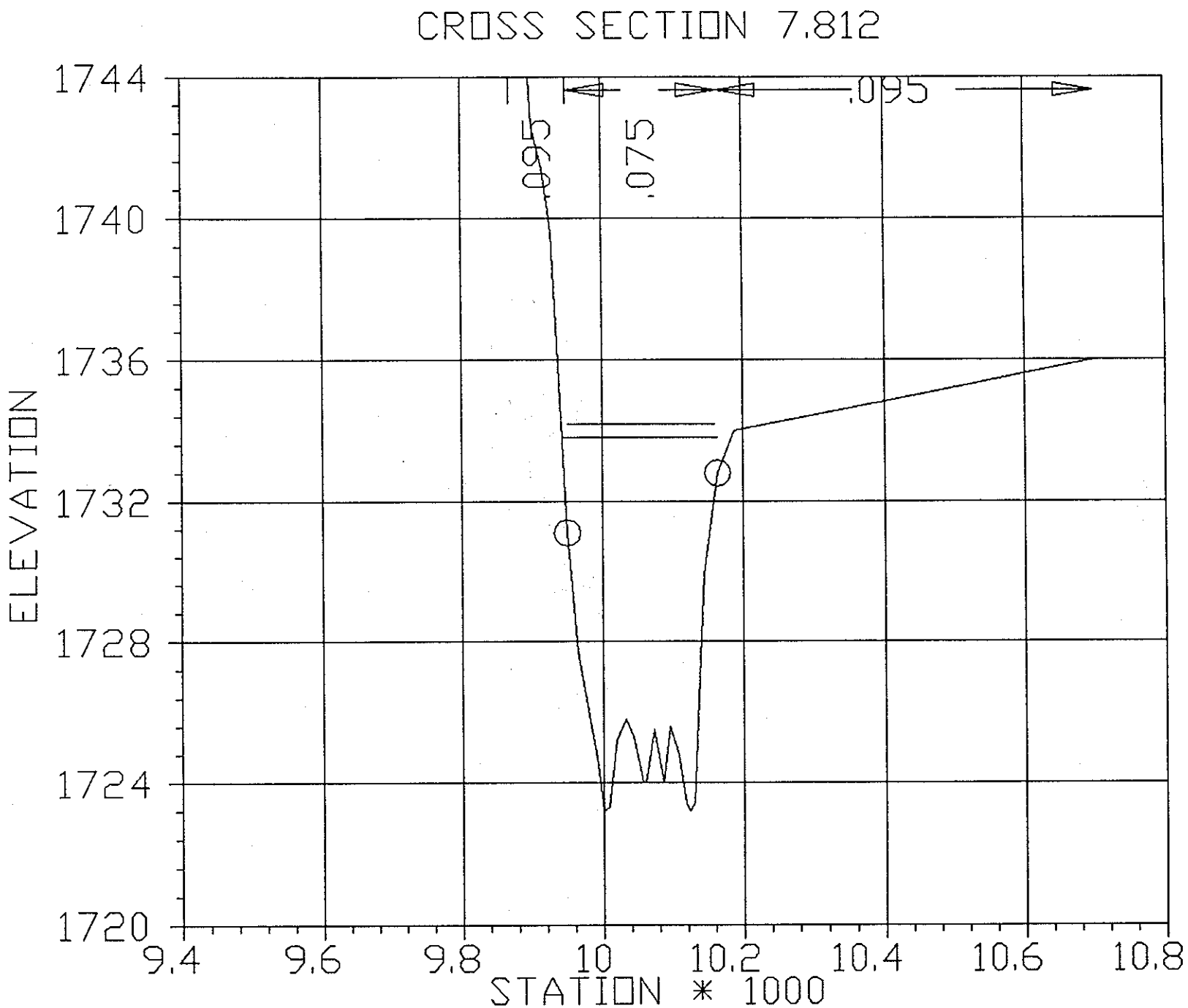

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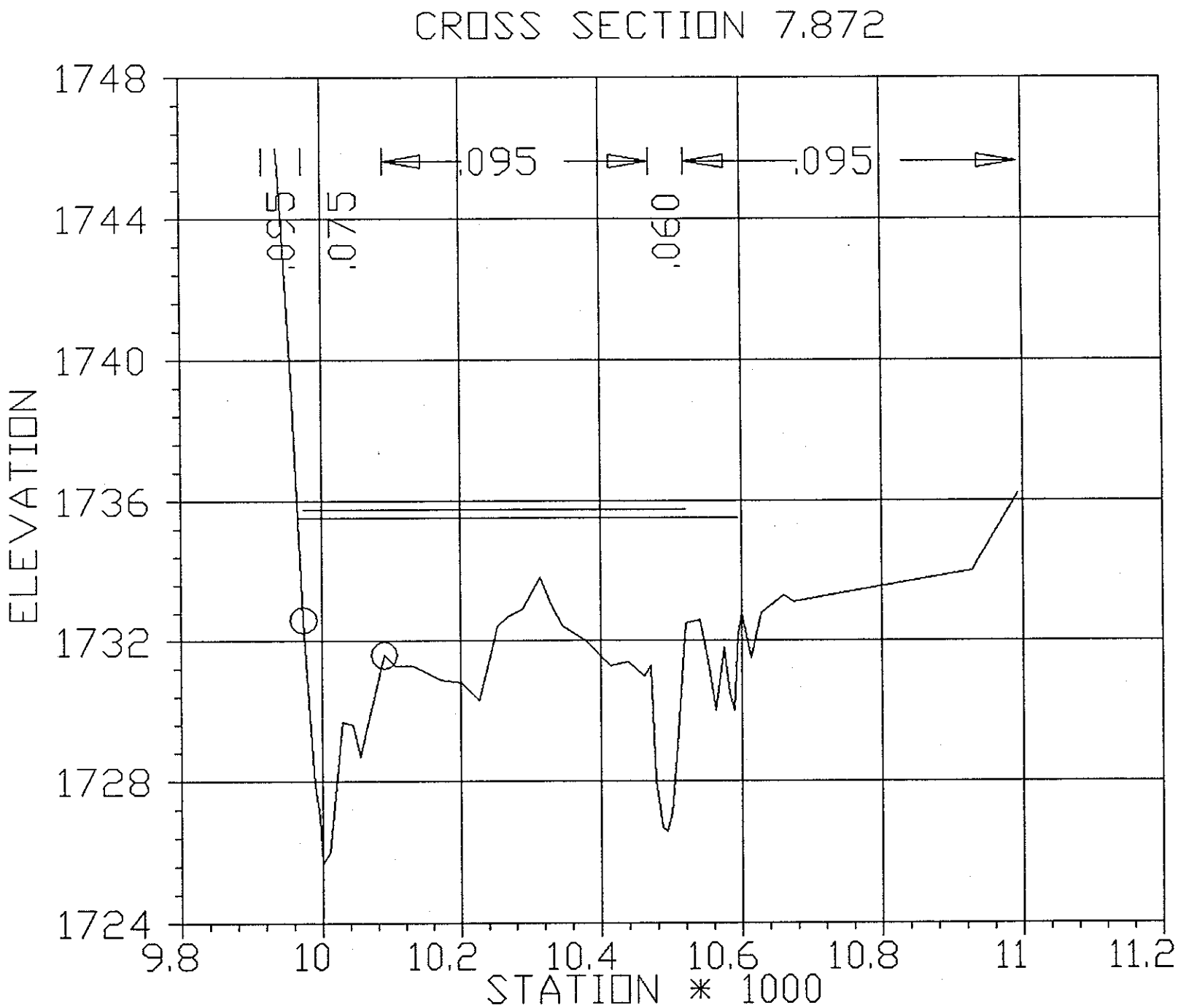

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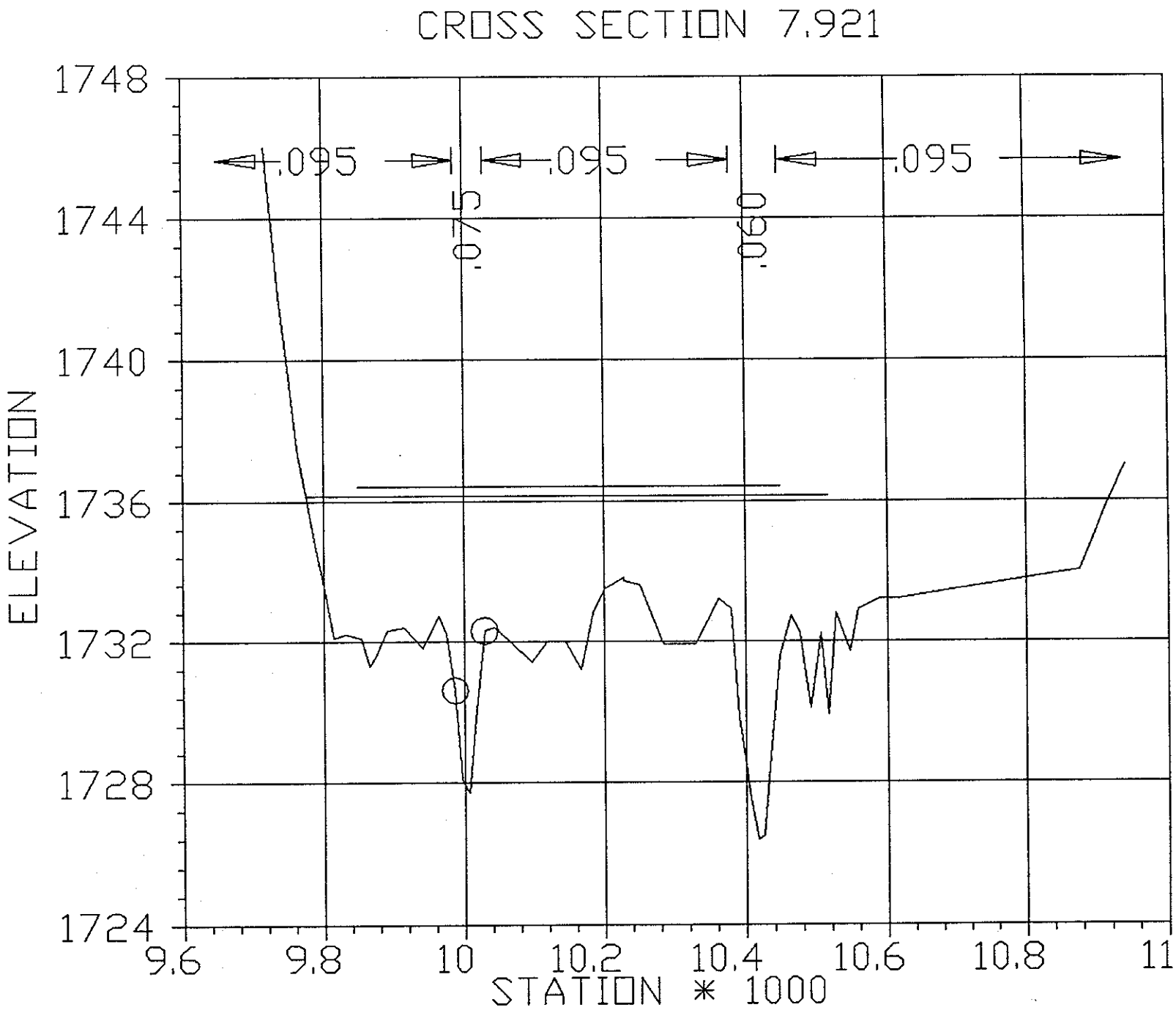

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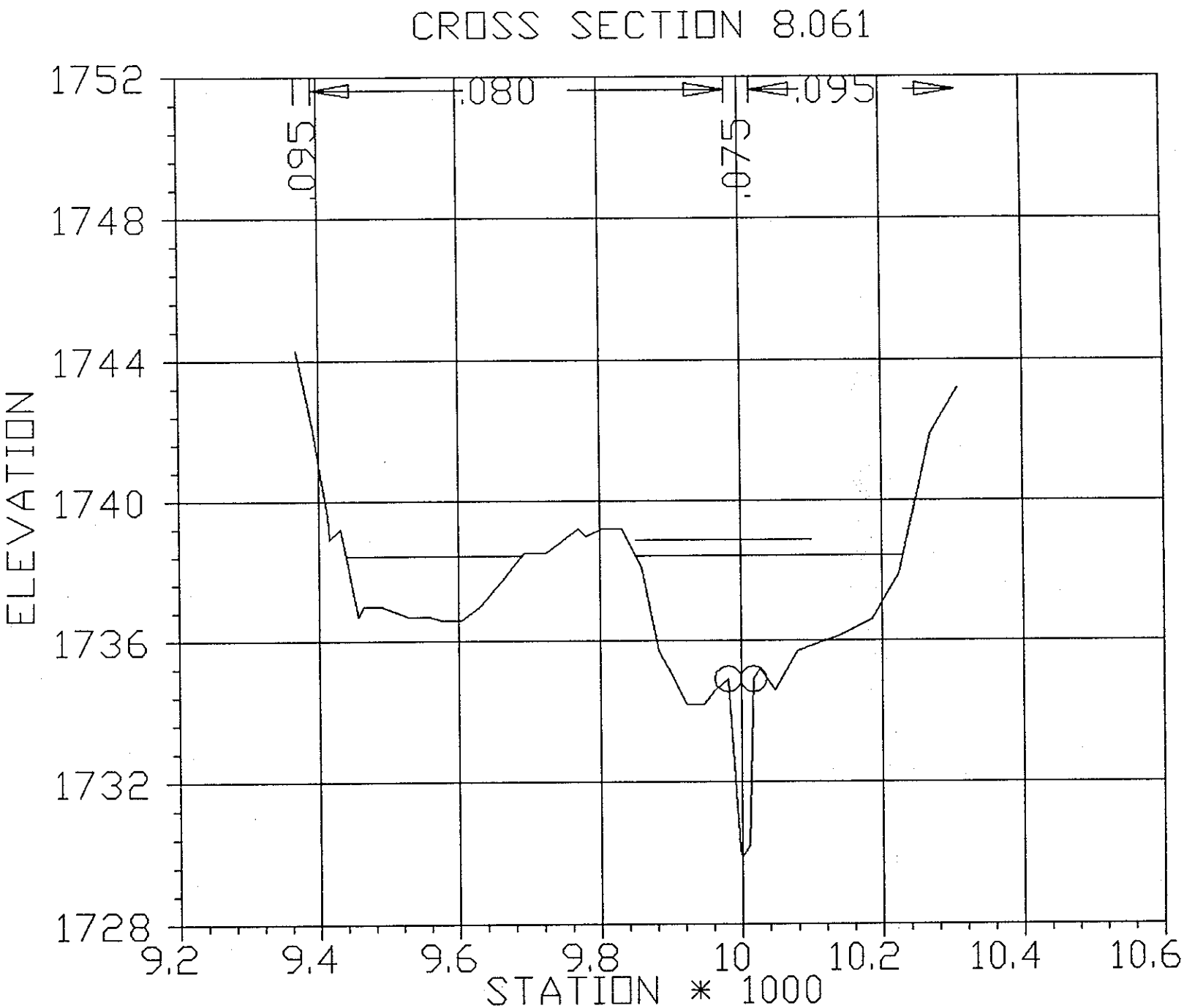

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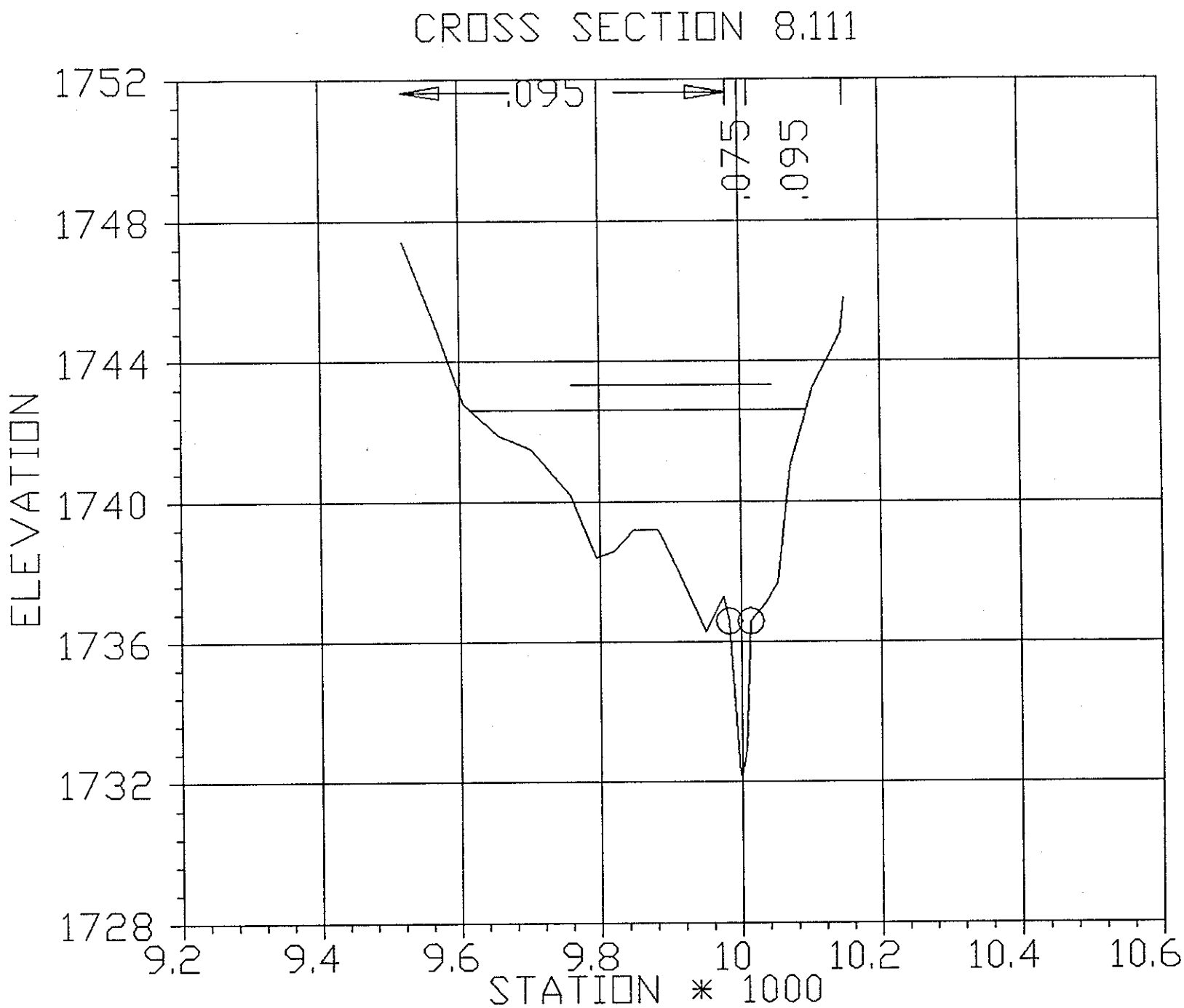

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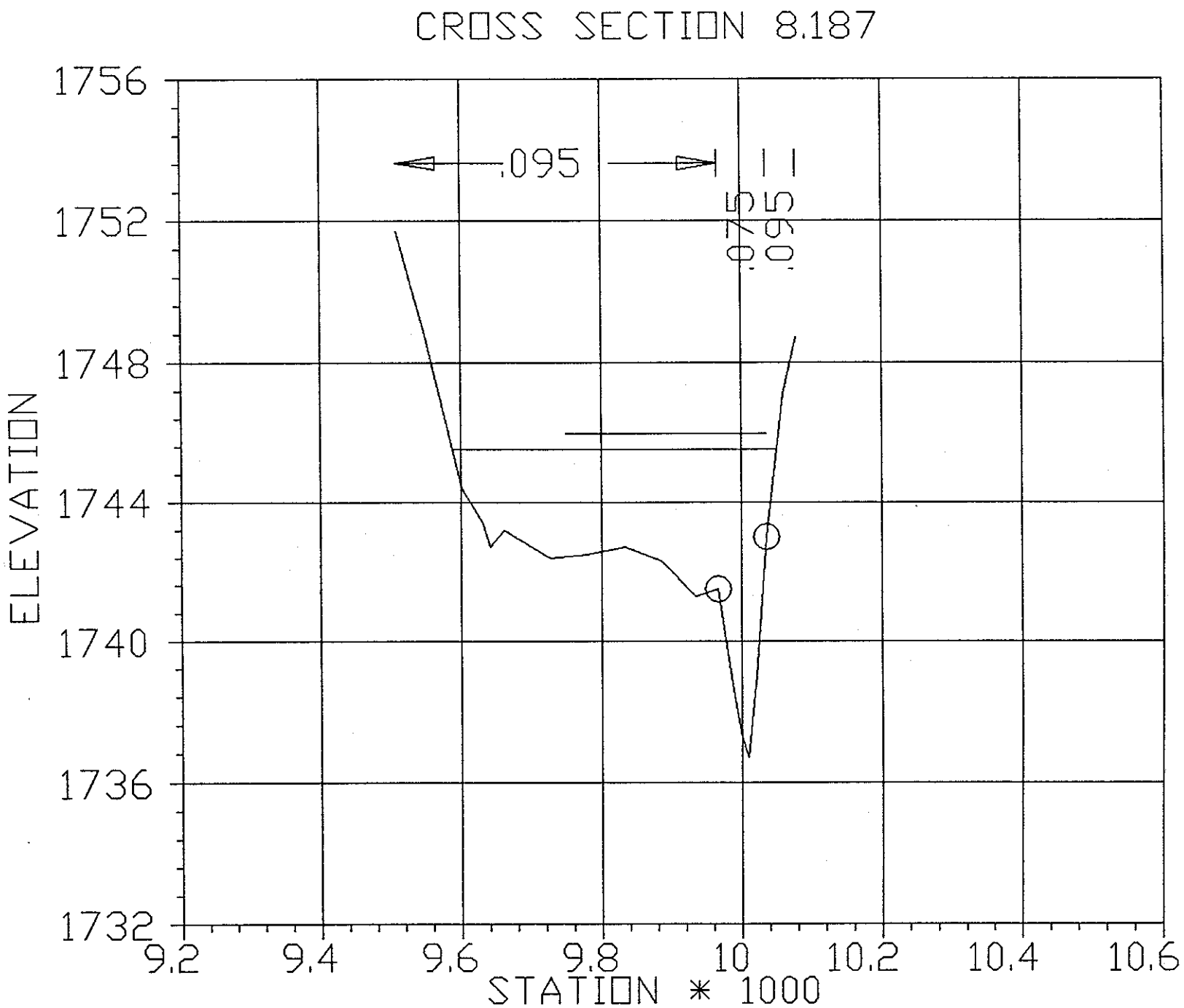

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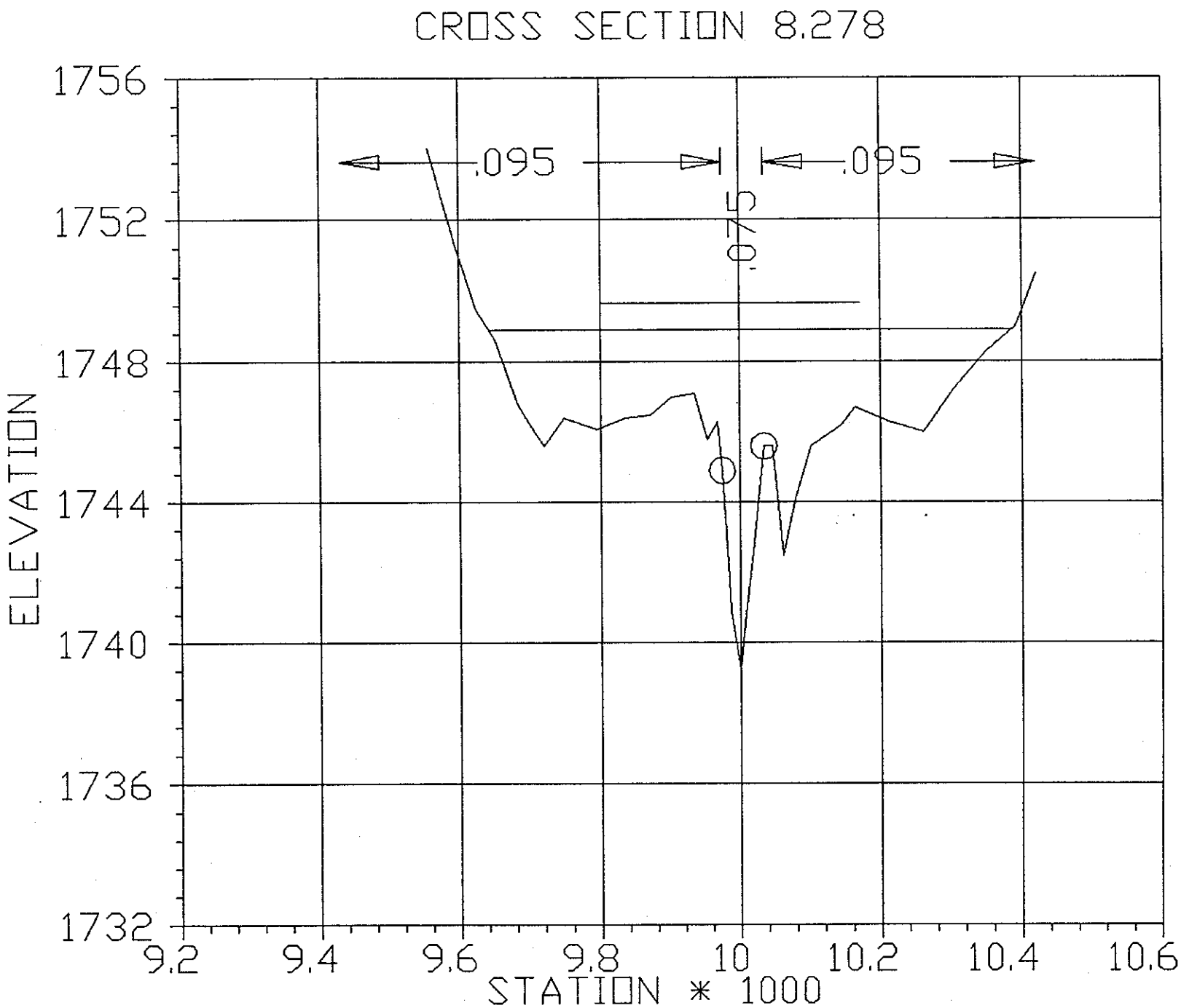

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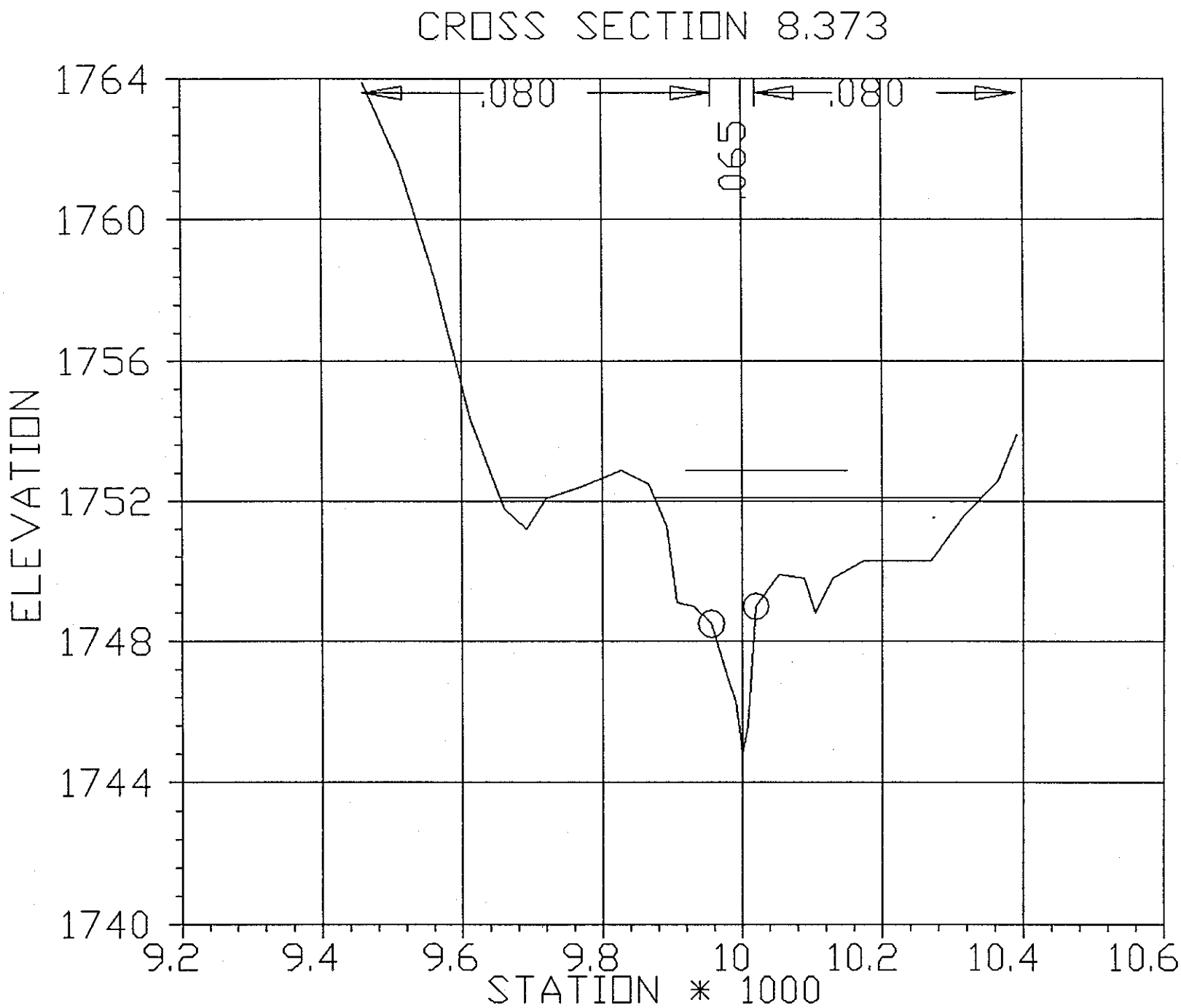

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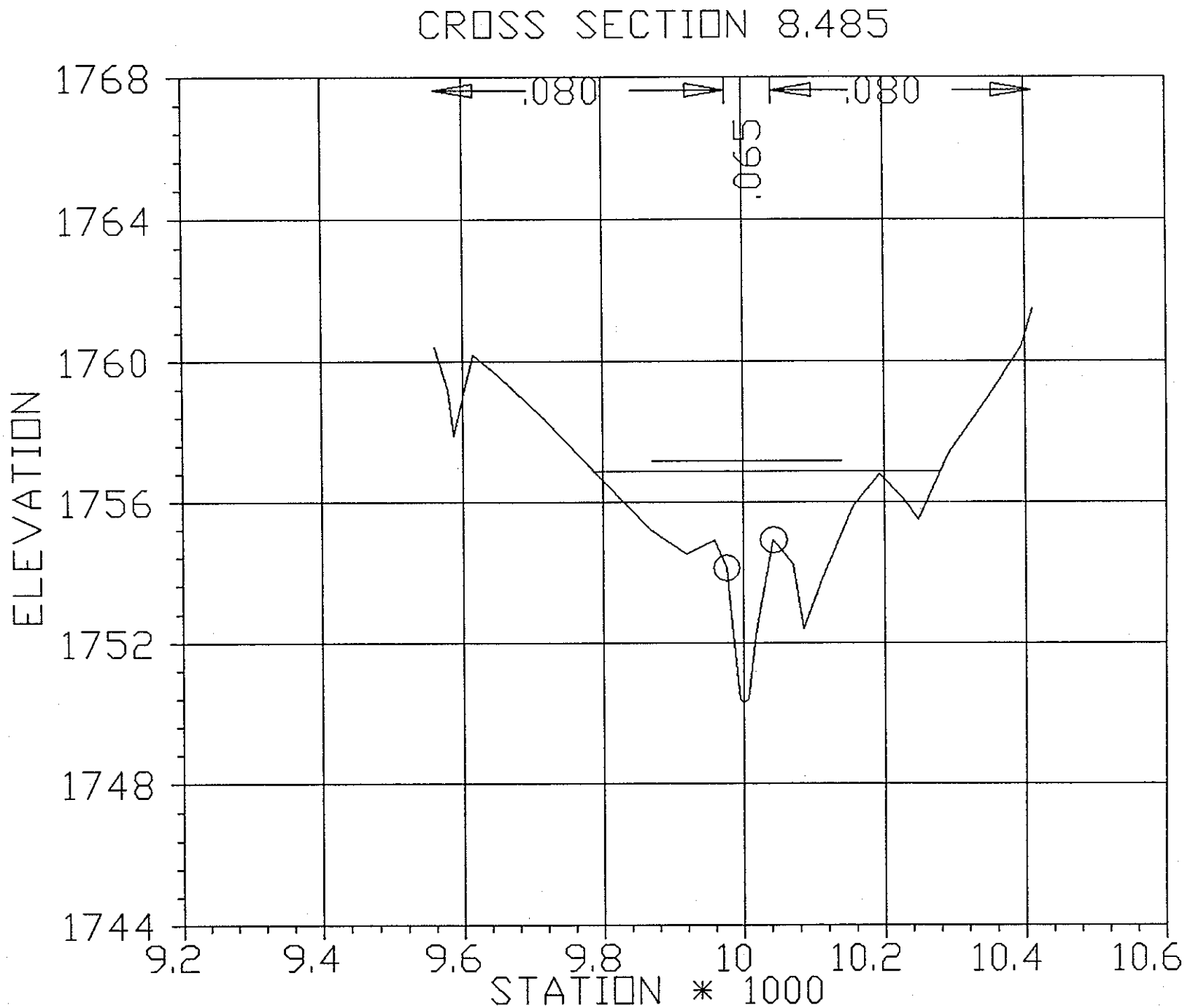

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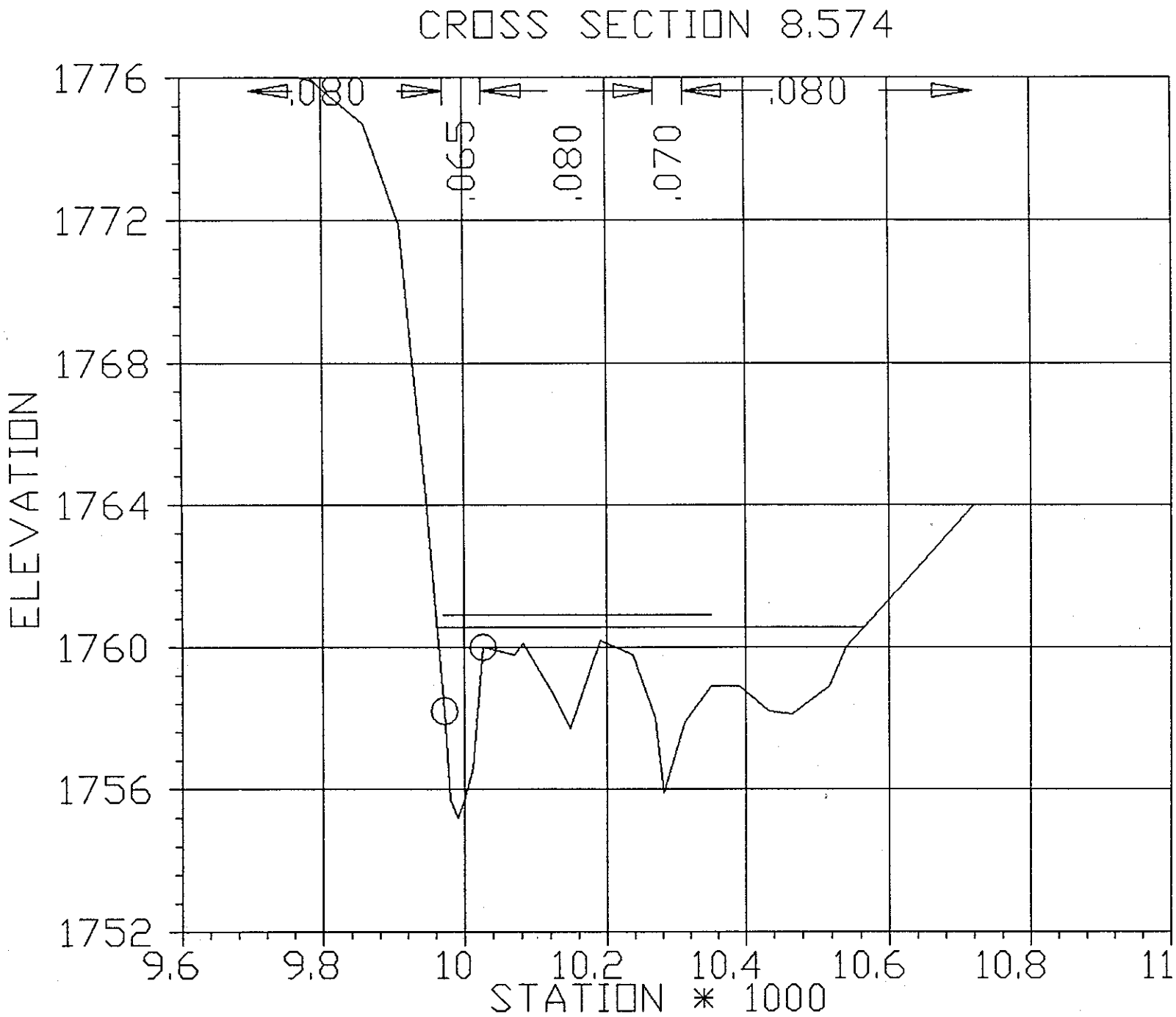

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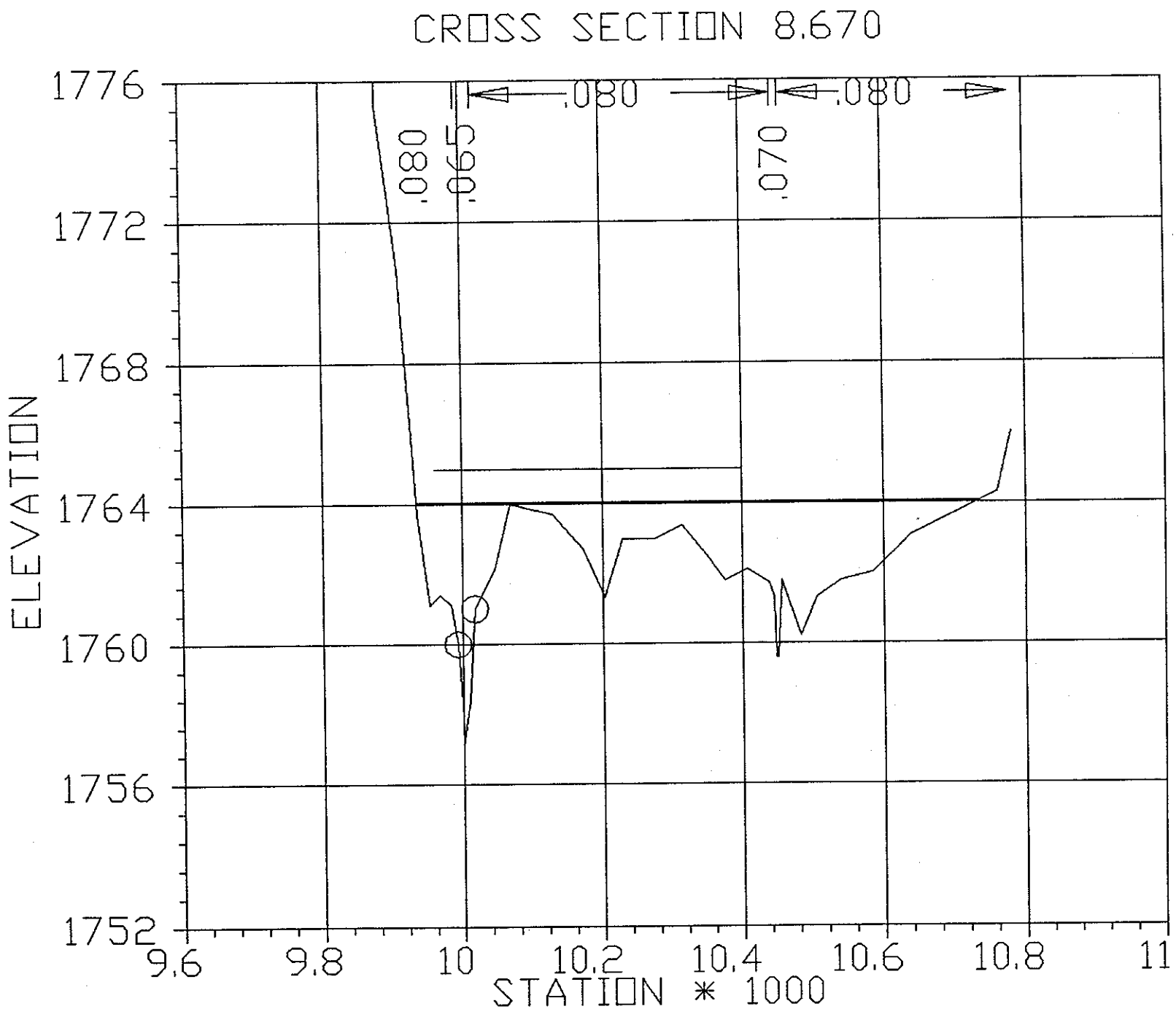

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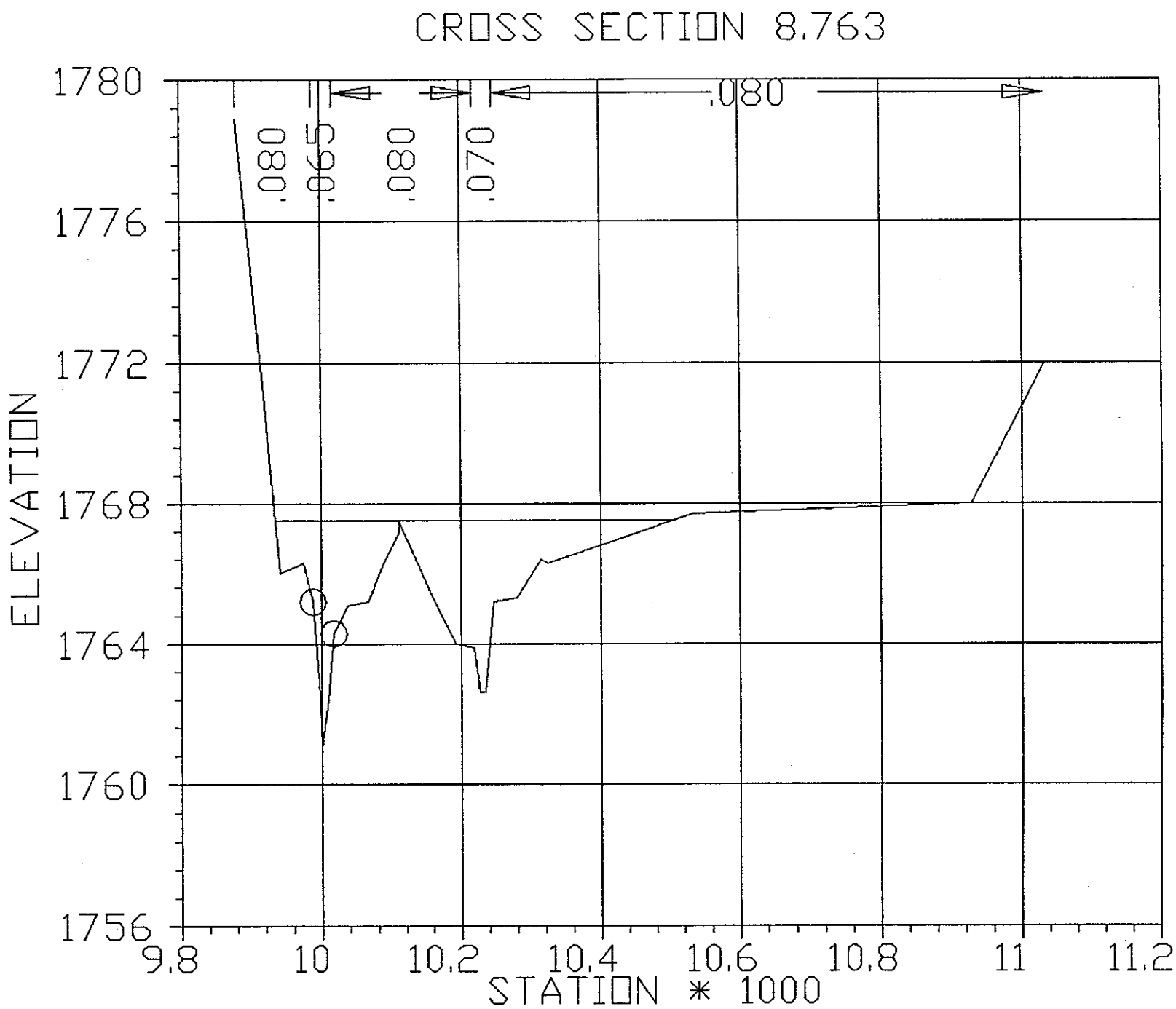

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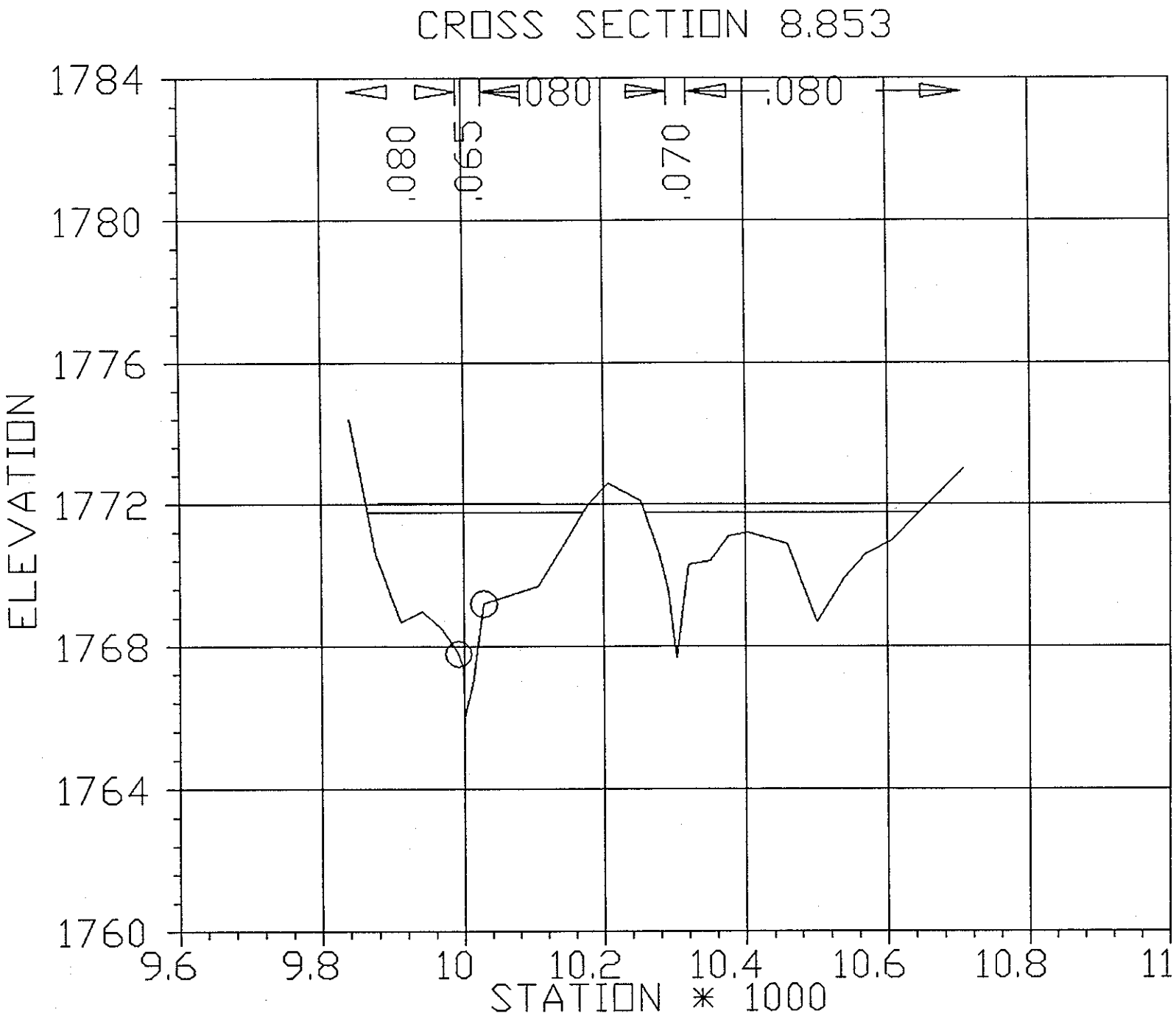

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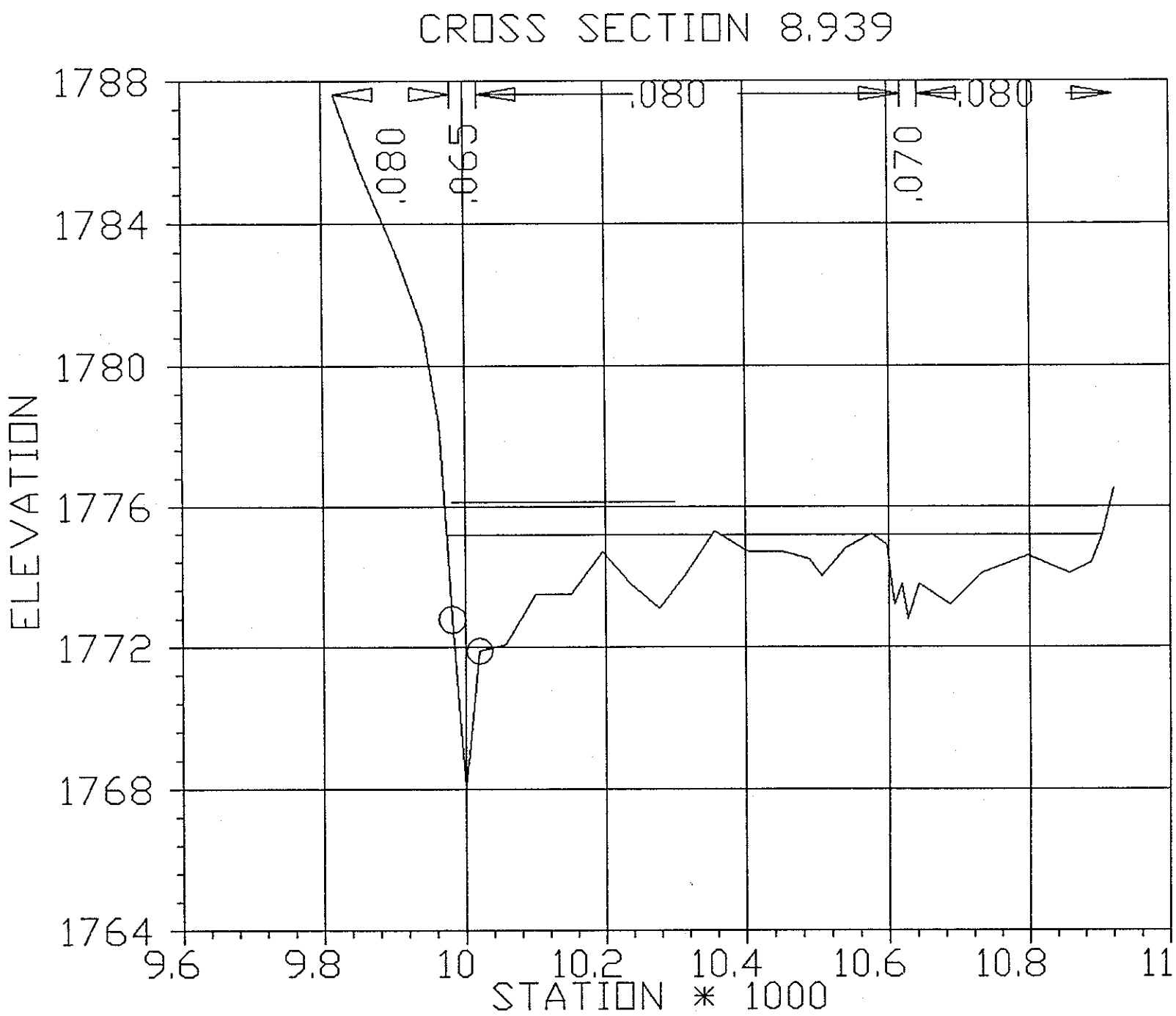

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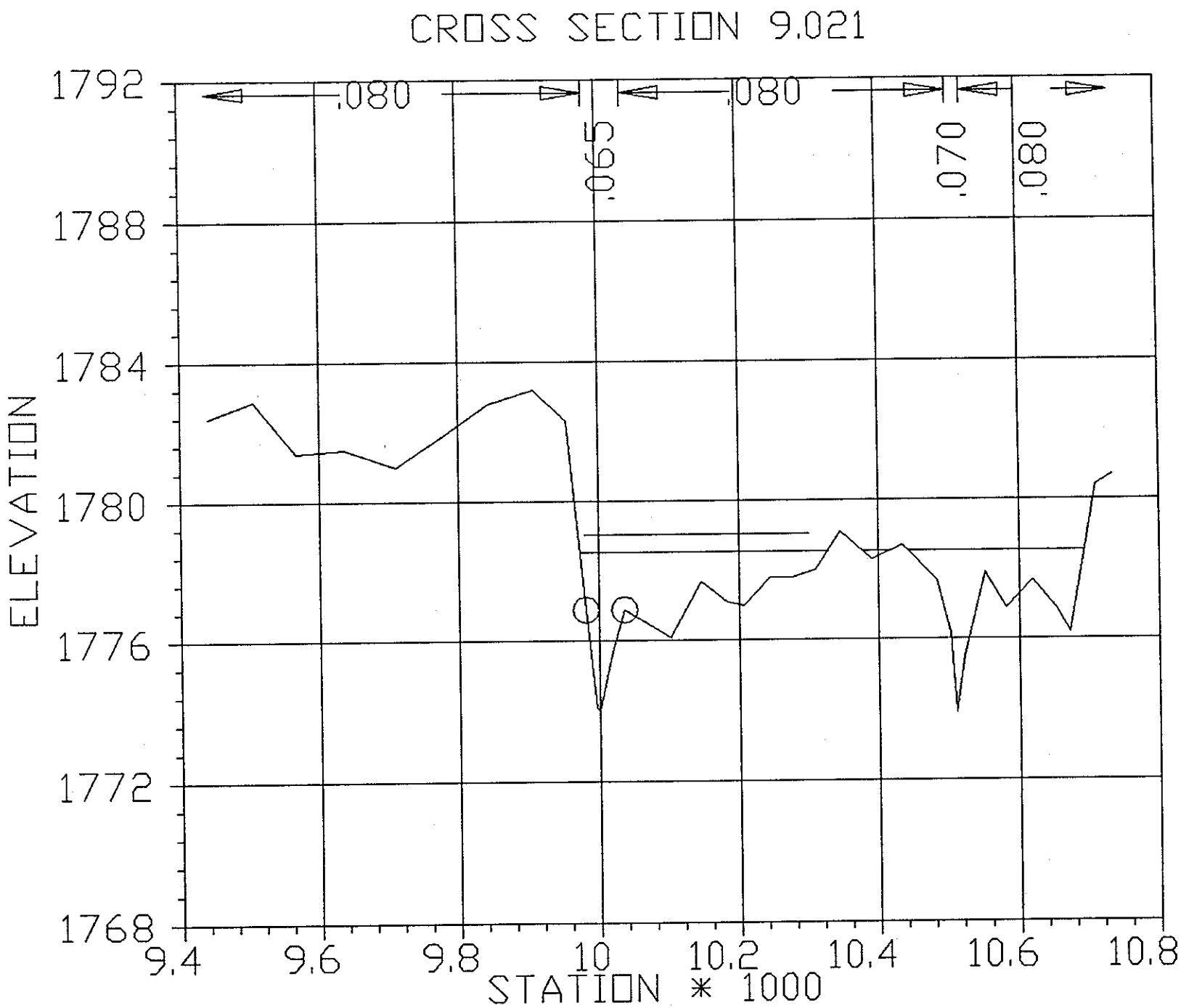

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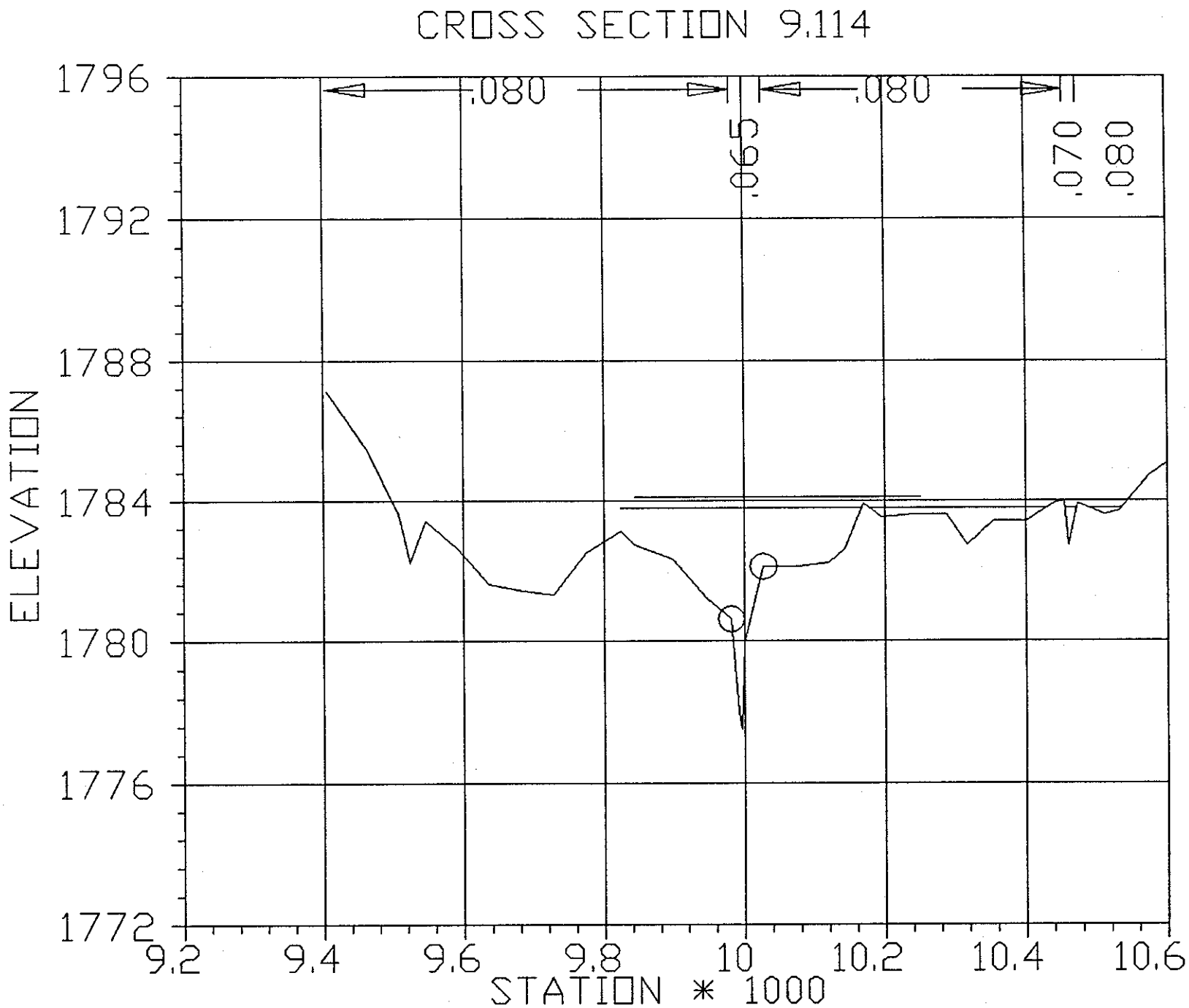

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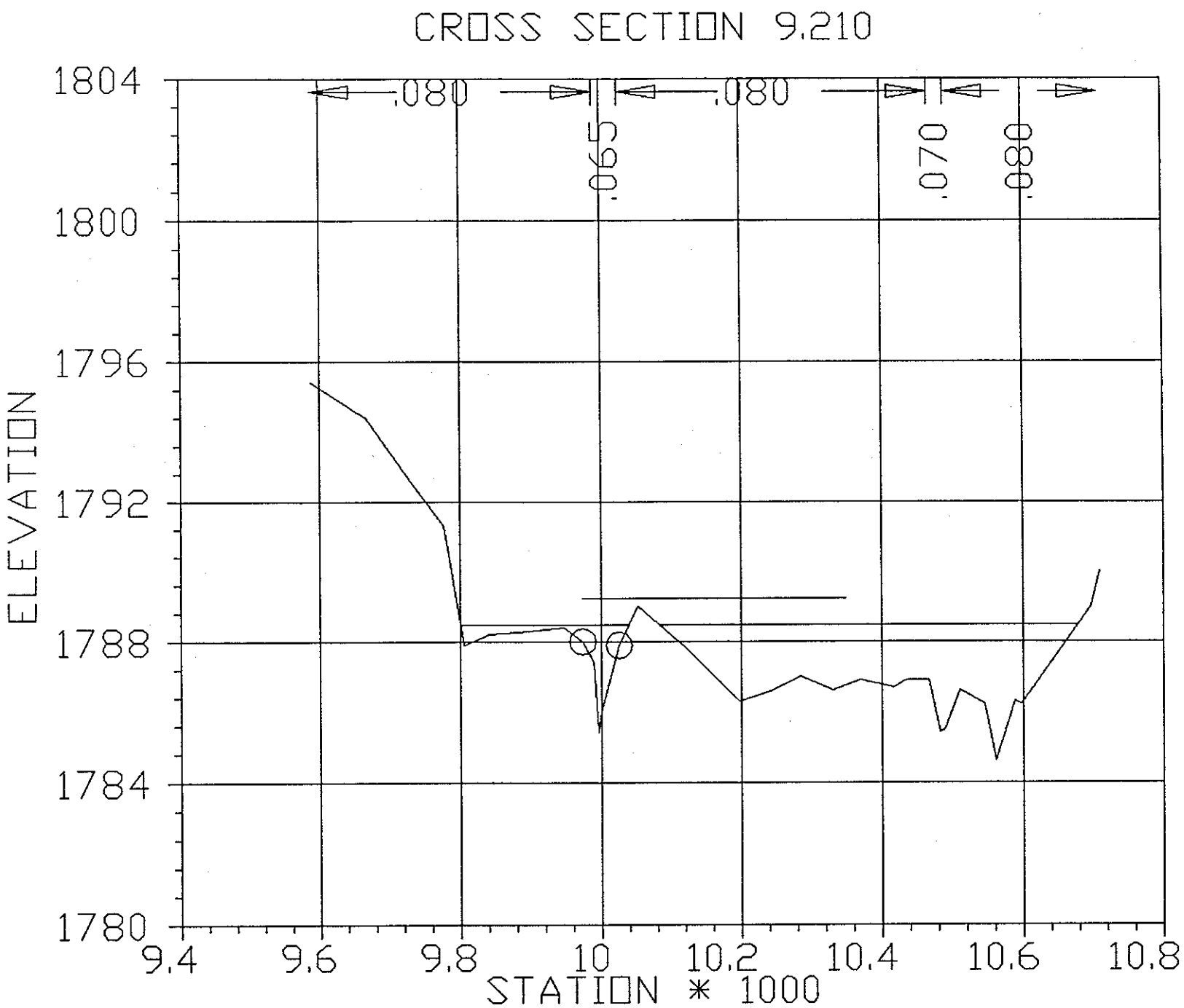

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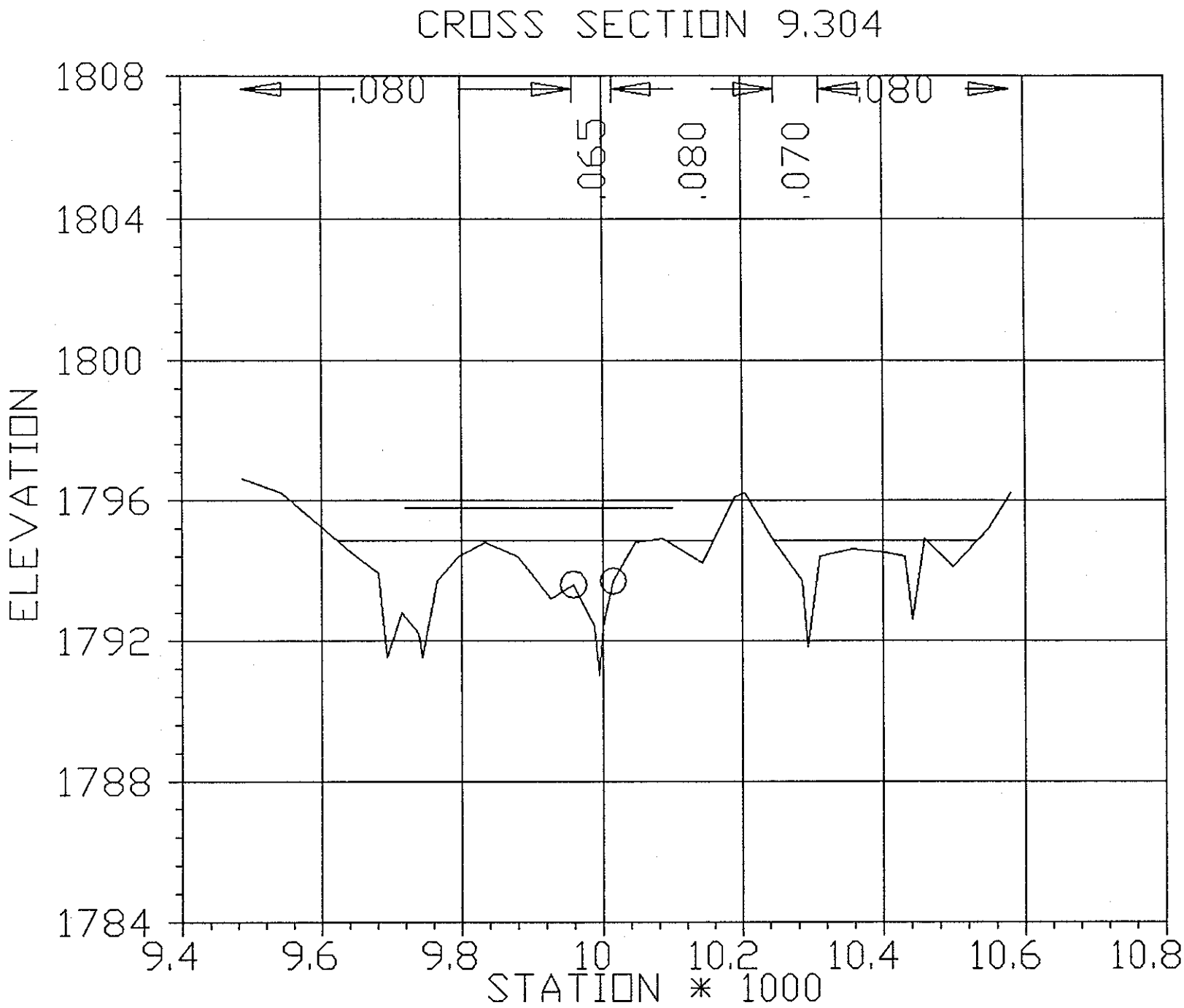

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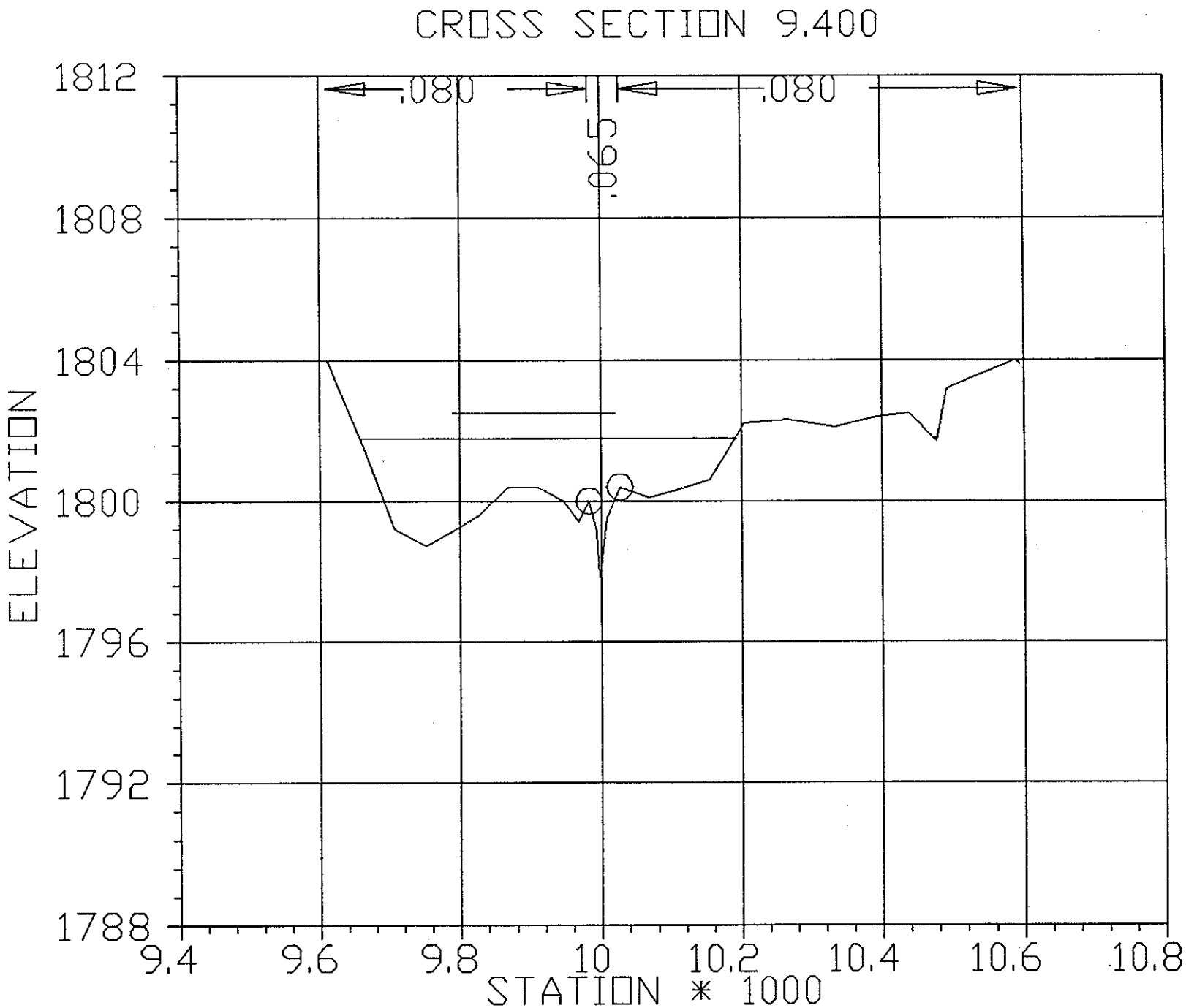

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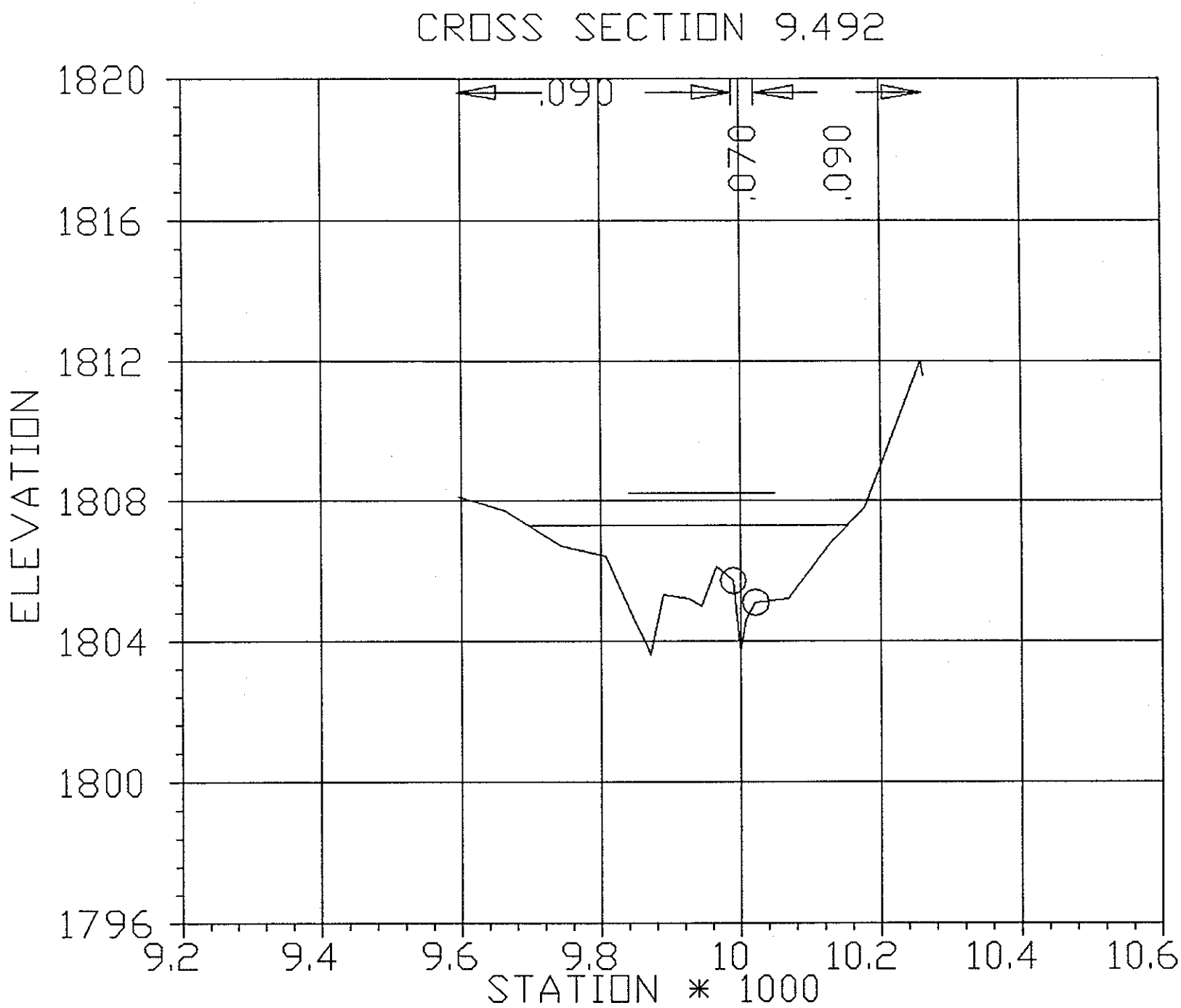

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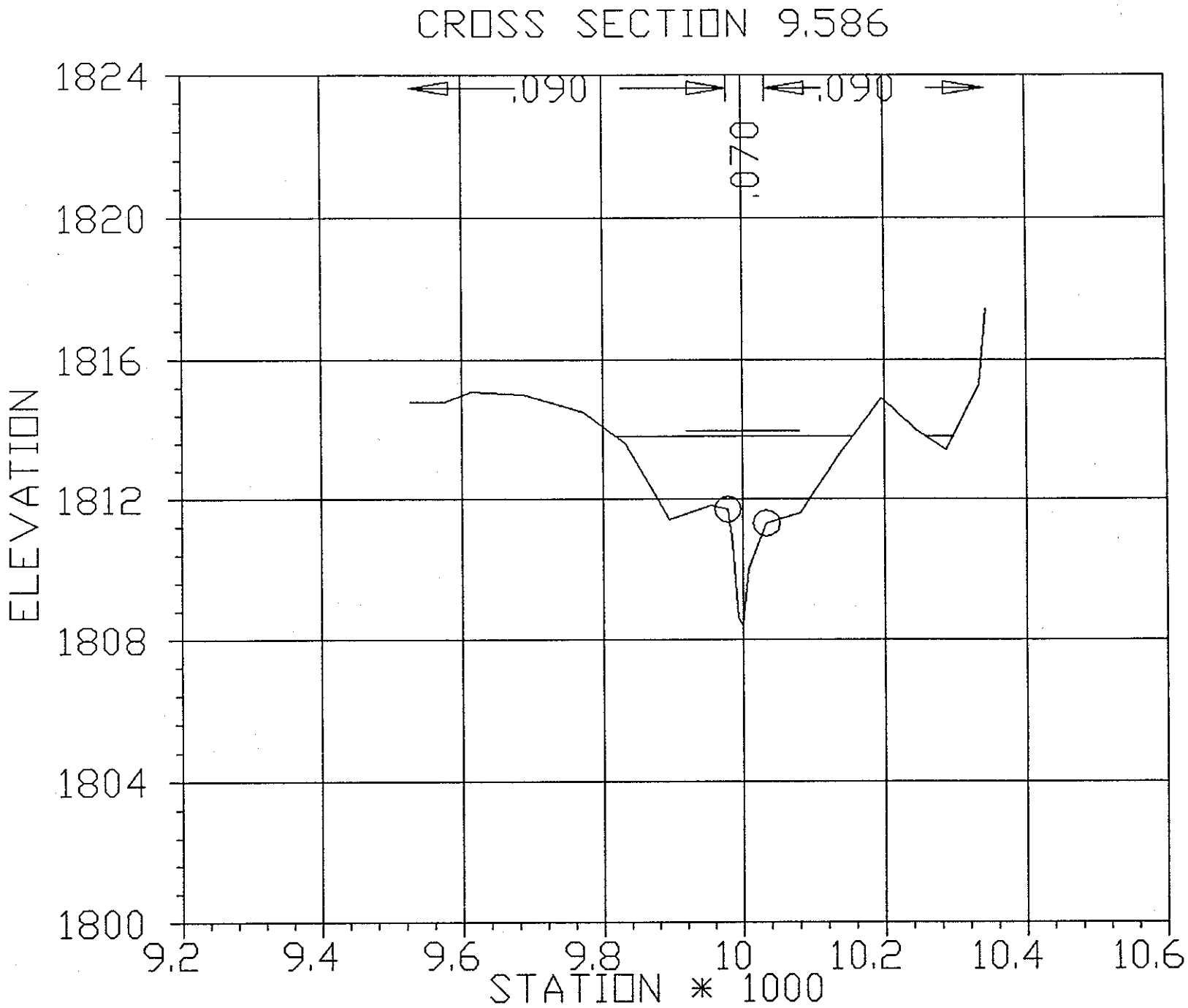

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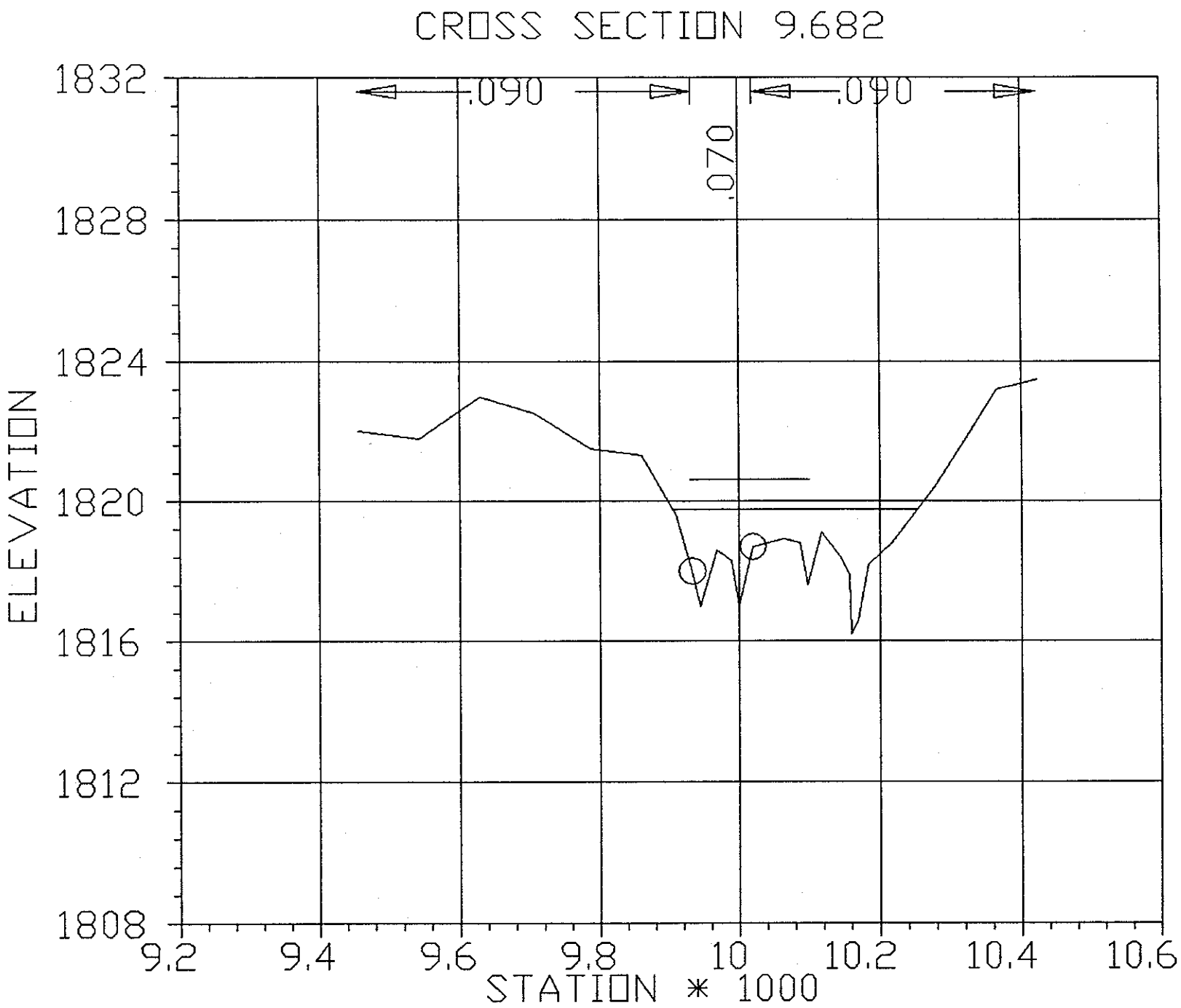

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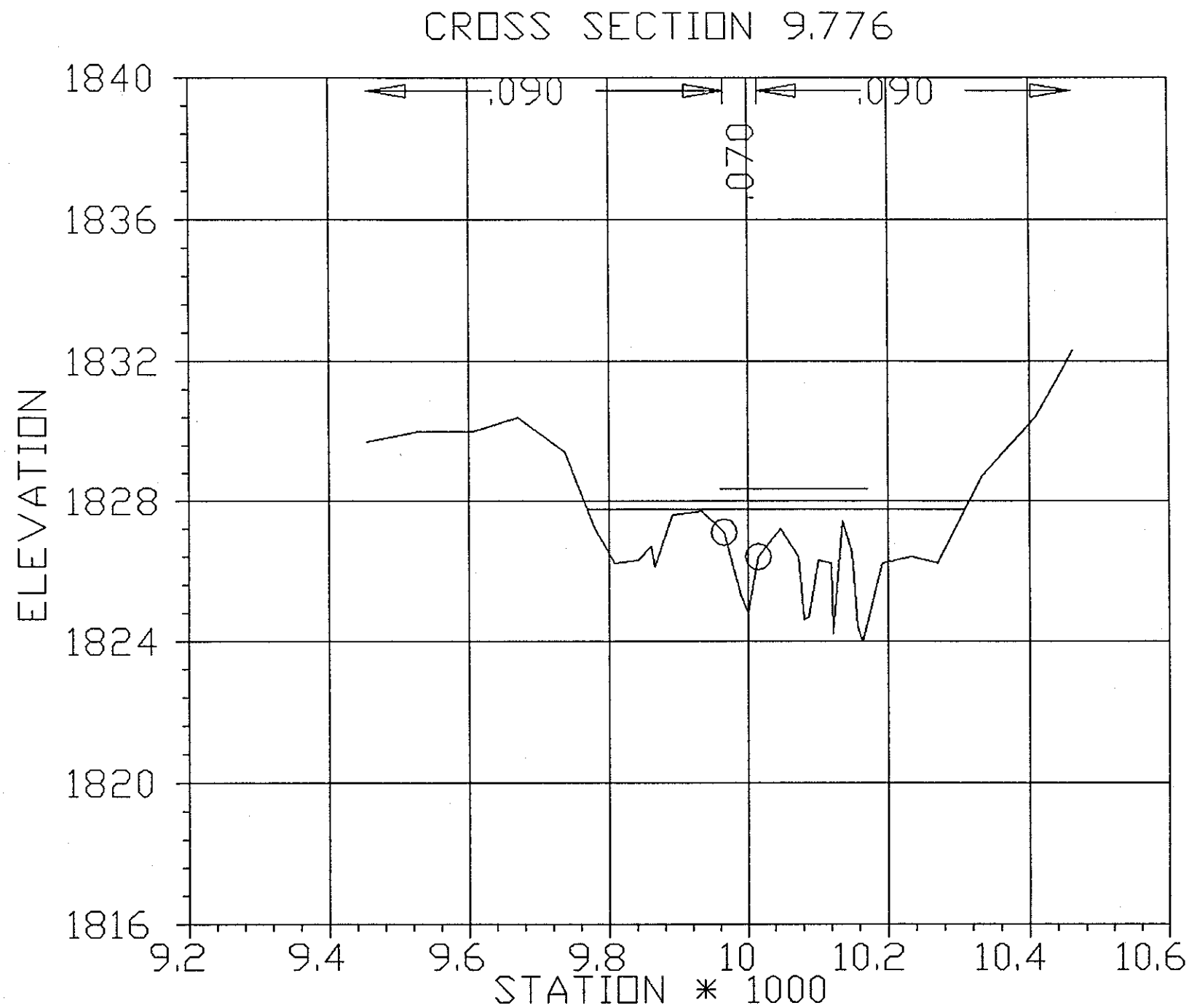

CROSS SECTION PLOT

DEADMAN WASH

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HNTB

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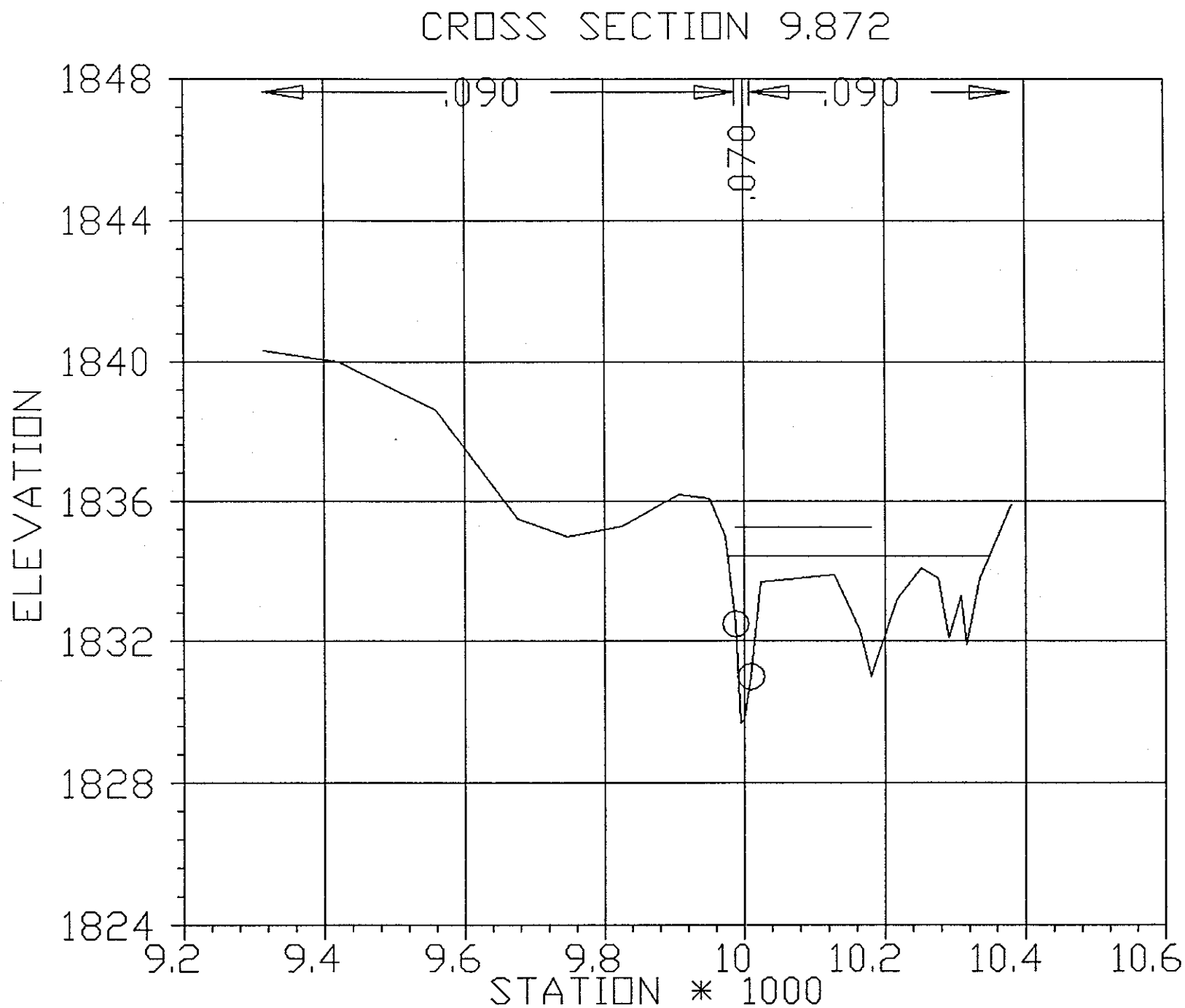

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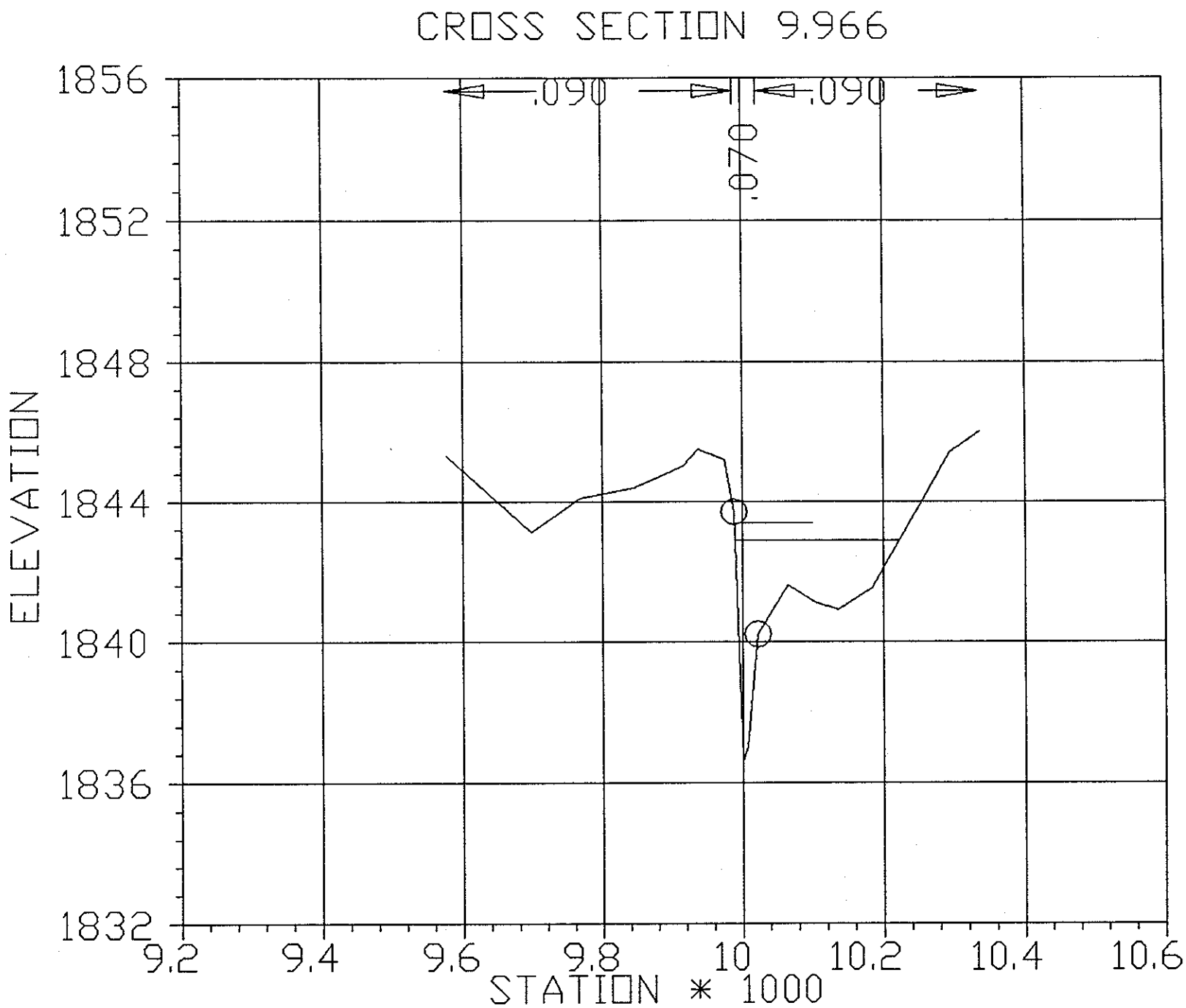

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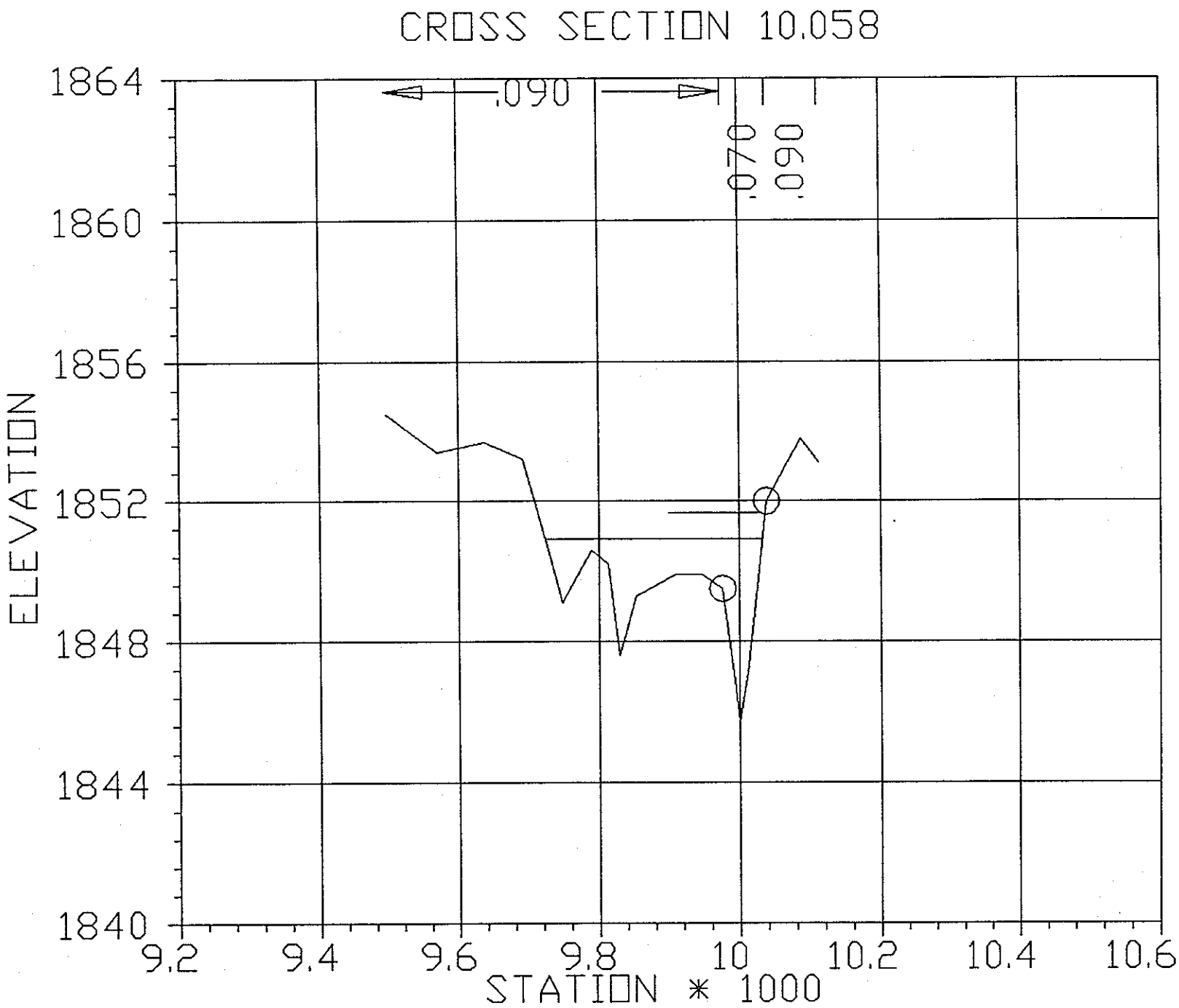

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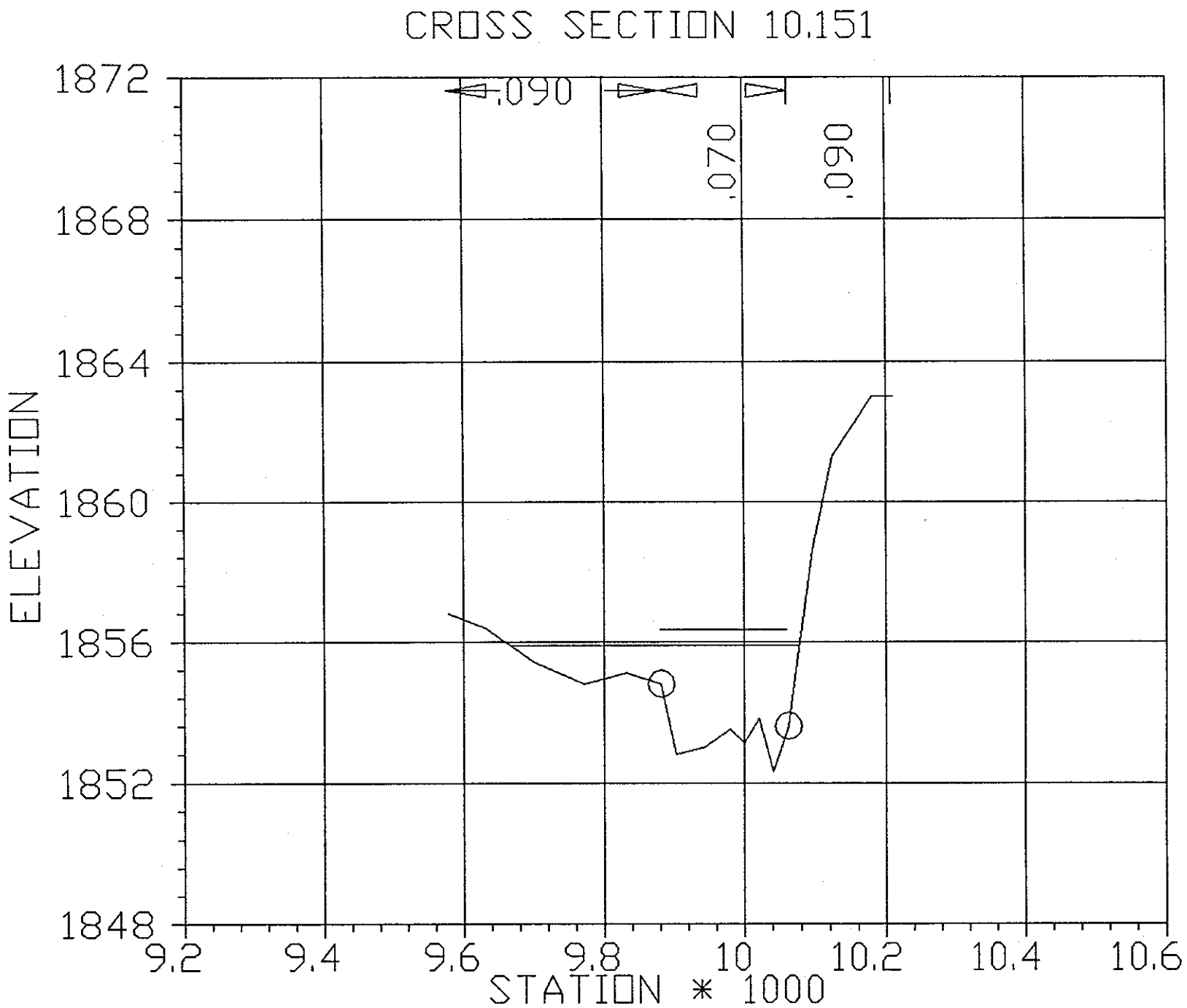

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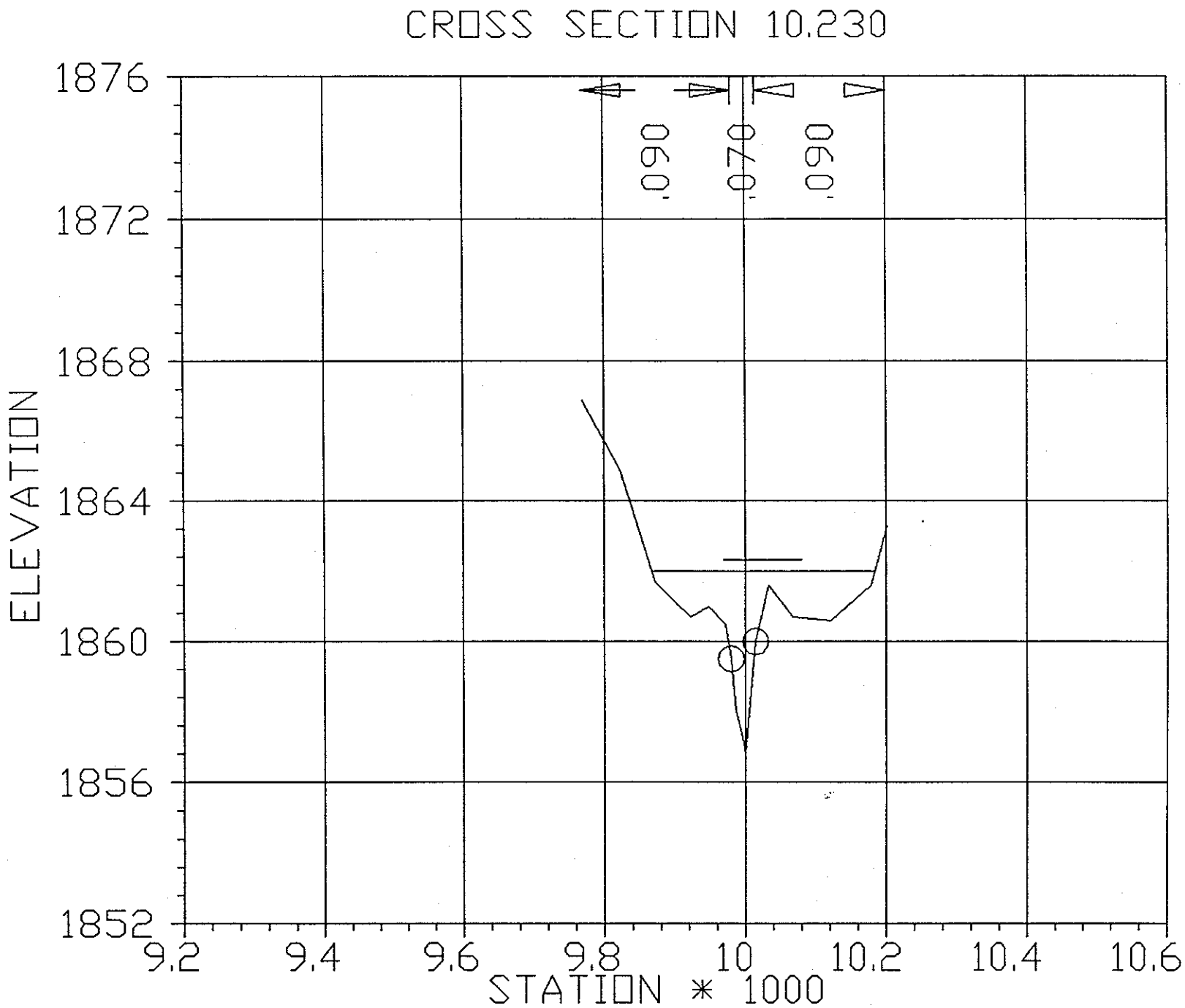

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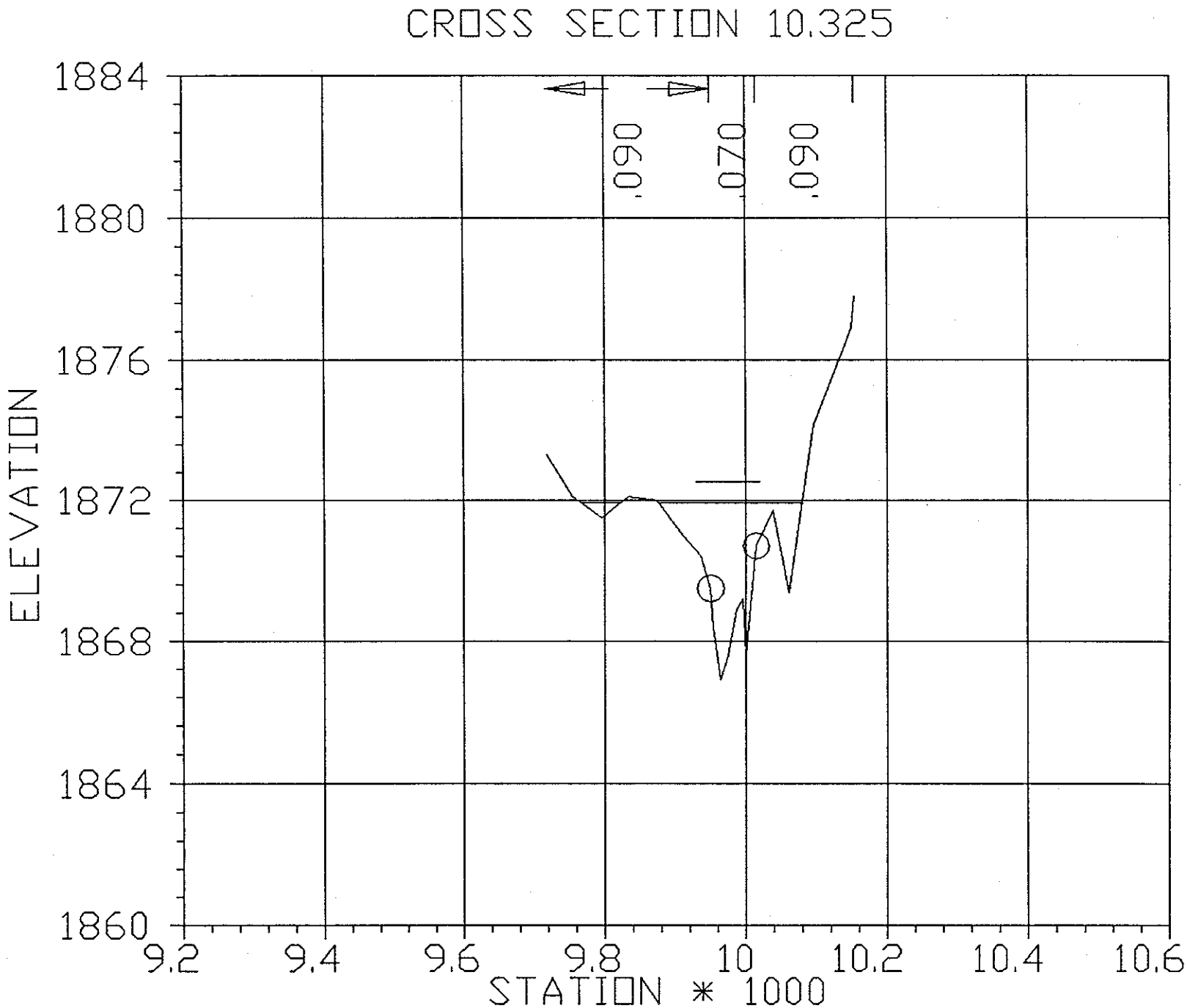

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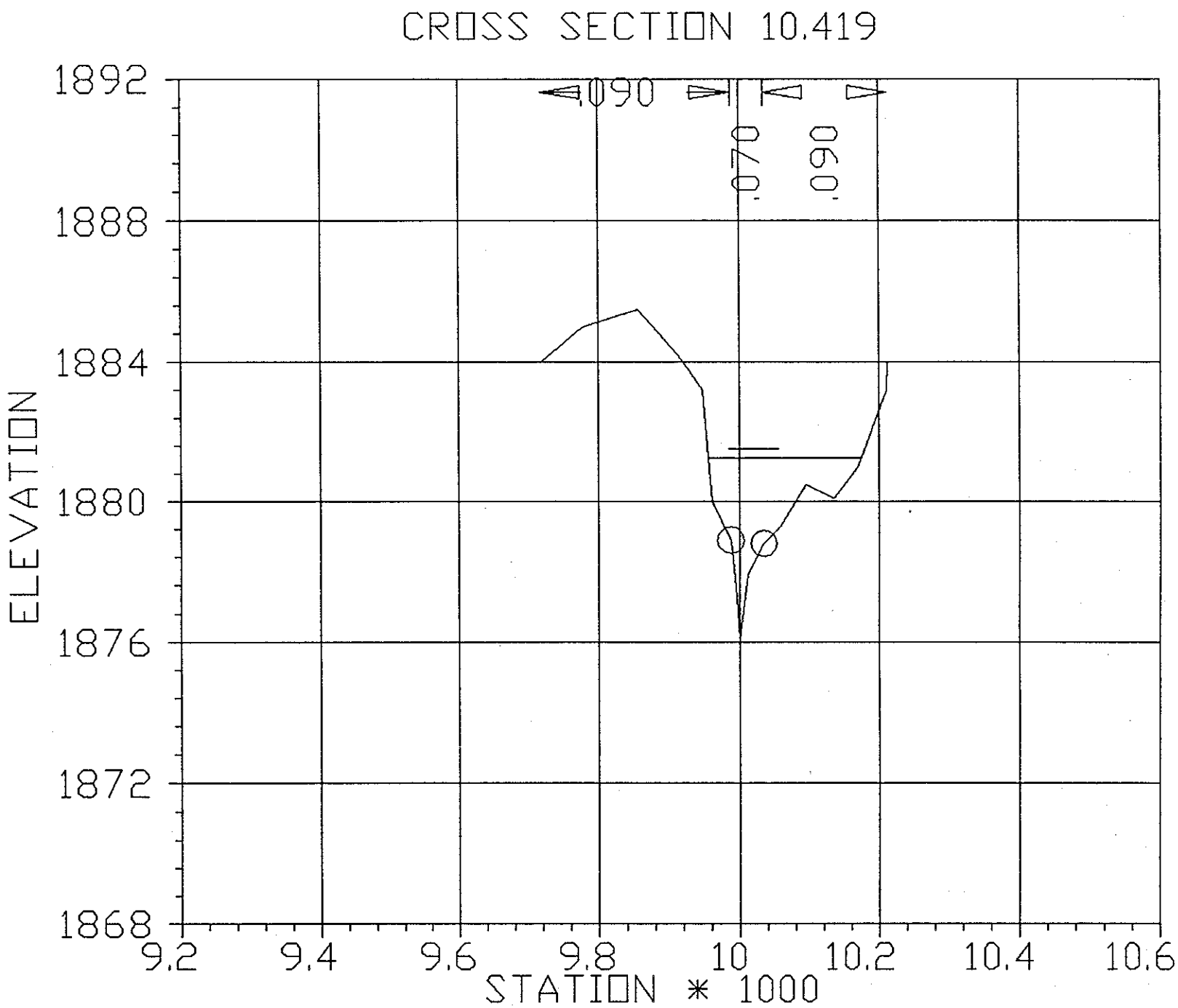

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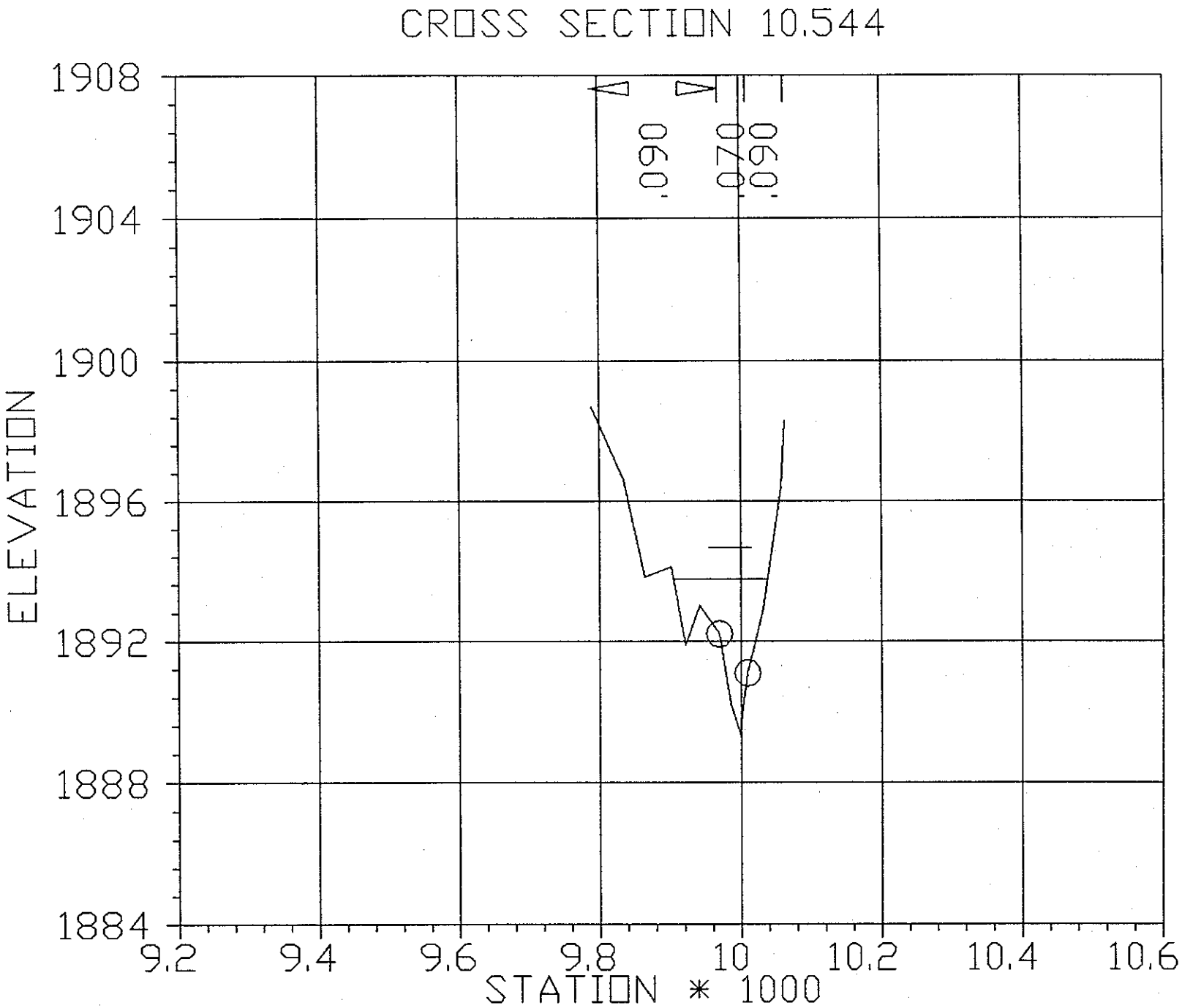

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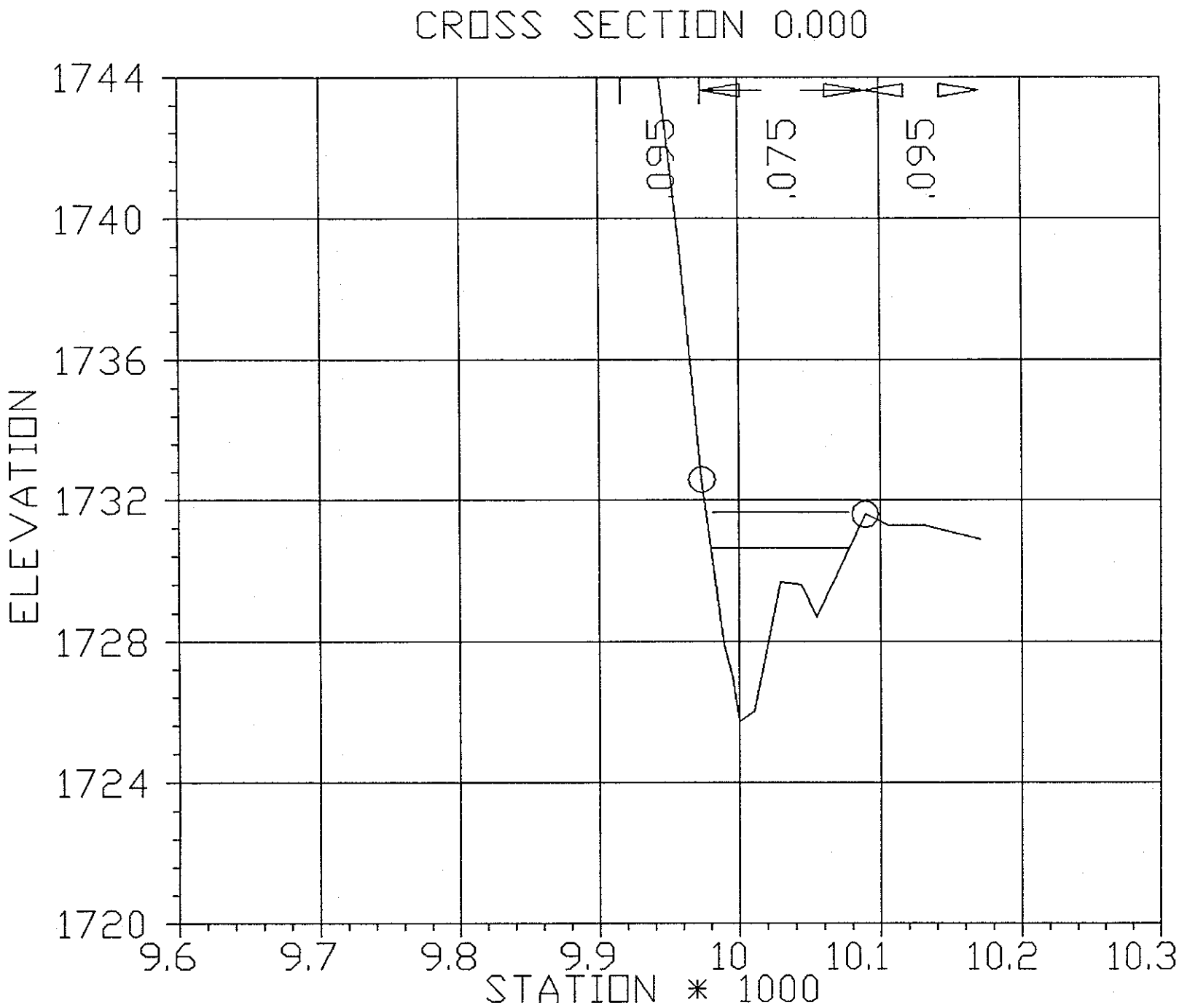

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STREAM NUMBER 4

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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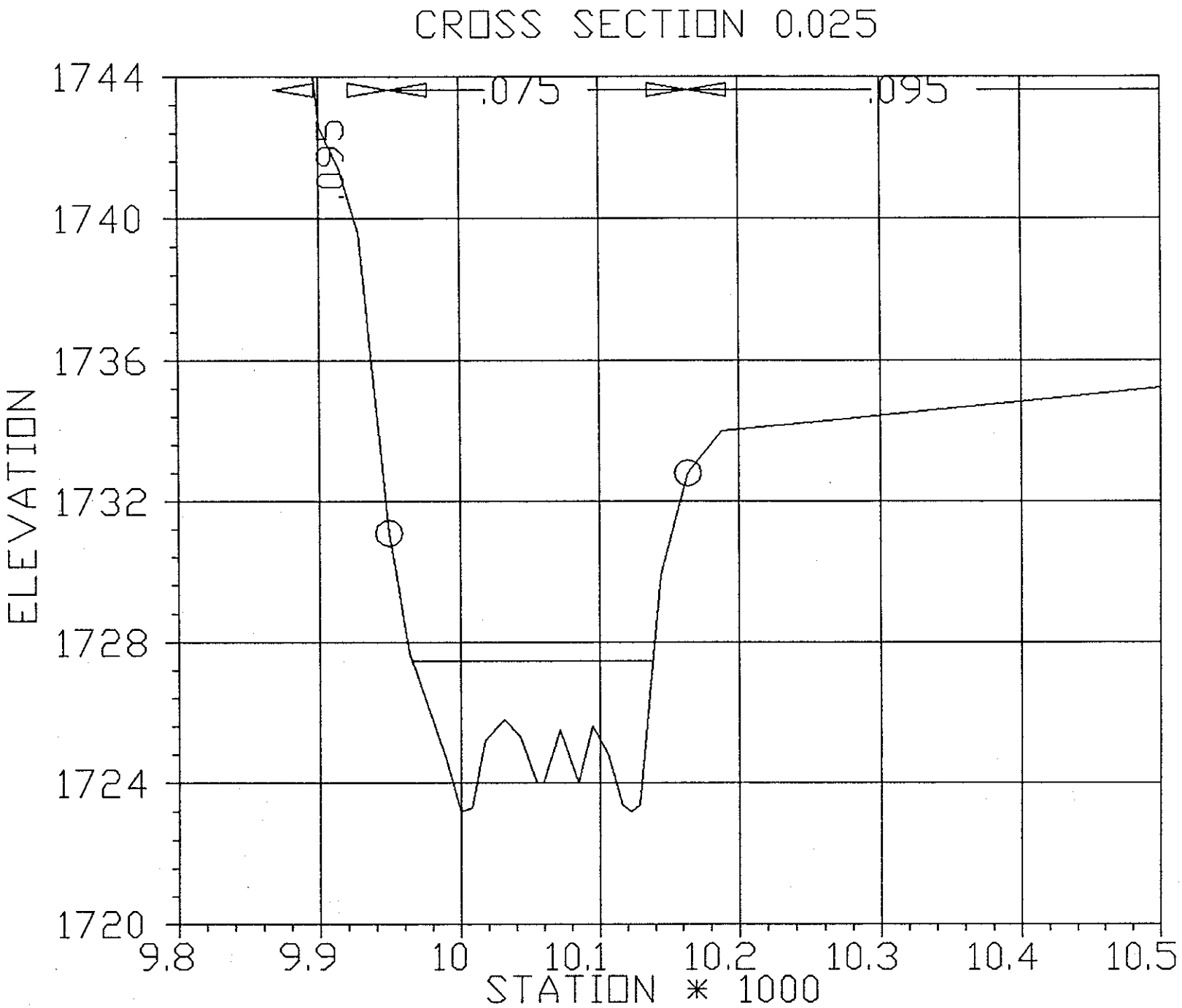

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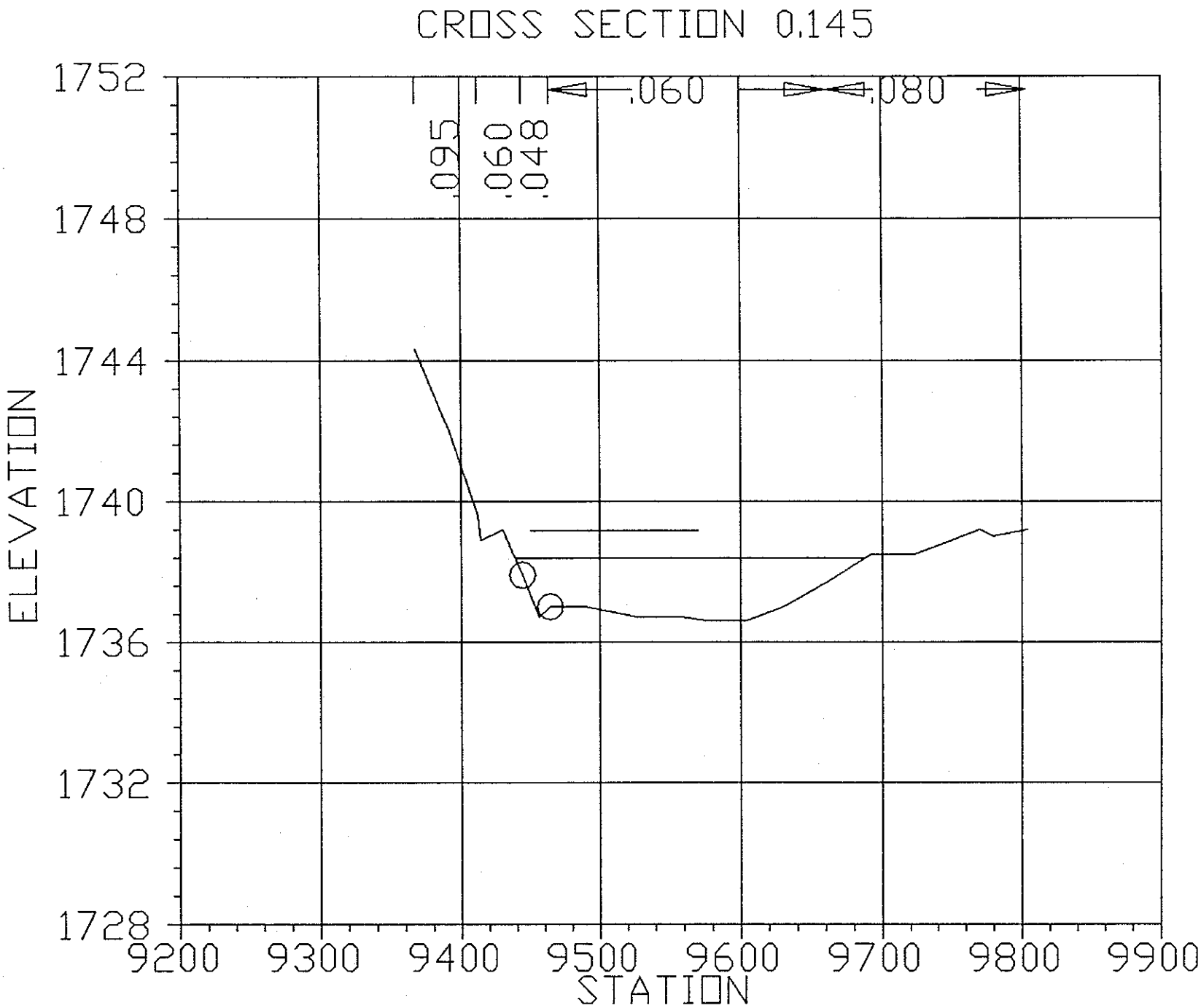

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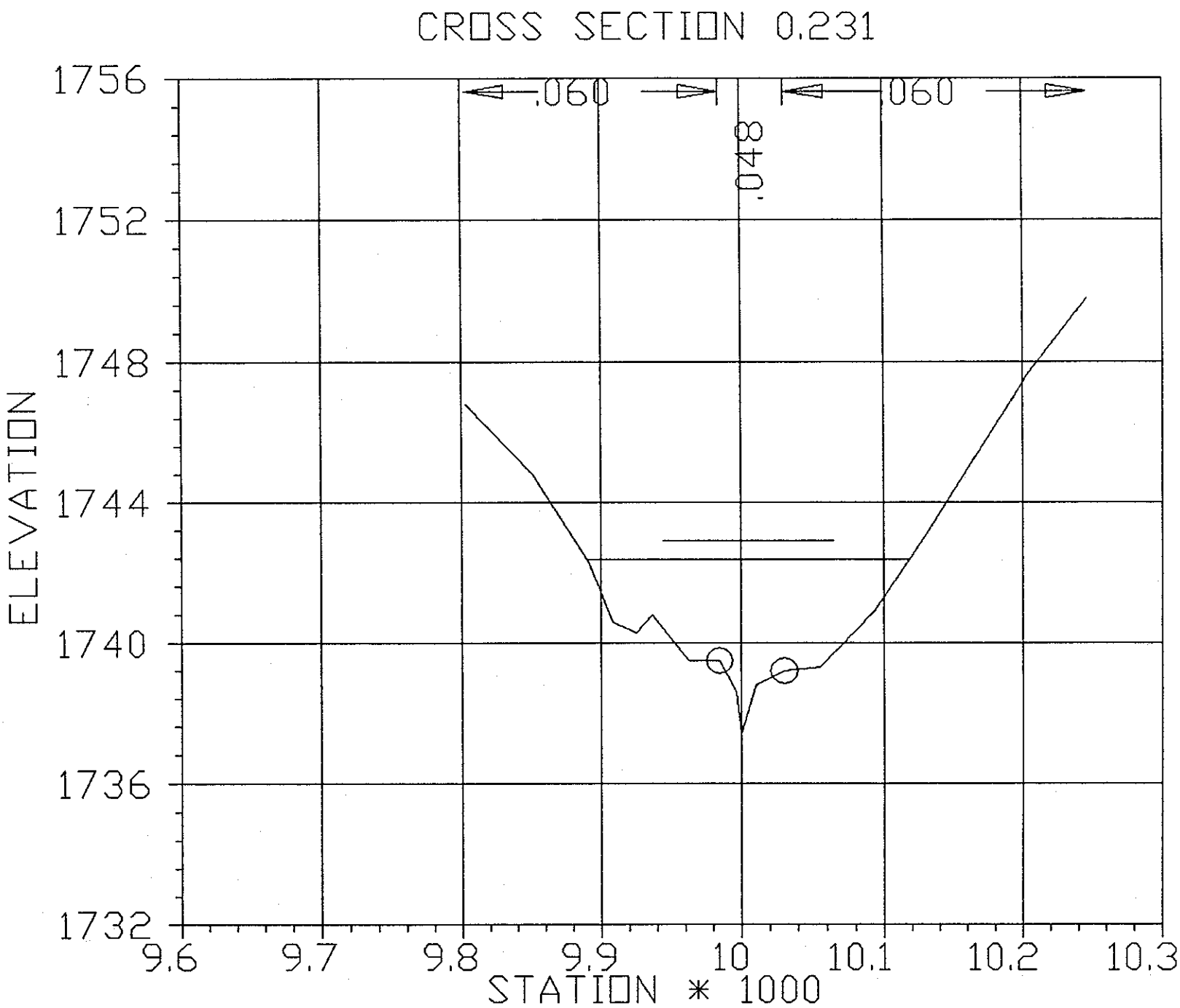

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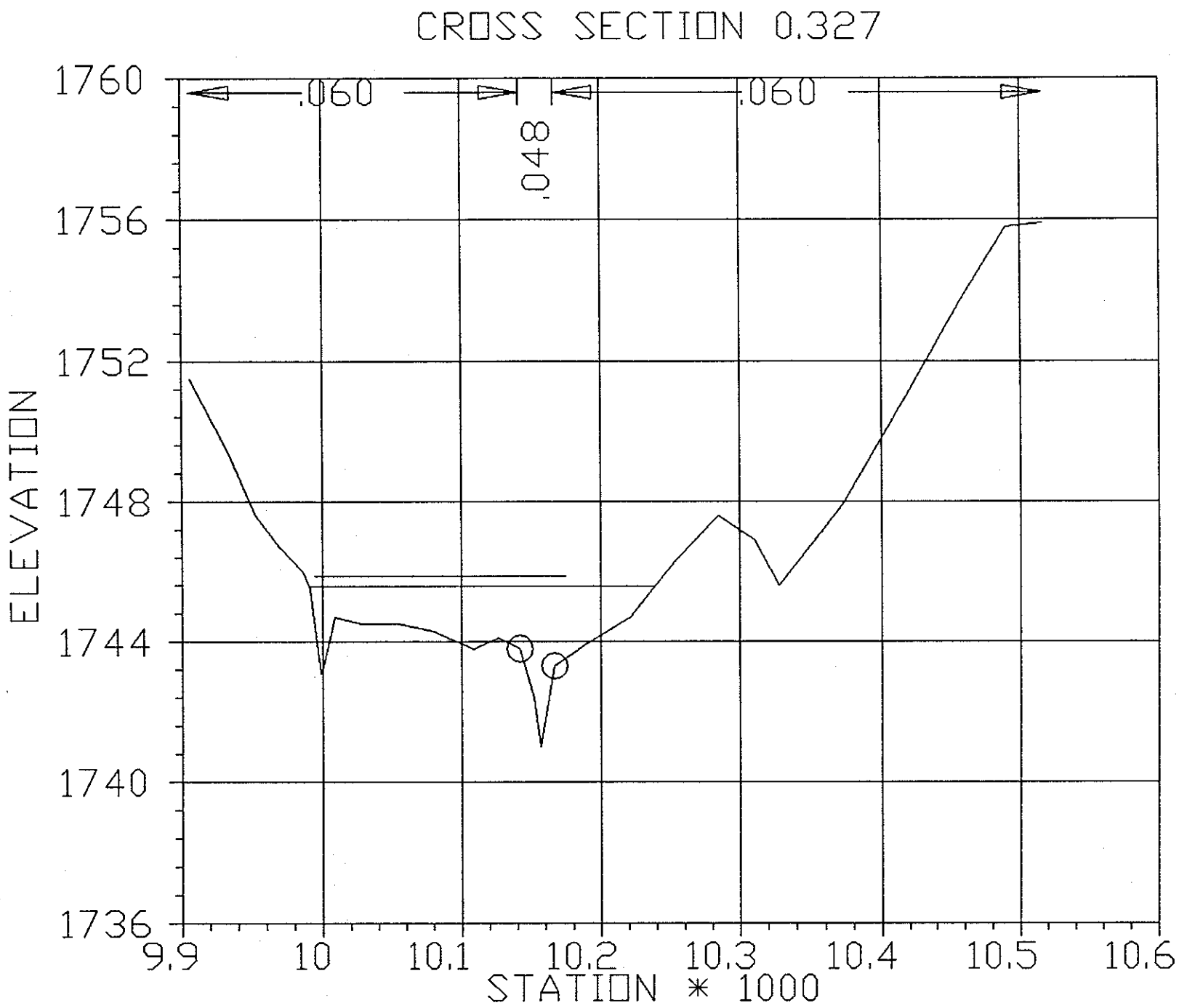

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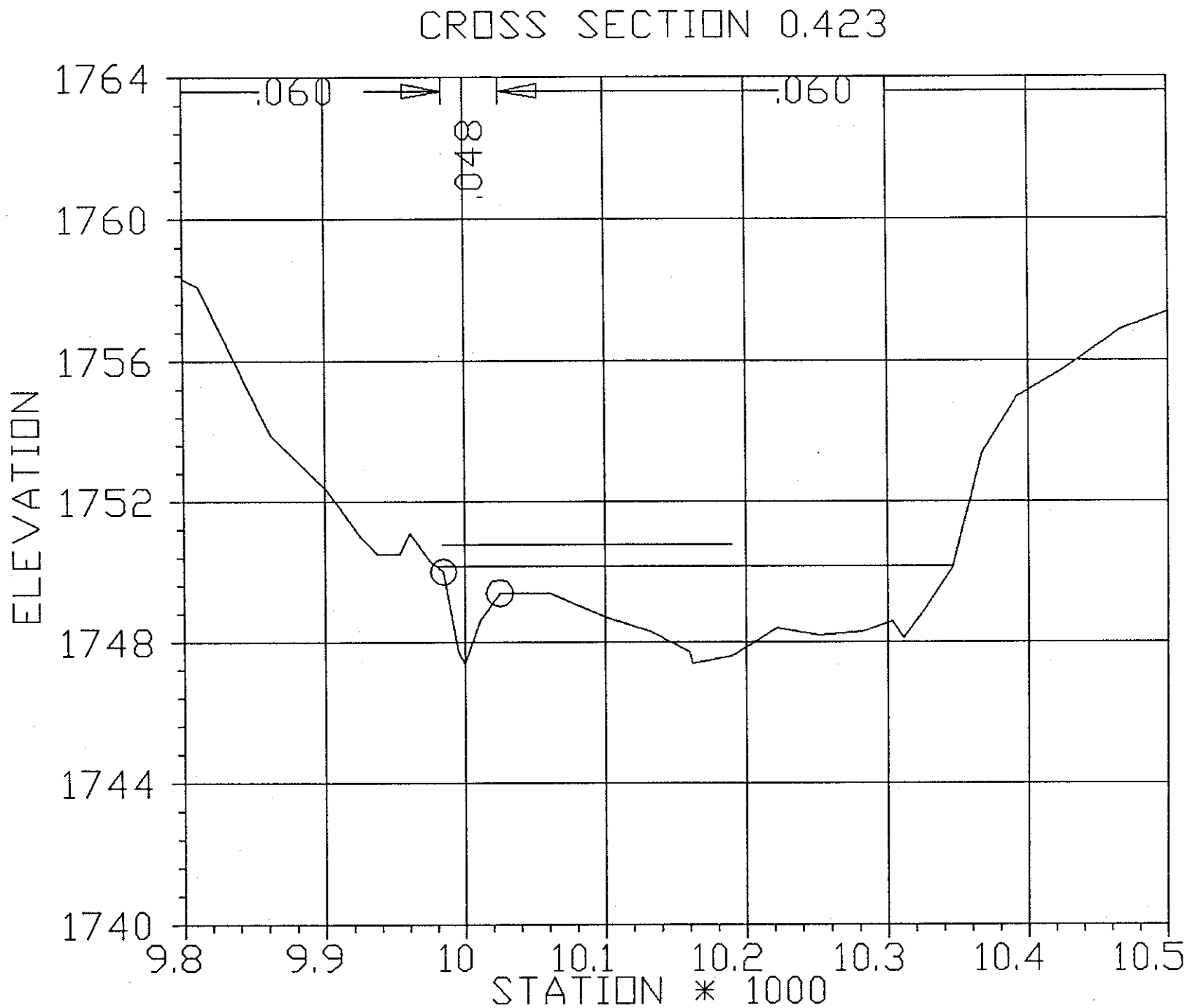

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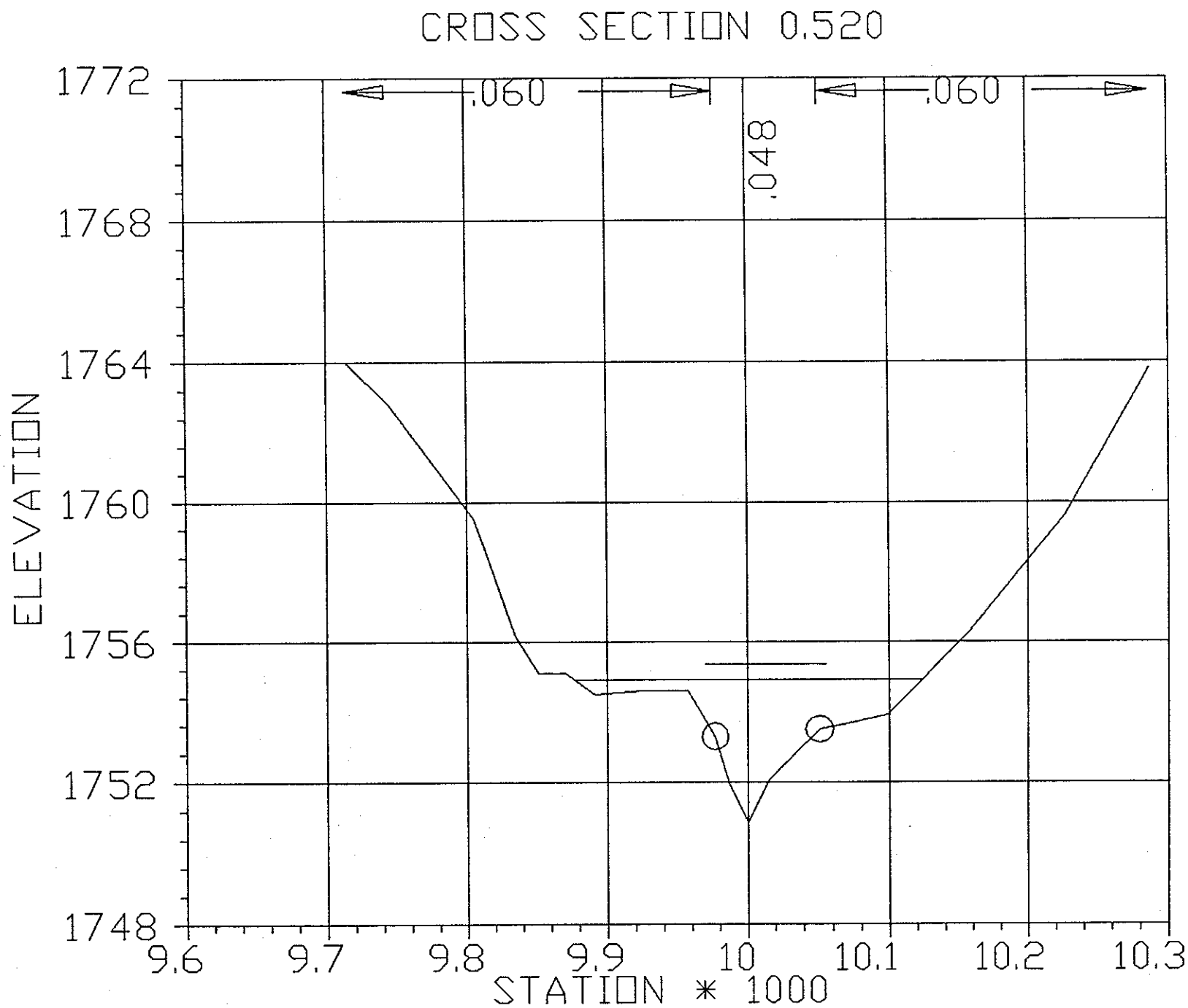

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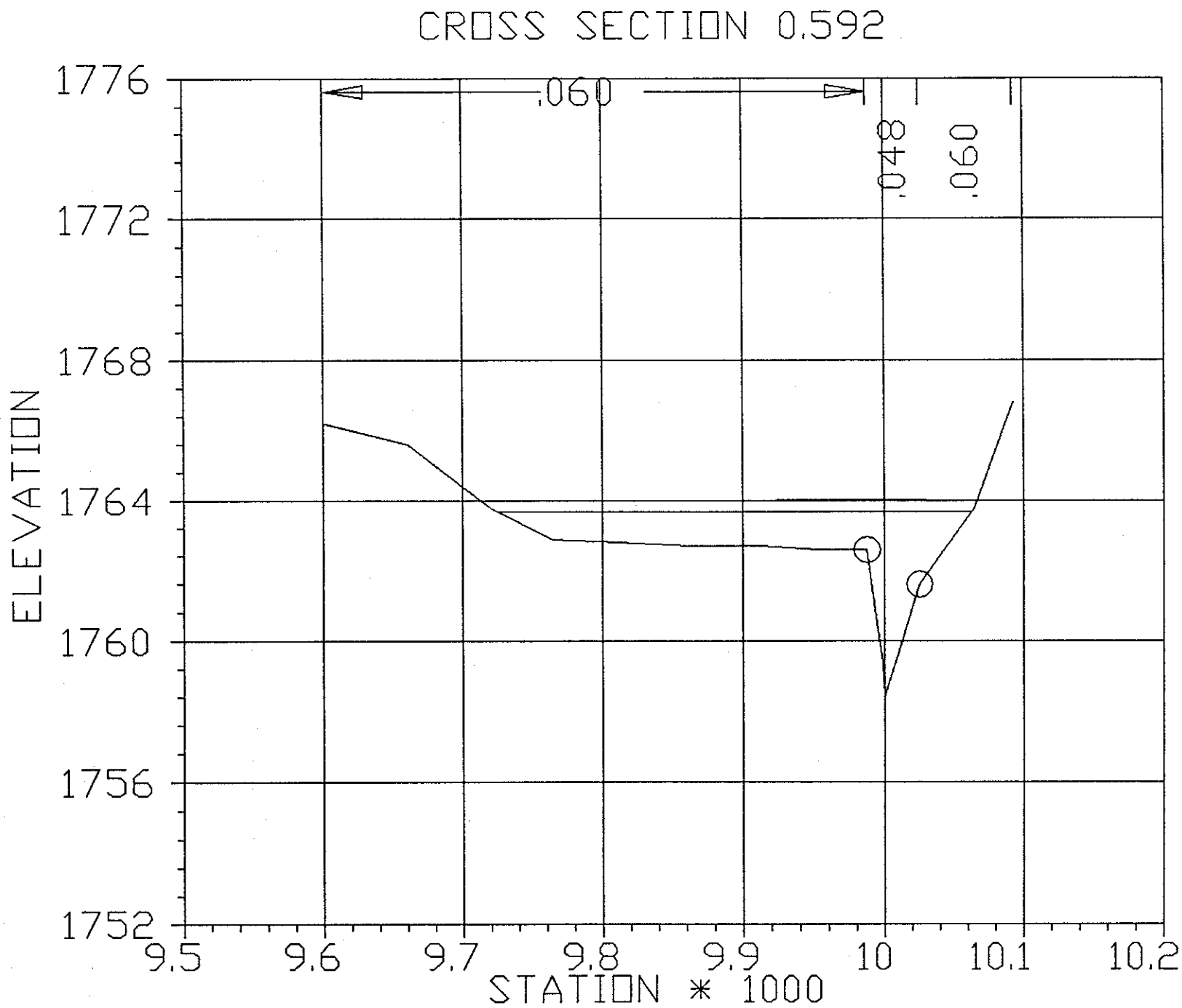

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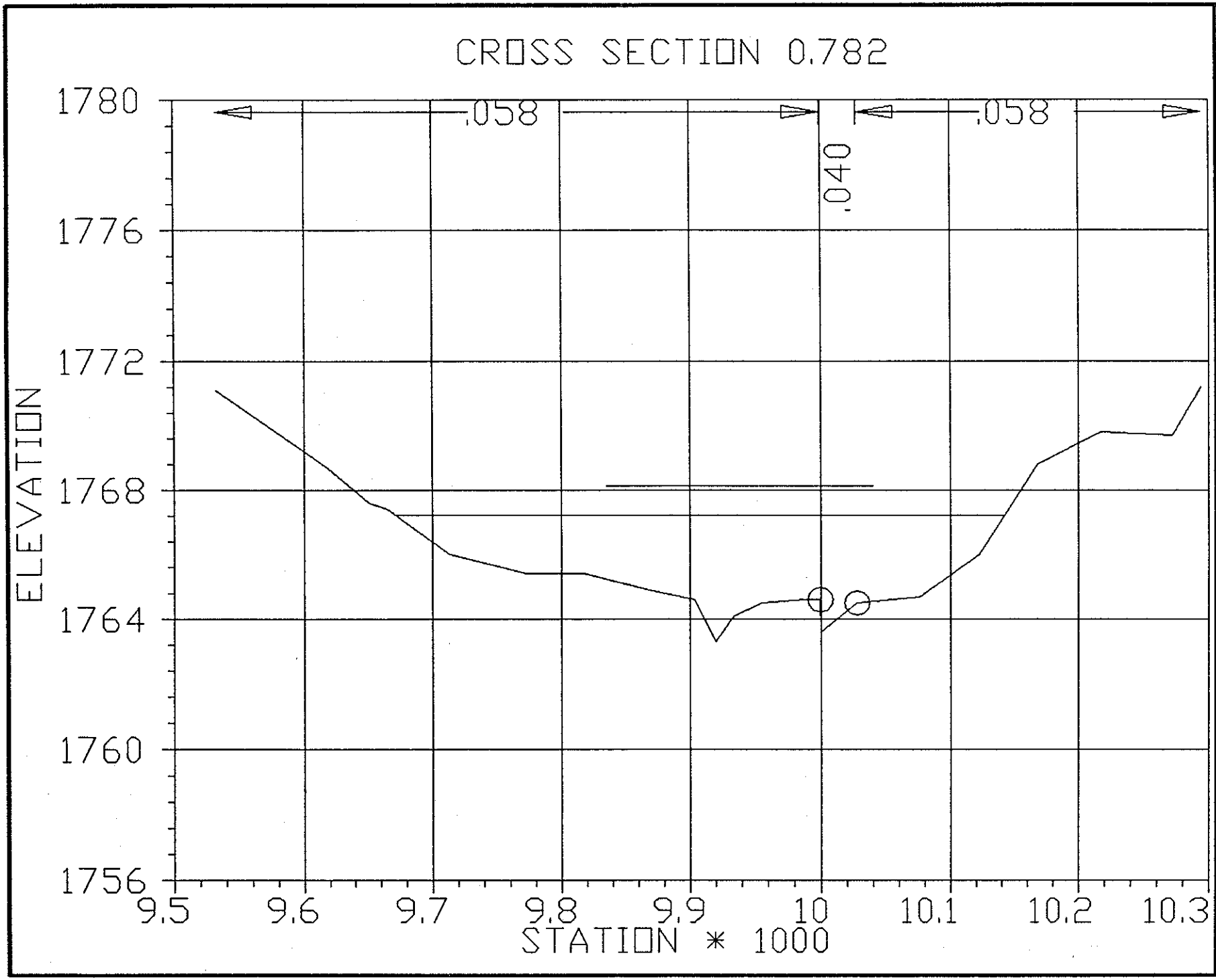

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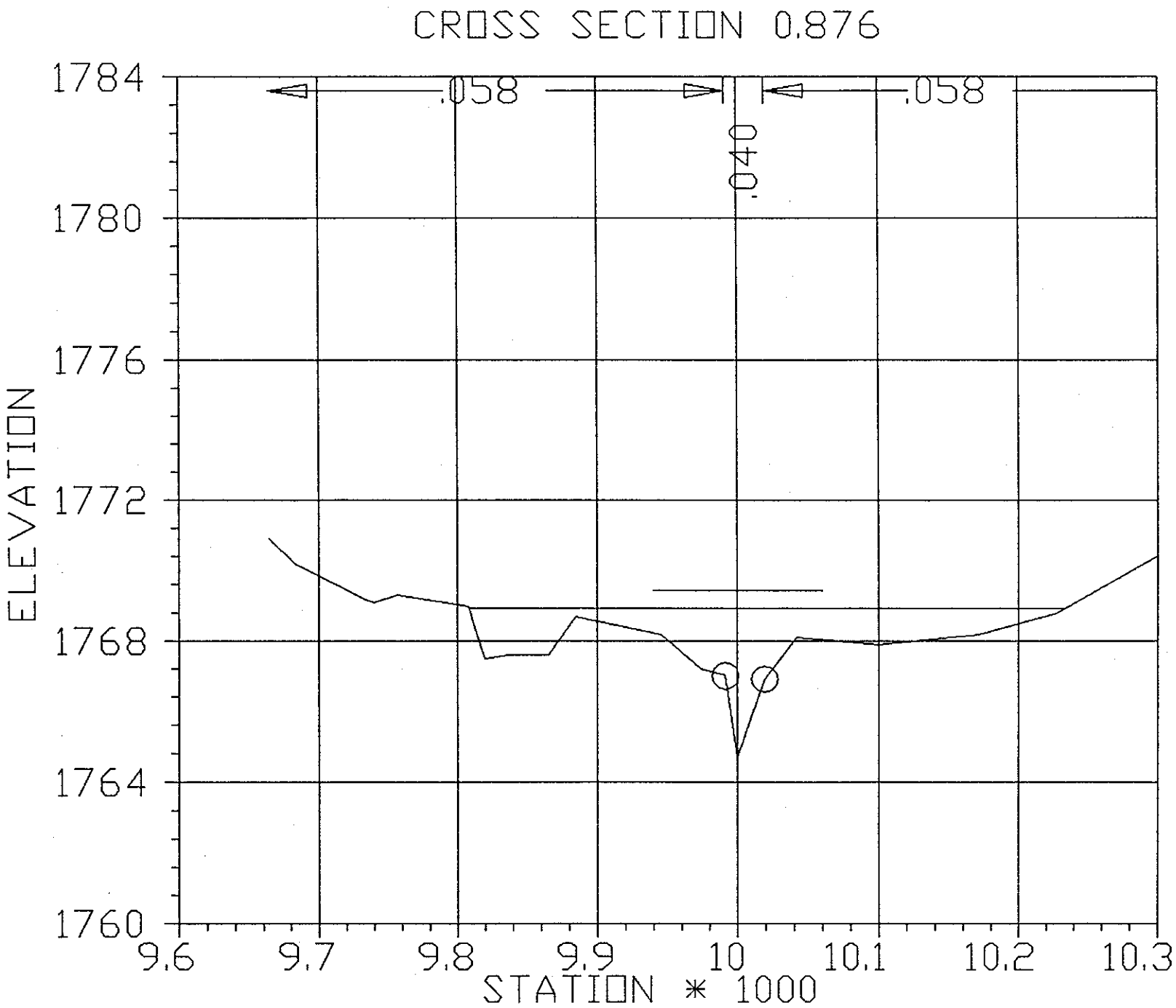

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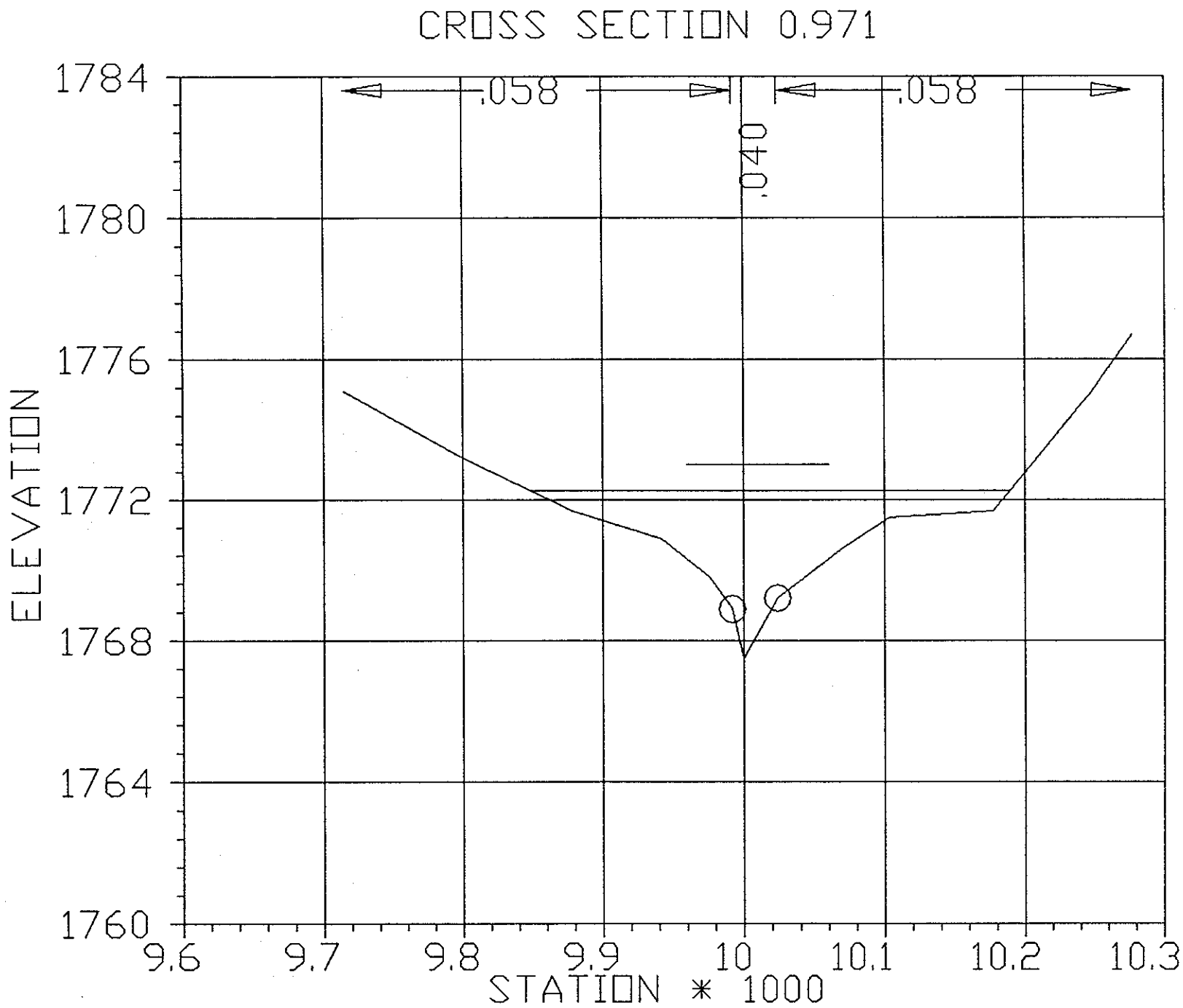

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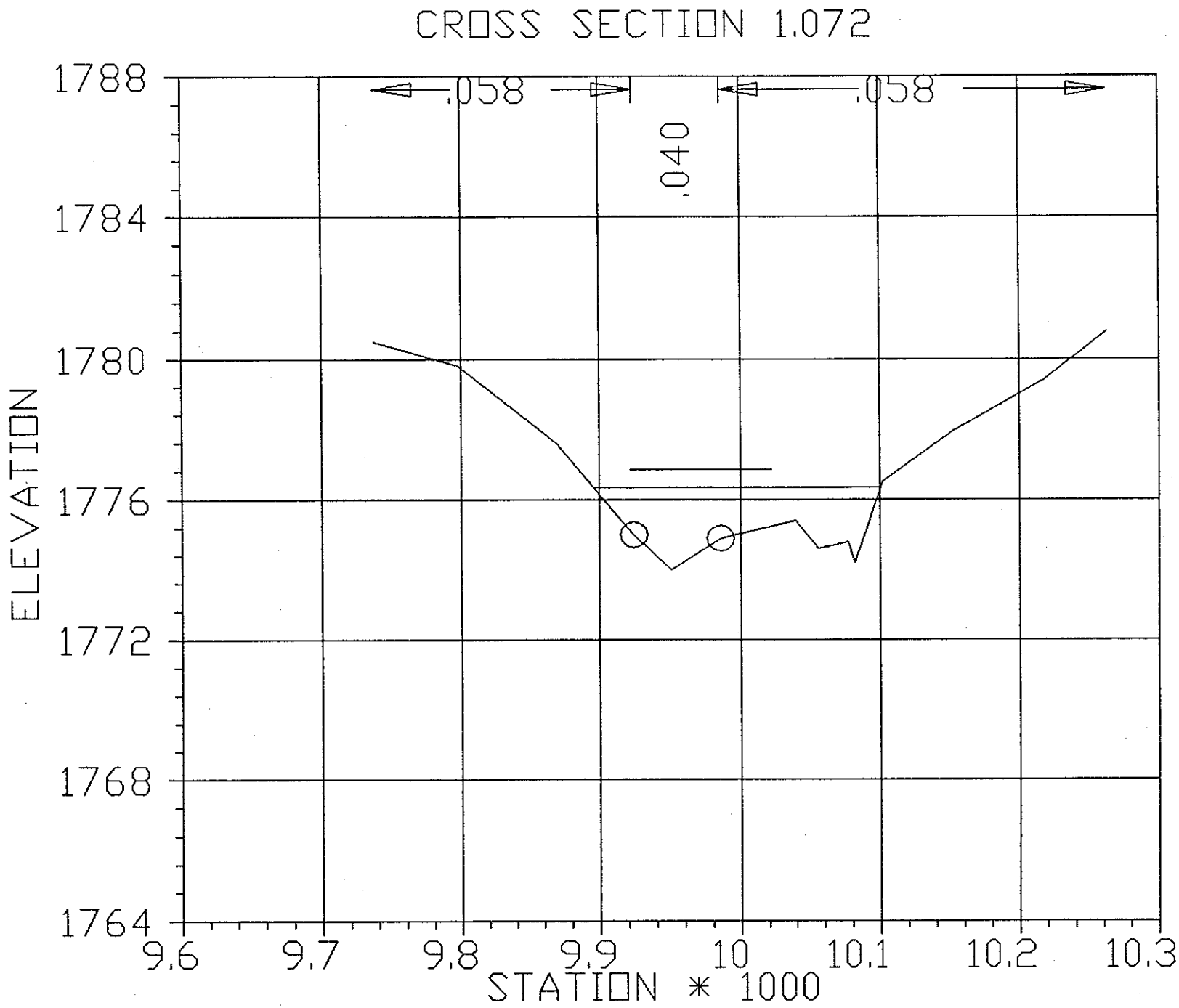

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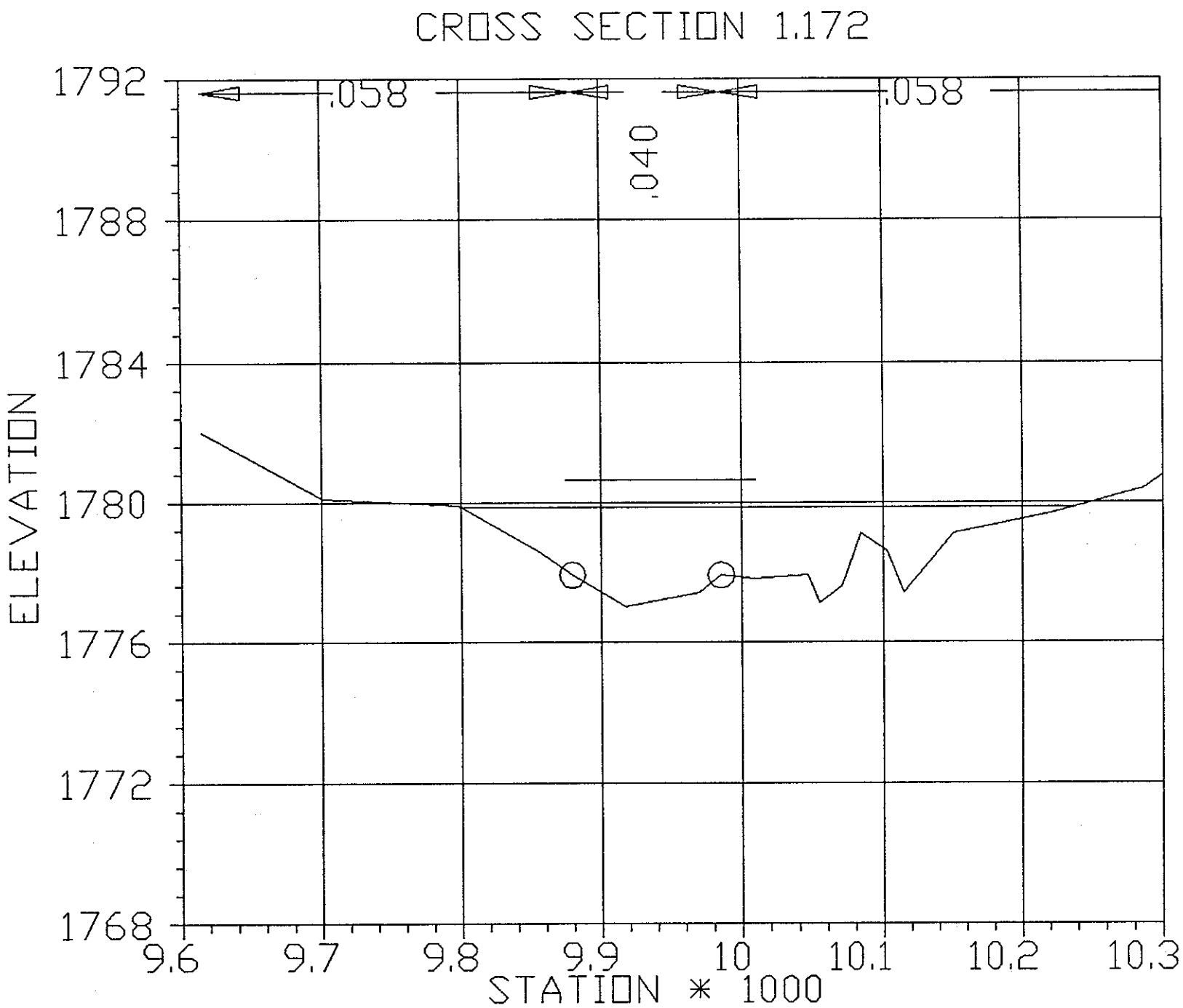

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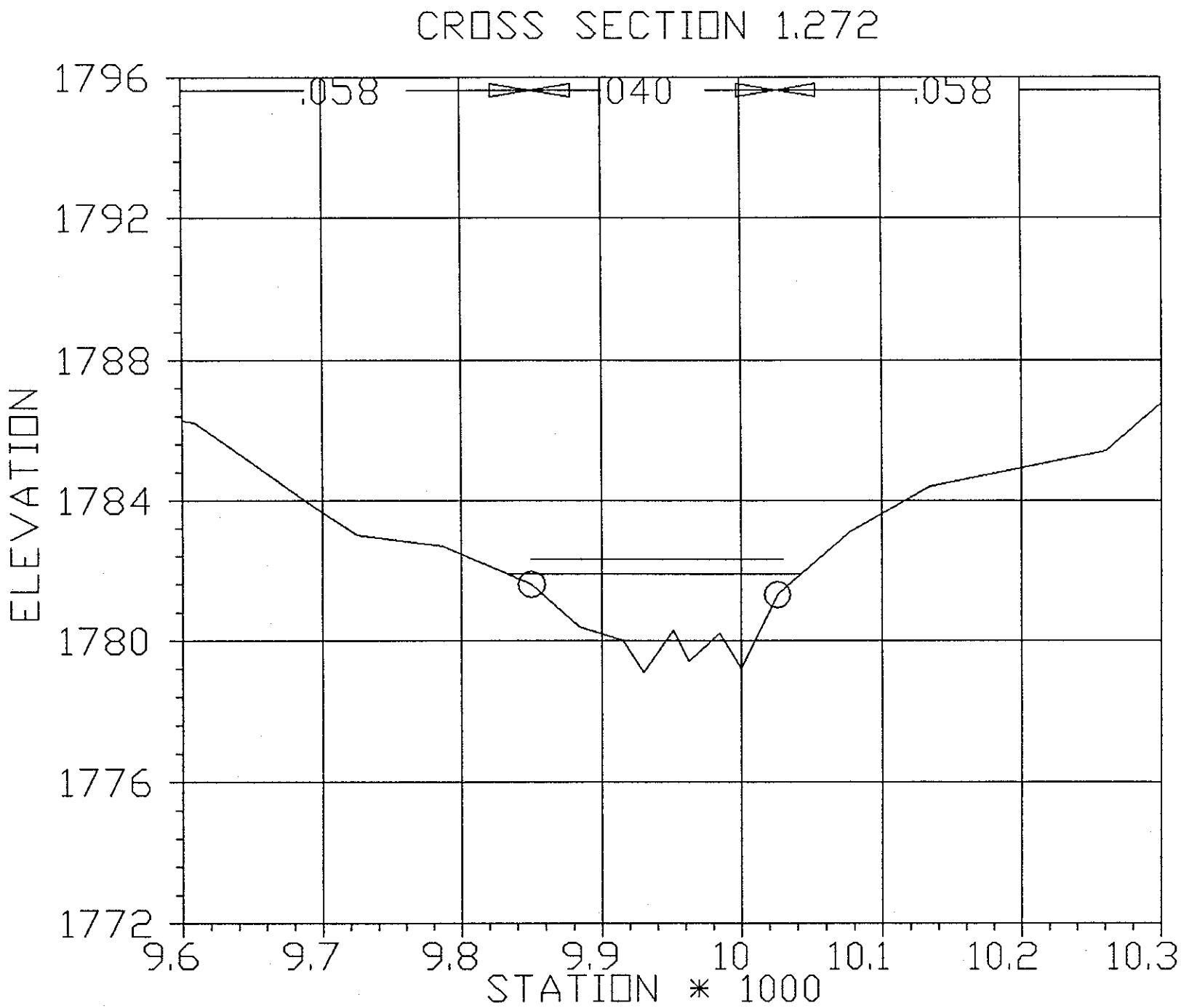

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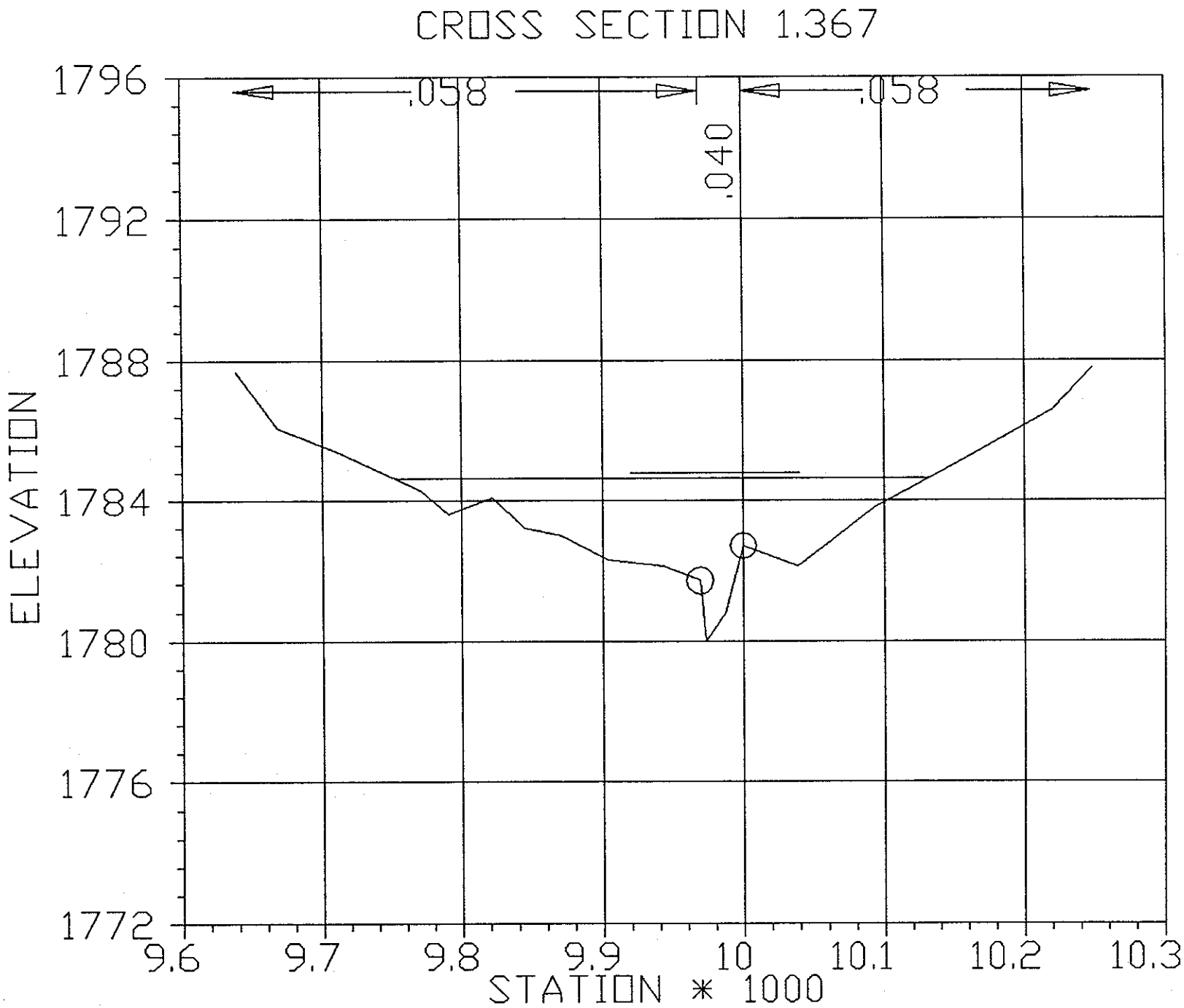

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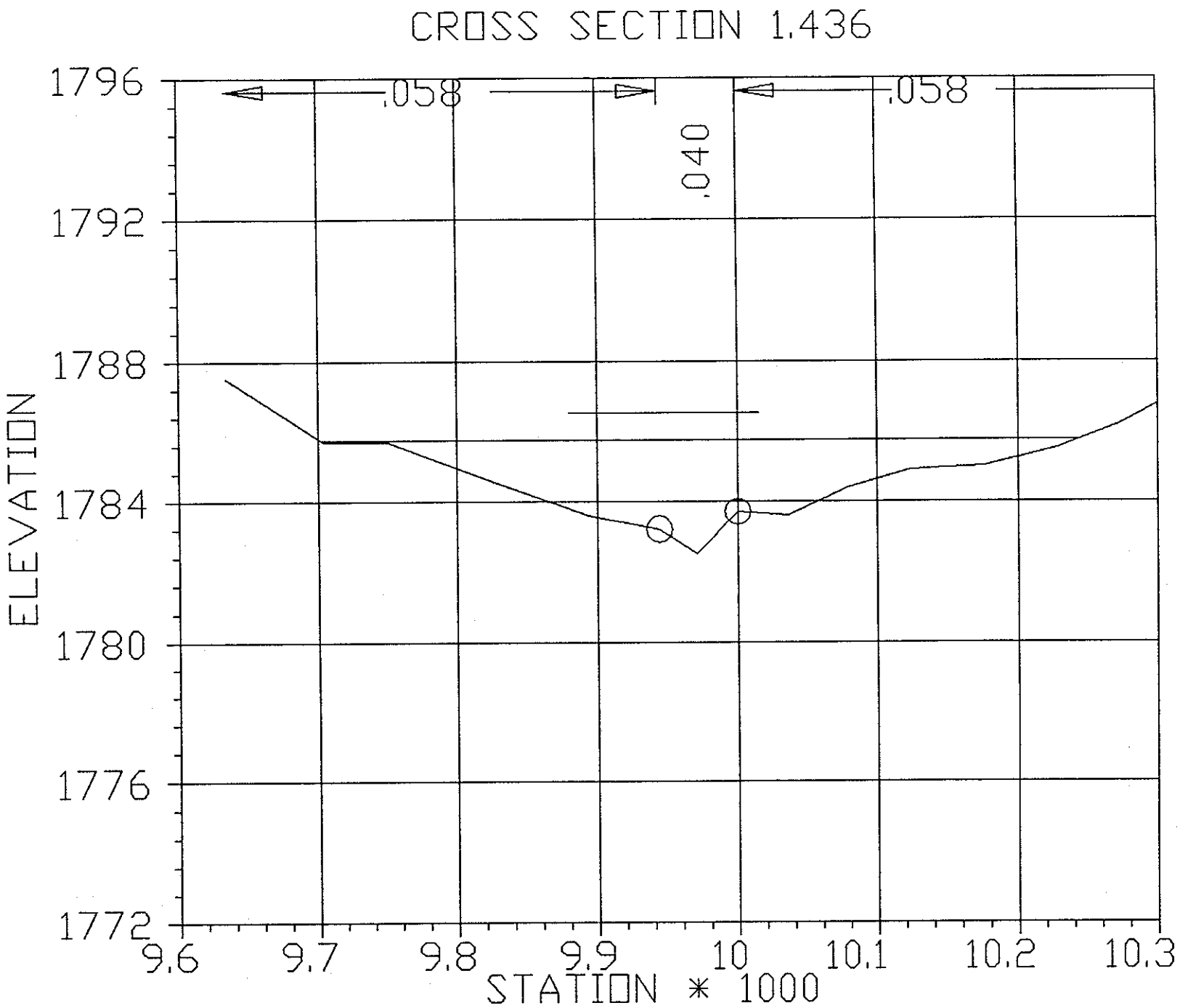

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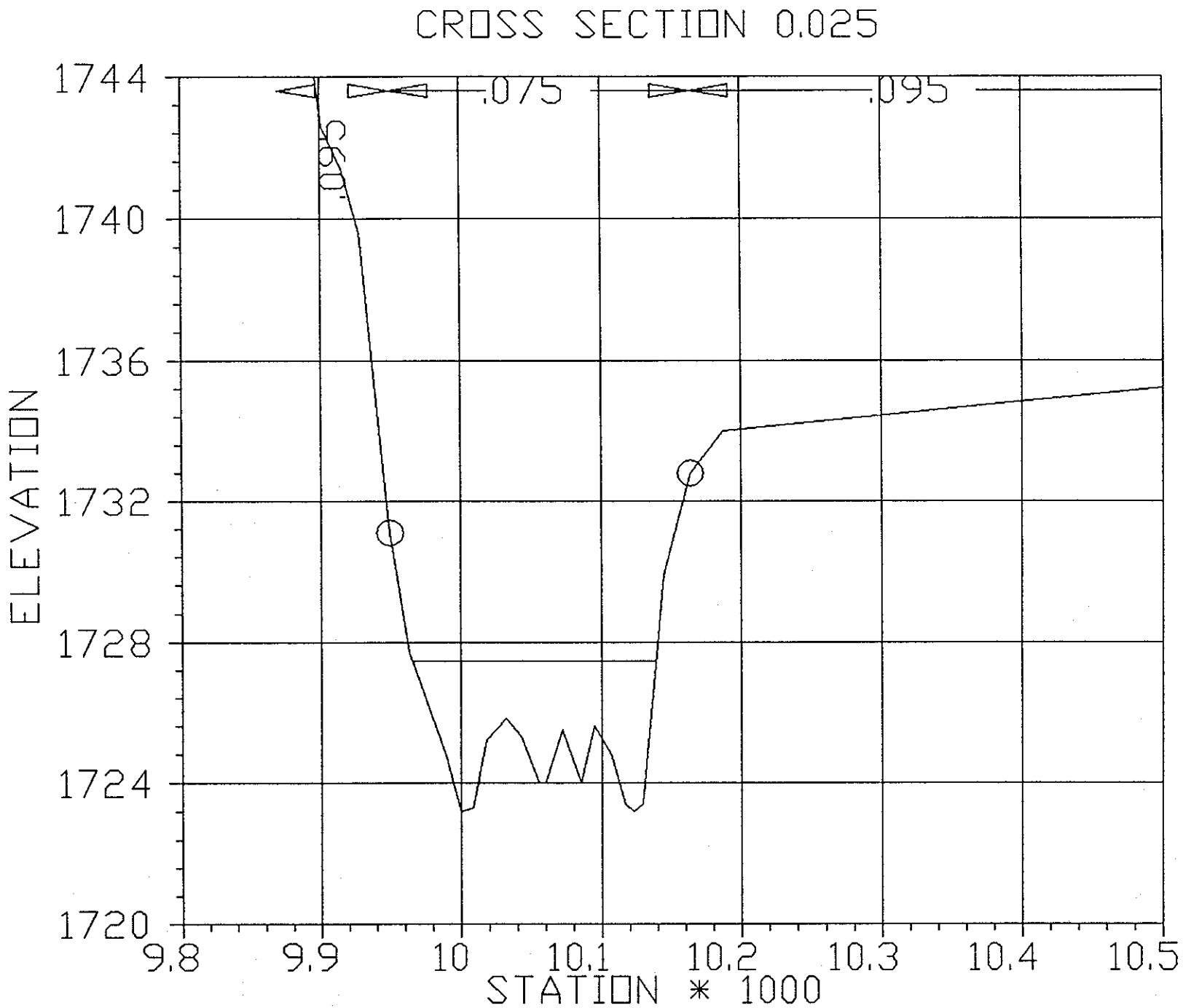

CROSS SECTION PLOT

DEADMAN WASH TRIBUTARY
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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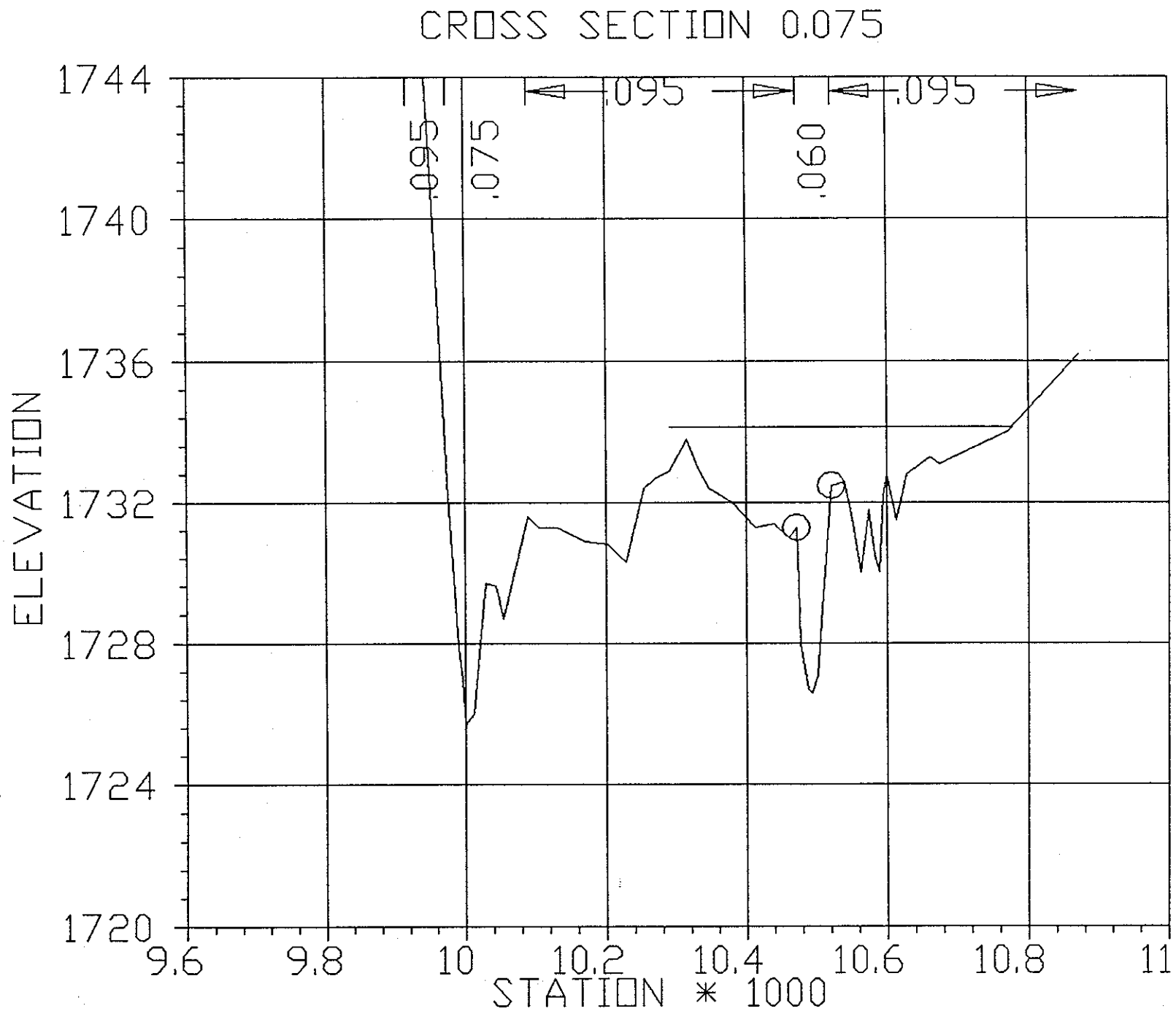

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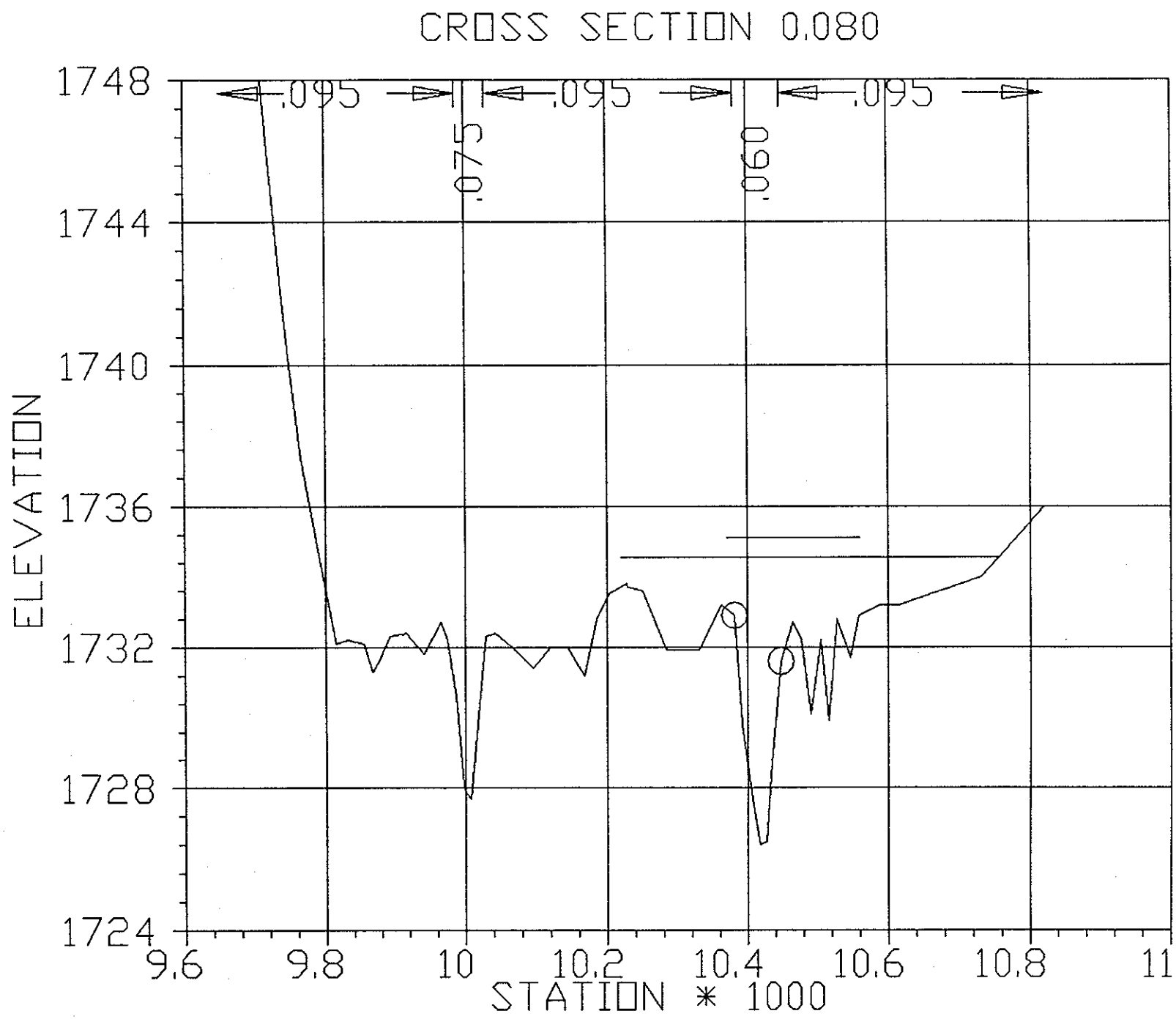

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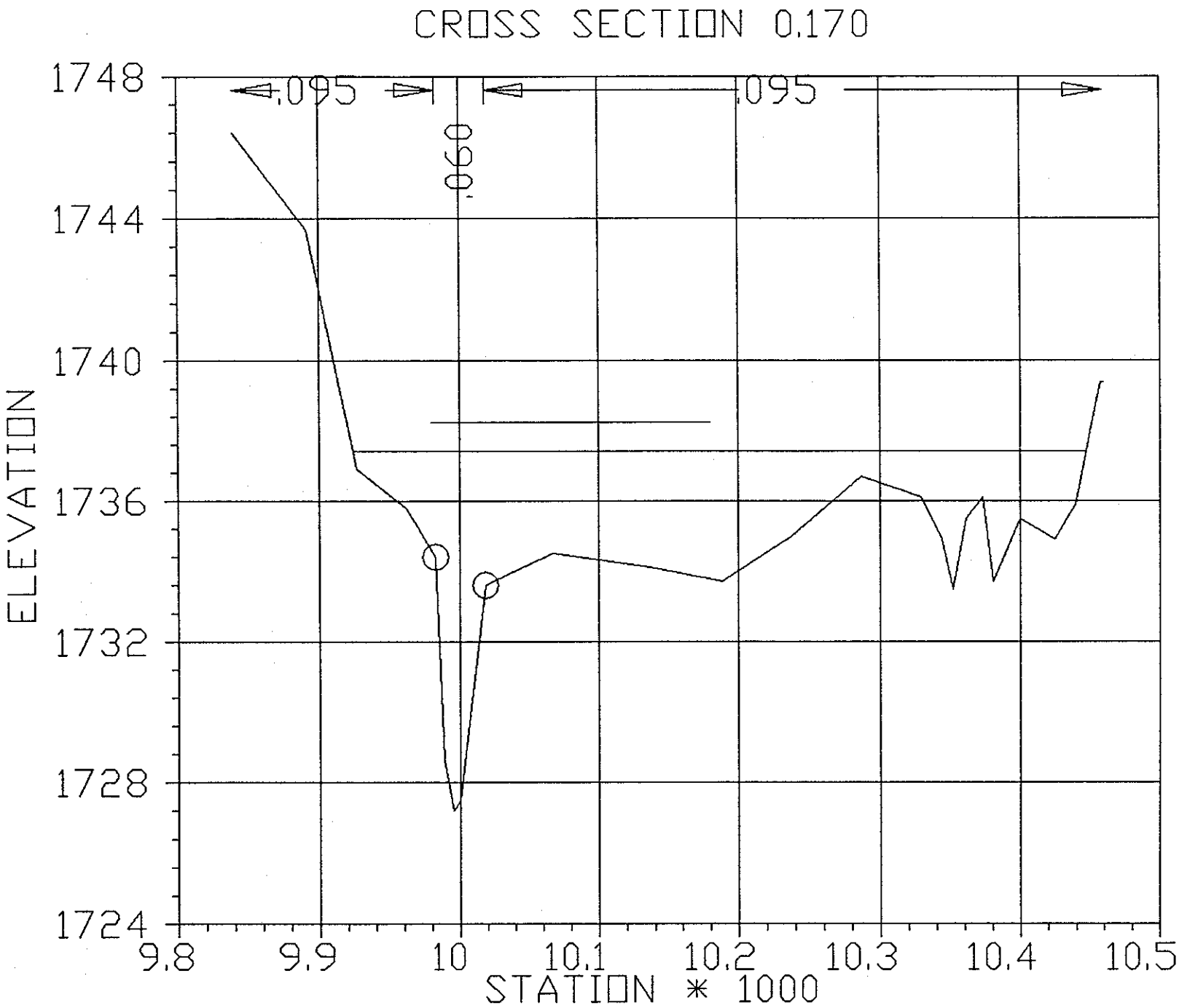

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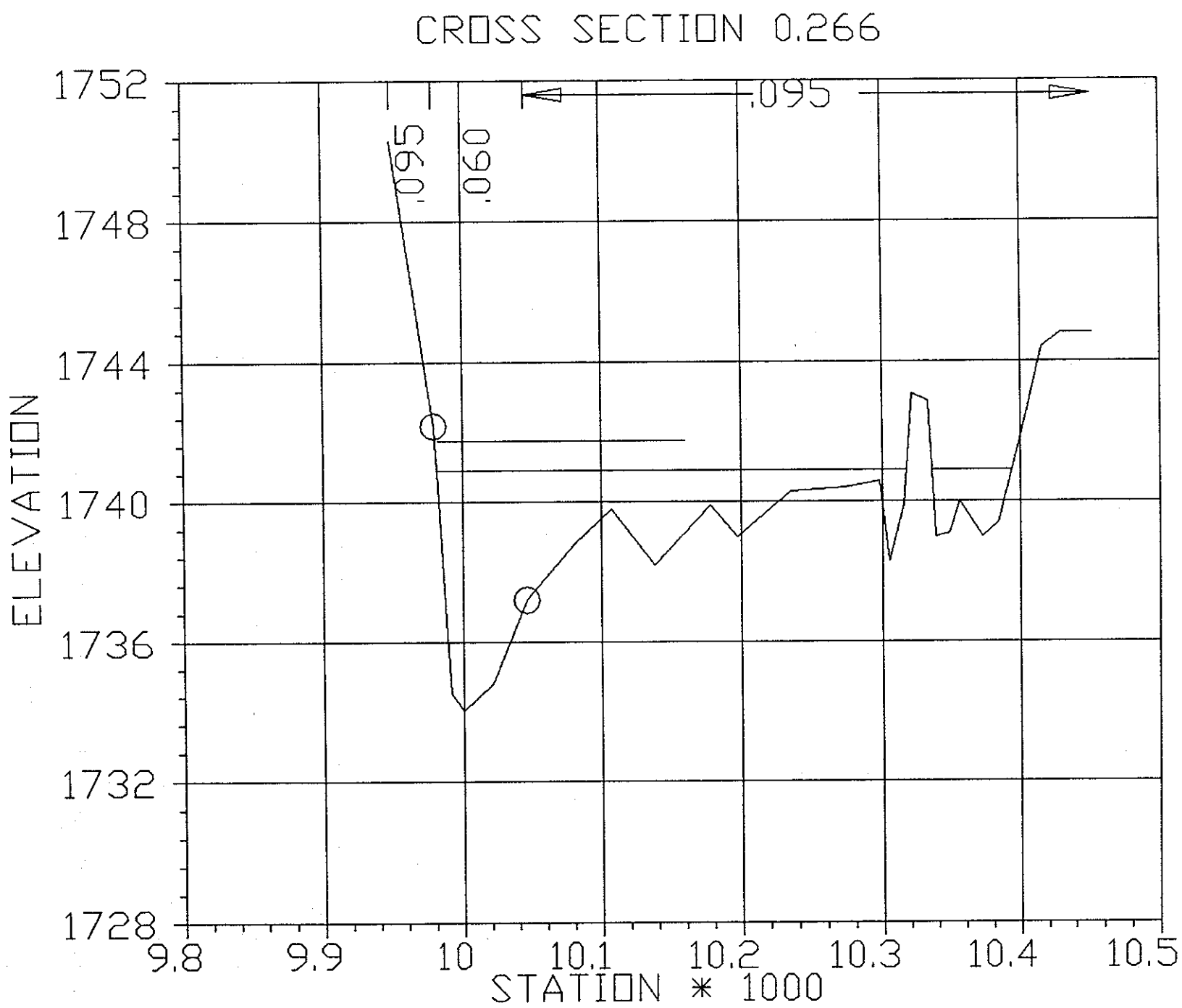

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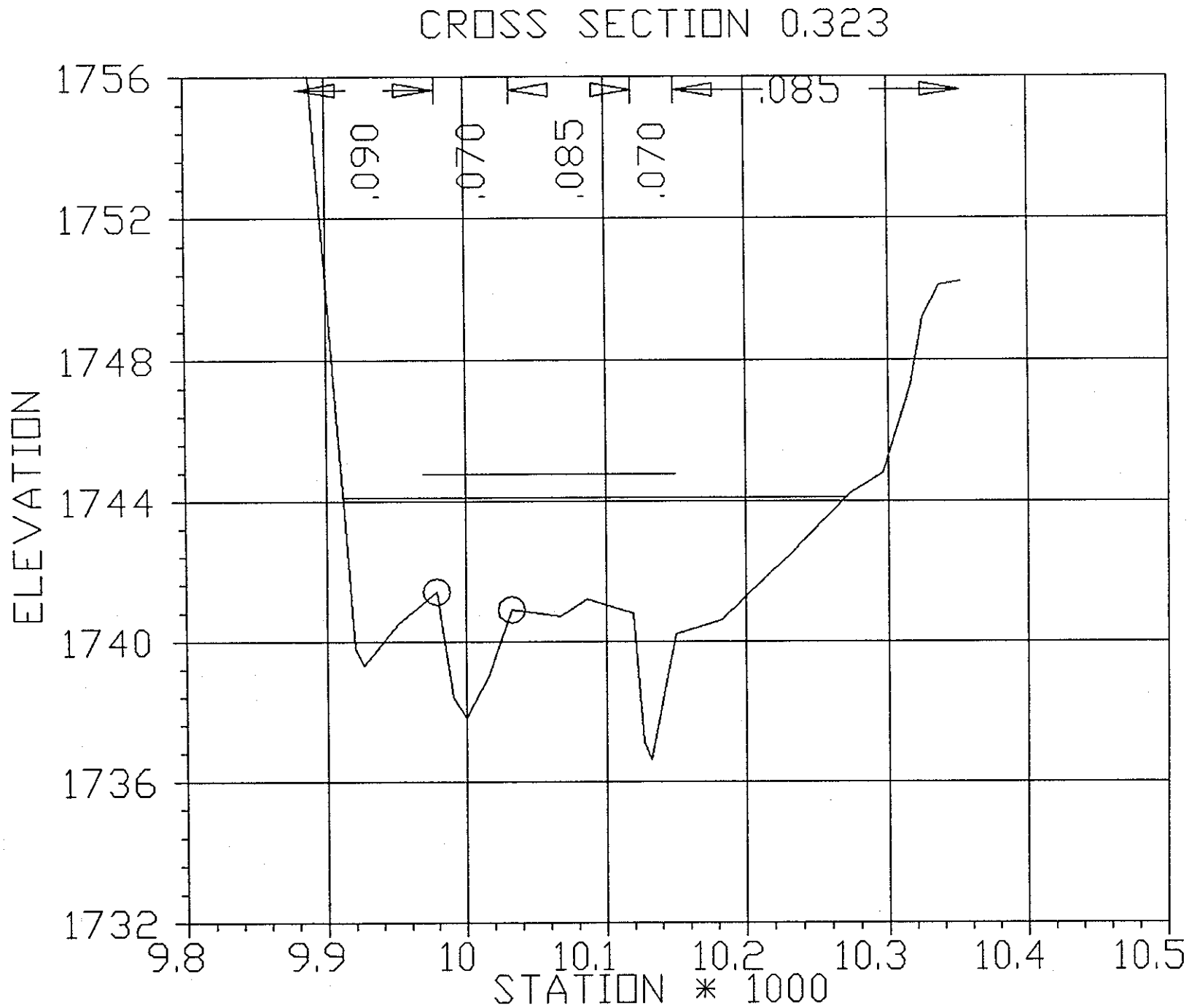

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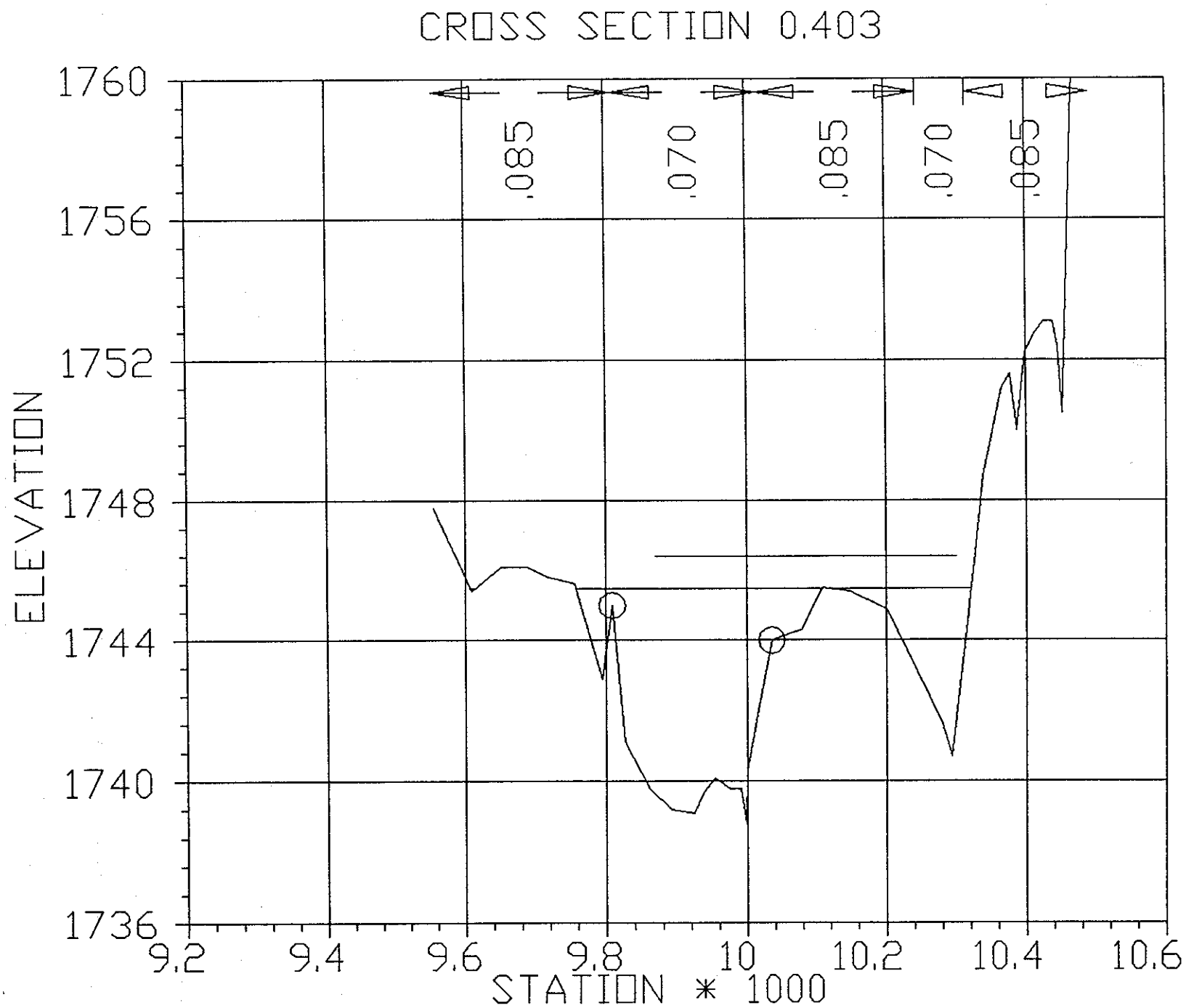

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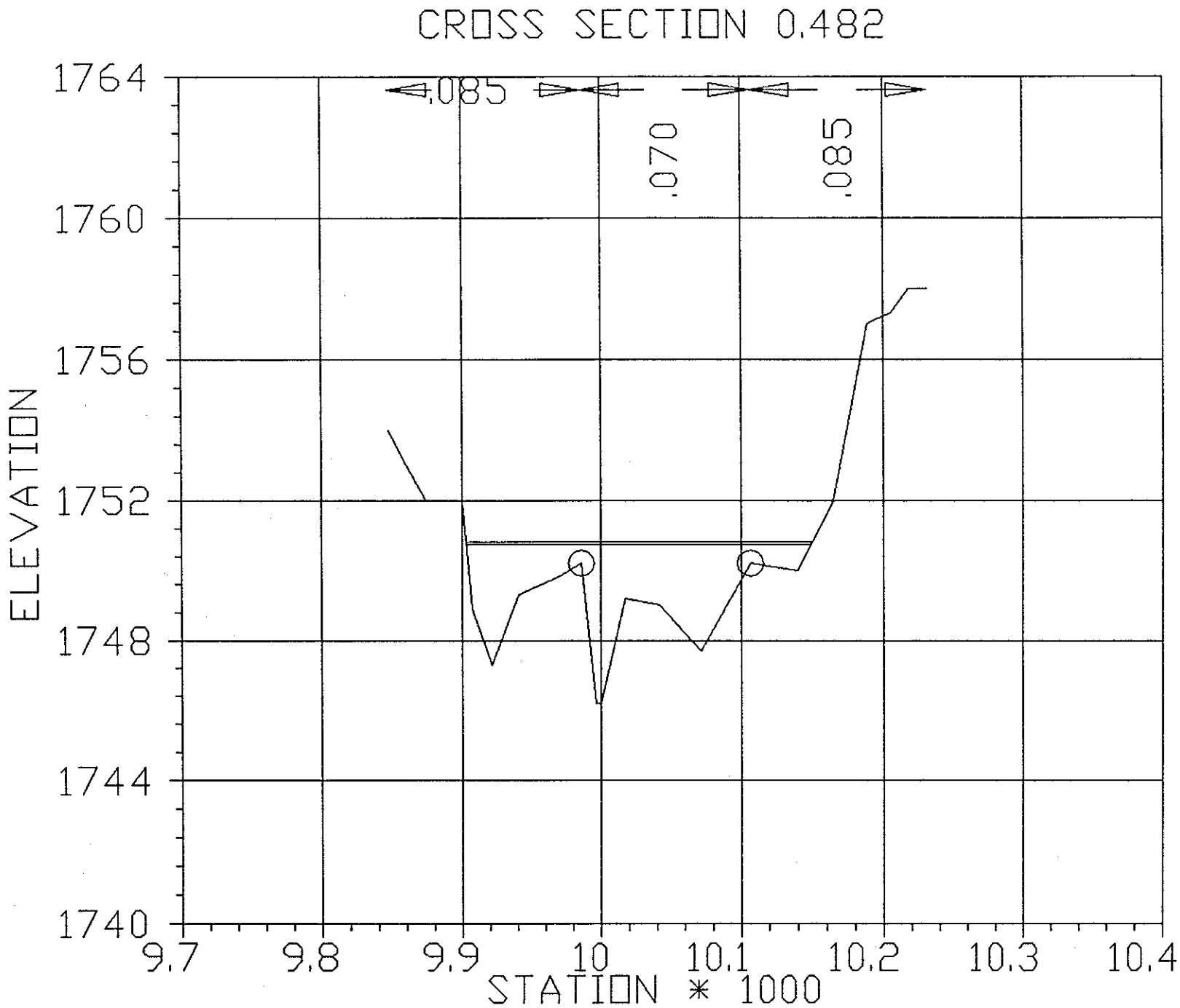

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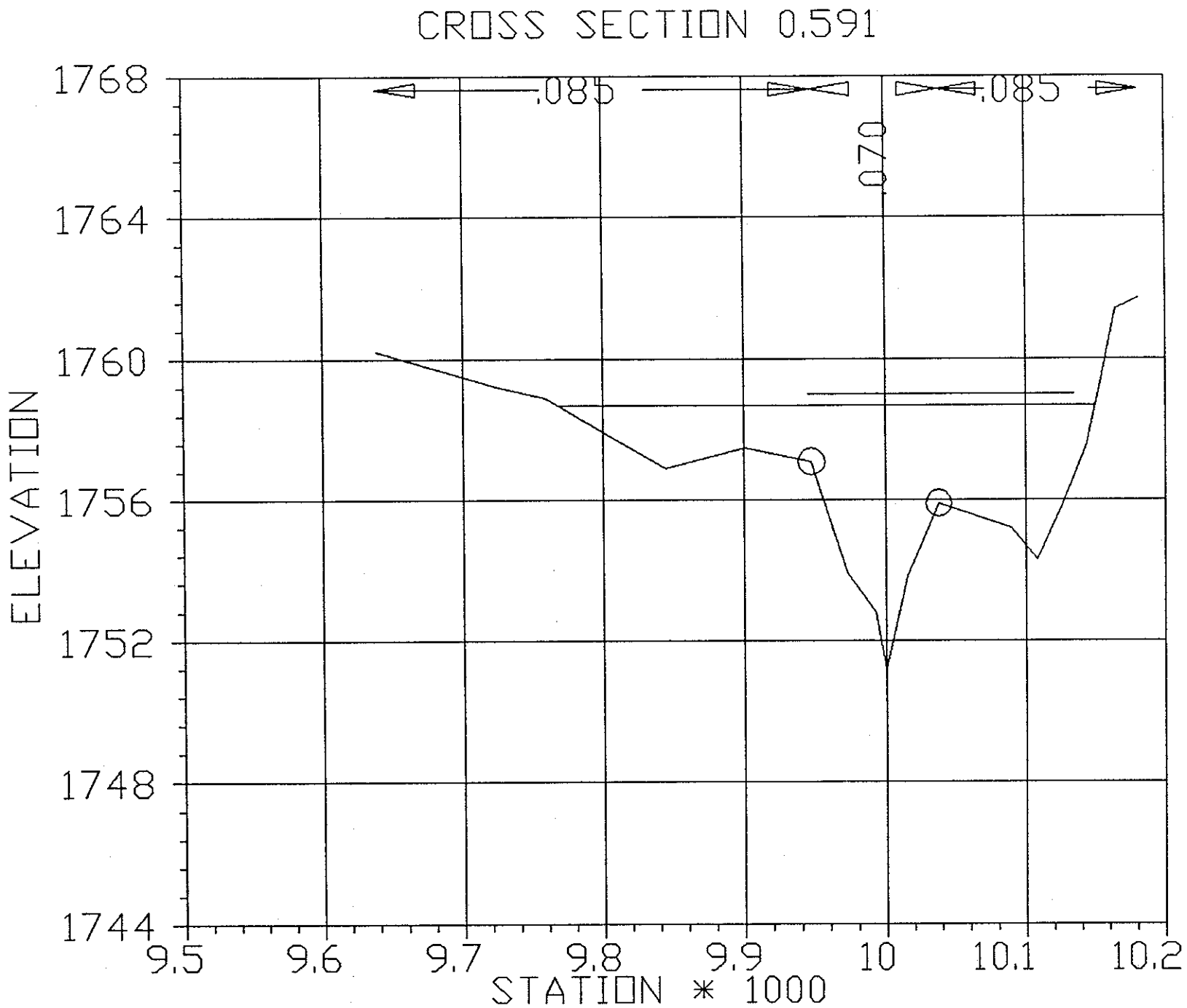

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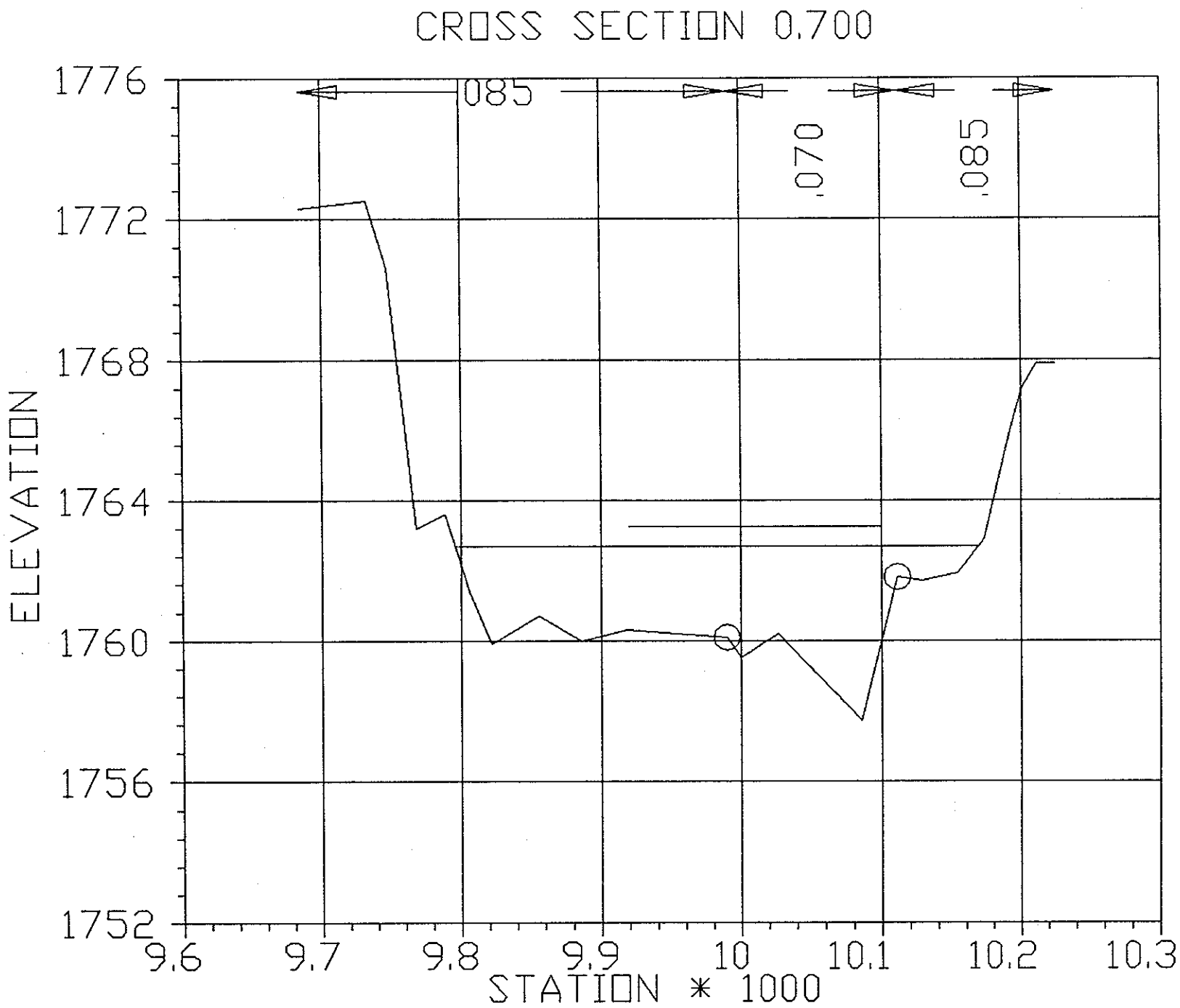

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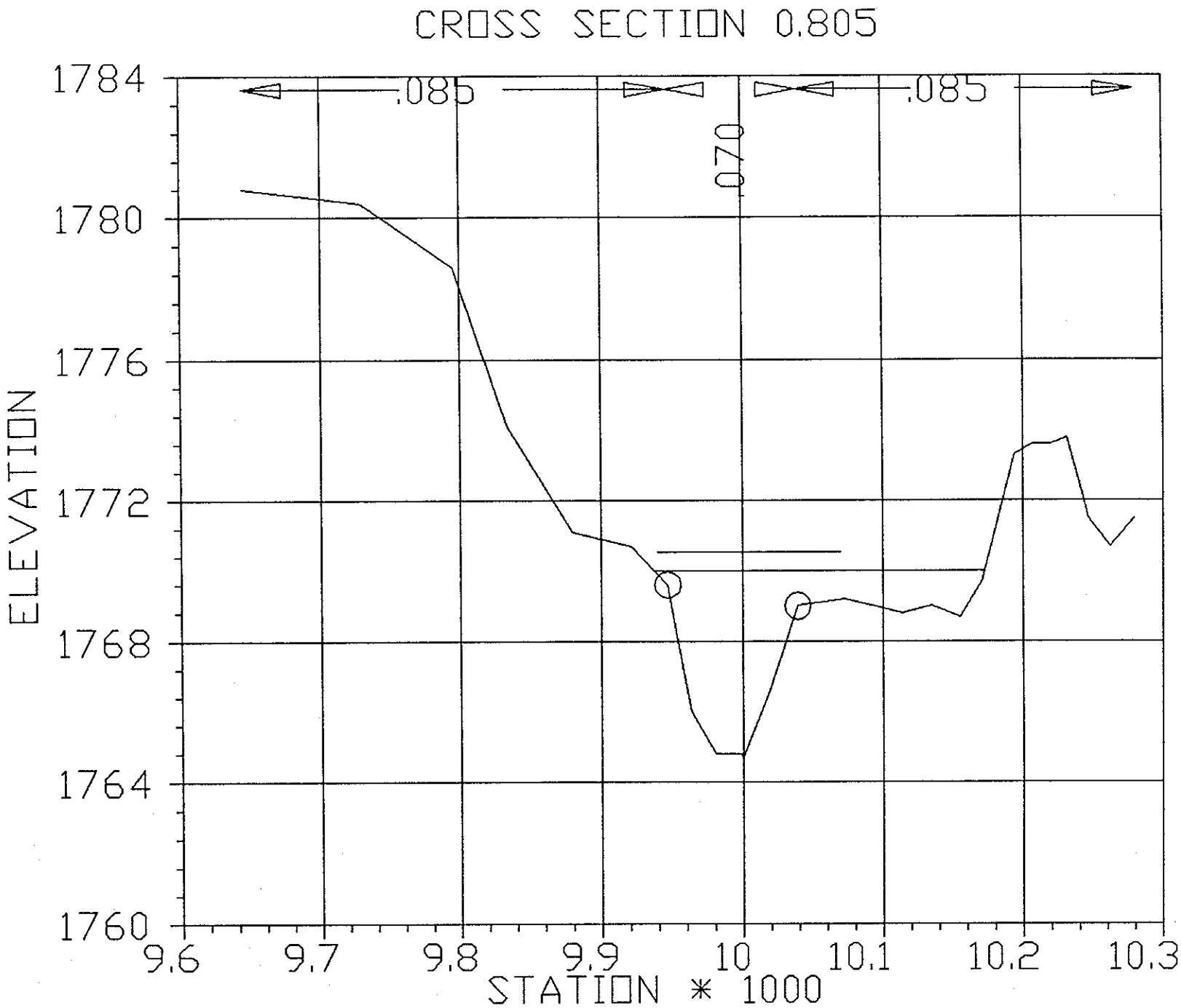

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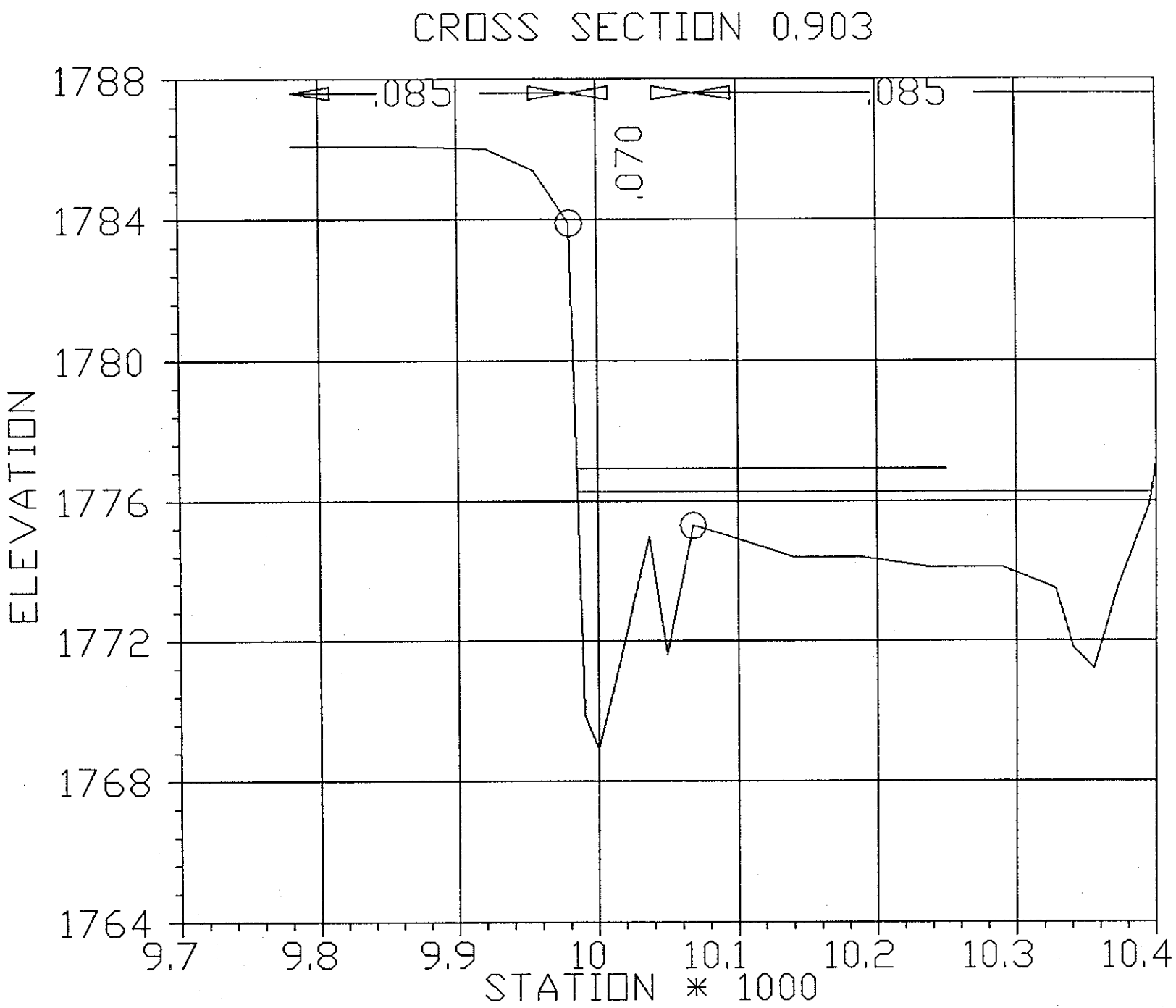

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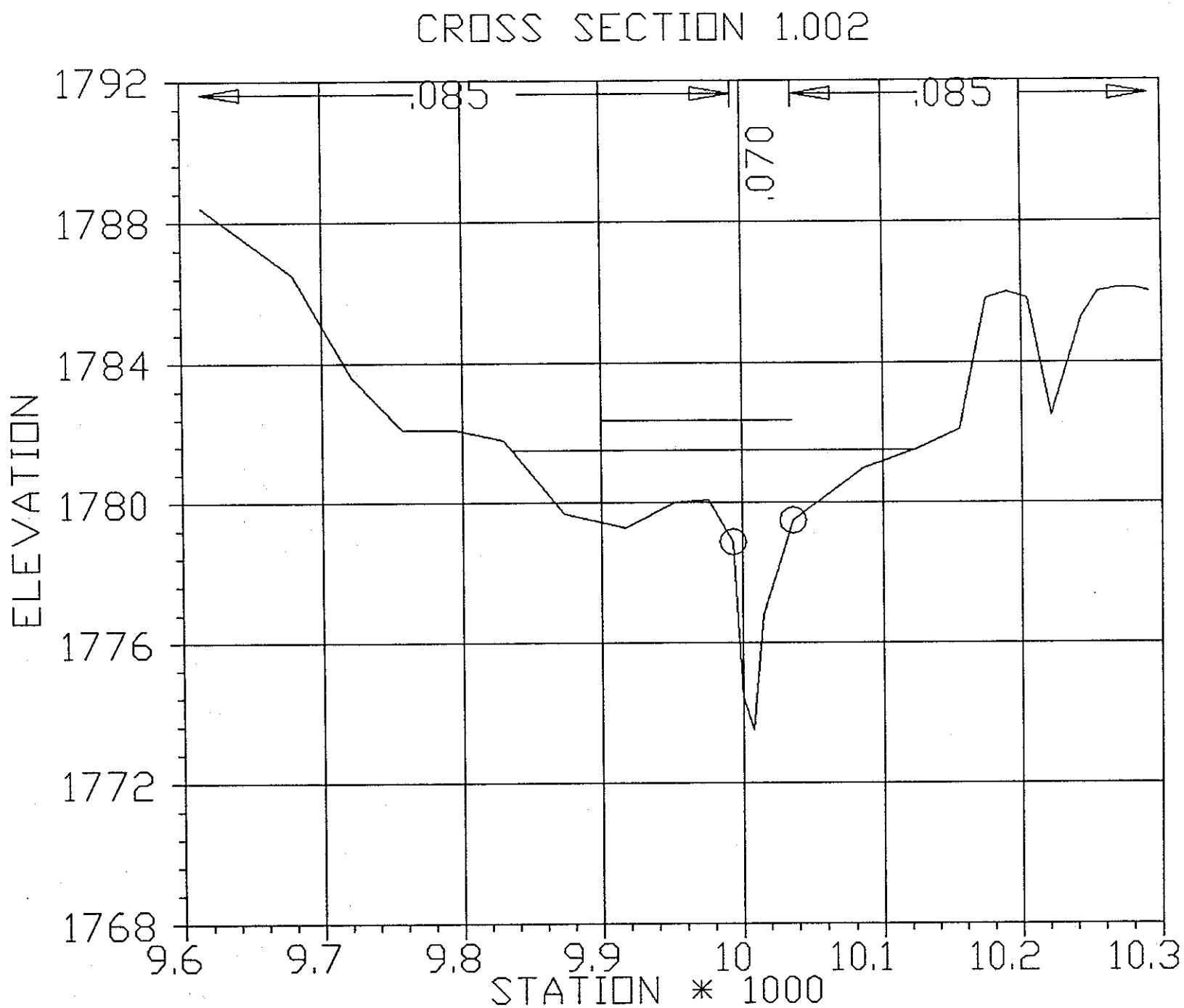

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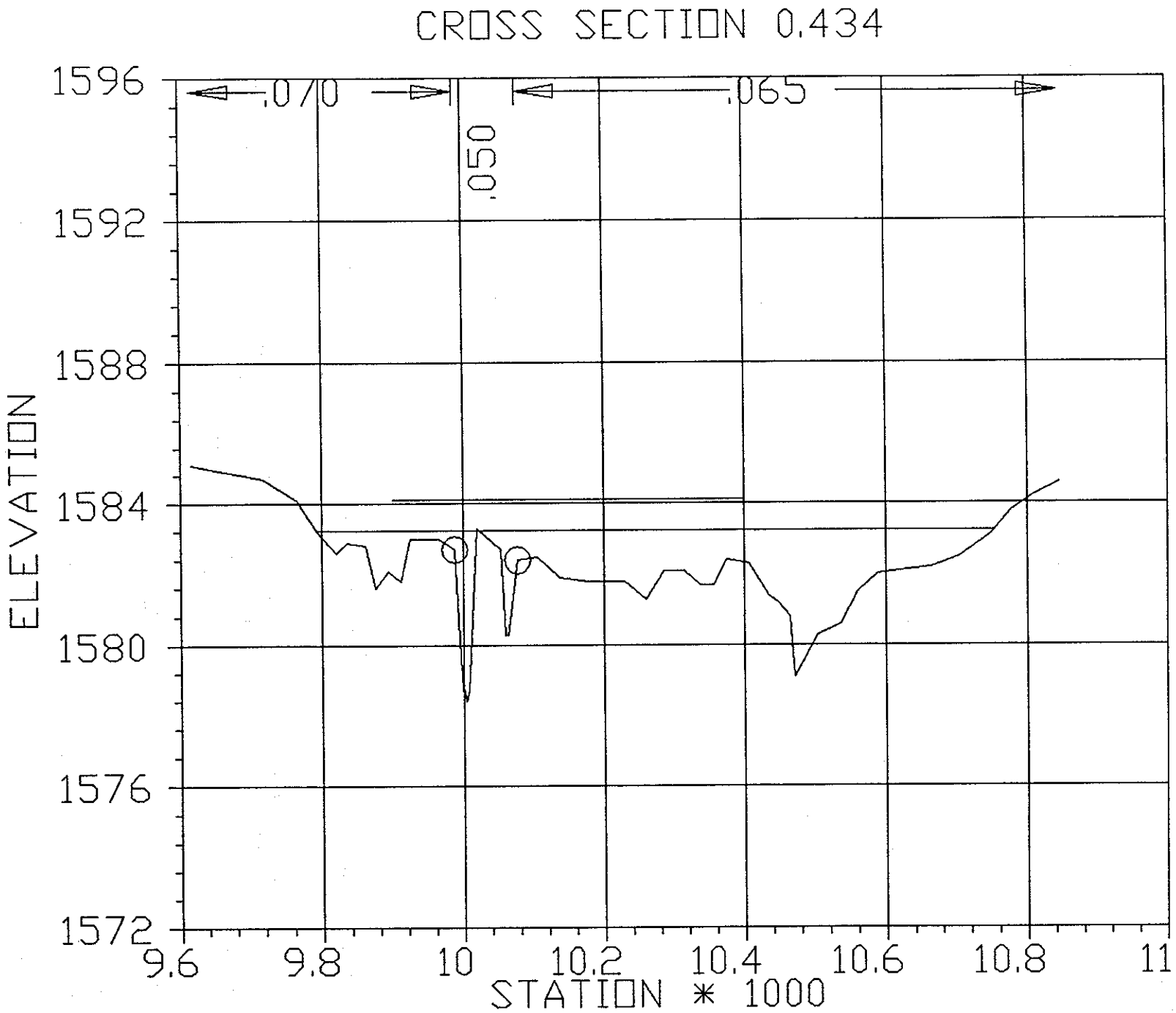

CROSS SECTION PLOT

DEADMAN WASH TRIBUTARY
STREAM NUMBER 12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HNTB
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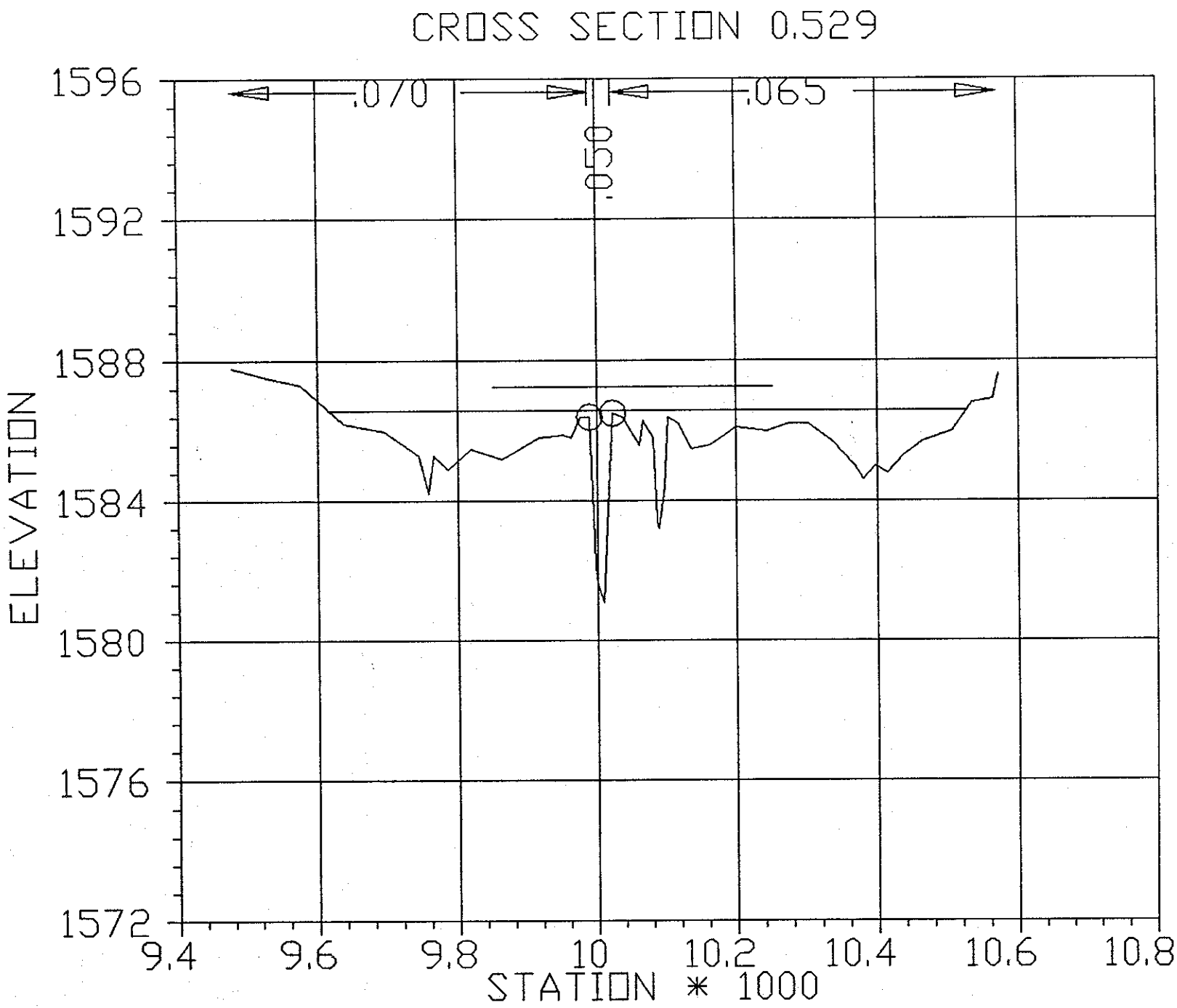

CROSS SECTION PLOT

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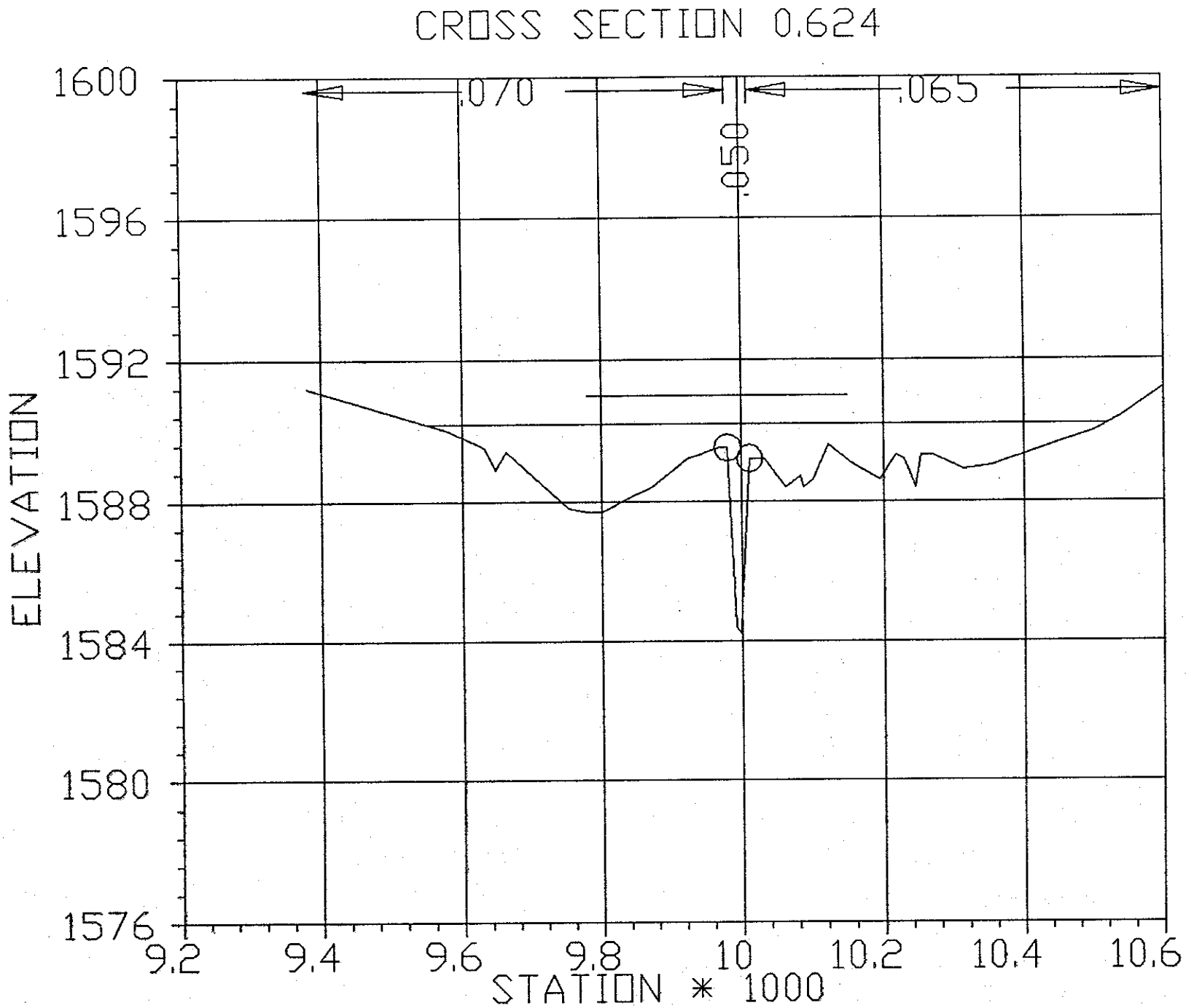

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