FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WHITE TANKS WASH FLOOD INSURANCE STUDY

FCD 90-64

HYDROLOGIC ANALYSIS

BOOK C

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO.
26129
MARK E.
FOREST
Date Signed 1/31/96
ARIZONA, U.S.A.

PREPARED BY:

Harding Lawson Associates, Inc.
Alpha Engineering Group
2800 North 44th Street, Suite 500
Phoenix, Arizona 85013
602/954-0436

January 30, 1996

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SECTION 4
HYDRAULIC ANALYSIS

4.1 - Method Description

Hydraulic analyses were performed using the Corps of Engineers Water Surface Profile Program, HEC-2 (Version 4.6.2, May 1991). HEC-2 is a one-dimensional, steady flow model that computes the water surface elevations using standard step backwater calculation methods. The model assumes that the cross section is rigid (is not modified by erosion or scour during the passage of the flow event) and flow is gradually varied. Four separate watercourses were modeled using HEC-2. White Tanks Wash and Tributary #1 were modeled using detailed methods. Tributaries #2 and #3 were modeled using approximate methods as described below. In all cases, these watercourses were modeled using subcritical computational methods (downstream to upstream using standard step method).

The procedures used in this study are based on the Federal Emergency Management Agency's (FEMA) *Guidelines and Specifications for Study Contractors* (1993). The resulting floodplain mapping and plotted Base Flood Profiles are included herein by reference. The mapping includes 8 sheets and 6 sheets of flood profiles for a total of 14 sheets.

4.2 - Parameter Estimation

4.2.1 - Cross Section Data and Descriptions

The entire area encompassing the Main Channel for White Tanks Wash and Tributary #1 was mapped by Aerial Mapping Co., Inc. to assure that there was adequate coverage. The individual stream channels were identified and the maximum flood plain width estimated. A wide area was designated for cross-section coverage to insure that all area that would affect the water surface determination would be included. Cross-sections were identified at approximately 500 foot spacings. This spacing is less than often used for the initial spacing, but was selected so that intermediate sections would not be required at a later time because of the variation in channel conditions. Each section was individually selected to be oriented perpendicular to the 100-year flood flow and be representative of the stream for half the distance to the next cross-sections.

The sections were labeled from the mouth by distance in miles along the channels from the low point in Buckeye Structure Number 1 for the main channel. The main channel sections are numbered 0.00 to 9.66 and the branch channel is numbered 0.00 to 3.51, with 0.00 equal to 3.51 on the main channel. Distances for the channel and overbank lengths were measured on the aerial topographic maps and the overbank lengths later corrected as the width was determined.

Each cross-section was digitized directly from the aerial photos rather than from the mapping to provide greater accuracy. The thalweg of each channel was selected as station 10,000 even when the same section was used for both the Main and Branch channels. The stations and elevations

were transferred directly by disk from the digitizing into HEC-2. Plots of each cross-section with the water surface and floodway location are included with the HEC-2 output. Elevations are based on the National Geodetic Vertical Datum of 1929. The mapping methods are described in greater detail in Section 2.

4.2.2 - Manning's "n" Values

Manning's roughness values were selected based on field review. Values of 0.040 to 0.045 were typically used for the channel and 0.050 to 0.060 for the overbanks. These values are considered to be conservative.

Manning's roughness values were also used to model ineffective flow areas as described below.

4.2.3 - Expansion/Contraction Coefficients

At any particular flood stage the channels are moderately uniform. The channel bottoms are generally gently curving without major obstructions or structures. The banks of the channels are typically vegetated with a much more dense cover than the general desert overbank areas. Expansion and contraction losses were selected as 0.3 and 0.1 respectively in accordance with standard practice.

Sensitivity analyses were performed using expansion and contraction values of 0.5 and 0.3, respectively. The results of the sensitivity analyses show that there is a minimal difference in computed water surface elevations using the higher expansion and contraction coefficients. Therefore, the models do not appear to be sensitive to this input parameter.

4.2.4 - Peak Discharge Values

This study presents the results for only the 100-year (Base Flood) event. Due to the use of the simplified flood zones currently used by FEMA, the Flood Control District of Maricopa County deemed other return periods to be of lesser importance for flood insurance purposes. Peak discharge values were computed as a part of this Flood Insurance Study using the Corps of Engineers Flood Hydrograph Package, HEC-1 and methods recommended by the Flood Control District of Maricopa County. The hydrologic analysis methods and results are described in Section 3 (Book B).

The peak discharges used in the hydraulic analysis were based on the results presented in Section 3. The hydrologic analysis includes concentration points at key locations along the channel reaches studied in detail. The HEC-1 models do not include concentration points at a spacing that is frequent enough for the hydraulic analysis. Therefore, the discharge values used in the hydraulic analyses were interpolated between concentration points based upon watershed area at the reach in question. The discharge values to be used in the hydraulic analysis were mutually agreed upon between Alpha and the FCMC before the hydraulic analyses were initiated.

The watercourses studied using approximate methods were estimated based on the results presented in Section 3 for similar watersheds. The discharge estimates used in the detailed and approximate analyses are summarized in Table 4-1. The peak discharges used in the analysis are also noted adjacent to the cross section number on the Work Maps (Sheets 2 through 8).

4.2.5 - Ineffective Flow Areas

Natural streams often have areas within the channel section that are ineffective for the conveyance of flow. Since HEC-2 is a one-dimensional model, these areas must be treated differently in the model input file to obtain reasonable results for computation of both the base flood elevations and the regulatory floodway. There are a number of ways to "code out" ineffective flow areas using HEC-2. Some of these methods effectively obstruct the ineffective flow area. The method used in this analysis was to use very high Manning's roughness values to reduce the flow velocity in the ineffective portion of the cross section. This approach is better suited to a floodway analysis since many of the other methods are not compatible with the Method 4 floodway encroachment option in HEC-2. The use of high roughness values results in low velocities and low conveyance in this portion of the section.

Table 4-1 Summary of 100-Year Peak Discharges By Channel Reach And Watercourse		
Section Range From	To	100-yr Peak Discharge
White Tanks Wash (Detailed Study)		
0.00	0.86	7209
0.95	3.51	6256
3.59	5.73	6208
5.82	6.17	3728
6.26	6.45	3442
6.66	6.84	3140
6.94	7.57	2751
7.68	8.31	2125
8.41	8.41	1246
8.50	9.19	894
9.29	9.52	871
Tributary #1 (Detailed Study)		
0.26	2.11	818
2.21	2.78	816
2.87	3.14	767
3.25	3.81	603
Tributary #2 (Approximate Study)		
1	3	2000
4	5	1392
5	9	700
Tributary #2A (Approximate Study)		
1	3	2000
4	5	1392
10	11	1200
Tributary #2B (Approximate Study)		
1	3	2000
101	102	700
Tributary #3 (Approximate Study)		
301	302	600

4.2.6 - Floodway Analyses

In accordance with the recommendations of *Guidelines and Specifications for Study Contractors*, floodway analyses were initially performed using the equal conveyance reduction method (Method 4 Analysis) as described in the HEC-2 documentation. At the request of the Flood Control District of Maricopa County, the final analysis was performed using Method 1 (fixed encroachment stations selected by the engineer) after minor adjustments were made to the results obtained with Method 4. Adjustments were made to "smooth" the floodway to produce a floodway that was continuous and hydraulically efficient. Where the channel was narrow (near the upstream limits of study) and contained multiple low flow channels, the floodway was adjusted outward to encompass the entire floodplain.

4.3 - White Tanks Wash

The starting water surface elevation for the study of White Tanks Wash is based on the U.S. Soil Conservation Service (SCS) design of Buckeye Flood Retarding Structure Number 1. The crest elevation of the spillway for Buckeye Structure Number 1 was designed by the SCS to be at the design pool crest elevation for the 100-year flood with larger storms causing overflow. Although not exactly the same 100-year flood as developed for this study, it was based on similar rainfall and routing. Use of the spillway crest elevation of 1081 as the starting water surface for the 100-year flood is a conservative (unlikely to be exceeded) value. It is very improbable that the crest of the 100-year outflow from White Tanks Wash would reach the detention area behind the Buckeye Structure Number 1 at the same time that the water level in the detention area is also cresting from the other areas. The crest in the detention pool from the other areas will occur later than the peak from White Tanks Wash, since the balance of the flow must pass through three reservoirs and two outlet works before reaching the outfall. The outfall discharges through the 60" diameter outlet works into the Hassayampa River. In addition the overflow spillway has an 800 foot long crest, which is sufficiently long to limit any additional increase in water surface elevation to a few tenths of a foot if the 100-year flood is exceeded slightly. For the purpose of this study, the conservative pool elevation of 1081 was used as the starting water surface elevation for computing the Base Flood Profile.

In accordance with the recommendations of *Guidelines and Specifications for Study Contractors*, the floodway model for White Tanks Wash uses a starting water surface elevation that is based on a friction slope of 0.005 feet/feet, which assumes that the Buckeye structure is empty.

4.4 - White Tanks Wash Tributary #1

In accordance with the recommendations of *Guidelines and Specifications for Study Contractors*, the starting water surface for Tributary #1, was based on only the contribution from Tributary #1 only. In the area of the confluence, White Tanks Wash produces higher water surface elevations in comparison to Tributary #1 as noted on Sheet 13.

The floodway analysis for Tributary #1 was based on the same assumptions and conditions as the Base Flood Profile.

4.5 - White Tanks Wash Tributaries #2 and #3

Tributaries 2 and 3 were analyzed using HEC-2 with approximate methods. These tributaries were not included in the original scope of work but were deemed important floodplain areas since they are in areas currently undergoing development. Due to insufficient topographic data to perform the analysis with detailed methods, approximate methods of analysis were used. The cross section data was interpolated from the Work Map (Sheets 2 through 8). The discharge values were not directly computed in for all of these reaches analyzed with approximate methods. Where the discharge values were not directly computed, the discharges were estimated based on watershed size and the results obtained for similar watersheds in the study area.

Use of more accurate topographic data and discharge values would produce a better estimate of the Base Flood Profile but would only have a minor impact on the floodplain limits. Therefore, the floodplain limits identified on the Work Maps for Tributaries 2 and 3 are considered reasonable. The computed water surface elevations should only be used approximate identification of the 100-year floodplain limits and should not be used for engineering applications.

4.6 - Photographs

Photographs are included for White Tanks Wash and Tributary #1 in Appendices A and F, respectively.

4.7 - Results

The output generated by HEC-2 for White Tanks Wash, Tributary #1, Tributary #2, Tributary #2A, Tributary #2B and Tributary #3 are included in Appendices B through D, G through I and K through M. The plotted cross sections and stream profiles are included in Appendices E and J. For White Tanks Wash and Tributary #1, the cross sections are plotted for the Method 1 floodway models to show the encroachments and the water surface elevations for the encroached and unencroached conditions. The channel cross sections were plotted using the Corps of Engineers, HEC-RAS Version 1.0 (July 1995)..

It should be noted that the base flood elevations for the lower reach of White Tanks Wash are reflected in the model contained in Appendix B. The floodway model does not consider the backwater condition created by the Buckeye Flood Control Structure. Therefore, the "regulatory water surface elevation" contained in the floodway data table will not be appropriate for the downstream reach. The highest of the two sets of water surface elevations should be used. The plotted profiles attached to the work maps show the higher water surface elevation represented by the model in Appendix B.

Also included at the end of this volume are the HEC-1 and HEC-2 files on 3.5" diskettes.

The Hydrology diskette contains the following files:

PKUNZIP.EXE	The program to uncompress the ZIP file
WT6.HC1	HEC-1 input data for the 6 hour model
WT24.HC1	HEC-1 input data for the 24 hour model
WTW-HEC1.ZIP	Compressed file which includes the following:
WT6.HC1	HEC-1 input data for the 6 hour model
WT6.OT1	HEC-1 output data for the 6 hour model
WT24.HC1	HEC-1 input data for the 24 hour model
WTW4.OT1	HEC-1 output data for the 24 hour model
WT24T.OT1	HEC-1 input data for the 24 hour model (complete output)
TAPE22	
TAPE23	

The Hydraulics diskette contains the following:

MAIN.HC2	Main branch water surface profile model
MAINM4.HC2	Main branch floodway model - Method 4
MAINM1.HC2	Main branch floodway model - Method 1
BRNCH.HC2	Tributary #1 water surface profile model
BRNCHM4.HC2	Tributary #1 floodway model - Method 4
BRNCHM1.HC2	Tributary #1 floodway model - Method 1
TRIB2.HC2	Tributary #2 approximate analysis
TRIB2A.HC2	Tributary #2a approximate analysis
TRIB2B.HC2	Tributary #2b approximate analysis
TRIB3.HC2	Tributary #3 approximate analysis

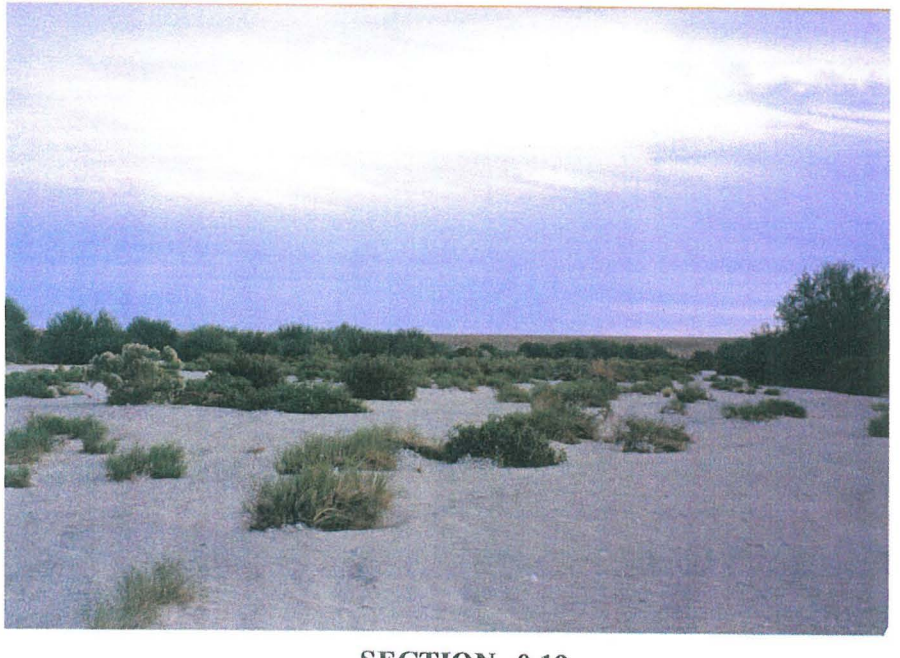
Appendix A

Photographs of Stream Sections

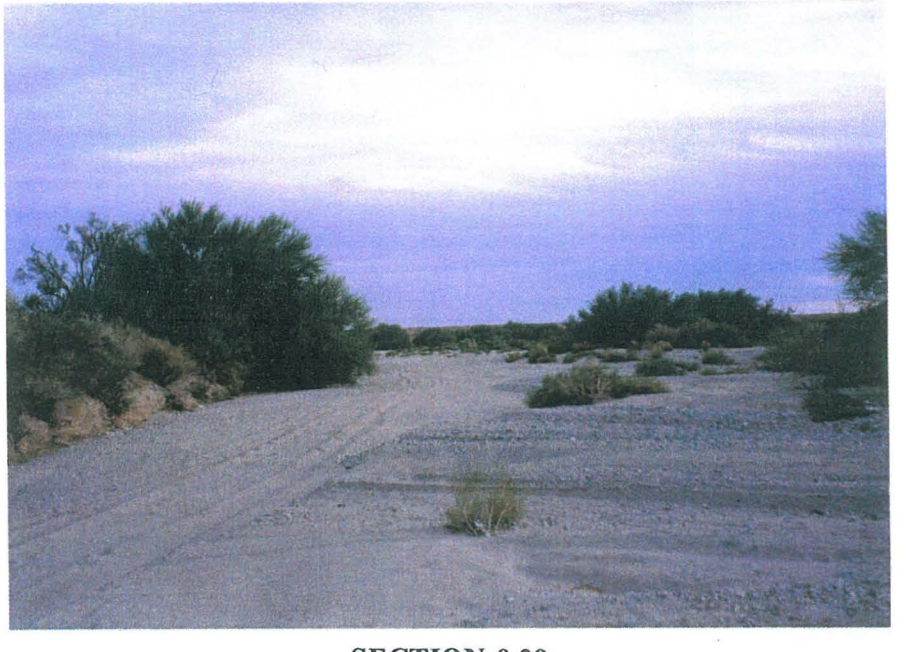
White Tanks Wash

SECTION 0.00

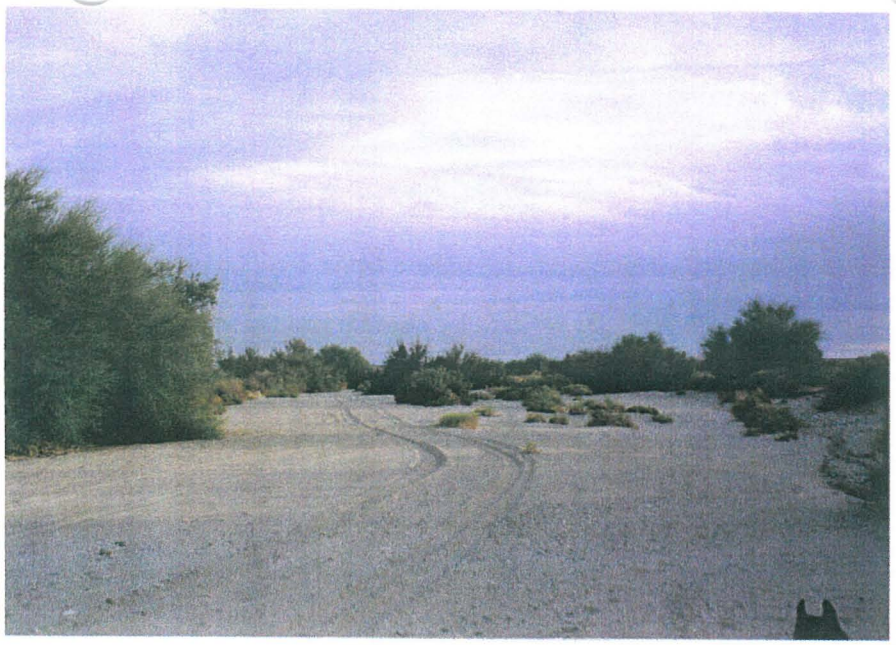
SECTION 0.08



SECTION 0.19



SECTION 0.29



SECTION 0.38

SECTION 0.48

SECTION 0.57

SECTION 0.67

SECTION 0.76

SECTION 0.86

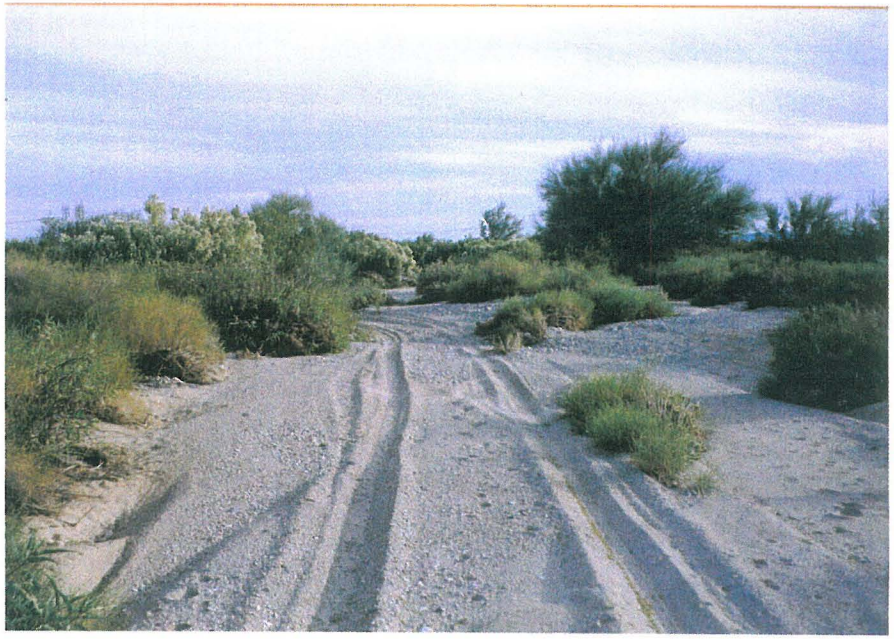
SECTION 0.95

SECTION 1.04

SECTION 1.13

SECTION 1.23

SECTION 1.32



SECTION 1.41

SECTION 1.50

SECTION 1.59

SECTION 1.68

SECTION 1.78

SECTION 1.87

SECTION 1.97

SECTION 2.07

SECTION 2.15

SECTION 2.24

SECTION 2.34

SECTION 2.43

SECTION 2.52

SECTION 2.62

SECTION 2.72

SECTION 2.82

SECTION 2.92

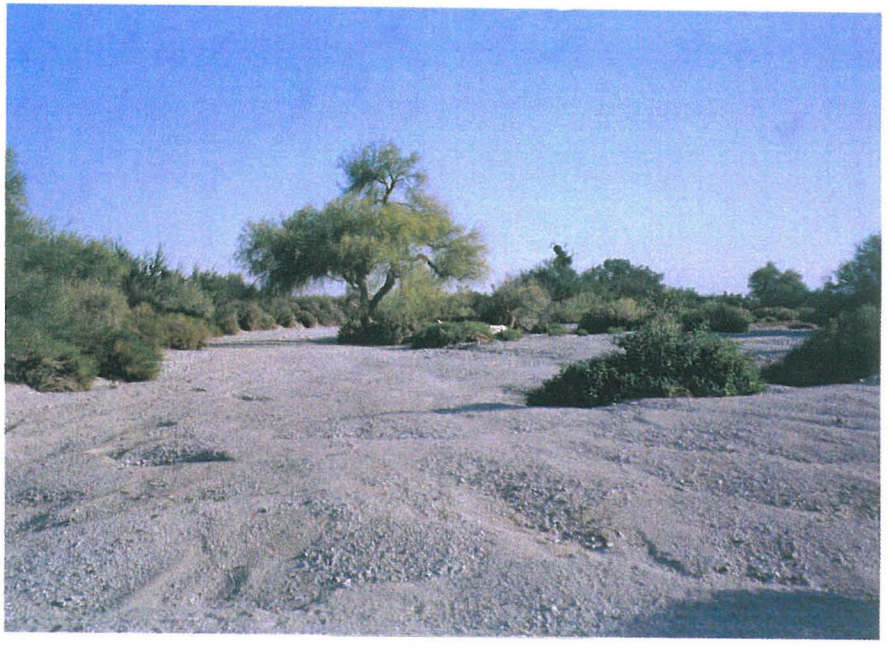
SECTION 3.04

SECTION 3.14

SECTION 3.23

SECTION 3.32

SECTION 3.42



SECTION 3.51

SECTION 3.59

SECTION 3.70

SECTION 3.79

SECTION 3.88

SECTION 3.96

SECTION 4.05

SECTION 4.16

SECTION 4.25

SECTION 4.35

SECTION 4.46

SECTION 4.55

SECTION 4.65

SECTION 4.76

SECTION 4.86

SECTION 4.96

SECTION 5.05

SECTION 5.16

SECTION 5.23

SECTION 5.29

SECTION 5.39

SECTION 5.46

SECTION 5.55

SECTION 5.64

SECTION 5.73

SECTION 5.82

SECTION 5.91

SECTION 5.99

SECTION 6.08

SECTION 6.17

SECTION 6.26

SECTION 6.36

SECTION 6.45

SECTION 6.56

SECTION 6.66

SECTION 6.75

SECTION 6.84

SECTION 6.94

No Photo

SECTION 7.02

SECTION 7.11

SECTION 7.20

SECTION 7.30

SECTION 7.40

SECTION 7.49

SECTION 7.57

SECTION 7.68

SECTION 7.79

SECTION 7.90

SECTION 8.00

SECTION 8.13

SECTION 8.22

SECTION 8.31

SECTION 8.41

SECTION 8.50

SECTION 8.59

SECTION 8.69

SECTION 8.78

SECTION 8.89

SECTION 8.99

SECTION 9.09

SECTION 9.19

SECTION 9.29

SECTION 9.39

SECTION 9.48

SECTION 9.52

SECTION 9.61

SECTION 9.62

Appendix B

HEC-2 Output File for:

White Tanks Wash
100-Year Water Surface Profile

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    29JAN96    TIME   17:38:10    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 17:38:10

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      White Tanks Wash Main Channel
T4      Water Surface Profile Model - 100-year event only.
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Water Surface Profile Model for White Tanks Wash
   This model is based on:
      -  Subcritical flow regime.
      -  The cross sections were obtained by photogrammetric methods by
         Aerial Mapping Company, Phoenix, AZ, based photographs taken
         October 1991.
      -  The lower reach of this analysis is submerged during a 100-year event
         by the pool that is impounded by the Buckeye Flood Control Structure.
         The peak stage in the Buckeye Structure is 1081.0 based on information
         provided by the Flood Control District of Maricopa County.  This model
         assumes that the peak inflow from White Tanks Wash occures at the time
         of peak stage in the Buckeye Structure.  The same value is used as the
         starting water surface elevation in the floodway run because the water
         surface elevation is controlled by this downstream detention basin.
      -  Ineffective flow areas have been modeled using high roughness values
         so that ineffective flow areas do not conflict with the Method 4
         (equal conveyance method) floodway analysis.
      -  This file is the final water surface profile model.  The others are:
         File MAINM4.HC2 is the file containing the Method 4 analysis.
         File MAINM1.HC2 is the final floodway model using Method 1.
         ------------------------------------------------------------

  By: M. Forest                                                Prepared By:
  File Name:  MAIN.HC2                                  Alpha Engineering Group
  January 1996                                                 Phoenix, Arizona
  ==============================================================================


J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0       0.0        0      0.0    7209.0   1081.0

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     -1        0       -1
```

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	43	53	54	1	110	115

Manning's roughness values for the primary channel were estimated from field investigations. Values for the overbank are modified for some sections to account for effective conveyance in the overbank areas as noted in the input.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively. Sensitivity analyses suggested that the model is not highly sensitive to these variables.

NC	0.060	0.060	0.040	.1	.3

Beginning section located just upstream of the Buckeye Flood Control Structure. Sections 0.00, 0.08, 0.19, 0.29, 0.38, 0.48 are submerged by the backwater from the Buckeye Flood Control Structure. No floodway encroachments are attempted for these sections since these sections are within the flood pool.

X1	0.00	14	9632.5	10196.8	0.0	0.0	0.0	0.0	0.0	
GR	1061.5	8903.6	1061.7	9020.6	1061.4	9161.9	1062.1	9409.0	1061.8	9632.5
GR	1061.2	9833.2	1061.4	10000.0	1061.6	10196.8	1061.3	10426.7	1060.3	10654.5
GR	1060.7	10829.5	1062.6	11023.2	1065.0	11173.7	1065.7	11222.2		
X1	0.08	48	9917.6	10185.3	445.0	440.0	430.0	0.0	0.0	
GR	1070.7	8904.4	1069.2	8926.3	1066.8	8948.9	1066.8	8972.7	1064.5	8996.5
GR	1064.3	9015.8	1064.0	9038.5	1063.6	9073.2	1064.0	9109.1	1064.0	9140.0
GR	1063.7	9198.2	1063.0	9272.1	1062.7	9349.6	1063.2	9451.8	1064.3	9537.7
GR	1064.7	9611.5	1063.9	9685.3	1064.0	9739.3	1063.0	9781.6	1062.1	9805.4
GR	1064.8	9826.9	1066.5	9862.3	1067.4	9887.7	1067.2	9917.6	1065.8	9944.0
GR	1063.1	9969.6	1063.6	9996.3	1063.5	10000.0	1063.0	10016.0	1063.6	10051.5
GR	1064.4	10081.7	1063.7	10109.7	1065.2	10145.7	1065.5	10185.3	1065.5	10229.9
GR	1066.5	10294.4	1067.0	10359.9	1066.3	10391.5	1064.0	10424.5	1063.9	10469.3
GR	1064.1	10530.9	1064.3	10614.9	1064.3	10695.8	1064.3	10775.6	1064.3	10829.5
GR	1065.0	10860.4	1071.7	10909.8	1075.4	10923.3				
X1	0.19	53	9976.2	10163.0	750.0	300.0	570.0			
GR	1076.5	9112.6	1074.4	9174.1	1073.1	9198.5	1073.4	9213.7	1074.5	9258.0
GR	1074.7	9303.1	1073.6	9344.8	1073.6	9395.1	1071.8	9430.9	1071.2	9463.9
GR	1071.3	9486.7	1069.9	9490.4	1071.2	9499.5	1071.3	9530.3	1071.4	9588.6
GR	1070.0	9657.1	1069.3	9697.5	1069.2	9721.2	1069.7	9770.7	1070.0	9827.0
GR	1070.4	9875.6	1069.7	9907.4	1069.0	9921.7	1065.6	9926.0	1068.9	9933.2
GR	1069.0	9950.9	1068.8	9976.2	1066.8	9990.5	1066.0	9998.3	1066.1	10000.0
GR	1066.3	10012.0	1067.1	10053.6	1067.0	10098.6	1066.7	10134.4	1065.1	10150.1
GR	1065.2	10154.7	1068.7	10163.0	1067.7	10193.3	1068.0	10250.5	1067.3	10295.0
GR	1067.1	10323.8	1072.0	10356.2	1072.7	10386.8	1072.6	10433.2	1071.9	10504.8
GR	1066.8	10571.4	1066.9	10643.9	1067.1	10730.9	1067.0	10829.2	1068.4	10919.3

```
GR   1072.1   10985.4    1075.6   11011.4    1075.6    11070.0

X1      0.29        61    9972.1   10097.7     530.0      500.0      515.0
GR   1079.9    8747.8    1079.9    8788.2    1078.8     8854.4     1076.7    8908.0    1077.1    8959.5
GR   1075.9    9011.0    1073.1    9026.8    1074.8     9040.3     1076.4    9087.6    1076.1    9134.6
GR   1076.8    9191.5    1076.8    9228.2    1078.8     9267.6     1078.3    9302.6    1076.2    9342.1
GR   1074.8    9371.6    1076.0    9404.0    1076.4     9444.8     1077.3    9504.0    1076.8    9556.8
GR   1076.4    9620.6    1074.7    9657.7    1074.7     9697.1     1074.9    9757.0    1072.3    9785.5
GR   1073.2    9805.7    1072.6    9844.8    1072.8     9875.8     1071.2    9906.9    1073.3    9942.7
GR   1073.3    9972.1    1071.2    9981.1    1067.0     9988.2     1068.6   10000.0    1068.8   10027.4
GR   1070.2   10054.5    1071.7   10097.7    1072.3    10109.6     1069.3   10122.6    1069.9   10149.5
GR   1073.1   10178.5    1072.8   10218.0    1071.5    10243.5     1072.2   10269.8    1072.0   10316.3
GR   1072.4   10352.3    1072.1   10372.0    1069.6    10386.6     1072.0   10403.9    1076.4   10421.4
GR   1076.7   10444.6    1075.7   10458.4    1073.3    10467.7     1077.8   10498.7    1077.3   10540.1
GR   1077.2   10555.3    1074.1   10565.0    1077.4    10577.6     1078.4   10656.1    1079.3   10768.4
GR   1080.0   10863.7

X1      0.38        34    9957.4   10036.8     560.0      520.0      510.0
GR   1082.1    9134.6    1081.0    9190.4    1080.5     9239.4     1079.7    9286.7    1079.3    9323.1
GR   1079.7    9379.5    1076.9    9445.0    1077.5     9521.7     1077.8    9569.2    1076.9    9620.9
GR   1075.9    9661.1    1076.0    9713.4    1076.9     9761.1     1076.8    9822.6    1076.0    9863.8
GR   1075.4    9901.3    1074.1    9920.9    1073.9     9957.4     1071.3    9982.3    1071.7   10000.0
GR   1071.7   10025.5    1074.8   10036.8    1074.4    10073.1     1074.9   10142.0    1074.8   10223.6
GR   1074.7   10294.8    1074.7   10341.3    1075.0    10361.4     1079.3   10383.8    1080.8   10408.0
GR   1079.0   10429.0    1080.5   10445.4    1081.5    10489.7     1082.5   10563.3
```

Section 0.48

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

```
NH        8        .9    9714.7       .3    9760.4        .2    9802.3       .2    9837.5       .06
NH   9945.1      .045   10060.6      .06   10413.4        .2   10600.1
X1      0.48        45    9945.1   10060.6     480.0      520.0      490.0
GR   1083.7    9229.9    1081.0    9257.9    1081.7     9292.9     1082.6    9340.1    1081.5    9391.5
GR   1080.3    9433.5    1079.8    9477.2    1079.3     9529.8     1079.3    9582.8    1081.1    9624.4
GR   1082.1    9668.4    1080.7    9714.7    1078.4     9760.4     1078.9    9802.3    1079.3    9837.5
GR   1073.1    9852.1    1077.0    9867.6    1076.6     9876.5     1074.6    9886.6    1075.1    9902.4
GR   1078.0    9923.4    1077.8    9945.1    1076.4     9964.4     1073.8    9977.6    1074.2   10000.0
GR   1074.3   10026.8    1077.4   10037.4    1078.1    10060.6     1079.0   10101.2    1077.1   10149.3
GR   1077.0   10194.3    1078.2   10235.8    1076.6    10274.3     1077.2   10296.6    1077.9   10324.6
GR   1079.0   10355.9    1077.8   10377.1    1075.7    10380.7     1077.5   10392.3    1077.8   10413.4
GR   1079.4   10451.3    1079.3   10492.4    1084.8    10528.9     1085.5   10581.6    1085.8   10600.1
```

Section 0.57

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

NH	8	.9	9789.1	.3	9827.5	.2	9853.0	.08	9884.6	.06
NH	9932.5	.045	10084.3	.06	10345.8	.9	10769.2			
X1	0.57	29	9932.5	10084.3	490.0	501.0	501.0			
GR	1085.3	9747.9	1082.9	9789.1	1080.7	9827.5	1077.3	9853.0	1078.2	9884.6
GR	1076.3	9905.2	1079.9	9919.9	1080.3	9932.5	1078.4	9952.2	1075.2	9965.7
GR	1076.1	9980.6	1074.1	9988.9	1075.1	10000.0	1075.2	10014.5	1077.7	10035.7
GR	1077.7	10056.0	1079.5	10084.3	1079.2	10118.4	1079.4	10181.6	1079.6	10248.3
GR	1078.8	10284.6	1080.4	10315.3	1081.7	10345.8	1081.0	10406.3	1081.0	10496.4
GR	1080.7	10592.9	1080.7	10680.9	1081.3	10732.6	1084.7	10769.2		
NC	.07	.06	.045							
X1	0.67	28	9956.6	10041.6	480.0	498.0	498.0			
GR	1086.1	9616.7	1085.3	9638.3	1085.3	9661.6	1081.3	9684.7	1079.5	9697.4
GR	1079.8	9705.5	1082.1	9722.6	1081.3	9744.9	1081.4	9768.4	1081.6	9805.3
GR	1082.1	9841.6	1081.1	9872.1	1081.7	9883.4	1084.5	9892.8	1082.2	9909.6
GR	1080.2	9926.4	1079.8	9940.1	1081.1	9956.6	1080.0	9972.0	1078.2	9985.0
GR	1077.8	10000.0	1077.8	10010.1	1080.9	10016.8	1081.5	10041.6	1081.5	10078.5
GR	1081.8	10108.1	1085.5	10130.8	1087.1	10183.7				
NC	.06	.06	.045							
X1	0.76	25	9917.8	10055.0	501.0	501.0	501.0			
GR	1087.8	9594.5	1087.0	9716.6	1085.9	9757.5	1083.2	9770.3	1082.6	9777.6
GR	1083.2	9782.8	1085.3	9792.8	1084.5	9817.0	1084.7	9855.8	1085.3	9891.3
GR	1085.6	9917.8	1080.8	9932.1	1081.9	9940.4	1082.9	9960.7	1083.4	9989.1
GR	1081.2	9993.9	1081.4	10000.0	1082.3	10023.5	1084.1	10055.0	1083.1	10088.7
GR	1082.3	10118.2	1085.5	10136.7	1085.5	10164.9	1085.9	10187.0	1089.2	10206.8

Section 0.86

This Section is located at the Junction 4E where Watersheds K1, K2 and K3 enter the main branch of White Tanks Wash. The flow is decreased at the next section.

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4        .2    9824.3      .06    9925.1      .045   10055.9      .06   10381.2
X1    0.86        26    9925.1  10055.9     522.0     510.0     522.0
GR  1095.0    9493.0    1092.1   9534.4    1089.3    9575.0    1088.9    9617.7    1088.4    9642.3
GR  1089.4    9670.3    1087.7   9685.0    1087.2    9708.8    1087.4    9737.2    1087.6    9781.5
GR  1086.8    9813.9    1085.4   9817.4    1087.3    9824.3    1087.3    9864.4    1086.6    9925.1
GR  1085.5    9968.3    1083.9   9973.9    1083.5    9999.0    1083.2   10000.0    1083.1   10024.3
GR  1086.0   10031.8    1086.8  10055.9    1086.1   10100.8    1087.3   10176.1    1089.5   10270.3
GR  1090.1   10381.2
```

Section 0.95

The discharge values are changed at this section since it is located upstream of juntion 4E.

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
QT       2    6256.0    6256.0
NH       4       .05    9984.6      .045   10048.5       .05   10398.7       .2   10559.9
X1    0.95        22    9984.6  10048.5     600.0     489.0     489.0
GR  1094.3    9937.9    1091.8   9959.0    1089.6    9984.6    1084.6    9991.4    1084.8   10000.0
GR  1084.8   10014.5    1088.5  10026.2    1090.0   10048.5    1089.3   10080.8    1088.8   10119.2
GR  1086.9   10144.6    1086.5  10155.9    1088.9   10167.1    1090.0   10205.5    1089.9   10240.3
GR  1091.6   10273.7    1091.7  10300.0    1090.5   10334.9    1091.0   10398.7    1090.8   10472.5
GR  1092.4   10515.7    1093.4  10559.9

NC     .06       .06      .045
X1    1.04        25   10020.2  10116.9     474.0     440.0     474.0
GR  1095.4    9800.1    1094.8   9823.9    1092.6    9839.1    1089.4    9852.7    1091.4    9860.0
GR  1091.3    9889.7    1091.5   9927.2    1091.2    9955.7    1090.7    9978.1    1089.9    9995.2
GR  1089.6   10000.0    1090.4  10020.2    1088.9   10025.9    1089.8   10055.0    1089.5   10072.6
GR  1088.4   10086.7    1093.4  10116.9    1094.9   10149.4    1093.3   10192.5    1093.4   10253.9
GR  1093.5   10339.3    1094.3  10406.3    1094.8   10463.1    1095.7   10551.5    1096.1   10615.7
```

Section 1.13

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4        .9    9768.9      .06    9972.7      .045   10044.4      .06   10376.8
X1    1.13        25    9972.7  10044.4     484.0     500.0     490.0
GR  1099.8    9617.0    1099.7   9660.4    1097.4    9699.4    1095.7    9730.1    1093.0    9736.0
GR  1095.1    9749.6    1096.4   9768.9    1094.3    9797.9    1093.3    9824.8    1093.2    9866.8
GR  1092.3    9912.8    1092.1   9932.5    1093.6    9947.7    1093.4    9972.7    1092.8    9983.9
GR  1090.0    9991.3    1090.3  10000.0    1090.7   10020.6    1094.2   10044.4    1096.4   10072.3
GR  1096.4   10133.2    1096.9  10202.6    1097.3   10250.7    1098.3   10313.5    1098.4   10376.8
```

```
NC      .06       .06      .045
X1     1.23        20    9946.3   10039.5     470.0     515.0     510.0
GR   1100.6    9698.5    1099.7    9752.2    1097.9    9788.2    1099.5    9818.2    1099.5    9855.8
GR   1097.1    9903.1    1095.1    9946.3    1094.0    9971.9    1093.6   10000.0    1094.1   10021.8
GR   1097.3   10039.5    1096.3   10077.9    1096.4   10141.4    1096.1   10192.3    1095.4   10228.1
GR   1093.7   10244.5    1093.8   10251.9    1097.7   10263.3    1100.1   10309.0    1102.4   10378.0

X1     1.32        15    9975.6   10049.4     485.0     485.0     485.0
GR   1102.7    9922.9    1102.5    9957.0    1100.1    9975.6    1095.3    9984.1    1095.7    9996.2
GR   1096.2   10000.0    1097.2   10021.6    1097.2   10049.4    1098.3   10102.1    1099.3   10167.7
GR   1098.5   10210.5    1098.7   10251.4    1100.8   10281.4    1102.0   10315.3    1102.5   10376.9
```

Section 1.41

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        5        .2    9888.4       .05    9955.8      .045   10029.3       .05   10211.1       .08
NH    10406
X1     1.41        22    9955.8   10029.3     445.0     445.0     445.0
GR   1106.2    9768.2    1103.6    9812.6    1101.8    9845.2    1099.9    9867.4    1099.4    9888.4
GR   1100.8    9915.5    1101.0    9955.8    1100.1    9982.2    1098.5    9993.6    1098.4   10000.0
GR   1098.4   10008.7    1100.9   10029.3    1100.9   10056.9    1101.2   10092.1    1102.8   10134.1
GR   1103.9   10169.9    1104.0   10211.1    1102.3   10250.6    1102.4   10290.7    1102.8   10330.9
GR   1104.4   10362.5    1105.4     10406

NC      .06       .06      .045
X1     1.50        23    9962.2   10035.7     480.0     483.0     483.0
GR   1109.4    9695.9    1107.3    9720.5    1103.3    9738.8    1101.9    9747.3    1102.5    9755.6
GR   1104.3    9768.5    1103.5    9798.1    1103.8    9840.5    1104.4    9872.1    1102.6    9901.5
GR   1102.9    9924.5    1102.9    9962.2    1102.4    9990.3    1100.7    9999.3    1101.0   10000.0
GR   1101.1   10014.0    1103.9   10035.7    1106.3   10062.4    1106.9   10121.1    1106.0   10190.5
GR   1105.5   10244.3    1107.2   10306.4    1109.2   10373.0

X1     1.59        32    9873.2   10037.2     494.0     494.0     494.0
GR   1112.9    9454.9    1111.4    9482.5    1108.9    9500.5    1108.8    9520.7    1108.6    9543.9
GR   1107.7    9565.3    1108.6    9592.8    1107.2    9610.7    1106.8    9641.6    1106.6    9659.9
GR   1107.7    9690.8    1107.3    9714.7    1105.3    9734.5    1106.0    9758.3    1107.4    9782.7
GR   1108.2    9812.3    1108.0    9847.4    1107.1    9873.2    1104.1    9886.4    1103.7    9902.6
GR   1103.8    9916.9    1105.2    9943.6    1104.9    9964.5    1103.7    9975.1    1103.8   10000.0
GR   1103.9   10015.7    1106.6   10037.2    1108.1   10076.4    1108.2   10126.0    1109.4   10201.1
GR   1109.6   10276.9    1110.6   10349.4

X1     1.68        18    9977.8   10046.1     490.0     480.0     480.0
GR   1113.1    9653.6    1110.9    9697.3    1109.7    9749.9    1109.3    9798.7    1108.3    9829.0
GR   1106.7    9841.3    1107.9    9866.4    1108.2    9901.4    1108.7    9944.5    1108.3    9977.8
GR   1106.1    9988.3    1105.9   10000.0    1106.0   10009.1    1107.1   10018.6    1106.8   10046.1
GR   1109.3   10091.4    1111.0   10139.2    1112.4   10182.2
```

X1	1.78	17	9971.2	10039.1	507.0	495.0	500.0			
GR	1116.7	9732.9	1116.4	9758.7	1112.5	9782.0	1112.4	9796.0	1113.7	9816.7
GR	1112.8	9856.1	1111.2	9901.7	1110.0	9941.7	1109.3	9971.2	1108.4	9982.9
GR	1108.5	10000.0	1108.6	10026.0	1110.8	10039.1	1110.4	10069.0	1110.6	10100.1
GR	1114.2	10143.3	1115.6	10197.2						
X1	1.87	13	9975.2	10040.5	495.0	495.0	495.0			
GR	1118.0	9740.4	1115.1	9789.1	1112.3	9840.1	1111.4	9897.6	1110.7	9939.0
GR	1110.2	9975.2	1108.8	9977.0	1109.0	10000.0	1109.6	10018.1	1110.8	10040.5
GR	1114.9	10069.6	1116.7	10119.5	1118.5	10181.9				
X1	1.97	12	9967.4	10050.5	535.0	560.0	540.0			
GR	1118.9	9838.7	1116.7	9881.5	1117.4	9912.7	1115.0	9935.2	1113.4	9967.4
GR	1113.2	9994.4	1113.1	10000.0	1113.5	10050.5	1113.6	10095.5	1114.3	10131.6
GR	1117.7	10158.9	1118.5	10192.0						
X1	2.07	18	9976.7	10039.3	484.0	484.0	484.0			
GR	1123.7	9811.3	1121.3	9861.3	1119.1	9899.9	1118.8	9930.7	1118.9	9962.8
GR	1116.9	9976.7	1114.7	9984.7	1114.4	10000.0	1114.4	10021.2	1116.1	10039.3
GR	1116.5	10065.4	1117.6	10090.4	1117.8	10121.8	1118.3	10150.0	1120.6	10184.8
GR	1121.3	10224.1	1121.0	10259.0	1122.7	10308.1				
X1	2.15	16	9982.1	10023.3	444.0	444.0	444.0			
GR	1125.1	9916.1	1123.7	9945.0	1122.5	9968.1	1120.3	9982.1	1115.9	9985.5
GR	1115.9	9998.8	1115.9	10000.0	1115.9	10007.4	1119.2	10023.3	1118.4	10055.6
GR	1118.7	10090.6	1118.7	10124.8	1120.0	10150.7	1121.7	10177.6	1124.3	10217.6
GR	1125.7	10264.6								
X1	2.24	18	9953.2	10015.4	489.0	489.0	489.0			
GR	1127.6	9643.1	1126.4	9695.7	1125.4	9745.5	1123.4	9784.1	1122.3	9816.3
GR	1122.4	9839.8	1120.0	9854.7	1122.6	9865.6	1122.6	9887.9	1122.6	9928.4
GR	1119.3	9953.2	1118.6	9975.9	1117.9	9994.9	1117.9	10000.0	1119.7	10015.4
GR	1122.2	10035.8	1125.0	10074.4	1127.6	10118.2				
X1	2.34	13	9946.2	10032.7	495.0	508.0	500.0			
GR	1128.9	9803.7	1127.8	9833.9	1125.6	9858.1	1126.3	9893.4	1125.4	9925.5
GR	1124.2	9946.2	1122.0	9961.6	1121.8	9975.5	1121.8	10000.0	1121.8	10017.9
GR	1123.7	10032.7	1127.6	10056.6	1130.0	10079.8				
X1	2.43	27	9960.9	10024.9	471.0	471.0	471.0			
GR	1133.0	9757.9	1130.8	9801.1	1130.1	9843.2	1129.1	9883.9	1125.4	9891.5
GR	1125.1	9913.1	1125.1	9937.5	1127.5	9945.0	1127.0	9960.9	1125.1	9975.9
GR	1123.9	9985.0	1123.9	9995.2	1124.0	10000.0	1125.7	10013.7	1128.5	10024.9
GR	1128.4	10043.1	1127.9	10060.5	1125.8	10070.4	1127.5	10080.6	1128.2	10094.1
GR	1127.8	10107.1	1126.0	10114.1	1123.3	10122.3	1123.4	10126.2	1127.2	10132.8
GR	1130.9	10150.1	1132.9	10184.3						
X1	2.52	27	9975.0	10045.3	490.0	500.0	495.0			
GR	1137.7	9864.6	1133.8	9886.0	1130.1	9895.7	1129.1	9907.9	1129.1	9920.9
GR	1131.1	9942.4	1132.0	9958.1	1130.9	9975.0	1127.6	9980.9	1128.0	10000.0
GR	1127.9	10020.3	1129.9	10030.2	1130.8	10045.3	1129.8	10060.0	1129.9	10072.3
GR	1131.1	10095.8	1131.5	10129.2	1132.6	10173.5	1133.2	10202.1	1132.6	10226.0
GR	1133.1	10258.2	1132.9	10279.4	1131.2	10298.0	1131.0	10309.4	1132.0	10330.4

```
GR   1133.0    10357.6    1135.1    10382.7

X1     2.62         36    9960.4    10024.2     525.0     525.0     525.0
GR   1138.2     9613.4    1137.5     9633.2    1135.9    9656.0    1135.2    9681.6    1134.5    9706.4
GR   1133.2     9718.5    1131.7     9721.7    1135.4    9738.7    1136.3    9765.1    1135.8    9788.1
GR   1132.3     9806.4    1130.8     9819.3    1131.7    9842.2    1134.2    9856.4    1133.5    9873.1
GR   1130.7     9895.1    1129.9     9903.1    1132.0    9912.9    1132.0    9924.5    1130.1    9931.1
GR   1132.4     9943.6    1132.3     9960.4    1131.7    9978.0    1130.7    9984.6    1128.7    9986.8
GR   1129.1    10000.0    1133.0    10011.1    1134.8   10024.2    1134.6   10052.0    1134.0   10079.5
GR   1132.6    10102.2    1133.1    10120.9    1135.2   10138.8    1135.8   10173.3    1137.7   10205.4
GR   1139.7    10237.9

X1     2.72         24    9975.4    10043.6     506.0     506.0     506.0
GR   1140.1     9698.8    1139.5     9725.1    1137.7    9768.2    1136.6    9780.8    1136.4    9791.7
GR   1137.6     9808.4    1138.2     9834.8    1139.0    9865.8    1136.5    9888.1    1135.5    9904.5
GR   1135.3     9936.5    1134.9     9959.6    1135.2    9975.4    1133.6    9981.0    1133.2   10000.0
GR   1133.3    10019.0    1135.1    10043.6    1136.8   10065.1    1137.7   10088.2    1135.3   10111.3
GR   1137.0    10133.7    1138.1    10149.6    1138.1   10172.8    1141.5   10205.0
```

Section 2.82

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4         .9    9785.6       .06    9978.1      .045   10030.2       .6   10131.1
X1     2.82         22    9978.1    10030.2     515.0     540.0     539.0
GR   1144.2     9657.1    1142.0     9693.2    1141.1    9732.8    1142.0    9785.6    1141.8    9825.8
GR   1140.8     9852.9    1137.9     9864.0    1138.0    9874.2    1138.5    9887.0    1138.5    9916.1
GR   1138.1     9954.2    1137.5     9978.1    1135.5    9994.5    1135.5   10000.0    1136.2   10012.0
GR   1138.1    10030.2    1137.5    10046.4    1135.7   10063.9    1134.7   10074.7    1135.8   10082.7
GR   1140.2    10106.0    1144.4    10131.1
```

Section 2.92

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4       .06    9922.6      .045   10062.5       .06   10209.7        .9   10387.6
X1     2.92         23    9922.6    10062.5     510.0     585.0     560.0
GR   1147.8     9775.5    1146.2     9815.7    1144.7    9855.3    1144.9    9884.1    1143.7    9905.4
GR   1140.1     9922.6    1139.6     9940.4    1139.5    9954.0    1139.2    9977.3    1138.9   10000.0
GR   1138.8    10015.6    1142.1    10062.5    1142.2   10098.4    1142.1   10126.5    1142.9   10161.8
GR   1142.9    10182.9    1144.0    10209.7    1142.6   10232.2    1140.0   10253.6    1141.3   10276.8
GR   1143.8    10310.9    1146.3    10345.1    1148.7   10387.6
```

Section 3.04

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	4	.06	9972.6	.045	10045.6	.06	10495.3	.9	10765.5	
X1	3.04	34	9972.6	10045.6	610.0	625.0	625.0			
GR	1151.1	9972.6	1142.0	9992.8	1142.8	10000.0	1144.0	10022.3	1144.8	10045.6
GR	1145.5	10091.3	1145.4	10123.8	1145.3	10150.5	1142.9	10162.9	1142.5	10181.9
GR	1142.1	10192.4	1142.3	10215.1	1142.2	10230.5	1142.9	10249.8	1142.2	10262.3
GR	1141.2	10269.6	1141.9	10275.9	1143.6	10294.0	1144.0	10316.2	1144.0	10332.5
GR	1146.3	10361.4	1147.1	10382.8	1145.8	10419.7	1146.8	10495.3	1146.5	10525.5
GR	1146.2	10570.1	1146.6	10596.6	1145.9	10639.8	1145.1	10661.4	1144.1	10673.8
GR	1143.1	10682.0	1146.6	10710.6	1147.7	10732.1	1150.0	10765.5		

Section 3.14

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	5	.9	9875.1	.06	9981.2	.045	10065.8	.06	10285.4	.9
NH	10616									
X1	3.14	36	9981.2	10065.8	510.0	340.0	495.0			
GR	1149.4	9557.7	1148.5	9611.6	1148.6	9681.0	1147.3	9713.5	1148.4	9731.3
GR	1148.4	9762.8	1148.1	9804.7	1148.4	9848.4	1148.4	9875.1	1146.3	9891.0
GR	1145.7	9904.9	1146.3	9929.0	1146.4	9955.1	1146.5	9969.4	1145.4	9981.2
GR	1143.4	9987.0	1143.3	10000.0	1143.3	10008.6	1144.3	10028.3	1144.2	10043.4
GR	1142.9	10055.6	1143.0	10065.8	1144.4	10081.9	1144.9	10108.6	1147.2	10147.1
GR	1147.8	10208.8	1148.3	10285.4	1148.0	10362.6	1146.5	10425.3	1146.9	10476.0
GR	1146.4	10495.0	1144.7	10503.4	1145.7	10520.9	1147.9	10542.5	1148.8	10579.1
GR	1150.4	10616								
NC	.06	.06	.045							
X1	3.23	20	9974.1	10010.2	511.0	511.0	511.0			
GR	1152.3	9638.9	1151.0	9701.2	1150.4	9747.7	1148.8	9777.8	1148.6	9803.1
GR	1150.6	9821.2	1151.1	9840.5	1150.0	9866.8	1148.0	9883.5	1149.0	9907.6
GR	1149.1	9948.8	1148.1	9974.1	1146.2	9988.2	1146.4	10000.0	1147.5	10010.2
GR	1147.2	10045.9	1147.1	10067.3	1147.2	10076.9	1151.9	10101.1	1152.8	10128.1
X1	3.32	24	9975.1	10053.0	460.0	465.0	487.0			
GR	1156.7	9803.8	1154.6	9850.3	1153.5	9880.8	1153.2	9898.5	1154.6	9915.8
GR	1154.4	9943.8	1153.3	9965.5	1152.3	9975.1	1149.2	9982.3	1149.0	10000.0
GR	1149.0	10016.4	1149.0	10036.0	1149.8	10053.0	1151.0	10076.8	1151.9	10114.2
GR	1152.4	10152.9	1152.3	10201.3	1153.4	10259.5	1152.6	10315.2	1151.6	10357.6
GR	1152.2	10389.8	1152.7	10410.2	1155.4	10443.1	1157.3	10491.6		

```
X1     3.42        28    9962.0   10023.5     488.0     440.0     488.0
GR   1157.8    9932.4    1157.5    9951.5    1154.0    9962.0    1152.2    9974.2    1151.1    9995.7
GR   1150.9   10000.0    1150.9   10012.3    1154.9   10023.5    1155.2   10039.4    1155.1   10064.4
GR   1154.6   10073.5    1151.5   10082.6    1152.4   10098.8    1153.6   10120.8    1153.9   10149.7
GR   1153.8   10184.1    1154.6   10215.8    1154.6   10251.9    1154.4   10296.5    1154.9   10349.6
GR   1154.6   10410.4    1155.1   10461.4    1155.1   10506.2    1154.9   10551.2    1153.5   10576.2
GR   1154.1   10598.4    1155.8   10631.2    1158.9   10666.8
```

Section 3.51

Flow added at Junction 3E

```
X1     3.51        20    9971.6   10029.0     487.0     487.0     487.0
GR   1160.4    9859.7    1158.4    9896.9    1155.3    9920.3    1156.3    9944.6    1156.1    9971.6
GR   1152.8    9984.3    1152.9   10000.0    1153.6   10029.0    1155.1   10074.8    1155.7   10125.7
GR   1157.0   10170.4    1158.1   10221.8    1157.6   10270.7    1157.1   10336.2    1157.2   10403.7
GR   1156.8   10458.8    1155.5   10489.3    1155.9   10515.7    1158.5   10545.8    1161.3   10588.8

QT        2    6208.0    6208.0
X1     3.59        20    9983.3   10038.7     440.0     440.0     440.0
GR   1159.5    9795.4    1157.9    9823.1    1157.0    9838.1    1157.0    9857.6    1157.0    9873.4
GR   1158.2    9894.5    1158.2    9922.5    1159.2    9943.5    1159.5    9963.4    1158.9    9983.3
GR   1154.9    9997.5    1154.9   10000.0    1155.0   10012.5    1155.1   10024.1    1157.9   10038.7
GR   1159.1   10061.3    1161.2   10080.6    1160.1   10105.6    1161.4   10147.8    1164.0   10201.9

X1     3.70        13    9984.8   10039.4     558.0     558.0     558.0
GR   1164.1    9773.7    1163.5    9826.0    1161.4    9876.5    1159.8    9917.1    1161.8    9940.3
GR   1162.3    9963.8    1159.1    9984.8    1157.2    9998.0    1157.3   10000.0    1157.3   10021.1
GR   1158.3   10039.4    1168.5   10060.8    1168.5   10101.9

X1     3.79        18    9957.2   10034.2     460.0     460.0     460.0
GR   1167.1    9824.8    1166.5    9875.2    1165.5    9926.6    1163.1    9957.2    1159.5    9975.2
GR   1159.7    9997.0    1159.5   10000.0    1159.5   10018.9    1163.1   10034.2    1164.8   10074.8
GR   1165.4   10117.0    1164.9   10142.1    1161.7   10150.9    1164.9   10169.7    1164.2   10186.8
GR   1161.5   10201.3    1165.0   10215.2    1167.3   10232.1
```

Section 3.88

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      4      .06    9973.3     .045   10029.1      .06   10341.5       .9   10595.0
X1   3.88       15    9973.3  10029.1     475.0    475.0     475.0
GR 1170.8   9911.5    1168.0   9952.2    1166.2   9973.3    1162.1    9984.5    1162.1   10000.0
GR 1162.0  10015.0    1165.1  10029.1    1167.3  10059.8    1167.2   10104.2    1166.1   10150.1
GR 1166.8  10203.2    1167.6  10279.3    1168.7  10341.5    1169.0   10547.9    1171.5   10595.0
```

Section 3.96

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      4       .9    9799.4      .06    9982.6     .045   10022.7      .06   10184.0
X1   3.96       27    9982.6  10022.7     440.0    440.0     440.0
GR 1173.9   9673.9    1171.8   9717.9    1171.3   9738.7    1172.0    9753.9    1173.5    9776.3
GR 1173.9   9799.4    1172.1   9824.5    1170.6   9868.4    1169.0    9889.8    1168.2    9912.1
GR 1170.4   9921.3    1170.7   9943.9    1171.2   9975.7    1170.1    9982.6    1165.1    9991.0
GR 1165.1  10000.0    1165.1  10010.4    1168.9  10022.7    1168.4   10035.9    1167.0   10046.1
GR 1167.2  10064.7    1167.4  10079.1    1169.4  10085.7    1171.0   10103.4    1171.1   10120.4
GR 1172.8  10150.1    1174.8  10184.0
```

Section 4.05

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      4       2.0    9932.0      .06    9970.7     .045   10023.6      .06   10287.1
X1   4.05        33    9970.7  10023.6     520.0    509.0     509.0
GR 1175.9   9522.2    1175.3   9562.6    1174.9   9608.0    1172.8    9646.8    1172.2    9676.2
GR 1172.4   9712.1    1173.7   9754.9    1172.2   9781.9    1171.9    9798.5    1173.4    9822.0
GR 1173.8   9847.4    1172.9   9883.7    1171.2   9905.6    1170.1    9916.9    1170.3    9925.7
GR 1173.8   9932.0    1173.9   9948.2    1172.0   9970.7    1170.5    9982.3    1167.8    9988.2
GR 1167.3  10000.0    1167.3  10011.0    1170.4  10023.6    1171.2   10064.0    1172.5   10107.2
GR 1172.8  10141.8    1170.7  10162.8    1168.7  10176.4    1169.9   10186.8    1172.7   10208.8
GR 1175.7  10236.4    1179.2  10258.6    1178.3  10287.1

NC      .06       .06     .045
X1   4.16        17    9978.2  10030.3     520.0    540.0     530.0
GR 1179.0   9758.8    1177.0   9801.4    1175.0   9850.2    1174.2    9882.8    1175.7    9905.8
GR 1174.8   9940.0    1174.1   9966.5    1172.2   9978.2    1171.2    9988.2    1170.3   10000.0
GR 1169.9  10014.3    1173.3  10030.3    1175.5  10060.7    1173.6   10089.7    1172.9   10107.0
GR 1177.2  10143.6    1179.0  10182.1
```

```
X1     4.25       15    9988.4   10023.7     485.0     500.0     495.0
GR   1180.8   9680.2    1179.8    9746.8    1179.2    9806.0    1177.2    9872.6    1176.1    9928.5
GR   1175.5   9962.9    1175.7    9981.0    1173.7    9988.4    1172.1    9995.7    1172.1   10000.0
GR   1172.3  10014.3    1174.1   10023.7    1174.8   10062.1    1175.6   10092.5    1181.5   10131.0

X1     4.35       21    9976.4   10021.4     500.0     540.0     520.0
GR   1183.4   9895.7    1181.4    9941.8    1181.0    9967.3    1178.6    9976.4    1176.1    9983.8
GR   1175.7  10000.0    1176.1   10009.5    1177.6   10021.4    1178.4   10045.5    1178.8   10090.0
GR   1177.5  10114.7    1177.6   10135.1    1179.4   10176.7    1180.0   10238.0    1180.7   10304.1
GR   1180.4  10361.2    1180.1   10393.2    1179.2   10404.1    1180.5   10427.2    1182.3   10454.0
GR   1183.4  10499.2

X1     4.46       24    9979.2   10026.3     625.0     515.0     590.0
GR   1188.9   9960.5    1187.1    9979.2    1180.0    9991.0    1179.0    9999.3    1179.1   10000.0
GR   1179.8  10011.0    1182.6   10026.3    1182.8   10045.1    1182.7   10100.1    1183.0   10133.5
GR   1182.8  10168.9    1181.7   10187.2    1180.2   10198.4    1182.9   10227.5    1183.7   10274.0
GR   1183.4  10318.1    1183.5   10365.4    1183.6   10401.7    1183.6   10428.9    1184.5   10459.5
GR   1184.4  10487.6    1183.4   10515.0    1184.0   10554.2    1186.5   10601.8

X1     4.55       19    9976.1   10011.4     495.0     445.0     490.0
GR   1192.2   9946.6    1190.5    9963.7    1184.8    9976.1    1182.5    9984.6    1181.1    9992.8
GR   1181.0  10000.0    1182.4   10011.4    1185.3   10029.8    1185.1   10084.1    1184.6   10113.2
GR   1184.0  10123.6    1185.5   10150.1    1185.2   10211.7    1186.8   10248.0    1187.3   10294.7
GR   1189.1  10344.2    1189.0   10373.0    1187.7   10399.3    1189.6   10443.2

X1     4.65       16    9986.9   10013.5     460.0     455.0     495.0
GR   1192.9   9674.7    1191.2    9696.1    1187.2    9715.6    1186.8    9732.7    1186.9    9744.9
GR   1185.3   9753.6    1187.5    9767.5    1187.4    9828.0    1187.4    9902.3    1187.2    9951.7
GR   1186.3   9986.9    1184.9    9995.2    1183.9   10000.0    1184.9   10013.5    1192.1   10018.0
GR   1193.1  10057.3
```

Section 4.76

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4        .9    9837.2       .06    9980.1      .045   10020.4       .06   10281.3
X1     4.76       25    9980.1   10020.4     520.0     655.0     605.0
GR   1196.2   9662.1    1194.6    9686.1    1190.6    9711.6    1189.1    9725.8    1191.0    9745.7
GR   1193.4   9800.1    1194.2    9837.2    1191.2    9875.5    1192.3    9916.7    1190.7    9940.8
GR   1191.5   9967.3    1190.5    9980.1    1188.3    9994.8    1187.4   10000.0    1189.1   10007.6
GR   1189.9  10020.4    1190.0   10059.7    1191.0   10115.9    1190.8   10172.7    1191.0   10208.7
GR   1188.6  10223.7    1187.1   10232.2    1188.4   10240.3    1191.7   10255.6    1194.9   10281.3
```

```
NC      .06       .06      .045
X1     4.86        24    9979.7   10021.5     475.0     525.0     520.0
GR   1197.3    9816.5    1195.5    9847.0    1192.9    9872.5    1193.2    9901.3    1192.4    9923.1
GR   1193.6    9956.7    1192.9    9979.7    1189.7    9993.0    1190.3   10000.0    1190.4   10021.5
GR   1193.6   10041.8    1194.1   10077.9    1192.9   10102.5    1191.3   10120.7    1194.2   10148.0
GR   1194.4   10190.8    1194.5   10240.1    1194.2   10267.1    1192.2   10283.9    1193.7   10300.7
GR   1192.8   10312.7    1192.2   10321.1    1194.2   10346.9    1196.4   10406.7

X1     4.96        17    9969.6   10026.7     495.0     515.0     515.0
GR   1200.0    9823.6    1199.4    9860.7    1196.8    9896.4    1197.1    9939.2    1196.9    9957.1
GR   1193.4    9969.6    1192.8    9996.0    1192.4   10000.0    1192.8   10012.7    1195.3   10026.7
GR   1195.3   10066.5    1194.6   10113.5    1193.5   10131.2    1195.5   10152.7    1196.8   10215.4
GR   1198.2   10284.1    1200.4   10337.0

X1     5.05        14    9986.0   10041.5     480.0     525.0     515.0
GR   1204.1    9921.5    1202.8    9934.9    1199.0    9957.1    1196.1    9986.0    1195.0   10000.0
GR   1196.3   10019.5    1196.7   10041.5    1198.6   10102.0    1198.8   10178.8    1200.4   10242.5
GR   1200.5   10312.5    1200.3   10389.3    1201.3   10474.0    1204.0   10543.1

X1     5.16        31    9956.5   10037.1     520.0     440.0     560.0
GR   1205.5    9554.4    1204.4    9579.8    1198.4    9601.9    1200.5    9616.1    1202.2    9646.4
GR   1201.2    9689.0    1201.6    9711.4    1198.8    9720.5    1197.6    9727.4    1201.0    9742.5
GR   1203.8    9766.6    1201.6    9784.2    1199.3    9795.3    1198.0    9807.7    1197.3    9818.8
GR   1199.0    9827.8    1201.0    9853.0    1199.0    9866.0    1198.4    9875.5    1200.6    9911.9
GR   1201.4    9956.5    1199.9    9982.6    1199.0    9999.3    1198.7   10000.0    1199.8   10017.1
GR   1202.5   10037.1    1202.4   10110.7    1203.1   10165.4    1203.1   10244.4    1203.7   10326.9
GR   1204.6   10375.6

X1     5.23        19    9949.7   10049.4     395.0     335.0     390.0
GR   1207.4    9790.8    1203.4    9801.7    1200.8    9814.7    1200.7    9826.4    1202.4    9844.2
GR   1204.4    9874.2    1203.6    9886.8    1200.7    9905.5    1203.0    9924.1    1204.0    9949.7
GR   1202.7    9977.3    1201.7    9999.4    1201.1   10000.0    1202.1   10021.4    1203.7   10049.4
GR   1203.7   10115.2    1204.2   10207.2    1205.9   10231.8    1208.2   10280.7
```

Section 5.29

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      5        .9    9719.3      .06    9961.7     .045   10045.9      .06   10660.7       .9
NH  11229
X1     5.29        47    9961.7   10045.9     340.0     310.0     300.0
GR   1215.1    9433.1    1212.9    9495.4    1210.7    9538.8    1210.3    9582.1    1209.2    9615.0
GR   1210.0    9641.8    1209.4    9661.4    1207.1    9677.6    1211.2    9702.3    1210.5    9719.3
GR   1205.0    9741.3    1202.4    9760.2    1204.6    9773.8    1202.4    9786.4    1204.4    9807.6
GR   1204.0    9818.7    1202.2    9826.7    1203.5    9835.3    1205.8    9863.9    1205.0    9919.4
GR   1204.7    9961.7    1201.7    9984.0    1202.1    9996.2    1201.8   10000.0    1203.7   10012.8
GR   1204.9   10045.9    1204.9   10076.1    1205.1   10157.1    1205.0   10240.5    1204.7   10273.8
GR   1202.2   10282.2    1204.0   10291.7    1205.3   10315.6    1204.7   10345.9    1206.3   10394.6
```

```
GR   1206.6    10473.4    1206.7    10559.9    1206.5    10660.7    1206.7    10740.3    1205.6    10833.9
GR   1205.0    10871.2    1206.6    10929.0    1206.4    10979.4    1205.5    11029.7    1206.7    11083.6
GR   1207.1    11147.9    1207.9    11229

NC     .06        .06      .045
X1    5.39         26    9912.1    10048.3     380.0     410.0     500.0
GR   1212.0     9458.0    1209.3     9500.5    1205.6    9534.5    1205.7     9562.9    1203.4     9570.6
GR   1205.7     9583.7    1205.5     9607.0    1203.2    9619.5    1206.0     9637.7    1206.0     9703.3
GR   1206.0     9784.5    1206.2     9849.7    1207.2    9912.1    1206.2     9961.9    1204.8     9994.1
GR   1204.4    10000.0    1206.5    10027.8    1208.2    10048.3   1207.7    10088.0    1205.4    10103.2
GR   1208.5    10126.8    1208.5    10216.9    1208.3    10305.8   1208.0    10398.5    1207.4    10443.9
GR   1209.0    10509.2

X1    5.46         16    9955.6    10030.7     345.0     420.0     420.0
GR   1212.9     9312.8    1209.7     9358.7    1209.2    9901.7    1209.5     9955.6    1207.6     9983.9
GR   1206.8     9996.3    1205.5    10000.0    1206.7    10017.2   1208.9    10030.7    1210.0    10086.2
GR   1209.5    10179.5    1210.0    10285.3    1210.3    10376.7   1210.5    10475.1    1210.7    10562.3
GR   1211.9    10655.3

X1    5.55         28    9986.8    10032.2     450.0     455.0     475.0
GR   1215.5     9565.4    1212.9     9602.3    1210.6    9631.0    1211.1     9663.5    1208.9     9667.5
GR   1211.2     9675.5    1209.7     9692.0    1209.4    9702.8    1212.6     9760.0    1212.5     9802.8
GR   1210.3     9839.6    1209.7     9861.6    1211.5    9891.2    1212.4     9933.6    1211.4     9986.8
GR   1209.2     9996.5    1208.9    10000.0    1209.7    10012.9   1212.7    10032.2    1211.1    10107.6
GR   1210.9    10191.7    1210.9    10275.3    1210.8    10307.6   1213.4    10353.8    1213.2    10404.0
GR   1211.2    10440.0    1213.4    10484.6    1214.4    10558.5

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  Section 5.64

  Flow added from area 2E
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NH       4        .06    9981.2      .045    10045.9      .06    10396.6       2.0    10760.1
X1    5.64         27    9981.2    10045.9     450.0     445.0     450.0
GR   1218.0     9737.9    1214.5     9758.2    1214.9    9804.9    1213.7     9828.5    1215.2     9861.7
GR   1215.4     9894.6    1214.1     9909.3    1212.1    9920.1    1212.9     9928.5    1214.5     9948.6
GR   1214.2     9981.2    1213.6     9995.2    1211.6    10000.0   1212.6    10021.1    1213.9    10045.9
GR   1212.7    10104.0    1212.2    10131.9    1214.4    10181.5   1215.9    10252.7    1216.2    10335.4
GR   1216.3    10396.6    1214.7    10448.2    1213.6    10470.2   1215.6    10506.9    1217.0    10591.4
GR   1218.0    10687.4    1218.7    10760.1

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  Section 5.73

  Flow added from area F3
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```

```
NC      .06       .06      .045
X1     5.73        23    9973.7   10033.5     450.0     475.0     475.0
GR   1220.4    9553.5    1218.1    9583.7    1217.2    9632.6    1216.4    9668.1    1215.1    9684.6
GR   1217.6    9711.9    1218.9    9734.7    1217.4    9777.8    1217.8    9814.4    1216.6    9838.2
GR   1217.9    9867.2    1217.4    9895.8    1215.5    9906.0    1213.8    9915.9    1216.6    9938.0
GR   1216.5    9973.7    1215.1    9997.6    1213.3   10000.0    1214.0   10019.5    1216.6   10033.5
GR   1217.7   10112.4    1219.6   10180.9    1221.0   10253.1

QT        2    3728.0    3728.0
X1     5.82        15    9981.9   10033.5     410.0     460.0     460.0
GR   1222.1    9841.5    1220.2    9883.7    1218.0    9895.8    1220.2    9939.2    1220.8    9981.9
GR   1218.1    9991.0    1217.0   10000.0    1217.4   10014.4    1219.6   10033.5    1220.5   10103.5
GR   1221.1   10159.0    1219.9   10231.2    1219.2   10275.3    1222.0   10317.4    1223.3   10368.0

X1     5.91        15    9977.0   10031.3     485.0     465.0     500.0
GR   1226.3    9731.2    1224.5    9788.5    1223.5    9833.4    1221.7    9848.7    1222.7    9879.3
GR   1223.0    9937.5    1222.2    9977.0    1220.1    9995.7    1219.1   10000.0    1219.7   10014.7
GR   1222.9   10031.3    1221.9   10097.9    1222.1   10154.2    1224.0   10225.0    1225.2   10320.4
```

Section 5.99

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4       .06    9982.8      .045   10035.2       .06   10115.2       2.0   10426.5
X1     5.99        19    9982.8   10035.2     425.0     425.0     425.0
GR   1228.7    9729.5    1226.5    9790.5    1224.9    9834.9    1226.0    9891.3    1226.2    9948.2
GR   1225.6    9982.8    1224.1    9996.6    1221.9   10000.0    1222.9   10014.1    1223.3   10024.0
GR   1225.7   10035.2    1224.2   10060.1    1223.3   10070.4    1227.3   10115.2    1227.2   10174.7
GR   1226.6   10237.8    1226.5   10317.2    1225.7   10366.1    1227.7   10426.5
```

Section 6.08

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4       .06    9980.4      .045   10027.5       .06   10265.0       2.0   10599.5
X1     6.08        18    9980.4   10027.5     450.0     450.0     450.0
GR   1231.4    9671.4    1229.9    9765.9    1228.6    9843.4    1229.6    9910.2    1229.0    9950.8
GR   1227.4    9980.4    1224.5    9993.4    1223.5   10000.0    1224.2   10015.5    1227.6   10027.5
GR   1226.8   10060.9    1228.3   10115.7    1230.2   10181.9    1230.5   10265.0    1230.4   10349.1
GR   1229.1   10420.4    1230.5   10498.8    1230.7   10599.5
```

Section 6.17

Flow added from area E3G

NC	.06	.06	.045							
X1	6.17	13	9983.5	10040.5	460.0	450.0	465.0			
GR	1232.7	9889.9	1232.3	9936.4	1230.9	9964.3	1227.1	9971.1	1227.7	9983.5
GR	1225.8	9992.6	1225.8	10000.0	1227.0	10019.6	1229.4	10040.5	1230.4	10074.4
GR	1229.4	10187.4	1232.6	10254.8	1232.8	10319.8				
QT	2	3442.0	3442.0							
X1	6.26	20	9991.5	10036.1	490.0	490.0	505.0			
GR	1236.3	9635.0	1235.0	9667.6	1233.7	9705.2	1231.7	9733.5	1230.3	9741.1
GR	1233.2	9765.2	1233.6	9824.8	1232.2	9894.4	1230.1	9912.6	1231.8	9938.3
GR	1232.2	9966.7	1231.6	9991.5	1229.7	10000.0	1231.0	10020.7	1233.4	10036.1
GR	1232.2	10052.7	1233.5	10108.3	1234.2	10188.1	1234.6	10261.3	1235.7	10330.8

Section 6.36

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	4	.06	9976.9	.045	10034	.06	10116.8	.9	10374.2	
X1	6.36	22	9976.9	10034.	510.0	525.0	525.0			
GR	1238.6	9601.1	1237.6	9712.2	1237.5	9784.3	1236.6	9817.1	1234.5	9826.7
GR	1236.8	9842.0	1237.1	9882.5	1233.6	9915.3	1236.9	9945.7	1238.2	9976.9
GR	1232.7	9991.9	1231.1	10000.0	1233.3	10015.3	1236.2	10034.0	1235.1	10057.1
GR	1233.7	10068.6	1237.3	10116.8	1236.6	10177.7	1236.9	10227.0	1236.9	10281.0
GR	1236.6	10323.7	1238.0	10374.2						

Section 6.45

Flow added from area E3A

NC	.06	.06	.045							
X1	6.45	12	9982.	10021.6	445.0	485.0	480.0			
GR	1241.4	9579.9	1238.8	9662.5	1239.2	9982.0	1237.7	9991.4	1234.3	10000.0
GR	1235.3	10011.7	1237.9	10021.6	1237.3	10064.2	1237.6	10096.4	1239.3	10150.6
GR	1240.9	10218.2	1242.1	10281.0						
QT	2	3140.0	3140.0							

Section 6.56

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to

reduce the flow velocities in these areas.

NH	4	.06	9985.5	.045	10030.9	.06	10128.1	.9	10483.7	
X1	6.56	24	9985.5	10030.9	435.0	560.0	550.0			
GR	1243.6	9714.2	1241.9	9797.5	1241.5	9842.1	1241.3	9895.3	1240.8	9914.4
GR	1241.9	9944.1	1239.8	9961.7	1240.6	9985.5	1239.5	9994.0	1238.0	10000.0
GR	1239.8	10015.9	1241.1	10030.9	1239.9	10060.3	1243.4	10079.0	1241.3	10095.5
GR	1243.7	10128.1	1242.0	10176.5	1241.4	10266.6	1240.5	10271.8	1242.0	10292.8
GR	1241.5	10409.8	1239.3	10418.3	1241.8	10433.0	1244.2	10483.7		

Section 6.66

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	4	.06	9984.9	.045	10021.9	.06	10372	.9	10905.3	
X1	6.66	25	9984.9	10021.9	560.0	525.0	545.0			
GR	1247.4	9710.6	1247.0	9780.1	1245.6	9800.8	1243.6	9811.8	1246.2	9826.1
GR	1246.9	9878.2	1245.5	9922.5	1245.6	9960.2	1244.6	9984.9	1242.2	9990.6
GR	1241.0	9998.2	1241.9	10000.0	1243.9	10009.2	1245.3	10021.9	1245.5	10096.6
GR	1245.6	10212.2	1245.1	10372.0	1245.7	10464.8	1245.6	10551.6	1245.0	10625.7
GR	1246.0	10696.2	1245.4	10757.9	1245.5	10800.3	1247.1	10847.8	1248.2	10905.3

Section 6.75

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	5	.9	9860.2	.06	9987.9	.045	10039.9	.06	10254.4	.9
NH	10810									
X1	6.75	30	9987.9	10039.9	470.0	505.0	485.0			
GR	1251.8	9366.5	1249.2	9426.8	1249.6	9483.5	1249.0	9537.8	1248.9	9550.8
GR	1247.0	9560.9	1249.1	9573.9	1249.2	9677.0	1249.8	9783.8	1251.1	9860.2
GR	1250.3	9924.5	1250.0	9956.8	1247.2	9968.7	1248.2	9987.9	1246.8	9992.8
GR	1245.2	9998.4	1245.2	10000.0	1246.9	10013.6	1248.3	10026.4	1249.9	10039.9
GR	1249.1	10104.7	1250.3	10166.7	1250.8	10254.4	1249.5	10334.8	1249.5	10432.0
GR	1249.7	10524.0	1249.1	10597.1	1249.4	10674.2	1250.7	10764.5	1251.2	10810.0

Section 6.84

Flow added from area E3B

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to

reduce the flow velocities in these areas.

NH	5	.9	9693.6	.06	9969	.045	10029.2	.06	10282.2	1.0
NH	10919									
X1	6.84	31	9969.	10029.2	470.0	490.0	490.0			
GR	1255.1	9072.0	1254.1	9185.5	1253.9	9276.3	1253.6	9366.3	1253.3	9442.3
GR	1252.6	9452.5	1251.6	9460.1	1253.1	9476.4	1253.5	9549.3	1253.4	9693.6
GR	1253.2	9800.7	1253.1	9854.6	1253.4	9888.8	1254.1	9941.9	1252.3	9969.0
GR	1248.6	9988.7	1247.5	10000.0	1249.4	10016.2	1252.3	10029.2	1254.1	10091.0
GR	1253.7	10185.9	1254.5	10282.2	1254.0	10383.6	1253.0	10424.7	1254.4	10490.6
GR	1254.6	10580.0	1253.5	10663.0	1254.6	10731.1	1253.7	10780.3	1254.4	10861.9
GR	1255.2	10919.0								
QT	2	2751.0	2751.0							

Section 6.94

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	4	.9	9869.3	.06	9988.3	.045	10029.0	.06	10770.7	
X1	6.94	22	9988.3	10029.0	435.0	460.0	520.0			
GR	1257.8	9558.9	1256.7	9621.9	1255.6	9670.8	1254.9	9725.4	1257.2	9760.2
GR	1257.8	9802.2	1258.0	9869.3	1256.8	9934.9	1256.2	9988.3	1254.3	9996.6
GR	1253.1	10000.0	1254.1	10013.2	1255.3	10029.0	1256.3	10076.2	1255.6	10167.4
GR	1255.3	10224.2	1256.1	10283.7	1255.8	10463.8	1257.4	10528.6	1258.5	10615.9
GR	1257.7	10700.2	1258.3	10770.7						

Section 7.02

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

NH	4	.9	9812.3	.06	9979.6	.045	10013.3	.06	10354.3	
X1	7.02	25	9979.6	10013.3	400.0	415.0	410.0			
GR	1260.9	9215.0	1260.2	9276.3	1260.4	9312.6	1259.4	9332.0	1259.5	9399.9
GR	1260.1	9485.4	1259.1	9519.5	1257.3	9531.3	1259.0	9565.0	1259.7	9657.0
GR	1260.2	9743.8	1261.6	9812.3	1260.7	9891.2	1259.6	9953.0	1257.9	9979.6
GR	1256.3	9990.6	1255.6	10000.0	1259.1	10013.3	1258.0	10053.9	1256.8	10063.5
GR	1255.3	10069.6	1258.7	10088.0	1259.3	10194.7	1260.6	10268.4	1262.2	10354.3

```
NC      .06       .06      .045
X1     7.11        16    9995.1   10016.8     475.0     490.0     500.0
GR   1264.6    9570.9    1264.1    9613.6    1262.7    9653.9    1262.9    9867.9    1262.6    9896.3
GR   1262.2    9915.4    1262.5    9970.4    1262.5    9995.1    1259.8   10000.0    1259.0   10005.8
GR   1261.5   10016.8    1262.2   10083.2    1262.2   10174.0    1261.2   10179.1    1263.1   10209.1
GR   1264.5   10314.0

X1     7.20        16    9974.0   10033.6     450.0     465.0     455.0
GR   1268.6    9520.0    1267.6    9615.1    1266.1    9678.2    1266.6    9704.2    1265.0    9710.0
GR   1266.2    9737.7    1266.5    9851.4    1266.1    9913.5    1266.6    9974.0    1265.0    9994.4
GR   1264.1   10000.0    1265.5   10016.8    1266.9   10033.6    1263.7   10050.1    1266.3   10077.0
GR   1268.5   10126.2

X1     7.30        13    9976.4   10045.6     480.0     485.0     500.0
GR   1272.4    9869.1    1270.4    9920.2    1269.2    9949.4    1270.0    9976.4    1268.5    9992.2
GR   1267.9   10000.0    1269.0   10018.5    1270.5   10045.6    1270.4   10077.9    1268.9   10097.4
GR   1271.0   10144.4    1272.3   10223.2    1272.6   10310.1

X1     7.40        18    9966.5   10030.9     505.0     475.0     540.0
GR   1277.9    9720.3    1276.1    9764.7    1272.6    9794.8    1273.3    9844.3    1275.2    9905.3
GR   1275.5    9966.5    1273.7    9986.3    1271.6    9994.1    1271.0   10000.0    1272.4   10013.6
GR   1275.8   10030.9    1274.0   10097.9    1272.8   10133.5    1274.2   10188.7    1273.5   10242.4
GR   1274.8   10294.8    1275.1   10314.8    1276.3   10360.3

X1     7.49        16    9986.9   10028.2     460.0     465.0     470.0
GR   1280.6    9503.7    1278.3    9532.2    1278.5    9609.7    1279.6    9659.0    1278.9    9704.7
GR   1279.6    9782.4    1277.7    9861.3    1277.7    9897.7    1275.4    9910.1    1274.4    9923.2
GR   1277.4    9949.0    1277.9    9986.9    1277.0    9997.2    1274.5   10000.0    1276.5   10011.5
GR   1280.5   10028.2
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Section 7.57

Flow added from area E3D

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X1     7.57        18    9988.1   10049.5     380.0     445.0     435.0
GR   1283.4    9501.0    1282.0    9525.9    1282.3    9785.1    1281.2    9801.5    1281.6    9892.8
GR   1282.8    9936.6    1281.9    9952.8    1279.7    9972.6    1280.9    9988.1    1279.1    9999.6
GR   1278.4   10000.0    1280.8   10014.1    1277.9   10025.9    1280.7   10049.5    1282.3   10091.9
GR   1282.7   10139.4    1282.7   10235.1    1283.9   10299.0

QT        2    2125.0    2125.0
X1     7.68        21    9979.6   10023.7     550.0     570.0     560.0
GR   1289.0    9530.5    1287.4    9595.8    1286.7    9636.1    1287.3    9697.2    1287.3    9739.8
GR   1286.7    9772.8    1286.3    9802.2    1286.2    9809.3    1285.3    9813.6    1286.7    9828.2
GR   1286.1    9863.8    1285.6    9871.6    1286.3    9908.5    1286.7    9949.9    1286.4    9979.6
GR   1282.7    9988.3    1282.4    9999.7    1282.6   10000.0    1284.2   10009.4    1286.7   10023.7
GR   1288.0   10057.3
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X1     7.79       19    9987.5   10014.8     610.0     625.0     620.0
GR   1293.6   9816.2    1292.6    9867.3    1291.7    9950.3    1291.7    9987.5    1289.9    9995.3
GR   1289.7  10000.0    1291.7   10014.8    1291.5   10081.5    1291.7   10169.0    1291.5   10247.2
GR   1288.9  10254.4    1289.2   10260.7    1291.3   10278.0    1291.1   10300.2    1289.1   10305.9
GR   1290.5  10323.0    1291.7   10379.2    1292.6   10478.0    1294.0   10571.3

X1     7.90       19    9965.5   10018.0     565.0     545.0     575.0
GR   1297.7   9619.2    1297.6    9679.2    1297.4    9784.6    1297.4    9884.0    1296.7    9935.3
GR   1294.9   9944.2    1297.0    9965.5    1296.2    9989.1    1294.9    9994.7    1294.3   10000.0
GR   1296.4  10018.0    1296.1   10054.9    1295.8   10091.2    1297.3   10161.6    1297.4   10251.7
GR   1296.1  10303.4    1295.1   10318.0    1296.7   10362.2    1298.5   10434.3

X1     8.00       22    9989.3   10025.1     535.0     540.0     540.0
GR   1302.5   9680.1    1301.9    9870.5    1300.9    9989.3    1298.9   10000.0    1300.5   10014.9
GR   1301.5  10025.1    1300.2   10035.6    1298.5   10041.1    1301.0   10053.3    1298.1   10061.7
GR   1300.8  10080.9    1300.4   10106.4    1299.1   10120.6    1301.1   10136.6    1301.6   10186.7
GR   1300.4  10212.0    1300.0   10229.7    1301.6   10256.1    1302.5   10341.0    1302.4   10425.2
GR   1302.4  10464.0    1302.9   10540.4

X1     8.13       16    9970.6   10023.4     620.0     540.0     670.0
GR   1307.5   9910.8    1305.4    9926.0    1307.3    9970.6    1305.7    9991.6    1304.7   10000.0
GR   1307.1  10023.4    1306.1   10069.4    1305.9   10104.8    1304.3   10116.0    1305.9   10142.7
GR   1305.1  10184.6    1304.7   10212.2    1303.2   10229.0    1305.2   10262.2    1307.2   10359.0
GR   1308.1  10455.4

X1     8.22       20    9924.8   10000      450.0     460.0     460.0
GR   1312.0   9847.7    1310.1    9901.7    1309.8    9924.8    1307.4    9938.6    1308.5    9954.5
GR   1309.5   9980.3    1308.1    9996.1    1309.0   10000.0    1311.2   10029.0    1311.5   10088.9
GR   1309.7  10119.9    1310.9   10154.2    1310.9   10273.9    1310.3   10330.1    1312.3   10395.3
GR   1308.7  10433.7    1311.4   10491.5    1309.9   10549.7    1309.6   10573.4    1312.4   10623.9

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  Section 8.31

  Flow added from area CB24
  ---------------------------------------------------------------------------


X1     8.31       23    9981.5   10020.7     470.0     485.0     490.0
GR   1316.6   9455.6    1315.1    9500.9    1314.3    9534.0    1313.0    9539.6    1313.8    9554.4
GR   1313.3   9564.5    1313.7    9596.5    1313.4    9634.0    1314.3    9667.2    1314.6    9683.0
GR   1314.6   9755.4    1314.0    9804.5    1312.8    9819.9    1314.3    9862.5    1314.6    9922.3
GR   1314.2   9981.5    1313.3    9994.3    1312.5   10000.0    1314.6   10020.7    1315.2   10066.4
GR   1314.8  10164.1    1315.2   10260.9    1316.2   10310.9

QT        2    1246.0    1246.0

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  Section 8.41

  Flow added from area E3F
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X1     8.41        10    9972.9   10018.1     550.0     490.0     520.0
GR   1320.5    9877.2    1319.7    9951.4    1317.6    9972.9    1314.9    9995.8    1315.0   10000.0
GR   1317.2   10018.1    1317.8   10043.1    1318.6   10082.7    1318.8   10139.6    1320.0   10240.1

QT        2     894.0     894.0
NH        4       1.0    9844.7       .06    9922.9      .045   10022.1       .06   10075.3
X1     8.50        14    9922.9   10022.1     500.0     490.0     500.0
GR   1325.1    9668.9    1322.7    9696.6    1321.7    9717.0    1323.3    9732.8    1322.6    9756.9
GR   1321.6    9770.6    1324.7    9844.7    1324.2    9922.9    1322.4    9974.3    1321.6    9987.4
GR   1320.1    9996.2    1321.2   10000.0    1324.2   10022.1    1326.5   10075.3

NC      .06       .06      .045
X1     8.59        11    9982.7   10013.7     465.0     465.0     465.0
GR   1331.7    9810.3    1329.9    9884.2    1328.3    9917.2    1329.6    9962.5    1328.8    9982.7
GR   1326.4    9996.5    1325.9   10000.0    1328.4   10013.7    1328.3   10040.1    1329.5   10063.3
GR   1331.1   10098.4

X1     8.69         9    9985.3   10019.3     500.0     495.0     500.0
GR   1336.8    9895.8    1334.3    9934.4    1333.2    9968.0    1332.2    9985.3    1330.4    9996.8
GR   1330.9   10000.0    1333.1   10019.3    1336.0   10042.6    1338.0   10099.2

X1     8.78        11    9988.0   10031.7     495.0     490.0     495.0
GR   1340.6    9756.2    1339.5    9811.3    1337.6    9841.7    1339.1    9879.0    1339.1    9948.7
GR   1338.4    9988.0    1336.3   10000.0    1336.6   10012.4    1338.4   10031.7    1339.6   10054.4
GR   1342.1   10096.3

X1     8.89         9    9986.2   10009.4     555.0     590.0     590.0
GR   1347.2    9937.6    1345.6    9970.8    1342.6    9986.2    1340.7    9992.5    1340.0   10000.0
GR   1341.9   10009.4    1344.0   10036.9    1346.2   10078.0    1347.5   10118.0

X1     8.99        10    9992.9   10024.6     491.0     491.0     491.0
GR   1355.4    9928.6    1355.1    9962.8    1350.8    9979.9    1348.3    9992.9    1346.6   10000.0
GR   1345.9   10008.9    1348.3   10024.6    1348.8   10048.9    1351.1   10071.2    1352.0   10118.0

X1     9.09         9    9980.9   10008.9     575.0     570.0     570.0
GR   1360.8    9901.8    1356.4    9947.4    1354.6    9980.9    1353.3    9988.2    1352.8    9994.8
GR   1353.1   10000.0    1354.3   10008.9    1358.2   10035.5    1360.0   10095.6

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  Section 9.19

  Flow added from area E3C
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X1     9.19         9    9973.8   10015.5     510.0     510.0     515.0
GR   1364.6    9838.8    1363.5    9886.5    1362.8    9946.5    1360.9    9973.8    1359.6    9989.3
GR   1359.2    9998.8    1359.5   10000.0    1364.3   10015.5    1365.3   10071.3
```

QT	2	871.0	871.0							
X1	9.29	9	9994.7	10030.1	490.0	505.0	500.0			
GR	1372.6	9880.9	1370.6	9950.6	1366.1	9994.7	1364.9	10000.0	1365.5	10016.1
GR	1369.3	10030.1	1367.8	10055.2	1368.6	10080.4	1369.6	10127.1		
X1	9.39	13	9976.7	10021.8	550.0	523.0	555.0			
GR	1377.6	9876.8	1375.1	9927.2	1373.4	9946.6	1373.4	9954.5	1375.1	9976.7
GR	1373.5	9989.7	1372.7	9999.3	1372.1	10000.0	1373.5	10008.3	1374.2	10021.8
GR	1376.8	10053.6	1373.6	10115.5	1377.0	10178.8				
X1	9.48	9	9984.2	10021.6	485.0	485.0	485.0			
GR	1383.5	9848.9	1382.9	9913.7	1381.5	9959.6	1380.7	9984.2	1379.0	9994.5
GR	1378.5	10000.0	1378.9	10012.5	1382.7	10021.6	1385.9	10042.3		
X1	9.52	11	9959.8	10012.6	160.0	205.0	180.0			
GR	1386.3	9836.9	1384.8	9860.6	1384.1	9878.7	1385.7	9917.7	1383.9	9959.8
GR	1383.0	9985.7	1381.4	9998.6	1381.7	10000.0	1384.2	10012.6	1385.0	10039.2
GR	1387.6	10097.0								
X1	9.61	8	9954.4	9980.2	460.0	480.0	470.0			
GR	1393.9	9940.4	1393.6	9954.4	1390.7	9964.6	1392.6	9980.2	1391.3	9995.6
GR	1391.5	10000.0	1394.2	10048.1	1396.5	10147.6				

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

*PROF 1

CCHV= .100 CEHV= .300
*SECNO .000
3280 CROSS SECTION .00 EXTENDED 19.50 FEET

.000	20.70	1081.00	.00	1081.00	1081.00	.00	.00	.00	1061.80
7209.0	1979.8	2398.6	2830.7	14032.4	11037.2	19779.3	.0	.0	1061.60
.00	.14	.22	.14	.060	.040	.060	.000	1060.30	8903.60
.000001	0.	0.	0.	0	0	0	.00	2318.60	11222.20

*SECNO .080
3280 CROSS SECTION .08 EXTENDED 10.30 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .63

.080	18.90	1081.00	.00	.00	1081.00	.00	.00	.00	1067.20
7209.0	3514.7	1378.5	2315.8	16954.8	4458.3	11605.6	393.3	21.9	1065.50
.54	.21	.31	.20	.060	.040	.060	.000	1062.10	8904.40
.000002	445.	430.	440.	0	0	0	.00	2018.90	10923.30

*SECNO .190
3280 CROSS SECTION .19 EXTENDED 5.40 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .51

.190	15.90	1081.00	.00	.00	1081.00	.00	.00	.00	1068.80
7209.0	2282.1	1451.6	3475.3	8083.9	2661.6	10584.1	731.8	46.7	1068.70
.96	.28	.55	.33	.060	.040	.060	.000	1065.10	9112.60
.000006	750.	570.	300.	0	0	0	.00	1957.40	11070.00

*SECNO .290
3280 CROSS SECTION .29 EXTENDED 1.10 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .39

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
.290	14.00	1081.00	.00	.00	1081.01	.01	.01	.00	1073.30
7209.0	3039.7	1642.1	2527.3	6091.2	1402.2	4285.3	927.4	70.9	1071.70
1.17	.50	1.17	.59	.060	.040	.060	.000	1067.00	8747.80
.000040	530.	515.	500.	0	0	0	.00	2115.90	10863.70

*SECNO .380

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .41

.380	9.73	1081.03	.00	.00	1081.06	.04	.04	.01	1073.90
7209.0	2732.9	1716.4	2759.7	2713.6	703.7	2200.6	1035.1	92.0	1074.80
1.27	1.01	2.44	1.25	.060	.040	.060	.000	1071.30	9189.35
.000237	560.	510.	520.	1	0	0	.00	1279.12	10468.47

1490 NH CARD USED
*SECNO .480

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .39

.480	8.11	1081.21	.00	.00	1081.34	.13	.24	.03	1077.80
7209.0	1677.7	2632.1	2899.1	1092.2	644.7	1419.0	1085.2	105.3	1078.10
1.32	1.54	4.08	2.04	.083	.045	.064	.000	1073.10	9255.75
.001557	480.	490.	520.	2	0	0	.00	1046.96	10505.05

1490 NH CARD USED
*SECNO .570

.570	8.05	1082.15	.00	.00	1082.45	.30	1.06	.05	1080.30
7209.0	1124.3	4250.9	1833.8	424.5	780.2	1142.0	1116.7	116.6	1079.50
1.36	2.65	5.45	1.61	.077	.045	.083	.000	1074.10	9802.13
.003095	490.	501.	501.	2	0	0	.00	939.66	10741.79

*SECNO .670

3265 DIVIDED FLOW

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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


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

     .670      6.47   1084.27       .00       .00   1084.87       .60      2.33       .09   1081.10
   7209.0    3164.3    3219.7     825.0     797.9     392.8     198.3    1137.8     124.5   1081.50
     1.38      3.97      8.20      4.16      .070      .045      .060      .000   1077.80   9667.56
  .008111      480.      498.      498.         3         0         0       .00    453.21  10123.24


*SECNO  .760
     .760      6.61   1087.41       .00       .00   1087.83       .42      2.94       .02   1085.60
   7209.0    1483.4    4086.6    1639.0     483.8     658.2     430.7    1154.8     130.2   1084.10
     1.41      3.07      6.21      3.81      .060      .045      .060      .000   1080.80   9654.12
  .004430      501.      501.      501.         2         0         0       .00    541.94  10196.06


1490 NH CARD USED
*SECNO  .860
     .860      6.70   1089.80       .00       .00   1090.24       .44      2.41       .00   1086.60
   7209.0    1312.5    4162.4    1734.1     728.3     633.7     525.3    1175.4     137.9   1086.80
     1.44      1.80      6.57      3.30      .102      .045      .060      .000   1083.10   9567.68
  .004868      522.      522.      510.         3         0         0       .00    758.96  10326.64


1490 NH CARD USED
*SECNO  .950
     .950      7.70   1092.30       .00       .00   1092.74       .44      2.50       .00   1089.60
   6256.0     118.9    2432.5    3704.6      41.8     343.1     969.2    1194.6     145.8   1090.00
     1.46      2.85      7.09      3.82      .050      .045      .053      .000   1084.60   9954.85
  .005135      600.      489.      489.         1         0         0       .00    557.94  10512.79


*SECNO 1.040

3265 DIVIDED FLOW

    1.040      6.22   1094.62       .00       .00   1095.06       .44      2.32       .00   1090.40
   6256.0    2780.5    3005.3     470.2     677.6     461.3     271.0    1209.1     151.8   1093.40
     1.49      4.10      6.52      1.74      .060      .045      .060      .000   1088.40   9825.16
  .004892      474.      474.      440.         1         0         0       .00    603.60  10442.45
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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 1.130
     1.130       7.03    1097.03        .00        .00    1097.52        .49       2.45        .02    1093.40
    6256.0     3227.6     2829.7      198.7      835.3      389.1      114.1     1224.5      158.1    1094.20
      1.52       3.86       7.27       1.74       .065       .045       .060       .000    1090.00    9706.08
   .005161       484.       490.       500.          2          0          0        .00     512.18   10218.26


*SECNO 1.230

3265 DIVIDED FLOW

     1.230       5.82    1099.42        .00        .00    1099.79        .36       2.25        .01    1095.10
    6256.0      649.4     2873.3     2733.4      241.8      470.2      781.2     1240.7      163.9    1097.30
      1.55       2.69       6.11       3.50       .060       .045       .060       .000    1093.60    9757.72
   .003974       470.       510.       515.          2          0          0        .00     497.89   10296.13


*SECNO 1.320
     1.320       6.46    1101.76        .00        .00    1102.40        .64       2.53        .08    1100.10
    6256.0       19.6     2967.5     3268.9       10.7      368.3      730.0     1255.1      168.6    1097.20
      1.57       1.84       8.06       4.48       .060       .045       .060       .000    1095.30    9962.75
   .007149       485.       485.       485.          2          0          0        .00     345.72   10308.47


1490 NH CARD USED
*SECNO 1.410
     1.410       6.22    1104.62        .00        .00    1104.97        .35       2.54        .03    1101.00
    6256.0     1714.6     2375.4     2166.0      531.5      363.9      674.0     1268.8      173.3    1100.90
      1.59       3.23       6.53       3.21       .077       .045       .057       .000    1098.40    9795.23
   .004655       445.       445.       445.          2          0          0        .00     576.71   10371.94


*SECNO 1.500
     1.500       6.26    1106.96        .00        .00    1107.39        .44       2.40        .03    1102.90
    6256.0     3460.2     2415.2      380.6      823.7      352.9      207.6     1285.2      179.7    1103.90
      1.62       4.20       6.84       1.83       .060       .045       .060       .000    1100.70    9722.10
   .005342       480.       483.       483.          2          0          0        .00     575.18   10297.28


*SECNO 1.590
     1.590       5.50    1109.20        .00        .00    1109.58        .38       2.18        .01    1107.10
    6256.0     1551.7     4428.6      275.7      636.7      780.0      155.8     1301.9      186.8    1106.60
      1.65       2.44       5.68       1.77       .060       .045       .060       .000    1103.70    9498.34
   .003714       494.       494.       494.          2          0          0        .00     690.21   10188.56
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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 1.680

1.680	5.54	1111.44	.00	.00	1111.93	.49	2.32	.03	1108.30
6256.0	2957.6	2464.5	833.9	734.8	327.9	218.0	1317.8	193.3	1106.80
1.68	4.02	7.52	3.82	.060	.045	.060	.000	1105.90	9686.61
.006430	490.	480.	480.	2	0	0	.00	466.06	10152.66

*SECNO 1.780

1.780	5.98	1114.38	.00	.00	1114.95	.57	3.00	.02	1109.30
6256.0	2012.6	2934.5	1308.9	509.9	379.3	320.4	1332.2	198.2	1110.80
1.70	3.95	7.74	4.08	.060	.045	.060	.000	1108.40	9770.74
.005559	507.	500.	495.	2	0	0	.00	379.70	10150.43

*SECNO 1.870

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

1.870	7.64	1116.44	.00	.00	1116.81	.37	1.84	.02	1110.20
6256.0	3091.8	2817.1	347.1	859.2	455.1	137.5	1347.3	202.3	1110.80
1.73	3.60	6.19	2.52	.060	.045	.060	.000	1108.80	9766.56
.002668	495.	495.	495.	3	0	0	.00	345.79	10112.35

*SECNO 1.970

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

1.970	5.25	1118.35	.00	.00	1118.94	.59	2.06	.07	1113.40
6256.0	939.3	3126.1	2190.6	248.9	420.4	447.6	1363.3	206.5	1113.50
1.75	3.77	7.44	4.89	.060	.045	.060	.000	1113.10	9849.42
.005838	535.	540.	560.	2	0	0	.00	336.33	10185.75

*SECNO 2.070

3265 DIVIDED FLOW

2.070	6.71	1121.11	.00	.00	1121.86	.76	2.87	.05	1116.90
6256.0	706.7	3388.9	2160.4	218.8	391.0	485.7	1375.6	210.4	1116.10
1.77	3.23	8.67	4.45	.060	.045	.060	.000	1114.40	9864.69
.006039	484.	484.	484.	2	0	0	.00	364.07	10262.08

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 2.150

2.150	7.83	1123.73	.00	.00	1124.41	.68	2.54	.01	1120.30
6256.0	123.9	2476.4	3655.6	47.4	289.2	736.4	1386.6	213.6	1119.20
1.79	2.61	8.56	4.96	.060	.045	.060	.000	1115.90	9944.24
.005414	444.	444.	444.	1	0	0	.00	264.69	10208.93

*SECNO 2.240

2.240	8.06	1125.96	.00	.00	1126.45	.49	2.02	.02	1119.30
6256.0	2355.4	3246.8	653.8	708.8	456.7	200.7	1400.3	217.2	1119.70
1.82	3.32	7.11	3.26	.060	.045	.060	.000	1117.90	9717.86
.003257	489.	489.	489.	2	0	0	.00	372.63	10090.49

*SECNO 2.340

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.340	6.12	1127.92	.00	.00	1129.31	1.38	2.59	.27	1124.20
6256.0	943.8	5086.2	226.0	230.9	494.4	54.9	1412.6	220.7	1123.70
1.83	4.09	10.29	4.12	.060	.045	.060	.000	1121.80	9830.46
.009539	495.	500.	508.	2	0	0	.00	229.29	10059.75

*SECNO 2.430

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.76

2.430	8.12	1131.42	.00	.00	1131.77	.35	2.36	.10	1127.00
6256.0	2042.7	2414.7	1798.6	542.1	394.3	499.5	1424.6	223.9	1128.50
1.86	3.77	6.12	3.60	.060	.045	.060	.000	1123.30	9788.98
.003086	471.	471.	471.	2	0	0	.00	369.97	10158.95

*SECNO 2.520

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 = .60

2.520	5.96	1133.56	.00	.00	1134.29	.73	2.40	.11	1130.90
6256.0	1333.4	3019.1	1903.5	263.5	343.8	507.0	1439.1	228.7	1130.80
1.88	5.06	8.78	3.75	.060	.045	.060	.000	1127.60	9886.63
.008691	490.	495.	500.	2	0	0	.00	477.65	10364.28

*SECNO 2.620

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.66

2.620	7.95	1136.65	.00	.00	1136.91	.26	2.58	.05	1132.30
6256.0	3484.5	1835.5	936.0	986.6	333.8	357.0	1455.9	234.9	1134.80
1.92	3.53	5.50	2.62	.060	.045	.060	.000	1128.70	9645.26
.003158	525.	525.	525.	1	0	0	.00	542.46	10187.72

*SECNO 2.720

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.720	5.59	1138.79	.00	.00	1139.64	.85	2.55	.18	1135.20
6256.0	2046.7	3229.3	980.0	442.3	345.3	246.9	1471.7	240.5	1135.10
1.94	4.63	9.35	3.97	.060	.045	.060	.000	1133.20	9742.06
.009280	506.	506.	506.	3	0	0	.00	427.35	10179.35

1490 NH CARD USED
*SECNO 2.820

2.820	8.13	1142.83	.00	.00	1143.49	.65	3.83	.02	1137.50
6256.0	3120.2	2852.6	283.2	769.9	331.5	467.2	1487.4	245.7	1138.10
1.97	4.05	8.61	.61	.065	.045	.600	.000	1134.70	9679.51
.005794	515.	539.	540.	3	0	0	.00	442.24	10121.74

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

1490 NH CARD USED
*SECNO 2.920

2.920	6.59	1145.39	.00	.00	1145.83	.43	2.32	.02	1140.10
6256.0	247.7	4751.9	1256.3	107.1	797.3	774.3	1508.2	251.7	1142.10
2.00	2.31	5.96	1.62	.060	.045	.111	.000	1138.80	9836.91
.003203	510.	560.	585.	3	0	0	.00	495.83	10332.74

1490 NH CARD USED
*SECNO 3.040

3.040	6.56	1147.76	.00	.00	1147.92	.16	2.07	.03	1151.10
6256.0	.0	1167.4	5088.6	.0	250.6	1827.2	1535.1	260.6	1144.80
2.05	.00	4.66	2.78	.000	.045	.071	.000	1141.20	9980.02
.003420	610.	625.	625.	2	0	0	.00	752.88	10732.90

1490 NH CARD USED
*SECNO 3.140

3.140	6.29	1149.19	.00	.00	1149.60	.41	1.61	.08	1145.40
6256.0	1052.7	3245.0	1958.2	550.4	467.4	1081.9	1553.7	268.6	1143.00
2.08	1.91	6.94	1.81	.081	.045	.106	.000	1142.90	9570.41
.004556	510.	495.	340.	2	0	0	.00	1017.63	10588.04

*SECNO 3.230

3.230	5.78	1151.98	.00	.00	1152.50	.52	2.86	.03	1148.10
6256.0	2655.0	1538.8	2062.2	678.9	186.4	373.8	1573.3	277.2	1147.50
2.10	3.91	8.26	5.52	.060	.045	.060	.000	1146.20	9654.33
.007055	511.	511.	511.	2	0	0	.00	449.12	10103.44

*SECNO 3.320

3.320	5.76	1154.76	.00	.00	1155.21	.46	2.71	.01	1152.30
6256.0	193.7	3018.5	3043.7	107.9	427.7	933.0	1587.9	282.7	1149.80
2.13	1.80	7.06	3.26	.060	.045	.060	.000	1149.00	9846.72
.004769	460.	487.	465.	1	0	0	.00	588.61	10435.32

*SECNO 3.420

3.420	6.05	1156.95	.00	.00	1157.20	.25	1.96	.02	1154.00
6256.0	24.8	1806.8	4424.3	12.9	305.5	1515.8	1605.0	289.3	1154.90
2.16	1.92	5.91	2.92	.060	.045	.060	.000	1150.90	9953.19
.003854	488.	488.	440.	2	0	0	.00	691.08	10644.26

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 3.510

3.510	6.07	1158.87	.00	.00	1159.20	.33	1.98	.02	1156.10
6256.0	606.1	2100.7	3549.3	196.2	313.8	1152.0	1624.6	296.9	1153.60
2.19	3.09	6.69	3.08	.060	.045	.060	.000	1152.80	9888.11
.004311	487.	487.	487.	2	0	0	.00	663.41	10551.52

*SECNO 3.590

3265 DIVIDED FLOW

3280 CROSS SECTION 3.59 EXTENDED 1.69 FEET

3301 HV CHANGED MORE THAN HVINS

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

3.590	6.29	1161.19	.00	.00	1162.10	.90	2.72	.17	1158.90
6208.0	2937.6	2880.2	390.3	561.7	294.6	114.1	1637.9	302.0	1157.90
2.21	5.23	9.78	3.42	.060	.045	.060	.000	1154.90	9795.40
.009633	440.	440.	440.	3	0	0	.00	345.52	10141.11

*SECNO 3.700

3280 CROSS SECTION 3.70 EXTENDED .95 FEET

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

3.700	7.85	1165.05	.00	.00	1165.82	.77	3.71	.01	1159.10
6208.0	2521.0	3513.4	173.7	637.9	402.9	47.8	1651.1	306.0	1158.30
2.23	3.95	8.72	3.63	.060	.045	.060	.000	1157.20	9773.70
.004873	558.	558.	558.	1	0	0	.00	279.86	10053.56

*SECNO 3.790

3280 CROSS SECTION 3.79 EXTENDED .13 FEET

3.790	7.73	1167.23	.00	.00	1167.83	.60	1.99	.02	1163.10
6208.0	411.6	3944.1	1852.3	174.1	532.5	565.9	1663.5	309.6	1163.10
2.26	2.36	7.41	3.27	.060	.045	.060	.000	1159.50	9824.80
.003870	460.	460.	460.	2	0	0	.00	406.76	10231.56

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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 3.880
    3.880      7.44   1169.44       .00       .00   1170.20       .76      2.32       .05   1166.20
   6208.0     194.5    3342.5    2671.0      64.3     366.7     855.8    1677.5     315.3   1165.10
     2.28      3.03      9.12      3.12      .060      .045      .064      .000   1162.00   9931.33
  .006347      475.      475.      475.         2         0         0       .00    624.79  10556.12


1490 NH CARD USED
*SECNO 3.960

3265 DIVIDED FLOW

    3.960      7.44   1172.54       .00       .00   1173.41       .87      3.18       .03   1170.10
   6208.0    1407.3    2541.7    2259.0     382.8     254.4     390.8    1689.2     320.4   1168.90
     2.29      3.68      9.99      5.78      .063      .045      .060      .000   1165.10   9702.19
  .008304      440.      440.      440.         2         0         0       .00    387.44  10145.73


1490 NH CARD USED
*SECNO 4.050

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

    4.050      8.39   1175.69       .00       .00   1176.14       .45      2.69       .04   1172.00
   6208.0     336.3    2587.7    3284.0    1070.8     364.1     834.9    1708.6     326.8   1170.40
     2.32       .31      7.11      3.93      .587      .045      .060      .000   1167.30   9537.00
  .003633      520.      509.      509.         2         0         0       .00    699.22  10236.22


*SECNO 4.160
    4.160      7.92   1177.82       .00       .00   1178.44       .62      2.24       .05   1172.20
   6208.0    1766.1    2940.4    1501.5     498.1     354.3     382.9    1729.9     333.3   1173.30
     2.35      3.55      8.30      3.92      .060      .045      .060      .000   1169.90   9784.02
  .004956      520.      530.      540.         3         0         0       .00    372.76  10156.78


*SECNO 4.250
    4.250      8.03   1180.13       .00       .00   1180.61       .48      2.16       .01   1173.70
   6208.0    2190.1    2094.5    1923.4     634.5     265.8     434.7    1744.4     337.6   1174.10
     2.37      3.45      7.88      4.42      .060      .045      .060      .000   1172.10   9724.97
  .003910      485.      495.      500.         2         0         0       .00    397.07  10122.05
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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 4.350

4.350	6.69	1182.39	.00	.00	1182.74	.35	2.11	.01	1178.60
6208.0	133.8	1872.0	4202.2	65.0	269.8	1226.4	1761.9	343.3	1177.60
2.41	2.06	6.94	3.43	.060	.045	.060	.000	1175.70	9919.08
.004114	500.	520.	540.	2	0	0	.00	538.44	10457.52

*SECNO 4.460

4.460	6.36	1185.36	.00	.00	1185.81	.46	3.05	.03	1187.10
6208.0	.0	1675.4	4532.6	.0	205.5	1148.2	1779.7	350.1	1182.60
2.44	.00	8.15	3.95	.000	.045	.060	.000	1179.00	9982.10
.008295	625.	590.	515.	2	0	0	.00	597.95	10580.05

*SECNO 4.550

3265 DIVIDED FLOW

4.550	7.59	1188.59	.00	.00	1189.23	.64	3.36	.06	1184.80
6208.0	44.7	2122.7	4040.6	15.6	230.4	931.2	1792.8	355.3	1182.40
2.46	2.87	9.21	4.34	.060	.045	.060	.000	1181.00	9967.86
.006502	495.	490.	445.	2	0	0	.00	400.71	10419.81

*SECNO 4.650

4.650	7.41	1191.31	.00	.00	1191.71	.40	2.46	.02	1186.30
6208.0	4863.4	1314.8	29.9	1166.5	173.9	12.9	1806.3	359.1	1184.90
2.48	4.17	7.56	2.32	.060	.045	.060	.000	1183.90	9694.67
.004340	460.	495.	455.	3	0	0	.00	322.83	10017.51

1490 NH CARD USED
*SECNO 4.760

3265 DIVIDED FLOW

4.760	6.95	1194.05	.00	.00	1194.37	.33	2.65	.01	1190.50
6208.0	1074.6	1357.1	3776.3	611.8	202.8	902.9	1826.4	364.9	1189.90
2.52	1.76	6.69	4.18	.111	.045	.060	.000	1187.10	9689.63
.004836	520.	605.	655.	2	0	0	.00	575.72	10274.44

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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 4.860
    4.860      6.65    1196.35        .00        .00    1196.66        .31       2.29        .00    1192.90
   6208.0    1416.0     1629.0     3162.9      418.1      240.9      985.8     1846.0      371.6    1190.40
     2.56      3.39       6.76       3.21       .060       .045       .060       .000    1189.70    9832.49
  .004112      475.       520.       525.          1          0          0        .00     573.02   10405.51


*SECNO 4.960
    4.960      6.32    1198.72        .00        .00    1199.29        .57       2.55        .08    1193.40
   6208.0     545.6     2549.8     3112.6      176.4      315.9      734.7     1862.9      377.5    1195.30
     2.58      3.09       8.07       4.24       .060       .045       .060       .000    1192.40    9870.05
  .006141      495.       515.       515.          2          0          0        .00     426.54   10296.59


*SECNO 5.050
    5.050      6.76    1201.76        .00        .00    1202.26        .50       2.97        .01    1196.10
   6208.0     625.5     2516.8     3065.7      144.2      322.1      904.1     1878.3      383.2    1196.70
     2.61      4.34       7.81       3.39       .060       .045       .060       .000    1195.00    9940.94
  .005377      480.       515.       525.          2          0          0        .00     544.98   10485.92


*SECNO 5.160
    5.160      6.77    1204.07        .00        .00    1204.26        .19       1.97        .03    1201.40
   6208.0    4360.2     1356.0      491.8     1320.5      310.6      326.0     1897.3      390.4    1202.50
     2.65      3.30       4.37       1.51       .060       .045       .060       .000    1197.30    9581.03
  .002909      520.       560.       440.          2          0          0        .00     765.71   10346.74


*SECNO 5.230

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

    5.230      5.03    1205.73        .00        .00    1206.30        .57       1.93        .11    1204.00
   6208.0    2717.9     2290.6     1199.5      475.9      314.4      315.2     1910.7      395.5    1203.70
     2.67      5.71       7.29       3.81       .060       .045       .060       .000    1200.70    9795.34
  .010575      395.       390.       335.          2          0          0        .00     434.08   10229.41


1490 NH CARD USED
*SECNO 5.290

3265 DIVIDED FLOW
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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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.09

5.290	5.93	1207.63	.00	.00	1207.76	.12	1.41	.04	1204.70
6208.0	1986.3	1557.0	2664.7	730.6	363.3	1919.9	1925.7	402.4	1204.90
2.70	2.72	4.29	1.39	.060	.045	.083	.000	1201.70	9673.84
.002413	340.	300.	310.	2	0	0	.00	1478.18	11201.97

*SECNO 5.390

5.390	5.70	1208.90	.00	.00	1209.09	.19	1.31	.02	1207.20
6208.0	4037.2	1564.3	606.5	1191.1	372.3	370.6	1949.1	414.1	1208.20
2.74	3.39	4.20	1.64	.060	.045	.060	.000	1203.20	9504.16
.004244	380.	500.	410.	3	0	0	.00	1001.02	10505.18

*SECNO 5.460

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

5.460	5.53	1211.03	.00	.00	1211.36	.33	2.23	.04	1209.50
6208.0	3022.0	1882.7	1303.3	961.0	264.1	526.5	1965.0	424.1	1208.90
2.76	3.14	7.13	2.48	.060	.045	.060	.000	1205.50	9339.63
.008795	345.	420.	420.	3	0	0	.00	1248.22	10587.85

*SECNO 5.550

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

5.550	4.90	1213.80	.00	.00	1213.95	.15	2.57	.02	1211.40
6208.0	2878.1	748.2	2581.7	965.3	158.7	948.9	1985.0	435.4	1212.70
2.80	2.98	4.72	2.72	.060	.045	.060	.000	1208.90	9589.58
.003904	450.	475.	455.	3	0	0	.00	924.33	10513.91

1490 NH CARD USED
*SECNO 5.640

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

5.640	4.73	1216.33	.00	.00	1216.75	.42	2.72	.08	1214.20
6208.0	1819.1	1663.4	2725.5	438.0	217.6	717.5	2002.7	444.2	1213.90
2.83	4.15	7.64	3.80	.060	.045	.072	.000	1211.60	9747.58
.010733	450.	450.	445.	2	0	0	.00	803.44	10551.02

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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 5.730

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.48

    5.730      6.39   1219.69       .00       .00   1220.01       .32      3.25       .01   1216.50
   6208.0    3577.8    1855.2     775.0    1033.5     285.4     271.9    2018.4     451.8   1216.60
     2.86      3.46      6.50      2.85      .060      .045      .060      .000   1213.30   9562.82
  .004919      450.      475.      475.         2         0         0       .00    622.72  10185.54

*SECNO 5.820

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

    5.820      5.06   1222.06       .00       .00   1222.40       .34      2.38       .01   1220.80
   3728.0     924.7    1326.5    1476.8     269.5     202.4     496.0    2031.2     457.3   1219.60
     2.89      3.43      6.55      2.98      .060      .045      .060      .000   1217.00   9842.35
  .006464      410.      460.      460.         3         0         0       .00    477.45  10319.80

*SECNO 5.910
    5.910      5.71   1224.81       .00       .00   1225.10       .28      2.69       .01   1222.20
   3728.0     981.0    1364.7    1382.3     353.2     228.7     469.7    2042.3     462.7   1222.90
     2.92      2.78      5.97      2.94      .060      .045      .060      .000   1219.10   9778.59
  .004865      485.      500.      465.         0         0         0       .00    510.91  10289.50

1490 NH CARD USED
*SECNO 5.990
    5.990      5.61   1227.51       .00       .00   1227.99       .49      2.84       .06   1225.60
   3728.0    1200.0    1585.3     942.6     345.7     201.2     448.5    2052.3     468.4   1225.70
     2.94      3.47      7.88      2.10      .060      .045      .096      .000   1221.90   9762.61
  .009709      425.      425.      425.         2         0         0       .00    658.03  10420.64

1490 NH CARD USED
*SECNO 6.080

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

    6.080      7.02   1230.52       .00       .00   1230.94       .42      2.94       .01   1227.40
   3728.0     715.8    1835.8    1176.4     325.6     261.6     493.0    2063.0     475.9   1227.60
     2.97      2.20      7.02      2.39      .060      .045      .068      .000   1223.50   9726.34
  .004704      450.      450.      450.         2         0         0       .00    786.54  10512.88
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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 6.170
    6.170      6.71    1232.51        .00        .00    1232.91        .40       1.96        .00    1227.70
   3728.0     405.9     1988.1     1334.1      115.1      311.8      484.9     2073.4      481.8    1229.40
     3.00      3.53       6.38       2.75       .060       .045       .060       .000    1225.80    9912.17
  .003901      460.       465.       450.          3          0          0        .00     340.70   10252.87


*SECNO 6.260
    6.260      5.05    1234.75        .00        .00    1234.95        .20       2.02        .02    1231.60
   3442.0    2114.2      851.4      476.4      697.1      165.4      237.0     2084.8      487.1    1233.40
     3.04      3.03       5.15       2.01       .060       .045       .060       .000    1229.70    9674.72
  .004291      490.       505.       490.          2          0          0        .00     596.29   10271.01


1490 NH CARD USED
*SECNO 6.360

3265 DIVIDED FLOW


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

    6.360      6.57    1237.67        .00        .00    1238.19        .53       3.14        .10    1238.20
   3442.0     929.5     1697.6      814.9      266.3      218.7      379.4     2096.5      494.4    1236.20
     3.06      3.49       7.76       2.15       .060       .045       .087       .000    1231.10    9704.47
  .009215      510.       525.       525.          2          0          0        .00     643.63   10362.28


*SECNO 6.450

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.54

    6.450      6.43    1240.73        .00        .00    1240.92        .20       2.69        .03    1239.20
   3442.0    1323.3      930.9     1187.8      612.2      172.4      405.9     2107.5      501.1    1237.90
     3.10      2.16       5.40       2.93       .060       .045       .060       .000    1234.30    9601.16
  .003906      445.       480.       485.          2          0          0        .00     609.88   10211.05


1490 NH CARD USED
*SECNO 6.560

3265 DIVIDED FLOW
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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


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

    6.560      5.25    1243.25       .00        .00    1243.58       .33       2.62        .04    1240.60
   3140.0     1417.7    1111.9     610.3      426.2      165.5     630.2     2121.5      508.7    1241.10
     3.14      3.33       6.72       .97       .060       .045      .190       .000    1238.00    9731.22
  .007469      435.      550.      560.          2          0         0        .00     711.72   10463.69


1490 NH CARD USED
*SECNO 6.660
    6.660      6.05    1247.05       .00        .00    1247.25       .20       3.66        .01    1244.60
   3140.0     607.1     880.6    1652.3      242.8      141.8    1272.5     2139.2      519.7    1245.30
     3.19      2.50       6.21      1.30       .060       .045      .121       .000    1241.00    9770.62
  .006132      560.      545.      525.          5          0         0        .00    1075.83   10846.45


1490 NH CARD USED
*SECNO 6.750

3265 DIVIDED FLOW


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

    6.750      5.73    1250.93       .00        .00    1251.53       .60       4.16        .12    1248.20
   3140.0     762.1    1613.8     764.1      809.1      187.4     851.1     2159.0      533.5    1249.90
     3.22       .94       8.61       .90       .251       .045      .219       .000    1245.20    9386.63
  .012532      470.      485.      505.          3          0         0        .00    1375.61   10785.62


1490 NH CARD USED
*SECNO 6.840

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

    6.840      7.11    1254.61       .00        .00    1255.05       .44       3.50        .02    1252.30
   3140.0     775.5    2011.9     352.5      920.3      304.7     509.6     2178.7      550.8    1252.30
     3.25       .84       6.60       .69       .138       .045      .122       .000    1247.50    9127.68
  .004684      470.      490.      490.          4          0         0        .00    1749.16   10876.84
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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 6.940

3265 DIVIDED FLOW

6.940	4.33	1257.43	.00	.00	1257.61	.18	2.54	.03	1256.20
2751.0	145.5	669.7	1935.8	308.0	124.6	748.9	2194.1	564.1	1255.30
3.29	.47	5.38	2.58	.314	.045	.060	.000	1253.10	9579.95
.006063	435.	520.	460.	3	0	0	.00	827.38	10531.18

1490 NH CARD USED
*SECNO 7.020

3265 DIVIDED FLOW

7.020	5.15	1260.45	.00	.00	1260.90	.46	3.21	.08	1257.90
2751.0	267.1	932.4	1551.6	485.2	120.3	388.1	2204.3	572.0	1259.10
3.31	.55	7.75	4.00	.302	.045	.060	.000	1255.30	9254.69
.010342	400.	410.	415.	3	0	0	.00	855.48	10259.71

*SECNO 7.110

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

7.110	5.12	1264.12	.00	.00	1264.28	.16	3.34	.03	1262.50
2751.0	1130.7	466.4	1153.9	520.2	84.5	435.2	2215.6	580.4	1261.50
3.36	2.17	5.52	2.65	.060	.045	.060	.000	1259.00	9611.98
.004856	475.	500.	490.	4	0	0	.00	673.46	10285.45

*SECNO 7.200

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

7.200	3.82	1267.52	.00	.00	1267.86	.34	3.53	.05	1266.60
2751.0	1413.4	749.3	588.4	416.7	119.8	121.3	2224.5	586.5	1266.90
3.39	3.39	6.26	4.85	.060	.045	.060	.000	1263.70	9618.33
.014226	450.	455.	465.	2	0	0	.00	486.02	10104.35

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

*SECNO 7.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.43

7.300	4.35	1272.25	.00	.00	1272.59	.34	4.73	.00	1270.00
2751.0	636.7	1279.6	834.7	186.3	216.7	263.4	2231.9	591.1	1270.50
3.42	3.42	5.91	3.17	.060	.045	.060	.000	1267.90	9873.06
.007003	480.	500.	485.	3	0	0	.00	346.79	10219.86

*SECNO 7.400

3265 DIVIDED FLOW

7.400	4.67	1275.67	.00	.00	1275.85	.17	3.24	.02	1275.50
2751.0	828.2	681.1	1241.7	282.1	152.0	451.6	2240.7	596.3	1275.80
3.46	2.94	4.48	2.75	.060	.045	.060	.000	1271.00	9768.37
.005881	505.	540.	475.	4	0	0	.00	562.84	10336.55

*SECNO 7.490

3265 DIVIDED FLOW

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

7.490	4.98	1279.38	.00	.00	1279.77	.38	3.86	.06	1277.90
2751.0	2135.4	615.6	.0	490.7	92.1	.0	2248.6	601.6	1280.50
3.49	4.35	6.69	.00	.060	.045	.000	.000	1274.40	9518.79
.012663	460.	470.	465.	3	0	0	.00	447.62	10023.53

*SECNO 7.570

7.570	5.10	1283.00	.00	.00	1283.31	.31	3.54	.01	1280.90
2751.0	1233.8	1294.4	222.7	526.8	214.5	118.5	2255.1	607.1	1280.70
3.51	2.34	6.03	1.88	.060	.045	.060	.000	1277.90	9508.11
.006470	380.	435.	445.	4	0	0	.00	742.96	10251.08

*SECNO 7.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

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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

    7.680      5.20    1287.60    1287.60        .00    1288.12        .52       4.28        .06    1286.40
   2125.0     944.5     1165.4       15.1      359.0      155.8       10.4     2263.9      614.7    1286.70
     3.54      2.63       7.48       1.44       .060       .045       .060       .000    1282.40    9587.69
  .009873      550.       560.       570.          4          5          0        .00     459.24   10046.93

*SECNO 7.790
    7.790      3.90    1292.80        .00        .00    1292.93        .13       4.77        .04    1291.70
   2125.0     168.2       269.1     1687.8       97.5       61.1      634.4     2273.3      622.5    1291.70
     3.61      1.72       4.40       2.66       .060       .045       .060       .000    1288.90    9856.46
  .006172      610.       620.       625.          5          0          0        .00     635.68   10492.14

*SECNO 7.900

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

    7.900      3.32    1297.62        .00        .00    1297.87        .25       4.90        .04    1297.00
   2125.0     306.7       522.8     1295.5      116.3       92.6      379.1     2282.1      631.2    1296.40
     3.65      2.64       5.64       3.42       .060       .045       .060       .000    1294.30    9665.94
  .013810      565.       575.       545.          4          0          0        .00     733.19   10399.13

*SECNO 8.000

3265 DIVIDED FLOW

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

    8.000      4.36    1302.46        .00        .00    1302.62        .16       4.74        .01    1300.90
   2125.0     290.4       373.7     1460.8      173.9       83.2      485.9     2290.3      640.2    1301.50
     3.69      1.67       4.49       3.01       .060       .045       .060       .000    1298.10    9694.74
  .006085      535.       540.       540.          4          0          0        .00     734.27   10472.23

*SECNO 8.130

3265 DIVIDED FLOW

    8.130      3.80    1307.00        .00        .00    1307.23        .23       4.59        .02    1307.30
   2125.0      89.0       192.4     1843.6       39.2       51.8      468.4     2298.8      647.8    1307.10
     3.73      2.27       3.71       3.94       .060       .045       .060       .000    1303.20    9914.44
  .011409      620.       670.       540.          4          0          0        .00     417.88   10349.17
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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 8.220

3265 DIVIDED FLOW

8.220	3.90	1311.30	.00	.00	1311.60	.30	4.35	.02	1309.80
2125.0	117.5	1133.2	874.3	52.0	200.6	408.0	2305.2	653.4	1309.00
3.77	2.26	5.65	2.14	.060	.045	.060	.000	1307.40	9867.42
.007976	450.	460.	460.	4	0	0	.00	646.06	10604.17

*SECNO 8.310

8.310	2.87	1315.37	.00	.00	1315.52	.15	3.90	.02	1314.20
2125.0	1686.3	326.4	112.4	601.4	72.4	93.8	2313.0	661.2	1314.60
3.81	2.80	4.51	1.20	.060	.045	.060	.000	1312.50	9492.79
.008266	470.	490.	485.	5	0	0	.00	776.54	10269.33

*SECNO 8.410

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

8.410	4.42	1319.32	.00	.00	1319.77	.45	4.16	.09	1317.60
1246.0	29.0	907.1	309.9	15.2	147.0	136.8	2319.5	667.3	1317.20
3.84	1.91	6.17	2.26	.060	.045	.060	.000	1314.90	9955.27
.007301	550.	520.	490.	2	0	0	.00	228.08	10183.35

1490 NH CARD USED
*SECNO 8.500

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .48

8.500	4.10	1324.20	.00	.00	1324.65	.45	4.88	.00	1324.20
894.0	55.2	838.8	.0	221.0	151.6	.0	2323.4	670.0	1324.20
3.87	.25	5.53	.00	1.000	.045	.000	.000	1320.10	9679.24
.016054	500.	500.	490.	4	0	0	.00	253.60	10022.20

*SECNO 8.590

8.590	4.02	1329.92	.00	.00	1330.30	.38	5.64	.01	1328.80
894.0	188.7	511.0	194.2	85.4	83.1	67.0	2326.6	672.4	1328.40
3.89	2.21	6.15	2.90	.060	.045	.060	.000	1325.90	9883.44
.009496	465.	465.	465.	5	0	0	.00	189.04	10072.48

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 8.690									
8.690	4.22	1334.62	.00	.00	1335.19	.57	4.84	.06	1332.20
894.0	191.1	684.2	18.8	62.9	101.3	9.2	2329.0	674.0	1333.10
3.92	3.04	6.76	2.04	.060	.045	.060	.000	1330.40	9929.54
.009882	500.	500.	495.	4	0	0	.00	101.93	10031.47
*SECNO 8.780									
8.780	3.25	1339.55	.00	.00	1339.89	.34	4.67	.02	1338.40
894.0	293.7	580.3	20.0	136.9	104.1	12.4	2331.4	676.0	1338.40
3.95	2.15	5.57	1.62	.060	.045	.060	.000	1336.30	9809.12
.009024	495.	495.	490.	3	0	0	.00	244.22	10053.33
*SECNO 8.890									
8.890	4.73	1344.73	.00	.00	1345.49	.76	5.47	.13	1342.60
894.0	29.2	683.9	180.9	11.6	87.7	53.8	2334.1	678.1	1341.90
3.97	2.52	7.80	3.36	.060	.045	.060	.000	1340.00	9975.29
.009743	555.	590.	590.	3	0	0	.00	75.18	10050.47
*SECNO 8.990									
8.990	4.11	1350.01	.00	.00	1350.77	.76	5.28	.00	1348.30
894.0	18.4	737.5	138.0	7.6	97.5	42.7	2335.8	678.9	1348.30
3.99	2.41	7.57	3.23	.060	.045	.060	.000	1345.90	9983.99
.011949	491.	491.	491.	4	0	0	.00	76.69	10060.67
*SECNO 9.090									
9.090	3.92	1356.72	.00	.00	1357.49	.77	6.72	.00	1354.60
894.0	125.8	707.7	60.5	41.6	91.1	20.1	2337.8	680.0	1354.30
4.02	3.02	7.77	3.01	.060	.045	.060	.000	1352.80	9944.02
.011602	575.	570.	570.	4	0	0	.00	81.43	10025.45
*SECNO 9.190									
9.190	3.90	1363.10	1362.90	.00	1363.87	.76	6.38	.00	1360.90
894.0	116.1	777.9	.0	38.0	104.8	.0	2339.5	681.0	1364.30
4.04	3.05	7.42	.00	.060	.045	.000	.000	1359.20	9920.70
.013283	510.	515.	510.	6	11	0	.00	90.93	10011.63

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 9.290

3265 DIVIDED FLOW

9.290	4.08	1368.98	.00	.00	1369.55	.56	5.66	.02	1366.10
871.0	127.2	679.3	64.5	40.8	101.8	35.1	2341.3	682.2	1369.30
4.06	3.12	6.67	1.84	.060	.045	.060	.000	1364.90	9966.42
.009774	490.	500.	505.	3	0	0	.00	125.61	10098.44

*SECNO 9.390

3265 DIVIDED FLOW

9.390	3.32	1375.42	.00	.00	1375.75	.32	6.18	.02	1375.10
871.0	226.6	458.0	186.4	65.8	82.0	72.2	2343.8	684.2	1374.20
4.10	3.44	5.58	2.58	.060	.045	.060	.000	1372.10	9920.69
.013066	550.	555.	523.	4	0	0	.00	185.28	10149.44

*SECNO 9.480

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.480	3.63	1382.13	1382.13	.00	1383.04	.90	7.01	.17	1380.70
871.0	90.8	780.2	.0	31.9	97.5	.0	2345.8	685.6	1382.70
4.11	2.84	8.00	.00	.060	.045	.000	.000	1378.50	9938.90
.016052	485.	485.	485.	3	8	0	.00	81.34	10020.24

*SECNO 9.520

3265 DIVIDED FLOW

9.520	3.75	1385.15	1385.12	.00	1385.72	.57	2.66	.03	1383.90
871.0	94.9	747.1	29.0	45.5	115.0	15.0	2346.4	686.1	1384.20
4.12	2.08	6.50	1.94	.060	.045	.060	.000	1381.40	9855.03
.013857	160.	180.	205.	4	5	0	.00	161.40	10042.59

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

*SECNO 9.610

9.610	3.10	1393.80	1393.74	.00	1394.53	.73	8.76	.05	1393.60
871.0	.8	415.2	455.0	1.0	50.4	86.3	2348.1	687.5	1392.60
4.14	.87	8.23	5.27	.060	.045	.060	.000	1390.70	9944.95
.026101	460.	470.	480.	6	16	0	.00	96.08	10041.02

THIS RUN EXECUTED 29JAN96 17:38:17

****
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

White Tanks Wash Main Ch

SUMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL
	.000	7209.00	8903.60	11222.20	1081.00
*	.080	7209.00	8904.40	10923.30	1081.00
*	.190	7209.00	9112.60	11070.00	1081.00
*	.290	7209.00	8747.80	10863.70	1081.00
*	.380	7209.00	9189.35	10468.47	1081.03
*	.480	7209.00	9255.75	10505.05	1081.21
	.570	7209.00	9802.13	10741.79	1082.15
*	.670	7209.00	9667.56	10123.24	1084.27
	.760	7209.00	9654.12	10196.06	1087.41
	.860	7209.00	9567.68	10326.64	1089.80
	.950	6256.00	9954.85	10512.79	1092.30
	1.040	6256.00	9825.16	10442.45	1094.62
	1.130	6256.00	9706.08	10218.26	1097.03
	1.230	6256.00	9757.72	10296.13	1099.42
	1.320	6256.00	9962.75	10308.47	1101.76
	1.410	6256.00	9795.23	10371.94	1104.62
	1.500	6256.00	9722.10	10297.28	1106.96

	SECNO	Q	SSTA	ENDST	CWSEL
	1.590	6256.00	9498.34	10188.56	1109.20
	1.680	6256.00	9686.61	10152.66	1111.44
	1.780	6256.00	9770.74	10150.43	1114.38
*	1.870	6256.00	9766.56	10112.35	1116.44
*	1.970	6256.00	9849.42	10185.75	1118.35
	2.070	6256.00	9864.69	10262.08	1121.11
	2.150	6256.00	9944.24	10208.93	1123.73
	2.240	6256.00	9717.86	10090.49	1125.96
*	2.340	6256.00	9830.46	10059.75	1127.92
*	2.430	6256.00	9788.98	10158.95	1131.42
*	2.520	6256.00	9886.63	10364.28	1133.56
*	2.620	6256.00	9645.26	10187.72	1136.65
*	2.720	6256.00	9742.06	10179.35	1138.79
	2.820	6256.00	9679.51	10121.74	1142.83
	2.920	6256.00	9836.91	10332.74	1145.39
	3.040	6256.00	9980.02	10732.90	1147.76
	3.140	6256.00	9570.41	10588.04	1149.19
	3.230	6256.00	9654.33	10103.44	1151.98
	3.320	6256.00	9846.72	10435.32	1154.76
	3.420	6256.00	9953.19	10644.26	1156.95
	3.510	6256.00	9888.11	10551.52	1158.87
*	3.590	6208.00	9795.40	10141.11	1161.19
*	3.700	6208.00	9773.70	10053.56	1165.05
	3.790	6208.00	9824.80	10231.56	1167.23
	3.880	6208.00	9931.33	10556.12	1169.44
	3.960	6208.00	9702.19	10145.73	1172.54

	SECNO	Q	SSTA	ENDST	CWSEL
*	4.050	6208.00	9537.00	10236.22	1175.69
	4.160	6208.00	9784.02	10156.78	1177.82
	4.250	6208.00	9724.97	10122.05	1180.13
	4.350	6208.00	9919.08	10457.52	1182.39
	4.460	6208.00	9982.10	10580.05	1185.36
	4.550	6208.00	9967.86	10419.81	1188.59
	4.650	6208.00	9694.67	10017.51	1191.31
	4.760	6208.00	9689.63	10274.44	1194.05
	4.860	6208.00	9832.49	10405.51	1196.35
	4.960	6208.00	9870.05	10296.59	1198.72
	5.050	6208.00	9940.94	10485.92	1201.76
	5.160	6208.00	9581.03	10346.74	1204.07
*	5.230	6208.00	9795.34	10229.41	1205.73
*	5.290	6208.00	9673.84	11201.97	1207.63
	5.390	6208.00	9504.16	10505.18	1208.90
*	5.460	6208.00	9339.63	10587.85	1211.03
*	5.550	6208.00	9589.58	10513.91	1213.80
*	5.640	6208.00	9747.58	10551.02	1216.33
*	5.730	6208.00	9562.82	10185.54	1219.69
*	5.820	3728.00	9842.35	10319.80	1222.06
	5.910	3728.00	9778.59	10289.50	1224.81
	5.990	3728.00	9762.61	10420.64	1227.51
*	6.080	3728.00	9726.34	10512.88	1230.52
	6.170	3728.00	9912.17	10252.87	1232.51
	6.260	3442.00	9674.72	10271.01	1234.75
*	6.360	3442.00	9704.47	10362.28	1237.67

	SECNO	Q	SSTA	ENDST	CWSEL
*	6.450	3442.00	9601.16	10211.05	1240.73
*	6.560	3140.00	9731.22	10463.69	1243.25
	6.660	3140.00	9770.62	10846.45	1247.05
*	6.750	3140.00	9386.63	10785.62	1250.93
*	6.840	3140.00	9127.68	10876.84	1254.61
	6.940	2751.00	9579.95	10531.18	1257.43
	7.020	2751.00	9254.69	10259.71	1260.45
*	7.110	2751.00	9611.98	10285.45	1264.12
*	7.200	2751.00	9618.33	10104.35	1267.52
*	7.300	2751.00	9873.06	10219.86	1272.25
	7.400	2751.00	9768.37	10336.55	1275.67
*	7.490	2751.00	9518.79	10023.53	1279.38
	7.570	2751.00	9508.11	10251.08	1283.00
*	7.680	2125.00	9587.69	10046.93	1287.60
	7.790	2125.00	9856.46	10492.14	1292.80
*	7.900	2125.00	9665.94	10399.13	1297.62
*	8.000	2125.00	9694.74	10472.23	1302.46
	8.130	2125.00	9914.44	10349.17	1307.00
	8.220	2125.00	9867.42	10604.17	1311.30
	8.310	2125.00	9492.79	10269.33	1315.37
*	8.410	1246.00	9955.27	10183.35	1319.32
*	8.500	894.00	9679.24	10022.20	1324.20
	8.590	894.00	9883.44	10072.48	1329.92
	8.690	894.00	9929.54	10031.47	1334.62
	8.780	894.00	9809.12	10053.33	1339.55
	8.890	894.00	9975.29	10050.47	1344.73

	SECNO	Q	SSTA	ENDST	CWSEL
	8.990	894.00	9983.99	10060.67	1350.01
	9.090	894.00	9944.02	10025.45	1356.72
	9.190	894.00	9920.70	10011.63	1363.10
	9.290	871.00	9966.42	10098.44	1368.98
	9.390	871.00	9920.69	10149.44	1375.42
*	9.480	871.00	9938.90	10020.24	1382.13
	9.520	871.00	9855.03	10042.59	1385.15
	9.610	871.00	9944.95	10041.02	1393.80

White Tanks Wash Main Ch

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1081.00	.00	1081.00	2318.60	1979.75	2398.58	2830.67	.00	.00	9632.50	10196.80	.00
*	.080	1081.00	.00	1081.00	2018.90	3514.72	1378.46	2315.82	.00	.00	9917.60	10185.30	.00
*	.190	1081.00	.00	1081.00	1957.40	2282.12	1451.63	3475.26	.00	.00	9976.20	10163.00	.00
*	.290	1081.00	.00	1081.01	2115.90	3039.67	1642.06	2527.27	.00	.00	9972.10	10097.70	.00
*	.380	1081.03	.00	1081.06	1279.12	2732.93	1716.39	2759.68	.00	.00	9957.40	10036.80	.00
*	.480	1081.21	.00	1081.34	1046.96	1677.75	2632.14	2899.12	.00	.00	9945.10	10060.60	.00
	.570	1082.15	.00	1082.45	939.66	1124.28	4250.94	1833.78	.00	.00	9932.50	10084.30	.00
*	.670	1084.27	.00	1084.87	453.21	3164.31	3219.74	824.95	.00	.00	9956.60	10041.60	.00
	.760	1087.41	.00	1087.83	541.94	1483.41	4086.57	1639.02	.00	.00	9917.80	10055.00	.00
	.860	1089.80	.00	1090.24	758.96	1312.51	4162.43	1734.06	.00	.00	9925.10	10055.90	.00
	.950	1092.30	.00	1092.74	557.94	118.93	2432.46	3704.61	.00	.00	9984.60	10048.50	.00
	1.040	1094.62	.00	1095.06	603.60	2780.46	3005.33	470.21	.00	.00	10020.20	10116.90	.00
	1.130	1097.03	.00	1097.52	512.18	3227.62	2829.69	198.68	.00	.00	9972.70	10044.40	.00
	1.230	1099.42	.00	1099.79	497.89	649.36	2873.26	2733.38	.00	.00	9946.30	10039.50	.00
	1.320	1101.76	.00	1102.40	345.72	19.59	2967.55	3268.86	.00	.00	9975.60	10049.40	.00
	1.410	1104.62	.00	1104.97	576.71	1714.59	2375.42	2165.99	.00	.00	9955.80	10029.30	.00
	1.500	1106.96	.00	1107.39	575.18	3460.19	2415.21	380.60	.00	.00	9962.20	10035.70	.00
	1.590	1109.20	.00	1109.58	690.21	1551.73	4428.59	275.68	.00	.00	9873.20	10037.20	.00
	1.680	1111.44	.00	1111.93	466.06	2957.64	2464.49	833.86	.00	.00	9977.80	10046.10	.00
	1.780	1114.38	.00	1114.95	379.70	2012.61	2934.53	1308.86	.00	.00	9971.20	10039.10	.00
*	1.870	1116.44	.00	1116.81	345.79	3091.84	2817.10	347.06	.00	.00	9975.20	10040.50	.00
*	1.970	1118.35	.00	1118.94	336.33	939.32	3126.09	2190.58	.00	.00	9967.40	10050.50	.00
	2.070	1121.11	.00	1121.86	364.07	706.67	3388.94	2160.38	.00	.00	9976.70	10039.30	.00
	2.150	1123.73	.00	1124.41	264.69	123.93	2476.44	3655.62	.00	.00	9982.10	10023.30	.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	2.240	1125.96	.00	1126.45	372.63	2355.40	3246.75	653.84	.00	.00	9953.20	10015.40	.00
*	2.340	1127.92	.00	1129.31	229.29	943.81	5086.23	225.96	.00	.00	9946.20	10032.70	.00
*	2.430	1131.42	.00	1131.77	369.97	2042.74	2414.71	1798.56	.00	.00	9960.90	10024.90	.00
*	2.520	1133.56	.00	1134.29	477.65	1333.41	3019.06	1903.53	.00	.00	9975.00	10045.30	.00
*	2.620	1136.65	.00	1136.91	542.46	3484.55	1835.49	935.96	.00	.00	9960.40	10024.20	.00
*	2.720	1138.79	.00	1139.64	427.35	2046.67	3229.30	980.03	.00	.00	9975.40	10043.60	.00
	2.820	1142.83	.00	1143.49	442.24	3120.15	2852.61	283.24	.00	.00	9978.10	10030.20	.00
	2.920	1145.39	.00	1145.83	495.83	247.73	4751.94	1256.33	.00	.00	9922.60	10062.50	.00
	3.040	1147.76	.00	1147.92	752.88	.00	1167.38	5088.62	.00	.00	9972.60	10045.60	.00
	3.140	1149.19	.00	1149.60	1017.63	1052.74	3245.04	1958.22	.00	.00	9981.20	10065.80	.00
	3.230	1151.98	.00	1152.50	449.12	2655.00	1538.82	2062.18	.00	.00	9974.10	10010.20	.00
	3.320	1154.76	.00	1155.21	588.61	193.75	3018.53	3043.72	.00	.00	9975.10	10053.00	.00
	3.420	1156.95	.00	1157.20	691.08	24.83	1806.85	4424.32	.00	.00	9962.00	10023.50	.00
	3.510	1158.87	.00	1159.20	663.41	606.07	2100.67	3549.27	.00	.00	9971.60	10029.00	.00
*	3.590	1161.19	.00	1162.10	345.52	2937.56	2880.19	390.25	.00	.00	9983.30	10038.70	.00
*	3.700	1165.05	.00	1165.82	279.86	2520.96	3513.35	173.68	.00	.00	9984.80	10039.40	.00
	3.790	1167.23	.00	1167.83	406.76	411.61	3944.13	1852.26	.00	.00	9957.20	10034.20	.00
	3.880	1169.44	.00	1170.20	624.79	194.49	3342.53	2670.97	.00	.00	9973.30	10029.10	.00
	3.960	1172.54	.00	1173.41	387.44	1407.29	2541.67	2259.04	.00	.00	9982.60	10022.70	.00
*	4.050	1175.69	.00	1176.14	699.22	336.29	2587.74	3283.97	.00	.00	9970.70	10023.60	.00
	4.160	1177.82	.00	1178.44	372.76	1766.12	2940.41	1501.47	.00	.00	9978.20	10030.30	.00
	4.250	1180.13	.00	1180.61	397.07	2190.07	2094.52	1923.41	.00	.00	9988.40	10023.70	.00
	4.350	1182.39	.00	1182.74	538.44	133.76	1872.04	4202.19	.00	.00	9976.40	10021.40	.00
	4.460	1185.36	.00	1185.81	597.95	.00	1675.43	4532.57	.00	.00	9979.20	10026.30	.00
	4.550	1188.59	.00	1189.23	400.71	44.74	2122.67	4040.59	.00	.00	9976.10	10011.40	.00
	4.650	1191.31	.00	1191.71	322.83	4863.38	1314.75	29.86	.00	.00	9986.90	10013.50	.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.760	1194.05	.00	1194.37	575.72	1074.64	1357.10	3776.25	.00	.00	9980.10	10020.40	.00
	4.860	1196.35	.00	1196.66	573.02	1416.01	1629.04	3162.95	.00	.00	9979.70	10021.50	.00
	4.960	1198.72	.00	1199.29	426.54	545.57	2549.81	3112.61	.00	.00	9969.60	10026.70	.00
	5.050	1201.76	.00	1202.26	544.98	625.50	2516.79	3065.71	.00	.00	9986.00	10041.50	.00
	5.160	1204.07	.00	1204.26	765.71	4360.16	1356.00	491.84	.00	.00	9956.50	10037.10	.00
*	5.230	1205.73	.00	1206.30	434.08	2717.87	2290.61	1199.51	.00	.00	9949.70	10049.40	.00
*	5.290	1207.63	.00	1207.76	1478.18	1986.26	1557.02	2664.72	.00	.00	9961.70	10045.90	.00
	5.390	1208.90	.00	1209.09	1001.02	4037.19	1564.33	606.48	.00	.00	9912.10	10048.30	.00
*	5.460	1211.03	.00	1211.36	1248.22	3021.98	1882.71	1303.32	.00	.00	9955.60	10030.70	.00
*	5.550	1213.80	.00	1213.95	924.33	2878.07	748.20	2581.72	.00	.00	9986.80	10032.20	.00
*	5.640	1216.33	.00	1216.75	803.44	1819.14	1663.40	2725.45	.00	.00	9981.20	10045.90	.00
*	5.730	1219.69	.00	1220.01	622.72	3577.76	1855.19	775.05	.00	.00	9973.70	10033.50	.00
*	5.820	1222.06	.00	1222.40	477.45	924.69	1326.49	1476.82	.00	.00	9981.90	10033.50	.00
	5.910	1224.81	.00	1225.10	510.91	980.96	1364.74	1382.30	.00	.00	9977.00	10031.30	.00
	5.990	1227.51	.00	1227.99	658.03	1200.05	1585.31	942.64	.00	.00	9982.80	10035.20	.00
*	6.080	1230.52	.00	1230.94	786.54	715.80	1835.85	1176.36	.00	.00	9980.40	10027.50	.00
	6.170	1232.51	.00	1232.91	340.70	405.86	1988.08	1334.06	.00	.00	9983.50	10040.50	.00
	6.260	1234.75	.00	1234.95	596.29	2114.17	851.43	476.41	.00	.00	9991.50	10036.10	.00
*	6.360	1237.67	.00	1238.19	643.63	929.53	1697.58	814.89	.00	.00	9976.90	10034.00	.00
*	6.450	1240.73	.00	1240.92	609.88	1323.34	930.89	1187.77	.00	.00	9982.00	10021.60	.00
*	6.560	1243.25	.00	1243.58	711.72	1417.73	1111.94	610.32	.00	.00	9985.50	10030.90	.00
	6.660	1247.05	.00	1247.25	1075.83	607.13	880.58	1652.29	.00	.00	9984.90	10021.90	.00
*	6.750	1250.93	.00	1251.53	1375.61	762.06	1613.83	764.11	.00	.00	9987.90	10039.90	.00
*	6.840	1254.61	.00	1255.05	1749.16	775.55	2011.93	352.52	.00	.00	9969.00	10029.20	.00
	6.940	1257.43	.00	1257.61	827.38	145.46	669.70	1935.84	.00	.00	9988.30	10029.00	.00
	7.020	1260.45	.00	1260.90	855.48	267.08	932.36	1551.55	.00	.00	9979.60	10013.30	.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	7.110	1264.12	.00	1264.28	673.46	1130.67	466.40	1153.93	.00	.00	9995.10	10016.80	.00
*	7.200	1267.52	.00	1267.86	486.02	1413.36	749.25	588.38	.00	.00	9974.00	10033.60	.00
*	7.300	1272.25	.00	1272.59	346.79	636.72	1279.55	834.73	.00	.00	9976.40	10045.60	.00
	7.400	1275.67	.00	1275.85	562.84	828.15	681.12	1241.73	.00	.00	9966.50	10030.90	.00
*	7.490	1279.38	.00	1279.77	447.62	2135.36	615.64	.00	.00	.00	9986.90	10028.20	.00
	7.570	1283.00	.00	1283.31	742.96	1233.82	1294.44	222.74	.00	.00	9988.10	10049.50	.00
*	7.680	1287.60	.00	1288.12	459.24	944.53	1165.41	15.06	.00	.00	9979.60	10023.70	.00
	7.790	1292.80	.00	1292.93	635.68	168.15	269.06	1687.79	.00	.00	9987.50	10014.80	.00
*	7.900	1297.62	.00	1297.87	733.19	306.68	522.85	1295.47	.00	.00	9965.50	10018.00	.00
*	8.000	1302.46	.00	1302.62	734.27	290.42	373.73	1460.84	.00	.00	9989.30	10025.10	.00
	8.130	1307.00	.00	1307.23	417.88	88.97	192.43	1843.61	.00	.00	9970.60	10023.40	.00
	8.220	1311.30	.00	1311.60	646.06	117.52	1133.18	874.31	.00	.00	9924.80	10000.00	.00
	8.310	1315.37	.00	1315.52	776.54	1686.26	326.38	112.35	.00	.00	9981.50	10020.70	.00
*	8.410	1319.32	.00	1319.77	228.08	29.00	907.09	309.91	.00	.00	9972.90	10018.10	.00
*	8.500	1324.20	.00	1324.65	253.60	55.17	838.82	.00	.00	.00	9922.90	10022.10	.00
	8.590	1329.92	.00	1330.30	189.04	188.72	511.05	194.23	.00	.00	9982.70	10013.70	.00
	8.690	1334.62	.00	1335.19	101.93	191.07	684.17	18.76	.00	.00	9985.30	10019.30	.00
	8.780	1339.55	.00	1339.89	244.22	293.66	580.31	20.03	.00	.00	9988.00	10031.70	.00
	8.890	1344.73	.00	1345.49	75.18	29.19	683.87	180.94	.00	.00	9986.20	10009.40	.00
	8.990	1350.01	.00	1350.77	76.69	18.44	737.53	138.03	.00	.00	9992.90	10024.60	.00
	9.090	1356.72	.00	1357.49	81.43	125.84	707.69	60.47	.00	.00	9980.90	10008.90	.00
	9.190	1363.10	.00	1363.87	90.93	116.14	777.86	.00	.00	.00	9973.80	10015.50	.00
	9.290	1368.98	.00	1369.55	125.61	127.19	679.33	64.48	.00	.00	9994.70	10030.10	.00
	9.390	1375.42	.00	1375.75	185.28	226.59	458.04	186.37	.00	.00	9976.70	10021.80	.00
*	9.480	1382.13	.00	1383.04	81.34	90.77	780.23	.00	.00	.00	9984.20	10021.60	.00
	9.520	1385.15	.00	1385.72	161.40	94.91	747.12	28.96	.00	.00	9959.80	10012.60	.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
9.610	1393.80	.00	1394.53	96.08	.83	415.18	454.99	.00	.00	9954.40	9980.20	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .190  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .380  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .480  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .670  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.870  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.970  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.520  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.620  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.720  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.590  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.230  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.460  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.550  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.640  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.730  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.820  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.360  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

WARNING SECNO= 6.450 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

```
WARNING SECNO=      6.560  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.750  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.840  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.110  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.490  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      7.680  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      7.680  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      7.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.410  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.480  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.480  PROFILE=  1  MINIMUM SPECIFIC ENERGY
```

Appendix C

HEC-2 Output File for:

White Tanks Wash
Method 4 Floodway Analysis

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    29JAN96    TIME   17:10:55    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 17:10:55

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Main Channel
T4      Floodway Encroachment Method 4
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Floodway Model for White Tanks Wash
   This model is based on:
      -  Subcritical flow regime.
      -  The cross sections were obtained by photogrammetric methods by
         Aerial Mapping Company, Phoenix, AZ, based photographs taken
         October 1991.
      -  The lower reach of this analysis is submerged during a 100-year event
         by the pool that is impounded by the Buckeye Flood Control Structure.
         The peak stage in the Buckeye Structure is 1081.0.  In the water
         surface profile model (MAIN.HC2) Sections 0.00, 0.08, 0.19, 0.29, 0.38,
         0.48 are submerged by the backwater from the Buckeye Flood Control
         Structure.  Based on the Guidelines for Study Contractors (FEMA, 1994),
         this floodway model is based on conditions without submergence.
      -  Ineffective flow areas have been modeled using high roughness values
         so that ineffective flow areas do not conflict with the a Method 4
         (equal conveyance method) floodway analysis.
      -  Floodway modeling is performed using Method 4 to determine initial
         limits and Method 1 to set the limits.  This model uses Method 4.
         target values vary in an attempt to gain consistant results.
         File MAINM4.HC2 is the file containing the Method 1 analysis.
         File MAINM1.HC2 is the final floodway model!
         ---------------------------------------------


  By: M. Forest                                          Prepared By:
  File Name:  MAINM4.HC2                          Alpha Engineering Group
  January 1996                                          Phoenix, Arizona
  ==============================================================================

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0      .005       0       0.0    7209.0   1062.92

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH     FN      ALLDC    IBW      CHNIM    ITRACE

      1        0       -1        0        0        0        0       0        0
```

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	27	28	26	4	0	110	115	200

Manning's roughness values for the primary channel were estimated from field investigations. Values for the overbank are modified for some sections to account for effective conveyance in the overbank areas as noted in the input.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively. Sensitivity analyses suggested that the model is not highly sensitive to these values.

NC	0.060	0.060	0.040	.1	.3

Beginning section located just upstream of the Buckeye Flood Control Structure The beginning water surface elevation is based on slope area method since the floodway model is to be performed without the downstream submergence.

ET			7.4							
X1	0.00	14	9632.5	10196.8	0.0	0.0	0.0	0.0	0.0	
GR	1061.5	8903.6	1061.7	9020.6	1061.4	9161.9	1062.1	9409.0	1061.8	9632.5
GR	1061.2	9833.2	1061.4	10000.0	1061.6	10196.8	1061.3	10426.7	1060.3	10654.5
GR	1060.7	10829.5	1062.6	11023.2	1065.0	11173.7	1065.7	11222.2		
X1	0.08	48	9917.6	10185.3	445.0	440.0	430.0			
GR	1070.7	8904.4	1069.2	8926.3	1066.8	8948.9	1066.8	8972.7	1064.5	8996.5
GR	1064.3	9015.8	1064.0	9038.5	1063.6	9073.2	1064.0	9109.1	1064.0	9140.0
GR	1063.7	9198.2	1063.0	9272.1	1062.7	9349.6	1063.2	9451.8	1064.3	9537.7
GR	1064.7	9611.5	1063.9	9685.3	1064.0	9739.3	1063.0	9781.6	1062.1	9805.4
GR	1064.8	9826.9	1066.5	9862.3	1067.4	9887.7	1067.2	9917.6	1065.8	9944.0
GR	1063.1	9969.6	1063.6	9996.3	1063.5	10000.0	1063.0	10016.0	1063.6	10051.5
GR	1064.4	10081.7	1063.7	10109.7	1065.2	10145.7	1065.5	10185.3	1065.5	10229.9
GR	1066.5	10294.4	1067.0	10359.9	1066.3	10391.5	1064.0	10424.5	1063.9	10469.3
GR	1064.1	10530.9	1064.3	10614.9	1064.3	10695.8	1064.3	10775.6	1064.3	10829.5
GR	1065.0	10860.4	1071.7	10909.8	1075.4	10923.3				
X1	0.19	53	9976.2	10163.0	750.0	300.0	570.0			
GR	1076.5	9112.6	1074.4	9174.1	1073.1	9198.5	1073.4	9213.7	1074.5	9258.0
GR	1074.7	9303.1	1073.6	9344.8	1073.6	9395.1	1071.8	9430.9	1071.2	9463.9
GR	1071.3	9486.7	1069.9	9490.4	1071.2	9499.5	1071.3	9530.3	1071.4	9588.6
GR	1070.0	9657.1	1069.3	9697.5	1069.2	9721.2	1069.7	9770.7	1070.0	9827.0
GR	1070.4	9875.6	1069.7	9907.4	1069.0	9921.7	1065.6	9926.0	1068.9	9933.2
GR	1069.0	9950.9	1068.8	9976.2	1066.8	9990.5	1066.0	9998.3	1066.1	10000.0
GR	1066.3	10012.0	1067.1	10053.6	1067.0	10098.6	1066.7	10134.4	1065.1	10150.1
GR	1065.2	10154.7	1068.7	10163.0	1067.7	10193.3	1068.0	10250.5	1067.3	10295.0
GR	1067.1	10323.8	1072.0	10356.2	1072.7	10386.8	1072.6	10433.2	1071.9	10504.8
GR	1066.8	10571.4	1066.9	10643.9	1067.1	10730.9	1067.0	10829.2	1068.4	10919.3
GR	1072.1	10985.4	1075.6	11011.4	1075.6	11070.0				

```
X1     0.29        61    9972.1   10097.7     530.0     500.0     515.0
GR   1079.9    8747.8    1079.9    8788.2    1078.8    8854.4    1076.7    8908.0    1077.1    8959.5
GR   1075.9    9011.0    1073.1    9026.8    1074.8    9040.3    1076.4    9087.6    1076.1    9134.6
GR   1076.8    9191.5    1076.8    9228.2    1078.8    9267.6    1078.3    9302.6    1076.2    9342.1
GR   1074.8    9371.6    1076.0    9404.0    1076.4    9444.8    1077.3    9504.0    1076.8    9556.8
GR   1076.4    9620.6    1074.7    9657.7    1074.7    9697.1    1074.9    9757.0    1072.3    9785.5
GR   1073.2    9805.7    1072.6    9844.8    1072.8    9875.8    1071.2    9906.9    1073.3    9942.7
GR   1073.3    9972.1    1071.2    9981.1    1067.0    9988.2    1068.6   10000.0    1068.8   10027.4
GR   1070.2   10054.5    1071.7   10097.7    1072.3   10109.6    1069.3   10122.6    1069.9   10149.5
GR   1073.1   10178.5    1072.8   10218.0    1071.5   10243.5    1072.2   10269.8    1072.0   10316.3
GR   1072.4   10352.3    1072.1   10372.0    1069.6   10386.6    1072.0   10403.9    1076.4   10421.4
GR   1076.7   10444.6    1075.7   10458.4    1073.3   10467.7    1077.8   10498.7    1077.3   10540.1
GR   1077.2   10555.3    1074.1   10565.0    1077.4   10577.6    1078.4   10656.1    1079.3   10768.4
GR   1080.0   10863.7

X1     0.38        34    9957.4   10036.8     560.0     520.0     510.0
GR   1082.1    9134.6    1081.0    9190.4    1080.5    9239.4    1079.7    9286.7    1079.3    9323.1
GR   1079.7    9379.5    1076.9    9445.0    1077.5    9521.7    1077.8    9569.2    1076.9    9620.9
GR   1075.9    9661.1    1076.0    9713.4    1076.9    9761.1    1076.8    9822.6    1076.0    9863.8
GR   1075.4    9901.3    1074.1    9920.9    1073.9    9957.4    1071.3    9982.3    1071.7   10000.0
GR   1071.7   10025.5    1074.8   10036.8    1074.4   10073.1    1074.9   10142.0    1074.8   10223.6
GR   1074.7   10294.8    1074.7   10341.3    1075.0   10361.4    1079.3   10383.8    1080.8   10408.0
GR   1079.0   10429.0    1080.5   10445.4    1081.5   10489.7    1082.5   10563.3
```

Section 0.48

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

```
ET                      3.4
NH       8         .9    9714.7        .3    9760.4        .2    9802.3        .2    9837.5       .06
NH  9945.1       .045   10060.6       .06   10413.4        .2   10600.1
X1     0.48        45    9945.1   10060.6     480.0     520.0     490.0
GR   1083.7    9229.9    1081.0    9257.9    1081.7    9292.9    1082.6    9340.1    1081.5    9391.5
GR   1080.3    9433.5    1079.8    9477.2    1079.3    9529.8    1079.3    9582.8    1081.1    9624.4
GR   1082.1    9668.4    1080.7    9714.7    1078.4    9760.4    1078.9    9802.3    1079.3    9837.5
GR   1073.1    9852.1    1077.0    9867.6    1076.6    9876.5    1074.6    9886.6    1075.1    9902.4
GR   1078.0    9923.4    1077.8    9945.1    1076.4    9964.4    1073.8    9977.6    1074.2   10000.0
GR   1074.3   10026.8    1077.4   10037.4    1078.1   10060.6    1079.0   10101.2    1077.1   10149.3
GR   1077.0   10194.3    1078.2   10235.8    1076.6   10274.3    1077.2   10296.6    1077.9   10324.6
GR   1079.0   10355.9    1077.8   10377.1    1075.7   10380.7    1077.5   10392.3    1077.8   10413.4
GR   1079.4   10451.3    1079.3   10492.4    1084.8   10528.9    1085.5   10581.6    1085.8   10600.1
```

Section 0.57

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

```
ET                        8.4
NH       8        .9    9789.1       .3    9827.5        .2    9853.0       .08    9884.6       .06
NH  9932.5      .045   10084.3      .06   10345.8        .9   10769.2
X1    0.57        29    9932.5  10084.3     490.0     501.0     501.0
GR  1085.3    9747.9    1082.9   9789.1    1080.7    9827.5    1077.3    9853.0    1078.2    9884.6
GR  1076.3    9905.2    1079.9   9919.9    1080.3    9932.5    1078.4    9952.2    1075.2    9965.7
GR  1076.1    9980.6    1074.1   9988.9    1075.1   10000.0    1075.2   10014.5    1077.7   10035.7
GR  1077.7   10056.0    1079.5  10084.3    1079.2   10118.4    1079.4   10181.6    1079.6   10248.3
GR  1078.8   10284.6    1080.4  10315.3    1081.7   10345.8    1081.0   10406.3    1081.0   10496.4
GR  1080.7   10592.9    1080.7  10680.9    1081.3   10732.6    1084.7   10769.2

NC      .07       .06      .045
ET                         1.4
X1    0.67        28    9956.6  10041.6     480.0     498.0     498.0
GR  1086.1    9616.7    1085.3   9638.3    1085.3    9661.6    1081.3    9684.7    1079.5    9697.4
GR  1079.8    9705.5    1082.1   9722.6    1081.3    9744.9    1081.4    9768.4    1081.6    9805.3
GR  1082.1    9841.6    1081.1   9872.1    1081.7    9883.4    1084.5    9892.8    1082.2    9909.6
GR  1080.2    9926.4    1079.8   9940.1    1081.1    9956.6    1080.0    9972.0    1078.2    9985.0
GR  1077.8   10000.0    1077.8  10010.1    1080.9   10016.8    1081.5   10041.6    1081.5   10078.5
GR  1081.8   10108.1    1085.5  10130.8    1087.1   10183.7

NC      .06       .06      .045
ET                        10.4
X1    0.76        25    9917.8  10055.0     501.0     501.0     501.0
GR  1087.8    9594.5    1087.0   9716.6    1085.9    9757.5    1083.2    9770.3    1082.6    9777.6
GR  1083.2    9782.8    1085.3   9792.8    1084.5    9817.0    1084.7    9855.8    1085.3    9891.3
GR  1085.6    9917.8    1080.8   9932.1    1081.9    9940.4    1082.9    9960.7    1083.4    9989.1
GR  1081.2    9993.9    1081.4  10000.0    1082.3   10023.5    1084.1   10055.0    1083.1   10088.7
GR  1082.3   10118.2    1085.5  10136.7    1085.5   10164.9    1085.9   10187.0    1089.2   10206.8
```

Section 0.86

This Section is located at the Junction 4E where Watersheds K1, K2 and K3 enter the main branch of White Tanks Wash. The flow is decreased at the next section.

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          6.4
NH       4         .2     9824.3       .06     9925.1       .045    10055.9       .06    10381.2
X1    0.86         26     9925.1   10055.9      522.0      510.0      522.0
GR  1095.0     9493.0     1092.1    9534.4     1089.3     9575.0     1088.9     9617.7     1088.4     9642.3
GR  1089.4     9670.3     1087.7    9685.0     1087.2     9708.8     1087.4     9737.2     1087.6     9781.5
GR  1086.8     9813.9     1085.4    9817.4     1087.3     9824.3     1087.3     9864.4     1086.6     9925.1
GR  1085.5     9968.3     1083.9    9973.9     1083.5     9999.0     1083.2    10000.0     1083.1    10024.3
GR  1086.0    10031.8     1086.8   10055.9     1086.1    10100.8     1087.3    10176.1     1089.5    10270.3
GR  1090.1    10381.2
```

Section 0.95

The discharge values are changed at this section since it is located upstream of juntion 4E.

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
QT       2     6256.0     6256.0
NH       4        .05     9984.6       .045    10048.5        .05    10398.7        .2    10559.9
X1    0.95         22     9984.6   10048.5      600.0      489.0      489.0
GR  1094.3     9937.9     1091.8    9959.0     1089.6     9984.6     1084.6     9991.4     1084.8    10000.0
GR  1084.8    10014.5     1088.5   10026.2     1090.0    10048.5     1089.3    10080.8     1088.8    10119.2
GR  1086.9    10144.6     1086.5   10155.9     1088.9    10167.1     1090.0    10205.5     1089.9    10240.3
GR  1091.6    10273.7     1091.7   10300.0     1090.5    10334.9     1091.0    10398.7     1090.8    10472.5
GR  1092.4    10515.7     1093.4   10559.9

NC     .06        .06      .045
X1    1.04         25    10020.2   10116.9      474.0      440.0      474.0
GR  1095.4     9800.1     1094.8    9823.9     1092.6     9839.1     1089.4     9852.7     1091.4     9860.0
GR  1091.3     9889.7     1091.5    9927.2     1091.2     9955.7     1090.7     9978.1     1089.9     9995.2
GR  1089.6    10000.0     1090.4   10020.2     1088.9    10025.9     1089.8    10055.0     1089.5    10072.6
GR  1088.4    10086.7     1093.4   10116.9     1094.9    10149.4     1093.3    10192.5     1093.4    10253.9
GR  1093.5    10339.3     1094.3   10406.3     1094.8    10463.1     1095.7    10551.5     1096.1    10615.7
```

Section 1.13

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4         .9     9768.9       .06     9972.7       .045    10044.4       .06    10376.8
X1    1.13         25     9972.7   10044.4      484.0      500.0      490.0
GR  1099.8     9617.0     1099.7    9660.4     1097.4     9699.4     1095.7     9730.1     1093.0     9736.0
GR  1095.1     9749.6     1096.4    9768.9     1094.3     9797.9     1093.3     9824.8     1093.2     9866.8
GR  1092.3     9912.8     1092.1    9932.5     1093.6     9947.7     1093.4     9972.7     1092.8     9983.9
GR  1090.0     9991.3     1090.3   10000.0     1090.7    10020.6     1094.2    10044.4     1096.4    10072.3
GR  1096.4    10133.2     1096.9   10202.6     1097.3    10250.7     1098.3    10313.5     1098.4    10376.8
```

```
NC      .06       .06      .045
ET                         6.4
X1     1.23        20    9946.3   10039.5     470.0     515.0     510.0
GR   1100.6    9698.5    1099.7    9752.2    1097.9    9788.2    1099.5    9818.2    1099.5    9855.8
GR   1097.1    9903.1    1095.1    9946.3    1094.0    9971.9    1093.6   10000.0    1094.1   10021.8
GR   1097.3   10039.5    1096.3   10077.9    1096.4   10141.4    1096.1   10192.3    1095.4   10228.1
GR   1093.7   10244.5    1093.8   10251.9    1097.7   10263.3    1100.1   10309.0    1102.4   10378.0

ET                         8.4
X1     1.32        15    9975.6   10049.4     485.0     485.0     485.0
GR   1102.7    9922.9    1102.5    9957.0    1100.1    9975.6    1095.3    9984.1    1095.7    9996.2
GR   1096.2   10000.0    1097.2   10021.6    1097.2   10049.4    1098.3   10102.1    1099.3   10167.7
GR   1098.5   10210.5    1098.7   10251.4    1100.8   10281.4    1102.0   10315.3    1102.5   10376.9
```

Section 1.41

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        5        .2    9888.4       .05    9955.8      .045   10029.3       .05   10211.1       .08
NH    10406
X1     1.41        22    9955.8   10029.3     445.0     445.0     445.0
GR   1106.2    9768.2    1103.6    9812.6    1101.8    9845.2    1099.9    9867.4    1099.4    9888.4
GR   1100.8    9915.5    1101.0    9955.8    1100.1    9982.2    1098.5    9993.6    1098.4   10000.0
GR   1098.4   10008.7    1100.9   10029.3    1100.9   10056.9    1101.2   10092.1    1102.8   10134.1
GR   1103.9   10169.9    1104.0   10211.1    1102.3   10250.6    1102.4   10290.7    1102.8   10330.9
GR   1104.4   10362.5    1105.4   10406.0

NC      .06       .06      .045
X1     1.50        23    9962.2   10035.7     480.0     483.0     483.0
GR   1109.4    9695.9    1107.3    9720.5    1103.3    9738.8    1101.9    9747.3    1102.5    9755.6
GR   1104.3    9768.5    1103.5    9798.1    1103.8    9840.5    1104.4    9872.1    1102.6    9901.5
GR   1102.9    9924.5    1102.9    9962.2    1102.4    9990.3    1100.7    9999.3    1101.0   10000.0
GR   1101.1   10014.0    1103.9   10035.7    1106.3   10062.4    1106.9   10121.1    1106.0   10190.5
GR   1105.5   10244.3    1107.2   10306.4    1109.2   10373.0

X1     1.59        32    9873.2   10037.2     494.0     494.0     494.0
GR   1112.9    9454.9    1111.4    9482.5    1108.9    9500.5    1108.8    9520.7    1108.6    9543.9
GR   1107.7    9565.3    1108.6    9592.8    1107.2    9610.7    1106.8    9641.6    1106.6    9659.9
GR   1107.7    9690.8    1107.3    9714.7    1105.3    9734.5    1106.0    9758.3    1107.4    9782.7
GR   1108.2    9812.3    1108.0    9847.4    1107.1    9873.2    1104.1    9886.4    1103.7    9902.6
GR   1103.8    9916.9    1105.2    9943.6    1104.9    9964.5    1103.7    9975.1    1103.8   10000.0
GR   1103.9   10015.7    1106.6   10037.2    1108.1   10076.4    1108.2   10126.0    1109.4   10201.1
GR   1109.6   10276.9    1110.6   10349.4
```

X1	1.68	18	9977.8	10046.1	490.0	480.0	480.0			
GR	1113.1	9653.6	1110.9	9697.3	1109.7	9749.9	1109.3	9798.7	1108.3	9829.0
GR	1106.7	9841.3	1107.9	9866.4	1108.2	9901.4	1108.7	9944.5	1108.3	9977.8
GR	1106.1	9988.3	1105.9	10000.0	1106.0	10009.1	1107.1	10018.6	1106.8	10046.1
GR	1109.3	10091.4	1111.0	10139.2	1112.4	10182.2				
X1	1.78	17	9971.2	10039.1	507.0	495.0	500.0			
GR	1116.7	9732.9	1116.4	9758.7	1112.5	9782.0	1112.4	9796.0	1113.7	9816.7
GR	1112.8	9856.1	1111.2	9901.7	1110.0	9941.7	1109.3	9971.2	1108.4	9982.9
GR	1108.5	10000.0	1108.6	10026.0	1110.8	10039.1	1110.4	10069.0	1110.6	10100.1
GR	1114.2	10143.3	1115.6	10197.2						
ET			4.4							
X1	1.87	13	9975.2	10040.5	495.0	495.0	495.0			
GR	1118.0	9740.4	1115.1	9789.1	1112.3	9840.1	1111.4	9897.6	1110.7	9939.0
GR	1110.2	9975.2	1108.8	9977.0	1109.0	10000.0	1109.6	10018.1	1110.8	10040.5
GR	1114.9	10069.6	1116.7	10119.5	1118.5	10181.9				
ET			9.4							
X1	1.97	12	9967.4	10050.5	535.0	560.0	540.0			
GR	1118.9	9838.7	1116.7	9881.5	1117.4	9912.7	1115.0	9935.2	1113.4	9967.4
GR	1113.2	9994.4	1113.1	10000.0	1113.5	10050.5	1113.6	10095.5	1114.3	10131.6
GR	1117.7	10158.9	1118.5	10192.0						
ET			5.4							
X1	2.07	18	9976.7	10039.3	484.0	484.0	484.0			
GR	1123.7	9811.3	1121.3	9861.3	1119.1	9899.9	1118.8	9930.7	1118.9	9962.8
GR	1116.9	9976.7	1114.7	9984.7	1114.4	10000.0	1114.4	10021.2	1116.1	10039.3
GR	1116.5	10065.4	1117.6	10090.4	1117.8	10121.8	1118.3	10150.0	1120.6	10184.8
GR	1121.3	10224.1	1121.0	10259.0	1122.7	10308.1				
ET			4.4							
X1	2.15	16	9982.1	10023.3	444.0	444.0	444.0			
GR	1125.1	9916.1	1123.7	9945.0	1122.5	9968.1	1120.3	9982.1	1115.9	9985.5
GR	1115.9	9998.8	1115.9	10000.0	1115.9	10007.4	1119.2	10023.3	1118.4	10055.6
GR	1118.7	10090.6	1118.7	10124.8	1120.0	10150.7	1121.7	10177.6	1124.3	10217.6
GR	1125.7	10264.6								
ET			9.4							
X1	2.24	18	9953.2	10015.4	489.0	489.0	489.0			
GR	1127.6	9643.1	1126.4	9695.7	1125.4	9745.5	1123.4	9784.1	1122.3	9816.3
GR	1122.4	9839.8	1120.0	9854.7	1122.6	9865.6	1122.6	9887.9	1122.6	9928.4
GR	1119.3	9953.2	1118.6	9975.9	1117.9	9994.9	1117.9	10000.0	1119.7	10015.4
GR	1122.2	10035.8	1125.0	10074.4	1127.6	10118.2				
ET			7.4							
X1	2.34	13	9946.2	10032.7	495.0	508.0	500.0			
GR	1128.9	9803.7	1127.8	9833.9	1125.6	9858.1	1126.3	9893.4	1125.4	9925.5
GR	1124.2	9946.2	1122.0	9961.6	1121.8	9975.5	1121.8	10000.0	1121.8	10017.9
GR	1123.7	10032.7	1127.6	10056.6	1130.0	10079.8				

```
ET                          5.4
X1     2.43        27    9960.9   10024.9     471.0     471.0     471.0
GR   1133.0    9757.9    1130.8    9801.1    1130.1    9843.2    1129.1    9883.9    1125.4    9891.5
GR   1125.1    9913.1    1125.1    9937.5    1127.5    9945.0    1127.0    9960.9    1125.1    9975.9
GR   1123.9    9985.0    1123.9    9995.2    1124.0   10000.0    1125.7   10013.7    1128.5   10024.9
GR   1128.4   10043.1    1127.9   10060.5    1125.8   10070.4    1127.5   10080.6    1128.2   10094.1
GR   1127.8   10107.1    1126.0   10114.1    1123.3   10122.3    1123.4   10126.2    1127.2   10132.8
GR   1130.9   10150.1    1132.9   10184.3

ET                          7.4
X1     2.52        27    9975.0   10045.3     490.0     500.0     495.0
GR   1137.7    9864.6    1133.8    9886.0    1130.1    9895.7    1129.1    9907.9    1129.1    9920.9
GR   1131.1    9942.4    1132.0    9958.1    1130.9    9975.0    1127.6    9980.9    1128.0   10000.0
GR   1127.9   10020.3    1129.9   10030.2    1130.8   10045.3    1129.8   10060.0    1129.9   10072.3
GR   1131.1   10095.8    1131.5   10129.2    1132.6   10173.5    1133.2   10202.1    1132.6   10226.0
GR   1133.1   10258.2    1132.9   10279.4    1131.2   10298.0    1131.0   10309.4    1132.0   10330.4
GR   1133.0   10357.6    1135.1   10382.7

ET                          6.4
X1     2.62        36    9960.4   10024.2     525.0     525.0     525.0
GR   1138.2    9613.4    1137.5    9633.2    1135.9    9656.0    1135.2    9681.6    1134.5    9706.4
GR   1133.2    9718.5    1131.7    9721.7    1135.4    9738.7    1136.3    9765.1    1135.8    9788.1
GR   1132.3    9806.4    1130.8    9819.3    1131.7    9842.2    1134.2    9856.4    1133.5    9873.1
GR   1130.7    9895.1    1129.9    9903.1    1132.0    9912.9    1132.0    9924.5    1130.1    9931.1
GR   1132.4    9943.6    1132.3    9960.4    1131.7    9978.0    1130.7    9984.6    1128.7    9986.8
GR   1129.1   10000.0    1133.0   10011.1    1134.8   10024.2    1134.6   10052.0    1134.0   10079.5
GR   1132.6   10102.2    1133.1   10120.9    1135.2   10138.8    1135.8   10173.3    1137.7   10205.4
GR   1139.7   10237.9

X1     2.72        24    9975.4   10043.6     506.0     506.0     506.0
GR   1140.1    9698.8    1139.5    9725.1    1137.7    9768.2    1136.6    9780.8    1136.4    9791.7
GR   1137.6    9808.4    1138.2    9834.8    1139.0    9865.8    1136.5    9888.1    1135.5    9904.5
GR   1135.3    9936.5    1134.9    9959.6    1135.2    9975.4    1133.6    9981.0    1133.2   10000.0
GR   1133.3   10019.0    1135.1   10043.6    1136.8   10065.1    1137.7   10088.2    1135.3   10111.3
GR   1137.0   10133.7    1138.1   10149.6    1138.1   10172.8    1141.5   10205.0

ET                          5.4
  ---------------------------------------------------------------------------
  Section 2.82

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH        4        .9    9785.6       .06    9978.1      .045   10030.2        .6   10131.1
X1     2.82        22    9978.1   10030.2     515.0     540.0     539.0
GR   1144.2    9657.1    1142.0    9693.2    1141.1    9732.8    1142.0    9785.6    1141.8    9825.8
GR   1140.8    9852.9    1137.9    9864.0    1138.0    9874.2    1138.5    9887.0    1138.5    9916.1
GR   1138.1    9954.2    1137.5    9978.1    1135.5    9994.5    1135.5   10000.0    1136.2   10012.0
GR   1138.1   10030.2    1137.5   10046.4    1135.7   10063.9    1134.7   10074.7    1135.8   10082.7
GR   1140.2   10106.0    1144.4   10131.1
```

```
ET                          9.4
  ---------------------------------------------------------------------------
  Section 2.92

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH       4       .06    9922.6     .045   10062.5       .06   10209.7        .9   10387.6
X1    2.92        23    9922.6  10062.5     510.0     585.0     560.0
GR  1147.8    9775.5    1146.2   9815.7    1144.7    9855.3    1144.9    9884.1    1143.7    9905.4
GR  1140.1    9922.6    1139.6   9940.4    1139.5    9954.0    1139.2    9977.3    1138.9   10000.0
GR  1138.8   10015.6    1142.1  10062.5    1142.2   10098.4    1142.1   10126.5    1142.9   10161.8
GR  1142.9   10182.9    1144.0  10209.7    1142.6   10232.2    1140.0   10253.6    1141.3   10276.8
GR  1143.8   10310.9    1146.3  10345.1    1148.7   10387.6

ET                          6.4
  ---------------------------------------------------------------------------
  Section 3.04

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH       4       .06    9972.6     .045   10045.6       .06   10495.3        .9   10765.5
X1    3.04        34    9972.6  10045.6     610.0     625.0     625.0
GR  1151.1    9972.6    1142.0   9992.8    1142.8   10000.0    1144.0   10022.3    1144.8   10045.6
GR  1145.5   10091.3    1145.4  10123.8    1145.3   10150.5    1142.9   10162.9    1142.5   10181.9
GR  1142.1   10192.4    1142.3  10215.1    1142.2   10230.5    1142.9   10249.8    1142.2   10262.3
GR  1141.2   10269.6    1141.9  10275.9    1143.6   10294.0    1144.0   10316.2    1144.0   10332.5
GR  1146.3   10361.4    1147.1  10382.8    1145.8   10419.7    1146.8   10495.3    1146.5   10525.5
GR  1146.2   10570.1    1146.6  10596.6    1145.9   10639.8    1145.1   10661.4    1144.1   10673.8
GR  1143.1   10682.0    1146.6  10710.6    1147.7   10732.1    1150.0   10765.5

ET                          9.4
  ---------------------------------------------------------------------------
  Section 3.14

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH       5        .9    9875.1       .06    9981.2     .045   10065.8       .06   10285.4        .9
NH   10616
X1    3.14        36    9981.2  10065.8     510.0     340.0     495.0
GR  1149.4    9557.7    1148.5   9611.6    1148.6    9681.0    1147.3    9713.5    1148.4    9731.3
GR  1148.4    9762.8    1148.1   9804.7    1148.4    9848.4    1148.4    9875.1    1146.3    9891.0
GR  1145.7    9904.9    1146.3   9929.0    1146.4    9955.1    1146.5    9969.4    1145.4    9981.2
GR  1143.4    9987.0    1143.3  10000.0    1143.3   10008.6    1144.3   10028.3    1144.2   10043.4
GR  1142.9   10055.6    1143.0  10065.8    1144.4   10081.9    1144.9   10108.6    1147.2   10147.1
```

```
GR   1147.8   10208.8   1148.3   10285.4   1148.0   10362.6   1146.5   10425.3   1146.9   10476.0
GR   1146.4   10495.0   1144.7   10503.4   1145.7   10520.9   1147.9   10542.5   1148.8   10579.1
GR   1150.4      10616

NC      .06        .06      .045
X1     3.23         20    9974.1   10010.2    511.0    511.0    511.0
GR   1152.3     9638.9   1151.0    9701.2   1150.4    9747.7   1148.8    9777.8   1148.6    9803.1
GR   1150.6     9821.2   1151.1    9840.5   1150.0    9866.8   1148.0    9883.5   1149.0    9907.6
GR   1149.1     9948.8   1148.1    9974.1   1146.2    9988.2   1146.4   10000.0   1147.5   10010.2
GR   1147.2    10045.9   1147.1   10067.3   1147.2   10076.9   1151.9   10101.1   1152.8   10128.1

ET                          7.4
X1     3.32         24    9975.1   10053.0    460.0    465.0    487.0
GR   1156.7     9803.8   1154.6    9850.3   1153.5    9880.8   1153.2    9898.5   1154.6    9915.8
GR   1154.4     9943.8   1153.3    9965.5   1152.3    9975.1   1149.2    9982.3   1149.0   10000.0
GR   1149.0    10016.4   1149.0   10036.0   1149.8   10053.0   1151.0   10076.8   1151.9   10114.2
GR   1152.4    10152.9   1152.3   10201.3   1153.4   10259.5   1152.6   10315.2   1151.6   10357.6
GR   1152.2    10389.8   1152.7   10410.2   1155.4   10443.1   1157.3   10491.6

X1     3.42         28    9962.0   10023.5    488.0    440.0    488.0
GR   1157.8     9932.4   1157.5    9951.5   1154.0    9962.0   1152.2    9974.2   1151.1    9995.7
GR   1150.9    10000.0   1150.9   10012.3   1154.9   10023.5   1155.2   10039.4   1155.1   10064.4
GR   1154.6    10073.5   1151.5   10082.6   1152.4   10098.8   1153.6   10120.8   1153.9   10149.7
GR   1153.8    10184.1   1154.6   10215.8   1154.6   10251.9   1154.4   10296.5   1154.9   10349.6
GR   1154.6    10410.4   1155.1   10461.4   1155.1   10506.2   1154.9   10551.2   1153.5   10576.2
GR   1154.1    10598.4   1155.8   10631.2   1158.9   10666.8

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  Section 3.51

  Flow added at Junction 3E
 ---------------------------------------------------------------------------


X1     3.51         20    9971.6   10029.0    487.0    487.0    487.0
GR   1160.4     9859.7   1158.4    9896.9   1155.3    9920.3   1156.3    9944.6   1156.1    9971.6
GR   1152.8     9984.3   1152.9   10000.0   1153.6   10029.0   1155.1   10074.8   1155.7   10125.7
GR   1157.0    10170.4   1158.1   10221.8   1157.6   10270.7   1157.1   10336.2   1157.2   10403.7
GR   1156.8    10458.8   1155.5   10489.3   1155.9   10515.7   1158.5   10545.8   1161.3   10588.8

QT        2     6208.0    6208.0
X1     3.59         20    9983.3   10038.7    440.0    440.0    440.0
GR   1159.5     9795.4   1157.9    9823.1   1157.0    9838.1   1157.0    9857.6   1157.0    9873.4
GR   1158.2     9894.5   1158.2    9922.5   1159.2    9943.5   1159.5    9963.4   1158.9    9983.3
GR   1154.9     9997.5   1154.9   10000.0   1155.0   10012.5   1155.1   10024.1   1157.9   10038.7
GR   1159.1    10061.3   1161.2   10080.6   1160.1   10105.6   1161.4   10147.8   1164.0   10201.9

X1     3.70         13    9984.8   10039.4    558.0    558.0    558.0
GR   1164.1     9773.7   1163.5    9826.0   1161.4    9876.5   1159.8    9917.1   1161.8    9940.3
GR   1162.3     9963.8   1159.1    9984.8   1157.2    9998.0   1157.3   10000.0   1157.3   10021.1
GR   1158.3    10039.4   1168.5   10060.8   1168.5   10101.9
```

```
X1     3.79        18     9957.2    10034.2      460.0      460.0      460.0
GR   1167.1    9824.8     1166.5     9875.2     1165.5     9926.6     1163.1    9957.2     1159.5     9975.2
GR   1159.7    9997.0     1159.5    10000.0     1159.5    10018.9     1163.1   10034.2     1164.8    10074.8
GR   1165.4   10117.0     1164.9    10142.1     1161.7    10150.9     1164.9   10169.7     1164.2    10186.8
GR   1161.5   10201.3     1165.0    10215.2     1167.3    10232.1
```

Section 3.88

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4       .06     9973.3      .045    10029.1       .06    10341.5       .9   10595.0
X1    3.88        15     9973.3    10029.1      475.0      475.0      475.0
GR   1170.8    9911.5     1168.0     9952.2     1166.2     9973.3     1162.1    9984.5     1162.1    10000.0
GR   1162.0   10015.0     1165.1    10029.1     1167.3    10059.8     1167.2   10104.2     1166.1    10150.1
GR   1166.8   10203.2     1167.6    10279.3     1168.7    10341.5     1169.0   10547.9     1171.5    10595.0
```

Section 3.96

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4        .9     9799.4       .06     9982.6      .045    10022.7       .06   10184.0
X1    3.96        27     9982.6    10022.7      440.0      440.0      440.0
GR   1173.9    9673.9     1171.8     9717.9     1171.3     9738.7     1172.0    9753.9     1173.5     9776.3
GR   1173.9    9799.4     1172.1     9824.5     1170.6     9868.4     1169.0    9889.8     1168.2     9912.1
GR   1170.4    9921.3     1170.7     9943.9     1171.2     9975.7     1170.1    9982.6     1165.1     9991.0
GR   1165.1   10000.0     1165.1    10010.4     1168.9    10022.7     1168.4   10035.9     1167.0    10046.1
GR   1167.2   10064.7     1167.4    10079.1     1169.4    10085.7     1171.0   10103.4     1171.1    10120.4
GR   1172.8   10150.1     1174.8    10184.0
```

Section 4.05

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4       2.0     9932.0       .06     9970.7      .045    10023.6       .06   10287.1
X1    4.05        33     9970.7    10023.6      520.0      509.0      509.0
GR   1175.9    9522.2     1175.3     9562.6     1174.9     9608.0     1172.8    9646.8     1172.2     9676.2
GR   1172.4    9712.1     1173.7     9754.9     1172.2     9781.9     1171.9    9798.5     1173.4     9822.0
GR   1173.8    9847.4     1172.9     9883.7     1171.2     9905.6     1170.1    9916.9     1170.3     9925.7
GR   1173.8    9932.0     1173.9     9948.2     1172.0     9970.7     1170.5    9982.3     1167.8     9988.2
```

```
GR   1167.3   10000.0   1167.3   10011.0   1170.4   10023.6   1171.2   10064.0   1172.5   10107.2
GR   1172.8   10141.8   1170.7   10162.8   1168.7   10176.4   1169.9   10186.8   1172.7   10208.8
GR   1175.7   10236.4   1179.2   10258.6   1178.3   10287.1

NC     .06       .06     .045
X1    4.16        17   9978.2   10030.3    520.0    540.0    530.0
GR   1179.0    9758.8   1177.0    9801.4   1175.0    9850.2   1174.2    9882.8   1175.7    9905.8
GR   1174.8    9940.0   1174.1    9966.5   1172.2    9978.2   1171.2    9988.2   1170.3   10000.0
GR   1169.9   10014.3   1173.3   10030.3   1175.5   10060.7   1173.6   10089.7   1172.9   10107.0
GR   1177.2   10143.6   1179.0   10182.1

X1    4.25        15   9988.4   10023.7    485.0    500.0    495.0
GR   1180.8    9680.2   1179.8    9746.8   1179.2    9806.0   1177.2    9872.6   1176.1    9928.5
GR   1175.5    9962.9   1175.7    9981.0   1173.7    9988.4   1172.1    9995.7   1172.1   10000.0
GR   1172.3   10014.3   1174.1   10023.7   1174.8   10062.1   1175.6   10092.5   1181.5   10131.0

X1    4.35        21   9976.4   10021.4    500.0    540.0    520.0
GR   1183.4    9895.7   1181.4    9941.8   1181.0    9967.3   1178.6    9976.4   1176.1    9983.8
GR   1175.7   10000.0   1176.1   10009.5   1177.6   10021.4   1178.4   10045.5   1178.8   10090.0
GR   1177.5   10114.7   1177.6   10135.1   1179.4   10176.7   1180.0   10238.0   1180.7   10304.1
GR   1180.4   10361.2   1180.1   10393.2   1179.2   10404.1   1180.5   10427.2   1182.3   10454.0
GR   1183.4   10499.2

X1    4.46        24   9979.2   10026.3    625.0    515.0    590.0
GR   1188.9    9960.5   1187.1    9979.2   1180.0    9991.0   1179.0    9999.3   1179.1   10000.0
GR   1179.8   10011.0   1182.6   10026.3   1182.8   10045.1   1182.7   10100.1   1183.0   10133.5
GR   1182.8   10168.9   1181.7   10187.2   1180.2   10198.4   1182.9   10227.5   1183.7   10274.0
GR   1183.4   10318.1   1183.5   10365.4   1183.6   10401.7   1183.6   10428.9   1184.5   10459.5
GR   1184.4   10487.6   1183.4   10515.0   1184.0   10554.2   1186.5   10601.8

X1    4.55        19   9976.1   10011.4    495.0    445.0    490.0
GR   1192.2    9946.6   1190.5    9963.7   1184.8    9976.1   1182.5    9984.6   1181.1    9992.8
GR   1181.0   10000.0   1182.4   10011.4   1185.3   10029.8   1185.1   10084.1   1184.6   10113.2
GR   1184.0   10123.6   1185.5   10150.1   1185.2   10211.7   1186.8   10248.0   1187.3   10294.7
GR   1189.1   10344.2   1189.0   10373.0   1187.7   10399.3   1189.6   10443.2

X1    4.65        16   9986.9   10013.5    460.0    455.0    495.0
GR   1192.9    9674.7   1191.2    9696.1   1187.2    9715.6   1186.8    9732.7   1186.9    9744.9
GR   1185.3    9753.6   1187.5    9767.5   1187.4    9828.0   1187.4    9902.3   1187.2    9951.7
GR   1186.3    9986.9   1184.9    9995.2   1183.9   10000.0   1184.9   10013.5   1192.1   10018.0
GR   1193.1   10057.3
```

Section 4.76

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      4       .9    9837.2     .06    9980.1     .045   10020.4     .06   10281.3
X1   4.76       25    9980.1   10020.4   520.0     655.0     605.0
GR 1196.2   9662.1    1194.6    9686.1  1190.6    9711.6    1189.1   9725.8    1191.0    9745.7
GR 1193.4   9800.1    1194.2    9837.2  1191.2    9875.5    1192.3   9916.7    1190.7    9940.8
GR 1191.5   9967.3    1190.5    9980.1  1188.3    9994.8    1187.4  10000.0    1189.1   10007.6
GR 1189.9  10020.4    1190.0   10059.7  1191.0   10115.9    1190.8  10172.7    1191.0   10208.7
GR 1188.6  10223.7    1187.1   10232.2  1188.4   10240.3    1191.7  10255.6    1194.9   10281.3

NC     .06     .06     .045
X1   4.86       24    9979.7   10021.5   475.0     525.0     520.0
GR 1197.3   9816.5    1195.5    9847.0  1192.9    9872.5    1193.2   9901.3    1192.4    9923.1
GR 1193.6   9956.7    1192.9    9979.7  1189.7    9993.0    1190.3  10000.0    1190.4   10021.5
GR 1193.6  10041.8    1194.1   10077.9  1192.9   10102.5    1191.3  10120.7    1194.2   10148.0
GR 1194.4  10190.8    1194.5   10240.1  1194.2   10267.1    1192.2  10283.9    1193.7   10300.7
GR 1192.8  10312.7    1192.2   10321.1  1194.2   10346.9    1196.4  10406.7

X1   4.96       17    9969.6   10026.7   495.0     515.0     515.0
GR 1200.0   9823.6    1199.4    9860.7  1196.8    9896.4    1197.1   9939.2    1196.9    9957.1
GR 1193.4   9969.6    1192.8    9996.0  1192.4   10000.0    1192.8  10012.7    1195.3   10026.7
GR 1195.3  10066.5    1194.6   10113.5  1193.5   10131.2    1195.5  10152.7    1196.8   10215.4
GR 1198.2  10284.1    1200.4   10337.0

X1   5.05       14    9986.0   10041.5   480.0     525.0     515.0
GR 1204.1   9921.5    1202.8    9934.9  1199.0    9957.1    1196.1   9986.0    1195.0   10000.0
GR 1196.3  10019.5    1196.7   10041.5  1198.6   10102.0    1198.8  10178.8    1200.4   10242.5
GR 1200.5  10312.5    1200.3   10389.3  1201.3   10474.0    1204.0  10543.1

X1   5.16       31    9956.5   10037.1   520.0     440.0     560.0
GR 1205.5   9554.4    1204.4    9579.8  1198.4    9601.9    1200.5   9616.1    1202.2    9646.4
GR 1201.2   9689.0    1201.6    9711.4  1198.8    9720.5    1197.6   9727.4    1201.0    9742.5
GR 1203.8   9766.6    1201.6    9784.2  1199.3    9795.3    1198.0   9807.7    1197.3    9818.8
GR 1199.0   9827.8    1201.0    9853.0  1199.0    9866.0    1198.4   9875.5    1200.6    9911.9
GR 1201.4   9956.5    1199.9    9982.6  1199.0    9999.3    1198.7  10000.0    1199.8   10017.1
GR 1202.5  10037.1    1202.4   10110.7  1203.1   10165.4    1203.1  10244.4    1203.7   10326.9
GR 1204.6  10375.6

X1   5.23       19    9949.7   10049.4   395.0     335.0     390.0
GR 1207.4   9790.8    1203.4    9801.7  1200.8    9814.7    1200.7   9826.4    1202.4    9844.2
GR 1204.4   9874.2    1203.6    9886.8  1200.7    9905.5    1203.0   9924.1    1204.0    9949.7
GR 1202.7   9977.3    1201.7    9999.4  1201.1   10000.0    1202.1  10021.4    1203.7   10049.4
GR 1203.7  10115.2    1204.2   10207.2  1205.9   10231.8    1208.2  10280.7
```

Section 5.29

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       5        .9    9719.3      .06    9961.7      .045   10045.9      .06   10660.7       .9
NH   11229
X1    5.29        47    9961.7  10045.9     340.0     310.0     300.0
GR  1215.1    9433.1    1212.9   9495.4    1210.7    9538.8    1210.3    9582.1    1209.2    9615.0
GR  1210.0    9641.8    1209.4   9661.4    1207.1    9677.6    1211.2    9702.3    1210.5    9719.3
GR  1205.0    9741.3    1202.4   9760.2    1204.6    9773.8    1202.4    9786.4    1204.4    9807.6
GR  1204.0    9818.7    1202.2   9826.7    1203.5    9835.3    1205.8    9863.9    1205.0    9919.4
GR  1204.7    9961.7    1201.7   9984.0    1202.1    9996.2    1201.8   10000.0    1203.7   10012.8
GR  1204.9   10045.9    1204.9  10076.1    1205.1   10157.1    1205.0   10240.5    1204.7   10273.8
GR  1202.2   10282.2    1204.0  10291.7    1205.3   10315.6    1204.7   10345.9    1206.3   10394.6
GR  1206.6   10473.4    1206.7  10559.9    1206.5   10660.7    1206.7   10740.3    1205.6   10833.9
GR  1205.0   10871.2    1206.6  10929.0    1206.4   10979.4    1205.5   11029.7    1206.7   11083.6
GR  1207.1   11147.9    1207.9     11229

NC      .06       .06      .045
X1    5.39        26    9912.1  10048.3     380.0     410.0     500.0
GR  1212.0    9458.0    1209.3   9500.5    1205.6    9534.5    1205.7    9562.9    1203.4    9570.6
GR  1205.7    9583.7    1205.5   9607.0    1203.2    9619.5    1206.0    9637.7    1206.0    9703.3
GR  1206.0    9784.5    1206.2   9849.7    1207.2    9912.1    1206.2    9961.9    1204.8    9994.1
GR  1204.4   10000.0    1206.5  10027.8    1208.2   10048.3    1207.7   10088.0    1205.4   10103.2
GR  1208.5   10126.8    1208.5  10216.9    1208.3   10305.8    1208.0   10398.5    1207.4   10443.9
GR  1209.0   10509.2

X1    5.46        16    9955.6  10030.7     345.0     420.0     420.0
GR  1212.9    9312.8    1209.7   9358.7    1209.2    9901.7    1209.5    9955.6    1207.6    9983.9
GR  1206.8    9996.3    1205.5  10000.0    1206.7   10017.2    1208.9   10030.7    1210.0   10086.2
GR  1209.5   10179.5    1210.0  10285.3    1210.3   10376.7    1210.5   10475.1    1210.7   10562.3
GR  1211.9   10655.3

X1    5.55        28    9986.8  10032.2     450.0     455.0     475.0
GR  1215.5    9565.4    1212.9   9602.3    1210.6    9631.0    1211.1    9663.5    1208.9    9667.5
GR  1211.2    9675.5    1209.7   9692.0    1209.4    9702.8    1212.6    9760.0    1212.5    9802.8
GR  1210.3    9839.6    1209.7   9861.6    1211.5    9891.2    1212.4    9933.6    1211.4    9986.8
GR  1209.2    9996.5    1208.9  10000.0    1209.7   10012.9    1212.7   10032.2    1211.1   10107.6
GR  1210.9   10191.7    1210.9  10275.3    1210.8   10307.6    1213.4   10353.8    1213.2   10404.0
GR  1211.2   10440.0    1213.4  10484.6    1214.4   10558.5
```

Section 5.64

Flow added from area 2E

```
NH       4       .06    9981.2      .045   10045.9       .06   10396.6       2.0   10760.1
X1    5.64        27    9981.2  10045.9     450.0     445.0     450.0
GR  1218.0    9737.9    1214.5   9758.2    1214.9    9804.9    1213.7    9828.5    1215.2    9861.7
GR  1215.4    9894.6    1214.1   9909.3    1212.1    9920.1    1212.9    9928.5    1214.5    9948.6
GR  1214.2    9981.2    1213.6   9995.2    1211.6   10000.0    1212.6   10021.1    1213.9   10045.9
GR  1212.7   10104.0    1212.2  10131.9    1214.4   10181.5    1215.9   10252.7    1216.2   10335.4
GR  1216.3   10396.6    1214.7  10448.2    1213.6   10470.2    1215.6   10506.9    1217.0   10591.4
GR  1218.0   10687.4    1218.7  10760.1
```

Section 5.73

Flow added from area F3

```
NC      .06       .06      .045
X1     5.73        23    9973.7   10033.5     450.0     475.0     475.0
GR   1220.4    9553.5    1218.1    9583.7    1217.2    9632.6    1216.4    9668.1    1215.1    9684.6
GR   1217.6    9711.9    1218.9    9734.7    1217.4    9777.8    1217.8    9814.4    1216.6    9838.2
GR   1217.9    9867.2    1217.4    9895.8    1215.5    9906.0    1213.8    9915.9    1216.6    9938.0
GR   1216.5    9973.7    1215.1    9997.6    1213.3   10000.0    1214.0   10019.5    1216.6   10033.5
GR   1217.7   10112.4    1219.6   10180.9    1221.0   10253.1

QT        2    3728.0    3728.0
X1     5.82        15    9981.9   10033.5     410.0     460.0     460.0
GR   1222.1    9841.5    1220.2    9883.7    1218.0    9895.8    1220.2    9939.2    1220.8    9981.9
GR   1218.1    9991.0    1217.0   10000.0    1217.4   10014.4    1219.6   10033.5    1220.5   10103.5
GR   1221.1   10159.0    1219.9   10231.2    1219.2   10275.3    1222.0   10317.4    1223.3   10368.0

X1     5.91        15    9977.0   10031.3     485.0     465.0     500.0
GR   1226.3    9731.2    1224.5    9788.5    1223.5    9833.4    1221.7    9848.7    1222.7    9879.3
GR   1223.0    9937.5    1222.2    9977.0    1220.1    9995.7    1219.1   10000.0    1219.7   10014.7
GR   1222.9   10031.3    1221.9   10097.9    1222.1   10154.2    1224.0   10225.0    1225.2   10320.4

ET                          7.4
```

Section 5.99

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH        4       .06    9982.8      .045   10035.2       .06   10115.2       2.0   10426.5
X1     5.99        19    9982.8   10035.2     425.0     425.0     425.0
GR   1228.7    9729.5    1226.5    9790.5    1224.9    9834.9    1226.0    9891.3    1226.2    9948.2
GR   1225.6    9982.8    1224.1    9996.6    1221.9   10000.0    1222.9   10014.1    1223.3   10024.0
GR   1225.7   10035.2    1224.2   10060.1    1223.3   10070.4    1227.3   10115.2    1227.2   10174.7
GR   1226.6   10237.8    1226.5   10317.2    1225.7   10366.1    1227.7   10426.5
```

Section 6.08

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          7.4
NH       4        .06     9980.4      .045   10027.5       .06   10265.0       2.0   10599.5
X1    6.08         18     9980.4   10027.5     450.0     450.0     450.0
GR  1231.4     9671.4     1229.9    9765.9    1228.6    9843.4    1229.6    9910.2    1229.0    9950.8
GR  1227.4     9980.4     1224.5    9993.4    1223.5   10000.0    1224.2   10015.5    1227.6   10027.5
GR  1226.8    10060.9     1228.3   10115.7    1230.2   10181.9    1230.5   10265.0    1230.4   10349.1
GR  1229.1    10420.4     1230.5   10498.8    1230.7   10599.5

ET                          8.4
```

Section 6.17

Flow added from area E3G

```
NC     .06        .06      .045
X1    6.17         13     9983.5   10040.5     460.0     450.0     465.0
GR  1232.7     9889.9     1232.3    9936.4    1230.9    9964.3    1227.1    9971.1    1227.7    9983.5
GR  1225.8     9992.6     1225.8   10000.0    1227.0   10019.6    1229.4   10040.5    1230.4   10074.4
GR  1229.4    10187.4     1232.6   10254.8    1232.8   10319.8

QT       2     3442.0     3442.0
ET                          9.4
X1    6.26         20     9991.5   10036.1     490.0     490.0     505.0
GR  1236.3     9635.0     1235.0    9667.6    1233.7    9705.2    1231.7    9733.5    1230.3    9741.1
GR  1233.2     9765.2     1233.6    9824.8    1232.2    9894.4    1230.1    9912.6    1231.8    9938.3
GR  1232.2     9966.7     1231.6    9991.5    1229.7   10000.0    1231.0   10020.7    1233.4   10036.1
GR  1232.2    10052.7     1233.5   10108.3    1234.2   10188.1    1234.6   10261.3    1235.7   10330.8
```

Section 6.36

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH       4        .06     9976.9      .045     10034       .06   10116.8        .9   10374.2
X1    6.36         22     9976.9    10034.     510.0     525.0     525.0
GR  1238.6     9601.1     1237.6    9712.2    1237.5    9784.3    1236.6    9817.1    1234.5    9826.7
GR  1236.8     9842.0     1237.1    9882.5    1233.6    9915.3    1236.9    9945.7    1238.2    9976.9
GR  1232.7     9991.9     1231.1   10000.0    1233.3   10015.3    1236.2   10034.0    1235.1   10057.1
GR  1233.7    10068.6     1237.3   10116.8    1236.6   10177.7    1236.9   10227.0    1236.9   10281.0
GR  1236.6    10323.7     1238.0   10374.2
```

Section 6.45

Flow added from area E3A

```
NC      .06       .06      .045
ET                         8.4
X1     6.45        12     9982.   10021.6     445.0     485.0     480.0
GR   1241.4    9579.9    1238.8    9662.5    1239.2    9982.0    1237.7    9991.4    1234.3   10000.0
GR   1235.3   10011.7    1237.9   10021.6    1237.3   10064.2    1237.6   10096.4    1239.3   10150.6
GR   1240.9   10218.2    1242.1   10281.0

QT        2    3140.0    3140.0
ET                         9.4
  ---------------------------------------------------------------------------
  Section 6.56

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH        4       .06    9985.5      .045   10030.9       .06   10128.1       .9   10483.7
X1     6.56        24    9985.5   10030.9     435.0     560.0     550.0
GR   1243.6    9714.2    1241.9    9797.5    1241.5    9842.1    1241.3    9895.3    1240.8    9914.4
GR   1241.9    9944.1    1239.8    9961.7    1240.6    9985.5    1239.5    9994.0    1238.0   10000.0
GR   1239.8   10015.9    1241.1   10030.9    1239.9   10060.3    1243.4   10079.0    1241.3   10095.5
GR   1243.7   10128.1    1242.0   10176.5    1241.4   10266.6    1240.5   10271.8    1242.0   10292.8
GR   1241.5   10409.8    1239.3   10418.3    1241.8   10433.0    1244.2   10483.7

ET                         7.4
  ---------------------------------------------------------------------------
  Section 6.66

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH        4       .06    9984.9      .045   10021.9       .06     10372       .9   10905.3
X1     6.66        25    9984.9   10021.9     560.0     525.0     545.0
GR   1247.4    9710.6    1247.0    9780.1    1245.6    9800.8    1243.6    9811.8    1246.2    9826.1
GR   1246.9    9878.2    1245.5    9922.5    1245.6    9960.2    1244.6    9984.9    1242.2    9990.6
GR   1241.0    9998.2    1241.9   10000.0    1243.9   10009.2    1245.3   10021.9    1245.5   10096.6
GR   1245.6   10212.2    1245.1   10372.0    1245.7   10464.8    1245.6   10551.6    1245.0   10625.7
GR   1246.0   10696.2    1245.4   10757.9    1245.5   10800.3    1247.1   10847.8    1248.2   10905.3
  ---------------------------------------------------------------------------
  Section 6.75

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------
```

```
NH       5        .9    9860.2      .06    9987.9      .045   10039.9      .06   10254.4       .9
NH   10810
X1    6.75        30    9987.9  10039.9     470.0     505.0     485.0
GR  1251.8    9366.5    1249.2   9426.8    1249.6    9483.5    1249.0    9537.8    1248.9    9550.8
GR  1247.0    9560.9    1249.1   9573.9    1249.2    9677.0    1249.8    9783.8    1251.1    9860.2
GR  1250.3    9924.5    1250.0   9956.8    1247.2    9968.7    1248.2    9987.9    1246.8    9992.8
GR  1245.2    9998.4    1245.2  10000.0    1246.9   10013.6    1248.3   10026.4    1249.9   10039.9
GR  1249.1   10104.7    1250.3  10166.7    1250.8   10254.4    1249.5   10334.8    1249.5   10432.0
GR  1249.7   10524.0    1249.1  10597.1    1249.4   10674.2    1250.7   10764.5    1251.2   10810.0

ET                         5.4
  ---------------------------------------------------------------------------
  Section 6.84

  Flow added from area E3B

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH       5        .9    9693.6      .06     9969      .045   10029.2      .06   10282.2       1.0
NH   10919
X1    6.84        31     9969.  10029.2     470.0     490.0     490.0
GR  1255.1    9072.0    1254.1   9185.5    1253.9    9276.3    1253.6    9366.3    1253.3    9442.3
GR  1252.6    9452.5    1251.6   9460.1    1253.1    9476.4    1253.5    9549.3    1253.4    9693.6
GR  1253.2    9800.7    1253.1   9854.6    1253.4    9888.8    1254.1    9941.9    1252.3    9969.0
GR  1248.6    9988.7    1247.5  10000.0    1249.4   10016.2    1252.3   10029.2    1254.1   10091.0
GR  1253.7   10185.9    1254.5  10282.2    1254.0   10383.6    1253.0   10424.7    1254.4   10490.6
GR  1254.6   10580.0    1253.5  10663.0    1254.6   10731.1    1253.7   10780.3    1254.4   10861.9
GR  1255.2   10919.0

QT       2    2751.0    2751.0
ET                         7.4
  ---------------------------------------------------------------------------
  Section 6.94

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

NH       4        .9    9869.3      .06    9988.3      .045   10029.0      .06   10770.7
X1    6.94        22    9988.3  10029.0     435.0     460.0     520.0
GR  1257.8    9558.9    1256.7   9621.9    1255.6    9670.8    1254.9    9725.4    1257.2    9760.2
GR  1257.8    9802.2    1258.0   9869.3    1256.8    9934.9    1256.2    9988.3    1254.3    9996.6
GR  1253.1   10000.0    1254.1  10013.2    1255.3   10029.0    1256.3   10076.2    1255.6   10167.4
GR  1255.3   10224.2    1256.1  10283.7    1255.8   10463.8    1257.4   10528.6    1258.5   10615.9
GR  1257.7   10700.2    1258.3  10770.7
```

ET 7.4

Section 7.02

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
NH      4       .9    9812.3     .06    9979.6     .045   10013.3     .06   10354.3
X1   7.02       25    9979.6 10013.3     400.0     415.0     410.0
GR 1260.9   9215.0    1260.2  9276.3    1260.4    9312.6    1259.4  9332.0   1259.5   9399.9
GR 1260.1   9485.4    1259.1  9519.5    1257.3    9531.3    1259.0  9565.0   1259.7   9657.0
GR 1260.2   9743.8    1261.6  9812.3    1260.7    9891.2    1259.6  9953.0   1257.9   9979.6
GR 1256.3   9990.6    1255.6 10000.0    1259.1   10013.3    1258.0 10053.9   1256.8  10063.5
GR 1255.3  10069.6    1258.7 10088.0    1259.3   10194.7    1260.6 10268.4   1262.2  10354.3

NC    .06       .06      .045
X1   7.11       16    9995.1 10016.8     475.0     490.0     500.0
GR 1264.6   9570.9    1264.1  9613.6    1262.7    9653.9    1262.9  9867.9   1262.6   9896.3
GR 1262.2   9915.4    1262.5  9970.4    1262.5    9995.1    1259.8 10000.0   1259.0  10005.8
GR 1261.5  10016.8    1262.2 10083.2    1262.2   10174.0    1261.2 10179.1   1263.1  10209.1
GR 1264.5  10314.0

X1   7.20       16    9974.0 10033.6     450.0     465.0     455.0
GR 1268.6   9520.0    1267.6  9615.1    1266.1    9678.2    1266.6  9704.2   1265.0   9710.0
GR 1266.2   9737.7    1266.5  9851.4    1266.1    9913.5    1266.6  9974.0   1265.0   9994.4
GR 1264.1  10000.0    1265.5 10016.8    1266.9   10033.6    1263.7 10050.1   1266.3  10077.0
GR 1268.5  10126.2

X1   7.30       13    9976.4 10045.6     480.0     485.0     500.0
GR 1272.4   9869.1    1270.4  9920.2    1269.2    9949.4    1270.0  9976.4   1268.5   9992.2
GR 1267.9  10000.0    1269.0 10018.5    1270.5   10045.6    1270.4 10077.9   1268.9  10097.4
GR 1271.0  10144.4    1272.3 10223.2    1272.6   10310.1

X1   7.40       18    9966.5 10030.9     505.0     475.0     540.0
GR 1277.9   9720.3    1276.1  9764.7    1272.6    9794.8    1273.3  9844.3   1275.2   9905.3
GR 1275.5   9966.5    1273.7  9986.3    1271.6    9994.1    1271.0 10000.0   1272.4  10013.6
GR 1275.8  10030.9    1274.0 10097.9    1272.8   10133.5    1274.2 10188.7   1273.5  10242.4
GR 1274.8  10294.8    1275.1 10314.8    1276.3   10360.3

X1   7.49       16    9986.9 10028.2     460.0     465.0     470.0
GR 1280.6   9503.7    1278.3  9532.2    1278.5    9609.7    1279.6  9659.0   1278.9   9704.7
GR 1279.6   9782.4    1277.7  9861.3    1277.7    9897.7    1275.4  9910.1   1274.4   9923.2
GR 1277.4   9949.0    1277.9  9986.9    1277.0    9997.2    1274.5 10000.0   1276.5  10011.5
GR 1280.5  10028.2
```

Section 7.57

Flow added from area E3D

```
X1     7.57        18    9988.1   10049.5     380.0     445.0     435.0
GR   1283.4    9501.0    1282.0    9525.9    1282.3    9785.1    1281.2    9801.5    1281.6    9892.8
GR   1282.8    9936.6    1281.9    9952.8    1279.7    9972.6    1280.9    9988.1    1279.1    9999.6
GR   1278.4   10000.0    1280.8   10014.1    1277.9   10025.9    1280.7   10049.5    1282.3   10091.9
GR   1282.7   10139.4    1282.7   10235.1    1283.9   10299.0

QT        2    2125.0    2125.0
ET                        7.4
X1     7.68        21    9979.6   10023.7     550.0     570.0     560.0
GR   1289.0    9530.5    1287.4    9595.8    1286.7    9636.1    1287.3    9697.2    1287.3    9739.8
GR   1286.7    9772.8    1286.3    9802.2    1286.2    9809.3    1285.3    9813.6    1286.7    9828.2
GR   1286.1    9863.8    1285.6    9871.6    1286.3    9908.5    1286.7    9949.9    1286.4    9979.6
GR   1282.7    9988.3    1282.4    9999.7    1282.6   10000.0    1284.2   10009.4    1286.7   10023.7
GR   1288.0   10057.3

X1     7.79        19    9987.5   10014.8     610.0     625.0     620.0
GR   1293.6    9816.2    1292.6    9867.3    1291.7    9950.3    1291.7    9987.5    1289.9    9995.3
GR   1289.7   10000.0    1291.7   10014.8    1291.5   10081.5    1291.7   10169.0    1291.5   10247.2
GR   1288.9   10254.4    1289.2   10260.7    1291.3   10278.0    1291.1   10300.2    1289.1   10305.9
GR   1290.5   10323.0    1291.7   10379.2    1292.6   10478.0    1294.0   10571.3

ET                        7.4
X1     7.90        19    9965.5   10018.0     565.0     545.0     575.0
GR   1297.7    9619.2    1297.6    9679.2    1297.4    9784.6    1297.4    9884.0    1296.7    9935.3
GR   1294.9    9944.2    1297.0    9965.5    1296.2    9989.1    1294.9    9994.7    1294.3   10000.0
GR   1296.4   10018.0    1296.1   10054.9    1295.8   10091.2    1297.3   10161.6    1297.4   10251.7
GR   1296.1   10303.4    1295.1   10318.0    1296.7   10362.2    1298.5   10434.3

ET                        6.4
X1     8.00        22    9989.3   10025.1     535.0     540.0     540.0
GR   1302.5    9680.1    1301.9    9870.5    1300.9    9989.3    1298.9   10000.0    1300.5   10014.9
GR   1301.5   10025.1    1300.2   10035.6    1298.5   10041.1    1301.0   10053.3    1298.1   10061.7
GR   1300.8   10080.9    1300.4   10106.4    1299.1   10120.6    1301.1   10136.6    1301.6   10186.7
GR   1300.4   10212.0    1300.0   10229.7    1301.6   10256.1    1302.5   10341.0    1302.4   10425.2
GR   1302.4   10464.0    1302.9   10540.4

ET                        9.4
X1     8.13        16    9970.6   10023.4     620.0     540.0     670.0
GR   1307.5    9910.8    1305.4    9926.0    1307.3    9970.6    1305.7    9991.6    1304.7   10000.0
GR   1307.1   10023.4    1306.1   10069.4    1305.9   10104.8    1304.3   10116.0    1305.9   10142.7
GR   1305.1   10184.6    1304.7   10212.2    1303.2   10229.0    1305.2   10262.2    1307.2   10359.0
GR   1308.1   10455.4

ET                        8.4
X1     8.22        20    9924.8      10000     450.0     460.0     460.0
GR   1312.0    9847.7    1310.1    9901.7    1309.8    9924.8    1307.4    9938.6    1308.5    9954.5
GR   1309.5    9980.3    1308.1    9996.1    1309.0   10000.0    1311.2   10029.0    1311.5   10088.9
GR   1309.7   10119.9    1310.9   10154.2    1310.9   10273.9    1310.3   10330.1    1312.3   10395.3
GR   1308.7   10433.7    1311.4   10491.5    1309.9   10549.7    1309.6   10573.4    1312.4   10623.9
  ----------------------------------------------------------------------
  Section 8.31

  Flow added from area CB24
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ET                          9.4
X1     8.31        23    9981.5   10020.7     470.0     485.0     490.0
GR   1316.6    9455.6    1315.1    9500.9    1314.3    9534.0    1313.0    9539.6    1313.8    9554.4
GR   1313.3    9564.5    1313.7    9596.5    1313.4    9634.0    1314.3    9667.2    1314.6    9683.0
GR   1314.6    9755.4    1314.0    9804.5    1312.8    9819.9    1314.3    9862.5    1314.6    9922.3
GR   1314.2    9981.5    1313.3    9994.3    1312.5   10000.0    1314.6   10020.7    1315.2   10066.4
GR   1314.8   10164.1    1315.2   10260.9    1316.2   10310.9

QT        2    1246.0    1246.0
ET                          9.4
---------------------------------------------------------------------------
  Section 8.41

  Flow added from area E3F
---------------------------------------------------------------------------

X1     8.41        10    9972.9   10018.1     550.0     490.0     520.0
GR   1320.5    9877.2    1319.7    9951.4    1317.6    9972.9    1314.9    9995.8    1315.0   10000.0
GR   1317.2   10018.1    1317.8   10043.1    1318.6   10082.7    1318.8   10139.6    1320.0   10240.1

QT        2     894.0     894.0
ET                          6.4
NH        4       1.0    9844.7       .06    9922.9      .045   10022.1       .06   10075.3
X1     8.50        14    9922.9   10022.1     500.0     490.0     500.0
GR   1325.1    9668.9    1322.7    9696.6    1321.7    9717.0    1323.3    9732.8    1322.6    9756.9
GR   1321.6    9770.6    1324.7    9844.7    1324.2    9922.9    1322.4    9974.3    1321.6    9987.4
GR   1320.1    9996.2    1321.2   10000.0    1324.2   10022.1    1326.5   10075.3

NC      .06       .06      .045
ET                          2.4
X1     8.59        11    9982.7   10013.7     465.0     465.0     465.0
GR   1331.7    9810.3    1329.9    9884.2    1328.3    9917.2    1329.6    9962.5    1328.8    9982.7
GR   1326.4    9996.5    1325.9   10000.0    1328.4   10013.7    1328.3   10040.1    1329.5   10063.3
GR   1331.1   10098.4

X1     8.69         9    9985.3   10019.3     500.0     495.0     500.0
GR   1336.8    9895.8    1334.3    9934.4    1333.2    9968.0    1332.2    9985.3    1330.4    9996.8
GR   1330.9   10000.0    1333.1   10019.3    1336.0   10042.6    1338.0   10099.2

X1     8.78        11    9988.0   10031.7     495.0     490.0     495.0
GR   1340.6    9756.2    1339.5    9811.3    1337.6    9841.7    1339.1    9879.0    1339.1    9948.7
GR   1338.4    9988.0    1336.3   10000.0    1336.6   10012.4    1338.4   10031.7    1339.6   10054.4
GR   1342.1   10096.3

X1     8.89         9    9986.2   10009.4     555.0     590.0     590.0
GR   1347.2    9937.6    1345.6    9970.8    1342.6    9986.2    1340.7    9992.5    1340.0   10000.0
GR   1341.9   10009.4    1344.0   10036.9    1346.2   10078.0    1347.5   10118.0
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X1     8.99        10    9992.9   10024.6     491.0     491.0     491.0
GR   1355.4    9928.6    1355.1    9962.8    1350.8    9979.9    1348.3    9992.9    1346.6   10000.0
GR   1345.9   10008.9    1348.3   10024.6    1348.8   10048.9    1351.1   10071.2    1352.0   10118.0

X1     9.09         9    9980.9   10008.9     575.0     570.0     570.0
GR   1360.8    9901.8    1356.4    9947.4    1354.6    9980.9    1353.3    9988.2    1352.8    9994.8
GR   1353.1   10000.0    1354.3   10008.9    1358.2   10035.5    1360.0   10095.6
  ---------------------------------------------------------------------------
  Section 9.19

  Flow added from area E3C
  ---------------------------------------------------------------------------


X1     9.19         9    9973.8   10015.5     510.0     510.0     515.0
GR   1364.6    9838.8    1363.5    9886.5    1362.8    9946.5    1360.9    9973.8    1359.6    9989.3
GR   1359.2    9998.8    1359.5   10000.0    1364.3   10015.5    1365.3   10071.3

QT        2     871.0     871.0
X1     9.29         9    9994.7   10030.1     490.0     505.0     500.0
GR   1372.6    9880.9    1370.6    9950.6    1366.1    9994.7    1364.9   10000.0    1365.5   10016.1
GR   1369.3   10030.1    1367.8   10055.2    1368.6   10080.4    1369.6   10127.1

X1     9.39        13    9976.7   10021.8     550.0     523.0     555.0
GR   1377.6    9876.8    1375.1    9927.2    1373.4    9946.6    1373.4    9954.5    1375.1    9976.7
GR   1373.5    9989.7    1372.7    9999.3    1372.1   10000.0    1373.5   10008.3    1374.2   10021.8
GR   1376.8   10053.6    1373.6   10115.5    1377.0   10178.8

X1     9.48         9    9984.2   10021.6     485.0     485.0     485.0
GR   1383.5    9848.9    1382.9    9913.7    1381.5    9959.6    1380.7    9984.2    1379.0    9994.5
GR   1378.5   10000.0    1378.9   10012.5    1382.7   10021.6    1385.9   10042.3

X1     9.52        11    9959.8   10012.6     160.0     205.0     180.0
GR   1386.3    9836.9    1384.8    9860.6    1384.1    9878.7    1385.7    9917.7    1383.9    9959.8
GR   1383.0    9985.7    1381.4    9998.6    1381.7   10000.0    1384.2   10012.6    1385.0   10039.2
GR   1387.6   10097.0

X1     9.61         8    9954.4    9980.2     460.0     480.0     470.0
GR   1393.9    9940.4    1393.6    9954.4    1390.7    9964.6    1392.6    9980.2    1391.3    9995.6
GR   1391.5   10000.0    1394.2   10048.1    1396.5   10147.6
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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

*PROF 1

CCHV= .100 CEHV= .300

*SECNO .000

3280 CROSS SECTION .00 EXTENDED 1.27 FEET

.000	2.47	1062.77	.00	1062.92	1062.88	.11	.00	.00	1061.80
7209.0	1338.0	2382.9	3488.0	744.5	750.0	1367.2	.0	.0	1061.60
.00	1.80	3.18	2.55	.060	.040	.060	.000	1060.30	8903.60
.005006	0.	0.	0.	0	0	6	.00	2130.26	11033.86

*SECNO .080

3265 DIVIDED FLOW

.080	3.30	1065.40	.00	.00	1065.56	.17	2.66	.02	1067.20
7209.0	4726.4	1242.9	1239.7	1450.5	310.2	521.1	26.0	18.5	1065.50
.04	3.26	4.01	2.38	.060	.040	.060	.000	1062.10	8987.29
.007491	445.	430.	440.	3	0	0	.00	1533.44	10863.27

*SECNO .190

3265 DIVIDED FLOW

.190	4.29	1069.39	.00	.00	1069.77	.38	4.14	.06	1068.80
7209.0	112.0	3124.2	3972.8	51.2	492.3	1107.7	49.8	33.0	1068.70
.07	2.19	6.35	3.59	.060	.040	.060	.000	1065.10	9692.43
.008072	750.	570.	300.	4	0	0	.00	871.86	10936.95

*SECNO .290

3265 DIVIDED FLOW

.290	6.62	1073.62	.00	.00	1074.45	.83	4.55	.13	1073.30
7209.0	519.8	4250.0	2439.2	196.2	476.0	582.5	66.7	41.9	1071.70
.09	2.65	8.93	4.19	.060	.040	.060	.000	1067.00	9023.82
.009940	530.	515.	500.	2	0	0	.00	650.15	10469.96

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

*SECNO .380

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.47

.380	6.10	1077.40	.00	.00	1077.87	.47	3.39	.04	1073.90
7209.0	1225.7	3154.0	2829.3	504.5	416.6	881.4	85.2	51.2	1074.80
.12	2.43	7.57	3.21	.060	.040	.060	.000	1071.30	9433.18
.004597	560.	510.	520.	3	0	0	.00	858.44	10373.93

1490 NH CARD USED
*SECNO .480

3265 DIVIDED FLOW

.480	6.83	1079.93	.00	.00	1080.25	.32	2.37	.01	1077.80
7209.0	1753.6	3029.4	2426.0	562.4	497.4	857.6	106.6	61.3	1078.10
.15	3.12	6.09	2.83	.067	.045	.062	.000	1073.10	9465.70
.004896	480.	490.	520.	3	0	0	.00	898.32	10496.59

1490 NH CARD USED
*SECNO .570

.570	7.89	1081.99	.00	.00	1082.33	.33	2.07	.00	1080.30
7209.0	1126.5	4320.5	1762.0	403.0	755.0	1032.8	130.1	71.7	1079.50
.18	2.80	5.72	1.71	.076	.045	.080	.000	1074.10	9805.03
.003568	490.	501.	501.	2	0	0	.00	934.96	10740.00

*SECNO .670

3265 DIVIDED FLOW

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

.670	6.51	1084.31	.00	.00	1084.90	.58	2.50	.07	1081.10
7209.0	3175.4	3202.3	831.3	811.3	396.8	202.1	150.4	79.6	1081.50
.21	3.91	8.07	4.11	.070	.045	.060	.000	1077.80	9667.29
.007758	480.	498.	498.	2	0	0	.00	454.26	10123.53

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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  .760
     .760      6.59   1087.39       .00       .00   1087.82       .42      2.90       .02   1085.60
   7209.0    1478.2    4092.7    1638.1     479.8     656.1     428.6     167.5      85.3   1084.10
     .23      3.08      6.24      3.82      .060      .045      .060      .000   1080.80   9656.43
  .004490      501.      501.      501.         2         0         0       .00    539.54  10195.97


1490 NH CARD USED
*SECNO  .860
     .860      6.71   1089.81       .00       .00   1090.24       .44      2.42       .00   1086.60
   7209.0    1313.4    4160.4    1735.2     729.6     634.1     526.3     188.1      93.0   1086.80
     .26      1.80      6.56      3.30      .102      .045      .060      .000   1083.10   9567.63
  .004851      522.      522.      510.         3         0         0       .00    759.69  10327.32


1490 NH CARD USED
*SECNO  .950
     .950      7.70   1092.30       .00       .00   1092.74       .44      2.49       .00   1089.60
   6256.0     118.9    2432.5    3704.6      41.8     343.1     969.1     207.3     100.9   1090.00
     .29      2.85      7.09      3.82      .050      .045      .053      .000   1084.60   9954.85
  .005136      600.      489.      489.         1         0         0       .00    557.94  10512.79


*SECNO 1.040

3265 DIVIDED FLOW

    1.040      6.22   1094.62       .00       .00   1095.06       .44      2.32       .00   1090.40
   6256.0    2780.6    3005.9     469.5     677.4     461.2     270.6     221.8     106.9   1093.40
     .32      4.10      6.52      1.74      .060      .045      .060      .000   1088.40   9825.17
  .004898      474.      474.      440.         1         0         0       .00    603.37  10442.30


1490 NH CARD USED
*SECNO 1.130
    1.130      7.03   1097.03       .00       .00   1097.52       .49      2.45       .02   1093.40
   6256.0    3227.7    2829.4     198.9     835.5     389.1     114.2     237.2     113.2   1094.20
     .34      3.86      7.27      1.74      .065      .045      .060      .000   1090.00   9706.06
  .005158      484.      490.      500.         2         0         0       .00    512.29  10218.35


*SECNO 1.230
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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

3265 DIVIDED FLOW

1.230	5.82	1099.42	.00	.00	1099.79	.36	2.25	.01	1095.10
6256.0	649.4	2873.3	2733.4	241.8	470.2	781.2	253.3	119.0	1097.30
.37	2.69	6.11	3.50	.060	.045	.060	.000	1093.60	9757.72
.003974	470.	510.	515.	2	0	0	.00	497.89	10296.13

*SECNO 1.320

1.320	6.46	1101.76	.00	.00	1102.40	.64	2.53	.08	1100.10
6256.0	19.6	2967.5	3268.9	10.7	368.3	730.0	267.8	123.7	1097.20
.39	1.84	8.06	4.48	.060	.045	.060	.000	1095.30	9962.75
.007149	485.	485.	485.	2	0	0	.00	345.72	10308.47

1490 NH CARD USED

*SECNO 1.410

1.410	6.22	1104.62	.00	.00	1104.97	.35	2.54	.03	1101.00
6256.0	1714.6	2375.4	2166.0	531.5	363.9	674.0	281.5	128.4	1100.90
.42	3.23	6.53	3.21	.077	.045	.057	.000	1098.40	9795.23
.004655	445.	445.	445.	2	0	0	.00	576.71	10371.94

*SECNO 1.500

1.500	6.26	1106.96	.00	.00	1107.39	.44	2.40	.03	1102.90
6256.0	3460.2	2415.3	380.5	823.7	352.9	207.6	297.8	134.8	1103.90
.45	4.20	6.84	1.83	.060	.045	.060	.000	1100.70	9722.10
.005343	480.	483.	483.	2	0	0	.00	575.17	10297.27

*SECNO 1.590

1.590	5.50	1109.20	.00	.00	1109.58	.38	2.18	.01	1107.10
6256.0	1551.7	4428.6	275.7	636.7	780.0	155.8	314.6	141.9	1106.60
.48	2.44	5.68	1.77	.060	.045	.060	.000	1103.70	9498.34
.003714	494.	494.	494.	2	0	0	.00	690.21	10188.56

*SECNO 1.680

1.680	5.54	1111.44	.00	.00	1111.93	.49	2.32	.03	1108.30
6256.0	2957.6	2464.5	833.9	734.8	327.9	218.0	330.5	148.4	1106.80
.50	4.02	7.52	3.82	.060	.045	.060	.000	1105.90	9686.61
.006430	490.	480.	480.	2	0	0	.00	466.06	10152.66

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 1.780

1.780	5.98	1114.38	.00	.00	1114.95	.57	3.00	.02	1109.30
6256.0	2012.6	2934.5	1308.9	509.9	379.3	320.4	344.8	153.3	1110.80
.53	3.95	7.74	4.08	.060	.045	.060	.000	1108.40	9770.74
.005559	507.	500.	495.	2	0	0	.00	379.70	10150.43

*SECNO 1.870

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

1.870	7.64	1116.44	.00	.00	1116.81	.37	1.84	.02	1110.20
6256.0	3091.9	2817.1	347.1	859.2	455.1	137.5	360.0	157.4	1110.80
.56	3.60	6.19	2.52	.060	.045	.060	.000	1108.80	9766.56
.002668	495.	495.	495.	3	0	0	.00	345.80	10112.36

*SECNO 1.970

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

1.970	5.25	1118.35	.00	.00	1118.94	.59	2.06	.07	1113.40
6256.0	939.3	3126.1	2190.6	248.9	420.4	447.6	376.0	161.7	1113.50
.58	3.77	7.44	4.89	.060	.045	.060	.000	1113.10	9849.42
.005837	535.	540.	560.	2	0	0	.00	336.34	10185.76

*SECNO 2.070

3265 DIVIDED FLOW

2.070	6.71	1121.11	.00	.00	1121.86	.76	2.87	.05	1116.90
6256.0	706.6	3389.0	2160.4	218.8	391.0	485.7	388.3	165.5	1116.10
.60	3.23	8.67	4.45	.060	.045	.060	.000	1114.40	9864.69
.006039	484.	484.	484.	2	0	0	.00	364.04	10262.08

*SECNO 2.150

2.150	7.83	1123.73	.00	.00	1124.41	.68	2.54	.01	1120.30
6256.0	123.9	2476.4	3655.6	47.4	289.2	736.4	399.3	168.7	1119.20
.62	2.61	8.56	4.96	.060	.045	.060	.000	1115.90	9944.24
.005414	444.	444.	444.	1	0	0	.00	264.69	10208.93

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

*SECNO 2.240

2.240	8.06	1125.96	.00	.00	1126.45	.49	2.02	.02	1119.30
6256.0	2355.4	3246.8	653.8	708.8	456.7	200.7	413.0	172.3	1119.70
.65	3.32	7.11	3.26	.060	.045	.060	.000	1117.90	9717.86
.003257	489.	489.	489.	2	0	0	.00	372.62	10090.49

*SECNO 2.340

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.340	6.12	1127.92	.00	.00	1129.31	1.38	2.59	.27	1124.20
6256.0	943.9	5086.2	226.0	230.9	494.4	54.9	425.3	175.8	1123.70
.66	4.09	10.29	4.12	.060	.045	.060	.000	1121.80	9830.46
.009538	495.	500.	508.	2	0	0	.00	229.29	10059.75

*SECNO 2.430

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.76

2.430	8.12	1131.42	.00	.00	1131.77	.35	2.36	.10	1127.00
6256.0	2042.7	2414.7	1798.5	542.1	394.3	499.5	437.3	179.0	1128.50
.69	3.77	6.12	3.60	.060	.045	.060	.000	1123.30	9788.98
.003086	471.	471.	471.	2	0	0	.00	369.96	10158.94

*SECNO 2.520

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

2.520	5.96	1133.56	.00	.00	1134.29	.73	2.40	.11	1130.90
6256.0	1333.4	3019.1	1903.5	263.5	343.8	507.0	451.8	183.8	1130.80
.71	5.06	8.78	3.75	.060	.045	.060	.000	1127.60	9886.63
.008691	490.	495.	500.	2	0	0	.00	477.65	10364.28

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 2.620

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.66

2.620	7.95	1136.65	.00	.00	1136.91	.26	2.58	.05	1132.30
6256.0	3484.5	1835.5	936.0	986.6	333.8	357.1	468.6	190.0	1134.80
.75	3.53	5.50	2.62	.060	.045	.060	.000	1128.70	9645.26
.003158	525.	525.	525.	1	0	0	.00	542.46	10187.72

*SECNO 2.720

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.720	5.59	1138.79	.00	.00	1139.64	.85	2.55	.18	1135.20
6256.0	2046.6	3229.4	980.0	442.2	345.3	246.8	484.3	195.6	1135.10
.77	4.63	9.35	3.97	.060	.045	.060	.000	1133.20	9742.07
.009283	506.	506.	506.	3	0	0	.00	427.33	10179.35

1490 NH CARD USED
*SECNO 2.820

2.820	8.14	1142.84	.00	.00	1143.49	.65	3.83	.02	1137.50
6256.0	3120.2	2852.6	283.2	770.0	331.5	467.2	500.1	200.9	1138.10
.79	4.05	8.60	.61	.065	.045	.600	.000	1134.70	9679.50
.005793	515.	539.	540.	3	0	0	.00	442.24	10121.75

1490 NH CARD USED
*SECNO 2.920

2.920	6.59	1145.39	.00	.00	1145.83	.43	2.32	.02	1140.10
6256.0	247.7	4751.9	1256.3	107.1	797.3	774.3	520.8	206.8	1142.10
.82	2.31	5.96	1.62	.060	.045	.111	.000	1138.80	9836.91
.003203	510.	560.	585.	3	0	0	.00	495.83	10332.74

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

1490 NH CARD USED
*SECNO 3.040

3.040	6.56	1147.76	.00	.00	1147.92	.16	2.07	.03	1151.10
6256.0	.0	1167.4	5088.6	.0	250.6	1827.2	547.8	215.7	1144.80
.88	.00	4.66	2.78	.000	.045	.071	.000	1141.20	9980.02
.003420	610.	625.	625.	2	0	0	.00	752.88	10732.90

1490 NH CARD USED
*SECNO 3.140

3.140	6.29	1149.19	.00	.00	1149.60	.41	1.61	.08	1145.40
6256.0	1052.7	3245.0	1958.2	550.4	467.4	1081.9	566.4	223.7	1143.00
.90	1.91	6.94	1.81	.081	.045	.106	.000	1142.90	9570.41
.004556	510.	495.	340.	2	0	0	.00	1017.63	10588.04

*SECNO 3.230

3.230	5.78	1151.98	.00	.00	1152.50	.52	2.86	.03	1148.10
6256.0	2655.0	1538.8	2062.2	678.9	186.4	373.8	586.0	232.3	1147.50
.93	3.91	8.26	5.52	.060	.045	.060	.000	1146.20	9654.33
.007055	511.	511.	511.	2	0	0	.00	449.12	10103.44

*SECNO 3.320

3.320	5.76	1154.76	.00	.00	1155.21	.46	2.71	.01	1152.30
6256.0	193.7	3018.5	3043.7	107.9	427.7	933.0	600.6	237.8	1149.80
.96	1.80	7.06	3.26	.060	.045	.060	.000	1149.00	9846.72
.004769	460.	487.	465.	1	0	0	.00	588.61	10435.32

*SECNO 3.420

3.420	6.05	1156.95	.00	.00	1157.20	.25	1.96	.02	1154.00
6256.0	24.8	1806.8	4424.3	12.9	305.5	1515.8	617.7	244.5	1154.90
.99	1.92	5.91	2.92	.060	.045	.060	.000	1150.90	9953.19
.003854	488.	488.	440.	2	0	0	.00	691.08	10644.26

*SECNO 3.510

3.510	6.07	1158.87	.00	.00	1159.20	.33	1.98	.02	1156.10
6256.0	606.1	2100.7	3549.3	196.2	313.8	1152.0	637.3	252.0	1153.60
1.02	3.09	6.69	3.08	.060	.045	.060	.000	1152.80	9888.11
.004311	487.	487.	487.	2	0	0	.00	663.41	10551.52

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

*SECNO 3.590

3265 DIVIDED FLOW

3280 CROSS SECTION 3.59 EXTENDED 1.69 FEET

3301 HV CHANGED MORE THAN HVINS

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

3.590	6.29	1161.19	.00	.00	1162.10	.90	2.72	.17	1158.90
6208.0	2937.6	2880.2	390.3	561.7	294.6	114.1	650.6	257.1	1157.90
1.04	5.23	9.78	3.42	.060	.045	.060	.000	1154.90	9795.40
.009633	440.	440.	440.	3	0	0	.00	345.52	10141.11

*SECNO 3.700
3280 CROSS SECTION 3.70 EXTENDED .95 FEET

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

3.700	7.85	1165.05	.00	.00	1165.82	.77	3.71	.01	1159.10
6208.0	2521.0	3513.4	173.7	637.9	402.9	47.8	663.8	261.1	1158.30
1.06	3.95	8.72	3.63	.060	.045	.060	.000	1157.20	9773.70
.004873	558.	558.	558.	1	0	0	.00	279.86	10053.56

*SECNO 3.790
3280 CROSS SECTION 3.79 EXTENDED .13 FEET

3.790	7.73	1167.23	.00	.00	1167.83	.60	1.99	.02	1163.10
6208.0	411.6	3944.1	1852.3	174.1	532.5	565.9	676.2	264.7	1163.10
1.08	2.36	7.41	3.27	.060	.045	.060	.000	1159.50	9824.80
.003870	460.	460.	460.	2	0	0	.00	406.76	10231.56

1490 NH CARD USED
*SECNO 3.880

3.880	7.44	1169.44	.00	.00	1170.20	.76	2.32	.05	1166.20
6208.0	194.5	3342.5	2671.0	64.3	366.7	855.8	690.2	270.4	1165.10
1.10	3.03	9.12	3.12	.060	.045	.064	.000	1162.00	9931.33
.006347	475.	475.	475.	2	0	0	.00	624.79	10556.12

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 3.960

3265 DIVIDED FLOW

3.960	7.44	1172.54	.00	.00	1173.41	.87	3.18	.03	1170.10
6208.0	1407.3	2541.7	2259.0	382.8	254.4	390.8	701.9	275.5	1168.90
1.12	3.68	9.99	5.78	.063	.045	.060	.000	1165.10	9702.19
.008304	440.	440.	440.	2	0	0	.00	387.44	10145.73

1490 NH CARD USED
*SECNO 4.050

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

4.050	8.39	1175.69	.00	.00	1176.14	.45	2.69	.04	1172.00
6208.0	336.3	2587.7	3284.0	1070.8	364.1	834.9	721.3	281.9	1170.40
1.15	.31	7.11	3.93	.587	.045	.060	.000	1167.30	9537.00
.003633	520.	509.	509.	2	0	0	.00	699.22	10236.22

*SECNO 4.160

4.160	7.92	1177.82	.00	.00	1178.44	.62	2.24	.05	1172.20
6208.0	1766.1	2940.4	1501.5	498.1	354.3	382.9	742.6	288.4	1173.30
1.17	3.55	8.30	3.92	.060	.045	.060	.000	1169.90	9784.02
.004956	520.	530.	540.	3	0	0	.00	372.76	10156.78

*SECNO 4.250

4.250	8.03	1180.13	.00	.00	1180.61	.48	2.16	.01	1173.70
6208.0	2190.1	2094.5	1923.4	634.5	265.8	434.7	757.1	292.7	1174.10
1.20	3.45	7.88	4.42	.060	.045	.060	.000	1172.10	9724.97
.003910	485.	495.	500.	2	0	0	.00	397.07	10122.05

*SECNO 4.350

4.350	6.69	1182.39	.00	.00	1182.74	.35	2.11	.01	1178.60
6208.0	133.8	1872.0	4202.2	65.0	269.8	1226.4	774.6	298.4	1177.60
1.23	2.06	6.94	3.43	.060	.045	.060	.000	1175.70	9919.08
.004114	500.	520.	540.	2	0	0	.00	538.44	10457.52

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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 4.460
    4.460      6.36    1185.36        .00        .00    1185.81        .46       3.05        .03    1187.10
   6208.0        .0     1675.4     4532.6        .0      205.5     1148.2      792.3      305.2    1182.60
     1.26       .00       8.15       3.95       .000       .045       .060       .000    1179.00    9982.10
  .008295      625.       590.       515.          2          0          0        .00     597.95   10580.05


*SECNO 4.550

3265 DIVIDED FLOW

    4.550      7.59    1188.59        .00        .00    1189.23        .64       3.36        .06    1184.80
   6208.0      44.7     2122.7     4040.6       15.6      230.4      931.2      805.5      310.4    1182.40
     1.28      2.87       9.21       4.34       .060       .045       .060       .000    1181.00    9967.86
  .006502      495.       490.       445.          2          0          0        .00     400.71   10419.81


*SECNO 4.650
    4.650      7.41    1191.31        .00        .00    1191.71        .40       2.46        .02    1186.30
   6208.0    4863.4     1314.8       29.9     1166.5      173.9       12.9      819.0      314.2    1184.90
     1.31      4.17       7.56       2.32       .060       .045       .060       .000    1183.90    9694.67
  .004340      460.       495.       455.          3          0          0        .00     322.83   10017.51


1490 NH CARD USED
*SECNO 4.760

3265 DIVIDED FLOW

    4.760      6.95    1194.05        .00        .00    1194.37        .33       2.65        .01    1190.50
   6208.0    1074.6     1357.1     3776.3      611.8      202.8      902.9      839.1      320.0    1189.90
     1.35      1.76       6.69       4.18       .111       .045       .060       .000    1187.10    9689.63
  .004836      520.       605.       655.          2          0          0        .00     575.72   10274.44


*SECNO 4.860
    4.860      6.65    1196.35        .00        .00    1196.66        .31       2.29        .00    1192.90
   6208.0    1416.0     1629.0     3162.9      418.1      240.9      985.8      858.7      326.7    1190.40
     1.38      3.39       6.76       3.21       .060       .045       .060       .000    1189.70    9832.49
  .004112      475.       520.       525.          1          0          0        .00     573.02   10405.51
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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 4.960

4.960	6.32	1198.72	.00	.00	1199.29	.57	2.55	.08	1193.40
6208.0	545.6	2549.8	3112.6	176.4	315.9	734.7	875.6	332.6	1195.30
1.41	3.09	8.07	4.24	.060	.045	.060	.000	1192.40	9870.05
.006141	495.	515.	515.	2	0	0	.00	426.54	10296.59

*SECNO 5.050

5.050	6.76	1201.76	.00	.00	1202.26	.50	2.97	.01	1196.10
6208.0	625.5	2516.8	3065.7	144.2	322.1	904.1	891.0	338.3	1196.70
1.43	4.34	7.81	3.39	.060	.045	.060	.000	1195.00	9940.94
.005377	480.	515.	525.	2	0	0	.00	544.98	10485.92

*SECNO 5.160

5.160	6.77	1204.07	.00	.00	1204.26	.19	1.97	.03	1201.40
6208.0	4360.2	1356.0	491.8	1320.5	310.6	326.0	910.0	345.5	1202.50
1.48	3.30	4.37	1.51	.060	.045	.060	.000	1197.30	9581.03
.002909	520.	560.	440.	2	0	0	.00	765.71	10346.74

*SECNO 5.230

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .52

5.230	5.03	1205.73	.00	.00	1206.30	.57	1.93	.11	1204.00
6208.0	2717.9	2290.6	1199.5	475.9	314.4	315.2	923.4	350.6	1203.70
1.49	5.71	7.29	3.81	.060	.045	.060	.000	1200.70	9795.34
.010575	395.	390.	335.	2	0	0	.00	434.08	10229.41

1490 NH CARD USED
*SECNO 5.290

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.09

5.290	5.93	1207.63	.00	.00	1207.76	.12	1.41	.04	1204.70
6208.0	1986.3	1557.0	2664.7	730.6	363.3	1919.9	938.4	357.5	1204.90
1.53	2.72	4.29	1.39	.060	.045	.083	.000	1201.70	9673.84
.002413	340.	300.	310.	2	0	0	.00	1478.18	11201.97

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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 5.390
     5.390       5.70    1208.90        .00        .00    1209.09        .19       1.31        .02    1207.20
    6208.0     4037.2     1564.3      606.5     1191.1      372.3      370.6      961.8      369.2    1208.20
      1.56       3.39       4.20       1.64       .060       .045       .060       .000    1203.20    9504.16
   .004244       380.       500.       410.          3          0          0        .00    1001.02   10505.18


*SECNO 5.460

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .69

     5.460       5.53    1211.03        .00        .00    1211.36        .33       2.23        .04    1209.50
    6208.0     3022.0     1882.7     1303.3      961.0      264.1      526.5      977.7      379.2    1208.90
      1.59       3.14       7.13       2.48       .060       .045       .060       .000    1205.50    9339.63
   .008795       345.       420.       420.          3          0          0        .00    1248.22   10587.85


*SECNO 5.550

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

     5.550       4.90    1213.80        .00        .00    1213.95        .15       2.57        .02    1211.40
    6208.0     2878.1      748.2     2581.7      965.3      158.7      948.9      997.7      390.5    1212.70
      1.63       2.98       4.72       2.72       .060       .045       .060       .000    1208.90    9589.58
   .003904       450.       475.       455.          3          0          0        .00     924.33   10513.91


1490 NH CARD USED
*SECNO 5.640

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .60

     5.640       4.73    1216.33        .00        .00    1216.75        .42       2.72        .08    1214.20
    6208.0     1819.1     1663.4     2725.5      438.0      217.6      717.5     1015.4      399.4    1213.90
      1.65       4.15       7.64       3.80       .060       .045       .072       .000    1211.60    9747.58
   .010733       450.       450.       445.          2          0          0        .00     803.44   10551.02


*SECNO 5.730

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.48

     5.730       6.39    1219.69        .00        .00    1220.01        .32       3.25        .01    1216.50
    6208.0     3577.8     1855.2      775.0     1033.5      285.4      271.9     1031.1      406.9    1216.60
      1.68       3.46       6.50       2.85       .060       .045       .060       .000    1213.30    9562.82
   .004919       450.       475.       475.          2          0          0        .00     622.72   10185.54
```

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

*SECNO 5.820

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .52

5.820	5.06	1222.06	.00	.00	1222.40	.34	2.38	.01	1220.80
3728.0	924.7	1326.5	1476.8	269.5	202.4	496.0	1043.9	412.4	1219.60
1.71	3.43	6.55	2.98	.060	.045	.060	.000	1217.00	9842.35
.006464	410.	460.	460.	3	0	0	.00	477.45	10319.80

*SECNO 5.910

5.910	5.71	1224.81	.00	.00	1225.10	.28	2.69	.01	1222.20
3728.0	981.0	1364.7	1382.3	353.2	228.7	469.7	1055.0	417.8	1222.90
1.75	2.78	5.97	2.94	.060	.045	.060	.000	1219.10	9778.59
.004865	485.	500.	465.	0	0	0	.00	510.91	10289.50

1490 NH CARD USED
*SECNO 5.990

5.990	5.61	1227.51	.00	.00	1227.99	.49	2.84	.06	1225.60
3728.0	1200.0	1585.3	942.6	345.7	201.2	448.5	1065.0	423.5	1225.70
1.77	3.47	7.88	2.10	.060	.045	.096	.000	1221.90	9762.61
.009709	425.	425.	425.	2	0	0	.00	658.03	10420.64

1490 NH CARD USED
*SECNO 6.080

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

6.080	7.02	1230.52	.00	.00	1230.94	.42	2.94	.01	1227.40
3728.0	715.8	1835.8	1176.4	325.6	261.6	493.0	1075.7	431.0	1227.60
1.80	2.20	7.02	2.39	.060	.045	.068	.000	1223.50	9726.34
.004704	450.	450.	450.	2	0	0	.00	786.54	10512.88

*SECNO 6.170

6.170	6.71	1232.51	.00	.00	1232.91	.40	1.96	.00	1227.70
3728.0	405.9	1988.1	1334.1	115.1	311.8	484.9	1086.1	436.9	1229.40
1.82	3.53	6.38	2.75	.060	.045	.060	.000	1225.80	9912.17
.003901	460.	465.	450.	3	0	0	.00	340.70	10252.87

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 6.260

6.260	5.05	1234.75	.00	.00	1234.95	.20	2.02	.02	1231.60
3442.0	2114.2	851.4	476.4	697.1	165.4	237.0	1097.5	442.2	1233.40
1.86	3.03	5.15	2.01	.060	.045	.060	.000	1229.70	9674.72
.004291	490.	505.	490.	2	0	0	.00	596.29	10271.01

1490 NH CARD USED
*SECNO 6.360

3265 DIVIDED FLOW

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

6.360	6.57	1237.67	.00	.00	1238.19	.53	3.14	.10	1238.20
3442.0	929.5	1697.6	814.9	266.3	218.7	379.4	1109.2	449.5	1236.20
1.89	3.49	7.76	2.15	.060	.045	.087	.000	1231.10	9704.47
.009215	510.	525.	525.	2	0	0	.00	643.63	10362.28

*SECNO 6.450

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.54

6.450	6.43	1240.73	.00	.00	1240.92	.20	2.69	.03	1239.20
3442.0	1323.3	930.9	1187.8	612.2	172.4	405.9	1120.2	456.2	1237.90
1.93	2.16	5.40	2.93	.060	.045	.060	.000	1234.30	9601.16
.003906	445.	480.	485.	2	0	0	.00	609.88	10211.05

1490 NH CARD USED
*SECNO 6.560

3265 DIVIDED FLOW

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

6.560	5.25	1243.25	.00	.00	1243.58	.33	2.62	.04	1240.60
3140.0	1417.7	1111.9	610.3	426.2	165.5	630.2	1134.2	463.8	1241.10
1.96	3.33	6.72	.97	.060	.045	.190	.000	1238.00	9731.22
.007469	435.	550.	560.	2	0	0	.00	711.72	10463.69

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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 6.660
     6.660       6.05    1247.05        .00        .00    1247.25        .20       3.66        .01    1244.60
    3140.0      607.1      880.6     1652.3      242.8      141.8     1272.5     1151.9      474.8    1245.30
      2.02       2.50       6.21       1.30       .060       .045       .121       .000    1241.00    9770.62
   .006132       560.       545.       525.          5          0          0        .00    1075.83   10846.45

1490 NH CARD USED
*SECNO 6.750

3265 DIVIDED FLOW

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

     6.750       5.73    1250.93        .00        .00    1251.53        .60       4.16        .12    1248.20
    3140.0      762.1     1613.8      764.1      809.1      187.4      851.1     1171.7      488.6    1249.90
      2.04        .94       8.61        .90       .251       .045       .219       .000    1245.20    9386.63
   .012532       470.       485.       505.          3          0          0        .00    1375.61   10785.62

1490 NH CARD USED
*SECNO 6.840

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

     6.840       7.11    1254.61        .00        .00    1255.05        .44       3.50        .02    1252.30
    3140.0      775.5     2011.9      352.5      920.3      304.7      509.6     1191.4      505.9    1252.30
      2.07        .84       6.60        .69       .138       .045       .122       .000    1247.50    9127.68
   .004684       470.       490.       490.          4          0          0        .00    1749.16   10876.84

1490 NH CARD USED
*SECNO 6.940

3265 DIVIDED FLOW

     6.940       4.33    1257.43        .00        .00    1257.61        .18       2.54        .03    1256.20
    2751.0      145.5      669.7     1935.8      308.0      124.6      748.9     1206.8      519.2    1255.30
      2.12        .47       5.38       2.58       .314       .045       .060       .000    1253.10    9579.95
   .006063       435.       520.       460.          3          0          0        .00     827.38   10531.18
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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

1490 NH CARD USED
*SECNO 7.020

3265 DIVIDED FLOW

7.020	5.15	1260.45	.00	.00	1260.90	.46	3.21	.08	1257.90
2751.0	267.1	932.4	1551.6	485.2	120.3	388.1	1217.0	527.1	1259.10
2.14	.55	7.75	4.00	.302	.045	.060	.000	1255.30	9254.69
.010342	400.	410.	415.	3	0	0	.00	855.48	10259.71

*SECNO 7.110

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

7.110	5.12	1264.12	.00	.00	1264.28	.16	3.34	.03	1262.50
2751.0	1130.7	466.4	1153.9	520.2	84.5	435.2	1228.3	535.5	1261.50
2.19	2.17	5.52	2.65	.060	.045	.060	.000	1259.00	9611.98
.004856	475.	500.	490.	4	0	0	.00	673.46	10285.45

*SECNO 7.200

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

7.200	3.82	1267.52	.00	.00	1267.86	.34	3.53	.05	1266.60
2751.0	1413.4	749.3	588.4	416.7	119.8	121.3	1237.1	541.6	1266.90
2.21	3.39	6.26	4.85	.060	.045	.060	.000	1263.70	9618.33
.014226	450.	455.	465.	2	0	0	.00	486.02	10104.35

*SECNO 7.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.43

7.300	4.35	1272.25	.00	.00	1272.59	.34	4.73	.00	1270.00
2751.0	636.7	1279.6	834.7	186.3	216.7	263.4	1244.5	546.2	1270.50
2.24	3.42	5.91	3.17	.060	.045	.060	.000	1267.90	9873.06
.007003	480.	500.	485.	3	0	0	.00	346.79	10219.86

*SECNO 7.400

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

7.400	4.67	1275.67	.00	.00	1275.85	.17	3.24	.02	1275.50
2751.0	828.2	681.1	1241.7	282.1	152.0	451.6	1253.4	551.4	1275.80
2.29	2.94	4.48	2.75	.060	.045	.060	.000	1271.00	9768.37
.005881	505.	540.	475.	4	0	0	.00	562.84	10336.55

*SECNO 7.490

3265 DIVIDED FLOW

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

7.490	4.98	1279.38	.00	.00	1279.77	.38	3.86	.06	1277.90
2751.0	2135.4	615.6	.0	490.7	92.1	.0	1261.2	556.8	1280.50
2.31	4.35	6.69	.00	.060	.045	.000	.000	1274.40	9518.79
.012663	460.	470.	465.	3	0	0	.00	447.62	10023.53

*SECNO 7.570

7.570	5.10	1283.00	.00	.00	1283.31	.31	3.54	.01	1280.90
2751.0	1233.8	1294.4	222.7	526.8	214.5	118.5	1267.8	562.2	1280.70
2.34	2.34	6.03	1.88	.060	.045	.060	.000	1277.90	9508.11
.006470	380.	435.	445.	4	0	0	.00	742.96	10251.08

*SECNO 7.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.680	5.20	1287.60	1287.60	.00	1288.12	.52	4.28	.06	1286.40
2125.0	944.5	1165.4	15.1	359.0	155.8	10.4	1276.6	569.8	1286.70
2.37	2.63	7.48	1.44	.060	.045	.060	.000	1282.40	9587.69
.009873	550.	560.	570.	4	5	0	.00	459.24	10046.93

*SECNO 7.790

7.790	3.90	1292.80	.00	.00	1292.93	.13	4.77	.04	1291.70
2125.0	168.2	269.1	1687.8	97.5	61.1	634.4	1286.0	577.6	1291.70
2.43	1.72	4.40	2.66	.060	.045	.060	.000	1288.90	9856.46
.006172	610.	620.	625.	5	0	0	.00	635.68	10492.14

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 7.900

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

7.900	3.32	1297.62	.00	.00	1297.87	.25	4.90	.04	1297.00
2125.0	306.7	522.8	1295.5	116.3	92.6	379.1	1294.7	586.3	1296.40
2.47	2.64	5.64	3.42	.060	.045	.060	.000	1294.30	9665.94
.013810	565.	575.	545.	4	0	0	.00	733.19	10399.13

*SECNO 8.000

3265 DIVIDED FLOW

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

8.000	4.36	1302.46	.00	.00	1302.62	.16	4.74	.01	1300.90
2125.0	290.4	373.7	1460.8	173.9	83.2	485.9	1303.0	595.3	1301.50
2.52	1.67	4.49	3.01	.060	.045	.060	.000	1298.10	9694.74
.006085	535.	540.	540.	4	0	0	.00	734.27	10472.23

*SECNO 8.130

3265 DIVIDED FLOW

8.130	3.80	1307.00	.00	.00	1307.23	.23	4.59	.02	1307.30
2125.0	89.0	192.4	1843.6	39.2	51.8	468.4	1311.4	602.9	1307.10
2.56	2.27	3.71	3.94	.060	.045	.060	.000	1303.20	9914.44
.011409	620.	670.	540.	4	0	0	.00	417.88	10349.17

*SECNO 8.220

3265 DIVIDED FLOW

8.220	3.90	1311.30	.00	.00	1311.60	.30	4.35	.02	1309.80
2125.0	117.5	1133.2	874.3	52.0	200.6	408.0	1317.9	608.5	1309.00
2.59	2.26	5.65	2.14	.060	.045	.060	.000	1307.40	9867.42
.007976	450.	460.	460.	4	0	0	.00	646.06	10604.17

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 8.310

8.310	2.87	1315.37	.00	.00	1315.52	.15	3.90	.02	1314.20
2125.0	1686.3	326.4	112.4	601.4	72.4	93.8	1325.7	616.3	1314.60
2.64	2.80	4.51	1.20	.060	.045	.060	.000	1312.50	9492.79
.008266	470.	490.	485.	5	0	0	.00	776.54	10269.33

*SECNO 8.410

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

8.410	4.42	1319.32	.00	.00	1319.77	.45	4.16	.09	1317.60
1246.0	29.0	907.1	309.9	15.2	147.0	136.8	1332.2	622.4	1317.20
2.67	1.91	6.17	2.26	.060	.045	.060	.000	1314.90	9955.27
.007301	550.	520.	490.	2	0	0	.00	228.08	10183.35

1490 NH CARD USED
*SECNO 8.500

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .48

8.500	4.10	1324.20	.00	.00	1324.65	.45	4.88	.00	1324.20
894.0	55.2	838.8	.0	221.0	151.6	.0	1336.1	625.1	1324.20
2.69	.25	5.53	.00	1.000	.045	.000	.000	1320.10	9679.24
.016054	500.	500.	490.	4	0	0	.00	253.60	10022.20

*SECNO 8.590

8.590	4.02	1329.92	.00	.00	1330.30	.38	5.64	.01	1328.80
894.0	188.7	511.0	194.2	85.4	83.1	67.0	1339.3	627.5	1328.40
2.72	2.21	6.15	2.90	.060	.045	.060	.000	1325.90	9883.44
.009496	465.	465.	465.	5	0	0	.00	189.04	10072.48

*SECNO 8.690

8.690	4.22	1334.62	.00	.00	1335.19	.57	4.84	.06	1332.20
894.0	191.1	684.2	18.8	62.9	101.3	9.2	1341.7	629.1	1333.10
2.74	3.04	6.76	2.04	.060	.045	.060	.000	1330.40	9929.54
.009882	500.	500.	495.	4	0	0	.00	101.93	10031.47

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 8.780

8.780	3.25	1339.55	.00	.00	1339.89	.34	4.67	.02	1338.40
894.0	293.7	580.3	20.0	136.9	104.1	12.4	1344.1	631.1	1338.40
2.78	2.15	5.57	1.62	.060	.045	.060	.000	1336.30	9809.12
.009024	495.	495.	490.	3	0	0	.00	244.22	10053.33

*SECNO 8.890

8.890	4.73	1344.73	.00	.00	1345.49	.76	5.47	.13	1342.60
894.0	29.2	683.9	180.9	11.6	87.7	53.8	1346.8	633.2	1341.90
2.80	2.52	7.80	3.36	.060	.045	.060	.000	1340.00	9975.29
.009743	555.	590.	590.	3	0	0	.00	75.18	10050.47

*SECNO 8.990

8.990	4.11	1350.01	.00	.00	1350.77	.76	5.28	.00	1348.30
894.0	18.4	737.5	138.0	7.6	97.5	42.7	1348.5	634.1	1348.30
2.82	2.41	7.57	3.23	.060	.045	.060	.000	1345.90	9983.99
.011949	491.	491.	491.	4	0	0	.00	76.69	10060.67

*SECNO 9.090

9.090	3.92	1356.72	.00	.00	1357.49	.77	6.72	.00	1354.60
894.0	125.8	707.7	60.5	41.6	91.1	20.1	1350.4	635.1	1354.30
2.84	3.02	7.77	3.01	.060	.045	.060	.000	1352.80	9944.02
.011602	575.	570.	570.	4	0	0	.00	81.43	10025.45

*SECNO 9.190

9.190	3.90	1363.10	1362.90	.00	1363.87	.76	6.38	.00	1360.90
894.0	116.1	777.9	.0	38.0	104.8	.0	1352.2	636.1	1364.30
2.86	3.05	7.42	.00	.060	.045	.000	.000	1359.20	9920.70
.013283	510.	515.	510.	6	11	0	.00	90.93	10011.63

*SECNO 9.290

3265 DIVIDED FLOW

9.290	4.08	1368.98	.00	.00	1369.55	.56	5.66	.02	1366.10
871.0	127.2	679.3	64.5	40.8	101.8	35.1	1354.0	637.3	1369.30
2.89	3.12	6.67	1.84	.060	.045	.060	.000	1364.90	9966.42
.009774	490.	500.	505.	3	0	0	.00	125.61	10098.44

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 9.390

3265 DIVIDED FLOW

9.390	3.32	1375.42	.00	.00	1375.75	.32	6.18	.02	1375.10
871.0	226.6	458.0	186.4	65.8	82.0	72.2	1356.5	639.3	1374.20
2.92	3.44	5.58	2.58	.060	.045	.060	.000	1372.10	9920.69
.013066	550.	555.	523.	4	0	0	.00	185.28	10149.44

*SECNO 9.480

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.480	3.63	1382.13	1382.13	.00	1383.04	.90	7.01	.17	1380.70
871.0	90.8	780.2	.0	31.9	97.5	.0	1358.5	640.7	1382.70
2.94	2.84	8.00	.00	.060	.045	.000	.000	1378.50	9938.90
.016052	485.	485.	485.	3	8	0	.00	81.34	10020.24

*SECNO 9.520

3265 DIVIDED FLOW

9.520	3.75	1385.15	1385.12	.00	1385.72	.57	2.66	.03	1383.90
871.0	94.9	747.1	29.0	45.5	115.0	15.0	1359.1	641.2	1384.20
2.95	2.08	6.50	1.94	.060	.045	.060	.000	1381.40	9855.03
.013857	160.	180.	205.	4	5	0	.00	161.40	10042.59

*SECNO 9.610

9.610	3.10	1393.80	1393.74	.00	1394.53	.73	8.76	.05	1393.60
871.0	.8	415.2	455.0	1.0	50.4	86.3	1360.8	642.6	1392.60
2.97	.87	8.23	5.27	.060	.045	.060	.000	1390.70	9944.95
.026101	460.	470.	480.	6	16	0	.00	96.08	10041.02

T1 FCD 90-64 AEG 5115.01
T2 White Tanks Wash Flood Insurance Study
T3 Main Channel - Final with Floodway

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	0	0	0	7209.0	1063.7	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2	0	-1	0	0	0	0	0	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


*PROF 2



CCHV=     .100 CEHV=     .300
*SECNO  .000
 2800 NAT Q1=    1018.88  WSELK=    1062.77  ENC Q1=    1018.88  WSEL=    1063.47  RATIO=    .0000
 NAT Q1=    2002.  RATIOS LOB, CH, ROB=    .2235   .3405   .4361  WSEL=    1063.47
3280 CROSS SECTION       .00 EXTENDED      2.20 FEET


3470 ENCROACHMENT STATIONS=     9632.5   10565.3  TYPE=      4  TARGET=         .491
      .000      3.40   1063.70       .00   1062.77   1063.89       .19       .00       .00   1061.80
    7209.0        .0    4842.3    2366.7        .0    1274.8     892.1        .0        .0   1061.60
      .00       .00      3.80      2.65      .000      .040      .060      .000   1060.30   9632.50
   .003543        0.        0.        0.         0         0         0       .00    932.83  10565.33


*SECNO  .080
 2800 NAT Q1=     832.92  WSELK=    1065.40  ENC Q1=     832.92  WSEL=    1066.10  RATIO=    .0000
 NAT Q1=    1542.  RATIOS LOB, CH, ROB=    .6114   .1798   .2088  WSEL=    1066.10

3265 DIVIDED FLOW


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


3470 ENCROACHMENT STATIONS=     9332.1   10185.3  TYPE=      4  TARGET=         .460
      .080      3.86   1065.96       .00   1065.40   1066.29       .33      2.36       .04   1067.20
    7209.0    4839.4    2369.6        .0    1143.9     445.5        .0      18.8       8.5   1065.50
      .03      4.23      5.32       .00      .060      .040      .000      .000   1062.10   9332.06
   .009232      445.      430.      440.         2         0         0       .00    763.15  10185.30


*SECNO  .190
 2800 NAT Q1=     802.38  WSELK=    1069.39  ENC Q1=     802.38  WSEL=    1070.09  RATIO=    .0000
 NAT Q1=    1282.  RATIOS LOB, CH, ROB=    .0347   .4011   .5641  WSEL=    1070.09

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9976.2   10623.6  TYPE=      4  TARGET=         .374
      .190      5.18   1070.28       .00   1069.39   1070.83       .55      4.48       .07   1068.80
    7209.0        .0    4560.4    2648.6        .0     660.3     702.2      38.3      16.8   1068.70
      .05       .00      6.91      3.77      .000      .040      .060      .000   1065.10   9976.20
   .006531      750.      570.      300.         4         0         0       .00    466.45  10623.63
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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  .290
 2800 NAT Q1=     723.07  WSELK=    1073.62  ENC Q1=     723.07  WSEL=    1074.32  RATIO=    .0000
 NAT Q1=    1078.  RATIOS LOB, CH, ROB=    .1123   .5229   .3649  WSEL=    1074.32

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9972.1   10169.4  TYPE=      4  TARGET=         .329
      .290      7.07   1074.07       .00   1073.62   1075.57      1.50      4.45       .29   1073.30
    7209.0        .0    5627.6    1581.4        .0     530.9     248.1      50.8      20.6   1071.70
       .07       .00     10.60      6.37      .000      .040      .060      .000   1067.00   9972.10
   .012208      530.      515.      500.         2         0         0       .00    197.27  10169.37


*SECNO  .380
 2800 NAT Q1=    1063.23  WSELK=    1077.40  ENC Q1=    1063.23  WSEL=    1078.10  RATIO=    .0000
 NAT Q1=    1536.  RATIOS LOB, CH, ROB=    .2257   .3729   .4014  WSEL=    1078.10

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.77


3470 ENCROACHMENT STATIONS=     9912.5   10240.4  TYPE=      4  TARGET=         .308
      .380      7.04   1078.34       .00   1077.40   1078.93       .59      3.27       .09   1073.90
    7209.0     752.5    3811.6    2644.8     192.0     491.0     735.1      63.9      23.7   1074.80
       .09      3.92      7.76      3.60      .060      .040      .060      .000   1071.30   9912.46
   .003882      560.      510.      520.         2         0         0       .00    327.98  10240.44


1490 NH CARD USED
*SECNO  .480
 2800 NAT Q1=    1030.28  WSELK=    1079.93  ENC Q1=    1030.28  WSEL=    1080.23  RATIO=    .0000
 NAT Q1=    1198.  RATIOS LOB, CH, ROB=    .2397   .4042   .3561  WSEL=    1080.23

3470 ENCROACHMENT STATIONS=     9857.6   10347.2  TYPE=      4  TARGET=         .140
      .480      7.43   1080.53       .00   1079.93   1080.86       .34      1.91       .03   1077.80
    7209.0    1401.2    3295.7    2512.1     360.9     566.0     811.7      82.1      28.5   1078.10
       .12      3.88      5.82      3.09      .060      .045      .060      .000   1073.10   9857.58
   .003769      480.      490.      520.         2         0         0       .00    489.58  10347.17
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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  .570
 2800 NAT Q1=    1206.95  WSELK=    1081.99  ENC Q1=    1206.95  WSEL=    1082.79  RATIO=    .0000
 NAT Q1=    1665.  RATIOS LOB, CH, ROB=    .1549   .5580   .2871  WSEL=    1082.79

3470 ENCROACHMENT STATIONS=     9912.3   10214.3  TYPE=      4  TARGET=        .275
      .570      8.31   1082.41       .00   1081.99   1083.03       .62      2.09       .08   1080.30
    7209.0     159.4    5651.8    1397.8      55.3     819.6     397.9      99.4      33.0   1079.50
      .15      2.88      6.90      3.51      .060      .045      .060      .000   1074.10   9912.30
   .004644      490.      501.      501.         2         0         0       .00    301.95  10214.25


*SECNO  .670
 2800 NAT Q1=     818.45  WSELK=    1084.31  ENC Q1=     818.45  WSEL=    1084.41  RATIO=    .0000
 NAT Q1=     858.  RATIOS LOB, CH, ROB=    .4437   .4392   .1171  WSEL=    1084.41

3470 ENCROACHMENT STATIONS=     9689.0   10099.5  TYPE=      4  TARGET=        .046
      .670      7.16   1084.96       .00   1084.31   1085.40       .44      2.35       .02   1081.10
    7209.0    3299.6    3155.4     753.9     943.3     451.6     198.0     115.6      37.1   1081.50
      .17      3.50      6.99      3.81      .070      .045      .060      .000   1077.80   9689.00
   .004892      480.      498.      498.         2         0         0       .00    410.47  10099.47


*SECNO  .760
 2800 NAT Q1=    1075.80  WSELK=    1087.39  ENC Q1=    1075.80  WSEL=    1088.39  RATIO=    .0000
 NAT Q1=    1627.  RATIOS LOB, CH, ROB=    .2536   .5149   .2315  WSEL=    1088.39

3470 ENCROACHMENT STATIONS=     9840.4   10088.2  TYPE=      4  TARGET=        .339
      .760      6.83   1087.63       .00   1087.39   1088.57       .93      3.01       .15   1085.60
    7209.0     774.7    5765.8     668.6     197.0     688.8     133.5     130.6      40.8   1084.10
      .19      3.93      8.37      5.01      .060      .045      .060      .000   1080.80   9840.43
   .007578      501.      501.      501.         2         0         0       .00    247.73  10088.16


1490 NH CARD USED
*SECNO  .860
 2800 NAT Q1=    1035.03  WSELK=    1089.81  ENC Q1=    1035.03  WSEL=    1090.41  RATIO=    .0000
 NAT Q1=    1358.  RATIOS LOB, CH, ROB=    .1994   .5340   .2666  WSEL=    1090.41
3280 CROSS SECTION       .86 EXTENDED       .68 FEET


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


3470 ENCROACHMENT STATIONS=     9867.7   10139.3  TYPE=      4  TARGET=         .238
      .860      7.68   1090.78       .00   1089.81   1091.31       .53      2.71       .04   1086.60
    7209.0     794.4    4985.2    1429.4     220.7     761.1     362.8     144.7      43.9   1086.80
      .22      3.60      6.55      3.94      .060      .045      .060      .000   1083.10   9867.75
   .003791      522.      522.      510.         2         0         0       .00    271.57  10139.32


1490 NH CARD USED
*SECNO  .950
 2800 NAT Q1=     872.96  WSELK=    1092.30  ENC Q1=     872.96  WSEL=    1092.90  RATIO=    .0000
 NAT Q1=    1160.  RATIOS LOB, CH, ROB=    .0251   .3494   .6255  WSEL=    1092.90

3470 ENCROACHMENT STATIONS=     9984.6   10192.2  TYPE=      4  TARGET=         .247
      .950      8.27   1092.87       .00   1092.30   1093.55       .67      2.19       .04   1089.60
    6256.0        .0    2856.9    3399.1        .0     380.1     596.6     158.0      46.7   1090.00
      .24       .00      7.52      5.70      .000      .045      .050      .000   1084.60   9984.60
   .005371      600.      489.      489.         2         0         0       .00    207.62  10192.22


*SECNO 1.040
 2800 NAT Q1=     893.90  WSELK=    1094.62  ENC Q1=     893.90  WSEL=    1095.22  RATIO=    .0000
 NAT Q1=    1192.  RATIOS LOB, CH, ROB=    .4313   .4395   .1293  WSEL=    1095.22

3470 ENCROACHMENT STATIONS=     9891.6   10127.4  TYPE=      4  TARGET=         .250
     1.040      6.91   1095.31       .00   1094.62   1095.87       .57      2.32       .01   1090.40
    6256.0    2562.6    3655.8      37.6     567.8     527.0      17.3     169.1      49.0   1093.40
      .26      4.51      6.94      2.17      .060      .045      .060      .000   1088.40   9891.56
   .004642      474.      474.      440.         2         0         0       .00    235.79  10127.35


1490 NH CARD USED
*SECNO 1.130
 2800 NAT Q1=     871.06  WSELK=    1097.03  ENC Q1=     871.06  WSEL=    1097.63  RATIO=    .0000
 NAT Q1=    1115.  RATIOS LOB, CH, ROB=    .5160   .4207   .0633  WSEL=    1097.63

3470 ENCROACHMENT STATIONS=     9849.9   10044.4  TYPE=      4  TARGET=         .219
     1.130      7.65   1097.65       .00   1097.03   1098.32       .67      2.41       .03   1093.40
    6256.0    2933.5    3322.5        .0     583.8     433.2        .0     181.0      51.5   1094.20
      .28      5.02      7.67       .00      .060      .045      .000      .000   1090.00   9849.90
   .005291      484.      490.      500.         2         0         0       .00    194.50  10044.40
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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 1.230
 2800 NAT Q1=     992.41  WSELK=    1099.42  ENC Q1=     992.41  WSEL=    1100.02  RATIO=    .0000
 NAT Q1=    1283.  RATIOS LOB, CH, ROB=    .1256   .4284   .4460  WSEL=    1100.02

3470 ENCROACHMENT STATIONS=     9940.8   10231.5  TYPE=      4  TARGET=         .227
     1.230      6.51   1100.11       .00   1099.42   1100.57       .46      2.23       .02   1095.10
    6256.0      77.2    3463.4    2715.4      26.7     533.8     734.2     194.3      54.2   1097.30
       .31      2.89      6.49      3.70      .060      .045      .060      .000   1093.60   9940.82
   .003784      470.      510.      515.         2         0         0       .00    290.65  10231.48


*SECNO 1.320
 2800 NAT Q1=     739.89  WSELK=    1101.76  ENC Q1=     739.89  WSEL=    1102.56  RATIO=    .0000
 NAT Q1=    1030.  RATIOS LOB, CH, ROB=    .0065   .4368   .5567  WSEL=    1102.56

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9975.6   10151.6  TYPE=      4  TARGET=         .281
     1.320      7.05   1102.35       .00   1101.76   1103.36      1.01      2.62       .16   1100.10
    6256.0        .0    3796.6    2459.4        .0     412.1     424.3     206.2      56.8   1097.20
       .33       .00      9.21      5.80      .000      .045      .060      .000   1095.30   9975.60
   .008369      485.      485.      485.         2         0         0       .00    175.96  10151.56


1490 NH CARD USED
*SECNO 1.410
 2800 NAT Q1=     916.92  WSELK=    1104.62  ENC Q1=     916.92  WSEL=    1105.42  RATIO=    .0000
 NAT Q1=    1305.  RATIOS LOB, CH, ROB=    .2624   .3423   .3953  WSEL=    1105.42
3280 CROSS SECTION      1.41 EXTENDED       .06 FEET


3470 ENCROACHMENT STATIONS=     9915.3   10135.7  TYPE=      4  TARGET=         .297
     1.410      7.07   1105.47       .00   1104.62   1106.07       .60      2.67       .04   1101.00
    6256.0    1011.5    3044.4    2200.1     184.9     425.9     430.8     215.8      58.9   1100.90
       .35      5.47      7.15      5.11      .050      .045      .050      .000   1098.40   9915.26
   .004523      445.      445.      445.         2         0         0       .00    220.43  10135.69
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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 1.500
 2800 NAT Q1=     855.86  WSELK=    1106.96  ENC Q1=     855.86  WSEL=    1107.76  RATIO=    .0000
 NAT Q1=    1245.  RATIOS LOB, CH, ROB=    .5363   .3438   .1198  WSEL=    1107.76

3470 ENCROACHMENT STATIONS=     9812.3   10035.7  TYPE=      4  TARGET=         .312
     1.500      7.13   1107.83       .00   1106.96   1108.42       .59      2.35       .00   1102.90
    6256.0    3191.5    3064.5        .0     663.0     416.9        .0     227.5      61.3   1103.90
       .37      4.81      7.35       .00      .060      .045      .000      .000   1100.70   9812.29
   .005287      480.      483.      483.         2         0         0       .00    223.41  10035.70


*SECNO 1.590
 2800 NAT Q1=    1026.60  WSELK=    1109.20  ENC Q1=    1026.60  WSEL=    1110.00  RATIO=    .0000
 NAT Q1=    1511.  RATIOS LOB, CH, ROB=    .3004   .6234   .0762  WSEL=    1110.00

3470 ENCROACHMENT STATIONS=     9779.1   10037.2  TYPE=      4  TARGET=         .320
     1.590      6.34   1110.04       .00   1109.20   1110.60       .56      2.17       .00   1107.10
    6256.0     528.3    5727.7        .0     208.3     917.6        .0     240.0      64.0   1106.60
       .39      2.54      6.24       .00      .060      .045      .000      .000   1103.70   9779.13
   .003717      494.      494.      494.         3         0         0       .00    258.07  10037.20


*SECNO 1.680
 2800 NAT Q1=     780.19  WSELK=    1111.44  ENC Q1=     780.19  WSEL=    1112.24  RATIO=    .0000
 NAT Q1=    1127.  RATIOS LOB, CH, ROB=    .4994   .3527   .1479  WSEL=    1112.24

3470 ENCROACHMENT STATIONS=     9831.3   10046.1  TYPE=      4  TARGET=         .307
     1.680      6.38   1112.28       .00   1111.44   1112.98       .71      2.34       .04   1108.30
    6256.0    3158.2    3097.8        .0     613.1     385.3        .0     251.8      66.7   1106.80
       .41      5.15      8.04       .00      .060      .045      .000      .000   1105.90   9831.26
   .006579      490.      480.      480.         2         0         0       .00    214.84  10046.10


*SECNO 1.780
 2800 NAT Q1=     839.09  WSELK=    1114.38  ENC Q1=     839.09  WSEL=    1115.18  RATIO=    .0000
 NAT Q1=    1150.  RATIOS LOB, CH, ROB=    .3495   .4276   .2229  WSEL=    1115.18

3470 ENCROACHMENT STATIONS=     9900.8   10071.7  TYPE=      4  TARGET=         .270
     1.780      6.81   1115.21       .00   1114.38   1116.02       .81      3.00       .03   1109.30
    6256.0    1875.6    3649.1     731.3     351.3     434.8     150.8     263.0      68.9   1110.80
       .43      5.34      8.39      4.85      .060      .045      .060      .000   1108.40   9900.85
   .005453      507.      500.      495.         2         0         0       .00    170.90  10071.75
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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 1.870
 2800 NAT Q1=    1211.17  WSELK=    1116.44  ENC Q1=    1211.17  WSEL=    1116.84  RATIO=    .0000
 NAT Q1=    1371.  RATIOS LOB, CH, ROB=    .5013   .4365   .0621  WSEL=    1116.84

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.59


3470 ENCROACHMENT STATIONS=     9835.9   10041.9  TYPE=      4  TARGET=        .117
     1.870      8.48   1117.28       .00   1116.44   1117.67       .39      1.61       .04   1110.20
    6256.0    3181.4    3063.3      11.3     838.1     509.9       8.9     276.0      71.1   1110.80
       .46      3.80      6.01      1.27      .060      .045      .060      .000   1108.80   9835.93
   .002158      495.      495.      495.         2         0         0       .00    205.97  10041.90


*SECNO 1.970
 2800 NAT Q1=     818.83  WSELK=    1118.35  ENC Q1=     818.83  WSEL=    1119.25  RATIO=    .0000
 NAT Q1=    1145.  RATIOS LOB, CH, ROB=    .1767   .4696   .3536  WSEL=    1119.25
3280 CROSS SECTION      1.97 EXTENDED       .33 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9956.2   10106.7  TYPE=      4  TARGET=        .285
     1.970      5.73   1118.83       .00   1118.35   1119.85      1.02      1.99       .19   1113.40
    6256.0     291.2    4130.5    1834.3      57.8     460.0     294.7     289.5      73.3   1113.50
       .48      5.04      8.98      6.22      .060      .045      .060      .000   1113.10   9956.18
   .007550      535.      540.      560.         2         0         0       .00    150.52  10106.70


*SECNO 2.070
 2800 NAT Q1=     805.02  WSELK=    1121.11  ENC Q1=     805.02  WSEL=    1121.61  RATIO=    .0000
 NAT Q1=     979.  RATIOS LOB, CH, ROB=    .1321   .5064   .3615  WSEL=    1121.61

3470 ENCROACHMENT STATIONS=     9952.6   10127.0  TYPE=      4  TARGET=        .178
     2.070      7.56   1121.96       .00   1121.11   1122.79       .83      2.93       .02   1116.90
    6256.0     345.2    3798.6    2112.2      87.7     444.4     425.4     299.3      75.1   1116.10
       .50      3.94      8.55      4.96      .060      .045      .060      .000   1114.40   9952.62
   .004952      484.      484.      484.         2         0         0       .00    174.34  10126.96
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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 2.150
 2800 NAT Q1=     850.22  WSELK=    1123.73  ENC Q1=     850.22  WSEL=    1124.13  RATIO=    .0000
 NAT Q1=     966.  RATIOS LOB, CH, ROB=    .0254   .3817   .5928  WSEL=    1124.13

3470 ENCROACHMENT STATIONS=     9982.1   10143.4  TYPE=      4  TARGET=         .120
     2.150      8.43   1124.33       .00   1123.73   1125.04       .71      2.24       .01   1120.30
    6256.0        .0    2597.7    3658.3        .0     313.4     669.1     309.2      76.8   1119.20
       .52       .00      8.29      5.47      .000      .045      .060      .000   1115.90   9982.10
   .005122      444.      444.      444.         2         0         0       .00    161.34  10143.44


*SECNO 2.240
 2800 NAT Q1=    1096.21  WSELK=    1125.96  ENC Q1=    1096.21  WSEL=    1126.86  RATIO=    .0000
 NAT Q1=    1474.  RATIOS LOB, CH, ROB=    .4146   .4685   .1169  WSEL=    1126.86

3470 ENCROACHMENT STATIONS=     9839.0   10015.4  TYPE=      4  TARGET=         .256
     2.240      8.67   1126.57       .00   1125.96   1127.29       .72      2.25       .00   1119.30
    6256.0    2354.8    3901.2        .0     529.0     494.7        .0     320.5      78.7   1119.70
       .54      4.45      7.89       .00      .060      .045      .000      .000   1117.90   9839.01
   .004141      489.      489.      489.         2         0         0       .00    176.39  10015.40


*SECNO 2.340
 2800 NAT Q1=     640.58  WSELK=    1127.92  ENC Q1=     640.58  WSEL=    1128.62  RATIO=    .0000
 NAT Q1=     823.  RATIOS LOB, CH, ROB=    .1888   .7664   .0448  WSEL=    1128.62

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9941.8   10032.7  TYPE=      4  TARGET=         .222
     2.340      7.00   1128.80       .00   1127.92   1130.60      1.80      2.99       .32   1124.20
    6256.0      82.5    6173.5        .0      19.9     570.2        .0     329.7      80.2   1123.70
       .55      4.14     10.83       .00      .060      .045      .000      .000   1121.80   9941.75
   .009427      495.      500.      508.         2         0         0       .00     90.95  10032.70


*SECNO 2.430
 2800 NAT Q1=    1126.14  WSELK=    1131.42  ENC Q1=    1126.14  WSEL=    1131.92  RATIO=    .0000
 NAT Q1=    1330.  RATIOS LOB, CH, ROB=    .3336   .3725   .2940  WSEL=    1131.92
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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 =  2.01


3470 ENCROACHMENT STATIONS=     9890.8   10124.1  TYPE=      4  TARGET=         .153
     2.430      9.04   1132.34       .00   1131.42   1132.70       .36      1.96       .14   1127.00
    6256.0    1930.0    2647.0    1679.0     461.0     453.6     491.3     340.5      82.0   1128.50
       .58      4.19      5.84      3.42      .060      .045      .060      .000   1123.30   9890.80
   .002324      471.      471.      471.         3         0         0       .00    233.34  10124.14


*SECNO 2.520
 2800 NAT Q1=     671.08  WSELK=    1133.56  ENC Q1=     671.08  WSEL=    1134.26  RATIO=    .0000
 NAT Q1=     946.  RATIOS LOB, CH, ROB=    .2101    .4274    .3625  WSEL=    1134.26

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .45


3470 ENCROACHMENT STATIONS=     9932.1   10159.4  TYPE=      4  TARGET=         .291
     2.520      6.31   1133.91       .00   1133.56   1135.15      1.24      2.19       .27   1130.90
    6256.0     534.1    3885.1    1836.8     112.4     368.7     332.0     353.1      84.6   1130.80
       .59      4.75     10.54      5.53      .060      .045      .060      .000   1127.60   9932.15
   .011404      490.      495.      500.         2         0         0       .00    227.21  10159.36


*SECNO 2.620
 2800 NAT Q1=    1113.26  WSELK=    1136.65  ENC Q1=    1113.26  WSEL=    1137.25  RATIO=    .0000
 NAT Q1=    1420.  RATIOS LOB, CH, ROB=    .5561    .2756    .1683  WSEL=    1137.25

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.05


3470 ENCROACHMENT STATIONS=     9801.5   10086.9  TYPE=      4  TARGET=         .216
     2.620      8.80   1137.50       .00   1136.65   1137.82       .33      2.58       .09   1132.30
    6256.0    3562.3    2184.7     509.1     879.3     387.4     192.9     366.8      87.7   1134.80
       .63      4.05      5.64      2.64      .060      .045      .060      .000   1128.70   9801.47
   .002724      525.      525.      525.         1         0         0       .00    285.40  10086.87
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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 2.720
 2800 NAT Q1=     649.32  WSELK=    1138.79  ENC Q1=     649.32  WSEL=    1139.39  RATIO=    .0000
 NAT Q1=     864.  RATIOS LOB, CH, ROB=    .3520   .4675   .1804  WSEL=    1139.39

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .51


3470 ENCROACHMENT STATIONS=     9900.2   10072.2  TYPE=      4  TARGET=         .248
     2.720      6.04   1139.24       .00   1138.79   1140.52      1.28      2.41       .28   1135.20
    6256.0    1875.0    3927.1     453.9     300.3     376.0      87.2     379.7      90.3   1135.10
       .64      6.24     10.44      5.20      .060      .045      .060      .000   1133.20   9900.24
   .010326      506.      506.      506.         2         0         0       .00    171.99  10072.23


1490 NH CARD USED
*SECNO 2.820
 2800 NAT Q1=     821.93  WSELK=    1142.84  ENC Q1=     821.93  WSEL=    1143.34  RATIO=    .0000
 NAT Q1=     970.  RATIOS LOB, CH, ROB=    .5178   .4382   .0441  WSEL=    1143.34

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9871.0   10030.2  TYPE=      4  TARGET=         .153
     2.820      8.92   1143.62       .00   1142.84   1144.38       .77      3.82       .05   1137.50
    6256.0    3155.9    3100.1        .0     577.0     372.1        .0     390.1      92.3   1138.10
       .66      5.47      8.33       .00      .060      .045      .000      .000   1134.70   9870.99
   .005319      515.      539.      540.         2         0         0       .00    159.21  10030.20


1490 NH CARD USED
*SECNO 2.920
 2800 NAT Q1=    1105.32  WSELK=    1145.39  ENC Q1=    1105.32  WSEL=    1146.29  RATIO=    .0000
 NAT Q1=    1508.  RATIOS LOB, CH, ROB=    .0581   .7108   .2311  WSEL=    1146.29

3470 ENCROACHMENT STATIONS=     9922.6   10077.1  TYPE=      4  TARGET=         .267
     2.920      7.32   1146.12       .00   1145.39   1146.81       .69      2.42       .01   1140.10
    6256.0        .0    6066.6     189.4        .0     897.8      58.5     402.0      94.3   1142.10
       .69       .00      6.76      3.24      .000      .045      .060      .000   1138.80   9922.60
   .003717      510.      560.      585.         3         0         0       .00    154.54  10077.14
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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 3.040
 2800 NAT Q1=    1069.76  WSELK=    1147.76  ENC Q1=    1069.76  WSEL=    1148.36  RATIO=    .0000
 NAT Q1=    1377.  RATIOS LOB, CH, ROB=    .0000    .1829    .8171  WSEL=    1148.36

3470 ENCROACHMENT STATIONS=     9972.6   10291.2  TYPE=      4  TARGET=         .223
     3.040      7.42   1148.62       .00   1147.76   1148.89       .27      2.04       .04   1201.10
    6256.0        .0    1477.9    4778.1        .0     307.5    1205.3     419.7      97.6   1144.80
       .73       .00      4.81      3.96      .000      .045      .060      .000   1141.20   9978.13
   .002888      610.      625.      625.         2         0         0       .00    313.12  10291.24


1490 NH CARD USED
*SECNO 3.140
 2800 NAT Q1=     926.82  WSELK=    1149.19  ENC Q1=     926.82  WSEL=    1150.09  RATIO=    .0000
 NAT Q1=    1331.  RATIOS LOB, CH, ROB=    .1890    .4643    .3466  WSEL=    1150.09
3280 CROSS SECTION      3.14 EXTENDED       .43 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9958.7   10130.8  TYPE=      4  TARGET=         .304
     3.140      6.93   1149.83       .00   1149.19   1150.63       .80      1.58       .16   1145.40
    6256.0     323.3    4191.4    1741.4      81.7     521.5     331.5     430.9      99.8   1143.00
       .74      3.96      8.04      5.25      .060      .045      .060      .000   1142.90   9958.72
   .005276      510.      495.      340.         2         0         0       .00    172.06  10130.78


*SECNO 3.230
 2800 NAT Q1=     744.82  WSELK=    1151.98  ENC Q1=     744.82  WSEL=    1152.88  RATIO=    .0000
 NAT Q1=    1115.  RATIOS LOB, CH, ROB=    .4804    .2148    .3048  WSEL=    1152.88
3280 CROSS SECTION      3.23 EXTENDED       .66 FEET


3470 ENCROACHMENT STATIONS=     9802.9   10046.6  TYPE=      4  TARGET=         .332
     3.230      6.76   1152.96       .00   1151.98   1153.66       .71      3.02       .01   1148.10
    6256.0    2969.1    2001.3    1285.6     610.9     221.8     204.2     442.5     102.3   1147.50
       .77      4.86      9.02      6.30      .060      .045      .060      .000   1146.20   9802.85
   .006681      511.      511.      511.         3         0         0       .00    243.72  10046.58
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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 3.320
 2800 NAT Q1=     905.87  WSELK=    1154.76  ENC Q1=     905.87  WSEL=    1155.46  RATIO=    .0000
 NAT Q1=    1257.  RATIOS LOB, CH, ROB=    .0549   .4241   .5211  WSEL=    1155.46

3470 ENCROACHMENT STATIONS=     9975.1   10232.0  TYPE=      4  TARGET=        .280
     3.320      6.64   1155.64       .00   1154.76   1156.21       .57      2.53       .01   1152.30
    6256.0        .0    3593.1    2662.9        .0     495.3     667.5     454.4     105.0   1149.80
       .79       .00      7.25      3.99      .000      .045      .060      .000   1149.00   9975.10
   .004378      460.      487.      465.         2         0         0       .00    256.87  10231.97


*SECNO 3.420
 2800 NAT Q1=    1007.68  WSELK=    1156.95  ENC Q1=    1007.68  WSEL=    1157.65  RATIO=    .0000
 NAT Q1=    1440.  RATIOS LOB, CH, ROB=    .0051   .2523   .7426  WSEL=    1157.65

3470 ENCROACHMENT STATIONS=     9962.0   10344.3  TYPE=      4  TARGET=        .300
     3.420      6.85   1157.75       .00   1156.95   1158.08       .33      1.85       .02   1154.00
    6256.0        .0    2177.1    4078.9        .0     355.1    1144.1     468.3     108.3   1154.90
       .82       .00      6.13      3.57      .000      .045      .060      .000   1150.90   9962.00
   .003662      488.      488.      440.         2         0         0       .00    382.32  10344.32


*SECNO 3.510
 2800 NAT Q1=     952.86  WSELK=    1158.87  ENC Q1=     952.86  WSEL=    1159.57  RATIO=    .0000
 NAT Q1=    1348.  RATIOS LOB, CH, ROB=    .1028   .2902   .6070  WSEL=    1159.57

3470 ENCROACHMENT STATIONS=     9971.6   10371.0  TYPE=      4  TARGET=        .293
     3.510      6.81   1159.61       .00   1158.87   1160.04       .43      1.93       .03   1156.10
    6256.0        .0    2495.1    3760.9        .0     356.2    1028.0     484.4     112.7   1153.60
       .84       .00      7.00      3.66      .000      .045      .060      .000   1152.80   9971.60
   .004310      487.      487.      487.         2         0         0       .00    399.41  10371.01


*SECNO 3.590
 2800 NAT Q1=     632.50  WSELK=    1161.19  ENC Q1=     632.50  WSEL=    1161.89  RATIO=    .0000
 NAT Q1=     856.  RATIOS LOB, CH, ROB=    .4887   .4212   .0901  WSEL=    1161.89
3280 CROSS SECTION      3.59 EXTENDED      2.37 FEET


3301 HV CHANGED MORE THAN HVINS
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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


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


3470 ENCROACHMENT STATIONS=     9853.1   10038.7  TYPE=      4  TARGET=         .261
     3.590      6.97   1161.87       .00   1161.19   1163.07      1.20      2.80       .23   1158.90
    6208.0    2723.9    3484.1        .0     462.1     332.2        .0     495.4     115.6   1157.90
       .86      5.90     10.49       .00      .060      .045      .000      .000   1154.90   9853.10
   .010339      440.      440.      440.         2         0         0       .00    185.60  10038.70


*SECNO 3.700
 2800 NAT Q1=     889.30  WSELK=    1165.05  ENC Q1=     889.30  WSEL=    1165.75  RATIO=    .0000
 NAT Q1=    1113.  RATIOS LOB, CH, ROB=    .4449   .5260   .0291  WSEL=    1165.75
3280 CROSS SECTION      3.70 EXTENDED      1.92 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.47


3470 ENCROACHMENT STATIONS=     9891.6   10039.4  TYPE=      4  TARGET=         .201
     3.700      8.82   1166.02       .00   1165.05   1166.88       .86      3.77       .03   1159.10
    6208.0    2300.7    3907.3        .0     471.6     455.8        .0     506.4     117.7   1158.30
       .88      4.88      8.57       .00      .060      .045      .000      .000   1157.20   9891.63
   .004764      558.      558.      558.         2         0         0       .00    147.77  10039.40


*SECNO 3.790
 2800 NAT Q1=     997.96  WSELK=    1167.23  ENC Q1=     997.96  WSEL=    1167.93  RATIO=    .0000
 NAT Q1=    1285.  RATIOS LOB, CH, ROB=    .0921   .5803   .3276  WSEL=    1167.93
3280 CROSS SECTION      3.79 EXTENDED      1.02 FEET


3470 ENCROACHMENT STATIONS=     9957.2   10160.7  TYPE=      4  TARGET=         .224
     3.790      8.62   1168.12       .00   1167.23   1168.82       .70      1.93       .02   1163.10
    6208.0        .0    4537.8    1670.2        .0     601.3     468.6     517.0     119.6   1163.10
       .90       .00      7.55      3.56      .000      .045      .060      .000   1159.50   9957.20
   .003713      460.      460.      460.         2         0         0       .00    203.52  10160.72


1490 NH CARD USED
*SECNO 3.880
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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


 2800 NAT Q1=     779.22  WSELK=    1169.44  ENC Q1=     779.22  WSEL=    1170.14  RATIO=    .0000
 NAT Q1=    1051.  RATIOS LOB, CH, ROB=    .0397   .4726   .4877  WSEL=    1170.14

3470 ENCROACHMENT STATIONS=     9973.3   10174.5  TYPE=      4  TARGET=         .258
    3.880      8.20   1170.20       .00   1169.44   1171.18       .99      2.28       .09   1166.20
   6208.0        .0    3868.6    2339.4        .0     409.4     513.1     527.8     121.8   1165.10
      .92       .00      9.45      4.56      .000      .045      .060      .000   1162.00   9973.30
  .006447      475.      475.      475.         2         0         0       .00    201.22  10174.52


1490 NH CARD USED
*SECNO 3.960
 2800 NAT Q1=     681.24  WSELK=    1172.54  ENC Q1=     681.24  WSEL=    1173.24  RATIO=    .0000
 NAT Q1=     896.  RATIOS LOB, CH, ROB=    .2660   .3699   .3641  WSEL=    1173.24

3470 ENCROACHMENT STATIONS=     9897.5   10075.6  TYPE=      4  TARGET=         .240
    3.960      8.17   1173.27       .00   1172.54   1174.40      1.14      3.18       .05   1170.10
   6208.0    1204.2    3007.0    1996.8     259.8     283.2     298.0     536.7     123.7   1168.90
      .93      4.63     10.62      6.70      .060      .045      .060      .000   1165.10   9897.51
  .008131      440.      440.      440.         2         0         0       .00    178.12  10075.63


1490 NH CARD USED
*SECNO 4.050
 2800 NAT Q1=    1029.89  WSELK=    1175.69  ENC Q1=    1029.89  WSEL=    1176.39  RATIO=    .0000
 NAT Q1=    1296.  RATIOS LOB, CH, ROB=    .0651   .3899   .5450  WSEL=    1176.39
3280 CROSS SECTION      4.05 EXTENDED       .63 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9970.7   10178.2  TYPE=      4  TARGET=         .205
    4.050      9.23   1176.53       .00   1175.69   1177.05       .52      2.58       .06   1172.00
   6208.0        .0    2901.8    3306.2        .0     409.0     775.2     548.6     126.0   1170.40
      .96       .00      7.10      4.27      .000      .045      .060      .000   1167.30   9970.70
  .003453      520.      509.      509.         2         0         0       .00    207.54  10178.24
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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 4.160
 2800 NAT Q1=     881.82  WSELK=    1177.82  ENC Q1=     881.82  WSEL=    1178.52  RATIO=    .0000
 NAT Q1=    1149.  RATIOS LOB, CH, ROB=    .3161   .4279   .2559  WSEL=    1178.52

3470 ENCROACHMENT STATIONS=     9880.1   10093.7  TYPE=      4  TARGET=        .233
     4.160      8.62   1178.52       .00   1177.82   1179.33       .81      2.19       .09   1172.20
    6208.0    1607.9    3475.1    1124.9     375.9     390.9     260.3     562.1     128.6   1173.30
       .98      4.28      8.89      4.32      .060      .045      .060      .000   1169.90   9880.10
   .004992      520.      530.      540.         2         0         0       .00    213.61  10093.71


*SECNO 4.250
 2800 NAT Q1=     992.84  WSELK=    1180.13  ENC Q1=     992.84  WSEL=    1180.83  RATIO=    .0000
 NAT Q1=    1268.  RATIOS LOB, CH, ROB=    .3904   .3065   .3031  WSEL=    1180.83
3280 CROSS SECTION      4.25 EXTENDED       .07 FEET


3470 ENCROACHMENT STATIONS=     9881.0   10072.4  TYPE=      4  TARGET=        .217
     4.250      8.78   1180.88       .00   1180.13   1181.49       .62      2.14       .02   1173.70
    6208.0    2250.4    2424.9    1532.7     520.4     292.1     307.6     574.3     130.8   1174.10
      1.00      4.32      8.30      4.98      .060      .045      .060      .000   1172.10   9880.96
   .003824      485.      495.      500.         2         0         0       .00    191.40  10072.36


*SECNO 4.350
 2800 NAT Q1=     967.86  WSELK=    1182.39  ENC Q1=     967.86  WSEL=    1183.09  RATIO=    .0000
 NAT Q1=    1316.  RATIOS LOB, CH, ROB=    .0315   .2666   .7019  WSEL=    1183.09

3470 ENCROACHMENT STATIONS=     9976.4   10223.7  TYPE=      4  TARGET=        .265
     4.350      7.44   1183.14       .00   1182.39   1183.61       .47      2.10       .02   1178.60
    6208.0        .0    2151.8    4056.2        .0     303.4     919.6     588.4     133.5   1177.60
      1.03       .00      7.09      4.41      .000      .045      .060      .000   1175.70   9976.40
   .004173      500.      520.      540.         2         0         0       .00    247.35  10223.75


*SECNO 4.460
 2800 NAT Q1=     681.64  WSELK=    1185.36  ENC Q1=     681.64  WSEL=    1186.06  RATIO=    .0000
 NAT Q1=    1011.  RATIOS LOB, CH, ROB=    .0000   .2262   .7738  WSEL=    1186.06

3470 ENCROACHMENT STATIONS=     9979.2   10247.5  TYPE=      4  TARGET=        .326
     4.460      7.07   1186.07       .00   1185.36   1186.75       .69      3.08       .07   1187.10
    6208.0        .0    2081.1    4126.9        .0     237.2     783.6     602.1     136.6   1182.60
      1.05       .00      8.77      5.27      .000      .045      .060      .000   1179.00   9980.92
   .008248      625.      590.      515.         2         0         0       .00    266.60  10247.52
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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 4.550
 2800 NAT Q1=     769.88  WSELK=    1188.59  ENC Q1=     769.88  WSEL=    1189.29  RATIO=    .0000
 NAT Q1=    1028.  RATIOS LOB, CH, ROB=    .0085   .3033   .6882  WSEL=    1189.29

3470 ENCROACHMENT STATIONS=     9976.1   10167.4  TYPE=      4  TARGET=        .251
     4.550      8.38   1189.38       .00   1188.59   1190.17       .79      3.38       .03   1184.80
    6208.0        .0    2381.0    3827.0        .0     258.3     703.5     612.5     139.0   1182.40
      1.07       .00      9.22      5.44      .000      .045      .060      .000   1181.00   9976.10
   .006566      495.      490.      445.         2         0         0       .00    191.34  10167.44


*SECNO 4.650
 2800 NAT Q1=     942.30  WSELK=    1191.31  ENC Q1=     942.30  WSEL=    1192.01  RATIO=    .0000
 NAT Q1=    1204.  RATIOS LOB, CH, ROB=    .7988   .1963   .0050  WSEL=    1192.01

3470 ENCROACHMENT STATIONS=     9770.5   10013.5  TYPE=      4  TARGET=        .218
     4.650      8.31   1192.21       .00   1191.31   1192.62       .41      2.42       .04   1186.30
    6208.0    4853.7    1354.3        .0    1064.3     197.6        .0     624.4     141.3   1184.90
      1.10      4.56      6.85       .00      .060      .045      .000      .000   1183.90   9770.52
   .004149      460.      495.      455.         2         0         0       .00    242.98  10013.50


1490 NH CARD USED
*SECNO 4.760
 2800 NAT Q1=     892.72  WSELK=    1194.05  ENC Q1=     892.72  WSEL=    1194.75  RATIO=    .0000
 NAT Q1=    1202.  RATIOS LOB, CH, ROB=    .1969   .2019   .6012  WSEL=    1194.75

3470 ENCROACHMENT STATIONS=     9940.1   10227.2  TYPE=      4  TARGET=        .257
     4.760      7.67   1194.77       .00   1194.05   1195.21       .44      2.58       .01   1190.50
    6208.0     595.9    1677.9    3934.2     148.4     231.9     885.8     641.3     144.9   1189.90
      1.13      4.01      7.24      4.44      .060      .045      .060      .000   1187.10   9940.07
   .004726      520.      605.      655.         2         0         0       .00    287.17  10227.24


*SECNO 4.860
 2800 NAT Q1=     968.10  WSELK=    1196.35  ENC Q1=     968.10  WSEL=    1197.05  RATIO=    .0000
 NAT Q1=    1334.  RATIOS LOB, CH, ROB=    .2333   .2304   .5363  WSEL=    1197.05
3280 CROSS SECTION      4.86 EXTENDED       .67 FEET


3470 ENCROACHMENT STATIONS=     9924.1   10289.1  TYPE=      4  TARGET=        .274
     4.860      7.38   1197.08       .00   1196.35   1197.48       .41      2.27       .00   1192.90
    6208.0     824.1    1969.6    3414.3     219.7     270.6     925.3     657.2     148.7   1190.40
      1.16      3.75      7.28      3.69      .060      .045      .060      .000   1189.70   9924.13
   .004076      475.      520.      525.         2         0         0       .00    364.99  10289.12
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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 4.960
 2800 NAT Q1=     792.19  WSELK=    1198.72  ENC Q1=     792.19  WSEL=    1199.42  RATIO=    .0000
 NAT Q1=    1070.  RATIOS LOB, CH, ROB=    .1075   .3707   .5218  WSEL=    1199.42

3470 ENCROACHMENT STATIONS=     9969.6   10153.7  TYPE=      4  TARGET=         .260
     4.960      7.03   1199.43       .00   1198.72   1200.21       .78      2.62       .11   1193.40
    6208.0        .0    3010.4    3197.6        .0     356.4     580.0     671.1     152.0   1195.30
      1.18       .00      8.45      5.51      .000      .045      .060      .000   1192.40   9969.60
   .006541      495.      515.      515.         2         0         0       .00    184.12  10153.72


*SECNO 5.050
 2800 NAT Q1=     846.59  WSELK=    1201.76  ENC Q1=     846.59  WSEL=    1202.46  RATIO=    .0000
 NAT Q1=    1167.  RATIOS LOB, CH, ROB=    .0973   .3549   .5478  WSEL=    1202.46

3470 ENCROACHMENT STATIONS=     9986.0   10211.5  TYPE=      4  TARGET=         .274
     5.050      7.63   1202.63       .00   1201.76   1203.25       .62      3.02       .02   1196.10
    6208.0        .0    2886.5    3321.5        .0     369.5     713.0     683.2     154.4   1196.70
      1.20       .00      7.81      4.66      .000      .045      .060      .000   1195.00   9986.00
   .005193      480.      515.      525.         2         0         0       .00    225.50  10211.50


*SECNO 5.160
 2800 NAT Q1=    1151.08  WSELK=    1204.07  ENC Q1=    1151.08  WSEL=    1204.77  RATIO=    .0000
 NAT Q1=    1610.  RATIOS LOB, CH, ROB=    .6663   .2068   .1270  WSEL=    1204.77
3280 CROSS SECTION      5.16 EXTENDED       .30 FEET


3470 ENCROACHMENT STATIONS=     9703.3   10037.1  TYPE=      4  TARGET=         .285
     5.160      7.60   1204.90       .00   1204.07   1205.16       .25      1.87       .04   1201.40
    6208.0    4433.3    1774.7        .0    1184.0     377.6        .0     698.6     157.7   1202.50
      1.24      3.74      4.70       .00      .060      .045      .000      .000   1197.30   9703.31
   .002701      520.      560.      440.         2         0         0       .00    333.79  10037.10


*SECNO 5.230
 2800 NAT Q1=     603.68  WSELK=    1205.73  ENC Q1=     603.68  WSEL=    1206.43  RATIO=    .0000
 NAT Q1=     877.  RATIOS LOB, CH, ROB=    .4150   .3548   .2302  WSEL=    1206.43

3301 HV CHANGED MORE THAN HVINS
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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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50


3470 ENCROACHMENT STATIONS=     9835.8   10100.6  TYPE=      4  TARGET=         .311
     5.230      5.69   1206.39       .00   1205.73   1207.21       .81      1.88       .17   1204.00
    6208.0    2336.2    3201.6     670.1     394.8     380.2     138.0     709.7     160.3   1203.70
      1.25      5.92      8.42      4.85      .060      .045      .060      .000   1200.70   9835.84
   .010968      395.      390.      335.         2         0         0       .00    264.79  10100.63


1490 NH CARD USED
*SECNO 5.290
 2800 NAT Q1=    1263.74  WSELK=    1207.63  ENC Q1=    1263.74  WSEL=    1208.33  RATIO=    .0000
 NAT Q1=    1828.  RATIOS LOB, CH, ROB=    .3043   .2228   .4729  WSEL=    1208.33
3280 CROSS SECTION      5.29 EXTENDED       .52 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.21


3470 ENCROACHMENT STATIONS=     9823.0   10340.9  TYPE=      4  TARGET=         .309
     5.290      6.72   1208.42       .00   1207.63   1208.61       .18      1.34       .06   1204.70
    6208.0    1350.0    1985.0    2873.0     496.0     429.7    1051.6     720.2     163.2   1204.90
      1.28      2.72      4.62      2.73      .060      .045      .060      .000   1201.70   9823.04
   .002241      340.      300.      310.         2         0         0       .00    517.83  10340.87


*SECNO 5.390
 2800 NAT Q1=     952.97  WSELK=    1208.90  ENC Q1=     952.97  WSEL=    1209.60  RATIO=    .0000
 NAT Q1=    1461.  RATIOS LOB, CH, ROB=    .5990   .2400   .1611  WSEL=    1209.60
3280 CROSS SECTION      5.39 EXTENDED       .64 FEET


3470 ENCROACHMENT STATIONS=     9616.7   10048.3  TYPE=      4  TARGET=         .348
     5.390      6.44   1209.64       .00   1208.90   1209.91       .27      1.27       .03   1207.20
    6208.0    3928.6    2279.4        .0    1056.3     472.3        .0     737.1     167.7   1208.20
      1.31      3.72      4.83       .00      .060      .045      .000      .000   1203.20   9616.70
   .004136      380.      500.      410.         2         0         0       .00    431.60  10048.30
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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 5.460
 2800 NAT Q1=     661.96  WSELK=    1211.03  ENC Q1=     661.96  WSEL=    1211.73  RATIO=    .0000
 NAT Q1=    1194.  RATIOS LOB, CH, ROB=    .4977   .2274   .2749  WSEL=    1211.73

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


3470 ENCROACHMENT STATIONS=     9647.1   10099.3  TYPE=      4  TARGET=         .446
     5.460      6.17   1211.67       .00   1211.03   1212.27       .60      2.26       .10   1209.50
    6208.0    3058.3    2575.2     574.5     723.7     312.1     145.5     748.6     171.5   1208.90
      1.33      4.23      8.25      3.95      .060      .045      .060      .000   1205.50   9647.13
   .009429      345.      420.      420.         3         0         0       .00    452.21  10099.34


*SECNO 5.550
 2800 NAT Q1=     993.58  WSELK=    1213.80  ENC Q1=     993.58  WSEL=    1214.50  RATIO=    .0000
 NAT Q1=    1500.  RATIOS LOB, CH, ROB=    .4561   .1082   .4356  WSEL=    1214.50
3280 CROSS SECTION      5.55 EXTENDED       .20 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.63


3470 ENCROACHMENT STATIONS=     9709.4   10261.7  TYPE=      4  TARGET=         .337
     5.550      5.70   1214.60       .00   1213.80   1214.80       .20      2.49       .04   1211.40
    6208.0    2699.3    1003.7    2505.0     852.9     195.0     764.5     764.3     176.7   1212.70
      1.36      3.16      5.15      3.28      .060      .045      .060      .000   1208.90   9709.43
   .003533      450.      475.      455.         3         0         0       .00    552.23  10261.66


1490 NH CARD USED
*SECNO 5.640
 2800 NAT Q1=     599.21  WSELK=    1216.33  ENC Q1=     599.21  WSEL=    1217.03  RATIO=    .0000
 NAT Q1=     919.  RATIOS LOB, CH, ROB=    .3142   .2394   .4464  WSEL=    1217.03

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9908.2   10144.3  TYPE=      4  TARGET=         .348
     5.640      5.23   1216.83       .00   1216.33   1217.73       .89      2.72       .21   1214.20
    6208.0    1337.9    2288.1    2582.0     223.7     250.1     381.5     778.0     180.8   1213.90
      1.38      5.98      9.15      6.77      .060      .045      .060      .000   1211.60   9908.18
   .012768      450.      450.      445.         2         0         0       .00    236.08  10144.26
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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 5.730
 2800 NAT Q1=     885.15  WSELK=    1219.69  ENC Q1=     885.15  WSEL=    1220.39  RATIO=    .0000
 NAT Q1=    1261.  RATIOS LOB, CH, ROB=    .5910   .2635   .1455  WSEL=    1220.39
3280 CROSS SECTION      5.73 EXTENDED       .20 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.72


3470 ENCROACHMENT STATIONS=     9681.2   10033.5  TYPE=      4  TARGET=         .298
     5.730      7.29   1220.59       .00   1219.69   1220.98       .39      3.20       .05   1216.50
    6208.0    3983.8    2224.2        .0    1029.3     339.5        .0     789.8     183.9   1216.60
      1.41      3.87      6.55       .00      .060      .045      .000      .000   1213.30   9681.23
   .004314      450.      475.      475.         2         0         0       .00    352.27  10033.50


*SECNO 5.820
 2800 NAT Q1=     463.70  WSELK=    1222.06  ENC Q1=     463.70  WSEL=    1222.76  RATIO=    .0000
 NAT Q1=     719.  RATIOS LOB, CH, ROB=    .2549   .3017   .4433  WSEL=    1222.76
3280 CROSS SECTION      5.82 EXTENDED       .63 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .48


3470 ENCROACHMENT STATIONS=     9927.4   10223.3  TYPE=      4  TARGET=         .355
     5.820      5.73   1222.73       .00   1222.06   1223.23       .50      2.22       .03   1220.80
    3728.0     444.5    1754.5    1529.0     128.5     236.9     433.9     800.6     187.1   1219.60
      1.43      3.46      7.41      3.52      .060      .045      .060      .000   1217.00   9927.43
   .006693      410.      460.      460.         3         0         0       .00    295.90  10223.33


*SECNO 5.910
 2800 NAT Q1=     534.49  WSELK=    1224.81  ENC Q1=     534.49  WSEL=    1225.51  RATIO=    .0000
 NAT Q1=     809.  RATIOS LOB, CH, ROB=    .2901   .3125   .3974  WSEL=    1225.51
3280 CROSS SECTION      5.91 EXTENDED       .34 FEET


3470 ENCROACHMENT STATIONS=     9903.5   10136.9  TYPE=      4  TARGET=         .340
     5.910      6.44   1225.54       .00   1224.81   1225.96       .42      2.71       .01   1222.20
    3728.0     681.2    1758.3    1288.5     205.1     268.0     348.0     809.5     190.0   1222.90
      1.45      3.32      6.56      3.70      .060      .045      .060      .000   1219.10   9903.52
   .004760      485.      500.      465.         3         0         0       .00    233.42  10136.94
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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 5.990
 2800 NAT Q1=     378.35  WSELK=    1227.51  ENC Q1=     378.35  WSEL=    1228.21  RATIO=    .0000
 NAT Q1=     576.  RATIOS LOB, CH, ROB=    .3795   .3691   .2514  WSEL=    1228.21
3280 CROSS SECTION      5.99 EXTENDED       .42 FEET


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


3470 ENCROACHMENT STATIONS=     9858.1   10061.4  TYPE=      4  TARGET=         .343
    5.990      6.22   1228.12       .00   1227.51   1228.99       .87      2.90       .13   1225.60
   3728.0    1158.7    2122.2     447.1     273.1     233.5      84.2     816.4     192.1   1225.70
     1.47      4.24      9.09      5.31      .060      .045      .060      .000   1221.90   9858.10
  .010599      425.      425.      425.         3         0         0       .00    203.31  10061.41


1490 NH CARD USED
*SECNO 6.080
 2800 NAT Q1=     543.57  WSELK=    1230.52  ENC Q1=     543.57  WSEL=    1231.22  RATIO=    .0000
 NAT Q1=     803.  RATIOS LOB, CH, ROB=    .2544   .4057   .3400  WSEL=    1231.22
3280 CROSS SECTION      6.08 EXTENDED       .64 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.56


3470 ENCROACHMENT STATIONS=     9912.0   10085.8  TYPE=      4  TARGET=         .323
    6.080      7.84   1231.34       .00   1230.52   1231.93       .59      2.91       .03   1227.40
   3728.0     528.2    2214.4     985.4     172.4     299.7     242.8     823.1     194.1   1227.60
     1.49      3.06      7.39      4.06      .060      .045      .060      .000   1223.50   9911.99
  .004352      450.      450.      450.         2         0         0       .00    173.85  10085.84


*SECNO 6.170
 2800 NAT Q1=     596.91  WSELK=    1232.51  ENC Q1=     596.91  WSEL=    1233.31  RATIO=    .0000
 NAT Q1=     856.  RATIOS LOB, CH, ROB=    .1187   .4666   .4146  WSEL=    1233.31
3280 CROSS SECTION      6.17 EXTENDED       .65 FEET


3470 ENCROACHMENT STATIONS=     9983.5   10151.8  TYPE=      4  TARGET=         .303
    6.170      7.55   1233.35       .00   1232.51   1233.88       .53      1.95       .01   1227.70
   3728.0        .0    2434.5    1293.5        .0     359.9     371.9     830.7     195.9   1229.40
     1.52       .00      6.77      3.48      .000      .045      .060      .000   1225.80   9983.50
  .004112      460.      465.      450.         3         0         0       .00    168.30  10151.80
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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


*SECNO 6.260
 2800 NAT Q1=     525.43  WSELK=    1234.75  ENC Q1=     525.43  WSEL=    1235.65  RATIO=    .0000
 NAT Q1=     917.  RATIOS LOB, CH, ROB=    .5946   .2035   .2019  WSEL=    1235.65

3470 ENCROACHMENT STATIONS=     9834.2   10036.1  TYPE=      4  TARGET=         .427
     6.260      5.96   1235.66       .00   1234.75   1236.00       .34      2.10       .02   1231.60
    3442.0    2245.8    1196.2        .0     572.8     205.9        .0     839.3     198.0   1233.40
      1.55      3.92      5.81       .00      .060      .045      .000      .000   1229.70   9834.15
   .004351      490.      505.      490.         3         0         0       .00    201.95  10036.10


1490 NH CARD USED
*SECNO 6.360
 2800 NAT Q1=     358.56  WSELK=    1237.67  ENC Q1=     358.56  WSEL=    1238.57  RATIO=    .0000
 NAT Q1=     619.  RATIOS LOB, CH, ROB=    .3582   .3974   .2444  WSEL=    1238.57
3280 CROSS SECTION      6.36 EXTENDED       .48 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9903.9   10051.4  TYPE=      4  TARGET=         .421
     6.360      7.38   1238.48       .00   1237.67   1239.46       .98      3.27       .19   1238.20
    3442.0     859.6    2381.3     201.1     176.1     264.7      46.9     846.8     200.0   1236.20
      1.56      4.88      9.00      4.28      .060      .045      .060      .000   1231.10   9903.88
   .009942      510.      525.      525.         3         0         0       .00    147.52  10051.41


*SECNO 6.450
 2800 NAT Q1=     550.73  WSELK=    1240.73  ENC Q1=     550.73  WSEL=    1241.53  RATIO=    .0000
 NAT Q1=     909.  RATIOS LOB, CH, ROB=    .4483   .2166   .3351  WSEL=    1241.53
3280 CROSS SECTION      6.45 EXTENDED       .33 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.75
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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


3470 ENCROACHMENT STATIONS=     9774.0   10074.2  TYPE=      4  TARGET=        .394
    6.450      7.43   1241.73       .00   1240.73   1241.99       .26      2.46       .07   1239.20
   3442.0    1481.2    1194.3     766.5     553.0     211.9     219.5     854.7     202.4   1237.90
     1.60      2.68      5.64      3.49      .060      .045      .060      .000   1234.30   9773.99
  .003232      445.      480.      485.         3         0         0       .00    300.17  10074.16


1490 NH CARD USED
*SECNO 6.560
 2800 NAT Q1=     363.32  WSELK=    1243.25  ENC Q1=     363.32  WSEL=    1244.15  RATIO=    .0000
 NAT Q1=     640.  RATIOS LOB, CH, ROB=    .4968   .2899   .2133  WSEL=    1244.15
3280 CROSS SECTION      6.56 EXTENDED       .32 FEET


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


3470 ENCROACHMENT STATIONS=     9883.1   10030.9  TYPE=      4  TARGET=        .433
    6.560      5.92   1243.92       .00   1243.25   1244.65       .72      2.52       .14   1240.60
   3140.0    1536.4    1603.6        .0     305.7     195.9        .0     862.9     204.8   1241.10
     1.62      5.03      8.19       .00      .060      .045      .000      .000   1238.00   9883.08
  .009588      435.      550.      560.         3         0         0       .00    147.82  10030.90


1490 NH CARD USED
*SECNO 6.660
 2800 NAT Q1=     400.99  WSELK=    1247.05  ENC Q1=     400.99  WSEL=    1247.75  RATIO=    .0000
 NAT Q1=     693.  RATIOS LOB, CH, ROB=    .2319   .2145   .5536  WSEL=    1247.75
3280 CROSS SECTION      6.66 EXTENDED       .56 FEET


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


3470 ENCROACHMENT STATIONS=     9973.6   10269.9  TYPE=      4  TARGET=        .422
    6.660      6.96   1247.96       .00   1247.05   1248.28       .32      3.59       .04   1244.60
   3140.0     112.5    1115.3    1912.2      35.5     175.3     611.4     871.1     207.5   1245.30
     1.65      3.17      6.36      3.13      .060      .045      .060      .000   1241.00   9973.57
  .004846      560.      545.      525.         4         0         0       .00    296.29  10269.86
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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 6.750
 2800 NAT Q1=     280.49  WSELK=    1250.93  ENC Q1=     280.49  WSEL=    1251.63  RATIO=    .0000
 NAT Q1=     471.  RATIOS LOB, CH, ROB=    .2611   .4114   .3274  WSEL=    1251.63
3280 CROSS SECTION      6.75 EXTENDED       .11 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9973.5   10106.9  TYPE=      4  TARGET=         .404
     6.750      6.11   1251.31   1251.31   1250.93   1252.73      1.42      4.07       .33   1248.20
    3140.0     321.4    2235.8     582.8      50.4     207.0     122.0     878.0     210.0   1249.90
      1.67      6.38     10.80      4.78      .060      .045      .060      .000   1245.20   9973.46
   .017250      470.      485.      505.         4        15         0       .00    133.39  10106.85


1490 NH CARD USED
*SECNO 6.840
 2800 NAT Q1=     458.79  WSELK=    1254.61  ENC Q1=     458.79  WSEL=    1255.11  RATIO=    .0000
 NAT Q1=     652.  RATIOS LOB, CH, ROB=    .3023   .5275   .1701  WSEL=    1255.11
3280 CROSS SECTION      6.84 EXTENDED       .41 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.27


3470 ENCROACHMENT STATIONS=     9807.4   10041.6  TYPE=      4  TARGET=         .296
     6.840      8.01   1255.51       .00   1254.61   1255.96       .45      3.13       .10   1252.30
    3140.0     814.2    2228.3      97.5     344.6     358.7      37.4     884.2     212.0   1252.30
      1.70      2.36      6.21      2.61      .060      .045      .060      .000   1247.50   9807.37
   .003335      470.      490.      490.         3         0         0       .00    234.19  10041.56


1490 NH CARD USED
*SECNO 6.940
 2800 NAT Q1=     353.31  WSELK=    1257.43  ENC Q1=     353.31  WSEL=    1258.13  RATIO=    .0000
 NAT Q1=     640.  RATIOS LOB, CH, ROB=    .0788   .1891   .7321  WSEL=    1258.13
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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

3280 CROSS SECTION      6.94 EXTENDED       .13 FEET

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

3470 ENCROACHMENT STATIONS=     9988.3   10248.2  TYPE=      4  TARGET=         .448
    6.940      4.82   1257.92       .00   1257.43   1258.30       .38      2.34       .01   1256.20
   2751.0        .0     959.8    1791.2        .0     144.7     480.7     891.6     214.7   1255.30
     1.72       .00      6.63      3.73      .000      .045      .060      .000   1253.10   9988.30
  .007979      435.      520.      460.         3         0         0       .00    259.90  10248.20

1490 NH CARD USED
*SECNO 7.020
 2800 NAT Q1=     270.51  WSELK=    1260.45  ENC Q1=     270.51  WSEL=    1261.15  RATIO=    .0000
 NAT Q1=     447.  RATIOS LOB, CH, ROB=    .1399   .2763   .5838  WSEL=    1261.15
3280 CROSS SECTION      7.02 EXTENDED       .40 FEET

3470 ENCROACHMENT STATIONS=     9979.6   10093.4  TYPE=      4  TARGET=         .395
    7.020      6.00   1261.30       .00   1260.45   1262.02       .72      3.62       .10   1257.90
   2751.0        .0    1209.1    1541.9        .0     149.0     274.2     896.6     216.4   1259.10
     1.74       .00      8.12      5.62      .000      .045      .060      .000   1255.30   9979.60
  .009662      400.      410.      415.         3         0         0       .00    113.84  10093.44

*SECNO 7.110
 2800 NAT Q1=     394.79  WSELK=    1264.12  ENC Q1=     394.79  WSEL=    1264.82  RATIO=    .0000
 NAT Q1=     697.  RATIOS LOB, CH, ROB=    .4629   .1266   .4106  WSEL=    1264.82
3280 CROSS SECTION      7.11 EXTENDED       .41 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.48

3470 ENCROACHMENT STATIONS=     9812.5   10112.2  TYPE=      4  TARGET=         .433
    7.110      5.91   1264.91       .00   1264.12   1265.14       .23      3.07       .05   1262.50
   2751.0    1210.1     603.1     937.9     422.2     101.6     281.7     903.5     218.7   1261.50
     1.78      2.87      5.93      3.33      .060      .045      .060      .000   1259.00   9812.49
  .004385      475.      500.      490.         4         0         0       .00    299.71  10112.20
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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 7.200
 2800 NAT Q1=     230.65  WSELK=    1267.52  ENC Q1=     230.65  WSEL=    1268.22  RATIO=    .0000
 NAT Q1=     439.  RATIOS LOB, CH, ROB=    .5813   .2350   .1837  WSEL=    1268.22

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .51


3470 ENCROACHMENT STATIONS=     9791.0   10033.6  TYPE=      4  TARGET=         .475
     7.200      4.42   1268.12   1267.93   1267.52   1268.75       .63      3.49       .12   1266.60
    2751.0    1509.1    1241.9        .0     323.3     155.5        .0     910.2     221.6   1266.90
      1.80      4.67      7.99       .00      .060      .045      .000      .000   1263.70   9790.97
   .016815      450.      455.      465.         6        14         0       .00    242.63  10033.60


*SECNO 7.300
 2800 NAT Q1=     328.74  WSELK=    1272.25  ENC Q1=     328.74  WSEL=    1272.95  RATIO=    .0000
 NAT Q1=     520.  RATIOS LOB, CH, ROB=    .2400   .4118   .3482  WSEL=    1272.95
3280 CROSS SECTION      7.30 EXTENDED       .65 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.62


3470 ENCROACHMENT STATIONS=     9957.5   10103.8  TYPE=      4  TARGET=         .368
     7.300      5.16   1273.06       .00   1272.25   1273.58       .53      4.82       .01   1270.00
    2751.0     248.6    1795.9     706.5      63.1     272.7     176.1     915.7     223.7   1270.50
      1.82      3.94      6.59      4.01      .060      .045      .060      .000   1267.90   9957.47
   .006408      480.      500.      485.         3         0         0       .00    146.31  10103.78


*SECNO 7.400
 2800 NAT Q1=     358.72  WSELK=    1275.67  ENC Q1=     358.72  WSEL=    1276.37  RATIO=    .0000
 NAT Q1=     616.  RATIOS LOB, CH, ROB=    .3057   .2209   .4734  WSEL=    1276.37
3280 CROSS SECTION      7.40 EXTENDED       .11 FEET


3470 ENCROACHMENT STATIONS=     9849.7   10188.3  TYPE=      4  TARGET=         .418
     7.400      5.41   1276.41       .00   1275.67   1276.67       .26      3.06       .03   1275.50
    2751.0     462.6    1038.3    1250.1     180.8     199.6     368.7     923.1     226.5   1275.80
      1.86      2.56      5.20      3.39      .060      .045      .060      .000   1271.00   9849.68
   .005580      505.      540.      475.         4         0         0       .00    338.60  10188.28
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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 7.490
 2800 NAT Q1=     244.47  WSELK=    1279.38  ENC Q1=     244.47  WSEL=    1280.08  RATIO=    .0000
 NAT Q1=     424.  RATIOS LOB, CH, ROB=    .8127   .1873   .0000  WSEL=    1280.08

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9907.9   10028.2  TYPE=      4  TARGET=         .424
     7.490      5.56   1279.96       .00   1279.38   1280.77       .82      3.94       .17   1277.90
    2751.0    1855.6     895.4        .0     267.9     113.8        .0     929.1     229.0   1280.50
      1.88      6.93      7.87       .00      .060      .045      .000      .000   1274.40   9907.90
   .014364      460.      470.      465.         2         0         0       .00    118.04  10025.93


*SECNO 7.570
 2800 NAT Q1=     342.00  WSELK=    1283.00  ENC Q1=     342.00  WSEL=    1283.70  RATIO=    .0000
 NAT Q1=     630.  RATIOS LOB, CH, ROB=    .5219   .3465   .1316  WSEL=    1283.70
3280 CROSS SECTION      7.57 EXTENDED       .45 FEET


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


3470 ENCROACHMENT STATIONS=     9850.4   10049.5  TYPE=      4  TARGET=         .457
     7.570      5.96   1283.86       .00   1283.00   1284.32       .46      3.51       .04   1280.90
    2751.0    1048.4    1702.6        .0     312.0     267.0        .0     933.5     230.4   1280.70
      1.90      3.36      6.38       .00      .060      .045      .000      .000   1277.90   9850.38
   .005764      380.      435.      445.         3         0         0       .00    199.12  10049.50


*SECNO 7.680
 2800 NAT Q1=     213.87  WSELK=    1287.60  ENC Q1=     213.87  WSEL=    1288.30  RATIO=    .0000
 NAT Q1=     392.  RATIOS LOB, CH, ROB=    .5765   .4042   .0193  WSEL=    1288.30
3280 CROSS SECTION      7.68 EXTENDED       .07 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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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


3470 ENCROACHMENT STATIONS=     9896.5   10023.7  TYPE=      4  TARGET=         .455
     7.680      5.67   1288.07   1288.07   1287.60   1289.12      1.05      4.41       .18   1286.40
    2125.0     505.6    1619.4        .0     132.7     176.6        .0     939.2     232.5   1286.70
      1.92      3.81      9.17       .00      .060      .045      .000      .000   1282.40   9896.50
   .013071      550.      560.      570.         4        10         0       .00    127.20  10023.70


*SECNO 7.790
 2800 NAT Q1=     270.49  WSELK=    1292.80  ENC Q1=     270.49  WSEL=    1293.50  RATIO=    .0000
 NAT Q1=     520.  RATIOS LOB, CH, ROB=    .1186   .1032   .7782  WSEL=    1293.50
3280 CROSS SECTION      7.79 EXTENDED       .08 FEET


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9987.5   10270.4  TYPE=      4  TARGET=         .479
     7.790      4.78   1293.68       .00   1292.80   1293.86       .18      4.65       .09   1291.70
    2125.0        .0     394.2    1730.8        .0      84.9     576.4     946.1     235.4   1291.70
      1.97       .00      4.64      3.00      .000      .045      .060      .000   1288.90   9987.50
   .004852      610.      620.      625.         5         0         0       .00    282.86  10270.36


*SECNO 7.900
 2800 NAT Q1=     180.83  WSELK=    1297.62  ENC Q1=     180.83  WSEL=    1298.32  RATIO=    .0000
 NAT Q1=     417.  RATIOS LOB, CH, ROB=    .2376   .1859   .5764  WSEL=    1298.32
3280 CROSS SECTION      7.90 EXTENDED       .41 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50


3470 ENCROACHMENT STATIONS=     9965.5   10133.8  TYPE=      4  TARGET=         .567
     7.900      3.81   1298.11   1297.82   1297.62   1298.76       .65      4.76       .14   1297.00
    2125.0        .0     915.1    1209.9        .0     118.4     226.5     952.5     238.2   1296.40
      1.99       .00      7.73      5.34      .000      .045      .060      .000   1294.30   9965.50
   .019191      565.      575.      545.        16        19         0       .00    168.33  10133.83
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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 8.000
 2800 NAT Q1=     272.41  WSELK=    1302.46  ENC Q1=     272.41  WSEL=    1303.06  RATIO=    .0000
 NAT Q1=     496.  RATIOS LOB, CH, ROB=    .2125   .1423   .6452  WSEL=    1303.06
3280 CROSS SECTION      8.00 EXTENDED       .77 FEET


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


3470 ENCROACHMENT STATIONS=     9989.3   10174.5  TYPE=      4  TARGET=         .451
     8.000      5.17   1303.27       .00   1302.46   1303.51       .24      4.70       .04   1300.90
    2125.0        .0     532.5    1592.5        .0     112.3     437.7     958.0     240.4   1301.50
      2.03       .00      4.74      3.64      .000      .045      .060      .000   1298.10   9989.30
   .004951      535.      540.      540.         4         0         0       .00    185.16  10174.46


*SECNO 8.130
 2800 NAT Q1=     198.95  WSELK=    1307.00  ENC Q1=     198.95  WSEL=    1307.90  RATIO=    .0000
 NAT Q1=     437.  RATIOS LOB, CH, ROB=    .0681   .1133   .8186  WSEL=    1307.90
3280 CROSS SECTION      8.13 EXTENDED       .23 FEET


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


3470 ENCROACHMENT STATIONS=     9970.6   10192.5  TYPE=      4  TARGET=         .545
     8.130      4.53   1307.73   1307.29   1307.00   1308.14       .41      4.58       .05   1307.30
    2125.0        .0     517.4    1607.6        .0      90.0     327.9     964.3     243.1   1307.10
      2.06       .00      5.75      4.90      .000      .045      .060      .000   1303.20   9970.60
   .015110      620.      670.      540.        19        14         0       .00    221.86  10192.46


*SECNO 8.220
 2800 NAT Q1=     237.94  WSELK=    1311.30  ENC Q1=     237.94  WSEL=    1312.10  RATIO=    .0000
 NAT Q1=     517.  RATIOS LOB, CH, ROB=    .0677   .3790   .5533  WSEL=    1312.10
3280 CROSS SECTION      8.22 EXTENDED       .23 FEET


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


3470 ENCROACHMENT STATIONS=     9924.8   10114.3  TYPE=      4  TARGET=         .540
     8.220      4.83   1312.23       .00   1311.30   1312.76       .53      4.58       .04   1309.80
    2125.0        .0    1715.6     409.4        .0     270.3     152.2     968.8     245.3   1309.00
      2.09       .00      6.35      2.69      .000      .045      .060      .000   1307.40   9924.80
   .007049      450.      460.      460.         4         0         0       .00    189.50  10114.30
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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 8.310
 2800 NAT Q1=     233.73  WSELK=    1315.37  ENC Q1=     233.73  WSEL=    1316.27  RATIO=    .0000
 NAT Q1=     605.  RATIOS LOB, CH, ROB=    .7273   .1149   .1578  WSEL=    1316.27
3280 CROSS SECTION      8.31 EXTENDED       .04 FEET


3470 ENCROACHMENT STATIONS=     9799.3   10020.7  TYPE=      4  TARGET=        .614
    8.310      3.74   1316.24   1315.51   1315.37   1316.56       .32      3.79       .02   1314.20
   2125.0    1500.9     624.1        .0     385.9     106.6        .0     973.8     247.5   1314.60
     2.12      3.89      5.85       .00      .060      .045      .000      .000   1312.50   9799.30
  .008797      470.      490.      485.         8        14         0       .00    221.40  10020.70


*SECNO 8.410
 2800 NAT Q1=     145.82  WSELK=    1319.32  ENC Q1=     159.23  WSEL=    1320.22  RATIO=   -.0919
 NAT Q1=     282.  RATIOS LOB, CH, ROB=    .0443   .5643   .3914  WSEL=    1320.22
3280 CROSS SECTION      8.41 EXTENDED       .26 FEET


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


3470 ENCROACHMENT STATIONS=     9972.9   10018.1  TYPE=      4  TARGET=        .436
    8.410      5.36   1320.26       .00   1319.32   1320.93       .67      4.26       .11   1317.60
   1246.0        .0    1246.0        .0        .0     189.4        .0     978.0     249.2   1317.20
     2.14       .00      6.58       .00      .000      .045      .000      .000   1314.90   9972.90
  .006944      550.      520.      490.         3         0         0       .00     45.20  10018.10


1490 NH CARD USED
*SECNO 8.500
 2800 NAT Q1=      70.56  WSELK=    1324.20  ENC Q1=     114.81  WSEL=    1324.80  RATIO=   -.6271
 NAT Q1=     126.  RATIOS LOB, CH, ROB=    .0860   .9103   .0037  WSEL=    1324.80

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


3470 ENCROACHMENT STATIONS=     9922.9   10022.1  TYPE=      4  TARGET=        .090
    8.500      4.43   1324.53       .00   1324.20   1324.90       .36      3.93       .03   1324.20
    894.0        .0     894.0        .0        .0     184.9        .0     980.2     250.0   1324.20
     2.17       .00      4.84       .00      .000      .045      .000      .000   1320.10   9922.90
  .009500      500.      500.      490.         3         0         0       .00     99.20  10022.10
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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 8.590
 2800 NAT Q1=      91.74  WSELK=    1329.92  ENC Q1=      91.74  WSEL=    1330.12  RATIO=    .0000
 NAT Q1=     112.  RATIOS LOB, CH, ROB=    .2446   .5286   .2268  WSEL=    1330.12
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9919.3   10038.8  TYPE=      4  TARGET=        .180
     8.590      3.99   1329.89   1329.89   1329.92   1330.53       .64      5.34       .08   1328.80
     894.0     137.2     611.7     145.1      53.0      82.1      38.6     982.1     251.2   1328.40
      2.19      2.59      7.45      3.76      .060      .045      .060      .000   1325.90   9919.32
   .014171      465.      465.      465.         8        10         0       .00    119.52  10038.84


*SECNO 8.690
 2800 NAT Q1=      89.93  WSELK=    1334.62  ENC Q1=      89.93  WSEL=    1334.82  RATIO=    .0000
 NAT Q1=     104.  RATIOS LOB, CH, ROB=    .2354   .7392   .0254  WSEL=    1334.82

3470 ENCROACHMENT STATIONS=     9969.6   10019.3  TYPE=      4  TARGET=        .136
     8.690      4.70   1335.10       .00   1334.62   1335.67       .57      5.13       .01   1332.20
     894.0     140.7     753.3        .0      38.4     117.9        .0     984.0     252.1   1333.10
      2.21      3.66      6.39       .00      .060      .045      .000      .000   1330.40   9969.62
   .007793      500.      500.      495.         3         0         0       .00     49.68  10019.30


*SECNO 8.780
 2800 NAT Q1=      94.11  WSELK=    1339.55  ENC Q1=      94.11  WSEL=    1339.75  RATIO=    .0000
 NAT Q1=     118.  RATIOS LOB, CH, ROB=    .3775   .5930   .0295  WSEL=    1339.75

3470 ENCROACHMENT STATIONS=     9857.8   10031.7  TYPE=      4  TARGET=        .205
     8.780      3.38   1339.68       .00   1339.55   1340.14       .46      4.46       .01   1338.40
     894.0     215.5     678.5        .0      99.3     110.4        .0     986.0     253.4   1338.40
      2.24      2.17      6.14       .00      .060      .045      .000      .000   1336.30   9857.83
   .010539      495.      495.      490.         3         0         0       .00    173.87  10031.70


*SECNO 8.890
 2800 NAT Q1=      90.57  WSELK=    1344.73  ENC Q1=      90.57  WSEL=    1344.93  RATIO=    .0000
 NAT Q1=     102.  RATIOS LOB, CH, ROB=    .0370   .7432   .2198  WSEL=    1344.93

3470 ENCROACHMENT STATIONS=     9986.2   10024.2  TYPE=      4  TARGET=        .108
     8.890      5.14   1345.14       .00   1344.73   1345.90       .76      5.67       .09   1342.60
     894.0        .0     729.8     164.2        .0      97.5      39.8     988.3     254.8   1341.90
      2.26       .00      7.48      4.13      .000      .045      .060      .000   1340.00   9986.20
   .008921      555.      590.      590.         2         0         0       .00     38.02  10024.22
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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 8.990
 2800 NAT Q1=      81.78  WSELK=    1350.01  ENC Q1=      81.78  WSEL=    1350.21  RATIO=    .0000
 NAT Q1=      93.  RATIOS LOB, CH, ROB=    .0242   .8048   .1710  WSEL=    1350.21

3470 ENCROACHMENT STATIONS=     9992.9   10036.3  TYPE=      4  TARGET=        .120
     8.990      4.32   1350.22       .00   1350.01   1351.11       .88      5.17       .04   1348.30
     894.0        .0     814.4      79.6        .0     104.1      21.1     989.8     255.3   1348.30
      2.28       .00      7.82      3.77      .000      .045      .060      .000   1345.90   9992.90
   .012629      491.      491.      491.         4         0         0       .00     43.40  10036.30


*SECNO 9.090
 2800 NAT Q1=      83.00  WSELK=    1356.72  ENC Q1=      83.00  WSEL=    1356.92  RATIO=    .0000
 NAT Q1=      94.  RATIOS LOB, CH, ROB=    .1591   .7678   .0731  WSEL=    1356.92

3470 ENCROACHMENT STATIONS=     9967.7   10010.3  TYPE=      4  TARGET=        .118
     9.090      4.17   1356.97       .00   1356.72   1357.86       .89      6.75       .00   1354.60
     894.0     102.6     782.7       8.6      26.7      98.0       3.5     991.5     255.8   1354.30
      2.30      3.85      7.99      2.46      .060      .045      .060      .000   1352.80   9967.70
   .011119      575.      570.      570.         4         0         0       .00     42.57  10010.27


*SECNO 9.190
 2800 NAT Q1=      77.57  WSELK=    1363.10  ENC Q1=      77.57  WSEL=    1363.30  RATIO=    .0000
 NAT Q1=      89.  RATIOS LOB, CH, ROB=    .1538   .8462   .0000  WSEL=    1363.30

3470 ENCROACHMENT STATIONS=     9970.9   10015.5  TYPE=      4  TARGET=        .125
     9.190      4.08   1363.28       .00   1363.10   1364.21       .92      6.33       .01   1360.90
     894.0      22.6     871.4        .0       6.6     111.9        .0     992.9     256.3   1364.30
      2.32      3.44      7.79       .00      .060      .045      .000      .000   1359.20   9970.93
   .013702      510.      515.      510.         4         0         0       .00     41.29  10012.23


*SECNO 9.290
 2800 NAT Q1=      88.10  WSELK=    1368.98  ENC Q1=      88.10  WSEL=    1369.18  RATIO=    .0000
 NAT Q1=     101.  RATIOS LOB, CH, ROB=    .1521   .7486   .0993  WSEL=    1369.18

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9986.8   10056.8  TYPE=      4  TARGET=        .126
     9.290      4.34   1369.24       .00   1368.98   1369.88       .64      5.64       .03   1366.10
     871.0      84.9     748.9      37.1      21.5     110.3      19.3     994.5     256.9   1369.30
      2.34      3.94      6.79      1.93      .060      .045      .060      .000   1364.90   9986.80
   .009433      490.      500.      505.         3         0         0       .00     68.51  10056.75
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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 9.390
 2800 NAT Q1=      76.20  WSELK=    1375.42  ENC Q1=      76.20  WSEL=    1375.62  RATIO=    .0000
 NAT Q1=      95.  RATIOS LOB, CH, ROB=    .2655   .5040   .2304  WSEL=    1375.62

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9946.2   10116.0  TYPE=      4  TARGET=         .194
     9.390      3.50   1375.60       .00   1375.42   1376.02       .42      6.12       .02   1375.10
     871.0     190.2     541.1     139.7      48.3      90.3      51.9     996.6     258.2   1374.20
      2.37      3.94      5.99      2.69      .060      .045      .060      .000   1372.10   9946.23
   .013252      550.      555.      523.         5         0         0       .00    132.03  10115.97


*SECNO 9.480
 2800 NAT Q1=      68.75  WSELK=    1382.13  ENC Q1=      68.76  WSEL=    1382.33  RATIO=   -.0002
 NAT Q1=      79.  RATIOS LOB, CH, ROB=    .1290   .8710   .0000  WSEL=    1382.33

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9984.2   10021.6  TYPE=      4  TARGET=         .129
     9.480      3.85   1382.35       .00   1382.13   1383.41      1.06      7.20       .19   1380.70
     871.0        .0     871.0        .0        .0     105.3        .0     998.3     259.1   1382.70
      2.39       .00      8.27       .00      .000      .045      .000      .000   1378.50   9984.20
   .016738      485.      485.      485.         4         0         0       .00     36.55  10020.75


*SECNO 9.520
 2800 NAT Q1=      73.99  WSELK=    1385.15  ENC Q1=      73.99  WSEL=    1385.35  RATIO=    .0000
 NAT Q1=      90.  RATIOS LOB, CH, ROB=    .1379   .8155   .0467  WSEL=    1385.35

3470 ENCROACHMENT STATIONS=     9958.5   10012.6  TYPE=      4  TARGET=         .179
     9.520      4.01   1385.41       .00   1385.15   1386.12       .70      2.67       .04   1383.90
     871.0       4.3     866.7        .0       1.9     128.5        .0     998.8     259.3   1384.20
      2.40      2.25      6.74       .00      .060      .045      .000      .000   1381.40   9958.50
   .013247      160.      180.      205.         3         0         0       .00     54.10  10012.60


*SECNO 9.610
 2800 NAT Q1=      53.91  WSELK=    1393.80  ENC Q1=      53.91  WSEL=    1394.00  RATIO=    .0000
 NAT Q1=      65.  RATIOS LOB, CH, ROB=    .0054   .4680   .5266  WSEL=    1394.00
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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

3280 CROSS SECTION 9.61 EXTENDED .08 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3470 ENCROACHMENT STATIONS= 9954.4 10006.2 TYPE= 4 TARGET= .166

9.610	3.28	1393.98	.00	1393.80	1394.98	1.00	8.78	.09	1393.60
871.0	.0	491.1	379.9	.0	55.0	56.9	1000.1	259.9	1392.60
2.41	.00	8.94	6.68	.000	.045	.060	.000	1390.70	9954.40
.027964	460.	470.	480.	2	0	0	.00	51.82	10006.22

THIS RUN EXECUTED 29JAN96 17:11:10

****
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

Main Channel

SUMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID
	.000	.00	.00	3.18	2130.26
	.000	9632.50	10565.33	3.80	932.83
	.080	.00	.00	4.01	1533.44
*	.080	9332.06	10185.30	5.32	763.15
	.190	.00	.00	6.35	871.86
	.190	9976.20	10623.63	6.91	466.45
	.290	.00	.00	8.93	650.15
	.290	9972.10	10169.37	10.60	197.27
*	.380	.00	.00	7.57	858.44
*	.380	9912.46	10240.44	7.76	327.98
	.480	.00	.00	6.09	898.32
	.480	9857.58	10347.17	5.82	489.58
	.570	.00	.00	5.72	934.96
	.570	9912.30	10214.25	6.90	301.95
*	.670	.00	.00	8.07	454.26
	.670	9689.00	10099.47	6.99	410.47
	.760	.00	.00	6.24	539.54
	.760	9840.43	10088.16	8.37	247.73
	.860	.00	.00	6.56	759.69
*	.860	9867.75	10139.32	6.55	271.57
	.950	.00	.00	7.09	557.94
	.950	9984.60	10192.22	7.52	207.62

	SECNO	STENCL	STENCR	VCH	TOPWID
	1.040	.00	.00	6.52	603.37
	1.040	9891.56	10127.35	6.94	235.79
	1.130	.00	.00	7.27	512.29
	1.130	9849.90	10044.40	7.67	194.50
	1.230	.00	.00	6.11	497.89
	1.230	9940.82	10231.48	6.49	290.65
	1.320	.00	.00	8.06	345.72
*	1.320	9975.60	10151.56	9.21	175.96
	1.410	.00	.00	6.53	576.71
	1.410	9915.26	10135.69	7.15	220.43
	1.500	.00	.00	6.84	575.17
	1.500	9812.29	10035.70	7.35	223.41
	1.590	.00	.00	5.68	690.21
	1.590	9779.13	10037.20	6.24	258.07
	1.680	.00	.00	7.52	466.06
	1.680	9831.26	10046.10	8.04	214.84
	1.780	.00	.00	7.74	379.70
	1.780	9900.85	10071.75	8.39	170.90
*	1.870	.00	.00	6.19	345.80
*	1.870	9835.93	10041.90	6.01	205.97
*	1.970	.00	.00	7.44	336.34
*	1.970	9956.18	10106.70	8.98	150.52
	2.070	.00	.00	8.67	364.04
	2.070	9952.62	10126.96	8.55	174.34
	2.150	.00	.00	8.56	264.69
	2.150	9982.10	10143.44	8.29	161.34
	2.240	.00	.00	7.11	372.62
	2.240	9839.01	10015.40	7.89	176.39
*	2.340	.00	.00	10.29	229.29
*	2.340	9941.75	10032.70	10.83	90.95
*	2.430	.00	.00	6.12	369.96
*	2.430	9890.80	10124.14	5.84	233.34
*	2.520	.00	.00	8.78	477.65
*	2.520	9932.15	10159.36	10.54	227.21

	SECNO	STENCL	STENCR	VCH	TOPWID
*	2.620	.00	.00	5.50	542.46
*	2.620	9801.47	10086.87	5.64	285.40
*	2.720	.00	.00	9.35	427.33
*	2.720	9900.24	10072.23	10.44	171.99
	2.820	.00	.00	8.60	442.24
	2.820	9870.99	10030.20	8.33	159.21
	2.920	.00	.00	5.96	495.83
	2.920	9922.60	10077.14	6.76	154.54
	3.040	.00	.00	4.66	752.88
	3.040	9972.60	10291.25	4.81	313.12
	3.140	.00	.00	6.94	1017.63
	3.140	9958.72	10130.78	8.04	172.06
	3.230	.00	.00	8.26	449.12
	3.230	9802.85	10046.58	9.02	243.72
	3.320	.00	.00	7.06	588.61
	3.320	9975.10	10231.97	7.25	256.87
	3.420	.00	.00	5.91	691.08
	3.420	9962.00	10344.32	6.13	382.32
	3.510	.00	.00	6.69	663.41
	3.510	9971.60	10371.01	7.00	399.41
*	3.590	.00	.00	9.78	345.52
*	3.590	9853.10	10038.70	10.49	185.60
*	3.700	.00	.00	8.72	279.86
*	3.700	9891.63	10039.40	8.57	147.77
	3.790	.00	.00	7.41	406.76
	3.790	9957.20	10160.72	7.55	203.52
	3.880	.00	.00	9.12	624.79
	3.880	9973.30	10174.52	9.45	201.22
	3.960	.00	.00	9.99	387.44
	3.960	9897.51	10075.63	10.62	178.12
*	4.050	.00	.00	7.11	699.22
*	4.050	9970.70	10178.25	7.10	207.54
	4.160	.00	.00	8.30	372.76
	4.160	9880.10	10093.71	8.89	213.61

	SECNO	STENCL	STENCR	VCH	TOPWID
	4.250	.00	.00	7.88	397.07
	4.250	9880.96	10072.37	8.30	191.40
	4.350	.00	.00	6.94	538.44
	4.350	9976.40	10223.75	7.09	247.35
	4.460	.00	.00	8.15	597.95
	4.460	9979.20	10247.52	8.77	266.60
	4.550	.00	.00	9.21	400.71
	4.550	9976.10	10167.44	9.22	191.34
	4.650	.00	.00	7.56	322.83
	4.650	9770.52	10013.50	6.85	242.98
	4.760	.00	.00	6.69	575.72
	4.760	9940.07	10227.24	7.24	287.17
	4.860	.00	.00	6.76	573.02
	4.860	9924.13	10289.12	7.28	364.99
	4.960	.00	.00	8.07	426.54
	4.960	9969.60	10153.72	8.45	184.12
	5.050	.00	.00	7.81	544.98
	5.050	9986.00	10211.50	7.81	225.50
	5.160	.00	.00	4.37	765.71
	5.160	9703.31	10037.10	4.70	333.79
*	5.230	.00	.00	7.29	434.08
*	5.230	9835.84	10100.63	8.42	264.79
*	5.290	.00	.00	4.29	1478.18
*	5.290	9823.04	10340.87	4.62	517.83
	5.390	.00	.00	4.20	1001.02
	5.390	9616.70	10048.30	4.83	431.60
*	5.460	.00	.00	7.13	1248.22
*	5.460	9647.13	10099.34	8.25	452.21
*	5.550	.00	.00	4.72	924.33
*	5.550	9709.43	10261.66	5.15	552.23
*	5.640	.00	.00	7.64	803.44
*	5.640	9908.18	10144.26	9.15	236.08
*	5.730	.00	.00	6.50	622.72
*	5.730	9681.23	10033.50	6.55	352.27

	SECNO	STENCL	STENCR	VCH	TOPWID
*	5.820	.00	.00	6.55	477.45
*	5.820	9927.43	10223.33	7.41	295.90
	5.910	.00	.00	5.97	510.91
	5.910	9903.52	10136.94	6.56	233.42
	5.990	.00	.00	7.88	658.03
*	5.990	9858.10	10061.41	9.09	203.31
*	6.080	.00	.00	7.02	786.54
*	6.080	9911.99	10085.84	7.39	173.85
	6.170	.00	.00	6.38	340.70
	6.170	9983.50	10151.81	6.77	168.30
	6.260	.00	.00	5.15	596.29
	6.260	9834.15	10036.10	5.81	201.95
*	6.360	.00	.00	7.76	643.63
*	6.360	9903.88	10051.41	9.00	147.52
*	6.450	.00	.00	5.40	609.88
*	6.450	9773.99	10074.16	5.64	300.17
*	6.560	.00	.00	6.72	711.72
*	6.560	9883.08	10030.90	8.19	147.82
	6.660	.00	.00	6.21	1075.83
*	6.660	9973.57	10269.86	6.36	296.29
*	6.750	.00	.00	8.61	1375.61
*	6.750	9973.46	10106.85	10.80	133.39
*	6.840	.00	.00	6.60	1749.16
*	6.840	9807.37	10041.56	6.21	234.19
	6.940	.00	.00	5.38	827.38
*	6.940	9988.30	10248.20	6.63	259.90
	7.020	.00	.00	7.75	855.48
	7.020	9979.60	10093.45	8.12	113.84
*	7.110	.00	.00	5.52	673.46
*	7.110	9812.49	10112.20	5.93	299.71
*	7.200	.00	.00	6.26	486.02
*	7.200	9790.97	10033.60	7.99	242.63
*	7.300	.00	.00	5.91	346.79
*	7.300	9957.47	10103.78	6.59	146.31

	SECNO	STENCL	STENCR	VCH	TOPWID
	7.400	.00	.00	4.48	562.84
	7.400	9849.68	10188.28	5.20	338.60
*	7.490	.00	.00	6.69	447.62
*	7.490	9907.90	10028.20	7.87	118.04
	7.570	.00	.00	6.03	742.96
*	7.570	9850.38	10049.50	6.38	199.12
*	7.680	.00	.00	7.48	459.24
*	7.680	9896.50	10023.70	9.17	127.20
	7.790	.00	.00	4.40	635.68
*	7.790	9987.50	10270.36	4.64	282.86
*	7.900	.00	.00	5.64	733.19
*	7.900	9965.50	10133.83	7.73	168.33
*	8.000	.00	.00	4.49	734.27
*	8.000	9989.30	10174.46	4.74	185.16
	8.130	.00	.00	3.71	417.88
*	8.130	9970.60	10192.46	5.75	221.86
	8.220	.00	.00	5.65	646.06
*	8.220	9924.80	10114.30	6.35	189.50
	8.310	.00	.00	4.51	776.54
	8.310	9799.30	10020.70	5.85	221.40
*	8.410	.00	.00	6.17	228.08
*	8.410	9972.90	10018.10	6.58	45.20
*	8.500	.00	.00	5.53	253.60
*	8.500	9922.90	10022.10	4.84	99.20
	8.590	.00	.00	6.15	189.04
*	8.590	9919.32	10038.84	7.45	119.52
	8.690	.00	.00	6.76	101.93
	8.690	9969.62	10019.30	6.39	49.68
	8.780	.00	.00	5.57	244.22
	8.780	9857.83	10031.70	6.14	173.87
	8.890	.00	.00	7.80	75.18
	8.890	9986.20	10024.22	7.48	38.02
	8.990	.00	.00	7.57	76.69
	8.990	9992.90	10036.30	7.82	43.40

	SECNO	STENCL	STENCR	VCH	TOPWID
	9.090	.00	.00	7.77	81.43
	9.090	9967.70	10010.27	7.99	42.57
	9.190	.00	.00	7.42	90.93
	9.190	9970.93	10015.50	7.79	41.29
	9.290	.00	.00	6.67	125.61
	9.290	9986.80	10056.75	6.79	68.51
	9.390	.00	.00	5.58	185.28
	9.390	9946.23	10115.97	5.99	132.03
*	9.480	.00	.00	8.00	81.34
	9.480	9984.20	10021.60	8.27	36.55
	9.520	.00	.00	6.50	161.40
	9.520	9958.50	10012.60	6.74	54.10
	9.610	.00	.00	8.23	96.08
*	9.610	9954.40	10006.22	8.94	51.82

Main Channel

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1062.77	-.15	1062.88	2130.26	1338.02	2382.93	3488.05	.00	.00	9632.50	10196.80	.00
	.000	1063.70	.93	1063.89	932.83	.00	4842.32	2366.68	.49	9632.50	9632.50	10196.80	10565.33
	.080	1065.40	.00	1065.56	1533.44	4726.38	1242.89	1239.73	.00	.00	9917.60	10185.30	.00
*	.080	1065.96	.56	1066.29	763.15	4839.45	2369.55	.00	.46	9332.06	9917.60	10185.30	10185.30
	.190	1069.39	.00	1069.77	871.86	112.00	3124.20	3972.80	.00	.00	9976.20	10163.00	.00
	.190	1070.28	.90	1070.83	466.45	.00	4560.44	2648.56	.37	9976.20	9976.20	10163.00	10623.63
	.290	1073.62	.00	1074.45	650.15	519.80	4250.02	2439.17	.00	.00	9972.10	10097.70	.00
	.290	1074.07	.45	1075.57	197.27	.00	5627.63	1581.37	.33	9972.10	9972.10	10097.70	10169.37
*	.380	1077.40	.00	1077.87	858.44	1225.70	3154.01	2829.29	.00	.00	9957.40	10036.80	.00
*	.380	1078.34	.93	1078.93	327.98	752.53	3811.64	2644.83	.31	9912.46	9957.40	10036.80	10240.44
	.480	1079.93	.00	1080.25	898.32	1753.61	3029.43	2425.96	.00	.00	9945.10	10060.60	.00
	.480	1080.53	.59	1080.86	489.58	1401.24	3295.65	2512.11	.14	9857.58	9945.10	10060.60	10347.17
	.570	1081.99	.00	1082.33	934.96	1126.51	4320.49	1762.00	.00	.00	9932.50	10084.30	.00
	.570	1082.41	.42	1083.03	301.95	159.41	5651.80	1397.79	.28	9912.30	9932.50	10084.30	10214.25
*	.670	1084.31	.00	1084.90	454.26	3175.44	3202.30	831.27	.00	.00	9956.60	10041.60	.00
	.670	1084.96	.65	1085.40	410.47	3299.65	3155.43	753.93	.05	9689.00	9956.60	10041.60	10099.47
	.760	1087.39	.00	1087.82	539.54	1478.25	4092.67	1638.09	.00	.00	9917.80	10055.00	.00
	.760	1087.63	.24	1088.57	247.73	774.69	5765.75	668.56	.34	9840.43	9917.80	10055.00	10088.16
	.860	1089.81	.00	1090.24	759.69	1313.43	4160.40	1735.17	.00	.00	9925.10	10055.90	.00
*	.860	1090.78	.97	1091.31	271.57	794.38	4985.19	1429.44	.24	9867.75	9925.10	10055.90	10139.32
	.950	1092.30	.00	1092.74	557.94	118.92	2432.52	3704.56	.00	.00	9984.60	10048.50	.00
	.950	1092.87	.58	1093.55	207.62	.00	2856.87	3399.13	.25	9984.60	9984.60	10048.50	10192.22
	1.040	1094.62	.00	1095.06	603.37	2780.60	3005.91	469.49	.00	.00	10020.20	10116.90	.00
	1.040	1095.31	.69	1095.87	235.79	2562.64	3655.79	37.57	.25	9891.56	10020.20	10116.90	10127.35
	1.130	1097.03	.00	1097.52	512.29	3227.66	2829.45	198.89	.00	.00	9972.70	10044.40	.00
	1.130	1097.65	.62	1098.32	194.50	2933.45	3322.54	.00	.22	9849.90	9972.70	10044.40	10044.40
	1.230	1099.42	.00	1099.79	497.89	649.36	2873.26	2733.38	.00	.00	9946.30	10039.50	.00
	1.230	1100.11	.69	1100.57	290.65	77.19	3463.44	2715.37	.23	9940.82	9946.30	10039.50	10231.48
	1.320	1101.76	.00	1102.40	345.72	19.59	2967.55	3268.86	.00	.00	9975.60	10049.40	.00
*	1.320	1102.35	.59	1103.36	175.96	.00	3796.61	2459.38	.28	9975.60	9975.60	10049.40	10151.56
	1.410	1104.62	.00	1104.97	576.71	1714.59	2375.42	2165.99	.00	.00	9955.80	10029.30	.00
	1.410	1105.47	.85	1106.07	220.43	1011.49	3044.39	2200.12	.30	9915.26	9955.80	10029.30	10135.69

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.500	1106.96	.00	1107.39	575.17	3460.20	2415.25	380.55	.00	.00	9962.20	10035.70	.00
	1.500	1107.83	.87	1108.42	223.41	3191.46	3064.54	.00	.31	9812.29	9962.20	10035.70	10035.70
	1.590	1109.20	.00	1109.58	690.21	1551.73	4428.59	275.68	.00	.00	9873.20	10037.20	.00
	1.590	1110.04	.84	1110.60	258.07	528.25	5727.75	.00	.32	9779.13	9873.20	10037.20	10037.20
	1.680	1111.44	.00	1111.93	466.06	2957.64	2464.49	833.86	.00	.00	9977.80	10046.10	.00
	1.680	1112.28	.84	1112.98	214.84	3158.17	3097.83	.00	.31	9831.26	9977.80	10046.10	10046.10
	1.780	1114.38	.00	1114.95	379.70	2012.61	2934.53	1308.86	.00	.00	9971.20	10039.10	.00
	1.780	1115.21	.82	1116.02	170.90	1875.55	3649.12	731.32	.27	9900.85	9971.20	10039.10	10071.75
*	1.870	1116.44	.00	1116.81	345.80	3091.85	2817.08	347.07	.00	.00	9975.20	10040.50	.00
*	1.870	1117.28	.84	1117.67	205.97	3181.39	3063.30	11.32	.12	9835.93	9975.20	10040.50	10041.90
*	1.970	1118.35	.00	1118.94	336.34	939.35	3126.07	2190.58	.00	.00	9967.40	10050.50	.00
*	1.970	1118.83	.48	1119.85	150.52	291.19	4130.46	1834.35	.28	9956.18	9967.40	10050.50	10106.70
	2.070	1121.11	.00	1121.86	364.04	706.64	3389.00	2160.36	.00	.00	9976.70	10039.30	.00
	2.070	1121.96	.85	1122.79	174.34	345.25	3798.60	2112.16	.18	9952.62	9976.70	10039.30	10126.96
	2.150	1123.73	.00	1124.41	264.69	123.93	2476.44	3655.62	.00	.00	9982.10	10023.30	.00
	2.150	1124.33	.59	1125.04	161.34	.00	2597.69	3658.31	.12	9982.10	9982.10	10023.30	10143.44
	2.240	1125.96	.00	1126.45	372.62	2355.37	3246.80	653.83	.00	.00	9953.20	10015.40	.00
	2.240	1126.57	.61	1127.29	176.39	2354.83	3901.17	.00	.26	9839.01	9953.20	10015.40	10015.40
*	2.340	1127.92	.00	1129.31	229.29	943.86	5086.17	225.97	.00	.00	9946.20	10032.70	.00
*	2.340	1128.80	.88	1130.60	90.95	82.46	6173.54	.00	.22	9941.75	9946.20	10032.70	10032.70
*	2.430	1131.42	.00	1131.77	369.96	2042.73	2414.73	1798.55	.00	.00	9960.90	10024.90	.00
*	2.430	1132.34	.93	1132.70	233.34	1930.04	2647.01	1678.95	.15	9890.80	9960.90	10024.90	10124.14
*	2.520	1133.56	.00	1134.29	477.65	1333.41	3019.06	1903.53	.00	.00	9975.00	10045.30	.00
*	2.520	1133.91	.36	1135.15	227.21	534.07	3885.11	1836.82	.29	9932.15	9975.00	10045.30	10159.36
*	2.620	1136.65	.00	1136.91	542.46	3484.54	1835.47	935.99	.00	.00	9960.40	10024.20	.00
*	2.620	1137.50	.85	1137.82	285.40	3562.28	2184.66	509.06	.22	9801.47	9960.40	10024.20	10086.87
*	2.720	1138.79	.00	1139.64	427.33	2046.61	3229.43	979.96	.00	.00	9975.40	10043.60	.00
*	2.720	1139.24	.45	1140.52	171.99	1874.97	3927.11	453.92	.25	9900.24	9975.40	10043.60	10072.23
	2.820	1142.84	.00	1143.49	442.24	3120.22	2852.55	283.23	.00	.00	9978.10	10030.20	.00
	2.820	1143.62	.78	1144.38	159.21	3155.89	3100.11	.00	.15	9870.99	9978.10	10030.20	10030.20
	2.920	1145.39	.00	1145.83	495.83	247.73	4751.94	1256.33	.00	.00	9922.60	10062.50	.00
	2.920	1146.12	.72	1146.81	154.54	.00	6066.55	189.45	.27	9922.60	9922.60	10062.50	10077.14
	3.040	1147.76	.00	1147.92	752.88	.00	1167.38	5088.62	.00	.00	9972.60	10045.60	.00
	3.040	1148.62	.86	1148.89	313.12	.00	1477.91	4778.09	.22	9972.60	9972.60	10045.60	10291.25

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	3.140	1149.19	.00	1149.60	1017.63	1052.74	3245.04	1958.22	.00	.00	9981.20	10065.80	.00
	3.140	1149.83	.64	1150.63	172.06	323.26	4191.38	1741.36	.30	9958.72	9981.20	10065.80	10130.78
	3.230	1151.98	.00	1152.50	449.12	2655.00	1538.82	2062.18	.00	.00	9974.10	10010.20	.00
	3.230	1152.96	.98	1153.66	243.72	2969.11	2001.32	1285.56	.33	9802.85	9974.10	10010.20	10046.58
	3.320	1154.76	.00	1155.21	588.61	193.75	3018.53	3043.72	.00	.00	9975.10	10053.00	.00
	3.320	1155.64	.88	1156.21	256.87	.00	3593.06	2662.94	.28	9975.10	9975.10	10053.00	10231.97
	3.420	1156.95	.00	1157.20	691.08	24.83	1806.85	4424.32	.00	.00	9962.00	10023.50	.00
	3.420	1157.75	.80	1158.08	382.32	.00	2177.05	4078.95	.30	9962.00	9962.00	10023.50	10344.32
	3.510	1158.87	.00	1159.20	663.41	606.07	2100.67	3549.27	.00	.00	9971.60	10029.00	.00
	3.510	1159.61	.74	1160.04	399.41	.00	2495.09	3760.91	.29	9971.60	9971.60	10029.00	10371.01
*	3.590	1161.19	.00	1162.10	345.52	2937.56	2880.19	390.25	.00	.00	9983.30	10038.70	.00
*	3.590	1161.87	.68	1163.07	185.60	2723.85	3484.15	.00	.26	9853.10	9983.30	10038.70	10038.70
*	3.700	1165.05	.00	1165.82	279.86	2520.96	3513.35	173.68	.00	.00	9984.80	10039.40	.00
*	3.700	1166.02	.97	1166.88	147.77	2300.68	3907.32	.00	.20	9891.63	9984.80	10039.40	10039.40
	3.790	1167.23	.00	1167.83	406.76	411.61	3944.13	1852.26	.00	.00	9957.20	10034.20	.00
	3.790	1168.12	.88	1168.82	203.52	.00	4537.84	1670.16	.22	9957.20	9957.20	10034.20	10160.72
	3.880	1169.44	.00	1170.20	624.79	194.49	3342.53	2670.97	.00	.00	9973.30	10029.10	.00
	3.880	1170.20	.76	1171.18	201.22	.00	3868.64	2339.36	.26	9973.30	9973.30	10029.10	10174.52
	3.960	1172.54	.00	1173.41	387.44	1407.29	2541.67	2259.04	.00	.00	9982.60	10022.70	.00
	3.960	1173.27	.73	1174.40	178.12	1204.18	3007.01	1996.80	.24	9897.51	9982.60	10022.70	10075.63
*	4.050	1175.69	.00	1176.14	699.22	336.29	2587.74	3283.97	.00	.00	9970.70	10023.60	.00
*	4.050	1176.53	.85	1177.05	207.54	.00	2901.76	3306.24	.21	9970.70	9970.70	10023.60	10178.25
	4.160	1177.82	.00	1178.44	372.76	1766.12	2940.41	1501.47	.00	.00	9978.20	10030.30	.00
	4.160	1178.52	.70	1179.33	213.61	1607.94	3475.12	1124.94	.23	9880.10	9978.20	10030.30	10093.71
	4.250	1180.13	.00	1180.61	397.07	2190.07	2094.52	1923.41	.00	.00	9988.40	10023.70	.00
	4.250	1180.88	.75	1181.49	191.40	2250.42	2424.92	1532.65	.22	9880.96	9988.40	10023.70	10072.37
	4.350	1182.39	.00	1182.74	538.44	133.76	1872.04	4202.19	.00	.00	9976.40	10021.40	.00
	4.350	1183.14	.75	1183.61	247.35	.00	2151.81	4056.19	.26	9976.40	9976.40	10021.40	10223.75
	4.460	1185.36	.00	1185.81	597.95	.00	1675.43	4532.57	.00	.00	9979.20	10026.30	.00
	4.460	1186.07	.71	1186.75	266.60	.00	2081.14	4126.86	.33	9979.20	9979.20	10026.30	10247.52
	4.550	1188.59	.00	1189.23	400.71	44.74	2122.67	4040.59	.00	.00	9976.10	10011.40	.00
	4.550	1189.38	.79	1190.17	191.34	.00	2381.03	3826.97	.25	9976.10	9976.10	10011.40	10167.44
	4.650	1191.31	.00	1191.71	322.83	4863.38	1314.75	29.86	.00	.00	9986.90	10013.50	.00
	4.650	1192.21	.90	1192.62	242.98	4853.73	1354.26	.00	.22	9770.52	9986.90	10013.50	10013.50

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.760	1194.05	.00	1194.37	575.72	1074.64	1357.10	3776.25	.00	.00	9980.10	10020.40	.00
	4.760	1194.77	.72	1195.21	287.17	595.89	1677.92	3934.19	.26	9940.07	9980.10	10020.40	10227.24
	4.860	1196.35	.00	1196.66	573.02	1416.01	1629.04	3162.95	.00	.00	9979.70	10021.50	.00
	4.860	1197.08	.72	1197.48	364.99	824.10	1969.63	3414.27	.27	9924.13	9979.70	10021.50	10289.12
	4.960	1198.72	.00	1199.29	426.54	545.57	2549.81	3112.61	.00	.00	9969.60	10026.70	.00
	4.960	1199.43	.71	1200.21	184.12	.00	3010.43	3197.57	.26	9969.60	9969.60	10026.70	10153.72
	5.050	1201.76	.00	1202.26	544.98	625.50	2516.79	3065.71	.00	.00	9986.00	10041.50	.00
	5.050	1202.63	.87	1203.25	225.50	.00	2886.49	3321.51	.27	9986.00	9986.00	10041.50	10211.50
	5.160	1204.07	.00	1204.26	765.71	4360.16	1356.00	491.84	.00	.00	9956.50	10037.10	.00
	5.160	1204.90	.83	1205.16	333.79	4433.32	1774.68	.00	.29	9703.31	9956.50	10037.10	10037.10
*	5.230	1205.73	.00	1206.30	434.08	2717.87	2290.61	1199.51	.00	.00	9949.70	10049.40	.00
*	5.230	1206.39	.66	1207.21	264.79	2336.24	3201.65	670.11	.31	9835.84	9949.70	10049.40	10100.63
*	5.290	1207.63	.00	1207.76	1478.18	1986.26	1557.02	2664.72	.00	.00	9961.70	10045.90	.00
*	5.290	1208.42	.79	1208.61	517.83	1350.02	1984.99	2872.99	.31	9823.04	9961.70	10045.90	10340.87
	5.390	1208.90	.00	1209.09	1001.02	4037.19	1564.33	606.48	.00	.00	9912.10	10048.30	.00
	5.390	1209.64	.74	1209.91	431.60	3928.63	2279.37	.00	.35	9616.70	9912.10	10048.30	10048.30
*	5.460	1211.03	.00	1211.36	1248.22	3021.98	1882.71	1303.32	.00	.00	9955.60	10030.70	.00
*	5.460	1211.67	.64	1212.27	452.21	3058.33	2575.15	574.51	.45	9647.13	9955.60	10030.70	10099.34
*	5.550	1213.80	.00	1213.95	924.33	2878.07	748.20	2581.72	.00	.00	9986.80	10032.20	.00
*	5.550	1214.60	.80	1214.80	552.23	2699.31	1003.69	2505.00	.34	9709.43	9986.80	10032.20	10261.66
*	5.640	1216.33	.00	1216.75	803.44	1819.14	1663.40	2725.45	.00	.00	9981.20	10045.90	.00
*	5.640	1216.83	.50	1217.73	236.08	1337.89	2288.14	2581.97	.35	9908.18	9981.20	10045.90	10144.26
*	5.730	1219.69	.00	1220.01	622.72	3577.76	1855.19	775.05	.00	.00	9973.70	10033.50	.00
*	5.730	1220.59	.90	1220.98	352.27	3983.82	2224.17	.00	.30	9681.23	9973.70	10033.50	10033.50
*	5.820	1222.06	.00	1222.40	477.45	924.69	1326.49	1476.82	.00	.00	9981.90	10033.50	.00
*	5.820	1222.73	.67	1223.23	295.90	444.49	1754.47	1529.04	.35	9927.43	9981.90	10033.50	10223.33
	5.910	1224.81	.00	1225.10	510.91	980.96	1364.74	1382.30	.00	.00	9977.00	10031.30	.00
	5.910	1225.54	.72	1225.96	233.42	681.22	1758.30	1288.47	.34	9903.52	9977.00	10031.30	10136.94
	5.990	1227.51	.00	1227.99	658.03	1200.05	1585.31	942.64	.00	.00	9982.80	10035.20	.00
*	5.990	1228.12	.62	1228.99	203.31	1158.68	2122.18	447.14	.34	9858.10	9982.80	10035.20	10061.41
*	6.080	1230.52	.00	1230.94	786.54	715.80	1835.85	1176.36	.00	.00	9980.40	10027.50	.00
*	6.080	1231.34	.81	1231.93	173.85	528.18	2214.43	985.39	.32	9911.99	9980.40	10027.50	10085.84
	6.170	1232.51	.00	1232.91	340.70	405.86	1988.08	1334.06	.00	.00	9983.50	10040.50	.00
	6.170	1233.35	.84	1233.88	168.30	.00	2434.46	1293.54	.30	9983.50	9983.50	10040.50	10151.81

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	6.260	1234.75	.00	1234.95	596.29	2114.17	851.43	476.41	.00	.00	9991.50	10036.10	.00
	6.260	1235.66	.91	1236.00	201.95	2245.84	1196.16	.00	.43	9834.15	9991.50	10036.10	10036.10
*	6.360	1237.67	.00	1238.19	643.63	929.53	1697.58	814.89	.00	.00	9976.90	10034.00	.00
*	6.360	1238.48	.82	1239.46	147.52	859.58	2381.29	201.13	.42	9903.88	9976.90	10034.00	10051.41
*	6.450	1240.73	.00	1240.92	609.88	1323.34	930.89	1187.77	.00	.00	9982.00	10021.60	.00
*	6.450	1241.73	1.00	1241.99	300.17	1481.17	1194.30	766.53	.39	9773.99	9982.00	10021.60	10074.16
*	6.560	1243.25	.00	1243.58	711.72	1417.73	1111.94	610.32	.00	.00	9985.50	10030.90	.00
*	6.560	1243.92	.67	1244.65	147.82	1536.43	1603.57	.00	.43	9883.08	9985.50	10030.90	10030.90
	6.660	1247.05	.00	1247.25	1075.83	607.13	880.58	1652.29	.00	.00	9984.90	10021.90	.00
*	6.660	1247.96	.91	1248.28	296.29	112.48	1115.31	1912.21	.42	9973.57	9984.90	10021.90	10269.86
*	6.750	1250.93	.00	1251.53	1375.61	762.06	1613.83	764.11	.00	.00	9987.90	10039.90	.00
*	6.750	1251.31	.38	1252.73	133.39	321.37	2235.84	582.79	.40	9973.46	9987.90	10039.90	10106.85
*	6.840	1254.61	.00	1255.05	1749.16	775.55	2011.93	352.52	.00	.00	9969.00	10029.20	.00
*	6.840	1255.51	.90	1255.96	234.19	814.24	2228.30	97.46	.30	9807.37	9969.00	10029.20	10041.56
	6.940	1257.43	.00	1257.61	827.38	145.46	669.70	1935.84	.00	.00	9988.30	10029.00	.00
*	6.940	1257.92	.49	1258.30	259.90	.00	959.83	1791.17	.45	9988.30	9988.30	10029.00	10248.20
	7.020	1260.45	.00	1260.90	855.48	267.08	932.36	1551.55	.00	.00	9979.60	10013.30	.00
	7.020	1261.30	.85	1262.02	113.84	.00	1209.10	1541.90	.40	9979.60	9979.60	10013.30	10093.45
*	7.110	1264.12	.00	1264.28	673.46	1130.67	466.40	1153.93	.00	.00	9995.10	10016.80	.00
*	7.110	1264.91	.79	1265.14	299.71	1210.06	603.07	937.87	.43	9812.49	9995.10	10016.80	10112.20
*	7.200	1267.52	.00	1267.86	486.02	1413.36	749.25	588.38	.00	.00	9974.00	10033.60	.00
*	7.200	1268.12	.60	1268.75	242.63	1509.14	1241.86	.00	.48	9790.97	9974.00	10033.60	10033.60
*	7.300	1272.25	.00	1272.59	346.79	636.72	1279.55	834.73	.00	.00	9976.40	10045.60	.00
*	7.300	1273.06	.81	1273.58	146.31	248.56	1795.93	706.51	.37	9957.47	9976.40	10045.60	10103.78
	7.400	1275.67	.00	1275.85	562.84	828.15	681.12	1241.73	.00	.00	9966.50	10030.90	.00
	7.400	1276.41	.74	1276.67	338.60	462.59	1038.30	1250.11	.42	9849.68	9966.50	10030.90	10188.28
*	7.490	1279.38	.00	1279.77	447.62	2135.36	615.64	.00	.00	.00	9986.90	10028.20	.00
*	7.490	1279.96	.57	1280.77	118.04	1855.59	895.41	.00	.42	9907.90	9986.90	10028.20	10028.20
	7.570	1283.00	.00	1283.31	742.96	1233.82	1294.44	222.74	.00	.00	9988.10	10049.50	.00
*	7.570	1283.86	.86	1284.32	199.12	1048.43	1702.57	.00	.46	9850.38	9988.10	10049.50	10049.50
*	7.680	1287.60	.00	1288.12	459.24	944.53	1165.41	15.06	.00	.00	9979.60	10023.70	.00
*	7.680	1288.07	.47	1289.12	127.20	505.57	1619.43	.00	.45	9896.50	9979.60	10023.70	10023.70
	7.790	1292.80	.00	1292.93	635.68	168.15	269.06	1687.79	.00	.00	9987.50	10014.80	.00
*	7.790	1293.68	.88	1293.86	282.86	.00	394.18	1730.82	.48	9987.50	9987.50	10014.80	10270.36

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	7.900	1297.62	.00	1297.87	733.19	306.68	522.85	1295.47	.00	.00	9965.50	10018.00	.00
*	7.900	1298.11	.49	1298.76	168.33	.00	915.14	1209.86	.57	9965.50	9965.50	10018.00	10133.83
*	8.000	1302.46	.00	1302.62	734.27	290.42	373.73	1460.84	.00	.00	9989.30	10025.10	.00
*	8.000	1303.27	.80	1303.51	185.16	.00	532.50	1592.50	.45	9989.30	9989.30	10025.10	10174.46
	8.130	1307.00	.00	1307.23	417.88	88.97	192.43	1843.61	.00	.00	9970.60	10023.40	.00
*	8.130	1307.73	.73	1308.14	221.86	.00	517.36	1607.64	.54	9970.60	9970.60	10023.40	10192.46
	8.220	1311.30	.00	1311.60	646.06	117.52	1133.18	874.31	.00	.00	9924.80	10000.00	.00
*	8.220	1312.23	.93	1312.76	189.50	.00	1715.61	409.38	.54	9924.80	9924.80	10000.00	10114.30
	8.310	1315.37	.00	1315.52	776.54	1686.26	326.38	112.35	.00	.00	9981.50	10020.70	.00
	8.310	1316.24	.87	1316.56	221.40	1500.91	624.09	.00	.61	9799.30	9981.50	10020.70	10020.70
*	8.410	1319.32	.00	1319.77	228.08	29.00	907.09	309.91	.00	.00	9972.90	10018.10	.00
*	8.410	1320.26	.94	1320.93	45.20	.00	1246.00	.00	.44	9972.90	9972.90	10018.10	10018.10
*	8.500	1324.20	.00	1324.65	253.60	55.17	838.82	.00	.00	.00	9922.90	10022.10	.00
*	8.500	1324.53	.33	1324.90	99.20	.00	894.00	.00	.09	9922.90	9922.90	10022.10	10022.10
	8.590	1329.92	.00	1330.30	189.04	188.72	511.05	194.23	.00	.00	9982.70	10013.70	.00
*	8.590	1329.89	-.03	1330.53	119.52	137.15	611.70	145.14	.18	9919.32	9982.70	10013.70	10038.84
	8.690	1334.62	.00	1335.19	101.93	191.07	684.17	18.76	.00	.00	9985.30	10019.30	.00
	8.690	1335.10	.48	1335.67	49.68	140.74	753.26	.00	.14	9969.62	9985.30	10019.30	10019.30
	8.780	1339.55	.00	1339.89	244.22	293.66	580.31	20.03	.00	.00	9988.00	10031.70	.00
	8.780	1339.68	.13	1340.14	173.87	215.51	678.49	.00	.21	9857.83	9988.00	10031.70	10031.70
	8.890	1344.73	.00	1345.49	75.18	29.19	683.87	180.94	.00	.00	9986.20	10009.40	.00
	8.890	1345.14	.42	1345.90	38.02	.00	729.83	164.17	.11	9986.20	9986.20	10009.40	10024.22
	8.990	1350.01	.00	1350.77	76.69	18.44	737.53	138.03	.00	.00	9992.90	10024.60	.00
	8.990	1350.22	.21	1351.11	43.40	.00	814.40	79.60	.12	9992.90	9992.90	10024.60	10036.30
	9.090	1356.72	.00	1357.49	81.43	125.84	707.69	60.47	.00	.00	9980.90	10008.90	.00
	9.090	1356.97	.25	1357.86	42.57	102.62	782.73	8.64	.12	9967.70	9980.90	10008.90	10010.27
	9.190	1363.10	.00	1363.87	90.93	116.14	777.86	.00	.00	.00	9973.80	10015.50	.00
	9.190	1363.28	.18	1364.21	41.29	22.58	871.42	.00	.13	9970.93	9973.80	10015.50	10015.50
	9.290	1368.98	.00	1369.55	125.61	127.19	679.33	64.48	.00	.00	9994.70	10030.10	.00
	9.290	1369.24	.25	1369.88	68.51	84.93	748.92	37.15	.13	9986.80	9994.70	10030.10	10056.75
	9.390	1375.42	.00	1375.75	185.28	226.59	458.04	186.37	.00	.00	9976.70	10021.80	.00
	9.390	1375.60	.18	1376.02	132.03	190.19	541.15	139.66	.19	9946.23	9976.70	10021.80	10115.97
*	9.480	1382.13	.00	1383.04	81.34	90.77	780.23	.00	.00	.00	9984.20	10021.60	.00
	9.480	1382.35	.21	1383.41	36.55	.00	871.00	.00	.13	9984.20	9984.20	10021.60	10021.60

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	9.520	1385.15	.00	1385.72	161.40	94.91	747.12	28.96	.00	.00	9959.80	10012.60	.00
	9.520	1385.41	.26	1386.12	54.10	4.35	866.65	.00	.18	9958.50	9959.80	10012.60	10012.60
	9.610	1393.80	.00	1394.53	96.08	.83	415.18	454.99	.00	.00	9954.40	9980.20	.00
*	9.610	1393.98	.18	1394.98	51.82	.00	491.12	379.88	.17	9954.40	9954.40	9980.20	10006.22

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .380  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .380  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .670  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .860  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.320  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.870  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.870  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.970  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.970  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.340  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.430  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.520  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.520  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.620  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.620  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.720  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.720  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.590  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.590  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.050  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.230  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.230  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.290  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.460  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.460  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO= 5.550 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=     5.550  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.640  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.640  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.730  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.730  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.820  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.820  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.990  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.360  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.360  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.450  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.450  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.560  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.560  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.660  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.750  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     6.750  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     6.750  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     6.840  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     6.840  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     6.940  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.110  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.110  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.490  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     7.490  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     7.570  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     7.680  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     7.680  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     7.680  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     7.680  PROFILE=  2  MINIMUM SPECIFIC ENERGY
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WARNING SECNO=      7.790  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      7.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      8.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.130  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.220  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.410  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      8.410  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      8.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.590  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.590  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      9.480  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.480  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.610  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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Floodway width summary: Main Channel
Profile No. 2

Section Number	Elevation Increase	Top Width	Left Encroach Station	Left Sta Distance From Center	Center Station	Right Sta Distance From Center	Right Encroach Station
.000	.93	932.83	9632.50	282.15	9914.65	650.68	10565.33
.080	.56	853.24	9332.06	719.39	10051.45	133.85	10185.30
.190	.90	647.43	9976.20	93.40	10069.60	554.03	10623.63
.290	.45	197.27	9972.10	62.80	10034.90	134.47	10169.37
.380	.93	327.98	9912.46	84.65	9997.10	243.34	10240.44
.480	.59	489.59	9857.58	145.27	10002.85	344.32	10347.17
.570	.42	301.95	9912.30	96.10	10008.40	205.85	10214.25
.670	.65	410.47	9689.00	310.10	9999.10	100.37	10099.47
.760	.24	247.73	9840.43	145.97	9986.40	101.76	10088.16
.860	.97	271.57	9867.75	122.75	9990.50	148.82	10139.32
.950	.58	207.62	9984.60	31.95	10016.55	175.67	10192.22
1.040	.69	235.79	9891.56	176.99	10068.55	58.80	10127.35
1.130	.62	194.50	9849.90	158.65	10008.55	35.85	10044.40
1.230	.69	290.65	9940.82	52.08	9992.90	238.58	10231.48
1.320	.59	175.96	9975.60	36.90	10012.50	139.06	10151.56
1.410	.85	220.43	9915.26	77.29	9992.55	143.14	10135.69
1.500	.87	223.42	9812.29	186.66	9998.95	36.75	10035.70
1.590	.84	258.07	9779.13	176.07	9955.20	82.00	10037.20
1.680	.84	214.84	9831.26	180.69	10011.95	34.15	10046.10
1.780	.82	170.90	9900.85	104.30	10005.15	66.60	10071.75
1.870	.84	205.97	9835.93	171.92	10007.85	34.05	10041.90
1.970	.48	150.52	9956.18	52.77	10008.95	97.75	10106.70
2.070	.85	174.34	9952.62	55.38	10008.00	118.96	10126.96
2.150	.59	161.34	9982.10	20.60	10002.70	140.74	10143.44
2.240	.61	176.39	9839.01	145.29	9984.30	31.10	10015.40
2.340	.88	90.95	9941.75	47.70	9989.45	43.25	10032.70
2.430	.93	233.34	9890.80	102.10	9992.90	131.24	10124.14
2.520	.36	227.21	9932.15	78.00	10010.15	149.21	10159.36
2.620	.85	285.40	9801.47	190.83	9992.30	94.57	10086.87
2.720	.45	171.99	9900.24	109.26	10009.50	62.73	10072.23
2.820	.78	159.21	9870.99	133.16	10004.15	26.05	10030.20
2.920	.72	154.54	9922.60	69.95	9992.55	84.59	10077.14
3.040	.86	318.65	9972.60	36.50	10009.10	282.15	10291.25
3.140	.64	172.06	9958.72	64.78	10023.50	107.28	10130.78
3.230	.98	243.73	9802.85	189.30	9992.15	54.43	10046.58
3.320	.88	256.88	9975.10	38.95	10014.05	217.92	10231.97
3.420	.80	382.32	9962.00	30.75	9992.75	351.57	10344.32
3.510	.74	399.41	9971.60	28.70	10000.30	370.71	10371.01
3.590	.68	185.60	9853.10	157.90	10011.00	27.70	10038.70
3.700	.97	147.77	9891.63	120.47	10012.10	27.30	10039.40
3.790	.88	203.52	9957.20	38.50	9995.70	165.02	10160.72
3.880	.76	201.22	9973.30	27.90	10001.20	173.32	10174.52
3.960	.73	178.13	9897.51	105.14	10002.65	72.98	10075.63
4.050	.85	207.54	9970.70	26.45	9997.15	181.09	10178.25
4.160	.70	213.61	9880.10	124.15	10004.25	89.46	10093.71
4.250	.75	191.40	9880.96	125.09	10006.05	66.31	10072.37
4.350	.75	247.35	9976.40	22.50	9998.90	224.85	10223.75

4.460	.71	268.32	9979.20	23.55	10002.75	244.77	10247.52
4.550	.79	191.34	9976.10	17.65	9993.75	173.69	10167.44
4.650	.90	242.98	9770.52	229.68	10000.20	13.30	10013.50
4.760	.72	287.17	9940.07	60.18	10000.25	226.99	10227.24
4.860	.72	364.99	9924.13	76.47	10000.60	288.52	10289.12
4.960	.71	184.12	9969.60	28.55	9998.15	155.57	10153.72
5.050	.87	225.50	9986.00	27.75	10013.75	197.75	10211.50
5.160	.83	333.80	9703.31	293.49	9996.80	40.30	10037.10
5.230	.66	264.79	9835.84	163.71	9999.55	101.08	10100.63
5.290	.79	517.83	9823.04	180.76	10003.80	337.07	10340.87
5.390	.74	431.60	9616.70	363.50	9980.20	68.10	10048.30
5.460	.64	452.21	9647.13	346.02	9993.15	106.19	10099.34
5.550	.80	552.23	9709.43	300.07	10009.50	252.16	10261.66
5.640	.50	236.08	9908.18	105.37	10013.55	130.71	10144.26
5.730	.90	352.27	9681.23	322.37	10003.60	29.90	10033.50
5.820	.67	295.90	9927.43	80.27	10007.70	215.63	10223.33
5.910	.72	233.42	9903.52	100.63	10004.15	132.79	10136.94
5.990	.62	203.31	9858.10	150.90	10009.00	52.41	10061.41
6.080	.81	173.85	9911.99	91.96	10003.95	81.89	10085.84
6.170	.84	168.31	9983.50	28.50	10012.00	139.81	10151.81
6.260	.91	201.95	9834.15	179.65	10013.80	22.30	10036.10
6.360	.82	147.52	9903.88	101.57	10005.45	45.96	10051.41
6.450	1.00	300.17	9773.99	227.81	10001.80	72.36	10074.16
6.560	.67	147.82	9883.08	125.12	10008.20	22.70	10030.90
6.660	.91	296.29	9973.57	29.83	10003.40	266.46	10269.86
6.750	.38	133.40	9973.46	40.45	10013.90	92.95	10106.85
6.840	.90	234.19	9807.37	191.73	9999.10	42.46	10041.56
6.940	.49	259.90	9988.30	20.35	10008.65	239.55	10248.20
7.020	.85	113.85	9979.60	16.85	9996.45	97.00	10093.45
7.110	.79	299.71	9812.49	193.46	10005.95	106.25	10112.20
7.200	.60	242.63	9790.97	212.83	10003.80	29.80	10033.60
7.300	.81	146.31	9957.47	53.53	10011.00	92.78	10103.78
7.400	.74	338.60	9849.68	149.02	9998.70	189.58	10188.28
7.490	.57	120.30	9907.90	99.65	10007.55	20.65	10028.20
7.570	.86	199.13	9850.38	168.42	10018.80	30.70	10049.50
7.680	.47	127.21	9896.50	105.15	10001.65	22.05	10023.70
7.790	.88	282.86	9987.50	13.65	10001.15	269.21	10270.36
7.900	.49	168.33	9965.50	26.25	9991.75	142.08	10133.83
8.000	.80	185.16	9989.30	17.90	10007.20	167.26	10174.46
8.130	.73	221.86	9970.60	26.40	9997.00	195.46	10192.46
8.220	.93	189.50	9924.80	37.60	9962.40	151.90	10114.30
8.310	.87	221.40	9799.30	201.80	10001.10	19.60	10020.70
8.410	.94	45.20	9972.90	22.60	9995.50	22.60	10018.10
8.500	.33	99.20	9922.90	49.60	9972.50	49.60	10022.10
8.590	-.03	119.52	9919.32	78.88	9998.20	40.64	10038.84
8.690	.48	49.68	9969.62	32.68	10002.30	17.00	10019.30
8.780	.13	173.87	9857.83	152.02	10009.85	21.85	10031.70
8.890	.42	38.02	9986.20	11.60	9997.80	26.42	10024.22
8.990	.21	43.40	9992.90	15.85	10008.75	27.55	10036.30
9.090	.25	42.57	9967.70	27.20	9994.90	15.37	10010.27
9.190	.18	44.57	9970.93	23.72	9994.65	20.85	10015.50
9.290	.25	69.95	9986.80	25.60	10012.40	44.35	10056.75
9.390	.18	169.73	9946.23	53.02	9999.25	116.72	10115.97
9.480	.21	37.40	9984.20	18.70	10002.90	18.70	10021.60

9.520	.26	54.11	9958.50	27.70	9986.20	26.40	10012.60
9.610	.18	51.82	9954.40	12.90	9967.30	38.92	10006.22

FLOODWAY DATA, Main Channel
PROFILE NO. 2

STATION	WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.000	933.	2167.	3.3	1063.7	1062.8	.9
.080	853.	1589.	4.5	1066.0	1065.4	.6
.190	647.	1363.	5.3	1070.3	1069.4	.9
.290	197.	779.	9.3	1074.0	1073.6	.4
.380	328.	1418.	5.1	1078.3	1077.4	.9
.480	490.	1739.	4.1	1080.5	1079.9	.6
.570	302.	1273.	5.7	1082.4	1082.0	.4
.670	410.	1593.	4.5	1084.9	1084.3	.6
.760	248.	1019.	7.1	1087.6	1087.4	.2
.860	272.	1345.	5.4	1090.8	1089.8	1.0
.950	208.	977.	6.4	1092.9	1092.3	.6
1.040	236.	1112.	5.6	1095.3	1094.6	.7
1.130	194.	1017.	6.2	1097.6	1097.0	.6
1.230	291.	1295.	4.8	1100.1	1099.4	.7
1.320	176.	836.	7.5	1102.4	1101.8	.6
1.410	220.	1042.	6.0	1105.5	1104.6	.9
1.500	223.	1080.	5.8	1107.9	1107.0	.9
1.590	258.	1126.	5.6	1110.0	1109.2	.8
1.680	215.	998.	6.3	1112.2	1111.4	.8
1.780	171.	937.	6.7	1115.2	1114.4	.8
1.870	206.	1357.	4.6	1117.2	1116.4	.8
1.970	151.	812.	7.7	1118.8	1118.3	.5
2.070	174.	958.	6.5	1122.0	1121.1	.9
2.150	161.	983.	6.4	1124.3	1123.7	.6
2.240	176.	1024.	6.1	1126.6	1126.0	.6
2.340	91.	590.	10.6	1128.8	1127.9	.9
2.430	233.	1406.	4.4	1132.3	1131.4	.9
2.520	227.	813.	7.7	1134.0	1133.6	.4
2.620	285.	1460.	4.3	1137.5	1136.7	.8
2.720	172.	764.	8.2	1139.2	1138.8	.4
2.820	159.	949.	6.6	1143.6	1142.8	.8
2.920	155.	956.	6.5	1146.1	1145.4	.7
3.040	313.	1513.	4.1	1148.7	1147.8	.9
3.140	172.	935.	6.7	1149.8	1149.2	.6
3.230	244.	1037.	6.0	1153.0	1152.0	1.0
3.320	257.	1163.	5.4	1155.7	1154.8	.9
3.420	382.	1499.	4.2	1157.7	1156.9	.8
3.510	399.	1384.	4.5	1159.6	1158.9	.7
3.590	186.	794.	7.8	1161.9	1161.2	.7
3.700	148.	927.	6.7	1166.0	1165.0	1.0
3.790	204.	1070.	5.8	1168.1	1167.2	.9
3.880	201.	923.	6.7	1170.2	1169.4	.8

FLOODWAY DATA, Main Channel
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
3.960	178.	841.	7.4	1173.2	1172.5	.7
4.050	208.	1184.	5.2	1176.5	1175.7	.8
4.160	214.	1027.	6.0	1178.5	1177.8	.7
4.250	191.	1120.	5.5	1180.8	1180.1	.7
4.350	247.	1223.	5.1	1183.2	1182.4	.8
4.460	267.	1021.	6.1	1186.1	1185.4	.7
4.550	191.	962.	6.5	1189.4	1188.6	.8
4.650	243.	1262.	4.9	1192.2	1191.3	.9
4.760	287.	1266.	4.9	1194.7	1194.0	.7
4.860	365.	1416.	4.4	1197.1	1196.4	.7
4.960	184.	936.	6.6	1199.4	1198.7	.7
5.050	225.	1082.	5.7	1202.7	1201.8	.9
5.160	334.	1562.	4.0	1204.9	1204.1	.8
5.230	265.	913.	6.8	1206.4	1205.7	.7
5.290	518.	1977.	3.1	1208.4	1207.6	.8
5.390	432.	1529.	4.1	1209.6	1208.9	.7
5.460	452.	1181.	5.3	1211.6	1211.0	.6
5.550	552.	1812.	3.4	1214.6	1213.8	.8
5.640	236.	855.	7.3	1216.8	1216.3	.5
5.730	352.	1369.	4.5	1220.6	1219.7	.9
5.820	296.	799.	4.7	1222.8	1222.1	.7
5.910	233.	821.	4.5	1225.5	1224.8	.7
5.990	203.	591.	6.3	1228.1	1227.5	.6
6.080	174.	715.	5.2	1231.3	1230.5	.8
6.170	168.	732.	5.1	1233.3	1232.5	.8
6.260	202.	779.	4.4	1235.7	1234.8	.9
6.360	148.	488.	7.1	1238.5	1237.7	.8
6.450	300.	984.	3.5	1241.7	1240.7	1.0
6.560	148.	502.	6.3	1243.9	1243.2	.7
6.660	296.	822.	3.8	1248.0	1247.1	.9
6.750	133.	379.	8.3	1251.3	1250.9	.4
6.840	234.	741.	4.2	1255.5	1254.6	.9
6.940	260.	625.	4.4	1257.9	1257.4	.5
7.020	114.	423.	6.5	1261.3	1260.4	.9
7.110	300.	806.	3.4	1264.9	1264.1	.8
7.200	243.	479.	5.7	1268.1	1267.5	.6
7.300	146.	512.	5.4	1273.0	1272.2	.8
7.400	339.	749.	3.7	1276.4	1275.7	.7
7.490	118.	382.	7.2	1280.0	1279.4	.6
7.570	199.	579.	4.8	1283.9	1283.0	.9
7.680	127.	309.	6.9	1288.1	1287.6	.5
7.790	283.	661.	3.2	1293.7	1292.8	.9

FLOODWAY DATA, Main Channel
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
7.900	168.	345.	6.2	1298.1	1297.6	.5
8.000	185.	550.	3.9	1303.3	1302.5	.8
8.130	222.	418.	5.1	1307.7	1307.0	.7
8.220	190.	423.	5.0	1312.2	1311.3	.9
8.310	221.	492.	4.3	1316.3	1315.4	.9
8.410	45.	189.	6.6	1320.2	1319.3	.9
8.500	99.	185.	4.8	1324.5	1324.2	.3
8.590	120.	174.	5.1	1329.9	1329.9	.0
8.690	50.	156.	5.7	1335.1	1334.6	.5
8.780	174.	210.	4.3	1339.7	1339.6	.1
8.890	38.	137.	6.5	1345.1	1344.7	.4
8.990	43.	125.	7.1	1350.2	1350.0	.2
9.090	43.	128.	7.0	1357.0	1356.7	.3
9.190	41.	118.	7.5	1363.3	1363.1	.2
9.290	70.	151.	5.8	1369.3	1369.0	.3
9.390	170.	191.	4.6	1375.6	1375.4	.2
9.480	37.	105.	8.3	1382.3	1382.1	.2
9.520	54.	130.	6.7	1385.5	1385.2	.3
9.610	52.	112.	7.8	1394.0	1393.8	.2

Appendix D

HEC-2 Output File for:

White Tanks Wash
Method 1 Floodway Analysis

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    29JAN96    TIME   17:09:55   *
*********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 17:09:55

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Main Channel - Final with Floodway
T4      Floodway Encroachment Method 1
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Floodway Model for White Tanks Wash
   This model is based on:
      -  Subcritical flow regime.
      -  The cross sections were obtained by photogrammetric methods by
         Aerial Mapping Company, Phoenix, AZ, based photographs taken
         October 1991.
      -  The lower reach of this analysis is submerged during a 100-year event
         by the pool that is impounded by the Buckeye Flood Control Structure.
         The peak stage in the Buckeye Structure is 1081.0.  In the water
         surface profile model (MAIN.HC2) Sections 0.00, 0.08, 0.19, 0.29, 0.38,
         0.48 are submerged by the backwater from the Buckeye Flood Control
         Structure.  Based on the Guidelines for Study Contractors (FEMA, 1994),
         this floodway model is based on conditions without submergence.
      -  Ineffective flow areas have been modeled using high roughness values
         so that ineffective flow areas do not conflict with the a Method 4
         (equal conveyance method) floodway analysis.
      -  Floodway modeling is performed using Method 4 to determine initial
         limits and Method 1 to set the limits.  This model uses Method 1.
         target values vary in an attempt to gain consistant results.
         File MAINM4.HC2 is the file containing the Method 4 analysis.
      -  Some adjustments to the Method 4 stations were made to smooth the
         floodway boundary or to incorporate a branch of the channel that should
         not be obstructed by localized encroachments.
         ------------------------------------------------------------
      -  This file is the final floodway model for the main branch of
         White Tanks Wash.
         ------------------------------------------------------------


   By: M. Forest                                          Prepared By:
   File Name:  MAINM1.HC2                            Alpha Engineering Group
   January 1996                                            Phoenix, Arizona
  ==============================================================================
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	.005	0	0.0	7209.0	1062.92	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1	0	0	0	0	0	0	

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	27	28	26	4	0	110	115	200

Manning's roughness values for the primary channel were estimated from field investigations. Values for the overbank are modified for some sections to account for effective conveyance in the overbank areas as noted in the input.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively. Sensitivity analyses suggested that the model is not highly sensitive to these values.

NC	0.060	0.060	0.040	.1	.3

Beginning section located just upstream of the Buckeye Flood Control Structure The beginning water surface elevation is based on slope area method since the floodway model is to be performed without the downstream submergence.

ET			9.1						9500	10780
X1	0.00	14	9632.5	10196.8	0.0	0.0	0.0	0.0	0.0	
GR	1061.5	8903.6	1061.7	9020.6	1061.4	9161.9	1062.1	9409.0	1061.8	9632.5
GR	1061.2	9833.2	1061.4	10000.0	1061.6	10196.8	1061.3	10426.7	1060.3	10654.5
GR	1060.7	10829.5	1062.6	11023.2	1065.0	11173.7	1065.7	11222.2		

ET			9.1						9520	10630
X1	0.08	48	9917.6	10185.3	445.0	440.0	430.0			
GR	1070.7	8904.4	1069.2	8926.3	1066.8	8948.9	1066.8	8972.7	1064.5	8996.5
GR	1064.3	9015.8	1064.0	9038.5	1063.6	9073.2	1064.0	9109.1	1064.0	9140.0
GR	1063.7	9198.2	1063.0	9272.1	1062.7	9349.6	1063.2	9451.8	1064.3	9537.7
GR	1064.7	9611.5	1063.9	9685.3	1064.0	9739.3	1063.0	9781.6	1062.1	9805.4
GR	1064.8	9826.9	1066.5	9862.3	1067.4	9887.7	1067.2	9917.6	1065.8	9944.0
GR	1063.1	9969.6	1063.6	9996.3	1063.5	10000.0	1063.0	10016.0	1063.6	10051.5
GR	1064.4	10081.7	1063.7	10109.7	1065.2	10145.7	1065.5	10185.3	1065.5	10229.9
GR	1066.5	10294.4	1067.0	10359.9	1066.3	10391.5	1064.0	10424.5	1063.9	10469.3
GR	1064.1	10530.9	1064.3	10614.9	1064.3	10695.8	1064.3	10775.6	1064.3	10829.5
GR	1065.0	10860.4	1071.7	10909.8	1075.4	10923.3				

ET			9.1						9970	10630
X1	0.19	53	9976.2	10163.0	750.0	300.0	570.0			
GR	1076.5	9112.6	1074.4	9174.1	1073.1	9198.5	1073.4	9213.7	1074.5	9258.0
GR	1074.7	9303.1	1073.6	9344.8	1073.6	9395.1	1071.8	9430.9	1071.2	9463.9
GR	1071.3	9486.7	1069.9	9490.4	1071.2	9499.5	1071.3	9530.3	1071.4	9588.6
GR	1070.0	9657.1	1069.3	9697.5	1069.2	9721.2	1069.7	9770.7	1070.0	9827.0
GR	1070.4	9875.6	1069.7	9907.4	1069.0	9921.7	1065.6	9926.0	1068.9	9933.2
GR	1069.0	9950.9	1068.8	9976.2	1066.8	9990.5	1066.0	9998.3	1066.1	10000.0
GR	1066.3	10012.0	1067.1	10053.6	1067.0	10098.6	1066.7	10134.4	1065.1	10150.1
GR	1065.2	10154.7	1068.7	10163.0	1067.7	10193.3	1068.0	10250.5	1067.3	10295.0
GR	1067.1	10323.8	1072.0	10356.2	1072.7	10386.8	1072.6	10433.2	1071.9	10504.8
GR	1066.8	10571.4	1066.9	10643.9	1067.1	10730.9	1067.0	10829.2	1068.4	10919.3
GR	1072.1	10985.4	1075.6	11011.4	1075.6	11070.0				
ET			9.1						9970	10360
X1	0.29	61	9972.1	10097.7	530.0	500.0	515.0			
GR	1079.9	8747.8	1079.9	8788.2	1078.8	8854.4	1076.7	8908.0	1077.1	8959.5
GR	1075.9	9011.0	1073.1	9026.8	1074.8	9040.3	1076.4	9087.6	1076.1	9134.6
GR	1076.8	9191.5	1076.8	9228.2	1078.8	9267.6	1078.3	9302.6	1076.2	9342.1
GR	1074.8	9371.6	1076.0	9404.0	1076.4	9444.8	1077.3	9504.0	1076.8	9556.8
GR	1076.4	9620.6	1074.7	9657.7	1074.7	9697.1	1074.9	9757.0	1072.3	9785.5
GR	1073.2	9805.7	1072.6	9844.8	1072.8	9875.8	1071.2	9906.9	1073.3	9942.7
GR	1073.3	9972.1	1071.2	9981.1	1067.0	9988.2	1068.6	10000.0	1068.8	10027.4
GR	1070.2	10054.5	1071.7	10097.7	1072.3	10109.6	1069.3	10122.6	1069.9	10149.5
GR	1073.1	10178.5	1072.8	10218.0	1071.5	10243.5	1072.2	10269.8	1072.0	10316.3
GR	1072.4	10352.3	1072.1	10372.0	1069.6	10386.6	1072.0	10403.9	1076.4	10421.4
GR	1076.7	10444.6	1075.7	10458.4	1073.3	10467.7	1077.8	10498.7	1077.3	10540.1
GR	1077.2	10555.3	1074.1	10565.0	1077.4	10577.6	1078.4	10656.1	1079.3	10768.4
GR	1080.0	10863.7								
ET			9.1						9910	10250
X1	0.38	34	9957.4	10036.8	560.0	520.0	510.0			
GR	1082.1	9134.6	1081.0	9190.4	1080.5	9239.4	1079.7	9286.7	1079.3	9323.1
GR	1079.7	9379.5	1076.9	9445.0	1077.5	9521.7	1077.8	9569.2	1076.9	9620.9
GR	1075.9	9661.1	1076.0	9713.4	1076.9	9761.1	1076.8	9822.6	1076.0	9863.8
GR	1075.4	9901.3	1074.1	9920.9	1073.9	9957.4	1071.3	9982.3	1071.7	10000.0
GR	1071.7	10025.5	1074.8	10036.8	1074.4	10073.1	1074.9	10142.0	1074.8	10223.6
GR	1074.7	10294.8	1074.7	10341.3	1075.0	10361.4	1079.3	10383.8	1080.8	10408.0
GR	1079.0	10429.0	1080.5	10445.4	1081.5	10489.7	1082.5	10563.3		

Section 0.48

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

```
ET                      9.1                                                     9850     10350
NH      8       .9    9714.7       .3    9760.4       .2    9802.3       .2    9837.5       .06
NH   9945.1    .045   10060.6     .06   10413.4       .2   10600.1
X1    0.48      45    9945.1   10060.6     480.0    520.0     490.0
GR   1083.7  9229.9    1081.0    9257.9    1081.7   9292.9    1082.6    9340.1    1081.5    9391.5
GR   1080.3  9433.5    1079.8    9477.2    1079.3   9529.8    1079.3    9582.8    1081.1    9624.4
GR   1082.1  9668.4    1080.7    9714.7    1078.4   9760.4    1078.9    9802.3    1079.3    9837.5
GR   1073.1  9852.1    1077.0    9867.6    1076.6   9876.5    1074.6    9886.6    1075.1    9902.4
GR   1078.0  9923.4    1077.8    9945.1    1076.4   9964.4    1073.8    9977.6    1074.2   10000.0
GR   1074.3 10026.8    1077.4   10037.4    1078.1  10060.6    1079.0   10101.2    1077.1   10149.3
GR   1077.0 10194.3    1078.2   10235.8    1076.6  10274.3    1077.2   10296.6    1077.9   10324.6
GR   1079.0 10355.9    1077.8   10377.1    1075.7  10380.7    1077.5   10392.3    1077.8   10413.4
GR   1079.4 10451.3    1079.3   10492.4    1084.8  10528.9    1085.5   10581.6    1085.8   10600.1
```

Section 0.57

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

Extra data points were required to force a value in the first field of the second NH record that is small enough to fit in the first field that only allows 6 characters.

```
ET                      9.1                                                     9912     10230
NH      8       .9    9789.1       .3    9827.5       .2    9853.0      .08    9884.6       .06
NH   9932.5    .045   10084.3     .06   10345.8       .9   10769.2
X1    0.57      29    9932.5   10084.3     490.0    501.0     501.0
GR   1085.3  9747.9    1082.9    9789.1    1080.7   9827.5    1077.3    9853.0    1078.2    9884.6
GR   1076.3  9905.2    1079.9    9919.9    1080.3   9932.5    1078.4    9952.2    1075.2    9965.7
GR   1076.1  9980.6    1074.1    9988.9    1075.1  10000.0    1075.2   10014.5    1077.7   10035.7
GR   1077.7 10056.0    1079.5   10084.3    1079.2  10118.4    1079.4   10181.6    1079.6   10248.3
GR   1078.8 10284.6    1080.4   10315.3    1081.7  10345.8    1081.0   10406.3    1081.0   10496.4
GR   1080.7 10592.9    1080.7   10680.9    1081.3  10732.6    1084.7   10769.2

NC     .07       .06     .045
ET                      9.1                                                     9689     10100
X1    0.67      28    9956.6   10041.6     480.0    498.0     498.0
GR   1086.1  9616.7    1085.3    9638.3    1085.3   9661.6    1081.3    9684.7    1079.5    9697.4
GR   1079.8  9705.5    1082.1    9722.6    1081.3   9744.9    1081.4    9768.4    1081.6    9805.3
GR   1082.1  9841.6    1081.1    9872.1    1081.7   9883.4    1084.5    9892.8    1082.2    9909.6
GR   1080.2  9926.4    1079.8    9940.1    1081.1   9956.6    1080.0    9972.0    1078.2    9985.0
GR   1077.8 10000.0    1077.8   10010.1    1080.9  10016.8    1081.5   10041.6    1081.5   10078.5
GR   1081.8 10108.1    1085.5   10130.8    1087.1  10183.7
```

NC	.06	.06	.045							
ET			9.1						9830	10088
X1	0.76	25	9917.8	10055.0	501.0	501.0	501.0			
GR	1087.8	9594.5	1087.0	9716.6	1085.9	9757.5	1083.2	9770.3	1082.6	9777.6
GR	1083.2	9782.8	1085.3	9792.8	1084.5	9817.0	1084.7	9855.8	1085.3	9891.3
GR	1085.6	9917.8	1080.8	9932.1	1081.9	9940.4	1082.9	9960.7	1083.4	9989.1
GR	1081.2	9993.9	1081.4	10000.0	1082.3	10023.5	1084.1	10055.0	1083.1	10088.7
GR	1082.3	10118.2	1085.5	10136.7	1085.5	10164.9	1085.9	10187.0	1089.2	10206.8

Section 0.86

This Section is located at the Junction 4E where Watersheds K1, K2 and K3 enter the main branch of White Tanks Wash. The flow is decreased at the next section.

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9868	10139
NH	4	.2	9824.3	.06	9925.1	.045	10055.9	.06	10381.2	
X1	0.86	26	9925.1	10055.9	522.0	510.0	522.0			
GR	1095.0	9493.0	1092.1	9534.4	1089.3	9575.0	1088.9	9617.7	1088.4	9642.3
GR	1089.4	9670.3	1087.7	9685.0	1087.2	9708.8	1087.4	9737.2	1087.6	9781.5
GR	1086.8	9813.9	1085.4	9817.4	1087.3	9824.3	1087.3	9864.4	1086.6	9925.1
GR	1085.5	9968.3	1083.9	9973.9	1083.5	9999.0	1083.2	10000.0	1083.1	10024.3
GR	1086.0	10031.8	1086.8	10055.9	1086.1	10100.8	1087.3	10176.1	1089.5	10270.3
GR	1090.1	10381.2								

Section 0.95

The discharge values are changed at this section since it is located upstream of juntion 4E.

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9984	10192
QT	2	6256.0	6256.0							
NH	4	.05	9984.6	.045	10048.5	.05	10398.7	.2	10559.9	
X1	0.95	22	9984.6	10048.5	600.0	489.0	489.0			
GR	1094.3	9937.9	1091.8	9959.0	1089.6	9984.6	1084.6	9991.4	1084.8	10000.0
GR	1084.8	10014.5	1088.5	10026.2	1090.0	10048.5	1089.3	10080.8	1088.8	10119.2
GR	1086.9	10144.6	1086.5	10155.9	1088.9	10167.1	1090.0	10205.5	1089.9	10240.3
GR	1091.6	10273.7	1091.7	10300.0	1090.5	10334.9	1091.0	10398.7	1090.8	10472.5
GR	1092.4	10515.7	1093.4	10559.9						

```
ET                          9.1                                                   9891      10128
NC      .06       .06       .045
X1     1.04        25    10020.2   10116.9     474.0     440.0     474.0
GR   1095.4    9800.1    1094.8    9823.9    1092.6    9839.1    1089.4    9852.7    1091.4    9860.0
GR   1091.3    9889.7    1091.5    9927.2    1091.2    9955.7    1090.7    9978.1    1089.9    9995.2
GR   1089.6   10000.0    1090.4   10020.2    1088.9   10025.9    1089.8   10055.0    1089.5   10072.6
GR   1088.4   10086.7    1093.4   10116.9    1094.9   10149.4    1093.3   10192.5    1093.4   10253.9
GR   1093.5   10339.3    1094.3   10406.3    1094.8   10463.1    1095.7   10551.5    1096.1   10615.7
```

Section 1.13

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9849      10045
NH         4        .9    9768.9       .06    9972.7      .045   10044.4       .06   10376.8
X1      1.13        25    9972.7   10044.4     484.0     500.0     490.0
GR   1099.8    9617.0    1099.7    9660.4    1097.4    9699.4    1095.7    9730.1    1093.0    9736.0
GR   1095.1    9749.6    1096.4    9768.9    1094.3    9797.9    1093.3    9824.8    1093.2    9866.8
GR   1092.3    9912.8    1092.1    9932.5    1093.6    9947.7    1093.4    9972.7    1092.8    9983.9
GR   1090.0    9991.3    1090.3   10000.0    1090.7   10020.6    1094.2   10044.4    1096.4   10072.3
GR   1096.4   10133.2    1096.9   10202.6    1097.3   10250.7    1098.3   10313.5    1098.4   10376.8

NC      .06       .06       .045
ET                          9.1                                                   9940      10232
X1      1.23        20    9946.3   10039.5     470.0     515.0     510.0
GR   1100.6    9698.5    1099.7    9752.2    1097.9    9788.2    1099.5    9818.2    1099.5    9855.8
GR   1097.1    9903.1    1095.1    9946.3    1094.0    9971.9    1093.6   10000.0    1094.1   10021.8
GR   1097.3   10039.5    1096.3   10077.9    1096.4   10141.4    1096.1   10192.3    1095.4   10228.1
GR   1093.7   10244.5    1093.8   10251.9    1097.7   10263.3    1100.1   10309.0    1102.4   10378.0

ET                          9.1                                                   9975      10200
X1      1.32        15    9975.6   10049.4     485.0     485.0     485.0
GR   1102.7    9922.9    1102.5    9957.0    1100.1    9975.6    1095.3    9984.1    1095.7    9996.2
GR   1096.2   10000.0    1097.2   10021.6    1097.2   10049.4    1098.3   10102.1    1099.3   10167.7
GR   1098.5   10210.5    1098.7   10251.4    1100.8   10281.4    1102.0   10315.3    1102.5   10376.9
```

Section 1.41

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9900	10135
NH	5	.2	9888.4	.05	9955.8	.045	10029.3	.05	10211.1	.08
NH	10406									
X1	1.41	22	9955.8	10029.3	445.0	445.0	445.0			
GR	1106.2	9768.2	1103.6	9812.6	1101.8	9845.2	1099.9	9867.4	1099.4	9888.4
GR	1100.8	9915.5	1101.0	9955.8	1100.1	9982.2	1098.5	9993.6	1098.4	10000.0
GR	1098.4	10008.7	1100.9	10029.3	1100.9	10056.9	1101.2	10092.1	1102.8	10134.1
GR	1103.9	10169.9	1104.0	10211.1	1102.3	10250.6	1102.4	10290.7	1102.8	10330.9
GR	1104.4	10362.5	1105.4	10406.0						
NC	.06	.06	.045							
ET			9.1						9810	10036
X1	1.50	23	9962.2	10035.7	480.0	483.0	483.0			
GR	1109.4	9695.9	1107.3	9720.5	1103.3	9738.8	1101.9	9747.3	1102.5	9755.6
GR	1104.3	9768.5	1103.5	9798.1	1103.8	9840.5	1104.4	9872.1	1102.6	9901.5
GR	1102.9	9924.5	1102.9	9962.2	1102.4	9990.3	1100.7	9999.3	1101.0	10000.0
GR	1101.1	10014.0	1103.9	10035.7	1106.3	10062.4	1106.9	10121.1	1106.0	10190.5
GR	1105.5	10244.3	1107.2	10306.4	1109.2	10373.0				
ET			9.1						9770	10038
X1	1.59	32	9873.2	10037.2	494.0	494.0	494.0			
GR	1112.9	9454.9	1111.4	9482.5	1108.9	9500.5	1108.8	9520.7	1108.6	9543.9
GR	1107.7	9565.3	1108.6	9592.8	1107.2	9610.7	1106.8	9641.6	1106.6	9659.9
GR	1107.7	9690.8	1107.3	9714.7	1105.3	9734.5	1106.0	9758.3	1107.4	9782.7
GR	1108.2	9812.3	1108.0	9847.4	1107.1	9873.2	1104.1	9886.4	1103.7	9902.6
GR	1103.8	9916.9	1105.2	9943.6	1104.9	9964.5	1103.7	9975.1	1103.8	10000.0
GR	1103.9	10015.7	1106.6	10037.2	1108.1	10076.4	1108.2	10126.0	1109.4	10201.1
GR	1109.6	10276.9	1110.6	10349.4						
ET			9.1						9831	10047
X1	1.68	18	9977.8	10046.1	490.0	480.0	480.0			
GR	1113.1	9653.6	1110.9	9697.3	1109.7	9749.9	1109.3	9798.7	1108.3	9829.0
GR	1106.7	9841.3	1107.9	9866.4	1108.2	9901.4	1108.7	9944.5	1108.3	9977.8
GR	1106.1	9988.3	1105.9	10000.0	1106.0	10009.1	1107.1	10018.6	1106.8	10046.1
GR	1109.3	10091.4	1111.0	10139.2	1112.4	10182.2				
ET			9.1						9880	10072
X1	1.78	17	9971.2	10039.1	507.0	495.0	500.0			
GR	1116.7	9732.9	1116.4	9758.7	1112.5	9782.0	1112.4	9796.0	1113.7	9816.7
GR	1112.8	9856.1	1111.2	9901.7	1110.0	9941.7	1109.3	9971.2	1108.4	9982.9
GR	1108.5	10000.0	1108.6	10026.0	1110.8	10039.1	1110.4	10069.0	1110.6	10100.1
GR	1114.2	10143.3	1115.6	10197.2						
ET			9.1						9835	10042
X1	1.87	13	9975.2	10040.5	495.0	495.0	495.0			
GR	1118.0	9740.4	1115.1	9789.1	1112.3	9840.1	1111.4	9897.6	1110.7	9939.0
GR	1110.2	9975.2	1108.8	9977.0	1109.0	10000.0	1109.6	10018.1	1110.8	10040.5
GR	1114.9	10069.6	1116.7	10119.5	1118.5	10181.9				

ET			9.1						9945	10107
X1	1.97	12	9967.4	10050.5	535.0	560.0	540.0			
GR	1118.9	9838.7	1116.7	9881.5	1117.4	9912.7	1115.0	9935.2	1113.4	9967.4
GR	1113.2	9994.4	1113.1	10000.0	1113.5	10050.5	1113.6	10095.5	1114.3	10131.6
GR	1117.7	10158.9	1118.5	10192.0						
ET			9.1						9952	10127
X1	2.07	18	9976.7	10039.3	484.0	484.0	484.0			
GR	1123.7	9811.3	1121.3	9861.3	1119.1	9899.9	1118.8	9930.7	1118.9	9962.8
GR	1116.9	9976.7	1114.7	9984.7	1114.4	10000.0	1114.4	10021.2	1116.1	10039.3
GR	1116.5	10065.4	1117.6	10090.4	1117.8	10121.8	1118.3	10150.0	1120.6	10184.8
GR	1121.3	10224.1	1121.0	10259.0	1122.7	10308.1				
ET			9.1						9970	10143
X1	2.15	16	9982.1	10023.3	444.0	444.0	444.0			
GR	1125.1	9916.1	1123.7	9945.0	1122.5	9968.1	1120.3	9982.1	1115.9	9985.5
GR	1115.9	9998.8	1115.9	10000.0	1115.9	10007.4	1119.2	10023.3	1118.4	10055.6
GR	1118.7	10090.6	1118.7	10124.8	1120.0	10150.7	1121.7	10177.6	1124.3	10217.6
GR	1125.7	10264.6								
ET			9.1						9839	10016
X1	2.24	18	9953.2	10015.4	489.0	489.0	489.0			
GR	1127.6	9643.1	1126.4	9695.7	1125.4	9745.5	1123.4	9784.1	1122.3	9816.3
GR	1122.4	9839.8	1120.0	9854.7	1122.6	9865.6	1122.6	9887.9	1122.6	9928.4
GR	1119.3	9953.2	1118.6	9975.9	1117.9	9994.9	1117.9	10000.0	1119.7	10015.4
GR	1122.2	10035.8	1125.0	10074.4	1127.6	10118.2				
ET			9.1						9900	10033
X1	2.34	13	9946.2	10032.7	495.0	508.0	500.0			
GR	1128.9	9803.7	1127.8	9833.9	1125.6	9858.1	1126.3	9893.4	1125.4	9925.5
GR	1124.2	9946.2	1122.0	9961.6	1121.8	9975.5	1121.8	10000.0	1121.8	10017.9
GR	1123.7	10032.7	1127.6	10056.6	1130.0	10079.8				
ET			9.1						9890	10124
X1	2.43	27	9960.9	10024.9	471.0	471.0	471.0			
GR	1133.0	9757.9	1130.8	9801.1	1130.1	9843.2	1129.1	9883.9	1125.4	9891.5
GR	1125.1	9913.1	1125.1	9937.5	1127.5	9945.0	1127.0	9960.9	1125.1	9975.9
GR	1123.9	9985.0	1123.9	9995.2	1124.0	10000.0	1125.7	10013.7	1128.5	10024.9
GR	1128.4	10043.1	1127.9	10060.5	1125.8	10070.4	1127.5	10080.6	1128.2	10094.1
GR	1127.8	10107.1	1126.0	10114.1	1123.3	10122.3	1123.4	10126.2	1127.2	10132.8
GR	1130.9	10150.1	1132.9	10184.3						
ET			9.1						9930	10160
X1	2.52	27	9975.0	10045.3	490.0	500.0	495.0			
GR	1137.7	9864.6	1133.8	9886.0	1130.1	9895.7	1129.1	9907.9	1129.1	9920.9
GR	1131.1	9942.4	1132.0	9958.1	1130.9	9975.0	1127.6	9980.9	1128.0	10000.0
GR	1127.9	10020.3	1129.9	10030.2	1130.8	10045.3	1129.8	10060.0	1129.9	10072.3
GR	1131.1	10095.8	1131.5	10129.2	1132.6	10173.5	1133.2	10202.1	1132.6	10226.0
GR	1133.1	10258.2	1132.9	10279.4	1131.2	10298.0	1131.0	10309.4	1132.0	10330.4
GR	1133.0	10357.6	1135.1	10382.7						

```
ET                      9.1                                                  9800      10100
X1     2.62       36   9960.4   10024.2     525.0     525.0     525.0
GR   1138.2   9613.4   1137.5    9633.2    1135.9    9656.0    1135.2    9681.6    1134.5    9706.4
GR   1133.2   9718.5   1131.7    9721.7    1135.4    9738.7    1136.3    9765.1    1135.8    9788.1
GR   1132.3   9806.4   1130.8    9819.3    1131.7    9842.2    1134.2    9856.4    1133.5    9873.1
GR   1130.7   9895.1   1129.9    9903.1    1132.0    9912.9    1132.0    9924.5    1130.1    9931.1
GR   1132.4   9943.6   1132.3    9960.4    1131.7    9978.0    1130.7    9984.6    1128.7    9986.8
GR   1129.1  10000.0   1133.0   10011.1    1134.8   10024.2    1134.6   10052.0    1134.0   10079.5
GR   1132.6  10102.2   1133.1   10120.9    1135.2   10138.8    1135.8   10173.3    1137.7   10205.4
GR   1139.7  10237.9

ET                      9.1                                                  9900      10072
X1     2.72       24   9975.4   10043.6     506.0     506.0     506.0
GR   1140.1   9698.8   1139.5    9725.1    1137.7    9768.2    1136.6    9780.8    1136.4    9791.7
GR   1137.6   9808.4   1138.2    9834.8    1139.0    9865.8    1136.5    9888.1    1135.5    9904.5
GR   1135.3   9936.5   1134.9    9959.6    1135.2    9975.4    1133.6    9981.0    1133.2   10000.0
GR   1133.3  10019.0   1135.1   10043.6    1136.8   10065.1    1137.7   10088.2    1135.3   10111.3
GR   1137.0  10133.7   1138.1   10149.6    1138.1   10172.8    1141.5   10205.0
```

Section 2.82

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                      9.1                                                  9871      10075
NH       4        .9   9785.6       .06    9978.1      .045   10030.2        .6   10131.1
X1     2.82       22   9978.1   10030.2     515.0     540.0     539.0
GR   1144.2   9657.1   1142.0    9693.2    1141.1    9732.8    1142.0    9785.6    1141.8    9825.8
GR   1140.8   9852.9   1137.9    9864.0    1138.0    9874.2    1138.5    9887.0    1138.5    9916.1
GR   1138.1   9954.2   1137.5    9978.1    1135.5    9994.5    1135.5   10000.0    1136.2   10012.0
GR   1138.1  10030.2   1137.5   10046.4    1135.7   10063.9    1134.7   10074.7    1135.8   10082.7
GR   1140.2  10106.0   1144.4   10131.1
```

Section 2.92

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                      9.1                                                  9900      10090
NH       4       .06   9922.6       .045   10062.5       .06   10209.7        .9   10387.6
X1     2.92       23   9922.6   10062.5     510.0     585.0     560.0
GR   1147.8   9775.5   1146.2    9815.7    1144.7    9855.3    1144.9    9884.1    1143.7    9905.4
GR   1140.1   9922.6   1139.6    9940.4    1139.5    9954.0    1139.2    9977.3    1138.9   10000.0
GR   1138.8  10015.6   1142.1   10062.5    1142.2   10098.4    1142.1   10126.5    1142.9   10161.8
GR   1142.9  10182.9   1144.0   10209.7    1142.6   10232.2    1140.0   10253.6    1141.3   10276.8
```

```
GR   1143.8    10310.9     1146.3    10345.1      1148.7     10387.6

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  Section 3.04

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
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ET                          9.1                                                  9972.6       10300
NH       4        .06     9972.6       .045    10045.6        .06    10495.3        .9    10765.5
X1    3.04         34     9972.6    10045.6      610.0      625.0      625.0
GR   1151.1     9972.6     1142.0     9992.8     1142.8    10000.0     1144.0    10022.3     1144.8     10045.6
GR   1145.5    10091.3     1145.4    10123.8     1145.3    10150.5     1142.9    10162.9     1142.5     10181.9
GR   1142.1    10192.4     1142.3    10215.1     1142.2    10230.5     1142.9    10249.8     1142.2     10262.3
GR   1141.2    10269.6     1141.9    10275.9     1143.6    10294.0     1144.0    10316.2     1144.0     10332.5
GR   1146.3    10361.4     1147.1    10382.8     1145.8    10419.7     1146.8    10495.3     1146.5     10525.5
GR   1146.2    10570.1     1146.6    10596.6     1145.9    10639.8     1145.1    10661.4     1144.1     10673.8
GR   1143.1    10682.0     1146.6    10710.6     1147.7    10732.1     1150.0    10765.5

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  Section 3.14

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
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ET                          9.1                                                   9900       10131
NH       5         .9     9875.1        .06     9981.2       .045    10065.8        .06    10285.4         .9
NH   10616
X1    3.14         36     9981.2    10065.8      510.0      340.0      495.0
GR   1149.4     9557.7     1148.5     9611.6     1148.6     9681.0     1147.3     9713.5     1148.4     9731.3
GR   1148.4     9762.8     1148.1     9804.7     1148.4     9848.4     1148.4     9875.1     1146.3     9891.0
GR   1145.7     9904.9     1146.3     9929.0     1146.4     9955.1     1146.5     9969.4     1145.4     9981.2
GR   1143.4     9987.0     1143.3    10000.0     1143.3    10008.6     1144.3    10028.3     1144.2    10043.4
GR   1142.9    10055.6     1143.0    10065.8     1144.4    10081.9     1144.9    10108.6     1147.2    10147.1
GR   1147.8    10208.8     1148.3    10285.4     1148.0    10362.6     1146.5    10425.3     1146.9    10476.0
GR   1146.4    10495.0     1144.7    10503.4     1145.7    10520.9     1147.9    10542.5     1148.8    10579.1
GR   1150.4      10616

NC       .06        .06      .045
ET                          9.1                                                   9800       10060
X1    3.23         20     9974.1    10010.2      511.0      511.0      511.0
GR   1152.3     9638.9     1151.0     9701.2     1150.4     9747.7     1148.8     9777.8     1148.6     9803.1
GR   1150.6     9821.2     1151.1     9840.5     1150.0     9866.8     1148.0     9883.5     1149.0     9907.6
GR   1149.1     9948.8     1148.1     9974.1     1146.2     9988.2     1146.4    10000.0     1147.5    10010.2
GR   1147.2    10045.9     1147.1    10067.3     1147.2    10076.9     1151.9    10101.1     1152.8    10128.1
```

```
ET                          9.1                                                   9970      10250
X1     3.32        24    9975.1   10053.0     460.0     465.0     487.0
GR   1156.7    9803.8    1154.6    9850.3    1153.5    9880.8    1153.2    9898.5    1154.6    9915.8
GR   1154.4    9943.8    1153.3    9965.5    1152.3    9975.1    1149.2    9982.3    1149.0   10000.0
GR   1149.0   10016.4    1149.0   10036.0    1149.8   10053.0    1151.0   10076.8    1151.9   10114.2
GR   1152.4   10152.9    1152.3   10201.3    1153.4   10259.5    1152.6   10315.2    1151.6   10357.6
GR   1152.2   10389.8    1152.7   10410.2    1155.4   10443.1    1157.3   10491.6

ET                          9.1                                                   9962      10350
X1     3.42        28    9962.0   10023.5     488.0     440.0     488.0
GR   1157.8    9932.4    1157.5    9951.5    1154.0    9962.0    1152.2    9974.2    1151.1    9995.7
GR   1150.9   10000.0    1150.9   10012.3    1154.9   10023.5    1155.2   10039.4    1155.1   10064.4
GR   1154.6   10073.5    1151.5   10082.6    1152.4   10098.8    1153.6   10120.8    1153.9   10149.7
GR   1153.8   10184.1    1154.6   10215.8    1154.6   10251.9    1154.4   10296.5    1154.9   10349.6
GR   1154.6   10410.4    1155.1   10461.4    1155.1   10506.2    1154.9   10551.2    1153.5   10576.2
GR   1154.1   10598.4    1155.8   10631.2    1158.9   10666.8

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Section 3.51

Flow added at Junction 3E
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ET                          9.1                                                   9970      10345
X1     3.51        20    9971.6   10029.0     487.0     487.0     487.0
GR   1160.4    9859.7    1158.4    9896.9    1155.3    9920.3    1156.3    9944.6    1156.1    9971.6
GR   1152.8    9984.3    1152.9   10000.0    1153.6   10029.0    1155.1   10074.8    1155.7   10125.7
GR   1157.0   10170.4    1158.1   10221.8    1157.6   10270.7    1157.1   10336.2    1157.2   10403.7
GR   1156.8   10458.8    1155.5   10489.3    1155.9   10515.7    1158.5   10545.8    1161.3   10588.8

QT        2    6208.0    6208.0
ET                          9.1                                                   9845      10070
X1     3.59        20    9983.3   10038.7     440.0     440.0     440.0
GR   1159.5    9795.4    1157.9    9823.1    1157.0    9838.1    1157.0    9857.6    1157.0    9873.4
GR   1158.2    9894.5    1158.2    9922.5    1159.2    9943.5    1159.5    9963.4    1158.9    9983.3
GR   1154.9    9997.5    1154.9   10000.0    1155.0   10012.5    1155.1   10024.1    1157.9   10038.7
GR   1159.1   10061.3    1161.2   10080.6    1160.1   10105.6    1161.4   10147.8    1164.0   10201.9

ET                          9.1                                                   9892      10040
X1     3.70        13    9984.8   10039.4     558.0     558.0     558.0
GR   1164.1    9773.7    1163.5    9826.0    1161.4    9876.5    1159.8    9917.1    1161.8    9940.3
GR   1162.3    9963.8    1159.1    9984.8    1157.2    9998.0    1157.3   10000.0    1157.3   10021.1
GR   1158.3   10039.4    1168.5   10060.8    1168.5   10101.9

ET                          9.1                                                   9900      10161
X1     3.79        18    9957.2   10034.2     460.0     460.0     460.0
GR   1167.1    9824.8    1166.5    9875.2    1165.5    9926.6    1163.1    9957.2    1159.5    9975.2
GR   1159.7    9997.0    1159.5   10000.0    1159.5   10018.9    1163.1   10034.2    1164.8   10074.8
GR   1165.4   10117.0    1164.9   10142.1    1161.7   10150.9    1164.9   10169.7    1164.2   10186.8
GR   1161.5   10201.3    1165.0   10215.2    1167.3   10232.1

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Section 3.88

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9973	10175
NH	4	.06	9973.3	.045	10029.1	.06	10341.5	.9	10595.0	
X1	3.88	15	9973.3	10029.1	475.0	475.0	475.0			
GR	1170.8	9911.5	1168.0	9952.2	1166.2	9973.3	1162.1	9984.5	1162.1	10000.0
GR	1162.0	10015.0	1165.1	10029.1	1167.3	10059.8	1167.2	10104.2	1166.1	10150.1
GR	1166.8	10203.2	1167.6	10279.3	1168.7	10341.5	1169.0	10547.9	1171.5	10595.0

Section 3.96

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9895	10070
NH	4	.9	9799.4	.06	9982.6	.045	10022.7	.06	10184.0	
X1	3.96	27	9982.6	10022.7	440.0	440.0	440.0			
GR	1173.9	9673.9	1171.8	9717.9	1171.3	9738.7	1172.0	9753.9	1173.5	9776.3
GR	1173.9	9799.4	1172.1	9824.5	1170.6	9868.4	1169.0	9889.8	1168.2	9912.1
GR	1170.4	9921.3	1170.7	9943.9	1171.2	9975.7	1170.1	9982.6	1165.1	9991.0
GR	1165.1	10000.0	1165.1	10010.4	1168.9	10022.7	1168.4	10035.9	1167.0	10046.1
GR	1167.2	10064.7	1167.4	10079.1	1169.4	10085.7	1171.0	10103.4	1171.1	10120.4
GR	1172.8	10150.1	1174.8	10184.0						

Section 4.05

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

ET			9.1						9970	10180
NH	4	2.0	9932.0	.06	9970.7	.045	10023.6	.06	10287.1	
X1	4.05	33	9970.7	10023.6	520.0	509.0	509.0			
GR	1175.9	9522.2	1175.3	9562.6	1174.9	9608.0	1172.8	9646.8	1172.2	9676.2
GR	1172.4	9712.1	1173.7	9754.9	1172.2	9781.9	1171.9	9798.5	1173.4	9822.0
GR	1173.8	9847.4	1172.9	9883.7	1171.2	9905.6	1170.1	9916.9	1170.3	9925.7
GR	1173.8	9932.0	1173.9	9948.2	1172.0	9970.7	1170.5	9982.3	1167.8	9988.2
GR	1167.3	10000.0	1167.3	10011.0	1170.4	10023.6	1171.2	10064.0	1172.5	10107.2
GR	1172.8	10141.8	1170.7	10162.8	1168.7	10176.4	1169.9	10186.8	1172.7	10208.8
GR	1175.7	10236.4	1179.2	10258.6	1178.3	10287.1				

```
NC      .06       .06      .045
ET                         9.1                                                  9880      10100
X1     4.16        17    9978.2   10030.3     520.0     540.0     530.0
GR   1179.0    9758.8    1177.0    9801.4    1175.0    9850.2    1174.2    9882.8    1175.7    9905.8
GR   1174.8    9940.0    1174.1    9966.5    1172.2    9978.2    1171.2    9988.2    1170.3   10000.0
GR   1169.9   10014.3    1173.3   10030.3    1175.5   10060.7    1173.6   10089.7    1172.9   10107.0
GR   1177.2   10143.6    1179.0   10182.1

ET                         9.1                                                  9865      10080
X1     4.25        15    9988.4   10023.7     485.0     500.0     495.0
GR   1180.8    9680.2    1179.8    9746.8    1179.2    9806.0    1177.2    9872.6    1176.1    9928.5
GR   1175.5    9962.9    1175.7    9981.0    1173.7    9988.4    1172.1    9995.7    1172.1   10000.0
GR   1172.3   10014.3    1174.1   10023.7    1174.8   10062.1    1175.6   10092.5    1181.5   10131.0

ET                         9.1                                                  9975      10224
X1     4.35        21    9976.4   10021.4     500.0     540.0     520.0
GR   1183.4    9895.7    1181.4    9941.8    1181.0    9967.3    1178.6    9976.4    1176.1    9983.8
GR   1175.7   10000.0    1176.1   10009.5    1177.6   10021.4    1178.4   10045.5    1178.8   10090.0
GR   1177.5   10114.7    1177.6   10135.1    1179.4   10176.7    1180.0   10238.0    1180.7   10304.1
GR   1180.4   10361.2    1180.1   10393.2    1179.2   10404.1    1180.5   10427.2    1182.3   10454.0
GR   1183.4   10499.2

ET                         9.1                                                  9979      10248
X1     4.46        24    9979.2   10026.3     625.0     515.0     590.0
GR   1188.9    9960.5    1187.1    9979.2    1180.0    9991.0    1179.0    9999.3    1179.1   10000.0
GR   1179.8   10011.0    1182.6   10026.3    1182.8   10045.1    1182.7   10100.1    1183.0   10133.5
GR   1182.8   10168.9    1181.7   10187.2    1180.2   10198.4    1182.9   10227.5    1183.7   10274.0
GR   1183.4   10318.1    1183.5   10365.4    1183.6   10401.7    1183.6   10428.9    1184.5   10459.5
GR   1184.4   10487.6    1183.4   10515.0    1184.0   10554.2    1186.5   10601.8

ET                         9.1                                                  9976      10168
X1     4.55        19    9976.1   10011.4     495.0     445.0     490.0
GR   1192.2    9946.6    1190.5    9963.7    1184.8    9976.1    1182.5    9984.6    1181.1    9992.8
GR   1181.0   10000.0    1182.4   10011.4    1185.3   10029.8    1185.1   10084.1    1184.6   10113.2
GR   1184.0   10123.6    1185.5   10150.1    1185.2   10211.7    1186.8   10248.0    1187.3   10294.7
GR   1189.1   10344.2    1189.0   10373.0    1187.7   10399.3    1189.6   10443.2

ET                         9.1                                                  9771      10014
X1     4.65        16    9986.9   10013.5     460.0     455.0     495.0
GR   1192.9    9674.7    1191.2    9696.1    1187.2    9715.6    1186.8    9732.7    1186.9    9744.9
GR   1185.3    9753.6    1187.5    9767.5    1187.4    9828.0    1187.4    9902.3    1187.2    9951.7
GR   1186.3    9986.9    1184.9    9995.2    1183.9   10000.0    1184.9   10013.5    1192.1   10018.0
GR   1193.1   10057.3
```

Section 4.76

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                      9.1                                                     9930      10255
NH      4       .9    9837.2      .06    9980.1      .045   10020.4      .06  10281.3
X1   4.76       25    9980.1  10020.4     520.0     655.0     605.0
GR 1196.2   9662.1    1194.6   9686.1    1190.6    9711.6    1189.1   9725.8    1191.0    9745.7
GR 1193.4   9800.1    1194.2   9837.2    1191.2    9875.5    1192.3   9916.7    1190.7    9940.8
GR 1191.5   9967.3    1190.5   9980.1    1188.3    9994.8    1187.4  10000.0    1189.1   10007.6
GR 1189.9  10020.4    1190.0  10059.7    1191.0   10115.9    1190.8  10172.7    1191.0   10208.7
GR 1188.6  10223.7    1187.1  10232.2    1188.4   10240.3    1191.7  10255.6    1194.9   10281.3

NC    .06      .06      .045
ET                      9.1                                                     9924      10289
X1   4.86       24    9979.7  10021.5     475.0     525.0     520.0
GR 1197.3   9816.5    1195.5   9847.0    1192.9    9872.5    1193.2   9901.3    1192.4    9923.1
GR 1193.6   9956.7    1192.9   9979.7    1189.7    9993.0    1190.3  10000.0    1190.4   10021.5
GR 1193.6  10041.8    1194.1  10077.9    1192.9   10102.5    1191.3  10120.7    1194.2   10148.0
GR 1194.4  10190.8    1194.5  10240.1    1194.2   10267.1    1192.2  10283.9    1193.7   10300.7
GR 1192.8  10312.7    1192.2  10321.1    1194.2   10346.9    1196.4  10406.7

ET                      9.1                                                     9969      10155
X1   4.96       17    9969.6  10026.7     495.0     515.0     515.0
GR 1200.0   9823.6    1199.4   9860.7    1196.8    9896.4    1197.1   9939.2    1196.9    9957.1
GR 1193.4   9969.6    1192.8   9996.0    1192.4   10000.0    1192.8  10012.7    1195.3   10026.7
GR 1195.3  10066.5    1194.6  10113.5    1193.5   10131.2    1195.5  10152.7    1196.8   10215.4
GR 1198.2  10284.1    1200.4  10337.0

ET                      9.1                                                     9986      10211
X1   5.05       14    9986.0  10041.5     480.0     525.0     515.0
GR 1204.1   9921.5    1202.8   9934.9    1199.0    9957.1    1196.1   9986.0    1195.0   10000.0
GR 1196.3  10019.5    1196.7  10041.5    1198.6   10102.0    1198.8  10178.8    1200.4   10242.5
GR 1200.5  10312.5    1200.3  10389.3    1201.3   10474.0    1204.0  10543.1

ET                      9.1                                                     9703      10045
X1   5.16       31    9956.5  10037.1     520.0     440.0     560.0
GR 1205.5   9554.4    1204.4   9579.8    1198.4    9601.9    1200.5   9616.1    1202.2    9646.4
GR 1201.2   9689.0    1201.6   9711.4    1198.8    9720.5    1197.6   9727.4    1201.0    9742.5
GR 1203.8   9766.6    1201.6   9784.2    1199.3    9795.3    1198.0   9807.7    1197.3    9818.8
GR 1199.0   9827.8    1201.0   9853.0    1199.0    9866.0    1198.4   9875.5    1200.6    9911.9
GR 1201.4   9956.5    1199.9   9982.6    1199.0    9999.3    1198.7  10000.0    1199.8   10017.1
GR 1202.5  10037.1    1202.4  10110.7    1203.1   10165.4    1203.1  10244.4    1203.7   10326.9
GR 1204.6  10375.6

ET                      9.1                                                     9810      10101
X1   5.23       19    9949.7  10049.4     395.0     335.0     390.0
GR 1207.4   9790.8    1203.4   9801.7    1200.8    9814.7    1200.7   9826.4    1202.4    9844.2
GR 1204.4   9874.2    1203.6   9886.8    1200.7    9905.5    1203.0   9924.1    1204.0    9949.7
GR 1202.7   9977.3    1201.7   9999.4    1201.1   10000.0    1202.1  10021.4    1203.7   10049.4
GR 1203.7  10115.2    1204.2  10207.2    1205.9   10231.8    1208.2  10280.7
```

Section 5.29

Manning's roughness values are input using NH records. High roughness values were selected in the areas which have ineffective flow areas to

reduce the flow velocities in these areas.

```
ET                      9.1                                                     9780      10330
NH      5       .9    9719.3      .06    9961.7      .045   10045.9      .06   10660.7        .9
NH  11229
X1   5.29      47    9961.7   10045.9     340.0     310.0     300.0
GR  1215.1  9433.1   1212.9    9495.4    1210.7    9538.8    1210.3    9582.1    1209.2    9615.0
GR  1210.0  9641.8   1209.4    9661.4    1207.1    9677.6    1211.2    9702.3    1210.5    9719.3
GR  1205.0  9741.3   1202.4    9760.2    1204.6    9773.8    1202.4    9786.4    1204.4    9807.6
GR  1204.0  9818.7   1202.2    9826.7    1203.5    9835.3    1205.8    9863.9    1205.0    9919.4
GR  1204.7  9961.7   1201.7    9984.0    1202.1    9996.2    1201.8   10000.0    1203.7   10012.8
GR  1204.9 10045.9   1204.9   10076.1    1205.1   10157.1    1205.0   10240.5    1204.7   10273.8
GR  1202.2 10282.2   1204.0   10291.7    1205.3   10315.6    1204.7   10345.9    1206.3   10394.6
GR  1206.6 10473.4   1206.7   10559.9    1206.5   10660.7    1206.7   10740.3    1205.6   10833.9
GR  1205.0 10871.2   1206.6   10929.0    1206.4   10979.4    1205.5   11029.7    1206.7   11083.6
GR  1207.1 11147.9   1207.9      11229

NC      .06      .06     .045
ET                      9.1                                                     9610      10055
X1   5.39      26    9912.1   10048.3     380.0     410.0     500.0
GR  1212.0  9458.0   1209.3    9500.5    1205.6    9534.5    1205.7    9562.9    1203.4    9570.6
GR  1205.7  9583.7   1205.5    9607.0    1203.2    9619.5    1206.0    9637.7    1206.0    9703.3
GR  1206.0  9784.5   1206.2    9849.7    1207.2    9912.1    1206.2    9961.9    1204.8    9994.1
GR  1204.4 10000.0   1206.5   10027.8    1208.2   10048.3    1207.7   10088.0    1205.4   10103.2
GR  1208.5 10126.8   1208.5   10216.9    1208.3   10305.8    1208.0   10398.5    1207.4   10443.9
GR  1209.0 10509.2

ET                      9.1                                                     9645      10102
X1   5.46      16    9955.6   10030.7     345.0     420.0     420.0
GR  1212.9  9312.8   1209.7    9358.7    1209.2    9901.7    1209.5    9955.6    1207.6    9983.9
GR  1206.8  9996.3   1205.5   10000.0    1206.7   10017.2    1208.9   10030.7    1210.0   10086.2
GR  1209.5 10179.5   1210.0   10285.3    1210.3   10376.7    1210.5   10475.1    1210.7   10562.3
GR  1211.9 10655.3

ET                      9.1                                                     9709      10262
X1   5.55      28    9986.8   10032.2     450.0     455.0     475.0
GR  1215.5  9565.4   1212.9    9602.3    1210.6    9631.0    1211.1    9663.5    1208.9    9667.5
GR  1211.2  9675.5   1209.7    9692.0    1209.4    9702.8    1212.6    9760.0    1212.5    9802.8
GR  1210.3  9839.6   1209.7    9861.6    1211.5    9891.2    1212.4    9933.6    1211.4    9986.8
GR  1209.2  9996.5   1208.9   10000.0    1209.7   10012.9    1212.7   10032.2    1211.1   10107.6
GR  1210.9 10191.7   1210.9   10275.3    1210.8   10307.6    1213.4   10353.8    1213.2   10404.0
GR  1211.2 10440.0   1213.4   10484.6    1214.4   10558.5
```

Section 5.64

Flow added from area 2E

```
ET                        9.1                                                   9820      10170
NH      4       .06    9981.2      .045   10045.9       .06   10396.6       2.0   10760.1
X1   5.64        27    9981.2   10045.9     450.0     445.0     450.0
GR 1218.0    9737.9    1214.5    9758.2    1214.9    9804.9    1213.7    9828.5    1215.2    9861.7
GR 1215.4    9894.6    1214.1    9909.3    1212.1    9920.1    1212.9    9928.5    1214.5    9948.6
GR 1214.2    9981.2    1213.6    9995.2    1211.6   10000.0    1212.6   10021.1    1213.9   10045.9
GR 1212.7   10104.0    1212.2   10131.9    1214.4   10181.5    1215.9   10252.7    1216.2   10335.4
GR 1216.3   10396.6    1214.7   10448.2    1213.6   10470.2    1215.6   10506.9    1217.0   10591.4
GR 1218.0   10687.4    1218.7   10760.1
```

Section 5.73

Flow added from area F3

```
ET                        9.1                                                   9679      10050
NC    .06       .06      .045
X1   5.73        23    9973.7   10033.5     450.0     475.0     475.0
GR 1220.4    9553.5    1218.1    9583.7    1217.2    9632.6    1216.4    9668.1    1215.1    9684.6
GR 1217.6    9711.9    1218.9    9734.7    1217.4    9777.8    1217.8    9814.4    1216.6    9838.2
GR 1217.9    9867.2    1217.4    9895.8    1215.5    9906.0    1213.8    9915.9    1216.6    9938.0
GR 1216.5    9973.7    1215.1    9997.6    1213.3   10000.0    1214.0   10019.5    1216.6   10033.5
GR 1217.7   10112.4    1219.6   10180.9    1221.0   10253.1

QT       2    3728.0    3728.0
ET                        9.1                                                   9920      10225
X1   5.82        15    9981.9   10033.5     410.0     460.0     460.0
GR 1222.1    9841.5    1220.2    9883.7    1218.0    9895.8    1220.2    9939.2    1220.8    9981.9
GR 1218.1    9991.0    1217.0   10000.0    1217.4   10014.4    1219.6   10033.5    1220.5   10103.5
GR 1221.1   10159.0    1219.9   10231.2    1219.2   10275.3    1222.0   10317.4    1223.3   10368.0

ET                        9.1                                                   9880      10130
X1   5.91        15    9977.0   10031.3     485.0     465.0     500.0
GR 1226.3    9731.2    1224.5    9788.5    1223.5    9833.4    1221.7    9848.7    1222.7    9879.3
GR 1223.0    9937.5    1222.2    9977.0    1220.1    9995.7    1219.1   10000.0    1219.7   10014.7
GR 1222.9   10031.3    1221.9   10097.9    1222.1   10154.2    1224.0   10225.0    1225.2   10320.4
```

Section 5.99

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                      9.1                                                     9858      10061
NH      4       .06   9982.8     .045  10035.2       .06  10115.2       2.0  10426.5
X1   5.99        19   9982.8  10035.2     425.0     425.0     425.0
GR 1228.7    9729.5   1226.5   9790.5    1224.9    9834.9    1226.0    9891.3    1226.2    9948.2
GR 1225.6    9982.8   1224.1   9996.6    1221.9   10000.0    1222.9   10014.1    1223.3   10024.0
GR 1225.7   10035.2   1224.2  10060.1    1223.3   10070.4    1227.3   10115.2    1227.2   10174.7
GR 1226.6   10237.8   1226.5  10317.2    1225.7   10366.1    1227.7   10426.5
```

Section 6.08

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                      9.1                                                     9900      10086
NH      4       .06   9980.4     .045  10027.5       .06  10265.0       2.0  10599.5
X1   6.08        18   9980.4  10027.5     450.0     450.0     450.0
GR 1231.4    9671.4   1229.9   9765.9    1228.6    9843.4    1229.6    9910.2    1229.0    9950.8
GR 1227.4    9980.4   1224.5   9993.4    1223.5   10000.0    1224.2   10015.5    1227.6   10027.5
GR 1226.8   10060.9   1228.3  10115.7    1230.2   10181.9    1230.5   10265.0    1230.4   10349.1
GR 1229.1   10420.4   1230.5  10498.8    1230.7   10599.5
```

Section 6.17

Flow added from area E3G

```
NC     .06       .06     .045
ET                      9.1                                                     9980      10152
X1   6.17        13   9983.5  10040.5     460.0     450.0     465.0
GR 1232.7    9889.9   1232.3   9936.4    1230.9    9964.3    1227.1    9971.1    1227.7    9983.5
GR 1225.8    9992.6   1225.8  10000.0    1227.0   10019.6    1229.4   10040.5    1230.4   10074.4
GR 1229.4   10187.4   1232.6  10254.8    1232.8   10319.8

QT      2    3442.0   3442.0
ET                      9.1                                                     9834      10050
X1   6.26        20   9991.5  10036.1     490.0     490.0     505.0
GR 1236.3    9635.0   1235.0   9667.6    1233.7    9705.2    1231.7    9733.5    1230.3    9741.1
GR 1233.2    9765.2   1233.6   9824.8    1232.2    9894.4    1230.1    9912.6    1231.8    9938.3
GR 1232.2    9966.7   1231.6   9991.5    1229.7   10000.0    1231.0   10020.7    1233.4   10036.1
GR 1232.2   10052.7   1233.5  10108.3    1234.2   10188.1    1234.6   10261.3    1235.7   10330.8
```

Section 6.36

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9850      10051
NH       4        .06     9976.9      .045     10034       .06   10116.8        .9  10374.2
X1    6.36         22     9976.9    10034.     510.0     525.0     525.0
GR  1238.6     9601.1     1237.6    9712.2    1237.5    9784.3    1236.6    9817.1    1234.5    9826.7
GR  1236.8     9842.0     1237.1    9882.5    1233.6    9915.3    1236.9    9945.7    1238.2    9976.9
GR  1232.7     9991.9     1231.1   10000.0    1233.3   10015.3    1236.2   10034.0    1235.1   10057.1
GR  1233.7    10068.6     1237.3   10116.8    1236.6   10177.7    1236.9   10227.0    1236.9   10281.0
GR  1236.6    10323.7     1238.0   10374.2
```

Section 6.45

Flow added from area E3A

```
NC     .06       .06      .045
ET                          9.1                                                   9774      10074
X1    6.45        12      9982.   10021.6     445.0     485.0     480.0
GR  1241.4     9579.9     1238.8    9662.5    1239.2    9982.0    1237.7    9991.4    1234.3   10000.0
GR  1235.3    10011.7     1237.9   10021.6    1237.3   10064.2    1237.6   10096.4    1239.3   10150.6
GR  1240.9    10218.2     1242.1   10281.0

QT       2     3140.0     3140.0
```

Section 6.56

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9890      10100
NH       4        .06     9985.5      .045   10030.9       .06   10128.1        .9  10483.7
X1    6.56         24     9985.5   10030.9     435.0     560.0     550.0
GR  1243.6     9714.2     1241.9    9797.5    1241.5    9842.1    1241.3    9895.3    1240.8    9914.4
GR  1241.9     9944.1     1239.8    9961.7    1240.6    9985.5    1239.5    9994.0    1238.0   10000.0
GR  1239.8    10015.9     1241.1   10030.9    1239.9   10060.3    1243.4   10079.0    1241.3   10095.5
GR  1243.7    10128.1     1242.0   10176.5    1241.4   10266.6    1240.5   10271.8    1242.0   10292.8
GR  1241.5    10409.8     1239.3   10418.3    1241.8   10433.0    1244.2   10483.7
```

Section 6.66

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9973      10270
NH      4       .06      9984.9      .045   10021.9       .06     10372        .9  10905.3
X1   6.66        25      9984.9   10021.9     560.0     525.0     545.0
GR  1247.4    9710.6     1247.0    9780.1    1245.6    9800.8    1243.6    9811.8    1246.2    9826.1
GR  1246.9    9878.2     1245.5    9922.5    1245.6    9960.2    1244.6    9984.9    1242.2    9990.6
GR  1241.0    9998.2     1241.9   10000.0    1243.9   10009.2    1245.3   10021.9    1245.5   10096.6
GR  1245.6   10212.2     1245.1   10372.0    1245.7   10464.8    1245.6   10551.6    1245.0   10625.7
GR  1246.0   10696.2     1245.4   10757.9    1245.5   10800.3    1247.1   10847.8    1248.2   10905.3
```

Section 6.75

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9950      10110
NH      5        .9      9860.2       .06    9987.9      .045   10039.9       .06  10254.4        .9
NH  10810
X1   6.75        30      9987.9   10039.9     470.0     505.0     485.0
GR  1251.8    9366.5     1249.2    9426.8    1249.6    9483.5    1249.0    9537.8    1248.9    9550.8
GR  1247.0    9560.9     1249.1    9573.9    1249.2    9677.0    1249.8    9783.8    1251.1    9860.2
GR  1250.3    9924.5     1250.0    9956.8    1247.2    9968.7    1248.2    9987.9    1246.8    9992.8
GR  1245.2    9998.4     1245.2   10000.0    1246.9   10013.6    1248.3   10026.4    1249.9   10039.9
GR  1249.1   10104.7     1250.3   10166.7    1250.8   10254.4    1249.5   10334.8    1249.5   10432.0
GR  1249.7   10524.0     1249.1   10597.1    1249.4   10674.2    1250.7   10764.5    1251.2   10810.0
```

Section 6.84

Manning's roughness values are input using an NH record. High roughness values were selected in the areas which have ineffective flow areas to reduce the flow velocities in these areas.

```
ET                          9.1                                                   9800      10050
NH      5        .9      9693.6       .06    9969      .045   10029.2       .06  10282.2       1.0
NH  10919
X1   6.84        31      9969.   10029.2     470.0     490.0     490.0
GR  1255.1    9072.0     1254.1    9185.5    1253.9    9276.3    1253.6    9366.3    1253.3    9442.3
GR  1252.6    9452.5     1251.6    9460.1    1253.1    9476.4    1253.5    9549.3    1253.4    9693.6
GR  1253.2    9800.7     1253.1    9854.6    1253.4    9888.8    1254.1    9941.9    1252.3    9969.0
GR  1248.6    9988.7     1247.5   10000.0    1249.4   10016.2    1252.3   10029.2    1254.1   10091.0
GR  1253.7   10185.9     1254.5   10282.2    1254.0   10383.6    1253.0   10424.7    1254.4   10490.6
GR  1254.6   10580.0     1253.5   10663.0    1254.6   10731.1    1253.7   10780.3    1254.4   10861.9
GR  1255.2   10919.0
```

```
QT        2     2751.0     2751.0

  ---------------------------------------------------------------------------
  Section 6.94

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

ET                          9.1                                                  9970       10250
NH        4        .9     9869.3       .06     9988.3       .045    10029.0       .06    10770.7
X1     6.94        22     9988.3   10029.0      435.0      460.0      520.0
GR   1257.8    9558.9     1256.7    9621.9     1255.6     9670.8     1254.9    9725.4     1257.2     9760.2
GR   1257.8    9802.2     1258.0    9869.3     1256.8     9934.9     1256.2    9988.3     1254.3     9996.6
GR   1253.1   10000.0     1254.1   10013.2     1255.3    10029.0     1256.3   10076.2     1255.6    10167.4
GR   1255.3   10224.2     1256.1   10283.7     1255.8    10463.8     1257.4   10528.6     1258.5    10615.9
GR   1257.7   10700.2     1258.3   10770.7

  ---------------------------------------------------------------------------
  Section 7.02

  Manning's roughness values are input using an NH record.  High roughness
  values were selected in the areas which have ineffective flow areas to
  reduce the flow velocities in these areas.
  ---------------------------------------------------------------------------

ET                          9.1                                                  9920       10125
NH        4        .9     9812.3       .06     9979.6       .045    10013.3       .06    10354.3
X1     7.02        25     9979.6   10013.3      400.0      415.0      410.0
GR   1260.9    9215.0     1260.2    9276.3     1260.4     9312.6     1259.4    9332.0     1259.5     9399.9
GR   1260.1    9485.4     1259.1    9519.5     1257.3     9531.3     1259.0    9565.0     1259.7     9657.0
GR   1260.2    9743.8     1261.6    9812.3     1260.7     9891.2     1259.6    9953.0     1257.9     9979.6
GR   1256.3    9990.6     1255.6   10000.0     1259.1    10013.3     1258.0   10053.9     1256.8    10063.5
GR   1255.3   10069.6     1258.7   10088.0     1259.3    10194.7     1260.6   10268.4     1262.2    10354.3

NC       .06       .06      .045
ET                          9.1                                                  9814       10125
X1     7.11        16     9995.1   10016.8      475.0      490.0      500.0
GR   1264.6    9570.9     1264.1    9613.6     1262.7     9653.9     1262.9    9867.9     1262.6     9896.3
GR   1262.2    9915.4     1262.5    9970.4     1262.5     9995.1     1259.8   10000.0     1259.0    10005.8
GR   1261.5   10016.8     1262.2   10083.2     1262.2    10174.0     1261.2   10179.1     1263.1    10209.1
GR   1264.5   10314.0

ET                          9.1                                                  9790       10034
X1     7.20        16     9974.0   10033.6      450.0      465.0      455.0
GR   1268.6    9520.0     1267.6    9615.1     1266.1     9678.2     1266.6    9704.2     1265.0     9710.0
GR   1266.2    9737.7     1266.5    9851.4     1266.1     9913.5     1266.6    9974.0     1265.0     9994.4
GR   1264.1   10000.0     1265.5   10016.8     1266.9    10033.6     1263.7   10050.1     1266.3    10077.0
GR   1268.5   10126.2
```

```
ET                          9.1                                                   9950      10120
X1     7.30        13    9976.4   10045.6     480.0     485.0     500.0
GR   1272.4    9869.1    1270.4    9920.2    1269.2    9949.4    1270.0    9976.4    1268.5    9992.2
GR   1267.9   10000.0    1269.0   10018.5    1270.5   10045.6    1270.4   10077.9    1268.9   10097.4
GR   1271.0   10144.4    1272.3   10223.2    1272.6   10310.1

ET                          9.1                                                   9849      10190
X1     7.40        18    9966.5   10030.9     505.0     475.0     540.0
GR   1277.9    9720.3    1276.1    9764.7    1272.6    9794.8    1273.3    9844.3    1275.2    9905.3
GR   1275.5    9966.5    1273.7    9986.3    1271.6    9994.1    1271.0   10000.0    1272.4   10013.6
GR   1275.8   10030.9    1274.0   10097.9    1272.8   10133.5    1274.2   10188.7    1273.5   10242.4
GR   1274.8   10294.8    1275.1   10314.8    1276.3   10360.3

ET                          9.1                                                   9850     10028.2
X1     7.49        16    9986.9   10028.2     460.0     465.0     470.0
GR   1280.6    9503.7    1278.3    9532.2    1278.5    9609.7    1279.6    9659.0    1278.9    9704.7
GR   1279.6    9782.4    1277.7    9861.3    1277.7    9897.7    1275.4    9910.1    1274.4    9923.2
GR   1277.4    9949.0    1277.9    9986.9    1277.0    9997.2    1274.5   10000.0    1276.5   10011.5
GR   1280.5   10028.2
```

Section 7.57

Flow added from area E3D

```
ET                          9.1                                                   9830      10050
X1     7.57        18    9988.1   10049.5     380.0     445.0     435.0
GR   1283.4    9501.0    1282.0    9525.9    1282.3    9785.1    1281.2    9801.5    1281.6    9892.8
GR   1282.8    9936.6    1281.9    9952.8    1279.7    9972.6    1280.9    9988.1    1279.1    9999.6
GR   1278.4   10000.0    1280.8   10014.1    1277.9   10025.9    1280.7   10049.5    1282.3   10091.9
GR   1282.7   10139.4    1282.7   10235.1    1283.9   10299.0

QT        2    2125.0    2125.0
ET                          9.1                                                   9890      10050
X1     7.68        21    9979.6   10023.7     550.0     570.0     560.0
GR   1289.0    9530.5    1287.4    9595.8    1286.7    9636.1    1287.3    9697.2    1287.3    9739.8
GR   1286.7    9772.8    1286.3    9802.2    1286.2    9809.3    1285.3    9813.6    1286.7    9828.2
GR   1286.1    9863.8    1285.6    9871.6    1286.3    9908.5    1286.7    9949.9    1286.4    9979.6
GR   1282.7    9988.3    1282.4    9999.7    1282.6   10000.0    1284.2   10009.4    1286.7   10023.7
GR   1288.0   10057.3

ET                          9.1                                                   9970      10290
X1     7.79        19    9987.5   10014.8     610.0     625.0     620.0
GR   1293.6    9816.2    1292.6    9867.3    1291.7    9950.3    1291.7    9987.5    1289.9    9995.3
GR   1289.7   10000.0    1291.7   10014.8    1291.5   10081.5    1291.7   10169.0    1291.5   10247.2
GR   1288.9   10254.4    1289.2   10260.7    1291.3   10278.0    1291.1   10300.2    1289.1   10305.9
GR   1290.5   10323.0    1291.7   10379.2    1292.6   10478.0    1294.0   10571.3
```

```
ET                        9.1                                                  9920      10135
X1     7.90        19  9965.5   10018.0     565.0     545.0     575.0
GR   1297.7    9619.2  1297.6    9679.2    1297.4    9784.6    1297.4    9884.0   1296.7    9935.3
GR   1294.9    9944.2  1297.0    9965.5    1296.2    9989.1    1294.9    9994.7   1294.3   10000.0
GR   1296.4   10018.0  1296.1   10054.9    1295.8   10091.2    1297.3   10161.6   1297.4   10251.7
GR   1296.1   10303.4  1295.1   10318.0    1296.7   10362.2    1298.5   10434.3

ET                        9.1                                                  9945      10180
X1     8.00        22  9989.3   10025.1     535.0     540.0     540.0
GR   1302.5    9680.1  1301.9    9870.5    1300.9    9989.3    1298.9   10000.0   1300.5   10014.9
GR   1301.5   10025.1  1300.2   10035.6    1298.5   10041.1    1301.0   10053.3   1298.1   10061.7
GR   1300.8   10080.9  1300.4   10106.4    1299.1   10120.6    1301.1   10136.6   1301.6   10186.7
GR   1300.4   10212.0  1300.0   10229.7    1301.6   10256.1    1302.5   10341.0   1302.4   10425.2
GR   1302.4   10464.0  1302.9   10540.4

ET                        9.1                                                  9960      10200
X1     8.13        16  9970.6   10023.4     620.0     540.0     670.0
GR   1307.5    9910.8  1305.4    9926.0    1307.3    9970.6    1305.7    9991.6   1304.7   10000.0
GR   1307.1   10023.4  1306.1   10069.4    1305.9   10104.8    1304.3   10116.0   1305.9   10142.7
GR   1305.1   10184.6  1304.7   10212.2    1303.2   10229.0    1305.2   10262.2   1307.2   10359.0
GR   1308.1   10455.4

ET                        9.1                                                  9924      10113
X1     8.22        20  9924.8    10000      450.0     460.0     460.0
GR   1312.0    9847.7  1310.1    9901.7    1309.8    9924.8    1307.4    9938.6   1308.5    9954.5
GR   1309.5    9980.3  1308.1    9996.1    1309.0   10000.0    1311.2   10029.0   1311.5   10088.9
GR   1309.7   10119.9  1310.9   10154.2    1310.9   10273.9    1310.3   10330.1   1312.3   10395.3
GR   1308.7   10433.7  1311.4   10491.5    1309.9   10549.7    1309.6   10573.4   1312.4   10623.9

  ---------------------------------------------------------------------------
  Section 8.31

  Flow added from area CB24
  ---------------------------------------------------------------------------

ET                        9.1                                                  9801      10021
X1     8.31        23  9981.5   10020.7     470.0     485.0     490.0
GR   1316.6    9455.6  1315.1    9500.9    1314.3    9534.0    1313.0    9539.6   1313.8    9554.4
GR   1313.3    9564.5  1313.7    9596.5    1313.4    9634.0    1314.3    9667.2   1314.6    9683.0
GR   1314.6    9755.4  1314.0    9804.5    1312.8    9819.9    1314.3    9862.5   1314.6    9922.3
GR   1314.2    9981.5  1313.3    9994.3    1312.5   10000.0    1314.6   10020.7   1315.2   10066.4
GR   1314.8   10164.1  1315.2   10260.9    1316.2   10310.9

QT        2    1246.0   1246.0

  ---------------------------------------------------------------------------
  Section 8.41

  Flow added from area E3F
  ---------------------------------------------------------------------------

ET                        9.1                                                  9940      10090
```

```
X1    8.41       10    9972.9   10018.1     550.0     490.0     520.0
GR   1320.5   9877.2    1319.7    9951.4    1317.6    9972.9    1314.9    9995.8    1315.0   10000.0
GR   1317.2  10018.1    1317.8   10043.1    1318.6   10082.7    1318.8   10139.6    1320.0   10240.1

QT       2    894.0     894.0
ET                       9.1                                                          9920     10040
NH       4      1.0    9844.7       .06    9922.9       .045   10022.1       .06   10075.3
X1    8.50       14    9922.9   10022.1     500.0     490.0     500.0
GR   1325.1   9668.9    1322.7    9696.6    1321.7    9717.0    1323.3    9732.8    1322.6    9756.9
GR   1321.6   9770.6    1324.7    9844.7    1324.2    9922.9    1322.4    9974.3    1321.6    9987.4
GR   1320.1   9996.2    1321.2   10000.0    1324.2   10022.1    1326.5   10075.3

NC     .06      .06      .045
ET                       9.1                                                          9919     10039
X1    8.59       11    9982.7   10013.7     465.0     465.0     465.0
GR   1331.7   9810.3    1329.9    9884.2    1328.3    9917.2    1329.6    9962.5    1328.8    9982.7
GR   1326.4   9996.5    1325.9   10000.0    1328.4   10013.7    1328.3   10040.1    1329.5   10063.3
GR   1331.1  10098.4

ET                       9.1                                                          9950     10020
X1    8.69        9    9985.3   10019.3     500.0     495.0     500.0
GR   1336.8   9895.8    1334.3    9934.4    1333.2    9968.0    1332.2    9985.3    1330.4    9996.8
GR   1330.9  10000.0    1333.1   10019.3    1336.0   10042.6    1338.0   10099.2

ET                       9.1                                                          9860     10032
X1    8.78       11    9988.0   10031.7     495.0     490.0     495.0
GR   1340.6   9756.2    1339.5    9811.3    1337.6    9841.7    1339.1    9879.0    1339.1    9948.7
GR   1338.4   9988.0    1336.3   10000.0    1336.6   10012.4    1338.4   10031.7    1339.6   10054.4
GR   1342.1  10096.3

ET                       9.1                                                          9960     10050
X1    8.89        9    9986.2   10009.4     555.0     590.0     590.0
GR   1347.2   9937.6    1345.6    9970.8    1342.6    9986.2    1340.7    9992.5    1340.0   10000.0
GR   1341.9  10009.4    1344.0   10036.9    1346.2   10078.0    1347.5   10118.0

ET                       9.1                                                          9960     10060
X1    8.99       10    9992.9   10024.6     491.0     491.0     491.0
GR   1355.4   9928.6    1355.1    9962.8    1350.8    9979.9    1348.3    9992.9    1346.6   10000.0
GR   1345.9  10008.9    1348.3   10024.6    1348.8   10048.9    1351.1   10071.2    1352.0   10118.0

ET                       9.1                                                          9901.8     10025
X1    9.09        9    9980.9   10008.9     575.0     570.0     570.0
GR   1360.8   9901.8    1356.4    9947.4    1354.6    9980.9    1353.3    9988.2    1352.8    9994.8
GR   1353.1  10000.0    1354.3   10008.9    1358.2   10035.5    1360.0   10095.6
```

Section 9.19

Flow added from area E3C

ET			9.1						9918	10016
X1	9.19	9	9973.8	10015.5	510.0	510.0	515.0			
GR	1364.6	9838.8	1363.5	9886.5	1362.8	9946.5	1360.9	9973.8	1359.6	9989.3
GR	1359.2	9998.8	1359.5	10000.0	1364.3	10015.5	1365.3	10071.3		
QT	2	871.0	871.0							
ET			9.1						9920	10097
X1	9.29	9	9994.7	10030.1	490.0	505.0	500.0			
GR	1372.6	9880.9	1370.6	9950.6	1366.1	9994.7	1364.9	10000.0	1365.5	10016.1
GR	1369.3	10030.1	1367.8	10055.2	1368.6	10080.4	1369.6	10127.1		
ET			9.1						9910	10116
X1	9.39	13	9976.7	10021.8	550.0	523.0	555.0			
GR	1377.6	9876.8	1375.1	9927.2	1373.4	9946.6	1373.4	9954.5	1375.1	9976.7
GR	1373.5	9989.7	1372.7	9999.3	1372.1	10000.0	1373.5	10008.3	1374.2	10021.8
GR	1376.8	10053.6	1373.6	10115.5	1377.0	10178.8				
ET			9.1						9920	10022
X1	9.48	9	9984.2	10021.6	485.0	485.0	485.0			
GR	1383.5	9848.9	1382.9	9913.7	1381.5	9959.6	1380.7	9984.2	1379.0	9994.5
GR	1378.5	10000.0	1378.9	10012.5	1382.7	10021.6	1385.9	10042.3		
ET			9.1						9950	10030
X1	9.52	11	9959.8	10012.6	160.0	205.0	180.0			
GR	1386.3	9836.9	1384.8	9860.6	1384.1	9878.7	1385.7	9917.7	1383.9	9959.8
GR	1383.0	9985.7	1381.4	9998.6	1381.7	10000.0	1384.2	10012.6	1385.0	10039.2
GR	1387.6	10097.0								
ET			9.1						9954	10006
X1	9.61	8	9954.4	9980.2	460.0	480.0	470.0			
GR	1393.9	9940.4	1393.6	9954.4	1390.7	9964.6	1392.6	9980.2	1391.3	9995.6
GR	1391.5	10000.0	1394.2	10048.1	1396.5	10147.6				

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

*PROF 1

CCHV= .100 CEHV= .300
*SECNO .000
3280 CROSS SECTION .00 EXTENDED 1.27 FEET

.000	2.47	1062.77	.00	1062.92	1062.88	.11	.00	.00	1061.80
7209.0	1338.0	2382.9	3488.0	744.5	750.0	1367.2	.0	.0	1061.60
.00	1.80	3.18	2.55	.060	.040	.060	.000	1060.30	8903.60
.005006	0.	0.	0.	0	0	6	.00	2130.26	11033.86

*SECNO .080

3265 DIVIDED FLOW

.080	3.30	1065.40	.00	.00	1065.56	.17	2.66	.02	1067.20
7209.0	4726.4	1242.9	1239.7	1450.5	310.2	521.1	26.0	18.5	1065.50
.04	3.26	4.01	2.38	.060	.040	.060	.000	1062.10	8987.29
.007491	445.	430.	440.	3	0	0	.00	1533.44	10863.27

*SECNO .190

3265 DIVIDED FLOW

.190	4.29	1069.39	.00	.00	1069.77	.38	4.14	.06	1068.80
7209.0	112.0	3124.2	3972.8	51.2	492.3	1107.7	49.8	33.0	1068.70
.07	2.19	6.35	3.59	.060	.040	.060	.000	1065.10	9692.43
.008072	750.	570.	300.	4	0	0	.00	871.86	10936.95

*SECNO .290

3265 DIVIDED FLOW

.290	6.62	1073.62	.00	.00	1074.45	.83	4.55	.13	1073.30
7209.0	519.8	4250.0	2439.2	196.2	476.0	582.5	66.7	41.9	1071.70
.09	2.65	8.93	4.19	.060	.040	.060	.000	1067.00	9023.82
.009940	530.	515.	500.	2	0	0	.00	650.15	10469.96

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

*SECNO .380

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.47

.380	6.10	1077.40	.00	.00	1077.87	.47	3.39	.04	1073.90
7209.0	1225.7	3154.0	2829.3	504.5	416.6	881.4	85.2	51.2	1074.80
.12	2.43	7.57	3.21	.060	.040	.060	.000	1071.30	9433.18
.004597	560.	510.	520.	3	0	0	.00	858.44	10373.93

1490 NH CARD USED
*SECNO .480

3265 DIVIDED FLOW

.480	6.83	1079.93	.00	.00	1080.25	.32	2.37	.01	1077.80
7209.0	1753.6	3029.4	2426.0	562.4	497.4	857.6	106.6	61.3	1078.10
.15	3.12	6.09	2.83	.067	.045	.062	.000	1073.10	9465.70
.004896	480.	490.	520.	3	0	0	.00	898.32	10496.59

1490 NH CARD USED
*SECNO .570

.570	7.89	1081.99	.00	.00	1082.33	.33	2.07	.00	1080.30
7209.0	1126.5	4320.5	1762.0	403.0	755.0	1032.8	130.1	71.7	1079.50
.18	2.80	5.72	1.71	.076	.045	.080	.000	1074.10	9805.03
.003568	490.	501.	501.	2	0	0	.00	934.96	10740.00

*SECNO .670

3265 DIVIDED FLOW

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

.670	6.51	1084.31	.00	.00	1084.90	.58	2.50	.07	1081.10
7209.0	3175.4	3202.3	831.3	811.3	396.8	202.1	150.4	79.6	1081.50
.21	3.91	8.07	4.11	.070	.045	.060	.000	1077.80	9667.29
.007758	480.	498.	498.	2	0	0	.00	454.26	10123.53

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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  .760
      .760       6.59    1087.39        .00        .00    1087.82        .42       2.90        .02    1085.60
    7209.0     1478.2     4092.7     1638.1      479.8      656.1      428.6      167.5       85.3    1084.10
      .23       3.08       6.24       3.82       .060       .045       .060       .000    1080.80    9656.43
   .004490       501.       501.       501.          2          0          0        .00     539.54   10195.97


1490 NH CARD USED
*SECNO  .860
      .860       6.71    1089.81        .00        .00    1090.24        .44       2.42        .00    1086.60
    7209.0     1313.4     4160.4     1735.2      729.6      634.1      526.3      188.1       93.0    1086.80
      .26       1.80       6.56       3.30       .102       .045       .060       .000    1083.10    9567.63
   .004851       522.       522.       510.          3          0          0        .00     759.69   10327.32


1490 NH CARD USED
*SECNO  .950
      .950       7.70    1092.30        .00        .00    1092.74        .44       2.49        .00    1089.60
    6256.0      118.9     2432.5     3704.6       41.8      343.1      969.1      207.3      100.9    1090.00
      .29       2.85       7.09       3.82       .050       .045       .053       .000    1084.60    9954.85
   .005136       600.       489.       489.          1          0          0        .00     557.94   10512.79


*SECNO 1.040

3265 DIVIDED FLOW

     1.040       6.22    1094.62        .00        .00    1095.06        .44       2.32        .00    1090.40
    6256.0     2780.6     3005.9      469.5      677.4      461.2      270.6      221.8      106.9    1093.40
      .32       4.10       6.52       1.74       .060       .045       .060       .000    1088.40    9825.17
   .004898       474.       474.       440.          1          0          0        .00     603.37   10442.30


1490 NH CARD USED
*SECNO 1.130
     1.130       7.03    1097.03        .00        .00    1097.52        .49       2.45        .02    1093.40
    6256.0     3227.7     2829.4      198.9      835.5      389.1      114.2      237.2      113.2    1094.20
      .34       3.86       7.27       1.74       .065       .045       .060       .000    1090.00    9706.06
   .005158       484.       490.       500.          2          0          0        .00     512.29   10218.35


*SECNO 1.230
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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

3265 DIVIDED FLOW

1.230	5.82	1099.42	.00	.00	1099.79	.36	2.25	.01	1095.10
6256.0	649.4	2873.3	2733.4	241.8	470.2	781.2	253.3	119.0	1097.30
.37	2.69	6.11	3.50	.060	.045	.060	.000	1093.60	9757.72
.003974	470.	510.	515.	2	0	0	.00	497.89	10296.13

*SECNO 1.320

1.320	6.46	1101.76	.00	.00	1102.40	.64	2.53	.08	1100.10
6256.0	19.6	2967.5	3268.9	10.7	368.3	730.0	267.8	123.7	1097.20
.39	1.84	8.06	4.48	.060	.045	.060	.000	1095.30	9962.75
.007149	485.	485.	485.	2	0	0	.00	345.72	10308.47

1490 NH CARD USED

*SECNO 1.410

1.410	6.22	1104.62	.00	.00	1104.97	.35	2.54	.03	1101.00
6256.0	1714.6	2375.4	2166.0	531.5	363.9	674.0	281.5	128.4	1100.90
.42	3.23	6.53	3.21	.077	.045	.057	.000	1098.40	9795.23
.004655	445.	445.	445.	2	0	0	.00	576.71	10371.94

*SECNO 1.500

1.500	6.26	1106.96	.00	.00	1107.39	.44	2.40	.03	1102.90
6256.0	3460.2	2415.3	380.5	823.7	352.9	207.6	297.8	134.8	1103.90
.45	4.20	6.84	1.83	.060	.045	.060	.000	1100.70	9722.10
.005343	480.	483.	483.	2	0	0	.00	575.17	10297.27

*SECNO 1.590

1.590	5.50	1109.20	.00	.00	1109.58	.38	2.18	.01	1107.10
6256.0	1551.7	4428.6	275.7	636.7	780.0	155.8	314.6	141.9	1106.60
.48	2.44	5.68	1.77	.060	.045	.060	.000	1103.70	9498.34
.003714	494.	494.	494.	2	0	0	.00	690.21	10188.56

*SECNO 1.680

1.680	5.54	1111.44	.00	.00	1111.93	.49	2.32	.03	1108.30
6256.0	2957.6	2464.5	833.9	734.8	327.9	218.0	330.5	148.4	1106.80
.50	4.02	7.52	3.82	.060	.045	.060	.000	1105.90	9686.61
.006430	490.	480.	480.	2	0	0	.00	466.06	10152.66

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 1.780

1.780	5.98	1114.38	.00	.00	1114.95	.57	3.00	.02	1109.30
6256.0	2012.6	2934.5	1308.9	509.9	379.3	320.4	344.8	153.3	1110.80
.53	3.95	7.74	4.08	.060	.045	.060	.000	1108.40	9770.74
.005559	507.	500.	495.	2	0	0	.00	379.70	10150.43

*SECNO 1.870

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

1.870	7.64	1116.44	.00	.00	1116.81	.37	1.84	.02	1110.20
6256.0	3091.9	2817.1	347.1	859.2	455.1	137.5	360.0	157.4	1110.80
.56	3.60	6.19	2.52	.060	.045	.060	.000	1108.80	9766.56
.002668	495.	495.	495.	3	0	0	.00	345.80	10112.36

*SECNO 1.970

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

1.970	5.25	1118.35	.00	.00	1118.94	.59	2.06	.07	1113.40
6256.0	939.3	3126.1	2190.6	248.9	420.4	447.6	376.0	161.7	1113.50
.58	3.77	7.44	4.89	.060	.045	.060	.000	1113.10	9849.42
.005837	535.	540.	560.	2	0	0	.00	336.34	10185.76

*SECNO 2.070

3265 DIVIDED FLOW

2.070	6.71	1121.11	.00	.00	1121.86	.76	2.87	.05	1116.90
6256.0	706.6	3389.0	2160.4	218.8	391.0	485.7	388.3	165.5	1116.10
.60	3.23	8.67	4.45	.060	.045	.060	.000	1114.40	9864.69
.006039	484.	484.	484.	2	0	0	.00	364.04	10262.08

*SECNO 2.150

2.150	7.83	1123.73	.00	.00	1124.41	.68	2.54	.01	1120.30
6256.0	123.9	2476.4	3655.6	47.4	289.2	736.4	399.3	168.7	1119.20
.62	2.61	8.56	4.96	.060	.045	.060	.000	1115.90	9944.24
.005414	444.	444.	444.	1	0	0	.00	264.69	10208.93

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

*SECNO 2.240

2.240	8.06	1125.96	.00	.00	1126.45	.49	2.02	.02	1119.30
6256.0	2355.4	3246.8	653.8	708.8	456.7	200.7	413.0	172.3	1119.70
.65	3.32	7.11	3.26	.060	.045	.060	.000	1117.90	9717.86
.003257	489.	489.	489.	2	0	0	.00	372.62	10090.49

*SECNO 2.340

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.340	6.12	1127.92	.00	.00	1129.31	1.38	2.59	.27	1124.20
6256.0	943.9	5086.2	226.0	230.9	494.4	54.9	425.3	175.8	1123.70
.66	4.09	10.29	4.12	.060	.045	.060	.000	1121.80	9830.46
.009538	495.	500.	508.	2	0	0	.00	229.29	10059.75

*SECNO 2.430

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.76

2.430	8.12	1131.42	.00	.00	1131.77	.35	2.36	.10	1127.00
6256.0	2042.7	2414.7	1798.5	542.1	394.3	499.5	437.3	179.0	1128.50
.69	3.77	6.12	3.60	.060	.045	.060	.000	1123.30	9788.98
.003086	471.	471.	471.	2	0	0	.00	369.96	10158.94

*SECNO 2.520

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

2.520	5.96	1133.56	.00	.00	1134.29	.73	2.40	.11	1130.90
6256.0	1333.4	3019.1	1903.5	263.5	343.8	507.0	451.8	183.8	1130.80
.71	5.06	8.78	3.75	.060	.045	.060	.000	1127.60	9886.63
.008691	490.	495.	500.	2	0	0	.00	477.65	10364.28

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 2.620

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.66

2.620	7.95	1136.65	.00	.00	1136.91	.26	2.58	.05	1132.30
6256.0	3484.5	1835.5	936.0	986.6	333.8	357.1	468.6	190.0	1134.80
.75	3.53	5.50	2.62	.060	.045	.060	.000	1128.70	9645.26
.003158	525.	525.	525.	1	0	0	.00	542.46	10187.72

*SECNO 2.720

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

2.720	5.59	1138.79	.00	.00	1139.64	.85	2.55	.18	1135.20
6256.0	2046.6	3229.4	980.0	442.2	345.3	246.8	484.3	195.6	1135.10
.77	4.63	9.35	3.97	.060	.045	.060	.000	1133.20	9742.07
.009283	506.	506.	506.	3	0	0	.00	427.33	10179.35

1490 NH CARD USED
*SECNO 2.820

2.820	8.14	1142.84	.00	.00	1143.49	.65	3.83	.02	1137.50
6256.0	3120.2	2852.6	283.2	770.0	331.5	467.2	500.1	200.9	1138.10
.79	4.05	8.60	.61	.065	.045	.600	.000	1134.70	9679.50
.005793	515.	539.	540.	3	0	0	.00	442.24	10121.75

1490 NH CARD USED
*SECNO 2.920

2.920	6.59	1145.39	.00	.00	1145.83	.43	2.32	.02	1140.10
6256.0	247.7	4751.9	1256.3	107.1	797.3	774.3	520.8	206.8	1142.10
.82	2.31	5.96	1.62	.060	.045	.111	.000	1138.80	9836.91
.003203	510.	560.	585.	3	0	0	.00	495.83	10332.74

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

1490 NH CARD USED
*SECNO 3.040

3.040	6.56	1147.76	.00	.00	1147.92	.16	2.07	.03	1151.10
6256.0	.0	1167.4	5088.6	.0	250.6	1827.2	547.8	215.7	1144.80
.88	.00	4.66	2.78	.000	.045	.071	.000	1141.20	9980.02
.003420	610.	625.	625.	2	0	0	.00	752.88	10732.90

1490 NH CARD USED
*SECNO 3.140

3.140	6.29	1149.19	.00	.00	1149.60	.41	1.61	.08	1145.40
6256.0	1052.7	3245.0	1958.2	550.4	467.4	1081.9	566.4	223.7	1143.00
.90	1.91	6.94	1.81	.081	.045	.106	.000	1142.90	9570.41
.004556	510.	495.	340.	2	0	0	.00	1017.63	10588.04

*SECNO 3.230

3.230	5.78	1151.98	.00	.00	1152.50	.52	2.86	.03	1148.10
6256.0	2655.0	1538.8	2062.2	678.9	186.4	373.8	586.0	232.3	1147.50
.93	3.91	8.26	5.52	.060	.045	.060	.000	1146.20	9654.33
.007055	511.	511.	511.	2	0	0	.00	449.12	10103.44

*SECNO 3.320

3.320	5.76	1154.76	.00	.00	1155.21	.46	2.71	.01	1152.30
6256.0	193.7	3018.5	3043.7	107.9	427.7	933.0	600.6	237.8	1149.80
.96	1.80	7.06	3.26	.060	.045	.060	.000	1149.00	9846.72
.004769	460.	487.	465.	1	0	0	.00	588.61	10435.32

*SECNO 3.420

3.420	6.05	1156.95	.00	.00	1157.20	.25	1.96	.02	1154.00
6256.0	24.8	1806.8	4424.3	12.9	305.5	1515.8	617.7	244.5	1154.90
.99	1.92	5.91	2.92	.060	.045	.060	.000	1150.90	9953.19
.003854	488.	488.	440.	2	0	0	.00	691.08	10644.26

*SECNO 3.510

3.510	6.07	1158.87	.00	.00	1159.20	.33	1.98	.02	1156.10
6256.0	606.1	2100.7	3549.3	196.2	313.8	1152.0	637.3	252.0	1153.60
1.02	3.09	6.69	3.08	.060	.045	.060	.000	1152.80	9888.11
.004311	487.	487.	487.	2	0	0	.00	663.41	10551.52

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

*SECNO 3.590

3265 DIVIDED FLOW

3280 CROSS SECTION 3.59 EXTENDED 1.69 FEET

3301 HV CHANGED MORE THAN HVINS

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

3.590	6.29	1161.19	.00	.00	1162.10	.90	2.72	.17	1158.90
6208.0	2937.6	2880.2	390.3	561.7	294.6	114.1	650.6	257.1	1157.90
1.04	5.23	9.78	3.42	.060	.045	.060	.000	1154.90	9795.40
.009633	440.	440.	440.	3	0	0	.00	345.52	10141.11

*SECNO 3.700
3280 CROSS SECTION 3.70 EXTENDED .95 FEET

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

3.700	7.85	1165.05	.00	.00	1165.82	.77	3.71	.01	1159.10
6208.0	2521.0	3513.4	173.7	637.9	402.9	47.8	663.8	261.1	1158.30
1.06	3.95	8.72	3.63	.060	.045	.060	.000	1157.20	9773.70
.004873	558.	558.	558.	1	0	0	.00	279.86	10053.56

*SECNO 3.790
3280 CROSS SECTION 3.79 EXTENDED .13 FEET

3.790	7.73	1167.23	.00	.00	1167.83	.60	1.99	.02	1163.10
6208.0	411.6	3944.1	1852.3	174.1	532.5	565.9	676.2	264.7	1163.10
1.08	2.36	7.41	3.27	.060	.045	.060	.000	1159.50	9824.80
.003870	460.	460.	460.	2	0	0	.00	406.76	10231.56

1490 NH CARD USED
*SECNO 3.880

3.880	7.44	1169.44	.00	.00	1170.20	.76	2.32	.05	1166.20
6208.0	194.5	3342.5	2671.0	64.3	366.7	855.8	690.2	270.4	1165.10
1.10	3.03	9.12	3.12	.060	.045	.064	.000	1162.00	9931.33
.006347	475.	475.	475.	2	0	0	.00	624.79	10556.12

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 3.960

3265 DIVIDED FLOW

3.960	7.44	1172.54	.00	.00	1173.41	.87	3.18	.03	1170.10
6208.0	1407.3	2541.7	2259.0	382.8	254.4	390.8	701.9	275.5	1168.90
1.12	3.68	9.99	5.78	.063	.045	.060	.000	1165.10	9702.19
.008304	440.	440.	440.	2	0	0	.00	387.44	10145.73

1490 NH CARD USED
*SECNO 4.050

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

4.050	8.39	1175.69	.00	.00	1176.14	.45	2.69	.04	1172.00
6208.0	336.3	2587.7	3284.0	1070.8	364.1	834.9	721.3	281.9	1170.40
1.15	.31	7.11	3.93	.587	.045	.060	.000	1167.30	9537.00
.003633	520.	509.	509.	2	0	0	.00	699.22	10236.22

*SECNO 4.160

4.160	7.92	1177.82	.00	.00	1178.44	.62	2.24	.05	1172.20
6208.0	1766.1	2940.4	1501.5	498.1	354.3	382.9	742.6	288.4	1173.30
1.17	3.55	8.30	3.92	.060	.045	.060	.000	1169.90	9784.02
.004956	520.	530.	540.	3	0	0	.00	372.76	10156.78

*SECNO 4.250

4.250	8.03	1180.13	.00	.00	1180.61	.48	2.16	.01	1173.70
6208.0	2190.1	2094.5	1923.4	634.5	265.8	434.7	757.1	292.7	1174.10
1.20	3.45	7.88	4.42	.060	.045	.060	.000	1172.10	9724.97
.003910	485.	495.	500.	2	0	0	.00	397.07	10122.05

*SECNO 4.350

4.350	6.69	1182.39	.00	.00	1182.74	.35	2.11	.01	1178.60
6208.0	133.8	1872.0	4202.2	65.0	269.8	1226.4	774.6	298.4	1177.60
1.23	2.06	6.94	3.43	.060	.045	.060	.000	1175.70	9919.08
.004114	500.	520.	540.	2	0	0	.00	538.44	10457.52

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

*SECNO 4.460

4.460	6.36	1185.36	.00	.00	1185.81	.46	3.05	.03	1187.10
6208.0	.0	1675.4	4532.6	.0	205.5	1148.2	792.3	305.2	1182.60
1.26	.00	8.15	3.95	.000	.045	.060	.000	1179.00	9982.10
.008295	625.	590.	515.	2	0	0	.00	597.95	10580.05

*SECNO 4.550

3265 DIVIDED FLOW

4.550	7.59	1188.59	.00	.00	1189.23	.64	3.36	.06	1184.80
6208.0	44.7	2122.7	4040.6	15.6	230.4	931.2	805.5	310.4	1182.40
1.28	2.87	9.21	4.34	.060	.045	.060	.000	1181.00	9967.86
.006502	495.	490.	445.	2	0	0	.00	400.71	10419.81

*SECNO 4.650

4.650	7.41	1191.31	.00	.00	1191.71	.40	2.46	.02	1186.30
6208.0	4863.4	1314.8	29.9	1166.5	173.9	12.9	819.0	314.2	1184.90
1.31	4.17	7.56	2.32	.060	.045	.060	.000	1183.90	9694.67
.004340	460.	495.	455.	3	0	0	.00	322.83	10017.51

1490 NH CARD USED
*SECNO 4.760

3265 DIVIDED FLOW

4.760	6.95	1194.05	.00	.00	1194.37	.33	2.65	.01	1190.50
6208.0	1074.6	1357.1	3776.3	611.8	202.8	902.9	839.1	320.0	1189.90
1.35	1.76	6.69	4.18	.111	.045	.060	.000	1187.10	9689.63
.004836	520.	605.	655.	2	0	0	.00	575.72	10274.44

*SECNO 4.860

4.860	6.65	1196.35	.00	.00	1196.66	.31	2.29	.00	1192.90
6208.0	1416.0	1629.0	3162.9	418.1	240.9	985.8	858.7	326.7	1190.40
1.38	3.39	6.76	3.21	.060	.045	.060	.000	1189.70	9832.49
.004112	475.	520.	525.	1	0	0	.00	573.02	10405.51

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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 4.960
     4.960      6.32   1198.72       .00       .00   1199.29       .57      2.55       .08   1193.40
    6208.0     545.6    2549.8    3112.6     176.4     315.9     734.7     875.6     332.6   1195.30
      1.41      3.09      8.07      4.24      .060      .045      .060      .000   1192.40   9870.05
   .006141      495.      515.      515.         2         0         0       .00    426.54  10296.59


*SECNO 5.050
     5.050      6.76   1201.76       .00       .00   1202.26       .50      2.97       .01   1196.10
    6208.0     625.5    2516.8    3065.7     144.2     322.1     904.1     891.0     338.3   1196.70
      1.43      4.34      7.81      3.39      .060      .045      .060      .000   1195.00   9940.94
   .005377      480.      515.      525.         2         0         0       .00    544.98  10485.92


*SECNO 5.160
     5.160      6.77   1204.07       .00       .00   1204.26       .19      1.97       .03   1201.40
    6208.0    4360.2    1356.0     491.8    1320.5     310.6     326.0     910.0     345.5   1202.50
      1.48      3.30      4.37      1.51      .060      .045      .060      .000   1197.30   9581.03
   .002909      520.      560.      440.         2         0         0       .00    765.71  10346.74


*SECNO 5.230

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

     5.230      5.03   1205.73       .00       .00   1206.30       .57      1.93       .11   1204.00
    6208.0    2717.9    2290.6    1199.5     475.9     314.4     315.2     923.4     350.6   1203.70
      1.49      5.71      7.29      3.81      .060      .045      .060      .000   1200.70   9795.34
   .010575      395.      390.      335.         2         0         0       .00    434.08  10229.41


1490 NH CARD USED
*SECNO 5.290

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.09

     5.290      5.93   1207.63       .00       .00   1207.76       .12      1.41       .04   1204.70
    6208.0    1986.3    1557.0    2664.7     730.6     363.3    1919.9     938.4     357.5   1204.90
      1.53      2.72      4.29      1.39      .060      .045      .083      .000   1201.70   9673.84
   .002413      340.      300.      310.         2         0         0       .00   1478.18  11201.97
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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 5.390
    5.390      5.70    1208.90        .00        .00    1209.09        .19       1.31        .02    1207.20
   6208.0    4037.2     1564.3      606.5     1191.1      372.3      370.6      961.8      369.2    1208.20
     1.56      3.39       4.20       1.64       .060       .045       .060       .000    1203.20    9504.16
  .004244      380.       500.       410.          3          0          0        .00    1001.02   10505.18


*SECNO 5.460

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .69

    5.460      5.53    1211.03        .00        .00    1211.36        .33       2.23        .04    1209.50
   6208.0    3022.0     1882.7     1303.3      961.0      264.1      526.5      977.7      379.2    1208.90
     1.59      3.14       7.13       2.48       .060       .045       .060       .000    1205.50    9339.63
  .008795      345.       420.       420.          3          0          0        .00    1248.22   10587.85


*SECNO 5.550

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

    5.550      4.90    1213.80        .00        .00    1213.95        .15       2.57        .02    1211.40
   6208.0    2878.1      748.2     2581.7      965.3      158.7      948.9      997.7      390.5    1212.70
     1.63      2.98       4.72       2.72       .060       .045       .060       .000    1208.90    9589.58
  .003904      450.       475.       455.          3          0          0        .00     924.33   10513.91


1490 NH CARD USED
*SECNO 5.640

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .60

    5.640      4.73    1216.33        .00        .00    1216.75        .42       2.72        .08    1214.20
   6208.0    1819.1     1663.4     2725.5      438.0      217.6      717.5     1015.4      399.4    1213.90
     1.65      4.15       7.64       3.80       .060       .045       .072       .000    1211.60    9747.58
 .010733      450.       450.       445.          2          0          0        .00     803.44   10551.02


*SECNO 5.730

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.48

    5.730      6.39    1219.69        .00        .00    1220.01        .32       3.25        .01    1216.50
   6208.0    3577.8     1855.2      775.0     1033.5      285.4      271.9     1031.1      406.9    1216.60
     1.68      3.46       6.50       2.85       .060       .045       .060       .000    1213.30    9562.82
  .004919      450.       475.       475.          2          0          0        .00     622.72   10185.54
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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 5.820

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .52

5.820	5.06	1222.06	.00	.00	1222.40	.34	2.38	.01	1220.80
3728.0	924.7	1326.5	1476.8	269.5	202.4	496.0	1043.9	412.4	1219.60
1.71	3.43	6.55	2.98	.060	.045	.060	.000	1217.00	9842.35
.006464	410.	460.	460.	3	0	0	.00	477.45	10319.80

*SECNO 5.910

5.910	5.71	1224.81	.00	.00	1225.10	.28	2.69	.01	1222.20
3728.0	981.0	1364.7	1382.3	353.2	228.7	469.7	1055.0	417.8	1222.90
1.75	2.78	5.97	2.94	.060	.045	.060	.000	1219.10	9778.59
.004865	485.	500.	465.	0	0	0	.00	510.91	10289.50

1490 NH CARD USED
*SECNO 5.990

5.990	5.61	1227.51	.00	.00	1227.99	.49	2.84	.06	1225.60
3728.0	1200.0	1585.3	942.6	345.7	201.2	448.5	1065.0	423.5	1225.70
1.77	3.47	7.88	2.10	.060	.045	.096	.000	1221.90	9762.61
.009709	425.	425.	425.	2	0	0	.00	658.03	10420.64

1490 NH CARD USED
*SECNO 6.080

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

6.080	7.02	1230.52	.00	.00	1230.94	.42	2.94	.01	1227.40
3728.0	715.8	1835.8	1176.4	325.6	261.6	493.0	1075.7	431.0	1227.60
1.80	2.20	7.02	2.39	.060	.045	.068	.000	1223.50	9726.34
.004704	450.	450.	450.	2	0	0	.00	786.54	10512.88

*SECNO 6.170

6.170	6.71	1232.51	.00	.00	1232.91	.40	1.96	.00	1227.70
3728.0	405.9	1988.1	1334.1	115.1	311.8	484.9	1086.1	436.9	1229.40
1.82	3.53	6.38	2.75	.060	.045	.060	.000	1225.80	9912.17
.003901	460.	465.	450.	3	0	0	.00	340.70	10252.87

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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 6.260
    6.260       5.05    1234.75        .00        .00    1234.95        .20       2.02        .02    1231.60
   3442.0     2114.2      851.4      476.4      697.1      165.4      237.0     1097.5      442.2    1233.40
     1.86       3.03       5.15       2.01       .060       .045       .060       .000    1229.70    9674.72
  .004291       490.       505.       490.          2          0          0        .00     596.29   10271.01


1490 NH CARD USED
*SECNO 6.360

3265 DIVIDED FLOW


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

    6.360       6.57    1237.67        .00        .00    1238.19        .53       3.14        .10    1238.20
   3442.0      929.5     1697.6      814.9      266.3       218.7      379.4     1109.2      449.5    1236.20
     1.89       3.49       7.76       2.15       .060       .045       .087       .000    1231.10    9704.47
  .009215       510.       525.       525.          2          0          0        .00     643.63   10362.28


*SECNO 6.450

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.54

    6.450       6.43    1240.73        .00        .00    1240.92        .20       2.69        .03    1239.20
   3442.0     1323.3      930.9     1187.8      612.2       172.4      405.9     1120.2      456.2    1237.90
     1.93       2.16       5.40       2.93       .060       .045       .060       .000    1234.30    9601.16
  .003906       445.       480.       485.          2          0          0        .00     609.88   10211.05


1490 NH CARD USED
*SECNO 6.560

3265 DIVIDED FLOW


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

    6.560       5.25    1243.25        .00        .00    1243.58        .33       2.62        .04    1240.60
   3140.0     1417.7     1111.9      610.3      426.2       165.5      630.2     1134.2      463.8    1241.10
     1.96       3.33       6.72        .97       .060       .045       .190       .000    1238.00    9731.22
  .007469       435.       550.       560.          2          0          0        .00     711.72   10463.69
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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 6.660
     6.660       6.05    1247.05        .00        .00    1247.25        .20       3.66        .01    1244.60
    3140.0      607.1      880.6     1652.3      242.8      141.8     1272.5     1151.9      474.8    1245.30
      2.02       2.50       6.21       1.30       .060       .045       .121       .000    1241.00    9770.62
   .006132       560.       545.       525.          5          0          0        .00    1075.83   10846.45


1490 NH CARD USED
*SECNO 6.750

3265 DIVIDED FLOW


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

     6.750       5.73    1250.93        .00        .00    1251.53        .60       4.16        .12    1248.20
    3140.0      762.1     1613.8      764.1      809.1      187.4      851.1     1171.7      488.6    1249.90
      2.04        .94       8.61        .90       .251       .045       .219       .000    1245.20    9386.63
   .012532       470.       485.       505.          3          0          0        .00    1375.61   10785.62


1490 NH CARD USED
*SECNO 6.840

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

     6.840       7.11    1254.61        .00        .00    1255.05        .44       3.50        .02    1252.30
    3140.0      775.5     2011.9      352.5      920.3      304.7      509.6     1191.4      505.9    1252.30
      2.07        .84       6.60        .69       .138       .045       .122       .000    1247.50    9127.68
   .004684       470.       490.       490.          4          0          0        .00    1749.16   10876.84


1490 NH CARD USED
*SECNO 6.940

3265 DIVIDED FLOW

     6.940       4.33    1257.43        .00        .00    1257.61        .18       2.54        .03    1256.20
    2751.0      145.5      669.7     1935.8      308.0      124.6      748.9     1206.8      519.2    1255.30
      2.12        .47       5.38       2.58       .314       .045       .060       .000    1253.10    9579.95
   .006063       435.       520.       460.          3          0          0        .00     827.38   10531.18
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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

1490 NH CARD USED
*SECNO 7.020

3265 DIVIDED FLOW

7.020	5.15	1260.45	.00	.00	1260.90	.46	3.21	.08	1257.90
2751.0	267.1	932.4	1551.6	485.2	120.3	388.1	1217.0	527.1	1259.10
2.14	.55	7.75	4.00	.302	.045	.060	.000	1255.30	9254.69
.010342	400.	410.	415.	3	0	0	.00	855.48	10259.71

*SECNO 7.110

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

7.110	5.12	1264.12	.00	.00	1264.28	.16	3.34	.03	1262.50
2751.0	1130.7	466.4	1153.9	520.2	84.5	435.2	1228.3	535.5	1261.50
2.19	2.17	5.52	2.65	.060	.045	.060	.000	1259.00	9611.98
.004856	475.	500.	490.	4	0	0	.00	673.46	10285.45

*SECNO 7.200

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

7.200	3.82	1267.52	.00	.00	1267.86	.34	3.53	.05	1266.60
2751.0	1413.4	749.3	588.4	416.7	119.8	121.3	1237.1	541.6	1266.90
2.21	3.39	6.26	4.85	.060	.045	.060	.000	1263.70	9618.33
.014226	450.	455.	465.	2	0	0	.00	486.02	10104.35

*SECNO 7.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.43

7.300	4.35	1272.25	.00	.00	1272.59	.34	4.73	.00	1270.00
2751.0	636.7	1279.6	834.7	186.3	216.7	263.4	1244.5	546.2	1270.50
2.24	3.42	5.91	3.17	.060	.045	.060	.000	1267.90	9873.06
.007003	480.	500.	485.	3	0	0	.00	346.79	10219.86

*SECNO 7.400

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

7.400	4.67	1275.67	.00	.00	1275.85	.17	3.24	.02	1275.50
2751.0	828.2	681.1	1241.7	282.1	152.0	451.6	1253.4	551.4	1275.80
2.29	2.94	4.48	2.75	.060	.045	.060	.000	1271.00	9768.37
.005881	505.	540.	475.	4	0	0	.00	562.84	10336.55

*SECNO 7.490

3265 DIVIDED FLOW

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

7.490	4.98	1279.38	.00	.00	1279.77	.38	3.86	.06	1277.90
2751.0	2135.4	615.6	.0	490.7	92.1	.0	1261.2	556.8	1280.50
2.31	4.35	6.69	.00	.060	.045	.000	.000	1274.40	9518.79
.012663	460.	470.	465.	3	0	0	.00	447.62	10023.53

*SECNO 7.570

7.570	5.10	1283.00	.00	.00	1283.31	.31	3.54	.01	1280.90
2751.0	1233.8	1294.4	222.7	526.8	214.5	118.5	1267.8	562.2	1280.70
2.34	2.34	6.03	1.88	.060	.045	.060	.000	1277.90	9508.11
.006470	380.	435.	445.	4	0	0	.00	742.96	10251.08

*SECNO 7.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.680	5.20	1287.60	1287.60	.00	1288.12	.52	4.28	.06	1286.40
2125.0	944.5	1165.4	15.1	359.0	155.8	10.4	1276.6	569.8	1286.70
2.37	2.63	7.48	1.44	.060	.045	.060	.000	1282.40	9587.69
.009873	550.	560.	570.	4	5	0	.00	459.24	10046.93

*SECNO 7.790

7.790	3.90	1292.80	.00	.00	1292.93	.13	4.77	.04	1291.70
2125.0	168.2	269.1	1687.8	97.5	61.1	634.4	1286.0	577.6	1291.70
2.43	1.72	4.40	2.66	.060	.045	.060	.000	1288.90	9856.46
.006172	610.	620.	625.	5	0	0	.00	635.68	10492.14

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 7.900

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

7.900	3.32	1297.62	.00	.00	1297.87	.25	4.90	.04	1297.00
2125.0	306.7	522.8	1295.5	116.3	92.6	379.1	1294.7	586.3	1296.40
2.47	2.64	5.64	3.42	.060	.045	.060	.000	1294.30	9665.94
.013810	565.	575.	545.	4	0	0	.00	733.19	10399.13

*SECNO 8.000

3265 DIVIDED FLOW

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

8.000	4.36	1302.46	.00	.00	1302.62	.16	4.74	.01	1300.90
2125.0	290.4	373.7	1460.8	173.9	83.2	485.9	1303.0	595.3	1301.50
2.52	1.67	4.49	3.01	.060	.045	.060	.000	1298.10	9694.74
.006085	535.	540.	540.	4	0	0	.00	734.27	10472.23

*SECNO 8.130

3265 DIVIDED FLOW

8.130	3.80	1307.00	.00	.00	1307.23	.23	4.59	.02	1307.30
2125.0	89.0	192.4	1843.6	39.2	51.8	468.4	1311.4	602.9	1307.10
2.56	2.27	3.71	3.94	.060	.045	.060	.000	1303.20	9914.44
.011409	620.	670.	540.	4	0	0	.00	417.88	10349.17

*SECNO 8.220

3265 DIVIDED FLOW

8.220	3.90	1311.30	.00	.00	1311.60	.30	4.35	.02	1309.80
2125.0	117.5	1133.2	874.3	52.0	200.6	408.0	1317.9	608.5	1309.00
2.59	2.26	5.65	2.14	.060	.045	.060	.000	1307.40	9867.42
.007976	450.	460.	460.	4	0	0	.00	646.06	10604.17

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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 8.310
    8.310      2.87   1315.37       .00       .00   1315.52       .15      3.90       .02   1314.20
   2125.0    1686.3     326.4     112.4     601.4      72.4      93.8    1325.7     616.3   1314.60
     2.64      2.80      4.51      1.20      .060      .045      .060      .000   1312.50   9492.79
  .008266      470.      490.      485.         5         0         0       .00    776.54  10269.33


*SECNO 8.410

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

    8.410      4.42   1319.32       .00       .00   1319.77       .45      4.16       .09   1317.60
   1246.0      29.0     907.1     309.9      15.2     147.0     136.8    1332.2     622.4   1317.20
     2.67      1.91      6.17      2.26      .060      .045      .060      .000   1314.90   9955.27
  .007301      550.      520.      490.         2         0         0       .00    228.08  10183.35


1490 NH CARD USED
*SECNO 8.500

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .48

    8.500      4.10   1324.20       .00       .00   1324.65       .45      4.88       .00   1324.20
    894.0      55.2     838.8        .0     221.0     151.6        .0    1336.1     625.1   1324.20
     2.69       .25      5.53       .00     1.000      .045      .000      .000   1320.10   9679.24
  .016054      500.      500.      490.         4         0         0       .00    253.60  10022.20


*SECNO 8.590
    8.590      4.02   1329.92       .00       .00   1330.30       .38      5.64       .01   1328.80
    894.0     188.7     511.0     194.2      85.4      83.1      67.0    1339.3     627.5   1328.40
     2.72      2.21      6.15      2.90      .060      .045      .060      .000   1325.90   9883.44
  .009496      465.      465.      465.         5         0         0       .00    189.04  10072.48


*SECNO 8.690
    8.690      4.22   1334.62       .00       .00   1335.19       .57      4.84       .06   1332.20
    894.0     191.1     684.2      18.8      62.9     101.3       9.2    1341.7     629.1   1333.10
     2.74      3.04      6.76      2.04      .060      .045      .060      .000   1330.40   9929.54
  .009882      500.      500.      495.         4         0         0       .00    101.93  10031.47
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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

*SECNO 8.780

8.780	3.25	1339.55	.00	.00	1339.89	.34	4.67	.02	1338.40
894.0	293.7	580.3	20.0	136.9	104.1	12.4	1344.1	631.1	1338.40
2.78	2.15	5.57	1.62	.060	.045	.060	.000	1336.30	9809.12
.009024	495.	495.	490.	3	0	0	.00	244.22	10053.33

*SECNO 8.890

8.890	4.73	1344.73	.00	.00	1345.49	.76	5.47	.13	1342.60
894.0	29.2	683.9	180.9	11.6	87.7	53.8	1346.8	633.2	1341.90
2.80	2.52	7.80	3.36	.060	.045	.060	.000	1340.00	9975.29
.009743	555.	590.	590.	3	0	0	.00	75.18	10050.47

*SECNO 8.990

8.990	4.11	1350.01	.00	.00	1350.77	.76	5.28	.00	1348.30
894.0	18.4	737.5	138.0	7.6	97.5	42.7	1348.5	634.1	1348.30
2.82	2.41	7.57	3.23	.060	.045	.060	.000	1345.90	9983.99
.011949	491.	491.	491.	4	0	0	.00	76.69	10060.67

*SECNO 9.090

9.090	3.92	1356.72	.00	.00	1357.49	.77	6.72	.00	1354.60
894.0	125.8	707.7	60.5	41.6	91.1	20.1	1350.4	635.1	1354.30
2.84	3.02	7.77	3.01	.060	.045	.060	.000	1352.80	9944.02
.011602	575.	570.	570.	4	0	0	.00	81.43	10025.45

*SECNO 9.190

9.190	3.90	1363.10	1362.90	.00	1363.87	.76	6.38	.00	1360.90
894.0	116.1	777.9	.0	38.0	104.8	.0	1352.2	636.1	1364.30
2.86	3.05	7.42	.00	.060	.045	.000	.000	1359.20	9920.70
.013283	510.	515.	510.	6	11	0	.00	90.93	10011.63

*SECNO 9.290

3265 DIVIDED FLOW

9.290	4.08	1368.98	.00	.00	1369.55	.56	5.66	.02	1366.10
871.0	127.2	679.3	64.5	40.8	101.8	35.1	1354.0	637.3	1369.30
2.89	3.12	6.67	1.84	.060	.045	.060	.000	1364.90	9966.42
.009774	490.	500.	505.	3	0	0	.00	125.61	10098.44

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 9.390

3265 DIVIDED FLOW

9.390	3.32	1375.42	.00	.00	1375.75	.32	6.18	.02	1375.10
871.0	226.6	458.0	186.4	65.8	82.0	72.2	1356.5	639.3	1374.20
2.92	3.44	5.58	2.58	.060	.045	.060	.000	1372.10	9920.69
.013066	550.	555.	523.	4	0	0	.00	185.28	10149.44

*SECNO 9.480

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.480	3.63	1382.13	1382.13	.00	1383.04	.90	7.01	.17	1380.70
871.0	90.8	780.2	.0	31.9	97.5	.0	1358.5	640.7	1382.70
2.94	2.84	8.00	.00	.060	.045	.000	.000	1378.50	9938.90
.016052	485.	485.	485.	3	8	0	.00	81.34	10020.24

*SECNO 9.520

3265 DIVIDED FLOW

9.520	3.75	1385.15	1385.12	.00	1385.72	.57	2.66	.03	1383.90
871.0	94.9	747.1	29.0	45.5	115.0	15.0	1359.1	641.2	1384.20
2.95	2.08	6.50	1.94	.060	.045	.060	.000	1381.40	9855.03
.013857	160.	180.	205.	4	5	0	.00	161.40	10042.59

*SECNO 9.610

9.610	3.10	1393.80	1393.74	.00	1394.53	.73	8.76	.05	1393.60
871.0	.8	415.2	455.0	1.0	50.4	86.3	1360.8	642.6	1392.60
2.97	.87	8.23	5.27	.060	.045	.060	.000	1390.70	9944.95
.026101	460.	470.	480.	6	16	0	.00	96.08	10041.02

T1 FCD 90-64 AEG 5115.01
T2 White Tanks Wash Flood Insurance Study
T3 Main Channel - Final with Floodway

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	.005	0	0.0	7209.0	1063	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2	0	-1	0	0	0	0	0	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

*PROF 2

CCHV= .100 CEHV= .300
*SECNO .000

3470 ENCROACHMENT STATIONS= 9500.0 10780.0 TYPE= 1 TARGET= 1280.000

.000	2.77	1063.07	.00	1062.77	1063.23	.16	.00	.00	1061.80
7209.0	304.6	3348.4	3556.0	156.1	917.8	1217.6	.0	.0	1061.60
.00	1.95	3.65	2.92	.060	.040	.060	.000	1060.30	9500.00
.005042	0.	0.	0.	0	0	4	.00	1280.00	10780.00

*SECNO .080

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 9520.0 10630.0 TYPE= 1 TARGET= 1110.000

.080	3.94	1066.04	.00	1065.40	1066.40	.36	3.11	.06	1067.20
7209.0	2751.1	2738.3	1719.6	647.7	464.4	461.3	19.4	10.9	1065.50
.03	4.25	5.90	3.73	.060	.040	.060	.000	1062.10	9520.00
.010791	445.	430.	440.	3	0	0	.00	891.94	10630.00

*SECNO .190

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9970.0 10630.0 TYPE= 1 TARGET= 660.000

.190	5.14	1070.24	.00	1069.39	1070.79	.55	4.33	.05	1068.80
7209.0	19.5	4505.9	2683.6	8.8	652.1	711.3	36.4	18.7	1068.70
.05	2.22	6.91	3.77	.060	.040	.060	.000	1065.10	9970.00
.006579	750.	570.	300.	2	0	0	.00	478.15	10630.00

*SECNO .290

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

.290	6.95	1073.95	.00	1073.62	1074.94	.99	4.02	.13	1073.30
7209.0	2.1	4786.3	2420.6	1.4	516.4	554.3	50.6	23.8	1071.70
.07	1.52	9.27	4.37	.060	.040	.060	.000	1067.00	9970.00
.009609	530.	515.	500.	3	0	0	.00	390.00	10360.00

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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


*SECNO  .380

3470 ENCROACHMENT STATIONS=     9910.0   10250.0  TYPE=      1  TARGET=      340.000
      .380       6.55    1077.85       .00    1077.40    1078.59       .74       3.63       .02    1073.90
    7209.0      754.7     3903.0    2551.3      177.5      452.0     664.5       64.7      28.1    1074.80
       .09       4.25       8.63      3.84       .060       .040      .060       .000   1071.30    9910.00
   .005364       560.       510.      520.          2          0         0        .00    340.00   10250.00


1490 NH CARD USED
*SECNO  .480

3470 ENCROACHMENT STATIONS=     9850.0   10350.0  TYPE=      1  TARGET=      500.000
      .480       7.38    1080.48       .00    1079.93    1080.80       .32       2.17       .04    1077.80
    7209.0     1616.0     3181.3    2411.7      408.5      561.1     804.5       82.4      33.0    1078.10
       .12       3.96       5.67      3.00       .060       .045      .060       .000   1073.10    9850.00
   .003614       480.       490.      520.          3          0         0        .00    500.00   10350.00


1490 NH CARD USED
*SECNO  .570

3470 ENCROACHMENT STATIONS=     9912.0   10230.0  TYPE=      1  TARGET=      318.000
      .570       8.23    1082.33       .00    1081.99    1082.94       .61       2.05       .09    1080.30
    7209.0      157.7     5553.5    1497.8       55.0      807.4     431.8      100.0      37.7    1079.50
       .15       2.87       6.88      3.47       .060       .045      .060       .000   1074.10    9912.00
   .004712       490.       501.      501.          2          0         0        .00    318.00   10230.00


*SECNO  .670

3470 ENCROACHMENT STATIONS=     9689.0   10100.0  TYPE=      1  TARGET=      411.000
      .670       7.12    1084.92       .00    1084.31    1085.37       .45       2.41       .02    1081.10
    7209.0     3287.4     3164.8     756.8      930.7      447.6     197.0      116.2      41.8    1081.50
       .17       3.53       7.07      3.84       .070       .045      .060       .000   1077.80    9689.00
   .005069       480.       498.      498.          2          0         0        .00    411.00   10100.00


*SECNO  .760

3470 ENCROACHMENT STATIONS=     9830.0   10088.0  TYPE=      1  TARGET=      258.000
      .760       6.83    1087.63       .00    1087.39    1088.52       .89       3.02       .13    1085.60
    7209.0      899.1     5657.9     652.0      228.8      689.0     132.8      131.3      45.6    1084.10
       .19       3.93       8.21      4.91       .060       .045      .060       .000   1080.80    9830.00
   .007291       501.       501.      501.          2          0         0        .00    258.00   10088.00
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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


1490 NH CARD USED
*SECNO  .860
3280 CROSS SECTION        .86 EXTENDED        .63 FEET


3470 ENCROACHMENT STATIONS=     9868.0   10139.0  TYPE=      1  TARGET=      271.000
      .860      7.63   1090.73       .00   1089.81   1091.27       .54      2.72       .03   1086.60
    7209.0     787.9    4999.2    1421.8     216.9     754.5     357.3     145.5      48.8   1086.80
      .22      3.63      6.63      3.98      .060      .045      .060      .000   1083.10   9868.00
   .003925     522.      522.      510.         2         0         0       .00    271.00  10139.00


1490 NH CARD USED
*SECNO  .950

3470 ENCROACHMENT STATIONS=     9984.0   10192.0  TYPE=      1  TARGET=      208.000
      .950      8.25   1092.85       .00   1092.30   1093.54       .69      2.22       .04   1089.60
    6256.0       2.7    2911.2    3342.2       1.9     378.5     592.5     158.7      51.5   1090.00
      .24      1.38      7.69      5.64      .050      .045      .050      .000   1084.60   9984.00
   .005300     600.      489.      489.         3         0         0       .00    208.00  10192.00


*SECNO 1.040

3470 ENCROACHMENT STATIONS=     9891.0   10128.0  TYPE=      1  TARGET=      237.000
     1.040      6.89   1095.29       .00   1094.62   1095.86       .57      2.31       .01   1090.40
    6256.0    2566.6    3650.2      39.3     568.9     526.1      18.1     169.8      53.9   1093.40
      .26      4.51      6.94      2.17      .060      .045      .060      .000   1088.40   9891.00
   .004654     474.      474.      440.         2         0         0       .00    237.00  10128.00


1490 NH CARD USED
*SECNO 1.130

3470 ENCROACHMENT STATIONS=     9849.0   10045.0  TYPE=      1  TARGET=      196.000
     1.130      7.61   1097.61       .00   1097.03   1098.29       .69      2.40       .04   1093.40
    6256.0    2889.7    3364.0       2.3     582.8     430.3       2.0     181.7      56.3   1094.20
      .28      4.96      7.82      1.14      .060      .045      .060      .000   1090.00   9849.00
   .005215     484.      490.      500.         2         0         0       .00    196.00  10045.00


*SECNO 1.230
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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


3470 ENCROACHMENT STATIONS=     9940.0   10232.0  TYPE=      1  TARGET=      292.000
     1.230      6.49   1100.09       .00   1099.42   1100.54       .46       2.23       .02   1095.10
    6256.0      92.0    3456.0    2708.0      30.5     531.3     731.7      195.0      59.1   1097.30
       .31      3.02      6.50      3.70      .060      .045      .060       .000   1093.60   9940.00
   .003827      470.      510.      515.         1         0         0        .00    292.00  10232.00


*SECNO 1.320

3470 ENCROACHMENT STATIONS=     9975.0   10200.0  TYPE=      1  TARGET=      225.000
     1.320      6.99   1102.29       .00   1101.76   1103.05       .77       2.42       .09   1100.10
    6256.0       1.6    3408.5    2845.9       1.3     407.0     573.4      207.6      62.0   1097.20
       .33      1.24      8.38      4.96      .060      .045      .060       .000   1095.30   9975.00
   .006760      485.      485.      485.         1         0         0        .00    225.00  10200.00


1490 NH CARD USED
*SECNO 1.410

3470 ENCROACHMENT STATIONS=     9900.0   10135.0  TYPE=      1  TARGET=      235.000
     1.410      6.69   1105.09       .00   1104.62   1105.71       .63       2.64       .01   1101.00
    6256.0    1305.9    2934.1    2016.0     241.2     398.1     388.9      217.9      64.4   1100.90
       .35      5.42      7.37      5.18      .050      .045      .050       .000   1098.40   9900.00
   .005263      445.      445.      445.         2         0         0        .00    235.00  10135.00


*SECNO 1.500

3470 ENCROACHMENT STATIONS=     9810.0   10036.0  TYPE=      1  TARGET=      226.000
     1.500      6.98   1107.68       .00   1106.96   1108.32       .64       2.60       .00   1102.90
    6256.0    3141.2    3113.9        .9     650.8     406.3       1.1      229.4      66.9   1103.90
       .37      4.83      7.66       .79      .060      .045      .060       .000   1100.70   9810.00
   .005550      480.      483.      483.         2         0         0        .00    226.00  10036.00


*SECNO 1.590

3470 ENCROACHMENT STATIONS=     9770.0   10038.0  TYPE=      1  TARGET=      268.000
     1.590      6.28   1109.98       .00   1109.20   1110.54       .56       2.21       .01   1107.10
    6256.0     580.8    5672.1       3.0     230.0     907.1       2.7      241.9      69.7   1106.60
       .39      2.53      6.25      1.13      .060      .045      .060       .000   1103.70   9770.00
   .003684      494.      494.      494.         2         0         0        .00    268.00  10038.00
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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


*SECNO 1.680

3470 ENCROACHMENT STATIONS=     9831.0   10047.0  TYPE=      1  TARGET=      216.000
     1.680      6.28   1112.18       .00   1111.44   1112.94       .76      2.34       .06   1108.30
    6256.0    3061.7    3186.1       8.2     599.7     378.5       4.8     253.7      72.4   1106.80
       .41      5.11      8.42      1.70      .060      .045      .060      .000   1105.90   9831.00
   .006664      490.      480.      480.         2         0         0       .00    216.00  10047.00


*SECNO 1.780

3470 ENCROACHMENT STATIONS=     9880.0   10072.0  TYPE=      1  TARGET=      192.000
     1.780      6.74   1115.14       .00   1114.38   1115.87       .73      2.93       .00   1109.30
    6256.0    2070.6    3486.7     698.7     420.5     430.4     149.8     265.2      74.8   1110.80
       .43      4.92      8.10      4.66      .060      .045      .060      .000   1108.40   9880.00
   .005153      507.      500.      495.         2         0         0       .00    192.00  10072.00


*SECNO 1.870

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


3470 ENCROACHMENT STATIONS=     9835.0   10042.0  TYPE=      1  TARGET=      207.000
     1.870      8.34   1117.14       .00   1116.44   1117.54       .40      1.64       .03   1110.20
    6256.0    3173.0    3070.3      12.7     822.6     500.7       9.3     278.4      77.0   1110.80
       .46      3.86      6.13      1.36      .060      .045      .060      .000   1108.80   9835.00
   .002305      495.      495.      495.         3         0         0       .00    207.00  10042.00


*SECNO 1.970
3280 CROSS SECTION      1.97 EXTENDED       .30 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .58


3470 ENCROACHMENT STATIONS=     9945.0   10107.0  TYPE=      1  TARGET=      162.000
     1.970      5.69   1118.79       .00   1118.35   1119.71       .91      2.01       .15   1113.40
    6256.0     570.1    3931.7    1754.3     108.4     457.5     294.5     292.0      79.3   1113.50
       .48      5.26      8.59      5.96      .060      .045      .060      .000   1113.10   9945.00
   .006966      535.      540.      560.         2         0         0       .00    162.00  10107.00
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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

*SECNO 2.070

3470 ENCROACHMENT STATIONS= 9952.0 10127.0 TYPE= 1 TARGET= 175.000

2.070	7.39	1121.79	.00	1121.11	1122.68	.88	2.97	.00	1116.90
6256.0	342.4	3823.8	2089.8	85.5	433.9	410.9	302.0	81.2	1116.10
.50	4.00	8.81	5.09	.060	.045	.060	.000	1114.40	9952.00
.005433	484.	484.	484.	3	0	0	.00	175.00	10127.00

*SECNO 2.150

3470 ENCROACHMENT STATIONS= 9970.0 10143.0 TYPE= 1 TARGET= 173.000

2.150	8.36	1124.26	.00	1123.73	1124.98	.72	2.29	.02	1120.30
6256.0	117.2	2649.5	3489.3	36.3	310.5	658.6	311.8	83.0	1119.20
.52	3.22	8.53	5.30	.060	.045	.060	.000	1115.90	9970.00
.004888	444.	444.	444.	2	0	0	.00	173.00	10143.00

*SECNO 2.240

3470 ENCROACHMENT STATIONS= 9839.0 10016.0 TYPE= 1 TARGET= 177.000

2.240	8.50	1126.40	.00	1125.96	1127.20	.80	2.20	.02	1119.30
6256.0	2215.2	4036.6	4.3	509.3	483.9	4.0	323.1	84.9	1119.70
.54	4.35	8.34	1.07	.060	.045	.060	.000	1117.90	9839.00
.004150	489.	489.	489.	2	0	0	.00	177.00	10016.00

*SECNO 2.340

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9900.0 10033.0 TYPE= 1 TARGET= 133.000

2.340	6.90	1128.70	.00	1127.92	1130.07	1.36	2.70	.17	1124.20
6256.0	732.3	5522.4	1.4	156.0	561.8	1.5	332.9	86.7	1123.70
.55	4.69	9.83	.91	.060	.045	.060	.000	1121.80	9900.00
.007343	495.	500.	508.	2	0	0	.00	133.00	10033.00

*SECNO 2.430

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 = 1.56

3470 ENCROACHMENT STATIONS= 9890.0 10124.0 TYPE= 1 TARGET= 234.000

2.430	8.56	1131.86	.00	1131.42	1132.28	.42	2.12	.09	1127.00
6256.0	1953.0	2685.8	1617.3	431.6	422.4	441.6	343.8	88.7	1128.50
.58	4.53	6.36	3.66	.060	.045	.060	.000	1123.30	9890.00
.003036	471.	471.	471.	2	0	0	.00	234.00	10124.00

*SECNO 2.520

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .52

3470 ENCROACHMENT STATIONS= 9930.0 10160.0 TYPE= 1 TARGET= 230.000

2.520	6.31	1133.91	.00	1133.56	1135.12	1.21	2.60	.24	1130.90
6256.0	577.9	3851.6	1826.5	120.9	369.0	333.5	355.8	91.3	1130.80
.59	4.78	10.44	5.48	.060	.045	.060	.000	1127.60	9930.00
.011180	490.	495.	500.	2	0	0	.00	230.00	10160.00

*SECNO 2.620

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.05

3470 ENCROACHMENT STATIONS= 9800.0 10100.0 TYPE= 1 TARGET= 300.000

2.620	8.73	1137.43	.00	1136.65	1137.74	.31	2.53	.09	1132.30
6256.0	3474.2	2121.9	659.9	874.6	383.1	244.9	369.8	94.5	1134.80
.63	3.97	5.54	2.69	.060	.045	.060	.000	1128.70	9800.00
.002667	525.	525.	525.	2	0	0	.00	300.00	10100.00

*SECNO 2.720

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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 =   .49


3470 ENCROACHMENT STATIONS=     9900.0   10072.0  TYPE=      1  TARGET=      172.000
     2.720      5.94   1139.14       .00   1138.79   1140.48      1.34      2.43       .31   1135.20
    6256.0    1866.5    3946.2     443.4     293.3     369.0      83.8     382.9      97.3   1135.10
       .64      6.36     10.70      5.29      .060      .045      .060      .000   1133.20   9900.00
   .011107      506.      506.      506.         3         0         0       .00    172.00  10072.00


1490 NH CARD USED
*SECNO 2.820

3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9871.0   10075.0  TYPE=      1  TARGET=      204.000
     2.820      8.83   1143.53       .00   1142.84   1144.28       .75      3.75       .06   1137.50
    6256.0    2948.3    3116.1     191.6     567.9     367.8     306.7     395.0      99.5   1138.10
       .66      5.19      8.47       .62      .060      .045      .600      .000   1134.70   9871.00
   .004892      515.      539.      540.         2         0         0       .00    204.00  10075.00


1490 NH CARD USED
*SECNO 2.920

3470 ENCROACHMENT STATIONS=     9900.0   10090.0  TYPE=      1  TARGET=      190.000
     2.920      7.10   1145.90       .00   1145.39   1146.52       .61      2.22       .01   1140.10
    6256.0     268.9    5653.7     333.3      80.0     868.7     103.6     409.5     102.0   1142.10
       .69      3.36      6.51      3.22      .060      .045      .060      .000   1138.80   9900.00
   .003408      510.      560.      585.         3         0         0       .00    190.00  10090.00


1490 NH CARD USED
*SECNO 3.040
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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


3470 ENCROACHMENT STATIONS=     9972.6   10300.0  TYPE=      1  TARGET=      327.400
   3.040      7.14   1148.34       .00   1147.76   1148.63       .29      2.08       .03   1201.10
  6256.0        .0    1424.2    4831.8        .0     289.2    1180.0     427.6     105.7   1144.80
     .73       .00      4.92      4.09      .000      .045      .060      .000   1141.20   9978.73
 .003247      610.      625.      625.         2         0         0       .00    321.27  10300.00


1490 NH CARD USED
*SECNO 3.140

3470 ENCROACHMENT STATIONS=     9900.0   10131.0  TYPE=      1  TARGET=      231.000
   3.140      6.79   1149.69       .00   1149.19   1150.28       .59      1.57       .09   1145.40
  6256.0    1059.2    3676.2    1520.6     285.5     509.8     323.2     439.6     108.3   1143.00
     .75      3.71      7.21      4.70      .060      .045      .060      .000   1142.90   9900.00
 .004378      510.      495.      340.         2         0         0       .00    231.00  10131.00


*SECNO 3.230

3470 ENCROACHMENT STATIONS=     9800.0   10060.0  TYPE=      1  TARGET=      260.000
   3.230      6.33   1152.53       .00   1151.98   1153.27       .74      2.95       .04   1148.10
  6256.0    2682.6    1936.8    1636.6     549.5     206.5     260.8     452.2     111.2   1147.50
     .77      4.88      9.38      6.28      .060      .045      .060      .000   1146.20   9800.00
 .007942      511.      511.      511.         2         0         0       .00    260.00  10060.00


*SECNO 3.320

3470 ENCROACHMENT STATIONS=     9970.0   10250.0  TYPE=      1  TARGET=      280.000
   3.320      6.47   1155.47       .00   1154.76   1156.06       .59      2.77       .02   1152.30
  6256.0      37.7    3580.2    2638.1      14.8     482.5     681.6     464.0     114.1   1149.80
     .79      2.55      7.42      3.87      .060      .045      .060      .000   1149.00   9970.00
 .004488      460.      487.      465.         1         0         0       .00    280.00  10250.00


*SECNO 3.420

3470 ENCROACHMENT STATIONS=     9962.0   10350.0  TYPE=      1  TARGET=      388.000
   3.420      6.76   1157.66       .00   1156.95   1158.00       .34      1.91       .02   1154.00
  6256.0        .0    2176.1    4079.9        .0     350.0    1133.0     477.9     117.5   1154.90
     .82       .00      6.22      3.60      .000      .045      .060      .000   1150.90   9962.00
 .003836      488.      488.      440.         3         0         0       .00    388.00  10350.00
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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


*SECNO 3.510

3470 ENCROACHMENT STATIONS=     9970.0   10345.0  TYPE=      1  TARGET=      375.000
     3.510      6.78   1159.58       .00   1158.87   1160.07       .49       2.03       .05   1156.10
    6256.0       9.9    2639.7    3606.4       5.6     354.5     953.9      493.6     121.8   1153.60
       .85      1.77       7.45      3.78      .060      .045      .060       .000   1152.80   9970.00
   .004534      487.       487.      487.         2         0         0        .00    375.00  10345.00


*SECNO 3.590

3470 ENCROACHMENT STATIONS=     9845.0   10070.0  TYPE=      1  TARGET=      225.000
     3.590      6.96   1161.86       .00   1161.19   1162.78       .93       2.58       .13   1158.90
    6208.0    2591.9    3174.8     441.3      499.5     331.4      95.8      504.9     124.8   1157.90
       .86      5.19       9.58      4.61      .060      .045      .060       .000   1154.90   9845.00
   .007901      440.       440.      440.         2         0         0        .00    225.00  10070.00


*SECNO 3.700

3470 ENCROACHMENT STATIONS=     9892.0   10040.0  TYPE=      1  TARGET=      148.000
     3.700      8.24   1165.44       .00   1165.05   1166.56      1.11       3.72       .06   1159.10
    6208.0    2060.6    4142.1       5.3      416.4     424.4       4.2      516.2     127.2   1158.30
       .88      4.95       9.76      1.27      .060      .045      .060       .000   1157.20   9892.00
   .005695      558.       558.      558.         2         0         0        .00    148.00  10040.00


*SECNO 3.790
3280 CROSS SECTION      3.79 EXTENDED       .64 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     9900.0   10161.0  TYPE=      1  TARGET=      261.000
     3.790      8.44   1167.94       .00   1167.23   1168.55       .61       1.94       .05   1163.10
    6208.0     502.7    4258.7    1446.7      169.3     587.3     446.7      527.0     129.3   1163.10
       .90      2.97       7.25      3.24      .060      .045      .060       .000   1159.50   9900.00
   .003255      460.       460.      460.         2         0         0        .00    261.00  10161.00


1490 NH CARD USED
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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 3.880

3301 HV CHANGED MORE THAN HVINS

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

3470 ENCROACHMENT STATIONS= 9973.0 10175.0 TYPE= 1 TARGET= 202.000

3.880	7.79	1169.79	.00	1169.44	1171.04	1.25	2.30	.19	1166.20
6208.0	1.0	4079.5	2127.5	1.1	386.5	455.1	538.2	131.9	1165.10
.92	.94	10.55	4.67	.060	.045	.060	.000	1162.00	9973.00
.007933	475.	475.	475.	2	0	0	.00	202.00	10175.00

1490 NH CARD USED
*SECNO 3.960

3470 ENCROACHMENT STATIONS= 9895.0 10070.0 TYPE= 1 TARGET= 175.000

3.960	8.30	1173.40	.00	1172.54	1174.53	1.14	3.48	.01	1170.10
6208.0	1337.3	3052.9	1817.8	282.5	288.4	270.6	546.7	133.8	1168.90
.93	4.73	10.59	6.72	.060	.045	.060	.000	1165.10	9895.00
.007887	440.	440.	440.	3	0	0	.00	175.00	10070.00

1490 NH CARD USED
*SECNO 4.050

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.56

3470 ENCROACHMENT STATIONS= 9970.0 10180.0 TYPE= 1 TARGET= 210.000

4.050	9.22	1176.52	.00	1175.69	1177.05	.53	2.46	.06	1172.00
6208.0	3.2	2962.7	3242.1	3.1	408.7	787.6	558.7	136.0	1170.40
.96	1.01	7.25	4.12	.060	.045	.060	.000	1167.30	9970.00
.003240	520.	509.	509.	3	0	0	.00	210.00	10180.00

*SECNO 4.160

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= 9880.0 10100.0 TYPE= 1 TARGET= 220.000

4.160	8.55	1178.45	.00	1177.82	1179.24	.79	2.11	.08	1172.20
6208.0	1557.7	3414.7	1235.6	369.2	387.0	287.9	572.4	138.7	1173.30
.98	4.22	8.82	4.29	.060	.045	.060	.000	1169.90	9880.00
.004980	520.	530.	540.	2	0	0	.00	220.00	10100.00

*SECNO 4.250

3470 ENCROACHMENT STATIONS= 9865.0 10080.0 TYPE= 1 TARGET= 215.000

4.250	8.68	1180.78	.00	1180.13	1181.32	.54	2.05	.02	1173.70
6208.0	2301.3	2281.0	1625.8	566.8	288.6	345.7	585.1	141.1	1174.10
1.00	4.06	7.90	4.70	.060	.045	.060	.000	1172.10	9865.00
.003521	485.	495.	500.	2	0	0	.00	215.00	10080.00

*SECNO 4.350

3470 ENCROACHMENT STATIONS= 9975.0 10224.0 TYPE= 1 TARGET= 249.000

4.350	7.19	1182.89	.00	1182.39	1183.43	.54	2.12	.00	1178.60
6208.0	10.2	2277.6	3920.2	5.7	292.5	871.4	599.4	143.9	1177.60
1.03	1.77	7.79	4.50	.060	.045	.060	.000	1175.70	9975.00
.004654	500.	520.	540.	2	0	0	.00	249.00	10224.00

*SECNO 4.460

3470 ENCROACHMENT STATIONS= 9979.0 10248.0 TYPE= 1 TARGET= 269.000

4.460	7.07	1186.07	.00	1185.36	1186.76	.68	3.28	.04	1187.10
6208.0	.0	2078.0	4130.0	.0	237.4	785.9	612.8	147.1	1182.60
1.05	.00	8.75	5.25	.000	.045	.060	.000	1179.00	9980.91
.008202	625.	590.	515.	2	0	0	.00	267.09	10248.00

*SECNO 4.550

3470 ENCROACHMENT STATIONS= 9976.0 10168.0 TYPE= 1 TARGET= 192.000

4.550	8.29	1189.29	.00	1188.59	1190.16	.87	3.35	.06	1184.80
6208.0	.2	2512.9	3694.9	.4	255.3	692.5	623.1	149.4	1182.40
1.07	.42	9.84	5.34	.060	.045	.060	.000	1181.00	9976.00
.006475	495.	490.	445.	2	0	0	.00	192.00	10168.00

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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


*SECNO 4.650

3470 ENCROACHMENT STATIONS=     9771.0   10014.0  TYPE=      1  TARGET=      243.000
    4.650      8.22   1192.12       .00   1191.31   1192.59       .48      2.39       .04   1186.30
   6208.0    4659.1    1545.7       3.2    1041.5     195.1       3.4     634.8     151.8   1184.90
     1.10      4.47      7.92       .95      .060      .045      .060      .000   1183.90   9771.00
  .004093      460.      495.      455.         2         0         0       .00    243.00  10014.00


1490 NH CARD USED
*SECNO 4.760

3470 ENCROACHMENT STATIONS=     9930.0   10255.0  TYPE=      1  TARGET=      325.000
    4.760      7.50   1194.60       .00   1194.05   1194.95       .34      2.34       .01   1190.50
   6208.0     611.3    1447.7    4148.9     176.7     224.8    1007.3     652.6     155.6   1189.90
     1.13      3.46      6.44      4.12      .060      .045      .060      .000   1187.10   9930.00
  .003905      520.      605.      655.         2         0         0       .00    325.00  10255.00


*SECNO 4.860
3280 CROSS SECTION      4.86 EXTENDED       .40 FEET


3470 ENCROACHMENT STATIONS=     9924.0   10289.0  TYPE=      1  TARGET=      365.000
    4.860      7.10   1196.80       .00   1196.35   1197.28       .48      2.29       .04   1192.90
   6208.0     821.4    2045.1    3341.5     205.4     259.4     852.9     668.8     159.7   1190.40
     1.16      4.00      7.88      3.92      .060      .045      .060      .000   1189.70   9924.00
  .005062      475.      520.      525.         2         0         0       .00    365.00  10289.00


*SECNO 4.960

3470 ENCROACHMENT STATIONS=     9969.0   10155.0  TYPE=      1  TARGET=      186.000
    4.960      7.02   1199.42       .00   1198.72   1200.23       .81      2.85       .10   1193.40
   6208.0       4.6    3105.0    3098.3       3.6     355.9     583.8     682.1     162.9   1195.30
     1.18      1.30      8.72      5.31      .060      .045      .060      .000   1192.40   9969.00
  .006120      495.      515.      515.         2         0         0       .00    186.00  10155.00


*SECNO 5.050

3470 ENCROACHMENT STATIONS=     9986.0   10211.0  TYPE=      1  TARGET=      225.000
    5.050      7.58   1202.58       .00   1201.76   1203.22       .63      2.97       .02   1196.10
   6208.0        .0    2897.9    3310.1        .0     367.4     705.1     694.2     165.4   1196.70
     1.20       .00      7.89      4.69      .000      .045      .060      .000   1195.00   9986.00
  .005330      480.      515.      525.         2         0         0       .00    225.00  10211.00
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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


*SECNO 5.160
3280 CROSS SECTION      5.16 EXTENDED       .28 FEET


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


3470 ENCROACHMENT STATIONS=     9703.0   10045.0  TYPE=      1  TARGET=      342.000
     5.160      7.58   1204.88       .00   1204.07   1205.13       .25      1.88       .04   1201.40
    6208.0    4384.2    1787.7      36.1    1180.8     376.3      18.9     709.7     168.7   1202.50
      1.24      3.71      4.75      1.92      .060      .045      .060      .000   1197.30   9703.00
   .002668      520.      560.      440.         3         0         0       .00    342.00  10045.00


*SECNO 5.230

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


3470 ENCROACHMENT STATIONS=     9810.0   10101.0  TYPE=      1  TARGET=      291.000
     5.230      5.63   1206.33       .00   1205.73   1206.94       .61      1.70       .11   1204.00
    6208.0    2926.6    2715.2     566.2     525.4     373.8     135.7     721.3     171.5   1203.70
      1.26      5.57      7.26      4.17      .060      .045      .060      .000   1200.70   9810.00
   .008348      395.      390.      335.         2         0         0       .00    291.00  10101.00


1490 NH CARD USED
*SECNO 5.290
3280 CROSS SECTION      5.29 EXTENDED       .20 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.85


3470 ENCROACHMENT STATIONS=     9780.0   10330.0  TYPE=      1  TARGET=      550.000
     5.290      6.41   1208.11       .00   1207.63   1208.29       .18      1.31       .04   1204.70
    6208.0    1865.2    1861.7    2481.1     647.1     402.6     921.9     732.4     174.6   1204.90
      1.28      2.88      4.62      2.69      .060      .045      .060      .000   1201.70   9780.00
   .002449      340.      300.      310.         1         0         0       .00    550.00  10330.00


*SECNO 5.390
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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

3280 CROSS SECTION      5.39 EXTENDED       .44 FEET

3470 ENCROACHMENT STATIONS=     9610.0   10055.0  TYPE=      1  TARGET=      445.000
     5.390      6.24   1209.44       .00   1208.90   1209.73       .28      1.40       .03   1207.20
    6208.0    3973.1    2219.6      15.3    1033.7     446.0       8.6     748.9     179.3   1208.20
      1.31      3.84      4.98      1.77      .060      .045      .060      .000   1203.20   9610.00
   .004679      380.      500.      410.         3         0         0       .00    445.00  10055.00

*SECNO 5.460

3470 ENCROACHMENT STATIONS=     9645.0   10102.0  TYPE=      1  TARGET=      457.000
     5.460      6.16   1211.66       .00   1211.03   1212.25       .59      2.43       .09   1209.50
    6208.0    3056.5    2565.4     586.0     725.3     311.4     149.5     760.3     183.1   1208.90
      1.33      4.21      8.24      3.92      .060      .045      .060      .000   1205.50   9645.00
   .009436      345.      420.      420.         3         0         0       .00    457.00  10102.00

*SECNO 5.550
3280 CROSS SECTION      5.55 EXTENDED       .19 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.63

3470 ENCROACHMENT STATIONS=     9709.0   10262.0  TYPE=      1  TARGET=      553.000
     5.550      5.69   1214.59       .00   1213.80   1214.79       .20      2.50       .04   1211.40
    6208.0    2701.4    1002.2    2504.4     853.5     194.7     764.5     776.0     188.4   1212.70
      1.36      3.17      5.15      3.28      .060      .045      .060      .000   1208.90   9709.00
   .003537      450.      475.      455.         2         0         0       .00    553.00  10262.00

1490 NH CARD USED
*SECNO 5.640

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

3470 ENCROACHMENT STATIONS=     9820.0   10170.0  TYPE=      1  TARGET=      350.000
     5.640      5.15   1216.75       .00   1216.33   1217.32       .57      2.42       .11   1214.20
    6208.0    1740.2    1868.6    2599.3     390.7     244.1     460.4     790.9     193.0   1213.90
      1.39      4.45      7.65      5.65      .060      .045      .060      .000   1211.60   9820.00
   .009235      450.      450.      445.         2         0         0       .00    350.00  10170.00
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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


*SECNO 5.730

3470 ENCROACHMENT STATIONS=     9679.0   10050.0  TYPE=      1  TARGET=      371.000
     5.730      6.84   1220.14       .00   1219.69   1220.61       .47      3.29       .01   1216.50
    6208.0    3695.6    2301.6     210.8     906.4     312.3      56.5     803.5     196.8   1216.60
      1.41      4.08      7.37      3.73      .060      .045      .060      .000   1213.30   9679.00
   .005609      450.      475.      475.         3         0         0       .00    371.00  10050.00


*SECNO 5.820

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


3470 ENCROACHMENT STATIONS=     9920.0   10225.0  TYPE=      1  TARGET=      305.000
     5.820      5.73   1222.73       .00   1222.06   1223.19       .46      2.58       .00   1220.80
    3728.0     531.1    1698.7    1498.1     153.3     237.0     438.9     814.0     200.2   1219.60
      1.43      3.47      7.17      3.41      .060      .045      .060      .000   1217.00   9920.00
   .006265      410.      460.      460.         2         0         0       .00    305.00  10225.00


*SECNO 5.910
3280 CROSS SECTION      5.91 EXTENDED       .25 FEET


3470 ENCROACHMENT STATIONS=     9880.0   10130.0  TYPE=      1  TARGET=      250.000
     5.910      6.35   1225.45       .00   1224.81   1225.85       .41      2.65       .01   1222.20
    3728.0     859.7    1718.9    1149.3     262.0     263.4     315.2     823.2     203.2   1222.90
      1.46      3.28      6.53      3.65      .060      .045      .060      .000   1219.10   9880.00
   .004821      485.      500.      465.         1         0         0       .00    250.00  10130.00


1490 NH CARD USED
*SECNO 5.990
3280 CROSS SECTION      5.99 EXTENDED       .38 FEET


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


3470 ENCROACHMENT STATIONS=     9858.0   10061.0  TYPE=      1  TARGET=      203.000
     5.990      6.18   1228.08       .00   1227.51   1228.98       .90      2.98       .15   1225.60
    3728.0    1148.9    2137.4     441.8     267.9     231.2      81.4     830.1     205.4   1225.70
      1.48      4.29      9.24      5.43      .060      .045      .060      .000   1221.90   9858.00
   .011110      425.      425.      425.         2         0         0       .00    203.00  10061.00
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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


1490 NH CARD USED
*SECNO 6.080
3280 CROSS SECTION      6.08 EXTENDED       .65 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.63


3470 ENCROACHMENT STATIONS=     9900.0   10086.0  TYPE=      1  TARGET=      186.000
     6.080      7.85   1231.35      .00   1230.52   1231.91       .56      2.90       .03   1227.40
    3728.0     574.7    2179.7    973.6     194.7     300.1     243.9     837.0     207.5   1227.60
      1.50      2.95      7.26     3.99      .060      .045      .060      .000   1223.50   9900.00
   .004196      450.      450.     450.         2         0         0       .00    186.00  10086.00


*SECNO 6.170
3280 CROSS SECTION      6.17 EXTENDED       .43 FEET


3470 ENCROACHMENT STATIONS=     9980.0   10152.0  TYPE=      1  TARGET=      172.000
     6.170      7.43   1233.23      .00   1232.51   1233.79       .56      1.88       .00   1227.70
    3728.0      51.0    2473.8   1203.2      19.7     353.1     359.5     844.7     209.3   1229.40
      1.52      2.59      7.01     3.35      .060      .045      .060      .000   1225.80   9980.00
   .003989      460.      465.     450.         3         0         0       .00    172.00  10152.00


*SECNO 6.260

3470 ENCROACHMENT STATIONS=     9834.0   10050.0  TYPE=      1  TARGET=      216.000
     6.260      5.86   1235.56      .00   1234.75   1235.89       .34      2.08       .02   1231.60
    3442.0    2148.2    1192.6    101.2     556.0     201.1      36.9     853.4     211.5   1233.40
      1.55      3.86      5.93     2.74      .060      .045      .060      .000   1229.70   9834.00
   .004388      490.      505.     490.         2         0         0       .00    216.00  10050.00


1490 NH CARD USED
*SECNO 6.360
3280 CROSS SECTION      6.36 EXTENDED       .37 FEET


3470 ENCROACHMENT STATIONS=     9850.0   10051.0  TYPE=      1  TARGET=      201.000
     6.360      7.27   1238.37      .00   1237.67   1239.14       .77      3.11       .13   1238.20
    3442.0    1125.3    2145.6    171.2     265.2     258.5      43.8     861.4     214.0   1236.20
      1.57      4.24      8.30     3.90      .060      .045      .060      .000   1231.10   9850.00
   .008732      510.      525.     525.         2         0         0       .00    201.00  10051.00
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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

*SECNO 6.450

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.49

3470 ENCROACHMENT STATIONS=     9774.0   10074.0  TYPE=      1  TARGET=      300.000
     6.450      7.22   1241.52      .00   1240.73   1241.82      .30      2.64      .05   1239.20
    3442.0    1429.6    1235.7    776.7     509.5     203.6    207.9     869.3    216.6   1237.90
      1.60      2.81      6.07     3.74      .060      .045     .060      .000  1234.30   9774.00
   .003952      445.      480.     485.         2         0        0       .00   300.00  10074.00

1490 NH CARD USED
*SECNO 6.560

3470 ENCROACHMENT STATIONS=     9890.0   10100.0  TYPE=      1  TARGET=      210.000
     6.560      5.88   1243.88      .00   1243.25   1244.32      .44      2.46      .04   1240.60
    3140.0    1147.6    1323.2    669.2     283.7     194.0    177.2     878.3    219.5   1241.10
      1.63      4.04      6.82     3.78      .060      .045     .060      .000  1238.00   9890.00
   .006229      435.      550.     560.         3         0        0       .00   210.00  10100.00

1490 NH CARD USED
*SECNO 6.660

3470 ENCROACHMENT STATIONS=     9973.0   10270.0  TYPE=      1  TARGET=      297.000
     6.660      6.58   1247.58      .00   1247.05   1248.03      .46      3.70      .00   1244.60
    3140.0     121.0    1212.0   1807.0      32.6     161.1    516.4     886.7    222.6   1245.30
      1.66      3.72      7.52     3.50      .060      .045     .060      .000  1241.00   9973.00
   .007588      560.      545.     525.         4         0        0       .00   297.00  10270.00

1490 NH CARD USED
*SECNO 6.750
3280 CROSS SECTION      6.75 EXTENDED       .37 FEET

3470 ENCROACHMENT STATIONS=     9950.0   10110.0  TYPE=      1  TARGET=      160.000
     6.750      6.37   1251.57      .00   1250.93   1252.41      .84      4.26      .11   1248.20
    3140.0    661.7    1893.5    584.7     120.1     220.5    146.9     893.5    225.2   1249.90
      1.68      5.51      8.59     3.98      .060      .045     .060      .000  1245.20   9950.00
   .010024      470.      485.     505.         3         0        0       .00   160.00  10110.00
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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

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1490 NH CARD USED
*SECNO 6.840

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.47


3470 ENCROACHMENT STATIONS=     9800.0   10050.0  TYPE=      1  TARGET=      250.000
     6.840      7.55   1255.05      .00   1254.61   1255.62      .58      3.19      .03   1252.30
    3140.0     689.0    2304.6    146.4     285.1     331.5     51.0     899.9    227.4   1252.30
      1.70      2.42      6.95     2.87      .060      .045     .060      .000  1247.50   9800.00
   .004642      470.      490.     490.         2         0        0       .00   250.00  10050.00


1490 NH CARD USED
*SECNO 6.940

3470 ENCROACHMENT STATIONS=     9970.0   10250.0  TYPE=      1  TARGET=      280.000
     6.940      4.89   1257.99      .00   1257.43   1258.32      .33      2.67      .02   1256.20
    2751.0      84.0     931.2   1735.8      30.9     147.3    498.7     907.3    230.3   1255.30
      1.73      2.72      6.32     3.48      .060      .045     .060      .000  1253.10   9970.00
   .006706      435.      520.     460.         2         0        0       .00   280.00  10250.00


1490 NH CARD USED
*SECNO 7.020

3470 ENCROACHMENT STATIONS=     9920.0   10125.0  TYPE=      1  TARGET=      205.000
     7.020      5.62   1260.92      .00   1260.45   1261.44      .52      3.06      .06   1257.90
    2751.0     294.5    1026.6   1429.9      91.7     136.3    310.3     913.0    232.6   1259.10
      1.75      3.21      7.53     4.61      .060      .045     .060      .000  1255.30   9920.00
   .008270      400.      410.     415.         3         0        0       .00   205.00  10125.00


*SECNO 7.110
3280 CROSS SECTION      7.11 EXTENDED       .10 FEET


3470 ENCROACHMENT STATIONS=     9814.0   10125.0  TYPE=      1  TARGET=      311.000
     7.110      5.60   1264.60      .00   1264.12   1264.88      .29      3.42      .02   1262.50
    2751.0    1105.9     628.3   1016.8     362.4      94.8    282.5     920.1    235.4   1261.50
      1.79      3.05      6.63     3.60      .060      .045     .060      .000  1259.00   9814.00
   .005994      475.      500.     490.         2         0        0       .00   311.00  10125.00
```

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

*SECNO 7.200

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

3470 ENCROACHMENT STATIONS= 9790.0 10034.0 TYPE= 1 TARGET= 244.000

7.200	4.58	1268.28	.00	1267.52	1268.82	.54	3.86	.07	1266.60
2751.0	1533.0	1217.3	.7	353.9	164.8	.6	926.7	238.3	1266.90
1.81	4.33	7.38	1.27	.060	.045	.060	.000	1263.70	9790.00
.012951	450.	455.	465.	3	0	0	.00	244.00	10034.00

*SECNO 7.300
3280 CROSS SECTION 7.30 EXTENDED .16 FEET

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

3470 ENCROACHMENT STATIONS= 9950.0 10120.0 TYPE= 1 TARGET= 170.000

7.300	4.85	1272.75	.00	1272.25	1273.21	.46	4.38	.01	1270.00
2751.0	328.5	1590.6	831.8	83.1	252.2	211.0	932.7	240.6	1270.50
1.84	3.95	6.31	3.94	.060	.045	.060	.000	1267.90	9950.00
.006524	480.	500.	485.	2	0	0	.00	170.00	10120.00

*SECNO 7.400

3470 ENCROACHMENT STATIONS= 9849.0 10190.0 TYPE= 1 TARGET= 341.000

7.400	5.27	1276.27	.00	1275.67	1276.56	.29	3.33	.02	1275.50
2751.0	444.3	1046.3	1260.5	167.5	191.2	351.7	940.0	243.6	1275.80
1.87	2.65	5.47	3.58	.060	.045	.060	.000	1271.00	9849.00
.006544	505.	540.	475.	3	0	0	.00	341.00	10190.00

*SECNO 7.490

3470 ENCROACHMENT STATIONS= 9850.0 10028.2 TYPE= 1 TARGET= 178.200

7.490	5.44	1279.84	.00	1279.38	1280.32	.48	3.70	.06	1277.90
2751.0	2049.8	701.2	.0	390.6	109.2	.0	946.4	246.3	100000.00
1.89	5.25	6.42	.00	.060	.045	.000	.000	1274.40	9850.00
.009931	460.	470.	465.	3	0	0	.00	175.44	10025.44

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 7.570

3470 ENCROACHMENT STATIONS= 9830.0 10050.0 TYPE= 1 TARGET= 220.000

7.570	5.49	1283.39	.00	1283.00	1283.97	.58	3.62	.03	1280.90
2751.0	1019.8	1729.5	1.7	289.2	238.5	1.3	951.1	248.1	1280.70
1.91	3.53	7.25	1.26	.060	.045	.060	.000	1277.90	9830.00
.008116	380.	435.	445.	2	0	0	.00	220.00	10050.00

*SECNO 7.680

3280 CROSS SECTION 7.68 EXTENDED .18 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3470 ENCROACHMENT STATIONS= 9890.0 10050.0 TYPE= 1 TARGET= 160.000

7.680	5.77	1288.17	.00	1287.60	1289.00	.82	4.95	.07	1286.40
2125.0	550.1	1513.9	61.0	155.6	181.3	25.4	956.8	250.5	1286.70
1.93	3.53	8.35	2.40	.060	.045	.060	.000	1282.40	9890.00
.010061	550.	560.	570.	2	0	0	.00	160.00	10050.00

*SECNO 7.790

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 9970.0 10290.0 TYPE= 1 TARGET= 320.000

7.790	4.52	1293.42	.00	1292.80	1293.60	.18	4.54	.06	1291.70
2125.0	74.5	379.6	1670.9	30.0	77.6	553.1	964.1	253.9	1291.70
1.99	2.48	4.89	3.02	.060	.045	.060	.000	1288.90	9970.00
.005552	610.	620.	625.	4	0	0	.00	320.00	10290.00

*SECNO 7.900

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

3470 ENCROACHMENT STATIONS= 9920.0 10135.0 TYPE= 1 TARGET= 215.000

7.900	3.71	1298.01	.00	1297.62	1298.47	.46	4.79	.08	1297.00
2125.0	376.5	761.7	986.8	81.8	112.8	215.7	970.9	257.3	1296.40
2.02	4.60	6.75	4.58	.060	.045	.060	.000	1294.30	9920.00
.015194	565.	575.	545.	3	0	0	.00	215.00	10135.00

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

*SECNO 8.000
3280 CROSS SECTION 8.00 EXTENDED .03 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

3470 ENCROACHMENT STATIONS= 9945.0 10180.0 TYPE= 1 TARGET= 235.000

8.000	4.84	1302.94	.00	1302.46	1303.16	.23	4.67	.02	1300.90
2125.0	222.1	489.0	1413.9	81.7	100.3	395.6	977.0	260.1	1301.50
2.05	2.72	4.88	3.57	.060	.045	.060	.000	1298.10	9945.00
.005588	535.	540.	540.	4	0	0	.00	235.00	10180.00

*SECNO 8.130

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

3470 ENCROACHMENT STATIONS= 9960.0 10200.0 TYPE= 1 TARGET= 240.000

8.130	4.49	1307.69	.00	1307.00	1308.07	.38	4.86	.04	1307.30
2125.0	13.3	484.9	1626.8	6.5	87.8	341.4	983.6	263.2	1307.10
2.09	2.03	5.53	4.77	.060	.045	.060	.000	1303.20	9960.00
.014306	620.	670.	540.	4	0	0	.00	240.00	10200.00

*SECNO 8.220

3470 ENCROACHMENT STATIONS= 9924.0 10113.0 TYPE= 1 TARGET= 189.000

8.220	4.77	1312.17	.00	1311.30	1312.73	.57	4.61	.06	1309.80
2125.0	2.9	1741.5	380.6	1.9	265.4	142.1	988.1	265.5	1309.00
2.11	1.51	6.56	2.68	.060	.045	.060	.000	1307.40	9924.00
.007400	450.	460.	460.	2	0	0	.00	189.00	10113.00

*SECNO 8.310
3280 CROSS SECTION 8.31 EXTENDED .06 FEET

3470 ENCROACHMENT STATIONS= 9801.0 10021.0 TYPE= 1 TARGET= 220.000

8.310	3.76	1316.26	.00	1315.37	1316.59	.33	3.83	.02	1314.20
2125.0	1485.7	638.8	.5	385.6	107.4	.5	993.1	267.8	1314.60
2.14	3.85	5.95	.92	.060	.045	.060	.000	1312.50	9801.00
.008530	470.	490.	485.	4	0	0	.00	220.00	10021.00

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

*SECNO 8.410

3470 ENCROACHMENT STATIONS= 9940.0 10090.0 TYPE= 1 TARGET= 150.000

8.410	4.85	1319.75	.00	1319.32	1320.09	.34	3.50	.00	1317.60
1246.0	42.6	887.6	315.8	23.9	166.6	126.2	998.0	270.0	1317.20
2.17	1.78	5.33	2.50	.060	.045	.060	.000	1314.90	9946.37
.004615	550.	520.	490.	3	0	0	.00	143.63	10090.00

1490 NH CARD USED
*SECNO 8.500
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9920.0 10040.0 TYPE= 1 TARGET= 120.000

8.500	3.89	1323.99	1323.99	1324.20	1324.71	.72	4.02	.11	1324.20
894.0	.0	894.0	.0	.0	131.4	.0	1000.6	271.3	1324.20
2.19	.00	6.80	.00	.000	.045	.000	.000	1320.10	9928.81
.026481	500.	500.	490.	0	16	0	.00	91.76	10020.57

*SECNO 8.590

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.89

3470 ENCROACHMENT STATIONS= 9919.0 10039.0 TYPE= 1 TARGET= 120.000

8.590	4.37	1330.27	.00	1329.92	1330.65	.38	5.91	.03	1328.80
894.0	186.9	555.0	152.1	77.9	94.0	48.5	1002.4	272.4	1328.40
2.22	2.40	5.90	3.13	.060	.045	.060	.000	1325.90	9919.00
.007429	465.	465.	465.	7	0	0	.00	120.00	10039.00

*SECNO 8.690

3470 ENCROACHMENT STATIONS= 9950.0 10020.0 TYPE= 1 TARGET= 70.000

8.690	4.17	1334.57	.00	1334.62	1335.24	.66	4.50	.09	1332.20
894.0	181.1	711.3	1.6	51.9	99.9	1.0	1004.6	273.5	1333.10
2.24	3.49	7.12	1.60	.060	.045	.060	.000	1330.40	9950.00
.011162	500.	500.	495.	4	0	0	.00	70.00	10020.00

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

*SECNO 8.780

3470 ENCROACHMENT STATIONS= 9860.0 10032.0 TYPE= 1 TARGET= 172.000

8.780	3.47	1339.77	.00	1339.55	1340.19	.42	4.92	.02	1338.40
894.0	223.5	670.1	.4	106.4	113.9	.4	1006.7	274.9	1338.40
2.27	2.10	5.88	.92	.060	.045	.060	.000	1336.30	9860.00
.008925	495.	495.	490.	5	0	0	.00	172.00	10032.00

*SECNO 8.890

3470 ENCROACHMENT STATIONS= 9960.0 10050.0 TYPE= 1 TARGET= 90.000

8.890	4.80	1344.80	.00	1344.73	1345.51	.71	5.23	.09	1342.60
894.0	30.5	676.6	186.9	12.4	89.3	56.6	1009.2	276.5	1341.90
2.29	2.47	7.57	3.30	.060	.045	.060	.000	1340.00	9974.92
.008970	555.	590.	590.	4	0	0	.00	75.07	10050.00

*SECNO 8.990

3470 ENCROACHMENT STATIONS= 9960.0 10060.0 TYPE= 1 TARGET= 100.000

8.990	4.06	1349.96	.00	1350.01	1350.76	.80	5.23	.03	1348.30
894.0	17.6	742.5	133.9	7.2	95.8	40.8	1010.9	277.4	1348.30
2.31	2.45	7.75	3.28	.060	.045	.060	.000	1345.90	9984.26
.012835	491.	491.	491.	4	0	0	.00	75.74	10060.00

*SECNO 9.090

3470 ENCROACHMENT STATIONS= 9901.8 10025.0 TYPE= 1 TARGET= 123.200

9.090	3.96	1356.76	.00	1356.72	1357.50	.73	6.73	.01	1354.60
894.0	129.7	701.4	63.0	43.3	92.4	20.8	1012.9	278.4	1354.30
2.34	2.99	7.59	3.03	.060	.045	.060	.000	1352.80	9943.55
.010875	575.	570.	570.	4	0	0	.00	81.45	10025.00

*SECNO 9.190

3470 ENCROACHMENT STATIONS= 9918.0 10016.0 TYPE= 1 TARGET= 98.000

9.190	3.86	1363.06	1362.91	1363.10	1363.86	.80	6.34	.02	1360.90
894.0	111.7	782.3	.0	35.7	103.1	.0	1014.6	279.4	1364.30
2.36	3.12	7.59	.00	.060	.045	.000	.000	1359.20	9924.53
.014107	510.	515.	510.	6	8	0	.00	86.96	10011.48

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 9.290

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9920.0 10097.0 TYPE= 1 TARGET= 177.000

9.290	4.12	1369.02	.00	1368.98	1369.56	.54	5.67	.03	1366.10
871.0	128.1	674.5	68.4	41.8	103.0	37.1	1016.5	280.6	1369.30
2.38	3.07	6.55	1.84	.060	.045	.060	.000	1364.90	9966.08
.009323	490.	500.	505.	3	0	0	.00	125.20	10097.00

*SECNO 9.390

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9910.0 10116.0 TYPE= 1 TARGET= 206.000

9.390	3.37	1375.47	.00	1375.42	1375.86	.39	6.29	.02	1375.10
871.0	251.6	500.6	118.9	68.5	84.2	44.6	1018.8	282.3	1374.20
2.41	3.67	5.95	2.66	.060	.045	.060	.000	1372.10	9919.74
.014330	550.	555.	523.	3	0	0	.00	154.27	10116.00

*SECNO 9.480

3470 ENCROACHMENT STATIONS= 9920.0 10022.0 TYPE= 1 TARGET= 102.000

9.480	3.69	1382.19	1382.13	1382.13	1383.03	.84	7.03	.13	1380.70
871.0	97.7	773.3	.0	34.9	99.8	.0	1020.7	283.7	1382.70
2.43	2.80	7.75	.00	.060	.045	.000	.000	1378.50	9936.79
.014669	485.	485.	485.	6	8	0	.00	83.60	10020.39

*SECNO 9.520

3470 ENCROACHMENT STATIONS= 9950.0 10030.0 TYPE= 1 TARGET= 80.000

9.520	3.72	1385.12	.00	1385.15	1385.87	.75	2.83	.01	1383.90
871.0	30.8	812.3	27.9	9.9	113.4	11.5	1021.2	284.0	1384.20
2.44	3.10	7.16	2.42	.060	.045	.060	.000	1381.40	9950.00
.017159	160.	180.	205.	3	0	0	.00	80.00	10030.00

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

*SECNO 9.610

3470 ENCROACHMENT STATIONS= 9954.0 10006.0 TYPE= 1 TARGET= 52.000

9.610	3.44	1394.14	.00	1393.80	1395.02	.88	9.11	.04	1393.60
871.0	.3	496.2	374.6	.2	59.2	60.7	1022.6	284.7	1392.60
2.46	1.38	8.38	6.17	.060	.045	.060	.000	1390.70	9954.00
.021844	460.	470.	480.	4	0	0	.00	52.00	10006.00

THIS RUN EXECUTED 29JAN96 17:10:09

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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

Main Channel - Final wit

SUMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID
	.000	.00	.00	3.18	2130.26
	.000	9500.00	10780.00	3.65	1280.00
	.080	.00	.00	4.01	1533.44
*	.080	9520.00	10630.00	5.90	891.94
	.190	.00	.00	6.35	871.86
	.190	9970.00	10630.00	6.91	478.15
	.290	.00	.00	8.93	650.15
	.290	9970.00	10360.00	9.27	390.00
*	.380	.00	.00	7.57	858.44
	.380	9910.00	10250.00	8.63	340.00
	.480	.00	.00	6.09	898.32
	.480	9850.00	10350.00	5.67	500.00
	.570	.00	.00	5.72	934.96
	.570	9912.00	10230.00	6.88	318.00
*	.670	.00	.00	8.07	454.26
	.670	9689.00	10100.00	7.07	411.00
	.760	.00	.00	6.24	539.54
	.760	9830.00	10088.00	8.21	258.00
	.860	.00	.00	6.56	759.69
	.860	9868.00	10139.00	6.63	271.00
	.950	.00	.00	7.09	557.94
	.950	9984.00	10192.00	7.69	208.00

	SECNO	STENCL	STENCR	VCH	TOPWID
	1.040	.00	.00	6.52	603.37
	1.040	9891.00	10128.00	6.94	237.00
	1.130	.00	.00	7.27	512.29
	1.130	9849.00	10045.00	7.82	196.00
	1.230	.00	.00	6.11	497.89
	1.230	9940.00	10232.00	6.50	292.00
	1.320	.00	.00	8.06	345.72
	1.320	9975.00	10200.00	8.38	225.00
	1.410	.00	.00	6.53	576.71
	1.410	9900.00	10135.00	7.37	235.00
	1.500	.00	.00	6.84	575.17
	1.500	9810.00	10036.00	7.66	226.00
	1.590	.00	.00	5.68	690.21
	1.590	9770.00	10038.00	6.25	268.00
	1.680	.00	.00	7.52	466.06
	1.680	9831.00	10047.00	8.42	216.00
	1.780	.00	.00	7.74	379.70
	1.780	9880.00	10072.00	8.10	192.00
*	1.870	.00	.00	6.19	345.80
*	1.870	9835.00	10042.00	6.13	207.00
*	1.970	.00	.00	7.44	336.34
*	1.970	9945.00	10107.00	8.59	162.00
	2.070	.00	.00	8.67	364.04
	2.070	9952.00	10127.00	8.81	175.00
	2.150	.00	.00	8.56	264.69
	2.150	9970.00	10143.00	8.53	173.00
	2.240	.00	.00	7.11	372.62
	2.240	9839.00	10016.00	8.34	177.00
*	2.340	.00	.00	10.29	229.29
	2.340	9900.00	10033.00	9.83	133.00
*	2.430	.00	.00	6.12	369.96
*	2.430	9890.00	10124.00	6.36	234.00
*	2.520	.00	.00	8.78	477.65
*	2.520	9930.00	10160.00	10.44	230.00

	SECNO	STENCL	STENCR	VCH	TOPWID
*	2.620	.00	.00	5.50	542.46
*	2.620	9800.00	10100.00	5.54	300.00
*	2.720	.00	.00	9.35	427.33
*	2.720	9900.00	10072.00	10.70	172.00
	2.820	.00	.00	8.60	442.24
*	2.820	9871.00	10075.00	8.47	204.00
	2.920	.00	.00	5.96	495.83
	2.920	9900.00	10090.00	6.51	190.00
	3.040	.00	.00	4.66	752.88
	3.040	9972.60	10300.00	4.92	321.27
	3.140	.00	.00	6.94	1017.63
	3.140	9900.00	10131.00	7.21	231.00
	3.230	.00	.00	8.26	449.12
	3.230	9800.00	10060.00	9.38	260.00
	3.320	.00	.00	7.06	588.61
	3.320	9970.00	10250.00	7.42	280.00
	3.420	.00	.00	5.91	691.08
	3.420	9962.00	10350.00	6.22	388.00
	3.510	.00	.00	6.69	663.41
	3.510	9970.00	10345.00	7.45	375.00
*	3.590	.00	.00	9.78	345.52
	3.590	9845.00	10070.00	9.58	225.00
*	3.700	.00	.00	8.72	279.86
	3.700	9892.00	10040.00	9.76	148.00
	3.790	.00	.00	7.41	406.76
	3.790	9900.00	10161.00	7.25	261.00
	3.880	.00	.00	9.12	624.79
*	3.880	9973.00	10175.00	10.55	202.00
	3.960	.00	.00	9.99	387.44
	3.960	9895.00	10070.00	10.59	175.00
*	4.050	.00	.00	7.11	699.22
*	4.050	9970.00	10180.00	7.25	210.00
	4.160	.00	.00	8.30	372.76
	4.160	9880.00	10100.00	8.82	220.00

	SECNO	STENCL	STENCR	VCH	TOPWID
	4.250	.00	.00	7.88	397.07
	4.250	9865.00	10080.00	7.90	215.00
	4.350	.00	.00	6.94	538.44
	4.350	9975.00	10224.00	7.79	249.00
	4.460	.00	.00	8.15	597.95
	4.460	9979.00	10248.00	8.75	267.09
	4.550	.00	.00	9.21	400.71
	4.550	9976.00	10168.00	9.84	192.00
	4.650	.00	.00	7.56	322.83
	4.650	9771.00	10014.00	7.92	243.00
	4.760	.00	.00	6.69	575.72
	4.760	9930.00	10255.00	6.44	325.00
	4.860	.00	.00	6.76	573.02
	4.860	9924.00	10289.00	7.88	365.00
	4.960	.00	.00	8.07	426.54
	4.960	9969.00	10155.00	8.72	186.00
	5.050	.00	.00	7.81	544.98
	5.050	9986.00	10211.00	7.89	225.00
	5.160	.00	.00	4.37	765.71
*	5.160	9703.00	10045.00	4.75	342.00
*	5.230	.00	.00	7.29	434.08
*	5.230	9810.00	10101.00	7.26	291.00
*	5.290	.00	.00	4.29	1478.18
*	5.290	9780.00	10330.00	4.62	550.00
	5.390	.00	.00	4.20	1001.02
	5.390	9610.00	10055.00	4.98	445.00
*	5.460	.00	.00	7.13	1248.22
	5.460	9645.00	10102.00	8.24	457.00
*	5.550	.00	.00	4.72	924.33
*	5.550	9709.00	10262.00	5.15	553.00
*	5.640	.00	.00	7.64	803.44
*	5.640	9820.00	10170.00	7.65	350.00
*	5.730	.00	.00	6.50	622.72
	5.730	9679.00	10050.00	7.37	371.00

	SECNO	STENCL	STENCR	VCH	TOPWID
*	5.820	.00	.00	6.55	477.45
*	5.820	9920.00	10225.00	7.17	305.00
	5.910	.00	.00	5.97	510.91
	5.910	9880.00	10130.00	6.53	250.00
	5.990	.00	.00	7.88	658.03
*	5.990	9858.00	10061.00	9.24	203.00
*	6.080	.00	.00	7.02	786.54
*	6.080	9900.00	10086.00	7.26	186.00
	6.170	.00	.00	6.38	340.70
	6.170	9980.00	10152.00	7.01	172.00
	6.260	.00	.00	5.15	596.29
	6.260	9834.00	10050.00	5.93	216.00
*	6.360	.00	.00	7.76	643.63
	6.360	9850.00	10051.00	8.30	201.00
*	6.450	.00	.00	5.40	609.88
*	6.450	9774.00	10074.00	6.07	300.00
*	6.560	.00	.00	6.72	711.72
	6.560	9890.00	10100.00	6.82	210.00
	6.660	.00	.00	6.21	1075.83
	6.660	9973.00	10270.00	7.52	297.00
*	6.750	.00	.00	8.61	1375.61
	6.750	9950.00	10110.00	8.59	160.00
*	6.840	.00	.00	6.60	1749.16
*	6.840	9800.00	10050.00	6.95	250.00
	6.940	.00	.00	5.38	827.38
	6.940	9970.00	10250.00	6.32	280.00
	7.020	.00	.00	7.75	855.48
	7.020	9920.00	10125.00	7.53	205.00
*	7.110	.00	.00	5.52	673.46
	7.110	9814.00	10125.00	6.63	311.00
*	7.200	.00	.00	6.26	486.02
*	7.200	9790.00	10034.00	7.38	244.00
*	7.300	.00	.00	5.91	346.79
*	7.300	9950.00	10120.00	6.31	170.00

	SECNO	STENCL	STENCR	VCH	TOPWID
	7.400	.00	.00	4.48	562.84
	7.400	9849.00	10190.00	5.47	341.00
*	7.490	.00	.00	6.69	447.62
	7.490	9850.00	10028.20	6.42	175.44
	7.570	.00	.00	6.03	742.96
	7.570	9830.00	10050.00	7.25	220.00
*	7.680	.00	.00	7.48	459.24
*	7.680	9890.00	10050.00	8.35	160.00
	7.790	.00	.00	4.40	635.68
	7.790	9970.00	10290.00	4.89	320.00
*	7.900	.00	.00	5.64	733.19
*	7.900	9920.00	10135.00	6.75	215.00
*	8.000	.00	.00	4.49	734.27
*	8.000	9945.00	10180.00	4.88	235.00
	8.130	.00	.00	3.71	417.88
*	8.130	9960.00	10200.00	5.53	240.00
	8.220	.00	.00	5.65	646.06
	8.220	9924.00	10113.00	6.56	189.00
	8.310	.00	.00	4.51	776.54
	8.310	9801.00	10021.00	5.95	220.00
*	8.410	.00	.00	6.17	228.08
	8.410	9940.00	10090.00	5.33	143.63
*	8.500	.00	.00	5.53	253.60
*	8.500	9920.00	10040.00	6.80	91.76
	8.590	.00	.00	6.15	189.04
*	8.590	9919.00	10039.00	5.90	120.00
	8.690	.00	.00	6.76	101.93
	8.690	9950.00	10020.00	7.12	70.00
	8.780	.00	.00	5.57	244.22
	8.780	9860.00	10032.00	5.88	172.00
	8.890	.00	.00	7.80	75.18
	8.890	9960.00	10050.00	7.57	75.07
	8.990	.00	.00	7.57	76.69
	8.990	9960.00	10060.00	7.75	75.74

	SECNO	STENCL	STENCR	VCH	TOPWID
	9.090	.00	.00	7.77	81.43
	9.090	9901.80	10025.00	7.59	81.45
	9.190	.00	.00	7.42	90.93
	9.190	9918.00	10016.00	7.59	86.96
	9.290	.00	.00	6.67	125.61
	9.290	9920.00	10097.00	6.55	125.20
	9.390	.00	.00	5.58	185.28
	9.390	9910.00	10116.00	5.95	154.27
*	9.480	.00	.00	8.00	81.34
	9.480	9920.00	10022.00	7.75	83.60
	9.520	.00	.00	6.50	161.40
	9.520	9950.00	10030.00	7.16	80.00
	9.610	.00	.00	8.23	96.08
	9.610	9954.00	10006.00	8.38	52.00

Main Channel - Final wit

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1062.77	-.15	1062.88	2130.26	1338.02	2382.93	3488.05	.00	.00	9632.50	10196.80	.00
	.000	1063.07	.30	1063.23	1280.00	304.64	3348.37	3555.99	1280.00	9500.00	9632.50	10196.80	10780.00
	.080	1065.40	.00	1065.56	1533.44	4726.38	1242.89	1239.73	.00	.00	9917.60	10185.30	.00
*	.080	1066.04	.64	1066.40	891.94	2751.13	2738.30	1719.57	1110.00	9520.00	9917.60	10185.30	10630.00
	.190	1069.39	.00	1069.77	871.86	112.00	3124.20	3972.80	.00	.00	9976.20	10163.00	.00
	.190	1070.24	.86	1070.79	478.15	19.49	4505.94	2683.57	660.00	9970.00	9976.20	10163.00	10630.00
	.290	1073.62	.00	1074.45	650.15	519.80	4250.02	2439.17	.00	.00	9972.10	10097.70	.00
	.290	1073.95	.33	1074.94	390.00	2.08	4786.29	2420.63	390.00	9970.00	9972.10	10097.70	10360.00
*	.380	1077.40	.00	1077.87	858.44	1225.70	3154.01	2829.29	.00	.00	9957.40	10036.80	.00
	.380	1077.85	.45	1078.59	340.00	754.73	3902.98	2551.29	340.00	9910.00	9957.40	10036.80	10250.00
	.480	1079.93	.00	1080.25	898.32	1753.61	3029.43	2425.96	.00	.00	9945.10	10060.60	.00
	.480	1080.48	.55	1080.80	500.00	1615.96	3181.30	2411.74	500.00	9850.00	9945.10	10060.60	10350.00
	.570	1081.99	.00	1082.33	934.96	1126.51	4320.49	1762.00	.00	.00	9932.50	10084.30	.00
	.570	1082.33	.34	1082.94	318.00	157.71	5553.46	1497.83	318.00	9912.00	9932.50	10084.30	10230.00
*	.670	1084.31	.00	1084.90	454.26	3175.44	3202.30	831.27	.00	.00	9956.60	10041.60	.00
	.670	1084.92	.60	1085.37	411.00	3287.42	3164.79	756.79	411.00	9689.00	9956.60	10041.60	10100.00
	.760	1087.39	.00	1087.82	539.54	1478.25	4092.67	1638.09	.00	.00	9917.80	10055.00	.00
	.760	1087.63	.24	1088.52	258.00	899.15	5657.86	652.00	258.00	9830.00	9917.80	10055.00	10088.00
	.860	1089.81	.00	1090.24	759.69	1313.43	4160.40	1735.17	.00	.00	9925.10	10055.90	.00
	.860	1090.73	.92	1091.27	271.00	787.93	4999.23	1421.84	271.00	9868.00	9925.10	10055.90	10139.00
	.950	1092.30	.00	1092.74	557.94	118.92	2432.52	3704.56	.00	.00	9984.60	10048.50	.00
	.950	1092.85	.55	1093.54	208.00	2.66	2911.18	3342.16	208.00	9984.00	9984.60	10048.50	10192.00
	1.040	1094.62	.00	1095.06	603.37	2780.60	3005.91	469.49	.00	.00	10020.20	10116.90	.00
	1.040	1095.29	.67	1095.86	237.00	2566.57	3650.18	39.25	237.00	9891.00	10020.20	10116.90	10128.00
	1.130	1097.03	.00	1097.52	512.29	3227.66	2829.45	198.89	.00	.00	9972.70	10044.40	.00
	1.130	1097.61	.57	1098.29	196.00	2889.70	3363.98	2.32	196.00	9849.00	9972.70	10044.40	10045.00
	1.230	1099.42	.00	1099.79	497.89	649.36	2873.26	2733.38	.00	.00	9946.30	10039.50	.00
	1.230	1100.09	.66	1100.54	292.00	92.01	3455.97	2708.02	292.00	9940.00	9946.30	10039.50	10232.00
	1.320	1101.76	.00	1102.40	345.72	19.59	2967.55	3268.86	.00	.00	9975.60	10049.40	.00
	1.320	1102.29	.53	1103.05	225.00	1.59	3408.54	2845.87	225.00	9975.00	9975.60	10049.40	10200.00
	1.410	1104.62	.00	1104.97	576.71	1714.59	2375.42	2165.99	.00	.00	9955.80	10029.30	.00
	1.410	1105.09	.47	1105.71	235.00	1305.92	2934.06	2016.03	235.00	9900.00	9955.80	10029.30	10135.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.500	1106.96	.00	1107.39	575.17	3460.20	2415.25	380.55	.00	.00	9962.20	10035.70	.00
	1.500	1107.68	.73	1108.32	226.00	3141.21	3113.90	.88	226.00	9810.00	9962.20	10035.70	10036.00
	1.590	1109.20	.00	1109.58	690.21	1551.73	4428.59	275.68	.00	.00	9873.20	10037.20	.00
	1.590	1109.98	.78	1110.54	268.00	580.85	5672.13	3.02	268.00	9770.00	9873.20	10037.20	10038.00
	1.680	1111.44	.00	1111.93	466.06	2957.64	2464.49	833.86	.00	.00	9977.80	10046.10	.00
	1.680	1112.18	.74	1112.94	216.00	3061.67	3186.13	8.20	216.00	9831.00	9977.80	10046.10	10047.00
	1.780	1114.38	.00	1114.95	379.70	2012.61	2934.53	1308.86	.00	.00	9971.20	10039.10	.00
	1.780	1115.14	.76	1115.87	192.00	2070.63	3486.69	698.68	192.00	9880.00	9971.20	10039.10	10072.00
*	1.870	1116.44	.00	1116.81	345.80	3091.85	2817.08	347.07	.00	.00	9975.20	10040.50	.00
*	1.870	1117.14	.70	1117.54	207.00	3173.02	3070.27	12.71	207.00	9835.00	9975.20	10040.50	10042.00
*	1.970	1118.35	.00	1118.94	336.34	939.35	3126.07	2190.58	.00	.00	9967.40	10050.50	.00
*	1.970	1118.79	.45	1119.71	162.00	570.07	3931.68	1754.26	162.00	9945.00	9967.40	10050.50	10107.00
	2.070	1121.11	.00	1121.86	364.04	706.64	3389.00	2160.36	.00	.00	9976.70	10039.30	.00
	2.070	1121.79	.69	1122.68	175.00	342.37	3823.84	2089.78	175.00	9952.00	9976.70	10039.30	10127.00
	2.150	1123.73	.00	1124.41	264.69	123.93	2476.44	3655.62	.00	.00	9982.10	10023.30	.00
	2.150	1124.26	.52	1124.98	173.00	117.20	2649.48	3489.32	173.00	9970.00	9982.10	10023.30	10143.00
	2.240	1125.96	.00	1126.45	372.62	2355.37	3246.80	653.83	.00	.00	9953.20	10015.40	.00
	2.240	1126.40	.44	1127.20	177.00	2215.17	4036.55	4.28	177.00	9839.00	9953.20	10015.40	10016.00
*	2.340	1127.92	.00	1129.31	229.29	943.86	5086.17	225.97	.00	.00	9946.20	10032.70	.00
	2.340	1128.70	.78	1130.07	133.00	732.28	5522.36	1.36	133.00	9900.00	9946.20	10032.70	10033.00
*	2.430	1131.42	.00	1131.77	369.96	2042.73	2414.73	1798.55	.00	.00	9960.90	10024.90	.00
*	2.430	1131.86	.44	1132.28	234.00	1952.97	2685.76	1617.27	234.00	9890.00	9960.90	10024.90	10124.00
*	2.520	1133.56	.00	1134.29	477.65	1333.41	3019.06	1903.53	.00	.00	9975.00	10045.30	.00
*	2.520	1133.91	.35	1135.12	230.00	577.88	3851.59	1826.53	230.00	9930.00	9975.00	10045.30	10160.00
*	2.620	1136.65	.00	1136.91	542.46	3484.54	1835.47	935.99	.00	.00	9960.40	10024.20	.00
*	2.620	1137.43	.77	1137.74	300.00	3474.23	2121.86	659.91	300.00	9800.00	9960.40	10024.20	10100.00
*	2.720	1138.79	.00	1139.64	427.33	2046.61	3229.43	979.96	.00	.00	9975.40	10043.60	.00
*	2.720	1139.14	.35	1140.48	172.00	1866.46	3946.16	443.38	172.00	9900.00	9975.40	10043.60	10072.00
	2.820	1142.84	.00	1143.49	442.24	3120.22	2852.55	283.23	.00	.00	9978.10	10030.20	.00
*	2.820	1143.53	.69	1144.28	204.00	2948.26	3116.10	191.64	204.00	9871.00	9978.10	10030.20	10075.00
	2.920	1145.39	.00	1145.83	495.83	247.73	4751.94	1256.33	.00	.00	9922.60	10062.50	.00
	2.920	1145.90	.51	1146.52	190.00	268.95	5653.75	333.30	190.00	9900.00	9922.60	10062.50	10090.00
	3.040	1147.76	.00	1147.92	752.88	.00	1167.38	5088.62	.00	.00	9972.60	10045.60	.00
	3.040	1148.34	.58	1148.63	321.27	.00	1424.19	4831.81	327.40	9972.60	9972.60	10045.60	10300.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	3.140	1149.19	.00	1149.60	1017.63	1052.74	3245.04	1958.22	.00	.00	9981.20	10065.80	.00
	3.140	1149.69	.50	1150.28	231.00	1059.17	3676.22	1520.61	231.00	9900.00	9981.20	10065.80	10131.00
	3.230	1151.98	.00	1152.50	449.12	2655.00	1538.82	2062.18	.00	.00	9974.10	10010.20	.00
	3.230	1152.53	.55	1153.27	260.00	2682.57	1936.79	1636.65	260.00	9800.00	9974.10	10010.20	10060.00
	3.320	1154.76	.00	1155.21	588.61	193.75	3018.53	3043.72	.00	.00	9975.10	10053.00	.00
	3.320	1155.47	.72	1156.06	280.00	37.72	3580.21	2638.08	280.00	9970.00	9975.10	10053.00	10250.00
	3.420	1156.95	.00	1157.20	691.08	24.83	1806.85	4424.32	.00	.00	9962.00	10023.50	.00
	3.420	1157.66	.71	1158.00	388.00	.00	2176.07	4079.93	388.00	9962.00	9962.00	10023.50	10350.00
	3.510	1158.87	.00	1159.20	663.41	606.07	2100.67	3549.27	.00	.00	9971.60	10029.00	.00
	3.510	1159.58	.71	1160.07	375.00	9.86	2639.70	3606.44	375.00	9970.00	9971.60	10029.00	10345.00
*	3.590	1161.19	.00	1162.10	345.52	2937.56	2880.19	390.25	.00	.00	9983.30	10038.70	.00
	3.590	1161.86	.66	1162.78	225.00	2591.90	3174.79	441.30	225.00	9845.00	9983.30	10038.70	10070.00
*	3.700	1165.05	.00	1165.82	279.86	2520.96	3513.35	173.68	.00	.00	9984.80	10039.40	.00
	3.700	1165.44	.39	1166.56	148.00	2060.63	4142.07	5.30	148.00	9892.00	9984.80	10039.40	10040.00
	3.790	1167.23	.00	1167.83	406.76	411.61	3944.13	1852.26	.00	.00	9957.20	10034.20	.00
	3.790	1167.94	.71	1168.55	261.00	502.67	4258.66	1446.67	261.00	9900.00	9957.20	10034.20	10161.00
	3.880	1169.44	.00	1170.20	624.79	194.49	3342.53	2670.97	.00	.00	9973.30	10029.10	.00
*	3.880	1169.79	.35	1171.04	202.00	1.01	4079.53	2127.47	202.00	9973.00	9973.30	10029.10	10175.00
	3.960	1172.54	.00	1173.41	387.44	1407.29	2541.67	2259.04	.00	.00	9982.60	10022.70	.00
	3.960	1173.40	.86	1174.53	175.00	1337.26	3052.93	1817.80	175.00	9895.00	9982.60	10022.70	10070.00
*	4.050	1175.69	.00	1176.14	699.22	336.29	2587.74	3283.97	.00	.00	9970.70	10023.60	.00
*	4.050	1176.52	.84	1177.05	210.00	3.19	2962.73	3242.08	210.00	9970.00	9970.70	10023.60	10180.00
	4.160	1177.82	.00	1178.44	372.76	1766.12	2940.41	1501.47	.00	.00	9978.20	10030.30	.00
	4.160	1178.45	.64	1179.24	220.00	1557.73	3414.70	1235.58	220.00	9880.00	9978.20	10030.30	10100.00
	4.250	1180.13	.00	1180.61	397.07	2190.07	2094.52	1923.41	.00	.00	9988.40	10023.70	.00
	4.250	1180.78	.65	1181.32	215.00	2301.25	2280.97	1625.78	215.00	9865.00	9988.40	10023.70	10080.00
	4.350	1182.39	.00	1182.74	538.44	133.76	1872.04	4202.19	.00	.00	9976.40	10021.40	.00
	4.350	1182.89	.50	1183.43	249.00	10.17	2277.63	3920.21	249.00	9975.00	9976.40	10021.40	10224.00
	4.460	1185.36	.00	1185.81	597.95	.00	1675.43	4532.57	.00	.00	9979.20	10026.30	.00
	4.460	1186.07	.71	1186.76	267.09	.00	2078.03	4129.96	269.00	9979.00	9979.20	10026.30	10248.00
	4.550	1188.59	.00	1189.23	400.71	44.74	2122.67	4040.59	.00	.00	9976.10	10011.40	.00
	4.550	1189.29	.71	1190.16	192.00	.19	2512.93	3694.88	192.00	9976.00	9976.10	10011.40	10168.00
	4.650	1191.31	.00	1191.71	322.83	4863.38	1314.75	29.86	.00	.00	9986.90	10013.50	.00
	4.650	1192.12	.80	1192.59	243.00	4659.07	1545.71	3.22	243.00	9771.00	9986.90	10013.50	10014.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	4.760	1194.05	.00	1194.37	575.72	1074.64	1357.10	3776.25	.00	.00	9980.10	10020.40	.00
	4.760	1194.60	.55	1194.95	325.00	611.33	1447.74	4148.93	325.00	9930.00	9980.10	10020.40	10255.00
	4.860	1196.35	.00	1196.66	573.02	1416.01	1629.04	3162.95	.00	.00	9979.70	10021.50	.00
	4.860	1196.80	.45	1197.28	365.00	821.40	2045.11	3341.49	365.00	9924.00	9979.70	10021.50	10289.00
	4.960	1198.72	.00	1199.29	426.54	545.57	2549.81	3112.61	.00	.00	9969.60	10026.70	.00
	4.960	1199.42	.70	1200.23	186.00	4.63	3105.03	3098.34	186.00	9969.00	9969.60	10026.70	10155.00
	5.050	1201.76	.00	1202.26	544.98	625.50	2516.79	3065.71	.00	.00	9986.00	10041.50	.00
	5.050	1202.58	.82	1203.22	225.00	.00	2897.93	3310.07	225.00	9986.00	9986.00	10041.50	10211.00
	5.160	1204.07	.00	1204.26	765.71	4360.16	1356.00	491.84	.00	.00	9956.50	10037.10	.00
*	5.160	1204.88	.81	1205.13	342.00	4384.19	1787.70	36.11	342.00	9703.00	9956.50	10037.10	10045.00
*	5.230	1205.73	.00	1206.30	434.08	2717.87	2290.61	1199.51	.00	.00	9949.70	10049.40	.00
*	5.230	1206.33	.60	1206.94	291.00	2926.56	2715.20	566.24	291.00	9810.00	9949.70	10049.40	10101.00
*	5.290	1207.63	.00	1207.76	1478.18	1986.26	1557.02	2664.72	.00	.00	9961.70	10045.90	.00
*	5.290	1208.11	.48	1208.29	550.00	1865.15	1861.71	2481.14	550.00	9780.00	9961.70	10045.90	10330.00
	5.390	1208.90	.00	1209.09	1001.02	4037.19	1564.33	606.48	.00	.00	9912.10	10048.30	.00
	5.390	1209.44	.54	1209.73	445.00	3973.09	2219.63	15.28	445.00	9610.00	9912.10	10048.30	10055.00
*	5.460	1211.03	.00	1211.36	1248.22	3021.98	1882.71	1303.32	.00	.00	9955.60	10030.70	.00
	5.460	1211.66	.63	1212.25	457.00	3056.54	2565.43	586.02	457.00	9645.00	9955.60	10030.70	10102.00
*	5.550	1213.80	.00	1213.95	924.33	2878.07	748.20	2581.72	.00	.00	9986.80	10032.20	.00
*	5.550	1214.59	.79	1214.79	553.00	2701.41	1002.24	2504.36	553.00	9709.00	9986.80	10032.20	10262.00
*	5.640	1216.33	.00	1216.75	803.44	1819.14	1663.40	2725.45	.00	.00	9981.20	10045.90	.00
*	5.640	1216.75	.42	1217.32	350.00	1740.18	1868.56	2599.26	350.00	9820.00	9981.20	10045.90	10170.00
*	5.730	1219.69	.00	1220.01	622.72	3577.76	1855.19	775.05	.00	.00	9973.70	10033.50	.00
	5.730	1220.14	.45	1220.61	371.00	3695.60	2301.63	210.77	371.00	9679.00	9973.70	10033.50	10050.00
*	5.820	1222.06	.00	1222.40	477.45	924.69	1326.49	1476.82	.00	.00	9981.90	10033.50	.00
*	5.820	1222.73	.67	1223.19	305.00	531.13	1698.73	1498.14	305.00	9920.00	9981.90	10033.50	10225.00
	5.910	1224.81	.00	1225.10	510.91	980.96	1364.74	1382.30	.00	.00	9977.00	10031.30	.00
	5.910	1225.45	.63	1225.85	250.00	859.73	1718.94	1149.33	250.00	9880.00	9977.00	10031.30	10130.00
	5.990	1227.51	.00	1227.99	658.03	1200.05	1585.31	942.64	.00	.00	9982.80	10035.20	.00
*	5.990	1228.08	.57	1228.98	203.00	1148.89	2137.35	441.76	203.00	9858.00	9982.80	10035.20	10061.00
*	6.080	1230.52	.00	1230.94	786.54	715.80	1835.85	1176.36	.00	.00	9980.40	10027.50	.00
*	6.080	1231.35	.82	1231.91	186.00	574.72	2179.73	973.56	186.00	9900.00	9980.40	10027.50	10086.00
	6.170	1232.51	.00	1232.91	340.70	405.86	1988.08	1334.06	.00	.00	9983.50	10040.50	.00
	6.170	1233.23	.72	1233.79	172.00	51.01	2473.79	1203.20	172.00	9980.00	9983.50	10040.50	10152.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	6.260	1234.75	.00	1234.95	596.29	2114.17	851.43	476.41	.00	.00	9991.50	10036.10	.00
	6.260	1235.56	.80	1235.89	216.00	2148.19	1192.58	101.23	216.00	9834.00	9991.50	10036.10	10050.00
*	6.360	1237.67	.00	1238.19	643.63	929.53	1697.58	814.89	.00	.00	9976.90	10034.00	.00
	6.360	1238.37	.70	1239.14	201.00	1125.28	2145.55	171.17	201.00	9850.00	9976.90	10034.00	10051.00
*	6.450	1240.73	.00	1240.92	609.88	1323.34	930.89	1187.77	.00	.00	9982.00	10021.60	.00
*	6.450	1241.52	.79	1241.82	300.00	1429.60	1235.69	776.71	300.00	9774.00	9982.00	10021.60	10074.00
*	6.560	1243.25	.00	1243.58	711.72	1417.73	1111.94	610.32	.00	.00	9985.50	10030.90	.00
	6.560	1243.88	.63	1244.32	210.00	1147.65	1323.19	669.17	210.00	9890.00	9985.50	10030.90	10100.00
	6.660	1247.05	.00	1247.25	1075.83	607.13	880.58	1652.29	.00	.00	9984.90	10021.90	.00
	6.660	1247.58	.52	1248.03	297.00	120.97	1212.04	1806.99	297.00	9973.00	9984.90	10021.90	10270.00
*	6.750	1250.93	.00	1251.53	1375.61	762.06	1613.83	764.11	.00	.00	9987.90	10039.90	.00
	6.750	1251.57	.64	1252.41	160.00	661.73	1893.54	584.73	160.00	9950.00	9987.90	10039.90	10110.00
*	6.840	1254.61	.00	1255.05	1749.16	775.55	2011.93	352.52	.00	.00	9969.00	10029.20	.00
*	6.840	1255.05	.44	1255.62	250.00	688.97	2304.60	146.43	250.00	9800.00	9969.00	10029.20	10050.00
	6.940	1257.43	.00	1257.61	827.38	145.46	669.70	1935.84	.00	.00	9988.30	10029.00	.00
	6.940	1257.99	.56	1258.32	280.00	84.02	931.17	1735.82	280.00	9970.00	9988.30	10029.00	10250.00
	7.020	1260.45	.00	1260.90	855.48	267.08	932.36	1551.55	.00	.00	9979.60	10013.30	.00
	7.020	1260.92	.48	1261.44	205.00	294.49	1026.60	1429.91	205.00	9920.00	9979.60	10013.30	10125.00
*	7.110	1264.12	.00	1264.28	673.46	1130.67	466.40	1153.93	.00	.00	9995.10	10016.80	.00
	7.110	1264.60	.48	1264.88	311.00	1105.92	628.27	1016.81	311.00	9814.00	9995.10	10016.80	10125.00
*	7.200	1267.52	.00	1267.86	486.02	1413.36	749.25	588.38	.00	.00	9974.00	10033.60	.00
*	7.200	1268.28	.76	1268.82	244.00	1532.99	1217.29	.72	244.00	9790.00	9974.00	10033.60	10034.00
*	7.300	1272.25	.00	1272.59	346.79	636.72	1279.55	834.73	.00	.00	9976.40	10045.60	.00
*	7.300	1272.75	.50	1273.21	170.00	328.52	1590.63	831.85	170.00	9950.00	9976.40	10045.60	10120.00
	7.400	1275.67	.00	1275.85	562.84	828.15	681.12	1241.73	.00	.00	9966.50	10030.90	.00
	7.400	1276.27	.60	1276.56	341.00	444.27	1046.26	1260.47	341.00	9849.00	9966.50	10030.90	10190.00
*	7.490	1279.38	.00	1279.77	447.62	2135.36	615.64	.00	.00	.00	9986.90	10028.20	.00
	7.490	1279.84	.46	1280.32	175.44	2049.84	701.16	.00	178.20	9850.00	9986.90	10028.20	10028.20
	7.570	1283.00	.00	1283.31	742.96	1233.82	1294.44	222.74	.00	.00	9988.10	10049.50	.00
	7.570	1283.39	.39	1283.97	220.00	1019.83	1729.49	1.68	220.00	9830.00	9988.10	10049.50	10050.00
*	7.680	1287.60	.00	1288.12	459.24	944.53	1165.41	15.06	.00	.00	9979.60	10023.70	.00
*	7.680	1288.17	.57	1289.00	160.00	550.07	1513.88	61.05	160.00	9890.00	9979.60	10023.70	10050.00
	7.790	1292.80	.00	1292.93	635.68	168.15	269.06	1687.79	.00	.00	9987.50	10014.80	.00
	7.790	1293.42	.61	1293.60	320.00	74.52	379.60	1670.88	320.00	9970.00	9987.50	10014.80	10290.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	7.900	1297.62	.00	1297.87	733.19	306.68	522.85	1295.47	.00	.00	9965.50	10018.00	.00
*	7.900	1298.01	.39	1298.47	215.00	376.47	761.74	986.78	215.00	9920.00	9965.50	10018.00	10135.00
*	8.000	1302.46	.00	1302.62	734.27	290.42	373.73	1460.84	.00	.00	9989.30	10025.10	.00
*	8.000	1302.94	.47	1303.16	235.00	222.07	488.99	1413.95	235.00	9945.00	9989.30	10025.10	10180.00
	8.130	1307.00	.00	1307.23	417.88	88.97	192.43	1843.61	.00	.00	9970.60	10023.40	.00
*	8.130	1307.69	.69	1308.07	240.00	13.27	484.89	1626.84	240.00	9960.00	9970.60	10023.40	10200.00
	8.220	1311.30	.00	1311.60	646.06	117.52	1133.18	874.31	.00	.00	9924.80	10000.00	.00
	8.220	1312.17	.86	1312.73	189.00	2.86	1741.53	380.61	189.00	9924.00	9924.80	10000.00	10113.00
	8.310	1315.37	.00	1315.52	776.54	1686.26	326.38	112.35	.00	.00	9981.50	10020.70	.00
	8.310	1316.26	.89	1316.59	220.00	1485.74	638.80	.45	220.00	9801.00	9981.50	10020.70	10021.00
*	8.410	1319.32	.00	1319.77	228.08	29.00	907.09	309.91	.00	.00	9972.90	10018.10	.00
	8.410	1319.75	.44	1320.09	143.63	42.56	887.64	315.80	150.00	9940.00	9972.90	10018.10	10090.00
*	8.500	1324.20	.00	1324.65	253.60	55.17	838.82	.00	.00	.00	9922.90	10022.10	.00
*	8.500	1323.99	-.21	1324.71	91.76	.00	894.00	.00	120.00	9920.00	9922.90	10022.10	10040.00
	8.590	1329.92	.00	1330.30	189.04	188.72	511.05	194.23	.00	.00	9982.70	10013.70	.00
*	8.590	1330.27	.35	1330.65	120.00	186.88	555.02	152.10	120.00	9919.00	9982.70	10013.70	10039.00
	8.690	1334.62	.00	1335.19	101.93	191.07	684.17	18.76	.00	.00	9985.30	10019.30	.00
	8.690	1334.57	-.05	1335.24	70.00	181.10	711.29	1.60	70.00	9950.00	9985.30	10019.30	10020.00
	8.780	1339.55	.00	1339.89	244.22	293.66	580.31	20.03	.00	.00	9988.00	10031.70	.00
	8.780	1339.77	.22	1340.19	172.00	223.49	670.14	.37	172.00	9860.00	9988.00	10031.70	10032.00
	8.890	1344.73	.00	1345.49	75.18	29.19	683.87	180.94	.00	.00	9986.20	10009.40	.00
	8.890	1344.80	.07	1345.51	75.07	30.54	676.60	186.86	90.00	9960.00	9986.20	10009.40	10050.00
	8.990	1350.01	.00	1350.77	76.69	18.44	737.53	138.03	.00	.00	9992.90	10024.60	.00
	8.990	1349.96	-.05	1350.76	75.74	17.58	742.55	133.88	100.00	9960.00	9992.90	10024.60	10060.00
	9.090	1356.72	.00	1357.49	81.43	125.84	707.69	60.47	.00	.00	9980.90	10008.90	.00
	9.090	1356.76	.05	1357.50	81.45	129.68	701.36	62.96	123.20	9901.80	9980.90	10008.90	10025.00
	9.190	1363.10	.00	1363.87	90.93	116.14	777.86	.00	.00	.00	9973.80	10015.50	.00
	9.190	1363.06	-.04	1363.86	86.96	111.71	782.29	.00	98.00	9918.00	9973.80	10015.50	10016.00
	9.290	1368.98	.00	1369.55	125.61	127.19	679.33	64.48	.00	.00	9994.70	10030.10	.00
	9.290	1369.02	.04	1369.56	125.20	128.15	674.46	68.40	177.00	9920.00	9994.70	10030.10	10097.00
	9.390	1375.42	.00	1375.75	185.28	226.59	458.04	186.37	.00	.00	9976.70	10021.80	.00
	9.390	1375.47	.05	1375.86	154.27	251.56	500.57	118.87	206.00	9910.00	9976.70	10021.80	10116.00
*	9.480	1382.13	.00	1383.04	81.34	90.77	780.23	.00	.00	.00	9984.20	10021.60	.00
	9.480	1382.19	.06	1383.03	83.60	97.67	773.33	.00	102.00	9920.00	9984.20	10021.60	10022.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
9.520	1385.15	.00	1385.72	161.40	94.91	747.12	28.96	.00	.00	9959.80	10012.60	.00
9.520	1385.12	-.03	1385.87	80.00	30.80	812.34	27.86	80.00	9950.00	9959.80	10012.60	10030.00
9.610	1393.80	.00	1394.53	96.08	.83	415.18	454.99	.00	.00	9954.40	9980.20	.00
9.610	1394.14	.34	1395.02	52.00	.30	496.15	374.55	52.00	9954.00	9954.40	9980.20	10006.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .380  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .670  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.870  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.870  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.970  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.970  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.430  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.520  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.520  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.620  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.620  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.720  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     2.720  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.820  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.590  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.880  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     4.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     4.050  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.160  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.230  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.230  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.290  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.460  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     5.550  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     5.550  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO= 5.640 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=      5.640  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      5.730  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      5.820  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      5.820  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      5.990  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      6.080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.360  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.450  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      6.450  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.560  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.750  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.840  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      6.840  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.110  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      7.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      7.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.490  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      7.680  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      7.680  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=      7.680  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      7.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      8.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.130  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.410  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      8.500  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.500  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      8.590  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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CAUTION SECNO=      9.480  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.480  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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Floodway width summary: Main Channel - Final wit
Profile No. 2

Section Number	Elevation Increase	Top Width	Left Encroach Station	Left Sta Distance From Center	Center Station	Right Sta Distance From Center	Right Encroach Station
.000	.30	1280.00	9500.00	414.65	9914.65	865.35	10780.00
.080	.64	1110.00	9520.00	531.45	10051.45	578.55	10630.00
.190	.86	660.00	9970.00	99.60	10069.60	560.40	10630.00
.290	.33	390.00	9970.00	64.90	10034.90	325.10	10360.00
.380	.45	340.00	9910.00	87.10	9997.10	252.90	10250.00
.480	.55	500.00	9850.00	152.85	10002.85	347.15	10350.00
.570	.34	318.00	9912.00	96.40	10008.40	221.60	10230.00
.670	.60	411.00	9689.00	310.10	9999.10	100.90	10100.00
.760	.24	258.00	9830.00	156.40	9986.40	101.60	10088.00
.860	.92	271.00	9868.00	122.50	9990.50	148.50	10139.00
.950	.55	208.00	9984.00	32.55	10016.55	175.45	10192.00
1.040	.67	237.00	9891.00	177.55	10068.55	59.45	10128.00
1.130	.57	196.00	9849.00	159.55	10008.55	36.45	10045.00
1.230	.66	292.00	9940.00	52.90	9992.90	239.10	10232.00
1.320	.53	225.00	9975.00	37.50	10012.50	187.50	10200.00
1.410	.47	235.00	9900.00	92.55	9992.55	142.45	10135.00
1.500	.73	226.00	9810.00	188.95	9998.95	37.05	10036.00
1.590	.78	268.00	9770.00	185.20	9955.20	82.80	10038.00
1.680	.74	216.00	9831.00	180.95	10011.95	35.05	10047.00
1.780	.76	192.00	9880.00	125.15	10005.15	66.85	10072.00
1.870	.70	207.00	9835.00	172.85	10007.85	34.15	10042.00
1.970	.45	162.00	9945.00	63.95	10008.95	98.05	10107.00
2.070	.69	175.00	9952.00	56.00	10008.00	119.00	10127.00
2.150	.52	173.00	9970.00	32.70	10002.70	140.30	10143.00
2.240	.44	177.00	9839.00	145.30	9984.30	31.70	10016.00
2.340	.78	133.00	9900.00	89.45	9989.45	43.55	10033.00
2.430	.44	234.00	9890.00	102.90	9992.90	131.10	10124.00
2.520	.35	230.00	9930.00	80.15	10010.15	149.85	10160.00
2.620	.77	300.00	9800.00	192.30	9992.30	107.70	10100.00
2.720	.35	172.00	9900.00	109.50	10009.50	62.50	10072.00
2.820	.69	204.00	9871.00	133.15	10004.15	70.85	10075.00
2.920	.51	190.00	9900.00	92.55	9992.55	97.45	10090.00
3.040	.58	327.40	9972.60	36.50	10009.10	290.90	10300.00
3.140	.50	231.00	9900.00	123.50	10023.50	107.50	10131.00
3.230	.55	260.00	9800.00	192.15	9992.15	67.85	10060.00
3.320	.72	280.00	9970.00	44.05	10014.05	235.95	10250.00
3.420	.71	388.00	9962.00	30.75	9992.75	357.25	10350.00
3.510	.71	375.00	9970.00	30.30	10000.30	344.70	10345.00
3.590	.66	225.00	9845.00	166.00	10011.00	59.00	10070.00
3.700	.39	148.00	9892.00	120.10	10012.10	27.90	10040.00
3.790	.71	261.00	9900.00	95.70	9995.70	165.30	10161.00
3.880	.35	202.00	9973.00	28.20	10001.20	173.80	10175.00
3.960	.86	175.00	9895.00	107.65	10002.65	67.35	10070.00
4.050	.84	210.00	9970.00	27.15	9997.15	182.85	10180.00
4.160	.64	220.00	9880.00	124.25	10004.25	95.75	10100.00
4.250	.65	215.00	9865.00	141.05	10006.05	73.95	10080.00
4.350	.50	249.00	9975.00	23.90	9998.90	225.10	10224.00

4.460	.71	269.00	9979.00	23.75	10002.75	245.25	10248.00
4.550	.71	192.00	9976.00	17.75	9993.75	174.25	10168.00
4.650	.80	243.00	9771.00	229.20	10000.20	13.80	10014.00
4.760	.55	325.00	9930.00	70.25	10000.25	254.75	10255.00
4.860	.45	365.00	9924.00	76.60	10000.60	288.40	10289.00
4.960	.70	186.00	9969.00	29.15	9998.15	156.85	10155.00
5.050	.82	225.00	9986.00	27.75	10013.75	197.25	10211.00
5.160	.81	342.00	9703.00	293.80	9996.80	48.20	10045.00
5.230	.60	291.00	9810.00	189.55	9999.55	101.45	10101.00
5.290	.48	550.00	9780.00	223.80	10003.80	326.20	10330.00
5.390	.54	445.00	9610.00	370.20	9980.20	74.80	10055.00
5.460	.63	457.00	9645.00	348.15	9993.15	108.85	10102.00
5.550	.79	553.00	9709.00	300.50	10009.50	252.50	10262.00
5.640	.42	350.00	9820.00	193.55	10013.55	156.45	10170.00
5.730	.45	371.00	9679.00	324.60	10003.60	46.40	10050.00
5.820	.67	305.00	9920.00	87.70	10007.70	217.30	10225.00
5.910	.63	250.00	9880.00	124.15	10004.15	125.85	10130.00
5.990	.57	203.00	9858.00	151.00	10009.00	52.00	10061.00
6.080	.82	186.00	9900.00	103.95	10003.95	82.05	10086.00
6.170	.72	172.00	9980.00	32.00	10012.00	140.00	10152.00
6.260	.80	216.00	9834.00	179.80	10013.80	36.20	10050.00
6.360	.70	201.00	9850.00	155.45	10005.45	45.55	10051.00
6.450	.79	300.00	9774.00	227.80	10001.80	72.20	10074.00
6.560	.63	210.00	9890.00	118.20	10008.20	91.80	10100.00
6.660	.52	297.00	9973.00	30.40	10003.40	266.60	10270.00
6.750	.64	160.00	9950.00	63.90	10013.90	96.10	10110.00
6.840	.44	250.00	9800.00	199.10	9999.10	50.90	10050.00
6.940	.56	280.00	9970.00	38.65	10008.65	241.35	10250.00
7.020	.48	205.00	9920.00	76.45	9996.45	128.55	10125.00
7.110	.48	311.00	9814.00	191.95	10005.95	119.05	10125.00
7.200	.76	244.00	9790.00	213.80	10003.80	30.20	10034.00
7.300	.50	170.00	9950.00	61.00	10011.00	109.00	10120.00
7.400	.60	341.00	9849.00	149.70	9998.70	191.30	10190.00
7.490	.46	178.20	9850.00	157.55	10007.55	20.65	10028.20
7.570	.39	220.00	9830.00	188.80	10018.80	31.20	10050.00
7.680	.57	160.00	9890.00	111.65	10001.65	48.35	10050.00
7.790	.61	320.00	9970.00	31.15	10001.15	288.85	10290.00
7.900	.39	215.00	9920.00	71.75	9991.75	143.25	10135.00
8.000	.47	235.00	9945.00	62.20	10007.20	172.80	10180.00
8.130	.69	240.00	9960.00	37.00	9997.00	203.00	10200.00
8.220	.86	189.00	9924.00	38.40	9962.40	150.60	10113.00
8.310	.89	220.00	9801.00	200.10	10001.10	19.90	10021.00
8.410	.44	150.00	9940.00	55.50	9995.50	94.50	10090.00
8.500	-.21	120.00	9920.00	52.50	9972.50	67.50	10040.00
8.590	.35	120.00	9919.00	79.20	9998.20	40.80	10039.00
8.690	-.05	70.00	9950.00	52.30	10002.30	17.70	10020.00
8.780	.22	172.00	9860.00	149.85	10009.85	22.15	10032.00
8.890	.07	90.00	9960.00	37.80	9997.80	52.20	10050.00
8.990	-.05	100.00	9960.00	48.75	10008.75	51.25	10060.00
9.090	.05	123.20	9901.80	93.10	9994.90	30.10	10025.00
9.190	-.04	98.00	9918.00	76.65	9994.65	21.35	10016.00
9.290	.04	177.00	9920.00	92.40	10012.40	84.60	10097.00
9.390	.05	206.00	9910.00	89.25	9999.25	116.75	10116.00
9.480	.06	102.00	9920.00	82.90	10002.90	19.10	10022.00

9.520	-.03	80.00	9950.00	36.20	9986.20	43.80	10030.00
9.610	.34	52.00	9954.00	13.30	9967.30	38.70	10006.00

FLOODWAY DATA, Main Channel - Final wit
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.000	1280.	2291.	3.1	1063.1	1062.8	.3
.080	1110.	1573.	4.6	1066.0	1065.4	.6
.190	660.	1372.	5.3	1070.3	1069.4	.9
.290	390.	1072.	6.7	1073.9	1073.6	.3
.380	340.	1294.	5.6	1077.8	1077.4	.4
.480	500.	1774.	4.1	1080.5	1079.9	.6
.570	318.	1294.	5.6	1082.3	1082.0	.3
.670	411.	1575.	4.6	1084.9	1084.3	.6
.760	258.	1051.	6.9	1087.6	1087.4	.2
.860	271.	1329.	5.4	1090.7	1089.8	.9
.950	208.	973.	6.4	1092.9	1092.3	.6
1.040	237.	1113.	5.6	1095.3	1094.6	.7
1.130	196.	1015.	6.2	1097.6	1097.0	.6
1.230	292.	1293.	4.8	1100.1	1099.4	.7
1.320	225.	982.	6.4	1102.3	1101.8	.5
1.410	235.	1028.	6.1	1105.1	1104.6	.5
1.500	226.	1058.	5.9	1107.7	1107.0	.7
1.590	268.	1140.	5.5	1110.0	1109.2	.8
1.680	216.	983.	6.4	1112.1	1111.4	.7
1.780	192.	1001.	6.3	1115.2	1114.4	.8
1.870	207.	1333.	4.7	1117.1	1116.4	.7
1.970	162.	860.	7.3	1118.7	1118.3	.4
2.070	175.	930.	6.7	1121.8	1121.1	.7
2.150	173.	1005.	6.2	1124.2	1123.7	.5
2.240	177.	997.	6.3	1126.4	1126.0	.4
2.340	133.	719.	8.7	1128.7	1127.9	.8
2.430	234.	1295.	4.8	1131.8	1131.4	.4
2.520	230.	823.	7.6	1134.0	1133.6	.4
2.620	300.	1503.	4.2	1137.5	1136.7	.8
2.720	172.	746.	8.4	1139.1	1138.8	.3
2.820	204.	1242.	5.0	1143.5	1142.8	.7
2.920	190.	1052.	5.9	1145.9	1145.4	.5
3.040	321.	1469.	4.3	1148.4	1147.8	.6
3.140	231.	1118.	5.6	1149.7	1149.2	.5
3.230	260.	1017.	6.2	1152.6	1152.0	.6
3.320	280.	1179.	5.3	1155.5	1154.8	.7
3.420	388.	1483.	4.2	1157.6	1156.9	.7
3.510	375.	1314.	4.8	1159.6	1158.9	.7
3.590	225.	927.	6.7	1161.9	1161.2	.7
3.700	148.	845.	7.3	1165.4	1165.0	.4
3.790	261.	1203.	5.2	1167.9	1167.2	.7
3.880	202.	843.	7.4	1169.8	1169.4	.4

FLOODWAY DATA, Main Channel - Final wit
PROFILE NO. 2

STATION	WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.960	175.	841.	7.4	1173.4	1172.5	.9
4.050	210.	1199.	5.2	1176.5	1175.7	.8
4.160	220.	1044.	5.9	1178.4	1177.8	.6
4.250	215.	1201.	5.2	1180.7	1180.1	.6
4.350	249.	1170.	5.3	1182.9	1182.4	.5
4.460	267.	1023.	6.1	1186.1	1185.4	.7
4.550	192.	948.	6.5	1189.3	1188.6	.7
4.650	243.	1240.	5.0	1192.1	1191.3	.8
4.760	325.	1409.	4.4	1194.6	1194.0	.6
4.860	365.	1318.	4.7	1196.8	1196.4	.4
4.960	186.	943.	6.6	1199.4	1198.7	.7
5.050	225.	1072.	5.8	1202.6	1201.8	.8
5.160	342.	1576.	3.9	1204.9	1204.1	.8
5.230	291.	1035.	6.0	1206.3	1205.7	.6
5.290	550.	1972.	3.1	1208.1	1207.6	.5
5.390	445.	1488.	4.2	1209.4	1208.9	.5
5.460	457.	1186.	5.2	1211.6	1211.0	.6
5.550	553.	1813.	3.4	1214.6	1213.8	.8
5.640	350.	1095.	5.7	1216.7	1216.3	.4
5.730	371.	1275.	4.9	1220.2	1219.7	.5
5.820	305.	829.	4.5	1222.8	1222.1	.7
5.910	250.	841.	4.4	1225.4	1224.8	.6
5.990	203.	581.	6.4	1228.1	1227.5	.6
6.080	186.	739.	5.0	1231.3	1230.5	.8
6.170	172.	732.	5.1	1233.2	1232.5	.7
6.260	216.	794.	4.3	1235.6	1234.8	.8
6.360	201.	568.	6.1	1238.4	1237.7	.7
6.450	300.	921.	3.7	1241.5	1240.7	.8
6.560	210.	655.	4.8	1243.8	1243.2	.6
6.660	297.	710.	4.4	1247.6	1247.1	.5
6.750	160.	488.	6.4	1251.5	1250.9	.6
6.840	250.	668.	4.7	1255.0	1254.6	.4
6.940	280.	677.	4.1	1258.0	1257.4	.6
7.020	205.	538.	5.1	1260.9	1260.4	.5
7.110	311.	740.	3.7	1264.6	1264.1	.5
7.200	244.	519.	5.3	1268.3	1267.5	.8
7.300	170.	546.	5.0	1272.7	1272.2	.5
7.400	341.	710.	3.9	1276.3	1275.7	.6
7.490	175.	500.	5.5	1279.9	1279.4	.5
7.570	220.	529.	5.2	1283.4	1283.0	.4
7.680	160.	362.	5.9	1288.2	1287.6	.6
7.790	320.	661.	3.2	1293.4	1292.8	.6

FLOODWAY DATA, Main Channel - Final wit
PROFILE NO. 2

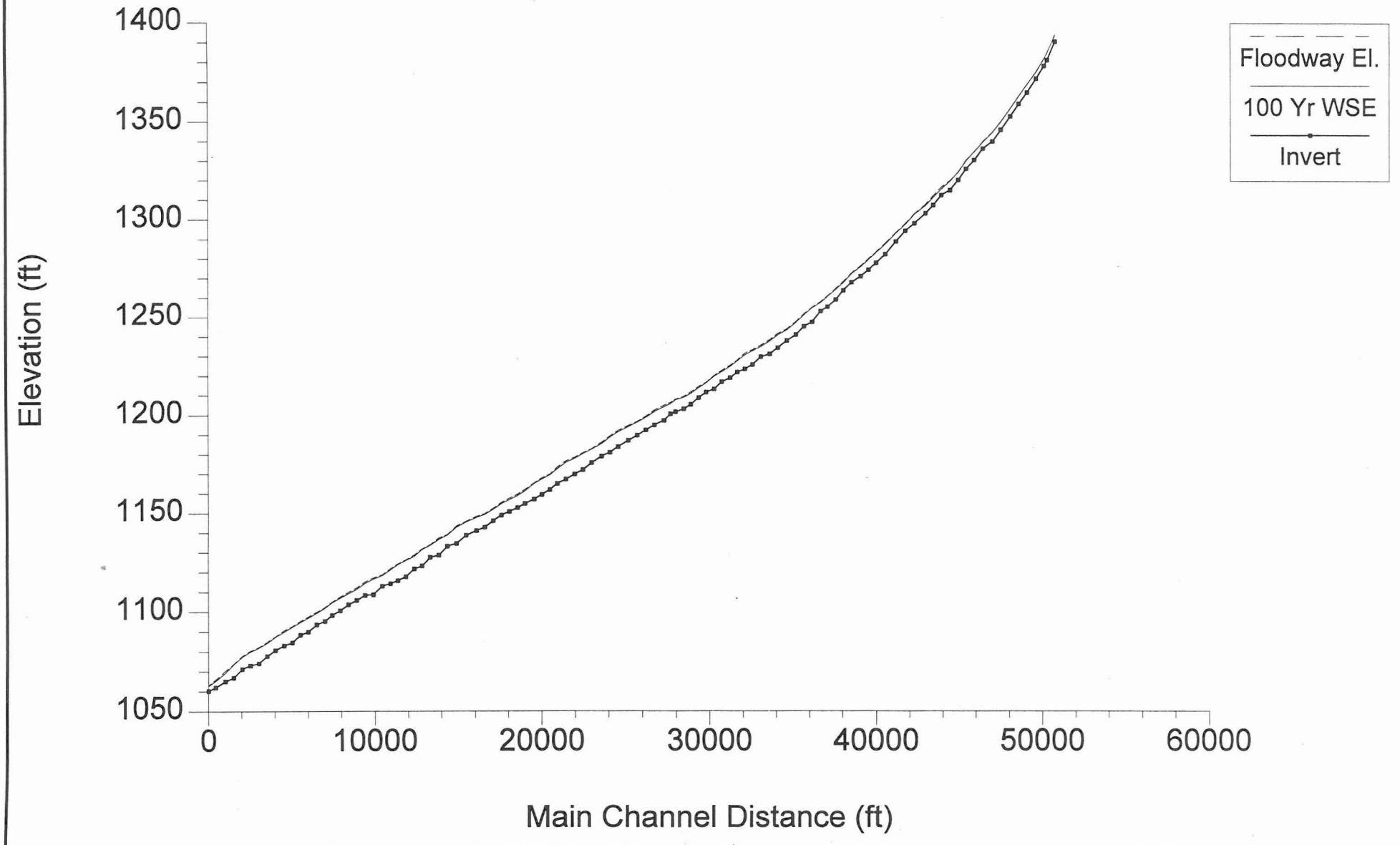
STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
7.900	215.	410.	5.2	1298.0	1297.6	.4
8.000	235.	578.	3.7	1303.0	1302.5	.5
8.130	240.	436.	4.9	1307.7	1307.0	.7
8.220	189.	409.	5.2	1312.2	1311.3	.9
8.310	220.	493.	4.3	1316.3	1315.4	.9
8.410	144.	317.	3.9	1319.7	1319.3	.4
8.500	92.	131.	6.8	1324.0	1324.2	-.2
8.590	120.	220.	4.1	1330.3	1329.9	.4
8.690	70.	153.	5.8	1334.6	1334.6	.0
8.780	172.	221.	4.1	1339.8	1339.6	.2
8.890	75.	158.	5.6	1344.8	1344.7	.1
8.990	76.	144.	6.2	1350.0	1350.0	.0
9.090	81.	157.	5.7	1356.7	1356.7	.0
9.190	87.	139.	6.4	1363.1	1363.1	.0
9.290	131.	182.	4.8	1369.0	1369.0	.0
9.390	196.	197.	4.4	1375.5	1375.4	.1
9.480	84.	135.	6.5	1382.2	1382.1	.1
9.520	80.	135.	6.5	1385.2	1385.2	.0
9.610	52.	120.	7.3	1394.1	1393.8	.3

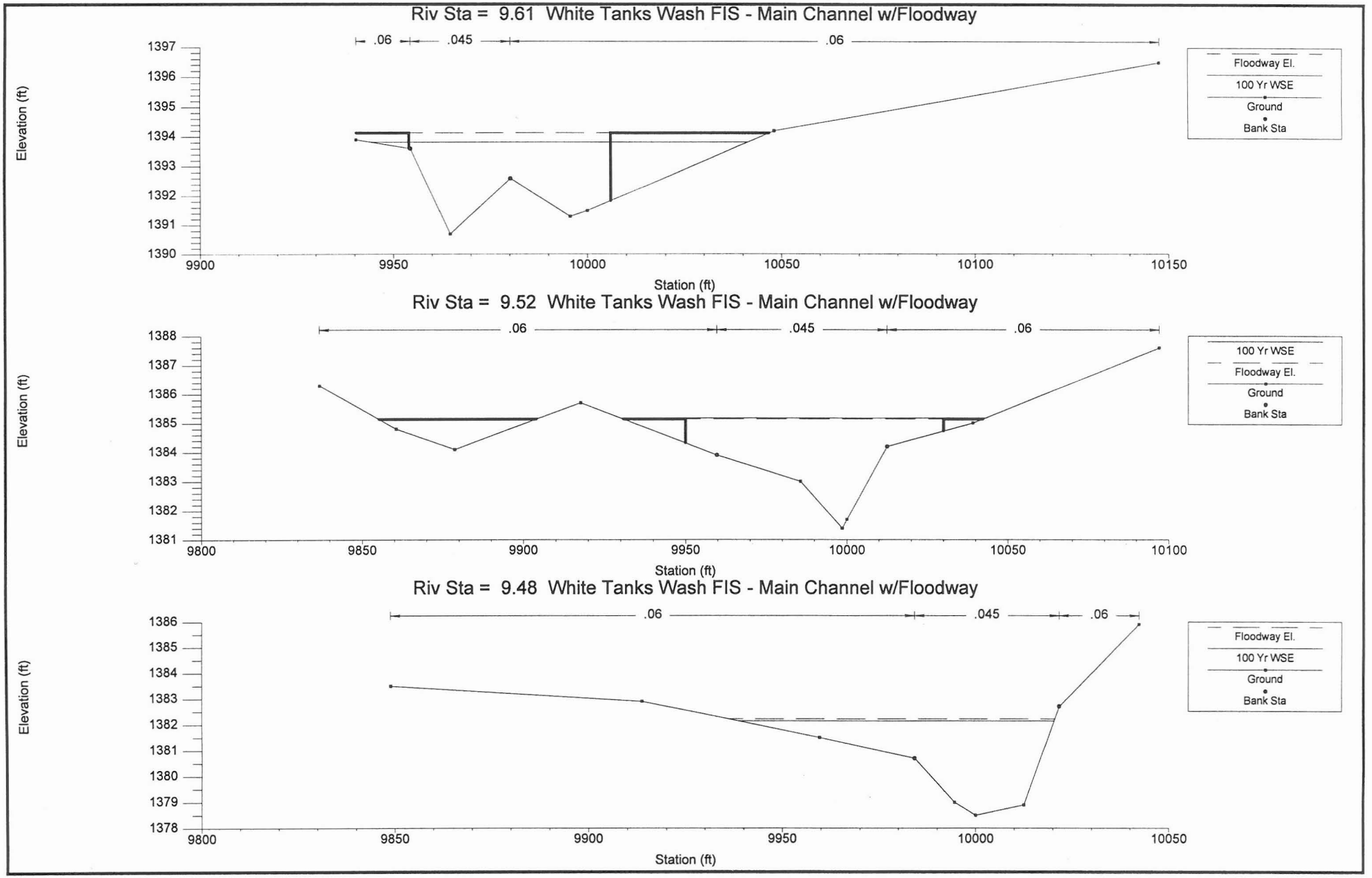
Appendix E

Plotted Cross Sections for:

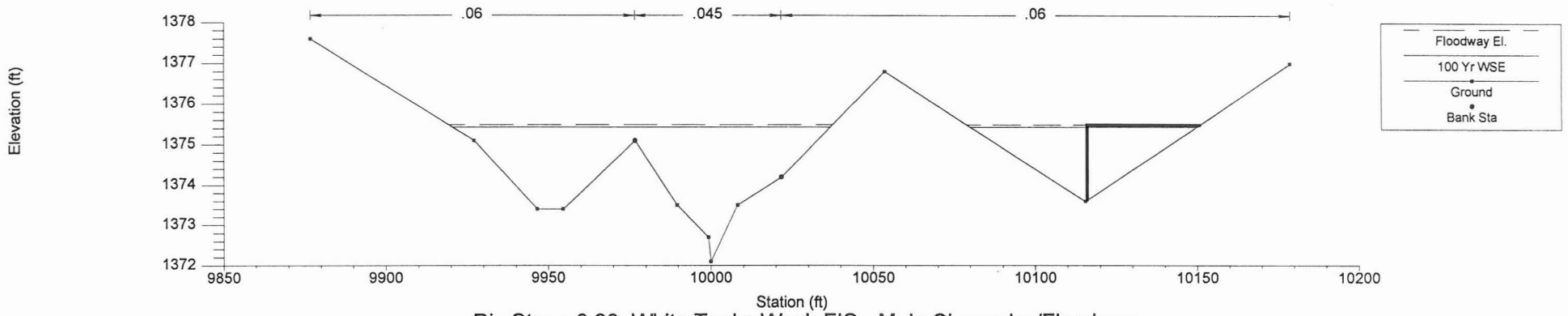
White Tanks Wash
With Floodway Encroachments
Based on Method 1 Analysis

White Tanks Wash FIS - Main Channel w/Floodway

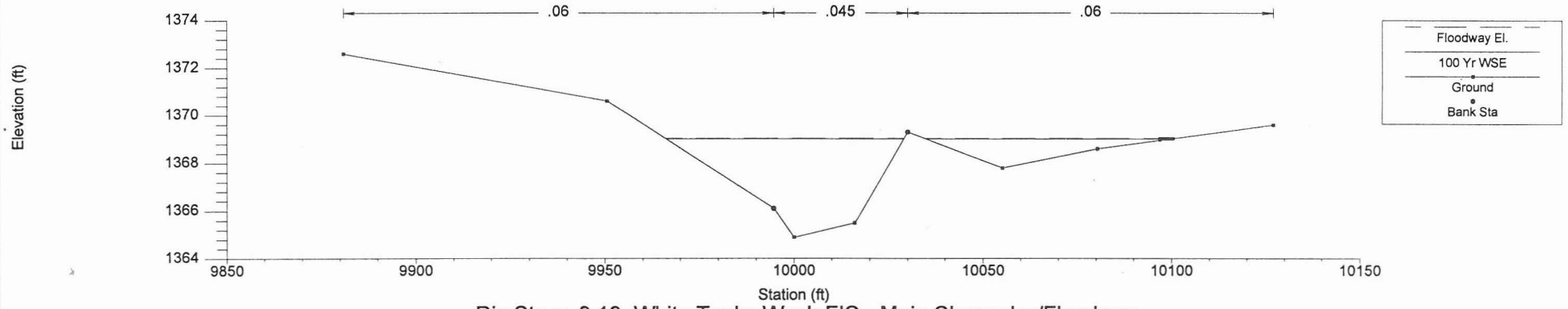



Riv Sta = 9.61 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1397
1396
1395
1394
1393
1392
1391
1390
9900
9950
10000
10050
10100
10150
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 9.52 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1388
1387
1386
1385
1384
1383
1382
1381
9800
9850
9900
9950
10000
10050
10100
Station (ft)
100 Yr WSE
Floodway El.
Ground
Bank Sta
Riv Sta = 9.48 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1386
1385
1384
1383
1382
1381
1380
1379
1378
9800
9850
9900
9950
10000
10050
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

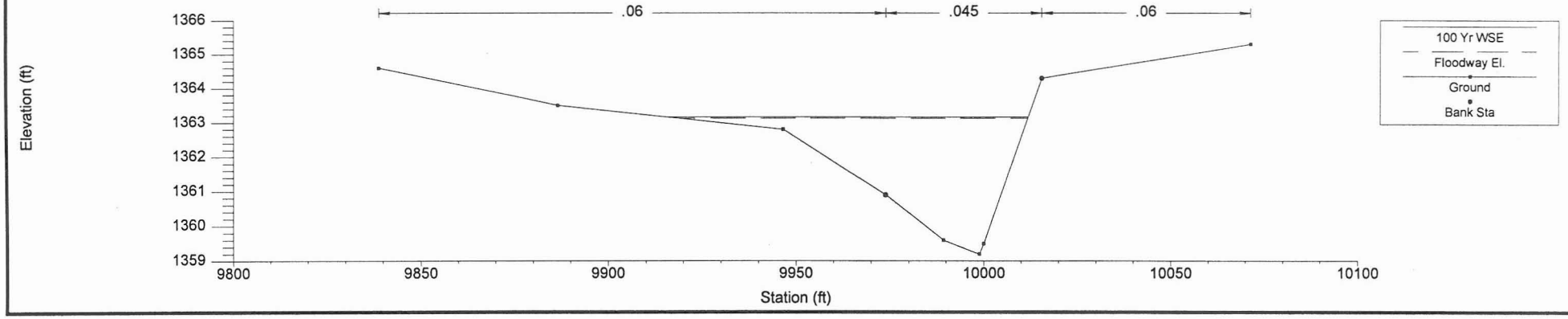
Riv Sta = 9.39 White Tanks Wash FIS - Main Channel w/Floodway

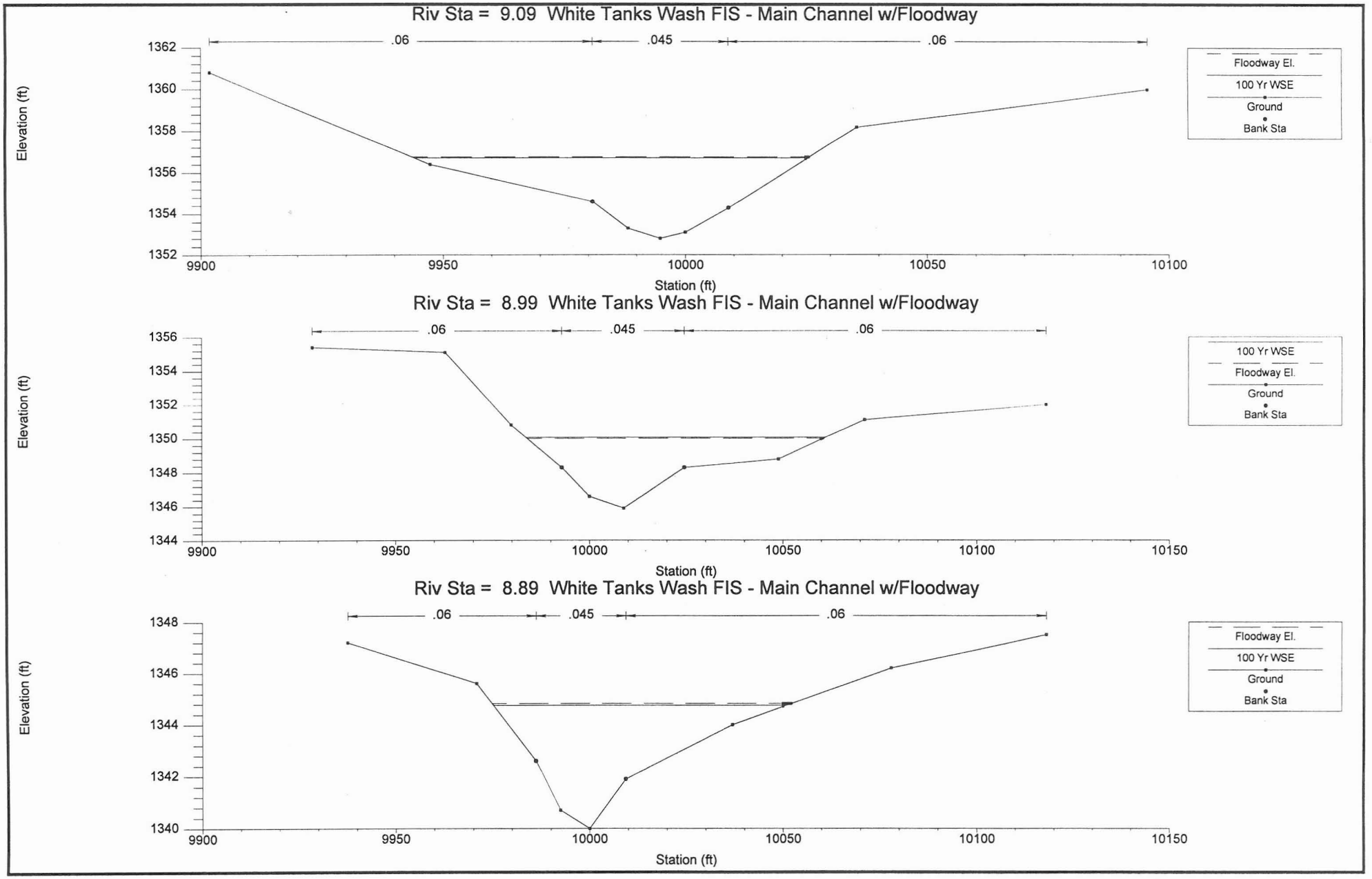


Riv Sta = 9.29 White Tanks Wash FIS - Main Channel w/Floodway

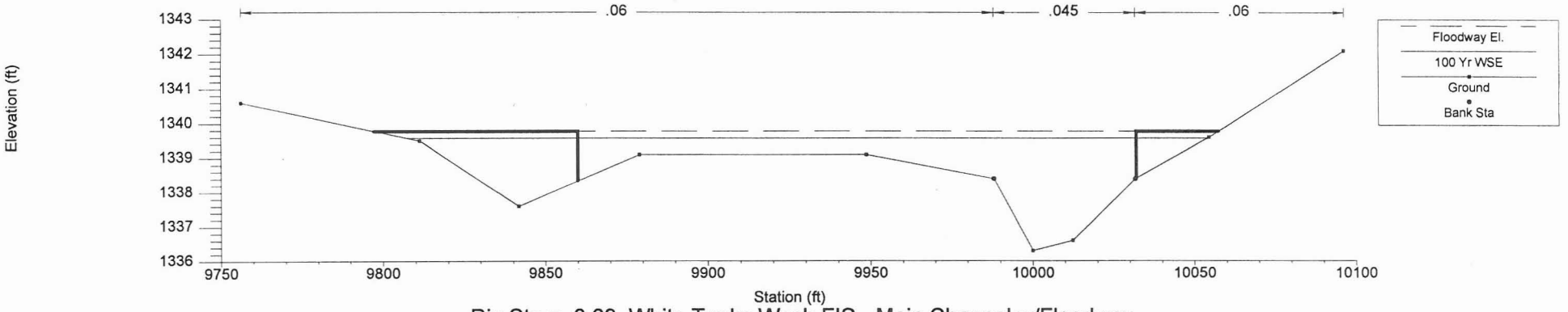


Riv Sta = 9.19 White Tanks Wash FIS - Main Channel w/Floodway

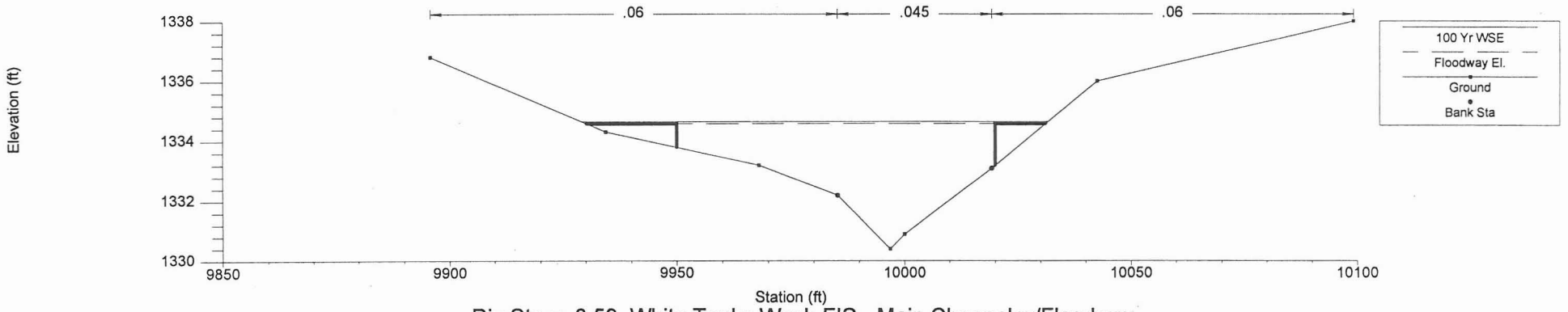



Riv Sta = 9.09 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1362
1360
1358
1356
1354
1352
9900
9950
10000
10050
10100
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 8.99 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1356
1354
1352
1350
1348
1346
1344
9900
9950
10000
10050
10100
10150
Station (ft)
100 Yr WSE
Floodway El.
Ground
Bank Sta
Riv Sta = 8.89 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1348
1346
1344
1342
1340
9900
9950
10000
10050
10100
10150
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

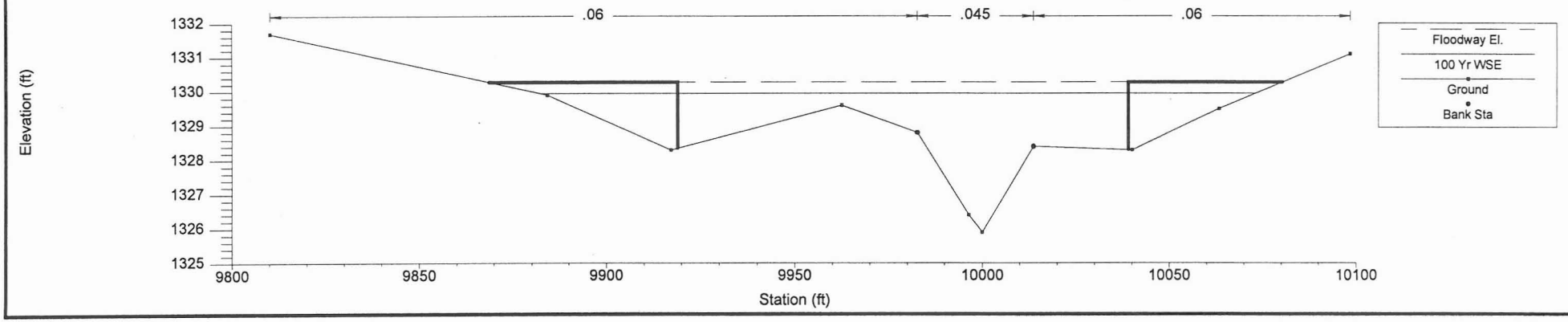
Riv Sta = 8.78 White Tanks Wash FIS - Main Channel w/Floodway



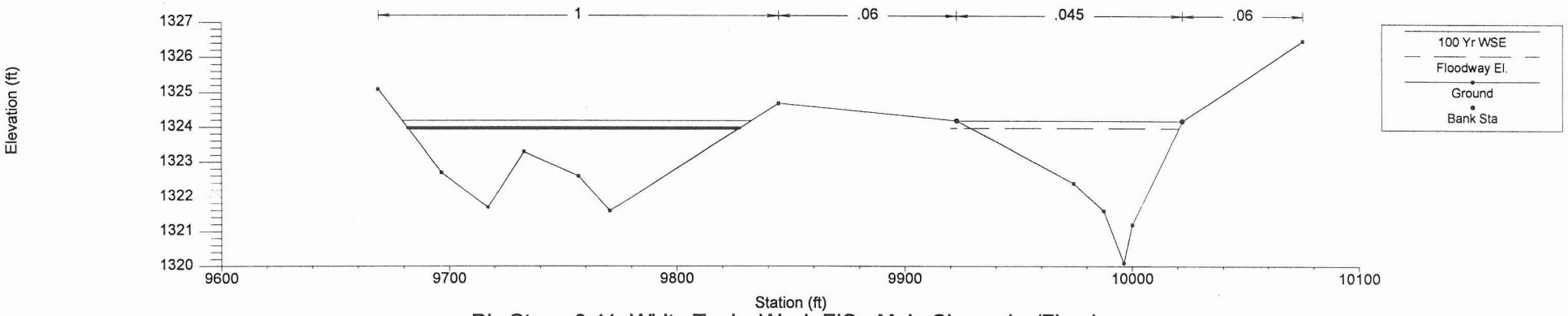
Riv Sta = 8.69 White Tanks Wash FIS - Main Channel w/Floodway



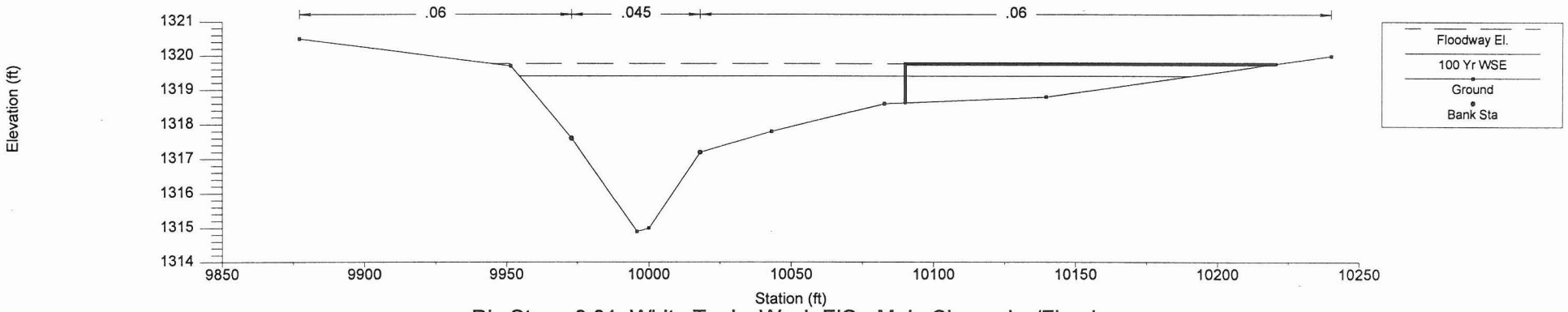
Riv Sta = 8.59 White Tanks Wash FIS - Main Channel w/Floodway



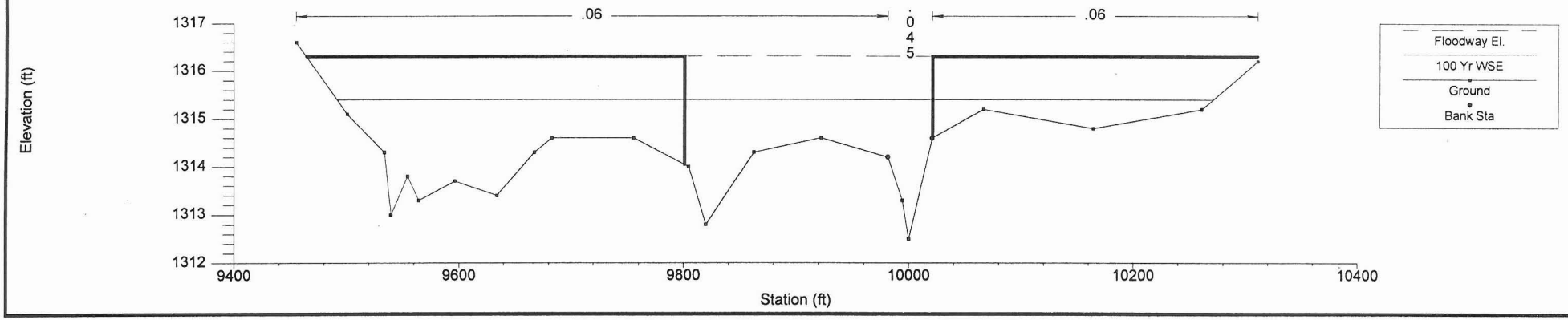
Riv Sta = 8.5 White Tanks Wash FIS - Main Channel w/Floodway

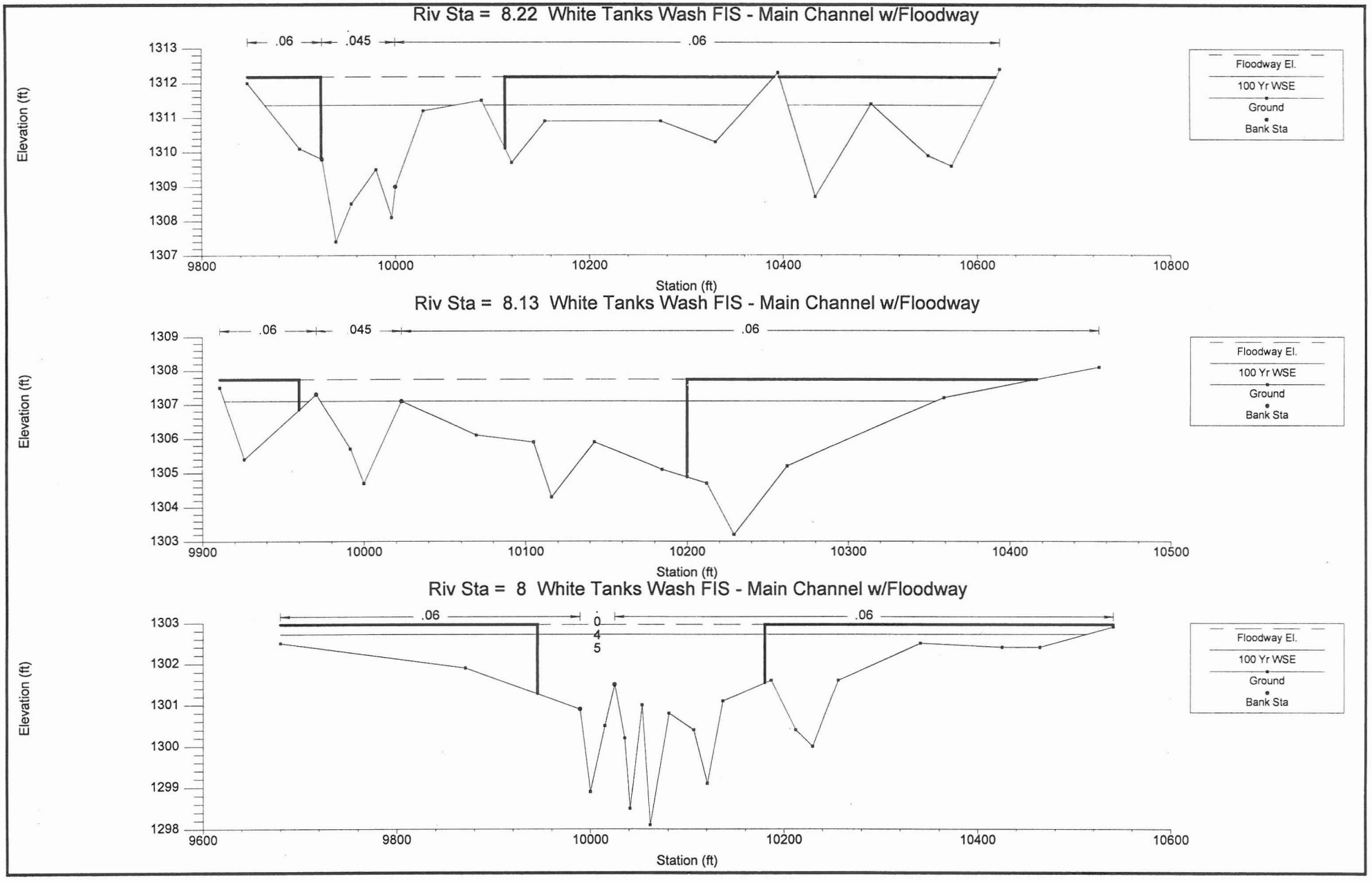


Riv Sta = 8.41 White Tanks Wash FIS - Main Channel w/Floodway

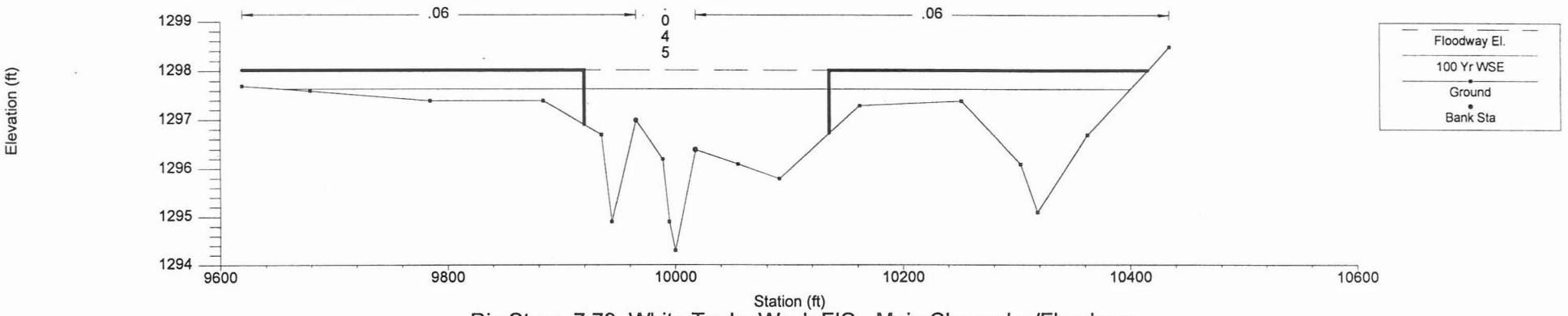


Riv Sta = 8.31 White Tanks Wash FIS - Main Channel w/Floodway

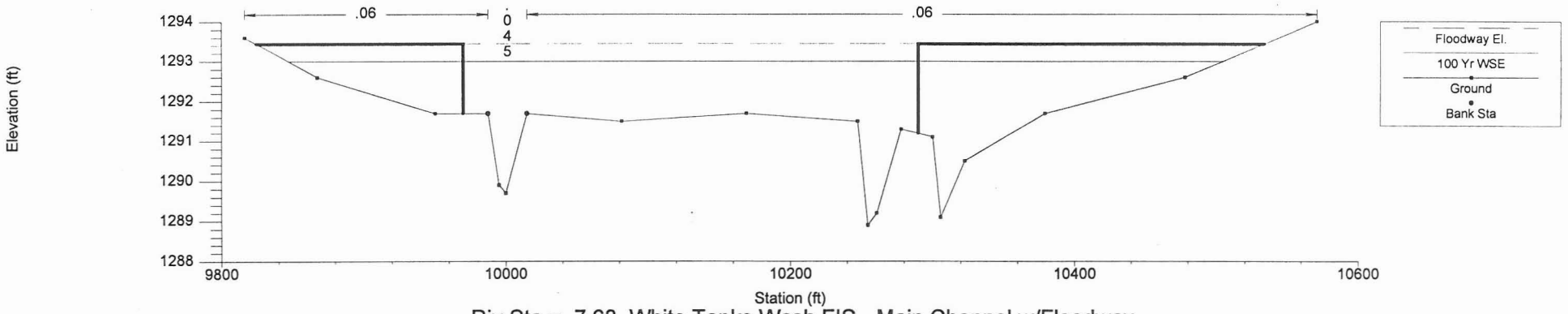



Riv Sta = 8.22 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1313
1312
1311
1310
1309
1308
1307
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 8.13 White Tanks Wash FIS - Main Channel w/Floodway
.06
045
.06
Elevation (ft)
1309
1308
1307
1306
1305
1304
1303
9900
10000
10100
10200
10300
10400
10500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 8 White Tanks Wash FIS - Main Channel w/Floodway
.06
.06
Elevation (ft)
1303
1302
1301
1300
1299
1298
9600
9800
10000
10200
10400
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

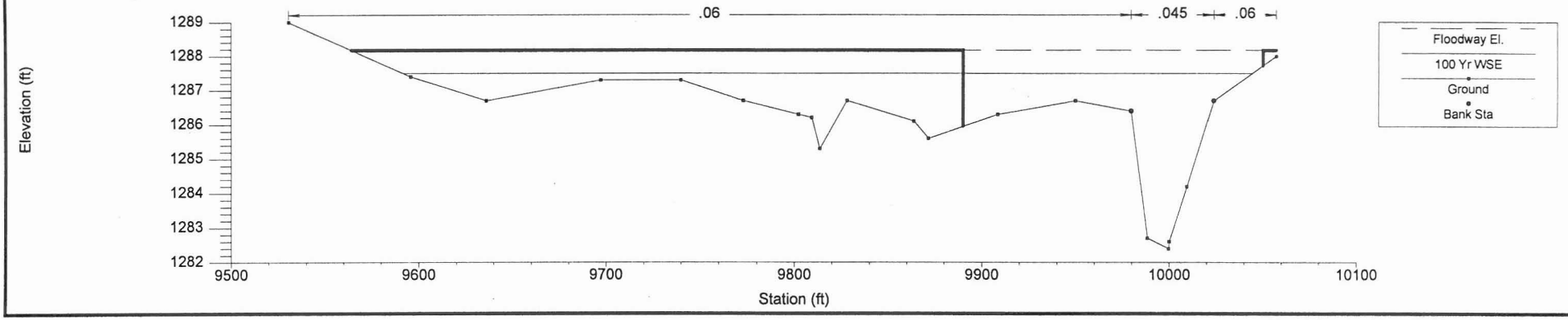
Riv Sta = 7.9 White Tanks Wash FIS - Main Channel w/Floodway



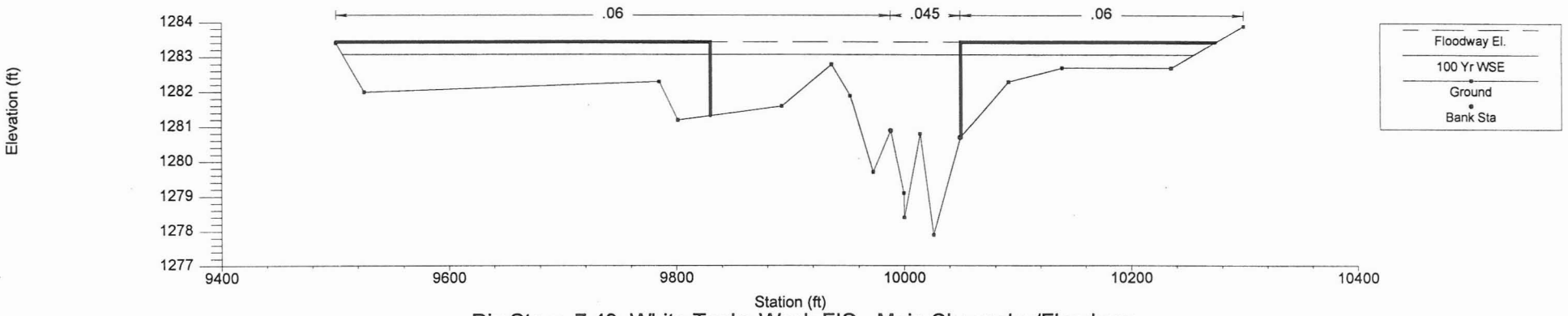
Riv Sta = 7.79 White Tanks Wash FIS - Main Channel w/Floodway



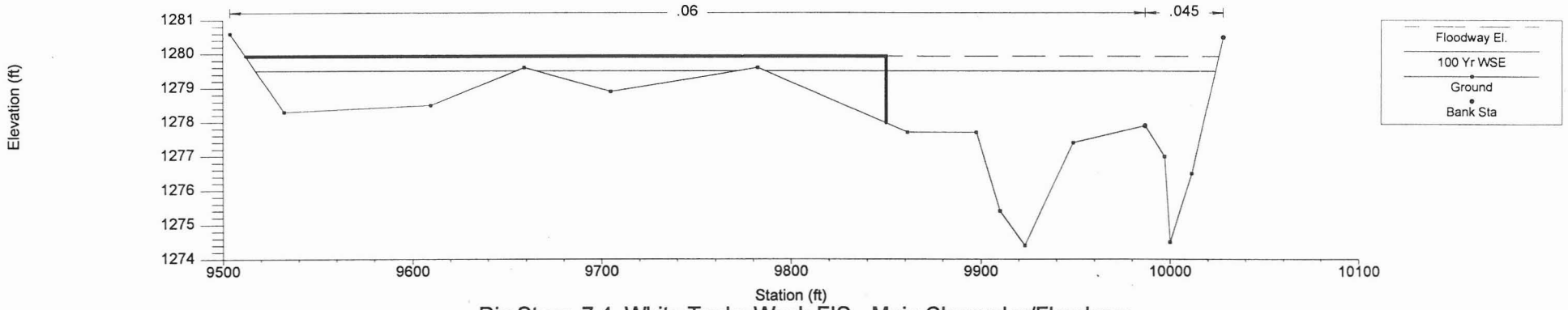
Riv Sta = 7.68 White Tanks Wash FIS - Main Channel w/Floodway



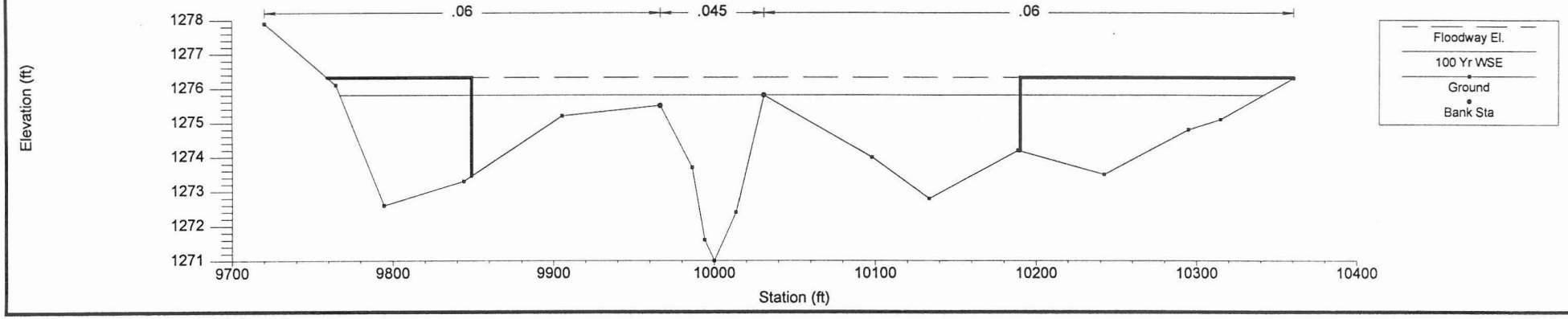
Riv Sta = 7.57 White Tanks Wash FIS - Main Channel w/Floodway



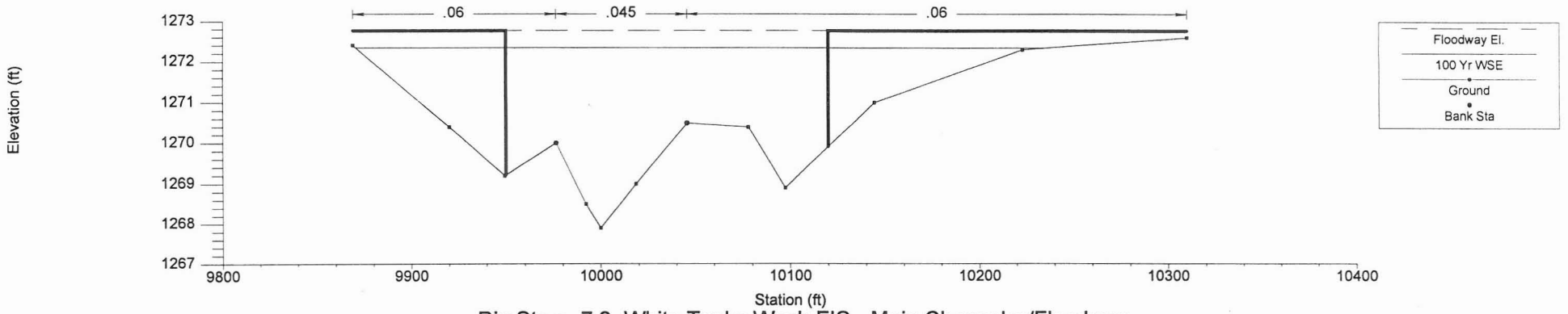
Riv Sta = 7.49 White Tanks Wash FIS - Main Channel w/Floodway



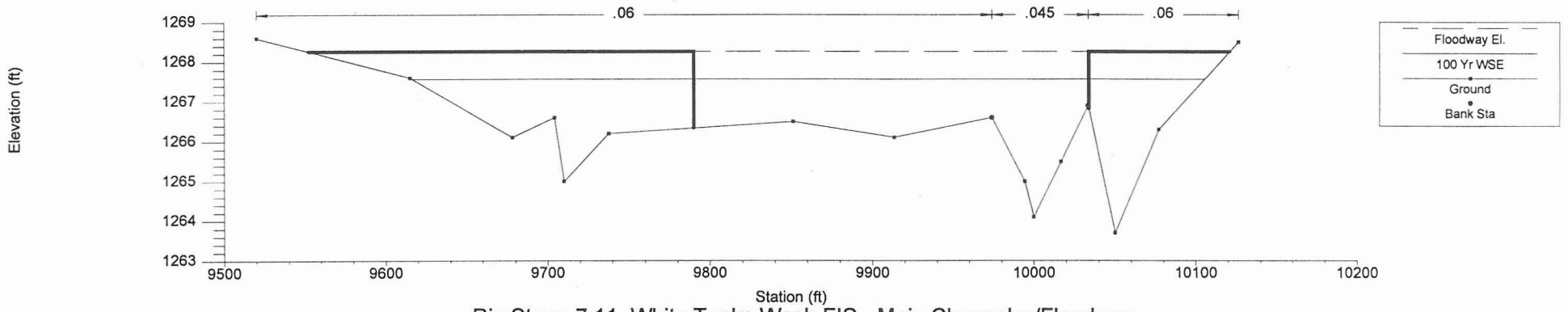
Riv Sta = 7.4 White Tanks Wash FIS - Main Channel w/Floodway



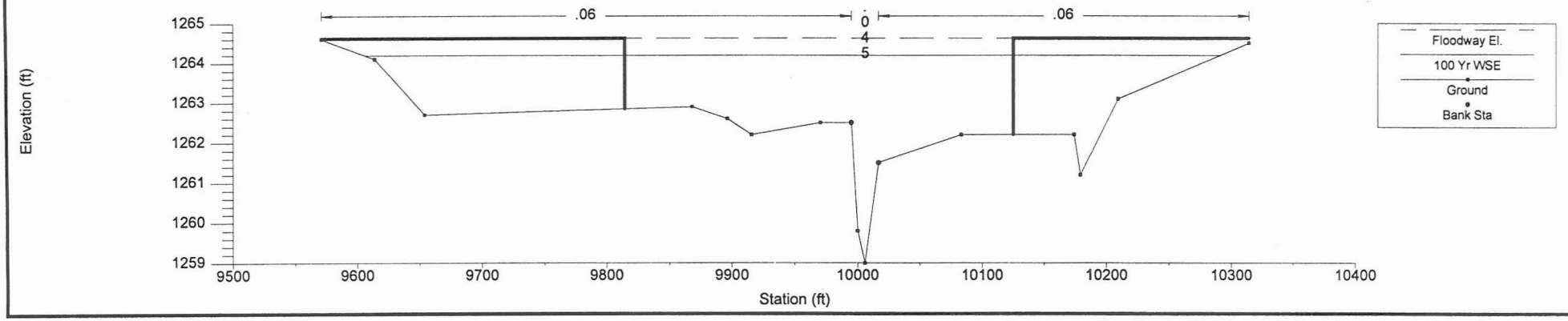
Riv Sta = 7.3 White Tanks Wash FIS - Main Channel w/Floodway

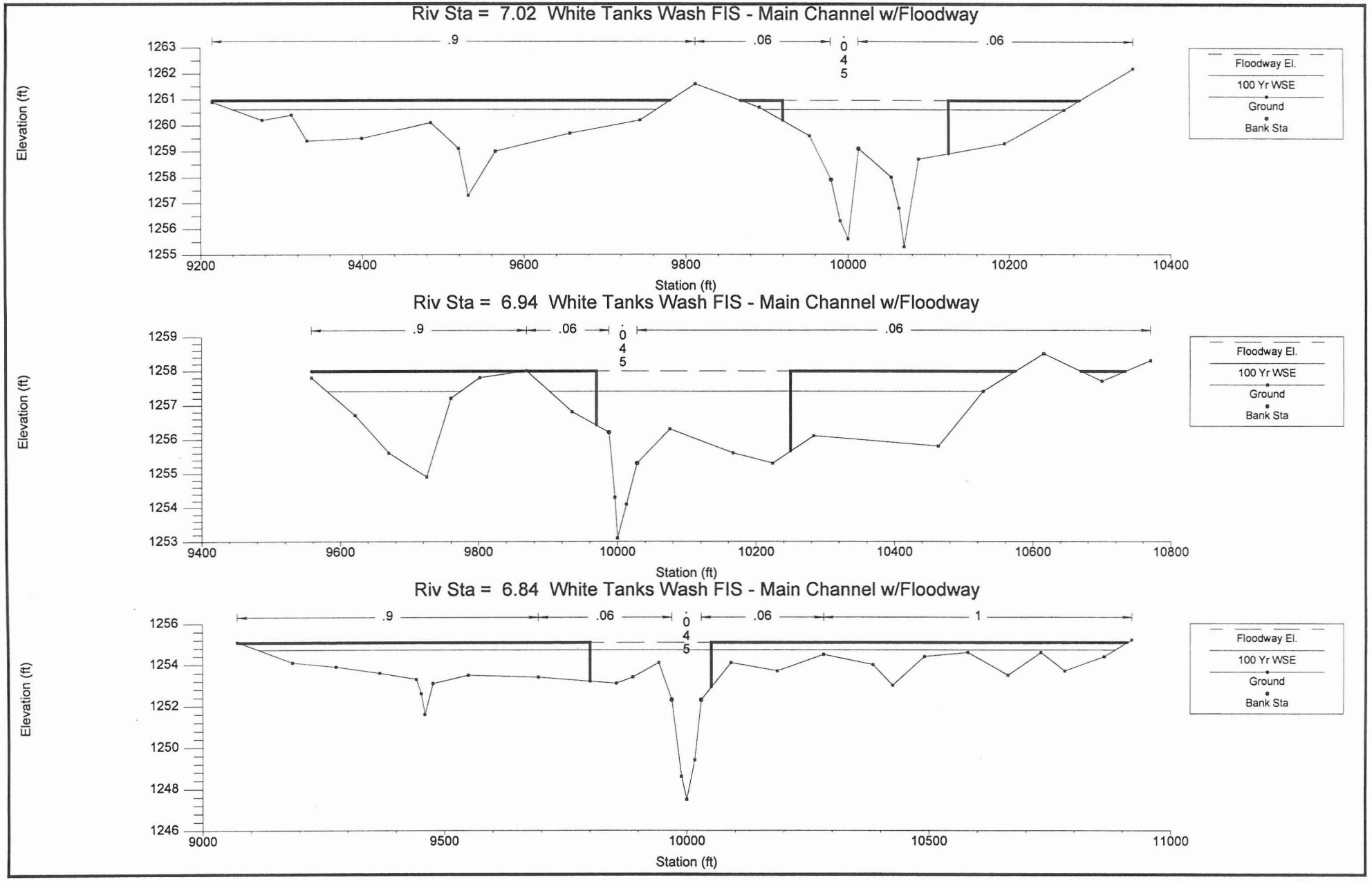


Riv Sta = 7.2 White Tanks Wash FIS - Main Channel w/Floodway

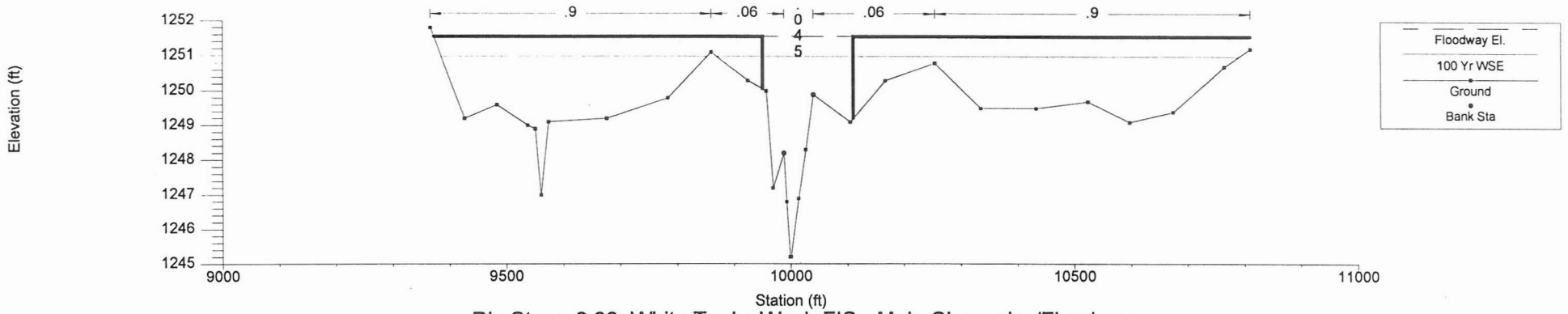


Riv Sta = 7.11 White Tanks Wash FIS - Main Channel w/Floodway

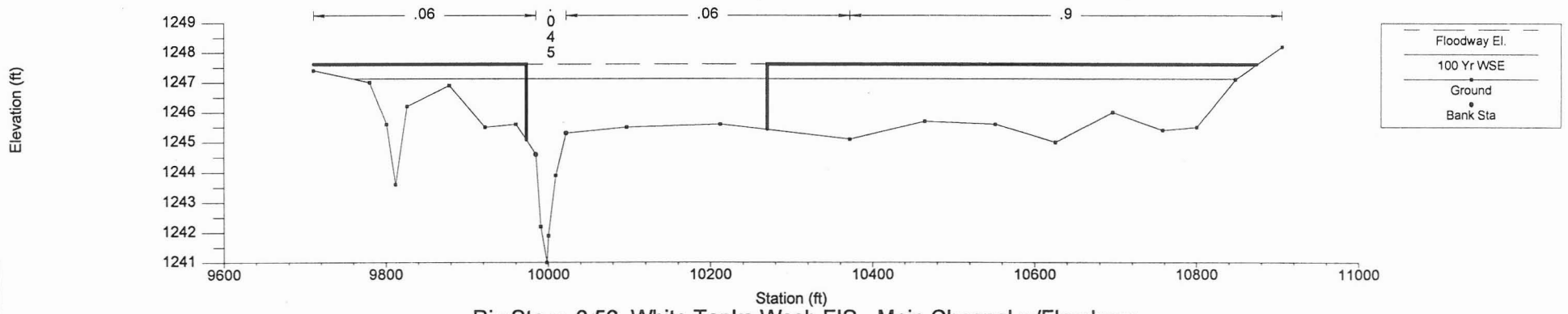



Riv Sta = 7.02 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.06
045
Elevation (ft)
1263
1262
1261
1260
1259
1258
1257
1256
1255
9200
9400
9600
9800
10000
10200
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 6.94 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.06
045
Elevation (ft)
1259
1258
1257
1256
1255
1254
1253
9400
9600
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 6.84 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.06
1
045
Elevation (ft)
1256
1254
1252
1250
1248
1246
9000
9500
10000
10500
11000
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

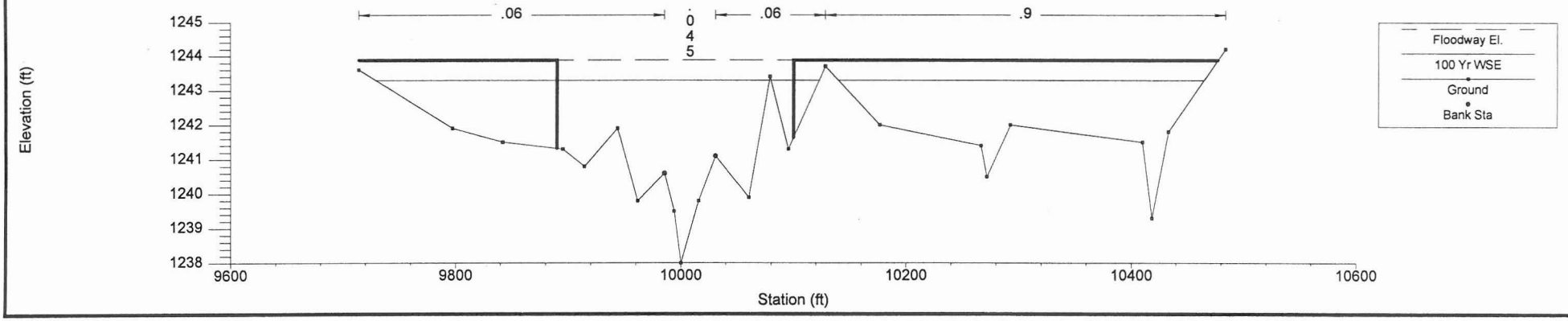
Riv Sta = 6.75 White Tanks Wash FIS - Main Channel w/Floodway



Riv Sta = 6.66 White Tanks Wash FIS - Main Channel w/Floodway



Riv Sta = 6.56 White Tanks Wash FIS - Main Channel w/Floodway



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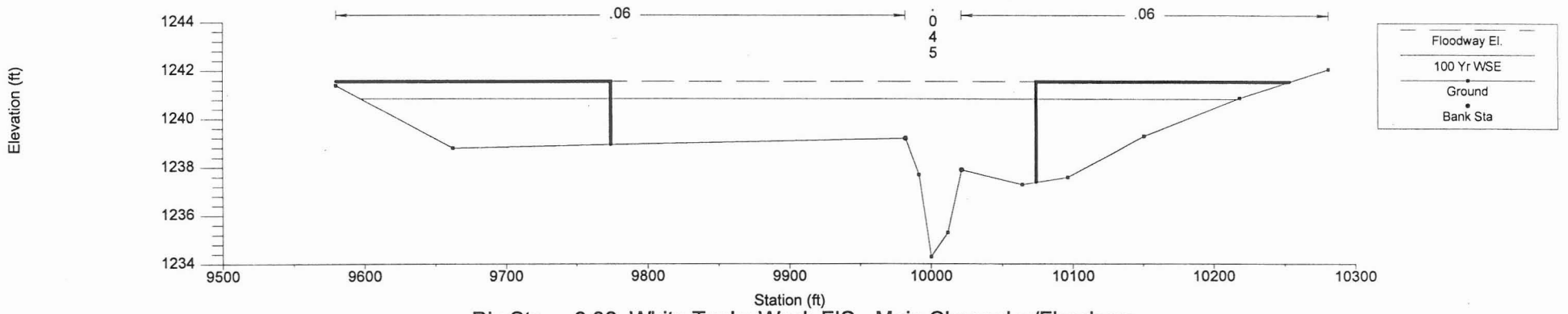
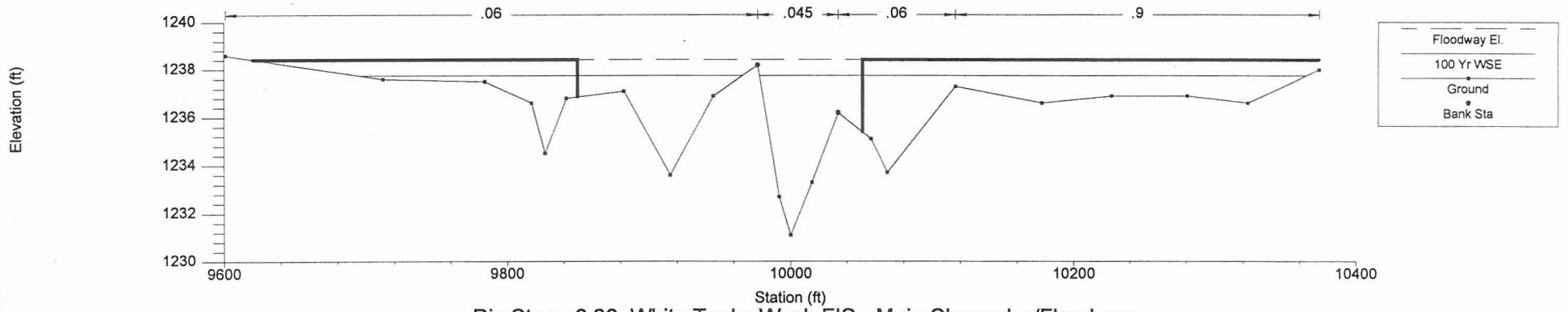
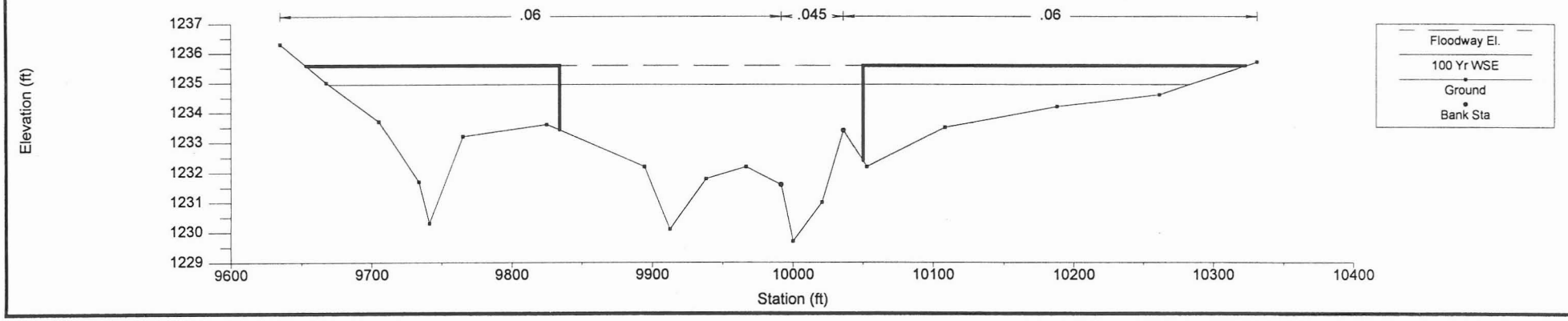
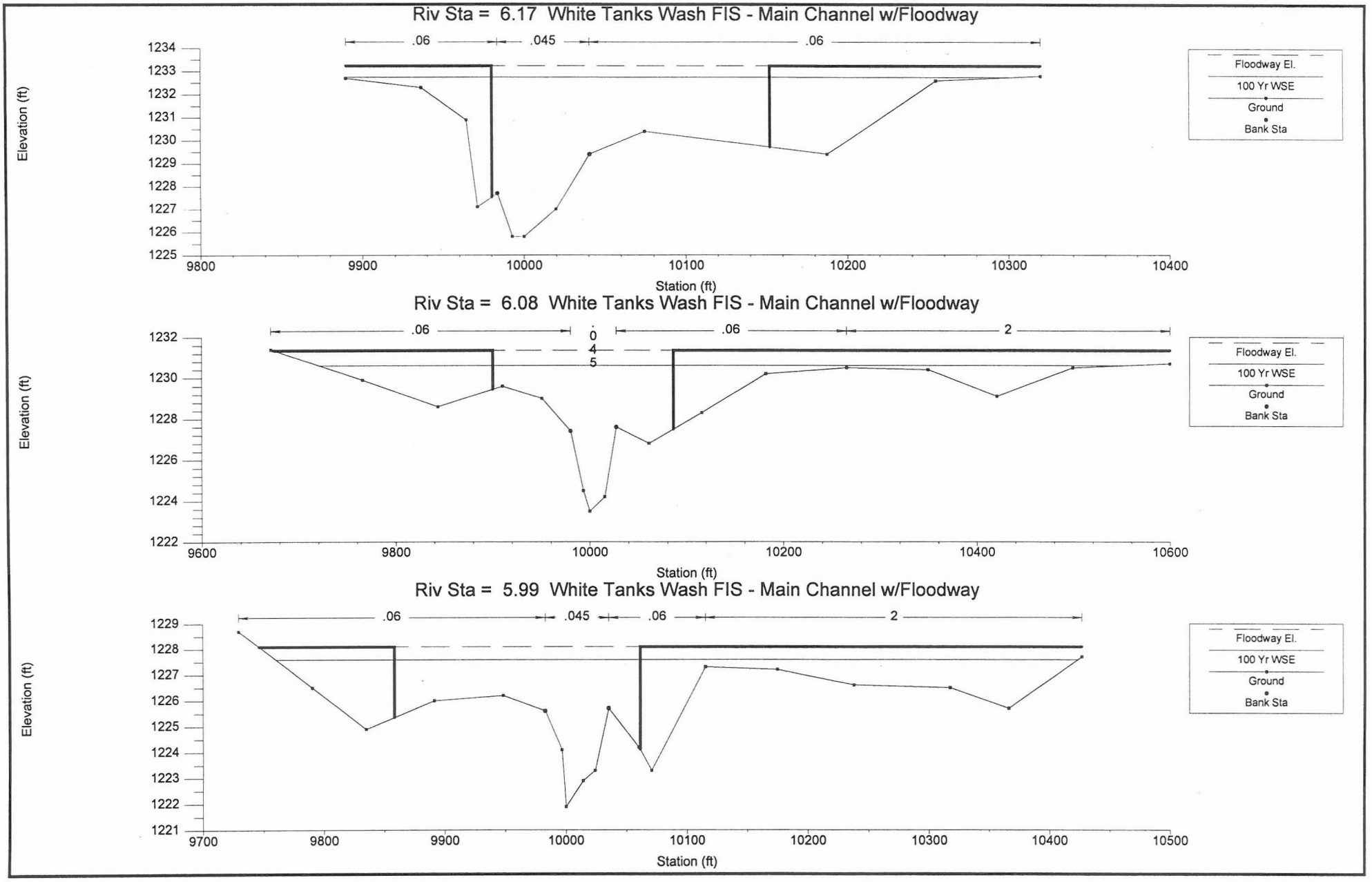


Riv Sta = 6.36 White Tanks Wash FIS - Main Channel w/Floodway

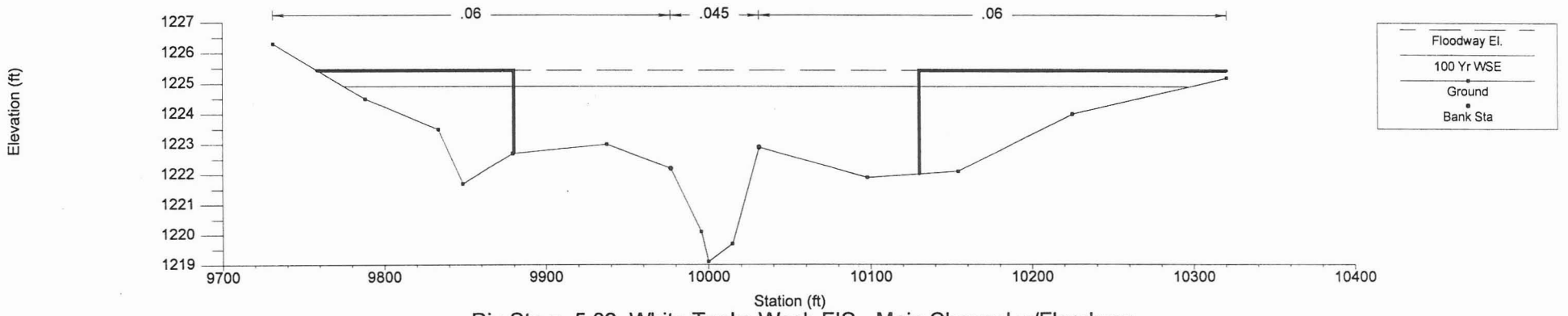


Riv Sta = 6.26 White Tanks Wash FIS - Main Channel w/Floodway

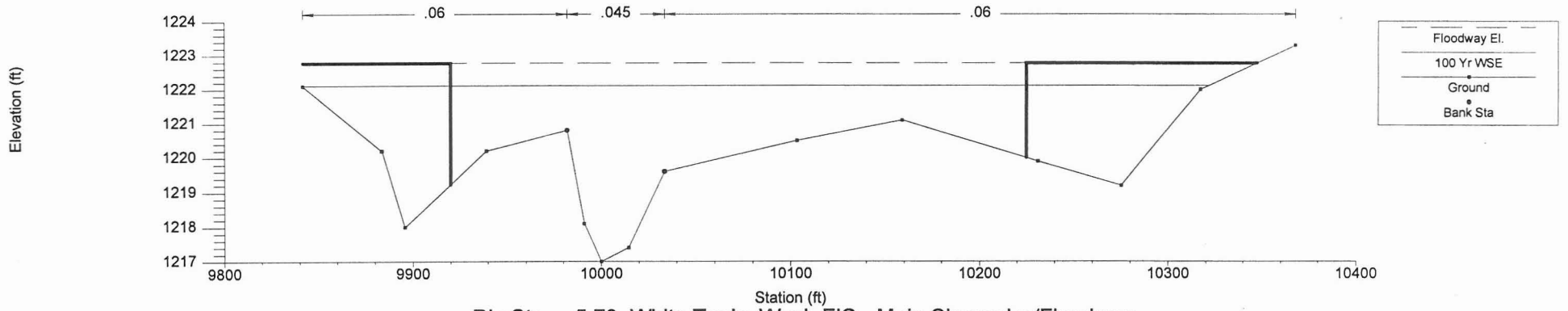



Riv Sta = 6.17 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1234
1233
1232
1231
1230
1229
1228
1227
1226
1225
9800
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 6.08 White Tanks Wash FIS - Main Channel w/Floodway
.06
.06
2
Elevation (ft)
1232
1230
1228
1226
1224
1222
9600
9800
10000
10200
10400
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.99 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
2
Elevation (ft)
1229
1228
1227
1226
1225
1224
1223
1222
1221
9700
9800
9900
10000
10100
10200
10300
10400
10500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

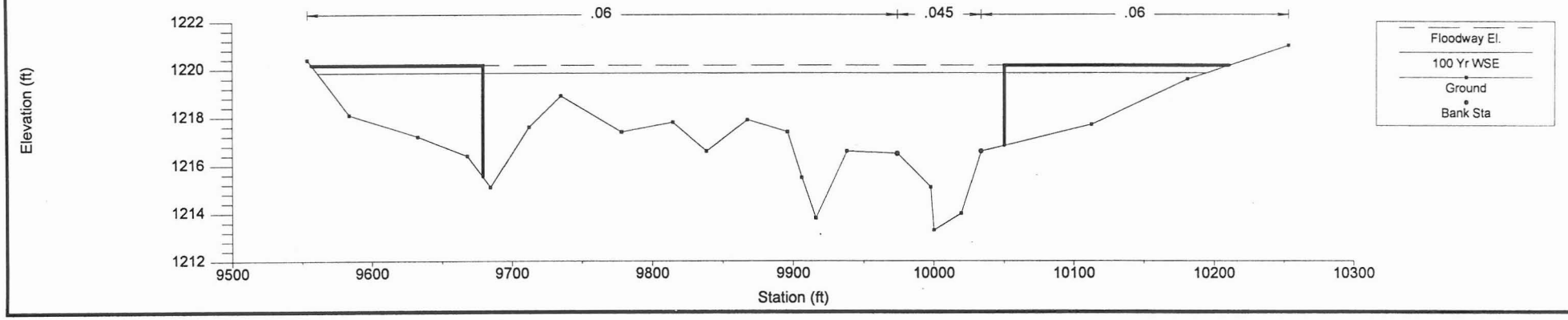
Riv Sta = 5.91 White Tanks Wash FIS - Main Channel w/Floodway

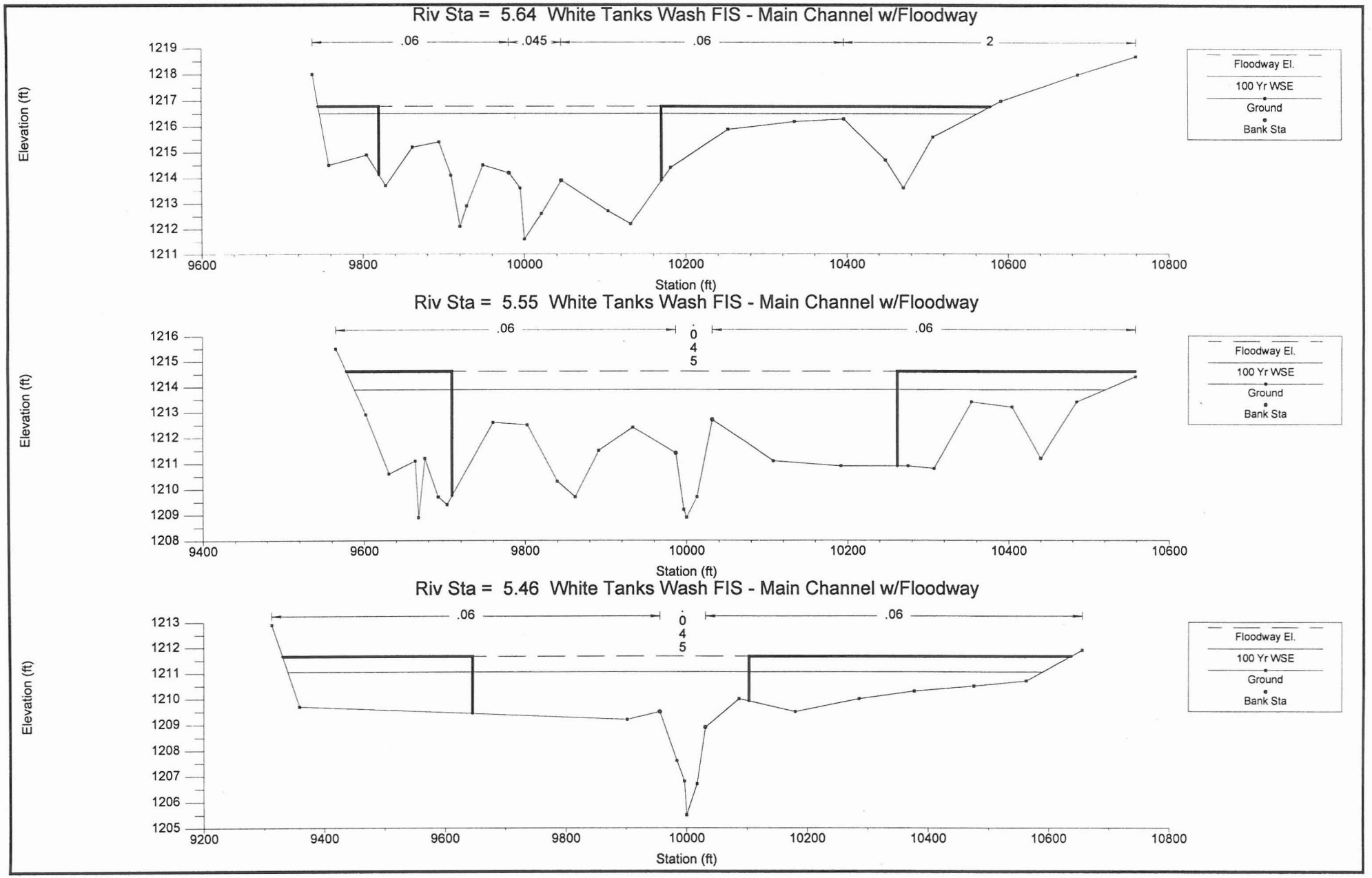


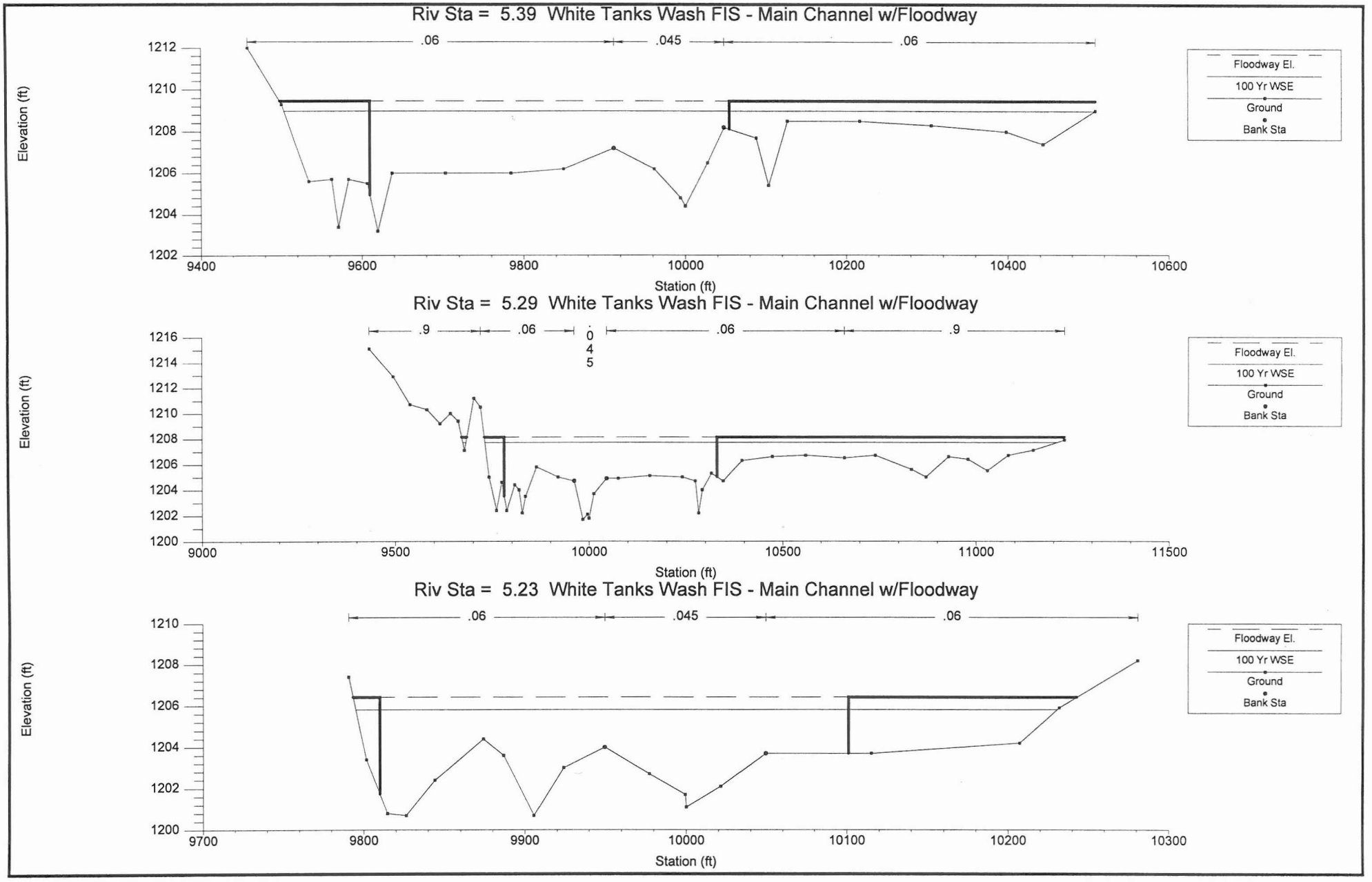
Riv Sta = 5.82 White Tanks Wash FIS - Main Channel w/Floodway

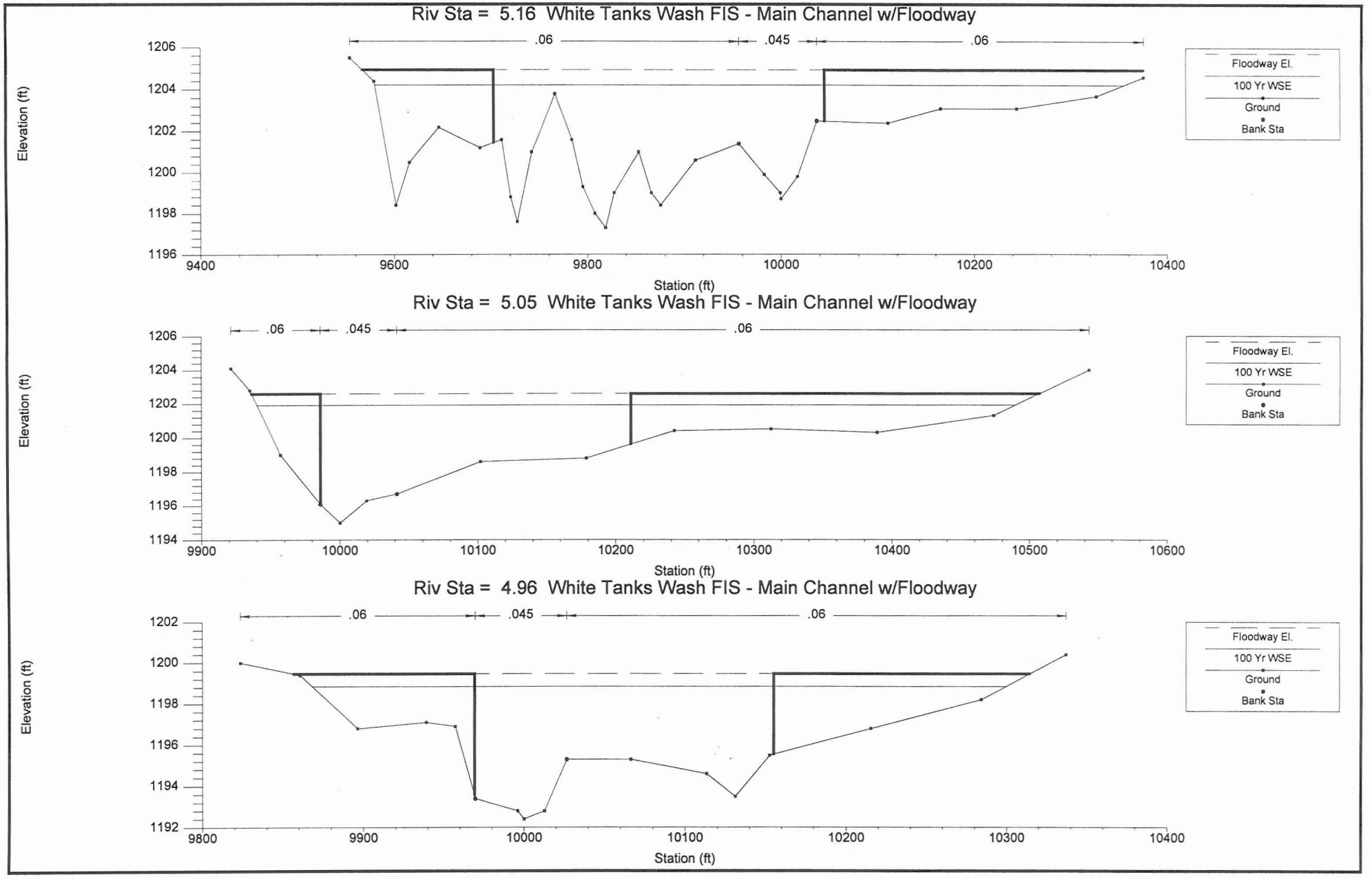


Riv Sta = 5.73 White Tanks Wash FIS - Main Channel w/Floodway

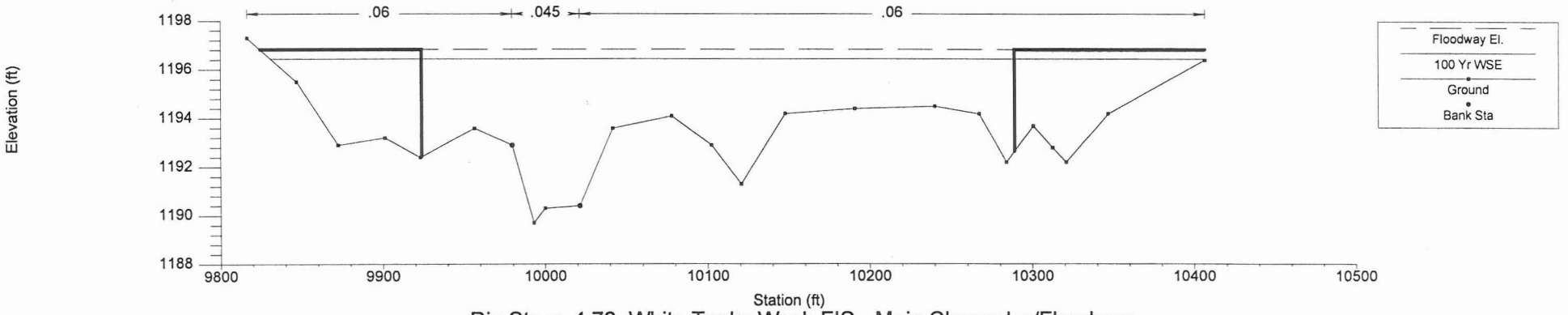



Riv Sta = 5.64 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
2
Elevation (ft)
1219
1218
1217
1216
1215
1214
1213
1212
1211
9600
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.55 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1216
1215
1214
1213
1212
1211
1210
1209
1208
9400
9600
9800
10000
10200
10400
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.46 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1213
1212
1211
1210
1209
1208
1207
1206
1205
9200
9400
9600
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

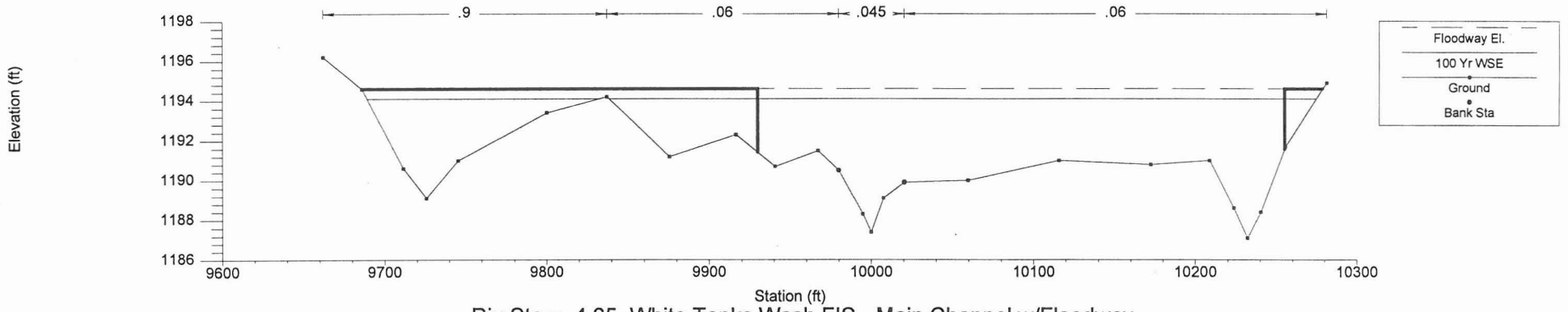

Riv Sta = 5.39 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1212
1210
1208
1206
1204
1202
9400
9600
9800
10000
10200
10400
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.29 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.045
.06
.9
Elevation (ft)
1216
1214
1212
1210
1208
1206
1204
1202
1200
9000
9500
10000
10500
11000
11500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.23 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1210
1208
1206
1204
1202
1200
9700
9800
9900
10000
10100
10200
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta


Riv Sta = 5.16 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1206
1204
1202
1200
1198
1196
9400
9600
9800
10000
10200
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 5.05 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1206
1204
1202
1200
1198
1196
1194
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 4.96 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1202
1200
1198
1196
1194
1192
9800
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

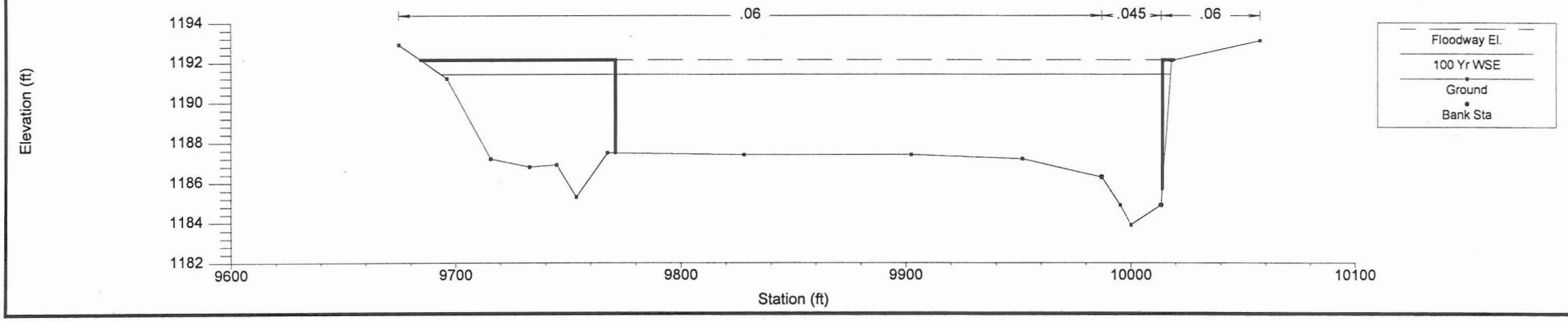
Riv Sta = 4.86 White Tanks Wash FIS - Main Channel w/Floodway



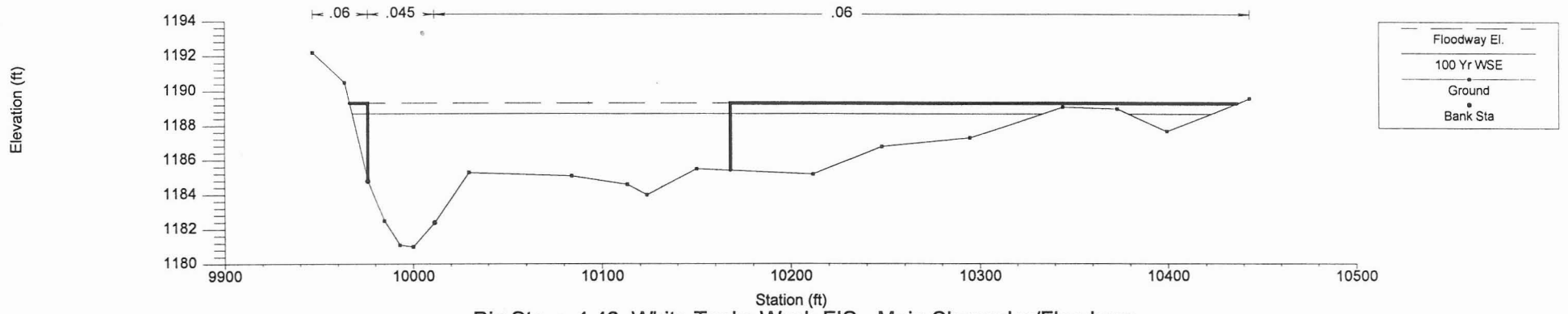
Riv Sta = 4.76 White Tanks Wash FIS - Main Channel w/Floodway



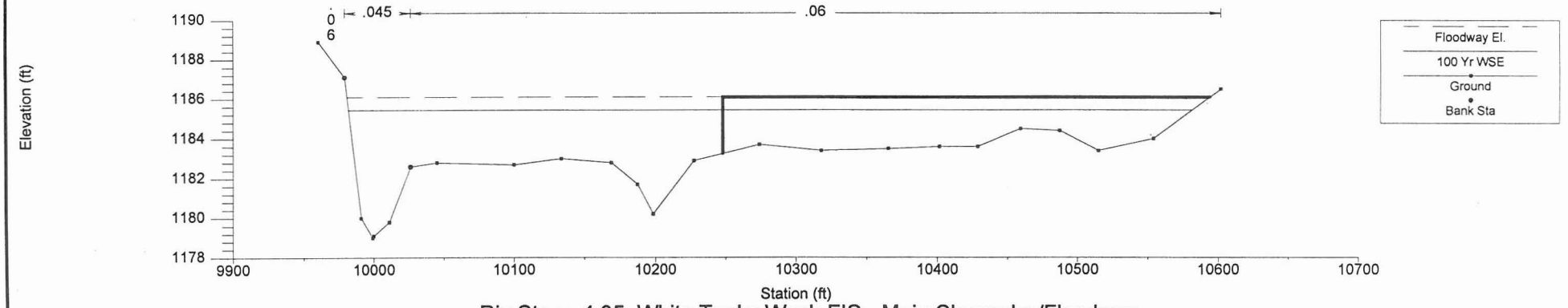
Riv Sta = 4.65 White Tanks Wash FIS - Main Channel w/Floodway



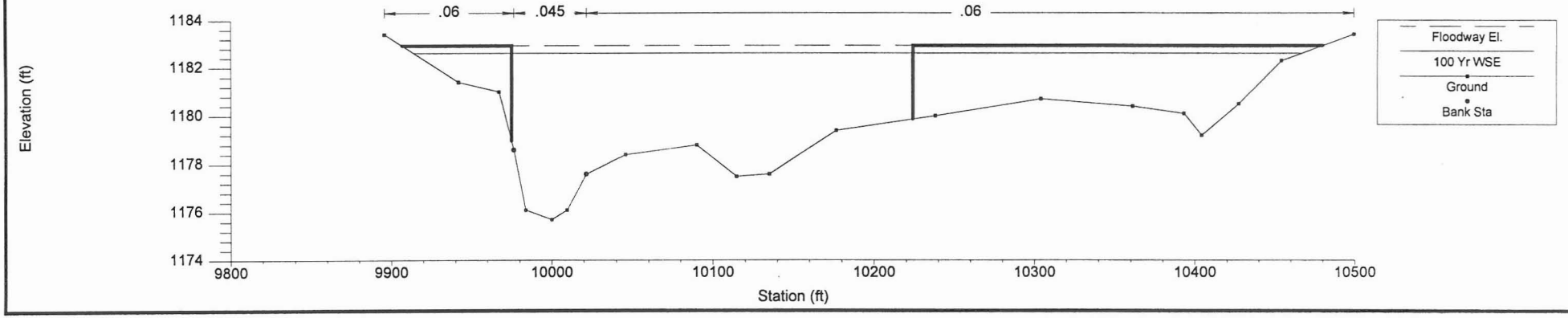
Riv Sta = 4.55 White Tanks Wash FIS - Main Channel w/Floodway

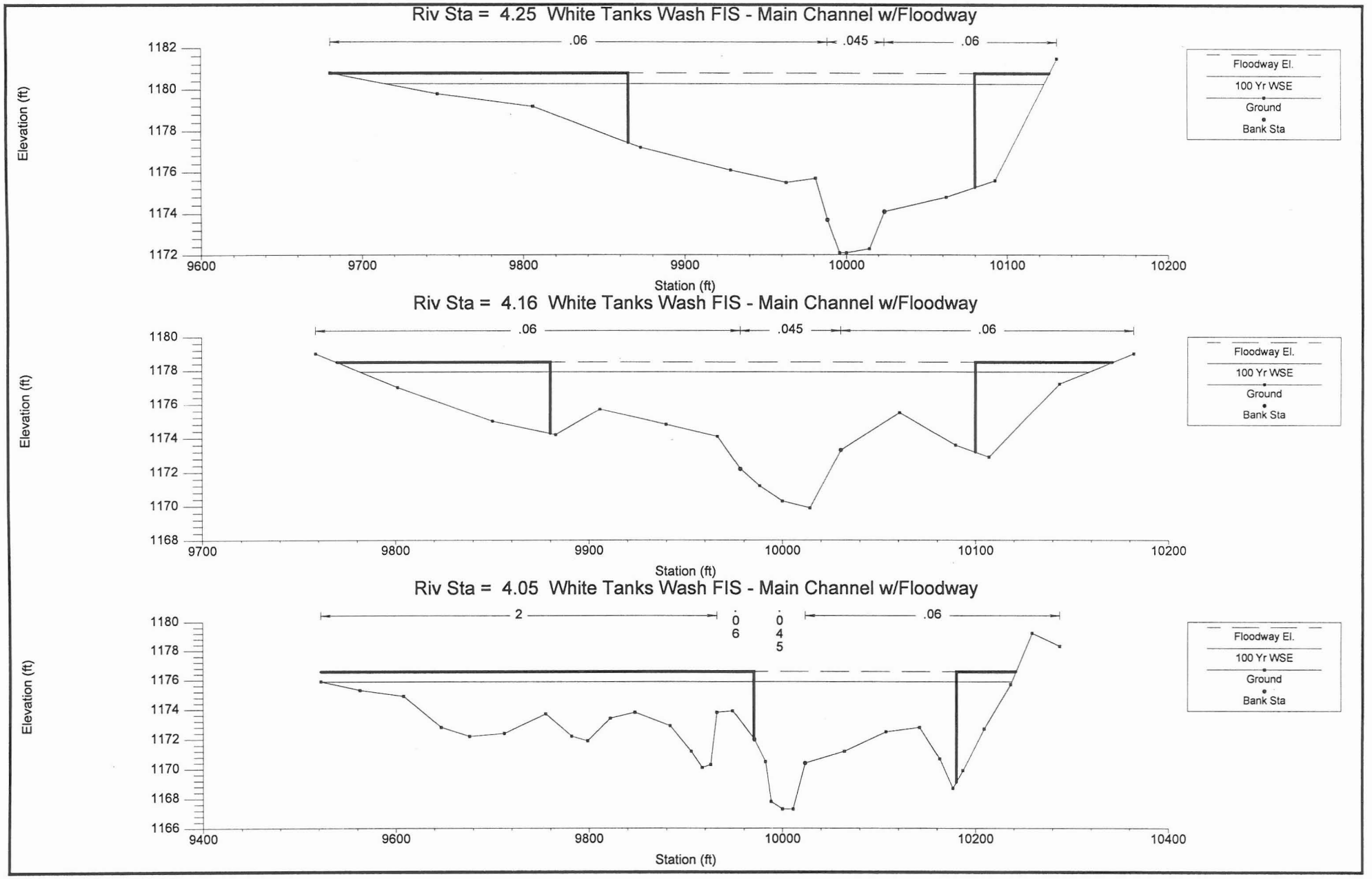


Riv Sta = 4.46 White Tanks Wash FIS - Main Channel w/Floodway

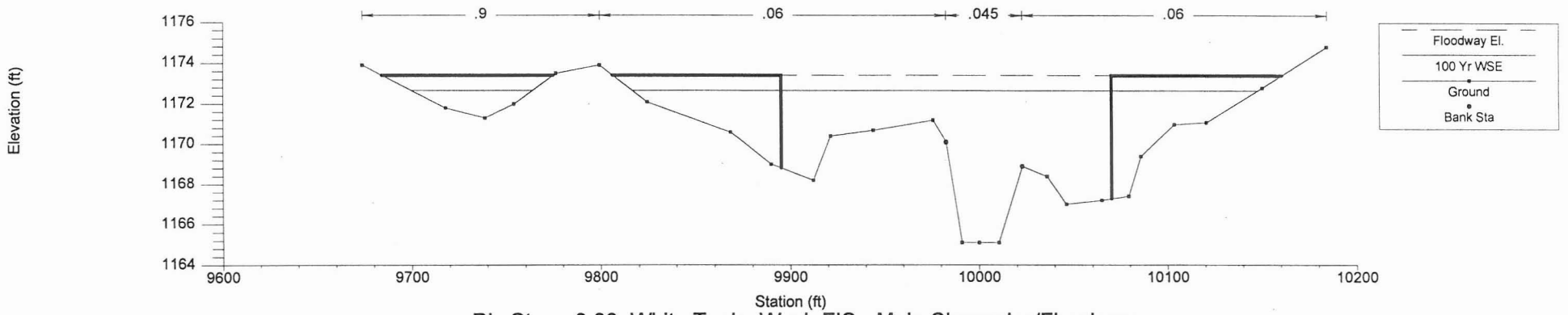


Riv Sta = 4.35 White Tanks Wash FIS - Main Channel w/Floodway

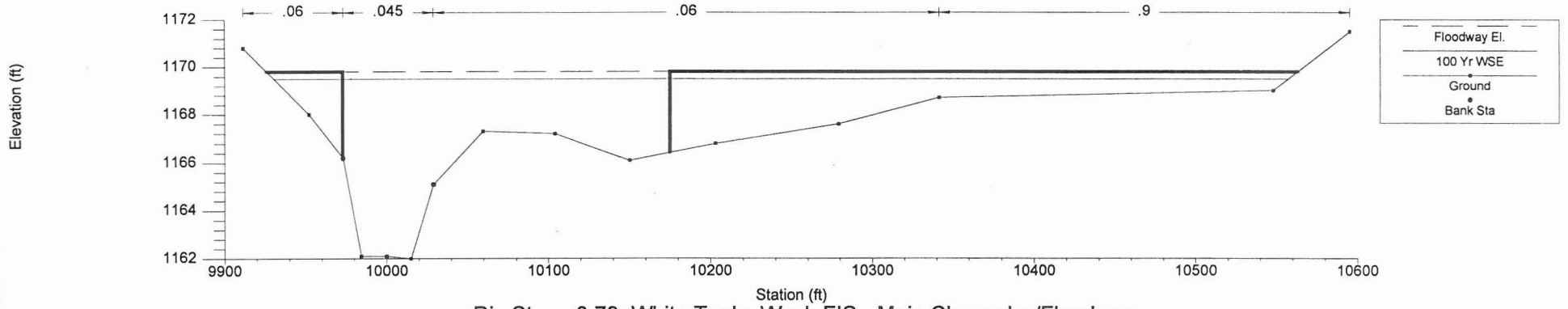



Riv Sta = 4.25 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1182
1180
1178
1176
1174
1172
9600
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 4.16 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1180
1178
1176
1174
1172
1170
1168
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 4.05 White Tanks Wash FIS - Main Channel w/Floodway
2
.06
.045
.06
Elevation (ft)
1180
1178
1176
1174
1172
1170
1168
1166
9400
9600
9800
10000
10200
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

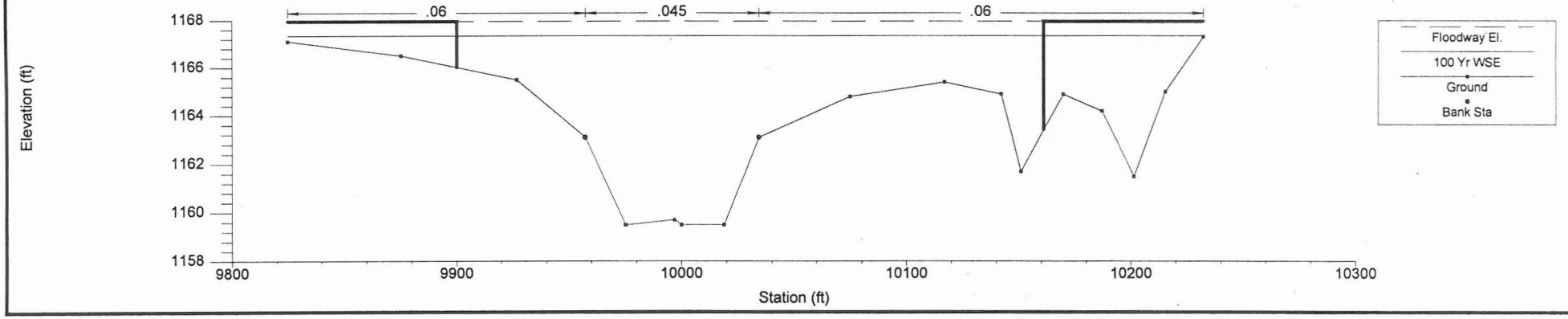
Riv Sta = 3.96 White Tanks Wash FIS - Main Channel w/Floodway

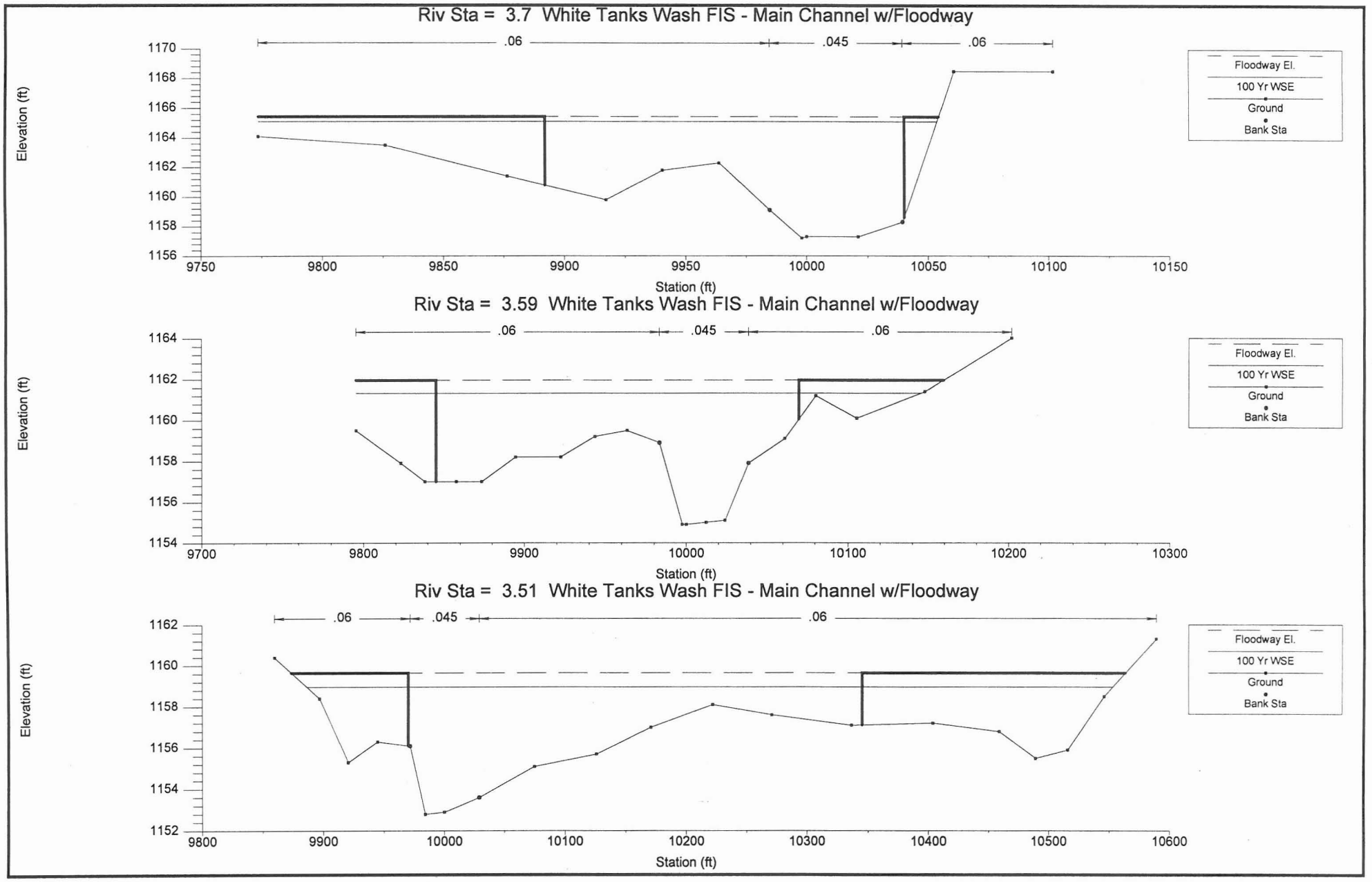


Riv Sta = 3.88 White Tanks Wash FIS - Main Channel w/Floodway

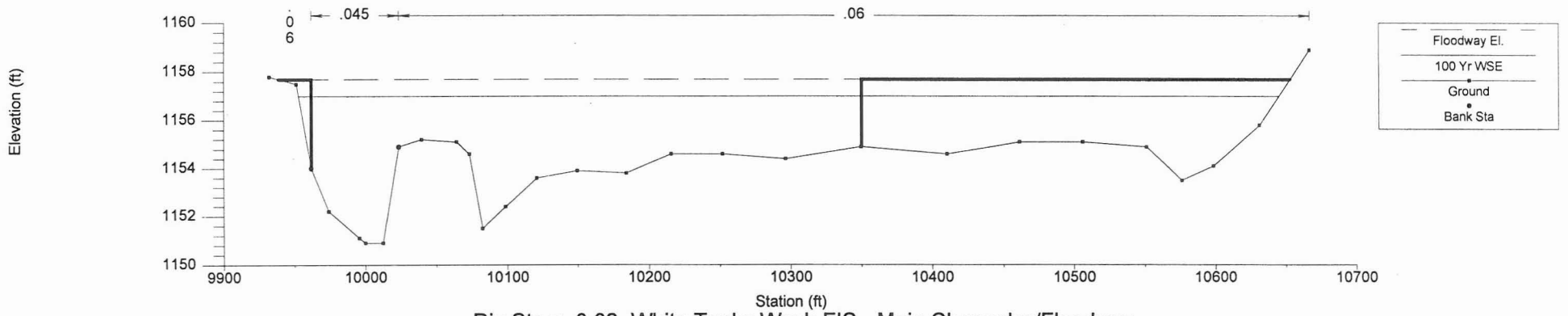


Riv Sta = 3.79 White Tanks Wash FIS - Main Channel w/Floodway

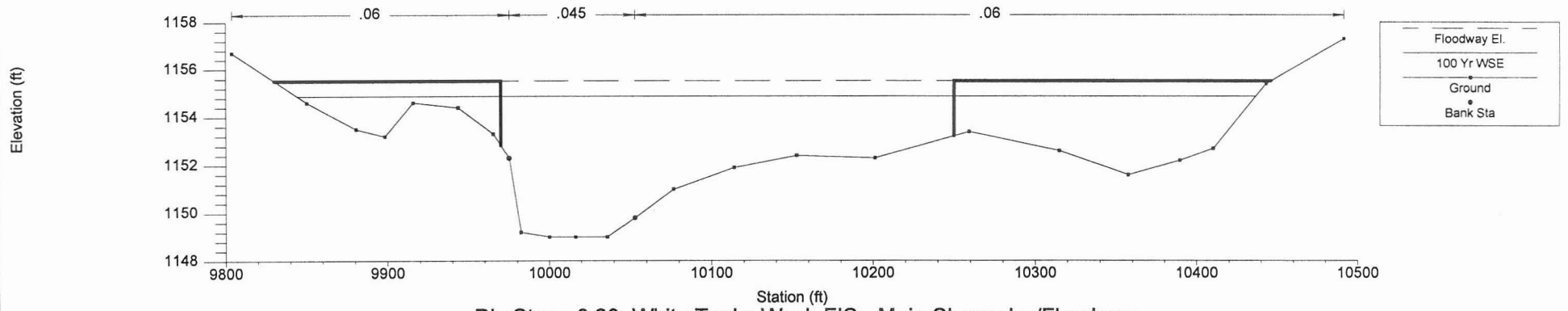



Riv Sta = 3.7 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1170
1168
1166
1164
1162
1160
1158
1156
9750
9800
9850
9900
9950
10000
10050
10100
10150
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 3.59 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1164
1162
1160
1158
1156
1154
9700
9800
9900
10000
10100
10200
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 3.51 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1162
1160
1158
1156
1154
1152
9800
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

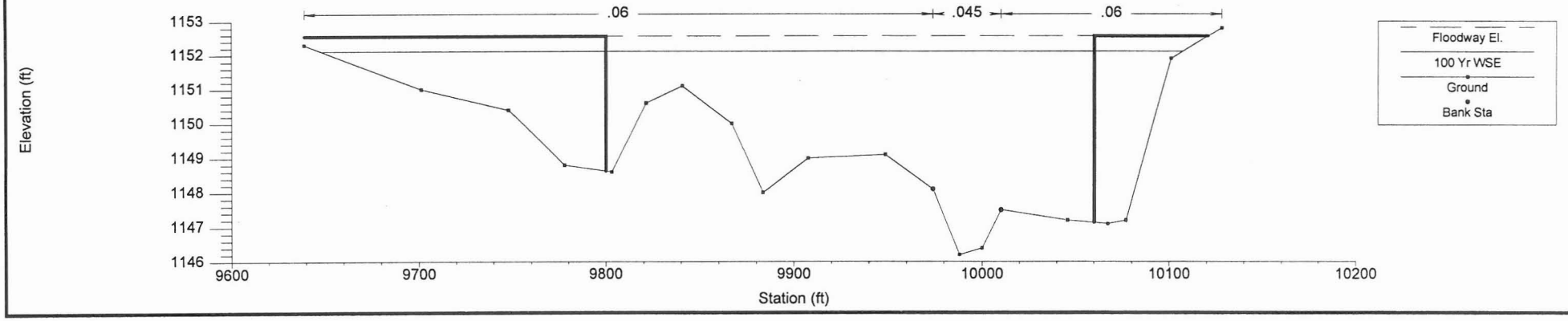
Riv Sta = 3.42 White Tanks Wash FIS - Main Channel w/Floodway

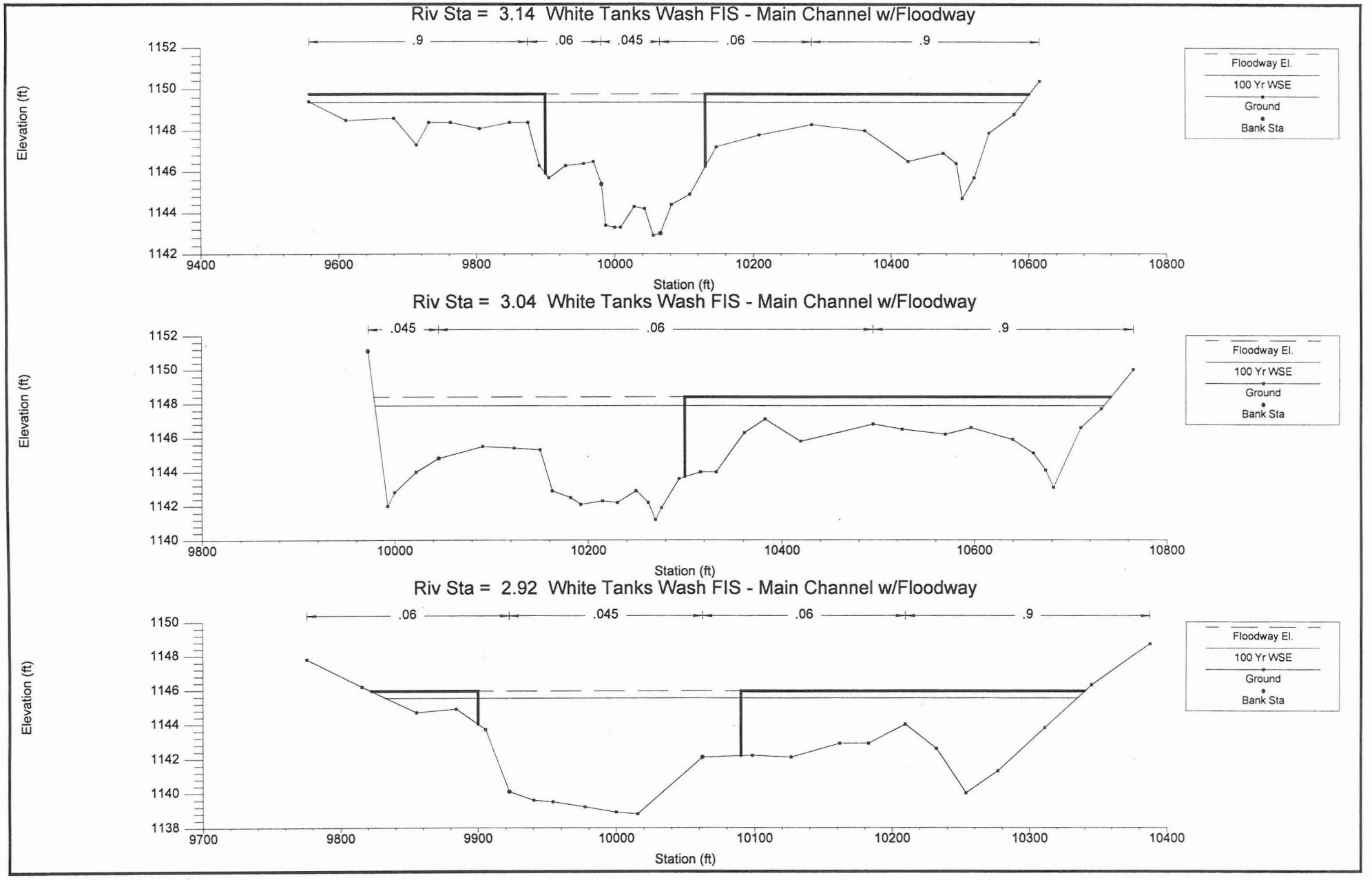


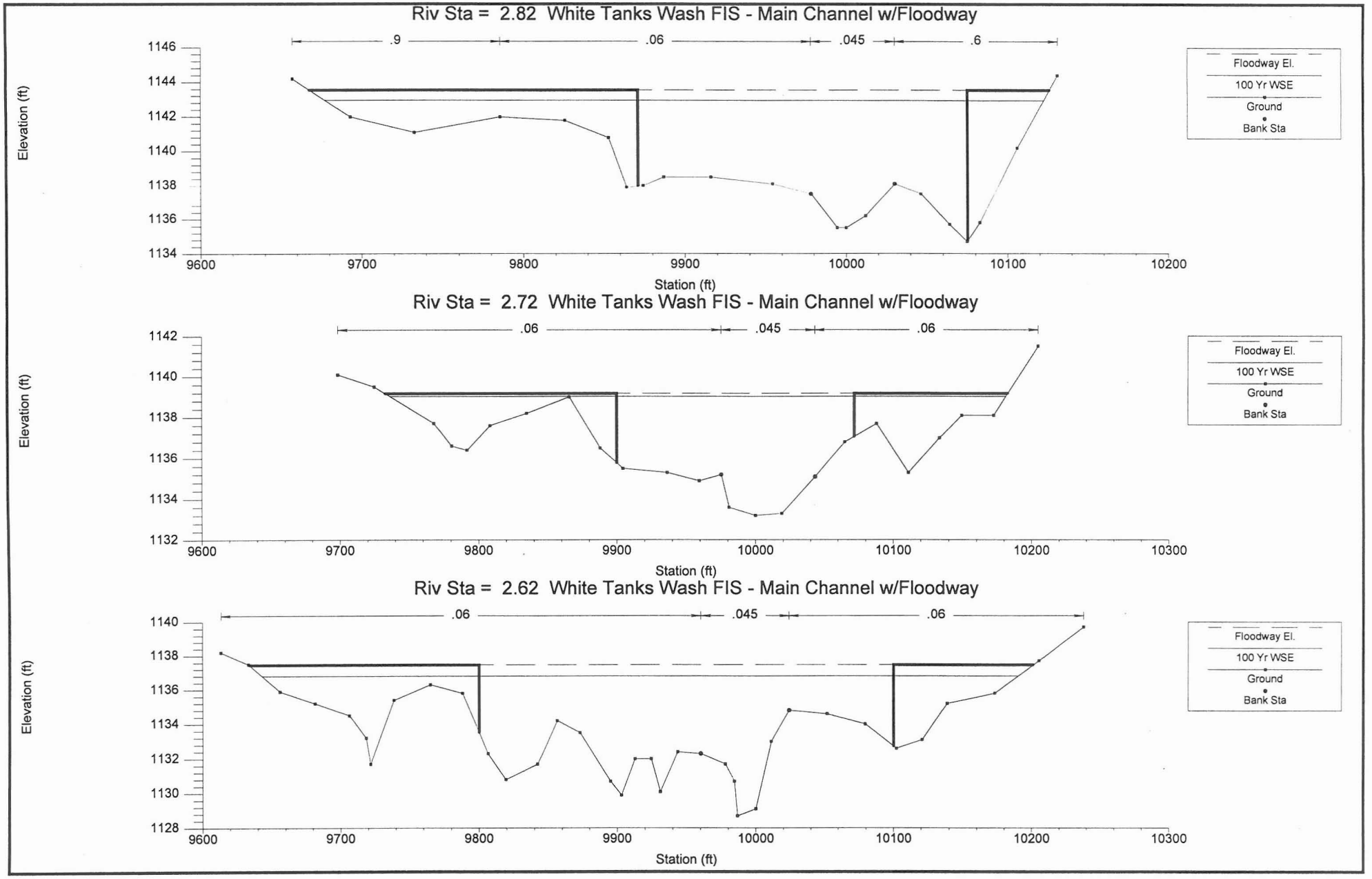
Riv Sta = 3.32 White Tanks Wash FIS - Main Channel w/Floodway



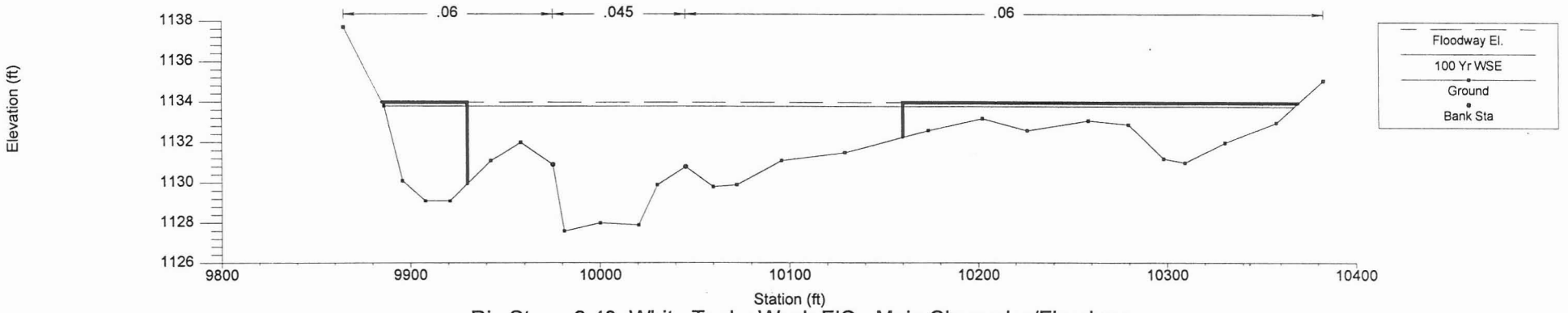
Riv Sta = 3.23 White Tanks Wash FIS - Main Channel w/Floodway



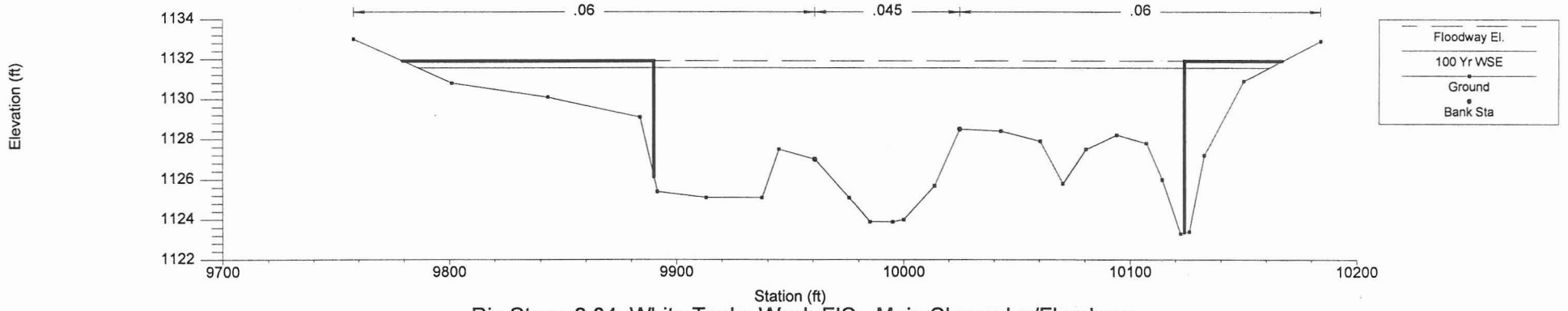

Riv Sta = 3.14 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.045
.06
.9
Elevation (ft)
1152
1150
1148
1146
1144
1142
9400
9600
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 3.04 White Tanks Wash FIS - Main Channel w/Floodway
.045
.06
.9
Elevation (ft)
1152
1150
1148
1146
1144
1142
1140
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 2.92 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
.9
Elevation (ft)
1150
1148
1146
1144
1142
1140
1138
9700
9800
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta


Riv Sta = 2.82 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.045
.6
Elevation (ft)
1146
1144
1142
1140
1138
1136
1134
9600
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 2.72 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1142
1140
1138
1136
1134
1132
9600
9700
9800
9900
10000
10100
10200
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 2.62 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1140
1138
1136
1134
1132
1130
1128
9600
9700
9800
9900
10000
10100
10200
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

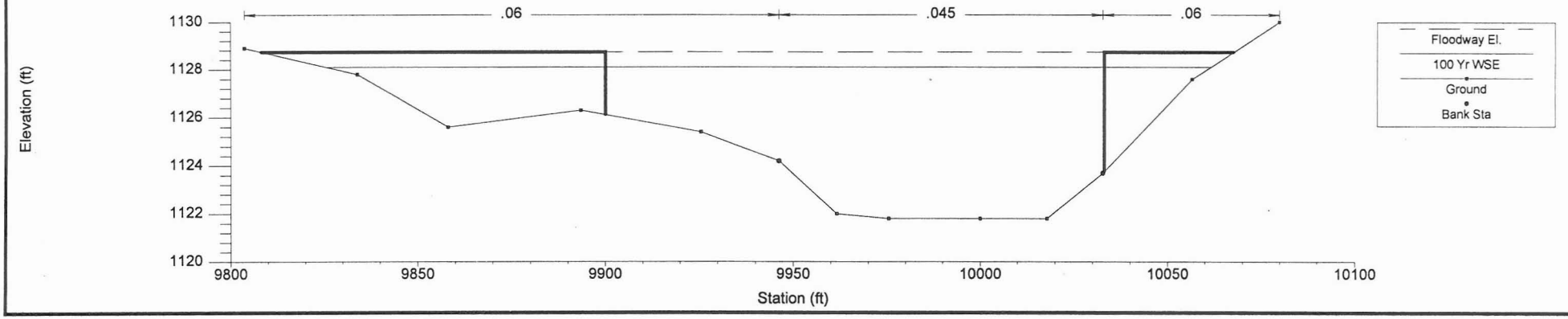
Riv Sta = 2.52 White Tanks Wash FIS - Main Channel w/Floodway

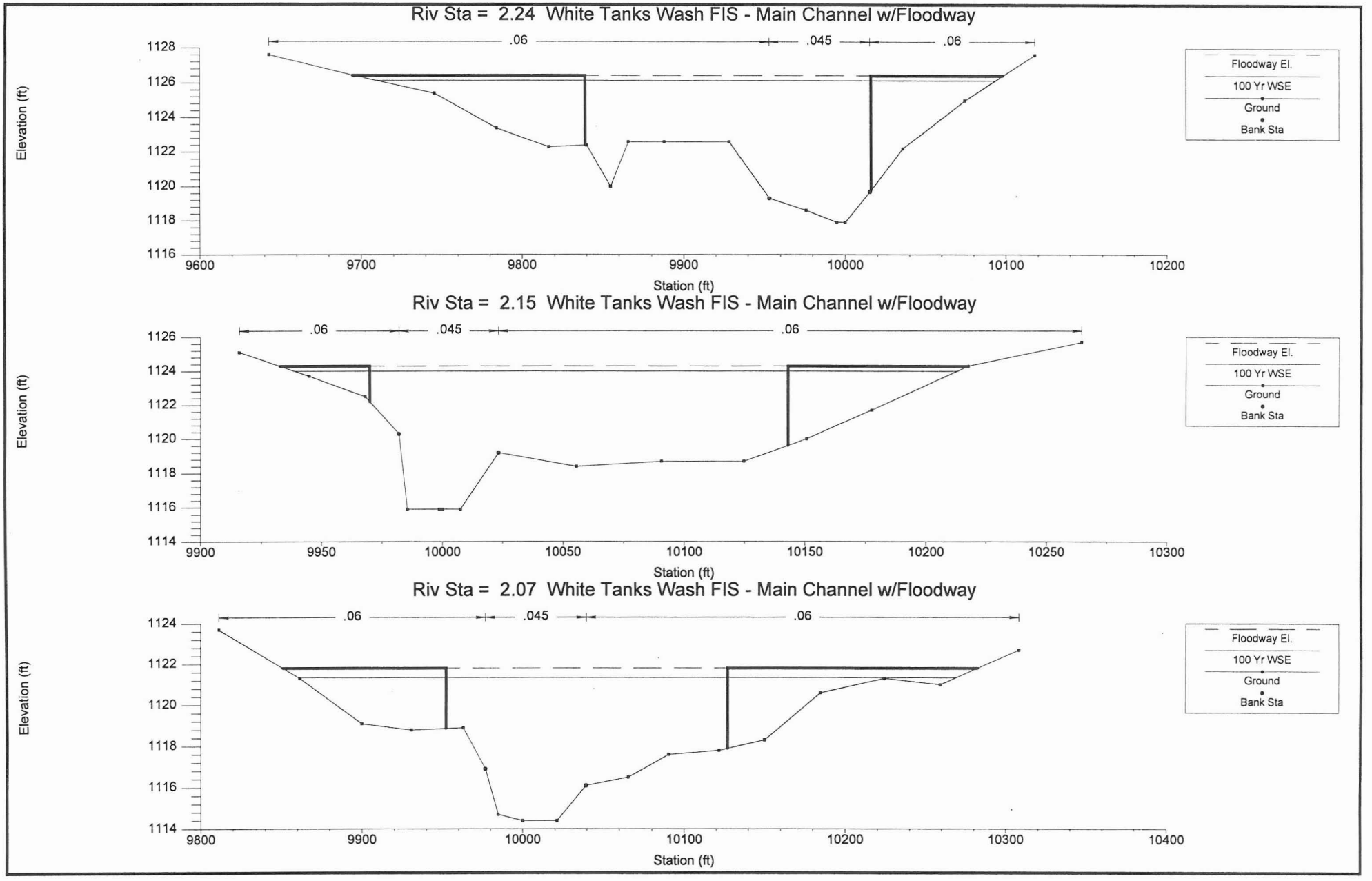


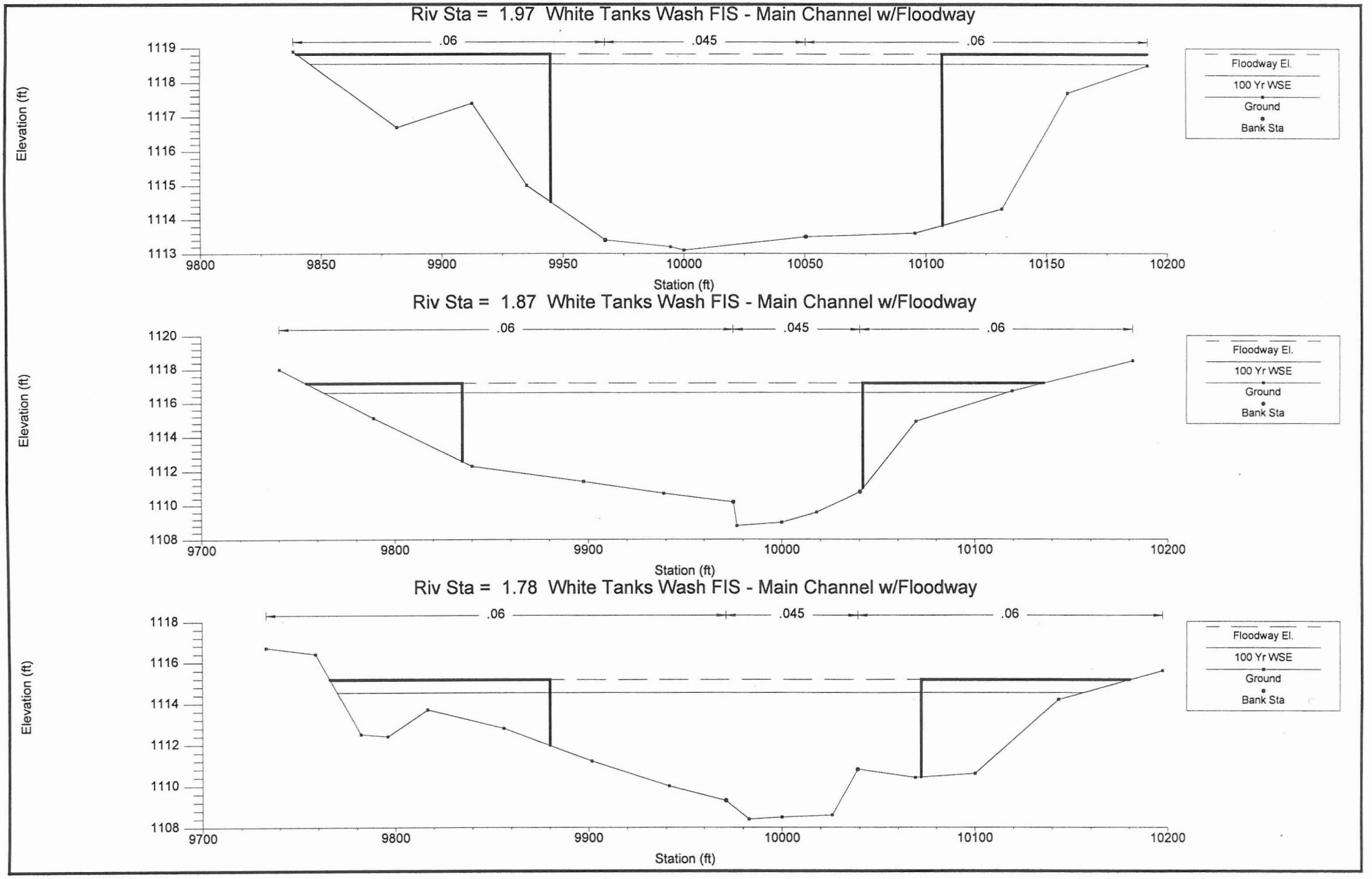
Riv Sta = 2.43 White Tanks Wash FIS - Main Channel w/Floodway



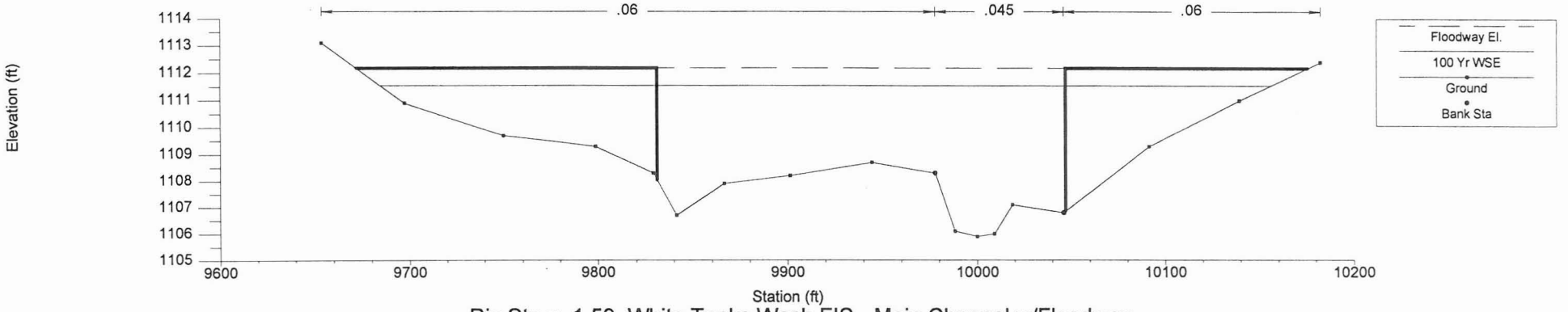
Riv Sta = 2.34 White Tanks Wash FIS - Main Channel w/Floodway



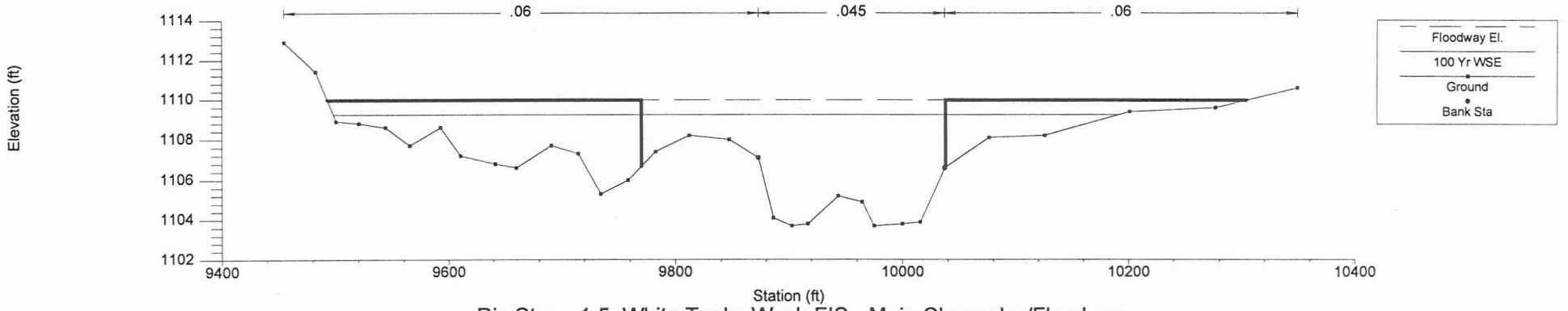

Riv Sta = 2.24 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1128
1126
1124
1122
1120
1118
1116
9600
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 2.15 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1126
1124
1122
1120
1118
1116
1114
9900
9950
10000
10050
10100
10150
10200
10250
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 2.07 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1124
1122
1120
1118
1116
1114
9800
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta


Riv Sta = 1.97 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1119
1118
1117
1116
1115
1114
1113
9800
9850
9900
9950
10000
10050
10100
10150
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 1.87 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1120
1118
1116
1114
1112
1110
1108
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 1.78 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1118
1116
1114
1112
1110
1108
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

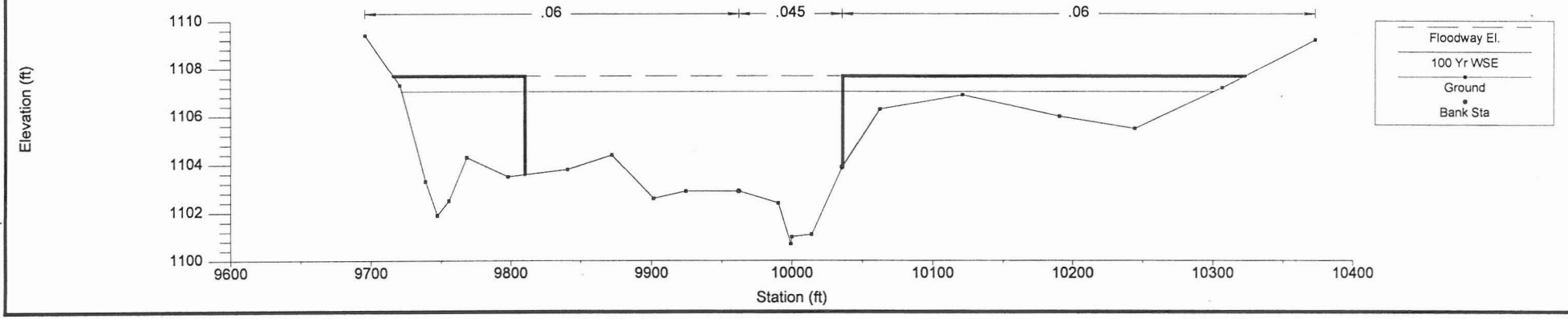
Riv Sta = 1.68 White Tanks Wash FIS - Main Channel w/Floodway

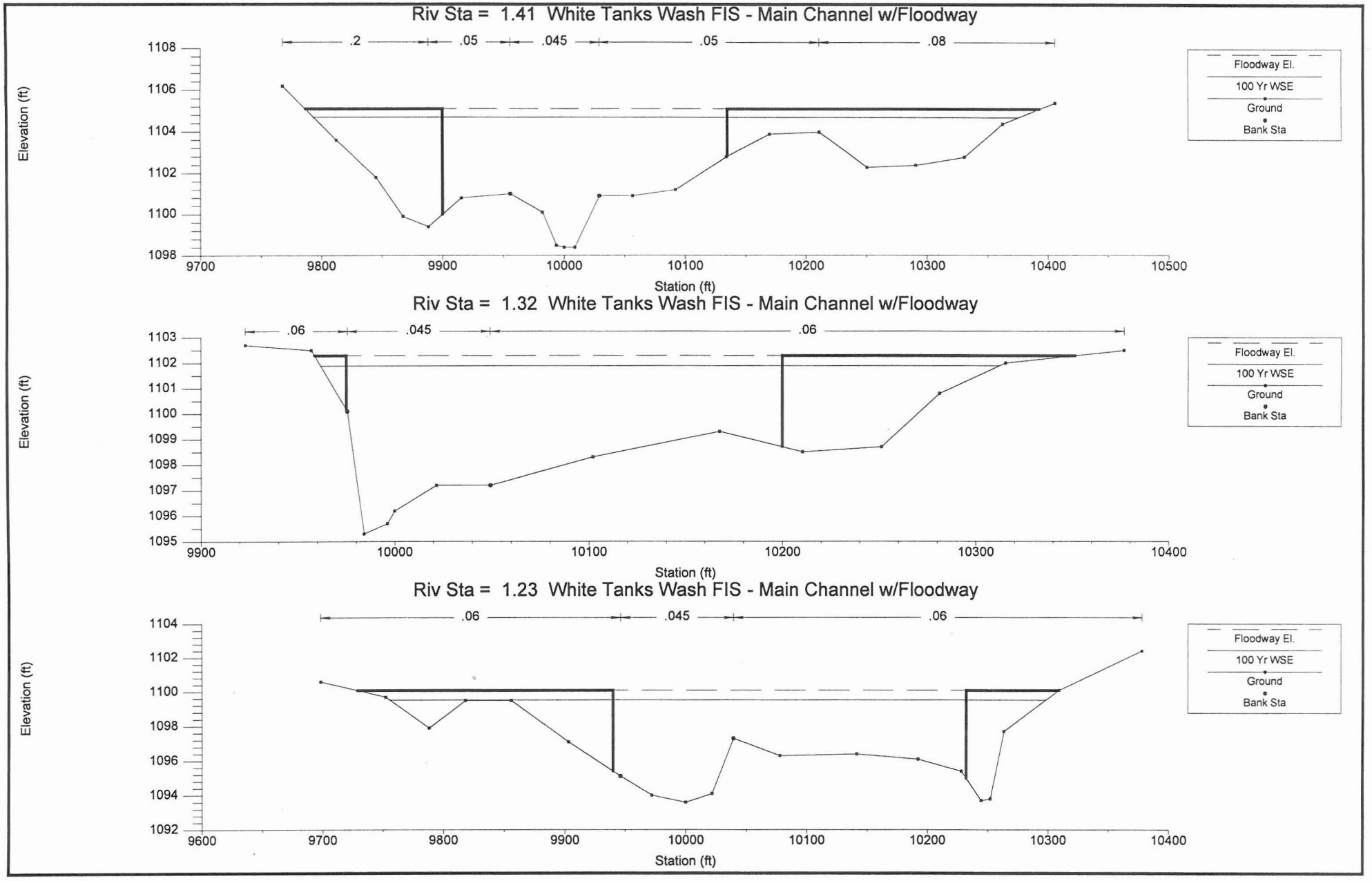


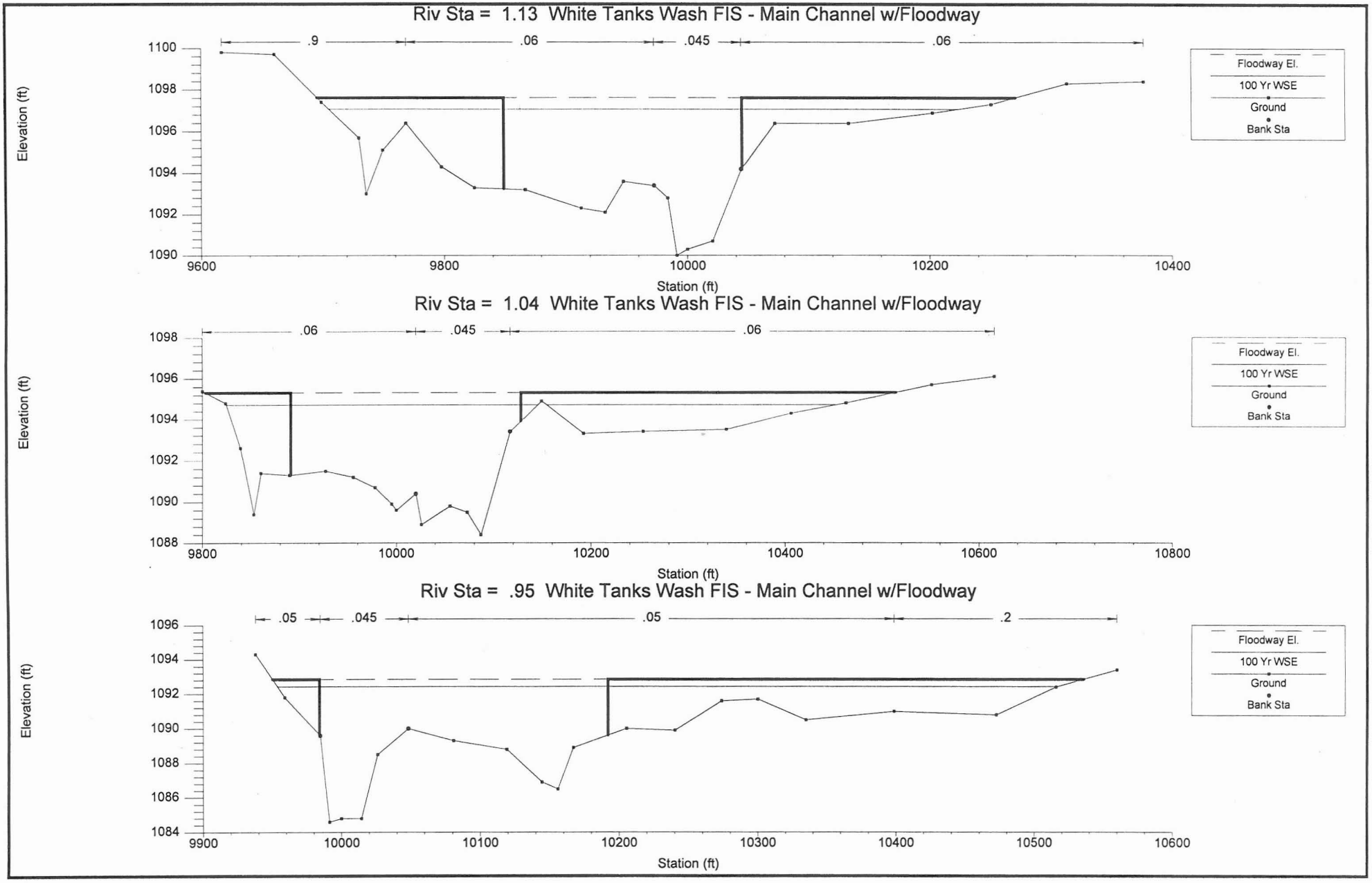
Riv Sta = 1.59 White Tanks Wash FIS - Main Channel w/Floodway

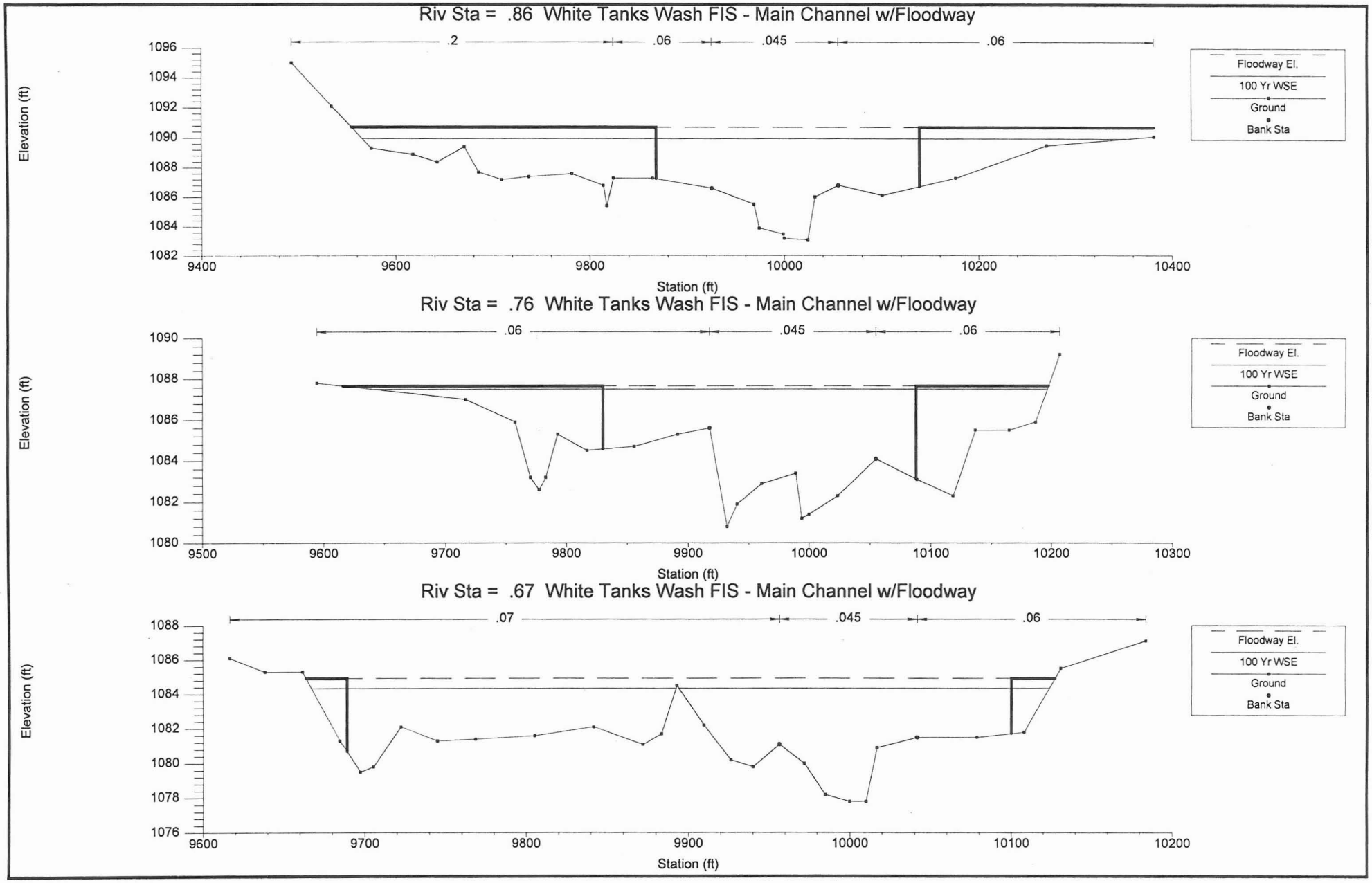


Riv Sta = 1.5 White Tanks Wash FIS - Main Channel w/Floodway

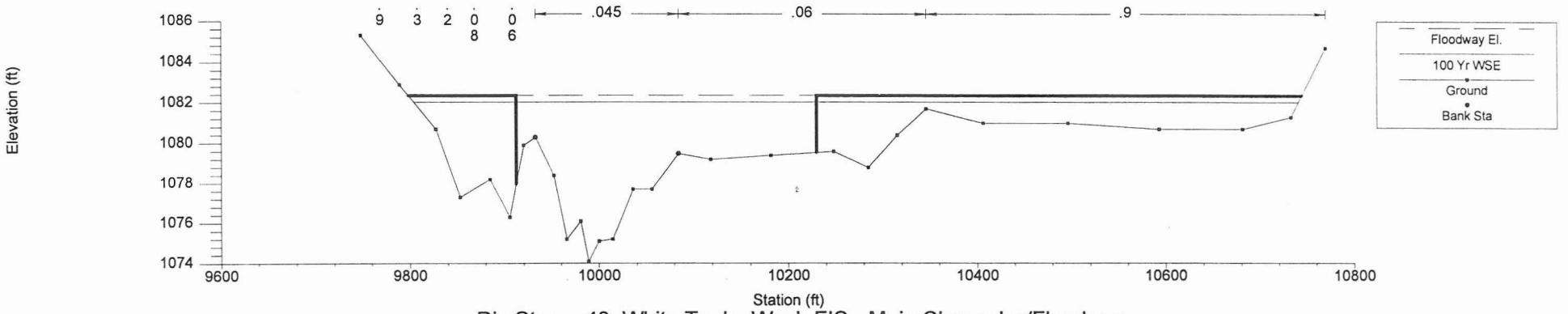



Riv Sta = 1.41 White Tanks Wash FIS - Main Channel w/Floodway
.2
.05
.045
.05
.08
Elevation (ft)
1108
1106
1104
1102
1100
1098
9700
9800
9900
10000
10100
10200
10300
10400
10500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 1.32 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1103
1102
1101
1100
1099
1098
1097
1096
1095
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 1.23 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1104
1102
1100
1098
1096
1094
1092
9600
9700
9800
9900
10000
10100
10200
10300
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

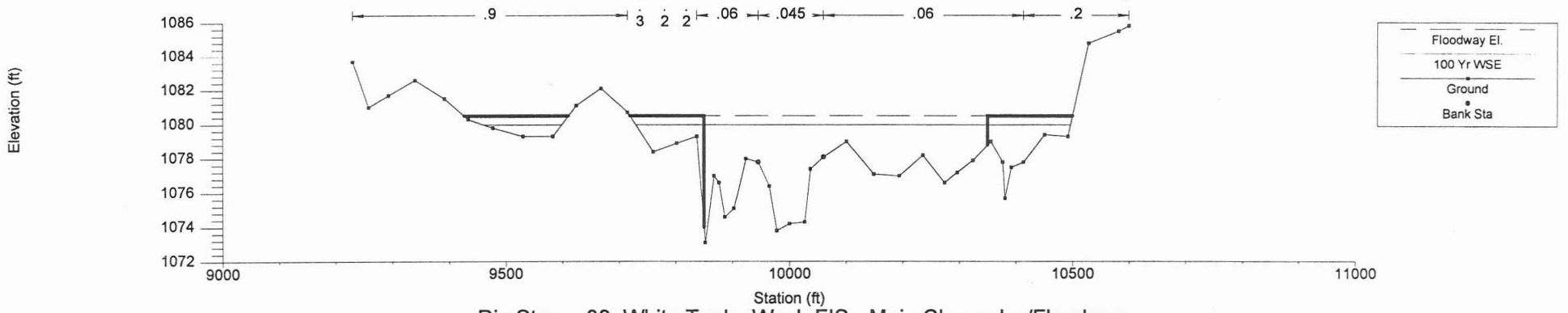

Riv Sta = 1.13 White Tanks Wash FIS - Main Channel w/Floodway
.9
.06
.045
.06
Elevation (ft)
1100
1098
1096
1094
1092
1090
9600
9800
10000
10200
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = 1.04 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1098
1096
1094
1092
1090
1088
9800
10000
10200
10400
10600
10800
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = .95 White Tanks Wash FIS - Main Channel w/Floodway
.05
.045
.05
.2
Elevation (ft)
1096
1094
1092
1090
1088
1086
1084
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta


Riv Sta = .86 White Tanks Wash FIS - Main Channel w/Floodway
.2
.06
.045
.06
Elevation (ft)
1096
1094
1092
1090
1088
1086
1084
1082
9400
9600
9800
10000
10200
10400
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = .76 White Tanks Wash FIS - Main Channel w/Floodway
.06
.045
.06
Elevation (ft)
1090
1088
1086
1084
1082
1080
9500
9600
9700
9800
9900
10000
10100
10200
10300
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = .67 White Tanks Wash FIS - Main Channel w/Floodway
.07
.045
.06
Elevation (ft)
1088
1086
1084
1082
1080
1078
1076
9600
9700
9800
9900
10000
10100
10200
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

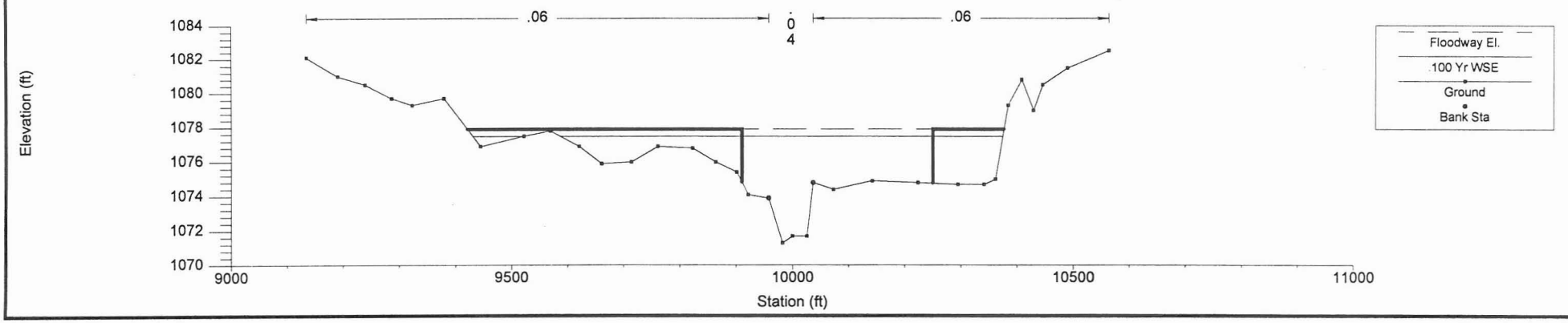
Riv Sta = .57 White Tanks Wash FIS - Main Channel w/Floodway

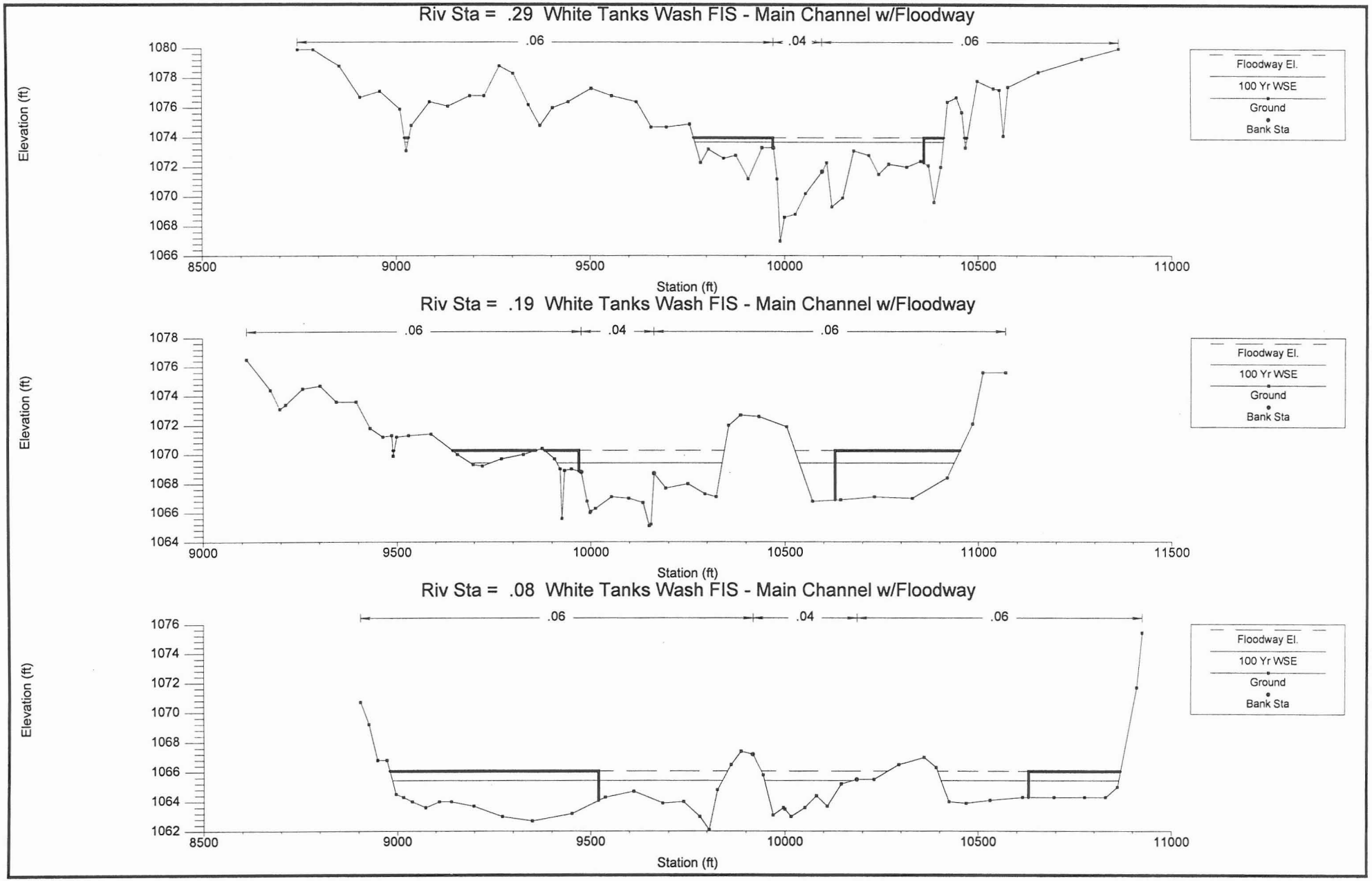


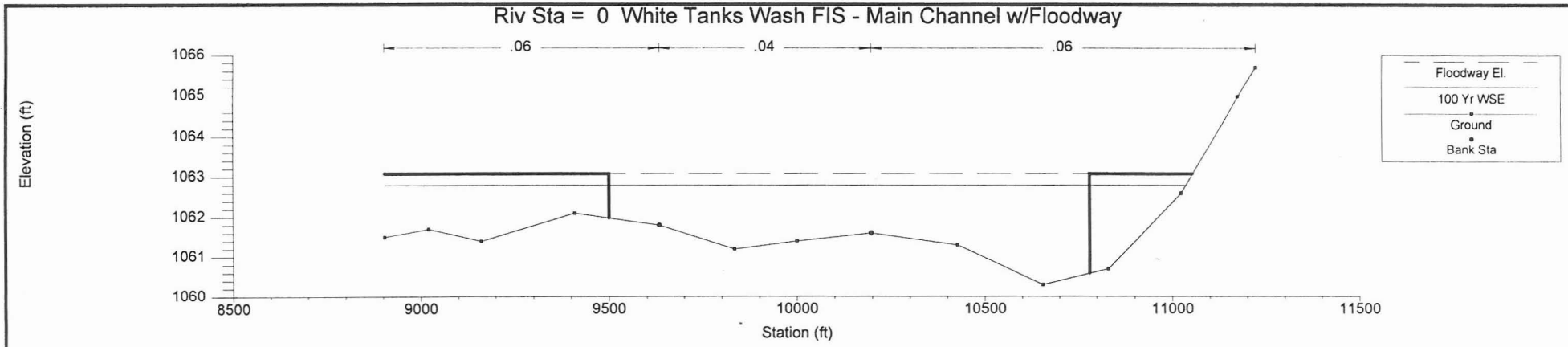
Riv Sta = .48 White Tanks Wash FIS - Main Channel w/Floodway



Riv Sta = .38 White Tanks Wash FIS - Main Channel w/Floodway




Riv Sta = .29 White Tanks Wash FIS - Main Channel w/Floodway
.06
.04
.06
Elevation (ft)
1080
1078
1076
1074
1072
1070
1068
1066
8500
9000
9500
10000
10500
11000
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = .19 White Tanks Wash FIS - Main Channel w/Floodway
.06
.04
.06
Elevation (ft)
1078
1076
1074
1072
1070
1068
1066
1064
9000
9500
10000
10500
11000
11500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta
Riv Sta = .08 White Tanks Wash FIS - Main Channel w/Floodway
.06
.04
.06
Elevation (ft)
1076
1074
1072
1070
1068
1066
1064
1062
8500
9000
9500
10000
10500
11000
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta


Riv Sta = 0 White Tanks Wash FIS - Main Channel w/Floodway
.06
.04
.06
Elevation (ft)
1066
1065
1064
1063
1062
1061
1060
8500
9000
9500
10000
10500
11000
11500
Station (ft)
Floodway El.
100 Yr WSE
Ground
Bank Sta

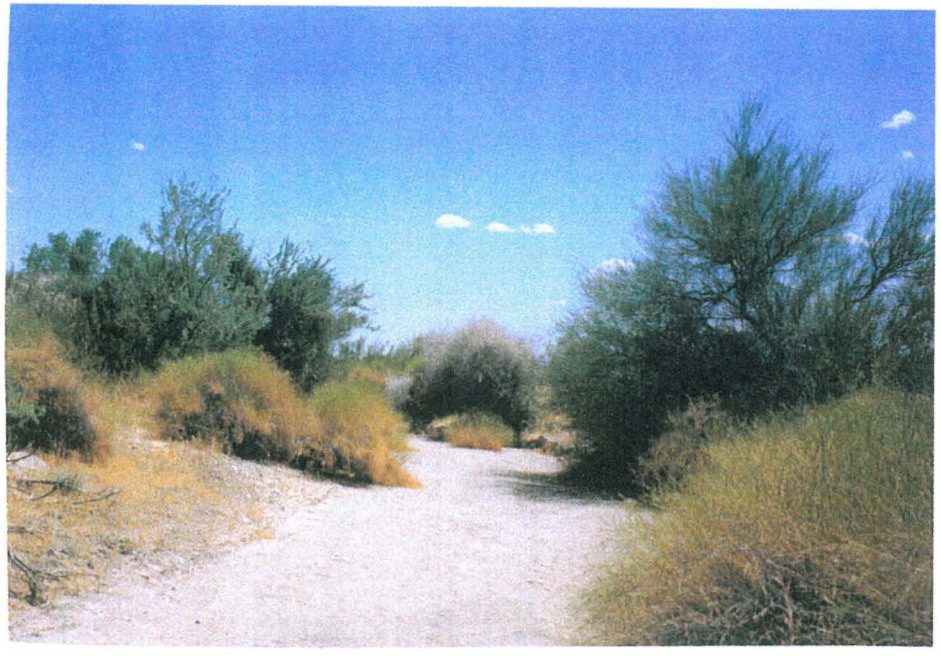
Appendix F

Photographs of Stream Sections

Tributary #1

SECTION 0.07

SECTION 0.16



SECTION 0.26

SECTION 0.34

SECTION 0.44

SECTION 0.52

SECTION 0.62

SECTION 0.71

SECTION 0.81

SECTION 0.91

SECTION 1.00

SECTION 1.10

SECTION 1.21

SECTION 1.31

SECTION 1.40

SECTION 1.49

SECTION 1.59

SECTION 1.71

SECTION 1.80

SECTION 1.89

SECTION 2.01

SECTION 2.11

SECTION 2.21

SECTION 2.30

SECTION 2.41

SECTION 2.49

SECTION 2.58

SECTION 2.68

SECTION 2.78

SECTION 2.87

SECTION 2.95

SECTION 3.05

SECTION 3.14

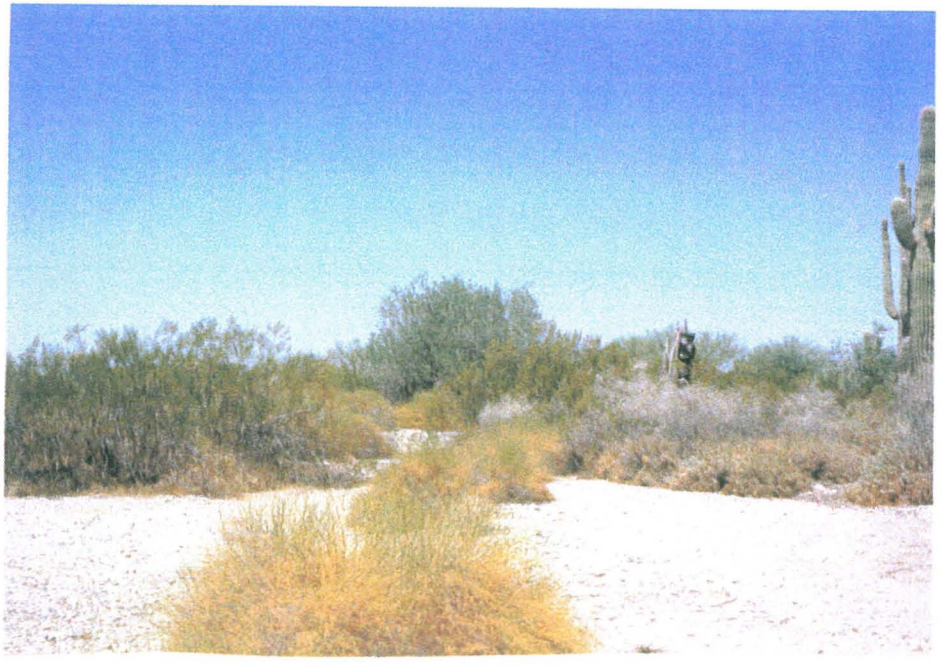
SECTION 3.25

SECTION 3.34

SECTION 3.43

SECTION 3.53

SECTION 3.57



SECTION 3.62

SECTION 3.68

SECTION 3.74

SECTION 3.89

Appendix G

HEC-2 Output File for:

Tributary #1
100-Year Water Surface Profile

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    29JAN96    TIME   17:11:28    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 17:11:28

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Branch Channel - Final Profile Model
T4      Water Surface Profile Model to Compute BFEs.
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Water Surface Profile Model for first unnamed tributary
   This model is based on:
      - The cross sections were obtained by photogrammetric methods by
        Aerial Mapping Company, Phoenix, AZ, based photographs taken
        October 1991.
      - Ineffective flow areas have been modeled using high roughness values
        so that ineffective flow areas do not conflict with the a Method 4
        (equal conveyance method) floodway analysis.


  By: MEF                                                    Prepared By:
  File Name:  BRNCH.HC2                                Alpha Engineering Group
  September 1995                                             Phoenix, Arizona
  ==============================================================================

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0      .004       0       0.0     818.0     1155

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1        0      -1.0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       27       28       26        4       43       53       54        1       110
   150

NC   0.060    0.060    0.045     0.1      0.3
  ------------------------------------------------------------------------------
  This branch joins the Main Channel at Section 3.51.  Sections 0.00, 0.07 and
  0.16 overlap with the Main Channel.  The main channel model includes the right
  half of the cross section shown on the map and this model includes the left
  half of the section.  This was done to effectively code out the ineffective
  flow areas for each model.  Flow from each branch will tend to spread into the
```

```
entire floodplain but considering typical expansion and flow patterns at
confluences, only a portion of the section is effective for conveyance.  The
hydraulic grade line at these sections is dominated by the main branch.  The
water surface elevations from that model should be used (MAIN.HC2).
-----------------------------------------------------------------------------
X1     0.00        21    9971.6   10074.8       0.0       0.0       0.0       0.0       0.0
GR   1162.2    9808.6    1160.4    9859.7    1158.4    9896.9    1155.3    9920.3    1156.3    9944.6
GR   1156.1    9971.6    1152.8    9984.3    1152.9   10000.0    1153.6   10029.0    1155.1   10074.8
GR   1155.7   10125.7    1157.0   10170.4    1158.1   10221.8    1157.6   10270.7    1157.1   10336.2
GR   1157.2   10403.7    1156.8   10458.8    1155.5   10489.3    1155.9   10515.7    1158.5   10545.8
GR   1161.3   10588.8
-----------------------------------------------------------------------------
Section 0.07
Ineffective flow area between stations 10202.2 and 10319.4.
-----------------------------------------------------------------------------

NH       4       .06    9967.6      .045   10034.2       .06   10202.2       .5   10319.4
X1    0.07        27    9967.6   10034.2     365.0     380.0     380.0       0.0       0.0
GR   1162.3    9840.2    1160.1    9876.5    1158.2    9896.6    1158.7    9916.4    1159.2    9948.5
GR   1160.5    9967.6    1157.7    9984.5    1156.6    9999.4    1156.6   10000.7    1159.1   10016.6
GR   1159.5   10034.2    1157.9   10061.9    1157.0   10076.9    1157.0   10096.4    1157.0   10112.2
GR   1158.2   10133.3    1158.2   10161.3    1159.2   10182.3    1159.5   10202.2    1158.9   10222.1
GR   1154.9   10236.3    1154.9   10238.8    1155.0   10251.3    1155.1   10262.9    1157.9   10277.5
GR   1159.1   10300.1    1161.2   10319.4

NC     .06       .06      .045
X1    0.16        13    9987.1   10031.5     420.0     480.0     490.0       0.0       0.0
GR   1166.2    9938.4    1163.6    9967.9    1164.1    9987.1    1159.8    9997.4    1159.9   10002.6
GR   1160.3   10016.2    1162.7   10031.5    1162.8   10079.7    1161.6   10141.2    1160.1   10187.7
GR   1162.8   10214.1    1163.8   10251.3    1164.0   10278.7

X1    0.26        15    9953.8   10017.8     455.0     450.0     480.0       0.0       0.0
GR   1167.0    9821.3    1166.8    9871.6    1166.2    9892.6    1164.9    9899.5    1166.1    9919.8
GR   1166.8    9953.8    1164.7    9985.6    1164.2    9993.6    1164.2   10006.5    1166.6   10017.8
GR   1166.9   10031.9    1165.9   10068.2    1166.2   10114.4    1166.8   10150.1    1168.7   10195.2

X1    0.34        13    9981.8   10017.4     465.0     520.0     500.0       0.0       0.0
GR   1171.0    9877.7    1170.1    9894.3    1169.5    9913.8    1169.5    9936.4    1166.8    9941.3
GR   1167.8    9954.3    1170.5    9969.3    1170.2    9981.8    1166.8    9991.1    1166.8    9998.9
GR   1166.8   10009.0    1170.0   10017.4    1171.0   10052.2

X1    0.44        19    9989.4   10017.5     475.0     540.0     520.0       0.0       0.0
GR   1174.7    9832.8    1173.6    9872.7    1173.7    9908.1    1173.8    9966.4    1173.1    9989.4
GR   1171.1    9996.6    1169.8   10000.0    1170.7   10008.2    1171.6   10017.5    1171.2   10044.2
GR   1173.0   10068.5    1173.9   10121.7    1173.2   10200.5    1173.3   10227.1    1172.3   10237.8
GR   1173.4   10275.8    1172.6   10345.0    1172.4   10412.3    1174.4   10474.2
-----------------------------------------------------------------------------
Section 0.52
Ineffective flow area between stations 10266.4 and 10819.0.
-----------------------------------------------------------------------------
```

```
NH      4     .060   9989.8    .045  10022.9     .06  10266.4      .5  10819.0
X1   0.52       20   9989.8  10022.9    420.0   440.0    430.0     0.0      0.0
GR 1176.6   9961.3   1176.1   9989.8   1173.9  9996.2   1173.5 10000.0   1173.5  10008.8
GR 1175.8  10022.9   1174.8  10082.2   1174.1 10131.3   1175.3 10165.1   1175.4  10266.4
GR 1175.6  10381.0   1175.6  10441.7   1175.8 10473.1   1174.8 10489.2   1174.8  10504.6
GR 1175.8  10517.1   1175.1  10587.3   1175.4 10657.4   1175.9 10737.6   1178.2  10819.0

NC    .06     .06     .045
X1   0.62       10   9988.3  10011.2    495.0   550.0    490.0     0.0      0.0
GR 1180.5   9814.8   1179.8   9902.4   1178.0  9955.3   1177.1  9969.4   1177.9   9988.3
GR 1176.7  10000.0   1178.0  10011.2   1179.4 10027.0   1179.6 10085.5   1180.2  10171.3

X1   0.71       13   9989.1  10023.3    505.0   510.0    500.0     0.0      0.0
GR 1183.6   9851.4   1182.4   9895.7   1183.0  9937.3   1182.3  9989.1   1179.6  10000.0
GR 1179.6  10005.6   1181.2  10023.3   1181.7 10052.9   1181.0 10077.0   1181.1  10096.0
GR 1179.9  10106.5   1181.9  10134.4   1184.1 10211.2

X1   0.81       16   9961.9  10011.0    510.0   510.0    500.0     0.0      0.0
GR 1188.3   9853.3   1185.4   9885.3   1183.9  9899.8   1185.2  9919.9   1183.4   9935.2
GR 1185.9   9961.9   1185.2   9988.5   1184.8  9994.7   1183.3  9999.1   1183.4  10000.0
GR 1186.1  10011.0   1184.2  10034.9   1182.7 10042.1   1185.4 10074.9   1185.0  10107.3
GR 1188.2  10165.0
  ------------------------------------------------------------------------
  Section 0.91
  Ineffective flow area between stations 10160.9 and 10318.8.
  ------------------------------------------------------------------------

NH      4     .06    9970.6    .045  10016.2     .06  10160.9      .9  10318.8
X1   0.91       22   9970.6  10016.2    525.0   540.0    530.0     0.0      0.0
GR 1191.6   9851.5   1190.5   9868.2   1189.3  9874.7   1190.5  9887.8   1188.7   9923.4
GR 1189.9   9946.7   1190.2   9961.2   1189.2  9970.6   1188.7  9994.1   1187.7   9999.9
GR 1188.7  10000.0   1189.3  10016.2   1190.9 10040.6   1189.6 10084.1   1190.1  10125.2
GR 1190.4  10160.9   1189.6  10177.0   1188.1 10181.6   1188.3 10186.7   1190.7  10193.7
GR 1190.6  10242.4   1191.7  10318.8

NC    .06     .06     .045
X1   1.00       16   9981.6  10020.1    480.0   490.0    485.0     0.0      0.0
GR 1196.0   9812.1   1195.1   9857.4   1194.0  9884.3   1192.8  9905.3   1194.3   9926.6
GR 1195.1   9957.1   1195.5   9981.6   1194.3  9992.6   1192.5  9999.5   1192.1  10000.0
GR 1193.3  10009.0   1195.0  10020.1   1194.3 10051.3   1194.2 10123.2   1193.7  10153.0
GR 1195.4  10182.2

X1   1.10       16   9988.1  10015.2    545.0   510.0    510.0     0.0      0.0
GR 1199.6   9844.0   1198.6   9888.9   1197.3  9895.8   1198.3  9917.9   1197.7   9943.1
GR 1197.4   9951.6   1198.8   9970.7   1198.2  9988.1   1196.7  9996.1   1196.4  10000.0
GR 1198.1  10015.2   1200.6  10026.7   1199.6 10041.9   1198.1 10055.1   1198.5  10091.5
GR 1199.8  10117.5
```

```
X1     1.21        20     9942.0    10022.1      600.0      560.0      600.0        0.0        0.0
GR   1204.5    9656.9     1203.6     9678.5     1202.0     9687.8     1203.4     9701.1     1203.6     9722.6
GR   1204.3    9797.6     1202.7     9828.9     1203.5     9855.2     1201.9     9867.7     1204.1     9902.2
GR   1204.7    9942.0     1202.9     9958.6     1201.4     9974.5     1202.7     9991.6     1201.2    10000.0
GR   1201.8   10013.0     1204.9    10022.1     1204.4    10076.6     1205.6    10199.3     1206.7    10285.8
  ----------------------------------------------------------------------------
  Section 1.31
  Ineffective flow area between stations 9644.4 and 9814.4.
  ----------------------------------------------------------------------------

NH       4        .2     9814.4       .05     9970.8       .045    10052.8        .06    10127.5
X1    1.31        20     9970.8    10017.6      500.0      490.0      510.0        0.0        0.0
GR   1209.5    9644.4     1208.9     9692.3     1207.4     9703.4     1208.6     9729.1     1207.5     9752.8
GR   1209.0    9814.4     1208.0     9876.0     1206.7     9882.4     1208.1     9893.6     1208.8     9924.0
GR   1208.7    9970.8     1208.0     9984.5     1207.2     9995.7     1207.0    10000.0     1208.5    10006.5
GR   1208.7   10017.6     1209.4    10052.8     1208.0    10069.8     1208.5    10080.9     1209.9    10127.5

NH       4       .06     9992.9       .045    10063.9       .05     10133.5       .045    10250.2
X1    1.40        16     9992.9    10063.9      490.0      485.0      505.0        0.0        0.0
GR   1215.5    9779.5     1213.7     9836.1     1213.0     9889.3     1213.4     9941.0     1212.3     9992.9
GR   1210.8   10000.0     1211.7    10009.8     1212.9    10017.8     1213.0    10027.6     1211.2    10040.2
GR   1213.5   10063.9     1213.2    10133.5     1211.8    10169.4     1213.0    10197.9     1211.7    10210.2
GR   1213.6   10250.2

NH       3       .045    10106.8       .05     10268.3       .045    10415.0
X1    1.49        21     9992.6    10106.8      460.0      470.0      475.0        0.0        0.0
GR   1217.6    9992.6     1216.5     9998.5     1215.8    10000.0     1216.1    10007.2     1217.2    10017.0
GR   1216.6   10039.9     1216.5    10062.2     1216.1    10073.9     1216.9    10106.8     1217.8    10175.7
GR   1216.4   10182.7     1217.4    10205.8     1217.2    10245.6     1216.2    10252.8     1216.3    10259.9
GR   1217.4   10268.3     1216.0    10298.9     1215.3    10311.4     1216.6    10334.1     1216.9    10362.0
GR   1219.0   10415.0

NH       4       .045     9895.3       .05     9949.6       .045    10027.9        .05    10400
X1    1.59        17     9949.6    10027.9      480.0      510.0      540.0        0.0        0.0
GR   1222.2    9782.2     1221.0     9801.4     1221.8     9836.6     1220.5     9857.4     1222.0     9895.3
GR   1222.2    9949.6     1221.0     9977.7     1220.8     9996.4     1220.1    10000.0     1221.2    10015.6
GR   1222.5   10027.9     1220.9    10065.8     1221.2    10101.4     1221.4    10161.1     1221.3    10199.4
GR   1222.1   10288.5     1222.5     10400

NC     .055      .055      .045
X1    1.71        28     9994.7    10032.8      570.0      575.0      590.0        0.0        0.0
GR   1227.7    9994.7     1225.9    10000.0     1226.4    10011.4     1226.9    10018.3     1225.3    10021.7
GR   1226.9   10032.8     1226.5    10079.3     1224.8    10090.3     1227.0    10115.1     1226.3    10140.9
GR   1227.2   10153.4     1225.7    10161.0     1226.8    10178.5     1227.5    10250.0     1228.3    10267.7
GR   1225.0   10277.2     1226.1    10287.7     1226.6    10298.3     1227.3    10319.7     1226.7    10349.7
GR   1227.7   10400.1     1227.2    10447.5     1225.5    10469.3     1227.0    10480.2     1228.1    10504.3
GR   1227.1   10534.8     1226.1    10540.8     1228.6    10580.9
```

```
X1     1.80        22    9958.8   10028.4     500.0     485.0     490.0       0.0       0.0
GR   1232.8    9958.8    1231.5    9967.1    1230.3    9974.1    1230.4    9981.2    1231.2    9991.1
GR   1230.3   10000.0    1230.3   10011.7    1232.3   10028.4    1231.3   10060.2    1232.7   10103.3
GR   1230.6   10188.3    1230.6   10237.8    1229.9   10264.1    1231.9   10320.3    1231.1   10405.1
GR   1231.0   10488.8    1231.1   10509.2    1230.9   10523.1    1231.2   10542.6    1230.6   10550.5
GR   1230.5   10557.6    1232.0   10588.3

X1     1.89        34    9925.9   10049.1     500.0     540.0     505.0       0.0       0.0
GR   1238.5    9754.3    1237.5    9813.6    1236.6    9872.0    1236.2    9898.7    1235.5    9909.7
GR   1237.3    9925.9    1236.4    9962.6    1233.4    9980.8    1236.1    9998.1    1234.1   10000.0
GR   1236.0   10017.6    1237.4   10049.1    1237.4   10082.3    1235.1   10101.8    1236.5   10123.3
GR   1237.1   10153.4    1237.5   10185.1    1237.2   10301.5    1238.0   10394.5    1237.8   10447.0
GR   1234.8   10480.1    1234.4   10491.5    1233.8   10497.5    1235.3   10508.8    1234.6   10518.3
GR   1237.3   10531.0    1236.7   10558.7    1234.6   10570.8    1234.9   10594.7    1236.9   10619.4
GR   1236.0   10644.0    1234.8   10656.0    1237.1   10676.9    1237.6   10744.5

X1     2.01        24    9935.0   10048.9     600.0     575.0     595.0       0.0       0.0
GR   1242.9    9859.8    1241.8    9880.3    1241.1    9889.4    1242.5    9904.9    1239.6    9911.5
GR   1240.1    9917.4    1242.4    9935.0    1241.7    9976.7    1239.9    9997.3    1239.5   10000.0
GR   1241.5   10019.9    1242.7   10048.9    1240.9   10069.2    1242.7   10086.4    1240.9   10098.3
GR   1242.6   10119.7    1241.3   10161.6    1242.5   10203.8    1242.6   10243.4    1241.6   10252.0
GR   1239.7   10256.5    1239.9   10261.2    1242.4   10277.4    1243.0   10337.5
  Inflow from sub-basin H2f added

X1     2.11        22    9876.3   10031.9     535.0     520.0     545.0       0.0       0.0
GR   1248.5    9496.5    1247.5    9526.4    1246.5    9594.1    1245.4    9633.4    1246.6    9705.5
GR   1247.8    9766.5    1248.1    9824.3    1247.4    9876.3    1245.7    9915.1    1244.3    9930.8
GR   1246.1    9956.8    1247.0    9987.9    1244.9   10000.0    1246.7   10031.9    1247.5   10119.7
GR   1247.1   10145.1    1245.3   10156.7    1246.6   10176.7    1246.7   10217.1    1245.9   10233.2
GR   1246.9   10286.1    1247.2      10320

QT        2     816.0     816.0
X1     2.21        17    9995.1   10039.4     550.0     560.0     525.0       0.0       0.0
GR   1252.1    9584.5    1251.3    9637.1    1249.7    9652.8    1250.7    9683.8    1250.9    9758.6
GR   1251.1    9832.4    1252.0    9883.1    1249.9    9896.9    1251.3    9940.1    1251.5    9995.1
GR   1249.7   10000.0    1250.1   10019.3    1252.5   10039.4    1251.4   10099.9    1251.1   10166.2
GR   1251.6   10248.1    1252.2   10374.7

X1     2.30        21    9987.4   10024.7     460.0     490.0     490.0       0.0       0.0
GR   1257.7    9417.1    1256.4    9475.0    1256.7    9539.6    1256.0    9619.2    1255.1    9641.0
GR   1256.2    9675.4    1256.2    9767.4    1255.6    9875.5    1255.3    9951.0    1256.0    9987.4
GR   1254.9    9998.9    1254.9   10000.0    1256.4   10008.7    1257.3   10024.7    1256.8   10080.4
GR   1257.1   10146.0    1255.9   10161.5    1257.0   10179.7    1257.1   10222.4    1257.1   10285.2
GR   1257.3   10326.4
  ---------------------------------------------------------------------------
  Section 2.41
  Ineffective flow area between stations 9676.8 and 9877.0.
  ---------------------------------------------------------------------------
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```
NH      5       .5     9877      .06    9976.8      .045   10013.5      .06   10056.7       .5
NH  10141
X1   2.41       22   9976.8  10013.5     470.0     660.0     565.0      0.0      0.0
GR 1261.7   9351.3   1260.6   9365.8    1261.1    9385.8    1260.7   9428.8   1261.2    9508.1
GR 1260.4   9587.2   1260.7   9656.2    1259.9    9696.5    1258.0   9707.1   1259.9    9720.4
GR 1260.1   9766.1   1258.1   9773.3    1259.6    9793.5    1260.9   9877.0   1259.4    9906.2
GR 1260.8   9932.4   1261.2   9976.8    1259.3   10000.0    1261.1  10013.5   1261.4   10056.7
GR 1261.8  10079.5   1262.3     10141

NC    .06     .055     .045
X1   2.49        9   9968.2  10110.1     450.0     450.0     435.0      0.0      0.0
GR 1265.2   9926.1   1264.2   9968.2    1263.3    9983.6    1262.4  10000.0   1264.4   10021.8
GR 1263.4  10047.9   1262.0  10067.3    1265.3   10110.1    1266.0  10183.5

X1   2.58       11   9964.7  10033.7     475.0     480.0     485.0      0.0      0.0
GR 1270.7   9835.0   1270.2   9918.6    1270.1    9964.7    1268.3   9980.5   1268.7   10000.0
GR 1270.2  10033.7   1270.2  10098.2    1270.3   10175.4    1270.3  10203.1   1269.8   10227.0
GR 1270.9  10253.4

NC    .06     .06      .045
X1   2.68       14   9991.1  10024.3     560.0     470.0     505.0      0.0      0.0
GR 1276.9   9892.7   1275.8   9957.9    1275.1    9991.1    1273.8  10000.0   1273.9   10012.7
GR 1275.4  10024.3   1275.0  10049.6    1273.7   10062.0    1275.0  10086.5   1275.1   10144.3
GR 1274.8  10192.0   1274.0  10207.8    1275.4   10228.0    1276.4  10276.9
  Inflow from sub-basins H2d & H2e added

X1   2.78       10   9953.8  10064.9     485.0     505.0     510.0      0.0      0.0
GR 1282.0   9923.1   1279.2   9939.8    1280.3    9953.8    1278.2   9967.5   1277.7    9982.7
GR 1277.8   9996.9   1278.2  10000.0    1279.4   10022.7    1280.8  10064.9   1281.0   10155.3

QT      2    767.0    767.0
X1   2.87       16   9974.7  10026.5     530.0     465.0     490.0      0.0      0.0
GR 1287.2   9873.5   1285.4   9900.8    1283.5    9908.9    1284.7   9938.4   1285.2    9974.7
GR 1283.9   9990.1   1282.7  10000.0    1283.8   10009.9    1285.3  10026.5   1285.8   10128.1
GR 1285.5  10149.4   1283.7  10158.9    1284.1   10176.7    1283.4  10185.9   1286.9   10208.1
GR 1287.5  10282.4
  ---------------------------------------------------------------------------
  Section 2.95
  Ineffective flow area between stations 9844.4 and 9897.3.
  ---------------------------------------------------------------------------

NH      3       .9   9897.3      .045   9981.1       .06  10137.8
X1   2.95       11   9897.3   9981.1     435.0     445.0     440.0      0.0      0.0
GR 1290.8   9844.4   1289.9   9864.8    1287.8    9871.2    1290.3   9897.3   1288.5    9945.0
GR 1290.2   9981.1   1289.5  10000.0    1289.7   10042.7    1289.0  10083.4   1289.1   10103.8
GR 1290.8  10137.8

NC    .06      .06     .045
X1   3.05        9   9922.5  10037.2     485.0     465.0     525.0      0.0      0.0
GR 1296.3   9803.3   1294.5   9867.8    1294.3    9922.5    1292.5   9963.2   1293.9    9990.2
GR 1292.1  10000.0   1293.4  10010.8    1295.5   10037.2    1295.9  10119.1
  ---------------------------------------------------------------------------
  Section 3.14
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Ineffective flow area between stations 9906.1 and 9953.1.
-----------------------------------------------------------------------------

NH       4       .06     9953.1      .045    10018.2       .06    10052.5        .5    10172.6
X1    3.14        10     9953.1   10018.2     480.0     490.0      495.0       0.0       0.0
GR  1301.4    9906.1     1300.1    9953.1    1299.2    9978.2     1298.4   10000.0    1299.8   10018.2
GR  1300.0   10052.5     1299.1   10079.4    1297.6   10092.8     1299.1   10112.8    1300.9   10172.6
-----------------------------------------------------------------------------
Section 3.25
Ineffective flow area between stations 10322.8 and 10544.7.
Inflow from sub-basin H2b occurs below this section.
-----------------------------------------------------------------------------


QT       2     603.0      603.0
NH       4       .06     9971.4      .045    10075.1       .06    10322.8        .9    10544.7
X1    3.25        15     9971.4   10075.1     515.0     560.0      555.0       0.0       0.0
GR  1308.0    9881.6     1306.0    9971.4    1303.3    9990.0     1303.1   10000.0    1303.8   10015.4
GR  1305.6   10075.1     1305.0   10191.8    1304.8   10282.6     1305.1   10322.8    1303.7   10338.2
GR  1302.2   10345.5     1303.6   10369.7    1304.5   10446.5     1303.2   10489.0    1306.0   10544.7

NC     .06       .06      .045
X1    3.34         7     9980.6   10048.6     480.0     480.0      485.0       0.0       0.0
GR  1312.7    9951.8     1310.9    9980.6    1307.9    9993.4     1307.3   10000.0    1309.1   10023.3
GR  1310.6   10048.6     1311.6   10143.5
-----------------------------------------------------------------------------
Section 3.43
Ineffective flow area between stations 9768.4 and 9891.1.
-----------------------------------------------------------------------------

NH       4        .9     9891.1       .06    9973.3      .045    10044.3       .06    10091.2
X1    3.43        11     9973.3   10044.3     485.0     505.0      490.0       0.0       0.0
GR  1317.0    9768.4     1316.1    9850.3    1314.0    9867.8     1315.4    9891.1    1315.0    9935.0
GR  1314.4    9973.3     1313.2    9986.5    1312.6   10000.0     1313.0   10025.4    1314.7   10044.3
GR  1317.1   10091.2
-----------------------------------------------------------------------------
Section 3.53
Ineffective flow area between stations 10100.1 and 10233.5.
-----------------------------------------------------------------------------

NH       4       .06       9990      .045    10010.2       .06    10100.1        .9    10233.5
X1    3.53        11     9990.0   10010.2     480.0     490.0      485.0       0.0       0.0
GR  1322.5    9919.6     1322.2    9971.8    1320.9    9990.0     1318.5   10000.0    1319.6   10010.2
GR  1320.4   10039.6     1320.5   10100.1    1320.1   10135.1     1318.4   10146.8    1320.3   10172.4
GR  1324.0   10233.5

NC     .06       .06      .045
X1    3.57        11     9945.5   10022.4     220.0     255.0      235.0       0.0       0.0
GR  1325.1    9814.8     1323.9    9866.4    1321.2    9883.1     1323.4    9903.5    1323.1    9945.5
GR  1322.5    9964.9     1321.0    9987.0    1320.1   10000.0     1321.0   10010.2    1322.8   10022.4
GR  1323.6   10101.2
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X1	3.62	10	9977.0	10020.9	240.0	300.0	260.0	0.0	0.0	
GR	1327.7	9900.0	1327.8	9956.7	1326.8	9977.0	1324.1	9993.5	1323.6	10000.0
GR	1325.1	10020.9	1325.3	10035.3	1324.3	10042.7	1327.0	10077.8	1327.4	10138.3
X1	3.68	9	9965.6	10067.6	300.0	325.0	305.0	0.0	0.0	
GR	1330.5	9940.3	1329.8	9965.6	1327.0	9976.6	1325.8	9991.6	1325.7	10000.0
GR	1327.1	10014.9	1328.7	10038.2	1330.3	10067.6	1331.1	10126.6		
X1	3.74	12	9964.6	10027.4	340.0	350.0	335.0	0.0	0.0	
GR	1333.6	9916.9	1332.9	9964.6	1330.3	9974.5	1330.7	9989.6	1329.0	9998.8
GR	1328.1	10000.0	1330.8	10010.3	1333.6	10027.4	1332.1	10040.5	1329.7	10045.7
GR	1333.1	10067.1	1334.2	10162.5						
X1	3.81	13	9972.8	10028.7	350.0	390.0	370.0	0.0	0.0	
GR	1337.9	9832.2	1337.2	9904.4	1335.0	9953.0	1335.5	9972.8	1332.7	9986.6
GR	1334.7	9999.2	1335.9	10000.0	1336.3	10028.7	1335.4	10039.0	1332.5	10055.2
GR	1335.5	10077.5	1336.6	10141.6	1337.8	10230.0				

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

*PROF 1

CCHV= .100 CEHV= .300
*SECNO .000

3265 DIVIDED FLOW

.000	3.18	1155.98	.00	1155.00	1156.16	.18	.00	.00	1156.10
818.0	5.5	773.6	38.9	7.3	222.1	40.7	.0	.0	1155.10
.00	.76	3.48	.96	.060	.045	.060	.000	1152.80	9915.19
.004004	0.	0.	0.	0	0	6	.00	223.15	10516.59

1490 NH CARD USED
*SECNO .070

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

.070	3.83	1158.73	.00	.00	1158.87	.14	2.71	.00	1160.50
818.0	9.3	208.9	599.8	7.0	43.9	292.3	2.7	2.1	1159.50
.04	1.33	4.76	2.05	.060	.045	.153	.000	1154.90	9891.00
.016078	365.	380.	380.	3	0	0	.00	258.48	10293.11

*SECNO .160

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.71

.160	3.15	1162.95	.00	.00	1163.11	.16	4.24	.01	1164.10
818.0	.0	355.5	462.5	.0	88.7	192.4	6.1	4.8	1162.70
.08	.00	4.01	2.40	.000	.045	.060	.000	1159.80	9989.87
.005512	420.	490.	480.	4	0	0	.00	229.60	10219.47

*SECNO .260

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 = .61

.260	2.58	1166.78	.00	.00	1167.12	.34	3.96	.05	1166.80
818.0	147.8	546.3	123.9	52.5	101.0	60.0	8.7	7.4	1166.60
.11	2.81	5.41	2.06	.060	.045	.060	.000	1164.20	9871.89
.014656	455.	480.	450.	3	0	0	.00	268.17	10149.61

*SECNO .340

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.77

.340	3.84	1170.64	.00	.00	1170.88	.24	3.75	.01	1170.20
818.0	320.6	492.0	5.4	125.4	107.1	6.9	11.3	9.8	1170.00
.15	2.56	4.59	.78	.060	.045	.060	.000	1166.80	9884.54
.004660	465.	500.	520.	4	0	0	.00	154.75	10039.29

*SECNO .440

3265 DIVIDED FLOW

.440	3.67	1173.47	.00	.00	1173.64	.16	2.75	.01	1173.10
818.0	1.5	315.4	501.1	2.4	68.4	254.6	14.7	13.1	1171.60
.20	.64	4.61	1.97	.060	.045	.060	.000	1169.80	9976.94
.006133	475.	520.	540.	3	0	0	.00	396.53	10445.70

1490 NH CARD USED
*SECNO .520

.520	2.63	1176.13	.00	.00	1176.20	.07	2.56	.01	1176.10
818.0	.0	222.3	595.7	.0	60.7	575.7	19.5	18.9	1175.80
.26	.02	3.66	1.03	.060	.045	.101	.000	1173.50	9987.64
.005594	420.	430.	440.	4	0	0	.00	758.38	10746.02

*SECNO .620

.620	3.06	1179.76	.00	.00	1180.10	.34	3.82	.08	1177.90
818.0	421.7	336.4	59.9	119.4	55.8	33.8	24.7	24.9	1178.00
.30	3.53	6.03	1.77	.060	.045	.060	.000	1176.70	9903.58
.010263	495.	490.	550.	3	0	0	.00	204.77	10108.35

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

*SECNO .710

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

.710	3.35	1182.95	.00	.00	1183.07	.13	2.96	.02	1182.30
818.0	20.9	317.0	480.1	30.9	85.4	220.2	27.8	27.8	1181.20
.35	.68	3.71	2.18	.060	.045	.060	.000	1179.60	9875.66
.003780	505.	500.	510.	4	0	0	.00	286.93	10170.80

*SECNO .810

3265 DIVIDED FLOW

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

.810	3.19	1185.89	.00	.00	1186.04	.15	2.96	.01	1185.90
818.0	313.0	106.0	399.0	103.9	37.7	125.7	31.4	30.8	1186.10
.39	3.01	2.81	3.17	.060	.045	.060	.000	1182.70	9879.86
.010146	510.	500.	510.	3	0	0	.00	239.72	10123.40

1490 NH CARD USED
*SECNO .910

3265 DIVIDED FLOW

.910	3.04	1190.74	.00	.00	1190.92	.18	4.87	.01	1189.20
818.0	267.0	381.6	169.4	110.0	84.9	137.3	35.0	34.6	1189.30
.44	2.43	4.49	1.23	.060	.045	.102	.000	1187.70	9864.67
.008324	525.	530.	540.	2	0	0	.00	378.80	10251.62

*SECNO 1.000

3265 DIVIDED FLOW

1.000	3.06	1195.16	.00	.00	1195.31	.15	4.38	.00	1195.50
818.0	297.9	206.3	313.8	102.1	50.4	136.0	38.5	38.4	1195.00
.49	2.92	4.10	2.31	.060	.045	.060	.000	1192.10	9854.30
.009838	480.	485.	490.	3	0	0	.00	299.98	10178.11

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 1.100

3265 DIVIDED FLOW

1.100	3.06	1199.46	.00	.00	1199.64	.18	4.32	.01	1198.20
818.0	402.9	287.5	127.7	159.3	61.0	63.7	41.9	41.7	1198.10
.53	2.53	4.71	2.00	.060	.045	.060	.000	1196.40	9850.34
.006991	545.	510.	510.	5	0	0	.00	238.65	10110.68

*SECNO 1.210

3265 DIVIDED FLOW

1.210	2.77	1203.97	.00	.00	1204.19	.21	4.54	.01	1204.70
818.0	285.0	533.0	.0	135.2	123.1	.0	45.7	45.1	1204.90
.58	2.11	4.33	.00	.060	.045	.000	.000	1201.20	9669.59
.008298	600.	600.	560.	4	0	0	.00	259.60	10019.37

1490 NH CARD USED
*SECNO 1.310

3265 DIVIDED FLOW

1.310	2.52	1209.22	1208.88	.00	1209.34	.12	5.15	.01	1208.70
818.0	513.0	233.9	71.0	257.9	55.8	35.5	49.2	49.0	1208.70
.63	1.99	4.19	2.00	.084	.045	.058	.000	1206.70	9666.50
.012856	500.	510.	490.	15	16	0	.00	427.43	10104.97

1490 NH CARD USED
*SECNO 1.400

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

1.400	2.80	1213.60	.00	.00	1213.73	.13	4.39	.00	1212.30
818.0	97.5	347.1	373.4	72.6	102.6	143.6	52.9	53.7	1213.50
.68	1.34	3.38	2.60	.060	.045	.045	.000	1210.80	9844.04
.006497	490.	505.	485.	4	0	0	.00	406.06	10250.11

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 1.490

3265 DIVIDED FLOW

1.490	2.15	1217.45	.00	.00	1217.61	.16	3.87	.01	1217.60
818.0	.0	318.6	499.4	.0	100.9	155.9	56.0	57.8	1216.90
.72	.00	3.16	3.20	.000	.045	.046	.000	1215.30	9993.38
.010722	460.	475.	470.	4	0	0	.00	354.46	10376.00

1490 NH CARD USED
*SECNO 1.590

3265 DIVIDED FLOW

1.590	2.03	1222.13	.00	.00	1222.23	.09	4.61	.01	1222.20
818.0	231.8	203.7	382.5	93.6	72.0	177.2	59.6	62.7	1222.50
.78	2.48	2.83	2.16	.045	.045	.050	.000	1220.10	9783.14
.007567	480.	540.	510.	5	0	0	.00	487.72	10300.03

*SECNO 1.710

3265 DIVIDED FLOW

1.710	2.52	1227.32	.00	.00	1227.44	.12	5.20	.01	1227.70
818.0	.0	134.5	683.5	.0	38.5	259.8	63.8	68.8	1226.90
.84	.00	3.50	2.63	.000	.045	.055	.000	1224.80	9995.83
.010913	570.	590.	575.	4	0	0	.00	428.24	10560.30

*SECNO 1.800

3265 DIVIDED FLOW

1.800	1.82	1231.72	.00	.00	1231.80	.08	4.36	.00	1232.80
818.0	.0	167.0	651.0	.0	58.3	313.8	67.6	74.0	1232.30
.90	.00	2.87	2.07	.000	.045	.055	.000	1229.90	9965.71
.007508	500.	490.	485.	4	0	0	.00	499.00	10582.52

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

*SECNO 1.890

3265 DIVIDED FLOW

1.890	2.85	1236.25	.00	.00	1236.42	.17	4.59	.03	1237.30
818.0	9.9	281.7	526.4	7.0	74.4	172.1	71.4	78.6	1237.40
.94	1.43	3.79	3.06	.055	.045	.055	.000	1233.40	9895.56
.010087	500.	505.	540.	4	0	0	.00	251.66	10669.15

*SECNO 2.010

3265 DIVIDED FLOW

2.010	2.83	1242.33	.00	.00	1242.47	.14	6.05	.00	1242.40
818.0	198.8	311.3	307.9	61.2	95.3	117.7	74.9	82.4	1242.70
1.00	3.25	3.27	2.62	.055	.045	.055	.000	1239.50	9870.41
.010604	600.	595.	575.	3	0	0	.00	320.62	10276.95

*SECNO 2.110

3265 DIVIDED FLOW

2.110	2.64	1246.94	.00	.00	1247.04	.10	4.56	.00	1247.40
818.0	240.3	443.9	133.8	115.8	153.5	81.9	78.8	87.2	1246.70
1.06	2.08	2.89	1.63	.055	.045	.055	.000	1244.30	9564.46
.006976	535.	545.	520.	4	0	0	.00	471.06	10290.36

*SECNO 2.210

3265 DIVIDED FLOW

2.210	1.87	1251.57	.00	.00	1251.70	.13	4.65	.01	1251.50
816.0	580.2	185.5	50.3	231.3	46.4	41.6	82.9	93.6	1252.50
1.11	2.51	4.00	1.21	.055	.045	.055	.000	1249.70	9618.73
.010857	550.	525.	560.	3	0	0	.00	541.22	10244.74

*SECNO 2.300

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

2.300	1.68	1256.58	.00	.00	1256.68	.09	4.98	.00	1256.00
816.0	731.0	75.7	9.3	306.6	23.3	6.9	86.4	99.3	1257.30
1.17	2.38	3.25	1.35	.055	.045	.055	.000	1254.90	9466.87
.010505	460.	490.	490.	4	0	0	.00	526.54	10172.79

1490 NH CARD USED
*SECNO 2.410

2.410	3.65	1261.65	.00	.00	1261.73	.08	5.05	.00	1261.20
816.0	575.5	217.1	23.4	753.3	52.0	19.0	92.8	106.3	1261.10
1.25	.76	4.17	1.23	.247	.045	.062	.000	1258.00	9351.96
.010089	470.	565.	660.	4	0	0	.00	718.96	10070.92

*SECNO 2.490

2.490	3.01	1265.01	.00	.00	1265.21	.20	3.44	.04	1264.20
816.0	15.1	800.9	.0	14.0	223.4	.0	98.3	110.9	1265.30
1.28	1.08	3.58	.00	.060	.045	.000	.000	1262.00	9933.81
.006233	450.	435.	450.	5	0	0	.00	172.62	10106.43

*SECNO 2.580
3280 CROSS SECTION 2.58 EXTENDED .00 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.580	2.40	1270.70	1270.70	.00	1270.98	.28	4.18	.03	1270.10
816.0	71.1	548.8	196.1	46.4	108.8	103.5	101.0	114.1	1270.20
1.32	1.53	5.04	1.89	.060	.045	.055	.000	1268.30	9835.00
.012750	475.	485.	480.	12	14	0	.00	413.62	10248.62

*SECNO 2.680

2.680	2.22	1275.92	.00	.00	1276.07	.14	5.07	.01	1275.10
816.0	22.0	228.1	565.9	16.2	54.2	228.8	104.2	118.2	1275.40
1.36	1.36	4.21	2.47	.060	.045	.060	.000	1273.70	9950.58
.008506	560.	505.	470.	6	0	0	.00	303.02	10253.60

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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 2.780
    2.780      2.88    1280.58        .00        .00    1280.90        .32       4.78        .05    1280.30
    816.0      37.3      778.7         .0       17.3      167.9         .0      107.0      120.7    1280.80
     1.39      2.15       4.64        .00       .060       .045       .000       .000    1277.70    9931.56
  .010512      485.       510.       505.          4          0          0        .00     126.75   10058.31


*SECNO 2.870

3265 DIVIDED FLOW

    2.870      2.89    1285.59        .00        .00    1285.78        .19       4.86        .01    1285.20
    767.0     203.0      334.3      229.7       77.1       79.4       81.1      109.4      122.8    1285.30
     1.43      2.63       4.21       2.83       .060       .045       .060       .000    1282.70    9897.84
  .009258      530.       490.       465.          5          0          0        .00     245.89   10199.83


1490 NH CARD USED
*SECNO 2.950
    2.950      2.65    1290.45        .00        .00    1290.63        .18       4.85        .00    1290.30
    767.0      11.6      359.3      396.1       50.4       90.1      139.7      112.0      125.4    1290.20
     1.47       .23       3.99       2.84       .900       .045       .060       .000    1287.80    9852.25
  .013262      435.       440.       445.          5          0          0        .00     278.61   10130.87


*SECNO 3.050

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.40

    3.050      3.00    1295.10        .00        .00    1295.31        .21       4.67        .01    1294.30
    767.0      65.8      701.2         .0       44.1      183.6         .0      114.9      128.1    1295.50
     1.51      1.49       3.82        .00       .060       .045       .000       .000    1292.10    9846.62
  .006746      485.       525.       465.          4          0          0        .00     185.44   10032.06


1490 NH CARD USED
*SECNO 3.140

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

    3.140      3.02    1300.62        .00        .00    1301.13        .51       5.73        .09    1300.10
    767.0       7.6      593.4      165.9        4.9       91.6      167.4      117.7      130.4    1299.80
     1.54      1.57       6.48        .99       .060       .045       .297       .000    1297.60    9934.37
  .024487      480.       495.       490.          4          0          0        .00     228.86   10163.23
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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 3.250

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.06

3.250	3.54	1305.74	.00	.00	1305.80	.06	4.63	.05	1306.00
603.0	.0	356.9	246.1	.0	144.1	547.4	123.8	135.5	1305.60
1.63	.00	2.48	.45	.000	.045	.258	.000	1302.20	9973.13
.003554	515.	555.	560.	5	0	0	.00	566.57	10539.70

*SECNO 3.340

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.340	2.92	1310.22	1310.22	.00	1310.98	.76	3.70	.21	1310.90
603.0	.0	603.0	.0	.0	86.5	.0	128.1	138.9	1310.60
1.65	.00	6.97	.00	.000	.045	.000	.000	1307.30	9983.50
.026866	480.	485.	480.	20	15	0	.00	58.70	10042.20

1490 NH CARD USED
*SECNO 3.430

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.40

3.430	2.80	1315.40	.00	.00	1315.60	.20	4.56	.06	1314.40
603.0	42.5	556.5	4.0	59.6	149.9	4.7	129.8	140.4	1314.70
1.69	.71	3.71	.84	.103	.045	.060	.000	1312.60	9856.17
.004680	485.	490.	505.	5	0	0	.00	201.17	10057.89

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 3.530
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.530	2.76	1321.16	1321.16	.00	1321.62	.46	4.47	.08	1320.90
603.0	.5	279.8	322.7	.5	36.2	182.5	132.2	142.6	1319.60
1.72	1.03	7.73	1.77	.060	.045	.152	.000	1318.40	9986.32
.025778	480.	485.	490.	20	5	0	.00	200.33	10186.65

*SECNO 3.570

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.45

3.570	3.49	1323.59	.00	.00	1323.73	.14	2.08	.03	1323.10
603.0	92.0	485.2	25.8	57.3	146.2	29.8	133.5	143.8	1322.80
1.74	1.60	3.32	.87	.060	.045	.060	.000	1320.10	9868.39
.004308	220.	235.	255.	5	0	0	.00	230.63	10099.02

*SECNO 3.620
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.620	2.48	1326.08	1326.08	.00	1326.70	.62	2.27	.14	1326.80
603.0	.0	440.6	162.4	.0	62.5	42.6	134.5	144.8	1325.10
1.75	.00	7.05	3.81	.000	.045	.060	.000	1323.60	9981.42
.024882	240.	260.	300.	4	19	0	.00	84.38	10065.80

*SECNO 3.680

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.30

3.680	3.65	1329.35	.00	.00	1329.56	.20	2.81	.04	1329.80
603.0	.0	603.0	.0	.0	167.3	.0	135.5	145.4	1330.30
1.78	.00	3.60	.00	.000	.045	.000	.000	1325.70	9967.35
.004703	300.	305.	325.	6	0	0	.00	82.87	10050.22

*SECNO 3.740

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 = .48

3.740	3.86	1331.96	.00	.00	1332.55	.59	2.88	.12	1332.90
603.0	.0	521.9	81.1	.0	80.9	21.7	136.5	146.0	1333.60
1.79	.00	6.45	3.75	.000	.045	.060	.000	1328.10	9968.17
.020296	340.	335.	350.	3	0	0	.00	68.37	10059.94

*SECNO 3.810

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.82

3.810	3.81	1336.31	.00	.00	1336.43	.12	3.83	.05	1335.50
603.0	69.2	206.7	327.1	39.6	69.9	113.0	137.9	147.2	1336.30
1.83	1.75	2.96	2.89	.060	.045	.060	.000	1332.50	9924.20
.006118	350.	370.	390.	4	0	0	.00	200.14	10124.33

THIS RUN EXECUTED 29JAN96 17:11:31

****
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

Branch Channel - Final P

SUMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	.000	.00	.00	3.48	223.15	818.00	9915.19	10516.59	1155.98
*	.070	.00	.00	4.76	258.48	818.00	9891.00	10293.11	1158.73
*	.160	.00	.00	4.01	229.60	818.00	9989.87	10219.47	1162.95
*	.260	.00	.00	5.41	268.17	818.00	9871.89	10149.61	1166.78
*	.340	.00	.00	4.59	154.75	818.00	9884.54	10039.29	1170.64
	.440	.00	.00	4.61	396.53	818.00	9976.94	10445.70	1173.47
	.520	.00	.00	3.66	758.38	818.00	9987.64	10746.02	1176.13
	.620	.00	.00	6.03	204.77	818.00	9903.58	10108.35	1179.76
*	.710	.00	.00	3.71	286.93	818.00	9875.66	10170.80	1182.95
*	.810	.00	.00	2.81	239.72	818.00	9879.86	10123.40	1185.89
	.910	.00	.00	4.49	378.80	818.00	9864.67	10251.62	1190.74
	1.000	.00	.00	4.10	299.98	818.00	9854.30	10178.11	1195.16
	1.100	.00	.00	4.71	238.65	818.00	9850.34	10110.68	1199.46
	1.210	.00	.00	4.33	259.60	818.00	9669.59	10019.37	1203.97
	1.310	.00	.00	4.19	427.43	818.00	9666.50	10104.97	1209.22
*	1.400	.00	.00	3.38	406.06	818.00	9844.04	10250.11	1213.60
	1.490	.00	.00	3.16	354.46	818.00	9993.38	10376.00	1217.45

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	1.590	.00	.00	2.83	487.72	818.00	9783.14	10300.03	1222.13
	1.710	.00	.00	3.50	428.24	818.00	9995.83	10560.30	1227.32
	1.800	.00	.00	2.87	499.00	818.00	9965.71	10582.52	1231.72
	1.890	.00	.00	3.79	251.66	818.00	9895.56	10669.15	1236.25
	2.010	.00	.00	3.27	320.62	818.00	9870.41	10276.95	1242.33
	2.110	.00	.00	2.89	471.06	818.00	9564.46	10290.36	1246.94
	2.210	.00	.00	4.00	541.22	816.00	9618.73	10244.74	1251.57
	2.300	.00	.00	3.25	526.54	816.00	9466.87	10172.79	1256.58
	2.410	.00	.00	4.17	718.96	816.00	9351.96	10070.92	1261.65
	2.490	.00	.00	3.58	172.62	816.00	9933.81	10106.43	1265.01
*	2.580	.00	.00	5.04	413.62	816.00	9835.00	10248.62	1270.70
	2.680	.00	.00	4.21	303.02	816.00	9950.58	10253.60	1275.92
	2.780	.00	.00	4.64	126.75	816.00	9931.56	10058.31	1280.58
	2.870	.00	.00	4.21	245.89	767.00	9897.84	10199.83	1285.59
	2.950	.00	.00	3.99	278.61	767.00	9852.25	10130.87	1290.45
*	3.050	.00	.00	3.82	185.44	767.00	9846.62	10032.06	1295.10
*	3.140	.00	.00	6.48	228.86	767.00	9934.37	10163.23	1300.62
*	3.250	.00	.00	2.48	566.57	603.00	9973.13	10539.70	1305.74
*	3.340	.00	.00	6.97	58.70	603.00	9983.50	10042.20	1310.22
*	3.430	.00	.00	3.71	201.17	603.00	9856.17	10057.89	1315.40
*	3.530	.00	.00	7.73	200.33	603.00	9986.32	10186.65	1321.16
*	3.570	.00	.00	3.32	230.63	603.00	9868.39	10099.02	1323.59
*	3.620	.00	.00	7.05	84.38	603.00	9981.42	10065.80	1326.08
*	3.680	.00	.00	3.60	82.87	603.00	9967.35	10050.22	1329.35
*	3.740	.00	.00	6.45	68.37	603.00	9968.17	10059.94	1331.96
*	3.810	.00	.00	2.96	200.14	603.00	9924.20	10124.33	1336.31

Branch Channel - Final P

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1155.98	.98	1156.16	223.15	5.53	773.59	38.87	.00	.00	9971.60	10074.80	.00
*	.070	1158.73	.00	1158.87	258.48	9.32	208.91	599.77	.00	.00	9967.60	10034.20	.00
*	.160	1162.95	.00	1163.11	229.60	.00	355.47	462.53	.00	.00	9987.10	10031.50	.00
*	.260	1166.78	.00	1167.12	268.17	147.81	546.34	123.85	.00	.00	9953.80	10017.80	.00
*	.340	1170.64	.00	1170.88	154.75	320.65	491.97	5.38	.00	.00	9981.80	10017.40	.00
	.440	1173.47	.00	1173.64	396.53	1.51	315.37	501.12	.00	.00	9989.40	10017.50	.00
	.520	1176.13	.00	1176.20	758.38	.00	222.31	595.69	.00	.00	9989.80	10022.90	.00
	.620	1179.76	.00	1180.10	204.77	421.68	336.39	59.93	.00	.00	9988.30	10011.20	.00
*	.710	1182.95	.00	1183.07	286.93	20.90	316.98	480.12	.00	.00	9989.10	10023.30	.00
*	.810	1185.89	.00	1186.04	239.72	313.03	105.96	399.01	.00	.00	9961.90	10011.00	.00
	.910	1190.74	.00	1190.92	378.80	267.04	381.57	169.39	.00	.00	9970.60	10016.20	.00
	1.000	1195.16	.00	1195.31	299.98	297.91	206.30	313.79	.00	.00	9981.60	10020.10	.00
	1.100	1199.46	.00	1199.64	238.65	402.85	287.48	127.67	.00	.00	9988.10	10015.20	.00
	1.210	1203.97	.00	1204.19	259.60	285.05	532.95	.00	.00	.00	9942.00	10022.10	.00
	1.310	1209.22	.00	1209.34	427.43	513.04	233.92	71.04	.00	.00	9970.80	10017.60	.00
*	1.400	1213.60	.00	1213.73	406.06	97.47	347.12	373.41	.00	.00	9992.90	10063.90	.00
	1.490	1217.45	.00	1217.61	354.46	.00	318.61	499.39	.00	.00	9992.60	10106.80	.00
	1.590	1222.13	.00	1222.23	487.72	231.81	203.66	382.53	.00	.00	9949.60	10027.90	.00
	1.710	1227.32	.00	1227.44	428.24	.00	134.46	683.54	.00	.00	9994.70	10032.80	.00
	1.800	1231.72	.00	1231.80	499.00	.00	167.01	650.99	.00	.00	9958.80	10028.40	.00
	1.890	1236.25	.00	1236.42	251.66	9.91	281.66	526.43	.00	.00	9925.90	10049.10	.00
	2.010	1242.33	.00	1242.47	320.62	198.78	311.35	307.87	.00	.00	9935.00	10048.90	.00
	2.110	1246.94	.00	1247.04	471.06	240.33	443.86	133.81	.00	.00	9876.30	10031.90	.00
	2.210	1251.57	.00	1251.70	541.22	580.19	185.52	50.29	.00	.00	9995.10	10039.40	.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	2.300	1256.58	.00	1256.68	526.54	731.04	75.70	9.27	.00	.00	9987.40	10024.70	.00
	2.410	1261.65	.00	1261.73	718.96	575.50	217.08	23.42	.00	.00	9976.80	10013.50	.00
	2.490	1265.01	.00	1265.21	172.62	15.12	800.88	.00	.00	.00	9968.20	10110.10	.00
*	2.580	1270.70	.00	1270.98	413.62	71.08	548.78	196.13	.00	.00	9964.70	10033.70	.00
	2.680	1275.92	.00	1276.07	303.02	21.98	228.14	565.88	.00	.00	9991.10	10024.30	.00
	2.780	1280.58	.00	1280.90	126.75	37.27	778.73	.00	.00	.00	9953.80	10064.90	.00
	2.870	1285.59	.00	1285.78	245.89	203.04	334.30	229.66	.00	.00	9974.70	10026.50	.00
	2.950	1290.45	.00	1290.63	278.61	11.57	359.30	396.13	.00	.00	9897.30	9981.10	.00
*	3.050	1295.10	.00	1295.31	185.44	65.77	701.23	.00	.00	.00	9922.50	10037.20	.00
*	3.140	1300.62	.00	1301.13	228.86	7.64	593.42	165.94	.00	.00	9953.10	10018.20	.00
*	3.250	1305.74	.00	1305.80	566.57	.00	356.92	246.08	.00	.00	9971.40	10075.10	.00
*	3.340	1310.22	.00	1310.98	58.70	.00	603.00	.00	.00	.00	9980.60	10048.60	.00
*	3.430	1315.40	.00	1315.60	201.17	42.53	556.51	3.96	.00	.00	9973.30	10044.30	.00
*	3.530	1321.16	.00	1321.62	200.33	.50	279.78	322.72	.00	.00	9990.00	10010.20	.00
*	3.570	1323.59	.00	1323.73	230.63	91.98	485.21	25.81	.00	.00	9945.50	10022.40	.00
*	3.620	1326.08	.00	1326.70	84.38	.00	440.64	162.35	.00	.00	9977.00	10020.90	.00
*	3.680	1329.35	.00	1329.56	82.87	.00	603.00	.00	.00	.00	9965.60	10067.60	.00
*	3.740	1331.96	.00	1332.55	68.37	.00	521.89	81.11	.00	.00	9964.60	10027.40	.00
*	3.810	1336.31	.00	1336.43	200.14	69.17	206.74	327.09	.00	.00	9972.80	10028.70	.00

Branch Channel - Final P

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	.000	.00	.00	.00	1152.80	818.00	1155.98	.00	1156.16	40.04	3.48	270.02	129.28
*	.070	380.00	.00	.00	1154.90	818.00	1158.73	.00	1158.87	160.78	4.76	343.21	64.51
*	.160	490.00	.00	.00	1159.80	818.00	1162.95	.00	1163.11	55.12	4.01	281.08	110.18
*	.260	480.00	.00	.00	1164.20	818.00	1166.78	.00	1167.12	146.56	5.41	213.55	67.57
*	.340	500.00	.00	.00	1166.80	818.00	1170.64	.00	1170.88	46.60	4.59	239.33	119.83
	.440	520.00	.00	.00	1169.80	818.00	1173.47	.00	1173.64	61.33	4.61	325.31	104.45
	.520	430.00	.00	.00	1173.50	818.00	1176.13	.00	1176.20	55.94	3.66	636.51	109.36
	.620	490.00	.00	.00	1176.70	818.00	1179.76	.00	1180.10	102.63	6.03	208.91	80.74
*	.710	500.00	.00	.00	1179.60	818.00	1182.95	.00	1183.07	37.80	3.71	336.54	133.04
*	.810	500.00	.00	.00	1182.70	818.00	1185.89	.00	1186.04	101.46	2.81	267.28	81.21
	.910	530.00	.00	.00	1187.70	818.00	1190.74	.00	1190.92	83.24	4.49	332.21	89.66
	1.000	485.00	.00	.00	1192.10	818.00	1195.16	.00	1195.31	98.38	4.10	288.40	82.47
	1.100	510.00	.00	.00	1196.40	818.00	1199.46	.00	1199.64	69.91	4.71	284.00	97.83
	1.210	600.00	.00	.00	1201.20	818.00	1203.97	.00	1204.19	82.98	4.33	258.36	89.80
	1.310	510.00	.00	.00	1206.70	818.00	1209.22	1208.88	1209.34	128.56	4.19	349.10	72.15
*	1.400	505.00	.00	.00	1210.80	818.00	1213.60	.00	1213.73	64.97	3.38	318.79	101.48
	1.490	475.00	.00	.00	1215.30	818.00	1217.45	.00	1217.61	107.22	3.16	256.87	79.00
	1.590	540.00	.00	.00	1220.10	818.00	1222.13	.00	1222.23	75.67	2.83	342.85	94.03
	1.710	590.00	.00	.00	1224.80	818.00	1227.32	.00	1227.44	109.13	3.50	298.22	78.30
	1.800	490.00	.00	.00	1229.90	818.00	1231.72	.00	1231.80	75.08	2.87	372.04	94.41
	1.890	505.00	.00	.00	1233.40	818.00	1236.25	.00	1236.42	100.87	3.79	253.43	81.45
	2.010	595.00	.00	.00	1239.50	818.00	1242.33	.00	1242.47	106.04	3.27	274.10	79.44
	2.110	545.00	.00	.00	1244.30	818.00	1246.94	.00	1247.04	69.76	2.89	351.21	97.94
	2.210	525.00	.00	.00	1249.70	816.00	1251.57	.00	1251.70	108.57	4.00	319.21	78.31

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	2.300	490.00	.00	.00	1254.90	816.00	1256.58	.00	1256.68	105.05	3.25	336.79	79.61
	2.410	565.00	.00	.00	1258.00	816.00	1261.65	.00	1261.73	100.89	4.17	824.38	81.24
	2.490	435.00	.00	.00	1262.00	816.00	1265.01	.00	1265.21	62.33	3.58	237.45	103.36
*	2.580	485.00	.00	.00	1268.30	816.00	1270.70	1270.70	1270.98	127.50	5.04	258.70	72.27
	2.680	505.00	.00	.00	1273.70	816.00	1275.92	.00	1276.07	85.06	4.21	299.19	88.48
	2.780	510.00	.00	.00	1277.70	816.00	1280.58	.00	1280.90	105.12	4.64	185.25	79.59
	2.870	490.00	.00	.00	1282.70	767.00	1285.59	.00	1285.78	92.58	4.21	237.61	79.71
	2.950	440.00	.00	.00	1287.80	767.00	1290.45	.00	1290.63	132.62	3.99	280.17	66.60
*	3.050	525.00	.00	.00	1292.10	767.00	1295.10	.00	1295.31	67.46	3.82	227.72	93.38
*	3.140	495.00	.00	.00	1297.60	767.00	1300.62	.00	1301.13	244.87	6.48	263.80	49.02
*	3.250	555.00	.00	.00	1302.20	603.00	1305.74	.00	1305.80	35.54	2.48	691.56	101.14
*	3.340	485.00	.00	.00	1307.30	603.00	1310.22	1310.22	1310.98	268.66	6.97	86.45	36.79
*	3.430	490.00	.00	.00	1312.60	603.00	1315.40	.00	1315.60	46.80	3.71	214.18	88.15
*	3.530	485.00	.00	.00	1318.40	603.00	1321.16	1321.16	1321.62	257.78	7.73	219.14	37.56
*	3.570	235.00	.00	.00	1320.10	603.00	1323.59	.00	1323.73	43.08	3.32	233.33	91.87
*	3.620	260.00	.00	.00	1323.60	603.00	1326.08	1326.08	1326.70	248.82	7.05	105.12	38.23
*	3.680	305.00	.00	.00	1325.70	603.00	1329.35	.00	1329.56	47.03	3.60	167.32	87.93
*	3.740	335.00	.00	.00	1328.10	603.00	1331.96	.00	1332.55	202.96	6.45	102.53	42.33
*	3.810	370.00	.00	.00	1332.50	603.00	1336.31	.00	1336.43	61.18	2.96	222.50	77.09

Branch Channel - Final P

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	.000	818.00	1155.98	.00	.00	.98	223.15	.00
*	.070	818.00	1158.73	.00	2.75	.00	258.48	380.00
*	.160	818.00	1162.95	.00	4.22	.00	229.60	490.00
*	.260	818.00	1166.78	.00	3.83	.00	268.17	480.00
*	.340	818.00	1170.64	.00	3.85	.00	154.75	500.00
	.440	818.00	1173.47	.00	2.83	.00	396.53	520.00
	.520	818.00	1176.13	.00	2.66	.00	758.38	430.00
	.620	818.00	1179.76	.00	3.63	.00	204.77	490.00
*	.710	818.00	1182.95	.00	3.19	.00	286.93	500.00
*	.810	818.00	1185.89	.00	2.94	.00	239.72	500.00
	.910	818.00	1190.74	.00	4.85	.00	378.80	530.00
	1.000	818.00	1195.16	.00	4.42	.00	299.98	485.00
	1.100	818.00	1199.46	.00	4.30	.00	238.65	510.00
	1.210	818.00	1203.97	.00	4.51	.00	259.60	600.00
	1.310	818.00	1209.22	.00	5.25	.00	427.43	510.00
*	1.400	818.00	1213.60	.00	4.38	.00	406.06	505.00
	1.490	818.00	1217.45	.00	3.85	.00	354.46	475.00
	1.590	818.00	1222.13	.00	4.68	.00	487.72	540.00
	1.710	818.00	1227.32	.00	5.18	.00	428.24	590.00
	1.800	818.00	1231.72	.00	4.41	.00	499.00	490.00
	1.890	818.00	1236.25	.00	4.52	.00	251.66	505.00
	2.010	818.00	1242.33	.00	6.08	.00	320.62	595.00
	2.110	818.00	1246.94	.00	4.61	.00	471.06	545.00
	2.210	816.00	1251.57	.00	4.63	.00	541.22	525.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	2.300	816.00	1256.58	.00	5.01	.00	526.54	490.00
	2.410	816.00	1261.65	.00	5.07	.00	718.96	565.00
	2.490	816.00	1265.01	.00	3.36	.00	172.62	435.00
*	2.580	816.00	1270.70	.00	5.69	.00	413.62	485.00
	2.680	816.00	1275.92	.00	5.22	.00	303.02	505.00
	2.780	816.00	1280.58	.00	4.66	.00	126.75	510.00
	2.870	767.00	1285.59	.00	5.01	.00	245.89	490.00
	2.950	767.00	1290.45	.00	4.86	.00	278.61	440.00
*	3.050	767.00	1295.10	.00	4.64	.00	185.44	525.00
*	3.140	767.00	1300.62	.00	5.52	.00	228.86	495.00
*	3.250	603.00	1305.74	.00	5.13	.00	566.57	555.00
*	3.340	603.00	1310.22	.00	4.48	.00	58.70	485.00
*	3.430	603.00	1315.40	.00	5.18	.00	201.17	490.00
*	3.530	603.00	1321.16	.00	5.76	.00	200.33	485.00
*	3.570	603.00	1323.59	.00	2.42	.00	230.63	235.00
*	3.620	603.00	1326.08	.00	2.49	.00	84.38	260.00
*	3.680	603.00	1329.35	.00	3.28	.00	82.87	305.00
*	3.740	603.00	1331.96	.00	2.61	.00	68.37	335.00
*	3.810	603.00	1336.31	.00	4.34	.00	200.14	370.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=      .070  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .260  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .710  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.580  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.580  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.140  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.250  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.340  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.340  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.340  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     3.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.530  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.530  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.530  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     3.570  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.620  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.620  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.680  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

Appendix H

HEC-2 Output File for:

Tributary #1
Method 4 Floodway Analysis

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    29JAN96    TIME   17:12:01    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 17:12:01

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Branch Channel - Final with Floodway
T4      Floodway Encroachment Method 4.
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Floodway Model for first unnamed tributary
   This model is based on:
      -  The cross sections were obtained by photogrammetric methods by
         Aerial Mapping Company, Phoenix, AZ, based photographs taken
         October 1991.
      -  Ineffective flow areas have been modeled using high roughness values
         so that ineffective flow areas do not conflict with the a Method 4
         (equal conveyance method) floodway analysis.
      -  Floodway modeling is performed using Method 4 to determine initial
         limits and Method 1 to set the limits.  This model uses Method 4.
         File BRNCHM1.HC2 is the file containing the Method 1 analysis.
         File BRNCHM1.HC2 is the final floodway model!
         -------------------------------------------


  By: M. Forest                                                Prepared By:
  File Name:  BRNCHM4.HC2                                 Alpha Engineering Group
  January 1996                                                 Phoenix, Arizona
  ==============================================================================

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0      .004       0       0.0    818.0     1155

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN      ALLDC    IBW      CHNIM    ITRACE

      1        0      -1.0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38       27       28       26        4       43       53       54        1      110
    115      200
```

```
NC    0.060      0.060      0.045       0.1        0.3
  ---------------------------------------------------------------------------
  This branch joins the Main Channel at Section 3.51.  Sections 0.00, 0.07 and
  0.16 overlap with the Main Channel.  The main channel model includes the right
  half of the cross section shown on the map and this model includes the left
  half of the section.  This was done to effectively code out the ineffective
  flow areas for each model.  Flow from each branch will tend to spread into the
  entire floodplain but considering typical expansion and flow patterns at
  confluences, only a portion of the section is effective for conveyance.  The
  hydraulic grade line at these sections is dominated by the main branch.  The
  water surface elevations from that model should be used (MAIN.HC2).
  ---------------------------------------------------------------------------
ET                          5.4
X1     0.00         21    9971.6    10074.8       0.0       0.0       0.0       0.0       0.0
GR   1162.2     9808.6    1160.4     9859.7    1158.4    9896.9    1155.3    9920.3    1156.3    9944.6
GR   1156.1     9971.6    1152.8     9984.3    1152.9   10000.0    1153.6   10029.0    1155.1   10074.8
GR   1155.7    10125.7    1157.0    10170.4    1158.1   10221.8    1157.6   10270.7    1157.1   10336.2
GR   1157.2    10403.7    1156.8    10458.8    1155.5   10489.3    1155.9   10515.7    1158.5   10545.8
GR   1161.3    10588.8
  ---------------------------------------------------------------------------
  Subbasin H2g enters at this location.
  ---------------------------------------------------------------------------


  ---------------------------------------------------------------------------
  Ineffective flow areas are coded out in this model using high roughness values
  for the ineffective flow areas in the section.  This approach was used to
  reduce computed flow velocities and conveyance in this portion of the channel.
  This approach allows a more representative floodway analysis as compared to
  using other methods.  NH records are used to input the roughness values when
  ineffective flow areas are modeled.  Manning's roughness values of 0.2 to 0.9
  are used to block these portions of the cross section.
  ---------------------------------------------------------------------------

ET                          9.4
  ---------------------------------------------------------------------------
  Section 0.07
  Ineffective flow area between stations 10202.2 and 10319.4.
  ---------------------------------------------------------------------------
NH       4        .06    9967.6      .045   10034.2       .06   10202.2        .5   10319.4
X1    0.07         27    9967.6   10034.2     365.0     380.0     380.0       0.0       0.0
GR   1162.3    9840.2    1160.1    9876.5    1158.2    9896.6    1158.7    9916.4    1159.2    9948.5
GR   1160.5    9967.6    1157.7    9984.5    1156.6    9999.4    1156.6   10000.7    1159.1   10016.6
GR   1159.5   10034.2    1157.9   10061.9    1157.0   10076.9    1157.0   10096.4    1157.0   10112.2
GR   1158.2   10133.3    1158.2   10161.3    1159.2   10182.3    1159.5   10202.2    1158.9   10222.1
GR   1154.9   10236.3    1154.9   10238.8    1155.0   10251.3    1155.1   10262.9    1157.9   10277.5
GR   1159.1   10300.1    1161.2   10319.4
```

```
ET                      6.4
NC     .06       .06    .045
X1    0.16        13  9987.1  10031.5     420.0     480.0     490.0       0.0       0.0
GR  1166.2    9938.4  1163.6   9967.9    1164.1    9987.1    1159.8    9997.4    1159.9   10002.6
GR  1160.3   10016.2  1162.7  10031.5    1162.8   10079.7    1161.6   10141.2    1160.1   10187.7
GR  1162.8   10214.1  1163.8  10251.3    1164.0   10278.7

X1    0.26        15  9953.8  10017.8     455.0     450.0     480.0       0.0       0.0
GR  1167.0    9821.3  1166.8   9871.6    1166.2    9892.6    1164.9    9899.5    1166.1    9919.8
GR  1166.8    9953.8  1164.7   9985.6    1164.2    9993.6    1164.2   10006.5    1166.6   10017.8
GR  1166.9   10031.9  1165.9  10068.2    1166.2   10114.4    1166.8   10150.1    1168.7   10195.2

X1    0.34        13  9981.8  10017.4     465.0     520.0     500.0       0.0       0.0
GR  1171.0    9877.7  1170.1   9894.3    1169.5    9913.8    1169.5    9936.4    1166.8    9941.3
GR  1167.8    9954.3  1170.5   9969.3    1170.2    9981.8    1166.8    9991.1    1166.8    9998.9
GR  1166.8   10009.0  1170.0  10017.4    1171.0   10052.2

X1    0.44        19  9989.4  10017.5     475.0     540.0     520.0       0.0       0.0
GR  1174.7    9832.8  1173.6   9872.7    1173.7    9908.1    1173.8    9966.4    1173.1    9989.4
GR  1171.1    9996.6  1169.8  10000.0    1170.7   10008.2    1171.6   10017.5    1171.2   10044.2
GR  1173.0   10068.5  1173.9  10121.7    1173.2   10200.5    1173.3   10227.1    1172.3   10237.8
GR  1173.4   10275.8  1172.6  10345.0    1172.4   10412.3    1174.4   10474.2
  ---------------------------------------------------------------------------
  Section 0.52
  Ineffective flow area between stations 10266.4 and 10819.0.
  ---------------------------------------------------------------------------

NH       4      .060  9989.8     .045   10022.9       .06   10266.4        .5   10819.0
X1    0.52        20  9989.8  10022.9     420.0     440.0     430.0       0.0       0.0
GR  1176.6    9961.3  1176.1   9989.8    1173.9    9996.2    1173.5   10000.0    1173.5   10008.8
GR  1175.8   10022.9  1174.8  10082.2    1174.1   10131.3    1175.3   10165.1    1175.4   10266.4
GR  1175.6   10381.0  1175.6  10441.7    1175.8   10473.1    1174.8   10489.2    1174.8   10504.6
GR  1175.8   10517.1  1175.1  10587.3    1175.4   10657.4    1175.9   10737.6    1178.2   10819.0

NC     .06       .06    .045
X1    0.62        10  9988.3  10011.2     495.0     550.0     490.0       0.0       0.0
GR  1180.5    9814.8  1179.8   9902.4    1178.0    9955.3    1177.1    9969.4    1177.9    9988.3
GR  1176.7   10000.0  1178.0  10011.2    1179.4   10027.0    1179.6   10085.5    1180.2   10171.3

X1    0.71        13  9989.1  10023.3     505.0     510.0     500.0       0.0       0.0
GR  1183.6    9851.4  1182.4   9895.7    1183.0    9937.3    1182.3    9989.1    1179.6   10000.0
GR  1179.6   10005.6  1181.2  10023.3    1181.7   10052.9    1181.0   10077.0    1181.1   10096.0
GR  1179.9   10106.5  1181.9  10134.4    1184.1   10211.2

X1    0.81        16  9961.9  10011.0     510.0     510.0     500.0       0.0       0.0
GR  1188.3    9853.3  1185.4   9885.3    1183.9    9899.8    1185.2    9919.9    1183.4    9935.2
GR  1185.9    9961.9  1185.2   9988.5    1184.8    9994.7    1183.3    9999.1    1183.4   10000.0
GR  1186.1   10011.0  1184.2  10034.9    1182.7   10042.1    1185.4   10074.9    1185.0   10107.3
GR  1188.2   10165.0
  ---------------------------------------------------------------------------
  Section 0.91
  Ineffective flow area between stations 10160.9 and 10318.8.
  ---------------------------------------------------------------------------
```

```
NH      4      .06   9970.6     .045  10016.2      .06  10160.9       .9  10318.8
X1   0.91       22   9970.6  10016.2    525.0    540.0    530.0      0.0      0.0
GR 1191.6   9851.5  1190.5   9868.2   1189.3   9874.7   1190.5   9887.8   1188.7   9923.4
GR 1189.9   9946.7  1190.2   9961.2   1189.2   9970.6   1188.7   9994.1   1187.7   9999.9
GR 1188.7  10000.0  1189.3  10016.2   1190.9  10040.6   1189.6  10084.1   1190.1  10125.2
GR 1190.4  10160.9  1189.6  10177.0   1188.1  10181.6   1188.3  10186.7   1190.7  10193.7
GR 1190.6  10242.4  1191.7  10318.8

NC     .06     .06    .045
X1   1.00       16   9981.6  10020.1    480.0    490.0    485.0      0.0      0.0
GR 1196.0   9812.1  1195.1   9857.4   1194.0   9884.3   1192.8   9905.3   1194.3   9926.6
GR 1195.1   9957.1  1195.5   9981.6   1194.3   9992.6   1192.5   9999.5   1192.1  10000.0
GR 1193.3  10009.0  1195.0  10020.1   1194.3  10051.3   1194.2  10123.2   1193.7  10153.0
GR 1195.4  10182.2

X1   1.10       16   9988.1  10015.2    545.0    510.0    510.0      0.0      0.0
GR 1199.6   9844.0  1198.6   9888.9   1197.3   9895.8   1198.3   9917.9   1197.7   9943.1
GR 1197.4   9951.6  1198.8   9970.7   1198.2   9988.1   1196.7   9996.1   1196.4  10000.0
GR 1198.1  10015.2  1200.6  10026.7   1199.6  10041.9   1198.1  10055.1   1198.5  10091.5
GR 1199.8  10117.5

X1   1.21       20   9942.0  10022.1    600.0    560.0    600.0      0.0      0.0
GR 1204.5   9656.9  1203.6   9678.5   1202.0   9687.8   1203.4   9701.1   1203.6   9722.6
GR 1204.3   9797.6  1202.7   9828.9   1203.5   9855.2   1201.9   9867.7   1204.1   9902.2
GR 1204.7   9942.0  1202.9   9958.6   1201.4   9974.5   1202.7   9991.6   1201.2  10000.0
GR 1201.8  10013.0  1204.9  10022.1   1204.4  10076.6   1205.6  10199.3   1206.7  10285.8
  ---------------------------------------------------------------------------
  Section 1.31
  Ineffective flow area between stations 9644.4 and 9814.4.
  ---------------------------------------------------------------------------

NH      4      .2   9814.4      .05   9970.8     .045  10052.8       .06  10127.5
X1   1.31       20   9970.8  10017.6    500.0    490.0    510.0      0.0      0.0
GR 1209.5   9644.4  1208.9   9692.3   1207.4   9703.4   1208.6   9729.1   1207.5   9752.8
GR 1209.0   9814.4  1208.0   9876.0   1206.7   9882.4   1208.1   9893.6   1208.8   9924.0
GR 1208.7   9970.8  1208.0   9984.5   1207.2   9995.7   1207.0  10000.0   1208.5  10006.5
GR 1208.7  10017.6  1209.4  10052.8   1208.0  10069.8   1208.5  10080.9   1209.9  10127.5

NH      4     .06   9992.9     .045  10063.9      .05  10133.5      .045  10250.2
X1   1.40       16   9992.9  10063.9    490.0    485.0    505.0      0.0      0.0
GR 1215.5   9779.5  1213.7   9836.1   1213.0   9889.3   1213.4   9941.0   1212.3   9992.9
GR 1210.8  10000.0  1211.7  10009.8   1212.9  10017.8   1213.0  10027.6   1211.2  10040.2
GR 1213.5  10063.9  1213.2  10133.5   1211.8  10169.4   1213.0  10197.9   1211.7  10210.2
GR 1213.6  10250.2

NH      3    .045  10106.8      .05  10268.3     .045  10415.0
X1   1.49       21   9992.6  10106.8    460.0    470.0    475.0      0.0      0.0
GR 1217.6   9992.6  1216.5   9998.5   1215.8  10000.0   1216.1  10007.2   1217.2  10017.0
GR 1216.6  10039.9  1216.5  10062.2   1216.1  10073.9   1216.9  10106.8   1217.8  10175.7
GR 1216.4  10182.7  1217.4  10205.8   1217.2  10245.6   1216.2  10252.8   1216.3  10259.9
GR 1217.4  10268.3  1216.0  10298.9   1215.3  10311.4   1216.6  10334.1   1216.9  10362.0
GR 1219.0  10415.0
```

```
NH      4     .045    9895.3     .05    9949.6     .045   10027.9     .05    10400
X1   1.59       17    9949.6  10027.9     480.0     510.0     540.0     0.0      0.0
GR 1222.2   9782.2    1221.0   9801.4    1221.8    9836.6    1220.5  9857.4   1222.0   9895.3
GR 1222.2   9949.6    1221.0   9977.7    1220.8    9996.4    1220.1 10000.0   1221.2  10015.6
GR 1222.5  10027.9    1220.9  10065.8    1221.2   10101.4    1221.4 10161.1   1221.3  10199.4
GR 1222.1  10288.5    1222.5    10400

NC   .055     .055      .045
X1   1.71       28    9994.7  10032.8     570.0     575.0     590.0     0.0      0.0
GR 1227.7   9994.7    1225.9  10000.0    1226.4   10011.4    1226.9 10018.3   1225.3  10021.7
GR 1226.9  10032.8    1226.5  10079.3    1224.8   10090.3    1227.0 10115.1   1226.3  10140.9
GR 1227.2  10153.4    1225.7  10161.0    1226.8   10178.5    1227.5 10250.0   1228.3  10267.7
GR 1225.0  10277.2    1226.1  10287.7    1226.6   10298.3    1227.3 10319.7   1226.7  10349.7
GR 1227.7  10400.1    1227.2  10447.5    1225.5   10469.3    1227.0 10480.2   1228.1  10504.3
GR 1227.1  10534.8    1226.1  10540.8    1228.6   10580.9

X1   1.80       22    9958.8  10028.4     500.0     485.0     490.0     0.0      0.0
GR 1232.8   9958.8    1231.5   9967.1    1230.3    9974.1    1230.4  9981.2   1231.2   9991.1
GR 1230.3  10000.0    1230.3  10011.7    1232.3   10028.4    1231.3 10060.2   1232.7  10103.3
GR 1230.6  10188.3    1230.6  10237.8    1229.9   10264.1    1231.9 10320.3   1231.1  10405.1
GR 1231.0  10488.8    1231.1  10509.2    1230.9   10523.1    1231.2 10542.6   1230.6  10550.5
GR 1230.5  10557.6    1232.0  10588.3

X1   1.89       34    9925.9  10049.1     500.0     540.0     505.0     0.0      0.0
GR 1238.5   9754.3    1237.5   9813.6    1236.6    9872.0    1236.2  9898.7   1235.5   9909.7
GR 1237.3   9925.9    1236.4   9962.6    1233.4    9980.8    1236.1  9998.1   1234.1  10000.0
GR 1236.0  10017.6    1237.4  10049.1    1237.4   10082.3    1235.1 10101.8   1236.5  10123.3
GR 1237.1  10153.4    1237.5  10185.1    1237.2   10301.5    1238.0 10394.5   1237.8  10447.0
GR 1234.8  10480.1    1234.4  10491.5    1233.8   10497.5    1235.3 10508.8   1234.6  10518.3
GR 1237.3  10531.0    1236.7  10558.7    1234.6   10570.8    1234.9 10594.7   1236.9  10619.4
GR 1236.0  10644.0    1234.8  10656.0    1237.1   10676.9    1237.6 10744.5

X1   2.01       24    9935.0  10048.9     600.0     575.0     595.0     0.0      0.0
GR 1242.9   9859.8    1241.8   9880.3    1241.1    9889.4    1242.5  9904.9   1239.6   9911.5
GR 1240.1   9917.4    1242.4   9935.0    1241.7    9976.7    1239.9  9997.3   1239.5  10000.0
GR 1241.5  10019.9    1242.7  10048.9    1240.9   10069.2    1242.7 10086.4   1240.9  10098.3
GR 1242.6  10119.7    1241.3  10161.6    1242.5   10203.8    1242.6 10243.4   1241.6  10252.0
GR 1239.7  10256.5    1239.9  10261.2    1242.4   10277.4    1243.0 10337.5
  Inflow from sub-basin H2f added

X1   2.11       22    9876.3  10031.9     535.0     520.0     545.0     0.0      0.0
GR 1248.5   9496.5    1247.5   9526.4    1246.5    9594.1    1245.4  9633.4   1246.6   9705.5
GR 1247.8   9766.5    1248.1   9824.3    1247.4    9876.3    1245.7  9915.1   1244.3   9930.8
GR 1246.1   9956.8    1247.0   9987.9    1244.9   10000.0    1246.7 10031.9   1247.5  10119.7
GR 1247.1  10145.1    1245.3  10156.7    1246.6   10176.7    1246.7 10217.1   1245.9  10233.2
GR 1246.9  10286.1    1247.2    10320

QT      2     816.0     816.0
X1   2.21       17    9995.1  10039.4     550.0     560.0     525.0     0.0      0.0
GR 1252.1   9584.5    1251.3   9637.1    1249.7    9652.8    1250.7  9683.8   1250.9   9758.6
GR 1251.1   9832.4    1252.0   9883.1    1249.9    9896.9    1251.3  9940.1   1251.5   9995.1
GR 1249.7  10000.0    1250.1  10019.3    1252.5   10039.4    1251.4 10099.9   1251.1  10166.2
GR 1251.6  10248.1    1252.2  10374.7
```

```
X1     2.30        21    9987.4   10024.7     460.0     490.0     490.0       0.0       0.0
GR   1257.7    9417.1    1256.4    9475.0    1256.7    9539.6    1256.0    9619.2    1255.1    9641.0
GR   1256.2    9675.4    1256.2    9767.4    1255.6    9875.5    1255.3    9951.0    1256.0    9987.4
GR   1254.9    9998.9    1254.9   10000.0    1256.4   10008.7    1257.3   10024.7    1256.8   10080.4
GR   1257.1   10146.0    1255.9   10161.5    1257.0   10179.7    1257.1   10222.4    1257.1   10285.2
GR   1257.3   10326.4
  ---------------------------------------------------------------------------
  Section 2.41
  Ineffective flow area between stations 9676.8 and 9877.0.
  ---------------------------------------------------------------------------

NH       5        .5      9877       .06    9976.8      .045   10013.5       .06   10056.7        .5
NH   10141
X1     2.41        22    9976.8   10013.5     470.0     660.0     565.0       0.0       0.0
GR   1261.7    9351.3    1260.6    9365.8    1261.1    9385.8    1260.7    9428.8    1261.2    9508.1
GR   1260.4    9587.2    1260.7    9656.2    1259.9    9696.5    1258.0    9707.1    1259.9    9720.4
GR   1260.1    9766.1    1258.1    9773.3    1259.6    9793.5    1260.9    9877.0    1259.4    9906.2
GR   1260.8    9932.4    1261.2    9976.8    1259.3   10000.0    1261.1   10013.5    1261.4   10056.7
GR   1261.8   10079.5    1262.3     10141

NC      .06      .055      .045
X1     2.49         9    9968.2   10110.1     450.0     450.0     435.0       0.0       0.0
GR   1265.2    9926.1    1264.2    9968.2    1263.3    9983.6    1262.4   10000.0    1264.4   10021.8
GR   1263.4   10047.9    1262.0   10067.3    1265.3   10110.1    1266.0   10183.5

X1     2.58        11    9964.7   10033.7     475.0     480.0     485.0       0.0       0.0
GR   1270.7    9835.0    1270.2    9918.6    1270.1    9964.7    1268.3    9980.5    1268.7   10000.0
GR   1270.2   10033.7    1270.2   10098.2    1270.3   10175.4    1270.3   10203.1    1269.8   10227.0
GR   1270.9   10253.4

NC      .06       .06      .045
X1     2.68        14    9991.1   10024.3     560.0     470.0     505.0       0.0       0.0
GR   1276.9    9892.7    1275.8    9957.9    1275.1    9991.1    1273.8   10000.0    1273.9   10012.7
GR   1275.4   10024.3    1275.0   10049.6    1273.7   10062.0    1275.0   10086.5    1275.1   10144.3
GR   1274.8   10192.0    1274.0   10207.8    1275.4   10228.0    1276.4   10276.9
  Inflow from sub-basins H2d & H2e added

X1     2.78        10    9953.8   10064.9     485.0     505.0     510.0       0.0       0.0
GR   1282.0    9923.1    1279.2    9939.8    1280.3    9953.8    1278.2    9967.5    1277.7    9982.7
GR   1277.8    9996.9    1278.2   10000.0    1279.4   10022.7    1280.8   10064.9    1281.0   10155.3

QT       2     767.0     767.0
X1     2.87        16    9974.7   10026.5     530.0     465.0     490.0       0.0       0.0
GR   1287.2    9873.5    1285.4    9900.8    1283.5    9908.9    1284.7    9938.4    1285.2    9974.7
GR   1283.9    9990.1    1282.7   10000.0    1283.8   10009.9    1285.3   10026.5    1285.8   10128.1
GR   1285.5   10149.4    1283.7   10158.9    1284.1   10176.7    1283.4   10185.9    1286.9   10208.1
GR   1287.5   10282.4
  ---------------------------------------------------------------------------
  Section 2.95
  Ineffective flow area between stations 9844.4 and 9897.3.
  ---------------------------------------------------------------------------
```

```
NH       3        .9    9897.3     .045   9981.1      .06  10137.8
X1    2.95        11    9897.3   9981.1     435.0    445.0    440.0       0.0       0.0
GR  1290.8    9844.4    1289.9   9864.8    1287.8   9871.2   1290.3    9897.3    1288.5    9945.0
GR  1290.2    9981.1    1289.5  10000.0    1289.7  10042.7   1289.0   10083.4    1289.1   10103.8
GR  1290.8   10137.8

NC     .06       .06      .045
X1    3.05         9    9922.5  10037.2     485.0    465.0    525.0       0.0       0.0
GR  1296.3    9803.3    1294.5   9867.8    1294.3   9922.5   1292.5    9963.2    1293.9    9990.2
GR  1292.1   10000.0    1293.4  10010.8    1295.5  10037.2   1295.9   10119.1
  ---------------------------------------------------------------------------
  Section 3.14
  Ineffective flow area between stations 9906.1 and 9953.1.
  ---------------------------------------------------------------------------

NH       4       .06    9953.1     .045  10018.2      .06  10052.5        .5  10172.6
X1    3.14        10    9953.1  10018.2     480.0    490.0    495.0       0.0       0.0
GR  1301.4    9906.1    1300.1   9953.1    1299.2   9978.2   1298.4   10000.0    1299.8   10018.2
GR  1300.0   10052.5    1299.1  10079.4    1297.6  10092.8   1299.1   10112.8    1300.9   10172.6
  ---------------------------------------------------------------------------
  Section 3.25
  Ineffective flow area between stations 10322.8 and 10544.7.
  Inflow from sub-basin H2b occurs below this section.
  ---------------------------------------------------------------------------

QT       2     603.0     603.0
NH       4       .06    9971.4     .045  10075.1      .06  10322.8        .9  10544.7
X1    3.25        15    9971.4  10075.1     515.0    560.0    555.0       0.0       0.0
GR  1308.0    9881.6    1306.0   9971.4    1303.3   9990.0   1303.1   10000.0    1303.8   10015.4
GR  1305.6   10075.1    1305.0  10191.8    1304.8  10282.6   1305.1   10322.8    1303.7   10338.2
GR  1302.2   10345.5    1303.6  10369.7    1304.5  10446.5   1303.2   10489.0    1306.0   10544.7

NC     .06       .06      .045
X1    3.34         7    9980.6  10048.6     480.0    480.0    485.0       0.0       0.0
GR  1312.7    9951.8    1310.9   9980.6    1307.9   9993.4   1307.3   10000.0    1309.1   10023.3
GR  1310.6   10048.6    1311.6  10143.5
  ---------------------------------------------------------------------------
  Section 3.43
  Ineffective flow area between stations 9768.4 and 9891.1.
  ---------------------------------------------------------------------------

NH       4        .9    9891.1       .06   9973.3     .045  10044.3       .06  10091.2
X1    3.43        11    9973.3  10044.3     485.0    505.0    490.0       0.0       0.0
GR  1317.0    9768.4    1316.1   9850.3    1314.0   9867.8   1315.4    9891.1    1315.0    9935.0
GR  1314.4    9973.3    1313.2   9986.5    1312.6  10000.0   1313.0   10025.4    1314.7   10044.3
GR  1317.1   10091.2
  ---------------------------------------------------------------------------
  Section 3.53
  Ineffective flow area between stations 10100.1 and 10233.5.
  ---------------------------------------------------------------------------
```

NH	4	.06	9990	.045	10010.2	.06	10100.1	.9	10233.5	
X1	3.53	11	9990.0	10010.2	480.0	490.0	485.0	0.0	0.0	
GR	1322.5	9919.6	1322.2	9971.8	1320.9	9990.0	1318.5	10000.0	1319.6	10010.2
GR	1320.4	10039.6	1320.5	10100.1	1320.1	10135.1	1318.4	10146.8	1320.3	10172.4
GR	1324.0	10233.5								
NC	.06	.06	.045							
X1	3.57	11	9945.5	10022.4	220.0	255.0	235.0	0.0	0.0	
GR	1325.1	9814.8	1323.9	9866.4	1321.2	9883.1	1323.4	9903.5	1323.1	9945.5
GR	1322.5	9964.9	1321.0	9987.0	1320.1	10000.0	1321.0	10010.2	1322.8	10022.4
GR	1323.6	10101.2								
X1	3.62	10	9977.0	10020.9	240.0	300.0	260.0	0.0	0.0	
GR	1327.7	9900.0	1327.8	9956.7	1326.8	9977.0	1324.1	9993.5	1323.6	10000.0
GR	1325.1	10020.9	1325.3	10035.3	1324.3	10042.7	1327.0	10077.8	1327.4	10138.3
X1	3.68	9	9965.6	10067.6	300.0	325.0	305.0	0.0	0.0	
GR	1330.5	9940.3	1329.8	9965.6	1327.0	9976.6	1325.8	9991.6	1325.7	10000.0
GR	1327.1	10014.9	1328.7	10038.2	1330.3	10067.6	1331.1	10126.6		
X1	3.74	12	9964.6	10027.4	340.0	350.0	335.0	0.0	0.0	
GR	1333.6	9916.9	1332.9	9964.6	1330.3	9974.5	1330.7	9989.6	1329.0	9998.8
GR	1328.1	10000.0	1330.8	10010.3	1333.6	10027.4	1332.1	10040.5	1329.7	10045.7
GR	1333.1	10067.1	1334.2	10162.5						
X1	3.81	13	9972.8	10028.7	350.0	390.0	370.0	0.0	0.0	
GR	1337.9	9832.2	1337.2	9904.4	1335.0	9953.0	1335.5	9972.8	1332.7	9986.6
GR	1334.7	9999.2	1335.9	10000.0	1336.3	10028.7	1335.4	10039.0	1332.5	10055.2
GR	1335.5	10077.5	1336.6	10141.6	1337.8	10230.0				

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

*PROF 1

CCHV= .100 CEHV= .300
*SECNO .000

3265 DIVIDED FLOW

.000	3.18	1155.98	.00	1155.00	1156.16	.18	.00	.00	1156.10
818.0	5.5	773.6	38.9	7.3	222.1	40.7	.0	.0	1155.10
.00	.76	3.48	.96	.060	.045	.060	.000	1152.80	9915.19
.004004	0.	0.	0.	0	0	6	.00	223.15	10516.59

1490 NH CARD USED
*SECNO .070

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

.070	3.83	1158.73	.00	.00	1158.87	.14	2.71	.00	1160.50
818.0	9.3	208.9	599.8	7.0	43.9	292.3	2.7	2.1	1159.50
.04	1.33	4.76	2.05	.060	.045	.153	.000	1154.90	9891.00
.016078	365.	380.	380.	3	0	0	.00	258.48	10293.11

*SECNO .160

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.71

.160	3.15	1162.95	.00	.00	1163.11	.16	4.24	.01	1164.10
818.0	.0	355.5	462.5	.0	88.7	192.4	6.1	4.8	1162.70
.08	.00	4.01	2.40	.000	.045	.060	.000	1159.80	9989.87
.005512	420.	490.	480.	4	0	0	.00	229.60	10219.47

*SECNO .260

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 = .61

.260	2.58	1166.78	.00	.00	1167.12	.34	3.96	.05	1166.80
818.0	147.8	546.3	123.9	52.5	101.0	60.0	8.7	7.4	1166.60
.11	2.81	5.41	2.06	.060	.045	.060	.000	1164.20	9871.89
.014656	455.	480.	450.	3	0	0	.00	268.17	10149.61

*SECNO .340

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.77

.340	3.84	1170.64	.00	.00	1170.88	.24	3.75	.01	1170.20
818.0	320.6	492.0	5.4	125.4	107.1	6.9	11.3	9.8	1170.00
.15	2.56	4.59	.78	.060	.045	.060	.000	1166.80	9884.54
.004660	465.	500.	520.	4	0	0	.00	154.75	10039.29

*SECNO .440

3265 DIVIDED FLOW

.440	3.67	1173.47	.00	.00	1173.64	.16	2.75	.01	1173.10
818.0	1.5	315.4	501.1	2.4	68.4	254.6	14.7	13.1	1171.60
.20	.64	4.61	1.97	.060	.045	.060	.000	1169.80	9976.94
.006133	475.	520.	540.	3	0	0	.00	396.53	10445.70

1490 NH CARD USED
*SECNO .520

.520	2.63	1176.13	.00	.00	1176.20	.07	2.56	.01	1176.10
818.0	.0	222.3	595.7	.0	60.7	575.7	19.5	18.9	1175.80
.26	.02	3.66	1.03	.060	.045	.101	.000	1173.50	9987.64
.005594	420.	430.	440.	4	0	0	.00	758.38	10746.02

*SECNO .620

.620	3.06	1179.76	.00	.00	1180.10	.34	3.82	.08	1177.90
818.0	421.7	336.4	59.9	119.4	55.8	33.8	24.7	24.9	1178.00
.30	3.53	6.03	1.77	.060	.045	.060	.000	1176.70	9903.58
.010263	495.	490.	550.	3	0	0	.00	204.77	10108.35

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

*SECNO .710

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

.710	3.35	1182.95	.00	.00	1183.07	.13	2.96	.02	1182.30
818.0	20.9	317.0	480.1	30.9	85.4	220.2	27.8	27.8	1181.20
.35	.68	3.71	2.18	.060	.045	.060	.000	1179.60	9875.66
.003780	505.	500.	510.	4	0	0	.00	286.93	10170.80

*SECNO .810

3265 DIVIDED FLOW

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

.810	3.19	1185.89	.00	.00	1186.04	.15	2.96	.01	1185.90
818.0	313.0	106.0	399.0	103.9	37.7	125.7	31.4	30.8	1186.10
.39	3.01	2.81	3.17	.060	.045	.060	.000	1182.70	9879.86
.010146	510.	500.	510.	3	0	0	.00	239.72	10123.40

1490 NH CARD USED
*SECNO .910

3265 DIVIDED FLOW

.910	3.04	1190.74	.00	.00	1190.92	.18	4.87	.01	1189.20
818.0	267.0	381.6	169.4	110.0	84.9	137.3	35.0	34.6	1189.30
.44	2.43	4.49	1.23	.060	.045	.102	.000	1187.70	9864.67
.008324	525.	530.	540.	2	0	0	.00	378.80	10251.62

*SECNO 1.000

3265 DIVIDED FLOW

1.000	3.06	1195.16	.00	.00	1195.31	.15	4.38	.00	1195.50
818.0	297.9	206.3	313.8	102.1	50.4	136.0	38.5	38.4	1195.00
.49	2.92	4.10	2.31	.060	.045	.060	.000	1192.10	9854.30
.009838	480.	485.	490.	3	0	0	.00	299.98	10178.11

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 1.100

3265 DIVIDED FLOW

1.100	3.06	1199.46	.00	.00	1199.64	.18	4.32	.01	1198.20
818.0	402.9	287.5	127.7	159.3	61.0	63.7	41.9	41.7	1198.10
.53	2.53	4.71	2.00	.060	.045	.060	.000	1196.40	9850.34
.006991	545.	510.	510.	5	0	0	.00	238.65	10110.68

*SECNO 1.210

3265 DIVIDED FLOW

1.210	2.77	1203.97	.00	.00	1204.19	.21	4.54	.01	1204.70
818.0	285.0	533.0	.0	135.2	123.1	.0	45.7	45.1	1204.90
.58	2.11	4.33	.00	.060	.045	.000	.000	1201.20	9669.59
.008298	600.	600.	560.	4	0	0	.00	259.60	10019.37

1490 NH CARD USED
*SECNO 1.310

3265 DIVIDED FLOW

1.310	2.52	1209.22	1208.88	.00	1209.34	.12	5.15	.01	1208.70
818.0	513.0	233.9	71.0	257.9	55.8	35.5	49.2	49.0	1208.70
.63	1.99	4.19	2.00	.084	.045	.058	.000	1206.70	9666.50
.012856	500.	510.	490.	15	16	0	.00	427.43	10104.97

1490 NH CARD USED
*SECNO 1.400

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

1.400	2.80	1213.60	.00	.00	1213.73	.13	4.39	.00	1212.30
818.0	97.5	347.1	373.4	72.6	102.6	143.6	52.9	53.7	1213.50
.68	1.34	3.38	2.60	.060	.045	.045	.000	1210.80	9844.04
.006497	490.	505.	485.	4	0	0	.00	406.06	10250.11

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 1.490

3265 DIVIDED FLOW

1.490	2.15	1217.45	.00	.00	1217.61	.16	3.87	.01	1217.60
818.0	.0	318.6	499.4	.0	100.9	155.9	56.0	57.8	1216.90
.72	.00	3.16	3.20	.000	.045	.046	.000	1215.30	9993.38
.010722	460.	475.	470.	4	0	0	.00	354.46	10376.00

1490 NH CARD USED
*SECNO 1.590

3265 DIVIDED FLOW

1.590	2.03	1222.13	.00	.00	1222.23	.09	4.61	.01	1222.20
818.0	231.8	203.7	382.5	93.6	72.0	177.2	59.6	62.7	1222.50
.78	2.48	2.83	2.16	.045	.045	.050	.000	1220.10	9783.14
.007567	480.	540.	510.	5	0	0	.00	487.72	10300.03

*SECNO 1.710

3265 DIVIDED FLOW

1.710	2.52	1227.32	.00	.00	1227.44	.12	5.20	.01	1227.70
818.0	.0	134.5	683.5	.0	38.5	259.8	63.8	68.8	1226.90
.84	.00	3.50	2.63	.000	.045	.055	.000	1224.80	9995.83
.010913	570.	590.	575.	4	0	0	.00	428.24	10560.30

*SECNO 1.800

3265 DIVIDED FLOW

1.800	1.82	1231.72	.00	.00	1231.80	.08	4.36	.00	1232.80
818.0	.0	167.0	651.0	.0	58.3	313.8	67.6	74.0	1232.30
.90	.00	2.87	2.07	.000	.045	.055	.000	1229.90	9965.71
.007508	500.	490.	485.	4	0	0	.00	499.00	10582.52

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

*SECNO 1.890

3265 DIVIDED FLOW

1.890	2.85	1236.25	.00	.00	1236.42	.17	4.59	.03	1237.30
818.0	9.9	281.7	526.4	7.0	74.4	172.1	71.4	78.6	1237.40
.94	1.43	3.79	3.06	.055	.045	.055	.000	1233.40	9895.56
.010087	500.	505.	540.	4	0	0	.00	251.66	10669.15

*SECNO 2.010

3265 DIVIDED FLOW

2.010	2.83	1242.33	.00	.00	1242.47	.14	6.05	.00	1242.40
818.0	198.8	311.3	307.9	61.2	95.3	117.7	74.9	82.4	1242.70
1.00	3.25	3.27	2.62	.055	.045	.055	.000	1239.50	9870.41
.010604	600.	595.	575.	3	0	0	.00	320.62	10276.95

*SECNO 2.110

3265 DIVIDED FLOW

2.110	2.64	1246.94	.00	.00	1247.04	.10	4.56	.00	1247.40
818.0	240.3	443.9	133.8	115.8	153.5	81.9	78.8	87.2	1246.70
1.06	2.08	2.89	1.63	.055	.045	.055	.000	1244.30	9564.46
.006976	535.	545.	520.	4	0	0	.00	471.06	10290.36

*SECNO 2.210

3265 DIVIDED FLOW

2.210	1.87	1251.57	.00	.00	1251.70	.13	4.65	.01	1251.50
816.0	580.2	185.5	50.3	231.3	46.4	41.6	82.9	93.6	1252.50
1.11	2.51	4.00	1.21	.055	.045	.055	.000	1249.70	9618.73
.010857	550.	525.	560.	3	0	0	.00	541.22	10244.74

*SECNO 2.300

```
   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

    2.300      1.68   1256.58       .00       .00   1256.68       .09      4.98       .00   1256.00
    816.0     731.0      75.7       9.3     306.6      23.3       6.9      86.4      99.3   1257.30
     1.17      2.38      3.25      1.35      .055      .045      .055      .000   1254.90   9466.87
   .010505     460.      490.      490.         4         0         0       .00    526.54  10172.79


1490 NH CARD USED
*SECNO 2.410
    2.410      3.65   1261.65       .00       .00   1261.73       .08      5.05       .00   1261.20
    816.0     575.5     217.1      23.4     753.3      52.0      19.0      92.8     106.3   1261.10
     1.25       .76      4.17      1.23      .247      .045      .062      .000   1258.00   9351.96
   .010089     470.      565.      660.         4         0         0       .00    718.96  10070.92


*SECNO 2.490
    2.490      3.01   1265.01       .00       .00   1265.21       .20      3.44       .04   1264.20
    816.0      15.1     800.9        .0      14.0     223.4        .0      98.3     110.9   1265.30
     1.28      1.08      3.58       .00      .060      .045      .000      .000   1262.00   9933.81
   .006233     450.      435.      450.         5         0         0       .00    172.62  10106.43


*SECNO 2.580
3280 CROSS SECTION      2.58 EXTENDED       .00 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.580      2.40   1270.70   1270.70       .00   1270.98       .28      4.18       .03   1270.10
    816.0      71.1     548.8     196.1      46.4     108.8     103.5     101.0     114.1   1270.20
     1.32      1.53      5.04      1.89      .060      .045      .055      .000   1268.30   9835.00
   .012750     475.      485.      480.        12        14         0       .00    413.62  10248.62


*SECNO 2.680
    2.680      2.22   1275.92       .00       .00   1276.07       .14      5.07       .01   1275.10
    816.0      22.0     228.1     565.9      16.2      54.2     228.8     104.2     118.2   1275.40
     1.36      1.36      4.21      2.47      .060      .045      .060      .000   1273.70   9950.58
   .008506     560.      505.      470.         6         0         0       .00    303.02  10253.60
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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 2.780
    2.780     2.88   1280.58       .00       .00   1280.90       .32      4.78       .05   1280.30
    816.0     37.3     778.7        .0      17.3     167.9        .0     107.0     120.7   1280.80
     1.39     2.15      4.64       .00      .060      .045      .000      .000   1277.70   9931.56
  .010512     485.      510.      505.         4         0         0       .00    126.75  10058.31


*SECNO 2.870

3265 DIVIDED FLOW

    2.870     2.89   1285.59       .00       .00   1285.78       .19      4.86       .01   1285.20
    767.0    203.0     334.3     229.7      77.1      79.4      81.1     109.4     122.8   1285.30
     1.43     2.63      4.21      2.83      .060      .045      .060      .000   1282.70   9897.84
  .009258     530.      490.      465.         5         0         0       .00    245.89  10199.83


1490 NH CARD USED
*SECNO 2.950
    2.950     2.65   1290.45       .00       .00   1290.63       .18      4.85       .00   1290.30
    767.0     11.6     359.3     396.1      50.4      90.1     139.7     112.0     125.4   1290.20
     1.47      .23      3.99      2.84      .900      .045      .060      .000   1287.80   9852.25
  .013262     435.      440.      445.         5         0         0       .00    278.61  10130.87


*SECNO 3.050

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.40

    3.050     3.00   1295.10       .00       .00   1295.31       .21      4.67       .01   1294.30
    767.0     65.8     701.2        .0      44.1     183.6        .0     114.9     128.1   1295.50
     1.51     1.49      3.82       .00      .060      .045      .000      .000   1292.10   9846.62
  .006746     485.      525.      465.         4         0         0       .00    185.44  10032.06


1490 NH CARD USED
*SECNO 3.140

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

    3.140     3.02   1300.62       .00       .00   1301.13       .51      5.73       .09   1300.10
    767.0      7.6     593.4     165.9       4.9      91.6     167.4     117.7     130.4   1299.80
     1.54     1.57      6.48       .99      .060      .045      .297      .000   1297.60   9934.37
  .024487     480.      495.      490.         4         0         0       .00    228.86  10163.23
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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 3.250

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.06

3.250	3.54	1305.74	.00	.00	1305.80	.06	4.63	.05	1306.00
603.0	.0	356.9	246.1	.0	144.1	547.4	123.8	135.5	1305.60
1.63	.00	2.48	.45	.000	.045	.258	.000	1302.20	9973.13
.003554	515.	555.	560.	5	0	0	.00	566.57	10539.70

*SECNO 3.340

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.340	2.92	1310.22	1310.22	.00	1310.98	.76	3.70	.21	1310.90
603.0	.0	603.0	.0	.0	86.5	.0	128.1	138.9	1310.60
1.65	.00	6.97	.00	.000	.045	.000	.000	1307.30	9983.50
.026866	480.	485.	480.	20	15	0	.00	58.70	10042.20

1490 NH CARD USED
*SECNO 3.430

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.40

3.430	2.80	1315.40	.00	.00	1315.60	.20	4.56	.06	1314.40
603.0	42.5	556.5	4.0	59.6	149.9	4.7	129.8	140.4	1314.70
1.69	.71	3.71	.84	.103	.045	.060	.000	1312.60	9856.17
.004680	485.	490.	505.	5	0	0	.00	201.17	10057.89

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 3.530
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.530	2.76	1321.16	1321.16	.00	1321.62	.46	4.47	.08	1320.90
603.0	.5	279.8	322.7	.5	36.2	182.5	132.2	142.6	1319.60
1.72	1.03	7.73	1.77	.060	.045	.152	.000	1318.40	9986.32
.025778	480.	485.	490.	20	5	0	.00	200.33	10186.65

*SECNO 3.570

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.45

3.570	3.49	1323.59	.00	.00	1323.73	.14	2.08	.03	1323.10
603.0	92.0	485.2	25.8	57.3	146.2	29.8	133.5	143.8	1322.80
1.74	1.60	3.32	.87	.060	.045	.060	.000	1320.10	9868.39
.004308	220.	235.	255.	5	0	0	.00	230.63	10099.02

*SECNO 3.620
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.620	2.48	1326.08	1326.08	.00	1326.70	.62	2.27	.14	1326.80
603.0	.0	440.6	162.4	.0	62.5	42.6	134.5	144.8	1325.10
1.75	.00	7.05	3.81	.000	.045	.060	.000	1323.60	9981.42
.024882	240.	260.	300.	4	19	0	.00	84.38	10065.80

*SECNO 3.680

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.30

3.680	3.65	1329.35	.00	.00	1329.56	.20	2.81	.04	1329.80
603.0	.0	603.0	.0	.0	167.3	.0	135.5	145.4	1330.30
1.78	.00	3.60	.00	.000	.045	.000	.000	1325.70	9967.35
.004703	300.	305.	325.	6	0	0	.00	82.87	10050.22

*SECNO 3.740

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 = .48

3.740	3.86	1331.96	.00	.00	1332.55	.59	2.88	.12	1332.90
603.0	.0	521.9	81.1	.0	80.9	21.7	136.5	146.0	1333.60
1.79	.00	6.45	3.75	.000	.045	.060	.000	1328.10	9968.17
.020296	340.	335.	350.	3	0	0	.00	68.37	10059.94

*SECNO 3.810

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.82

3.810	3.81	1336.31	.00	.00	1336.43	.12	3.83	.05	1335.50
603.0	69.2	206.7	327.1	39.6	69.9	113.0	137.9	147.2	1336.30
1.83	1.75	2.96	2.89	.060	.045	.060	.000	1332.50	9924.20
.006118	350.	370.	390.	4	0	0	.00	200.14	10124.33

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T1      FCD 90-64    AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Branch Channel - Final with Floodway

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        3        0        0        0        0       0.0    818.0     1157

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     15        0      -1.0
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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


*PROF 2



CCHV=     .100 CEHV=     .300
*SECNO  .000
 2800 NAT Q1=     129.28  WSELK=    1155.98  ENC Q1=     172.61  WSEL=    1156.48  RATIO=   -.3352
 NAT Q1=     199.  RATIOS LOB, CH, ROB=    .0242   .8662   .1096  WSEL=    1156.48

3470 ENCROACHMENT STATIONS=     9971.6   10074.8  TYPE=      4  TARGET=         .134
      .000      4.20   1157.00       .00   1155.98   1157.10       .10       .00       .00   1156.10
     818.0        .0     818.0        .0        .0     327.7        .0        .0        .0   1155.10
       .00       .00      2.50       .00      .000      .045      .000      .000   1152.80   9971.60
   .001276        0.        0.        0.         0         0         0       .00    103.20  10074.80


1490 NH CARD USED
*SECNO  .070
 2800 NAT Q1=      64.51  WSELK=    1158.73  ENC Q1=      64.51  WSEL=    1159.63  RATIO=    .0000
 NAT Q1=     163.  RATIOS LOB, CH, ROB=    .0790   .2183   .7027  WSEL=    1159.63

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9967.6   10085.8  TYPE=      4  TARGET=         .604
      .070      4.36   1159.26   1159.26   1158.73   1159.91       .65      1.34       .17   1160.50
     818.0        .0     459.2     358.8        .0      65.2      63.2       2.0        .9   1159.50
       .02       .00      7.05      5.68      .000      .045      .060      .000   1154.90   9975.09
   .031017      365.      380.      380.        20         8         0       .00     95.90  10085.78


*SECNO  .160
 2800 NAT Q1=     110.18  WSELK=    1162.95  ENC Q1=     110.18  WSEL=    1163.55  RATIO=    .0000
 NAT Q1=     189.  RATIOS LOB, CH, ROB=    .0000   .3780   .6220  WSEL=    1163.55

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.88
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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


3470 ENCROACHMENT STATIONS=     9987.1   10148.5  TYPE=      4  TARGET=         .417
      .160      3.99   1163.79       .00   1162.95   1163.97       .18      4.01       .05   1164.10
     818.0        .0     500.7     317.3        .0     124.9     165.0       4.3       2.3   1162.70
       .06       .00      4.01      1.92      .000      .045      .060      .000   1159.80   9987.84
   .003743      420.      490.      480.         5         0         0       .00    160.67  10148.51


*SECNO  .260
 2800 NAT Q1=      67.57  WSELK=    1166.78  ENC Q1=      76.61  WSEL=    1167.38  RATIO=   -.1339
 NAT Q1=     148.  RATIOS LOB, CH, ROB=    .2337   .5191   .2472  WSEL=    1167.38

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .40


3470 ENCROACHMENT STATIONS=     9953.8   10017.8  TYPE=      4  TARGET=         .481
      .260      2.76   1166.96   1166.92   1166.78   1167.79       .82      3.63       .19   1166.80
     818.0        .0     818.0        .0        .0     112.2        .0       6.5       3.5   1166.60
       .08       .00      7.29       .00      .000      .045      .000      .000   1164.20   9953.80
   .023458      455.      480.      450.        12        19         0       .00     64.00  10017.80


*SECNO  .340
 2800 NAT Q1=     119.83  WSELK=    1170.64  ENC Q1=     119.83  WSEL=    1171.24  RATIO=    .0000
 NAT Q1=     182.  RATIOS LOB, CH, ROB=    .4337   .5380   .0284  WSEL=    1171.24
3280 CROSS SECTION       .34 EXTENDED       .45 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.45


3470 ENCROACHMENT STATIONS=     9949.7   10017.4  TYPE=      4  TARGET=         .342
      .340      4.65   1171.45       .00   1170.64   1171.76       .31      3.93       .05   1170.20
     818.0     159.4     658.6        .0      66.0     136.4        .0       8.3       4.2   1170.00
       .11      2.42      4.83       .00      .060      .045      .000      .000   1166.80   9949.70
   .003924      465.      500.      520.         4         0         0       .00     67.70  10017.40
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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  .440
 2800 NAT Q1=      104.45  WSELK=    1173.47  ENC Q1=      104.45  WSEL=    1174.07  RATIO=    .0000
 NAT Q1=     216.  RATIOS LOB, CH, ROB=    .0333   .2678   .6989  WSEL=    1174.07

3470 ENCROACHMENT STATIONS=     9989.4   10057.3  TYPE=      4  TARGET=        .517
      .440      4.23   1174.03       .00   1173.47   1174.37       .34      2.60       .01   1173.10
     818.0        .0     449.4     368.6        .0      83.9     101.0      10.6       5.0   1171.60
       .14       .00      5.36      3.65      .000      .045      .060      .000   1169.80   9989.40
   .006575      475.      520.      540.         3         0         0       .00     67.93  10057.33


1490 NH CARD USED
*SECNO  .520
 2800 NAT Q1=      109.36  WSELK=    1176.13  ENC Q1=      109.36  WSEL=    1176.73  RATIO=    .0000
 NAT Q1=     215.  RATIOS LOB, CH, ROB=    .0066   .2206   .7728  WSEL=    1176.73
3280 CROSS SECTION       .52 EXTENDED       .17 FEET


3470 ENCROACHMENT STATIONS=     9989.8   10121.6  TYPE=      4  TARGET=        .492
      .520      3.27   1176.77       .00   1176.13   1176.96       .19      2.57       .02   1176.10
     818.0        .0     350.4     467.6        .0      81.6     175.7      12.8       6.0   1175.80
       .18       .00      4.30      2.66      .000      .045      .060      .000   1173.50   9989.80
   .005336      420.      430.      440.         3         0         0       .00    131.83  10121.63


*SECNO  .620
 2800 NAT Q1=       80.74  WSELK=    1179.76  ENC Q1=       80.74  WSEL=    1180.36  RATIO=    .0000
 NAT Q1=     148.  RATIOS LOB, CH, ROB=    .4967   .3252   .1780  WSEL=    1180.36
3280 CROSS SECTION       .62 EXTENDED       .13 FEET


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


3470 ENCROACHMENT STATIONS=     9964.8   10011.2  TYPE=      4  TARGET=        .453
      .620      3.63   1180.33       .00   1179.76   1180.93       .60      3.85       .12   1177.90
     818.0     342.1     475.9        .0      67.6      68.8        .0      15.1       7.1   1178.00
       .20      5.06      6.91       .00      .060      .045      .000      .000   1176.70   9964.84
   .011587      495.      490.      550.         2         0         0       .00     46.36  10011.20


*SECNO  .710
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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

 2800 NAT Q1=     133.04  WSELK=    1182.95  ENC Q1=     133.04  WSEL=    1183.55  RATIO=    .0000
 NAT Q1=     228.  RATIOS LOB, CH, ROB=    .0997   .3252   .5751  WSEL=    1183.55
3280 CROSS SECTION       .71 EXTENDED       .06 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.85


3470 ENCROACHMENT STATIONS=     9989.1   10088.6  TYPE=      4  TARGET=         .415
      .710      4.06   1183.66       .00   1182.95   1183.84       .18      2.87       .04   1182.30
     818.0        .0     444.8     373.2        .0     110.0     151.7      17.4       8.0   1181.20
       .24       .00      4.04      2.46      .000      .045      .060      .000   1179.60   9989.10
   .003377      505.      500.      510.         2         0         0       .00     99.53  10088.63


*SECNO  .810
 2800 NAT Q1=      81.21  WSELK=    1185.89  ENC Q1=      81.21  WSEL=    1186.49  RATIO=    .0000
 NAT Q1=     158.  RATIOS LOB, CH, ROB=    .3675   .1707   .4618  WSEL=    1186.49

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


3470 ENCROACHMENT STATIONS=     9934.1   10050.0  TYPE=      4  TARGET=         .488
      .810      3.75   1186.45       .00   1185.89   1186.72       .27      2.86       .03   1185.90
     818.0     195.9     275.6     346.5      51.6      65.3      80.2      20.1       9.2   1186.10
       .27      3.80      4.22      4.32      .060      .045      .060      .000   1182.70   9934.09
   .011327      510.      500.      510.         3         0         0       .00    115.96  10050.05


1490 NH CARD USED
*SECNO  .910
 2800 NAT Q1=      89.66  WSELK=    1190.74  ENC Q1=      89.66  WSEL=    1191.34  RATIO=    .0000
 NAT Q1=     182.  RATIOS LOB, CH, ROB=    .3383   .3681   .2935  WSEL=    1191.34

3470 ENCROACHMENT STATIONS=     9937.8   10030.8  TYPE=      4  TARGET=         .508
      .910      3.68   1191.38       .00   1190.74   1191.74       .36      4.99       .03   1189.20
     818.0     141.6     609.7      66.7      50.1     114.2      23.3      22.4      10.5   1189.30
       .31      2.82      5.34      2.86      .060      .045      .060      .000   1187.70   9937.81
   .007902      525.      530.      540.         4         0         0       .00     92.98  10030.79


*SECNO 1.000
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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

 2800 NAT Q1=      82.47  WSELK=    1195.16  ENC Q1=      82.47  WSEL=    1195.76  RATIO=    .0000
 NAT Q1=     173.  RATIOS LOB, CH, ROB=    .3587   .2110   .4303  WSEL=    1195.76
3280 CROSS SECTION      1.00 EXTENDED       .36 FEET

3470 ENCROACHMENT STATIONS=     9915.4   10093.9  TYPE=      4  TARGET=        .522
     1.000      3.66   1195.76   1195.38   1195.16   1196.00       .24      4.25       .01   1195.50
     818.0     167.1     361.0     289.9      64.5      73.0      98.3      24.8      12.0   1195.00
       .34      2.59      4.94      2.95      .060      .045      .060      .000   1192.10   9915.42
   .009766      480.      485.      490.        14         9         0       .00    178.48  10093.90

*SECNO 1.100
 2800 NAT Q1=      97.83  WSELK=    1199.46  ENC Q1=      97.83  WSEL=    1200.06  RATIO=    .0000
 NAT Q1=     178.  RATIOS LOB, CH, ROB=    .5146   .2869   .1985  WSEL=    1200.06
3280 CROSS SECTION      1.10 EXTENDED       .47 FEET

3470 ENCROACHMENT STATIONS=     9926.6   10015.2  TYPE=      4  TARGET=        .449
     1.100      3.67   1200.07       .00   1199.46   1200.38       .31      4.36       .02   1198.20
     818.0     402.3     415.7        .0     122.3      77.5        .0      27.4      13.6   1198.10
       .38      3.29      5.36       .00      .060      .045      .000      .000   1196.40   9926.55
   .007209      545.      510.      510.         3         0         0       .00     88.65  10015.20

*SECNO 1.210
 2800 NAT Q1=      89.80  WSELK=    1203.97  ENC Q1=      91.75  WSEL=    1204.57  RATIO=   -.0217
 NAT Q1=     172.  RATIOS LOB, CH, ROB=    .4661   .5331   .0009  WSEL=    1204.57
3280 CROSS SECTION      1.21 EXTENDED       .07 FEET

3470 ENCROACHMENT STATIONS=     9942.0   10022.1  TYPE=      4  TARGET=        .467
     1.210      3.37   1204.57       .00   1203.97   1204.94       .37      4.54       .02   1204.70
     818.0        .0     818.0        .0        .0     167.7        .0      29.9      14.8   1204.90
       .41       .00      4.88       .00      .000      .045      .000      .000   1201.20   9943.19
   .007967      600.      600.      560.         4         0         0       .00     77.94  10021.13

1490 NH CARD USED
*SECNO 1.310
 2800 NAT Q1=      72.15  WSELK=    1209.22  ENC Q1=      72.15  WSEL=    1209.82  RATIO=    .0000
 NAT Q1=     170.  RATIOS LOB, CH, ROB=    .6214   .2385   .1401  WSEL=    1209.82
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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


3280 CROSS SECTION      1.31 EXTENDED       .30 FEET


3470 ENCROACHMENT STATIONS=     9892.2   10017.6  TYPE=      4  TARGET=         .576
     1.310      3.09   1209.79   1209.54   1209.22   1210.17       .37      5.22       .00   1208.70
     818.0     358.2     459.8        .0      92.5      82.7        .0      31.9      15.9   1208.70
       .44      3.87      5.56       .00      .050      .045      .000      .000   1206.70   9892.21
   .013795      500.      510.      490.        14         9         0       .00    125.39  10017.60


1490 NH CARD USED
*SECNO 1.400
 2800 NAT Q1=     101.48  WSELK=    1213.60  ENC Q1=     101.48  WSEL=    1214.20  RATIO=    .0000
 NAT Q1=     230.  RATIOS LOB, CH, ROB=    .1938   .3359   .4703  WSEL=    1214.20
3280 CROSS SECTION      1.40 EXTENDED       .67 FEET


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


3470 ENCROACHMENT STATIONS=     9992.9   10150.4  TYPE=      4  TARGET=         .559
     1.400      3.46   1214.26       .00   1213.60   1214.48       .21      4.30       .02   1212.30
     818.0        .0     611.7     206.3        .0     150.1      87.2      34.3      17.5   1213.50
       .48       .00      4.07      2.37      .000      .045      .048      .000   1210.80   9992.90
   .005876      490.      505.      485.         5         0         0       .00    157.46  10150.36


1490 NH CARD USED
*SECNO 1.490
 2800 NAT Q1=      79.00  WSELK=    1217.45  ENC Q1=      79.00  WSEL=    1218.05  RATIO=    .0000
 NAT Q1=     193.  RATIOS LOB, CH, ROB=    .0000   .3751   .6249  WSEL=    1218.05
3280 CROSS SECTION      1.49 EXTENDED       .42 FEET


3470 ENCROACHMENT STATIONS=     9992.6   10129.6  TYPE=      4  TARGET=         .591
     1.490      2.72   1218.02   1217.74   1217.45   1218.32       .31      3.82       .03   1267.60
     818.0        .0     750.1      67.9        .0     165.2      22.1      36.6      19.1   1216.90
       .51       .00      4.54      3.08      .000      .045      .050      .000   1215.30   9992.60
   .011720      460.      475.      470.        16        14         0       .00    136.95  10129.55


1490 NH CARD USED
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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 1.590
 2800 NAT Q1=      94.03  WSELK=    1222.13  ENC Q1=      94.03  WSEL=    1222.73  RATIO=    .0000
 NAT Q1=     249.  RATIOS LOB, CH, ROB=    .2927   .2046   .5027  WSEL=    1222.73
3280 CROSS SECTION      1.59 EXTENDED       .59 FEET


3470 ENCROACHMENT STATIONS=     9949.6   10111.9  TYPE=      4  TARGET=         .622
     1.590      2.69   1222.79       .00   1222.13   1222.97       .18      4.63       .01   1222.20
     818.0        .0     442.6     375.4        .0     122.2     119.9      39.2      21.0   1222.50
       .55       .00      3.62      3.13      .000      .045      .050      .000   1220.10   9949.60
   .006732      480.      540.      510.         4         0         0       .00    162.34  10111.94


*SECNO 1.710
 2800 NAT Q1=      78.30  WSELK=    1227.32  ENC Q1=      78.30  WSEL=    1227.92  RATIO=    .0000
 NAT Q1=     197.  RATIOS LOB, CH, ROB=    .0000   .1379   .8621  WSEL=    1227.92
3280 CROSS SECTION      1.71 EXTENDED       .16 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3470 ENCROACHMENT STATIONS=     9994.7   10118.2  TYPE=      4  TARGET=         .603
     1.710      3.06   1227.86   1227.46   1227.32   1228.16       .30      5.15       .03   1277.70
     818.0        .0     283.3     534.7        .0      59.1     130.0      42.1      22.9   1226.90
       .59       .00      4.79      4.11      .000      .045      .055      .000   1224.80   9994.70
   .012178      570.      590.      575.        21         6         0       .00    123.46  10118.16


*SECNO 1.800
 2800 NAT Q1=      94.41  WSELK=    1231.72  ENC Q1=      94.41  WSEL=    1232.32  RATIO=    .0000
 NAT Q1=     235.  RATIOS LOB, CH, ROB=    .0000   .1710   .8290  WSEL=    1232.32

3265 DIVIDED FLOW

3280 CROSS SECTION      1.80 EXTENDED       .37 FEET


3470 ENCROACHMENT STATIONS=     9958.8   10239.0  TYPE=      4  TARGET=         .599
     1.800      2.47   1232.37       .00   1231.72   1232.50       .14      4.33       .02   1282.80
     818.0        .0     347.7     470.3        .0      98.9     188.3      44.7      25.0   1232.30
       .63       .00      3.52      2.50      .000      .045      .055      .000   1229.90   9961.57
   .006774      500.      490.      485.         5         0         0       .00    253.67  10238.97
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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 1.890
 2800 NAT Q1=      81.45  WSELK=    1236.25  ENC Q1=      81.45  WSEL=    1236.85  RATIO=    .0000
 NAT Q1=     158.  RATIOS LOB, CH, ROB=    .0422   .2915   .6663  WSEL=    1236.85

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9925.9   10498.1  TYPE=      4  TARGET=         .483
     1.890      3.37   1236.77   1236.27   1236.25   1237.01       .23      4.48       .03   1237.30
     818.0        .0     457.1     360.9        .0     112.3      98.9      47.8      27.6   1237.40
       .67       .00      4.07      3.65      .000      .045      .055      .000   1233.40   9947.30
   .011160      500.      505.      540.        13         8         0       .00    177.03  10498.10


*SECNO 2.010
 2800 NAT Q1=      79.44  WSELK=    1242.33  ENC Q1=      79.44  WSEL=    1242.93  RATIO=    .0000
 NAT Q1=     183.  RATIOS LOB, CH, ROB=    .2108   .3692   .4200  WSEL=    1242.93
3280 CROSS SECTION      2.01 EXTENDED       .06 FEET


3470 ENCROACHMENT STATIONS=     9935.0   10080.3  TYPE=      4  TARGET=         .565
     2.010      3.46   1242.96   1242.56   1242.33   1243.22       .26      6.20       .01   1242.40
     818.0        .0     693.7     124.3        .0     165.2      40.0      50.6      29.8   1242.70
       .71       .00      4.20      3.11      .000      .045      .055      .000   1239.50   9935.00
   .009945      600.      595.      575.        16        10         0       .00    145.33  10080.33


*SECNO 2.110
 2800 NAT Q1=      97.94  WSELK=    1246.94  ENC Q1=     108.84  WSEL=    1247.54  RATIO=   -.1113
 NAT Q1=     241.  RATIOS LOB, CH, ROB=    .3033   .4518   .2449  WSEL=    1247.54
3280 CROSS SECTION      2.11 EXTENDED       .26 FEET


3470 ENCROACHMENT STATIONS=     9876.3   10031.9  TYPE=      4  TARGET=         .548
     2.110      3.15   1247.45       .00   1246.94   1247.65       .19      4.43       .01   1247.40
     818.0        .0     818.0        .0        .0     231.6        .0      53.3      31.6   1246.70
       .75       .00      3.53       .00      .000      .045      .000      .000   1244.30   9876.30
   .006800      535.      545.      520.         5         0         0       .00    155.60  10031.90


*SECNO 2.210
 2800 NAT Q1=      78.31  WSELK=    1251.57  ENC Q1=      78.31  WSEL=    1252.17  RATIO=    .0000
 NAT Q1=     216.  RATIOS LOB, CH, ROB=    .6756   .1487   .1757  WSEL=    1252.17
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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


3280 CROSS SECTION      2.21 EXTENDED       .03 FEET


3470 ENCROACHMENT STATIONS=     9830.9   10039.4  TYPE=      4  TARGET=        .637
     2.210      2.44   1252.14   1251.90   1251.57   1252.39       .25      4.72       .02   1251.50
     816.0     475.3     340.7        .0     153.6      67.8        .0      56.1      33.8   1252.50
       .79      3.09      5.02       .00      .055      .045      .000      .000   1249.70   9830.91
   .012075      550.      525.      560.         7        16         0       .00    205.40  10036.31


*SECNO 2.300
 2800 NAT Q1=      79.61  WSELK=    1256.58  ENC Q1=      79.61  WSEL=    1257.18  RATIO=    .0000
 NAT Q1=     221.  RATIOS LOB, CH, ROB=    .8951   .0682   .0367  WSEL=    1257.18

3470 ENCROACHMENT STATIONS=     9885.1   10024.7  TYPE=      4  TARGET=        .639
     2.300      2.32   1257.22   1256.62   1256.58   1257.44       .22      5.05       .00   1256.00
     816.0     661.3     154.7        .0     175.5      42.7        .0      58.4      35.7   1257.30
       .83      3.77      3.62       .00      .055      .045      .000      .000   1254.90   9885.07
   .009651      460.      490.      490.        18        19         0       .00    138.28  10023.35


1490 NH CARD USED
*SECNO 2.410
 2800 NAT Q1=      81.24  WSELK=    1261.65  ENC Q1=      81.24  WSEL=    1262.25  RATIO=    .0000
 NAT Q1=     159.  RATIOS LOB, CH, ROB=    .6843   .2452   .0705  WSEL=    1262.25
3280 CROSS SECTION      2.41 EXTENDED       .54 FEET


3470 ENCROACHMENT STATIONS=     9903.7   10013.5  TYPE=      4  TARGET=        .489
     2.410      4.24   1262.24       .00   1261.65   1262.56       .31      5.09       .03   1261.20
     816.0     423.7     392.3        .0     118.3      73.9        .0      60.8      37.1   1261.10
       .86      3.58      5.31       .00      .060      .045      .000      .000   1258.00   9903.72
   .010672      470.      565.      660.         4         0         0       .00    109.78  10013.50


*SECNO 2.490
 2800 NAT Q1=     103.36  WSELK=    1265.01  ENC Q1=     169.99  WSEL=    1265.61  RATIO=   -.6446
 NAT Q1=     179.  RATIOS LOB, CH, ROB=    .0498   .9479   .0023  WSEL=    1265.61
3280 CROSS SECTION      2.49 EXTENDED       .04 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.57
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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


3470 ENCROACHMENT STATIONS=     9968.2   10110.1  TYPE=      4  TARGET=         .052
     2.490      3.25   1265.25       .00   1265.01   1265.40       .16      2.83       .02   1264.20
     816.0        .0     816.0        .0        .0     255.2        .0      63.0      38.4   1265.30
       .90       .00      3.20       .00      .000      .045      .000      .000   1262.00   9968.20
   .004315      450.      435.      450.         3         0         0       .00    141.18  10109.38


*SECNO 2.580
 2800 NAT Q1=      72.27  WSELK=    1270.70  ENC Q1=      83.19  WSEL=    1271.30  RATIO=   -.1511
 NAT Q1=     180.  RATIOS LOB, CH, ROB=    .1678   .4626   .3696  WSEL=    1271.30
3280 CROSS SECTION      2.58 EXTENDED       .04 FEET


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9964.7   10033.7  TYPE=      4  TARGET=         .537
     2.580      2.44   1270.74   1270.74   1270.70   1271.57       .83      4.25       .20   1270.10
     816.0        .0     816.0        .0        .0     111.6        .0      65.1      39.5   1270.20
       .91       .00      7.31       .00      .000      .045      .000      .000   1268.30   9964.70
   .026489      475.      485.      480.        20        19         0       .00     69.00  10033.70


*SECNO 2.680
 2800 NAT Q1=      88.48  WSELK=    1275.92  ENC Q1=      88.48  WSEL=    1276.52  RATIO=    .0000
 NAT Q1=     181.  RATIOS LOB, CH, ROB=    .0617   .2297   .7085  WSEL=    1276.52
3280 CROSS SECTION      2.68 EXTENDED       .39 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.12


3470 ENCROACHMENT STATIONS=     9991.1   10094.1  TYPE=      4  TARGET=         .512
     2.680      3.08   1276.78       .00   1275.92   1277.01       .22      5.38       .06   1275.10
     816.0        .0     371.7     444.3        .0      82.9     143.5      67.0      40.5   1275.40
       .95       .00      4.49      3.10      .000      .045      .060      .000   1273.70   9991.10
   .005866      560.      505.      470.         5         0         0       .00    102.98  10094.08
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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 2.780
 2800 NAT Q1=      79.59  WSELK=    1280.58  ENC Q1=      126.71  WSEL=    1281.18  RATIO=   -.5921
 NAT Q1=     139.  RATIOS LOB, CH, ROB=    .0660   .9144   .0196  WSEL=    1281.18

3470 ENCROACHMENT STATIONS=     9953.8   10064.9  TYPE=      4  TARGET=        .086
     2.780      2.93   1280.63       .00   1280.58   1280.98       .34      3.93       .04   1280.30
     816.0        .0     816.0        .0        .0     173.3        .0      69.3      41.7   1280.80
       .98       .00      4.71       .00      .000      .045      .000      .000   1277.70   9953.80
   .010647      485.      510.      505.         4         0         0       .00    106.04  10059.84


*SECNO 2.870
 2800 NAT Q1=      79.71  WSELK=    1285.59  ENC Q1=       79.71  WSEL=    1286.19  RATIO=    .0000
 NAT Q1=     158.  RATIOS LOB, CH, ROB=    .2757   .3806   .3437  WSEL=    1286.19

3470 ENCROACHMENT STATIONS=     9959.0   10153.9  TYPE=      4  TARGET=        .496
     2.870      3.38   1286.08   1286.06   1285.59   1286.50       .42      5.50       .02   1285.20
     767.0      40.3     604.1     122.6      15.6     104.9      68.5      71.3      43.4   1285.30
      1.01      2.58      5.76      1.79      .060      .045      .060      .000   1282.70   9959.00
   .011954      530.      490.      465.        13         9         0       .00    194.92  10153.92


1490 NH CARD USED
*SECNO 2.950
 2800 NAT Q1=      66.60  WSELK=    1290.45  ENC Q1=       66.60  WSEL=    1291.05  RATIO=    .0000
 NAT Q1=     144.  RATIOS LOB, CH, ROB=    .0135   .4544   .5322  WSEL=    1291.05
3280 CROSS SECTION      2.95 EXTENDED       .36 FEET


3470 ENCROACHMENT STATIONS=     9897.3    9987.5  TYPE=      4  TARGET=        .536
     2.950      3.36   1291.16   1290.72   1290.45   1291.55       .39      5.04       .00   1290.30
     767.0        .0     750.3      16.7        .0     148.9       6.9      73.1      44.8   1290.20
      1.03       .00      5.04      2.43      .000      .045      .060      .000   1287.80   9897.30
   .010979      435.      440.      445.        15        15         0       .00     90.19   9987.49


*SECNO 3.050
 2800 NAT Q1=      93.38  WSELK=    1295.10  ENC Q1=      140.37  WSEL=    1295.70  RATIO=   -.5031
 NAT Q1=     166.  RATIOS LOB, CH, ROB=    .1530   .8457   .0013  WSEL=    1295.70

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


3470 ENCROACHMENT STATIONS=     9922.5   10037.2  TYPE=      4  TARGET=        .154
    3.050      3.22   1295.32       .00   1295.10   1295.53       .21      3.96       .02   1294.30
    767.0        .0     767.0        .0        .0     208.7        .0      75.3      46.1   1295.50
     1.07       .00      3.67       .00      .000      .045      .000      .000   1292.10   9922.50
  .005515      485.      525.      465.         4         0         0       .00    112.40  10034.90


1490 NH CARD USED
*SECNO 3.140
 2800 NAT Q1=      49.02  WSELK=    1300.62  ENC Q1=      68.54  WSEL=    1301.22  RATIO=   -.3984
 NAT Q1=      96.  RATIOS LOB, CH, ROB=    .0396   .7151   .2453  WSEL=    1301.22

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9953.1   10018.2  TYPE=      4  TARGET=        .285
    3.140      3.23   1300.83   1300.83   1300.62   1301.65       .83      5.17       .19   1300.10
    767.0        .0     767.0        .0        .0     105.1        .0      77.0      47.1   1299.80
     1.09       .00      7.30       .00      .000      .045      .000      .000   1297.60   9953.10
  .026773      480.      495.      490.         5         5         0       .00     65.10  10018.20


1490 NH CARD USED
*SECNO 3.250
 2800 NAT Q1=     101.14  WSELK=    1305.74  ENC Q1=     107.12  WSEL=    1306.34  RATIO=   -.0591
 NAT Q1=     213.  RATIOS LOB, CH, ROB=    .0010   .5036   .4954  WSEL=    1306.34
3280 CROSS SECTION      3.25 EXTENDED       .29 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.17


3470 ENCROACHMENT STATIONS=     9971.4   10075.1  TYPE=      4  TARGET=        .496
    3.250      4.09   1306.29       .00   1305.74   1306.43       .14      4.71       .07   1306.00
    603.0        .0     603.0        .0        .0     200.3        .0      79.0      48.1   1305.60
     1.14       .00      3.01       .00      .000      .045      .000      .000   1302.20   9971.40
  .003508      515.      555.      560.         7         0         0       .00    103.70  10075.10
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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 3.340
 2800 NAT Q1=      36.79  WSELK=    1310.22  ENC Q1=      61.91  WSEL=    1310.82  RATIO=   -.6829
 NAT Q1=      62.  RATIOS LOB, CH, ROB=    .0000    .9979    .0021  WSEL=    1310.82

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9980.6   10048.6  TYPE=      4  TARGET=         .002
     3.340      2.92   1310.22   1310.22   1310.22   1310.98       .76      3.68       .19   1310.90
     603.0        .0     603.0       .0        .0      86.3        .0      80.6      49.0   1310.60
      1.16       .00      6.98       .00      .000      .045      .000      .000   1307.30   9983.51
   .026960      480.      485.      480.         7        19         0       .00     58.66  10042.17


1490 NH CARD USED
*SECNO 3.430
 2800 NAT Q1=      88.15  WSELK=    1315.40  ENC Q1=     123.63  WSEL=    1316.00  RATIO=   -.4026
 NAT Q1=     150.  RATIOS LOB, CH, ROB=    .1536    .8260    .0204  WSEL=    1316.00

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.35


3470 ENCROACHMENT STATIONS=     9973.3   10044.3  TYPE=      4  TARGET=         .174
     3.430      2.90   1315.50       .00   1315.40   1315.73       .23      4.70       .05   1314.40
     603.0        .0     603.0       .0        .0     157.1        .0      81.9      49.8   1314.70
      1.20       .00      3.84       .00      .000      .045      .000      .000   1312.60   9973.30
   .004864      485.      490.      505.         6         0         0       .00     71.00  10044.30


1490 NH CARD USED
*SECNO 3.530
 2800 NAT Q1=      37.56  WSELK=    1321.16  ENC Q1=      37.56  WSEL=    1321.76  RATIO=    .0000
 NAT Q1=      75.  RATIOS LOB, CH, ROB=    .0098    .3745    .6157  WSEL=    1321.76

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE 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=     9990.0   10023.3  TYPE=      4  TARGET=        .501
    3.530      3.37   1321.77   1321.77   1321.16   1322.91      1.13      4.63       .27   1320.90
    603.0        .0     450.2     152.8        .0      48.5      26.1      83.2      50.4   1319.60
     1.21       .00      9.28      5.86      .000      .045      .060      .000   1318.40   9990.00
  .026553      480.      485.      490.        20        11         0       .00     33.25  10023.25


*SECNO 3.570
 2800 NAT Q1=      91.87  WSELK=    1323.59  ENC Q1=     117.50  WSEL=    1324.19  RATIO=   -.2790
 NAT Q1=     170.  RATIOS LOB, CH, ROB=    .1961   .6920   .1119  WSEL=    1324.19
3280 CROSS SECTION      3.57 EXTENDED       .66 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.25


3470 ENCROACHMENT STATIONS=     9945.5   10022.4  TYPE=      4  TARGET=        .308
    3.570      4.16   1324.26       .00   1323.59   1324.40       .14      1.39       .10   1323.10
    603.0        .0     603.0        .0        .0     198.5        .0      84.0      50.7   1322.80
     1.24       .00      3.04       .00      .000      .045      .000      .000   1320.10   9945.50
  .002508      220.      235.      255.         3         0         0       .00     76.90  10022.40


*SECNO 3.620
 2800 NAT Q1=      38.23  WSELK=    1326.08  ENC Q1=      45.92  WSEL=    1326.68  RATIO=   -.2012
 NAT Q1=      68.  RATIOS LOB, CH, ROB=    .0000   .6739   .3261  WSEL=    1326.68

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9977.0   10020.9  TYPE=      4  TARGET=        .326
    3.620      2.84   1326.44   1326.44   1326.08   1327.39       .95      1.52       .24   1326.80
    603.0        .0     603.0        .0        .0      77.2        .0      84.8      51.0   1325.10
     1.25       .00      7.81       .00      .000      .045      .000      .000   1323.60   9979.20
  .025854      240.      260.      300.        20        19         0       .00     41.70  10020.90
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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


*SECNO 3.680
 2800 NAT Q1=      87.93  WSELK=    1329.35  ENC Q1=      127.05  WSEL=    1329.95  RATIO=   -.4449
 NAT Q1=     127.  RATIOS LOB, CH, ROB=    .0002   .9998   .0000  WSEL=    1329.95

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.72


3470 ENCROACHMENT STATIONS=     9965.6   10067.6  TYPE=      4  TARGET=         .000
     3.680      3.89   1329.59       .00   1329.35   1329.75       .16      2.28       .08   1329.80
     603.0        .0     603.0        .0        .0     187.4        .0      85.7      51.5   1330.30
      1.27       .00      3.22       .00      .000      .045      .000      .000   1325.70   9966.43
   .003499      300.      305.      325.         3         0         0       .00     88.11  10054.54


*SECNO 3.740
 2800 NAT Q1=      42.33  WSELK=    1331.96  ENC Q1=       58.63  WSEL=    1332.56  RATIO=   -.3853
 NAT Q1=      70.  RATIOS LOB, CH, ROB=    .0000   .8425   .1575  WSEL=    1332.56

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9964.6   10027.4  TYPE=      4  TARGET=         .157
     3.740      3.87   1331.97   1331.97   1331.96   1332.83       .85      2.53       .21   1332.90
     603.0        .0     603.0        .0        .0      81.3        .0      86.8      52.0   1333.60
      1.28       .00      7.42       .00      .000      .045      .000      .000   1328.10   9968.14
   .026720      340.      335.      350.         4         5         0       .00     49.31  10017.45


*SECNO 3.810
 2800 NAT Q1=      77.09  WSELK=    1336.31  ENC Q1=       77.09  WSEL=    1336.91  RATIO=    .0000
 NAT Q1=     144.  RATIOS LOB, CH, ROB=    .1459   .3539   .5001  WSEL=    1336.91

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.08
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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

3470 ENCROACHMENT STATIONS= 9972.8 10056.3 TYPE= 4 TARGET= .465

3.810	4.39	1336.89	.00	1336.31	1337.10	.21	4.21	.06	1335.50
603.0	.0	385.6	217.4	.0	102.3	63.0	87.8	52.6	1336.30
1.31	.00	3.77	3.45	.000	.045	.060	.000	1332.50	9972.80
.006169	350.	370.	390.	4	0	0	.00	83.52	10056.32

THIS RUN EXECUTED 29JAN96 17:12:07

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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

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SUMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	.000	.00	.00	3.48	223.15	818.00	9915.19	10516.59	1155.98
	.000	9971.60	10074.80	2.50	103.20	818.00	9971.60	10074.80	1157.00
*	.070	.00	.00	4.76	258.48	818.00	9891.00	10293.11	1158.73
*	.070	9967.60	10085.78	7.05	95.90	818.00	9975.09	10085.78	1159.26
*	.160	.00	.00	4.01	229.60	818.00	9989.87	10219.47	1162.95
*	.160	9987.10	10148.51	4.01	160.67	818.00	9987.84	10148.51	1163.79
*	.260	.00	.00	5.41	268.17	818.00	9871.89	10149.61	1166.78
*	.260	9953.80	10017.80	7.29	64.00	818.00	9953.80	10017.80	1166.96
*	.340	.00	.00	4.59	154.75	818.00	9884.54	10039.29	1170.64
*	.340	9949.70	10017.40	4.83	67.70	818.00	9949.70	10017.40	1171.45
	.440	.00	.00	4.61	396.53	818.00	9976.94	10445.70	1173.47
	.440	9989.40	10057.34	5.36	67.93	818.00	9989.40	10057.33	1174.03
	.520	.00	.00	3.66	758.38	818.00	9987.64	10746.02	1176.13
	.520	9989.80	10121.63	4.30	131.83	818.00	9989.80	10121.63	1176.77
	.620	.00	.00	6.03	204.77	818.00	9903.58	10108.35	1179.76
*	.620	9964.84	10011.20	6.91	46.36	818.00	9964.84	10011.20	1180.33
*	.710	.00	.00	3.71	286.93	818.00	9875.66	10170.80	1182.95
*	.710	9989.10	10088.63	4.04	99.53	818.00	9989.10	10088.63	1183.66
*	.810	.00	.00	2.81	239.72	818.00	9879.86	10123.40	1185.89
*	.810	9934.09	10050.05	4.22	115.96	818.00	9934.09	10050.05	1186.45
	.910	.00	.00	4.49	378.80	818.00	9864.67	10251.62	1190.74
	.910	9937.81	10030.79	5.34	92.98	818.00	9937.81	10030.79	1191.38

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	1.000	.00	.00	4.10	299.98	818.00	9854.30	10178.11	1195.16
	1.000	9915.42	10093.91	4.94	178.48	818.00	9915.42	10093.90	1195.76
	1.100	.00	.00	4.71	238.65	818.00	9850.34	10110.68	1199.46
	1.100	9926.55	10015.20	5.36	88.65	818.00	9926.55	10015.20	1200.07
	1.210	.00	.00	4.33	259.60	818.00	9669.59	10019.37	1203.97
	1.210	9942.00	10022.10	4.88	77.94	818.00	9943.19	10021.13	1204.57
	1.310	.00	.00	4.19	427.43	818.00	9666.50	10104.97	1209.22
	1.310	9892.21	10017.60	5.56	125.39	818.00	9892.21	10017.60	1209.79
*	1.400	.00	.00	3.38	406.06	818.00	9844.04	10250.11	1213.60
*	1.400	9992.90	10150.36	4.07	157.46	818.00	9992.90	10150.36	1214.26
	1.490	.00	.00	3.16	354.46	818.00	9993.38	10376.00	1217.45
	1.490	9992.60	10129.55	4.54	136.95	818.00	9992.60	10129.55	1218.02
	1.590	.00	.00	2.83	487.72	818.00	9783.14	10300.03	1222.13
	1.590	9949.60	10111.94	3.62	162.34	818.00	9949.60	10111.94	1222.79
	1.710	.00	.00	3.50	428.24	818.00	9995.83	10560.30	1227.32
*	1.710	9994.70	10118.16	4.79	123.46	818.00	9994.70	10118.16	1227.86
	1.800	.00	.00	2.87	499.00	818.00	9965.71	10582.52	1231.72
	1.800	9958.80	10238.98	3.52	253.67	818.00	9961.57	10238.97	1232.37
	1.890	.00	.00	3.79	251.66	818.00	9895.56	10669.15	1236.25
	1.890	9925.90	10498.10	4.07	177.03	818.00	9947.30	10498.10	1236.77
	2.010	.00	.00	3.27	320.62	818.00	9870.41	10276.95	1242.33
	2.010	9935.00	10080.33	4.20	145.33	818.00	9935.00	10080.33	1242.96
	2.110	.00	.00	2.89	471.06	818.00	9564.46	10290.36	1246.94
	2.110	9876.30	10031.90	3.53	155.60	818.00	9876.30	10031.90	1247.45
	2.210	.00	.00	4.00	541.22	816.00	9618.73	10244.74	1251.57
	2.210	9830.91	10039.40	5.02	205.40	816.00	9830.91	10036.31	1252.14
	2.300	.00	.00	3.25	526.54	816.00	9466.87	10172.79	1256.58
	2.300	9885.07	10024.70	3.62	138.28	816.00	9885.07	10023.35	1257.22
	2.410	.00	.00	4.17	718.96	816.00	9351.96	10070.92	1261.65
	2.410	9903.72	10013.50	5.31	109.78	816.00	9903.72	10013.50	1262.24
	2.490	.00	.00	3.58	172.62	816.00	9933.81	10106.43	1265.01
*	2.490	9968.20	10110.10	3.20	141.18	816.00	9968.20	10109.38	1265.25
*	2.580	.00	.00	5.04	413.62	816.00	9835.00	10248.62	1270.70
*	2.580	9964.70	10033.70	7.31	69.00	816.00	9964.70	10033.70	1270.74

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	2.680	.00	.00	4.21	303.02	816.00	9950.58	10253.60	1275.92
*	2.680	9991.10	10094.08	4.49	102.98	816.00	9991.10	10094.08	1276.78
	2.780	.00	.00	4.64	126.75	816.00	9931.56	10058.31	1280.58
	2.780	9953.80	10064.90	4.71	106.04	816.00	9953.80	10059.84	1280.63
	2.870	.00	.00	4.21	245.89	767.00	9897.84	10199.83	1285.59
	2.870	9959.00	10153.92	5.76	194.92	767.00	9959.00	10153.92	1286.08
	2.950	.00	.00	3.99	278.61	767.00	9852.25	10130.87	1290.45
	2.950	9897.30	9987.49	5.04	90.19	767.00	9897.30	9987.49	1291.16
*	3.050	.00	.00	3.82	185.44	767.00	9846.62	10032.06	1295.10
*	3.050	9922.50	10037.20	3.67	112.40	767.00	9922.50	10034.90	1295.32
*	3.140	.00	.00	6.48	228.86	767.00	9934.37	10163.23	1300.62
*	3.140	9953.10	10018.20	7.30	65.10	767.00	9953.10	10018.20	1300.83
*	3.250	.00	.00	2.48	566.57	603.00	9973.13	10539.70	1305.74
*	3.250	9971.40	10075.10	3.01	103.70	603.00	9971.40	10075.10	1306.29
*	3.340	.00	.00	6.97	58.70	603.00	9983.50	10042.20	1310.22
*	3.340	9980.60	10048.60	6.98	58.66	603.00	9983.51	10042.17	1310.22
*	3.430	.00	.00	3.71	201.17	603.00	9856.17	10057.89	1315.40
*	3.430	9973.30	10044.30	3.84	71.00	603.00	9973.30	10044.30	1315.50
*	3.530	.00	.00	7.73	200.33	603.00	9986.32	10186.65	1321.16
*	3.530	9990.00	10023.25	9.28	33.25	603.00	9990.00	10023.25	1321.77
*	3.570	.00	.00	3.32	230.63	603.00	9868.39	10099.02	1323.59
*	3.570	9945.50	10022.40	3.04	76.90	603.00	9945.50	10022.40	1324.26
*	3.620	.00	.00	7.05	84.38	603.00	9981.42	10065.80	1326.08
*	3.620	9977.00	10020.90	7.81	41.70	603.00	9979.20	10020.90	1326.44
*	3.680	.00	.00	3.60	82.87	603.00	9967.35	10050.22	1329.35
*	3.680	9965.60	10067.60	3.22	88.11	603.00	9966.43	10054.54	1329.59
*	3.740	.00	.00	6.45	68.37	603.00	9968.17	10059.94	1331.96
*	3.740	9964.60	10027.40	7.42	49.31	603.00	9968.14	10017.45	1331.97
*	3.810	.00	.00	2.96	200.14	603.00	9924.20	10124.33	1336.31
*	3.810	9972.80	10056.32	3.77	83.52	603.00	9972.80	10056.32	1336.89

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SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1155.98	.98	1156.16	223.15	5.53	773.59	38.87	.00	.00	9971.60	10074.80	.00
	.000	1157.00	1.02	1157.10	103.20	.00	818.00	.00	.13	9971.60	9971.60	10074.80	10074.80
*	.070	1158.73	.00	1158.87	258.48	9.32	208.91	599.77	.00	.00	9967.60	10034.20	.00
*	.070	1159.26	.53	1159.91	95.90	.00	459.20	358.80	.60	9967.60	9967.60	10034.20	10085.78
*	.160	1162.95	.00	1163.11	229.60	.00	355.47	462.53	.00	.00	9987.10	10031.50	.00
*	.160	1163.79	.84	1163.97	160.67	.00	500.66	317.34	.42	9987.10	9987.10	10031.50	10148.51
*	.260	1166.78	.00	1167.12	268.17	147.81	546.34	123.85	.00	.00	9953.80	10017.80	.00
*	.260	1166.96	.18	1167.79	64.00	.00	818.00	.00	.48	9953.80	9953.80	10017.80	10017.80
*	.340	1170.64	.00	1170.88	154.75	320.65	491.97	5.38	.00	.00	9981.80	10017.40	.00
*	.340	1171.45	.82	1171.76	67.70	159.35	658.65	.00	.34	9949.70	9981.80	10017.40	10017.40
	.440	1173.47	.00	1173.64	396.53	1.51	315.37	501.12	.00	.00	9989.40	10017.50	.00
	.440	1174.03	.56	1174.37	67.93	.00	449.38	368.62	.52	9989.40	9989.40	10017.50	10057.34
	.520	1176.13	.00	1176.20	758.38	.00	222.31	595.69	.00	.00	9989.80	10022.90	.00
	.520	1176.77	.64	1176.96	131.83	.00	350.43	467.57	.49	9989.80	9989.80	10022.90	10121.63
	.620	1179.76	.00	1180.10	204.77	421.68	336.39	59.93	.00	.00	9988.30	10011.20	.00
*	.620	1180.33	.57	1180.93	46.36	342.11	475.89	.00	.45	9964.84	9988.30	10011.20	10011.20
*	.710	1182.95	.00	1183.07	286.93	20.90	316.98	480.12	.00	.00	9989.10	10023.30	.00
*	.710	1183.66	.71	1183.84	99.53	.00	444.83	373.17	.42	9989.10	9989.10	10023.30	10088.63
*	.810	1185.89	.00	1186.04	239.72	313.03	105.96	399.01	.00	.00	9961.90	10011.00	.00
*	.810	1186.45	.56	1186.72	115.96	195.91	275.60	346.49	.49	9934.09	9961.90	10011.00	10050.05
	.910	1190.74	.00	1190.92	378.80	267.04	381.57	169.39	.00	.00	9970.60	10016.20	.00
	.910	1191.38	.63	1191.74	92.98	141.59	609.74	66.67	.51	9937.81	9970.60	10016.20	10030.79
	1.000	1195.16	.00	1195.31	299.98	297.91	206.30	313.79	.00	.00	9981.60	10020.10	.00
	1.000	1195.76	.60	1196.00	178.48	167.11	360.99	289.91	.52	9915.42	9981.60	10020.10	10093.91
	1.100	1199.46	.00	1199.64	238.65	402.85	287.48	127.67	.00	.00	9988.10	10015.20	.00
	1.100	1200.07	.61	1200.38	88.65	402.34	415.66	.00	.45	9926.55	9988.10	10015.20	10015.20
	1.210	1203.97	.00	1204.19	259.60	285.05	532.95	.00	.00	.00	9942.00	10022.10	.00
	1.210	1204.57	.60	1204.94	77.94	.00	818.00	.00	.47	9942.00	9942.00	10022.10	10022.10
	1.310	1209.22	.00	1209.34	427.43	513.04	233.92	71.04	.00	.00	9970.80	10017.60	.00
	1.310	1209.79	.57	1210.17	125.39	358.21	459.79	.00	.58	9892.21	9970.80	10017.60	10017.60
*	1.400	1213.60	.00	1213.73	406.06	97.47	347.12	373.41	.00	.00	9992.90	10063.90	.00
*	1.400	1214.26	.66	1214.48	157.46	.00	611.66	206.34	.56	9992.90	9992.90	10063.90	10150.36

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.490	1217.45	.00	1217.61	354.46	.00	318.61	499.39	.00	.00	9992.60	10106.80	.00
	1.490	1218.02	.56	1218.32	136.95	.00	750.13	67.87	.59	9992.60	9992.60	10106.80	10129.55
	1.590	1222.13	.00	1222.23	487.72	231.81	203.66	382.53	.00	.00	9949.60	10027.90	.00
	1.590	1222.79	.66	1222.97	162.34	.00	442.63	375.37	.62	9949.60	9949.60	10027.90	10111.94
	1.710	1227.32	.00	1227.44	428.24	.00	134.46	683.54	.00	.00	9994.70	10032.80	.00
*	1.710	1227.86	.55	1228.16	123.46	.00	283.35	534.65	.60	9994.70	9994.70	10032.80	10118.16
	1.800	1231.72	.00	1231.80	499.00	.00	167.01	650.99	.00	.00	9958.80	10028.40	.00
	1.800	1232.37	.64	1232.50	253.67	.00	347.69	470.31	.60	9958.80	9958.80	10028.40	10238.98
	1.890	1236.25	.00	1236.42	251.66	9.91	281.66	526.43	.00	.00	9925.90	10049.10	.00
	1.890	1236.77	.53	1237.01	177.03	.00	457.11	360.89	.48	9925.90	9925.90	10049.10	10498.10
	2.010	1242.33	.00	1242.47	320.62	198.78	311.35	307.87	.00	.00	9935.00	10048.90	.00
	2.010	1242.96	.63	1243.22	145.33	.00	693.68	124.32	.57	9935.00	9935.00	10048.90	10080.33
	2.110	1246.94	.00	1247.04	471.06	240.33	443.86	133.81	.00	.00	9876.30	10031.90	.00
	2.110	1247.45	.52	1247.65	155.60	.00	818.00	.00	.55	9876.30	9876.30	10031.90	10031.90
	2.210	1251.57	.00	1251.70	541.22	580.19	185.52	50.29	.00	.00	9995.10	10039.40	.00
	2.210	1252.14	.57	1252.39	205.40	475.31	340.68	.00	.64	9830.91	9995.10	10039.40	10039.40
	2.300	1256.58	.00	1256.68	526.54	731.04	75.70	9.27	.00	.00	9987.40	10024.70	.00
	2.300	1257.22	.64	1257.44	138.28	661.28	154.72	.00	.64	9885.07	9987.40	10024.70	10024.70
	2.410	1261.65	.00	1261.73	718.96	575.50	217.08	23.42	.00	.00	9976.80	10013.50	.00
	2.410	1262.24	.59	1262.56	109.78	423.74	392.26	.00	.49	9903.72	9976.80	10013.50	10013.50
	2.490	1265.01	.00	1265.21	172.62	15.12	800.88	.00	.00	.00	9968.20	10110.10	.00
*	2.490	1265.25	.23	1265.40	141.18	.00	816.00	.00	.05	9968.20	9968.20	10110.10	10110.10
*	2.580	1270.70	.00	1270.98	413.62	71.08	548.78	196.13	.00	.00	9964.70	10033.70	.00
*	2.580	1270.74	.04	1271.57	69.00	.00	816.00	.00	.54	9964.70	9964.70	10033.70	10033.70
	2.680	1275.92	.00	1276.07	303.02	21.98	228.14	565.88	.00	.00	9991.10	10024.30	.00
*	2.680	1276.78	.86	1277.01	102.98	.00	371.68	444.32	.51	9991.10	9991.10	10024.30	10094.08
	2.780	1280.58	.00	1280.90	126.75	37.27	778.73	.00	.00	.00	9953.80	10064.90	.00
	2.780	1280.63	.05	1280.98	106.04	.00	816.00	.00	.09	9953.80	9953.80	10064.90	10064.90
	2.870	1285.59	.00	1285.78	245.89	203.04	334.30	229.66	.00	.00	9974.70	10026.50	.00
	2.870	1286.08	.49	1286.50	194.92	40.33	604.08	122.59	.50	9959.00	9974.70	10026.50	10153.92
	2.950	1290.45	.00	1290.63	278.61	11.57	359.30	396.13	.00	.00	9897.30	9981.10	.00
	2.950	1291.16	.71	1291.55	90.19	.00	750.34	16.66	.54	9897.30	9897.30	9981.10	9987.49
*	3.050	1295.10	.00	1295.31	185.44	65.77	701.23	.00	.00	.00	9922.50	10037.20	.00
*	3.050	1295.32	.22	1295.53	112.40	.00	767.00	.00	.15	9922.50	9922.50	10037.20	10037.20

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	3.140	1300.62	.00	1301.13	228.86	7.64	593.42	165.94	.00	.00	9953.10	10018.20	.00
*	3.140	1300.83	.21	1301.65	65.10	.00	767.00	.00	.28	9953.10	9953.10	10018.20	10018.20
*	3.250	1305.74	.00	1305.80	566.57	.00	356.92	246.08	.00	.00	9971.40	10075.10	.00
*	3.250	1306.29	.55	1306.43	103.70	.00	603.00	.00	.50	9971.40	9971.40	10075.10	10075.10
*	3.340	1310.22	.00	1310.98	58.70	.00	603.00	.00	.00	.00	9980.60	10048.60	.00
*	3.340	1310.22	.00	1310.98	58.66	.00	603.00	.00	.00	9980.60	9980.60	10048.60	10048.60
*	3.430	1315.40	.00	1315.60	201.17	42.53	556.51	3.96	.00	.00	9973.30	10044.30	.00
*	3.430	1315.50	.10	1315.73	71.00	.00	603.00	.00	.17	9973.30	9973.30	10044.30	10044.30
*	3.530	1321.16	.00	1321.62	200.33	.50	279.78	322.72	.00	.00	9990.00	10010.20	.00
*	3.530	1321.77	.61	1322.91	33.25	.00	450.25	152.75	.50	9990.00	9990.00	10010.20	10023.25
*	3.570	1323.59	.00	1323.73	230.63	91.98	485.21	25.81	.00	.00	9945.50	10022.40	.00
*	3.570	1324.26	.67	1324.40	76.90	.00	603.00	.00	.31	9945.50	9945.50	10022.40	10022.40
*	3.620	1326.08	.00	1326.70	84.38	.00	440.64	162.35	.00	.00	9977.00	10020.90	.00
*	3.620	1326.44	.36	1327.39	41.70	.00	603.00	.00	.33	9977.00	9977.00	10020.90	10020.90
*	3.680	1329.35	.00	1329.56	82.87	.00	603.00	.00	.00	.00	9965.60	10067.60	.00
*	3.680	1329.59	.23	1329.75	88.11	.00	603.00	.00	.00	9965.60	9965.60	10067.60	10067.60
*	3.740	1331.96	.00	1332.55	68.37	.00	521.89	81.11	.00	.00	9964.60	10027.40	.00
*	3.740	1331.97	.01	1332.83	49.31	.00	603.00	.00	.16	9964.60	9964.60	10027.40	10027.40
*	3.810	1336.31	.00	1336.43	200.14	69.17	206.74	327.09	.00	.00	9972.80	10028.70	.00
*	3.810	1336.89	.58	1337.10	83.52	.00	385.62	217.38	.46	9972.80	9972.80	10028.70	10056.32

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .070  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      .070  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .070  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .070  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      .160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .160  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .260  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .260  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .340  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .620  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .710  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .710  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .810  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     1.710  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     2.490  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.580  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.580  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.580  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.580  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.580  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     2.680  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.050  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.140  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     3.140  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.140  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.250  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.250  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.340  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.340  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.340  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION SECNO= 3.340 PROFILE= 2 CRITICAL DEPTH ASSUMED

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CAUTION SECNO=     3.340  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.430  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.530  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.530  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.530  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     3.530  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.530  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.530  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     3.570  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.570  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.620  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.620  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.620  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.620  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.620  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     3.680  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.680  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=     3.740  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.740  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.810  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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Floodway width summary: Branch Channel - Final w
Profile No. 2

Section Number	Elevation Increase	Top Width	Left Encroach Station	Left Sta Distance From Center	Center Station	Right Sta Distance From Center	Right Encroach Station
.000	1.02	103.20	9971.60	51.60	10023.20	51.60	10074.80
.070	.53	118.18	9967.60	33.30	10000.90	84.88	10085.78
.160	.84	161.41	9987.10	22.20	10009.30	139.21	10148.51
.260	.18	64.00	9953.80	32.00	9985.80	32.00	10017.80
.340	.82	67.70	9949.70	49.90	9999.60	17.80	10017.40
.440	.56	67.94	9989.40	14.05	10003.45	53.89	10057.34
.520	.64	131.83	9989.80	16.55	10006.35	115.29	10121.63
.620	.57	46.37	9964.84	34.91	9999.75	11.45	10011.20
.710	.71	99.53	9989.10	17.10	10006.20	82.43	10088.63
.810	.56	115.96	9934.09	52.36	9986.45	63.60	10050.05
.910	.63	92.98	9937.81	55.59	9993.40	37.39	10030.79
1.000	.60	178.49	9915.42	85.43	10000.85	93.06	10093.91
1.100	.61	88.65	9926.55	75.10	10001.65	13.55	10015.20
1.210	.60	80.10	9942.00	40.05	9982.05	40.05	10022.10
1.310	.57	125.39	9892.21	101.99	9994.20	23.40	10017.60
1.400	.66	157.46	9992.90	35.50	10028.40	121.96	10150.36
1.490	.56	136.95	9992.60	57.10	10049.70	79.85	10129.55
1.590	.66	162.34	9949.60	39.15	9988.75	123.19	10111.94
1.710	.55	123.46	9994.70	19.05	10013.75	104.41	10118.16
1.800	.64	280.18	9958.80	34.80	9993.60	245.38	10238.98
1.890	.53	572.20	9925.90	61.60	9987.50	510.60	10498.10
2.010	.63	145.33	9935.00	56.95	9991.95	88.38	10080.33
2.110	.52	155.60	9876.30	77.80	9954.10	77.80	10031.90
2.210	.57	208.49	9830.91	186.34	10017.25	22.15	10039.40
2.300	.64	139.63	9885.07	120.98	10006.05	18.65	10024.70
2.410	.59	109.79	9903.72	91.43	9995.15	18.35	10013.50
2.490	.23	141.90	9968.20	70.95	10039.15	70.95	10110.10
2.580	.04	69.00	9964.70	34.50	9999.20	34.50	10033.70
2.680	.86	102.98	9991.10	16.60	10007.70	86.38	10094.08
2.780	.05	111.10	9953.80	55.55	10009.35	55.55	10064.90
2.870	.49	194.92	9959.00	41.60	10000.60	153.32	10153.92
2.950	.71	90.19	9897.30	41.90	9939.20	48.29	9987.49
3.050	.22	114.70	9922.50	57.35	9979.85	57.35	10037.20
3.140	.21	65.10	9953.10	32.55	9985.65	32.55	10018.20
3.250	.55	103.70	9971.40	51.85	10023.25	51.85	10075.10
3.340	.00	68.00	9980.60	34.00	10014.60	34.00	10048.60
3.430	.10	71.00	9973.30	35.50	10008.80	35.50	10044.30
3.530	.61	33.25	9990.00	10.10	10000.10	23.16	10023.25
3.570	.67	76.90	9945.50	38.45	9983.95	38.45	10022.40
3.620	.36	43.90	9977.00	21.95	9998.95	21.95	10020.90
3.680	.23	102.00	9965.60	51.00	10016.60	51.00	10067.60
3.740	.01	62.80	9964.60	31.40	9996.00	31.40	10027.40
3.810	.58	83.52	9972.80	27.95	10000.75	55.57	10056.32

FLOODWAY DATA, Branch Channel - Final w
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
.000	103.	328.	2.5	1157.0	1156.0	1.0
.070	111.	128.	6.4	1159.2	1158.7	.5
.160	161.	290.	2.8	1163.8	1163.0	.8
.260	64.	112.	7.3	1167.0	1166.8	.2
.340	68.	202.	4.0	1171.4	1170.6	.8
.440	68.	185.	4.4	1174.1	1173.5	.6
.520	132.	257.	3.2	1176.7	1176.1	.6
.620	46.	136.	6.0	1180.4	1179.8	.6
.710	100.	262.	3.1	1183.6	1182.9	.7
.810	116.	197.	4.2	1186.5	1185.9	.6
.910	93.	188.	4.4	1191.3	1190.7	.6
1.000	178.	236.	3.5	1195.8	1195.2	.6
1.100	89.	200.	4.1	1200.1	1199.5	.6
1.210	78.	168.	4.9	1204.6	1204.0	.6
1.310	125.	175.	4.7	1209.8	1209.2	.6
1.400	157.	237.	3.4	1214.3	1213.6	.7
1.490	137.	187.	4.4	1218.1	1217.5	.6
1.590	162.	242.	3.4	1222.8	1222.1	.7
1.710	123.	189.	4.3	1227.8	1227.3	.5
1.800	277.	287.	2.8	1232.3	1231.7	.6
1.890	551.	211.	3.9	1236.7	1236.2	.5
2.010	145.	205.	4.0	1242.9	1242.3	.6
2.110	156.	232.	3.5	1247.4	1246.9	.5
2.210	205.	221.	3.7	1252.2	1251.6	.6
2.300	138.	218.	3.7	1257.2	1256.6	.6
2.410	110.	192.	4.2	1262.3	1261.7	.6
2.490	141.	255.	3.2	1265.2	1265.0	.2
2.580	69.	112.	7.3	1270.7	1270.7	.0
2.680	103.	226.	3.6	1276.8	1275.9	.9
2.780	106.	173.	4.7	1280.6	1280.6	.0
2.870	195.	189.	4.1	1286.1	1285.6	.5
2.950	90.	156.	4.9	1291.2	1290.5	.7
3.050	112.	209.	3.7	1295.3	1295.1	.2
3.140	65.	105.	7.3	1300.8	1300.6	.2
3.250	104.	200.	3.0	1306.2	1305.7	.5
3.340	59.	86.	7.0	1310.2	1310.2	.0
3.430	71.	157.	3.8	1315.5	1315.4	.1
3.530	33.	75.	8.1	1321.8	1321.2	.6
3.570	77.	199.	3.0	1324.3	1323.6	.7
3.620	42.	77.	7.8	1326.5	1326.1	.4
3.680	88.	187.	3.2	1329.6	1329.4	.2
3.740	49.	81.	7.4	1332.0	1332.0	.0

FLOODWAY DATA, Branch Channel - Final w
PROFILE NO. 2

STATION	------- FLOODWAY ------- WIDTH	SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.810	84.	165.	3.6	1336.9	1336.3	.6

Appendix I

HEC-2 Output File for:

Tributary #1
Method 1 Floodway Analysis

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    29JAN96    TIME   20:53:10    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 20:53:10

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Tributary #1 Channel - Final with Floodway
T4      Floodway Encroachment Method 1.
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Floodway Model for first unnamed tributary
   This model is based on:
      - The cross sections were obtained by photogrammetric methods by
        Aerial Mapping Company, Phoenix, AZ, based photographs taken
        October 1991.
      - Ineffective flow areas have been modeled using high roughness values
        so that ineffective flow areas do not conflict with the a Method 4
        (equal conveyance method) floodway analysis.
      - Floodway modeling is performed using Method 1 based on the results of
        the modeling using Method 4.
        File BRNCHM4.HC2 is the file containing the Method 4 analysis.
        This file (BRNCHM1.HC2) is the final floodway model!
        ---------------------------------------------------


  By: M. Forest                                                Prepared By:
  File Name:  BRNCHM1.HC2                                 Alpha Engineering Group
  January 1996                                                 Phoenix, Arizona
  ==============================================================================

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0      .004       0       0.0    818.0     1155

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN      ALLDC    IBW      CHNIM    ITRACE

      1        0      -1.0


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38       27       28       26        4       43       53       54        1       110
   115      200
```

```
NC    0.060      0.060      0.045       0.1        0.3
  ---------------------------------------------------------------------------
  This branch joins the Main Channel at Section 3.51.  Sections 0.00, 0.07 and
  0.16 overlap with the Main Channel.  The main channel model includes the right
  half of the cross section shown on the map and this model includes the left
  half of the section.  This was done to effectively code out the ineffective
  flow areas for each model.  Flow from each branch will tend to spread into the
  entire floodplain but considering typical expansion and flow patterns at
  confluences, only a portion of the section is effective for conveyance.  The
  hydraulic grade line at these sections is dominated by the main branch.  The
  water surface elevations from that model should be used (MAIN.HC2).
  ---------------------------------------------------------------------------
ET                          9.1                                                 9970       10075
X1    0.00         21     9971.6    10074.8       0.0       0.0       0.0       0.0        0.0
GR   1162.2     9808.6    1160.4     9859.7    1158.4    9896.9    1155.3    9920.3     1156.3     9944.6
GR   1156.1     9971.6    1152.8     9984.3    1152.9   10000.0    1153.6   10029.0     1155.1    10074.8
GR   1155.7    10125.7    1157.0    10170.4    1158.1   10221.8    1157.6   10270.7     1157.1    10336.2
GR   1157.2    10403.7    1156.8    10458.8    1155.5   10489.3    1155.9   10515.7     1158.5    10545.8
GR   1161.3    10588.8

ET                          9.1                                                 9965       10086
  ---------------------------------------------------------------------------
  Section 0.07
  Ineffective flow area between stations 10202.2 and 10319.4.
  ---------------------------------------------------------------------------
NH       4        .06     9967.6      .045   10034.2       .06   10202.2        .5    10319.4
X1    0.07         27     9967.6    10034.2     365.0     380.0     380.0       0.0        0.0
GR   1162.3     9840.2    1160.1     9876.5    1158.2    9896.6    1158.7    9916.4     1159.2     9948.5
GR   1160.5     9967.6    1157.7     9984.5    1156.6    9999.4    1156.6   10000.7     1159.1    10016.6
GR   1159.5    10034.2    1157.9    10061.9    1157.0   10076.9    1157.0   10096.4     1157.0    10112.2
GR   1158.2    10133.3    1158.2    10161.3    1159.2   10182.3    1159.5   10202.2     1158.9    10222.1
GR   1154.9    10236.3    1154.9    10238.8    1155.0   10251.3    1155.1   10262.9     1157.9    10277.5
GR   1159.1    10300.1    1161.2    10319.4

ET                          9.1                                                 9985       10150
NC     .06        .06      .045
X1    0.16         13     9987.1    10031.5     420.0     480.0     490.0       0.0        0.0
GR   1166.2     9938.4    1163.6     9967.9    1164.1    9987.1    1159.8    9997.4     1159.9     10002.6
GR   1160.3    10016.2    1162.7    10031.5    1162.8   10079.7    1161.6   10141.2     1160.1     10187.7
GR   1162.8    10214.1    1163.8    10251.3    1164.0   10278.7

ET                          9.1                                                 9950       10018
X1    0.26         15     9953.8    10017.8     455.0     450.0     480.0       0.0        0.0
GR   1167.0     9821.3    1166.8     9871.6    1166.2    9892.6    1164.9    9899.5     1166.1     9919.8
GR   1166.8     9953.8    1164.7     9985.6    1164.2    9993.6    1164.2   10006.5     1166.6     10017.8
GR   1166.9    10031.9    1165.9    10068.2    1166.2   10114.4    1166.8   10150.1     1168.7     10195.2

ET                          9.1                                                 9950       10018
X1    0.34         13     9981.8    10017.4     465.0     520.0     500.0       0.0        0.0
GR   1171.0     9877.7    1170.1     9894.3    1169.5    9913.8    1169.5    9936.4     1166.8     9941.3
GR   1167.8     9954.3    1170.5     9969.3    1170.2    9981.8    1166.8    9991.1     1166.8     9998.9
GR   1166.8    10009.0    1170.0    10017.4    1171.0   10052.2
```

```
ET                          9.1                                                   9960      10060
X1     0.44        19    9989.4   10017.5     475.0     540.0     520.0       0.0       0.0
GR   1174.7    9832.8    1173.6    9872.7    1173.7    9908.1    1173.8    9966.4    1173.1    9989.4
GR   1171.1    9996.6    1169.8   10000.0    1170.7   10008.2    1171.6   10017.5    1171.2   10044.2
GR   1173.0   10068.5    1173.9   10121.7    1173.2   10200.5    1173.3   10227.1    1172.3   10237.8
GR   1173.4   10275.8    1172.6   10345.0    1172.4   10412.3    1174.4   10474.2
  ---------------------------------------------------------------------------
  Section 0.52
  Ineffective flow area between stations 10266.4 and 10819.0.
  ---------------------------------------------------------------------------

ET                          9.1                                                   9980      10125
NH       4      .060    9989.8     .045   10022.9       .06   10266.4        .5   10819.0
X1     0.52        20    9989.8   10022.9     420.0     440.0     430.0       0.0       0.0
GR   1176.6    9961.3    1176.1    9989.8    1173.9    9996.2    1173.5   10000.0    1173.5   10008.8
GR   1175.8   10022.9    1174.8   10082.2    1174.1   10131.3    1175.3   10165.1    1175.4   10266.4
GR   1175.6   10381.0    1175.6   10441.7    1175.8   10473.1    1174.8   10489.2    1174.8   10504.6
GR   1175.8   10517.1    1175.1   10587.3    1175.4   10657.4    1175.9   10737.6    1178.2   10819.0

NC      .06       .06     .045
ET                          9.1                                                   9915      10050
X1     0.62        10    9988.3   10011.2     495.0     550.0     490.0       0.0       0.0
GR   1180.5    9814.8    1179.8    9902.4    1178.0    9955.3    1177.1    9969.4    1177.9    9988.3
GR   1176.7   10000.0    1178.0   10011.2    1179.4   10027.0    1179.6   10085.5    1180.2   10171.3

ET                          9.1                                                   9960      10090
X1     0.71        13    9989.1   10023.3     505.0     510.0     500.0       0.0       0.0
GR   1183.6    9851.4    1182.4    9895.7    1183.0    9937.3    1182.3    9989.1    1179.6   10000.0
GR   1179.6   10005.6    1181.2   10023.3    1181.7   10052.9    1181.0   10077.0    1181.1   10096.0
GR   1179.9   10106.5    1181.9   10134.4    1184.1   10211.2

ET                          9.1                                                   9900      10070
X1     0.81        16    9961.9   10011.0     510.0     510.0     500.0       0.0       0.0
GR   1188.3    9853.3    1185.4    9885.3    1183.9    9899.8    1185.2    9919.9    1183.4    9935.2
GR   1185.9    9961.9    1185.2    9988.5    1184.8    9994.7    1183.3    9999.1    1183.4   10000.0
GR   1186.1   10011.0    1184.2   10034.9    1182.7   10042.1    1185.4   10074.9    1185.0   10107.3
GR   1188.2   10165.0
  ---------------------------------------------------------------------------
  Section 0.91
  Ineffective flow area between stations 10160.9 and 10193.7.
  ---------------------------------------------------------------------------

ET                          9.1                                                   9900      10100
NH       4       .06    9970.6     .045   10016.2       .06   10160.9        .9   10318.8
X1     0.91        22    9970.6   10016.2     525.0     540.0     530.0       0.0       0.0
GR   1191.6    9851.5    1190.5    9868.2    1189.3    9874.7    1190.5    9887.8    1188.7    9923.4
GR   1189.9    9946.7    1190.2    9961.2    1189.2    9970.6    1188.7    9994.1    1187.7    9999.9
GR   1188.7   10000.0    1189.3   10016.2    1190.9   10040.6    1189.6   10084.1    1190.1   10125.2
GR   1190.4   10160.9    1189.6   10177.0    1188.1   10181.6    1188.3   10186.7    1190.7   10193.7
GR   1190.6   10242.4    1191.7   10318.8
```

```
NC      .06       .06      .045
ET                          9.1                                                    9900      10100
X1     1.00        16    9981.6   10020.1     480.0     490.0     485.0       0.0       0.0
GR   1196.0    9812.1    1195.1    9857.4    1194.0    9884.3    1192.8    9905.3    1194.3    9926.6
GR   1195.1    9957.1    1195.5    9981.6    1194.3    9992.6    1192.5    9999.5    1192.1   10000.0
GR   1193.3   10009.0    1195.0   10020.1    1194.3   10051.3    1194.2   10123.2    1193.7   10153.0
GR   1195.4   10182.2

ET                          9.1                                                    9890      10040
X1     1.10        16    9988.1   10015.2     545.0     510.0     510.0       0.0       0.0
GR   1199.6    9844.0    1198.6    9888.9    1197.3    9895.8    1198.3    9917.9    1197.7    9943.1
GR   1197.4    9951.6    1198.8    9970.7    1198.2    9988.1    1196.7    9996.1    1196.4   10000.0
GR   1198.1   10015.2    1200.6   10026.7    1199.6   10041.9    1198.1   10055.1    1198.5   10091.5
GR   1199.8   10117.5

ET                          9.1                                                    9805      10023
X1     1.21        20    9942.0   10022.1     600.0     560.0     600.0       0.0       0.0
GR   1204.5    9656.9    1203.6    9678.5    1202.0    9687.8    1203.4    9701.1    1203.6    9722.6
GR   1204.3    9797.6    1202.7    9828.9    1203.5    9855.2    1201.9    9867.7    1204.1    9902.2
GR   1204.7    9942.0    1202.9    9958.6    1201.4    9974.5    1202.7    9991.6    1201.2   10000.0
GR   1201.8   10013.0    1204.9   10022.1    1204.4   10076.6    1205.6   10199.3    1206.7   10285.8
  ---------------------------------------------------------------------------
  Section 1.31
  Ineffective flow area between stations 9644.4 and 9814.4.
  ---------------------------------------------------------------------------

ET                          9.1                                                    9820      10050
NH        4        .2    9814.4      .05    9970.8     .045   10052.8       .06   10127.5
X1     1.31        20    9970.8   10017.6     500.0     490.0     510.0       0.0       0.0
GR   1209.5    9644.4    1208.9    9692.3    1207.4    9703.4    1208.6    9729.1    1207.5    9752.8
GR   1209.0    9814.4    1208.0    9876.0    1206.7    9882.4    1208.1    9893.6    1208.8    9924.0
GR   1208.7    9970.8    1208.0    9984.5    1207.2    9995.7    1207.0   10000.0    1208.5   10006.5
GR   1208.7   10017.6    1209.4   10052.8    1208.0   10069.8    1208.5   10080.9    1209.9   10127.5

ET                          9.1                                                    9920      10155
NH        4       .06    9992.9     .045   10063.9      .05   10133.5      .045   10250.2
X1     1.40        16    9992.9   10063.9     490.0     485.0     505.0       0.0       0.0
GR   1215.5    9779.5    1213.7    9836.1    1213.0    9889.3    1213.4    9941.0    1212.3    9992.9
GR   1210.8   10000.0    1211.7   10009.8    1212.9   10017.8    1213.0   10027.6    1211.2   10040.2
GR   1213.5   10063.9    1213.2   10133.5    1211.8   10169.4    1213.0   10197.9    1211.7   10210.2
GR   1213.6   10250.2

ET                          9.1                                                    9992.6    10240
NH        3      .045   10106.8      .05   10268.3     .045   10415.0
X1     1.49        21    9992.6   10106.8     460.0     470.0     475.0       0.0       0.0
GR   1217.6    9992.6    1216.5    9998.5    1215.8   10000.0    1216.1   10007.2    1217.2   10017.0
GR   1216.6   10039.9    1216.5   10062.2    1216.1   10073.9    1216.9   10106.8    1217.8   10175.7
GR   1216.4   10182.7    1217.4   10205.8    1217.2   10245.6    1216.2   10252.8    1216.3   10259.9
GR   1217.4   10268.3    1216.0   10298.9    1215.3   10311.4    1216.6   10334.1    1216.9   10362.0
GR   1219.0   10415.0
```

```
ET                      9.1                                                 9930      10115
NH      4      .045   9895.3      .05   9949.6      .045  10027.9      .05  10400
X1   1.59        17   9949.6  10027.9    480.0     510.0    540.0      0.0    0.0
GR 1222.2    9782.2   1221.0   9801.4   1221.8    9836.6   1220.5   9857.4 1222.0    9895.3
GR 1222.2    9949.6   1221.0   9977.7   1220.8    9996.4   1220.1  10000.0 1221.2   10015.6
GR 1222.5   10027.9   1220.9  10065.8   1221.2   10101.4   1221.4  10161.1 1221.3   10199.4
GR 1222.1   10288.5   1222.5  10400

NC    .055     .055     .045
ET                      9.1                                                 9995      10200
X1   1.71        28   9994.7  10032.8    570.0     575.0    590.0      0.0    0.0
GR 1227.7    9994.7   1225.9  10000.0   1226.4   10011.4   1226.9  10018.3 1225.3   10021.7
GR 1226.9   10032.8   1226.5  10079.3   1224.8   10090.3   1227.0  10115.1 1226.3   10140.9
GR 1227.2   10153.4   1225.7  10161.0   1226.8   10178.5   1227.5  10250.0 1228.3   10267.7
GR 1225.0   10277.2   1226.1  10287.7   1226.6   10298.3   1227.3  10319.7 1226.7   10349.7
GR 1227.7   10400.1   1227.2  10447.5   1225.5   10469.3   1227.0  10480.2 1228.1   10504.3
GR 1227.1   10534.8   1226.1  10540.8   1228.6   10580.9

ET                      9.1                                                 9958.8    10250
X1   1.80        22   9958.8  10028.4    500.0     485.0    490.0      0.0    0.0
GR 1232.8    9958.8   1231.5   9967.1   1230.3    9974.1   1230.4   9981.2 1231.2    9991.1
GR 1230.3   10000.0   1230.3  10011.7   1232.3   10028.4   1231.3  10060.2 1232.7   10103.3
GR 1230.6   10188.3   1230.6  10237.8   1229.9   10264.1   1231.9  10320.3 1231.1   10405.1
GR 1231.0   10488.8   1231.1  10509.2   1230.9   10523.1   1231.2  10542.6 1230.6   10550.5
GR 1230.5   10557.6   1232.0  10588.3

ET                      9.1                                                 9925      10500
X1   1.89        34   9925.9  10049.1    500.0     540.0    505.0      0.0    0.0
GR 1238.5    9754.3   1237.5   9813.6   1236.6    9872.0   1236.2   9898.7 1235.5    9909.7
GR 1237.3    9925.9   1236.4   9962.6   1233.4    9980.8   1236.1   9998.1 1234.1   10000.0
GR 1236.0   10017.6   1237.4  10049.1   1237.4   10082.3   1235.1  10101.8 1236.5   10123.3
GR 1237.1   10153.4   1237.5  10185.1   1237.2   10301.5   1238.0  10394.5 1237.8   10447.0
GR 1234.8   10480.1   1234.4  10491.5   1233.8   10497.5   1235.3  10508.8 1234.6   10518.3
GR 1237.3   10531.0   1236.7  10558.7   1234.6   10570.8   1234.9  10594.7 1236.9   10619.4
GR 1236.0   10644.0   1234.8  10656.0   1237.1   10676.9   1237.6  10744.5

ET                      9.1                                                 9890      10270
X1   2.01        24   9935.0  10048.9    600.0     575.0    595.0      0.0    0.0
GR 1242.9    9859.8   1241.8   9880.3   1241.1    9889.4   1242.5   9904.9 1239.6    9911.5
GR 1240.1    9917.4   1242.4   9935.0   1241.7    9976.7   1239.9   9997.3 1239.5   10000.0
GR 1241.5   10019.9   1242.7  10048.9   1240.9   10069.2   1242.7  10086.4 1240.9   10098.3
GR 1242.6   10119.7   1241.3  10161.6   1242.5   10203.8   1242.6  10243.4 1241.6   10252.0
GR 1239.7   10256.5   1239.9  10261.2   1242.4   10277.4   1243.0  10337.5
  Inflow from sub-basin H2f added

ET                      9.1                                                 9850      10160
X1   2.11        22   9876.3  10031.9    535.0     520.0    545.0      0.0    0.0
GR 1248.5    9496.5   1247.5   9526.4   1246.5    9594.1   1245.4   9633.4 1246.6    9705.5
GR 1247.8    9766.5   1248.1   9824.3   1247.4    9876.3   1245.7   9915.1 1244.3    9930.8
GR 1246.1    9956.8   1247.0   9987.9   1244.9   10000.0   1246.7  10031.9 1247.5   10119.7
GR 1247.1   10145.1   1245.3  10156.7   1246.6   10176.7   1246.7  10217.1 1245.9   10233.2
GR 1246.9   10286.1   1247.2  10320
```

```
QT      2     816.0     816.0
ET                        9.1                                                  9830     10040
X1    2.21        17    9995.1   10039.4     550.0     560.0     525.0       0.0       0.0
GR  1252.1    9584.5    1251.3    9637.1    1249.7    9652.8    1250.7    9683.8    1250.9    9758.6
GR  1251.1    9832.4    1252.0    9883.1    1249.9    9896.9    1251.3    9940.1    1251.5    9995.1
GR  1249.7   10000.0    1250.1   10019.3    1252.5   10039.4    1251.4   10099.9    1251.1   10166.2
GR  1251.6   10248.1    1252.2   10374.7

ET                        9.1                                                  9885     10200
X1    2.30        21    9987.4   10024.7     460.0     490.0     490.0       0.0       0.0
GR  1257.7    9417.1    1256.4    9475.0    1256.7    9539.6    1256.0    9619.2    1255.1    9641.0
GR  1256.2    9675.4    1256.2    9767.4    1255.6    9875.5    1255.3    9951.0    1256.0    9987.4
GR  1254.9    9998.9    1254.9   10000.0    1256.4   10008.7    1257.3   10024.7    1256.8   10080.4
GR  1257.1   10146.0    1255.9   10161.5    1257.0   10179.7    1257.1   10222.4    1257.1   10285.2
GR  1257.3   10326.4
  ---------------------------------------------------------------------------
  Section 2.41
  Ineffective flow area between stations 9676.8 and 9877.0.
  ---------------------------------------------------------------------------

ET                        9.1                                                  9900     10020
NH      5        .5      9877       .06    9976.8      .045   10013.5       .06   10056.7        .5
NH  10141
X1    2.41        22    9976.8   10013.5     470.0     660.0     565.0       0.0       0.0
GR  1261.7    9351.3    1260.6    9365.8    1261.1    9385.8    1260.7    9428.8    1261.2    9508.1
GR  1260.4    9587.2    1260.7    9656.2    1259.9    9696.5    1258.0    9707.1    1259.9    9720.4
GR  1260.1    9766.1    1258.1    9773.3    1259.6    9793.5    1260.9    9877.0    1259.4    9906.2
GR  1260.8    9932.4    1261.2    9976.8    1259.3   10000.0    1261.1   10013.5    1261.4   10056.7
GR  1261.8   10079.5    1262.3     10141

NC     .06      .055      .045
ET                        9.1                                                  9934     10115
X1    2.49         9    9968.2   10110.1     450.0     450.0     435.0       0.0       0.0
GR  1265.2    9926.1    1264.2    9968.2    1263.3    9983.6    1262.4   10000.0    1264.4   10021.8
GR  1263.4   10047.9    1262.0   10067.3    1265.3   10110.1    1266.0   10183.5

ET                        9.1                                                  9910     10090
X1    2.58        11    9964.7   10033.7     475.0     480.0     485.0       0.0       0.0
GR  1270.7    9835.0    1270.2    9918.6    1270.1    9964.7    1268.3    9980.5    1268.7   10000.0
GR  1270.2   10033.7    1270.2   10098.2    1270.3   10175.4    1270.3   10203.1    1269.8   10227.0
GR  1270.9   10253.4

ET                        9.1                                                  9970     10095
NC     .06       .06      .045
X1    2.68        14    9991.1   10024.3     560.0     470.0     505.0       0.0       0.0
GR  1276.9    9892.7    1275.8    9957.9    1275.1    9991.1    1273.8   10000.0    1273.9   10012.7
GR  1275.4   10024.3    1275.0   10049.6    1273.7   10062.0    1275.0   10086.5    1275.1   10144.3
GR  1274.8   10192.0    1274.0   10207.8    1275.4   10228.0    1276.4   10276.9
  Inflow from sub-basins H2d & H2e added
```

```
ET                          9.1                                                   9932      10058
X1     2.78        10     9953.8   10064.9      485.0      505.0      510.0       0.0       0.0
GR   1282.0    9923.1     1279.2    9939.8     1280.3     9953.8     1278.2    9967.5    1277.7    9982.7
GR   1277.8    9996.9     1278.2   10000.0     1279.4    10022.7     1280.8   10064.9    1281.0   10155.3

QT        2     767.0      767.0
ET                          9.1                                                   9959      10180
X1     2.87        16     9974.7   10026.5      530.0      465.0      490.0       0.0       0.0
GR   1287.2    9873.5     1285.4    9900.8     1283.5     9908.9     1284.7    9938.4    1285.2    9974.7
GR   1283.9    9990.1     1282.7   10000.0     1283.8    10009.9     1285.3   10026.5    1285.8   10128.1
GR   1285.5   10149.4     1283.7   10158.9     1284.1    10176.7     1283.4   10185.9    1286.9   10208.1
GR   1287.5   10282.4
  ---------------------------------------------------------------------------
  Section 2.95
  Ineffective flow area between stations 9844.4 and 9897.3.
  ---------------------------------------------------------------------------

NH        3        .9     9897.3      .045     9981.1        .06   10137.8
ET                          9.1                                                   9897      10100
X1     2.95        11     9897.3    9981.1      435.0      445.0      440.0       0.0       0.0
GR   1290.8    9844.4     1289.9    9864.8     1287.8     9871.2     1290.3    9897.3    1288.5    9945.0
GR   1290.2    9981.1     1289.5   10000.0     1289.7    10042.7     1289.0   10083.4    1289.1   10103.8
GR   1290.8   10137.8

NC      .06       .06      .045
ET                          9.1                                                   9890      10032
X1     3.05         9     9922.5   10037.2      485.0      465.0      525.0       0.0       0.0
GR   1296.3    9803.3     1294.5    9867.8     1294.3     9922.5     1292.5    9963.2    1293.9    9990.2
GR   1292.1   10000.0     1293.4   10010.8     1295.5    10037.2     1295.9   10119.1
  ---------------------------------------------------------------------------
  Section 3.14
  Ineffective flow area between stations 9906.1 and 9953.1.
  ---------------------------------------------------------------------------

ET                          9.1                                                   9950      10100
NH        4       .06     9953.1      .045    10018.2        .06   10052.5        .5  10172.6
X1     3.14        10     9953.1   10018.2      480.0      490.0      495.0       0.0       0.0
GR   1301.4    9906.1     1300.1    9953.1     1299.2     9978.2     1298.4   10000.0    1299.8   10018.2
GR   1300.0   10052.5     1299.1   10079.4     1297.6    10092.8     1299.1   10112.8    1300.9   10172.6
  ---------------------------------------------------------------------------
  Section 3.25
  Ineffective flow area between stations 10322.8 and 10544.7.
  Inflow from sub-basin H2b occurs below this section.
  ---------------------------------------------------------------------------

QT        2     603.0      603.0
ET                          9.1                                                   9973      10080
NH        4       .06     9971.4      .045    10075.1        .06   10322.8        .9  10544.7
```

```
X1     3.25        15    9971.4   10075.1     515.0     560.0     555.0       0.0       0.0
GR   1308.0    9881.6    1306.0    9971.4    1303.3    9990.0    1303.1   10000.0    1303.8   10015.4
GR   1305.6   10075.1    1305.0   10191.8    1304.8   10282.6    1305.1   10322.8    1303.7   10338.2
GR   1302.2   10345.5    1303.6   10369.7    1304.5   10446.5    1303.2   10489.0    1306.0   10544.7

NC     .06       .06      .045
ET                        9.1                                                          9984     10042
X1     3.34         7    9980.6   10048.6     480.0     480.0     485.0       0.0       0.0
GR   1312.7    9951.8    1310.9    9980.6    1307.9    9993.4    1307.3   10000.0    1309.1   10023.3
GR   1310.6   10048.6    1311.6   10143.5

ET                        9.1                                                          9856     10058
  ---------------------------------------------------------------------------
  Section 3.43
  Ineffective flow area between stations 9768.4 and 9891.1.
  ---------------------------------------------------------------------------
NH       4        .9    9891.1       .06    9973.3      .045   10044.3       .06   10091.2
X1     3.43        11    9973.3   10044.3     485.0     505.0     490.0       0.0       0.0
GR   1317.0    9768.4    1316.1    9850.3    1314.0    9867.8    1315.4    9891.1    1315.0    9935.0
GR   1314.4    9973.3    1313.2    9986.5    1312.6   10000.0    1313.0   10025.4    1314.7   10044.3
GR   1317.1   10091.2

ET                        9.1                                                          9986     10070
  ---------------------------------------------------------------------------
  Section 3.53
  Ineffective flow area between stations 10100.1 and 10233.5.
  ---------------------------------------------------------------------------
NH       4       .06       9990      .045   10010.2       .06   10100.1        .9   10233.5
X1     3.53        11    9990.0   10010.2     480.0     490.0     485.0       0.0       0.0
GR   1322.5    9919.6    1322.2    9971.8    1320.9    9990.0    1318.5   10000.0    1319.6   10010.2
GR   1320.4   10039.6    1320.5   10100.1    1320.1   10135.1    1318.4   10146.8    1320.3   10172.4
GR   1324.0   10233.5

NC     .06       .06      .045
ET                        9.1                                                          9900     10040
X1     3.57        11    9945.5   10022.4     220.0     255.0     235.0       0.0       0.0
GR   1325.1    9814.8    1323.9    9866.4    1321.2    9883.1    1323.4    9903.5    1323.1    9945.5
GR   1322.5    9964.9    1321.0    9987.0    1320.1   10000.0    1321.0   10010.2    1322.8   10022.4
GR   1323.6   10101.2

ET                        9.1                                                          9981     10066
X1     3.62        10    9977.0   10020.9     240.0     300.0     260.0       0.0       0.0
GR   1327.7    9900.0    1327.8    9956.7    1326.8    9977.0    1324.1    9993.5    1323.6   10000.0
GR   1325.1   10020.9    1325.3   10035.3    1324.3   10042.7    1327.0   10077.8    1327.4   10138.3

ET                        9.1                                                          9967     10050
X1     3.68         9    9965.6   10067.6     300.0     325.0     305.0       0.0       0.0
GR   1330.5    9940.3    1329.8    9965.6    1327.0    9976.6    1325.8    9991.6    1325.7   10000.0
GR   1327.1   10014.9    1328.7   10038.2    1330.3   10067.6    1331.1   10126.6
```

ET			9.1						9968	10060
X1	3.74	12	9964.6	10027.4	340.0	350.0	335.0	0.0	0.0	
GR	1333.6	9916.9	1332.9	9964.6	1330.3	9974.5	1330.7	9989.6	1329.0	9998.8
GR	1328.1	10000.0	1330.8	10010.3	1333.6	10027.4	1332.1	10040.5	1329.7	10045.7
GR	1333.1	10067.1	1334.2	10162.5						
ET			9.1						9924	10124
X1	3.81	13	9972.8	10028.7	350.0	390.0	370.0	0.0	0.0	
GR	1337.9	9832.2	1337.2	9904.4	1335.0	9953.0	1335.5	9972.8	1332.7	9986.6
GR	1334.7	9999.2	1335.9	10000.0	1336.3	10028.7	1335.4	10039.0	1332.5	10055.2
GR	1335.5	10077.5	1336.6	10141.6	1337.8	10230.0				

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

*PROF 1

CCHV= .100 CEHV= .300
*SECNO .000

3265 DIVIDED FLOW

.000	3.18	1155.98	.00	1155.00	1156.16	.18	.00	.00	1156.10
818.0	5.5	773.6	38.9	7.3	222.1	40.7	.0	.0	1155.10
.00	.76	3.48	.96	.060	.045	.060	.000	1152.80	9915.19
.004004	0.	0.	0.	0	0	6	.00	223.15	10516.59

1490 NH CARD USED
*SECNO .070

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

.070	3.83	1158.73	.00	.00	1158.87	.14	2.71	.00	1160.50
818.0	9.3	208.9	599.8	7.0	43.9	292.3	2.7	2.1	1159.50
.04	1.33	4.76	2.05	.060	.045	.153	.000	1154.90	9891.00
.016078	365.	380.	380.	3	0	0	.00	258.48	10293.11

*SECNO .160

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.71

.160	3.15	1162.95	.00	.00	1163.11	.16	4.24	.01	1164.10
818.0	.0	355.5	462.5	.0	88.7	192.4	6.1	4.8	1162.70
.08	.00	4.01	2.40	.000	.045	.060	.000	1159.80	9989.87
.005512	420.	490.	480.	4	0	0	.00	229.60	10219.47

*SECNO .260

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 = .61

.260	2.58	1166.78	.00	.00	1167.12	.34	3.96	.05	1166.80
818.0	147.8	546.3	123.9	52.5	101.0	60.0	8.7	7.4	1166.60
.11	2.81	5.41	2.06	.060	.045	.060	.000	1164.20	9871.89
.014656	455.	480.	450.	3	0	0	.00	268.17	10149.61

*SECNO .340

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.77

.340	3.84	1170.64	.00	.00	1170.88	.24	3.75	.01	1170.20
818.0	320.6	492.0	5.4	125.4	107.1	6.9	11.3	9.8	1170.00
.15	2.56	4.59	.78	.060	.045	.060	.000	1166.80	9884.54
.004660	465.	500.	520.	4	0	0	.00	154.75	10039.29

*SECNO .440

3265 DIVIDED FLOW

.440	3.67	1173.47	.00	.00	1173.64	.16	2.75	.01	1173.10
818.0	1.5	315.4	501.1	2.4	68.4	254.6	14.7	13.1	1171.60
.20	.64	4.61	1.97	.060	.045	.060	.000	1169.80	9976.94
.006133	475.	520.	540.	3	0	0	.00	396.53	10445.70

1490 NH CARD USED
*SECNO .520

.520	2.63	1176.13	.00	.00	1176.20	.07	2.56	.01	1176.10
818.0	.0	222.3	595.7	.0	60.7	575.7	19.5	18.9	1175.80
.26	.02	3.66	1.03	.060	.045	.101	.000	1173.50	9987.64
.005594	420.	430.	440.	4	0	0	.00	758.38	10746.02

*SECNO .620

.620	3.06	1179.76	.00	.00	1180.10	.34	3.82	.08	1177.90
818.0	421.7	336.4	59.9	119.4	55.8	33.8	24.7	24.9	1178.00
.30	3.53	6.03	1.77	.060	.045	.060	.000	1176.70	9903.58
.010263	495.	490.	550.	3	0	0	.00	204.77	10108.35

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

*SECNO .710

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

.710	3.35	1182.95	.00	.00	1183.07	.13	2.96	.02	1182.30
818.0	20.9	317.0	480.1	30.9	85.4	220.2	27.8	27.8	1181.20
.35	.68	3.71	2.18	.060	.045	.060	.000	1179.60	9875.66
.003780	505.	500.	510.	4	0	0	.00	286.93	10170.80

*SECNO .810

3265 DIVIDED FLOW

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

.810	3.19	1185.89	.00	.00	1186.04	.15	2.96	.01	1185.90
818.0	313.0	106.0	399.0	103.9	37.7	125.7	31.4	30.8	1186.10
.39	3.01	2.81	3.17	.060	.045	.060	.000	1182.70	9879.86
.010146	510.	500.	510.	3	0	0	.00	239.72	10123.40

1490 NH CARD USED
*SECNO .910

3265 DIVIDED FLOW

.910	3.04	1190.74	.00	.00	1190.92	.18	4.87	.01	1189.20
818.0	267.0	381.6	169.4	110.0	84.9	137.3	35.0	34.6	1189.30
.44	2.43	4.49	1.23	.060	.045	.102	.000	1187.70	9864.67
.008324	525.	530.	540.	2	0	0	.00	378.80	10251.62

*SECNO 1.000

3265 DIVIDED FLOW

1.000	3.06	1195.16	.00	.00	1195.31	.15	4.38	.00	1195.50
818.0	297.9	206.3	313.8	102.1	50.4	136.0	38.5	38.4	1195.00
.49	2.92	4.10	2.31	.060	.045	.060	.000	1192.10	9854.30
.009838	480.	485.	490.	3	0	0	.00	299.98	10178.11

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 1.100

3265 DIVIDED FLOW

1.100	3.06	1199.46	.00	.00	1199.64	.18	4.32	.01	1198.20
818.0	402.9	287.5	127.7	159.3	61.0	63.7	41.9	41.7	1198.10
.53	2.53	4.71	2.00	.060	.045	.060	.000	1196.40	9850.34
.006991	545.	510.	510.	5	0	0	.00	238.65	10110.68

*SECNO 1.210

3265 DIVIDED FLOW

1.210	2.77	1203.97	.00	.00	1204.19	.21	4.54	.01	1204.70
818.0	285.0	533.0	.0	135.2	123.1	.0	45.7	45.1	1204.90
.58	2.11	4.33	.00	.060	.045	.000	.000	1201.20	9669.59
.008298	600.	600.	560.	4	0	0	.00	259.60	10019.37

1490 NH CARD USED
*SECNO 1.310

3265 DIVIDED FLOW

1.310	2.52	1209.22	1208.88	.00	1209.34	.12	5.15	.01	1208.70
818.0	513.0	233.9	71.0	257.9	55.8	35.5	49.2	49.0	1208.70
.63	1.99	4.19	2.00	.084	.045	.058	.000	1206.70	9666.50
.012856	500.	510.	490.	15	16	0	.00	427.43	10104.97

1490 NH CARD USED
*SECNO 1.400

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

1.400	2.80	1213.60	.00	.00	1213.73	.13	4.39	.00	1212.30
818.0	97.5	347.1	373.4	72.6	102.6	143.6	52.9	53.7	1213.50
.68	1.34	3.38	2.60	.060	.045	.045	.000	1210.80	9844.04
.006497	490.	505.	485.	4	0	0	.00	406.06	10250.11

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 1.490

3265 DIVIDED FLOW

1.490	2.15	1217.45	.00	.00	1217.61	.16	3.87	.01	1217.60
818.0	.0	318.6	499.4	.0	100.9	155.9	56.0	57.8	1216.90
.72	.00	3.16	3.20	.000	.045	.046	.000	1215.30	9993.38
.010722	460.	475.	470.	4	0	0	.00	354.46	10376.00

1490 NH CARD USED
*SECNO 1.590

3265 DIVIDED FLOW

1.590	2.03	1222.13	.00	.00	1222.23	.09	4.61	.01	1222.20
818.0	231.8	203.7	382.5	93.6	72.0	177.2	59.6	62.7	1222.50
.78	2.48	2.83	2.16	.045	.045	.050	.000	1220.10	9783.14
.007567	480.	540.	510.	5	0	0	.00	487.72	10300.03

*SECNO 1.710

3265 DIVIDED FLOW

1.710	2.52	1227.32	.00	.00	1227.44	.12	5.20	.01	1227.70
818.0	.0	134.5	683.5	.0	38.5	259.8	63.8	68.8	1226.90
.84	.00	3.50	2.63	.000	.045	.055	.000	1224.80	9995.83
.010913	570.	590.	575.	4	0	0	.00	428.24	10560.30

*SECNO 1.800

3265 DIVIDED FLOW

1.800	1.82	1231.72	.00	.00	1231.80	.08	4.36	.00	1232.80
818.0	.0	167.0	651.0	.0	58.3	313.8	67.6	74.0	1232.30
.90	.00	2.87	2.07	.000	.045	.055	.000	1229.90	9965.71
.007508	500.	490.	485.	4	0	0	.00	499.00	10582.52

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

*SECNO 1.890

3265 DIVIDED FLOW

1.890	2.85	1236.25	.00	.00	1236.42	.17	4.59	.03	1237.30
818.0	9.9	281.7	526.4	7.0	74.4	172.1	71.4	78.6	1237.40
.94	1.43	3.79	3.06	.055	.045	.055	.000	1233.40	9895.56
.010087	500.	505.	540.	4	0	0	.00	251.66	10669.15

*SECNO 2.010

3265 DIVIDED FLOW

2.010	2.83	1242.33	.00	.00	1242.47	.14	6.05	.00	1242.40
818.0	198.8	311.3	307.9	61.2	95.3	117.7	74.9	82.4	1242.70
1.00	3.25	3.27	2.62	.055	.045	.055	.000	1239.50	9870.41
.010604	600.	595.	575.	3	0	0	.00	320.62	10276.95

*SECNO 2.110

3265 DIVIDED FLOW

2.110	2.64	1246.94	.00	.00	1247.04	.10	4.56	.00	1247.40
818.0	240.3	443.9	133.8	115.8	153.5	81.9	78.8	87.2	1246.70
1.06	2.08	2.89	1.63	.055	.045	.055	.000	1244.30	9564.46
.006976	535.	545.	520.	4	0	0	.00	471.06	10290.36

*SECNO 2.210

3265 DIVIDED FLOW

2.210	1.87	1251.57	.00	.00	1251.70	.13	4.65	.01	1251.50
816.0	580.2	185.5	50.3	231.3	46.4	41.6	82.9	93.6	1252.50
1.11	2.51	4.00	1.21	.055	.045	.055	.000	1249.70	9618.73
.010857	550.	525.	560.	3	0	0	.00	541.22	10244.74

*SECNO 2.300

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

2.300	1.68	1256.58	.00	.00	1256.68	.09	4.98	.00	1256.00
816.0	731.0	75.7	9.3	306.6	23.3	6.9	86.4	99.3	1257.30
1.17	2.38	3.25	1.35	.055	.045	.055	.000	1254.90	9466.87
.010505	460.	490.	490.	4	0	0	.00	526.54	10172.79

1490 NH CARD USED
*SECNO 2.410

2.410	3.65	1261.65	.00	.00	1261.73	.08	5.05	.00	1261.20
816.0	575.5	217.1	23.4	753.3	52.0	19.0	92.8	106.3	1261.10
1.25	.76	4.17	1.23	.247	.045	.062	.000	1258.00	9351.96
.010089	470.	565.	660.	4	0	0	.00	718.96	10070.92

*SECNO 2.490

2.490	3.01	1265.01	.00	.00	1265.21	.20	3.44	.04	1264.20
816.0	15.1	800.9	.0	14.0	223.4	.0	98.3	110.9	1265.30
1.28	1.08	3.58	.00	.060	.045	.000	.000	1262.00	9933.81
.006233	450.	435.	450.	5	0	0	.00	172.62	10106.43

*SECNO 2.580
3280 CROSS SECTION 2.58 EXTENDED .00 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.580	2.40	1270.70	1270.70	.00	1270.98	.28	4.18	.03	1270.10
816.0	71.1	548.8	196.1	46.4	108.8	103.5	101.0	114.1	1270.20
1.32	1.53	5.04	1.89	.060	.045	.055	.000	1268.30	9835.00
.012750	475.	485.	480.	12	14	0	.00	413.62	10248.62

*SECNO 2.680

2.680	2.22	1275.92	.00	.00	1276.07	.14	5.07	.01	1275.10
816.0	22.0	228.1	565.9	16.2	54.2	228.8	104.2	118.2	1275.40
1.36	1.36	4.21	2.47	.060	.045	.060	.000	1273.70	9950.58
.008506	560.	505.	470.	6	0	0	.00	303.02	10253.60

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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 2.780
    2.780      2.88   1280.58       .00       .00   1280.90       .32      4.78       .05   1280.30
    816.0      37.3     778.7        .0      17.3     167.9        .0     107.0     120.7   1280.80
     1.39      2.15      4.64       .00      .060      .045      .000      .000   1277.70   9931.56
  .010512      485.      510.      505.         4         0         0       .00    126.75  10058.31


*SECNO 2.870

3265 DIVIDED FLOW

    2.870      2.89   1285.59       .00       .00   1285.78       .19      4.86       .01   1285.20
    767.0     203.0     334.3     229.7      77.1      79.4      81.1     109.4     122.8   1285.30
     1.43      2.63      4.21      2.83      .060      .045      .060      .000   1282.70   9897.84
  .009258      530.      490.      465.         5         0         0       .00    245.89  10199.83


1490 NH CARD USED
*SECNO 2.950
    2.950      2.65   1290.45       .00       .00   1290.63       .18      4.85       .00   1290.30
    767.0      11.6     359.3     396.1      50.4      90.1     139.7     112.0     125.4   1290.20
     1.47       .23      3.99      2.84      .900      .045      .060      .000   1287.80   9852.25
  .013262      435.      440.      445.         5         0         0       .00    278.61  10130.87


*SECNO 3.050

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.40

    3.050      3.00   1295.10       .00       .00   1295.31       .21      4.67       .01   1294.30
    767.0      65.8     701.2        .0      44.1     183.6        .0     114.9     128.1   1295.50
     1.51      1.49      3.82       .00      .060      .045      .000      .000   1292.10   9846.62
  .006746      485.      525.      465.         4         0         0       .00    185.44  10032.06


1490 NH CARD USED
*SECNO 3.140

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52

    3.140      3.02   1300.62       .00       .00   1301.13       .51      5.73       .09   1300.10
    767.0       7.6     593.4     165.9       4.9      91.6     167.4     117.7     130.4   1299.80
     1.54      1.57      6.48       .99      .060      .045      .297      .000   1297.60   9934.37
  .024487      480.      495.      490.         4         0         0       .00    228.86  10163.23
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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 3.250

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.06

3.250	3.54	1305.74	.00	.00	1305.80	.06	4.63	.05	1306.00
603.0	.0	356.9	246.1	.0	144.1	547.4	123.8	135.5	1305.60
1.63	.00	2.48	.45	.000	.045	.258	.000	1302.20	9973.13
.003554	515.	555.	560.	5	0	0	.00	566.57	10539.70

*SECNO 3.340

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.340	2.92	1310.22	1310.22	.00	1310.98	.76	3.70	.21	1310.90
603.0	.0	603.0	.0	.0	86.5	.0	128.1	138.9	1310.60
1.65	.00	6.97	.00	.000	.045	.000	.000	1307.30	9983.50
.026866	480.	485.	480.	20	15	0	.00	58.70	10042.20

1490 NH CARD USED
*SECNO 3.430

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.40

3.430	2.80	1315.40	.00	.00	1315.60	.20	4.56	.06	1314.40
603.0	42.5	556.5	4.0	59.6	149.9	4.7	129.8	140.4	1314.70
1.69	.71	3.71	.84	.103	.045	.060	.000	1312.60	9856.17
.004680	485.	490.	505.	5	0	0	.00	201.17	10057.89

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 3.530
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.530	2.76	1321.16	1321.16	.00	1321.62	.46	4.47	.08	1320.90
603.0	.5	279.8	322.7	.5	36.2	182.5	132.2	142.6	1319.60
1.72	1.03	7.73	1.77	.060	.045	.152	.000	1318.40	9986.32
.025778	480.	485.	490.	20	5	0	.00	200.33	10186.65

*SECNO 3.570

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.45

3.570	3.49	1323.59	.00	.00	1323.73	.14	2.08	.03	1323.10
603.0	92.0	485.2	25.8	57.3	146.2	29.8	133.5	143.8	1322.80
1.74	1.60	3.32	.87	.060	.045	.060	.000	1320.10	9868.39
.004308	220.	235.	255.	5	0	0	.00	230.63	10099.02

*SECNO 3.620
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3.620	2.48	1326.08	1326.08	.00	1326.70	.62	2.27	.14	1326.80
603.0	.0	440.6	162.4	.0	62.5	42.6	134.5	144.8	1325.10
1.75	.00	7.05	3.81	.000	.045	.060	.000	1323.60	9981.42
.024882	240.	260.	300.	4	19	0	.00	84.38	10065.80

*SECNO 3.680

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.30

3.680	3.65	1329.35	.00	.00	1329.56	.20	2.81	.04	1329.80
603.0	.0	603.0	.0	.0	167.3	.0	135.5	145.4	1330.30
1.78	.00	3.60	.00	.000	.045	.000	.000	1325.70	9967.35
.004703	300.	305.	325.	6	0	0	.00	82.87	10050.22

*SECNO 3.740

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 = .48

3.740	3.86	1331.96	.00	.00	1332.55	.59	2.88	.12	1332.90
603.0	.0	521.9	81.1	.0	80.9	21.7	136.5	146.0	1333.60
1.79	.00	6.45	3.75	.000	.045	.060	.000	1328.10	9968.17
.020296	340.	335.	350.	3	0	0	.00	68.37	10059.94

*SECNO 3.810

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.82

3.810	3.81	1336.31	.00	.00	1336.43	.12	3.83	.05	1335.50
603.0	69.2	206.7	327.1	39.6	69.9	113.0	137.9	147.2	1336.30
1.83	1.75	2.96	2.89	.060	.045	.060	.000	1332.50	9924.20
.006118	350.	370.	390.	4	0	0	.00	200.14	10124.33

T1 FCD 90-64 AEG 5115.01
T2 White Tanks Wash Flood Insurance Study
T3 Branch Channel - Final with Floodway

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	0	0	0.0	818.0	1157	
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15	0	-1.0							

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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


*PROF 2



CCHV=     .100 CEHV=     .300
*SECNO  .000

3470 ENCROACHMENT STATIONS=     9970.0   10075.0  TYPE=      1  TARGET=      105.000
     .000      4.20   1157.00       .00   1155.98   1157.10       .10       .00       .00   1156.10
    818.0        .9     817.0        .1       1.4     327.7        .4        .0        .0   1155.10
      .00       .60      2.49       .28      .060      .045      .060      .000   1152.80   9970.00
  .001229        0.        0.        0.         0         0         0       .00    105.00  10075.00


1490 NH CARD USED
*SECNO  .070

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9965.0   10086.0  TYPE=      1  TARGET=      121.000
     .070      4.35   1159.25   1159.25   1158.73   1159.91       .65      1.30       .17   1160.50
    818.0        .0     457.6     360.4        .0      64.9      63.5       2.0        .9   1159.50
      .02       .00      7.05      5.68      .000      .045      .060      .000   1154.90   9975.12
  .030953      365.      380.      380.        20         8         0       .00     95.82  10086.00


*SECNO  .160

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.88


3470 ENCROACHMENT STATIONS=     9985.0   10150.0  TYPE=      1  TARGET=      165.000
     .160      3.98   1163.78       .00   1162.95   1163.95       .17      4.00       .05   1164.10
    818.0        .0     496.4     321.6        .0     124.3     167.1       4.3       2.3   1162.70
      .06       .00      3.99      1.92      .000      .045      .060      .000   1159.80   9987.87
  .003733      420.      490.      480.         7         0         0       .00    162.13  10150.00
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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

*SECNO .260

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .40

3470 ENCROACHMENT STATIONS= 9950.0 10018.0 TYPE= 1 TARGET= 68.000

.260	2.75	1166.95	1166.93	1166.78	1167.79	.84	3.64	.20	1166.80
818.0	.9	817.1	.0	.7	111.2	.1	6.5	3.5	1166.60
.08	1.21	7.35	.04	.060	.045	.060	.000	1164.20	9950.00
.023891	455.	480.	450.	8	19	0	.00	68.00	10018.00

*SECNO .340
3280 CROSS SECTION .34 EXTENDED .43 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.48

3470 ENCROACHMENT STATIONS= 9950.0 10018.0 TYPE= 1 TARGET= 68.000

.340	4.63	1171.43	.00	1170.64	1171.75	.32	3.91	.05	1170.20
818.0	152.0	665.3	.7	64.0	135.6	.9	8.3	4.3	1170.00
.11	2.37	4.91	.87	.060	.045	.060	.000	1166.80	9950.00
.003876	465.	500.	520.	4	0	0	.00	68.00	10018.00

*SECNO .440

3470 ENCROACHMENT STATIONS= 9960.0 10060.0 TYPE= 1 TARGET= 100.000

.440	4.18	1173.98	.00	1173.47	1174.30	.32	2.55	.00	1173.10
818.0	16.3	438.2	363.6	13.2	82.3	103.4	10.6	5.3	1171.60
.14	1.23	5.32	3.52	.060	.045	.060	.000	1169.80	9960.00
.006379	475.	520.	540.	5	0	0	.00	100.00	10060.00

1490 NH CARD USED

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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  .520

3470 ENCROACHMENT STATIONS=     9980.0   10125.0  TYPE=      1  TARGET=      145.000
     .520      3.19   1176.69      .00   1176.13   1176.88      .18      2.57       .01   1176.10
    818.0       5.7     342.1    470.2       5.0      79.2    176.8      12.9       6.5   1175.80
      .18      1.14      4.32     2.66      .060      .045     .060      .000   1173.50   9980.00
  .005479      420.      430.     440.         4         0        0       .00    145.00  10125.00


*SECNO  .620

3470 ENCROACHMENT STATIONS=     9915.0   10050.0  TYPE=      1  TARGET=      135.000
     .620      3.22   1179.92      .00   1179.76   1180.20      .28      3.29       .03   1177.90
    818.0     431.5     324.2     62.4     129.0      59.5     30.4      15.8       8.2   1178.00
      .21      3.35      5.45     2.05      .060      .045     .060      .000   1176.70   9915.00
  .007697      495.      490.     550.         3         0        0       .00    135.00  10050.00


*SECNO  .710

3470 ENCROACHMENT STATIONS=     9960.0   10090.0  TYPE=      1  TARGET=      130.000
     .710      3.60   1183.20      .00   1182.95   1183.44      .24      3.24       .00   1182.30
    818.0      29.5     449.1    339.3      20.6      94.4    124.8      18.4       9.7   1181.20
      .25      1.43      4.76     2.72      .060      .045     .060      .000   1179.60   9960.00
  .005450      505.      500.     510.         2         0        0       .00    130.00  10090.00


*SECNO  .810

3470 ENCROACHMENT STATIONS=     9900.0   10070.0  TYPE=      1  TARGET=      170.000
     .810      3.56   1186.26      .00   1185.89   1186.40      .14      2.95       .01   1185.90
    818.0     296.0     157.9    364.1     107.3      56.0    114.5      21.5      11.5   1186.10
      .30      2.76      2.82     3.18      .060      .045     .060      .000   1182.70   9900.00
  .006226      510.      500.     510.         3         0        0       .00    170.00  10070.00


1490 NH CARD USED
*SECNO  .910

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=     9900.0   10100.0  TYPE=      1  TARGET=      200.000
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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
.910	2.98	1190.68	1190.46	1190.74	1190.99	.31	4.54	.05	1189.20
818.0	263.6	445.7	108.7	83.2	82.6	49.9	24.5	13.7	1189.30
.33	3.17	5.39	2.18	.060	.045	.060	.000	1187.70	9900.00
.012439	525.	530.	540.	10	14	0	.00	189.40	10100.00

*SECNO 1.000
3280 CROSS SECTION 1.00 EXTENDED .23 FEET

3470 ENCROACHMENT STATIONS= 9900.0 10100.0 TYPE= 1 TARGET= 200.000

1.000	3.53	1195.63	.00	1195.16	1195.81	.18	4.81	.01	1195.50
818.0	278.0	292.5	247.5	95.3	68.0	97.3	27.1	15.8	1195.00
.37	2.92	4.30	2.54	.060	.045	.060	.000	1192.10	9900.00
.008110	480.	485.	490.	6	0	0	.00	200.00	10100.00

*SECNO 1.100

3470 ENCROACHMENT STATIONS= 9890.0 10040.0 TYPE= 1 TARGET= 150.000

1.100	3.24	1199.64	.00	1199.46	1199.89	.24	4.06	.02	1198.20
818.0	472.3	336.1	9.6	159.8	66.0	5.5	30.1	17.8	1198.10
.41	2.96	5.09	1.76	.060	.045	.060	.000	1196.40	9890.00
.007339	545.	510.	510.	5	0	0	.00	132.30	10022.30

*SECNO 1.210

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9805.0 10023.0 TYPE= 1 TARGET= 218.000

1.210	2.93	1204.13	.00	1203.97	1204.36	.23	4.47	.00	1204.70
818.0	237.2	580.8	.0	104.0	134.8	.0	33.3	19.9	1204.90
.45	2.28	4.31	.00	.060	.045	.000	.000	1201.20	9805.00
.007564	600.	600.	560.	2	0	0	.00	172.09	10019.85

1490 NH CARD USED
*SECNO 1.310

3470 ENCROACHMENT STATIONS= 9820.0 10050.0 TYPE= 1 TARGET= 230.000

1.310	2.63	1209.33	1209.16	1209.22	1209.59	.26	5.22	.01	1208.70
818.0	509.9	289.7	18.4	136.7	60.6	9.9	35.9	22.2	1208.70
.49	3.73	4.78	1.86	.050	.045	.045	.000	1206.70	9820.00
.014946	500.	510.	490.	14	10	0	.00	229.10	10049.10

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

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1490 NH CARD USED
*SECNO 1.400
3280 CROSS SECTION      1.40 EXTENDED       .40 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.55


3470 ENCROACHMENT STATIONS=     9920.0   10155.0  TYPE=      1  TARGET=      235.000
     1.400      3.20   1214.00       .00   1213.60   1214.18       .17      4.58       .01   1212.30
     818.0     149.6     514.1     154.3      74.0     131.3      71.5      38.7      24.9   1213.50
       .53      2.02      3.91      2.16      .060      .045      .048      .000   1210.80   9920.00
   .006250      490.      505.      485.         4         0         0       .00    235.00  10155.00


1490 NH CARD USED
*SECNO 1.490

3470 ENCROACHMENT STATIONS=     9992.6   10240.0  TYPE=      1  TARGET=      247.400
     1.490      2.58   1217.88       .00   1217.45   1218.11       .23      3.91       .02   1267.60
     818.0        .0     620.4     197.6        .0     148.1      82.4      41.4      27.5   1216.90
       .57       .00      4.19      2.40      .000      .045      .050      .000   1215.30   9992.60
   .011490      460.      475.      470.         4         0         0       .00    247.40  10240.00


1490 NH CARD USED
*SECNO 1.590
3280 CROSS SECTION      1.59 EXTENDED       .22 FEET


3470 ENCROACHMENT STATIONS=     9930.0   10115.0  TYPE=      1  TARGET=      185.000
     1.590      2.61   1222.71       .00   1222.13   1222.89       .18      4.78       .00   1222.20
     818.0      18.1     426.7     373.2      10.8     116.3     118.1      44.3      30.1   1222.50
       .61      1.68      3.67      3.16      .050      .045      .050      .000   1220.10   9930.00
   .007301      480.      540.      510.         5         0         0       .00    185.00  10115.00


*SECNO 1.710

3470 ENCROACHMENT STATIONS=     9995.0   10200.0  TYPE=      1  TARGET=      205.000
     1.710      2.84   1227.64       .00   1227.32   1227.82       .18      4.93       .00 100000.00
     818.0        .0     201.1     616.9        .0      50.8     195.3      47.5      32.7   1226.90
       .66       .00      3.96      3.16      .000      .045      .055      .000   1224.80   9995.00
   .009988      570.      590.      575.         5         0         0       .00    205.00  10200.00
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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

*SECNO 1.800

3265 DIVIDED FLOW

3280 CROSS SECTION 1.80 EXTENDED .19 FEET

3470 ENCROACHMENT STATIONS= 9958.8 10250.0 TYPE= 1 TARGET= 291.200

1.800	2.29	1232.19	.00	1231.72	1232.35	.16	4.53	.00	1282.80
818.0	.0	327.5	490.5	.0	87.5	176.7	50.4	35.2	1232.30
.70	.00	3.75	2.78	.000	.045	.055	.000	1229.90	9962.67
.008695	500.	490.	485.	5	0	0	.00	246.97	10250.00

*SECNO 1.890

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9925.0 10500.0 TYPE= 1 TARGET= 575.000

1.890	3.45	1236.85	.00	1236.25	1237.05	.20	4.68	.01	1237.30
818.0	.0	442.3	375.7	.0	119.1	111.2	53.4	37.8	1237.40
.74	.00	3.71	3.38	.000	.045	.055	.000	1233.40	9944.22
.009208	500.	505.	540.	3	0	0	.00	188.98	10500.00

*SECNO 2.010

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9890.0 10270.0 TYPE= 1 TARGET= 380.000

2.010	2.90	1242.40	.00	1242.33	1242.54	.14	5.48	.01	1242.40
818.0	175.5	321.3	321.2	52.9	102.7	125.0	56.8	41.2	1242.70
.80	3.32	3.13	2.57	.055	.045	.055	.000	1239.50	9890.00
.009481	600.	595.	575.	5	0	0	.00	309.72	10270.00

*SECNO 2.110

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

3280 CROSS SECTION 2.11 EXTENDED .06 FEET

3470 ENCROACHMENT STATIONS= 9850.0 10160.0 TYPE= 1 TARGET= 310.000

2.110	2.96	1247.26	.00	1246.94	1247.46	.20	4.90	.02	1247.40
818.0	.0	749.2	68.8	.0	201.5	36.5	60.0	44.5	1246.70
.84	.00	3.72	1.89	.000	.045	.055	.000	1244.30	9879.48
.008775	535.	545.	520.	4	0	0	.00	239.10	10160.00

*SECNO 2.210
3280 CROSS SECTION 2.21 EXTENDED .01 FEET

3470 ENCROACHMENT STATIONS= 9830.0 10040.0 TYPE= 1 TARGET= 210.000

2.210	2.51	1252.21	.00	1251.57	1252.42	.21	4.95	.00	1251.50
816.0	487.1	328.9	.0	167.6	71.1	.0	62.9	47.3	1252.50
.88	2.91	4.63	.00	.055	.045	.000	.000	1249.70	9830.00
.009820	550.	525.	560.	2	0	0	.00	206.97	10036.97

*SECNO 2.300

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS= 9885.0 10200.0 TYPE= 1 TARGET= 315.000

2.300	2.19	1257.09	.00	1256.58	1257.30	.21	4.88	.00	1256.00
816.0	618.7	142.8	54.4	161.9	38.0	36.1	65.5	50.0	1257.30
.92	3.82	3.75	1.51	.055	.045	.055	.000	1254.90	9885.00
.011031	460.	490.	490.	4	0	0	.00	285.72	10200.00

1490 NH CARD USED
*SECNO 2.410

3470 ENCROACHMENT STATIONS= 9900.0 10020.0 TYPE= 1 TARGET= 120.000

2.410	4.22	1262.22	.00	1261.65	1262.50	.28	5.18	.02	1261.20
816.0	430.3	369.2	16.5	126.3	73.0	7.1	68.1	52.6	1261.10
.95	3.41	5.06	2.31	.060	.045	.060	.000	1258.00	9900.00
.009435	470.	565.	660.	5	0	0	.00	120.00	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


*SECNO 2.490

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.42


3470 ENCROACHMENT STATIONS=     9934.0   10115.0  TYPE=      1  TARGET=      181.000
    2.490      3.17   1265.17       .00   1265.01   1265.33       .16       2.82       .01   1264.20
    816.0      21.8     794.2        .0      19.1     244.0        .0       70.5      54.1   1265.30
      .99      1.14      3.26       .00      .060      .045      .000       .000   1262.00   9934.00
  .004655      450.      435.      450.         4         0         0        .00    174.34  10108.34


*SECNO 2.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     9910.0   10090.0  TYPE=      1  TARGET=      180.000
    2.580      2.48   1270.78   1270.78   1270.70   1271.22       .44       3.79       .08   1270.10
    816.0      76.1     663.2      76.7      33.8     114.3      32.7       72.9      56.0   1270.20
     1.01      2.25      5.80      2.35      .060      .045      .055       .000   1268.30   9910.00
  .015813      475.      485.      480.        20        14         0        .00    180.00  10090.00


*SECNO 2.680
3280 CROSS SECTION      2.68 EXTENDED       .07 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.40


3470 ENCROACHMENT STATIONS=     9970.0   10095.0  TYPE=      1  TARGET=      125.000
    2.680      2.77   1276.47       .00   1275.92   1276.72       .26       5.48       .02   1275.10
    816.0      57.0     358.2     400.8      24.1      72.2     122.5       75.2      57.8   1275.40
     1.05      2.36      4.96      3.27      .060      .045      .060       .000   1273.70   9970.00
  .008066      560.      505.      470.         5         0         0        .00    125.00  10095.00


*SECNO 2.780

3470 ENCROACHMENT STATIONS=     9932.0   10058.0  TYPE=      1  TARGET=      126.000
    2.780      2.97   1280.67       .00   1280.58   1280.96       .28       4.23       .01   1280.30
    816.0      40.8     775.2        .0      19.3     177.6        .0       77.6      59.3 100000.00
     1.08      2.11      4.37       .00      .060      .045      .000       .000   1277.70   9932.00
  .008620      485.      510.      505.         5         0         0        .00    126.00  10058.00
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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


*SECNO 2.870

3470 ENCROACHMENT STATIONS=     9959.0   10180.0  TYPE=      1  TARGET=      221.000
    2.870      3.10   1285.80       .00   1285.59   1286.17       .36      5.18       .02   1285.20
    767.0      25.0     502.3     239.7      11.2      90.2      80.6      79.8      61.2   1285.30
     1.11      2.23      5.57      2.98      .060      .045      .060      .000   1282.70   9959.00
  .013646      530.      490.      465.         3         0         0       .00    221.00  10180.00


1490 NH CARD USED
*SECNO 2.950

3470 ENCROACHMENT STATIONS=     9897.0   10100.0  TYPE=      1  TARGET=      203.000
    2.950      2.88   1290.68       .00   1290.45   1290.83       .15      4.65       .02   1290.30
    767.0        .0     394.6     372.4        .1     109.5     143.7      82.0      63.3   1290.20
     1.15       .05      3.60      2.59      .900      .045      .060      .000   1287.80   9897.00
  .008354      435.      440.      445.         2         0         0       .00    203.00  10100.00


*SECNO 3.050

3470 ENCROACHMENT STATIONS=     9890.0   10032.0  TYPE=      1  TARGET=      142.000
    3.050      2.90   1295.00       .00   1295.10   1295.27       .27      4.40       .03   1294.30
    767.0      34.7     732.3        .0      20.5     172.5        .0      84.6      65.3 100000.00
     1.19      1.70      4.25       .00      .060      .045      .000      .000   1292.10   9890.00
  .008923      485.      525.      465.         4         0         0       .00    140.77  10030.77


1490 NH CARD USED
*SECNO 3.140

3470 ENCROACHMENT STATIONS=     9950.0   10100.0  TYPE=      1  TARGET=      150.000
    3.140      3.21   1300.81   1300.60   1300.62   1301.25       .44      5.93       .05   1300.10
    767.0       4.6     614.8     147.7       2.1     104.3     119.5      86.9      66.9   1299.80
     1.21      2.19      5.89      1.24      .060      .045      .216      .000   1297.60   9950.00
  .017019      480.      495.      490.        11         8         0       .00    150.00  10100.00


1490 NH CARD USED
*SECNO 3.250
3280 CROSS SECTION      3.25 EXTENDED       .09 FEET
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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


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


3470 ENCROACHMENT STATIONS=     9973.0   10080.0  TYPE=      1  TARGET=      107.000
    3.250      3.89   1306.09       .00   1305.74   1306.26       .17      4.99       .03 100000.00
    603.0        .0     600.5       2.5        .0     178.8       2.5      89.5      68.6   1305.60
     1.26       .00      3.36      1.03      .000      .045      .060      .000   1302.20   9973.00
  .004939      515.      555.      560.         6         0         0       .00    107.00  10080.00


*SECNO 3.340

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .45


3470 ENCROACHMENT STATIONS=     9984.0   10042.0  TYPE=      1  TARGET=       58.000
    3.340      2.96   1310.26       .00   1310.22   1310.98       .72      4.55       .16 100000.00
    603.0        .0     603.0        .0        .0      88.8        .0      91.0      69.5 100000.00
     1.28       .00      6.79       .00      .000      .045      .000      .000   1307.30   9984.00
  .024310      480.      485.      480.         4         0         0       .00     58.00  10042.00


1490 NH CARD USED
*SECNO 3.430

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


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


3470 ENCROACHMENT STATIONS=     9856.0   10058.0  TYPE=      1  TARGET=      202.000
    3.430      2.77   1315.37       .00   1315.40   1315.58       .20      4.55       .05   1314.40
    603.0      40.9     558.3       3.7      57.3     148.5       4.5      92.7      70.9   1314.70
     1.32       .71      3.76       .84      .103      .045      .060      .000   1312.60   9856.33
  .004858      485.      490.      505.         5         0         0       .00    198.16  10057.51
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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 3.530
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9986.0 10070.0 TYPE= 1 TARGET= 84.000

3.530	2.96	1321.36	1321.36	1321.16	1321.99	.63	4.46	.13	1320.90
603.0	2.1	315.9	285.0	1.3	40.1	68.2	94.5	72.5	1319.60
1.34	1.69	7.88	4.18	.060	.045	.060	.000	1318.40	9986.00
.023372	480.	485.	490.	20	8	0	.00	84.00	10070.00

*SECNO 3.570
3280 CROSS SECTION 3.57 EXTENDED .19 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.42

3470 ENCROACHMENT STATIONS= 9900.0 10040.0 TYPE= 1 TARGET= 140.000

3.570	3.68	1323.78	.00	1323.59	1323.95	.17	1.92	.05	1323.10
603.0	25.1	555.6	22.3	24.5	162.2	15.8	95.3	73.1	1322.80
1.36	1.03	3.43	1.41	.060	.045	.060	.000	1320.10	9900.00
.003997	220.	235.	255.	6	0	0	.00	140.00	10040.00

*SECNO 3.620
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9981.0 10066.0 TYPE= 1 TARGET= 85.000

3.620	2.50	1326.10	1326.10	1326.08	1326.70	.60	2.13	.13	100000.00
603.0	.0	438.5	164.5	.0	63.6	43.8	96.3	73.8	1325.10
1.37	.00	6.90	3.76	.000	.045	.060	.000	1323.60	9981.26
.023445	240.	260.	300.	4	20	0	.00	84.74	10066.00

*SECNO 3.680

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.21

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= 9967.0 10050.0 TYPE= 1 TARGET= 83.000

3.680	3.64	1329.34	.00	1329.35	1329.55	.21	2.81	.04	100000.00
603.0	.0	603.0	.0	.0	165.8	.0	97.3	74.4	100000.00
1.40	.00	3.64	.00	.000	.045	.000	.000	1325.70	9967.42
.004817	300.	305.	325.	5	0	0	.00	82.46	10049.88

*SECNO 3.740

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .49

3470 ENCROACHMENT STATIONS= 9968.0 10060.0 TYPE= 1 TARGET= 92.000

3.740	3.88	1331.98	.00	1331.96	1332.56	.58	2.90	.11	100000.00
603.0	.0	521.5	81.5	.0	81.6	22.0	98.3	75.0	1333.60
1.41	.00	6.39	3.71	.000	.045	.060	.000	1328.10	9968.11
.019717	340.	335.	350.	3	0	0	.00	68.62	10060.00

*SECNO 3.810

3265 DIVIDED FLOW

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

3470 ENCROACHMENT STATIONS= 9924.0 10124.0 TYPE= 1 TARGET= 200.000

3.810	3.81	1336.31	.00	1336.31	1336.43	.12	3.83	.05	1335.50
603.0	68.8	206.9	327.3	39.3	69.5	112.3	99.7	76.1	1336.30
1.45	1.75	2.98	2.91	.060	.045	.060	.000	1332.50	9924.35
.006206	350.	370.	390.	4	0	0	.00	199.30	10123.93

THIS RUN EXECUTED 29JAN96 20:53:16

****
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

Tributary #1 Channel - F

SUMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	.000	.00	.00	3.48	223.15	818.00	9915.19	10516.59	1155.98
	.000	9970.00	10075.00	2.49	105.00	818.00	9970.00	10075.00	1157.00
*	.070	.00	.00	4.76	258.48	818.00	9891.00	10293.11	1158.73
*	.070	9965.00	10086.00	7.05	95.82	818.00	9975.12	10086.00	1159.25
*	.160	.00	.00	4.01	229.60	818.00	9989.87	10219.47	1162.95
*	.160	9985.00	10150.00	3.99	162.13	818.00	9987.87	10150.00	1163.78
*	.260	.00	.00	5.41	268.17	818.00	9871.89	10149.61	1166.78
*	.260	9950.00	10018.00	7.35	68.00	818.00	9950.00	10018.00	1166.95
*	.340	.00	.00	4.59	154.75	818.00	9884.54	10039.29	1170.64
*	.340	9950.00	10018.00	4.91	68.00	818.00	9950.00	10018.00	1171.43
	.440	.00	.00	4.61	396.53	818.00	9976.94	10445.70	1173.47
	.440	9960.00	10060.00	5.32	100.00	818.00	9960.00	10060.00	1173.98
	.520	.00	.00	3.66	758.38	818.00	9987.64	10746.02	1176.13
	.520	9980.00	10125.00	4.32	145.00	818.00	9980.00	10125.00	1176.69
	.620	.00	.00	6.03	204.77	818.00	9903.58	10108.35	1179.76
	.620	9915.00	10050.00	5.45	135.00	818.00	9915.00	10050.00	1179.92
*	.710	.00	.00	3.71	286.93	818.00	9875.66	10170.80	1182.95
	.710	9960.00	10090.00	4.76	130.00	818.00	9960.00	10090.00	1183.20
*	.810	.00	.00	2.81	239.72	818.00	9879.86	10123.40	1185.89
	.810	9900.00	10070.00	2.82	170.00	818.00	9900.00	10070.00	1186.26
	.910	.00	.00	4.49	378.80	818.00	9864.67	10251.62	1190.74
	.910	9900.00	10100.00	5.39	189.40	818.00	9900.00	10100.00	1190.68

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	1.000	.00	.00	4.10	299.98	818.00	9854.30	10178.11	1195.16
	1.000	9900.00	10100.00	4.30	200.00	818.00	9900.00	10100.00	1195.63
	1.100	.00	.00	4.71	238.65	818.00	9850.34	10110.68	1199.46
	1.100	9890.00	10040.00	5.09	132.30	818.00	9890.00	10022.30	1199.64
	1.210	.00	.00	4.33	259.60	818.00	9669.59	10019.37	1203.97
	1.210	9805.00	10023.00	4.31	172.09	818.00	9805.00	10019.85	1204.13
	1.310	.00	.00	4.19	427.43	818.00	9666.50	10104.97	1209.22
	1.310	9820.00	10050.00	4.78	229.10	818.00	9820.00	10049.10	1209.33
*	1.400	.00	.00	3.38	406.06	818.00	9844.04	10250.11	1213.60
*	1.400	9920.00	10155.00	3.91	235.00	818.00	9920.00	10155.00	1214.00
	1.490	.00	.00	3.16	354.46	818.00	9993.38	10376.00	1217.45
	1.490	9992.60	10240.00	4.19	247.40	818.00	9992.60	10240.00	1217.88
	1.590	.00	.00	2.83	487.72	818.00	9783.14	10300.03	1222.13
	1.590	9930.00	10115.00	3.67	185.00	818.00	9930.00	10115.00	1222.71
	1.710	.00	.00	3.50	428.24	818.00	9995.83	10560.30	1227.32
	1.710	9995.00	10200.00	3.96	205.00	818.00	9995.00	10200.00	1227.64
	1.800	.00	.00	2.87	499.00	818.00	9965.71	10582.52	1231.72
	1.800	9958.80	10250.00	3.75	246.97	818.00	9962.67	10250.00	1232.19
	1.890	.00	.00	3.79	251.66	818.00	9895.56	10669.15	1236.25
	1.890	9925.00	10500.00	3.71	188.98	818.00	9944.22	10500.00	1236.85
	2.010	.00	.00	3.27	320.62	818.00	9870.41	10276.95	1242.33
	2.010	9890.00	10270.00	3.13	309.72	818.00	9890.00	10270.00	1242.40
	2.110	.00	.00	2.89	471.06	818.00	9564.46	10290.36	1246.94
	2.110	9850.00	10160.00	3.72	239.10	818.00	9879.48	10160.00	1247.26
	2.210	.00	.00	4.00	541.22	816.00	9618.73	10244.74	1251.57
	2.210	9830.00	10040.00	4.63	206.97	816.00	9830.00	10036.97	1252.21
	2.300	.00	.00	3.25	526.54	816.00	9466.87	10172.79	1256.58
	2.300	9885.00	10200.00	3.75	285.72	816.00	9885.00	10200.00	1257.09
	2.410	.00	.00	4.17	718.96	816.00	9351.96	10070.92	1261.65
	2.410	9900.00	10020.00	5.06	120.00	816.00	9900.00	10020.00	1262.22
	2.490	.00	.00	3.58	172.62	816.00	9933.81	10106.43	1265.01
*	2.490	9934.00	10115.00	3.26	174.34	816.00	9934.00	10108.34	1265.17
*	2.580	.00	.00	5.04	413.62	816.00	9835.00	10248.62	1270.70
*	2.580	9910.00	10090.00	5.80	180.00	816.00	9910.00	10090.00	1270.78

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	CWSEL
	2.680	.00	.00	4.21	303.02	816.00	9950.58	10253.60	1275.92
*	2.680	9970.00	10095.00	4.96	125.00	816.00	9970.00	10095.00	1276.47
	2.780	.00	.00	4.64	126.75	816.00	9931.56	10058.31	1280.58
	2.780	9932.00	10058.00	4.37	126.00	816.00	9932.00	10058.00	1280.67
	2.870	.00	.00	4.21	245.89	767.00	9897.84	10199.83	1285.59
	2.870	9959.00	10180.00	5.57	221.00	767.00	9959.00	10180.00	1285.80
	2.950	.00	.00	3.99	278.61	767.00	9852.25	10130.87	1290.45
	2.950	9897.00	10100.00	3.60	203.00	767.00	9897.00	10100.00	1290.68
*	3.050	.00	.00	3.82	185.44	767.00	9846.62	10032.06	1295.10
	3.050	9890.00	10032.00	4.25	140.77	767.00	9890.00	10030.77	1295.00
*	3.140	.00	.00	6.48	228.86	767.00	9934.37	10163.23	1300.62
	3.140	9950.00	10100.00	5.89	150.00	767.00	9950.00	10100.00	1300.81
*	3.250	.00	.00	2.48	566.57	603.00	9973.13	10539.70	1305.74
*	3.250	9973.00	10080.00	3.36	107.00	603.00	9973.00	10080.00	1306.09
*	3.340	.00	.00	6.97	58.70	603.00	9983.50	10042.20	1310.22
*	3.340	9984.00	10042.00	6.79	58.00	603.00	9984.00	10042.00	1310.26
*	3.430	.00	.00	3.71	201.17	603.00	9856.17	10057.89	1315.40
*	3.430	9856.00	10058.00	3.76	198.16	603.00	9856.33	10057.51	1315.37
*	3.530	.00	.00	7.73	200.33	603.00	9986.32	10186.65	1321.16
*	3.530	9986.00	10070.00	7.88	84.00	603.00	9986.00	10070.00	1321.36
*	3.570	.00	.00	3.32	230.63	603.00	9868.39	10099.02	1323.59
*	3.570	9900.00	10040.00	3.43	140.00	603.00	9900.00	10040.00	1323.78
*	3.620	.00	.00	7.05	84.38	603.00	9981.42	10065.80	1326.08
*	3.620	9981.00	10066.00	6.90	84.74	603.00	9981.26	10066.00	1326.10
*	3.680	.00	.00	3.60	82.87	603.00	9967.35	10050.22	1329.35
*	3.680	9967.00	10050.00	3.64	82.46	603.00	9967.42	10049.88	1329.34
*	3.740	.00	.00	6.45	68.37	603.00	9968.17	10059.94	1331.96
*	3.740	9968.00	10060.00	6.39	68.62	603.00	9968.11	10060.00	1331.98
*	3.810	.00	.00	2.96	200.14	603.00	9924.20	10124.33	1336.31
*	3.810	9924.00	10124.00	2.98	199.30	603.00	9924.35	10123.93	1336.31

Tributary #1 Channel - F

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	.000	1155.98	.98	1156.16	223.15	5.53	773.59	38.87	.00	.00	9971.60	10074.80	.00
	.000	1157.00	1.02	1157.10	105.00	.86	817.04	.10	105.00	9970.00	9971.60	10074.80	10075.00
*	.070	1158.73	.00	1158.87	258.48	9.32	208.91	599.77	.00	.00	9967.60	10034.20	.00
*	.070	1159.25	.53	1159.91	95.82	.00	457.57	360.43	121.00	9965.00	9967.60	10034.20	10086.00
*	.160	1162.95	.00	1163.11	229.60	.00	355.47	462.53	.00	.00	9987.10	10031.50	.00
*	.160	1163.78	.83	1163.95	162.13	.00	496.41	321.59	165.00	9985.00	9987.10	10031.50	10150.00
*	.260	1166.78	.00	1167.12	268.17	147.81	546.34	123.85	.00	.00	9953.80	10017.80	.00
*	.260	1166.95	.16	1167.79	68.00	.87	817.12	.00	68.00	9950.00	9953.80	10017.80	10018.00
*	.340	1170.64	.00	1170.88	154.75	320.65	491.97	5.38	.00	.00	9981.80	10017.40	.00
*	.340	1171.43	.79	1171.75	68.00	151.97	665.29	.74	68.00	9950.00	9981.80	10017.40	10018.00
	.440	1173.47	.00	1173.64	396.53	1.51	315.37	501.12	.00	.00	9989.40	10017.50	.00
	.440	1173.98	.51	1174.30	100.00	16.27	438.17	363.57	100.00	9960.00	9989.40	10017.50	10060.00
	.520	1176.13	.00	1176.20	758.38	.00	222.31	595.69	.00	.00	9989.80	10022.90	.00
	.520	1176.69	.56	1176.88	145.00	5.66	342.12	470.22	145.00	9980.00	9989.80	10022.90	10125.00
	.620	1179.76	.00	1180.10	204.77	421.68	336.39	59.93	.00	.00	9988.30	10011.20	.00
	.620	1179.92	.16	1180.20	135.00	431.49	324.15	62.35	135.00	9915.00	9988.30	10011.20	10050.00
*	.710	1182.95	.00	1183.07	286.93	20.90	316.98	480.12	.00	.00	9989.10	10023.30	.00
	.710	1183.20	.25	1183.44	130.00	29.51	449.14	339.35	130.00	9960.00	9989.10	10023.30	10090.00
*	.810	1185.89	.00	1186.04	239.72	313.03	105.96	399.01	.00	.00	9961.90	10011.00	.00
	.810	1186.26	.37	1186.40	170.00	295.96	157.93	364.12	170.00	9900.00	9961.90	10011.00	10070.00
	.910	1190.74	.00	1190.92	378.80	267.04	381.57	169.39	.00	.00	9970.60	10016.20	.00
	.910	1190.68	-.06	1190.99	189.40	263.57	445.70	108.73	200.00	9900.00	9970.60	10016.20	10100.00
	1.000	1195.16	.00	1195.31	299.98	297.91	206.30	313.79	.00	.00	9981.60	10020.10	.00
	1.000	1195.63	.47	1195.81	200.00	277.99	292.55	247.47	200.00	9900.00	9981.60	10020.10	10100.00
	1.100	1199.46	.00	1199.64	238.65	402.85	287.48	127.67	.00	.00	9988.10	10015.20	.00
	1.100	1199.64	.19	1199.89	132.30	472.28	336.08	9.64	150.00	9890.00	9988.10	10015.20	10040.00
	1.210	1203.97	.00	1204.19	259.60	285.05	532.95	.00	.00	.00	9942.00	10022.10	.00
	1.210	1204.13	.16	1204.36	172.09	237.21	580.79	.00	218.00	9805.00	9942.00	10022.10	10023.00
	1.310	1209.22	.00	1209.34	427.43	513.04	233.92	71.04	.00	.00	9970.80	10017.60	.00
	1.310	1209.33	.11	1209.59	229.10	509.88	289.74	18.38	230.00	9820.00	9970.80	10017.60	10050.00
*	1.400	1213.60	.00	1213.73	406.06	97.47	347.12	373.41	.00	.00	9992.90	10063.90	.00
*	1.400	1214.00	.40	1214.18	235.00	149.59	514.10	154.31	235.00	9920.00	9992.90	10063.90	10155.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.490	1217.45	.00	1217.61	354.46	.00	318.61	499.39	.00	.00	9992.60	10106.80	.00
	1.490	1217.88	.42	1218.11	247.40	.00	620.37	197.63	247.40	9992.60	9992.60	10106.80	10240.00
	1.590	1222.13	.00	1222.23	487.72	231.81	203.66	382.53	.00	.00	9949.60	10027.90	.00
	1.590	1222.71	.58	1222.89	185.00	18.12	426.67	373.21	185.00	9930.00	9949.60	10027.90	10115.00
	1.710	1227.32	.00	1227.44	428.24	.00	134.46	683.54	.00	.00	9994.70	10032.80	.00
	1.710	1227.64	.33	1227.82	205.00	.00	201.06	616.94	205.00	9995.00	9994.70	10032.80	10200.00
	1.800	1231.72	.00	1231.80	499.00	.00	167.01	650.99	.00	.00	9958.80	10028.40	.00
	1.800	1232.19	.47	1232.35	246.97	.00	327.55	490.45	291.20	9958.80	9958.80	10028.40	10250.00
	1.890	1236.25	.00	1236.42	251.66	9.91	281.66	526.43	.00	.00	9925.90	10049.10	.00
	1.890	1236.85	.60	1237.05	188.98	.00	442.32	375.68	575.00	9925.00	9925.90	10049.10	10500.00
	2.010	1242.33	.00	1242.47	320.62	198.78	311.35	307.87	.00	.00	9935.00	10048.90	.00
	2.010	1242.40	.07	1242.54	309.72	175.47	321.34	321.20	380.00	9890.00	9935.00	10048.90	10270.00
	2.110	1246.94	.00	1247.04	471.06	240.33	443.86	133.81	.00	.00	9876.30	10031.90	.00
	2.110	1247.26	.32	1247.46	239.10	.00	749.18	68.82	310.00	9850.00	9876.30	10031.90	10160.00
	2.210	1251.57	.00	1251.70	541.22	580.19	185.52	50.29	.00	.00	9995.10	10039.40	.00
	2.210	1252.21	.63	1252.42	206.97	487.07	328.93	.00	210.00	9830.00	9995.10	10039.40	10040.00
	2.300	1256.58	.00	1256.68	526.54	731.04	75.70	9.27	.00	.00	9987.40	10024.70	.00
	2.300	1257.09	.51	1257.30	285.72	618.73	142.84	54.43	315.00	9885.00	9987.40	10024.70	10200.00
	2.410	1261.65	.00	1261.73	718.96	575.50	217.08	23.42	.00	.00	9976.80	10013.50	.00
	2.410	1262.22	.57	1262.50	120.00	430.32	369.17	16.51	120.00	9900.00	9976.80	10013.50	10020.00
	2.490	1265.01	.00	1265.21	172.62	15.12	800.88	.00	.00	.00	9968.20	10110.10	.00
*	2.490	1265.17	.15	1265.33	174.34	21.81	794.18	.00	181.00	9934.00	9968.20	10110.10	10115.00
*	2.580	1270.70	.00	1270.98	413.62	71.08	548.78	196.13	.00	.00	9964.70	10033.70	.00
*	2.580	1270.78	.08	1271.22	180.00	76.14	663.19	76.67	180.00	9910.00	9964.70	10033.70	10090.00
	2.680	1275.92	.00	1276.07	303.02	21.98	228.14	565.88	.00	.00	9991.10	10024.30	.00
*	2.680	1276.47	.54	1276.72	125.00	56.99	358.17	400.84	125.00	9970.00	9991.10	10024.30	10095.00
	2.780	1280.58	.00	1280.90	126.75	37.27	778.73	.00	.00	.00	9953.80	10064.90	.00
	2.780	1280.67	.09	1280.96	126.00	40.78	775.22	.00	126.00	9932.00	9953.80	10064.90	10058.00
	2.870	1285.59	.00	1285.78	245.89	203.04	334.30	229.66	.00	.00	9974.70	10026.50	.00
	2.870	1285.80	.21	1286.17	221.00	24.98	502.32	239.70	221.00	9959.00	9974.70	10026.50	10180.00
	2.950	1290.45	.00	1290.63	278.61	11.57	359.30	396.13	.00	.00	9897.30	9981.10	.00
	2.950	1290.68	.23	1290.83	203.00	.01	394.62	372.37	203.00	9897.00	9897.30	9981.10	10100.00
*	3.050	1295.10	.00	1295.31	185.44	65.77	701.23	.00	.00	.00	9922.50	10037.20	.00
	3.050	1295.00	-.10	1295.27	140.77	34.74	732.26	.00	142.00	9890.00	9922.50	10037.20	10032.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	3.140	1300.62	.00	1301.13	228.86	7.64	593.42	165.94	.00	.00	9953.10	10018.20	.00
	3.140	1300.81	.20	1301.25	150.00	4.55	614.77	147.68	150.00	9950.00	9953.10	10018.20	10100.00
*	3.250	1305.74	.00	1305.80	566.57	.00	356.92	246.08	.00	.00	9971.40	10075.10	.00
*	3.250	1306.09	.34	1306.26	107.00	.00	600.48	2.52	107.00	9973.00	9971.40	10075.10	10080.00
*	3.340	1310.22	.00	1310.98	58.70	.00	603.00	.00	.00	.00	9980.60	10048.60	.00
*	3.340	1310.26	.04	1310.98	58.00	.00	603.00	.00	58.00	9984.00	9980.60	10048.60	10042.00
*	3.430	1315.40	.00	1315.60	201.17	42.53	556.51	3.96	.00	.00	9973.30	10044.30	.00
*	3.430	1315.37	-.03	1315.58	198.16	40.94	558.32	3.74	202.00	9856.00	9973.30	10044.30	10058.00
*	3.530	1321.16	.00	1321.62	200.33	.50	279.78	322.72	.00	.00	9990.00	10010.20	.00
*	3.530	1321.36	.19	1321.99	84.00	2.12	315.91	284.97	84.00	9986.00	9990.00	10010.20	10070.00
*	3.570	1323.59	.00	1323.73	230.63	91.98	485.21	25.81	.00	.00	9945.50	10022.40	.00
*	3.570	1323.78	.20	1323.95	140.00	25.13	555.59	22.28	140.00	9900.00	9945.50	10022.40	10040.00
*	3.620	1326.08	.00	1326.70	84.38	.00	440.64	162.35	.00	.00	9977.00	10020.90	.00
*	3.620	1326.10	.03	1326.70	84.74	.00	438.54	164.46	85.00	9981.00	9977.00	10020.90	10066.00
*	3.680	1329.35	.00	1329.56	82.87	.00	603.00	.00	.00	.00	9965.60	10067.60	.00
*	3.680	1329.34	-.01	1329.55	82.46	.00	603.00	.00	83.00	9967.00	9965.60	10067.60	10050.00
*	3.740	1331.96	.00	1332.55	68.37	.00	521.89	81.11	.00	.00	9964.60	10027.40	.00
*	3.740	1331.98	.02	1332.56	68.62	.00	521.48	81.52	92.00	9968.00	9964.60	10027.40	10060.00
*	3.810	1336.31	.00	1336.43	200.14	69.17	206.74	327.09	.00	.00	9972.80	10028.70	.00
*	3.810	1336.31	.00	1336.43	199.30	68.81	206.86	327.33	200.00	9924.00	9972.80	10028.70	10124.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      .070  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=      .070  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      .070  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      .070  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      .160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .160  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .260  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .260  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .340  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=      .340  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .710  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      .810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     1.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     1.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     2.490  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     2.580  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.580  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.580  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     2.580  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     2.580  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     2.680  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.050  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.140  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.250  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.250  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.340  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.340  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.340  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=     3.340  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.430  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.430  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.530  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.530  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.530  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     3.530  PROFILE=  2  CRITICAL DEPTH ASSUMED
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CAUTION SECNO= 3.530 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY

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CAUTION SECNO=     3.530  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     3.570  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.570  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     3.620  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.620  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.620  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     3.620  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     3.680  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.680  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.740  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     3.810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     3.810  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

Floodway width summary: Tributary #1 Channel - F
Profile No. 2

Section Number	Elevation Increase	Top Width	Left Encroach Station	Left Sta Distance From Center	Center Station	Right Sta Distance From Center	Right Encroach Station
.000	1.02	105.00	9970.00	53.20	10023.20	51.80	10075.00
.070	.53	121.00	9965.00	35.90	10000.90	85.10	10086.00
.160	.83	165.00	9985.00	24.30	10009.30	140.70	10150.00
.260	.16	68.00	9950.00	35.80	9985.80	32.20	10018.00
.340	.79	68.00	9950.00	49.60	9999.60	18.40	10018.00
.440	.51	100.00	9960.00	43.45	10003.45	56.55	10060.00
.520	.56	145.00	9980.00	26.35	10006.35	118.65	10125.00
.620	.16	135.00	9915.00	84.75	9999.75	50.25	10050.00
.710	.25	130.00	9960.00	46.20	10006.20	83.80	10090.00
.810	.37	170.00	9900.00	86.45	9986.45	83.55	10070.00
.910	-.06	200.00	9900.00	93.40	9993.40	106.60	10100.00
1.000	.47	200.00	9900.00	100.85	10000.85	99.15	10100.00
1.100	.19	150.00	9890.00	111.65	10001.65	38.35	10040.00
1.210	.16	218.00	9805.00	177.05	9982.05	40.95	10023.00
1.310	.11	230.00	9820.00	174.20	9994.20	55.80	10050.00
1.400	.40	235.00	9920.00	108.40	10028.40	126.60	10155.00
1.490	.42	247.40	9992.60	57.10	10049.70	190.30	10240.00
1.590	.58	185.00	9930.00	58.75	9988.75	126.25	10115.00
1.710	.33	205.00	9995.00	18.75	10013.75	186.25	10200.00
1.800	.47	291.20	9958.80	34.80	9993.60	256.40	10250.00
1.890	.60	575.00	9925.00	62.50	9987.50	512.50	10500.00
2.010	.07	380.00	9890.00	101.95	9991.95	278.05	10270.00
2.110	.32	310.00	9850.00	104.10	9954.10	205.90	10160.00
2.210	.63	210.00	9830.00	187.25	10017.25	22.75	10040.00
2.300	.51	315.00	9885.00	121.05	10006.05	193.95	10200.00
2.410	.57	120.00	9900.00	95.15	9995.15	24.85	10020.00
2.490	.15	181.00	9934.00	105.15	10039.15	75.85	10115.00
2.580	.08	180.00	9910.00	89.20	9999.20	90.80	10090.00
2.680	.54	125.00	9970.00	37.70	10007.70	87.30	10095.00
2.780	.09	126.00	9932.00	77.35	10009.35	48.65	10058.00
2.870	.21	221.00	9959.00	41.60	10000.60	179.40	10180.00
2.950	.23	203.00	9897.00	42.20	9939.20	160.80	10100.00
3.050	-.10	142.00	9890.00	89.85	9979.85	52.15	10032.00
3.140	.20	150.00	9950.00	35.65	9985.65	114.35	10100.00
3.250	.34	107.00	9973.00	50.25	10023.25	56.75	10080.00
3.340	.04	58.00	9984.00	30.60	10014.60	27.40	10042.00
3.430	-.03	202.00	9856.00	152.80	10008.80	49.20	10058.00
3.530	.19	84.00	9986.00	14.10	10000.10	69.90	10070.00
3.570	.20	140.00	9900.00	83.95	9983.95	56.05	10040.00
3.620	.03	85.00	9981.00	17.95	9998.95	67.05	10066.00
3.680	-.01	83.00	9967.00	49.60	10016.60	33.40	10050.00
3.740	.02	92.00	9968.00	28.00	9996.00	64.00	10060.00
3.810	.00	200.00	9924.00	76.75	10000.75	123.25	10124.00

FLOODWAY DATA, Tributary #1 Channel - F
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
.000	105.	329.	2.5	1157.0	1156.0	1.0
.070	111.	128.	6.4	1159.2	1158.7	.5
.160	162.	291.	2.8	1163.8	1163.0	.8
.260	68.	112.	7.3	1167.0	1166.8	.2
.340	68.	201.	4.1	1171.4	1170.6	.8
.440	100.	199.	4.1	1174.0	1173.5	.5
.520	145.	261.	3.1	1176.7	1176.1	.6
.620	135.	219.	3.7	1180.0	1179.8	.2
.710	130.	240.	3.4	1183.2	1182.9	.3
.810	170.	278.	2.9	1186.3	1185.9	.4
.910	200.	216.	3.8	1190.6	1190.7	-.1
1.000	200.	261.	3.1	1195.7	1195.2	.5
1.100	132.	231.	3.5	1199.7	1199.5	.2
1.210	215.	239.	3.4	1204.2	1204.0	.2
1.310	229.	207.	3.9	1209.3	1209.2	.1
1.400	235.	277.	3.0	1214.0	1213.6	.4
1.490	247.	231.	3.5	1217.9	1217.5	.4
1.590	185.	245.	3.3	1222.7	1222.1	.6
1.710	205.	246.	3.3	1227.6	1227.3	.3
1.800	287.	264.	3.1	1232.2	1231.7	.5
1.890	556.	230.	3.6	1236.8	1236.2	.6
2.010	380.	281.	2.9	1242.4	1242.3	.1
2.110	281.	238.	3.4	1247.2	1246.9	.3
2.210	207.	239.	3.4	1252.2	1251.6	.6
2.300	315.	236.	3.5	1257.1	1256.6	.5
2.410	120.	206.	4.0	1262.3	1261.7	.6
2.490	174.	263.	3.1	1265.2	1265.0	.2
2.580	180.	181.	4.5	1270.8	1270.7	.1
2.680	125.	219.	3.7	1276.4	1275.9	.5
2.780	126.	197.	4.1	1280.7	1280.6	.1
2.870	221.	182.	4.2	1285.8	1285.6	.2
2.950	203.	253.	3.0	1290.7	1290.5	.2
3.050	141.	193.	4.0	1295.0	1295.1	-.1
3.140	150.	226.	3.4	1300.8	1300.6	.2
3.250	107.	181.	3.3	1306.0	1305.7	.3
3.340	58.	89.	6.8	1310.2	1310.2	.0
3.430	201.	210.	2.9	1315.4	1315.4	.0
3.530	84.	109.	5.5	1321.4	1321.2	.2
3.570	140.	202.	3.0	1323.8	1323.6	.2
3.620	85.	107.	5.6	1326.1	1326.1	.0
3.680	82.	166.	3.6	1329.4	1329.4	.0
3.740	92.	104.	5.8	1332.0	1332.0	.0

FLOODWAY DATA, Tributary #1 Channel - F
PROFILE NO. 2

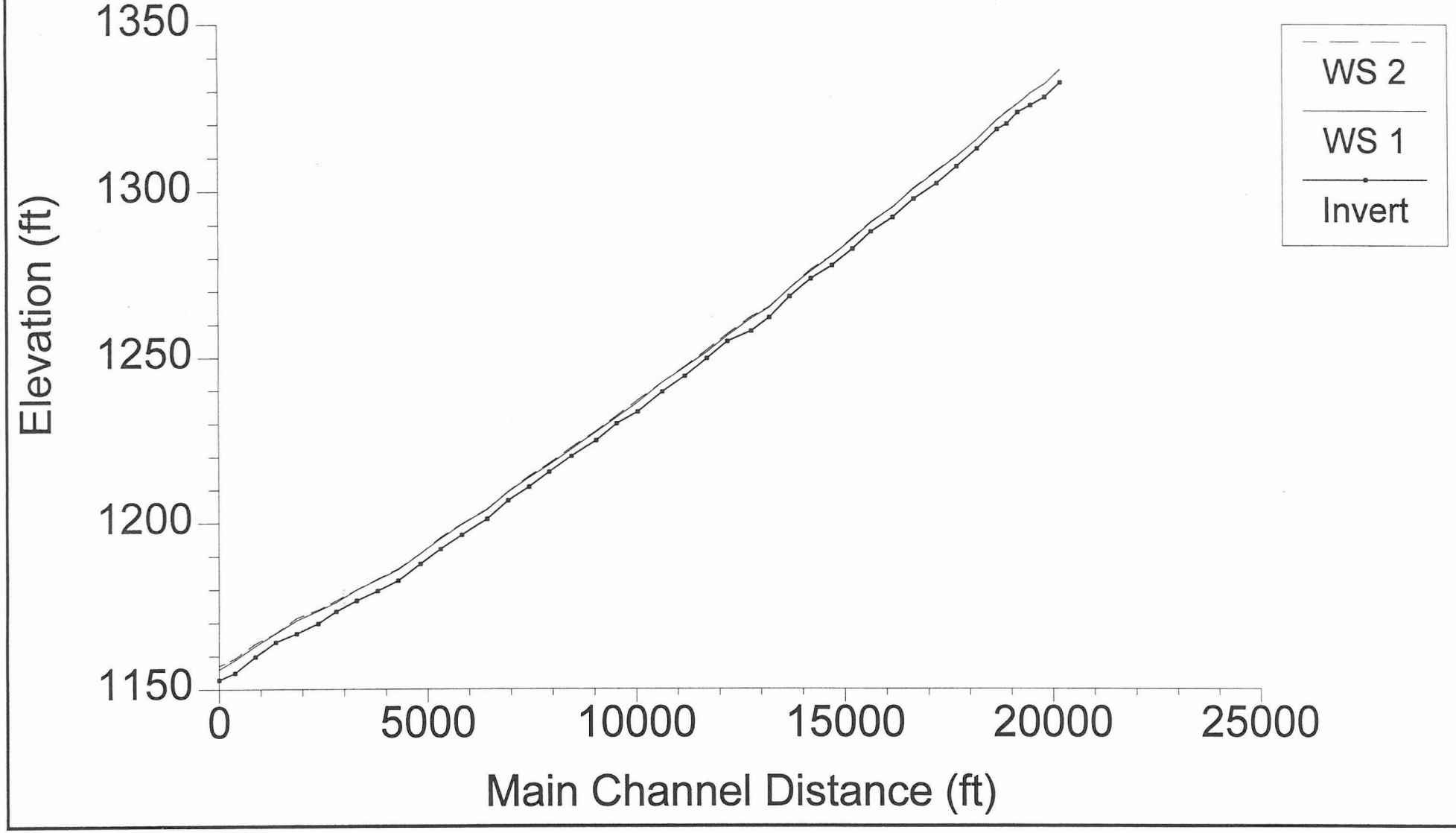
STATION	WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.810	200.	221.	2.7	1336.3	1336.3	.0

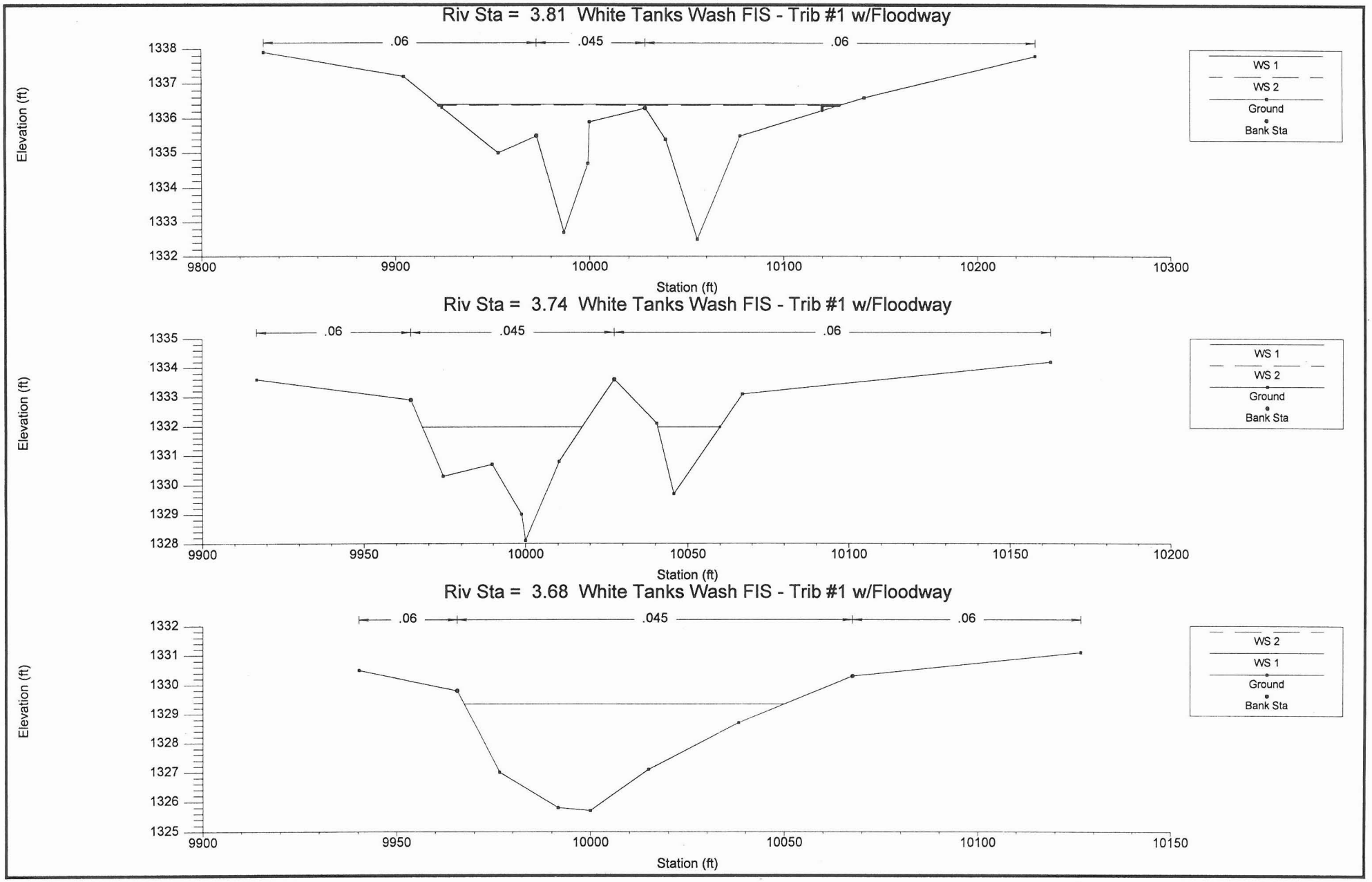
Appendix J

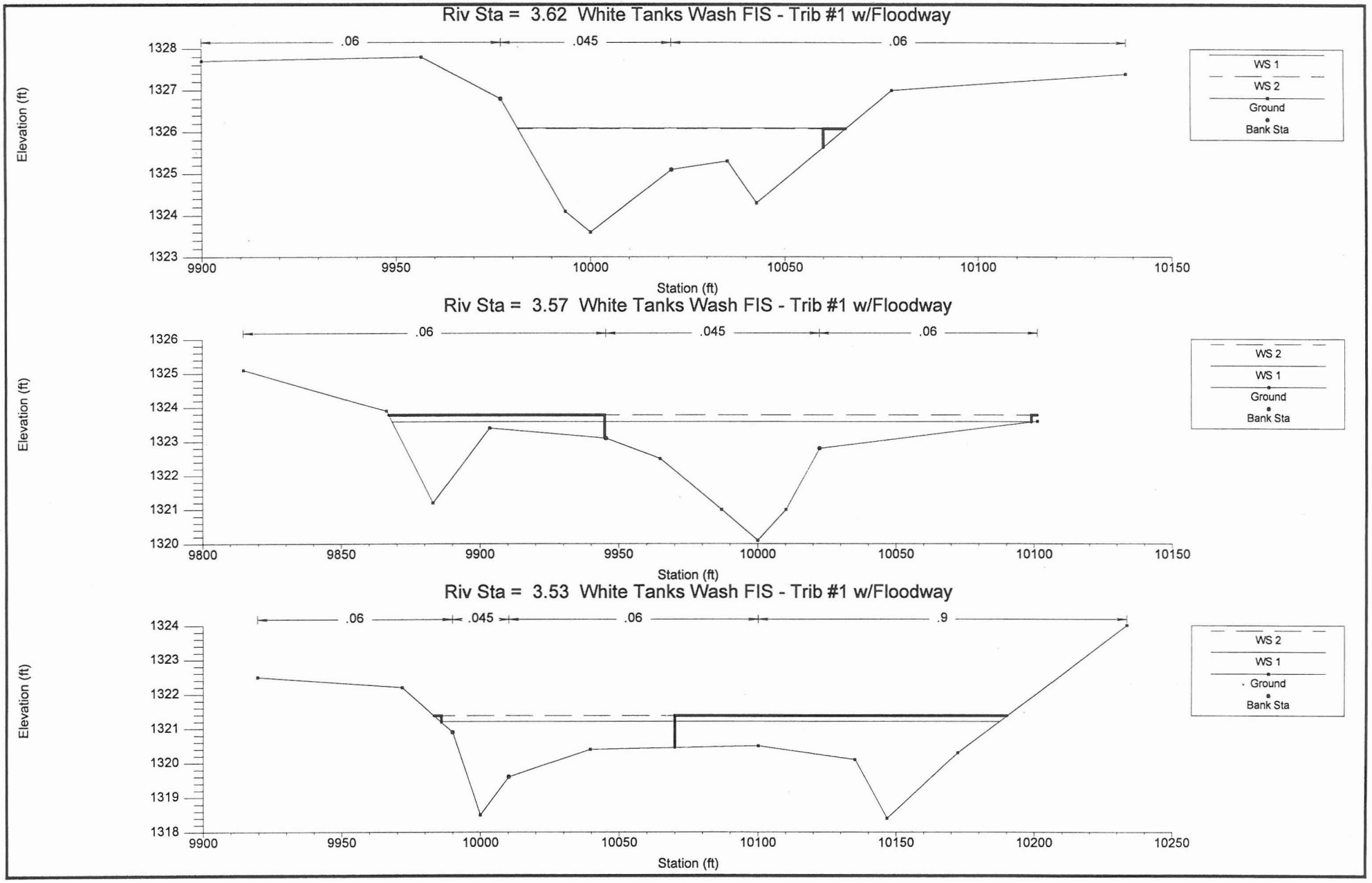
Plotted Cross Sections for:

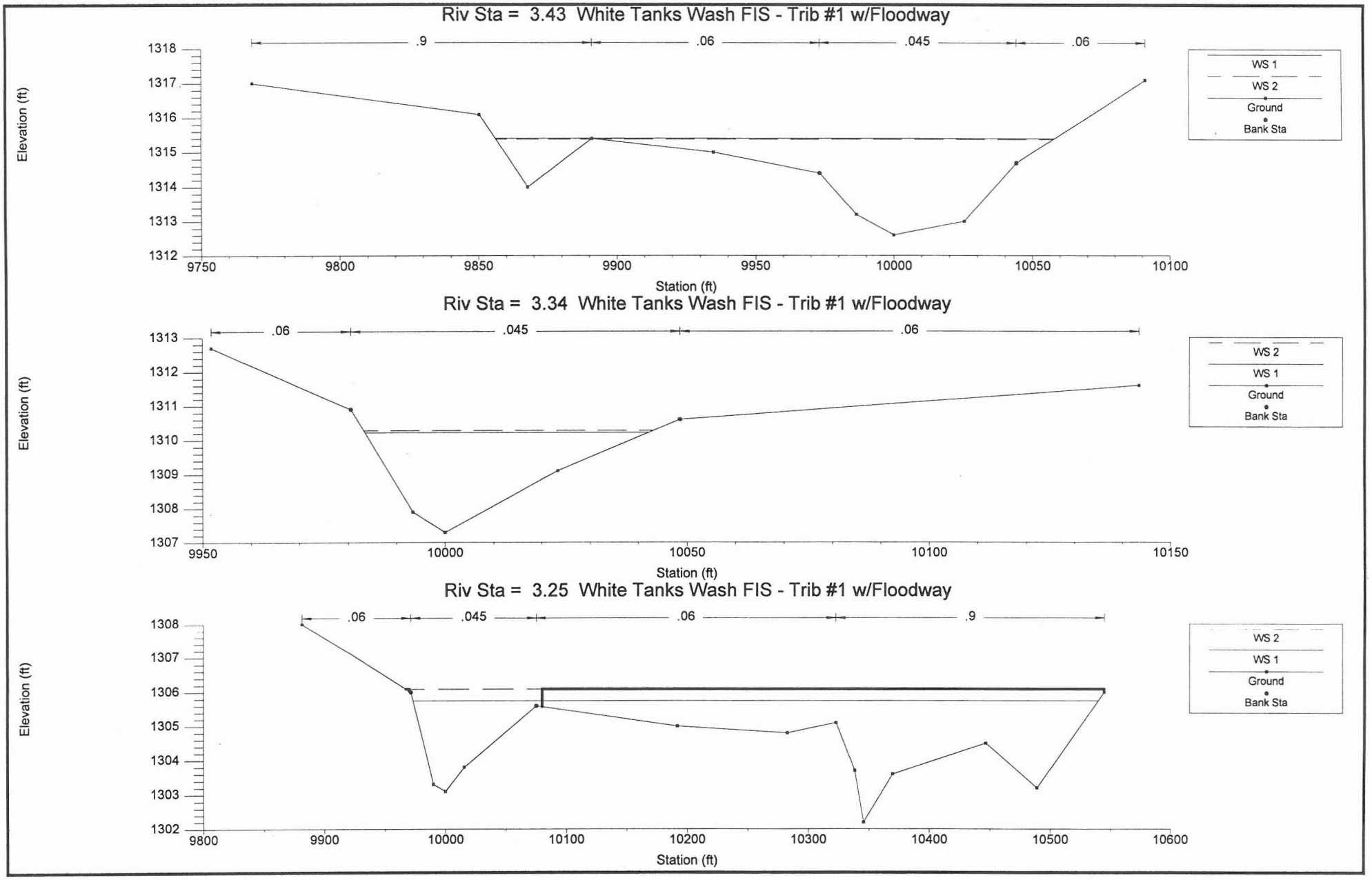
Tributary #1
With Floodway Encroachments
Based on Method 1 Analysis

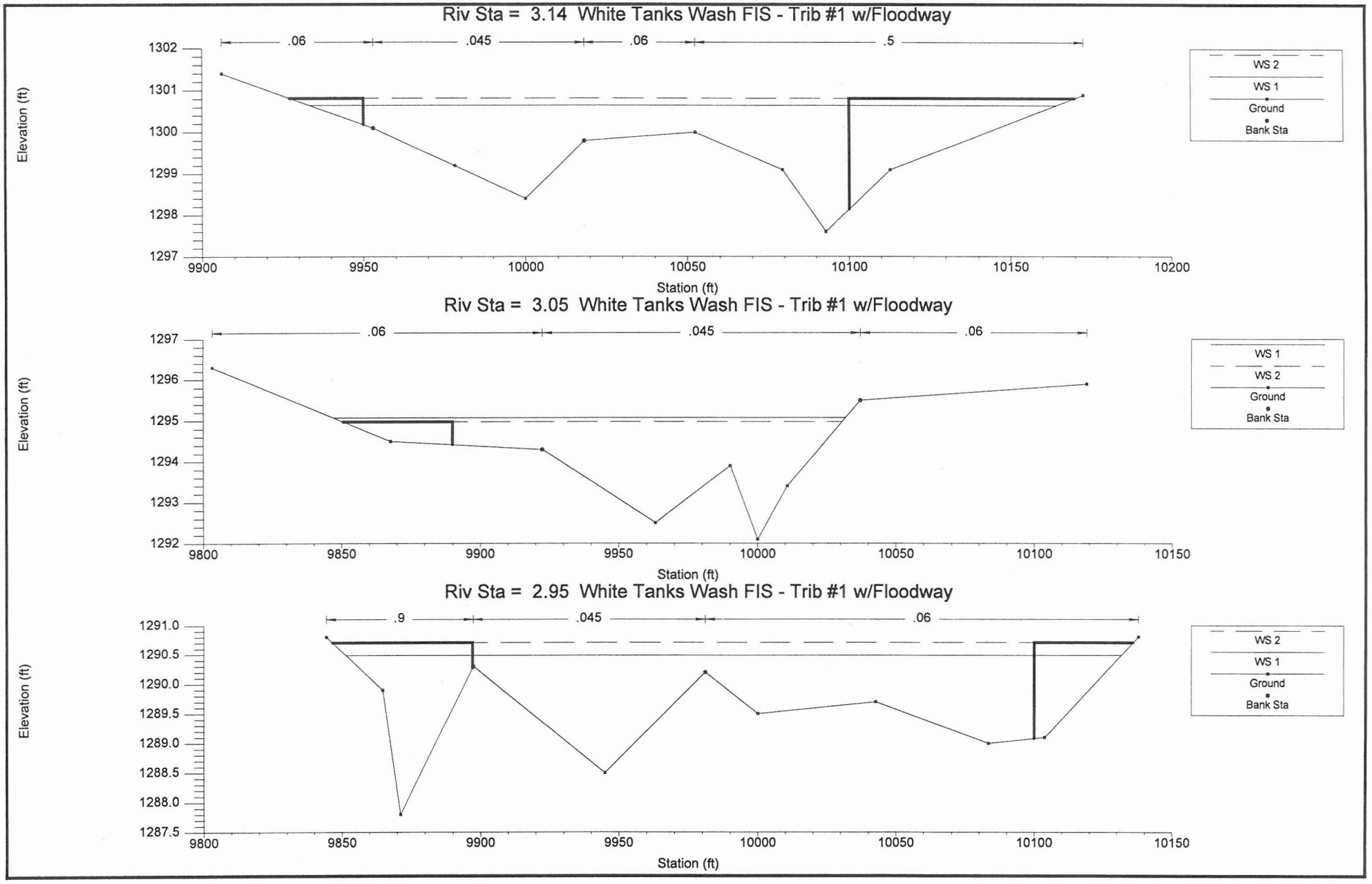
White Tanks Wash FIS - Trib #1 w/Floodway

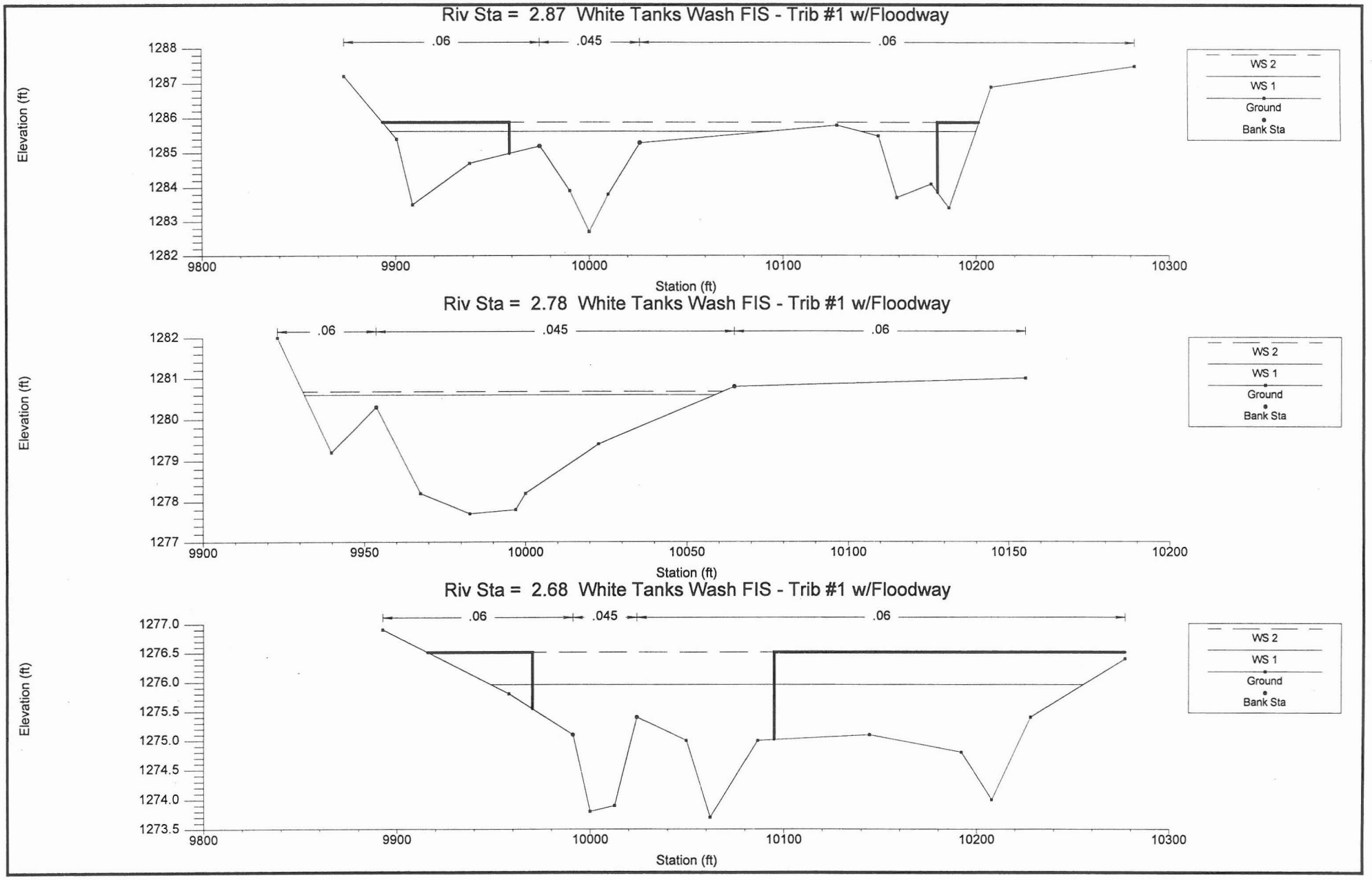


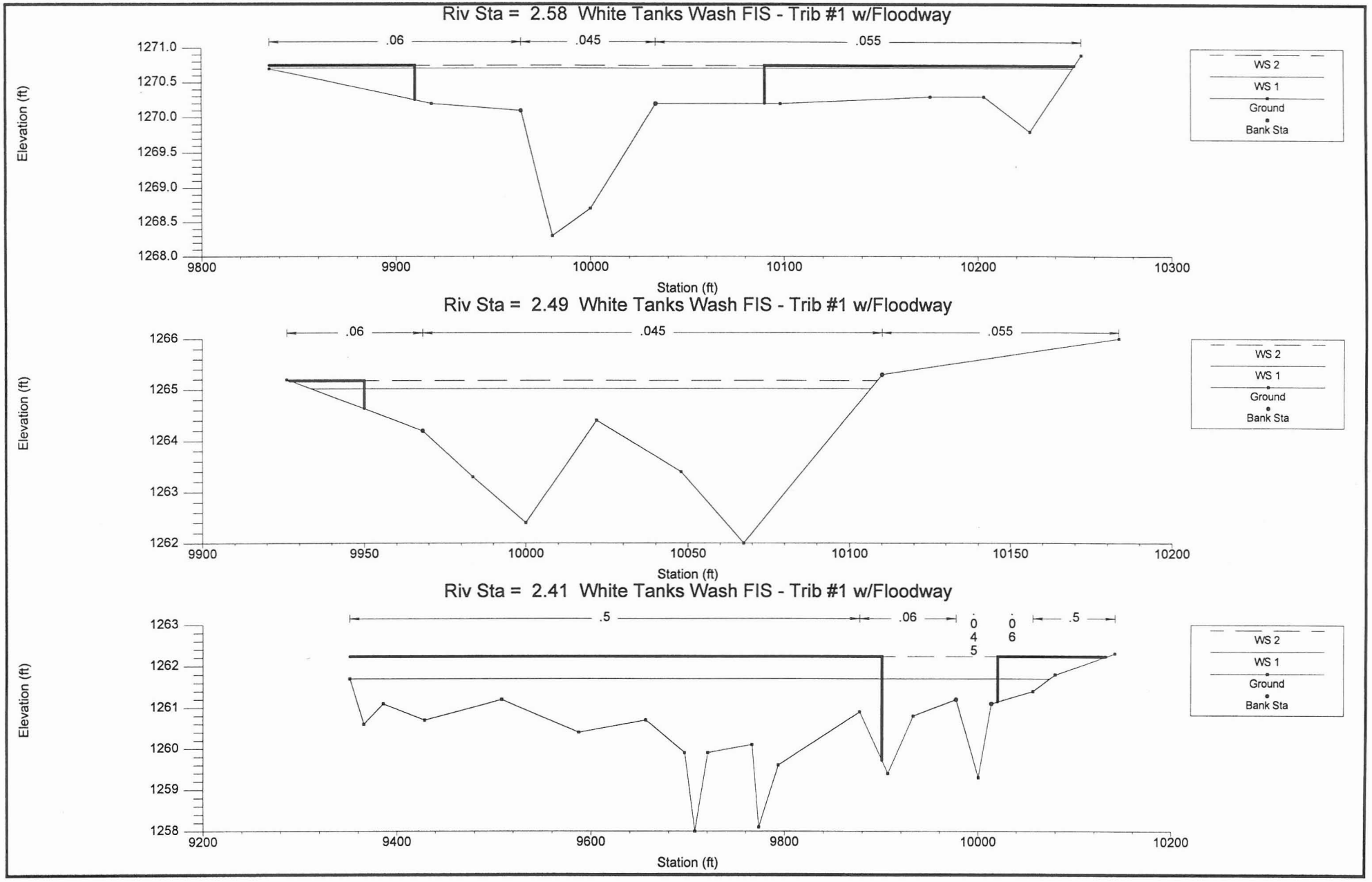

Riv Sta = 3.81 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1338
1337
1336
1335
1334
1333
1332
9800
9900
10000
10100
10200
10300
Station (ft)
WS 1
WS 2
Ground
Bank Sta
Riv Sta = 3.74 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1335
1334
1333
1332
1331
1330
1329
1328
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 1
WS 2
Ground
Bank Sta
Riv Sta = 3.68 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1332
1331
1330
1329
1328
1327
1326
1325
9900
9950
10000
10050
10100
10150
Station (ft)
WS 2
WS 1
Ground
Bank Sta

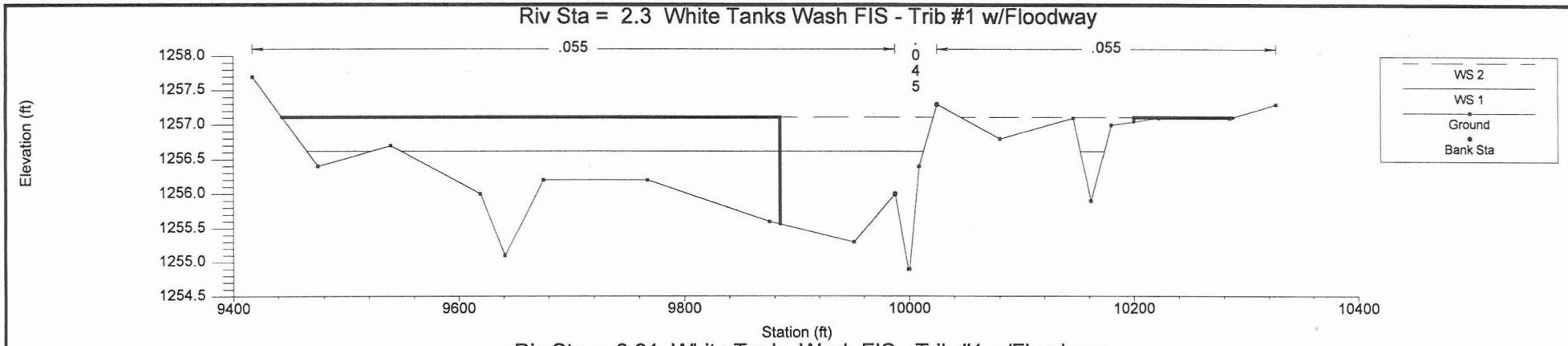

Riv Sta = 3.62 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1328
1327
1326
1325
1324
1323
9900
9950
10000
10050
10100
10150
Station (ft)
WS 1
WS 2
Ground
Bank Sta
Riv Sta = 3.57 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1326
1325
1324
1323
1322
1321
1320
9800
9850
9900
9950
10000
10050
10100
10150
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 3.53 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
.9
Elevation (ft)
1324
1323
1322
1321
1320
1319
1318
9900
9950
10000
10050
10100
10150
10200
10250
Station (ft)
WS 2
WS 1
Ground
Bank Sta

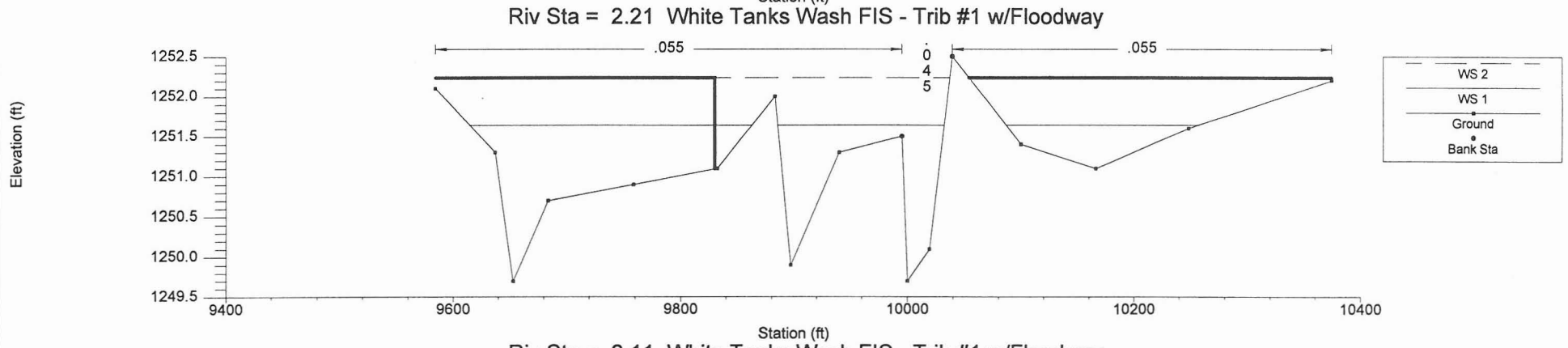

Riv Sta = 3.43 White Tanks Wash FIS - Trib #1 w/Floodway
.9
.06
.045
.06
Elevation (ft)
1318
1317
1316
1315
1314
1313
1312
9750
9800
9850
9900
9950
10000
10050
10100
Station (ft)
WS 1
WS 2
Ground
Bank Sta
Riv Sta = 3.34 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1313
1312
1311
1310
1309
1308
1307
9950
10000
10050
10100
10150
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 3.25 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
.9
Elevation (ft)
1308
1307
1306
1305
1304
1303
1302
9800
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
WS 2
WS 1
Ground
Bank Sta

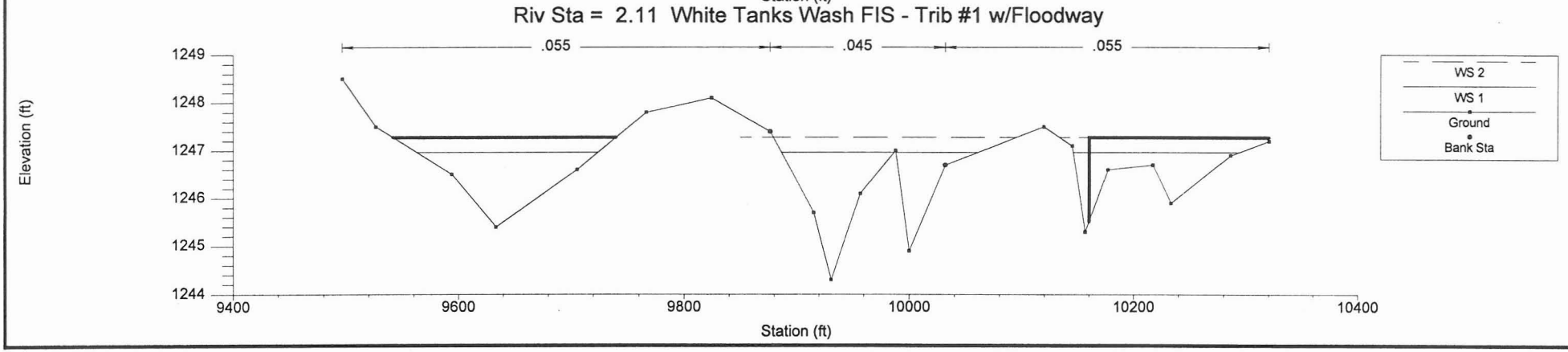

Riv Sta = 3.14 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
.5
Elevation (ft)
1302
1301
1300
1299
1298
1297
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 3.05 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1297
1296
1295
1294
1293
1292
9800
9850
9900
9950
10000
10050
10100
10150
Station (ft)
WS 1
WS 2
Ground
Bank Sta
Riv Sta = 2.95 White Tanks Wash FIS - Trib #1 w/Floodway
.9
.045
.06
Elevation (ft)
1291.0
1290.5
1290.0
1289.5
1289.0
1288.5
1288.0
1287.5
9800
9850
9900
9950
10000
10050
10100
10150
Station (ft)
WS 2
WS 1
Ground
Bank Sta

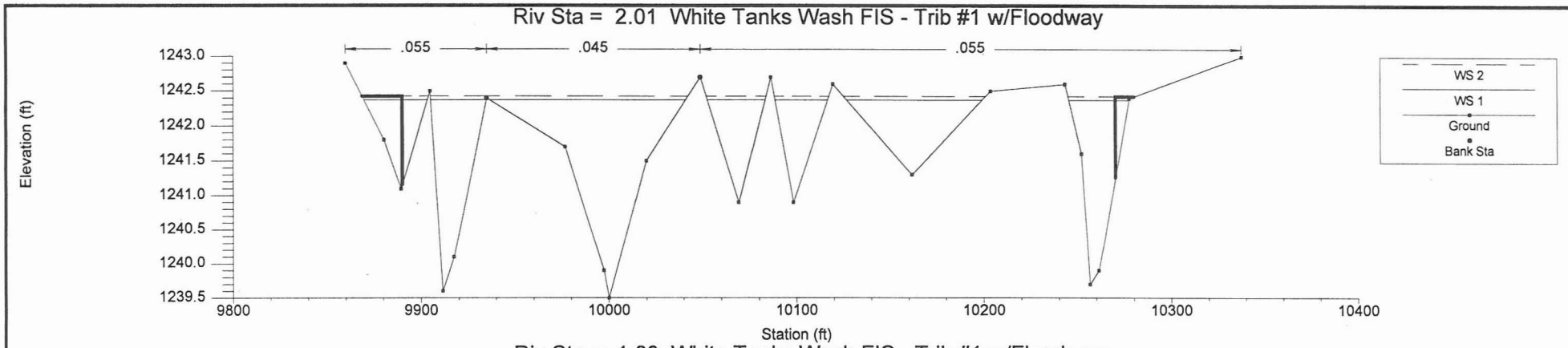

Riv Sta = 2.87 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1288
1287
1286
1285
1284
1283
1282
9800
9900
10000
10100
10200
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 2.78 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1282
1281
1280
1279
1278
1277
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 2.68 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1277.0
1276.5
1276.0
1275.5
1275.0
1274.5
1274.0
1273.5
9800
9900
10000
10100
10200
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta

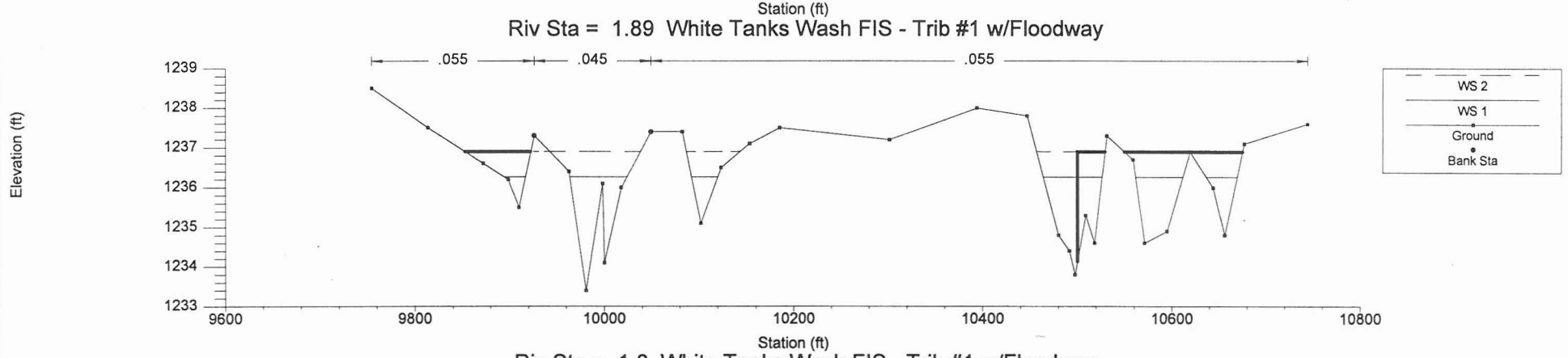

Riv Sta = 2.58 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.055
Elevation (ft)
1271.0
1270.5
1270.0
1269.5
1269.0
1268.5
1268.0
9800
9900
10000
10100
10200
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 2.49 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.055
Elevation (ft)
1266
1265
1264
1263
1262
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 2.41 White Tanks Wash FIS - Trib #1 w/Floodway
.5
.06
.045
.06
.5
Elevation (ft)
1263
1262
1261
1260
1259
1258
9200
9400
9600
9800
10000
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta

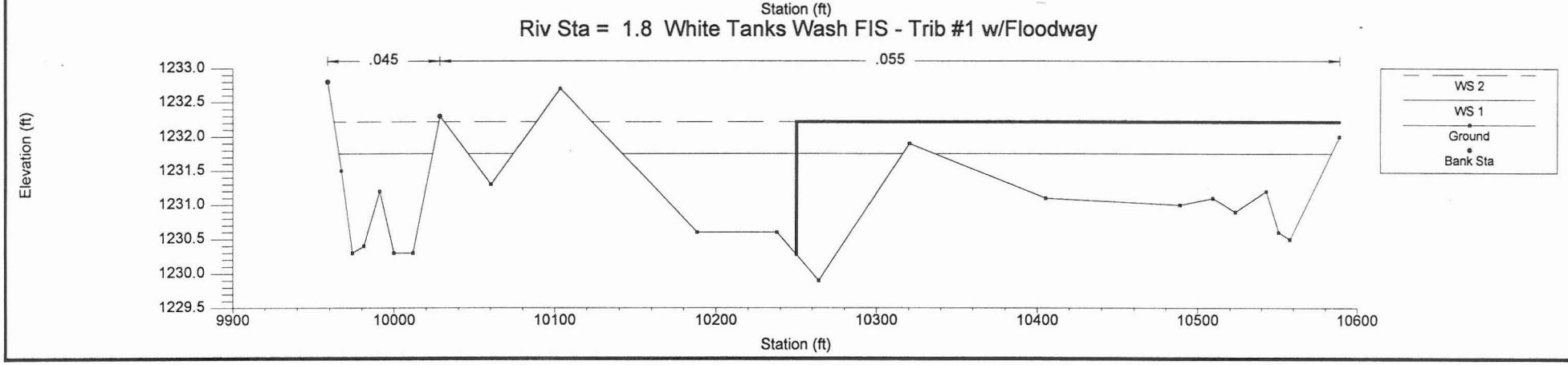

Riv Sta = 2.3 White Tanks Wash FIS - Trib #1 w/Floodway
.055
.045
.055
Elevation (ft)
1258.0
1257.5
1257.0
1256.5
1256.0
1255.5
1255.0
1254.5
9400
9600
9800
10000
10200
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta

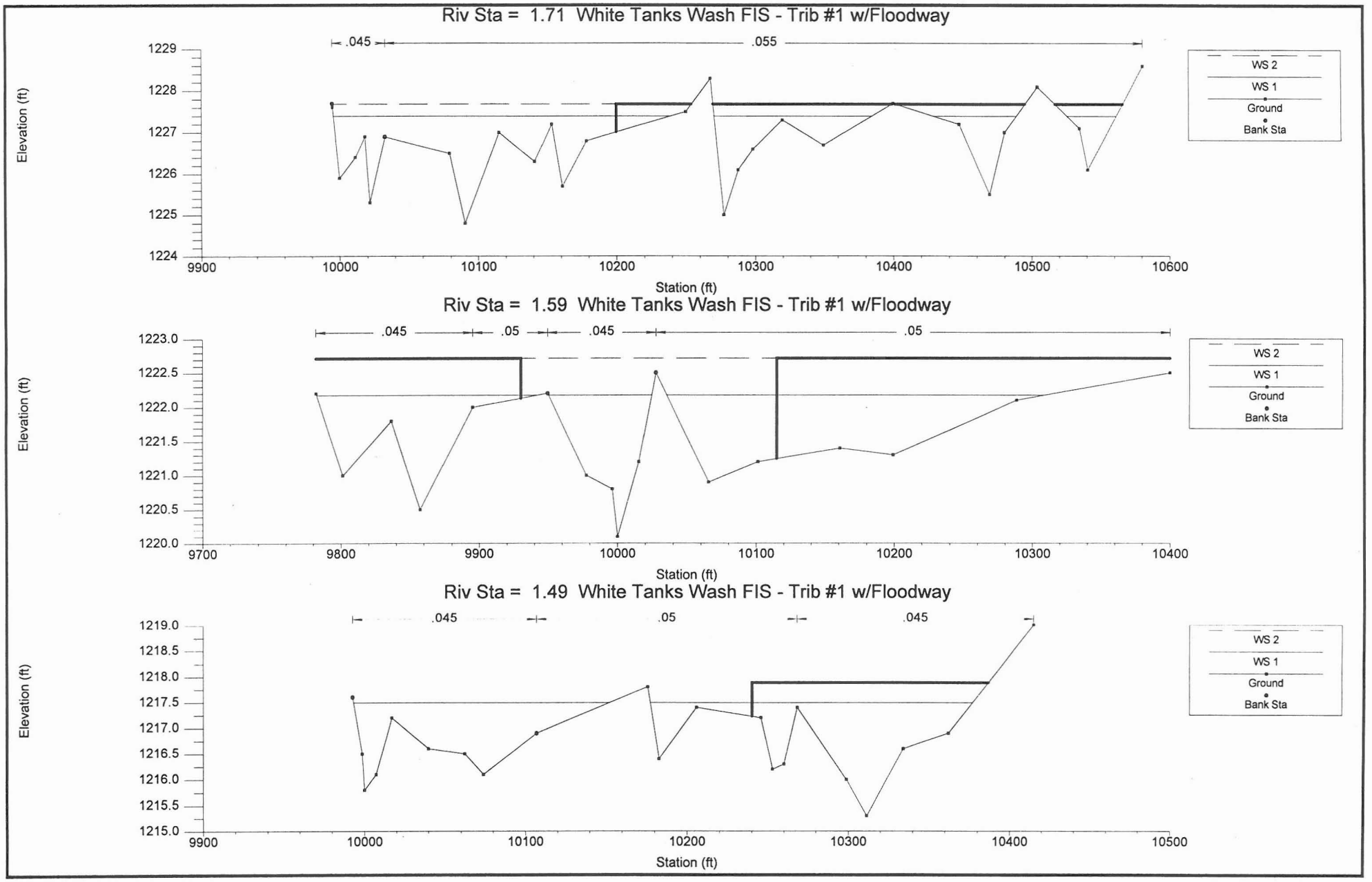

Riv Sta = 2.21 White Tanks Wash FIS - Trib #1 w/Floodway
.055
.045
.055
Elevation (ft)
1252.5
1252.0
1251.5
1251.0
1250.5
1250.0
1249.5
9400
9600
9800
10000
10200
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta

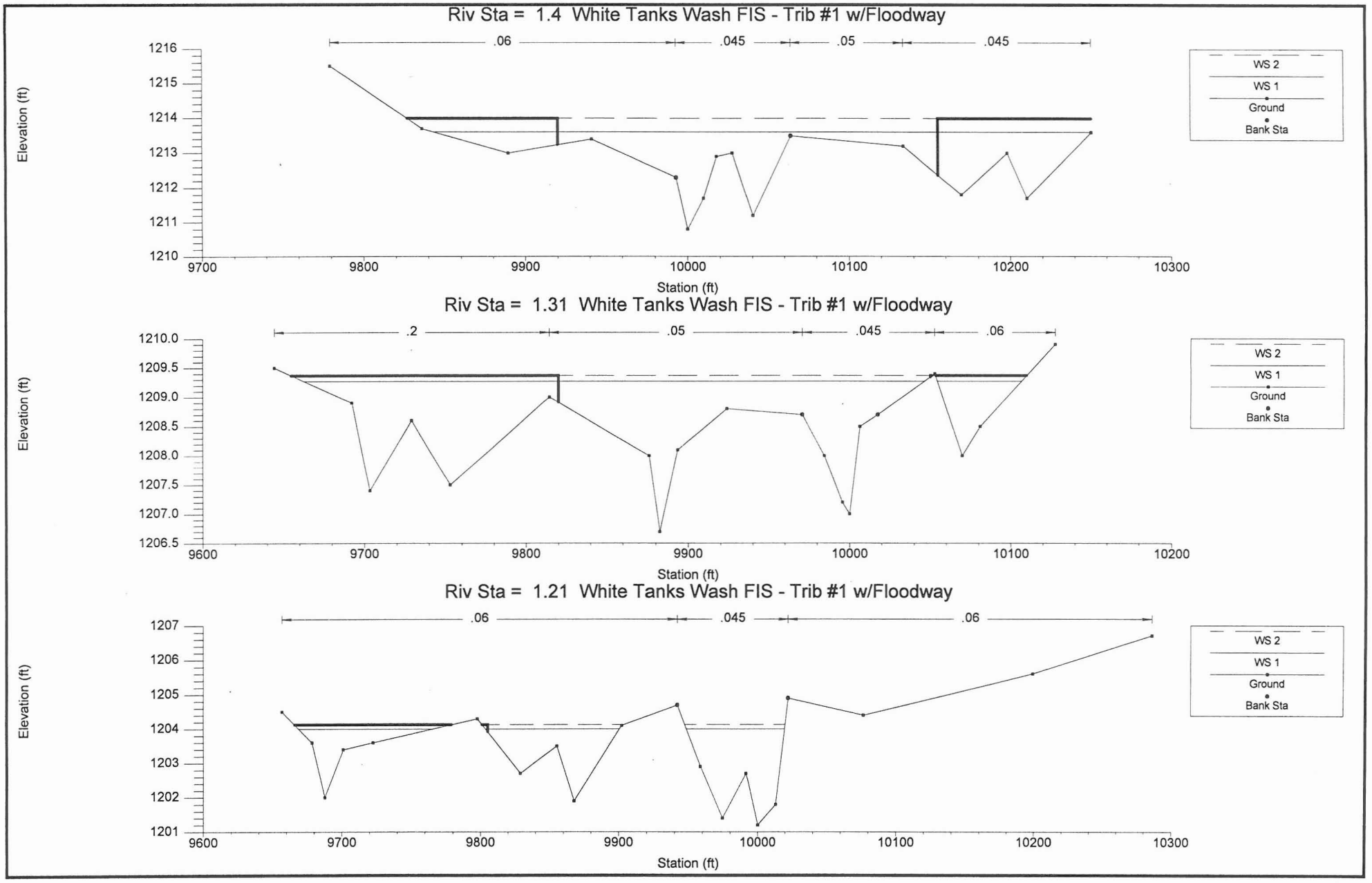

Riv Sta = 2.11 White Tanks Wash FIS - Trib #1 w/Floodway
.055
.045
.055
Elevation (ft)
1249
1248
1247
1246
1245
1244
9400
9600
9800
10000
10200
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta

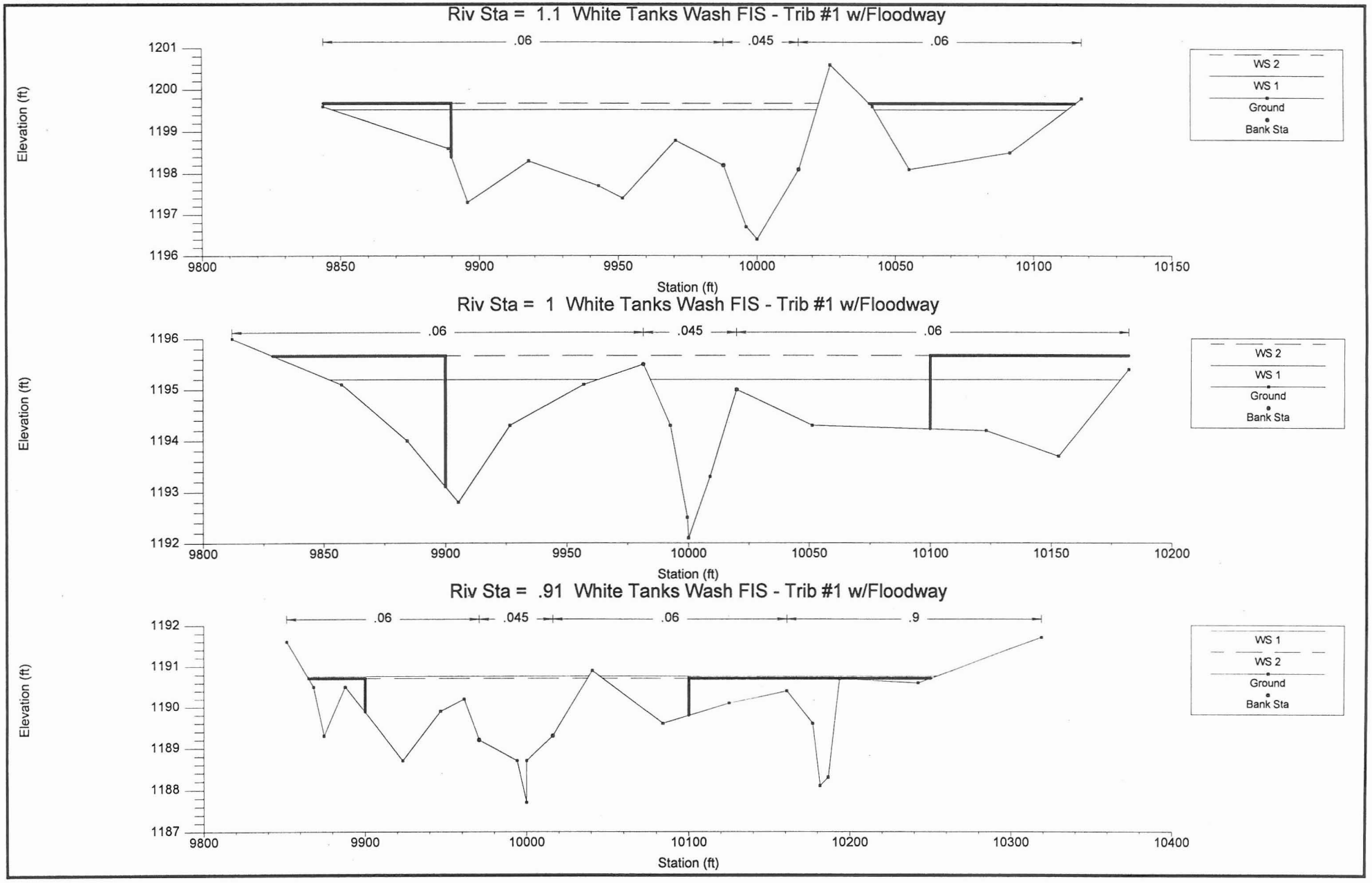

Riv Sta = 2.01 White Tanks Wash FIS - Trib #1 w/Floodway
.055
.045
.055
Elevation (ft)
1243.0
1242.5
1242.0
1241.5
1241.0
1240.5
1240.0
1239.5
9800
9900
10000
10100
10200
10300
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta

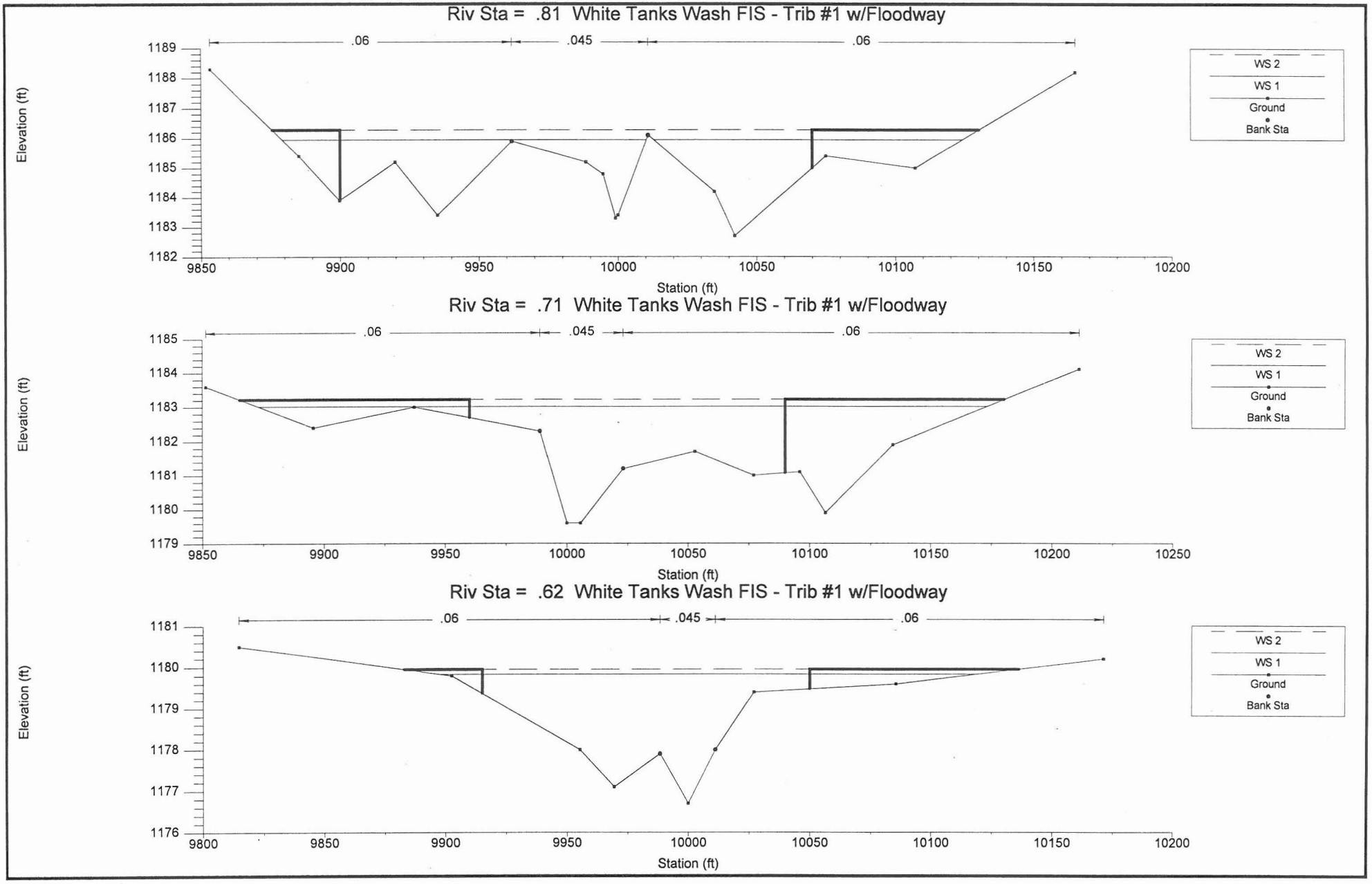

Riv Sta = 1.89 White Tanks Wash FIS - Trib #1 w/Floodway
.055
.045
.055
Elevation (ft)
1239
1238
1237
1236
1235
1234
1233
9600
9800
10000
10200
10400
10600
10800
Station (ft)
WS 2
WS 1
Ground
Bank Sta


Riv Sta = 1.8 White Tanks Wash FIS - Trib #1 w/Floodway
.045
.055
Elevation (ft)
1233.0
1232.5
1232.0
1231.5
1231.0
1230.5
1230.0
1229.5
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
WS 2
WS 1
Ground
Bank Sta

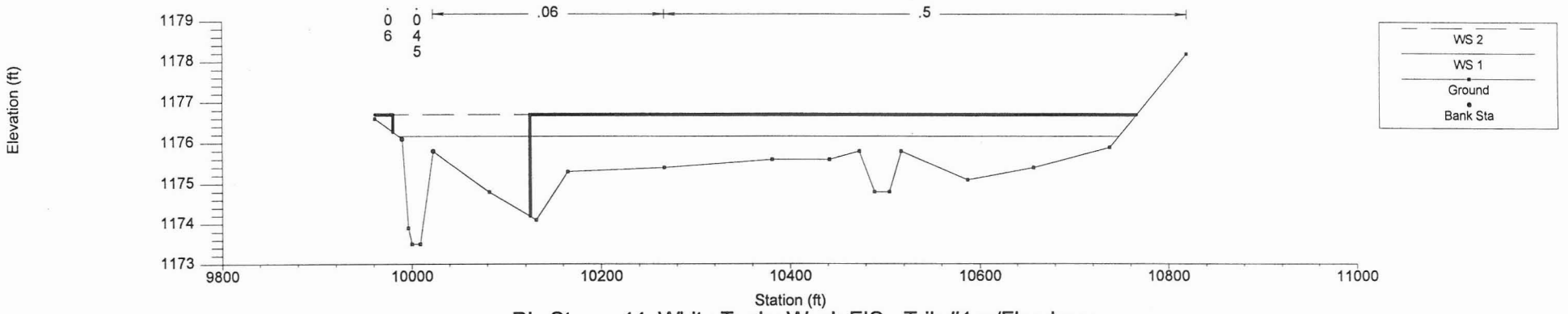

Riv Sta = 1.71 White Tanks Wash FIS - Trib #1 w/Floodway
.045
.055
Elevation (ft)
1229
1228
1227
1226
1225
1224
9900
10000
10100
10200
10300
10400
10500
10600
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 1.59 White Tanks Wash FIS - Trib #1 w/Floodway
.045
.05
.045
.05
Elevation (ft)
1223.0
1222.5
1222.0
1221.5
1221.0
1220.5
1220.0
9700
9800
9900
10000
10100
10200
10300
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 1.49 White Tanks Wash FIS - Trib #1 w/Floodway
.045
.05
.045
Elevation (ft)
1219.0
1218.5
1218.0
1217.5
1217.0
1216.5
1216.0
1215.5
1215.0
9900
10000
10100
10200
10300
10400
10500
Station (ft)
WS 2
WS 1
Ground
Bank Sta


Riv Sta = 1.4 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.05
.045
Elevation (ft)
1216
1215
1214
1213
1212
1211
1210
9700
9800
9900
10000
10100
10200
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 1.31 White Tanks Wash FIS - Trib #1 w/Floodway
.2
.05
.045
.06
Elevation (ft)
1210.0
1209.5
1209.0
1208.5
1208.0
1207.5
1207.0
1206.5
9600
9700
9800
9900
10000
10100
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 1.21 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1207
1206
1205
1204
1203
1202
1201
9600
9700
9800
9900
10000
10100
10200
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta

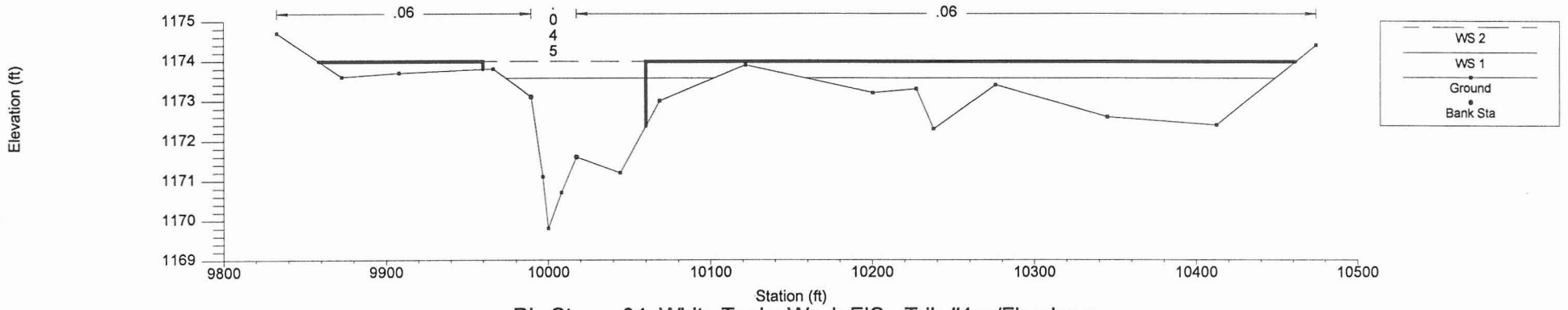

Riv Sta = 1.1 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1201
1200
1199
1198
1197
1196
9800
9850
9900
9950
10000
10050
10100
10150
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = 1 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1196
1195
1194
1193
1192
9800
9850
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = .91 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
.9
Elevation (ft)
1192
1191
1190
1189
1188
1187
9800
9900
10000
10100
10200
10300
10400
Station (ft)
WS 1
WS 2
Ground
Bank Sta


Riv Sta = .81 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1189
1188
1187
1186
1185
1184
1183
1182
9850
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = .71 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1185
1184
1183
1182
1181
1180
1179
9850
9900
9950
10000
10050
10100
10150
10200
10250
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = .62 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1181
1180
1179
1178
1177
1176
9800
9850
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta

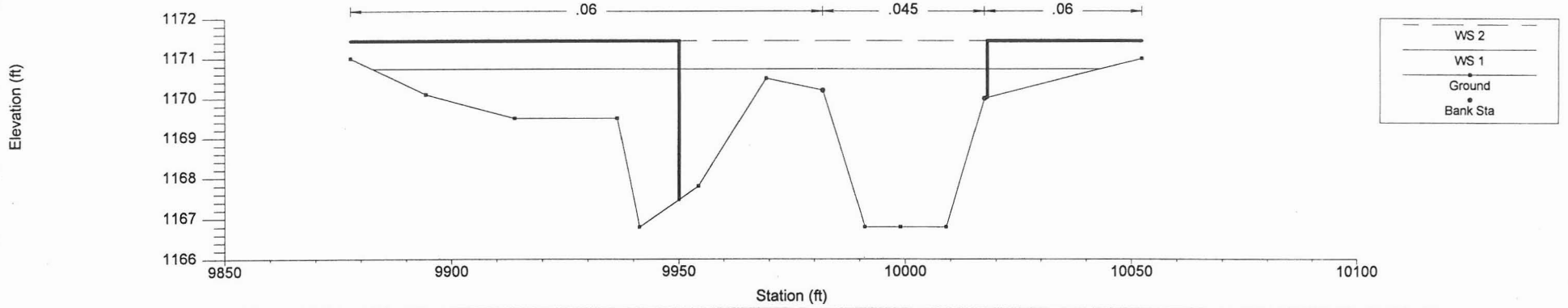
Riv Sta = .52 White Tanks Wash FIS - Trib #1 w/Floodway

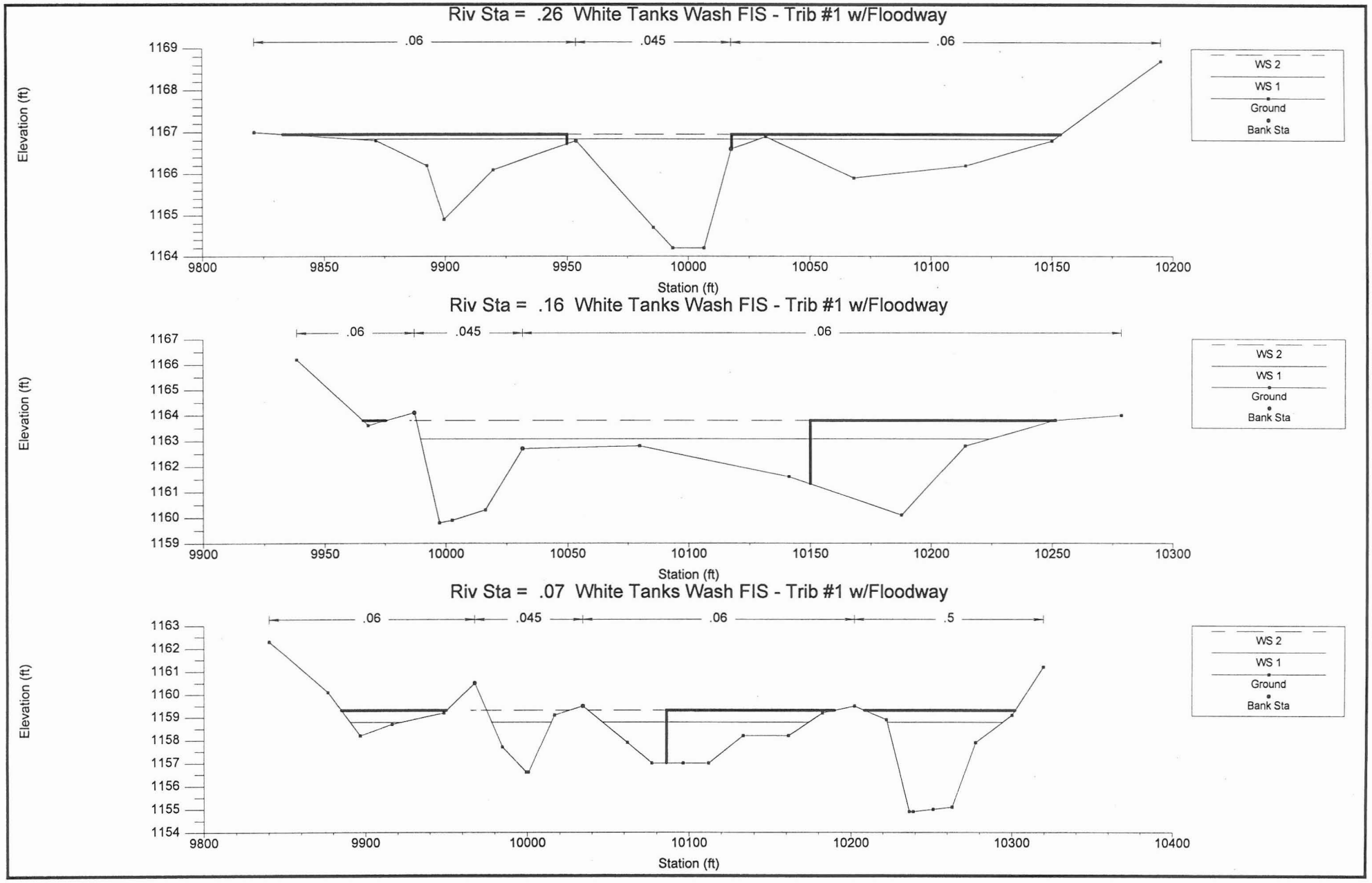


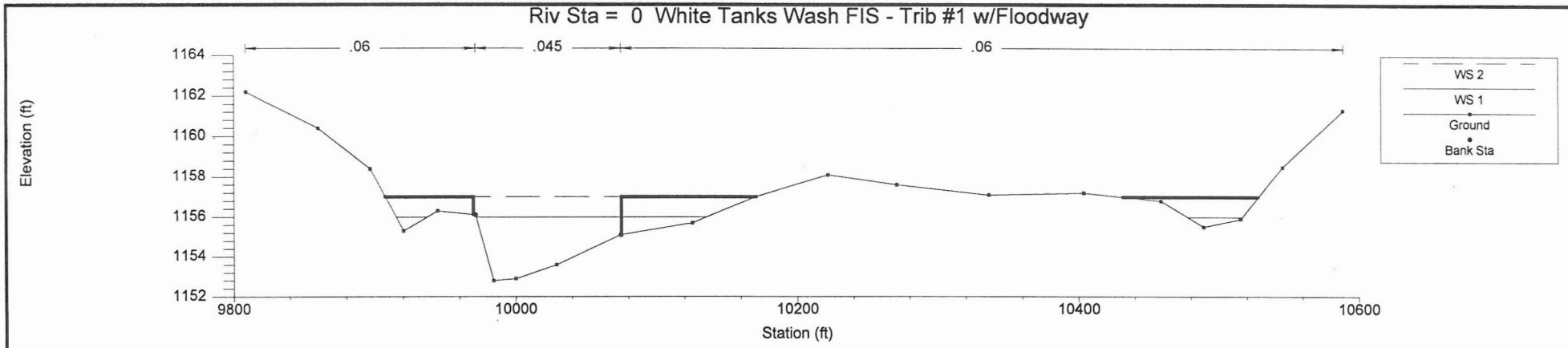
Riv Sta = .44 White Tanks Wash FIS - Trib #1 w/Floodway



Riv Sta = .34 White Tanks Wash FIS - Trib #1 w/Floodway




Riv Sta = .26 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1169
1168
1167
1166
1165
1164
9800
9850
9900
9950
10000
10050
10100
10150
10200
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = .16 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1167
1166
1165
1164
1163
1162
1161
1160
1159
9900
9950
10000
10050
10100
10150
10200
10250
10300
Station (ft)
WS 2
WS 1
Ground
Bank Sta
Riv Sta = .07 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
.5
Elevation (ft)
1163
1162
1161
1160
1159
1158
1157
1156
1155
1154
9800
9900
10000
10100
10200
10300
10400
Station (ft)
WS 2
WS 1
Ground
Bank Sta


Riv Sta = 0 White Tanks Wash FIS - Trib #1 w/Floodway
.06
.045
.06
Elevation (ft)
1164
1162
1160
1158
1156
1154
1152
9800
10000
10200
10400
10600
Station (ft)
WS 2
WS 1
Ground
Bank Sta

Appendix K

HEC-2 Output File for:

Tributary #2
Approximate Analysis

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    29JAN96    TIME   21:10:41   *
*********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 21:10:41

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

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

T1 Flood Control District of Maricopa County Contract 90-64 AEG 5115.01
T2 White Tanks Wash Flood Insurance Study
T3 Tributary Channel #2 - Approximate Floodplain Analysis
T4 Water Surface Profile Model - 100-year event only.

==========

White Tanks Wash Flood Insurance Study
Flood Control District of Maricopa County, Arizona
FCD Contract 90-64

Water Surface Profile Model for Tributary #2
This model is based on:

- APPROXIMATE METHODS OF ANALYSIS
- Subcritical flow regime.
- The cross sections were interpolated from the work map (4' CI) prepared by Aerial Mapping Company, Phoenix, AZ, based photographs taken October 1991.
- The starting WSE is from the main branch analysis.
- The discharge values are approximate. The first 3 sections are below the confluence of watersheds J2 and K3. J1 and J2 produce a peak flow of 1392 cfs. Watersheds K1, K2 and K3 produce a peak discharge of 688 cfs. The time of peak discharge is similar with K responding slightly before. The combined flow was assumed to be 2000 cfs. The computed discharge value of 1392 cfs was used for Section 4. The majority of flow from watershed J was assumed to enter between cross sections 4 and 5 based on aerial photos. The flow rate above cross section 5 was based on the size of the remaining watershed and discharges computed for similar watersheds in the study area. A value of 700 cfs was assumed for cross sections 5 and above.

This analysis is approximate because the cross sections would not meet the accuracy standards required by FEMA for a detailed analysis (Guidelines for Study Contractors (March 1993) and the discharge values are approximate.

By: M. Forest
File Name: TRIB2.HC2
September 1995

Prepared By:
Alpha Engineering Group
Phoenix, Arizona

==========

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	0	0	0	0	1092.3	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE

-1	0	-1	0	0	0	-1	0	0

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 53 54 1 110 115

Manning's roughness values for the primary channel were estimated from field investigations.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively.

QT	1	2000								
NC	0.060	0.060	0.050	.1	.3					
X1	1	10	650	690	0	0	0			
GR	1096	0	1094	200	1092	290	1088	520	1089	600
GR	1088	650	1086	670	1088	690	1092	710	1096	780
X1	2	13	535	570	820	820	820			
GR	1100	0	1096	60	1095	150	1096	250	1096	310
GR	1092	415	1092	435	1093	500	1092	535	1090	550
GR	1092	570	1096	640	1100	690				
X1	3	12	270	300	1350	1350	1350			
GR	1107.7	0	1104	240	1100	270	1099	280	1100	300
GR	1102.8	400	1104	520	1105	560	1104	610	1103	630
GR	1104	640	1108	680						
QT	1	1392								
X1	4	9	600	870	2000	2000	2000			
GR	1117	0	1116	250	1115.9	320	1116	410	1116.5	500
GR	1116	600	1113	800	1116	870	1120	1000		
QT	1	700								
X1	5	8	1100	1130	850	800	800			
GR	1126	600	1124	680	1120	820	1120	1100	1119	1110
GR	1120	1130	1124	1530	1127	1600				
X1	6	7	1100	1470	1550	1700	1700			
GR	1136	600	1134	980	1130	1100	1128	1320	1130	1470
GR	1132	1550	1136	1640						
X1	7	8	580	1050	1700	1700	1700			
GR	1144	0	1140	150	1140	320	1142.5	470	1140	580
GR	1137.5	760	1140	1050	1144	1170				
X1	8	8	260	760	2100	2350	2300			
GR	1156.7	0	1156	220	1152	260	1150	600	1152	760
GR	1154	1070	1152	1300	1154	1530				

X1	9	8	220	500	1500	1950	1750			
GR	1169	0	1168	130	1164	220	1163	350	1164	500
GR	1166	700	1165	900	1166	1100				

X1	9	8	220	500	1500	1950	1750			
GR	1169	0	1168	130	1164	220	1163	350	1164	500
GR	1166	700	1165	900	1166	1100				

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 1.000

1.000	6.30	1092.30	1089.80	1092.30	1092.35	.05	.00	.00	1088.00
2000.0	1428.5	518.1	53.3	1025.0	212.0	46.8	.0	.0	1088.00
.00	1.39	2.44	1.14	.060	.050	.060	.000	1086.00	276.50
.000737	0.	0.	0.	0	13	0	.00	438.75	715.25

*SECNO 2.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.000	3.88	1093.88	1093.88	.00	1094.59	.71	1.72	.20	1092.00
2000.0	999.8	891.4	108.7	222.6	100.9	31.1	15.4	6.4	1092.00
.04	4.49	8.83	3.50	.060	.050	.060	.000	1090.00	365.55
.021705	820.	820.	820.	0	14	0	.00	237.42	602.97

*SECNO 3.000

3265 DIVIDED FLOW

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

3.000	5.32	1104.32	1103.12	.00	1104.53	.21	9.89	.05	1100.00
2000.0	182.4	737.9	1079.8	72.9	144.6	431.7	31.0	15.7	1100.00
.14	2.50	5.10	2.50	.060	.050	.060	.000	1099.00	219.33
.003636	1350.	1350.	1350.	7	8	0	.00	362.53	643.19

*SECNO 4.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .35

4.000	2.68	1115.68	1115.25	.00	1115.97	.29	11.42	.02	1116.00
1392.0	.0	1392.0	.0	.0	324.1	.0	53.3	29.5	1116.00
.27	.00	4.29	.00	.000	.050	.000	.000	1113.00	621.08
.014113	2000.	2000.	2000.	5	18	0	.00	241.55	862.62

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

*SECNO 5.000

5.000	2.25	1121.25	1120.53	.00	1121.28	.03	5.28	.03	1120.00
700.0	519.1	111.1	69.8	378.8	52.6	78.7	61.2	36.3	1120.00
.43	1.37	2.11	.89	.060	.050	.060	.000	1119.00	776.09
.002389	850.	800.	800.	5	14	0	.00	479.38	1255.46

*SECNO 6.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .37

6.000	1.52	1129.52	1129.29	.00	1129.69	.17	8.37	.04	1130.00
700.0	.0	700.0	.0	.0	214.1	.0	74.7	50.6	1130.00
.57	.00	3.27	.00	.000	.050	.000	.000	1128.00	1152.64
.017424	1550.	1700.	1700.	5	11	0	.00	281.47	1434.11

*SECNO 7.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.45

7.000	2.12	1139.62	1138.77	.00	1139.66	.04	9.96	.01	1140.00
700.0	.0	700.0	.0	.0	420.9	.0	87.1	63.9	1140.00
.86	.00	1.66	.00	.000	.050	.000	.000	1137.50	607.65
.002905	1700.	1700.	1700.	6	15	0	.00	397.80	1005.45

*SECNO 8.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

8.000	1.46	1151.46	1151.14	.00	1151.57	.11	11.89	.02	1152.00
700.0	.0	700.0	.0	.0	268.4	.0	105.3	84.1	1152.00
1.10	.00	2.61	.00	.000	.050	.000	.000	1150.00	350.87
.011655	2100.	2300.	2350.	6	11	0	.00	366.36	717.24

*SECNO 9.000

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

9.000	1.58	1164.58	1164.07	.00	1164.66	.08	13.09	.00	1164.00
700.0	3.0	683.8	13.3	3.8	302.9	16.9	117.2	98.6	1164.00
1.32	.78	2.26	.78	.060	.050	.060	.000	1163.00	206.91
.005195	1500.	1750.	1950.	4	19	0	.00	351.27	558.18

THIS RUN EXECUTED 29JAN96 21:10:41

****
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

Tributary Channel #2 - A

SUMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL
	1.000	2000.00	276.50	715.25	1092.30
*	2.000	2000.00	365.55	602.97	1093.88
*	3.000	2000.00	219.33	643.19	1104.32
*	4.000	1392.00	621.08	862.62	1115.68
	5.000	700.00	776.09	1255.46	1121.25
*	6.000	700.00	1152.64	1434.11	1129.52
*	7.000	700.00	607.65	1005.45	1139.62
*	8.000	700.00	350.87	717.24	1151.46
*	9.000	700.00	206.91	558.18	1164.58

THIS RUN EXECUTED 29JAN96 21:10:41

****
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

Tributary Channel #2 - A

SUMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL
	1.000	2000.00	276.50	715.25	1092.30
*	2.000	2000.00	365.55	602.97	1093.88
*	3.000	2000.00	219.33	643.19	1104.32
*	4.000	1392.00	621.08	862.62	1115.68
	5.000	700.00	776.09	1255.46	1121.25
*	6.000	700.00	1152.64	1434.11	1129.52
*	7.000	700.00	607.65	1005.45	1139.62
*	8.000	700.00	350.87	717.24	1151.46
*	9.000	700.00	206.91	558.18	1164.58

Tributary Channel #2 - A

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.000	1092.30	.00	1092.35	438.75	1428.53	518.14	53.33	.00	.00	650.00	690.00	.00
*	2.000	1093.88	.00	1094.59	237.42	999.81	891.45	108.75	.00	.00	535.00	570.00	.00
*	3.000	1104.32	.00	1104.53	362.53	182.36	737.88	1079.77	.00	.00	270.00	300.00	.00
*	4.000	1115.68	.00	1115.97	241.55	.00	1392.00	.00	.00	.00	600.00	870.00	.00
	5.000	1121.25	.00	1121.28	479.38	519.13	111.06	69.82	.00	.00	1100.00	1130.00	.00
*	6.000	1129.52	.00	1129.69	281.47	.00	700.00	.00	.00	.00	1100.00	1470.00	.00
*	7.000	1139.62	.00	1139.66	397.80	.00	700.00	.00	.00	.00	580.00	1050.00	.00
*	8.000	1151.46	.00	1151.57	366.36	.00	700.00	.00	.00	.00	260.00	760.00	.00
*	9.000	1164.58	.00	1164.66	351.27	2.98	683.75	13.26	.00	.00	220.00	500.00	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=      2.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      3.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      4.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      6.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      7.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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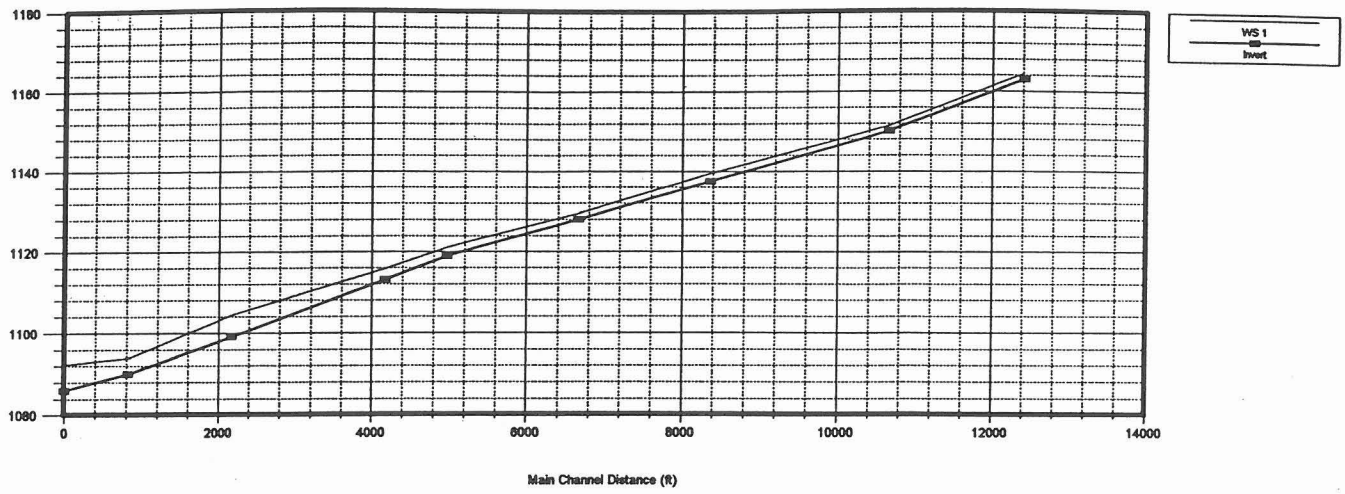
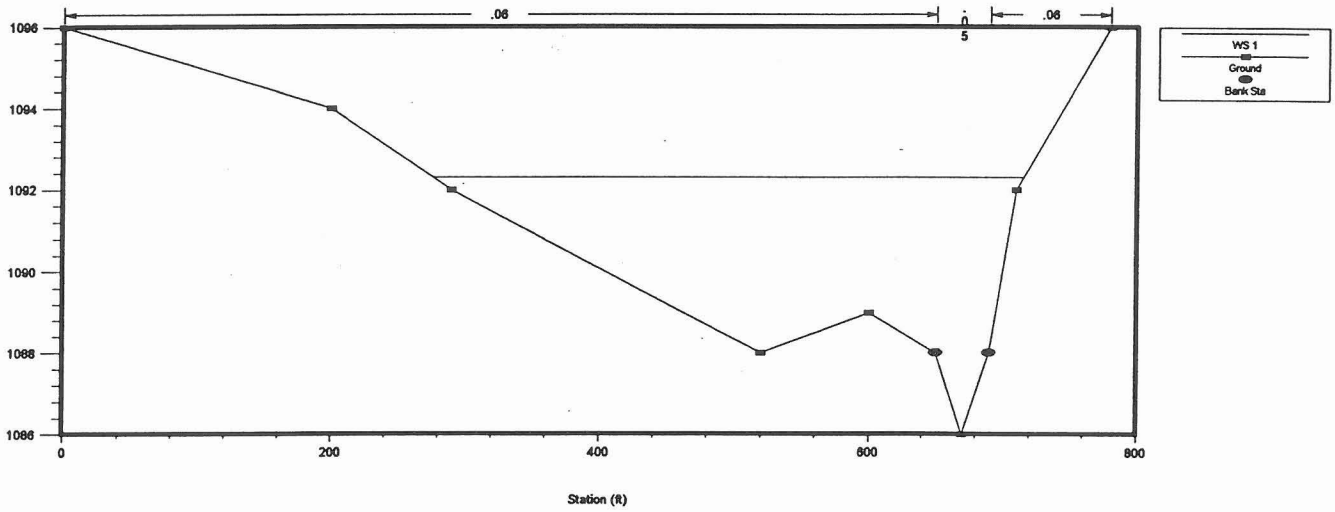
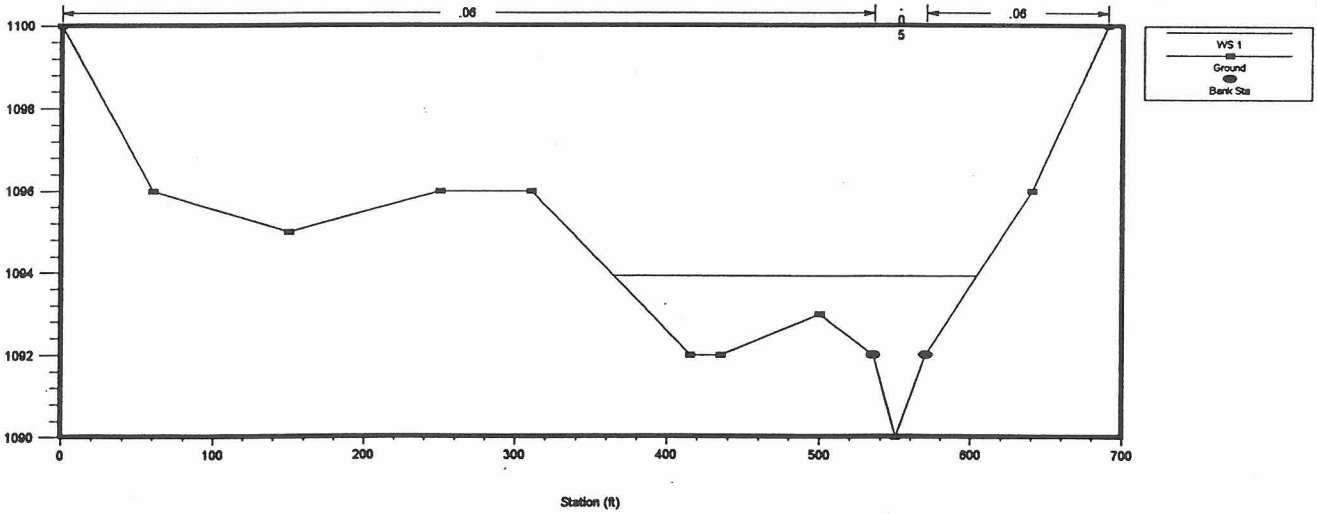
White Tanks Wash FIS - Trib #2
Existing Condition



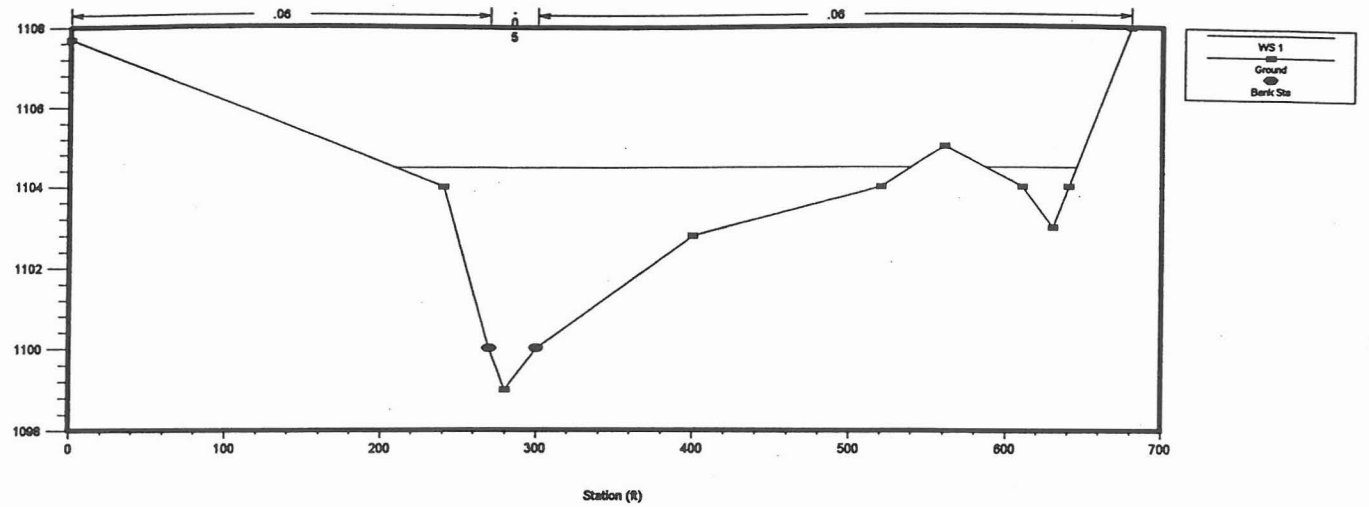
White Tanks Wash FIS - Trib #2
Riv Sta = 1 Existing Condition



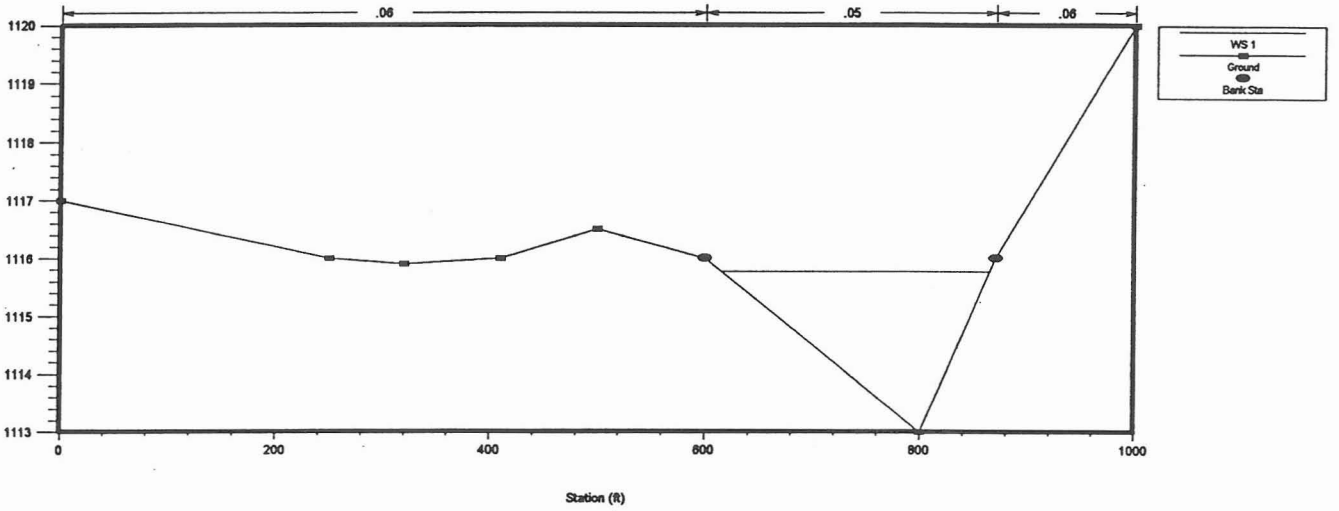
White Tanks Wash FIS - Trib #2
Riv Sta = 2 Existing Condition



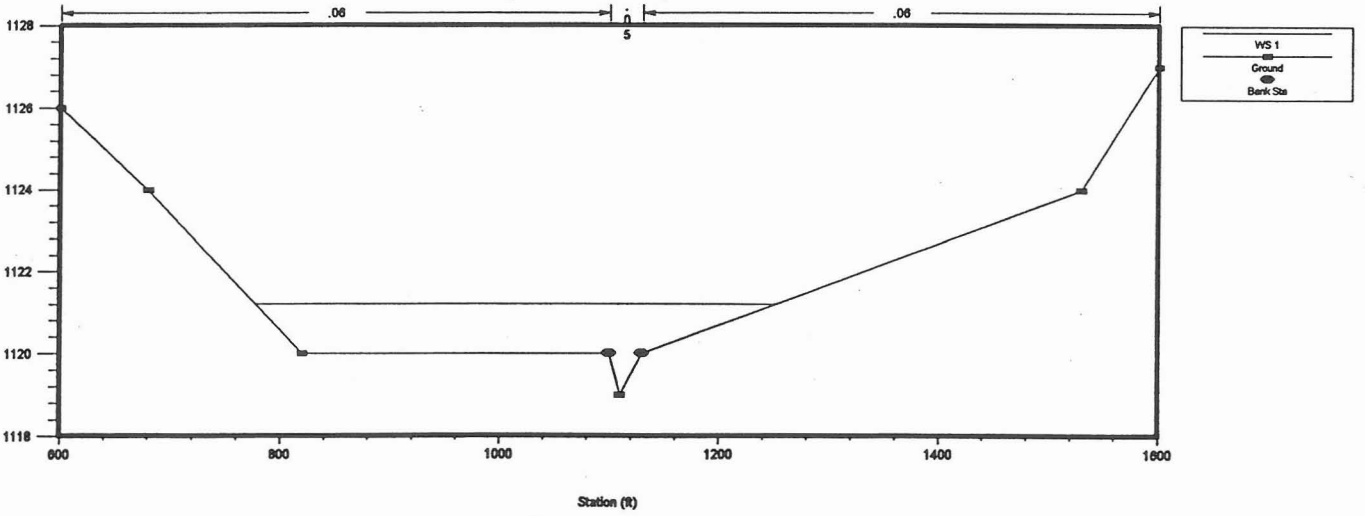
White Tanks Wash FIS - Trib #2
Riv Sta = 3 Existing Condition



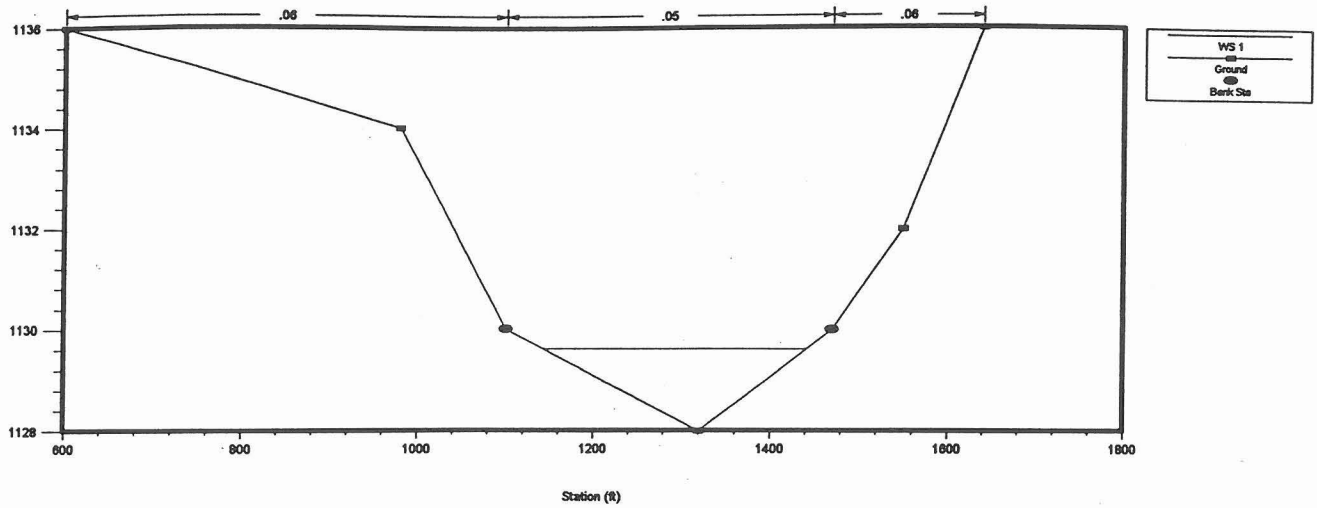
White Tanks Wash FIS - Trib #2
Riv Sta = 4 Existing Condition



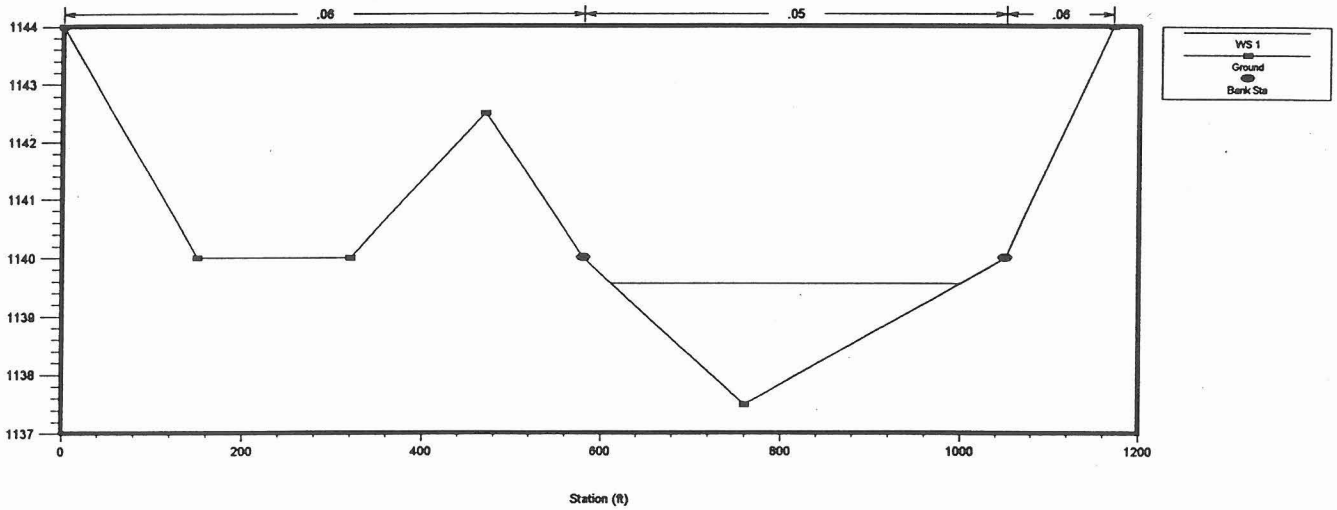
White Tanks Wash FIS - Trib #2
Riv Sta = 5 Existing Condition



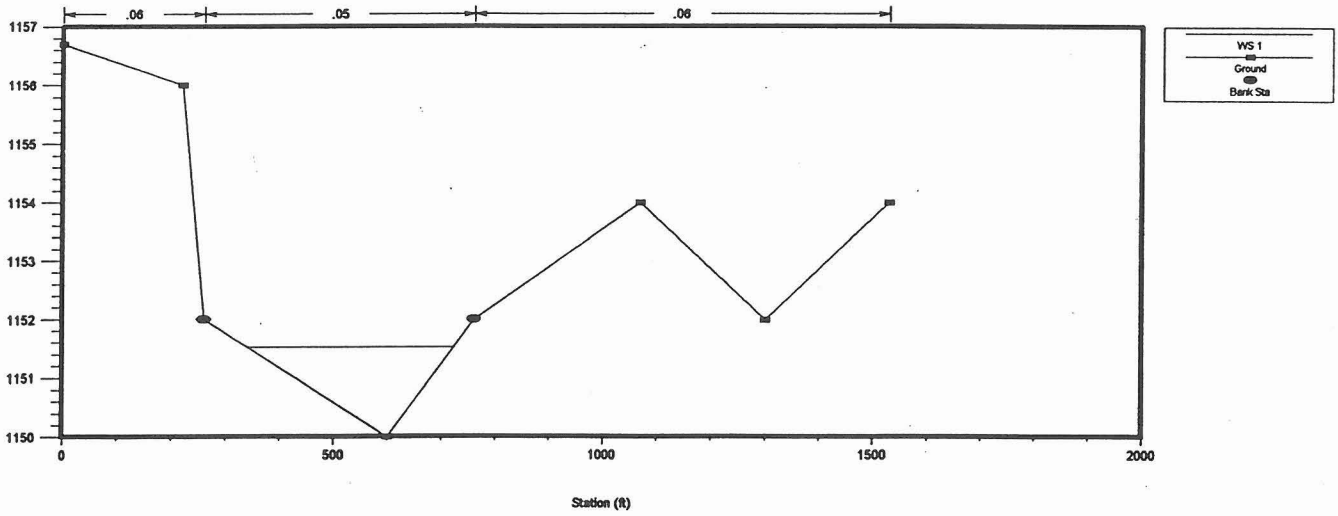
White Tanks Wash FIS - Trib #2
Riv Sta = 6 Existing Condition

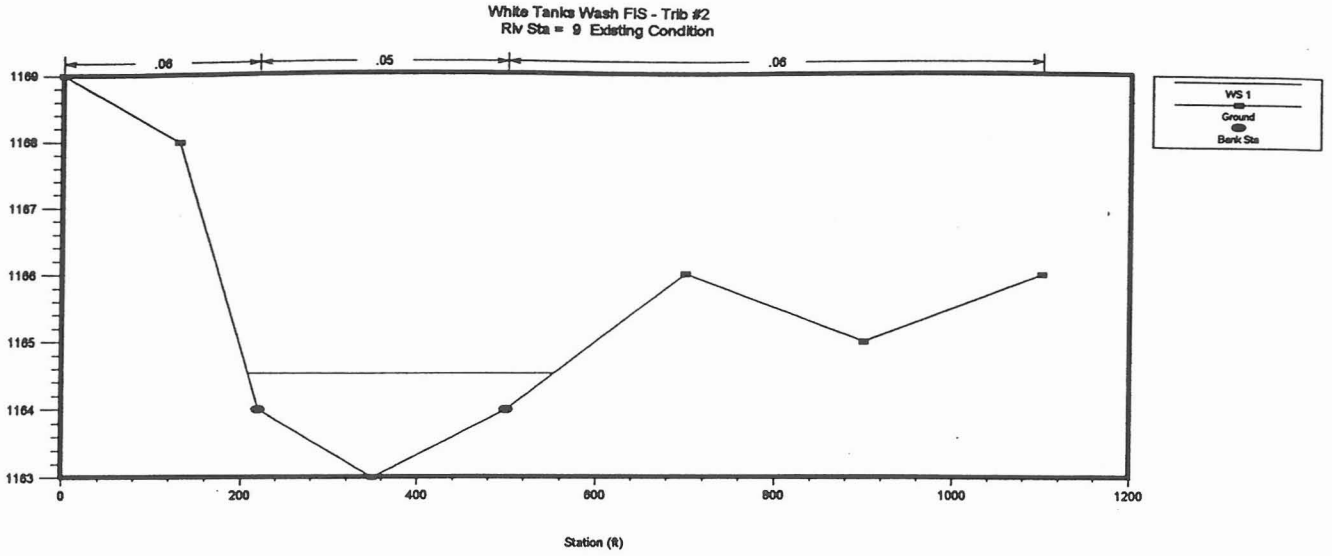


White Tanks Wash FIS - Trib #2
Riv Sta = 7 Existing Condition



White Tanks Wash FIS - Trib #2
Riv Sta = 8 Existing Condition




White Tanks Wash FIS - Trib #2
Riv Sta = 9 Existing Condition
.06
.05
.06
1169
1168
1167
1166
1165
1164
1163
0
200
400
600
800
1000
1200
Station (ft)
WS 1
Ground
Bank Sta

Appendix L

HEC-2 Output File for:

Tributary #2B
Approximate Analysis

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    30JAN96    TIME   06:47:27    *
**********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 30JAN96 06:47:27

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

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


T1      Flood Control District of Maricopa County Contract 90-64   AEG 5115.01
T2      White Tanks Wash Flood Insurance Study
T3      Tributary Channel #2B - Approximate Floodplain Analysis
T4      Water Surface Profile Model - 100-year event only.
  ==============================================================================
   White Tanks Wash Flood Insurance Study
   Flood Control District of Maricopa County, Arizona
   FCD Contract 90-64

   Water Surface Profile Model for Tributary #2B
   This model is based on:
      - APPROXIMATE METHODS OF ANALYSIS
      - Subcritical flow regime.
      - The cross sections were interpolated from the work map (4' CI) prepared
        by Aerial Mapping Company, Phoenix, AZ, based photographs taken
        October 1991.
      - The starting WSE is from the main branch analysis.
      - The discharge values are approximate.  The first 3 sections are below
        the confluence of watersheds J2 and K3.  J1 and J2 produce a peak flow
        of 1392 cfs.  Watersheds K1, K2 and K3 produce a peak discharge of 688
        cfs.  The time of peak discharge is similar with K responding slightly
        before.  The combined flow was assumed to be 2000 cfs.  The computed
        discharge value of 1392 cfs was used for Section 4.  The majority of
        flow from watershed J was assumed to enter between cross sections 4
        and 5 based on aerial photos.  The flow rate above cross section 5
        was based on the size of the remaining watershed and discharges
        computed for similar watersheds in the study area.  A value of 700 cfs
        was assumed for cross sections 101 and 102.

    This analysis is approximate because the cross sections would not meet the
    accuracy standards required by FEMA for a detailed analysis (Guidelines for
    Study Contractors (March 1993).


  By: MEF                                                    Prepared By:
  File Name:  TRIB2B.HC2                                 Alpha Engineering Grou
  September 1995                                              Phoenix, Arizona
  ==============================================================================

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0        2        0        0        0        0        0        0     1092.3

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE
```

-1	0	-1	0	0	0	-1	0	0

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	43	53	54	1	110	115

Manning's roughness values for the primary channel were estimated from field investigations. Values for the overbank are modified for some sections to account for effective conveyance in the overbank areas as noted in the input.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively. Sensitivity analyses suggested that the model is not highly sensitive to these variables.

QT	1	2000								
NC	0.060	0.060	0.050	.1	.3					
X1	1	10	650	690	0	0	0			
GR	1096	0	1094	200	1092	290	1088	520	1089	600
GR	1088	650	1086	670	1088	690	1092	710	1096	780
X1	2	13	535	570	820	820	820			
GR	1100	0	1096	60	1095	150	1096	250	1096	310
GR	1092	415	1092	435	1093	500	1092	535	1090	550
GR	1092	570	1096	640	1100	690				
X1	3	12	270	300	1350	1350	1350			
GR	1107.7	0	1104	240	1100	270	1099	280	1100	300
GR	1102.8	400	1104	520	1105	560	1104	610	1103	630
GR	1104	640	1108	680						
QT	1	700								
X1	101	9	140	160	1100	1100	1100			
GR	1116	0	1112	100	1108	140	1107	150	1108	160
GR	1110	200	1108	280	1112	340	1113	420		
X1	102	7	60	150	520	520	520			
GR	1118.4	0	1116	55	1114	60	1110	75	1114	150
GR	1116	240	1117	300						

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 1.000

1.000	6.30	1092.30	1089.80	1092.30	1092.35	.05	.00	.00	1088.00
2000.0	1428.5	518.1	53.3	1025.0	212.0	46.8	.0	.0	1088.00
.00	1.39	2.44	1.14	.060	.050	.060	.000	1086.00	276.50
.000737	0.	0.	0.	0	13	0	.00	438.75	715.25

*SECNO 2.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2.000	3.88	1093.88	1093.88	.00	1094.59	.71	1.72	.20	1092.00
2000.0	999.8	891.4	108.7	222.6	100.9	31.1	15.4	6.4	1092.00
.04	4.49	8.83	3.50	.060	.050	.060	.000	1090.00	365.55
.021705	820.	820.	820.	0	14	0	.00	237.42	602.97

*SECNO 3.000

3265 DIVIDED FLOW

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

3.000	5.32	1104.32	1103.12	.00	1104.53	.21	9.89	.05	1100.00
2000.0	182.4	737.9	1079.8	72.9	144.6	431.7	31.0	15.7	1100.00
.14	2.50	5.10	2.50	.060	.050	.060	.000	1099.00	219.33
.003636	1350.	1350.	1350.	7	8	0	.00	362.53	643.19

*SECNO 101.000

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 = .15

101.000	2.69	1109.69	1109.64	.00	1110.13	.44	5.54	.07	1108.00
700.0	45.3	314.1	340.6	14.3	43.8	107.3	41.3	22.3	1108.00
.21	3.17	7.17	3.17	.060	.050	.060	.000	1107.00	123.08
.020557	1100.	1100.	1100.	4	8	0	.00	163.79	305.37

*SECNO 102.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.16

102.000	4.27	1114.27	1112.98	.00	1114.45	.18	4.29	.03	1114.00
700.0	.0	699.2	.8	.1	205.2	1.8	43.5	23.9	1114.00
.25	.02	3.41	.44	.060	.050	.060	.000	1110.00	59.30
.004423	520.	520.	520.	5	8	0	.00	103.29	162.59

THIS RUN EXECUTED 30JAN96 06:47:28

****
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

Tributary Channel #2B -

SUMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL
	1.000	2000.00	276.50	715.25	1092.30
*	2.000	2000.00	365.55	602.97	1093.88
*	3.000	2000.00	219.33	643.19	1104.32
*	101.000	700.00	123.08	305.37	1109.69
*	102.000	700.00	59.30	162.59	1114.27

Tributary Channel #2B -

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	1.000	1092.30	.00	1092.35	438.75	1428.53	518.14	53.33	.00	.00	650.00	690.00	.00
*	2.000	1093.88	.00	1094.59	237.42	999.81	891.45	108.75	.00	.00	535.00	570.00	.00
*	3.000	1104.32	.00	1104.53	362.53	182.36	737.88	1079.77	.00	.00	270.00	300.00	.00
*	101.000	1109.69	.00	1110.13	163.79	45.29	314.11	340.60	.00	.00	140.00	160.00	.00
*	102.000	1114.27	.00	1114.45	103.29	.00	699.22	.78	.00	.00	60.00	150.00	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

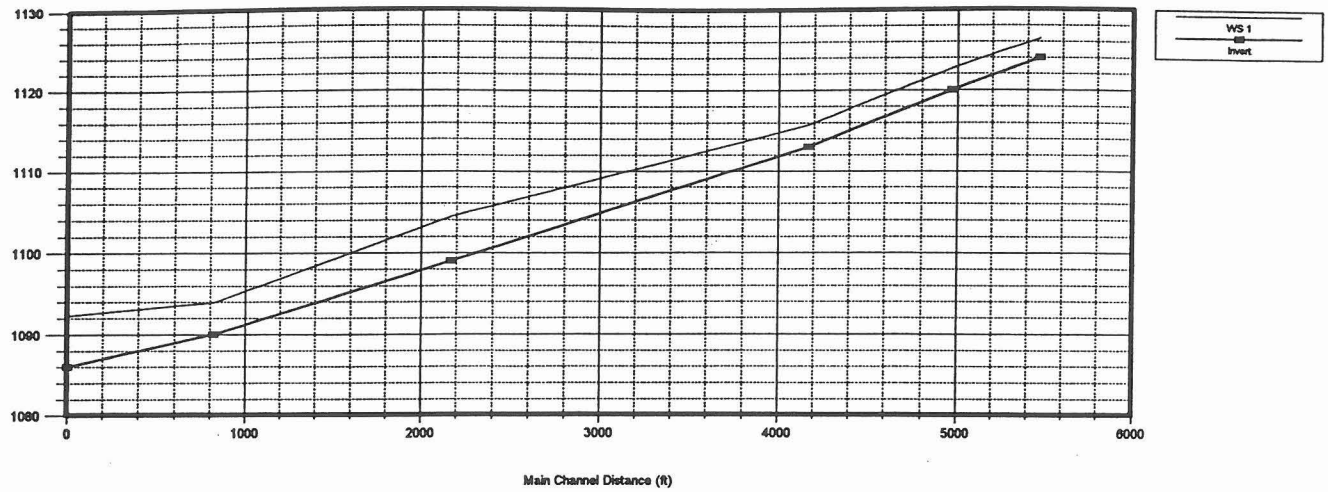
```
CAUTION SECNO=      2.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      2.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      3.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    101.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    102.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

Trib 2a



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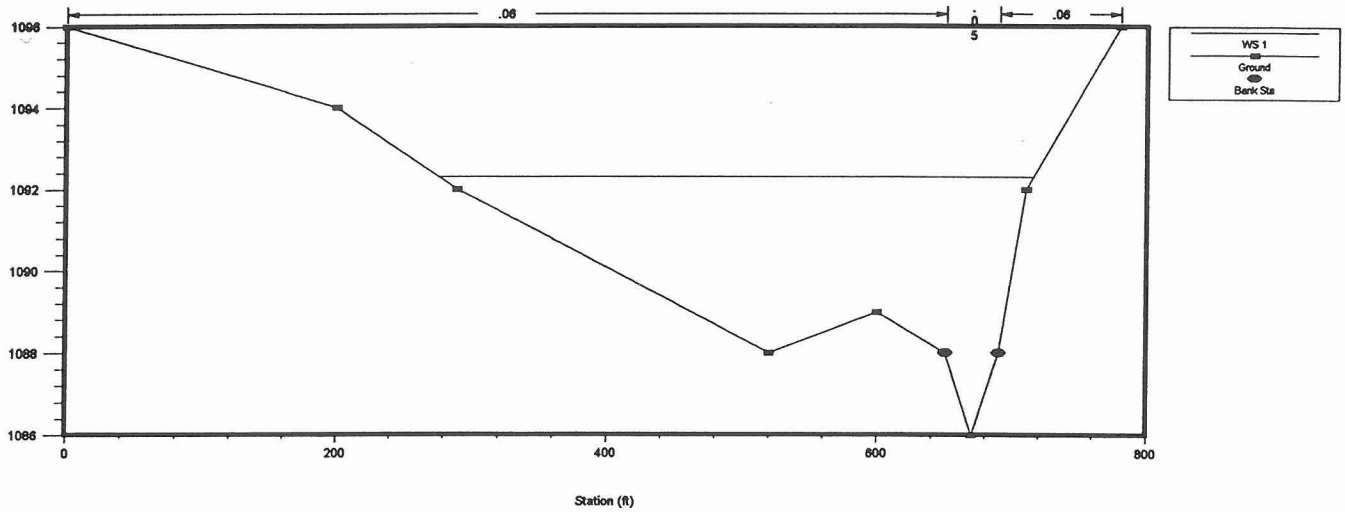

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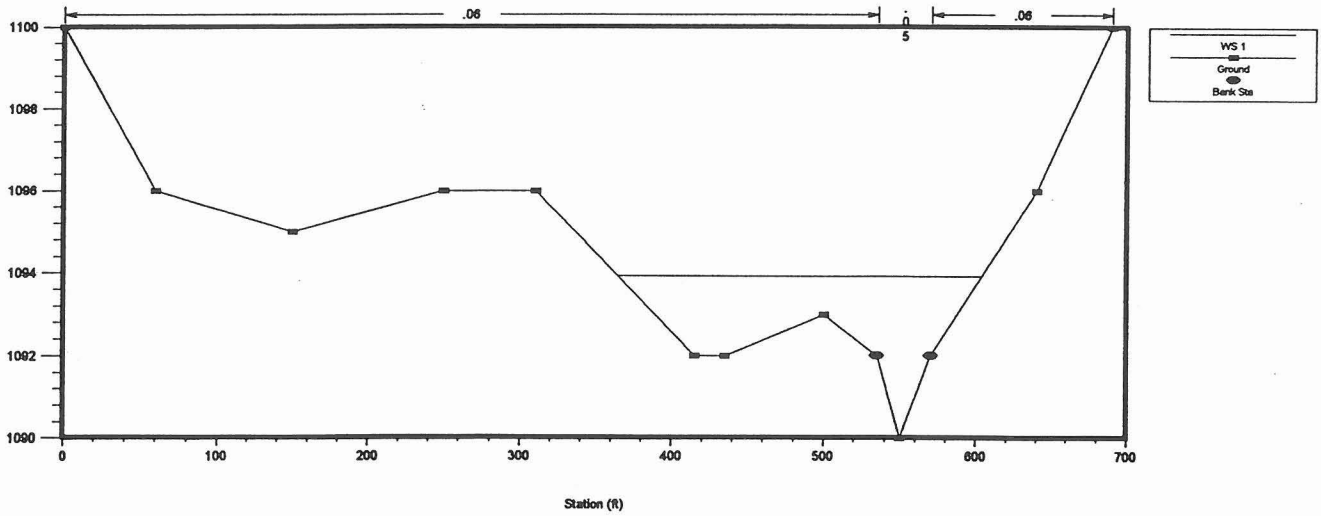
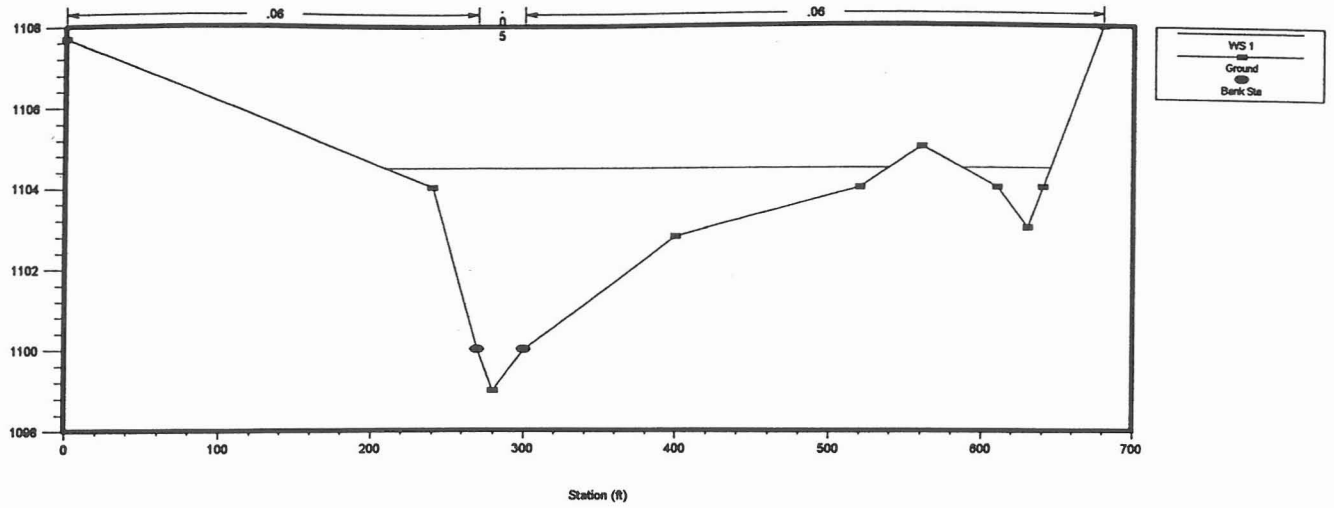
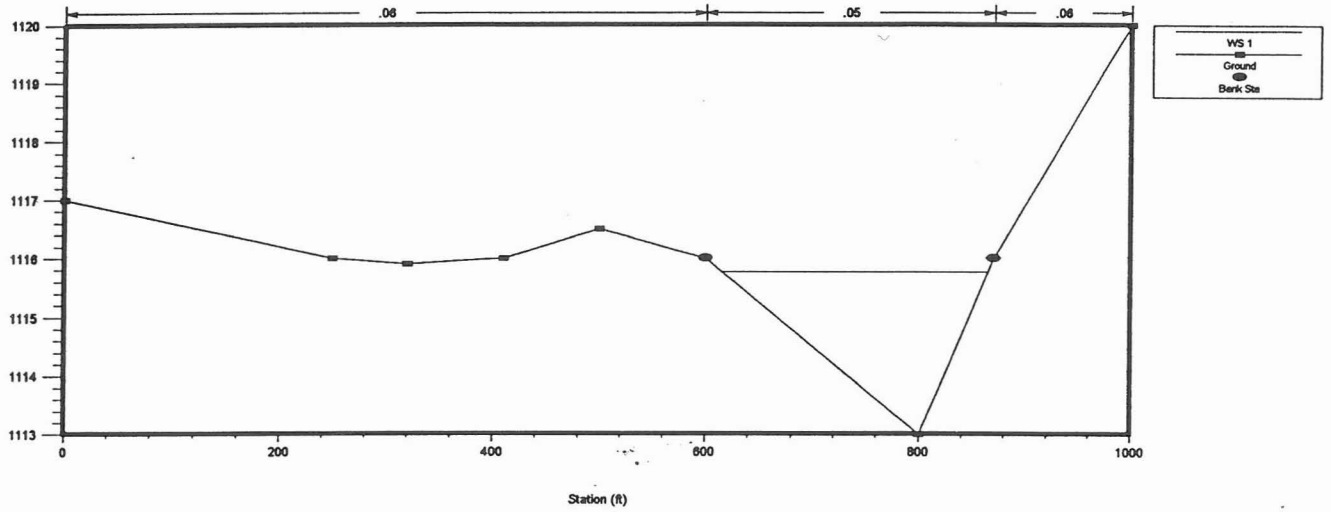
2 Riv Sta = 2



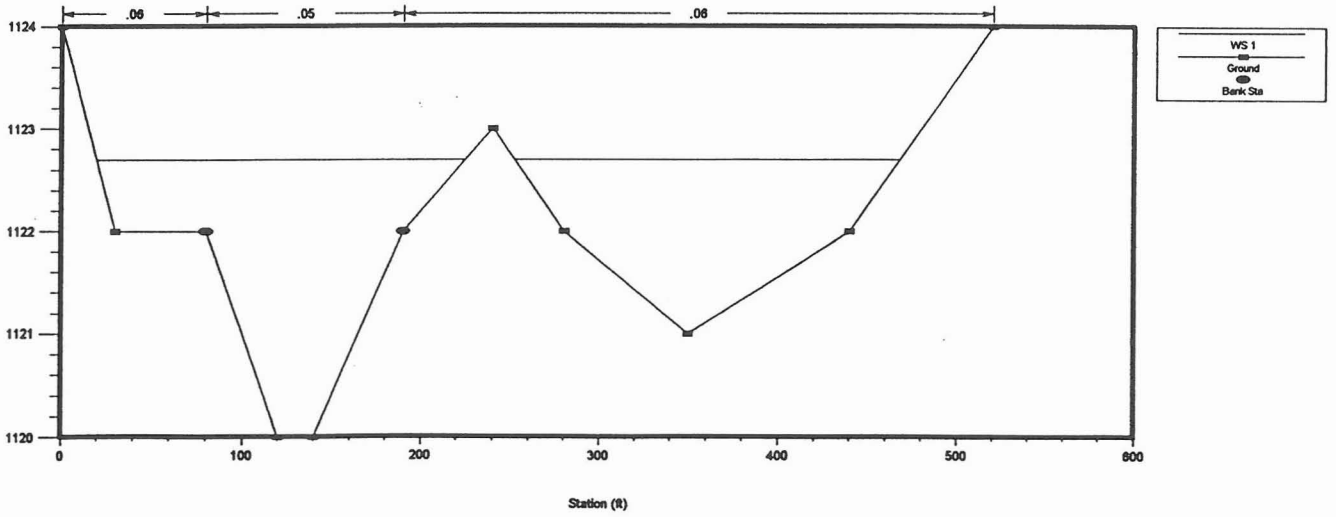
Trib 2a
3 Riv Sta = 3



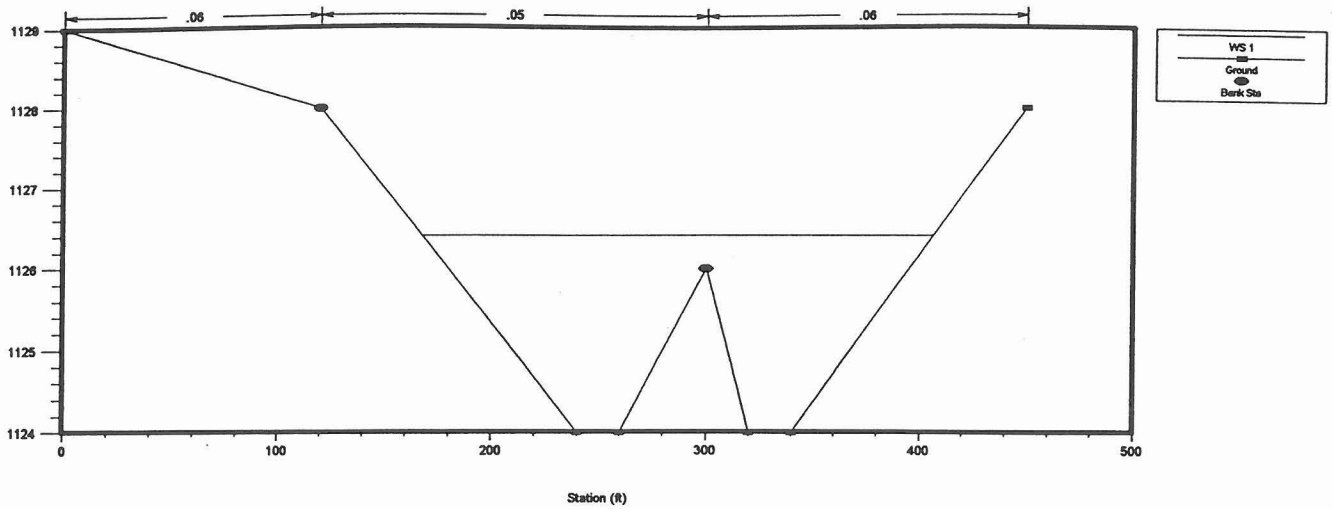
Trib 2a
4 Riv Sta = 4



Trib 2a
10 Riv Sta = 10



Trib 2a
11 Riv Sta = 11



Appendix M

HEC-2 Output File for:

Tributary #3
Approximate Analysis

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    29JAN96    TIME   18:20:20   *
*********************************************
```

```
****************************************
*  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
```

THIS RUN EXECUTED 29JAN96 18:20:20

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

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

T1 Flood Control District of Maricopa County Contract 90-64 AEG 5115.01
T2 White Tanks Wash Flood Insurance Study
T3 Tributary Channel #3 - Approximate Floodplain Analysis
T4 Water Surface Profile Model - 100-year event only.

==========

White Tanks Wash Flood Insurance Study
Flood Control District of Maricopa County, Arizona
FCD Contract 90-64

Water Surface Profile Model for Tributary #3
This model is based on:

- APPROXIMATE METHODS OF ANALYSIS
- Subcritical flow regime.
- The cross sections were interpolated from the work map (4' CI) by Aerial Mapping Company, Phoenix, AZ, based photographs taken October 1991.
- The starting WSE is from the main branch analysis.
- The discharge values are approximate and are derived from the hydrologic analysis for Watershed F4.

This analysis is approximate because the cross sections would not meet the accuracy standards required by FEMA for a detailed analysis (Guidelines for Study Contractors (March 1993).

By: M. Forest
File Name: TRIB3.HC2
September 1995

Prepared By:
Alpha Engineering Group
Phoenix, Arizona

==========

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	0	0	0	600	1185	
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1	0	-1	0	0	0	-1	0	0	

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 53 54 1 110 115

Manning's roughness values for the primary channel were estimated from field investigations. Values for the overbank are modified for some sections to

account for effective conveyance in the overbank areas as noted in the input.

The expansion and contraction coefficients used are 0.1 and 0.3 respectively. Sensitivity analyses suggested that the model is not highly sensitive to these variables.

NC	0.060	0.060	0.040	.1	.3					
X1	301	10	550	600	0	0	0			
GR	1189.1	0	1188	140	1184	230	1188	310	1190	370
GR	1188	550	1184	570	1184	600	1188	630	1189	740
X1	302	9	680	805	950	950	950			
GR	1200	0	1196	680	1191	710	1196	805	1195.5	975
GR	1196	1290	1194	1370	1196	1420	1196.2	1560		

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 301.000

3265 DIVIDED FLOW

3720 CRITICAL DEPTH ASSUMED

301.000	1.65	1185.65	1185.65	1185.00	1186.18	.53	.00	.00	1188.00
600.0	180.5	387.9	31.7	57.5	56.1	10.1	.0	.0	1184.00
.00	3.14	6.91	3.12	.060	.040	.060	.000	1184.00	192.99
.020864	0.	0.	0.	0	13	0	.00	120.48	612.34

*SECNO 302.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.05

302.000	3.52	1194.52	1193.69	.00	1194.75	.22	8.54	.03	1196.00
600.0	.0	593.5	6.5	.0	155.6	9.1	3.1	2.6	1196.00
.07	.00	3.81	.72	.000	.040	.060	.000	1191.00	688.83
.004977	950.	950.	950.	5	14	0	.00	122.50	1383.20

THIS RUN EXECUTED 29JAN96 18:20:20

****
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

Tributary Channel #3 - A

SUMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL
*	301.000	600.00	192.99	612.34	1185.65
*	302.000	600.00	688.83	1383.20	1194.52

Tributary Channel #3 - A

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	301.000	1185.65	.65	1186.18	120.48	180.46	387.86	31.68	.00	.00	550.00	600.00	.00
*	302.000	1194.52	.00	1194.75	122.50	.00	593.49	6.51	.00	.00	680.00	805.00	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=    301.000  PROFILE=  1  CRITICAL DEPTH ASSUMED

WARNING SECNO=    302.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```