Harding Lawson Associates
Infrastructure Inc.

Alpha Engineering Group

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

October 14, 1997

FLOOD CONTROL DISTRICT
OCT 1 6 1997
REMARKS

Mr. Michael Buckley, P.E., Chief
Hazard Identification Branch
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472

Subject: **Case No.: 96-09-827P**
White Tanks Wash Flood Insurance Study
Maricopa County, Arizona

Dear Mr. Buckley,

Pursuant to a fax transmittal from Massoud Rezakhani dated April 4, 1997 and subsequent telephone conversations with Mr. Rezakhani and Sheila Norlin, we have performed additional hydraulic analyses to evaluate locations where overflow was suspected. These locations were evaluated using the models presented in the study. In some instances, the HEC-2 split flow option was employed to approximate the relative magnitude of potential breakout. In other instances, the cross sections were extended. Each site is described below with the results of the investigation.

1. Location #1 - White Tanks Wash Main Branch, Between Sections 0.67 and 1.04 (Right Bank) - A split flow analysis was performed based on the contours and spot elevations shown on the work map. Based on this split flow analysis, only 11 cfs of overflow was predicted by the model between Sections 0.76 and 0.86. Based on a cross section obtained from the work map, this minor overflow results in an average depth of flow in overflow section of 0.12'. Since the overbank area will be shown as a shaded X zone, any additional analysis of this minor potential overflow is deemed to be unnecessary.

2. Location #2 - White Tanks Wash Main Branch, Between Sections 5.16 and 5.46 (Right Bank) - A split flow analysis was performed based on the contours and spot elevations shown on the work map. Based on this split flow analysis, approximately 74 cfs overflows the right bank between Sections 5.23 and 5.46. The majority of overflow predicted by the model is between Sections 5.29 and 5.46. Since the potential overflow predicted by the split flow analysis is slightly greater than 1% of the flow in White Tanks Wash, extending the cross sections to include this area was considered to be inappropriate. Extending the sections would result in a significant percentage of the flow in this extreme overbank area and would result in a lower water surface elevation in the main branch. The reduced depths in the main branch would result in a water surface elevation that is lower than the right bank and would suggest that the overflow does not take place. Because of the minor overflow, a separate profile for the overbank area was considered based on the overflow rate predicted by the split flow model. The cross section geometry for Section 5.23 was based on digitized data obtained as a part of this study. Cross Section 5.23 was approximated from the topographic

work map. Based on these analyses, the average depth of flow associated with this overflow is less than 1.0'. Since this area will be mapped as a shaded X zone, mapping of this flood zone is probably not necessary. However, it was deemed to be appropriate to map this area as an approximate A zone. Attached is copy of the work map with the proposed revision. No changes to the water surface elevations in the main branch and floodway locations are recommended since the potential overflow is less than 1% of the total flow.

3. Location #3 - White Tanks Wash Main Branch, Between Sections 7.20 and 7.40 (Right Bank) - At this location, the potential for breakout was confirmed. Sections 7.20 and 7.30 were extended to the right based on the photogrammetric data obtained for the study. A relatively high roughness value was used (0.15) for the extreme right overbank since this area is subject to overflow and is not directly connected. The use of a lower roughness value would result in HEC-2 distributing an unreasonable percentage of the flow in the right overbank. The resulting water surface elevations are within 0.2' of the original elevations. It is recommended that this extreme right overbank area be mapped as an approximate Zone A based on these results.

4. Location #4 - White Tanks Wash Main Branch, Between Sections 6.75 and 6.84 (Right Bank) - At this location, the channel banks are above the water surface elevation. Based upon telephone conversations with Mr. Rezakhani and Sheila Norlin, the potential breakout at this location is deemed minimal.

5. Location #5 - White Tanks Wash Tributary #1, Between Sections 0.00 and 0.26 (Left Bank) - At this location the White Tanks Wash Main Branch and Tributary #1 merge. As explained in the report, the Main Branch analysis is based on the right side of the section and the Tributary #1 analysis is based on the left portion of the section since the time to peak for each of these branches are similar, the section was divided and the adjoining tributary was assumed to be ineffective for conveyance allowing each to be modeled separately. The key concern with respect to the left side flood limit is at Section 0.16. At this location, the flood limit is based on the location predicted by the Tributary #1 analysis. However, the main branch water surface is higher than the Tributary #1 water surface. The flood limit for the higher water surface would extend farther left at Sections 0.16 and 0.07 than shown. Since the higher water surface is based on the White Tanks Wash Main Branch analysis, not the Tributary #1 analysis, no change to the HEC-2 model is proposed and the sections do not warrant extension since the left portion of the section would only be used by the Tributary #1 analysis which suggest that the flow is contained for Tributary #1 discharges. Therefore, a revised flood limit is proposed based on the Main Branch water surface elevations and the work map topographic mapping. Attached is a revised floodplain map. No other changes are recommended to this segment.

6. Location #5 - White Tanks Wash Tributary #1, At Section 2.01 (Right Bank) - At this location, the flood limit extended beyond the right end of the cross section into a low area associated with a tributary drainage. Since this is an isolated low area associated with a joining tributary, much of this low area would not be effective for conveyance. Therefore, much of the extended section was modeled with reduced effectiveness by using a high roughness value (0.2). This cross section was extended in both the method 1 floodway and water surface profile models. The resulting output file is attached. This modification impacted the profile by only 0.2' and did not cause a significant difference in the floodway elevations. The revised floodplain and water surface elevations are shown on the attached map. The profile will also require a minor modification to reflect these changes as well.

It is our understanding that the remaining locations in question have been resolved during previous telephone conversations. We trust that this information should be sufficient to address your technical comments. Should you have any questions regarding this submittal, please feel free to call Mark Forest at (702) 332-3737 or Bruce Krater at (702) 329-6123.

Sincerely,

HARDING LAWSON ASSOCIATES

Mark E. Forest, P.E.
Associate Engineer

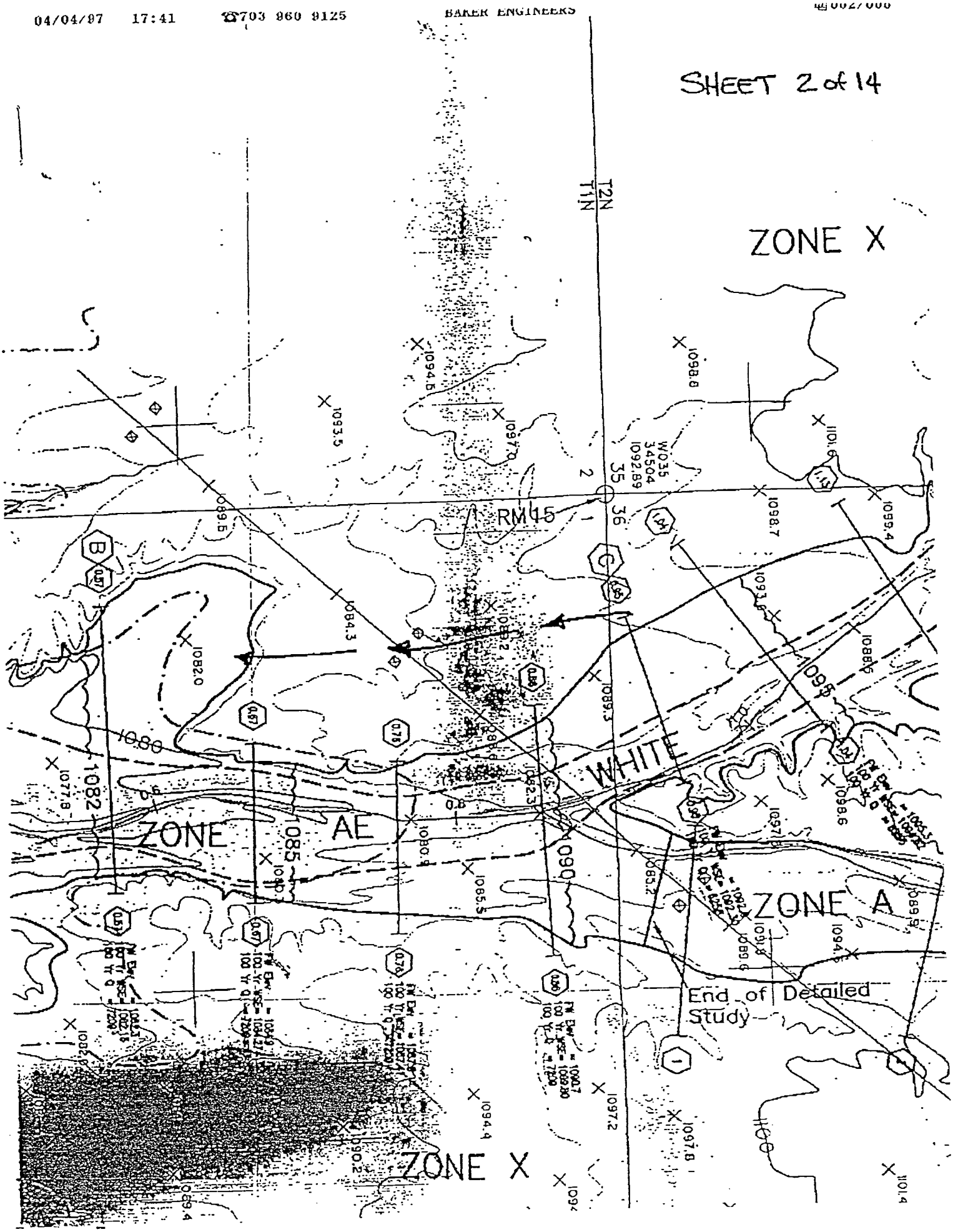
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO.
23129
MARK E.
FOREST
Date Signed 10/14/97
ARIZONA, U.S.A.

Bruce A. Krater
Consulting Principal

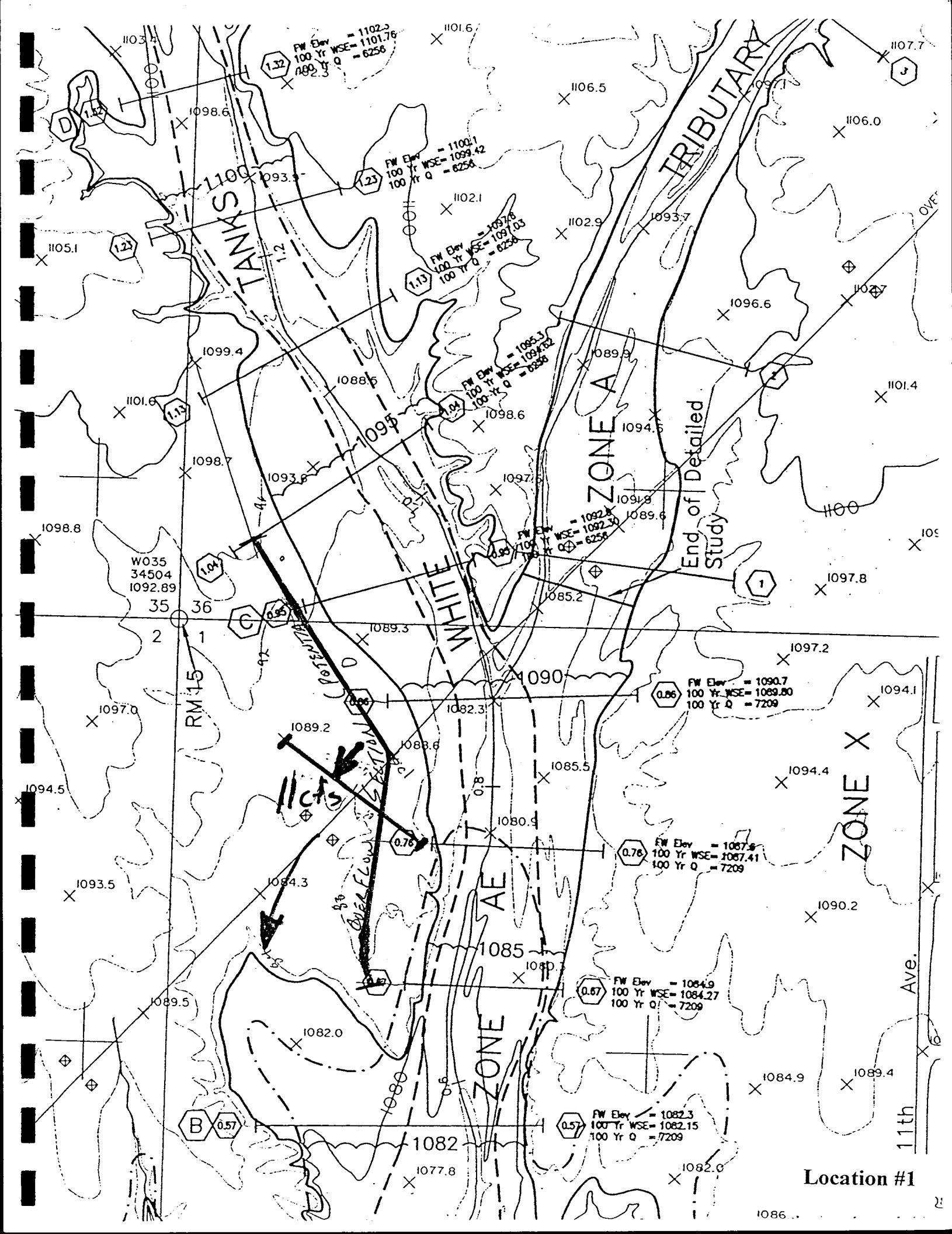
Attachments

Location #1

SHEET 2 of 14



Location #1


TANKS
TRIBUTARY
WHITE
ZONE A
ZONE AE
ZONE X
End of Detailed Study
FW Elev = 1102.3
100 Yr WSE= 1101.76
100 Yr Q = 6256
FW Elev = 1100.1
100 Yr WSE= 1099.42
100 Yr Q = 6256
FW Elev = 1097.8
100 Yr WSE= 1097.03
100 Yr Q = 6256
FW Elev = 1095.3
100 Yr WSE= 1094.62
100 Yr Q = 6256
FW Elev = 1092.8
100 Yr WSE= 1092.30
100 Yr Q = 6256
FW Elev = 1090.7
100 Yr WSE= 1089.80
100 Yr Q = 7209
FW Elev = 1087.8
100 Yr WSE= 1087.41
100 Yr Q = 7209
FW Elev = 1084.9
100 Yr WSE= 1084.27
100 Yr Q = 7209
FW Elev = 1082.3
100 Yr WSE= 1082.15
100 Yr Q = 7209
W035
34504
1092.89
35
36
2
1
RM 15
11cfs
Overflow
11th Ave.
1100
1095
1090
1085
1082

Location #1

LOCATION #1

Section 0.76 Right Overbank (overflow)
Worksheet for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 0.76 Right
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data		
Channel Slope	0.006000	ft/ft
Water Surface Elevation	1,088.25	ft

Elevation range: 1,088.00 ft to 1,089.20 ft.

Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
0.00	1,088.50	0.00	430.00	0.060
130.00	1,088.00			
180.00	1,088.20			
240.00	1,088.10			
430.00	1,089.20			

Results		
Wtd. Mannings Coefficient	0.060	
Discharge	10.83	cfs
Flow Area	23.57	ft²
Wetted Perimeter	200.91	ft
Top Width	200.91	ft
Height	0.25	ft
Critical Depth	1,088.16	ft
Critical Slope	0.133087	ft/ft
Velocity	0.46	ft/s
Velocity Head	0.33e-2	ft
Specific Energy	1,088.25	ft
Froude Number	0.24	
Flow is subcritical.		

AVERAGE DEPTH =

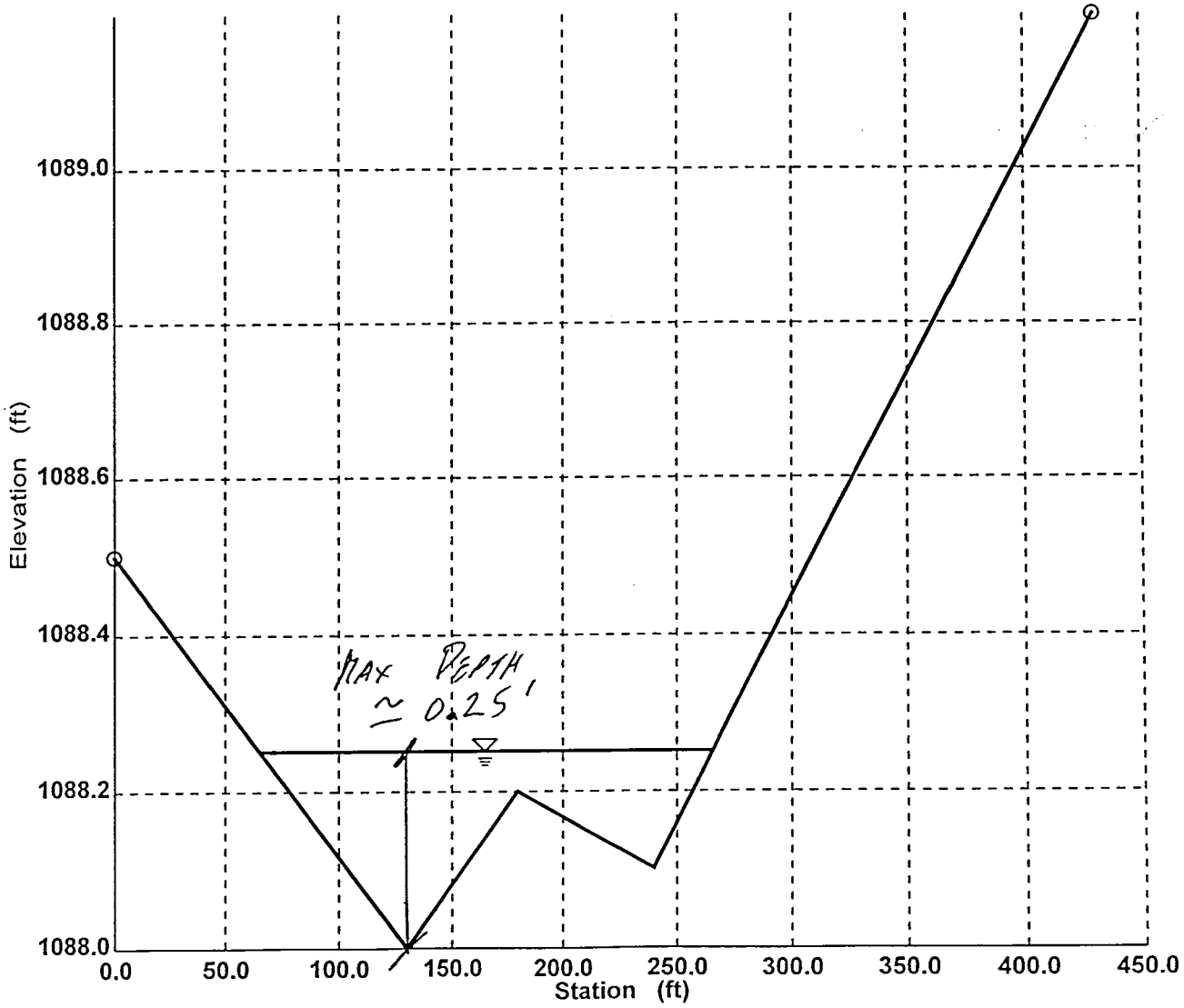
$$\frac{23.57 \text{ ft}^2}{200.91 \text{ ft}} = 0.12'$$

MAX DEPTH = 0.25'

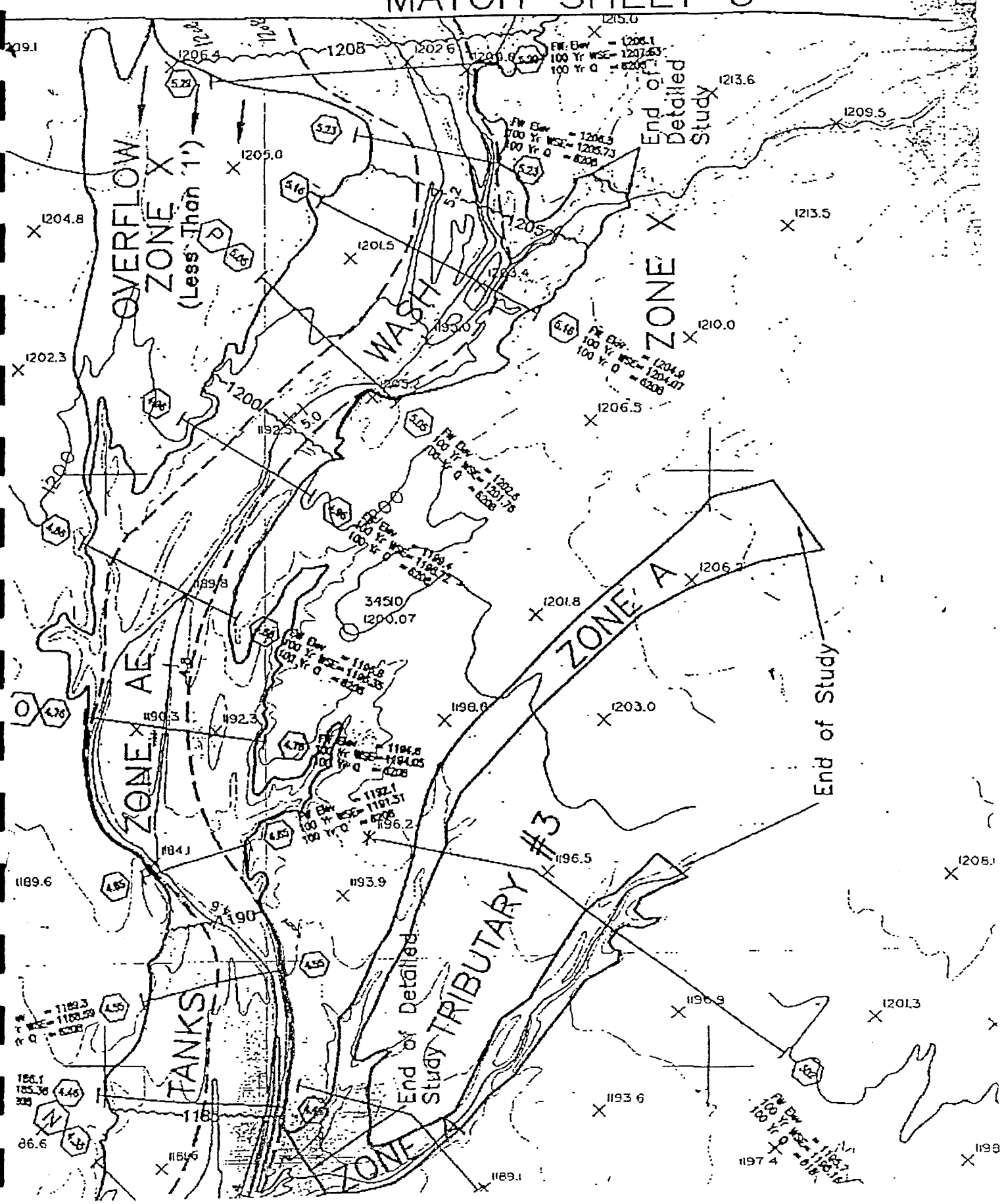
Overflow Section 0.76 (Right Bank)
Cross Section for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 0.76 Right
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

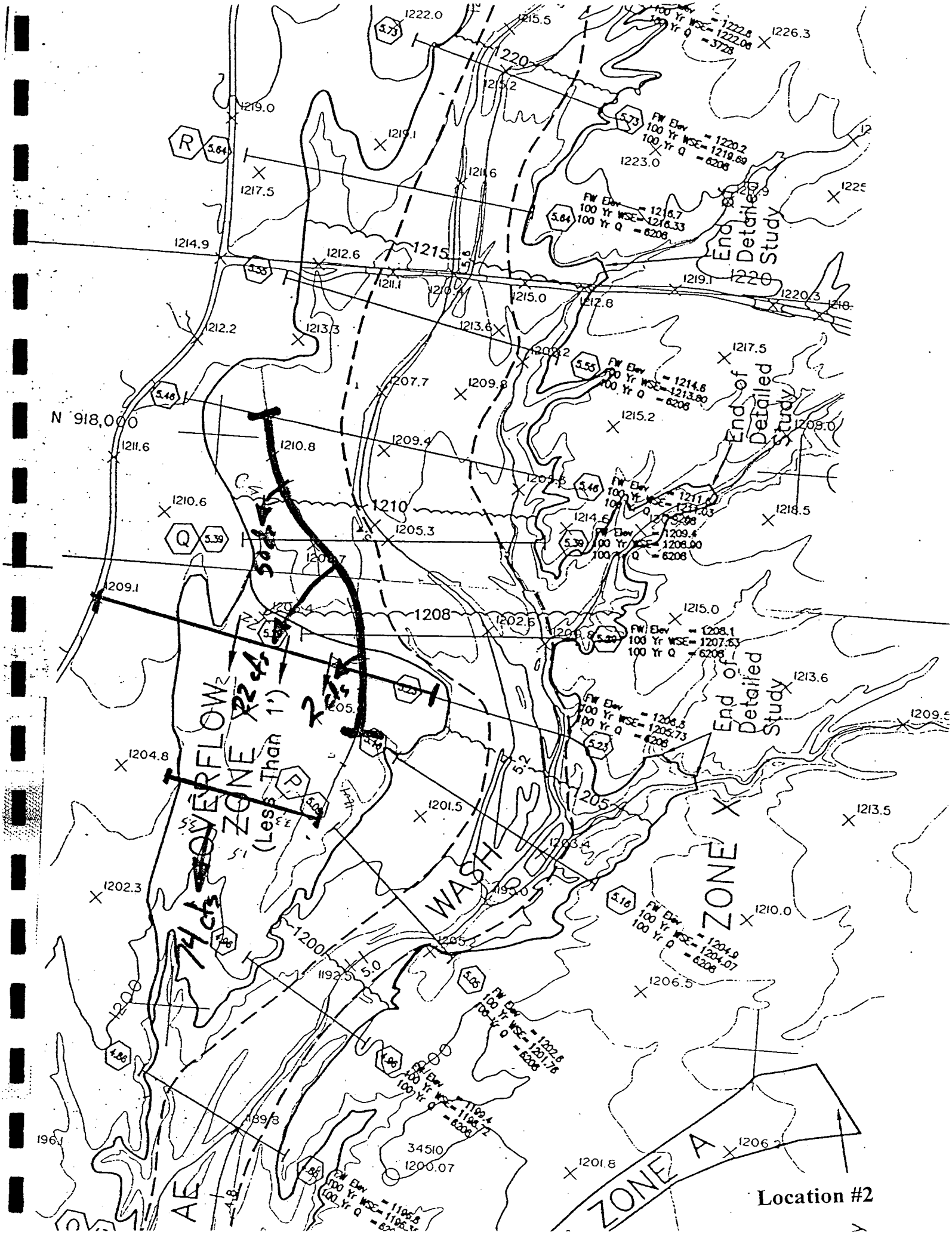
Section Data		
Wtd. Mannings Coefficient	0.060	
Channel Slope	0.006000	ft/ft
Water Surface Elevation	1,088.25	ft
Discharge	10.83	cfs



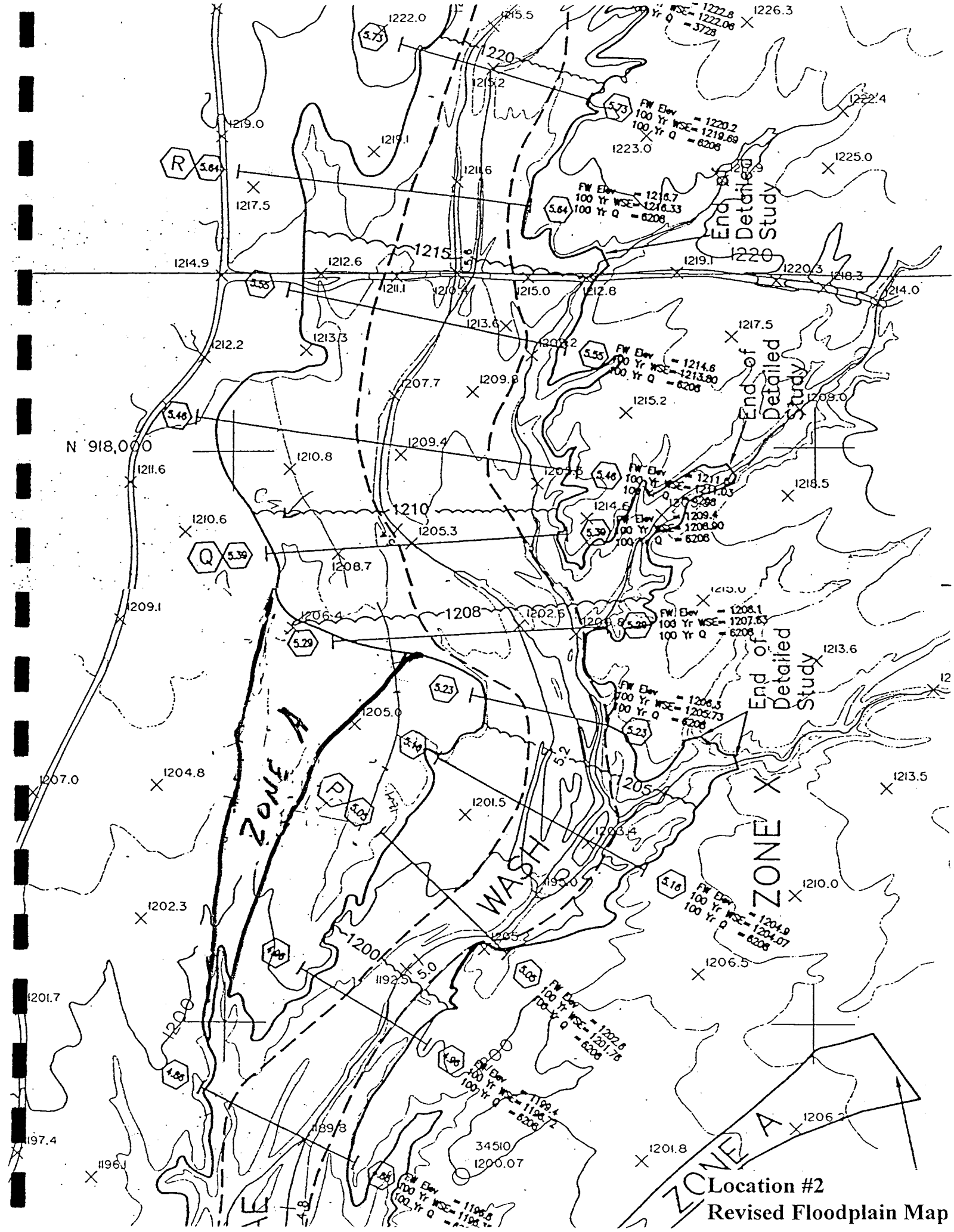
Location #2


MATCH SHEET 5
OVERFLOW ZONE
(Less Than 1')
WASH
ZONE AE
ZONE A
ZONE
TANKS
TRIBUTARY #3
End of Detailed Study
End of Study
End of Detailed Study

Location #2


N 918,000
OVERFLOW ZONE
(Less Than 1')
WASH
ZONE A
End of Detailed Study
End of Detailed Study
End of Detailed Study
FW Elev = 1222.8
100 Yr WSE = 1222.06
100 Yr Q = 3728
FW Elev = 1220.2
100 Yr WSE = 1219.89
100 Yr Q = 6208
FW Elev = 1216.7
100 Yr WSE = 1216.33
100 Yr Q = 6208
FW Elev = 1214.6
100 Yr WSE = 1213.80
100 Yr Q = 6208
FW Elev = 1211.60
100 Yr WSE = 1211.03
100 Yr Q = 6208
FW Elev = 1209.4
100 Yr WSE = 1208.00
100 Yr Q = 6208
FW Elev = 1208.1
100 Yr WSE = 1207.63
100 Yr Q = 6208
FW Elev = 1206.8
100 Yr WSE = 1205.73
100 Yr Q = 6208
FW Elev = 1204.9
100 Yr WSE = 1204.07
100 Yr Q = 6208
FW Elev = 1202.6
100 Yr WSE = 1201.76
100 Yr Q = 6208
FW Elev = 1199.4
100 Yr WSE = 1198.72
100 Yr Q = 6208
FW Elev = 1196.8
100 Yr WSE = 1196.1
100 Yr Q = 6208
34510
1200.07

Location #2



Location #2
Revised Floodplain Map

Section 5.05, ROB (Overflow Section)
Worksheet for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.05 Right Overbank
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data		
Channel Slope	0.007000	ft/ft
Water Surface Elevation	1,202.15	ft

Elevation range: 1,201.00 ft to 1,205.00 ft.

Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
0.00	1,205.00	0.00	510.00	0.060
50.00	1,204.00			
110.00	1,203.30			
190.00	1,204.00			
270.00	1,201.50			
320.00	1,203.50			
400.00	1,201.00			
510.00	1,204.00			

Results		
Wtd. Mannings Coefficient	0.060	
Discharge	74.48	cfs
Flow Area	57.45	ft²
Wetted Perimeter	116.07	ft
Top Width	116.02	ft
Height	1.15	ft
Critical Depth	1,201.78	ft
Critical Slope	0.075894	ft/ft
Velocity	1.30	ft/s
Velocity Head	0.03	ft
Specific Energy	1,202.18	ft
Froude Number	0.32	
Flow is subcritical.		
Flow is divided.		

AVE DEPTH = $\frac{57.45 \text{ ft}^2}{116.02 \text{ ft}}$

= 0.50'

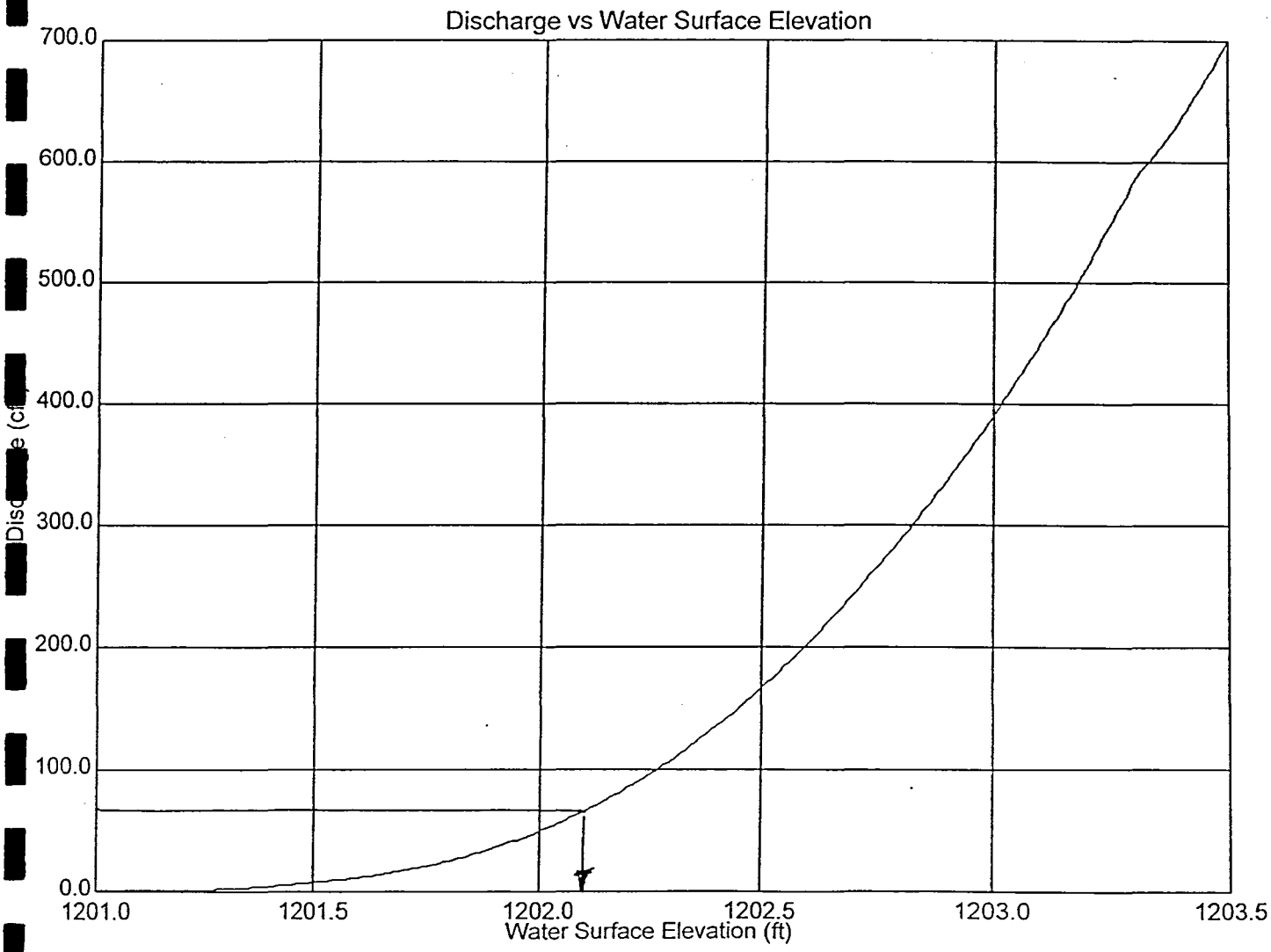
MAX DEPTH = 1.15'

Section 5.05 ROB Overflow Section
Plotted Curves for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.05 Right Overbank
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Constant Data	
Channel Slope	0.007000 ft/ft

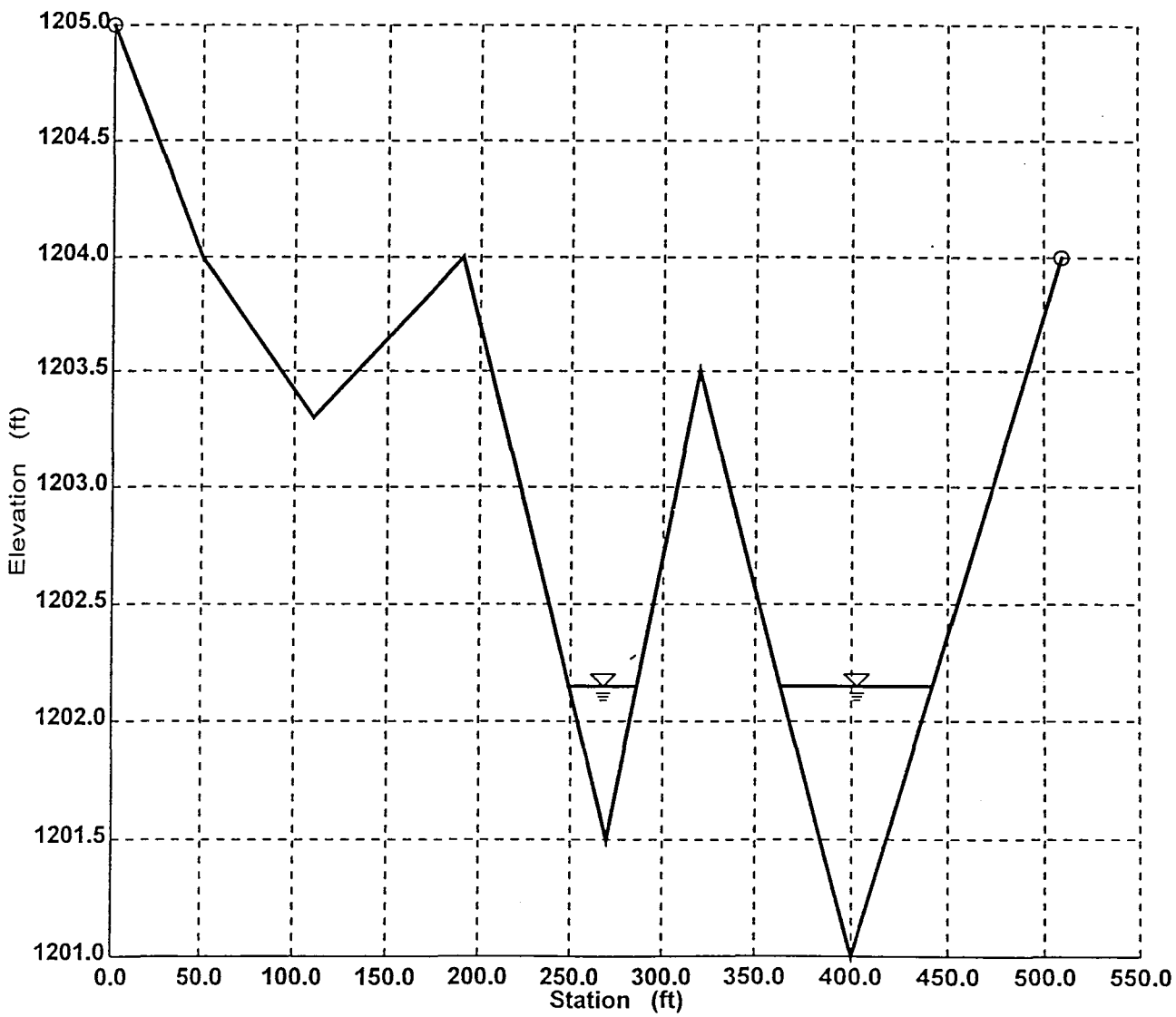
Input Data			
	Minimum	Maximum	Increment
Water Surface Elevation	1,201.00	1,203.50	0.01 ft



Section 5.05 ROB (Overflow Section)
Cross Section for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.05 Right Overbank
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data		
Wtd. Mannings Coefficient	0.060	
Channel Slope	0.007000	ft/ft
Water Surface Elevation	1,202.15	ft
Discharge	74.48	cfs



Section 5.23 ROB (Overflow Section)
Worksheet for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.23 ROB (Overflow Section)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data		
Channel Slope	0.007000	ft/ft
Water Surface Elevation	1,207.55	ft

Elevation range: 1,206.70 ft to 1,208.20 ft.

Station (ft)	Elevation (ft)	Start Station	End Station	Roughness
10,437.40	1,208.10	10,437.40	11,086.60	0.060
10,547.70	1,207.60			
10,665.60	1,207.30			
10,798.30	1,208.20			
10,907.80	1,208.00			
10,959.40	1,206.70			
10,990.80	1,206.70			
11,037.00	1,207.50			
11,086.60	1,208.00			

Results		
Wtd. Mannings Coefficient	0.060	
Discharge	75.38	cfs
Flow Area	78.83	ft²
Wetted Perimeter	251.43	ft
Top Width	251.41	ft
Height	0.85	ft
Critical Depth	1,207.15	ft
Critical Slope	0.077026	ft/ft
Velocity	0.96	ft/s
Velocity Head	0.01	ft
Specific Energy	1,207.56	ft
Froude Number	0.30	
Flow is subcritical.		
Flow is divided.		

AVE DEPTH = $\frac{78.83 \text{ ft}^2}{251.41 \text{ ft}}$

= 0.31'

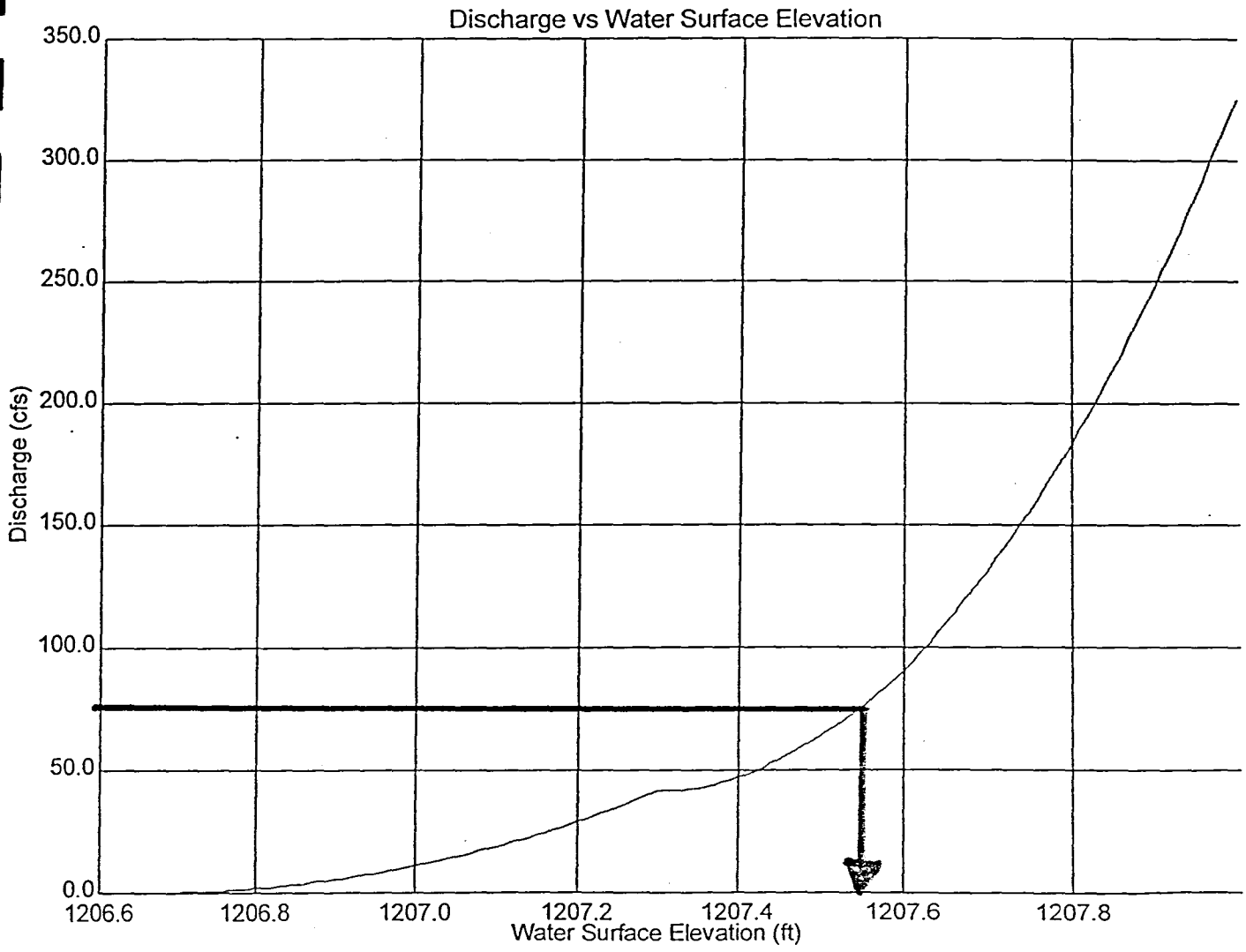
MAX DEPTH = 0.85'

Section 5.23 ROB (Overflow Section)
Plotted Curves for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.23 ROB (Overflow Section)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Constant Data	
Channel Slope	0.007000 ft/ft

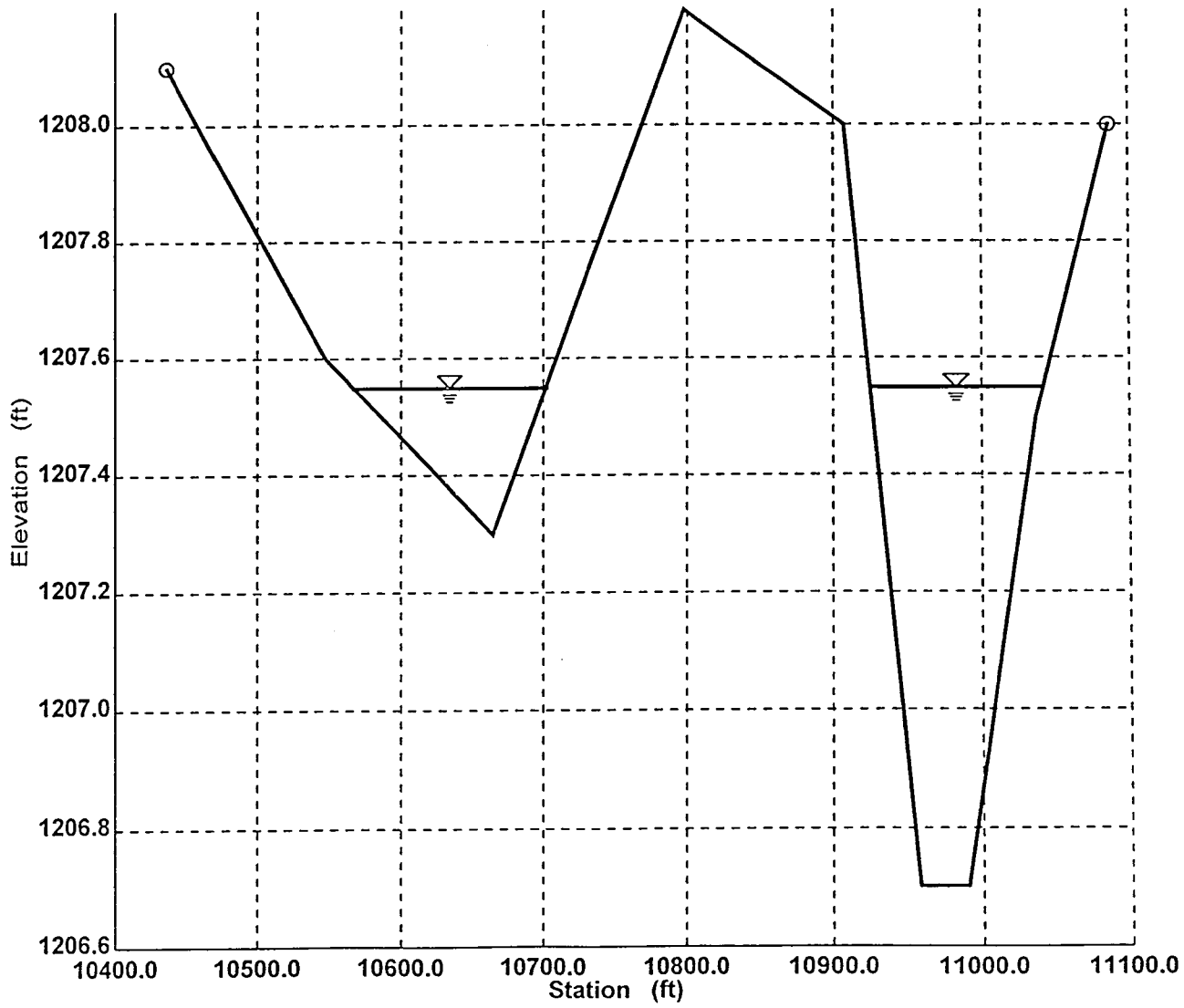
Input Data			
	Minimum	Maximum	Increment
Water Surface Elevation	1,206.70	1,208.00	0.01 ft



Section 5.23 ROB (Overflow Section)
Cross Section for Irregular Channel

Project Description	
Project File	g:\17777\wtwover.fm2
Worksheet	Section 5.23 ROB (Overflow Section)
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

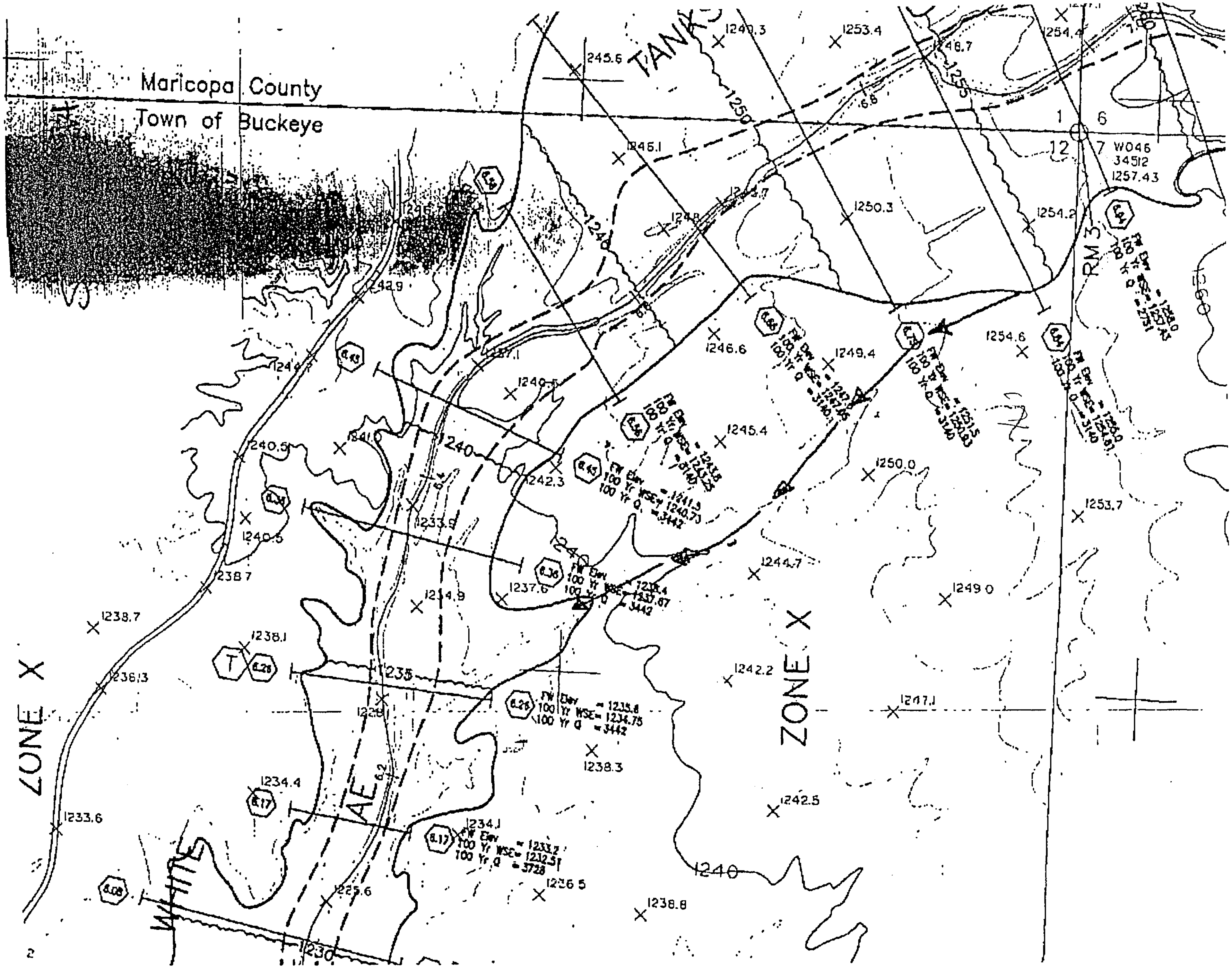
Section Data		
Wtd. Mannings Coefficient	0.060	
Channel Slope	0.007000	ft/ft
Water Surface Elevation	1,207.55	ft
Discharge	75.38	cfs



Location #3

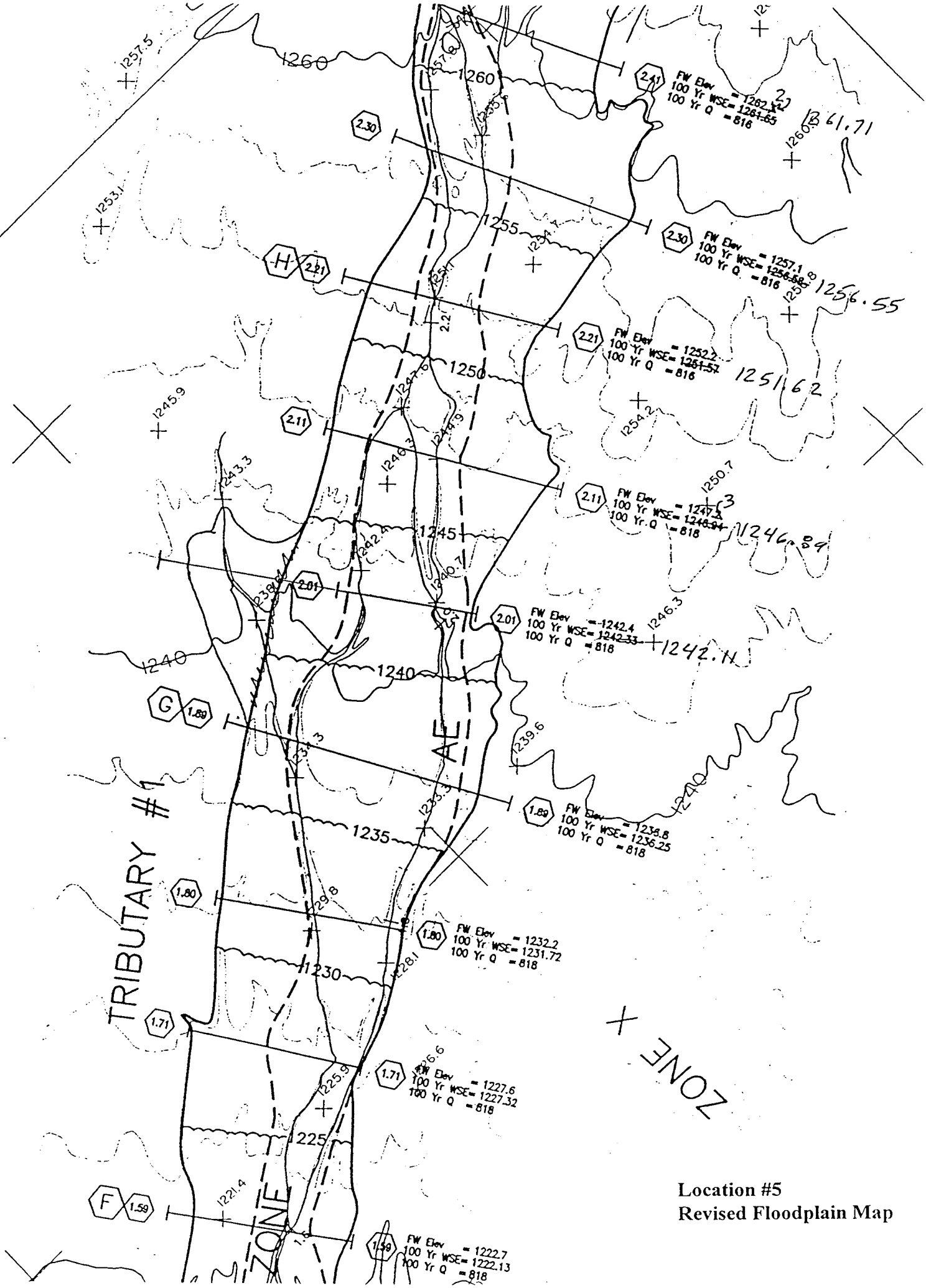
Location #4

Location #4


Maricopa County
Town of Buckeye
TANKS
ZONE X
ZONE X
ZONE AE
WHITE
RM 3
W046
34512
1257.43
1 6
12 7
FW Elev = 1241.9
100 Yr WSE= 1240.70
100 Yr Q = 3442
FW Elev = 1238.4
100 Yr WSE= 1237.87
100 Yr Q = 3442
FW Elev = 1235.8
100 Yr WSE= 1234.75
100 Yr Q = 3442
FW Elev = 1233.2
100 Yr WSE= 1232.31
100 Yr Q = 3728
1240
1235
1230
1250
1255
1253.4
1254.4
1250.3
1254.2
1246.6
1249.4
1254.6
1245.4
1250.0
1253.7
1244.7
1249.0
1242.2
1247.1
1238.3
1242.5
1238.8
1236.5
1234.1
1234.4
1225.6
1228.1
1234.9
1237.6
1233.9
1242.3
1241.0
1240.5
1240.5
1238.7
1238.7
1238.1
1236.3
1233.6
1242.9
1246.1
1245.6
1240.3
6.83
6.66
6.56
6.45
6.36
6.26
6.17
6.08
6.75
6.84
6.94

Location #5

White Tanks Wash
Tributary #1
Revised Work Map



Location #5
Revised Floodplain Map

HEC-2 Split Flow Analysis

White Tanks Wash
Main Branch
Split Flow At Locations #1 and #2
Extended Sections at Location #3

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
                                          *
  Version   4.6.2;  May 1991              *
*                                         *
  RUN DATE    13OCT97    TIME   04:59:32  *
*******************************************
```

```
****************************************
*  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 13OCT97 04:59:32

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

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


SPLIT FLOW BEING PERFORMED


SF      Split Flow Analysis for Main Branch of White Tanks Wash


C       Water surface elevation will be used for estimation of weir overflow
P     0       1              -1       0

TW    Right Bank
WS    3    0.67    0.76    0.57     2.7
WC    0    1087      90    1088     530  1088.5

TW    Right Bank
WS    3    0.76    0.86    0.57     2.7
WC    0  1088.5     300  1088.6     530    1090

TW    Right Bank
WS    3    0.86    0.95    0.57     2.7
WC    0    1090     320    1092     400  1092.4

TW    Right Bank
WS    3    0.95    1.04    0.57     2.7
WC    0  1092.4     240    1096     290  1096.4

TW    Right Bank
WS    2    5.16    5.23    4.86     2.7
WC    0    1205     200    1206

TW    Right Bank
WS    2    5.23    5.29    4.86     2.7
WC    0    1206     150  1207.5

TW    Right Bank
WS    3    5.29    5.39    4.86     2.7
WC    0  1207.5     100    1208     350  1208.7

TW    Right Bank
WS    3    5.39    5.46    4.86     2.7
WC    0  1208.7     320  1210.3     450  1211.3
```

```
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
File Name: MAIN.HC2
January 1996

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	0.0	7209.0	1081.0	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1	0	-1							15

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	43	53	54	1	3	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
R    1070.2   10054.5    1071.7   10097.7    1072.3   10109.6    1069.3   10122.6    1069.9   10149.5
R    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
R    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

1       0.38      34    9957.4   10036.8     560.0     520.0     510.0
R    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
R    1075.9    9661.1    1076.0    9713.4    1076.9    9761.1    1076.8    9822.6    1076.0    9863.8
R    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
R    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
1       0.48      45    9945.1   10060.6     480.0     520.0     490.0
R    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
R    1082.1    9668.4    1080.7    9714.7    1078.4    9760.4    1078.9    9802.3    1079.3    9837.5
R    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
R    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.

```
H       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
R   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
R   1077.7  10056.0    1079.5  10084.3    1079.2  10118.4    1079.4  10181.6    1079.6  10248.3
R   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

C     .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
R   1079.8   9705.5    1082.1   9722.6    1081.3   9744.9    1081.4   9768.4    1081.6   9805.3
R   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
R   1077.8  10000.0    1077.8  10010.1    1080.9  10016.8    1081.5  10041.6    1081.5  10078.5
R   1081.8  10108.1    1085.5  10130.8    1087.1  10183.7

NC    .06       .06      .045
1     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
R   1085.6   9917.8    1080.8   9932.1    1081.9   9940.4    1082.9   9960.7    1083.4   9989.1
R   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.

```
H       4       .2    9824.3      .06    9925.1      .045   10055.9      .06   10381.2
1     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
R   1089.4   9670.3    1087.7   9685.0    1087.2   9708.8    1087.4   9737.2    1087.6   9781.5
R   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
R   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.

T	2	6256.0	6256.0							
H	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
R	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
R	1092.4	10515.7	1093.4	10559.9						
NC	.06	.06	.045							
1	1.04	25	10020.2	10116.9	474.0	440.0	474.0			
R	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
R	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	
1	1.13	25	9972.7	10044.4	484.0	500.0	490.0			
R	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
R	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
C	.06	.06	.045							
1	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
R	1097.1	9903.1	1095.1	9946.3	1094.0	9971.9	1093.6	10000.0	1094.1	10021.8
R	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	
1	3.04	34	9972.6	10045.6	610.0	625.0	625.0			
R	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
R	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
R	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.

H	5	.9	9875.1	.06	9981.2	.045	10065.8	.06	10285.4	.9
NH	10616									
1	3.14	36	9981.2	10065.8	510.0	340.0	495.0			
R	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
R	1143.4	9987.0	1143.3	10000.0	1143.3	10008.6	1144.3	10028.3	1144.2	10043.4
R	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
R	1146.4	10495.0	1144.7	10503.4	1145.7	10520.9	1147.9	10542.5	1148.8	10579.1
R	1150.4	10616								
C	.06	.06	.045							
1	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
R	1149.1	9948.8	1148.1	9974.1	1146.2	9988.2	1146.4	10000.0	1147.5	10010.2
R	1147.2	10045.9	1147.1	10067.3	1147.2	10076.9	1151.9	10101.1	1152.8	10128.1
1	3.32	24	9975.1	10053.0	460.0	465.0	487.0			
R	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
R	1152.4	10152.9	1152.3	10201.3	1153.4	10259.5	1152.6	10315.2	1151.6	10357.6
R	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

NT        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
```

```
C      .06      .06     .045
1     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
R   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

1     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
R   1193.4   9969.6   1192.8   9996.0    1192.4   10000.0    1192.8   10012.7    1195.3   10026.7
R   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

1     5.05       14   9986.0  10041.5     480.0     525.0     515.0
R   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
R   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
R   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
R   1201.4   9956.5   1199.9   9982.6    1199.0    9999.3    1198.7   10000.0    1199.8   10017.1
R   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

1     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
R   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
H    11229
1     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
R   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
R   1204.9  10045.9   1204.9  10076.1    1205.1   10157.1    1205.0   10240.5    1204.7   10273.8
R   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

```
C      .06       .06      .045
1     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
R   1217.9    9867.2    1217.4    9895.8    1215.5    9906.0    1213.8    9915.9    1216.6    9938.0
R   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

T        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
R   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

1     5.91        15    9977.0   10031.3     485.0     465.0     500.0
R   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
R   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.

```
H        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
R   1225.6    9982.8    1224.1    9996.6    1221.9   10000.0    1222.9   10014.1    1223.3   10024.0
R   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
1     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
R   1226.8   10060.9    1228.3   10115.7    1230.2   10181.9    1230.5   10265.0    1230.4   10349.1
R   1229.1   10420.4    1230.5   10498.8    1230.7   10599.5
```

Section 6.17

Flow added from area E3G

```
C      .06       .06      .045
1     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
R    1225.8    9992.6    1225.8   10000.0    1227.0   10019.6    1229.4   10040.5    1230.4   10074.4
R    1229.4   10187.4    1232.6   10254.8    1232.8   10319.8

T        2    3442.0    3442.0
1     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
R    1232.2    9966.7    1231.6    9991.5    1229.7   10000.0    1231.0   10020.7    1233.4   10036.1
R    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.

```
H        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
R    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
R    1236.6   10323.7    1238.0   10374.2
```

Section 6.45

Flow added from area E3A

```
NC     .06       .06      .045
1     6.45        12      9982.   10021.6     445.0     485.0     480.0
R    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
R    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								
RT	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

NH      4      .06      9974      .045   10033.6       .06   10126.2       .15   10623.1
X1    7.20       24    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    1267.9   10205.1    1266.4   10283.8    1265.6   10356.3    1264.3   10381.6
GR  1265.9  10410.1    1266.8   10480.3    1268.2   10578.3    1268.6   10623.1

NH      4      .06    9976.4      .045   10045.6       .06   10310.1       .15   10576.2
X1    7.30       20    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    1270.6   10342.2    1269.4   10364.0
GR  1271.8  10400.1    1269.7     10434    1269.3   10450.2    1272.1   10510.6    1273.0   10576.2

NC     .06      .06      .045
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
```

```
T      2    2125.0    2125.0
1   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
R   1286.1    9863.8   1285.6    9871.6    1286.3    9908.5    1286.7    9949.9    1286.4    9979.6
R   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

1   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
R   1289.7   10000.0   1291.7   10014.8    1291.5   10081.5    1291.7   10169.0    1291.5   10247.2
R   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

1   7.90        19    9965.5   10018.0     565.0     545.0     575.0
R   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
R   1296.4   10018.0   1296.1   10054.9    1295.8   10091.2    1297.3   10161.6    1297.4   10251.7
R   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
R   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
R   1300.4   10212.0   1300.0   10229.7    1301.6   10256.1    1302.5   10341.0    1302.4   10425.2
R   1302.4   10464.0   1302.9   10540.4

X1  8.13        16    9970.6   10023.4     620.0     540.0     670.0
R   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
R   1308.1   10455.4

X1  8.22        20    9924.8   10000       450.0     460.0     460.0
R   1312.0    9847.7   1310.1    9901.7    1309.8    9924.8    1307.4    9938.6    1308.5    9954.5
R   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

```
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
R   1313.3    9564.5   1313.7    9596.5    1313.4    9634.0    1314.3    9667.2    1314.6    9683.0
R   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
R   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
--------------------------------------------------------------------------

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

--------------------------------------------------------------------------
Section 9.19

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

1	9.19	9	9973.8	10015.5	510.0	510.0	515.0			
R	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		
T	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
R	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
R	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				
1	9.48	9	9984.2	10021.6	485.0	485.0	485.0			
R	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		
1	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
R	1387.6	10097.0								
X1	9.61	8	9954.4	9980.2	460.0	480.0	470.0			
R	1393.9	9940.4	1393.6	9954.4	1390.7	9964.6	1392.6	9980.2	1391.3	9995.6
R	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
$280 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

FLOW DISTRIBUTION FOR SECNO= .00 CWSEL= 1081.00

STA=	8904.	9021.	9162.	9409.	9633.	10197.	10427.	10655.	10830.	11023.	11174.	11222.
PER Q=	4.1	5.5	9.5	8.4	33.3	9.0	9.4	7.4	7.5	4.8	1.1	
AREA=	2269.8	2748.3	4756.7	4257.7	11037.2	4494.5	4601.5	3587.5	3748.1	2588.6	759.0	
VEL=	.1	.1	.1	.1	.2	.1	.1	.1	.1	.1	.1	
DEPTH=	19.4	19.5	19.3	19.0	19.6	19.5	20.2	20.5	19.4	17.2	15.7	

*SECNO .080
$280 CROSS SECTION .08 EXTENDED 10.30 FEET

$302 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	16954.7	4458.2	11605.5	393.3	21.9	1065.50
.54	.21	.31	.20	.060	.040	.060	.000	1062.10	8904.40
.000002	445.	430.	440.	2	0	0	.00	2018.90	10923.30

FLOW DISTRIBUTION FOR SECNO= .08 CWSEL= 1081.00

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

STA=	8904.	9016.	9109.	9198.	9272.	9350.	9452.	9538.	9612.	9685.	9782.	9862.	9918.
PER Q=	3.9	4.7	4.4	3.9	4.3	5.6	4.3	3.5	3.5	4.9	3.9	1.9	
AREA=	1559.5	1596.8	1523.5	1304.3	1406.6	1844.7	1481.8	1217.7	1232.5	1661.0	1359.8	766.5	
VEL=	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	
DEPTH=	14.0	17.1	17.1	17.7	18.2	18.1	17.3	16.5	16.7	17.2	16.9	13.9	

STA=	9918.	10185.	10294.	10392.	10469.	10531.	10615.	10696.	10776.	10860.	10923.
PER Q=	19.1	4.5	3.6	3.7	3.0	4.1	3.9	3.8	4.0	1.6	
AREA=	4458.2	1658.8	1386.8	1286.9	1047.2	1411.2	1351.0	1332.7	1405.4	725.5	
VEL=	.3	.2	.2	.2	.2	.2	.2	.2	.2	.2	
DEPTH=	16.7	15.2	14.3	16.5	17.0	16.8	16.7	16.7	16.6	11.5	

*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	8084.0	2661.6	10584.2	731.8	46.7	1068.70
.96	.28	.55	.33	.060	.040	.060	.000	1065.10	9112.60
.000006	750.	570.	300.	2	0	0	.00	1957.40	11070.00

FLOW DISTRIBUTION FOR SECNO= .19 CWSEL= 1081.00

STA=	9113.	9303.	9431.	9530.	9657.	9721.	9827.	9907.	9976.	10163.	10251.	10324.	10433.
PER Q=	3.7	3.2	3.8	5.1	3.2	5.2	3.7	3.8	20.1	5.4	4.8	3.9	
AREA=	1237.1	955.1	969.8	1268.2	737.1	1199.6	873.2	844.0	2661.6	1140.1	991.6	1023.2	
VEL=	.2	.2	.3	.3	.3	.3	.3	.3	.5	.3	.4	.3	
DEPTH=	6.5	7.5	9.8	10.0	11.5	11.3	10.9	12.3	14.2	13.0	13.5	9.4	

STA=	10433.	10571.	10644.	10731.	10829.	10919.	11011.	11070.
PER Q=	5.7	5.2	6.1	6.8	5.8	3.6	.8	
AREA=	1402.5	1025.9	1218.1	1371.4	1198.4	896.6	316.5	
VEL=	.3	.4	.4	.4	.3	.3	.2	
DEPTH=	10.1	14.2	14.0	14.0	13.3	9.7	5.4	

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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 = .39

.290	14.00	1081.00	.00	.00	1081.01	.01	.01	.00	1073.30
7209.0	3039.8	1641.9	2527.3	6092.3	1402.3	4285.9	927.4	70.9	1071.70
1.17	.50	1.17	.59	.060	.040	.060	.000	1067.00	8747.80
.000040	530.	515.	500.	2	0	0	.00	2115.90	10863.70

LOW DISTRIBUTION FOR SECNO= .29 CWSEL= 1081.00

STA=	8748.	9011.	9088.	9228.	9404.	9557.	9658.	9757.	9806.	9876.	9943.	9972.	10098.
PER Q=	3.8	3.3	3.8	4.1	3.7	3.0	4.6	3.2	5.1	5.6	1.9	22.8	
AREA=	771.8	453.6	636.8	704.3	650.7	483.3	620.0	377.7	574.3	593.4	226.5	1402.3	
VEL=	.4	.5	.4	.4	.4	.5	.5	.6	.6	.7	.6	1.2	
DEPTH=	2.9	5.9	4.5	4.0	4.3	4.8	6.2	7.8	8.2	8.9	7.7	11.2	

STA=	10098.	10150.	10218.	10270.	10316.	10372.	10404.	10499.	10768.	10864.
PER Q=	5.7	5.5	4.4	3.9	4.6	3.3	3.5	3.8	.3	
AREA=	546.6	593.7	466.5	414.0	489.4	324.8	518.2	803.7	129.0	
VEL=	.8	.7	.7	.7	.7	.7	.5	.3	.2	
DEPTH=	10.6	8.7	9.0	8.9	8.8	10.2	5.5	3.0	1.4	

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	2735.8	1714.1	2759.0	2722.3	704.6	2205.4	1035.2	92.0	1074.80
1.27	1.00	2.43	1.25	.060	.040	.060	.000	1071.30	9188.78
.000236	560.	510.	520.	2	0	0	.00	1280.19	10468.97

LOW DISTRIBUTION FOR SECNO= .38 CWSEL= 1081.03

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

STA=	9189.	9445.	9522.	9621.	9713.	9761.	9823.	9901.	9957.	10037.	10073.	10142.	10224.
PER Q=	3.1	3.8	4.3	6.9	3.2	3.5	6.0	7.2	23.8	4.3	8.0	9.0	
AREA=	379.0	293.9	351.0	452.0	218.6	257.2	390.8	379.8	704.6	233.5	439.7	504.4	
VEL=	.6	.9	.9	1.1	1.0	1.0	1.1	1.4	2.4	1.3	1.3	1.3	
DEPTH=	1.5	3.8	3.5	4.9	4.6	4.2	5.0	6.8	8.9	6.4	6.4	6.2	

STA=	10224.	10295.	10341.	10384.	10469.
PER Q=	8.0	5.3	3.3	.4	
AREA=	447.3	294.4	211.2	74.8	
VEL=	1.3	1.3	1.1	.4	
DEPTH=	6.3	6.3	5.0	.9	

490 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	1081.33	.13	.24	.03	1077.80
7209.0	1677.5	2630.6	2900.8	1095.4	645.5	1421.9	1085.4	105.3	1078.10
1.32	1.53	4.08	2.04	.084	.045	.064	.000	1073.10	9255.69
.001549	480.	490.	520.	2	0	0	.00	1048.12	10505.10

LOW DISTRIBUTION FOR SECNO= .48 CWSEL= 1081.21

STA=	9256.	9852.	9868.	9887.	9902.	9923.	9945.	10061.	10149.	10194.	10236.	10274.	10297.
PER Q=	4.7	4.3	3.8	4.7	3.7	2.2	36.5	7.2	6.6	4.8	4.8	3.4	
AREA=	633.3	95.5	96.0	100.5	97.9	71.9	645.5	260.3	187.4	150.0	146.8	96.2	
VEL=	.5	3.2	2.9	3.3	2.7	2.2	4.1	2.0	2.5	2.3	2.4	2.6	
DEPTH=	1.1	6.2	5.1	6.4	4.7	3.3	5.6	2.9	4.2	3.6	3.8	4.3	

STA=	10297.	10325.	10377.	10413.	10505.
PER Q=	3.3	3.9	4.9	1.3	
AREA=	102.6	146.1	144.8	187.8	
VEL=	2.3	1.9	2.4	.5	
DEPTH=	3.7	2.8	4.0	2.0	

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

490 NH CARD USED

*SECNO .570

.570	8.05	1082.15	.00	.00	1082.45	.30	1.06	.05	1080.30
7209.0	1124.4	4253.3	1831.3	423.7	779.3	1138.1	1116.9	116.6	1079.50
1.36	2.65	5.46	1.61	.077	.045	.083	.000	1074.10	9802.23
.003110	490.	501.	501.	2	0	0	.00	939.49	10741.72

FLOW DISTRIBUTION FOR SECNO= .57 CWSEL= 1082.15

TA=	9802.	9885.	9905.	9933.	10084.	10118.	10182.	10248.	10285.	10346.	10742.
PER Q=	6.4	5.6	3.6	59.0	3.6	6.9	6.5	4.2	3.5	.7	
AREA=	237.5	100.9	85.3	779.3	95.4	180.0	176.6	107.0	111.7	467.5	
VEL=	1.9	4.0	3.1	5.5	2.7	2.8	2.6	2.8	2.2	.1	
DEPTH=	2.9	4.9	3.1	5.1	2.8	2.8	2.6	2.9	1.8	1.2	

SECNO .670

3265 DIVIDED FLOW

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
7198.4	3160.1	3214.4	824.0	798.4	393.0	198.5	1138.0	124.5	1081.50
1.38	3.96	8.18	4.15	.070	.045	.060	.000	1077.80	9667.55
.008074	480.	498.	498.	3	0	0	.00	453.24	10123.25

LOW DISTRIBUTION FOR SECNO= .67 CWSEL= 1084.27

STA=	9668.	9697.	9723.	9768.	9805.	9842.	9872.	9926.	9940.	9957.	10042.	10079.	10108.
PER Q=	4.1	6.1	6.6	5.3	4.2	4.2	5.4	4.1	4.1	44.7	6.2	4.6	
AREA=	74.6	94.2	125.9	102.2	87.8	81.4	110.7	58.5	63.0	393.0	102.2	77.5	
VEL=	3.9	4.6	3.8	3.8	3.4	3.7	3.5	5.0	4.7	8.2	4.4	4.2	
DEPTH=	2.5	3.7	2.7	2.8	2.4	2.7	2.0	4.3	3.8	4.6	2.8	2.6	

TA=	10108.	10123.
PER Q=	.7	
AREA=	18.7	
VEL=	2.5	
DEPTH=	1.2	

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


*SECNO  .760
     .760      6.60   1087.40       .00       .00   1087.82       .42      2.93       .02   1085.60
   7198.4    1479.0    4083.2    1636.2     482.1     657.3     429.8    1155.0     130.2   1084.10
     1.41      3.07      6.21      3.81      .060      .045      .060      .000   1080.80   9655.10
  .004443      501.      501.      501.         2         0         0       .00    540.92  10196.02


FLOW DISTRIBUTION FOR SECNO=       .76          CWSEL=   1087.40

STA=    9655.    9778.    9817.    9856.    9891.    9918.   10055.   10089.   10118.   10137.   10187.   10196.
 PER Q=      4.7      5.6      5.0      3.5      1.9     56.7      7.2      8.9      3.4      3.1       .1
 AREA=     120.8    115.5    108.8     85.3     51.8    657.3    128.2    138.7     64.8     91.3      6.8
  VEL=       2.8      3.5      3.3      3.0      2.6      6.2      4.0      4.6      3.8      2.5      1.4
DEPTH=       1.0      2.9      2.8      2.4      2.0      4.8      3.8      4.7      3.5      1.8       .8

1490 NH CARD USED
*SECNO  .860
     .860      6.71   1089.81       .00       .00   1090.25       .44      2.42       .01   1086.60
   7209.0    1311.2    4165.2    1732.6     726.6     633.0     524.0    1175.5     137.9   1086.80
     1.44      1.80      6.58      3.31      .102      .045      .060      .000   1083.10   9567.75
  .004891      522.      522.      510.         1         0         0       .00    757.96  10325.72


FLOW DISTRIBUTION FOR SECNO=       .86          CWSEL=   1089.81

STA=    9568.    9782.    9864.    9925.   10056.   10101.   10176.   10270.   10326.
 PER Q=      3.7      6.2      8.4     57.8      8.1     11.9      4.0       .1
 AREA=     332.3    221.2    173.0    633.0    150.4    233.4    131.9      8.3
  VEL=       .8      2.0      3.5      6.6      3.9      3.7      2.2       .5
DEPTH=       1.6      2.7      2.8      4.8      3.3      3.1      1.4       .1

1490 NH CARD USED
*SECNO  .950
     .950      7.70   1092.30       .00       .00   1092.74       .44      2.49       .00   1089.60
   6256.0     119.7    2427.3    3709.0      42.1     343.8     974.3    1194.7     145.8   1090.00
     1.47      2.84      7.06      3.81      .050      .045      .053      .000   1084.60   9954.75
  .005079      600.      489.      489.         2         0         0       .00    558.33  10513.09


FLOW DISTRIBUTION FOR SECNO=       .95          CWSEL=   1092.30
```

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

STA=	9955.	9985.	10049.	10081.	10119.	10145.	10156.	10167.	10206.	10240.	10335.	10399.	10513.
PER Q=	1.9	38.8	5.6	9.3	10.3	6.8	4.8	7.5	4.9	4.4	4.5	1.3	
AREA=	42.1	343.8	85.7	124.9	113.1	63.3	51.6	109.6	81.9	111.1	99.1	134.1	
VEL=	2.8	7.1	4.1	4.7	5.7	6.7	5.8	4.3	3.7	2.5	2.8	.6	
DEPTH=	1.4	5.4	2.7	3.3	4.5	5.6	4.6	2.9	2.4	1.2	1.6	1.2	

*SECNO 1.040

3265 DIVIDED FLOW

1.040	6.21	1094.61	.00	.00	1095.05	.44	2.31	.00	1090.40
6256.0	2780.8	3007.0	468.2	676.9	460.9	269.8	1209.3	151.8	1093.40
1.49	4.11	6.52	1.74	.060	.045	.060	.000	1088.40	9825.18
.004910	474.	474.	440.	3	0	0	.00	602.96	10442.02

FLOW DISTRIBUTION FOR SECNO= 1.04 CWSEL= 1094.61

STA=	9825.	9853.	9890.	9927.	9956.	9978.	9995.	10020.	10117.	10254.	10339.	10442.
PER Q=	3.5	8.1	7.3	5.7	5.4	5.4	9.0	48.1	3.3	3.1	1.1	
AREA=	63.2	127.7	120.5	93.0	82.1	73.8	116.6	460.9	116.9	99.4	53.5	
VEL=	3.5	4.0	3.8	3.8	4.1	4.6	4.8	6.5	1.8	1.9	1.3	
DEPTH=	2.3	3.5	3.2	3.3	3.7	4.3	4.7	4.8	.9	1.2	.5	

1490 NH CARD USED
*SECNO 1.130

1.130	7.03	1097.03	.00	.00	1097.52	.49	2.46	.02	1093.40
6256.0	3227.4	2830.9	197.7	834.3	388.8	113.5	1224.7	158.1	1094.20
1.52	3.87	7.28	1.74	.065	.045	.060	.000	1090.00	9706.14
.005177	484.	490.	500.	2	0	0	.00	511.69	10217.84

FLOW DISTRIBUTION FOR SECNO= 1.13 CWSEL= 1097.03

STA=	9706.	9825.	9867.	9913.	9933.	9948.	9973.	10044.	10203.	10218.
PER Q=	7.6	11.0	14.8	7.7	4.7	5.8	45.3	3.2	.0	
AREA=	232.2	158.6	196.7	95.1	63.5	88.2	388.8	112.5	1.0	
VEL=	2.1	4.3	4.7	5.1	4.6	4.1	7.3	1.8	.3	
DEPTH=	2.0	3.8	4.3	4.8	4.2	3.5	5.4	.7	.1	

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

*SECNO 1.230

3265 DIVIDED FLOW

1.230	5.83	1099.43	.00	.00	1099.79	.36	2.25	.01	1095.10
6256.0	649.8	2872.5	2733.7	242.2	470.5	781.8	1240.8	163.9	1097.30
1.55	2.68	6.11	3.50	.060	.045	.060	.000	1093.60	9757.67
.003966	470.	510.	515.	3	0	0	.00	498.07	10296.17

FLOW DISTRIBUTION FOR SECNO= 1.23 CWSEL= 1099.43

STA=	9758.	9946.	10040.	10078.	10141.	10192.	10228.	10245.	10252.	10296.
PER Q=	10.4	45.9	4.8	10.3	8.7	7.8	5.7	3.3	3.0	
AREA=	242.2	470.5	100.9	195.3	161.7	131.6	80.0	42.0	70.3	
VEL=	2.7	6.1	3.0	3.3	3.4	3.7	4.5	5.0	2.7	
DEPTH=	1.3	5.0	2.6	3.1	3.2	3.7	4.9	5.7	1.6	

*SECNO 1.320

1.320	6.46	1101.76	.00	.00	1102.40	.64	2.53	.08	1100.10
6256.0	19.6	2967.8	3268.6	10.6	368.2	729.8	1255.3	168.6	1097.20
1.57	1.84	8.06	4.48	.060	.045	.060	.000	1095.30	9962.75
.007154	485.	485.	485.	2	0	0	.00	345.70	10308.45

FLOW DISTRIBUTION FOR SECNO= 1.32 CWSEL= 1101.76

STA=	9963.	9976.	10049.	10102.	10168.	10211.	10251.	10281.	10308.
PER Q=	.3	47.4	17.8	13.4	8.2	9.3	3.2	.3	
AREA=	10.6	368.2	211.2	194.0	122.3	129.1	60.2	13.0	
VEL=	1.8	8.1	5.3	4.3	4.2	4.5	3.3	1.3	
DEPTH=	.8	5.0	4.0	3.0	2.9	3.2	2.0	.5	

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	1714.7	2376.0	2165.3	531.2	363.7	673.5	1269.0	173.3	1100.90
1.60	3.23	6.53	3.22	.077	.045	.057	.000	1098.40	9795.26
.004662	445.	445.	445.	1	0	0	.00	576.61	10371.87

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

FLOW DISTRIBUTION FOR SECNO= 1.41 CWSEL= 1104.62

STA=	9795.	9888.	9916.	9956.	10029.	10057.	10092.	10134.	10251.	10291.	10363.	10372.
PER Q=	4.9	10.8	11.7	38.0	8.0	9.5	6.8	3.9	3.2	3.3	.0	
AREA=	259.1	122.4	149.7	363.7	102.5	125.5	109.9	130.6	90.8	113.1	1.0	
VEL=	1.2	5.5	4.9	6.5	4.9	4.7	3.9	1.9	2.2	1.8	.3	
DEPTH=	2.8	4.5	3.7	4.9	3.7	3.6	2.6	1.1	2.3	1.6	.1	

*SECNO 1.500

1.500	6.26	1106.96	.00	.00	1107.39	.43	2.40	.02	1102.90
6256.0	3459.9	2414.1	381.9	824.4	353.1	208.4	1285.3	179.7	1103.90
1.62	4.20	6.84	1.83	.060	.045	.060	.000	1100.70	9722.09
.005326	480.	483.	483.	1	0	0	.00	575.30	10297.39

FLOW DISTRIBUTION FOR SECNO= 1.50 CWSEL= 1106.96

STA=	9722.	9747.	9756.	9769.	9798.	9841.	9872.	9902.	9925.	9962.	10036.	10191.	10297.
PER Q=	4.1	3.2	3.1	5.5	9.0	5.2	6.7	7.3	11.2	38.6	3.1	3.0	
AREA=	67.5	39.5	45.8	90.4	140.1	90.2	101.5	96.7	152.8	353.1	105.1	103.3	
VEL=	3.8	5.1	4.2	3.8	4.0	3.6	4.1	4.7	4.6	6.8	1.8	1.8	
DEPTH=	2.7	4.8	3.6	3.1	3.3	2.9	3.5	4.2	4.1	4.8	.7	1.0	

*SECNO 1.590

1.590	5.50	1109.20	.00	.00	1109.58	.38	2.18	.01	1107.10
6256.0	1550.9	4429.7	275.3	636.1	779.8	155.6	1302.1	186.8	1106.60
1.65	2.44	5.68	1.77	.060	.045	.060	.000	1103.70	9498.35
.003720	494.	494.	494.	3	0	0	.00	690.10	10188.46

FLOW DISTRIBUTION FOR SECNO= 1.59 CWSEL= 1109.20

STA=	9498.	9642.	9691.	9735.	9758.	9812.	9873.	10037.	10126.	10188.
PER Q=	5.0	4.5	4.2	4.7	4.0	2.4	70.8	3.9	.5	
AREA=	161.3	109.0	98.0	84.4	102.3	81.1	779.8	124.4	31.2	
VEL=	1.9	2.6	2.7	3.5	2.4	1.9	5.7	2.0	1.0	
DEPTH=	1.1	2.2	2.2	3.5	1.9	1.3	4.8	1.4	.5	

*SECNO 1.680

1.680	5.54	1111.44	.00	.00	1111.94	.50	2.33	.04	1108.30
6256.0	2956.3	2466.4	833.3	733.4	327.6	217.5	1317.9	193.3	1106.80
1.68	4.03	7.53	3.83	.060	.045	.060	.000	1105.90	9686.71
.006462	490.	480.	480.	1	0	0	.00	465.80	10152.51

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

FLOW DISTRIBUTION FOR SECNO= 1.68 CWSEL= 1111.44

STA=	9687.	9799.	9829.	9841.	9866.	9901.	9945.	9978.	10046.	10091.	10153.
PER Q=	6.8	4.8	3.8	8.5	8.5	8.5	6.4	39.4	11.0	2.3	
AREA=	156.8	79.8	48.4	103.7	118.4	128.6	97.7	327.6	153.3	64.2	
VEL=	2.7	3.8	4.9	5.1	4.5	4.1	4.1	7.5	4.5	2.3	
DEPTH=	1.4	2.6	3.9	4.1	3.4	3.0	2.9	4.8	3.4	1.1	

*SECNO 1.780

1.780	5.99	1114.39	.00	.00	1114.96	.57	3.00	.02	1109.30
6256.0	2014.2	2932.2	1309.6	511.2	379.8	321.1	1332.3	198.2	1110.80
1.70	3.94	7.72	4.08	.060	.045	.060	.000	1108.40	9770.70
.005529	507.	500.	495.	2	0	0	.00	379.98	10150.68

FLOW DISTRIBUTION FOR SECNO= 1.78 CWSEL= 1114.39

STA=	9771.	9782.	9796.	9817.	9856.	9902.	9942.	9971.	10039.	10069.	10100.	10143.	10151.
PER Q=	.3	1.2	1.0	1.4	5.7	10.9	11.6	46.9	8.1	8.8	4.0	.0	
AREA=	10.7	27.2	27.8	45.0	109.1	151.7	139.9	379.8	113.4	121.0	86.0	.7	
VEL=	1.8	2.9	2.2	2.0	3.3	4.5	5.2	7.7	4.5	4.6	2.9	.4	
DEPTH=	.9	1.9	1.3	1.1	2.4	3.8	4.7	5.6	3.8	3.9	2.0	.1	

*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	3091.7	2817.3	347.0	859.0	455.0	137.4	1347.4	202.3	1110.80
1.73	3.60	6.19	2.52	.060	.045	.060	.000	1108.80	9766.58
.002670	495.	495.	495.	3	0	0	.00	345.75	10112.33

FLOW DISTRIBUTION FOR SECNO= 1.87 CWSEL= 1116.44

STA=	9767.	9789.	9840.	9898.	9939.	9975.	10041.	10070.	10112.
PER Q=	.2	5.6	14.9	14.0	14.6	45.0	5.0	.6	
AREA=	15.1	139.8	264.0	223.2	216.9	455.0	104.5	32.9	
VEL=	1.0	2.5	3.5	3.9	4.2	6.2	3.0	1.1	
DEPTH=	.7	2.7	4.6	5.4	6.0	7.0	3.6	.8	

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

*SECNO 1.970

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	939.5	3125.9	2190.6	249.0	420.5	447.7	1363.4	206.5	1113.50
1.75	3.77	7.43	4.89	.060	.045	.060	.000	1113.10	9849.40
.005834	535.	540.	560.	3	0	0	.00	336.38	10185.79

FLOW DISTRIBUTION FOR SECNO= 1.97 CWSEL= 1118.35

STA=	9849.	9882.	9913.	9935.	9967.	10051.	10096.	10132.	10159.	10186.
PER Q=	.7	1.5	2.4	10.4	50.0	18.6	12.9	3.4	.1	
AREA=	26.5	40.6	48.4	133.6	420.5	216.0	158.8	64.2	8.7	
VEL=	1.7	2.3	3.1	4.9	7.4	5.4	5.1	3.3	.9	
DEPTH=	.8	1.3	2.1	4.1	5.1	4.8	4.4	2.3	.3	

*SECNO 2.070

265 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	485.8	1375.7	210.4	1116.10
1.77	3.23	8.67	4.45	.060	.045	.060	.000	1114.40	9864.69
.006038	484.	484.	484.	3	0	0	.00	364.10	10262.09

FLOW DISTRIBUTION FOR SECNO= 2.07 CWSEL= 1121.11

TA=	9865.	9931.	9963.	9977.	10039.	10065.	10090.	10122.	10150.	10262.
PER Q=	4.5	3.8	3.0	54.2	11.0	7.9	7.5	5.6	2.6	
AREA=	101.8	72.4	44.6	391.0	125.5	101.4	107.0	86.2	65.7	
VEL=	2.8	3.3	4.2	8.7	5.5	4.9	4.4	4.1	2.4	
DEPTH=	1.5	2.3	3.2	6.2	4.8	4.1	3.4	3.1	.6	

SECNO 2.150

2.150	7.83	1123.73	.00	.00	1124.41	.68	2.54	.01	1120.30
6256.0	123.6	2477.3	3655.1	47.3	289.0	735.7	1386.8	213.6	1119.20
1.79	2.61	8.57	4.97	.060	.045	.060	.000	1115.90	9944.32
.005427	444.	444.	444.	3	0	0	.00	264.56	10208.88

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

FLOW DISTRIBUTION FOR SECNO= 2.15 CWSEL= 1123.73

STA=	9944.	9968.	9982.	10023.	10056.	10091.	10125.	10151.	10178.	10209.
PER Q=	.3	1.7	39.6	13.5	15.8	14.7	8.9	4.6	.9	
AREA=	14.6	32.7	289.0	159.3	181.4	172.1	113.5	77.6	31.8	
VEL=	1.3	3.2	8.6	5.3	5.5	5.4	4.9	3.7	1.8	
DEPTH=	.6	2.3	7.0	4.9	5.2	5.0	4.4	2.9	1.0	

*SECNO 2.240

2.240	8.06	1125.96	.00	.00	1126.45	.49	2.02	.02	1119.30
6256.0	2356.9	3244.8	654.3	710.0	457.0	201.1	1400.5	217.2	1119.70
1.82	3.32	7.10	3.25	.060	.045	.060	.000	1117.90	9717.60
.003245	489.	489.	489.	2	0	0	.00	372.97	10090.58

FLOW DISTRIBUTION FOR SECNO= 2.24 CWSEL= 1125.96

STA=	9718.	9816.	9840.	9855.	9866.	9888.	9928.	9953.	10015.	10036.	10074.	10091.
PER Q=	6.7	4.5	4.5	3.1	3.8	6.9	8.2	51.9	6.7	3.6	.1	
AREA=	168.2	84.8	70.9	50.8	74.9	136.1	124.3	457.0	102.2	91.1	7.8	
VEL=	2.5	3.3	4.0	3.9	3.2	3.2	4.1	7.1	4.1	2.5	.9	
DEPTH=	1.7	3.6	4.8	4.7	3.4	3.4	5.0	7.3	5.0	2.4	.5	

*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	1.39	2.59	.27	1124.20
6256.0	942.2	5088.3	225.6	230.4	494.0	54.8	1412.8	220.7	1123.70
1.83	4.09	10.30	4.12	.060	.045	.060	.000	1121.80	9830.58
.009571	495.	500.	508.	3	0	0	.00	229.12	10059.70

LOW DISTRIBUTION FOR SECNO= 2.34 CWSEL= 1127.92

STA=	9831.	9858.	9893.	9926.	9946.	10033.	10057.	10060.
PER Q=	1.3	4.2	4.2	5.3	81.3	3.6	.0	
AREA=	29.7	69.6	66.5	64.6	494.0	54.3	.5	
VEL=	2.7	3.8	3.9	5.2	10.3	4.1	.7	
DEPTH=	1.1	2.0	2.1	3.1	5.7	2.3	.2	

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

*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	2042.9	2414.4	1798.7	542.4	394.4	499.7	1424.7	223.9	1128.50
1.86	3.77	6.12	3.60	.060	.045	.060	.000	1123.30	9788.95
.003083	471.	471.	471.	3	0	0	.00	370.02	10158.97

FLOW DISTRIBUTION FOR SECNO= 2.43 CWSEL= 1131.42

STA=	9789.	9884.	9913.	9938.	9961.	10025.	10061.	10081.	10107.	10122.	10133.	10159.
PER Q=	3.3	11.5	11.6	6.2	38.6	5.2	5.7	4.7	6.1	5.5	1.6	
AREA=	118.6	164.9	154.2	104.7	394.4	110.9	93.9	92.6	87.1	71.9	43.3	
VEL=	1.8	4.4	4.7	3.7	6.1	2.9	3.8	3.2	4.4	4.8	2.3	
DEPTH=	1.2	5.6	6.3	4.5	6.2	3.1	4.7	3.5	5.7	6.8	1.7	

*SECNO 2.520

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .59

2.520	5.96	1133.56	.00	.00	1134.29	.73	2.40	.11	1130.90
6256.0	1333.5	3021.1	1901.4	263.2	343.6	505.8	1439.2	228.7	1130.80
1.88	5.07	8.79	3.76	.060	.045	.060	.000	1127.60	9886.64
.008724	490.	495.	500.	3	0	0	.00	477.59	10364.24

FLOW DISTRIBUTION FOR SECNO= 2.52 CWSEL= 1133.56

STA=	9887.	9908.	9921.	9942.	9975.	10045.	10060.	10072.	10096.	10129.	10174.	10298.	10330.
PER Q=	5.2	5.8	6.3	4.0	48.3	3.9	4.0	5.6	4.8	3.2	3.3	4.5	
AREA=	63.9	57.9	74.3	67.1	343.6	47.9	45.6	71.8	75.3	66.7	96.9	71.1	
VEL=	5.1	6.3	5.3	3.7	8.8	5.1	5.5	4.9	4.0	3.0	2.1	3.9	
DEPTH=	3.0	4.5	3.5	2.1	4.9	3.3	3.7	3.1	2.3	1.5	.8	2.2	

STA=	10330.	10364.
PER Q=	1.1	
AREA=	30.5	
VEL=	2.3	
DEPTH=	.9	

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

*SECNO 2.620

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

2.620	7.96	1136.66	.00	.00	1136.92	.26	2.58	.05	1132.30
6256.0	3484.5	1834.8	936.7	987.7	334.0	357.6	1456.1	234.9	1134.80
1.92	3.53	5.49	2.62	.060	.045	.060	.000	1128.70	9645.21
.003149	525.	525.	525.	4	0	0	.00	542.57	10187.78

FLOW DISTRIBUTION FOR SECNO= 2.62 CWSEL= 1136.66

STA=	9645.	9719.	9739.	9819.	9842.	9873.	9895.	9903.	9913.	9925.	9944.	9960.	10024.
PER Q=	3.7	3.2	6.9	8.5	4.8	6.1	3.9	3.9	3.3	7.1	4.3	29.3	
AREA=	111.2	66.3	148.8	123.8	99.5	100.3	50.9	55.9	54.0	104.6	72.4	334.0	
VEL=	2.1	3.0	2.9	4.3	3.0	3.8	4.8	4.4	3.9	4.2	3.7	5.5	
DEPTH=	1.5	3.3	1.8	5.4	3.2	4.6	6.4	5.7	4.7	5.5	4.3	5.2	

STA=	10024.	10080.	10102.	10121.	10188.
PER Q=	4.4	3.8	3.9	2.9	
AREA=	119.2	76.2	71.2	91.0	
VEL=	2.3	3.1	3.4	2.0	
DEPTH=	2.2	3.4	3.8	1.4	

*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	2045.9	3230.9	979.2	441.6	345.1	246.5	1471.8	240.5	1135.10
1.94	4.63	9.36	3.97	.060	.045	.060	.000	1133.20	9742.13
.009308	506.	506.	506.	3	0	0	.00	427.11	10179.32

FLOW DISTRIBUTION FOR SECNO= 2.72 CWSEL= 1138.79

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

STA=	9742.	9792.	9888.	9905.	9937.	9960.	9975.	10044.	10065.	10111.	10134.	10179.
PER Q=	3.1	3.6	3.5	9.3	7.8	5.4	51.6	4.7	5.3	4.3	1.4	
AREA=	59.8	83.4	45.7	108.4	85.2	59.1	345.1	61.0	88.4	59.1	37.9	
VEL=	3.3	2.7	4.7	5.4	5.7	5.8	9.4	4.8	3.8	4.6	2.3	
DEPTH=	1.2	.9	2.8	3.4	3.7	3.7	5.1	2.8	1.9	2.6	.8	

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	3120.8	2852.0	283.2	770.7	331.6	467.4	1487.6	245.7	1138.10
1.97	4.05	8.60	.61	.065	.045	.600	.000	1134.70	9679.46
.005784	515.	539.	540.	3	0	0	.00	442.29	10121.76

FLOW DISTRIBUTION FOR SECNO= 2.82 CWSEL= 1142.84

STA=	9679.	9853.	9874.	9887.	9916.	9954.	9978.	10030.	10083.	10122.
PER Q=	3.0	6.9	4.9	10.1	14.3	10.6	45.6	3.5	1.0	
AREA=	204.0	88.6	58.7	126.2	172.9	120.4	331.6	333.9	133.5	
VEL=	.9	4.9	5.2	5.0	5.2	5.5	8.6	.7	.5	
DEPTH=	1.2	4.2	4.6	4.3	4.5	5.0	6.4	6.4	3.4	

1490 NH CARD USED
*SECNO 2.920

2.920	6.60	1145.40	.00	.00	1145.83	.43	2.31	.02	1140.10
6256.0	247.8	4751.8	1256.5	107.1	797.4	774.4	1508.3	251.7	1142.10
2.00	2.31	5.96	1.62	.060	.045	.111	.000	1138.80	9836.90
.003202	510.	560.	585.	3	0	0	.00	495.85	10332.75

FLOW DISTRIBUTION FOR SECNO= 2.92 CWSEL= 1145.40

STA=	9837.	9923.	10063.	10098.	10127.	10162.	10210.	10333.
PER Q=	4.0	76.0	5.7	4.5	4.7	4.0	1.2	
AREA=	107.1	797.4	116.6	91.2	102.3	104.9	359.5	
VEL=	2.3	6.0	3.1	3.1	2.8	2.4	.2	
DEPTH=	1.2	5.7	3.2	3.2	2.9	2.2	2.9	

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 3.040
   3.040      6.55   1147.75       .00       .00   1147.91       .16      2.06       .03   1151.10
  6256.0        .0    1167.1    5088.9        .0     251.0    1831.5    1535.3     260.6   1144.80
    2.05       .00      4.65      2.78      .000      .045      .071      .000   1141.20   9980.01
 .003401      610.      625.      625.         1         0         0       .00    752.98  10732.99


FLOW DISTRIBUTION FOR SECNO=      3.04          CWSEL=   1147.75

STA=    9980.   10046.   10091.   10124.   10163.   10182.   10192.   10215.   10231.   10250.   10262.   10270.   10276.
 PER Q=     18.7      5.2      3.0      5.1      6.5      4.1      9.1      6.1      7.0      4.5      3.4      3.0
  AREA=    251.0    119.3     75.1    109.8     96.2     57.3    126.2     84.9    100.6     65.1     44.2     39.1
   VEL=      4.6      2.7      2.5      2.9      4.3      4.5      4.5      4.5      4.3      4.3      4.8      4.9
 DEPTH=      3.8      2.6      2.3      2.8      5.1      5.5      5.6      5.5      5.2      5.2      6.1      6.2

STA=   10276.   10294.   10316.   10333.   10361.   10495.   10733.
 PER Q=      6.1      5.1      3.4      3.3      5.2      1.0
  AREA=     90.7     87.9     61.3     75.5    181.6    416.5
   VEL=      4.2      3.6      3.5      2.7      1.8       .2
 DEPTH=      5.0      4.0      3.8      2.6      1.4      1.8

1490 NH CARD USED
*SECNO 3.140
   3.140      6.28   1149.18       .00       .00   1149.60       .42      1.61       .08   1145.40
  6256.0    1051.4    3248.4    1956.2     547.2     466.8    1077.9    1553.9     268.6   1143.00
    2.08      1.92      6.96      1.81      .080      .045      .106      .000   1142.90   9570.87
 .004587      510.      495.      340.         2         0         0       .00   1017.00  10587.87


FLOW DISTRIBUTION FOR SECNO=      3.14          CWSEL=   1149.18

STA=    9571.    9905.    9929.    9955.    9981.   10066.   10082.   10109.   10147.   10209.   10476.   10588.
 PER Q=      4.1      4.4      4.0      4.3     51.9      7.3      8.9      6.9      3.9      3.4       .8
  AREA=    319.6     76.6     73.9     77.2    466.8     88.2    121.0    120.5    103.7    412.9    231.7
   VEL=       .8      3.6      3.4      3.5      7.0      5.2      4.6      3.6      2.4       .5       .2
 DEPTH=      1.0      3.2      2.8      3.0      5.5      5.5      4.5      3.1      1.7      1.5      2.1

*SECNO 3.230
   3.230      5.78   1151.98       .00       .00   1152.50       .52      2.87       .03   1148.10
  6256.0    2655.4    1538.6    2062.0     679.2     186.4     373.8    1573.5     277.2   1147.50
    2.10      3.91      8.25      5.52      .060      .045      .060      .000   1146.20   9654.28
 .007048      511.      511.      511.         2         0         0       .00    449.19  10103.47
```

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

FLOW DISTRIBUTION FOR SECNO= 3.23 CWSEL= 1151.98

STA=	9654.	9778.	9803.	9841.	9884.	9908.	9949.	9974.	10010.	10046.	10067.	10077.	10101.
PER Q=	7.0	6.1	3.3	5.0	6.4	8.2	6.4	24.6	15.3	9.8	4.4	3.5	
AREA=	154.1	83.0	64.9	87.3	83.8	120.7	85.5	186.4	165.3	103.3	46.4	58.8	
VEL=	2.9	4.6	3.2	3.6	4.8	4.3	4.7	8.3	5.8	5.9	5.9	3.7	
DEPTH=	1.2	3.3	1.7	2.0	3.5	2.9	3.4	5.2	4.6	4.8	4.8	2.4	

*SECNO 3.320

3.320	5.76	1154.76	.00	.00	1155.22	.46	2.71	.01	1152.30
6256.0	193.4	3019.5	3043.1	107.6	427.6	932.4	1588.0	282.7	1149.80
2.13	1.80	7.06	3.26	.060	.045	.060	.000	1149.00	9846.75
.004777	460.	487.	465.	1	0	0	.00	588.55	10435.30

FLOW DISTRIBUTION FOR SECNO= 3.32 CWSEL= 1154.76

STA=	9847.	9975.	10053.	10077.	10114.	10153.	10201.	10260.	10315.	10358.	10390.	10435.
PER Q=	3.1	48.3	7.6	7.5	5.2	5.7	4.7	3.9	5.9	5.1	3.0	
AREA=	107.6	427.6	103.8	123.8	101.0	116.7	111.2	98.0	112.8	92.1	73.0	
VEL=	1.8	7.1	4.6	3.8	3.2	3.1	2.6	2.5	3.3	3.4	2.5	
DEPTH=	.8	5.5	4.4	3.3	2.6	2.4	1.9	1.8	2.7	2.9	1.6	

SECNO 3.420

3.420	6.05	1156.95	.00	.00	1157.20	.25	1.96	.02	1154.00
6256.0	24.9	1805.2	4425.9	13.0	305.8	1518.4	1605.2	289.3	1154.90
2.16	1.92	5.90	2.91	.060	.045	.060	.000	1150.90	9953.17
.003837	488.	488.	440.	1	0	0	.00	691.14	10644.31

FLOW DISTRIBUTION FOR SECNO= 3.42 CWSEL= 1156.95

STA=	9953.	9962.	10024.	10074.	10099.	10121.	10150.	10184.	10216.	10252.	10297.	10350.	10410.
PER Q=	.4	28.9	3.5	7.9	5.3	4.9	5.5	4.2	3.7	4.8	5.2	5.5	
AREA=	13.0	305.8	93.9	116.3	86.7	92.2	106.3	86.9	84.5	108.9	121.7	133.3	
VEL=	1.9	5.9	2.3	4.2	3.8	3.3	3.3	3.0	2.7	2.8	2.7	2.6	
DEPTH=	1.5	5.0	1.9	4.6	3.9	3.2	3.1	2.7	2.3	2.4	2.3	2.2	

STA=	10410.	10461.	10506.	10551.	10576.	10598.	10644.
PER Q=	4.3	3.0	3.3	3.3	3.7	2.7	
AREA=	106.7	82.5	87.4	68.5	69.7	72.8	
VEL=	2.5	2.3	2.4	3.0	3.3	2.3	
DEPTH=	2.1	1.8	1.9	2.7	3.1	1.6	

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

*SECNO 3.510

3.510	6.07	1158.87	.00	.00	1159.21	.33	1.98	.02	1156.10
6256.0	605.9	2102.1	3548.0	196.0	313.6	1150.5	1624.7	296.9	1153.60
2.19	3.09	6.70	3.08	.060	.045	.060	.000	1152.80	9888.17
.004324	487.	487.	487.	1	0	0	.00	663.31	10551.48

*FLOW DISTRIBUTION FOR SECNO= 3.51 CWSEL= 1158.87

STA=	9888.	9945.	9972.	10029.	10075.	10126.	10170.	10271.	10336.	10404.	10459.	10489.	10516.
PER Q=	6.1	3.6	33.6	14.7	10.5	5.4	3.4	3.4	4.3	4.1	4.2	4.7	
AREA=	123.9	72.1	313.6	207.0	176.6	112.6	117.7	99.5	116.1	103.0	82.9	83.7	
VEL=	3.1	3.1	6.7	4.5	3.7	3.0	1.8	2.2	2.3	2.5	3.2	3.5	
DEPTH=	2.2	2.7	5.5	4.5	3.5	2.5	1.2	1.5	1.7	1.9	2.7	3.2	

STA=	10516.	10551.
PER Q=	1.8	
AREA=	51.3	
VEL=	2.3	
DEPTH=	1.4	

*SECNO 3.590

3265 DIVIDED FLOW

3280 CROSS SECTION 3.59 EXTENDED 1.70 FEET

3301 HV CHANGED MORE THAN HVINS

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

3.590	6.30	1161.20	.00	.00	1162.10	.90	2.72	.17	1158.90
6208.0	2938.6	2878.3	391.2	562.6	294.8	114.5	1638.0	302.0	1157.90
2.21	5.22	9.76	3.42	.060	.045	.060	.000	1154.90	9795.40
.009593	440.	440.	440.	2	0	0	.00	345.82	10141.26

*FLOW DISTRIBUTION FOR SECNO= 3.59 CWSEL= 1161.20

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

STA=	9795.	9823.	9838.	9858.	9873.	9895.	9923.	9944.	9983.	10039.	10061.	10141.
PER Q=	4.8	5.3	8.3	6.7	7.0	6.8	3.8	4.6	46.4	4.6	1.7	
AREA=	69.2	56.2	81.9	66.3	75.9	84.0	52.5	76.6	294.8	61.0	53.5	
VEL=	4.3	5.8	6.3	6.3	5.7	5.0	4.5	3.8	9.8	4.7	2.0	
DEPTH=	2.5	3.7	4.2	4.2	3.6	3.0	2.5	1.9	5.3	2.7	.7	

SECNO 3.700
3280 CROSS SECTION 3.70 EXTENDED .95 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.40

3.700	7.85	1165.05	.00	.00	1165.82	.77	3.71	.01	1159.10
6208.0	2519.4	3514.9	173.6	637.0	402.7	47.7	1651.2	306.0	1158.30
2.23	3.96	8.73	3.64	.060	.045	.060	.000	1157.20	9773.70
.004886	558.	558.	558.	3	0	0	.00	279.85	10053.55

FLOW DISTRIBUTION FOR SECNO= 3.70 CWSEL= 1165.05

STA=	9774.	9826.	9877.	9917.	9940.	9964.	9985.	10039.	10054.
PER Q=	2.1	6.9	13.6	7.2	4.1	6.7	56.6	2.8	
AREA=	65.2	131.1	180.5	98.5	70.4	91.3	402.7	47.7	
VEL=	2.0	3.3	4.7	4.5	3.6	4.6	8.7	3.6	
DEPTH=	1.2	2.6	4.4	4.2	3.0	4.3	7.4	3.4	

SECNO 3.790
3280 CROSS SECTION 3.79 EXTENDED .13 FEET

3.790	7.73	1167.23	.00	.00	1167.83	.59	1.99	.02	1163.10
6208.0	413.3	3940.1	1854.5	175.1	533.1	567.4	1663.7	309.6	1163.10
2.26	2.36	7.39	3.27	.060	.045	.060	.000	1159.50	9824.80
.003848	460.	460.	460.	2	0	0	.00	406.81	10231.61

FLOW DISTRIBUTION FOR SECNO= 3.79 CWSEL= 1167.23

STA=	9825.	9957.	10034.	10075.	10117.	10151.	10170.	10201.	10215.	10232.
PER Q=	6.7	63.5	7.3	3.7	4.2	4.5	6.4	3.4	.5	
AREA=	175.1	533.1	133.3	90.0	86.9	74.0	109.5	55.4	18.3	
VEL=	2.4	7.4	3.4	2.5	3.0	3.8	3.6	3.8	1.6	
DEPTH=	1.3	6.9	3.3	2.1	2.6	3.9	3.5	4.0	1.1	

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


1490 NH CARD USED
*SECNO 3.880
   3.880      7.43   1169.43       .00       .00   1170.20       .77      2.32       .05   1166.20
  6208.0     194.0    3346.8    2667.2      64.0     366.3     852.5    1677.6     315.3   1165.10
    2.28      3.03      9.14      3.13      .060      .045      .063      .000   1162.00   9931.42
 .006383      475.      475.      475.         2         0         0       .00    624.58  10556.00


FLOW DISTRIBUTION FOR SECNO=      3.88          CWSEL=   1169.43

TA=    9931.    9973.   10029.   10060.   10104.   10150.   10203.   10279.   10548.   10556.
 PER Q=      3.1     53.9      6.9      5.2      8.0     10.4      9.2      3.2       .0
  AREA=     64.0    366.3     99.2     96.8    127.6    158.2    169.7    199.3      1.7
   VEL=      3.0      9.1      4.3      3.3      3.9      4.1      3.4      1.0       .0
 DEPTH=      1.5      6.6      3.2      2.2      2.8      3.0      2.2       .7       .2

1490 NH CARD USED
SECNO 3.960

265 DIVIDED FLOW

   3.960      7.45   1172.55       .00       .00   1173.42       .87      3.19       .03   1170.10
  6208.0    1405.6    2543.3    2259.1     381.8     254.2     390.3    1689.3     320.4   1168.90
    2.29      3.68     10.00      5.79      .063      .045      .060      .000   1165.10   9702.27
 .008333      440.      440.      440.         1         0         0       .00    387.16  10145.66


LOW DISTRIBUTION FOR SECNO=      3.96          CWSEL=   1172.55

TA=    9702.    9890.    9912.    9944.    9983.   10023.   10036.   10046.   10065.   10079.   10103.   10146.
 PER Q=      6.5      8.0      4.9      3.2     41.0      4.6      5.1     11.4      8.3      5.2      1.7
  AREA=    155.0     88.0     75.0     63.8    254.2     51.4     49.4    101.3     75.5     68.9     43.7
   VEL=      2.6      5.6      4.1      3.2     10.0      5.6      6.4      7.0      6.8      4.7      2.5
 DEPTH=       .8      3.9      2.4      1.6      6.3      3.9      4.8      5.4      5.2      2.8      1.0

1490 NH CARD USED
SECNO 4.050

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

   4.050      8.39   1175.69       .00       .00   1176.14       .45      2.68       .04   1172.00
  6208.0     337.5    2584.7    3285.8    1075.9     364.7     837.4    1708.8     326.8   1170.40
    2.32       .31      7.09      3.92      .586      .045      .060      .000   1167.30   9536.21
 .003604      520.      509.      509.         2         0         0       .00    700.12  10236.33
```

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

FLOW DISTRIBUTION FOR SECNO= 4.05 CWSEL= 1175.69

STA=	9536.	9971.	10024.	10064.	10107.	10142.	10163.	10176.	10187.	10209.	10236.
PER Q=	5.4	41.6	13.6	9.7	5.3	4.9	6.4	5.5	6.2	1.3
AREA=	1075.9	364.7	197.6	166.0	105.3	82.8	81.5	66.5	96.6	41.2
VEL=	.3	7.1	4.3	3.6	3.1	3.7	4.9	5.1	4.0	1.9
DEPTH=	2.5	6.9	4.9	3.8	3.0	3.9	6.0	6.4	4.4	1.5

*SECNO 4.160

4.160	7.91	1177.81	.00	.00	1178.43	.62	2.24	.05	1172.20
6208.0	1764.6	2942.7	1500.8	497.1	354.1	382.2	1730.1	333.3	1173.30
2.35	3.55	8.31	3.93	.060	.045	.060	.000	1169.90	9784.12
.004976	520.	530.	540.	2	0	0	.00	372.55	10156.67

FLOW DISTRIBUTION FOR SECNO= 4.16 CWSEL= 1177.81

STA=	9784.	9850.	9883.	9906.	9940.	9967.	9978.	10030.	10061.	10090.	10107.	10144.	10157.
PER Q=	3.8	6.4	3.7	4.6	5.6	4.2	47.4	6.6	5.8	6.1	5.6	.1
AREA=	95.4	104.7	65.8	87.6	89.1	54.5	354.1	103.7	94.6	78.9	101.1	4.0
VEL=	2.5	3.8	3.5	3.3	3.9	4.8	8.3	4.0	3.8	4.8	3.4	.8
DEPTH=	1.4	3.2	2.9	2.6	3.4	4.7	6.8	3.4	3.3	4.6	2.8	.3

SECNO 4.250

4.250	8.03	1180.13	.00	.00	1180.61	.48	2.17	.01	1173.70
6208.0	2190.7	2094.0	1923.3	635.0	265.8	434.9	1744.6	337.6	1174.10
2.37	3.45	7.88	4.42	.060	.045	.060	.000	1172.10	9724.85
.003905	485.	495.	500.	2	0	0	.00	397.21	10122.06

LOW DISTRIBUTION FOR SECNO= 4.25 CWSEL= 1180.13

TA=	9725.	9747.	9806.	9873.	9929.	9963.	9981.	9988.	10024.	10062.	10093.	10122.
PER Q=	.0	.7	5.0	11.1	9.9	5.6	3.0	33.7	17.3	10.8	2.9
AREA=	3.6	37.3	128.5	194.5	148.9	82.0	40.2	265.8	218.1	149.9	66.9
VEL=	.5	1.1	2.4	3.6	4.1	4.2	4.7	7.9	4.9	4.5	2.6
DEPTH=	.2	.6	1.9	3.5	4.3	4.5	5.4	7.5	5.7	4.9	2.3

*SECNO 4.350

4.350	6.69	1182.39	.00	.00	1182.74	.35	2.11	.01	1178.60
6208.0	133.8	1871.9	4202.3	65.0	269.8	1226.6	1762.1	343.3	1177.60
2.41	2.06	6.94	3.43	.060	.045	.060	.000	1175.70	9919.07
.004113	500.	520.	540.	3	0	0	.00	538.47	10457.54

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

FLOW DISTRIBUTION FOR SECNO= 4.35 CWSEL= 1182.39

STA=	9919.	9976.	10021.	10046.	10090.	10115.	10135.	10177.	10238.	10304.	10361.	10404.	10454.
PER Q=	2.2	30.2	7.2	10.5	7.0	7.2	10.2	8.1	5.5	4.0	4.4	3.5	
AREA=	65.0	269.8	105.7	168.5	104.6	98.7	161.7	164.7	134.6	104.8	98.2	85.0	
VEL=	2.1	6.9	4.3	3.9	4.2	4.5	3.9	3.1	2.6	2.4	2.8	2.5	
DEPTH=	1.1	6.0	4.4	3.8	4.2	4.8	3.9	2.7	2.0	1.8	2.3	1.7	

STA=	10454.	10458.
PER Q=	.0	
AREA=	.2	
VEL=	.2	
DEPTH=	.0	

*SECNO 4.460

4.460	6.36	1185.36	.00	.00	1185.81	.45	3.04	.03	1187.10
6208.0	.0	1675.1	4532.9	.0	205.5	1148.6	1779.9	350.1	1182.60
2.44	.00	8.15	3.95	.000	.045	.060	.000	1179.00	9982.09
.008287	625.	590.	515.	2	0	0	.00	597.97	10580.06

FLOW DISTRIBUTION FOR SECNO= 4.46 CWSEL= 1185.36

STA=	9982.	10026.	10045.	10100.	10134.	10169.	10187.	10198.	10228.	10274.	10318.	10365.	10402.
PER Q=	27.0	3.5	9.9	5.6	5.8	4.4	4.8	9.8	5.6	4.3	5.0	3.5	
AREA=	205.5	50.0	143.5	83.8	87.0	56.9	49.4	110.8	95.7	79.8	90.3	65.6	
VEL=	8.2	4.3	4.3	4.2	4.1	4.8	6.0	5.5	3.6	3.3	3.5	3.3	
DEPTH=	4.6	2.7	2.6	2.5	2.5	3.1	4.4	3.8	2.1	1.8	1.9	1.8	

STA=	10402.	10460.	10554.	10580.
PER Q=	4.3	6.0	.5	
AREA=	87.9	130.5	17.6	
VEL=	3.0	2.9	1.7	
DEPTH=	1.5	1.4	.7	

*SECNO 4.550

265 DIVIDED FLOW

4.550	7.59	1188.59	.00	.00	1189.23	.64	3.36	.06	1184.80
6208.0	44.7	2123.7	4039.6	15.6	230.3	930.2	1793.0	355.3	1182.40
2.46	2.87	9.22	4.34	.060	.045	.060	.000	1181.00	9967.87
.006517	495.	490.	445.	3	0	0	.00	400.51	10419.75

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

FLOW DISTRIBUTION FOR SECNO= 4.55 CWSEL= 1188.59

STA=	9968.	9976.	10011.	10030.	10084.	10113.	10124.	10150.	10212.	10248.	10295.	10420.
PER Q=	.7	34.2	7.8	13.3	8.4	3.8	8.0	14.0	5.7	3.1	.9	
AREA=	15.6	230.3	87.1	183.8	108.7	44.6	101.6	199.3	93.8	71.7	39.7	
VEL=	2.9	9.2	5.6	4.5	4.8	5.3	4.9	4.4	3.8	2.7	1.3	
DEPTH=	1.9	6.5	4.7	3.4	3.7	4.3	3.8	3.2	2.6	1.5	.3	

*SECNO 4.650

4.650	7.42	1191.32	.00	.00	1191.71	.40	2.46	.02	1186.30
6208.0	4863.6	1314.5	29.9	1167.0	174.0	12.9	1806.5	359.1	1184.90
2.48	4.17	7.56	2.32	.060	.045	.060	.000	1183.90	9694.65
.004335	460.	495.	455.	2	0	0	.00	322.86	10017.51

FLOW DISTRIBUTION FOR SECNO= 4.65 CWSEL= 1191.32

STA=	9695.	9716.	9733.	9745.	9754.	9768.	9828.	9902.	9952.	9987.	10014.	10018.
PER Q=	1.8	5.1	3.9	3.5	5.1	15.1	19.0	13.2	11.6	21.2	.5	
AREA=	41.2	73.8	54.5	45.4	68.3	233.8	290.9	198.3	160.7	174.0	12.9	
VEL=	2.7	4.3	4.4	4.8	4.7	4.0	4.1	4.1	4.5	7.6	2.3	
DEPTH=	2.0	4.3	4.5	5.2	4.9	3.9	3.9	4.0	4.6	6.5	3.2	

490 NH CARD USED
*SECNO 4.760

265 DIVIDED FLOW

4.760	6.95	1194.05	.00	.00	1194.37	.33	2.65	.01	1190.50
6208.0	1074.7	1357.1	3776.2	611.9	202.8	902.9	1826.6	364.9	1189.90
2.52	1.76	6.69	4.18	.111	.045	.060	.000	1187.10	9689.63
.004835	520.	605.	655.	2	0	0	.00	575.73	10274.44

FLOW DISTRIBUTION FOR SECNO= 4.76 CWSEL= 1194.05

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

STA=	9690.	9917.	9941.	9967.	9980.	10020.	10060.	10116.	10173.	10209.	10224.	10232.	10240.
PER Q=	7.4	3.2	4.5	2.3	21.9	11.4	12.9	10.6	6.7	4.6	4.9	4.8	
AREA=	433.4	61.4	78.1	39.0	202.8	161.0	199.3	178.7	113.3	63.7	52.7	51.0	
VEL=	1.1	3.2	3.5	3.6	6.7	4.4	4.0	3.7	3.7	4.5	5.8	5.8	
DEPTH=	1.9	2.5	2.9	3.0	5.0	4.1	3.5	3.1	3.1	4.2	6.2	6.3	

STA=	10240.	10256.	10274.
PER Q=	4.2	.7	
AREA=	61.1	22.1	
VEL=	4.3	1.9	
DEPTH=	4.0	1.2	

SECNO 4.860

4.860	6.66	1196.36	.00	.00	1196.66	.31	2.29	.00	1192.90
6208.0	1415.9	1629.5	3162.6	418.0	240.8	985.3	1846.3	371.6	1190.40
2.56	3.39	6.77	3.21	.060	.045	.060	.000	1189.70	9832.51
.004117	475.	520.	525.	2	0	0	.00	572.96	10405.48

FLOW DISTRIBUTION FOR SECNO= 4.86 CWSEL= 1196.36

STA=	9833.	9901.	9923.	9957.	9980.	10022.	10042.	10078.	10103.	10121.	10148.	10191.	10240.
PER Q=	7.8	4.6	6.5	3.9	26.2	6.0	4.3	3.6	5.2	5.9	3.6	3.7	
AREA=	156.3	77.5	112.7	71.4	240.8	88.4	90.4	70.2	77.4	98.4	88.0	93.9	
VEL=	3.1	3.7	3.6	3.4	6.8	4.2	2.9	3.2	4.2	3.7	2.6	2.4	
DEPTH=	2.3	3.6	3.4	3.1	5.8	4.4	2.5	2.9	4.3	3.6	2.1	1.9	

STA=	10240.	10284.	10301.	10321.	10347.	10405.
PER Q=	5.1	3.3	4.1	4.5	1.7	
AREA=	107.1	57.2	69.6	81.4	63.1	
VEL=	3.0	3.6	3.6	3.4	1.7	
DEPTH=	2.4	3.4	3.4	3.2	1.1	

SECNO 4.960

4.960	6.31	1198.71	.00	.00	1199.27	.56	2.53	.08	1193.40
6133.5	537.0	2523.6	3073.0	175.3	315.3	731.8	1863.1	377.4	1195.30
2.58	3.06	8.00	4.20	.060	.045	.060	.000	1192.40	9870.20
.006055	495.	515.	515.	2	0	0	.00	426.13	10296.32

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

FLOW DISTRIBUTION FOR SECNO= 4.96 CWSEL= 1198.71

STA=	9870.	9896.	9939.	9957.	9970.	10027.	10067.	10114.	10131.	10153.	10215.	10284.	10296.
PER Q=	.8	3.4	1.4	3.2	41.1	9.7	13.4	7.2	7.4	9.4	3.0	.0	
AREA=	25.0	75.3	30.6	44.5	315.3	135.7	176.6	82.5	90.5	160.4	83.0	3.1	
VEL=	1.9	2.8	2.8	4.4	8.0	4.4	4.7	5.4	5.0	3.6	2.2	.8	
DEPTH=	1.0	1.8	1.7	3.6	5.5	3.4	3.8	4.7	4.2	2.6	1.2	.3	

*SECNO 5.050

5.050	6.73	1201.73	.00	.00	1202.23	.50	2.96	.01	1196.10
6133.5	619.1	2503.2	3011.2	142.8	320.4	890.0	1878.3	383.2	1196.70
2.61	4.34	7.81	3.38	.060	.045	.060	.000	1195.00	9941.13
.005417	480.	515.	525.	2	0	0	.00	543.99	10485.12

FLOW DISTRIBUTION FOR SECNO= 5.05 CWSEL= 1201.73

STA=	9941.	9957.	9986.	10042.	10102.	10179.	10243.	10313.	10389.	10474.	10485.
PER Q=	.8	9.3	40.8	18.8	14.5	6.7	3.2	3.7	2.2	.0	
AREA=	21.8	120.9	320.4	247.1	233.0	136.0	89.9	102.5	79.1	2.4	
VEL=	2.2	4.7	7.8	4.7	3.8	3.0	2.2	2.2	1.7	.7	
DEPTH=	1.4	4.2	5.8	4.1	3.0	2.1	1.3	1.3	.9	.2	

*SECNO 5.160

5.160	6.75	1204.05	.00	.00	1204.23	.18	1.97	.03	1201.40
6133.5	4314.1	1341.6	477.8	1313.6	309.1	320.3	1897.2	390.4	1202.50
2.65	3.28	4.34	1.49	.060	.045	.060	.000	1197.30	9581.10
.002893	520.	560.	440.	1	0	0	.00	764.65	10345.75

FLOW DISTRIBUTION FOR SECNO= 5.16 CWSEL= 1204.05

STA=	9581.	9616.	9646.	9689.	9721.	9743.	9795.	9808.	9819.	9828.	9853.	9876.	9912.
PER Q=	6.4	3.4	3.8	4.3	7.1	3.8	4.5	5.3	3.7	5.6	6.3	9.9	
AREA=	124.0	81.8	100.0	94.3	112.1	103.4	66.9	71.0	53.1	102.0	103.4	165.6	
VEL=	3.2	2.6	2.4	2.8	3.9	2.3	4.1	4.6	4.3	3.4	3.7	3.7	
DEPTH=	3.5	2.7	2.3	3.0	5.1	2.0	5.4	6.4	5.9	4.0	4.6	4.5	

STA=	9912.	9957.	10037.	10111.	10244.	10346.
PER Q=	6.2	21.9	3.5	3.4	.9	
AREA=	135.9	309.1	117.6	145.9	56.8	
VEL=	2.8	4.3	1.8	1.4	1.0	
DEPTH=	3.0	3.8	1.6	1.1	.6	

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

SECNO 5.230

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

5.230	5.01	1205.71	.00	.00	1206.28	.57	1.93	.12	1204.00
6133.5	2692.0	2266.9	1174.6	471.6	311.7	310.2	1910.5	395.5	1203.70
2.67	5.71	7.27	3.79	.060	.045	.060	.000	1200.70	9795.41
.010667	395.	390.	335.	3	0	0	.00	433.60	10229.01

FLOW DISTRIBUTION FOR SECNO= 5.23 CWSEL= 1205.71

STA=	9795.	9815.	9826.	9844.	9874.	9906.	9924.	9950.	10049.	10115.	10207.	10229.
PER Q=	4.9	7.0	8.0	5.0	7.7	7.3	4.0	37.0	8.8	9.8	.6	
AREA=	54.1	58.0	74.0	69.2	88.0	71.7	56.5	311.7	132.1	161.7	16.4	
VEL=	5.5	7.4	6.6	4.5	5.4	6.3	4.3	7.3	4.1	3.7	2.1	
DEPTH=	2.8	5.0	4.2	2.3	2.8	3.9	2.2	3.1	2.0	1.8	.8	

1490 NH CARD USED

SECNO 5.290

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.10

5.290	5.91	1207.61	.00	.00	1207.73	.12	1.41	.04	1204.70
6135.2	1966.6	1545.6	2623.0	725.2	361.3	1893.5	1925.3	402.4	1204.90
2.70	2.71	4.28	1.39	.060	.045	.083	.000	1201.70	9674.00
.002420	340.	300.	310.	3	0	0	.00	1475.48	11199.66

FLOW DISTRIBUTION FOR SECNO= 5.29 CWSEL= 1207.61

STA=	9674.	9760.	9786.	9808.	9827.	9864.	9919.	9962.	10046.	10076.	10157.	10241.	10274.
PER Q=	3.9	5.4	4.6	3.6	5.7	4.1	4.6	25.2	3.2	8.0	7.9	3.6	
AREA=	89.2	107.7	89.3	73.9	125.6	122.7	116.8	361.3	81.9	211.5	213.6	91.9	
VEL=	2.7	3.1	3.2	3.0	2.8	2.1	2.4	4.3	2.4	2.3	2.3	2.4	
DEPTH=	1.0	4.1	4.2	3.9	3.4	2.2	2.8	4.3	2.7	2.6	2.6	2.8	

STA=	10274.	10292.	10346.	10395.	10560.	11030.	11200.
PER Q=	4.0	5.9	3.4	3.6	3.0	.2	
AREA=	77.8	149.9	102.8	174.5	649.4	140.3	
VEL=	3.2	2.4	2.0	1.3	.3	.1	
DEPTH=	4.3	2.8	2.1	1.1	1.4	.8	

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

SECNO 5.390
   5.390      5.68   1208.88       .00       .00   1209.07       .19      1.32       .02   1207.20
  6157.6    4013.6    1553.3     590.7    1183.6     369.8     362.3    1948.5     414.0   1208.20
    2.74      3.39      4.20      1.63      .060      .045      .060      .000   1203.20   9504.33
 .004278      380.      500.      410.         2         0         0       .00   1000.11  10504.44

FLOW DISTRIBUTION FOR SECNO=      5.39          CWSEL=   1208.88

STA=    9504.    9563.    9584.    9607.    9620.    9638.    9703.    9785.    9850.    9912.   10048.   10127.   10444.
 PER Q=     7.1      6.2      4.4      4.0      5.4     10.1     12.5      9.4      6.0     25.2      4.4      4.2
  AREA=   141.4     90.1     76.5     56.7     78.0    189.2    234.1    181.5    136.2    369.8    118.2    199.2
   VEL=     3.1      4.2      3.6      4.4      4.2      3.3      3.3      3.2      2.7      4.2      2.3      1.3
 DEPTH=     2.4      4.3      3.3      4.5      4.3      2.9      2.9      2.8      2.2      2.7      1.5       .6

STA=   10444.   10504.
 PER Q=     1.0
  AREA=    44.9
   VEL=     1.3
 DEPTH=      .7

*SECNO 5.460
   5.460      5.53   1211.03       .00       .00   1211.36       .33      2.25       .04   1209.50
  6208.0    3021.9    1883.2    1303.0     960.7     264.1     526.2    1964.3     424.0   1208.90
    2.76      3.15      7.13      2.48      .060      .045      .060      .000   1205.50   9339.63
 .008804      345.      420.      420.         2         0         0       .00   1248.18  10587.81

FLOW DISTRIBUTION FOR SECNO=      5.46          CWSEL=   1211.03

STA=    9340.    9359.    9902.    9956.   10031.   10086.   10180.   10285.   10377.   10475.   10562.   10588.
 PER Q=      .4     43.5      4.8     30.3      4.4      5.3      6.0      2.8      1.7       .8       .0
  AREA=    12.7    857.5     90.5    264.1     87.6    119.3    135.3     80.4     61.9     37.4      4.2
   VEL=     1.8      3.2      3.3      7.1      3.2      2.7      2.7      2.1      1.7      1.3       .7
 DEPTH=      .7      1.6      1.7      3.5      1.6      1.3      1.3       .9       .6       .4       .2

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    2878.0     748.0    2582.0     965.8     158.7     949.5    1984.3     435.3   1212.70
    2.80      2.98      4.71      2.72      .060      .045      .060      .000   1208.90   9589.56
 .003897      450.      475.      455.         3         0         0       .00    924.45  10514.01
```

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

FLOW DISTRIBUTION FOR SECNO= 5.55 CWSEL= 1213.80

STA=	9590.	9664.	9692.	9760.	9840.	9862.	9891.	9987.	10032.	10108.	10192.	10275.	10308.
PER Q=	7.3	5.7	10.9	5.5	5.1	5.1	6.8	12.0	5.5	11.6	12.3	4.9	
AREA=	160.3	100.4	205.9	141.7	83.6	94.7	179.3	158.7	143.1	235.3	242.3	95.2	
VEL=	2.8	3.5	3.3	2.4	3.8	3.4	2.4	4.7	2.4	3.1	3.1	3.2	
DEPTH=	2.2	3.5	3.0	1.8	3.8	3.2	1.9	3.5	1.9	2.8	2.9	2.9	

STA=	10308.	10404.	10485.	10514.
PER Q=	3.2	4.1	.0	
AREA=	103.4	124.3	5.9	
VEL=	1.9	2.1	.5	
DEPTH=	1.1	1.5	.2	

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	1216.76	.42	2.73	.08	1214.20
6208.0	1817.6	1665.0	2725.4	436.7	217.3	714.7	2001.9	444.2	1213.90
2.83	4.16	7.66	3.81	.060	.045	.072	.000	1211.60	9747.61
.010812	450.	450.	445.	1	0	0	.00	803.07	10550.69

FLOW DISTRIBUTION FOR SECNO= 5.64 CWSEL= 1216.33

STA=	9748.	9805.	9829.	9862.	9920.	9929.	9949.	9981.	10046.	10104.	10132.	10182.	10253.
PER Q=	4.7	3.2	3.9	5.8	3.3	4.2	4.2	26.8	15.3	11.1	13.0	3.9	
AREA=	85.6	47.8	62.3	91.7	32.1	52.8	64.4	217.3	175.8	108.1	150.1	83.7	
VEL=	3.4	4.1	3.9	4.0	6.3	4.9	4.1	7.7	5.4	6.4	5.4	2.9	
DEPTH=	1.5	2.0	1.9	1.6	3.8	2.6	2.0	3.4	3.0	3.9	3.0	1.2	

STA=	10253.	10551.
PER Q=	.7	
AREA=	197.1	
VEL=	.2	
DEPTH=	.7	

*SECNO 5.730

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 = 1.49

5.730	6.39	1219.69	.00	.00	1220.01	.32	3.24	.01	1216.50
6208.0	3578.8	1853.0	776.2	1035.9	285.7	272.7	2017.7	451.8	1216.60
2.86	3.45	6.49	2.85	.060	.045	.060	.000	1213.30	9562.75
.004887	450.	475.	475.	4	0	0	.00	623.09	10185.84

LOW DISTRIBUTION FOR SECNO= 5.73 CWSEL= 1219.69

STA=	9563.	9633.	9668.	9685.	9712.	9778.	9814.	9838.	9867.	9906.	9916.	9938.	9974.
PER Q=	4.9	5.8	4.5	5.7	3.7	3.5	3.0	3.6	4.6	4.1	7.5	6.7	
AREA=	116.8	102.8	65.1	91.3	99.6	76.7	59.4	70.9	91.6	50.0	99.4	112.3	
VEL=	2.6	3.5	4.3	3.9	2.3	2.8	3.2	3.1	3.1	5.0	4.7	3.7	
DEPTH=	1.7	2.9	3.9	3.3	1.5	2.1	2.5	2.4	2.4	5.0	4.5	3.1	

STA=	9974.	10034.	10112.	10186.
PER Q=	29.8	10.4	2.1	
AREA=	285.7	200.9	71.9	
VEL=	6.5	3.2	1.8	
DEPTH=	4.8	2.5	1.0	

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	924.6	1327.9	1475.5	269.0	202.2	494.8	2030.5	457.3	1219.60
2.89	3.44	6.57	2.98	.060	.045	.060	.000	1217.00	9842.44
.006500	410.	460.	460.	3	0	0	.00	477.20	10319.64

LOW DISTRIBUTION FOR SECNO= 5.82 CWSEL= 1222.06

STA=	9842.	9884.	9896.	9939.	9982.	10034.	10104.	10159.	10231.	10275.	10317.
PER Q=	2.0	3.9	14.2	4.8	35.6	12.0	4.4	8.1	10.9	4.2	
AREA=	38.3	35.8	128.4	66.5	202.2	140.5	69.8	112.5	110.6	61.4	
VEL=	1.9	4.1	4.1	2.7	6.6	3.2	2.3	2.7	3.7	2.6	
DEPTH=	.9	3.0	3.0	1.6	3.9	2.0	1.3	1.6	2.5	1.5	

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

*SECNO 5.910
   5.910      5.72   1224.82       .00       .00   1225.10       .28      2.70       .01   1222.20
  3728.0     981.0    1364.6    1382.4     353.3     228.7     469.8    2041.5     462.7   1222.90
    2.92      2.78      5.97      2.94      .060      .045      .060      .000   1219.10   9778.58
 .004863      485.      500.      465.         3         0         0       .00    510.95  10289.53

FLOW DISTRIBUTION FOR SECNO=      5.91          CWSEL=   1224.82

STA=    9779.    9789.    9833.    9849.    9879.    9938.    9977.   10031.   10098.   10154.   10225.   10290.
 PER Q=      .0      1.5      2.6      7.0      8.3      6.9     36.6     13.4     14.6      8.4       .7
 AREA=      1.5     36.4     33.8     79.9    114.2     87.4    228.7    160.6    158.3    124.7     26.2
  VEL=       .5      1.5      2.9      3.3      2.7      2.9      6.0      3.1      3.4      2.5       .9
DEPTH=       .2       .8      2.2      2.6      2.0      2.2      4.2      2.4      2.8      1.8       .4

1490 NH CARD USED
*SECNO 5.990
   5.990      5.61   1227.51       .00       .00   1227.99       .49      2.83       .06   1225.60
  3728.0    1200.6    1584.8     942.6     346.0     201.3     449.0    2051.5     468.4   1225.70
    2.94      3.47      7.87      2.10      .060      .045      .096      .000   1221.90   9762.57
 .009692      425.      425.      425.         2         0         0       .00    658.11  10420.68

FLOW DISTRIBUTION FOR SECNO=      5.99          CWSEL=   1227.51

STA=    9763.    9835.    9891.    9948.    9983.   10035.   10060.   10070.   10115.   10421.
 PER Q=      8.4     12.3      6.6      5.0     42.5      7.8      6.1     10.9       .5
 AREA=      94.3    116.0     80.1     55.6    201.3     63.7     38.7     98.9    247.8
  VEL=       3.3      3.9      3.1      3.3      7.9      4.6      5.9      4.1       .1
DEPTH=       1.3      2.1      1.4      1.6      3.8      2.6      3.8      2.2       .8

1490 NH CARD USED
*SECNO 6.080

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

   6.080      7.03   1230.53       .00       .00   1230.95       .42      2.95       .01   1227.40
  3728.0     715.0    1836.9    1176.1     325.1     261.5     492.1    2062.2     475.8   1227.60
    2.97      2.20      7.02      2.39      .060      .045      .068      .000   1223.50   9726.46
 .004715      450.      450.      450.         4         0         0       .00    785.43  10511.89
```

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

FLOW DISTRIBUTION FOR SECNO= 6.08 CWSEL= 1230.53

STA=	9726.	9843.	9910.	9980.	10028.	10061.	10116.	10182.	10512.
PER Q=	5.6	5.5	8.1	49.3	11.3	15.4	4.5	.3	
AREA=	111.2	95.3	118.6	261.5	111.1	163.1	84.5	133.4	
VEL=	1.9	2.2	2.5	7.0	3.8	3.5	2.0	.1	
DEPTH=	1.0	1.4	1.7	5.6	3.3	3.0	1.3	.4	

*SECNO 6.170

6.170	6.71	1232.51	.00	.00	1232.91	.40	1.96	.00	1227.70
3728.0	405.9	1987.3	1334.8	115.3	312.0	485.5	2072.7	481.7	1229.40
3.00	3.52	6.37	2.75	.060	.045	.060	.000	1225.80	9911.87
.003891	460.	465.	450.	2	0	0	.00	341.05	10252.93

FLOW DISTRIBUTION FOR SECNO= 6.17 CWSEL= 1232.51

STA=	9912.	9936.	9964.	9971.	9984.	10041.	10074.	10187.	10253.
PER Q=	.0	1.0	2.1	7.8	53.3	7.0	23.2	5.7	
AREA=	2.6	25.4	23.9	63.4	312.0	88.5	295.0	101.9	
VEL=	.3	1.5	3.3	4.6	6.4	2.9	2.9	2.1	
DEPTH=	.1	.9	3.5	5.1	5.5	2.6	2.6	1.6	

*SECNO 6.260

6.260	5.05	1234.75	.00	.00	1234.95	.20	2.02	.02	1231.60
3442.0	2114.1	851.2	476.7	697.5	165.4	237.3	2084.1	487.0	1233.40
3.04	3.03	5.15	2.01	.060	.045	.060	.000	1229.70	9674.69
.004285	490.	505.	490.	3	0	0	.00	596.39	10271.08

FLOW DISTRIBUTION FOR SECNO= 6.26 CWSEL= 1234.75

STA=	9675.	9734.	9741.	9765.	9825.	9894.	9913.	9938.	9967.	9992.	10036.	10108.	10188.
PER Q=	4.9	3.2	7.1	4.7	9.2	7.2	11.2	7.2	6.7	24.7	10.0	3.2	
AREA=	74.2	28.5	72.4	80.7	129.1	65.6	97.8	78.2	70.8	165.4	138.4	72.2	
VEL=	2.3	3.9	3.4	2.0	2.4	3.8	3.9	3.2	3.3	5.1	2.5	1.5	
DEPTH=	1.3	3.8	3.0	1.4	1.9	3.6	3.8	2.8	2.9	3.7	1.9	.9	

STA=	10188.	10271.
PER Q=	.6	
AREA=	26.7	
VEL=	.8	
DEPTH=	.3	

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

5490 NH CARD USED
*SECNO 6.360

5265 DIVIDED FLOW

5302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

6.360	6.57	1237.67	.00	.00	1238.20	.53	3.15	.10	1238.20
3442.0	928.2	1699.3	814.5	265.3	218.5	378.1	2095.7	494.4	1236.20
3.06	3.50	7.78	2.15	.060	.045	.087	.000	1231.10	9704.93
.009264	510.	525.	525.	4	0	0	.00	642.91	10362.13

FLOW DISTRIBUTION FOR SECNO= 6.36 CWSEL= 1237.67

STA=	9705.	9827.	9842.	9915.	9946.	9964.	10034.	10057.	10069.	10117.	10362.
PER Q=	3.4	3.4	10.8	9.1	.3	49.4	5.1	5.7	12.1	.7	
AREA=	49.1	30.8	104.9	73.4	7.0	218.5	46.6	37.6	104.4	189.6	
VEL=	2.4	3.8	3.5	4.3	1.3	7.8	3.8	5.2	4.0	.1	
DEPTH=	.4	2.0	1.4	2.4	.4	3.9	2.0	3.3	2.2	.8	

*SECNO 6.450

5302 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	1324.7	929.8	1187.5	613.6	172.5	406.6	2106.8	501.0	1237.90
3.10	2.16	5.39	2.92	.060	.045	.060	.000	1234.30	9601.05
.003886	445.	480.	485.	2	0	0	.00	610.15	10211.20

FLOW DISTRIBUTION FOR SECNO= 6.45 CWSEL= 1240.73

STA=	9601.	9663.	9982.	10022.	10064.	10096.	10151.	10211.
PER Q=	2.6	35.9	27.0	12.8	10.5	9.6	1.6	
AREA=	59.4	554.1	172.5	133.5	105.8	123.8	43.5	
VEL=	1.5	2.2	5.4	3.3	3.4	2.7	1.2	
DEPTH=	1.0	1.7	4.4	3.1	3.3	2.3	.7	

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

1490 NH CARD USED
*SECNO 6.560

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .65

6.560	5.25	1243.25	.00	.00	1243.58	.33	2.62	.04	1240.60
3140.0	1415.9	1114.3	609.8	424.0	165.1	626.7	2120.7	508.6	1241.10
3.14	3.34	6.75	.97	.060	.045	.190	.000	1238.00	9731.63
.007559	435.	550.	560.	2	0	0	.00	710.66	10463.51

FLOW DISTRIBUTION FOR SECNO= 6.56 CWSEL= 1243.25

STA=	9732.	9842.	9895.	9914.	9944.	9962.	9986.	10031.	10060.	10096.	10293.	10464.
PER Q=	8.6	10.1	4.9	5.9	5.1	10.4	35.5	10.8	3.8	3.0	1.7	
AREA=	113.1	98.1	41.9	56.3	42.1	72.5	165.1	80.7	44.7	240.7	260.6	
VEL=	2.4	3.2	3.6	3.3	3.8	4.5	6.7	4.2	2.7	.4	.2	
DEPTH=	1.0	1.8	2.2	1.9	2.4	3.0	3.6	2.7	1.3	1.2	1.5	

1490 NH CARD USED
*SECNO 6.660

6.660	6.06	1247.06	.00	.00	1247.26	.20	3.66	.01	1244.60
3140.0	608.3	877.8	1653.8	244.3	142.0	1278.1	2138.4	519.6	1245.30
3.19	2.49	6.18	1.29	.060	.045	.121	.000	1241.00	9769.43
.006058	560.	545.	525.	5	0	0	.00	1077.22	10846.65

FLOW DISTRIBUTION FOR SECNO= 6.66 CWSEL= 1247.06

STA=	9769.	9812.	9826.	9923.	9960.	9985.	10022.	10097.	10212.	10372.	10758.	10847.
PER Q=	3.8	3.1	3.2	4.6	4.7	28.0	10.7	14.1	24.0	3.3	.5	
AREA=	43.2	30.9	64.8	57.0	48.4	142.0	124.1	174.7	273.5	601.3	104.5	
VEL=	2.8	3.2	1.5	2.5	3.0	6.2	2.7	2.5	2.8	.2	.2	
DEPTH=	1.0	2.2	.7	1.5	2.0	3.8	1.7	1.5	1.7	1.6	1.2	

1490 NH CARD USED
*SECNO 6.750

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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

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

6.750	5.72	1250.92	.00	.00	1251.53	.61	4.15	.12	1248.20
3140.0	761.5	1618.6	759.8	804.1	186.9	844.6	2158.2	533.4	1249.90
3.22	.95	8.66	.90	.251	.045	.220	.000	1245.20	9386.83
.012708	470.	485.	505.	2	0	0	.00	1373.42	10784.83

FLOW DISTRIBUTION FOR SECNO= 6.75 CWSEL= 1250.92

STA=	9387.	9677.	9957.	9969.	9988.	10040.	10105.	10167.	10524.	10785.
PER Q=	4.2	3.8	4.2	12.0	51.5	10.4	7.7	3.7	2.4	
AREA=	484.8	229.7	27.6	61.9	186.9	92.2	75.8	355.0	321.5	
VEL=	.3	.5	4.8	6.1	8.7	3.5	3.2	.3	.2	
DEPTH=	1.7	.8	2.3	3.2	3.6	1.4	1.2	1.0	1.2	

1490 NH CARD USED
*SECNO 6.840

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

6.840	7.11	1254.61	.00	.00	1255.05	.43	3.50	.02	1252.30
3140.0	778.1	2006.9	354.9	925.3	305.1	514.6	2177.9	550.7	1252.30
3.25	.84	6.58	.69	.138	.045	.122	.000	1247.50	9127.00
.004643	470.	490.	490.	5	0	0	.00	1750.27	10877.27

FLOW DISTRIBUTION FOR SECNO= 6.84 CWSEL= 1254.61

TA=	9127.	9801.	9855.	9889.	9969.	10029.	10091.	10282.	10877.
PER Q=	11.4	5.5	3.1	4.8	63.9	5.9	4.6	.7	
AREA=	715.4	79.0	46.7	84.3	305.1	87.5	117.5	309.6	
VEL=	.5	2.2	2.1	1.8	6.6	2.1	1.2	.1	
DEPTH=	1.1	1.5	1.4	1.1	5.1	1.4	.6	.5	

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 6.940

265 DIVIDED FLOW

6.940	4.33	1257.43	.00	.00	1257.61	.18	2.54	.02	1256.20
2751.0	144.9	671.1	1934.9	306.6	124.4	746.5	2193.3	564.0	1255.30
3.29	.47	5.40	2.59	.315	.045	.060	.000	1253.10	9580.22
.006120	435.	520.	460.	4	0	0	.00	826.13	10530.80

LOW DISTRIBUTION FOR SECNO= 6.94 CWSEL= 1257.43

TA=	9580.	9988.	10029.	10076.	10167.	10224.	10284.	10464.	10529.
PER Q=	5.3	24.4	7.5	12.3	12.5	10.4	24.3	3.3	
AREA=	306.6	124.4	76.8	134.8	112.3	102.8	266.1	53.6	
VEL=	.5	5.4	2.7	2.5	3.1	2.8	2.5	1.7	
DEPTH=	.8	3.1	1.6	1.5	2.0	1.7	1.5	.8	

1490 NH CARD USED
SECNO 7.020

3265 DIVIDED FLOW

7.020	5.15	1260.45	.00	.00	1260.91	.45	3.21	.08	1257.90
2751.0	268.0	930.9	1552.2	488.3	120.5	389.5	2203.5	571.9	1259.10
3.31	.55	7.73	3.99	.302	.045	.060	.000	1255.30	9254.22
.010257	400.	410.	415.	3	0	0	.00	856.82	10260.02

LOW DISTRIBUTION FOR SECNO= 7.02 CWSEL= 1260.45

STA=	9254.	9953.	9980.	10013.	10054.	10064.	10070.	10088.	10195.	10260.
PER Q=	3.9	5.9	33.8	10.8	5.6	6.4	13.1	18.1	2.4	
AREA=	443.0	45.3	120.5	77.2	29.3	26.9	63.5	154.9	37.6	
VEL=	.2	3.6	7.7	3.8	5.3	6.6	5.7	3.2	1.7	
DEPTH=	.6	1.7	3.6	1.9	3.1	4.4	3.5	1.5	.6	

SECNO 7.110

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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
7.110	5.11	1264.11	.00	.00	1264.27	.16	3.34	.03	1262.50
2751.0	1130.2	466.7	1154.0	519.7	84.4	434.8	2214.8	580.4	1261.50
3.36	2.17	5.53	2.65	.060	.045	.060	.000	1259.00	9612.11
.004869	475.	500.	490.	2	0	0	.00	673.23	10285.33

FLOW DISTRIBUTION FOR SECNO= 7.11 CWSEL= 1264.11

STA=	9612.	9868.	9896.	9970.	9995.	10017.	10083.	10174.	10209.	10285.
PER Q=	22.7	3.0	11.9	3.5	17.0	16.3	16.9	7.2	1.6	
AREA=	310.8	38.8	130.0	39.9	84.4	150.6	174.1	71.4	38.8	
VEL=	2.0	2.1	2.5	2.4	5.5	3.0	2.7	2.8	1.1	
DEPTH=	1.2	1.4	1.8	1.6	3.9	2.3	1.9	2.0	.5	

1490 NH CARD USED
*SECNO 7.200

3265 DIVIDED FLOW

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

7.200	3.72	1267.42	.00	.00	1267.61	.19	3.33	.01	1266.60
2751.0	1122.2	630.1	998.7	378.9	113.4	460.2	2225.3	587.9	1266.90
3.40	2.96	5.56	2.17	.060	.045	.105	.000	1263.70	9622.83
.012071	450.	455.	465.	4	0	0	.00	772.09	10523.44

FLOW DISTRIBUTION FOR SECNO= 7.20 CWSEL= 1267.42

STA=	9623.	9704.	9738.	9851.	9914.	9974.	10034.	10050.	10077.	10356.	10382.	10410.	10480.
PER Q=	5.6	8.6	12.5	7.4	6.7	22.9	5.6	11.5	6.7	4.5	4.6	3.1	
AREA=	64.2	59.7	121.2	69.3	64.5	113.4	34.9	65.0	143.7	62.4	66.0	74.8	
VEL=	2.4	4.0	2.8	2.9	2.8	5.6	4.4	4.9	1.3	2.0	1.9	1.1	
DEPTH=	.8	1.8	1.1	1.1	1.1	1.9	2.1	2.4	.5	2.5	2.3	1.1	

STA=	10480.	10523.
PER Q=	.2	
AREA=	13.3	
VEL=	.5	
DEPTH=	.3	

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

1490 NH CARD USED
*SECNO 7.300

3265 DIVIDED FLOW

7.300	4.10	1272.00	.00	.00	1272.29	.29	4.65	.03	1270.00
2751.0	552.3	1175.7	1023.0	162.2	200.1	495.7	2235.4	595.1	1270.50
3.43	3.40	5.88	2.06	.060	.045	.088	.000	1267.90	9879.19
.007711	480.	500.	485.	4	0	0	.00	515.03	10508.55

FLOW DISTRIBUTION FOR SECNO= 7.30 CWSEL= 1272.00

STA=	9879.	9949.	9976.	10046.	10078.	10097.	10144.	10364.	10434.	10509.
PER Q=	10.9	9.2	42.7	5.3	6.4	12.3	4.1	3.6	5.4	
AREA=	97.3	64.9	200.1	50.2	45.9	96.6	90.2	93.3	119.5	
VEL=	3.1	3.9	5.9	2.9	3.8	3.5	1.3	1.1	1.2	
DEPTH=	1.4	2.4	2.9	1.6	2.4	2.1	.4	1.3	1.6	

*SECNO 7.400

3265 DIVIDED FLOW

7.400	4.63	1275.63	.00	.00	1275.81	.18	3.51	.01	1275.50
2751.0	827.2	686.8	1236.9	274.2	149.4	439.6	2245.2	601.1	1275.80
3.48	3.02	4.60	2.81	.060	.045	.060	.000	1271.00	9768.71
.006300	505.	540.	475.	4	0	0	.00	559.28	10335.03

FLOW DISTRIBUTION FOR SECNO= 7.40 CWSEL= 1275.63

STA=	9769.	9795.	9844.	9905.	9967.	10031.	10098.	10134.	10189.	10242.	10295.	10315.	10335.
PER Q=	3.7	18.3	7.5	.5	25.0	3.1	9.7	13.9	10.1	7.2	.8	.2	
AREA=	39.6	132.8	84.4	17.4	149.4	49.7	79.5	117.8	95.8	77.7	13.7	5.4	
VEL=	2.6	3.8	2.4	.8	4.6	1.7	3.4	3.3	2.9	2.6	1.5	.8	
DEPTH=	1.5	2.7	1.4	.3	2.4	.7	2.2	2.1	1.8	1.5	.7	.3	

*SECNO 7.490

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
7.490	5.02	1279.42	.00	.00	1279.78	.36	3.91	.05	1277.90
2751.0	2140.8	610.2	.0	507.0	93.5	.0	2253.0	606.6	1280.50
3.50	4.22	6.53	.00	.060	.045	.000	.000	1274.40	9518.30
.011886	460.	470.	465.	2	0	0	.00	458.52	10023.70

FLOW DISTRIBUTION FOR SECNO= 7.49 CWSEL= 1279.42

STA=	9518.	9532.	9610.	9651.	9705.	9763.	9861.	9898.	9910.	9923.	9949.	9987.	10028.
PER Q=	.5	7.9	1.1	.4	.6	5.5	8.8	7.0	15.9	20.5	9.6	22.2	
AREA=	7.8	79.2	19.0	8.9	15.1	61.5	62.7	35.6	59.2	90.9	67.1	93.5	
VEL=	1.8	2.7	1.6	1.1	1.1	2.4	3.9	5.4	7.4	6.2	4.0	6.5	
DEPTH=	.6	1.0	.5	.2	.3	.6	1.7	2.9	4.5	3.5	1.8	2.5	

*SECNO 7.570

7.570	5.08	1282.98	.00	.00	1283.29	.32	3.51	.00	1280.90
2751.0	1225.9	1306.2	218.9	518.3	213.4	114.9	2259.6	612.0	1280.70
3.53	2.37	6.12	1.90	.060	.045	.060	.000	1277.90	9508.43
.006701	380.	435.	445.	2	0	0	.00	741.70	10250.13

FLOW DISTRIBUTION FOR SECNO= 7.57 CWSEL= 1282.98

STA=	9508.	9785.	9893.	9973.	9988.	10050.	10092.	10250.
PER Q=	14.5	16.2	8.0	5.9	47.5	6.0	1.9	
AREA=	224.3	164.7	87.7	41.6	213.4	62.9	52.1	
VEL=	1.8	2.7	2.5	3.9	6.1	2.6	1.0	
DEPTH=	.8	1.5	1.1	2.7	3.5	1.5	.3	

*SECNO 7.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.680	5.13	1287.53	1287.53	.00	1288.13	.60	4.61	.09	1286.40
2125.0	903.3	1208.8	12.9	330.7	152.6	8.8	2268.1	619.6	1286.70
3.56	2.73	7.92	1.46	.060	.045	.060	.000	1282.40	9590.64
.011380	550.	560.	570.	2	8	0	.00	454.42	10045.06

FLOW DISTRIBUTION FOR SECNO= 7.68 CWSEL= 1287.53

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

STA=	9591.	9697.	9802.	9828.	9864.	9909.	9950.	9980.	10024.	10045.
PER Q=	4.1	5.7	6.4	5.4	12.1	5.4	3.5	56.9	.6	
AREA=	51.7	57.2	39.0	40.1	71.2	42.5	29.0	152.6	8.8	
VEL=	1.7	2.1	3.5	2.9	3.6	2.7	2.6	7.9	1.5	
DEPTH=	.5	.5	1.5	1.1	1.6	1.0	1.0	3.5	.4	

SECNO 7.790

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

7.790	3.95	1292.85	.00	.00	1292.97	.12	4.79	.05	1291.70
2125.0	174.9	264.8	1685.3	103.3	62.3	655.7	2277.4	627.4	1291.70
3.62	1.69	4.25	2.57	.060	.045	.060	.000	1288.90	9854.19
.005601	610.	620.	625.	5	0	0	.00	640.90	10495.09

FLOW DISTRIBUTION FOR SECNO= 7.79 CWSEL= 1292.85

STA=	9854.	9950.	9988.	10015.	10082.	10169.	10247.	10254.	10261.	10278.	10300.	10323.	10379.
PER Q=	4.1	4.1	12.5	8.5	11.2	10.0	3.1	5.1	7.4	4.5	12.2	12.5	
AREA=	60.3	43.0	62.3	83.8	109.9	98.3	19.1	24.0	45.1	36.8	68.0	98.7	
VEL=	1.4	2.0	4.2	2.2	2.2	2.2	3.4	4.5	3.5	2.6	3.8	2.7	
DEPTH=	.6	1.2	2.3	1.3	1.3	1.3	2.7	3.8	2.6	1.7	3.0	1.8	

STA=	10379.	10478.	10495.
PER Q=	4.8	.0	
AREA=	69.8	2.2	
VEL=	1.5	.5	
DEPTH=	.7	.1	

SECNO 7.900

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

7.900	3.28	1297.58	.00	.00	1297.85	.27	4.84	.05	1297.00
2125.0	296.3	532.4	1296.3	104.0	90.4	362.9	2286.1	635.9	1296.40
3.66	2.85	5.89	3.57	.060	.045	.060	.000	1294.30	9690.01
.015532	565.	575.	545.	4	0	0	.00	707.42	10397.43

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

FLOW DISTRIBUTION FOR SECNO= 7.90 CWSEL= 1297.58

STA=	9690.	9935.	9944.	9966.	10018.	10055.	10091.	10162.	10303.	10318.	10362.	10397.
PER Q=	3.7	3.3	7.0	25.1	8.6	11.9	10.7	6.6	6.6	15.2	1.3	
AREA=	53.5	15.8	34.7	90.4	49.1	59.1	72.5	63.6	28.9	74.2	15.5	
VEL=	1.5	4.5	4.3	5.9	3.7	4.3	3.1	2.2	4.9	4.4	1.8	
DEPTH=	.2	1.8	1.6	1.7	1.3	1.6	1.0	.4	2.0	1.7	.4	

*SECNO 8.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

8.000	4.39	1302.49	.00	.00	1302.63	.15	4.77	.01	1300.90
2125.0	300.0	370.2	1454.8	183.6	84.4	499.5	2294.3	645.1	1301.50
3.71	1.63	4.39	2.91	.060	.045	.060	.000	1298.10	9684.44
.005700	535.	540.	540.	5	0	0	.00	779.94	10477.19

FLOW DISTRIBUTION FOR SECNO= 8.00 CWSEL= 1302.49

STA=	9684.	9989.	10025.	10041.	10053.	10062.	10081.	10106.	10121.	10137.	10187.	10212.	10230.
PER Q=	14.1	17.4	5.2	5.7	4.3	10.7	6.5	6.7	6.0	5.5	4.3	6.2	
AREA=	183.6	84.4	34.4	33.4	24.7	58.3	48.1	38.9	38.2	56.9	37.6	40.5	
VEL=	1.6	4.4	3.2	3.6	3.7	3.9	2.9	3.6	3.3	2.0	2.4	3.2	
DEPTH=	.6	2.4	2.2	2.7	2.9	3.0	1.9	2.7	2.4	1.1	1.5	2.3	

STA=	10230.	10256.	10477.
PER Q=	5.5	2.0	
AREA=	44.5	44.1	
VEL=	2.6	1.0	
DEPTH=	1.7	.2	

*SECNO 8.130

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 = .68

8.130	3.76	1306.96	.00	.00	1307.21	.24	4.54	.03	1307.30
2125.0	86.7	190.7	1847.6	37.4	50.2	457.2	2302.9	653.0	1307.10
3.75	2.32	3.80	4.04	.060	.045	.060	.000	1303.20	9914.70
.012218	620.	670.	540.	4	0	0	.00	412.66	10347.46

FLOW DISTRIBUTION FOR SECNO= 8.13 CWSEL= 1306.96

STA=	9915.	9926.	9963.	10023.	10069.	10105.	10116.	10143.	10185.	10212.	10229.	10262.	10347.
PER Q=	1.0	3.1	9.0	1.3	4.3	4.0	9.7	10.2	11.9	13.6	23.2	8.9	
AREA=	8.8	28.6	50.2	17.1	34.0	20.8	49.7	61.2	56.9	50.6	91.7	75.1	
VEL=	2.3	2.3	3.8	1.6	2.7	4.1	4.1	3.5	4.4	5.7	5.4	2.5	
DEPTH=	.8	.8	1.1	.4	1.0	1.9	1.9	1.5	2.1	3.0	2.8	.9	

*SECNO 8.220

6265 DIVIDED FLOW

8.220	3.92	1311.32	.00	.00	1311.61	.29	4.39	.01	1309.80
2125.0	118.4	1124.2	882.4	53.0	201.9	417.1	2309.3	658.6	1309.00
3.78	2.23	5.57	2.12	.060	.045	.060	.000	1307.40	9866.92
.007681	450.	460.	460.	4	0	0	.00	652.46	10604.49

FLOW DISTRIBUTION FOR SECNO= 8.22 CWSEL= 1311.32

STA=	9867.	9925.	10000.	10029.	10154.	10330.	10434.	10490.	10550.	10573.	10604.
PER Q=	5.6	52.9	4.1	5.7	6.3	5.6	9.0	3.2	5.2	2.5	
AREA=	53.0	201.9	35.5	59.3	91.4	53.8	73.7	39.3	37.3	26.8	
VEL=	2.2	5.6	2.5	2.0	1.5	2.2	2.6	1.7	2.9	2.0	
DEPTH=	.9	2.7	1.2	.5	.5	.5	1.3	.7	1.6	.9	

*SECNO 8.310

8.310	2.86	1315.36	.00	.00	1315.51	.15	3.88	.01	1314.20
2125.0	1688.4	328.0	108.6	596.0	72.0	91.0	2317.2	666.4	1314.60
3.82	2.83	4.56	1.19	.060	.045	.060	.000	1312.50	9493.13
.008516	470.	490.	485.	5	0	0	.00	775.65	10268.77

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

FLOW DISTRIBUTION FOR SECNO= 8.31 CWSEL= 1315.36

STA=	9493.	9540.	9554.	9597.	9634.	9667.	9755.	9805.	9820.	9863.	9922.	9982.	10021.
PER Q=	3.2	4.9	12.6	10.8	7.1	6.3	5.8	5.1	12.3	5.5	5.9	15.4	
AREA=	32.3	29.0	77.7	67.8	50.0	69.2	51.9	30.1	77.0	54.3	56.7	72.0	
VEL=	2.1	3.6	3.4	3.4	3.0	1.9	2.4	3.6	3.4	2.1	2.2	4.6	
DEPTH=	.7	2.0	1.8	1.8	1.5	.8	1.1	2.0	1.8	.9	1.0	1.8	

STA=	10021.	10164.	10269.
PER Q=	3.2	1.9	
AREA=	55.8	35.2	
VEL=	1.2	1.1	
DEPTH=	.4	.3	

*SECNO 8.410

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

8.410	4.44	1319.34	.00	.00	1319.78	.44	4.19	.09	1317.60
1246.0	29.4	901.9	314.7	15.6	148.0	140.3	2323.6	672.5	1317.20
3.85	1.89	6.09	2.24	.060	.045	.060	.000	1314.90	9955.06
.007068	550.	520.	490.	3	0	0	.00	230.01	10185.06

FLOW DISTRIBUTION FOR SECNO= 8.41 CWSEL= 1319.34

STA=	9955.	9973.	10018.	10043.	10083.	10140.	10185.
PER Q=	2.4	72.4	11.6	8.3	4.6	.9	
AREA=	15.6	148.0	46.1	45.3	36.6	12.3	
VEL=	1.9	6.1	3.1	2.3	1.6	.9	
DEPTH=	.9	3.3	1.8	1.1	.6	.3	

1490 NH CARD USED
*SECNO 8.500

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .46

8.500	4.08	1324.18	.00	.00	1324.64	.46	4.85	.01	1324.20
894.0	55.0	839.0	.0	216.7	148.8	.0	2327.5	675.2	1324.20
3.88	.25	5.64	.00	1.000	.045	.000	.000	1320.10	9679.56
.016889	500.	500.	490.	3	0	0	.00	250.96	10021.92

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

FLOW DISTRIBUTION FOR SECNO= 8.50 CWSEL= 1324.18

STA=	9680.	9697.	9717.	9733.	9757.	9771.	9832.	10022.
PER Q=	.2	1.4	.8	.7	1.0	2.0	93.8	
AREA=	12.6	40.3	26.5	29.6	28.4	79.3	148.8	
VEL=	.2	.3	.3	.2	.3	.2	5.6	
DEPTH=	.7	2.0	1.7	1.2	2.1	1.3	1.5	

*SECNO 8.590

8.590	4.03	1329.93	.00	.00	1330.29	.37	5.65	.01	1328.80
894.0	191.6	507.3	195.1	87.2	83.7	68.0	2330.7	677.6	1328.40
3.91	2.20	6.06	2.87	.060	.045	.060	.000	1325.90	9882.70
.009151	465.	465.	465.	2	0	0	.00	190.17	10072.88

FLOW DISTRIBUTION FOR SECNO= 8.59 CWSEL= 1329.93

STA=	9883.	9917.	9963.	9983.	10014.	10040.	10063.	10073.
PER Q=	6.5	11.7	3.2	56.7	15.1	6.5	.2	
AREA=	27.6	44.7	14.9	83.7	41.9	24.0	2.1	
VEL=	2.1	2.3	1.9	6.1	3.2	2.4	.9	
DEPTH=	.8	1.0	.7	2.7	1.6	1.0	.2	

*SECNO 8.690

8.690	4.19	1334.59	.00	.00	1335.18	.59	4.82	.07	1332.20
894.0	188.9	686.7	18.3	61.7	100.5	9.0	2333.0	679.2	1333.10
3.93	3.06	6.83	2.05	.060	.045	.060	.000	1330.40	9929.88
.010201	500.	500.	495.	3	0	0	.00	101.42	10031.30

FLOW DISTRIBUTION FOR SECNO= 8.69 CWSEL= 1334.59

STA=	9930.	9934.	9968.	9985.	10019.	10031.
PER Q=	.1	7.1	14.0	76.8	2.1	
AREA=	.7	28.3	32.8	100.5	9.0	
VEL=	.7	2.2	3.8	6.8	2.0	
DEPTH=	.1	.8	1.9	3.0	.7	

*SECNO 8.780

8.780	3.26	1339.56	.00	.00	1339.89	.33	4.69	.03	1338.40
894.0	296.1	577.6	20.3	138.8	104.6	12.6	2335.5	681.2	1338.40
3.96	2.13	5.52	1.61	.060	.045	.060	.000	1336.30	9808.59
.008809	495.	495.	490.	4	0	0	.00	244.94	10053.53

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

FLOW DISTRIBUTION FOR SECNO= 8.78 CWSEL= 1339.56

STA=	9809.	9842.	9879.	9949.	9988.	10032.	10054.
PER Q=	7.9	13.2	4.9	7.1	64.6	2.3	
AREA=	30.6	44.9	31.7	31.6	104.6	12.6	
VEL=	2.3	2.6	1.4	2.0	5.5	1.6	
DEPTH=	.9	1.2	.5	.8	2.4	.6	

*SECNO 8.890

8.890	4.71	1344.71	.00	.00	1345.48	.77	5.46	.13	1342.60
894.0	28.9	685.6	179.6	11.4	87.3	53.1	2338.2	683.3	1341.90
3.99	2.53	7.85	3.38	.060	.045	.060	.000	1340.00	9975.37
.009942	555.	590.	590.	3	0	0	.00	74.78	10050.15

FLOW DISTRIBUTION FOR SECNO= 8.89 CWSEL= 1344.71

STA=	9975.	9986.	10009.	10037.	10050.
PER Q=	3.2	76.7	19.4	.6	
AREA=	11.4	87.3	48.4	4.7	
VEL=	2.5	7.9	3.6	1.2	
DEPTH=	1.1	3.8	1.8	.4	

*SECNO 8.990

8.990	4.13	1350.03	.00	.00	1350.78	.75	5.29	.00	1348.30
894.0	18.7	736.2	139.1	7.8	97.9	43.2	2339.9	684.1	1348.30
4.01	2.40	7.52	3.22	.060	.045	.060	.000	1345.90	9983.91
.011729	491.	491.	491.	4	0	0	.00	76.89	10060.81

FLOW DISTRIBUTION FOR SECNO= 8.99 CWSEL= 1350.03

STA=	9984.	9993.	10025.	10049.	10061.
PER Q=	2.1	82.4	14.0	1.6	
AREA=	7.8	97.9	35.9	7.3	
VEL=	2.4	7.5	3.5	1.9	
DEPTH=	.9	3.1	1.5	.6	

*SECNO 9.090

9.090	3.91	1356.71	.00	.00	1357.49	.78	6.70	.01	1354.60
894.0	124.9	709.0	60.2	41.2	90.8	19.9	2341.8	685.2	1354.30
4.03	3.03	7.81	3.03	.060	.045	.060	.000	1352.80	9944.13
.011776	575.	570.	570.	3	0	0	.00	81.24	10025.37

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

FLOW DISTRIBUTION FOR SECNO= 9.09 CWSEL= 1356.71

STA=	9944.	9947.	9981.	10009.	10025.
PER Q=	.0	13.9	79.3	6.7	
AREA=	.5	40.7	90.8	19.9	
VEL=	.8	3.1	7.8	3.0	
DEPTH=	.2	1.2	3.2	1.2	

*SECNO 9.190

9.190	3.91	1363.11	1362.92	.00	1363.87	.75	6.37	.00	1360.90
894.0	117.4	776.6	.0	38.7	105.3	.0	2343.6	686.2	1364.30
4.05	3.03	7.38	.00	.060	.045	.000	.000	1359.20	9919.64
.013065	510.	515.	510.	4	8	0	.00	92.03	10011.67

FLOW DISTRIBUTION FOR SECNO= 9.19 CWSEL= 1363.11

STA=	9920.	9947.	9974.	10016.
PER Q=	.4	12.7	86.9	
AREA=	4.2	34.5	105.3	
VEL=	.8	3.3	7.4	
DEPTH=	.2	1.3	2.8	

*SECNO 9.290

3265 DIVIDED FLOW

9.290	4.08	1368.98	.00	.00	1369.55	.57	5.66	.02	1366.10
871.0	126.9	680.9	63.3	40.5	101.4	34.4	2345.4	687.4	1369.30
4.08	3.13	6.71	1.84	.060	.045	.060	.000	1364.90	9966.52
.009926	490.	500.	505.	3	0	0	.00	124.75	10097.91

FLOW DISTRIBUTION FOR SECNO= 9.29 CWSEL= 1368.98

STA=	9967.	9995.	10030.	10055.	10080.	10098.
PER Q=	14.6	78.2	2.3	4.7	.3	
AREA=	40.5	101.4	11.6	19.5	3.3	
VEL=	3.1	6.7	1.7	2.1	.8	
DEPTH=	1.4	3.0	.5	.8	.2	

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

*SECNO 9.390

3265 DIVIDED FLOW

9.390	3.33	1375.43	.00	.00	1375.75	.32	6.17	.03	1375.10
871.0	226.8	457.2	187.0	66.3	82.4	72.9	2347.9	689.4	1374.20
4.11	3.42	5.55	2.56	.060	.045	.060	.000	1372.10	9920.52
.012826	550.	555.	523.	4	0	0	.00	185.86	10149.59

FLOW DISTRIBUTION FOR SECNO= 9.39 CWSEL= 1375.43

STA=	9921.	9927.	9947.	9955.	9977.	10022.	10037.	10116.	10150.
PER Q=	.1	8.2	8.3	9.4	52.5	2.2	9.8	9.5	
AREA=	1.1	22.9	16.0	26.2	82.4	9.3	32.4	31.2	
VEL=	.8	3.1	4.5	3.1	5.5	2.0	2.6	2.6	
DEPTH=	.2	1.2	2.0	1.2	1.8	.6	.4	.9	

*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	6.94	.18	1380.70
871.0	90.7	780.3	.0	31.9	97.5	.0	2349.8	690.8	1382.70
4.13	2.84	8.00	.00	.060	.045	.000	.000	1378.50	9938.91
.016063	485.	485.	485.	3	8	0	.00	81.32	10020.24

FLOW DISTRIBUTION FOR SECNO= 9.48 CWSEL= 1382.13

STA=	9939.	9960.	9984.	10022.
PER Q=	1.1	9.3	89.6	
AREA=	6.5	25.4	97.5	
VEL=	1.5	3.2	8.0	
DEPTH=	.3	1.0	2.7	

*SECNO 9.520

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

3265 DIVIDED FLOW

9.520	3.75	1385.15	1385.12	.00	1385.72	.57	2.66	.03	1383.90
871.0	95.0	747.1	29.0	45.6	115.0	15.0	2350.5	691.3	1384.20
4.14	2.08	6.50	1.94	.060	.045	.060	.000	1381.40	9855.03
.013847	160.	180.	205.	4	5	0	.00	161.43	10042.59

FLOW DISTRIBUTION FOR SECNO= 9.52 CWSEL= 1385.15

STA=	9855.	9861.	9879.	9904.	9960.	10013.	10039.	10043.
PER Q=	.1	3.4	2.9	4.5	85.8	3.3	.0	
AREA=	1.0	12.7	13.5	18.4	115.0	14.7	.3	
VEL=	.9	2.3	1.9	2.1	6.5	2.0	.5	
DEPTH=	.2	.7	.5	.3	2.2	.6	.1	

*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	2352.2	692.7	1392.60
4.16	.87	8.23	5.27	.060	.045	.060	.000	1390.70	9944.96
.026114	460.	470.	480.	8	16	0	.00	96.06	10041.02

FLOW DISTRIBUTION FOR SECNO= 9.61 CWSEL= 1393.80

STA=	9945.	9954.	9980.	9996.	10000.	10041.
PER Q=	.1	47.7	19.7	8.7	23.8	
AREA=	1.0	50.4	28.5	10.6	47.2	
VEL=	.9	8.2	6.0	7.2	4.4	
DEPTH=	.1	2.0	1.9	2.4	1.2	

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	8	1084.270	1087.402	.670	.760

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
10.56	10.56	.00	10.56	10.56	.00	8	1087.402	1089.809	.760	.860

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	10.56	10.56	.00	8	1089.809	1092.301	.860	.950

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	10.56	10.56	.00	8	1092.301	1094.610	.950	1.040

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	10.56	10.56	.00	8	1204.048	1205.708	5.160	5.230

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1.72	1.72	.02	12.28	12.28	.00	8	1205.708	1207.613	5.230	5.290

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
22.39	22.39	.02	34.67	34.68	.02	8	1207.613	1208.885	5.290	5.390

TW Right Bank

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
50.38	50.41	.07	85.05	85.09	.05	8	1208.885	1211.028	5.390	5.460

THIS RUN EXECUTED 13OCT97 04:59:42

****
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

UMMARY PRINTOUT

	SECNO	Q	SSTA	ENDST	CWSEL	EG
	.000	7209.00	8903.60	11222.20	1081.00	1081.00
	.080	7209.00	8904.40	10923.30	1081.00	1081.00
*	.190	7209.00	9112.60	11070.00	1081.00	1081.00
	.290	7209.00	8747.80	10863.70	1081.00	1081.01
*	.380	7209.00	9188.78	10468.97	1081.03	1081.06
*	.480	7209.00	9255.69	10505.10	1081.21	1081.33
	.570	7209.00	9802.23	10741.72	1082.15	1082.45
*	.670	7198.44	9667.55	10123.25	1084.27	1084.87
	.760	7198.44	9655.10	10196.02	1087.40	1087.82
	.860	7209.00	9567.75	10325.72	1089.81	1090.25
	.950	6256.00	9954.75	10513.09	1092.30	1092.74
	1.040	6256.00	9825.18	10442.02	1094.61	1095.05
	1.130	6256.00	9706.14	10217.84	1097.03	1097.52
	1.230	6256.00	9757.67	10296.17	1099.43	1099.79
	1.320	6256.00	9962.75	10308.45	1101.76	1102.40
	1.410	6256.00	9795.26	10371.87	1104.62	1104.97
	1.500	6256.00	9722.09	10297.39	1106.96	1107.39

	SECNO	Q	SSTA	ENDST	CWSEL	EG
	1.590	6256.00	9498.35	10188.46	1109.20	1109.58
	1.680	6256.00	9686.71	10152.51	1111.44	1111.94
	1.780	6256.00	9770.70	10150.68	1114.39	1114.96
	1.870	6256.00	9766.58	10112.33	1116.44	1116.81
*	1.970	6256.00	9849.40	10185.79	1118.35	1118.94
	2.070	6256.00	9864.69	10262.09	1121.11	1121.86
	2.150	6256.00	9944.32	10208.88	1123.73	1124.41
	2.240	6256.00	9717.60	10090.58	1125.96	1126.45
	2.340	6256.00	9830.58	10059.70	1127.92	1129.31
*	2.430	6256.00	9788.95	10158.97	1131.42	1131.77
	2.520	6256.00	9886.64	10364.24	1133.56	1134.29
*	2.620	6256.00	9645.21	10187.78	1136.66	1136.92
	2.720	6256.00	9742.13	10179.32	1138.79	1139.64
	2.820	6256.00	9679.46	10121.76	1142.84	1143.49
	2.920	6256.00	9836.90	10332.75	1145.40	1145.83
	3.040	6256.00	9980.01	10732.99	1147.75	1147.91
	3.140	6256.00	9570.87	10587.87	1149.18	1149.60
	3.230	6256.00	9654.28	10103.47	1151.98	1152.50
	3.320	6256.00	9846.75	10435.30	1154.76	1155.22
	3.420	6256.00	9953.17	10644.31	1156.95	1157.20
	3.510	6256.00	9888.17	10551.48	1158.87	1159.21
*	3.590	6208.00	9795.40	10141.26	1161.20	1162.10
	3.700	6208.00	9773.70	10053.55	1165.05	1165.82
	3.790	6208.00	9824.80	10231.61	1167.23	1167.83
	3.880	6208.00	9931.42	10556.00	1169.43	1170.20
	3.960	6208.00	9702.27	10145.66	1172.55	1173.42

SECNO	Q	SSTA	ENDST	CWSEL	EG
4.050	6208.00	9536.21	10236.33	1175.69	1176.14
4.160	6208.00	9784.12	10156.67	1177.81	1178.43
4.250	6208.00	9724.85	10122.06	1180.13	1180.61
4.350	6208.00	9919.07	10457.54	1182.39	1182.74
4.460	6208.00	9982.09	10580.06	1185.36	1185.81
4.550	6208.00	9967.87	10419.75	1188.59	1189.23
4.650	6208.00	9694.65	10017.51	1191.32	1191.71
4.760	6208.00	9689.63	10274.44	1194.05	1194.37
4.860	6208.00	9832.51	10405.48	1196.36	1196.66
4.960	6133.51	9870.20	10296.32	1198.71	1199.27
5.050	6133.51	9941.13	10485.12	1201.73	1202.23
5.160	6133.51	9581.10	10345.75	1204.05	1204.23
5.230	6133.51	9795.41	10229.01	1205.71	1206.28
* 5.290	6135.23	9674.00	11199.66	1207.61	1207.73
5.390	6157.62	9504.33	10504.44	1208.88	1209.07
5.460	6208.00	9339.63	10587.81	1211.03	1211.36
* 5.550	6208.00	9589.56	10514.01	1213.80	1213.95
5.640	6208.00	9747.61	10550.69	1216.33	1216.76
* 5.730	6208.00	9562.75	10185.84	1219.69	1220.01
5.820	3728.00	9842.44	10319.64	1222.06	1222.40
5.910	3728.00	9778.58	10289.53	1224.82	1225.10
5.990	3728.00	9762.57	10420.68	1227.51	1227.99
6.080	3728.00	9726.46	10511.89	1230.53	1230.95
6.170	3728.00	9911.87	10252.93	1232.51	1232.91
6.260	3442.00	9674.69	10271.08	1234.75	1234.95
6.360	3442.00	9704.93	10362.13	1237.67	1238.20

	SECNO	Q	SSTA	ENDST	CWSEL	EG
	6.450	3442.00	9601.05	10211.20	1240.73	1240.92
*	6.560	3140.00	9731.63	10463.51	1243.25	1243.58
	6.660	3140.00	9769.43	10846.65	1247.06	1247.26
	6.750	3140.00	9386.83	10784.83	1250.92	1251.53
*	6.840	3140.00	9127.00	10877.27	1254.61	1255.05
	6.940	2751.00	9580.22	10530.80	1257.43	1257.61
	7.020	2751.00	9254.22	10260.02	1260.45	1260.91
	7.110	2751.00	9612.11	10285.33	1264.11	1264.27
	7.200	2751.00	9622.83	10523.44	1267.42	1267.61
	7.300	2751.00	9879.19	10508.55	1272.00	1272.29
	7.400	2751.00	9768.71	10335.03	1275.63	1275.81
	7.490	2751.00	9518.30	10023.70	1279.42	1279.78
	7.570	2751.00	9508.43	10250.13	1282.98	1283.29
*	7.680	2125.00	9590.64	10045.06	1287.53	1288.13
	7.790	2125.00	9854.19	10495.09	1292.85	1292.97
	7.900	2125.00	9690.01	10397.43	1297.58	1297.85
*	8.000	2125.00	9684.44	10477.19	1302.49	1302.63
	8.130	2125.00	9914.70	10347.46	1306.96	1307.21
	8.220	2125.00	9866.92	10604.49	1311.32	1311.61
	8.310	2125.00	9493.13	10268.77	1315.36	1315.51
	8.410	1246.00	9955.06	10185.06	1319.34	1319.78
*	8.500	894.00	9679.56	10021.92	1324.18	1324.64
	8.590	894.00	9882.70	10072.88	1329.93	1330.29
	8.690	894.00	9929.88	10031.30	1334.59	1335.18
	8.780	894.00	9808.59	10053.53	1339.56	1339.89
	8.890	894.00	9975.37	10050.15	1344.71	1345.48

SECNO	Q	SSTA	ENDST	CWSEL	EG
8.990	894.00	9983.91	10060.81	1350.03	1350.78
9.090	894.00	9944.13	10025.37	1356.71	1357.49
9.190	894.00	9919.64	10011.67	1363.11	1363.87
9.290	871.00	9966.52	10097.91	1368.98	1369.55
9.390	871.00	9920.52	10149.59	1375.43	1375.75
9.480	871.00	9938.91	10020.24	1382.13	1383.04
9.520	871.00	9855.03	10042.59	1385.15	1385.72
9.610	871.00	9944.96	10041.02	1393.80	1394.53

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	1451.62	3475.25	.00	.00	9976.20	10163.00	.00
.290	1081.00	.00	1081.01	2115.90	3039.82	1641.92	2527.26	.00	.00	9972.10	10097.70	.00
.380	1081.03	.00	1081.06	1280.19	2735.83	1714.14	2759.03	.00	.00	9957.40	10036.80	.00
.480	1081.21	.00	1081.33	1048.12	1677.54	2630.63	2900.82	.00	.00	9945.10	10060.60	.00
.570	1082.15	.00	1082.45	939.49	1124.36	4253.31	1831.33	.00	.00	9932.50	10084.30	.00
.670	1084.27	.00	1084.87	453.24	3160.08	3214.38	823.98	.00	.00	9956.60	10041.60	.00
.760	1087.40	.00	1087.82	540.92	1479.04	4083.18	1636.22	.00	.00	9917.80	10055.00	.00
.860	1089.81	.00	1090.25	757.96	1311.24	4165.20	1732.55	.00	.00	9925.10	10055.90	.00
.950	1092.30	.00	1092.74	558.33	119.68	2427.34	3708.98	.00	.00	9984.60	10048.50	.00
1.040	1094.61	.00	1095.05	602.96	2780.85	3006.97	468.18	.00	.00	10020.20	10116.90	.00
1.130	1097.03	.00	1097.52	511.69	3227.43	2830.88	197.69	.00	.00	9972.70	10044.40	.00
1.230	1099.43	.00	1099.79	498.07	649.76	2872.51	2733.73	.00	.00	9946.30	10039.50	.00
1.320	1101.76	.00	1102.40	345.70	19.57	2967.79	3268.64	.00	.00	9975.60	10049.40	.00
1.410	1104.62	.00	1104.97	576.61	1714.75	2375.96	2165.30	.00	.00	9955.80	10029.30	.00
1.500	1106.96	.00	1107.39	575.30	3459.93	2414.13	381.94	.00	.00	9962.20	10035.70	.00
1.590	1109.20	.00	1109.58	690.10	1550.93	4429.73	275.34	.00	.00	9873.20	10037.20	.00
1.680	1111.44	.00	1111.94	465.80	2956.34	2466.40	833.26	.00	.00	9977.80	10046.10	.00
1.780	1114.39	.00	1114.96	379.98	2014.22	2932.18	1309.60	.00	.00	9971.20	10039.10	.00
1.870	1116.44	.00	1116.81	345.75	3091.72	2817.32	346.96	.00	.00	9975.20	10040.50	.00
1.970	1118.35	.00	1118.94	336.38	939.49	3125.91	2190.60	.00	.00	9967.40	10050.50	.00
2.070	1121.11	.00	1121.86	364.10	706.70	3388.89	2160.41	.00	.00	9976.70	10039.30	.00
2.150	1123.73	.00	1124.41	264.56	123.63	2477.27	3655.10	.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	372.97	2356.90	3244.78	654.32	.00	.00	9953.20	10015.40	.00
*	2.340	1127.92	.00	1129.31	229.12	942.15	5088.26	225.58	.00	.00	9946.20	10032.70	.00
	2.430	1131.42	.00	1131.77	370.02	2042.86	2414.45	1798.69	.00	.00	9960.90	10024.90	.00
	2.520	1133.56	.00	1134.29	477.59	1333.50	3021.15	1901.36	.00	.00	9975.00	10045.30	.00
*	2.620	1136.66	.00	1136.92	542.57	3484.50	1834.78	936.72	.00	.00	9960.40	10024.20	.00
	2.720	1138.79	.00	1139.64	427.11	2045.90	3230.91	979.19	.00	.00	9975.40	10043.60	.00
	2.820	1142.84	.00	1143.49	442.29	3120.80	2852.00	283.20	.00	.00	9978.10	10030.20	.00
	2.920	1145.40	.00	1145.83	495.85	247.79	4751.76	1256.45	.00	.00	9922.60	10062.50	.00
	3.040	1147.75	.00	1147.91	752.98	.00	1167.12	5088.88	.00	.00	9972.60	10045.60	.00
	3.140	1149.18	.00	1149.60	1017.00	1051.41	3248.43	1956.17	.00	.00	9981.20	10065.80	.00
	3.230	1151.98	.00	1152.50	449.19	2655.45	1538.57	2061.98	.00	.00	9974.10	10010.20	.00
	3.320	1154.76	.00	1155.22	588.55	193.41	3019.50	3043.09	.00	.00	9975.10	10053.00	.00
	3.420	1156.95	.00	1157.20	691.14	24.86	1805.20	4425.94	.00	.00	9962.00	10023.50	.00
	3.510	1158.87	.00	1159.21	663.31	605.89	2102.11	3548.01	.00	.00	9971.60	10029.00	.00
*	3.590	1161.20	.00	1162.10	345.82	2938.55	2878.29	391.15	.00	.00	9983.30	10038.70	.00
	3.700	1165.05	.00	1165.82	279.85	2519.41	3514.95	173.64	.00	.00	9984.80	10039.40	.00
	3.790	1167.23	.00	1167.83	406.81	413.35	3940.13	1854.52	.00	.00	9957.20	10034.20	.00
	3.880	1169.43	.00	1170.20	624.58	194.02	3346.79	2667.19	.00	.00	9973.30	10029.10	.00
	3.960	1172.55	.00	1173.42	387.16	1405.64	2543.30	2259.06	.00	.00	9982.60	10022.70	.00
	4.050	1175.69	.00	1176.14	700.12	337.53	2584.70	3285.76	.00	.00	9970.70	10023.60	.00
	4.160	1177.81	.00	1178.43	372.55	1764.56	2942.67	1500.77	.00	.00	9978.20	10030.30	.00
	4.250	1180.13	.00	1180.61	397.21	2190.71	2093.97	1923.32	.00	.00	9988.40	10023.70	.00
	4.350	1182.39	.00	1182.74	538.47	133.79	1871.91	4202.29	.00	.00	9976.40	10021.40	.00
	4.460	1185.36	.00	1185.81	597.97	.00	1675.06	4532.94	.00	.00	9979.20	10026.30	.00
	4.550	1188.59	.00	1189.23	400.51	44.71	2123.70	4039.59	.00	.00	9976.10	10011.40	.00
	4.650	1191.32	.00	1191.71	322.86	4863.65	1314.48	29.87	.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	575.73	1074.67	1357.08	3776.25	.00	.00	9980.10	10020.40	.00
4.860	1196.36	.00	1196.66	572.96	1415.93	1629.45	3162.62	.00	.00	9979.70	10021.50	.00
4.960	1198.71	.00	1199.27	426.13	536.96	2523.59	3072.96	.00	.00	9969.60	10026.70	.00
5.050	1201.73	.00	1202.23	543.99	619.09	2503.19	3011.23	.00	.00	9986.00	10041.50	.00
5.160	1204.05	.00	1204.23	764.65	4314.08	1341.61	477.82	.00	.00	9956.50	10037.10	.00
5.230	1205.71	.00	1206.28	433.60	2691.96	2266.92	1174.63	.00	.00	9949.70	10049.40	.00
* 5.290	1207.61	.00	1207.73	1475.48	1966.65	1545.60	2622.99	.00	.00	9961.70	10045.90	.00
5.390	1208.88	.00	1209.07	1000.11	4013.60	1553.34	590.68	.00	.00	9912.10	10048.30	.00
5.460	1211.03	.00	1211.36	1248.18	3021.87	1883.17	1302.96	.00	.00	9955.60	10030.70	.00
* 5.550	1213.80	.00	1213.95	924.45	2877.99	748.02	2581.99	.00	.00	9986.80	10032.20	.00
5.640	1216.33	.00	1216.76	803.07	1817.61	1664.96	2725.43	.00	.00	9981.20	10045.90	.00
* 5.730	1219.69	.00	1220.01	623.09	3578.78	1852.99	776.23	.00	.00	9973.70	10033.50	.00
5.820	1222.06	.00	1222.40	477.20	924.57	1327.94	1475.49	.00	.00	9981.90	10033.50	.00
5.910	1224.82	.00	1225.10	510.95	981.02	1364.62	1382.36	.00	.00	9977.00	10031.30	.00
5.990	1227.51	.00	1227.99	658.11	1200.55	1584.81	942.64	.00	.00	9982.80	10035.20	.00
6.080	1230.53	.00	1230.95	785.43	715.02	1836.90	1176.08	.00	.00	9980.40	10027.50	.00
6.170	1232.51	.00	1232.91	341.05	405.92	1987.29	1334.79	.00	.00	9983.50	10040.50	.00
6.260	1234.75	.00	1234.95	596.39	2114.09	851.20	476.71	.00	.00	9991.50	10036.10	.00
* 6.360	1237.67	.00	1238.20	642.91	928.16	1699.34	814.49	.00	.00	9976.90	10034.00	.00
6.450	1240.73	.00	1240.92	610.15	1324.72	929.79	1187.48	.00	.00	9982.00	10021.60	.00
6.560	1243.25	.00	1243.58	710.66	1415.91	1114.27	609.82	.00	.00	9985.50	10030.90	.00
6.660	1247.06	.00	1247.26	1077.22	608.34	877.85	1653.81	.00	.00	9984.90	10021.90	.00
6.750	1250.92	.00	1251.53	1373.42	761.51	1618.65	759.85	.00	.00	9987.90	10039.90	.00
* 6.840	1254.61	.00	1255.05	1750.27	778.13	2006.92	354.94	.00	.00	9969.00	10029.20	.00
6.940	1257.43	.00	1257.61	826.13	144.95	671.10	1934.95	.00	.00	9988.30	10029.00	.00
7.020	1260.45	.00	1260.91	856.82	267.95	930.86	1552.19	.00	.00	9979.60	10013.30	.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
7.110	1264.11	.00	1264.27	673.23	1130.24	466.74	1154.02	.00	.00	9995.10	10016.80	.00
* 7.200	1267.42	.00	1267.61	772.09	1122.20	630.07	998.74	.00	.00	9974.00	10033.60	.00
7.300	1272.00	.00	1272.29	515.03	552.31	1175.69	1023.00	.00	.00	9976.40	10045.60	.00
7.400	1275.63	.00	1275.81	559.28	827.24	686.83	1236.93	.00	.00	9966.50	10030.90	.00
7.490	1279.42	.00	1279.78	458.52	2140.77	610.23	.00	.00	.00	9986.90	10028.20	.00
7.570	1282.98	.00	1283.29	741.70	1225.94	1306.18	218.88	.00	.00	9988.10	10049.50	.00
* 7.680	1287.53	.00	1288.13	454.42	903.26	1208.81	12.93	.00	.00	9979.60	10023.70	.00
7.790	1292.85	.00	1292.97	640.90	174.86	264.81	1685.33	.00	.00	9987.50	10014.80	.00
7.900	1297.58	.00	1297.85	707.42	296.33	532.35	1296.31	.00	.00	9965.50	10018.00	.00
* 8.000	1302.49	.00	1302.63	779.94	300.00	370.17	1454.83	.00	.00	9989.30	10025.10	.00
8.130	1306.96	.00	1307.21	412.66	86.74	190.70	1847.56	.00	.00	9970.60	10023.40	.00
8.220	1311.32	.00	1311.61	652.46	118.37	1124.19	882.44	.00	.00	9924.80	10000.00	.00
8.310	1315.36	.00	1315.51	775.65	1688.38	327.97	108.65	.00	.00	9981.50	10020.70	.00
* 8.410	1319.34	.00	1319.78	230.01	29.45	901.88	314.67	.00	.00	9972.90	10018.10	.00
* 8.500	1324.18	.00	1324.64	250.96	55.01	838.99	.00	.00	.00	9922.90	10022.10	.00
8.590	1329.93	.00	1330.29	190.17	191.64	507.29	195.07	.00	.00	9982.70	10013.70	.00
8.690	1334.59	.00	1335.18	101.42	188.92	686.73	18.34	.00	.00	9985.30	10019.30	.00
8.780	1339.56	.00	1339.89	244.94	296.13	577.59	20.28	.00	.00	9988.00	10031.70	.00
8.890	1344.71	.00	1345.48	74.78	28.85	685.59	179.55	.00	.00	9986.20	10009.40	.00
8.990	1350.03	.00	1350.78	76.89	18.67	736.21	139.12	.00	.00	9992.90	10024.60	.00
9.090	1356.71	.00	1357.49	81.24	124.85	708.96	60.19	.00	.00	9980.90	10008.90	.00
9.190	1363.11	.00	1363.87	92.03	117.38	776.62	.00	.00	.00	9973.80	10015.50	.00
9.290	1368.98	.00	1369.55	124.75	126.86	680.88	63.26	.00	.00	9994.70	10030.10	.00
9.390	1375.43	.00	1375.75	185.86	226.81	457.22	186.97	.00	.00	9976.70	10021.80	.00
9.480	1382.13	.00	1383.04	81.32	90.71	780.28	.00	.00	.00	9984.20	10021.60	.00
9.520	1385.15	.00	1385.72	161.43	94.96	747.05	28.99	.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	96.06	.83	415.19	454.98	.00	.00	9954.40	9980.20	.00

SUMMARY OF ERRORS AND SPECIAL NOTES

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=	5.550	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

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

WARNING SECNO=     7.790  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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

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

WARNING SECNO=     8.130  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
```

HEC-2 Analysis

White Tanks Wash
Tributary #1
Revised Water Surface Profile Model

```
*******************************************
HEC-2 WATER SURFACE PROFILES              *
                                          *
* Version   4.6.2;  May 1991               *
*                                          *
RUN DATE    14OCT97    TIME    05:33:49   *
*******************************************
```

```
****************************************
* 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 14OCT97 05:33:49

```
************************************
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:  BRNCHR.HC2                            Alpha Engineering Group
 September 1995 (Rev. 10/97)                             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       3        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).

```
---------------------------------------------------------------------------
1     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
R    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
R    1162.3   9840.2     1160.1     9876.5   1158.2    9896.6    1158.7    9916.4    1159.2    9948.5
R    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
R    1158.2  10133.3     1158.2    10161.3   1159.2   10182.3    1159.5   10202.2    1158.9   10222.1
R    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

C      .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
R    1160.3  10016.2     1162.7    10031.5   1162.8   10079.7    1161.6   10141.2    1160.1   10187.7
R    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
R    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
R    1167.8   9954.3     1170.5     9969.3   1170.2    9981.8    1166.8    9991.1    1166.8    9998.9
R    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
R    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
R    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.
---------------------------------------------------------------------------
```

```
H      4     .060    9989.8     .045   10022.9     .06   10266.4      .5   10819.0
1   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
R   1175.8 10022.9    1174.8  10082.2    1174.1 10131.3    1175.3 10165.1    1175.4   10266.4
R   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

C     .06       .06      .045
1   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
R   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
R   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

1   0.81       16    9961.9  10011.0     510.0   510.0     500.0     0.0       0.0
R   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
R   1186.1 10011.0    1184.2  10034.9    1182.7 10042.1    1185.4 10074.9    1185.0   10107.3
R   1188.2 10165.0
```

Section 0.91
Ineffective flow area between stations 10160.9 and 10318.8.

```
H      4       .06    9970.6     .045   10016.2     .06   10160.9       .9   10318.8
1   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
R   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

C     .06       .06      .045
X1  1.00       16    9981.6  10020.1     480.0   490.0     485.0     0.0       0.0
R   1196.0  9812.1    1195.1   9857.4    1194.0  9884.3    1192.8  9905.3    1194.3    9926.6
R   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
R   1197.4  9951.6    1198.8   9970.7    1198.2  9988.1    1196.7  9996.1    1196.4   10000.0
R   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
```

```
1     1.80       22     9958.8   10028.4     500.0     485.0     490.0       0.0       0.0
R  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
R  1230.6  10188.3    1230.6   10237.8    1229.9   10264.1    1231.9   10320.3    1231.1   10405.1
R  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

1     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
R  1236.0  10017.6    1237.4   10049.1    1237.4   10082.3    1235.1   10101.8    1236.5   10123.3
R  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
R  1236.0  10644.0    1234.8   10656.0    1237.1   10676.9    1237.6   10744.5
```

Revised 10/97 to extend Cross Section 2.01 on the right side. The extreme right overbank has a low area associated with an incoming stream. This area is assumed to be ineffective since it is isolated and subject to tributary flow. Therefore, a high roughness value was used to code out the ineffective flow area.

```
NH       4      .055      9935      .045  10048.9      .055  10337.5        .2  10935.1
1     2.01       40     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
R  1241.5  10019.9    1242.7   10048.9    1240.9   10069.2    1242.7   10086.4    1240.9   10098.3
R  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    1242.3   10427.7
GR 1241.4  10488.0    1241.0   10497.1    1239.6   10502.0    1241.3   10512.9    1240.1   10528.8
R  1242.1  10558.6    1241.4   10608.3    1241.1   10670.2    1241.3   10700.5    1239.4   10709.0
GR 1241.4  10726.9    1241.4   10765.1    1241.0   10796.4    1242.6   10848.7    1243.3   10935.1
Inflow from sub-basin H2f added

C      .055      .055      .045
X1    2.11       22     9876.3   10031.9     535.0     520.0     545.0       0.0       0.0
R  1248.5   9496.5    1247.5    9526.4    1246.5    9594.1    1245.4    9633.4    1246.6    9705.5
R  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
R  1246.9  10286.1    1247.2   10320

QT       2      816.0      816.0
1     2.21       17     9995.1   10039.4     550.0     560.0     525.0       0.0       0.0
R  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
R  1249.7  10000.0    1250.1   10019.3    1252.5   10039.4    1251.4   10099.9    1251.1   10166.2
R  1251.6  10248.1    1252.2   10374.7
```

```
  2.30       21    9987.4   10024.7     460.0     490.0     490.0       0.0       0.0
  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
  1254.9   9998.9   1254.9   10000.0    1256.4   10008.7    1257.3   10024.7    1256.8   10080.4
  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.
 ----------------------------------------------------------------------------

  5        .5    9877       .06    9976.8      .045   10013.5       .06   10056.7        .5
NH 10141
  2.41      22    9976.8   10013.5     470.0     660.0     565.0       0.0       0.0
  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
  1260.8   9932.4   1261.2    9976.8    1259.3   10000.0    1261.1   10013.5    1261.4   10056.7
  1261.8  10079.5   1262.3   10141

C     .06      .055     .045
1    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
  1270.2  10033.7   1270.2   10098.2    1270.3   10175.4    1270.3   10203.1    1269.8   10227.0
  1270.9  10253.4

C     .06       .06     .045
1    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
  1274.8  10192.0   1274.0   10207.8    1275.4   10228.0    1276.4   10276.9
 Inflow from sub-basins H2d & H2e added

1    2.78      10    9953.8   10064.9     485.0     505.0     510.0       0.0       0.0
  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

T       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
  1283.9   9990.1   1282.7   10000.0    1283.8   10009.9    1285.3   10026.5    1285.8   10128.1
  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.

H	4	.06	9990	.045	10010.2	.06	10100.1	.9	10233.5	
1	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
R	1320.4	10039.6	1320.5	10100.1	1320.1	10135.1	1318.4	10146.8	1320.3	10172.4
R	1324.0	10233.5								
C	.06	.06	.045							
1	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
R	1323.6	10101.2								
X1	3.62	10	9977.0	10020.9	240.0	300.0	260.0	0.0	0.0	
R	1327.7	9900.0	1327.8	9956.7	1326.8	9977.0	1324.1	9993.5	1323.6	10000.0
R	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	
R	1330.5	9940.3	1329.8	9965.6	1327.0	9976.6	1325.8	9991.6	1325.7	10000.0
R	1327.1	10014.9	1328.7	10038.2	1330.3	10067.6	1331.1	10126.6		
1	3.74	12	9964.6	10027.4	340.0	350.0	335.0	0.0	0.0	
R	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
R	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
R	1334.7	9999.2	1335.9	10000.0	1336.3	10028.7	1335.4	10039.0	1332.5	10055.2
R	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

CHV= .100 CEHV= .300
*SECNO .000

265 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

490 NH CARD USED
*SECNO .070

265 DIVIDED FLOW

302 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

302 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

265 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

490 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

265 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

265 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

490 NH CARD USED
*SECNO .910

265 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

265 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

265 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

265 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

265 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

265 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

1490 NH CARD USED
*SECNO 2.010

265 DIVIDED FLOW

2.010	2.71	1242.11	.00	.00	1242.19	.07	5.76	.01	1242.40
818.0	145.5	229.3	443.2	48.7	75.3	412.4	76.6	84.6	1242.70
1.03	2.99	3.04	1.07	.055	.045	.133	.000	1239.40	9874.46
.009652	600.	595.	575.	4	0	0	.00	659.87	10832.80

*SECNO 2.110

265 DIVIDED FLOW

2.110	2.59	1246.89	.00	.00	1247.00	.11	4.80	.01	1247.40
818.0	237.2	454.4	126.4	107.3	145.7	72.9	81.9	91.4	1246.70
1.08	2.21	3.12	1.73	.055	.045	.055	.000	1244.30	9568.18
.008407	535.	545.	520.	5	0	0	.00	449.52	10285.19

*SECNO 2.210

265 DIVIDED FLOW

2.210	1.92	1251.62	.00	.00	1251.73	.11	4.73	.00	1251.50
816.0	579.3	178.6	58.2	246.7	48.0	48.6	86.1	97.7	1252.50
1.14	2.35	3.72	1.20	.055	.045	.055	.000	1249.70	9615.84
.009096	550.	525.	560.	4	0	0	.00	557.92	10253.02

*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	1.65	1256.55	.00	.00	1256.65	.11	4.92	.00	1256.00
816.0	729.2	78.2	8.6	287.8	22.3	6.1	89.6	103.4	1257.30
1.19	2.53	3.50	1.41	.055	.045	.055	.000	1254.90	9468.64
.012408	460.	490.	490.	4	0	0	.00	509.79	10172.13

490 NH CARD USED

*SECNO 2.410

2.410	3.71	1261.71	.00	.00	1261.78	.07	5.12	.00	1261.20
816.0	573.9	215.5	26.7	783.7	53.8	21.9	96.1	110.3	1261.10
1.28	.73	4.00	1.22	.246	.045	.063	.000	1258.00	9351.32
.008884	470.	565.	660.	4	0	0	.00	722.37	10073.69

*SECNO 2.490

2.490	2.98	1264.98	.00	.00	1265.19	.20	3.37	.04	1264.20
816.0	14.0	802.0	.0	13.0	219.0	.0	101.7	114.9	1265.30
1.31	1.08	3.66	.00	.060	.045	.000	.000	1262.00	9935.15
.006651	450.	435.	450.	5	0	0	.00	170.86	10106.01

*SECNO 2.580

7280 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	4.33	.02	1270.10
816.0	71.2	548.5	196.3	46.5	108.8	103.7	104.4	118.1	1270.20
1.34	1.53	5.04	1.89	.060	.045	.055	.000	1268.30	9835.00
.012715	475.	485.	480.	15	14	0	.00	413.64	10248.64

*SECNO 2.680

2.680	2.22	1275.92	.00	.00	1276.07	.14	5.07	.01	1275.10
816.0	21.9	228.2	565.8	16.1	54.2	228.6	107.5	122.2	1275.40
1.39	1.36	4.21	2.47	.060	.045	.060	.000	1273.70	9950.62
.008523	560.	505.	470.	6	0	0	.00	302.95	10253.57

```
  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
  Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       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      4.79       .05   1280.30
   816.0      37.3     778.7        .0      17.4     168.0        .0     110.3     124.7   1280.80
    1.42      2.15      4.63       .00      .060      .045      .000      .000   1277.70   9931.55
 .010494      485.      510.      505.         4         0         0       .00    126.79  10058.34

*SECNO 2.870

65 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      81.0     112.7     126.8   1285.30
    1.46      2.63      4.21      2.83      .060      .045      .060      .000   1282.70   9897.84
 .009272      530.      490.      465.         5         0         0       .00    245.71  10199.82

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     139.8     115.4     129.4   1290.20
    1.50       .23      3.99      2.83      .900      .045      .060      .000   1287.80   9852.24
 .013236      435.      440.      445.         5         0         0       .00    278.64  10130.88

SECNO 3.050
   3.050      3.00   1295.10       .00       .00   1295.31       .21      4.67       .01   1294.30
   767.0      65.7     701.3        .0      44.0     183.6        .0     118.3     132.1   1295.50
    1.54      1.49      3.82       .00      .060      .045      .000      .000   1292.10   9846.64
 .006755      485.      525.      465.         4         0         0       .00    185.42  10032.05

90 NH CARD USED
ECNO 3.140

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

   3.140      3.02   1300.62       .00       .00   1301.13       .51      5.73       .09   1300.10
   767.0       7.7     593.4     166.0       4.9      91.6     167.5     121.0     134.4   1299.80
    1.56      1.57      6.48       .99      .060      .045      .297      .000   1297.60   9934.34
 .024440      480.      495.      490.         4         0         0       .00    228.91  10163.26
```

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

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	.04	1306.00
603.0	.0	356.9	246.1	.0	144.1	547.4	127.2	139.5	1305.60
1.66	.00	2.48	.45	.000	.045	.258	.000	1302.20	9973.13
.003556	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	86.4	.0	131.5	143.0	1310.60
1.68	.00	6.98	.00	.000	.045	.000	.000	1307.30	9983.50
.026907	480.	485.	480.	20	15	0	.00	58.68	10042.19

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	42.6	556.5	4.0	59.6	149.9	4.7	133.2	144.4	1314.70
1.72	.71	3.71	.84	.103	.045	.060	.000	1312.60	9856.17
.004676	485.	490.	505.	5	0	0	.00	201.23	10057.90

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

693 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	135.6	146.7	1319.60
1.75	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

302 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	136.8	147.9	1322.80
1.77	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

720 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	137.9	148.8	1325.10
1.78	.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	138.8	149.4	1330.30
1.80	.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	139.9	150.0	1333.60
1.82	.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	141.3	151.2	1336.30
1.86	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 14OCT97 05:33:50

****
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

UMMARY PRINTOUT

	SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	EG
	.000	.00	.00	3.48	223.15	818.00	9915.19	10516.59	1156.16
	.070	.00	.00	4.76	258.48	818.00	9891.00	10293.11	1158.87
*	.160	.00	.00	4.01	229.60	818.00	9989.87	10219.47	1163.11
*	.260	.00	.00	5.41	268.17	818.00	9871.89	10149.61	1167.12
	.340	.00	.00	4.59	154.75	818.00	9884.54	10039.29	1170.88
	.440	.00	.00	4.61	396.53	818.00	9976.94	10445.70	1173.64
	.520	.00	.00	3.66	758.38	818.00	9987.64	10746.02	1176.20
	.620	.00	.00	6.03	204.77	818.00	9903.58	10108.35	1180.10
	.710	.00	.00	3.71	286.93	818.00	9875.66	10170.80	1183.07
	.810	.00	.00	2.81	239.72	818.00	9879.86	10123.40	1186.04
	.910	.00	.00	4.49	378.80	818.00	9864.67	10251.62	1190.92
	1.000	.00	.00	4.10	299.98	818.00	9854.30	10178.11	1195.31
	1.100	.00	.00	4.71	238.65	818.00	9850.34	10110.68	1199.64
	1.210	.00	.00	4.33	259.60	818.00	9669.59	10019.37	1204.19
	1.310	.00	.00	4.19	427.43	818.00	9666.50	10104.97	1209.34
*	1.400	.00	.00	3.38	406.06	818.00	9844.04	10250.11	1213.73
	1.490	.00	.00	3.16	354.46	818.00	9993.38	10376.00	1217.61

SECNO	STENCL	STENCR	VCH	TOPWID	Q	SSTA	ENDST	EG
1.590	.00	.00	2.83	487.72	818.00	9783.14	10300.03	1222.23
1.710	.00	.00	3.50	428.24	818.00	9995.83	10560.30	1227.44
1.800	.00	.00	2.87	499.00	818.00	9965.71	10582.52	1231.80
1.890	.00	.00	3.79	251.66	818.00	9895.56	10669.15	1236.42
2.010	.00	.00	3.04	659.87	818.00	9874.46	10832.80	1242.19
2.110	.00	.00	3.12	449.52	818.00	9568.18	10285.19	1247.00
2.210	.00	.00	3.72	557.92	816.00	9615.84	10253.02	1251.73
2.300	.00	.00	3.50	509.79	816.00	9468.64	10172.13	1256.65
2.410	.00	.00	4.00	722.37	816.00	9351.32	10073.69	1261.78
2.490	.00	.00	3.66	170.86	816.00	9935.15	10106.01	1265.19
2.580	.00	.00	5.04	413.64	816.00	9835.00	10248.64	1270.98
2.680	.00	.00	4.21	302.95	816.00	9950.62	10253.57	1276.07
2.780	.00	.00	4.63	126.79	816.00	9931.55	10058.34	1280.90
2.870	.00	.00	4.21	245.71	767.00	9897.84	10199.82	1285.78
2.950	.00	.00	3.99	278.64	767.00	9852.24	10130.88	1290.63
3.050	.00	.00	3.82	185.42	767.00	9846.64	10032.05	1295.31
* 3.140	.00	.00	6.48	228.91	767.00	9934.34	10163.26	1301.13
3.250	.00	.00	2.48	566.57	603.00	9973.13	10539.70	1305.80
3.340	.00	.00	6.98	58.68	603.00	9983.50	10042.19	1310.98
* 3.430	.00	.00	3.71	201.23	603.00	9856.17	10057.90	1315.60
3.530	.00	.00	7.73	200.33	603.00	9986.32	10186.65	1321.62
* 3.570	.00	.00	3.32	230.63	603.00	9868.39	10099.02	1323.73
3.620	.00	.00	7.05	84.38	603.00	9981.42	10065.80	1326.70
3.680	.00	.00	3.60	82.87	603.00	9967.35	10050.22	1329.56
* 3.740	.00	.00	6.45	68.37	603.00	9968.17	10059.94	1332.55
3.810	.00	.00	2.96	200.14	603.00	9924.20	10124.33	1336.43

Branch Channel - Final P

UMMARY 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	1242.11	.00	1242.19	659.87	145.52	229.32	443.15	.00	.00	9935.00	10048.90	.00
2.110	1246.89	.00	1247.00	449.52	237.21	454.40	126.38	.00	.00	9876.30	10031.90	.00
2.210	1251.62	.00	1251.73	557.92	579.26	178.57	58.17	.00	.00	9995.10	10039.40	.00

SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
2.300	1256.55	.00	1256.65	509.79	729.24	78.18	8.58	.00	.00	9987.40	10024.70	.00
2.410	1261.71	.00	1261.78	722.37	573.88	215.46	26.66	.00	.00	9976.80	10013.50	.00
2.490	1264.98	.00	1265.19	170.86	14.04	801.95	.00	.00	.00	9968.20	10110.10	.00
2.580	1270.70	.00	1270.98	413.64	71.20	548.45	196.35	.00	.00	9964.70	10033.70	.00
2.680	1275.92	.00	1276.07	302.95	21.94	228.21	565.85	.00	.00	9991.10	10024.30	.00
2.780	1280.58	.00	1280.90	126.79	37.31	778.69	.00	.00	.00	9953.80	10064.90	.00
2.870	1285.59	.00	1285.78	245.71	203.01	334.33	229.66	.00	.00	9974.70	10026.50	.00
2.950	1290.45	.00	1290.63	278.64	11.57	359.29	396.14	.00	.00	9897.30	9981.10	.00
3.050	1295.10	.00	1295.31	185.42	65.71	701.29	.00	.00	.00	9922.50	10037.20	.00
* 3.140	1300.62	.00	1301.13	228.91	7.66	593.36	165.98	.00	.00	9953.10	10018.20	.00
3.250	1305.74	.00	1305.80	566.57	.00	356.94	246.06	.00	.00	9971.40	10075.10	.00
* 3.340	1310.22	.00	1310.98	58.68	.00	603.00	.00	.00	.00	9980.60	10048.60	.00
3.430	1315.40	.00	1315.60	201.23	42.56	556.48	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	1239.40	818.00	1242.11	.00	1242.19	96.52	3.04	536.39	83.26
	2.110	545.00	.00	.00	1244.30	818.00	1246.89	.00	1247.00	84.07	3.12	325.94	89.22
	2.210	525.00	.00	.00	1249.70	816.00	1251.62	.00	1251.73	90.96	3.72	343.29	85.56

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
2.300	490.00	.00	.00	1254.90	816.00	1256.55	.00	1256.65	124.08	3.50	316.16	73.25
2.410	565.00	.00	.00	1258.00	816.00	1261.71	.00	1261.78	88.84	4.00	859.39	86.58
2.490	435.00	.00	.00	1262.00	816.00	1264.98	.00	1265.19	66.51	3.66	231.98	100.06
2.580	485.00	.00	.00	1268.30	816.00	1270.70	1270.70	1270.98	127.15	5.04	259.00	72.37
2.680	505.00	.00	.00	1273.70	816.00	1275.92	.00	1276.07	85.23	4.21	298.97	88.39
2.780	510.00	.00	.00	1277.70	816.00	1280.58	.00	1280.90	104.94	4.63	185.38	79.66
2.870	490.00	.00	.00	1282.70	767.00	1285.59	.00	1285.78	92.72	4.21	237.46	79.65
2.950	440.00	.00	.00	1287.80	767.00	1290.45	.00	1290.63	132.36	3.99	280.34	66.67
3.050	525.00	.00	.00	1292.10	767.00	1295.10	.00	1295.31	67.55	3.82	227.60	93.32
* 3.140	495.00	.00	.00	1297.60	767.00	1300.62	.00	1301.13	244.40	6.48	263.97	49.06
3.250	555.00	.00	.00	1302.20	603.00	1305.74	.00	1305.80	35.56	2.48	691.49	101.12
* 3.340	485.00	.00	.00	1307.30	603.00	1310.22	1310.22	1310.98	269.07	6.98	86.40	36.76
3.430	490.00	.00	.00	1312.60	603.00	1315.40	.00	1315.60	46.76	3.71	214.25	88.18
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

UMMARY 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	1242.11	.00	5.86	.00	659.87	595.00
	2.110	818.00	1246.89	.00	4.78	.00	449.52	545.00
	2.210	816.00	1251.62	.00	4.74	.00	557.92	525.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
2.300	816.00	1256.55	.00	4.92	.00	509.79	490.00
2.410	816.00	1261.71	.00	5.16	.00	722.37	565.00
2.490	816.00	1264.98	.00	3.28	.00	170.86	435.00
* 2.580	816.00	1270.70	.00	5.72	.00	413.64	485.00
2.680	816.00	1275.92	.00	5.22	.00	302.95	505.00
2.780	816.00	1280.58	.00	4.66	.00	126.79	510.00
2.870	767.00	1285.59	.00	5.01	.00	245.71	490.00
2.950	767.00	1290.45	.00	4.86	.00	278.64	440.00
3.050	767.00	1295.10	.00	4.64	.00	185.42	525.00
* 3.140	767.00	1300.62	.00	5.52	.00	228.91	495.00
* 3.250	603.00	1305.74	.00	5.12	.00	566.57	555.00
* 3.340	603.00	1310.22	.00	4.48	.00	58.68	485.00
* 3.430	603.00	1315.40	.00	5.18	.00	201.23	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=     3.140  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
```

HEC-2 Analysis

White Tanks Wash
Tributary #1
Revised Floodway Model

```
*******************************************
* HEC-2 WATER SURFACE PROFILES            *
*                                         *
* Version   4.6.2;  May 1991              *
*                                         *
* RUN DATE    14OCT97    TIME    05:34:06 *
*******************************************
```

```
****************************************
*  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 14OCT97 05:34:06

```
************************************
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:  BRNCHM1R.HC2                          Alpha Engineering Group
January 1996  (Rev. 10/97)                              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
```

```
C    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
```

```
C     .06      .06      .045
                        9.1                                                    9900     10100
ET
X1    1.00     16       9981.6   10020.1  480.0    490.0    485.0    0.0      0.0
R     1196.0   9812.1   1195.1   9857.4   1194.0   9884.3   1192.8   9905.3   1194.3   9926.6
R     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
R     1195.4   10182.2

                        9.1                                                    9890     10040
ET
X1    1.10     16       9988.1   10015.2  545.0    510.0    510.0    0.0      0.0
R     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
R     1199.8   10117.5

                        9.1                                                    9805     10023
ET
X1    1.21     20       9942.0   10022.1  600.0    560.0    600.0    0.0      0.0
R     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
R     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.
-----------------------------------------------------------------------------

                        9.1                                                    9820     10050
ET
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
R     1209.0   9814.4   1208.0   9876.0   1206.7   9882.4   1208.1   9893.6   1208.8   9924.0
R     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

                        9.1                                                    9920     10155
ET
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
R     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
R     1213.6   10250.2

                        9.1                                                    9992.6   10240
ET
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
R     1216.4   10182.7  1217.4   10205.8  1217.2   10245.6  1216.2   10252.8  1216.3   10259.9
R     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
```

```
                        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
R  1222.2    9782.2   1221.0   9801.4   1221.8   9836.6   1220.5   9857.4   1222.0    9895.3
R  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
R  1222.1   10288.5   1222.5  10400

NC    .055     .055     .045
ET                      9.1                                                  9995      10200
1    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
R  1227.2   10153.4   1225.7  10161.0   1226.8  10178.5   1227.5  10250.0   1228.3   10267.7
R  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
R  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
R  1232.8    9958.8   1231.5   9967.1   1230.3   9974.1   1230.4   9981.2   1231.2    9991.1
R  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
R  1231.0   10488.8   1231.1  10509.2   1230.9  10523.1   1231.2  10542.6   1230.6   10550.5
R  1230.5   10557.6   1232.0  10588.3

ET                      9.1                                                  9925      10500
1    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
R  1236.0   10017.6   1237.4  10049.1   1237.4  10082.3   1235.1  10101.8   1236.5   10123.3
R  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
R  1237.3   10531.0   1236.7  10558.7   1234.6  10570.8   1234.9  10594.7   1236.9   10619.4
R  1236.0   10644.0   1234.8  10656.0   1237.1  10676.9   1237.6  10744.5

ET                      9.1                                                  9890      10270
-----------------------------------------------------------------------------
Revised 10/97 to extend Cross Section 2.01 on the right side.  The extreme
right overbank has a low area associated with an incoming stream.  This area
is assumed to be ineffective since it is isolated and subject to tributary
flow.  Therefore, a high roughness value was used to code out the ineffective
flow area.
-----------------------------------------------------------------------------
H       4      .055      9935     .045  10048.9     .055  10337.5       .2  10935.1
X1   2.01        40   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
R  1240.1    9917.4   1242.4   9935.0   1241.7   9976.7   1239.9   9997.3   1239.5   10000.0
R  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
R  1239.7   10256.5   1239.9  10261.2   1242.4  10277.4   1243.0  10337.5   1242.3   10427.7
R  1241.4   10488.0   1241.0  10497.1   1239.6  10502.0   1241.3  10512.9   1240.1   10528.8
GR 1242.1   10558.6   1241.4  10608.3   1241.1  10670.2   1241.3  10700.5   1239.4   10709.0
```

```
GR   1241.4    10726.9    1241.4    10765.1    1241.0    10796.4    1242.6    10848.7    1243.3    10935.1
Inflow from sub-basin H2f added

NC    .055       .055      .045
T                          9.1                                                            9850      10160
1    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
R    1247.8    9766.5     1248.1    9824.3     1247.4    9876.3    1245.7    9915.1    1244.3    9930.8
R    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

T       2       816.0      816.0
ET                         9.1                                                            9830      10040
1    2.21         17      9995.1    10039.4    550.0     560.0     525.0      0.0       0.0
R    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
R    1251.6    10248.1    1252.2    10374.7

ET                         9.1                                                            9885      10200
1    2.30         21      9987.4    10024.7    460.0     490.0     490.0      0.0       0.0
R    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
R    1254.9    9998.9     1254.9    10000.0    1256.4    10008.7   1257.3    10024.7   1256.8    10080.4
R    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.
-----------------------------------------------------------------------------------------------

T                          9.1                                                            9900      10020
NH      5         .5       9877      .06        9976.8    .045      10013.5   .06       10056.7   .5
H    10141
1    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
R    1260.1    9766.1     1258.1    9773.3     1259.6    9793.5    1260.9    9877.0    1259.4    9906.2
R    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

C     .06       .055      .045
ET                         9.1                                                            9934      10115
1    2.49          9      9968.2    10110.1    450.0     450.0     435.0      0.0       0.0
R    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

T                          9.1                                                            9910      10090
1    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
R    1270.2    10033.7    1270.2    10098.2    1270.3    10175.4   1270.3    10203.1   1269.8    10227.0
R    1270.9    10253.4
```

```
                          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

T        2     767.0     767.0
T                         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
T                         9.1                                                    9897      10100
1     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
R   1290.8   10137.8

NC     .06       .06      .045
T                         9.1                                                    9890      10032
1     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
H       4       .06    9953.1     .045   10018.2       .06   10052.5        .5  10172.6
1     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.
--------------------------------------------------------------------------------
```

```
     2     603.0     603.0                                                  9973     10080
ET                   9.1
NH   4      .06     9971.4     .045    10075.1      .06    10322.8      .9  10544.7
     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                                                   9984     10042
ET                   9.1
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

                     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
     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                                                        9986     10070
ET                   9.1
-----------------------------------------------------------------------------
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
     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                                                   9900     10040
ET                   9.1
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                                                        9981     10066
ET                   9.1
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
```

									9967	10050
T			9.1							
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
R	1327.1	10014.9	1328.7	10038.2	1330.3	10067.6	1331.1	10126.6		
									9968	10060
ET			9.1							
1	3.74	12	9964.6	10027.4	340.0	350.0	335.0	0.0	0.0	
R	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						
									9924	10124
ET			9.1							
X1	3.81	13	9972.8	10028.7	350.0	390.0	370.0	0.0	0.0	
R	1337.9	9832.2	1337.2	9904.4	1335.0	9953.0	1335.5	9972.8	1332.7	9986.6
R	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

CHV= .100 CEHV= .300
*SECNO .000

265 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

265 DIVIDED FLOW

302 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

302 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

265 DIVIDED FLOW

14OCT97 05:34:06

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

302 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

302 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

490 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

265 DIVIDED FLOW

302 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

265 DIVIDED FLOW

302 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

490 NH CARD USED

*SECNO .910

265 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

265 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

265 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

265 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

1490 NH CARD USED

*SECNO 2.010

3265 DIVIDED FLOW

2.010	2.71	1242.11	.00	.00	1242.19	.07	5.76	.01	1242.40
818.0	145.5	229.3	443.2	48.7	75.3	412.4	76.6	84.6	1242.70
1.03	2.99	3.04	1.07	.055	.045	.133	.000	1239.40	9874.46
.009652	600.	595.	575.	4	0	0	.00	659.87	10832.80

*SECNO 2.110

3265 DIVIDED FLOW

2.110	2.59	1246.89	.00	.00	1247.00	.11	4.80	.01	1247.40
818.0	237.2	454.4	126.4	107.3	145.7	72.9	81.9	91.4	1246.70
1.08	2.21	3.12	1.73	.055	.045	.055	.000	1244.30	9568.18
.008407	535.	545.	520.	5	0	0	.00	449.52	10285.19

*SECNO 2.210

3265 DIVIDED FLOW

2.210	1.92	1251.62	.00	.00	1251.73	.11	4.73	.00	1251.50
816.0	579.3	178.6	58.2	246.7	48.0	48.6	86.1	97.7	1252.50
1.14	2.35	3.72	1.20	.055	.045	.055	.000	1249.70	9615.84
.009096	550.	525.	560.	4	0	0	.00	557.92	10253.02

*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

265 DIVIDED FLOW

2.300	1.65	1256.55	.00	.00	1256.65	.11	4.92	.00	1256.00
816.0	729.2	78.2	8.6	287.8	22.3	6.1	89.6	103.4	1257.30
1.19	2.53	3.50	1.41	.055	.045	.055	.000	1254.90	9468.64
.012408	460.	490.	490.	4	0	0	.00	509.79	10172.13

490 NH CARD USED

*SECNO 2.410

2.410	3.71	1261.71	.00	.00	1261.78	.07	5.12	.00	1261.20
816.0	573.9	215.5	26.7	783.7	53.8	21.9	96.1	110.3	1261.10
1.28	.73	4.00	1.22	.246	.045	.063	.000	1258.00	9351.32
.008884	470.	565.	660.	4	0	0	.00	722.37	10073.69

*SECNO 2.490

2.490	2.98	1264.98	.00	.00	1265.19	.20	3.37	.04	1264.20
816.0	14.0	802.0	.0	13.0	219.0	.0	101.7	114.9	1265.30
1.31	1.08	3.66	.00	.060	.045	.000	.000	1262.00	9935.15
.006651	450.	435.	450.	5	0	0	.00	170.86	10106.01

*SECNO 2.580

280 CROSS SECTION 2.58 EXTENDED .00 FEET

7185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

2.580	2.40	1270.70	1270.70	.00	1270.98	.28	4.33	.02	1270.10
816.0	71.2	548.5	196.3	46.5	108.8	103.7	104.4	118.1	1270.20
1.34	1.53	5.04	1.89	.060	.045	.055	.000	1268.30	9835.00
.012715	475.	485.	480.	15	14	0	.00	413.64	10248.64

*SECNO 2.680

2.680	2.22	1275.92	.00	.00	1276.07	.14	5.07	.01	1275.10
816.0	21.9	228.2	565.8	16.1	54.2	228.6	107.5	122.2	1275.40
1.39	1.36	4.21	2.47	.060	.045	.060	.000	1273.70	9950.62
.008523	560.	505.	470.	6	0	0	.00	302.95	10253.57

```
SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       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      4.79       .05   1280.30
  816.0     37.3     778.7        .0      17.4     168.0        .0     110.3     124.7   1280.80
   1.42     2.15      4.63       .00      .060      .045      .000      .000   1277.70   9931.55
 .010494     485.     510.      505.         4         0         0       .00    126.79  10058.34

*SECNO 2.870

265 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      81.0     112.7     126.8   1285.30
   1.46     2.63      4.21      2.83      .060      .045      .060      .000   1282.70   9897.84
 .009272     530.     490.      465.         5         0         0       .00    245.71  10199.82

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     139.8     115.4     129.4   1290.20
   1.50      .23      3.99      2.83      .900      .045      .060      .000   1287.80   9852.24
 .013236     435.     440.      445.         5         0         0       .00    278.64  10130.88

SECNO 3.050
  3.050     3.00   1295.10       .00       .00   1295.31       .21      4.67       .01   1294.30
  767.0     65.7     701.3        .0      44.0     183.6        .0     118.3     132.1   1295.50
   1.54     1.49      3.82       .00      .060      .045      .000      .000   1292.10   9846.64
 .006755     485.     525.      465.         4         0         0       .00    185.42  10032.05

490 NH CARD USED
SECNO 3.140

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

  3.140     3.02   1300.62       .00       .00   1301.13       .51      5.73       .09   1300.10
  767.0      7.7     593.4     166.0       4.9      91.6     167.5     121.0     134.4   1299.80
   1.56     1.57      6.48       .99      .060      .045      .297      .000   1297.60   9934.34
 .024440     480.     495.      490.         4         0         0       .00    228.91  10163.26
```

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

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	.04	1306.00
603.0	.0	356.9	246.1	.0	144.1	547.4	127.2	139.5	1305.60
1.66	.00	2.48	.45	.000	.045	.258	.000	1302.20	9973.13
.003556	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	86.4	.0	131.5	143.0	1310.60
1.68	.00	6.98	.00	.000	.045	.000	.000	1307.30	9983.50
.026907	480.	485.	480.	20	15	0	.00	58.68	10042.19

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	42.6	556.5	4.0	59.6	149.9	4.7	133.2	144.4	1314.70
1.72	.71	3.71	.84	.103	.045	.060	.000	1312.60	9856.17
.004676	485.	490.	505.	5	0	0	.00	201.23	10057.90

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

685 20 TRIALS ATTEMPTED WSEL,CWSEL

693 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	135.6	146.7	1319.60
1.75	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

302 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	136.8	147.9	1322.80
1.77	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

720 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	137.9	148.8	1325.10
1.78	.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	138.8	149.4	1330.30
1.80	.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	139.9	150.0	1333.60
1.82	.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	141.3	151.2	1336.30
1.86	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

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

ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
0	3	0	0	0	0	0.0	818.0	1157	

NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
15	0	-1.0							

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

*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

14OCT97 05:34:06

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

*SECNO .260

301 HV CHANGED MORE THAN HVINS

302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .40

470 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

280 CROSS SECTION .34 EXTENDED .43 FEET

301 HV CHANGED MORE THAN HVINS

302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.48

470 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

14OCT97 05:34:06

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

*SECNO .520

470 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

470 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

470 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

490 NH CARD USED

*SECNO .910

265 DIVIDED FLOW

470 ENCROACHMENT STATIONS= 9900.0 10100.0 TYPE= 1 TARGET= 200.000

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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

470 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

265 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

490 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

1490 NH CARD USED
SECNO 1.400
280 CROSS SECTION 1.40 EXTENDED .40 FEET

302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.55

470 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

490 NH CARD USED
SECNO 1.490

470 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

490 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

470 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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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

265 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

265 DIVIDED FLOW

470 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

490 NH CARD USED

*SECNO 2.010

265 DIVIDED FLOW

470 ENCROACHMENT STATIONS= 9890.0 10270.0 TYPE= 1 TARGET= 380.000

2.010	3.00	1242.40	.00	1242.11	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	1239.40	9890.00
.009481	600.	595.	575.	5	0	0	.00	309.72	10270.00

*SECNO 2.110

3265 DIVIDED FLOW

14OCT97 05:34:06

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

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	1246.89	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	1251.62	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	1256.55	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

3490 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	1261.71	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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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	1264.98	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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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

470 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

490 NH CARD USED

*SECNO 2.950

470 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

490 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

490 NH CARD USED

SECNO 3.250

3280 CROSS SECTION 3.25 EXTENDED .09 FEET

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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

3490 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

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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
685 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
185 MINIMUM SPECIFIC ENERGY
720 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 14OCT97 05:34:09

****
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

UMMARY 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	3.04	659.87	818.00	9874.46	10832.80	1242.11
2.010	9890.00	10270.00	3.13	309.72	818.00	9890.00	10270.00	1242.40
2.110	.00	.00	3.12	449.52	818.00	9568.18	10285.19	1246.89
2.110	9850.00	10160.00	3.72	239.10	818.00	9879.48	10160.00	1247.26
2.210	.00	.00	3.72	557.92	816.00	9615.84	10253.02	1251.62
2.210	9830.00	10040.00	4.63	206.97	816.00	9830.00	10036.97	1252.21
2.300	.00	.00	3.50	509.79	816.00	9468.64	10172.13	1256.55
2.300	9885.00	10200.00	3.75	285.72	816.00	9885.00	10200.00	1257.09
2.410	.00	.00	4.00	722.37	816.00	9351.32	10073.69	1261.71
2.410	9900.00	10020.00	5.06	120.00	816.00	9900.00	10020.00	1262.22
2.490	.00	.00	3.66	170.86	816.00	9935.15	10106.01	1264.98
2.490	9934.00	10115.00	3.26	174.34	816.00	9934.00	10108.34	1265.17
* 2.580	.00	.00	5.04	413.64	816.00	9835.00	10248.64	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	302.95	816.00	9950.62	10253.57	1275.92
*	2.680	9970.00	10095.00	4.96	125.00	816.00	9970.00	10095.00	1276.47
	2.780	.00	.00	4.63	126.79	816.00	9931.55	10058.34	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	245.71	767.00	9897.84	10199.82	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	278.64	767.00	9852.24	10130.88	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	185.42	767.00	9846.64	10032.05	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	228.91	767.00	9934.34	10163.26	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	6.98	58.68	603.00	9983.50	10042.19	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	201.23	603.00	9856.17	10057.90	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	1242.11	.00	1242.19	659.87	145.52	229.32	443.15	.00	.00	9935.00	10048.90	.00
2.010	1242.40	.29	1242.54	309.72	175.47	321.34	321.20	380.00	9890.00	9935.00	10048.90	10270.00
2.110	1246.89	.00	1247.00	449.52	237.21	454.40	126.38	.00	.00	9876.30	10031.90	.00
2.110	1247.26	.37	1247.46	239.10	.00	749.18	68.82	310.00	9850.00	9876.30	10031.90	10160.00
2.210	1251.62	.00	1251.73	557.92	579.26	178.57	58.17	.00	.00	9995.10	10039.40	.00
2.210	1252.21	.58	1252.42	206.97	487.07	328.93	.00	210.00	9830.00	9995.10	10039.40	10040.00
2.300	1256.55	.00	1256.65	509.79	729.24	78.18	8.58	.00	.00	9987.40	10024.70	.00
2.300	1257.09	.54	1257.30	285.72	618.73	142.84	54.43	315.00	9885.00	9987.40	10024.70	10200.00
2.410	1261.71	.00	1261.78	722.37	573.88	215.46	26.66	.00	.00	9976.80	10013.50	.00
2.410	1262.22	.51	1262.50	120.00	430.32	369.17	16.51	120.00	9900.00	9976.80	10013.50	10020.00
2.490	1264.98	.00	1265.19	170.86	14.04	801.95	.00	.00	.00	9968.20	10110.10	.00
* 2.490	1265.17	.19	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	413.64	71.20	548.45	196.35	.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	302.95	21.94	228.21	565.85	.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	126.79	37.31	778.69	.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	245.71	203.01	334.33	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	278.64	11.57	359.29	396.14	.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	185.42	65.71	701.29	.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	228.91	7.66	593.36	165.98	.00	.00	9953.10	10018.20	.00
	3.140	1300.81	.19	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	356.94	246.06	.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	58.68	.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	201.23	42.56	556.48	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

```
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=     3.140  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
CAUTION SECNO=     3.530  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     3.530  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
```

```
ARNING SECNO=     3.570  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
ARNING SECNO=     3.570  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

AUTION SECNO=     3.620  PROFILE=  1  CRITICAL DEPTH ASSUMED
AUTION 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

ARNING SECNO=     3.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    3.740  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

ARNING 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
rofile 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	.29	380.00	9890.00	101.95	9991.95	278.05	10270.00
2.110	.37	310.00	9850.00	104.10	9954.10	205.90	10160.00
2.210	.58	210.00	9830.00	187.25	10017.25	22.75	10040.00
2.300	.54	315.00	9885.00	121.05	10006.05	193.95	10200.00
2.410	.51	120.00	9900.00	95.15	9995.15	24.85	10020.00
2.490	.19	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	.19	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

LOODWAY 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	1242.1	.3
2.110	281.	238.	3.4	1247.3	1246.9	.4
2.210	207.	239.	3.4	1252.2	1251.6	.6
2.300	315.	236.	3.5	1257.0	1256.5	.5
2.410	120.	206.	4.0	1262.2	1261.7	.5
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	------- FLOODWAY ------- WIDTH	SECTION AREA	MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.810	200.	221.	2.7	1336.3	1336.3	.0