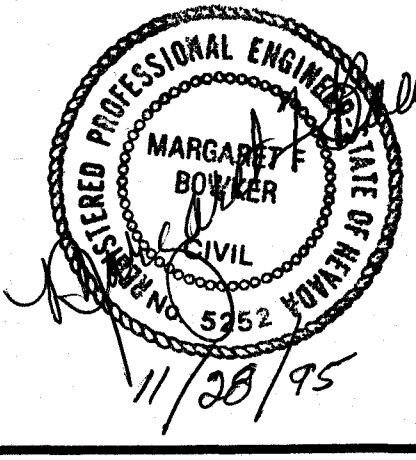
RETURN TO WASHOE COUNTY ENGINEERING

Hydrologic and Hydraulic Analysis

for:

Wedge Meadows Subdivision

A Portion of Section 20,
Township 18 N, Range 20 E, M.D.B.M.
Washoe County, Nevada



11/28/95

Nimbus Job No. 9311

October 1995
Revised November 1995

Nimbus Engineers
3710 Grant Dr., Suite D, Reno, NV 89509
Mail : P.O. Box 10220, Reno, NV 89510
(702) 689-8630

Rec 11/28/95

TABLE OF CONTENTS

APPENDIX

LIST OF FIGURES

1.0 INTRODUCTION

This report summarizes the hydrologic and hydraulic analyses performed for the proposed Wedge Meadows Subdivision. The development is comprised of 142 lots of single family residential sites on approximately 66 acres located in Section 20, Township 18 North, Range 20 East, M.D.B.M., near the southwest corner of South Virginia Street and Zolezzi Lane in unincorporated Washoe County, Nevada (Figure 1).

The area is affected by the 100 year floodplain of a branch of Whites Creek as shown on Panel No. 3170 of the Washoe County Flood Insurance Rate Map (Figure 2). The floodplain is delineated as a Zone A, an area subject to flooding in a 100 year event.

Whites Creek has not been studied by the Federal Emergency Management Agency using detailed methods and no further regulatory discharge has been developed by that agency for the stream. The purpose of this report is to adopt a design discharge for the 100 year event and to set forth a hydraulic analysis and floodplain mapping for the existing and proposed conditions to provide a master plan for the entire project.

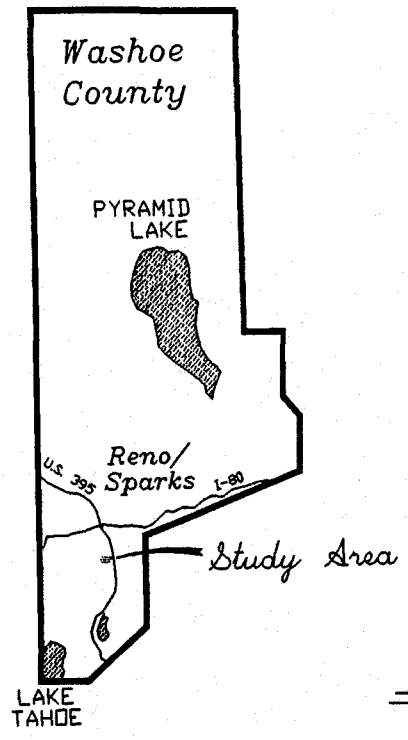
2.0 PHYSICAL DESCRIPTION

The project site is presently undeveloped and has not been used for any commercial enterprise in recent history. The proposed plan is for developing the site into single family residential homes with paved streets and utilities. All the streets, utilities and drainage facilities will be public property and maintained by the appropriate public agency.

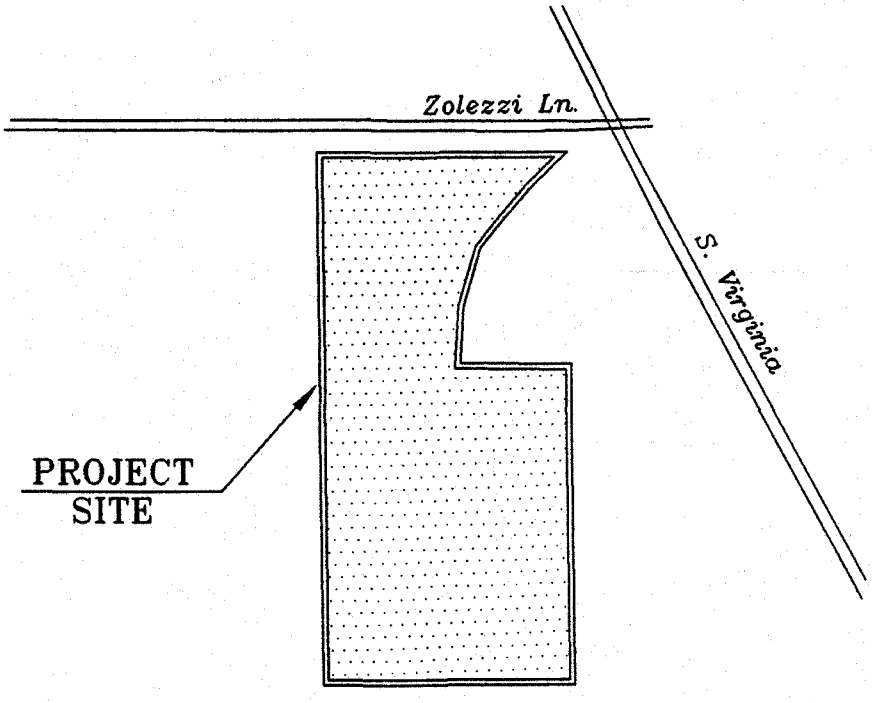
3.0 HYDROLOGIC ANALYSIS

In March 1993, Nimbus Engineers was retained by the Nevada Department of Transportation to develop a feasibility study for a detention facility on Whites Creek. The area had been identified in many earlier studies as a possible flood control site due to the possibility of high peak flows especially during thunder storm events. Floodplain studies were conducted in the 1960s and 1970s by the SCS and the Army Corps of Engineers and later by Kennedy Jenks as part of the Concept Level Master Flood Control Plan.

The Nimbus hydrologic analysis for NDOT was conducted in close coordination with Washoe County Comprehensive Planning and Public Works Department staff. The methodology which was used in the study was the SCS Curve Number Method combined with a Type II rainfall distribution. This method produced higher runoff values than had previously been calculated for the watershed. Table 1 below sets



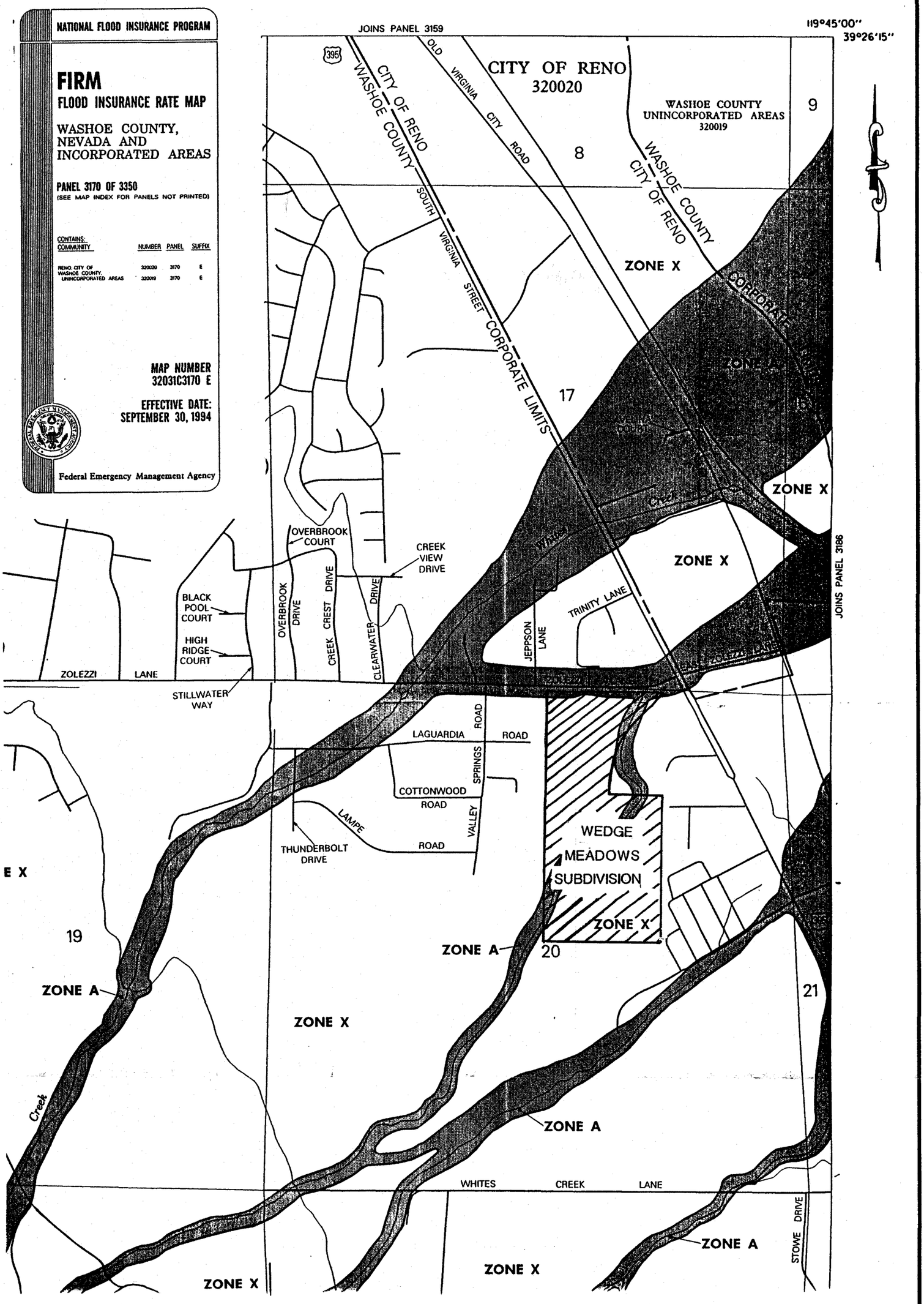
N.T.S.



Nimbus Engineers

FIGURE 1
Vicinity Map

Nimbus Job # : 9311 Date : October 1995



SHEET NO.	FIGURE 2	SCALE: 1" = 1000'	Nimbus Engineers
1/1	Flood Insurance Rate Map Wedge Meadows	DATE: OCTOBER 1995 FILE: 311FIG2.DWG JOB NO.: 9311 REVISIONS:	3710 Grant Dr. Reno NV. 89509 (702)689-8630

forth the previously published peak flow values which were developed for the stream at the area where it divides into the four branches depicted on the Washoe County FIRM.

TABLE 1 - HYDROLOGIC STUDY VALUES		
YEAR	**STUDY (REF NO.)**	**100 YEAR FLOW**
1974	COE-Floodplain Information	2000 cfs
1980	COE-Truckee River Hydrology	3900 cfs
1989	Kennedy Jenks Master Plan	3100 cfs
1993	Nimbus Engineers - NDOT	5100 cfs

Peak 100 year discharges at the flow split had been estimated in earlier studies by other consultants and generally adopted by Washoe County. During the course of the Nimbus Study, documentation of the calculations which were used to produce that flow split were sought by NDOT, Nimbus and Washoe County and could not be located. In order to establish values which could be verified, Nimbus obtained survey information at the area of the diffluence and available topography downstream of the split. For further discussion of the split analysis, the reader is referred to the NDOT report (Reference No. 5).

In comparing the peak flow values for Whites Creek and gaged flows for Galena Creek (an adjacent watershed of approximately the same size), an argument could be made for adopting less conservative peak flows at the diffluence and for the channels downstream. Due to the fact that preliminary information from a consultant performing meteorologic studies for Washoe County indicated that the rainfall values which have been used in the Truckee Meadows area may be low, no attempt has been made to develop lower discharges.

Existing Conditions

The hydrologic analysis used in the NDOT report was revised in order to obtain a detailed existing hydrologic model specifically for the Wedge Meadows Subdivision. Wedge Meadows is affected by the flows from channel 2 of the NDOT study and from some spillover from channel 1. The Whites Creek watershed area W12R was subdivided into three subbasins: W12RA, W12RB, and W12RC (Figure 3) and the U.S. Army Corps of Engineers' HEC-1 computer program was used.

The flow from Whites Creek Channel 2 was routed to the property boundary of the Wedge Meadows Subdivision. A split flow occurs just after entering the project site and these flows travel due north to Zolezzi Lane. The remainder of the flow continues to flow northeasterly through Wedge Meadows to the intersection of Zolezzi Lane and South Virginia Street. Just before the flow reaches the intersection, another split occurs and these flows travel easterly towards South Virginia Street. The on-site flow of 36 cfs joins Channel 2 just downstream of the second split.

Whites Creek Channel 1 was routed to Zolezzi Lane where a split flow occurs. Channel 1A continues northeasterly towards South Virginia Street and Channel 1B flows easterly along the southside of Zolezzi Lane. Before reaching the Wedge Meadows property, Channel 1B splits and weirs north over Zolezzi and rejoins Channel 1A. The remaining flow in Channel 1B continues easterly along Zolezzi Lane and 40 cfs from subbasin WI2RA joins Channel 1B just before the project site. The split from Channel 2 joins Channel 1B just after entering the project site. Weir flow occurs over Zolezzi Lane to the north and the remaining flows in Channel 1B join Channel 2 just west of the intersection at Zolezzi Lane and South Virginia Street. Figure 4 shows the flow schematic of the existing conditions approximate 100 year discharges obtained from the HEC-1 model. A copy of the HEC-1 model (EX-WEDGE.dat) is included in the Appendix.

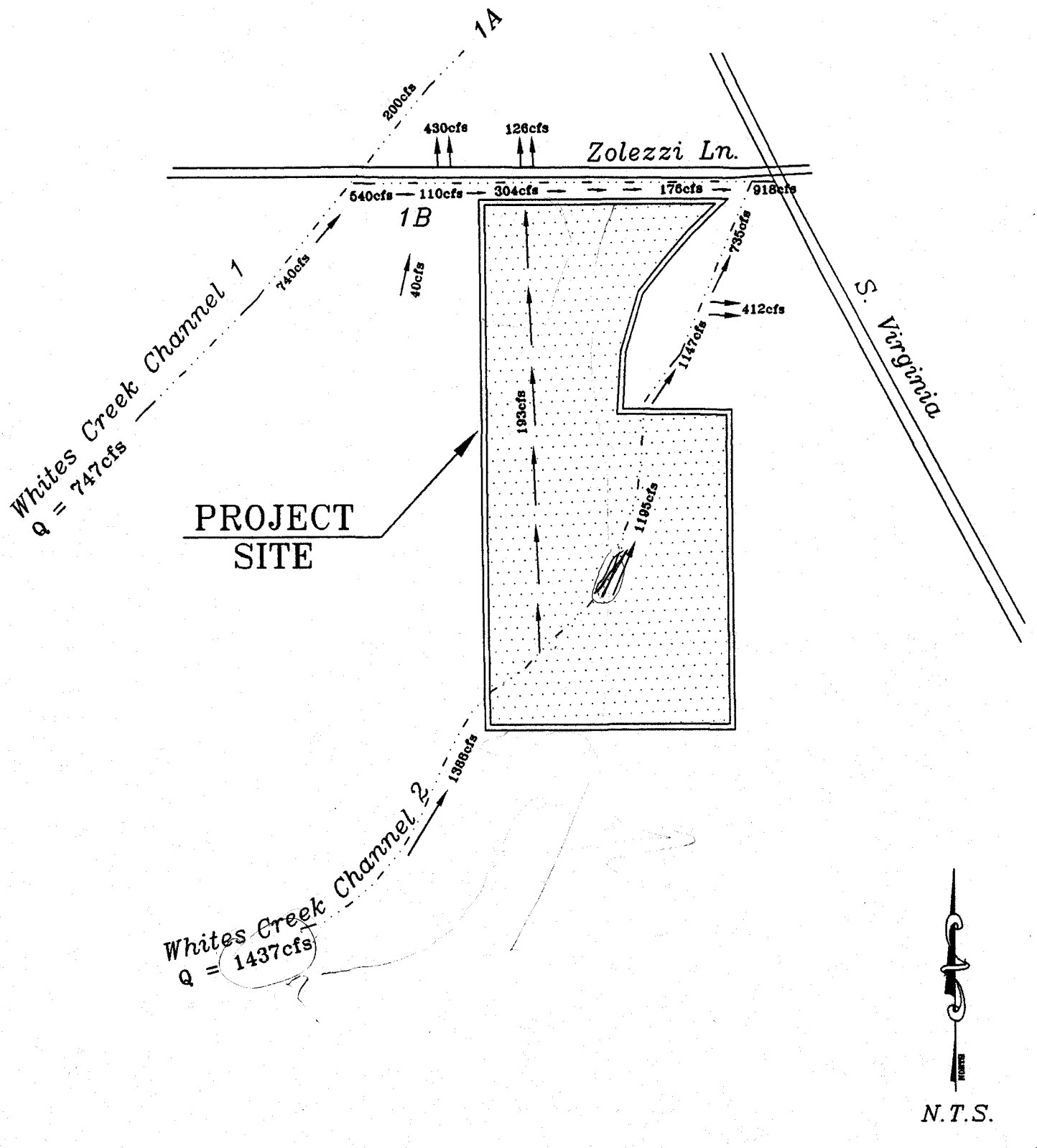
Proposed Conditions

The hydrologic analysis was also revised for the proposed conditions and a new HEC-1 model (PR-WEDGE.dat) was generated and is included in the Appendix.

The flow from Whites Creek Channel 2 was routed to the southwest property boundary of the Wedge Meadows Subdivision. Flanders Road will be elevated and used as a temporary dike to divert all the flood flows away from Unit 1 and into a proposed channel which will extend through the project site. The flow was then routed to the northeast property boundary. The spillover from Whites Creek Channel 1 (Channel 1B) was routed along Zolezzi Lane to the northeast property and combined with Channel 2 just west of the intersection of Zolezzi Lane and South Virginia Street. Figure 5 shows the channels and flow splits developed in the revised model.

4.0 HYDRAULIC ANALYSIS

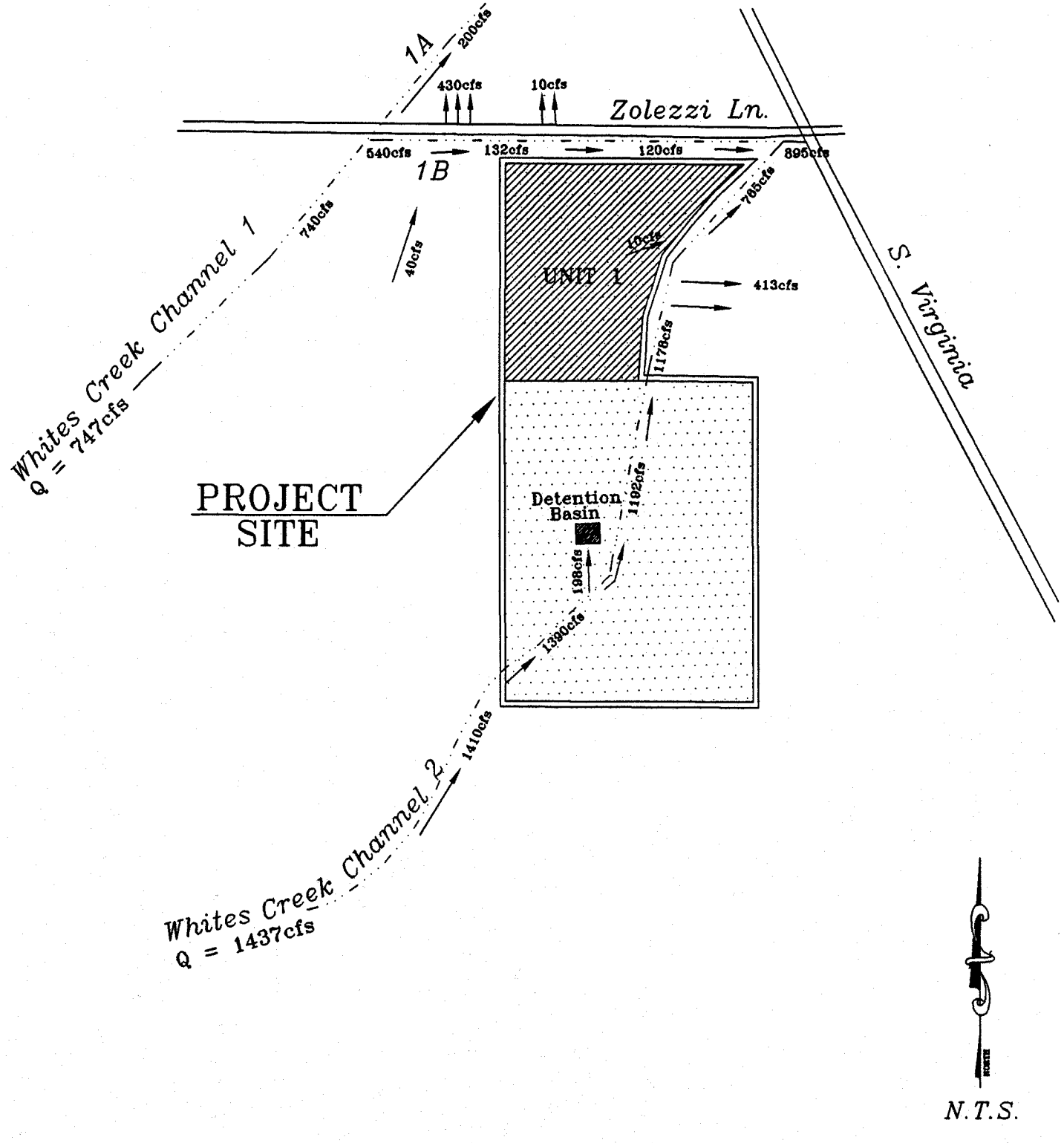
As stated earlier in this report, the discharge values from the NDOT report have been adopted as the design flows for Wedge Meadows. For additional refinements of flow patterns, the construction drawings from Zolezzi Lane, 1" = 100' mapping and topography developed for the design of Wedge Meadows improvements by Odyssey Engineering were used, as well as additional field investigations. Data from these



Nimbus Engineers

FIGURE 4
Flow Schematic
Existing Conditions

Nimbus Job # : 9311 Date : October 1995



Nimbus Engineers

FIGURE 5

Flow Schematic
Proposed Conditions

Nimbus Job # : 9311 Date : October 1995

maps were used in the Corps of Engineers HEC-2 program to quantify flow splits and determine direction of flows.

Existing Conditions

The parcel is primarily affected by 1410 cfs from Whites Creek channel 2 (Wedge2.dat). As flow reaches the parcel, it splits and approximately 200 cfs flows due north until it reaches Zolezzi Lane (Wedge2s.dat). This flow then combines with a portion of the flow from channel 1B which flows easterly down Zolezzi Lane (Wedge1.dat). The remainder of the channel 2 flows continue northeasterly and sheet flow across the Wedge Meadows development and properties to the east and north. Of the combined channel 1B and 200 cfs from channel 2 at the northwest property corner, a portion weir flows over Zolezzi Lane and the remainder flows due east to recombine with channel 2. Figure 6 shows a schematic of the split flows and quantities as well as cross section locations for the HEC-2 analyses which are included in the Appendix.

Proposed Conditions

Washoe County Public Works Department is regulating development in the Whites Creek Basin using Interim Policies proposed by Cella Barr Associates (CBA). These policies require that the corridor flows as determined by the NDOT Study be contained within a channel or drainage system and that the overall development be designed to accommodate 3000 cfs (the 1% flow down any path).

Wedge Meadows Subdivisions was originally designed with the corridor flow to be contained within a channel which would parallel Wedge Parkway.

Interim Design

In order to develop the 21 lots in Unit 1 and remove the building sites from the 100 year floodplain, Flanders Road will be elevated and used as a temporary dike to divert the flood flows away from the development. This diversion will slightly increase the split flow towards Virginia Street but the increase is insignificant. The diversion will not affect the floodplain on adjacent properties under other ownership. This diversion is proposed for Unit 1 because of the possibility of an upstream regional detention basin. Due to the amount of uncertainty in the future flood control policies and design requirements, it is requested that the condition of constructing the full flood control improvements be waived for Unit 1 of the project.

The flows which breakout of Channel 1 (Channel 1B) and affect the north boundary of the parcel will be accommodated in the Zolezzi Lane right-of-way and in the

drainage easement of Lots 10 thru 13 in Unit 1 (R311Wdge.dat). The finish floors of Lots 10 thru 13 will be elevated so that the structures will not be inundated by these flows. A 7' × 3' RCB will be placed under the temporary Wedge Parkway to allow the flow to continue easterly along Zolezzi Lane. Figure 7 shows Unit 1 and the interim design 100 year floodplain (Wedge6.dat).

Ultimate Design

The existing split of 200 cfs which flows due north to Zolezzi Lane along the west property line will be eliminated by the new Flanders Road alignment. All of the off-site flows will be collected at the southwest corner of the property and conveyed through a channel proposed to be built with Unit 2 (see Figure 8 and refer to 311chnl1.dat). A trapezoidal, riprap-lined channel with a 10' bottom width and side slopes at 3:1 (H:V) (Figure 9) will parallel Flanders Road and extend to the east side of Wedge Parkway. The addition of drop structures upstream of Wedge Parkway creates a subcritical channel. A triple 10' x 5' RCB will convey the flows under Wedge Parkway. The flows will then be allowed to exit in a manner similar to the existing condition.

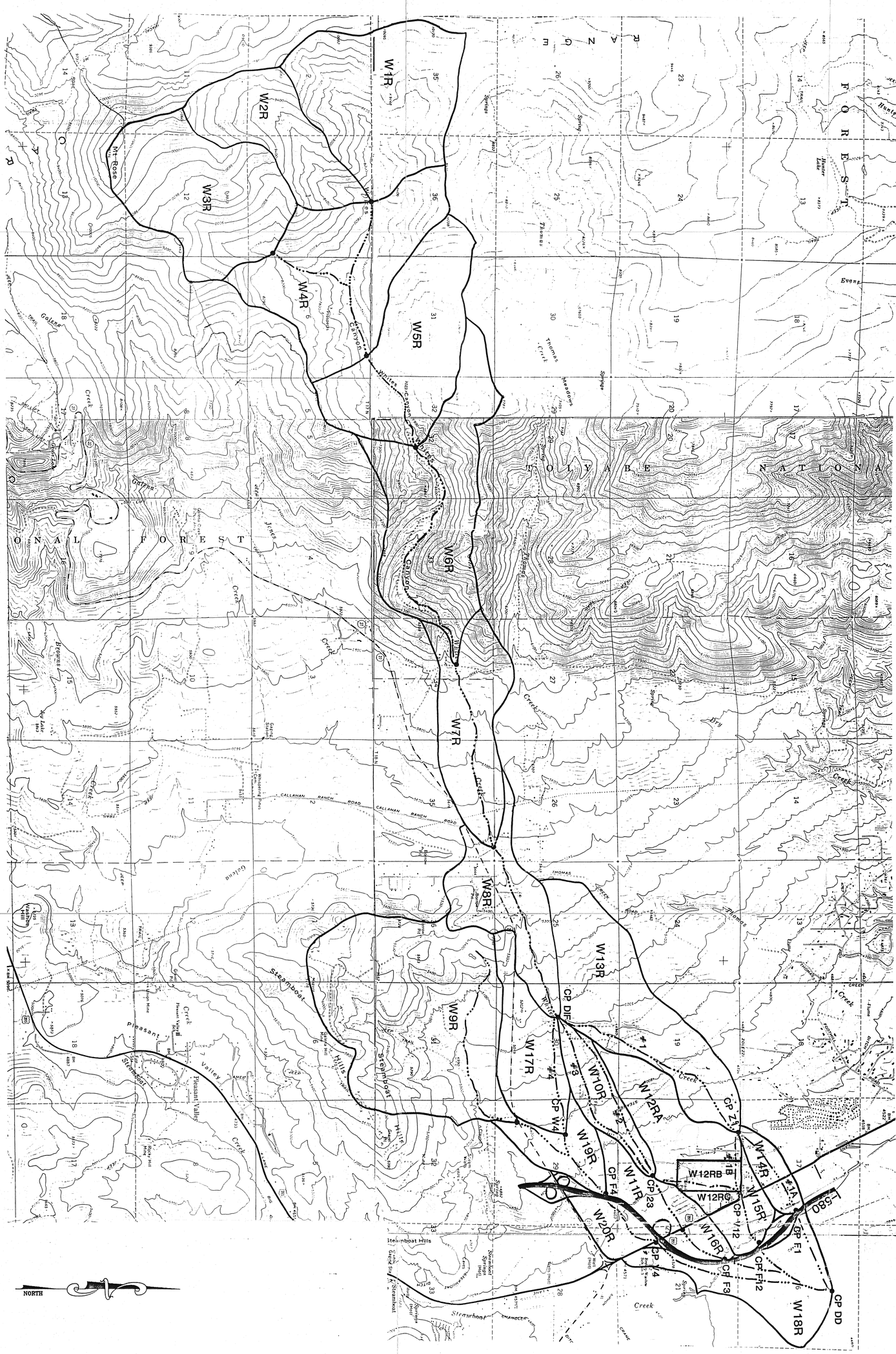
A 3.7 acre-feet detention basin is proposed just upstream of the Wedge Parkway crossing to detain flows above the existing condition of 1195 cfs. Flows above 1195 cfs will spill into the basin via a side weir (311weir1.dat) in the channel and re-enter the channel through a 24" RCP. This will reduce the peak flow at the intersection of Zolezzi Lane and South Virginia Street and return it to the existing condition.

This proposed design will alter flow patterns somewhat but its effects will primarily be beneficial to downstream properties. Negotiations have been completed with the owner of the nine acre parcel adjacent to Zolezzi Lane to obtain a temporary floodplain easement. A copy of the easement is included in the Appendix. At the time that parcel is developed, it is anticipated that the channel can either be constructed to the ultimate design or redirected through the parcel. The proposed channel profile is shown on Figure 10.

5.0 CONCLUSION

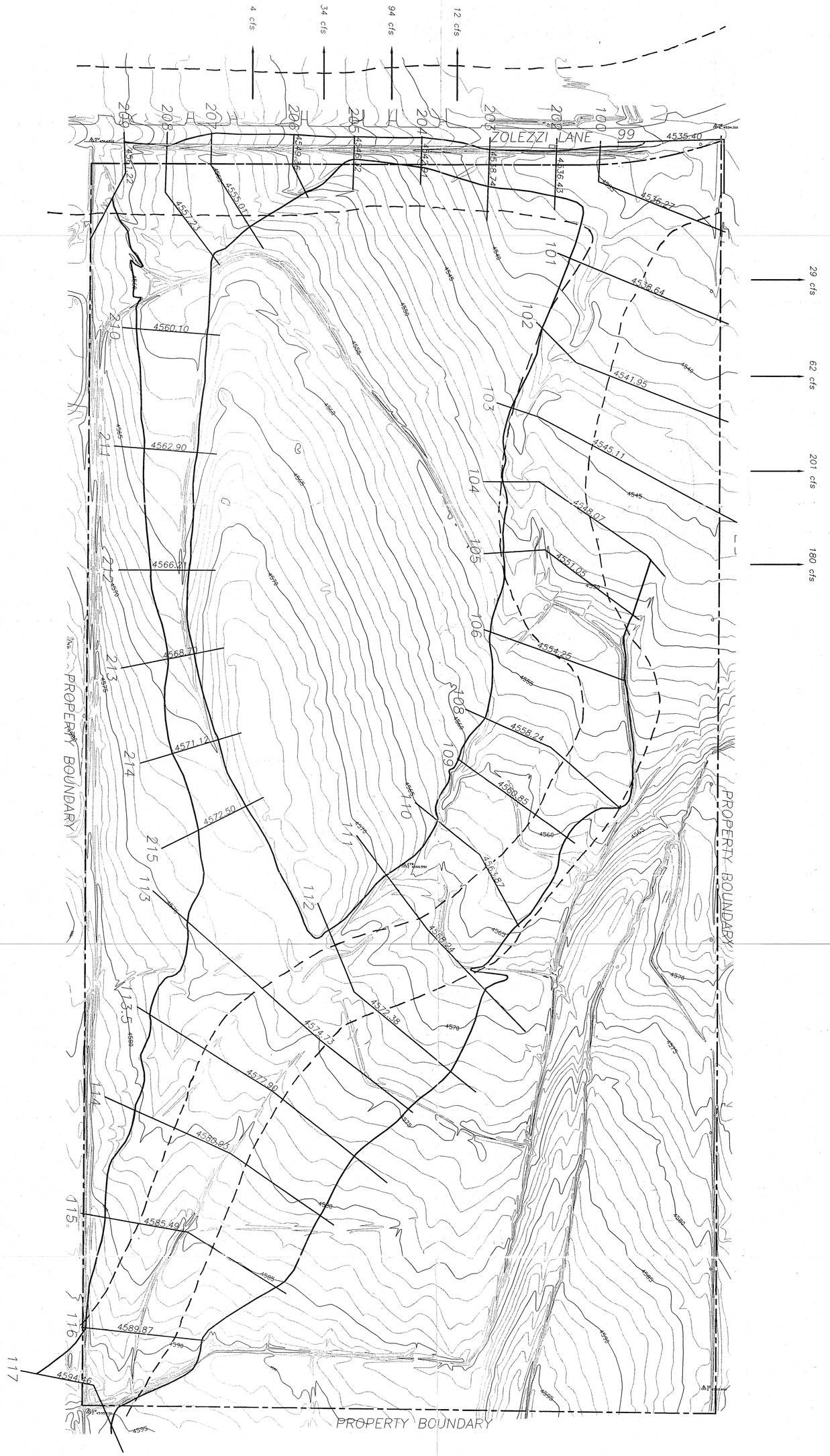
The development of Wedge Meadows can be implemented with minimal impact on the Whites Creek floodplain. The collection of flows there and conveyance through the parcel can be safely accomplished by construction of a rip rap lined channel which will parallel the roadway. Design provisions will be incorporated in order to return the flows to a sheet flow condition.

A HEC-2 model (311ZOLEZ.dat) was performed to determine the effect of 3000 cfs flowing along Zolezzi Lane from branch 1. All but 120 cfs will weir over Zolezzi to



SHEET NO. 1/1	FIGURE 3 Watershed Map Wedge Meadows Subdivision	SCALE: 1" = 2000' DATE: OCTOBER 1995 FILE: 311FIG3.DWG JOB NO.: 0311 REVISIONS:	Nimbus Engineers 3710 Grant Dr. Reno NV. 89509 (702)689-8630

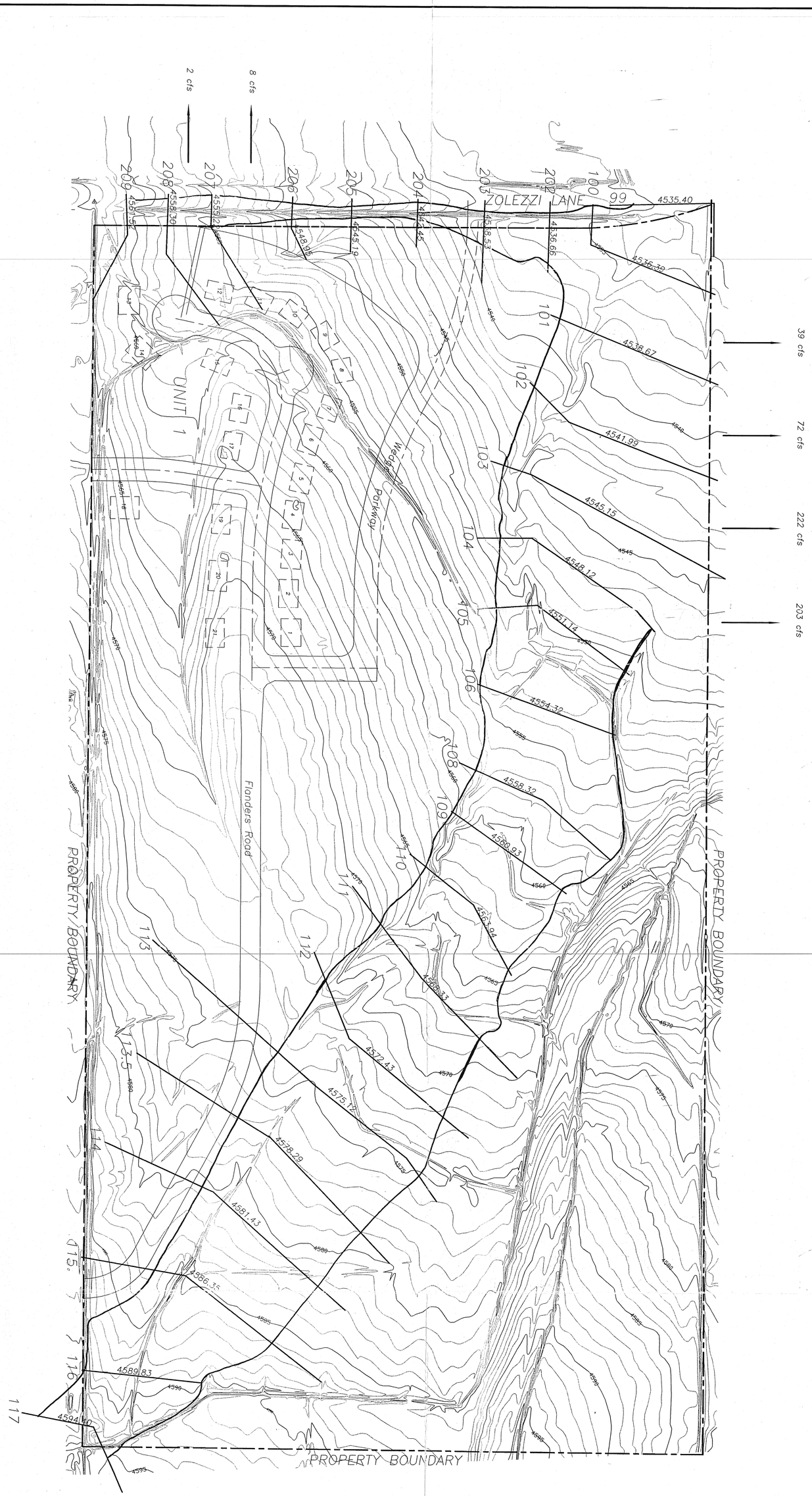
D:\9311\311FIG6 Tue Nov 21 11:56:19 1995



1 / 1	JOB NO.: 9311 SCALE: 1"=100' FILE: 311FIG6 DATE: Oct 1995 DESIGN BY: ACP DRAWN BY: ACP CHECKED BY: RMH	**FIGURE 6** Existing Conditions Hydraulic Work Map	**Nimbus Engineers** 3710 Grant Dr., Suite A, Reno, NV 89509 Mail: P.O. Box 10220, Reno, NV 89510 (702) 689-8630

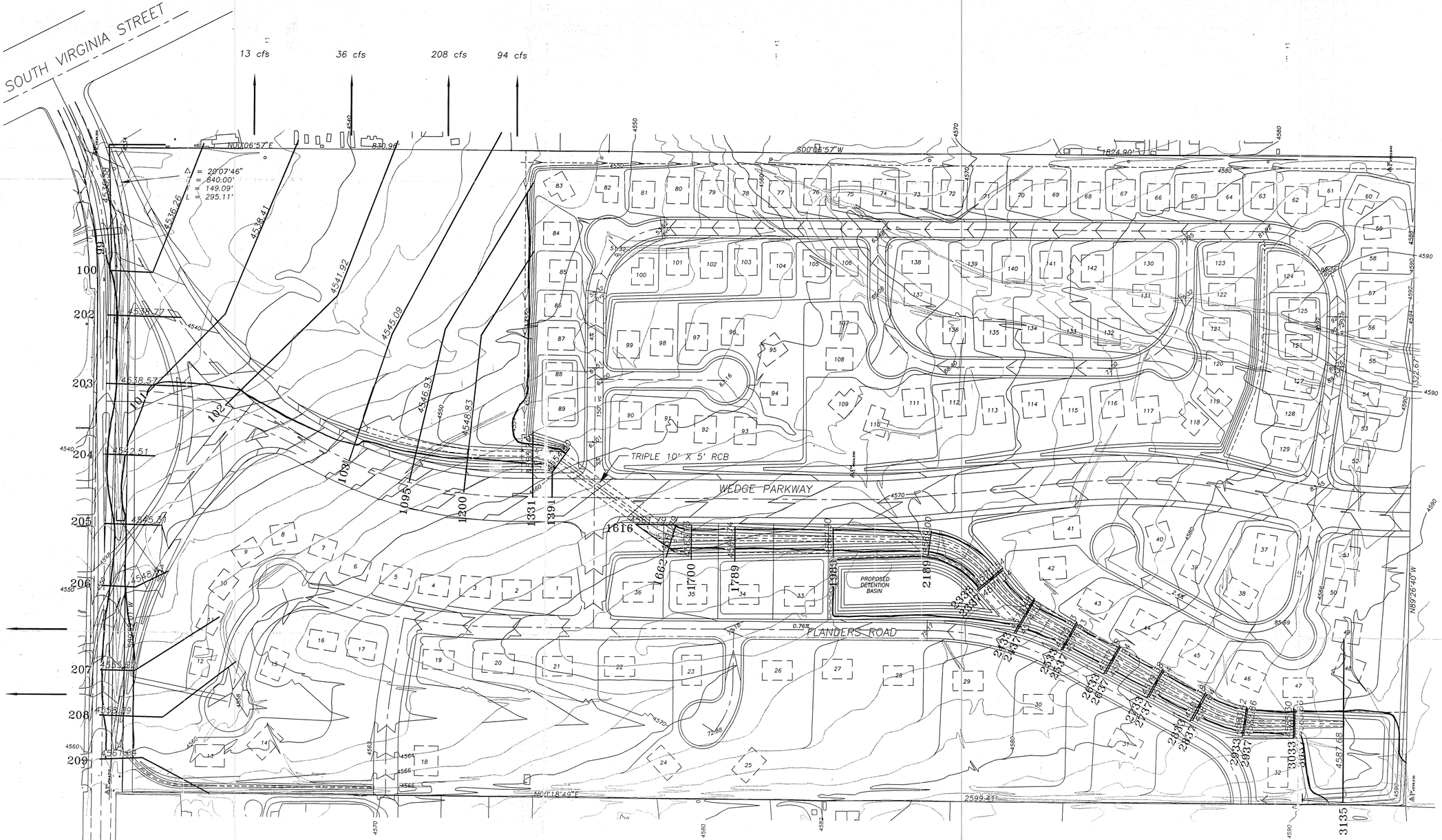
DATE	REVISIONS

D:\9311\311FIG7 Tue Nov 21 10:14:07 1995



1 / 1	JOB NO.: 9311 SCALE: 1"=100' FILE: 311FIG7 DATE: OCT 95 DESIGN BY: ACP DRAWN BY: ACP CHECKED BY: RMH	**FIGURE 7** Interim Design Hydraulic Work Map	**Nimbus Engineers** 3710 Grant Dr., Suite A, Reno, NV 89509 Mail : P.O. Box 10259, Reno, NV 89510 (702) 689-8630

DATE	REVISIONS



CROSS-SECTION	WATER SURFACE ELEVATION (3000 cfs)	CROSS-SECTION	WATER SURFACE ELEVATION (3000 cfs)	CROSS-SECTION	WATER SURFACE ELEVATION (3000 cfs)	CROSS-SECTION	WATER SURFACE ELEVATION (3000 cfs)
99	4535.84	1616	4563.50	2337	4573.90	2833	4583.54
100	4536.86	1662	4566.57	2433	4575.59	2837	4584.23
101	4538.82	1700	4566.06	2437	4576.58	2933	4585.63
102	4542.30	1704 (See Location?)	4565.79	2533	4577.86	2937	4586.12
103	4545.53	1785 (See Location?)	4566.79	2537	4578.19	3033	4587.48
1095	4547.47	1789	4567.53	2633	4579.59	3037	4588.15
1200	4549.61	1989	4570.02	2637	4580.23	3135	4590.59
1331	4556.57	2189	4571.76	2733	4581.54		
1391	4556.47	2333	4573.24	2737	4582.23		

ADD INFO TO TABLE FOR SECTIONS
202 – 209 – Per conversation w/ Ralph Hogaboom, Nimbus 120 cfs is the capacity on S. Side of Zolezzi all other flows cross Zolezzi, So WSELEV does not change for 3000 cfs,

Legend

———	100-YEAR FLOODPLAIN BOUNDARY
25 ———	CROSS SECTION LOCATION
4548.83	WATER SURFACE ELEVATION

NORTH

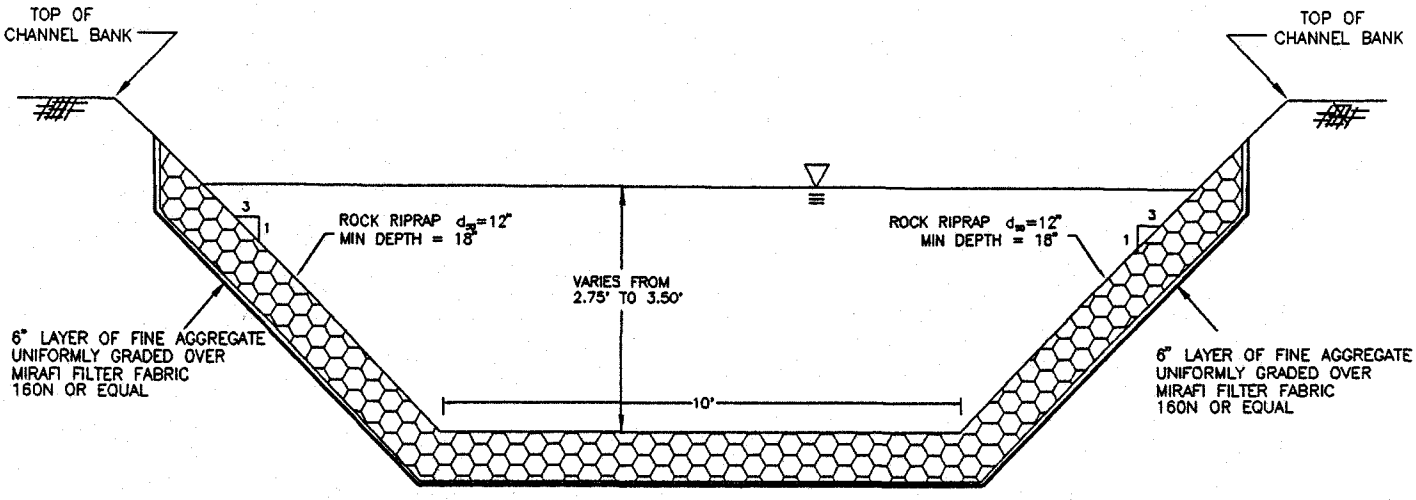
DATE	REVISIONS

Nimbus Engineers
3710 Grant Dr., Suite A, Reno, NV 89509
(775) 828-1900 Fax (775) 828-1901
Mail: PO Box 12800, Reno, NV 89510
(702) 683-9630

FIGURE 8
Ultimate Design Hydraulic Work Map

JOB NO.:	9311
SCALE:	1"=100'
FILE:	311FIG8
DATE:	OCT 95
DESIGN BY:	ACP
DRAWN BY:	ACP
CHECKED BY:	RMH

1 / 1

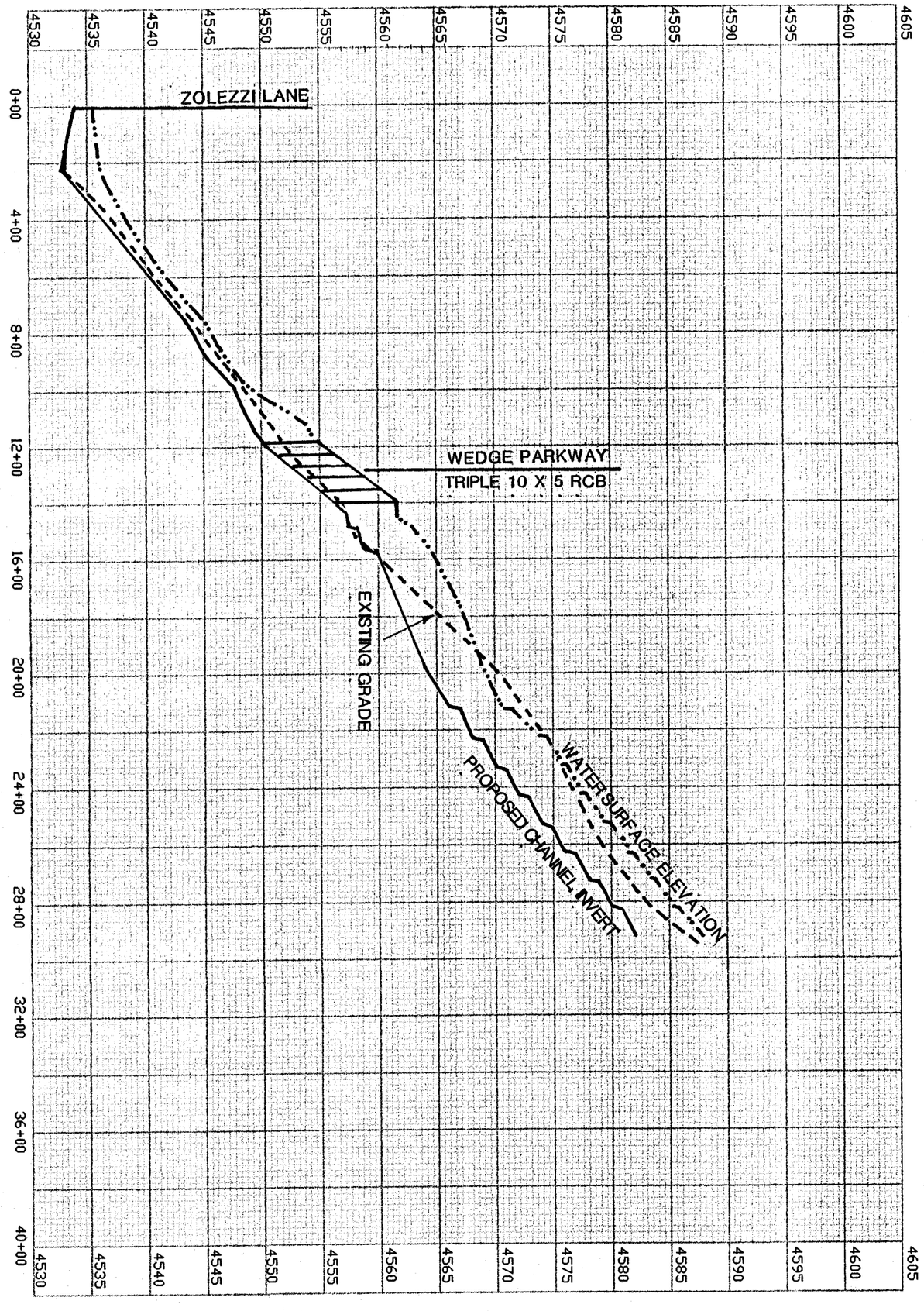


NOTE: Fine Aggregate Base shall be 100% passing the 3/4" sieve and 10% max. passing the No. 200 sieve.

Nimbus Engineers

FIGURE 9
Typical Channel Section

Nimbus Job #9311 Date: October 1995



SHEET NO. 1/1	FIGURE 10 Wedge Meadows Proposed Channel Profile	SCALE: 1" = 1000' DATE: OCT 1995 FILE: 311FIG10.DWG JOB NO.: 9311 REVISIONS:	Nimbus Engineers 3710 Grant Dr. Reno NV. 89509 (702)689-8630

APPENDIX

HEC-1 MODELS

EX-WEDGE.dat

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  10/17/95  TIME  09:39:42   *
*                                       *
*****************************************
```

```
 ****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
 ****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

              *DIAGRAM
    1         ID
    2         ID
    3         ID    Whites Creek              File : EX-WEDGE.DAT  - COPIED FROM 301WHITE.DAT
    4         ID    100-Year, 24 hour model
    5         ID    This model was taken from file : THWH100.909 given to local communities
    6         ID     on May 8, 1990
    7         ID
    8         ID    Revisions include:
    9         ID      1) Hypothetical rainfall distribution from NOAA (PH) replaced w/ Type II
   10         ID           - 15 minute time interval Type II
   11         ID      2) Rainfall Pt. values taken from Huffaker Detailed Parameters notebook
   12         ID      3) Revised Curve Numbers based on detailed soils analysis
   13         ID      4) Subbasins W7 & W8 revised for CP at Diffluence
   14         ID      5) Add lower subbasins (W9R - W22R)
   15         ID      6) Revised diversion cards at diffluence
   16         ID      7) Revised lower subbasins to provide CPs at NDOT proposed crossings
   17         ID      8) Add subbasins down through Whites Ck. Meadows (to Double Diamond)
   18         ID      9) REVISIONS FOR WEDGE MEADOWS SUBDIVISION
   19         ID    Legend :
   20         ID     W(No.)R = Subbasin
   21         ID     CP XX = Combine flows at point XX
   22         ID     RT XX = Route to CP XX
   23         ID     DV XX = Divert hydrograph XX
   24         ID     DR XX = Recall hydrograph XX
   25         ID     XX = Street and Channel #, where applicable
   26         ID        V = Virginia, Z = Zolezzi, F = 580 (Freeway), W = Wedge
   27         ID
```

```
28          ID
29          IT      5                   289
30          IO      5       0
31          IN    15.0

32          KK     W1R Whites Creek 1
33          BA    1.36
34          PB     5.5
35          PC     0.0    .002    .005    .008    .011    .014    .017    .020    .023    .026
36          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
37          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
38          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
39          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
40          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
41          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
42          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
43          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
44          PC    .983    .986    .992    .995    .998   1.00
45          LS              63
46          UD    0.21

47          KK     W2R  Whites Creek No. 2
48          BA    0.84
49          PB     5.4
50          LS              65
51          UD    0.17
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

52          KK    W1+W2  Combine W1 and W2
53          HC        2

54          KK     RT-A  Route to pt A
55          RM        1   0.122     0.4

56          KK     W3R  Whites Creek No. 3
57          BA    1.38
58          PB    5.25
59          LS              65
60          UD    0.23

61          KK     RT-A  Route to pt A
62          RM        1   0.095     0.4

63          KK     W4R  Whites Creek No. 4
64          BA    1.47
65          PB     5.0
66          LS              57
67          UD    0.27

68          KK    W1234  Combine W1-W4
69          HC        3

70          KK     RT-B  Route to pt B
71          RM        1  0.0597     0.4

72          KK     W5R  Whites Creek No. 5
73          BA    1.27
74          PB     4.8
75          LS              58
76          UD    0.28

77          KK    W5+CH  Combine W5 and channel
78          HC        2
```

```
79          KK    RT-C  Route to pt C
80          RM       2  0.185     0.4

81          KK     W6R  Whites Creek No. 6
82          BA    1.43
83          PB     4.1
84          LS              57
85          UD    0.44

86          KK   W6+CH  Combine W6 and channel
87          HC       2

88          KK    RT-D  Route to pt D
89          RM       1  0.122     0.4
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

90          KK     W7R  Whites Creek No. 7
91          BA    0.85
92          PB     3.4
93          LS              68
94          UD    0.17

95          KK   W7+CH  Combine W7 and channel
96          HC       2

97          KK  RT-DIF  Route flows to Diffluence
98          RM       1  0.104     0.4

99          KK     W8R  Whites Creek No. 8
100         BA    0.75
101         PB     3.0
102         LS              65
103         UD    0.29

104         KK  CP DIF  Combine flows at Diffluence
105         HC       2

106         KK    DV 4  Divert flows into channel #4 - south branch
107         KM          Hydrograph at this station is flow in channel 4
108         DT  CH 123
109         DI       0    2000    3500    5100
110         DQ       0    1700    2700    3750

111         KK   RT W4  Route flows in channel #4 to Wedge Parkway
112         RM       2    .178      .3

113         KK    W17R  Whites Creek No. 17
114         BA    0.58
115         PB     2.8
116         LS              67
117         UD    0.31

118         KK   CP W4  Combine flows at Wedge Parkway
119         HC       2

120         KK   RT F4  Route flows to proposed RCB at 580
121         RM       1  0.111      .3

122         KK    W19R  Whites Creek No. 19
123         BA    0.33
124         PB    2.75
125         LS              60
```

```
126          UD    0.22

127          KK     W9R  Whites Creek No. 9  (Steamboat Hills Area, above Mt. Rose Hwy)
128          BA    2.39
129          PB     2.8
130          LS              69
131          UD    0.51
```



```
LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

132          KK   RT F4  Route flows to proposed RCB at 580  (Channel 4)
133          RM       2   0.181      0.3

134          KK   CP F4  Combine flows at proposed I-580 RCB  (Channel 4)
135          HC       3

136          KK   RT V4  Route flows to Virginia Street (Channel 4 near Browns School)
137          RM       1   0.121       .3

138          KK    W20R  Whites Creek No. 20
139          BA    0.22
140          PB    2.73
141          LS              61
142          UD    0.22

143          KK   CP V4  Combine flows at Channel #4 and Virginia St. (near Browns School)
144          HC       2

145          KK  RT DSW  Route flows to just north of south property line
146          RM       2   0.195      .25

147          KK   RT DD  Route flows to south property line of Double Diamond
148          RM       8   0.647       .2
             *

149          KK  DR 123  Recall channel 1, 2, and 3 flows
150          DR  CH 123

151          KK  DV 2&3  Divert flows into channels 2 and 3 - two middle branches
152          KM          Hydrograph at this station is flow in channels 2 and 3
153          DT    CH 1
154          DI       0    1700    2700    3750
155          DQ       0     350     550     700

156          KK  RT 2&3  Route flows to pt where channels 2 and 3 combine (2000' u/s Virginia)
157          RM       3    .245      .3

158          KK    W10R  Whites Creek No. 10
159          BA     0.3
160          PB     2.8
161          LS              55
162          UD     .32

163          KK   CP 23  Combine local flows with channels 2 and 3
164          HC       2

165          KK  DV 23A  Divert flows at CP 23 (Channels 2 and 3 Diverge)
166          KM          Hydrograph at this station is in channel 3 (Channel 2 is diverted)
167          DT    CH 2
168          DI       0    2000    3500
169          DQ       0    1000    1750
```



```
LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
```

```
170          KK   RT V3  Route flow to Virginia St. (CP V3)
171          RM       2   0.136      .2

172          KK    W11R  Whites Creek No. 11
173          BA    0.32
174          PB     2.7
175          LS              75
176          UD    0.27

177          KK  CP V24  Combine Subbasin W11R, and Channel 2 at Virginia Street
178          HC       2

179          KK   RT F3  Route flow to F3 (Channel 3 at 580)
180          RM       3   0.234     0.2

181          KK    W16R  Whites Creek No. 16
182          BA    0.11
183          PB     2.7
184          LS              81
185          UD    0.21

186          KK   CP F3  Combine flows at proposed RCB on 580  (Channel 3)
187          HC       2

188          KK   RT DD  Route flows to south property line of Double Diamond
189          RM       5   .4093     0.2
             *
             *

190          KK  DR CH2  Recall Channel 2 Hydrograph
191          DR    CH 2

192          KK  RT SPL  ROUTE BRANCH 2 TO SPLIT
193          RM       2    0.13     0.2
             *

194          KK   DV 2A DIVERSION FROM BRANCH2 TO BRANCH 1B
195          DT   2TO1B
196          DI       0    1440
197          DQ       0     200

198          KK  RT ZOL   ROUTE TO ZOLEZZI LANE - NORTHEAST PROP. CORNER
199          RM       2    0.14     0.2
             *

200          KK   DV 2B  DIVERSION FROM BRANCH 2 TO EAST TOWARD S. VIRGINIA
201          DT   2TOEA
202          DI       0    1000    1240
203          DQ       0     348     452
             *
             *
```



```
LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

204          KK   W12RB  WHITES CREEK WATERSHED 12RB
205          BA    0.13
206          PB     2.8
207          LS              70
208          UD    0.27
             *

209          KK  CB WED  COMBINE WHITES BRANCH 2 & WS 12RB AT NORTHEAST CORNER OF WEDGE
```

```
210         HC      2
            *

211         KK    DR 1  Recall Channel 1 Hydrograph (@ Diffluence)
212         DR    CH 1

213         KK    RT Z1  Route Channel 1 to Zolezzi Lane (approx. 2800' West of Virginia St.)
214         RM       4     .34      .3

215         KK     W13R  Whites Creek No. 13
216         BA        2
217         PB      2.8
218         LS                61
219         UD     0.52

220         KK    CP Z1  Combine channel 1 w/ W13R at Zolezzi Lane
221         HC       2

222         KK    DV 1B  Divert flows to the north of Zolezzi (Channel 1A)
223         KM           Hydrograph is for flows along Zolezzi (Channel 1B, Ea. to Virginia)
224         DT    CH 1A
225         DI        0      200     1500
226         DQ        0      200      200

227         KK    RT NW    ROUTE TO NORTHWEST PROP. CORNER
228         RM        1    0.07     0.25
            *

229         KK  DV Z01 DIVERT FLOW OVER ZOLEZZI TO NORTH
230         DT   ZOLE1
231         DI        0      300      547
232         DQ        0      225      436

233         KK    W12RA  WHITES CREEK WATERSHED 12RA
234         BA     0.51
235         PB      2.8
236         LS                62
237         UD     0.43

238         KK    2TO1B RETRIEVE DIVERSION
239         DR    2TO1B
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9.......10


240         KK    RT NW  ROUTE TO NORTHWEST PROP. CORNER
241         RM        2    0.19     0.25

242         KK   CB 1B2  COMBINE 1B & SPLIT FROM 2 & WS W12RA
243         HC        3

244         KK    RT NE  ROUTE TO NORTHEAST PROP. CORNER
245         RM        1   0.075     0.25
            *

246         KK   DV Z02  DIVERT FLOW OVER ZOLEZZI TO NORTH
247         DT    ZOLE2
248         DI        0      200      320
249         DQ        0       32      143

250         KK   CP WED  COMBINE ALL FLOW @ NORTHEAST CORNER OF WEDGE
251         HC        2
            *  ROUTING FROM CP WED TO CP V12 IGNORED SINCE L=100'+/-

252         KK    W12RC  WHITES CREEK WATERSHED 12RC
```

```
253          BA    0.04
254          PB     2.8
255          LS              72
256          UD    0.16

257          KK    2TOEA  RETRIEVE DIVERSION FROM BRANCH 2
258          DR    2TOEA

259          KK   CP V12  COMBINE FLOWS AT S. VIRGINIA STREET.
260          HC        3
             *

261          KK   RT F12  Route flows to proposed RCB at 580 (Channels 1B and 2)
262          RM        2   0.201      0.2

263          KK     W15R  Whites Creek No. 15
264          BA    0.21
265          PB     2.7
266          LS              79
267          UD    0.21

268          KK    ZOLE1   RETRIEVE DIVERSION FROM BRANCH 1B
269          DR    ZOLE1

270          KK   RT F12
271          RM        3    0.26      0.2

272          KK    ZOLE2   RETRIEVE DIVERSION FROM BRANCH 1B
273          DR    ZOLE2
```

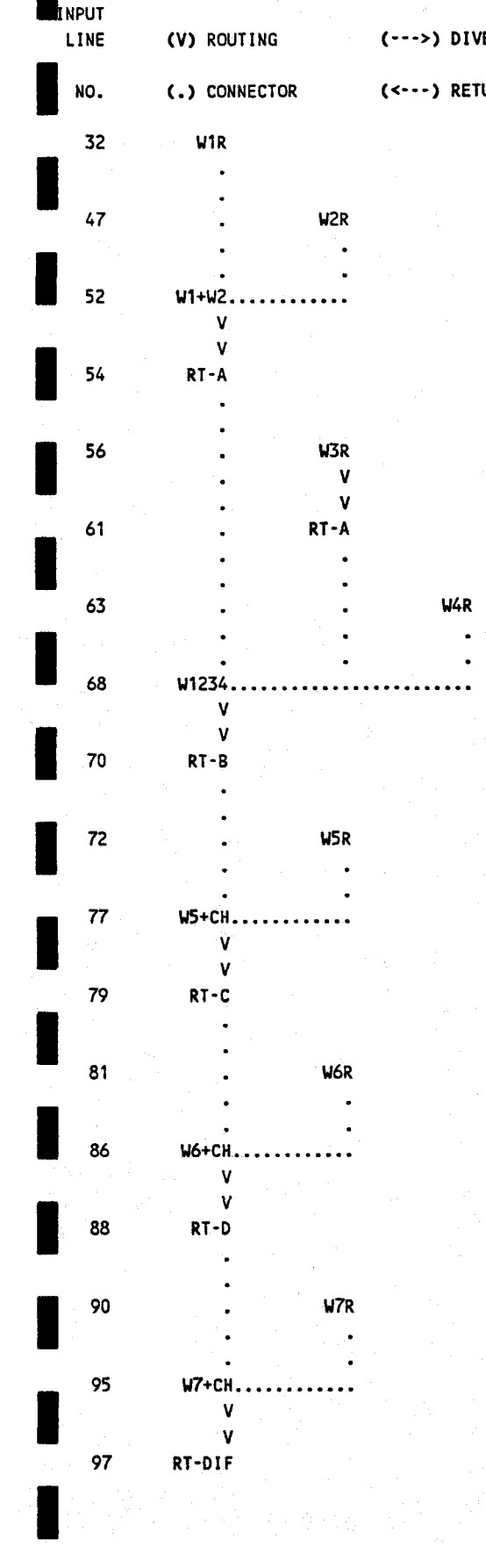


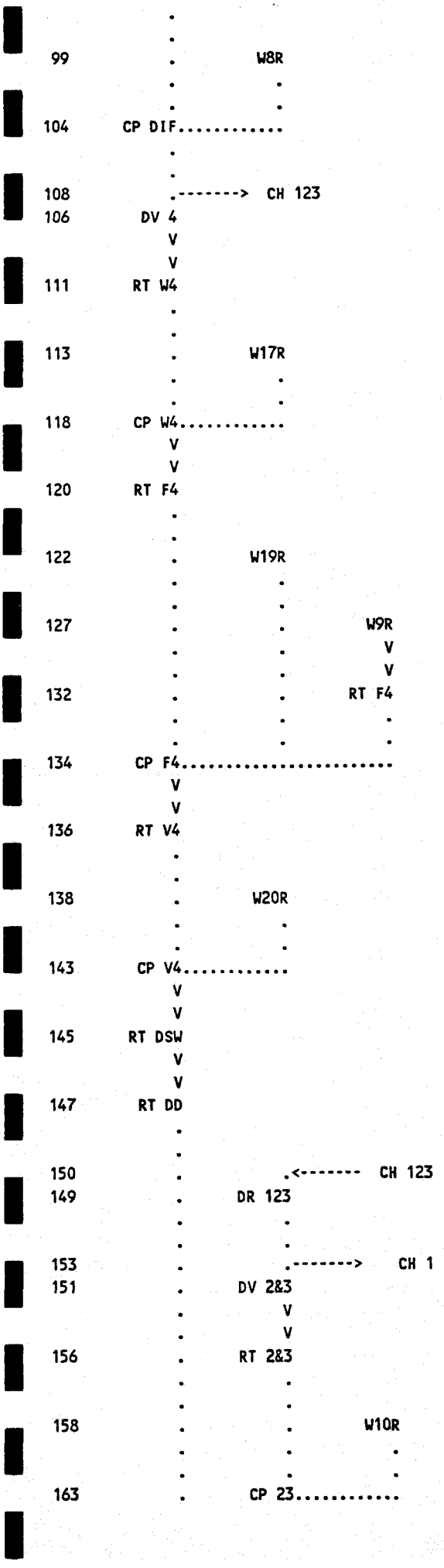
```
LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10


274          KK   RT F12
275          RM        2     0.2      0.2

276          KK   CP F12  Combine flows at proposed RCB at 580 (Channels 1B and 2)
277          HC        4

278          KK    RT DD  Route flows to south property line of Double Diamond
279          RM        5   0.449      0.2
             *

280          KK    DR 1A  Recall Channel 1A Hydrograph
281          DR    CH 1A

282          KK   RT F1A  Route flows to proposed RCB at 580 (Channel 1A)
283          RM        4   0.306      0.2

284          KK     W14R  Whites Creek No. 14
285          BA    0.18
286          PB     2.7
287          LS              77
288          UD    0.26

289          KK   CP F1A  Combine flows at proposed RCB at 580 (Channel 1A)
290          HC        2

291          KK    RT DD  Route flows to south property of Double Diamond (Channel 1A)
292          RM        4   0.317      0.2
             *

293          KK     W18R  Whites Creek No. 18
294          BA    0.85
295          PB     2.7
```

```
296          LS              80
297          UD    1.33
             *

298          KK    CP DD  Combine all Whites Creek flows at Double Diamond
299          HC       5
300          ZZ
```

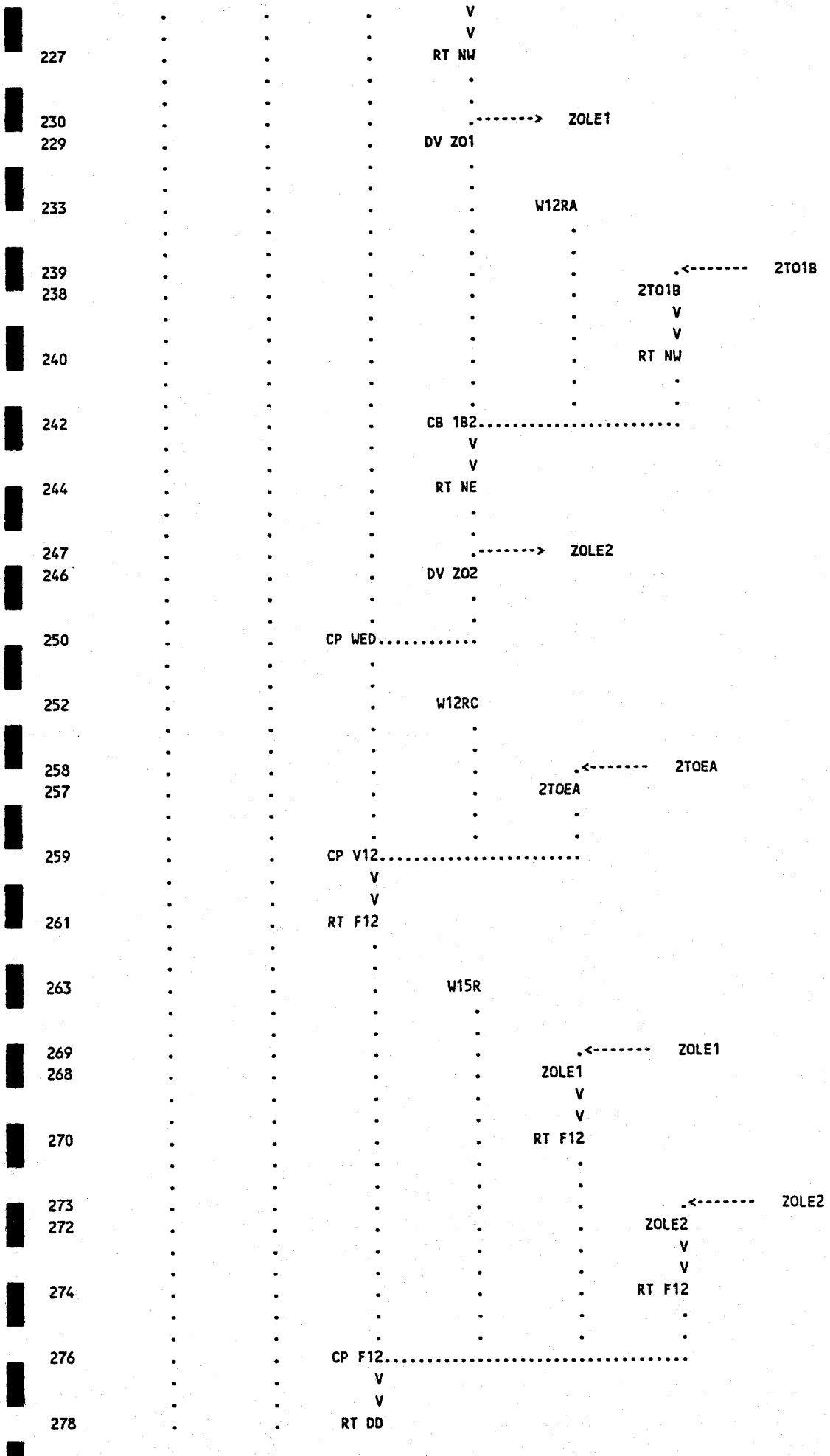
1

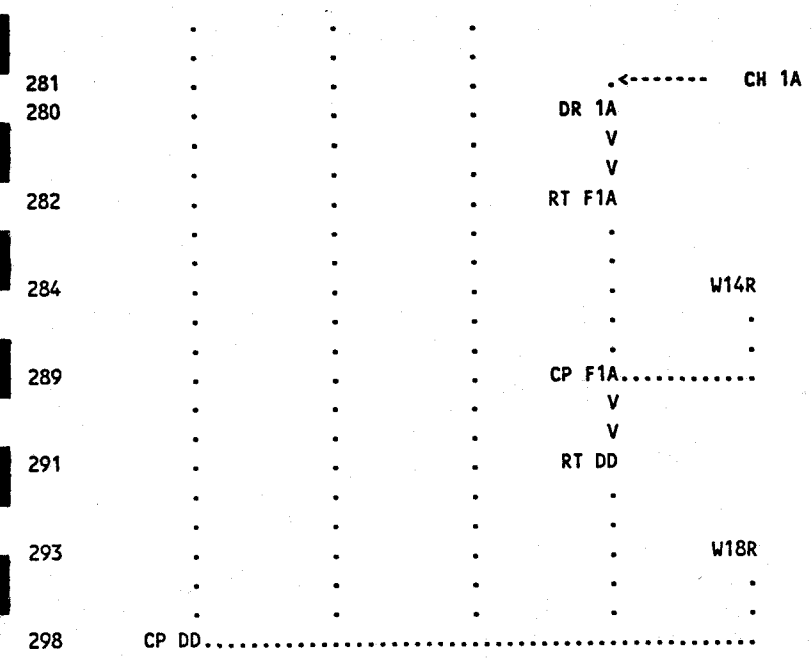
SCHEMATIC DIAGRAM OF STREAM NETWORK




99 W8R
104 CP DIF
108 CH 123
106 DV 4
111 RT W4
113 W17R
118 CP W4
120 RT F4
122 W19R
127 W9R
132 RT F4
134 CP F4
136 RT V4
138 W20R
143 CP V4
145 RT DSW
147 RT DD
150 CH 123
149 DR 123
153 CH 1
151 DV 2&3
156 RT 2&3
158 W10R
163 CP 23

```
                .          .
                .          .
167             .          .-------->    CH 2
165             .      DV 23A
                .          V
                .          V
170             .       RT V3
                .          .
                .          .
172             .          .        W11R
                .          .          .
                .          .          .
177             .       CP V24.............
                .          V
                .          V
179             .       RT F3
                .          .
                .          .
181             .          .        W16R
                .          .          .
                .          .          .
186             .       CP F3..............
                .          V
                .          V
188             .       RT DD
                .          .
                .          .
191             .          .           .<--------    CH 2
190             .          .      DR CH2
                .          .           V
                .          .           V
192             .          .      RT SPL
                .          .           .
                .          .           .
195             .          .           .-------->   2TO1B
194             .          .       DV 2A
                .          .           V
                .          .           V
198             .          .      RT ZOL
                .          .           .
                .          .           .
201             .          .           .-------->   2TOEA
200             .          .       DV 2B
                .          .           .
                .          .           .
204             .          .           .       W12RB
                .          .           .         .
                .          .           .         .
209             .          .      CB WED.............
                .          .           .
                .          .           .
212             .          .           .           .<--------    CH 1
211             .          .           .        DR 1
                .          .           .         V
                .          .           .         V
213             .          .           .       RT Z1
                .          .           .         .
                .          .           .         .
215             .          .           .         .         W13R
                .          .           .         .           .
                .          .           .         .           .
220             .          .           .       CP Z1.............
                .          .           .         .
                .          .           .         .
224             .          .           .         .-------->   CH 1A
222             .          .           .       DV 1B
```


227 RT NW
230 ZOLE1
229 DV ZO1
233 W12RA
239 2TO1B
238 2TO1B
240 RT NW
242 CB 1B2
244 RT NE
247 ZOLE2
246 DV ZO2
250 CP WED
252 W12RC
258 2TOEA
257 2TOEA
259 CP V12
261 RT F12
263 W15R
269 ZOLE1
268 ZOLE1
270 RT F12
273 ZOLE2
272 ZOLE2
274 RT F12
276 CP F12
278 RT DD



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  10/17/95  TIME  09:39:42   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

Whites Creek File : EX-WEDGE.DAT - COPIED FROM 301WHITE.DAT
100-Year, 24 hour model
This model was taken from file : THWH100.909 given to local communities
on May 8, 1990

Revisions include:

1) Hypothetical rainfall distribution from NOAA (PH) replaced w/ Type II - 15 minute time interval Type II
2) Rainfall Pt. values taken from Huffaker Detailed Parameters notebook
3) Revised Curve Numbers based on detailed soils analysis
4) Subbasins W7 & W8 revised for CP at Diffluence
5) Add lower subbasins (W9R - W22R)
6) Revised diversion cards at diffluence
7) Revised lower subbasins to provide CPs at NDOT proposed crossings
8) Add subbasins down through Whites Ck. Meadows (to Double Diamond)
9) REVISIONS FOR WEDGE MEADOWS SUBDIVISION

Legend :

W(No.)R = Subbasin
CP XX = Combine flows at point XX
RT XX = Route to CP XX
DV XX = Divert hydrograph XX
DR XX = Recall hydrograph XX
XX = Street and Channel #, where applicable
V = Virginia, Z = Zolezzi, F = 580 (Freeway), W = Wedge

```
 30 IO          OUTPUT CONTROL VARIABLES
                      IPRNT          5  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1   0  STARTING DATE
                      ITIME         0000  STARTING TIME
                         NQ         289  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      2   0  ENDING DATE
                     NDTIME         0000  ENDING TIME
                      ICENT           19  CENTURY MARK

                  COMPUTATION INTERVAL     0.08 HOURS
                      TOTAL TIME BASE     24.00 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
               SURFACE AREA           ACRES
               TEMPERATURE            DEGREES FAHRENHEIT
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-A.
      REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-B.
      REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-D.
      REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).
1
                                        RUNOFF SUMMARY
                                FLOW IN CUBIC FEET PER SECOND
                            TIME IN HOURS,  AREA IN SQUARE MILES
```

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	W1R	1479.	12.08	219.	67.	67.	1.36		
HYDROGRAPH AT	W2R	1095.	12.08	142.	43.	43.	0.84		
2 COMBINED AT	W1+W2	2574.	12.08	361.	110.	110.	2.20		
ROUTED TO	RT-A	2397.	12.25	360.	110.	110.	2.20		
HYDROGRAPH AT	W3R	1442.	12.17	220.	67.	67.	1.38		
ROUTED TO	RT-A	1416.	12.25	220.	67.	67.	1.38		
HYDROGRAPH AT	W4R	758.	12.17	138.	44.	44.	1.47		
3 COMBINED AT	W1234	4553.	12.25	719.	221.	221.	5.05		
ROUTED TO									

	RT-B	4529.	12.25	719.	221.	221.	5.05
HYDROGRAPH AT	W5R	609.	12.25	115.	36.	36.	1.27
2 COMBINED AT	W5+CH	5138.	12.25	833.	257.	257.	6.32
ROUTED TO	RT-C	4855.	12.50	833.	256.	256.	6.32
HYDROGRAPH AT	W6R	284.	12.42	78.	25.	25.	1.43
2 COMBINED AT	W6+CH	5132.	12.50	910.	281.	281.	7.75
ROUTED TO	RT-D	5055.	12.58	910.	280.	280.	7.75
HYDROGRAPH AT	W7R	452.	12.08	62.	19.	19.	0.85
2 COMBINED AT	W7+CH	5163.	12.58	967.	300.	300.	8.60
ROUTED TO	RT-DIF	5043.	12.67	967.	299.	299.	8.60
HYDROGRAPH AT	W8R	151.	12.25	31.	10.	10.	0.75
2 COMBINED AT	CP DIF	5115.	12.67	998.	309.	309.	9.35
DIVERSION TO	CH 123	3760.	12.67	808.	253.	253.	9.35
HYDROGRAPH AT	DV 4	1355.	12.67	190.	56.	56.	9.35
ROUTED TO	RT W4	1253.	12.83	190.	56.	56.	9.35
HYDROGRAPH AT	W17R	110.	12.25	24.	8.	8.	0.58
2 COMBINED AT	CP W4	1297.	12.83	213.	64.	64.	9.93
ROUTED TO	RT F4	1238.	13.00	213.	64.	64.	9.93
HYDROGRAPH AT	W19R	23.	12.25	6.	2.	2.	0.33
HYDROGRAPH AT	W9R	410.	12.50	113.	36.	36.	2.39
ROUTED TO	RT F4	399.	12.67	113.	36.	36.	2.39
3 COMBINED AT	CP F4	1562.	12.92	332.	101.	101.	12.65
ROUTED TO							

	DV ZO2	176.	13.25	56.	17.	17.	2.51
2 COMBINED AT							
	CP WED	918.	13.25	241.	75.	75.	2.64
HYDROGRAPH AT							
	W12RC	18.	12.08	2.	1.	1.	0.04
HYDROGRAPH AT							
	2TOEA	412.	13.25	97.	30.	30.	0.00
3 COMBINED AT							
	CP V12	1332.	13.25	339.	106.	106.	2.68
ROUTED TO							
	RT F12	1274.	13.42	339.	105.	105.	2.68
HYDROGRAPH AT							
	W15R	123.	12.08	18.	5.	5.	0.21
HYDROGRAPH AT							
	ZOLE1	430.	13.08	55.	14.	14.	0.00
ROUTED TO							
	RT F12	397.	13.33	55.	14.	14.	0.00
HYDROGRAPH AT							
	ZOLE2	126.	13.25	17.	5.	5.	0.00
ROUTED TO							
	RT F12	116.	13.50	17.	5.	5.	0.00
4 COMBINED AT							
	CP F12	1792.	13.42	422.	129.	129.	2.89
ROUTED TO							
	RT DD	1634.	13.83	421.	128.	128.	2.89
HYDROGRAPH AT							
	DR 1A	200.	12.42	136.	48.	48.	0.00
ROUTED TO							
	RT F1A	200.	13.42	136.	47.	47.	0.00
HYDROGRAPH AT							
	W14R	84.	12.17	14.	4.	4.	0.18
2 COMBINED AT							
	CP F1A	216.	12.92	144.	52.	52.	0.18
ROUTED TO							
	RT DD	214.	13.42	144.	51.	51.	0.18
HYDROGRAPH AT							
	W18R	165.	13.33	74.	23.	23.	0.85
5 COMBINED AT							
	CP DD	4426.	13.83	1313.	409.	409.	17.52

*** NORMAL END OF HEC-1 ***

PR-WEDGE.dat

```
**************************************
*                                    *
*   FLOOD HYDROGRAPH PACKAGE (HEC-1) *
*             MAY  1991              *
*          VERSION 4.0.1E            *
*                                    *
*  RUN DATE  10/17/95  TIME  09:39:59*
*                                    *
**************************************
```


```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET          *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 551-1748           *
*                                    *
**************************************
```


```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

              *DIAGRAM
    1         ID    PROPOSED CONDITION MODEL
    2         ID
    3         ID    Whites Creek              File : PR-WEDGE.DAT  - COPIED FROM 301WHITE.DAT
    4         ID    100-Year, 24 hour model
    5         ID    This model was taken from file : THWH100.909 given to local communities
    6         ID     on May 8, 1990
    7         ID
    8         ID    Revisions include:
    9         ID      1) Hypothetical rainfall distribution from NOAA (PH) replaced w/ Type II
   10         ID           - 15 minute time interval Type II
   11         ID      2) Rainfall Pt. values taken from Huffaker Detailed Parameters notebook
   12         ID      3) Revised Curve Numbers based on detailed soils analysis
   13         ID      4) Subbasins W7 & W8 revised for CP at Diffluence
   14         ID      5) Add lower subbasins (W9R - W22R)
   15         ID      6) Revised diversion cards at diffluence
   16         ID      7) Revised lower subbasins to provide CPs at NDOT proposed crossings
   17         ID      8) Add subbasins down through Whites Ck. Meadows (to Double Diamond)
   18         ID      9) REVISIONS FOR WEDGE MEADOWS SUBDIVISION
   19         ID    Legend :
   20         ID     W(No.)R = Subbasin
   21         ID     CP XX = Combine flows at point XX
   22         ID     RT XX = Route to CP XX
   23         ID     DV XX = Divert hydrograph XX
   24         ID     DR XX = Recall hydrograph XX
   25         ID     XX = Street and Channel #, where applicable
   26         ID        V = Virginia, Z = Zolezzi, F = 580 (Freeway), W = Wedge
   27         ID
```

```
28          ID
29          IT      5                   289
30          IO      5       0
31          IN    15.0

32          KK     W1R Whites Creek 1
33          BA    1.36
34          PB     5.5
35          PC     0.0    .002    .005    .008    .011    .014    .017    .020    .023    .026
36          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
37          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
38          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
39          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
40          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
41          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
42          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
43          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
44          PC    .983    .986    .992    .995    .998   1.00
45          LS              63
46          UD    0.21

47          KK     W2R  Whites Creek No. 2
48          BA    0.84
49          PB     5.4
50          LS              65
51          UD    0.17
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

52          KK   W1+W2  Combine W1 and W2
53          HC      2

54          KK    RT-A  Route to pt A
55          RM      1   0.122     0.4

56          KK     W3R  Whites Creek No. 3
57          BA    1.38
58          PB    5.25
59          LS              65
60          UD    0.23

61          KK    RT-A  Route to pt A
62          RM      1   0.095     0.4

63          KK     W4R  Whites Creek No. 4
64          BA    1.47
65          PB     5.0
66          LS              57
67          UD    0.27

68          KK   W1234  Combine W1-W4
69          HC      3

70          KK    RT-B  Route to pt B
71          RM      1  0.0597     0.4

72          KK     W5R  Whites Creek No. 5
73          BA    1.27
74          PB     4.8
75          LS              58
76          UD    0.28

77          KK   W5+CH  Combine W5 and channel
78          HC      2
```

```
 79          KK    RT-C  Route to pt C
 80          RM       2  0.185     0.4

 81          KK     W6R  Whites Creek No. 6
 82          BA    1.43
 83          PB     4.1
 84          LS             57
 85          UD    0.44

 86          KK   W6+CH  Combine W6 and channel
 87          HC       2

 88          KK    RT-D  Route to pt D
 89          RM       1  0.122     0.4
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 90          KK     W7R  Whites Creek No. 7
 91          BA    0.85
 92          PB     3.4
 93          LS             68
 94          UD    0.17

 95          KK   W7+CH  Combine W7 and channel
 96          HC       2

 97          KK  RT-DIF  Route flows to Diffluence
 98          RM       1  0.104     0.4

 99          KK     W8R  Whites Creek No. 8
100          BA    0.75
101          PB     3.0
102          LS             65
103          UD    0.29

104          KK  CP DIF  Combine flows at Diffluence
105          HC       2

106          KK    DV 4  Divert flows into channel #4 - south branch
107          KM          Hydrograph at this station is flow in channel 4
108          DT  CH 123
109          DI       0    2000    3500    5100
110          DQ       0    1700    2700    3750

111          KK   RT W4  Route flows in channel #4 to Wedge Parkway
112          RM       2    .178      .3

113          KK    W17R  Whites Creek No. 17
114          BA    0.58
115          PB     2.8
116          LS             67
117          UD    0.31

118          KK   CP W4  Combine flows at Wedge Parkway
119          HC       2

120          KK   RT F4  Route flows to proposed RCB at 580
121          RM       1  0.111      .3

122          KK    W19R  Whites Creek No. 19
123          BA    0.33
124          PB    2.75
125          LS             60
```

```
126          UD    0.22

127          KK     W9R  Whites Creek No. 9  (Steamboat Hills Area, above Mt. Rose Hwy)
128          BA    2.39
129          PB     2.8
130          LS             69
131          UD    0.51
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

132          KK   RT F4  Route flows to proposed RCB at 580  (Channel 4)
133          RM       2   0.181      0.3

134          KK   CP F4  Combine flows at proposed I-580 RCB  (Channel 4)
135          HC       3

136          KK   RT V4  Route flows to Virginia Street (Channel 4 near Browns School)
137          RM       1   0.121       .3

138          KK    W20R  Whites Creek No. 20
139          BA    0.22
140          PB    2.73
141          LS             61
142          UD    0.22

143          KK   CP V4  Combine flows at Channel #4 and Virginia St. (near Browns School)
144          HC       2

145          KK  RT DSW  Route flows to just north of south property line
146          RM       2   0.195      .25

147          KK   RT DD  Route flows to south property line of Double Diamond
148          RM       8   0.647       .2
             *

149          KK  DR 123  Recall channel 1, 2, and 3 flows
150          DR  CH 123

151          KK  DV 2&3  Divert flows into channels 2 and 3 - two middle branches
152          KM          Hydrograph at this station is flow in channels 2 and 3
153          DT    CH 1
154          DI       0    1700     2700     3750
155          DQ       0     350      550      700

156          KK  RT 2&3  Route flows to pt where channels 2 and 3 combine (2000' u/s Virginia)
157          RM       3    .245       .3

158          KK    W10R  Whites Creek No. 10
159          BA     0.3
160          PB     2.8
161          LS              55
162          UD     .32

163          KK   CP 23  Combine local flows with channels 2 and 3
164          HC       2

165          KK  DV 23A  Divert flows at CP 23 (Channels 2 and 3 Diverge)
166          KM          Hydrograph at this station is in channel 3 (Channel 2 is diverted)
167          DT    CH 2
168          DI       0    2000     3500
169          DQ       0    1000     1750
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
170          KK   RT V3  Route flow to Virginia St. (CP V3)
171          RM      2   0.136      .2

172          KK    W11R  Whites Creek No. 11
173          BA    0.32
174          PB     2.7
175          LS             75
176          UD    0.27

177          KK   CP V24  Combine Subbasin W11R, and Channel 2 at Virginia Street
178          HC      2

179          KK   RT F3  Route flow to F3 (Channel 3 at 580)
180          RM      3   0.234     0.2

181          KK    W16R  Whites Creek No. 16
182          BA    0.11
183          PB     2.7
184          LS             81
185          UD    0.21

186          KK   CP F3  Combine flows at proposed RCB on 580  (Channel 3)
187          HC      2

188          KK   RT DD  Route flows to south property line of Double Diamond
189          RM      5   .4093     0.2
             *
             *

190          KK  DR CH2  Recall Channel 2 Hydrograph
191          DR    CH 2

192          KK  RT SPL  ROUTE BRANCH 2 TO SOUTHWEST CORNER OF PROPERTY
193          RM      1    0.07     0.2
             *

194          KK  RT DET   ROUTE TO DETENTION BAINS
195          KO              2
196          RK   1600    0.01   0.035            TRAP      10       3

197          KK   DV 2A DIVERSION FROM BRANCH2 TO DETENTION BASIN
198          DT     DET
199          DI       0    1440
200          DQ       0     205

201          KK  RT ZOL   ROUTE TO ZOLEZZI LANE - NORTHEAST PROP. CORNER
202          RK   1400   0.016   0.035            TRAP      10       3
             *
```



```
LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

203          KK   DV 2B  DIVERSION FROM BRANCH 2 TO EAST TOWARD S. VIRGINIA
204          DT   2TOEA
205          DI       0     800    1215    1440
206          DQ       0     252     429     520
             *
             *

207          KK   W12RB  WHITES CREEK WATERSHED 12RB -PROPOSED COND
208          BA    0.13
209          PB     2.8
210          LS             73
```

the north before reaching the project site. The finished floors will be elevated a minimum of one foot above the water surface elevation based on 3000 cfs. A table with these elevations is shown on Figure 8.

The existing downstream drainage system does not have capacity to convey concentrated flows across Virginia Street. It is anticipated that with the construction of the US 395-I 580 freeway and the extension of Zolezzi Lane to the east, that accommodation of these Whites Creek flows will be included in the design. At that time, the channel could be connected to the system and safely conveyed beneath the roadways. It is assumed that this work will be included in the roadway construction.

6.0 REFERENCES

1. Chow, Ven Te, Open Channel Hydraulics, 1959.

2. Federal Emergency Management Agency, Flood Insurance Study: Washoe County, Nevada, Unincorporated Areas, April 1990.

3. Kennedy Jenks Chilton, Concept Level Report, Washoe County Master Plan, Volume I and II, January 1991.

4. Nimbus Engineers, Feasibility Analysis for Huffaker Hills Detention Facility, February 1990.

5. Nimbus Engineers, Whites Creek Detention Basin Feasibility Study, Revised June 1993.

6. U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Washoe County Nevada, South Part, August 1983.

7. U.S. Department of Agriculture, Soil Conservation Service, Engineering Division, Urban Hydrology for Small Watersheds, Technical Release 55, June 1986.

8. U.S. Department of Agriculture, Soil Conservation Service, SCS National Engineering Handbook, Section 4, Hydrology, March 1985.

9. U.S. Department of the Army, Corps of Engineers, Sacramento District, Floodplain Information Report, Southwest Foothill Streams, Reno, Nevada, June 1974.

10. U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center, Flood Hydrograph Package, February 1981, revised June 1988.

11. U.S. Department of the Army, Corps of Engineers, Sacramento District, Truckee River, California and Nevada, Hydrology, February 1980.

12. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, NOAA Atlas 2, Precipitation - Frequency Atlas of the Western United States, Volume VII - Nevada, 1973.

13. U.S. Department of the Interior, Geological Survey, 7.5-Minute Series Topographic Maps, Scale 1:24,000, Contour Interval = 40 feet, Mount Rose, Nevada, 1950.

	2TO1B	193.	13.08	45.	14.	14.	0.00
HYDROGRAPH AT	DV 2A	1195.	13.08	278.	86.	86.	0.00
ROUTED TO	RT ZOL	1147.	13.25	278.	86.	86.	0.00
DIVERSION TO	2TOEA	412.	13.25	97.	30.	30.	0.00
HYDROGRAPH AT	DV 2B	735.	13.25	181.	56.	56.	0.00
HYDROGRAPH AT	W12RB	36.	12.17	7.	2.	2.	0.13
2 COMBINED AT	CB WED	742.	13.25	185.	58.	58.	0.13
HYDROGRAPH AT	DR 1	701.	12.67	163.	51.	51.	0.00
ROUTED TO	RT Z1	654.	13.00	163.	51.	51.	0.00
HYDROGRAPH AT	W13R	120.	12.58	45.	15.	15.	2.00
2 COMBINED AT	CP Z1	747.	13.00	207.	66.	66.	2.00
DIVERSION TO	CH 1A	200.	13.00	136.	48.	48.	2.00
HYDROGRAPH AT	DV 1B	547.	13.00	71.	18.	18.	2.00
ROUTED TO	RT NW	540.	13.08	71.	18.	18.	2.00
DIVERSION TO	ZOLE1	430.	13.08	55.	14.	14.	2.00
HYDROGRAPH AT	DV ZO1	110.	13.08	16.	4.	4.	2.00
HYDROGRAPH AT	W12RA	40.	12.50	13.	4.	4.	0.51
HYDROGRAPH AT	2TO1B	193.	13.08	45.	14.	14.	0.00
ROUTED TO	RT NW	183.	13.25	45.	14.	14.	0.00
3 COMBINED AT	CB 1B2	304.	13.17	73.	22.	22.	2.51
ROUTED TO	RT NE	302.	13.25	73.	22.	22.	2.51
DIVERSION TO	ZOLE2	126.	13.25	17.	5.	5.	2.51
HYDROGRAPH AT							

	RT V4	1516.	13.08	331.	101.	101.	12.65
HYDROGRAPH AT	W20R	18.	12.17	5.	2.	2.	0.22
2 COMBINED AT	CP V4	1523.	13.08	335.	103.	103.	12.87
ROUTED TO	RT DSW	1446.	13.25	335.	102.	102.	12.87
ROUTED TO	RT DD	1271.	13.92	333.	100.	100.	12.87
HYDROGRAPH AT	DR 123	3760.	12.67	808.	253.	253.	0.00
DIVERSION TO	CH 1	701.	12.67	163.	51.	51.	0.00
HYDROGRAPH AT	DV 2&3	3058.	12.67	645.	201.	201.	0.00
ROUTED TO	RT 2&3	2868.	12.92	644.	200.	200.	0.00
HYDROGRAPH AT	W10R	5.	12.58	3.	1.	1.	0.30
2 COMBINED AT	CP 23	2873.	12.92	647.	201.	201.	0.30
DIVERSION TO	CH 2	1437.	12.92	323.	100.	100.	0.30
HYDROGRAPH AT	DV 23A	1437.	12.92	323.	100.	100.	0.30
ROUTED TO	RT V3	1385.	13.08	323.	100.	100.	0.30
HYDROGRAPH AT	W11R	126.	12.17	21.	7.	7.	0.32
2 COMBINED AT	CP V24	1410.	13.08	340.	107.	107.	0.62
ROUTED TO	RT F3	1327.	13.33	340.	106.	106.	0.62
HYDROGRAPH AT	W16R	73.	12.08	10.	3.	3.	0.11
2 COMBINED AT	CP F3	1335.	13.33	346.	109.	109.	0.73
ROUTED TO	RT DD	1230.	13.75	346.	108.	108.	0.73
HYDROGRAPH AT	DR CH2	1437.	12.92	323.	100.	100.	0.00
ROUTED TO	RT SPL	1388.	13.08	323.	100.	100.	0.00
DIVERSION TO							

```
211          UD    0.27
             *

212          KK  CB WED  COMBINE WHITES BRANCH 2 & WS 12RB AT NORTHEAST CORNER OF WEDGE
213          HC       2
             *

214          KK    DR 1  Recall Channel 1 Hydrograph (@ Diffluence)
215          DR    CH 1

216          KK   RT Z1  Route Channel 1 to Zolezzi Lane (approx. 2800' West of Virginia St.)
217          RM       4     .34      .3

218          KK    W13R  Whites Creek No. 13
219          BA       2
220          PB     2.8
221          LS              61
222          UD    0.52

223          KK   CP Z1  Combine channel 1 w/ W13R at Zolezzi Lane
224          HC       2

225          KK   DV 1B  Divert flows to the north of Zolezzi (Channel 1A)
226          KM          Hydrograph is for flows along Zolezzi (Channel 1B, Ea. to Virginia)
227          DT   CH 1A
228          DI       0     200    1500
229          DQ       0     200     200

230          KK  RT NW    ROUTE TO NORTHWEST PROP. CORNER
231          RM       1    0.07    0.25
             *

232          KK  DV Z01 DIVERT FLOW OVER ZOLEZZI TO NORTH
233          DT   ZOLE1
234          DI       0     300     547
235          DQ       0     225     436

236          KK   W12RA  WHITES CREEK WATERSHED 12RA
237          BA    0.51
238          PB     2.8
239          LS              62
240          UD    0.43
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9.......10

241          KK  CB 1B2  COMBINE 1B & SPLIT FROM 2 & WS W12RA
242          HC       2

243          KK   RT NE  ROUTE TO NORTHEAST PROP. CORNER
244          RM       1   0.075    0.25
             *

245          KK  DV Z02  DIVERT FLOW OVER ZOLEZZI TO NORTH
246          DT   ZOLE2
247          DI       0      60     120
248          DQ       0       0       8

249          KK  CP WED  COMBINE ALL FLOW @ NORTHEAST CORNER OF WEDGE
250          HC       2
             *  ROUTING FROM CP WED TO CP V12 IGNORED SINCE L=100'+/-

251          KK   W12RC  WHITES CREEK WATERSHED 12RC
252          BA    0.04
253          PB     2.8
```

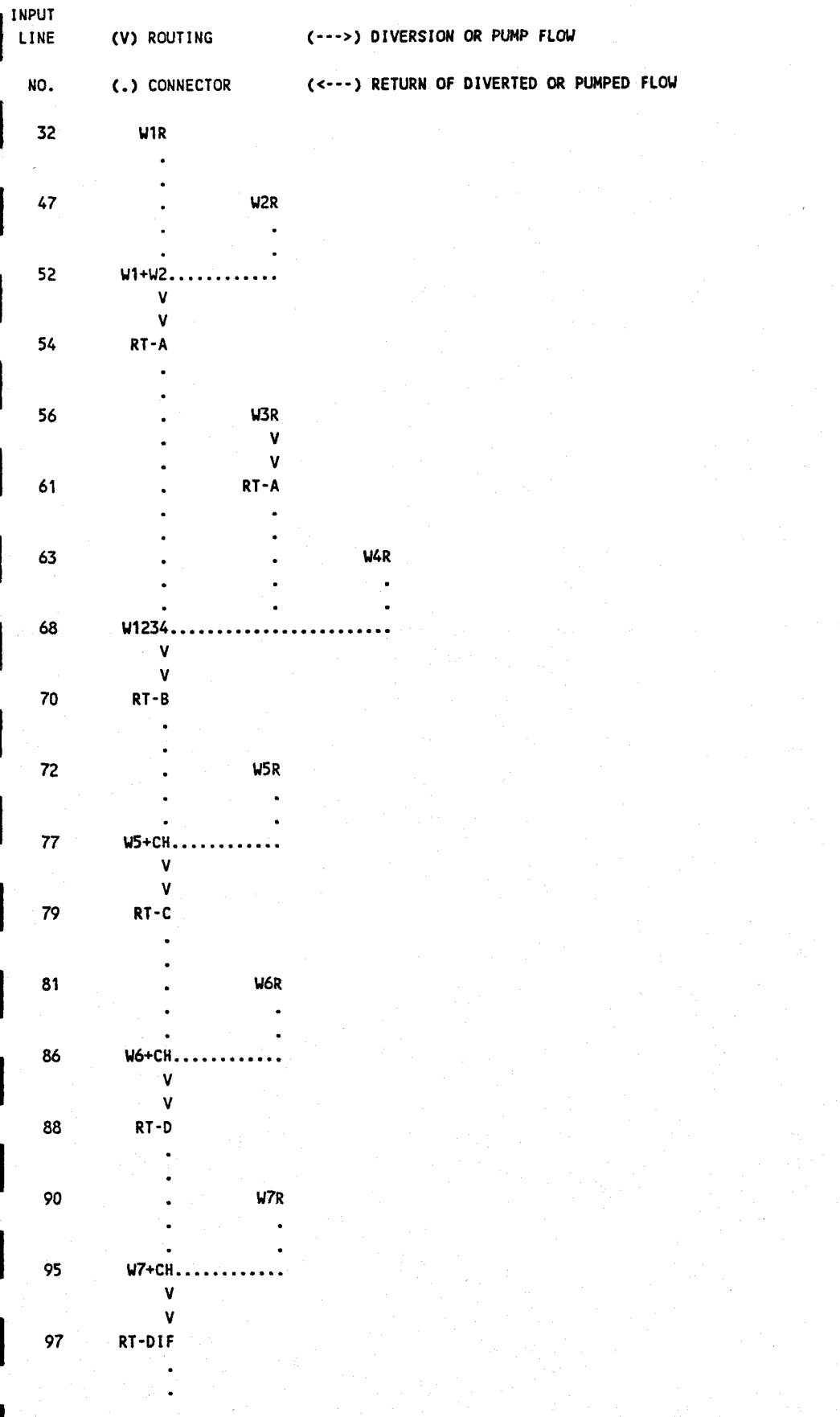
```
254          LS              72
255          UD    0.16

256          KK   2TOEA  RETRIEVE DIVERSION FROM BRANCH 2
257          DR   2TOEA

258          KK  CP V12  COMBINE FLOWS AT S. VIRGINIA STREET.
259          HC       3
             *

260          KK  RT F12  Route flows to proposed RCB at 580 (Channels 1B and 2)
261          RM       2   0.201     0.2

262          KK    W15R  Whites Creek No. 15
263          BA    0.21
264          PB     2.7
265          LS              79
266          UD    0.21

267          KK   ZOLE1   RETRIEVE DIVERSION FROM BRANCH 1B
268          DR   ZOLE1

269          KK  RT F12
270          RM       3    0.26     0.2

271          KK   ZOLE2   RETRIEVE DIVERSION FROM BRANCH 1B
272          DR   ZOLE2

273          KK  RT F12
274          RM       2     0.2     0.2
```

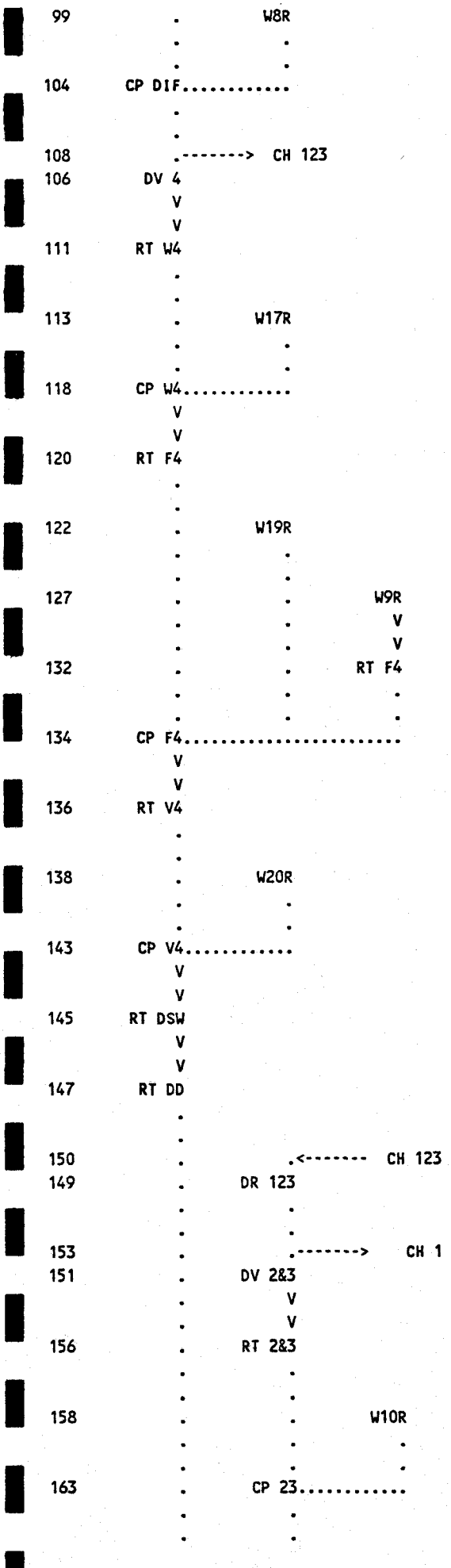


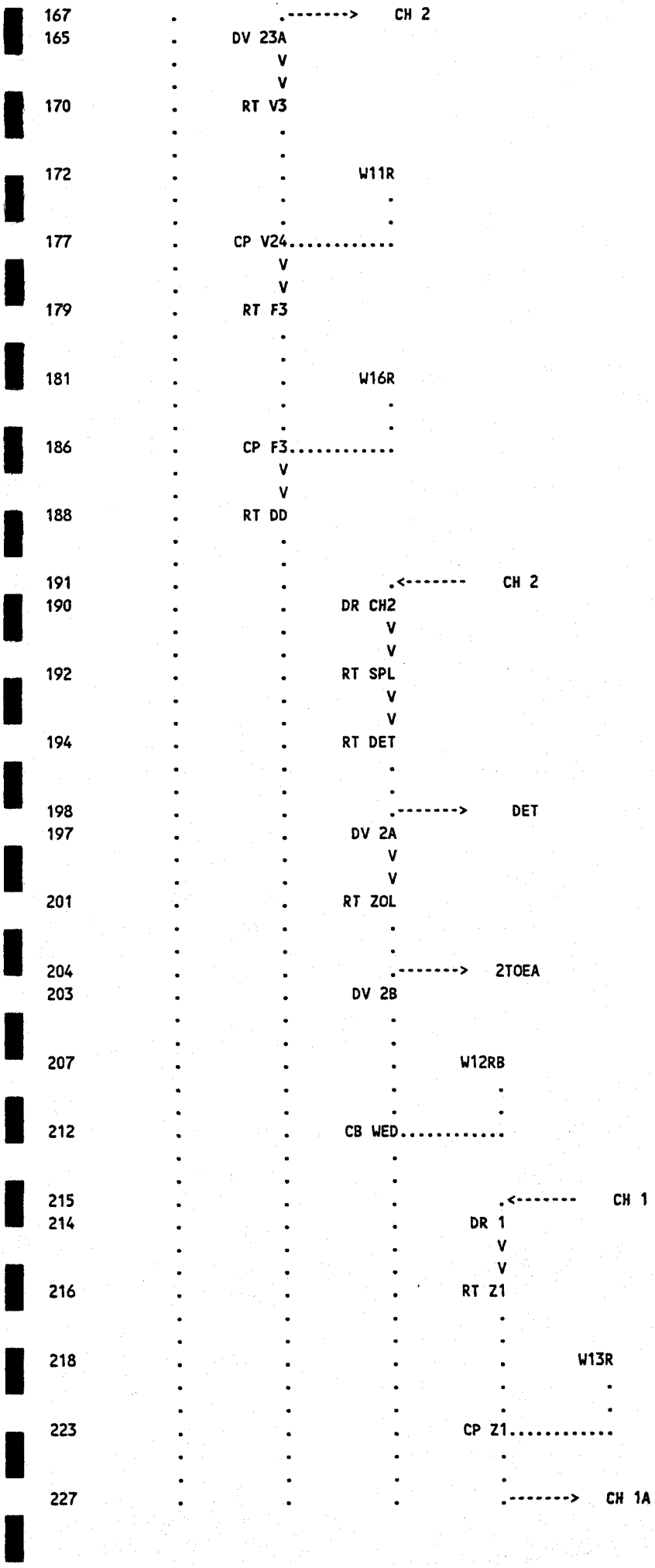
```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


275          KK  CP F12  Combine flows at proposed RCB at 580 (Channels 1B and 2)
276          HC       4

277          KK   RT DD  Route flows to south property line of Double Diamond
278          RM       5   0.449     0.2
             *

279          KK   DR 1A  Recall Channel 1A Hydrograph
280          DR   CH 1A

281          KK  RT F1A  Route flows to proposed RCB at 580 (Channel 1A)
282          RM       4   0.306     0.2

283          KK    W14R  Whites Creek No. 14
284          BA    0.18
285          PB     2.7
286          LS              77
287          UD    0.26

288          KK  CP F1A  Combine flows at proposed RCB at 580 (Channel 1A)
289          HC       2

290          KK   RT DD  Route flows to south property of Double Diamond (Channel 1A)
291          RM       4   0.317     0.2
             *

292          KK    W18R  Whites Creek No. 18
293          BA    0.85
294          PB     2.7
295          LS              80
296          UD    1.33
```

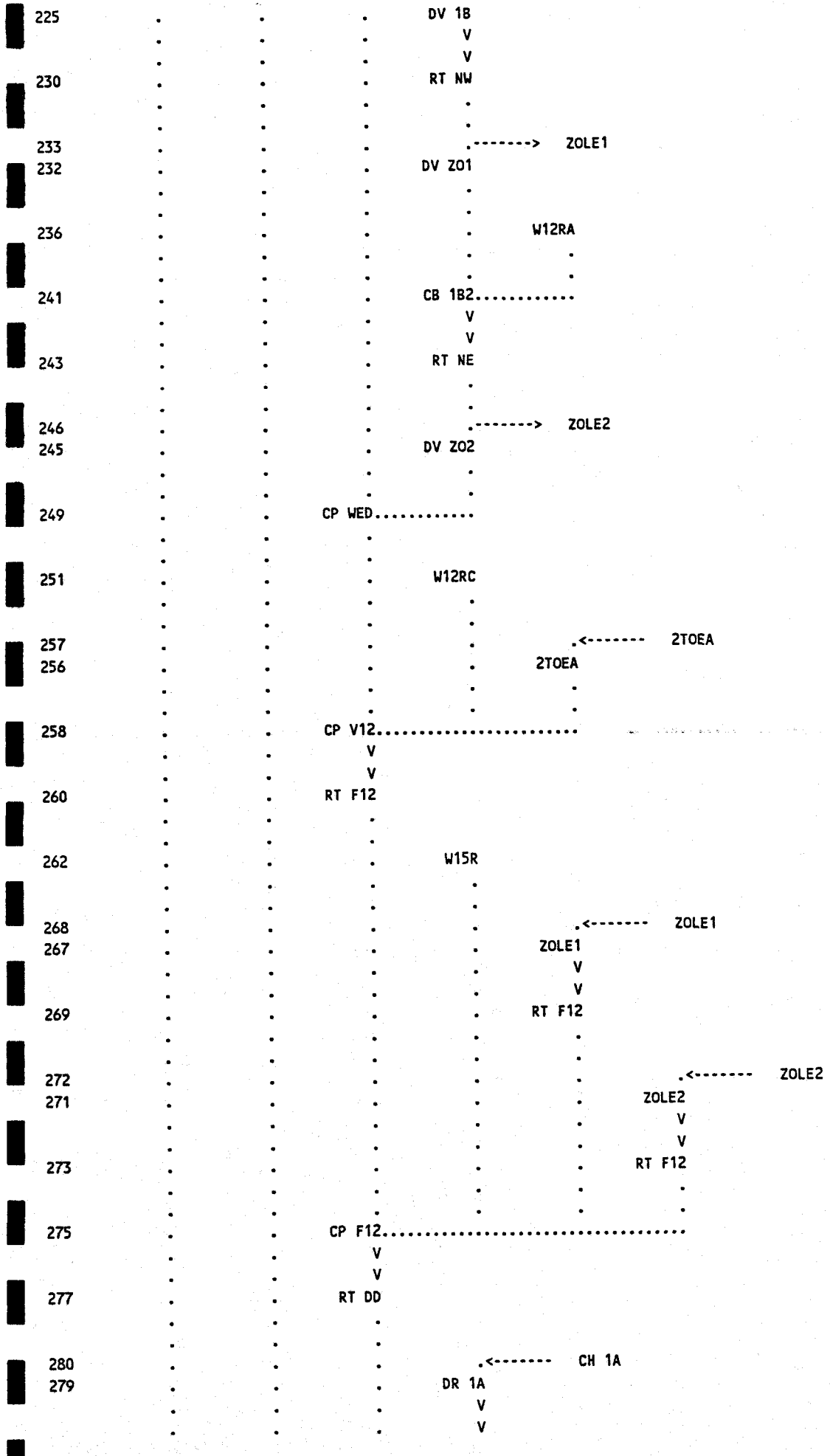
```
                *

      297          KK   CP DD  Combine all Whites Creek flows at Double Diamond
      298          HC       5
      299          ZZ
```

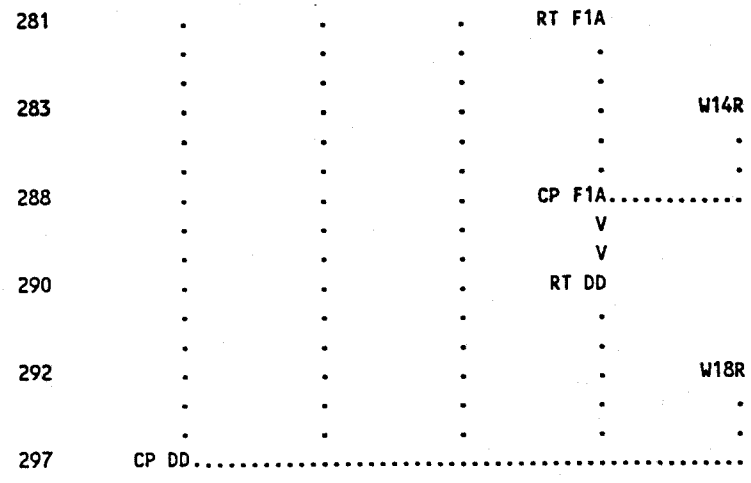
SCHEMATIC DIAGRAM OF STREAM NETWORK




99 W8R
104 CP DIF
108 CH 123
106 DV 4
111 RT W4
113 W17R
118 CP W4
120 RT F4
122 W19R
127 W9R
132 RT F4
134 CP F4
136 RT V4
138 W20R
143 CP V4
145 RT DSW
147 RT DD
150 CH 123
149 DR 123
153 CH 1
151 DV 2&3
156 RT 2&3
158 W10R
163 CP 23


167
.-------> CH 2
165
DV 23A
V
V
170
RT V3
172
W11R
177
CP V24.....
V
V
179
RT F3
181
W16R
186
CP F3.....
V
V
188
RT DD
191
.<------- CH 2
190
DR CH2
V
V
192
RT SPL
V
V
194
RT DET
198
.-------> DET
197
DV 2A
V
V
201
RT ZOL
204
.-------> 2TOEA
203
DV 2B
207
W12RB
212
CB WED.....
215
.<------- CH 1
214
DR 1
V
V
216
RT Z1
218
W13R
223
CP Z1.....
227
.-------> CH 1A


225
DV 1B
230
RT NW
233
ZOLE1
232
DV ZO1
236
W12RA
241
CB 1B2
243
RT NE
246
ZOLE2
245
DV ZO2
249
CP WED
251
W12RC
257
2TOEA
256
2TOEA
258
CP V12
260
RT F12
262
W15R
268
ZOLE1
267
ZOLE1
269
RT F12
272
ZOLE2
271
ZOLE2
273
RT F12
275
CP F12
277
RT DD
280
CH 1A
279
DR 1A



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  10/17/95  TIME  09:39:59   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

PROPOSED CONDITION MODEL

Whites Creek File : PR-WEDGE.DAT - COPIED FROM 301WHITE.DAT
100-Year, 24 hour model
This model was taken from file : THWH100.909 given to local communities
on May 8, 1990

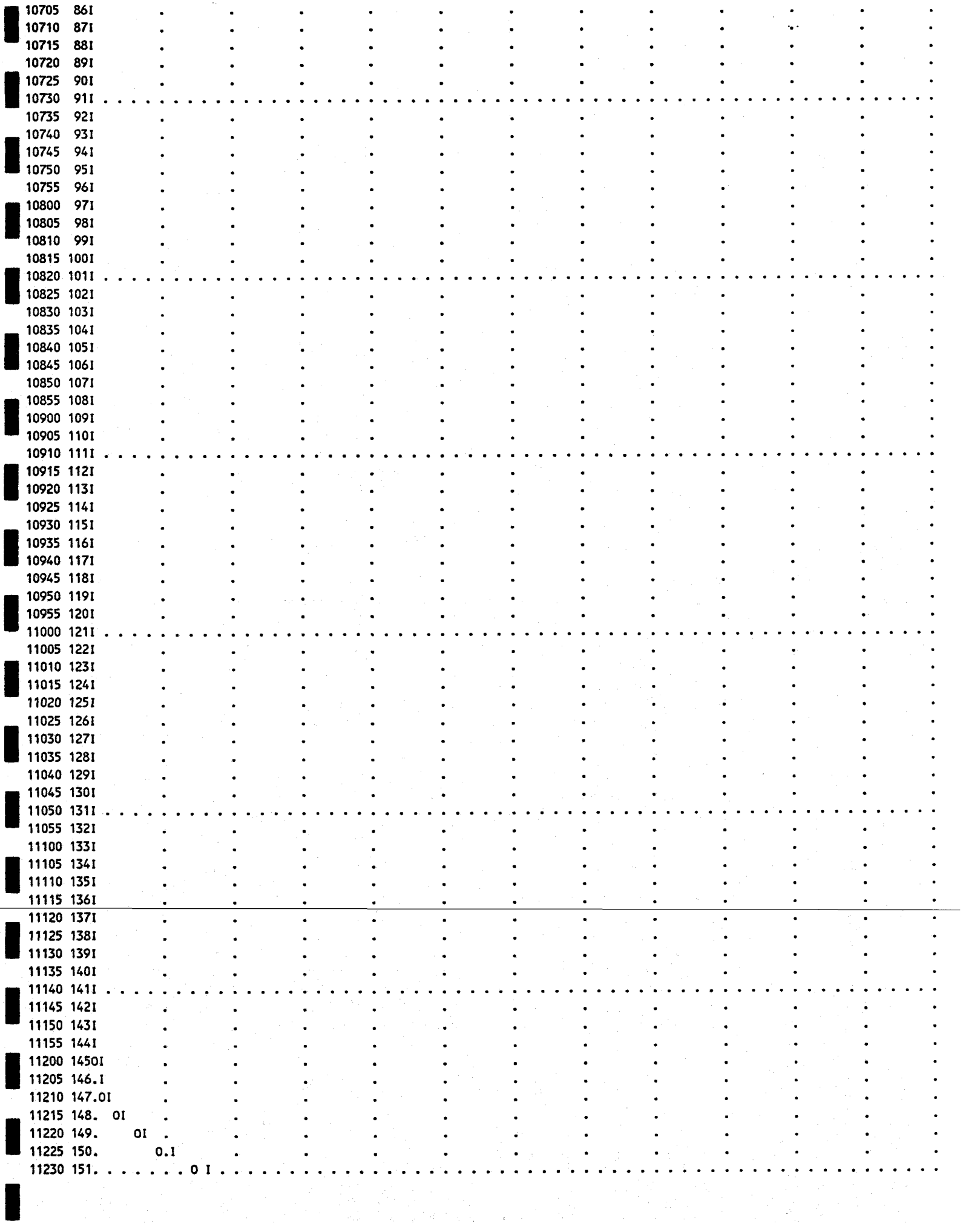
Revisions include:
1) Hypothetical rainfall distribution from NOAA (PH) replaced w/ Type II
- 15 minute time interval Type II
2) Rainfall Pt. values taken from Huffaker Detailed Parameters notebook
3) Revised Curve Numbers based on detailed soils analysis
4) Subbasins W7 & W8 revised for CP at Diffluence
5) Add lower subbasins (W9R - W22R)
6) Revised diversion cards at diffluence
7) Revised lower subbasins to provide CPs at NDOT proposed crossings
8) Add subbasins down through Whites Ck. Meadows (to Double Diamond)
9) REVISIONS FOR WEDGE MEADOWS SUBDIVISION

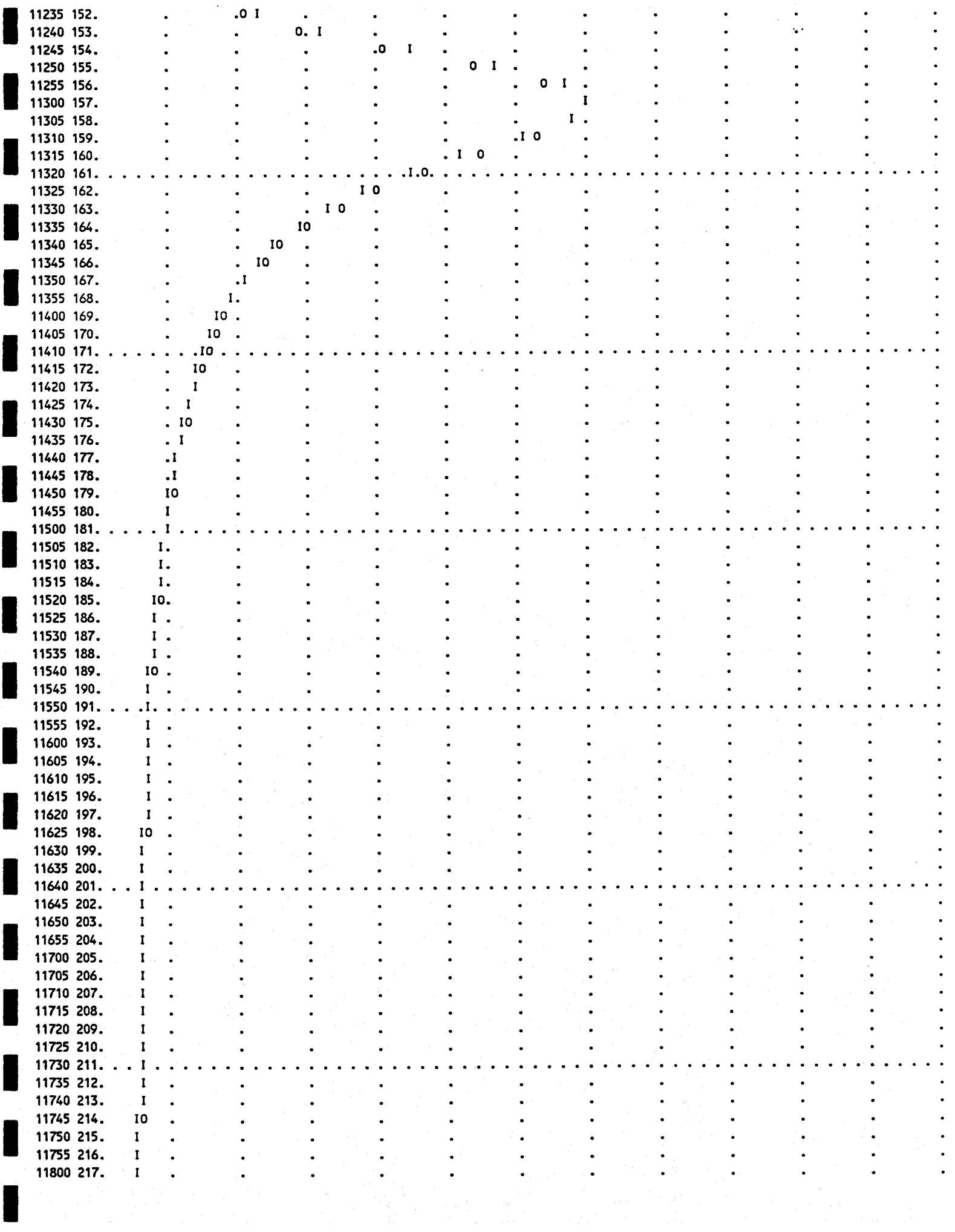
Legend :
W(No.)R = Subbasin
CP XX = Combine flows at point XX
RT XX = Route to CP XX
DV XX = Divert hydrograph XX
DR XX = Recall hydrograph XX
XX = Street and Channel #, where applicable
V = Virginia, Z = Zolezzi, F = 580 (Freeway), W = Wedge

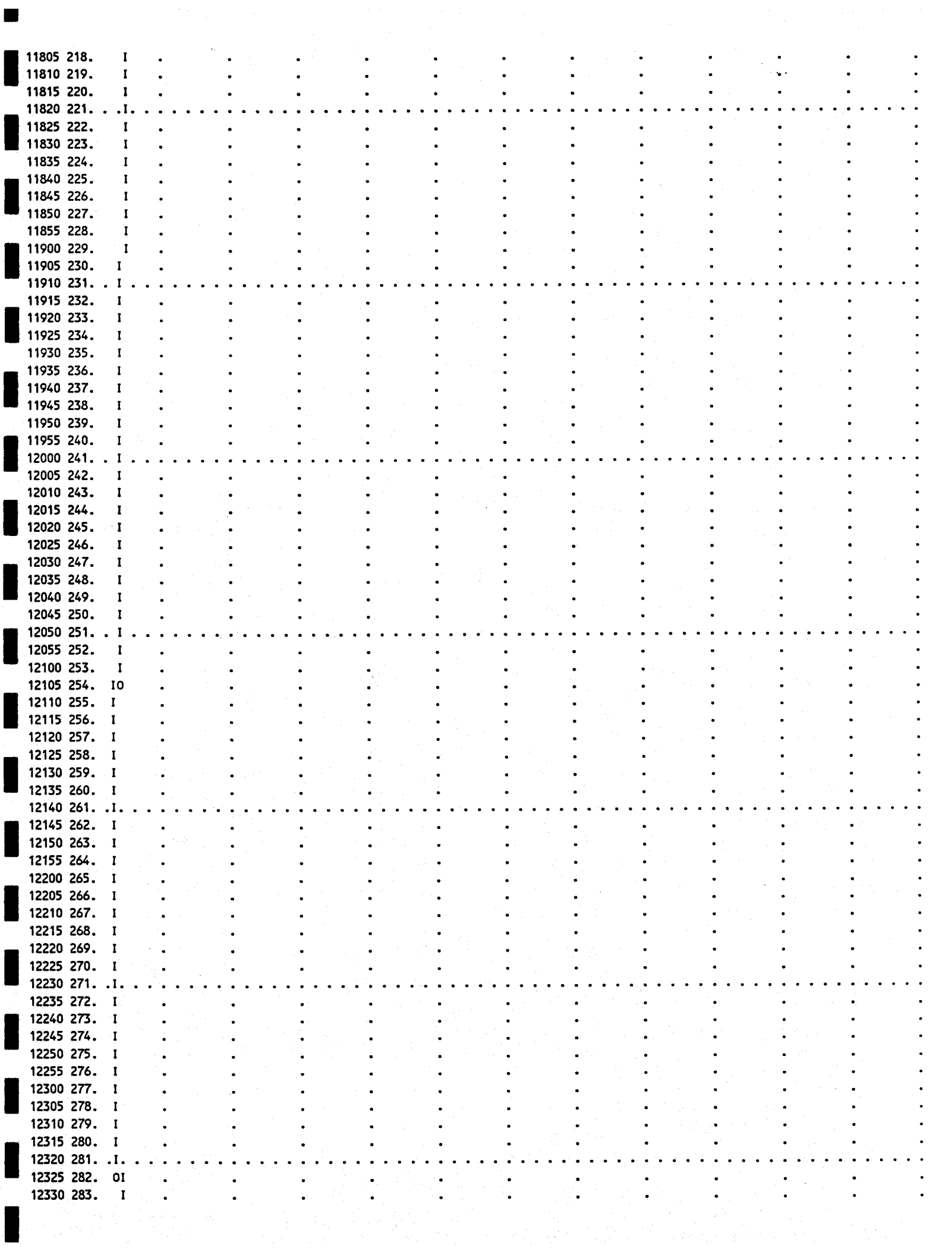
```
30 IO          OUTPUT CONTROL VARIABLES
                    IPRNT          5  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
```

```
 IT          HYDROGRAPH TIME DATA
                   NMIN          5  MINUTES IN COMPUTATION INTERVAL
                  IDATE      1   0  STARTING DATE
                  ITIME         0000  STARTING TIME
                     NQ         289  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE      2   0  ENDING DATE
                 NDTIME         0000  ENDING TIME
                  ICENT           19  CENTURY MARK

              COMPUTATION INTERVAL     0.08 HOURS
                  TOTAL TIME BASE     24.00 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-A.
     REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-B.
     REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).
***** WARNING *****  POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH    RT-D.
     REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
194 KK    *    RT DET  *        ROUTE TO DETENTION BAINS
          *            *
          **************

195 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          2  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
1                                                  STATION   RT DET

                     (I) INFLOW,   (O) OUTFLOW
         0.      200.      400.      600.      800.     1000.     1200.     1400.     1600.        0.        0.        0.        0.
DAHRMN PER
 10000   1I---------.---------.---------.---------.---------.---------.---------.---------.---------.---------.---------.---------.
 10005   2I         .         .         .         .         .         .         .         .         .         .         .         .
 10010   3I         .         .         .         .         .         .         .         .         .         .         .         .
 10015   4I         .         .         .         .         .         .         .         .         .         .         .         .
 10020   5I         .         .         .         .         .         .         .         .         .         .         .         .
 10025   6I         .         .         .         .         .         .         .         .         .         .         .         .
 10030   7I         .         .         .         .         .         .         .         .         .         .         .         .
 10035   8I         .         .         .         .         .         .         .         .         .         .         .         .
 10040   9I         .         .         .         .         .         .         .         .         .         .         .         .
 10045  10I         .         .         .         .         .         .         .         .         .         .         .         .
 10050  11I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
 10055  12I         .         .         .         .         .         .         .         .         .         .         .         .
 10100  13I         .         .         .         .         .         .         .         .         .         .         .         .
 10105  14I         .         .         .         .         .         .         .         .         .         .         .         .
 10110  15I         .         .         .         .         .         .         .         .         .         .         .         .
 10115  16I         .         .         .         .         .         .         .         .         .         .         .         .
 10120  17I         .         .         .         .         .         .         .         .         .         .         .         .
 10125  18I         .         .         .         .         .         .         .         .         .         .         .         .
 10130  19I         .         .         .         .         .         .         .         .         .         .         .         .
```

10135 20I
10140 21I
10145 22I
10150 23I
10155 24I
10200 25I
10205 26I
10210 27I
10215 28I
10220 29I
10225 30I
10230 31I
10235 32I
10240 33I
10245 34I
10250 35I
10255 36I
10300 37I
10305 38I
10310 39I
10315 40I
10320 41I
10325 42I
10330 43I
10335 44I
10340 45I
10345 46I
10350 47I
10355 48I
10400 49I
10405 50I
10410 51I
10415 52I
10420 53I
10425 54I
10430 55I
10435 56I
10440 57I
10445 58I
10450 59I
10455 60I
10500 61I
10505 62I
10510 63I
10515 64I
10520 65I
10525 66I
10530 67I
10535 68I
10540 69I
10545 70I
10550 71I
10555 72I
10600 73I
10605 74I
10610 75I
10615 76I
10620 77I
10625 78I
10630 79I
10635 80I
10640 81I
10645 82I
10650 83I
10655 84I
10700 85I


10705 86I
10710 87I
10715 88I
10720 89I
10725 90I
10730 91I
10735 92I
10740 93I
10745 94I
10750 95I
10755 96I
10800 97I
10805 98I
10810 99I
10815 100I
10820 101I
10825 102I
10830 103I
10835 104I
10840 105I
10845 106I
10850 107I
10855 108I
10900 109I
10905 110I
10910 111I
10915 112I
10920 113I
10925 114I
10930 115I
10935 116I
10940 117I
10945 118I
10950 119I
10955 120I
11000 121I
11005 122I
11010 123I
11015 124I
11020 125I
11025 126I
11030 127I
11035 128I
11040 129I
11045 130I
11050 131I
11055 132I
11100 133I
11105 134I
11110 135I
11115 136I
11120 137I
11125 138I
11130 139I
11135 140I
11140 141I
11145 142I
11150 143I
11155 144I
11200 145OI
11205 146.I
11210 147.OI
11215 148. OI
11220 149. OI
11225 150. 0.I
11230 151. . . . . 0 I


11235 152.
11240 153.
11245 154.
11250 155.
11255 156.
11300 157.
11305 158.
11310 159.
11315 160.
11320 161.
11325 162.
11330 163.
11335 164.
11340 165.
11345 166.
11350 167.
11355 168.
11400 169.
11405 170.
11410 171.
11415 172.
11420 173.
11425 174.
11430 175.
11435 176.
11440 177.
11445 178.
11450 179.
11455 180.
11500 181.
11505 182.
11510 183.
11515 184.
11520 185.
11525 186.
11530 187.
11535 188.
11540 189.
11545 190.
11550 191.
11555 192.
11600 193.
11605 194.
11610 195.
11615 196.
11620 197.
11625 198.
11630 199.
11635 200.
11640 201.
11645 202.
11650 203.
11655 204.
11700 205.
11705 206.
11710 207.
11715 208.
11720 209.
11725 210.
11730 211.
11735 212.
11740 213.
11745 214.
11750 215.
11755 216.
11800 217.


11805 218.
11810 219.
11815 220.
11820 221.
11825 222.
11830 223.
11835 224.
11840 225.
11845 226.
11850 227.
11855 228.
11900 229.
11905 230.
11910 231.
11915 232.
11920 233.
11925 234.
11930 235.
11935 236.
11940 237.
11945 238.
11950 239.
11955 240.
12000 241.
12005 242.
12010 243.
12015 244.
12020 245.
12025 246.
12030 247.
12035 248.
12040 249.
12045 250.
12050 251.
12055 252.
12100 253.
12105 254.
12110 255.
12115 256.
12120 257.
12125 258.
12130 259.
12135 260.
12140 261.
12145 262.
12150 263.
12155 264.
12200 265.
12205 266.
12210 267.
12215 268.
12220 269.
12225 270.
12230 271.
12235 272.
12240 273.
12245 274.
12250 275.
12255 276.
12300 277.
12305 278.
12310 279.
12315 280.
12320 281.
12325 282.
12330 283.

```
12335 284.   I     .         .         .         .         .         .         .         .         .         .         .         .
12340 285.   I     .         .         .         .         .         .         .         .         .         .         .         .
12345 286.   I     .         .         .         .         .         .         .         .         .         .         .         .
12350 287.   I     .         .         .         .         .         .         .         .         .         .         .         .
12355 288.   OI    .         .         .         .         .         .         .         .         .         .         .         .
20000 289.----I----.---------.---------.---------.---------.---------.---------.---------.---------.---------.---------.---------.
1
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	W1R	1479.	12.08	219.	67.	67.	1.36		
HYDROGRAPH AT	W2R	1095.	12.08	142.	43.	43.	0.84		
2 COMBINED AT	W1+W2	2574.	12.08	361.	110.	110.	2.20		
ROUTED TO	RT-A	2397.	12.25	360.	110.	110.	2.20		
HYDROGRAPH AT	W3R	1442.	12.17	220.	67.	67.	1.38		
ROUTED TO	RT-A	1416.	12.25	220.	67.	67.	1.38		
HYDROGRAPH AT	W4R	758.	12.17	138.	44.	44.	1.47		
3 COMBINED AT	W1234	4553.	12.25	719.	221.	221.	5.05		
ROUTED TO	RT-B	4529.	12.25	719.	221.	221.	5.05		
HYDROGRAPH AT	W5R	609.	12.25	115.	36.	36.	1.27		
2 COMBINED AT	W5+CH	5138.	12.25	833.	257.	257.	6.32		
ROUTED TO	RT-C	4855.	12.50	833.	256.	256.	6.32		
HYDROGRAPH AT	W6R	284.	12.42	78.	25.	25.	1.43		
2 COMBINED AT	W6+CH	5132.	12.50	910.	281.	281.	7.75		
ROUTED TO	RT-D	5055.	12.58	910.	280.	280.	7.75		
HYDROGRAPH AT	W7R	452.	12.08	62.	19.	19.	0.85		
2 COMBINED AT	W7+CH	5163.	12.58	967.	300.	300.	8.60		

ROUTED TO	RT-DIF	5043.	12.67	967.	299.	299.	8.60
HYDROGRAPH AT	W8R	151.	12.25	31.	10.	10.	0.75
2 COMBINED AT	CP DIF	5115.	12.67	998.	309.	309.	9.35
DIVERSION TO	CH 123	3760.	12.67	808.	253.	253.	9.35
HYDROGRAPH AT	DV 4	1355.	12.67	190.	56.	56.	9.35
ROUTED TO	RT W4	1253.	12.83	190.	56.	56.	9.35
HYDROGRAPH AT	W17R	110.	12.25	24.	8.	8.	0.58
2 COMBINED AT	CP W4	1297.	12.83	213.	64.	64.	9.93
ROUTED TO	RT F4	1238.	13.00	213.	64.	64.	9.93
HYDROGRAPH AT	W19R	23.	12.25	6.	2.	2.	0.33
HYDROGRAPH AT	W9R	410.	12.50	113.	36.	36.	2.39
ROUTED TO	RT F4	399.	12.67	113.	36.	36.	2.39
3 COMBINED AT	CP F4	1562.	12.92	332.	101.	101.	12.65
ROUTED TO	RT V4	1516.	13.08	331.	101.	101.	12.65
HYDROGRAPH AT	W20R	18.	12.17	5.	2.	2.	0.22
2 COMBINED AT	CP V4	1523.	13.08	335.	103.	103.	12.87
ROUTED TO	RT DSW	1446.	13.25	335.	102.	102.	12.87
ROUTED TO	RT DD	1271.	13.92	333.	100.	100.	12.87
HYDROGRAPH AT	DR 123	3760.	12.67	808.	253.	253.	0.00
DIVERSION TO	CH 1	701.	12.67	163.	51.	51.	0.00
HYDROGRAPH AT	DV 2&3	3058.	12.67	645.	201.	201.	0.00
ROUTED TO	RT 2&3	2868.	12.92	644.	200.	200.	0.00

HYDROGRAPH AT	W10R	5.	12.58	3.	1.	1.	0.30
2 COMBINED AT	CP 23	2873.	12.92	647.	201.	201.	0.30
DIVERSION TO	CH 2	1437.	12.92	323.	100.	100.	0.30
HYDROGRAPH AT	DV 23A	1437.	12.92	323.	100.	100.	0.30
ROUTED TO	RT V3	1385.	13.08	323.	100.	100.	0.30
HYDROGRAPH AT	W11R	126.	12.17	21.	7.	7.	0.32
2 COMBINED AT	CP V24	1410.	13.08	340.	107.	107.	0.62
ROUTED TO	RT F3	1327.	13.33	340.	106.	106.	0.62
HYDROGRAPH AT	W16R	73.	12.08	10.	3.	3.	0.11
2 COMBINED AT	CP F3	1335.	13.33	346.	109.	109.	0.73
ROUTED TO	RT DD	1230.	13.75	346.	108.	108.	0.73
HYDROGRAPH AT	DR CH2	1437.	12.92	323.	100.	100.	0.00
ROUTED TO	RT SPL	1410.	13.00	323.	100.	100.	0.00
ROUTED TO	RT DET	1390.	13.00	323.	100.	100.	0.00
DIVERSION TO	DET	198.	13.00	46.	14.	14.	0.00
HYDROGRAPH AT	DV 2A	1192.	13.00	277.	86.	86.	0.00
ROUTED TO	RT ZOL	1178.	13.08	277.	86.	86.	0.00
DIVERSION TO	2TOEA	413.	13.08	90.	28.	28.	0.00
HYDROGRAPH AT	DV 2B	765.	13.08	188.	58.	58.	0.00
HYDROGRAPH AT	W12RB	48.	12.17	8.	3.	3.	0.13
2 COMBINED AT	CB WED	775.	13.08	193.	61.	61.	0.13
HYDROGRAPH AT	DR 1	701.	12.67	163.	51.	51.	0.00

ROUTED TO	RT Z1	654.	13.00	163.	51.	51.	0.00
HYDROGRAPH AT	W13R	120.	12.58	45.	15.	15.	2.00
2 COMBINED AT	CP Z1	747.	13.00	207.	66.	66.	2.00
DIVERSION TO	CH 1A	200.	13.00	136.	48.	48.	2.00
HYDROGRAPH AT	DV 1B	547.	13.00	71.	18.	18.	2.00
ROUTED TO	RT NW	540.	13.08	71.	18.	18.	2.00
DIVERSION TO	ZOLE1	430.	13.08	55.	14.	14.	2.00
HYDROGRAPH AT	DV ZO1	110.	13.08	16.	4.	4.	2.00
HYDROGRAPH AT	W12RA	40.	12.50	13.	4.	4.	0.51
2 COMBINED AT	CB 1B2	133.	13.08	29.	8.	8.	2.51
ROUTED TO	RT NE	132.	13.17	29.	8.	8.	2.51
DIVERSION TO	ZOLE2	10.	13.17	1.	0.	0.	2.51
HYDROGRAPH AT	DV ZO2	122.	13.17	28.	8.	8.	2.51
2 COMBINED AT	CP WED	895.	13.08	221.	69.	69.	2.64
HYDROGRAPH AT	W12RC	18.	12.08	2.	1.	1.	0.04
HYDROGRAPH AT	2TOEA	413.	13.08	90.	28.	28.	0.00
3 COMBINED AT	CP V12	1311.	13.08	312.	97.	97.	2.68
ROUTED TO	RT F12	1241.	13.25	312.	96.	96.	2.68
HYDROGRAPH AT	W15R	123.	12.08	18.	5.	5.	0.21
HYDROGRAPH AT	ZOLE1	430.	13.08	55.	14.	14.	0.00
ROUTED TO	RT F12	397.	13.33	55.	14.	14.	0.00
HYDROGRAPH AT	ZOLE2	10.	13.17	1.	0.	0.	0.00

ROUTED TO	RT F12	9.	13.33	1.	0.	0.	0.00
4 COMBINED AT	CP F12	1638.	13.25	381.	116.	116.	2.89
ROUTED TO	RT DD	1501.	13.75	380.	114.	114.	2.89
HYDROGRAPH AT	DR 1A	200.	12.42	136.	48.	48.	0.00
ROUTED TO	RT F1A	200.	13.42	136.	47.	47.	0.00
HYDROGRAPH AT	W14R	84.	12.17	14.	4.	4.	0.18
2 COMBINED AT	CP F1A	216.	12.92	144.	52.	52.	0.18
ROUTED TO	RT DD	214.	13.42	144.	51.	51.	0.18
HYDROGRAPH AT	W18R	165.	13.33	74.	23.	23.	0.85
5 COMBINED AT	CP DD	4264.	13.75	1271.	396.	396.	17.52

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

						INTERPOLATED TO COMPUTATION INTERVAL			
ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
RT DET	MANE	0.81	1405.48	781.44	-1.00	5.00	1390.37	780.00	-1.00
RT ZOL	MANE	0.62	1190.62	781.54	-1.00	5.00	1178.29	785.00	-1.00

*** NORMAL END OF HEC-1 ***

HEC-2 MODELS

Wedge1.dat

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    17OCT95    TIME   10:21:54    *
**********************************************
```

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

1

17OCT95 10:21:54 PAGE 1

THIS RUN EXECUTED 17OCT95 10:21:54

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

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

SPLIT FLOW BEING PERFORMED

```
SF    Split Flow

JC    Weir flow over Zolezzi ln.
JP     0       0      40      -1       0

TW     SECT # 203 - 204
WS     2     203     204      -1       3
WC     0  4539.8     143  4542.5

TW     SECT # 204 - 205
WS     2     204     205      -1       3
WC   143  4542.5     284    4546

TW     SECT # 205 - 206
WS     2     205     206      -1       3
WC   284    4546     410  4549.3

TW     SECT # 206 - 207
WS     2     206     207      -1       3
WC   410  4549.3     581    4555

TW     SECT # 207 - 208
WS     2     207     208      -1       3
WC   581    4555     701    4560
```

1

T1 Wedge Parcel near Zolezzi File Name: Wedge1.dat
T2 By: Nimbus Engineers, Reno, NV Nimbus Job # 9311
T3 Whites Creek Ch. #1 Date: 7/1/1993

This HEC-2 model is to delineate the 100-year floodplain boundary for the south side of Zolezzi Ln. The floodplain boundary for the north side of Zollezi Ln. should not be used.

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	0	0	0	0	4535.4	0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1							

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	150	38	43	13	14	15	26	1	53	54
	4	25								
QT	1	1110								
NC	0.035	0.035	0.035	0.1	0.3					
X1	99	7	1204	1235	0	0	0			
GR	4536	1000	4535	1093	4534	1204	4534	1220	4534	1235
GR	4535	1330	4536	1400						
X1	100	21	1120	1201	215	150	220			
GR	4536.6	1000	4536	1020	4533.1	1027	4535	1030	4535.2	1035
GR	4535	1040	4534.9	1050	4535	1075	4535.2	1090	4535	1120
GR	4534	1170	4533.9	1179	4534	1182	4535	1201	4535.2	1210
GR	4535.2	1255	4535.5	1286	4535	1340	4535	1350	4536	1360
GR	4536.2	1370								
QT	1	320								
X1	202	31	1029	1034	90	90	90			
GR	4537.5	1000	4537.00	1017	4537.00	1025	4536.53	1026	4536.00	1028
GR	4535.4	1028	4535.00	1029	4534.43	1030	4534.00	1030	4534.00	1031
GR	4534.0	1032	4534.84	1034	4535.00	1034	4535.33	1054	4535.47	1064
GR	4535.6	1075	4536.00	1101	4536.00	1102	4536.00	1103	4536.25	1111
GR	4536.3	1113	4536.34	1116	4536.42	1120	4536.58	1126	4536.70	1133
GR	4536.8	1136	4536.87	1147	4536.97	1147	4537.00	1149	4537.00	1149
GR	4538	1200								
X1	203	42.00	1023	1035	137	139	137			
GR	4539.8	1000	4539.26	1018	4539.00	1023	4538.11	1026	4537.00	1027
GR	4537.0	1031	4537.49	1032	4538.48	1034	4539.00	1035	4539.00	1041
GR	4538.3	1044	4538.00	1049	4538.00	1056	4537.90	1062	4537.98	1069
GR	4538.0	1070	4538.12	1076	4538.15	1077	4538.15	1078	4538.33	1085
GR	4538.4	1087	4538.51	1092	4538.56	1095	4538.65	1098	4538.71	1102
GR	4538.8	1106	4538.84	1108	4538.91	1114	4538.99	1121	4539.06	1127

GR	4539.1	1133	4539.17	1135	4539.32	1141	4539.37	1143	4539.48	1148
GR	4539.5	1152	4539.63	1156	4539.7	1159	4539.81	1165	4539.84	1167
GR	4540.0	1174	4539.98	1175						
X1	204	32.00	1028	1034	143	145	143			
GR	4542.5	1000	4542.39	1012	4542.29	1016	4542.12	1020	4542.00	1023

GR	4541.7	1024	4541.00	1028	4540.00	1029	4540.00	1030	4540.00	1032
GR	4540.7	1033	4541.00	1034	4541.51	1035	4542.00	1037	4542.23	1038
GR	4542.4	1040	4542.76	1043	4542.77	1045	4542.85	1046	4542.91	1047
GR	4542.9	1063	4543.00	1069	4543.05	1070	4543.07	1071	4543.32	1078
GR	4543.4	1081	4543.57	1086	4543.71	1091	4543.78	1093	4543.97	1099
GR	4544.0	1100	4544.02	1101						
X1	205	21.00	1024	1036	141	141	141			
GR	4546.0	1000	4545.98	1002	4545.97	1003	4545.83	1008	4545.00	1024
GR	4544.0	1026	4543.20	1027	4543.00	1028	4543.00	1031	4544.00	1033
GR	4544.9	1036	4545.13	1037	4546.00	1040	4546.53	1051	4547.00	1060
GR	4547.1	1063	4548.00	1085	4548.47	1097	4548.64	1102	4549.00	1111
GR	4549.5	1113								
X1	206	45.00	1019	1042	126	123	126			
GR	4549.3	1000	4549.29	1008	4549.16	1013	4549.00	1019	4548.94	1020
GR	4548.0	1029	4547.00	1031	4547.00	1035	4547.96	1037	4548.00	1038
GR	4548.2	1039	4549.00	1042	4549.21	1046	4549.24	1047	4549.36	1050
GR	4549.4	1053	4549.46	1056	4549.50	1058	4549.50	1061	4549.56	1064
GR	4549.6	1067	4549.44	1071	4549.35	1074	4549.30	1076	4549.18	1080
GR	4549.1	1081	4549.03	1086	4549.02	1087	4548.94	1092	4548.92	1093
GR	4548.9	1094	4548.78	1101	4548.66	1103	4548.55	1108	4548.19	1114
GR	4548.1	1116	4548.00	1118	4548.00	1121	4548.00	1123	4548.47	1124
GR	4549.0	1126	4549.25	1127	4550.00	1129	4550.65	1136	4551.00	1140
X1	207	68.00	1019	1040	171	143	171			
GR	4555.0	1000	4555.00	1002	4555.01	1019	4554.82	1020	4554.73	1021
GR	4554.5	1024	4554.27	1028	4554.00	1030	4553.34	1031	4553.00	1034
GR	4553.0	1035	4553.38	1036	4554.00	1038	4554.79	1039	4555.00	1040
GR	4555.0	1070	4555.03	1074	4555.04	1078	4555.04	1091	4555.02	1097
GR	4555.0	1104	4554.97	1110	4554.92	1116	4554.92	1117	4554.87	1122
GR	4554.8	1123	4554.82	1128	4554.79	1129	4554.74	1135	4554.71	1136
GR	4554.7	1139	4554.59	1143	4554.53	1146	4554.47	1150	4554.38	1154
GR	4554.3	1156	4554.31	1160	4554.31	1161	4554.27	1163	4554.27	1164
GR	4554.3	1165	4554.24	1167	4554.30	1175	4554.29	1177	4554.27	1179
GR	4554.3	1180	4554.26	1183	4554.25	1184	4554.00	1200	4554.00	1209
GR	4554.3	1212	4554.83	1216	4555.00	1218	4555.32	1226	4555.66	1234
GR	4555.8	1238	4555.84	1239	4556.00	1243	4556.10	1246	4556.13	1247
GR	4556.3	1253	4556.40	1255	4556.71	1262	4556.80	1265	4556.85	1266
GR	4556.9	1270	4557.00	1272	4557.09	1274				
X1	208	16.00	1027	1041	93	92	93			
GR	4558.6	1000	4558	1027	4557	1032	4556	1033	4555.5	1034
GR	4556	1035	4557	1038	4558	1041	4558.1	1045	4558	1047
GR	4557.5	1127	4557	1154	4556.3	1214	4557	1286	4558	1309
GR	4559	1316								

QT	1	120								
X1	209	19	1041	1103	87	87	87			
GR	4562	1000	4561.1	1026	4561.4	1033	4561.2	1038	4561	1041
GR	4560.8	1046	4560.6	1057	4560.7	1087	4561	1103	4561.7	1128
GR	4560.9	1137	4561	1142	4562.1	1150	4561.8	1159	4562	1167
GR	4561.7	1175	4562	1180	4563	1217	4564.5	1243		

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 99.000

99.000	1.40	4535.40	.00	4535.40	4535.66	.26	.00	.00	4534.00
966.9	399.4	226.8	340.7	107.3	43.4	91.1	.0	.0	4534.00
.00	3.72	5.23	3.74	.035	.035	.035	.000	4534.00	1055.81
.009674	0.	0.	0.	0	0	0	.00	302.18	1357.99

SECNO 100.000
3280 CROSS SECTION 100.00 EXTENDED .07 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.37

100.000	3.17	4536.27	4535.62	.00	4536.35	.08	.67	.02	4535.00
966.9	272.2	399.6	295.1	130.7	150.1	164.7	1.5	1.4	4535.00
.02	2.08	2.66	1.79	.035	.035	.035	.000	4533.10	1010.94
.001727	215.	220.	150.	18	20	0	.00	359.06	1370.00

SECNO 202.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .15

202.000	2.43	4536.43	.00	.00	4536.52	.09	.17	.00	4535.00
176.9	2.5	34.7	139.8	1.6	10.6	66.0	2.1	1.9	4535.00
.03	1.58	3.27	2.12	.035	.035	.035	.000	4534.00	1026.38
.002725	90.	90.	90.	3	0	0	.00	94.01	1120.38

SECNO 203.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

203.000	1.74	4538.74	4538.74	.00	4539.01	.28	.73	.06	4539.00
176.9	.0	60.2	116.7	.0	11.8	31.6	2.3	2.2	4539.00
.04	.00	5.09	3.69	.000	.035	.035	.000	4537.00	1023.89
.013959	137.	137.	139.	20	14	0	.00	71.62	1103.15

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 204.000

3265 DIVIDED FLOW

3280 CROSS SECTION 204.00 EXTENDED .41 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

204.000	2.91	4542.91	4542.91	.00	4543.31	.40	1.37	.04	4541.00
189.3	66.3	99.3	23.7	20.4	15.7	7.4	2.4	2.4	4541.00
.05	3.24	6.31	3.22	.035	.035	.035	.000	4540.00	1000.00
.007032	143.	143.	145.	20	14	0	.00	58.02	1063.41

*SECNO 205.000
3280 CROSS SECTION 205.00 EXTENDED .32 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

205.000	3.32	4546.32	4546.32	.00	4546.90	.58	1.08	.05	4545.00
282.7	58.3	210.2	14.1	17.7	30.8	4.7	2.6	2.5	4544.90
.06	3.30	6.82	3.02	.035	.035	.035	.000	4543.00	1000.00
.008073	141.	141.	141.	20	8	0	.00	46.72	1046.72

*SECNO 206.000

3265 DIVIDED FLOW

3280 CROSS SECTION 206.00 EXTENDED .06 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

206.000	2.36	4549.36	4549.36	.00	4549.72	.36	1.22	.02	4549.00
316.3	4.6	164.8	146.8	2.9	30.3	36.0	2.7	2.8	4549.00
.07	1.58	5.44	4.08	.035	.035	.035	.000	4547.00	1000.00
.011775	126.	126.	123.	20	16	0	.00	103.94	1127.30

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 207.000

3265 DIVIDED FLOW

3280 CROSS SECTION 207.00 EXTENDED .01 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

207.000	2.01	4555.01	4555.01	.00	4555.25	.24	1.86	.01	4555.01
320.0	.0	87.7	232.3	.1	19.8	62.1	3.0	3.3	4555.00
.08	.05	4.43	3.74	.035	.035	.035	.000	4553.00	1000.00
.012330	171.	171.	143.	20	9	0	.00	186.77	1218.22

*SECNO 208.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

208.000	1.67	4557.17	4557.17	.00	4557.45	.28	1.52	.01	4558.00
320.0	.0	28.5	291.5	.0	5.7	70.1	3.2	3.6	4558.00

.08	.00	5.04	4.16	.000	.035	.035	.000	4555.50	1031.14
.023320	93.	93.	92.	7	9	0	.00	152.65	1289.96

SECNO 209.000

3265 DIVIDED FLOW

6685 20 TRIALS ATTEMPTED WSEL,CWSEL
6693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

209.000	.62	4561.22	4561.22	.00	4561.43	.21	1.94	.01	4561.00
120.0	.9	113.2	5.9	.8	30.4	3.0	3.3	3.9	4561.00
.09	1.18	3.72	1.97	.035	.035	.035	.000	4560.60	1022.50
.019893	87.	87.	87.	20	18	0	.00	89.97	1143.61

1

TW SECT # 203 - 204

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
12.33	12.31	.14	12.33	12.31	.14	22	4538.736	4542.907	203.000	204.000

TW SECT # 204 - 205

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
93.42	93.63	.22	105.75	105.94	.18	22	4542.907	4546.324	204.000	205.000

TW SECT # 205 - 206

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
33.58	33.93	1.02	139.33	139.87	.38	22	4546.324	4549.363	205.000	206.000

TW SECT # 206 - 207

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
3.74	3.73	.11	143.07	143.60	.37	22	4549.363	4555.009	206.000	207.000

TW SECT # 207 - 208

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	29.06	143.07	143.60	.37	22	4555.009	4557.172	207.000	208.000

1

THIS RUN EXECUTED 17OCT95 10:22:38

****
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

Whites Creek Ch. #1

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
	99.000	966.93	399.41	226.78	340.74	5.23	4535.40	1055.81	1357.99	302.18	241.81
*	100.000	966.93	272.22	399.62	295.09	2.66	4536.27	1010.94	1370.00	359.06	445.51
*	202.000	176.93	2.49	34.66	139.79	3.27	4536.43	1026.38	1120.38	94.01	78.15
*	203.000	176.93	.00	60.23	116.70	5.09	4538.74	1023.89	1103.15	71.62	43.45
*	204.000	189.26	66.29	99.25	23.71	6.31	4542.91	1000.00	1063.41	58.02	43.53
*	205.000	282.68	58.31	210.24	14.14	6.82	4546.32	1000.00	1046.72	46.72	53.18
*	206.000	316.26	4.63	164.80	146.84	5.44	4549.36	1000.00	1127.30	103.94	69.21
*	207.000	320.00	.00	87.74	232.25	4.43	4555.01	1000.00	1218.22	186.77	82.00
*	208.000	320.00	.00	28.52	291.48	5.04	4557.17	1031.14	1289.96	152.65	75.76
*	209.000	120.00	.89	113.24	5.88	3.72	4561.22	1022.50	1143.61	89.97	34.15

Whites Creek Ch. #1

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	99.000	.00	.00	.00	4534.00	966.93	4535.40	.00	4535.66	96.74	5.23	241.81	98.31
*	100.000	220.00	.00	.00	4533.10	966.93	4536.27	4535.62	4536.35	17.27	2.66	445.51	232.65
*	202.000	90.00	.00	.00	4534.00	176.93	4536.43	.00	4536.52	27.25	3.27	78.15	33.90
*	203.000	137.00	.00	.00	4537.00	176.93	4538.74	4538.74	4539.01	139.59	5.09	43.45	14.98
*	204.000	143.00	.00	.00	4540.00	189.26	4542.91	4542.91	4543.31	70.32	6.31	43.53	22.57
*	205.000	141.00	.00	.00	4543.00	282.68	4546.32	4546.32	4546.90	80.73	6.82	53.18	31.46
*	206.000	126.00	.00	.00	4547.00	316.26	4549.36	4549.36	4549.72	117.75	5.44	69.21	29.15
*	207.000	171.00	.00	.00	4553.00	320.00	4555.01	4555.01	4555.25	123.30	4.43	82.00	28.82
*	208.000	93.00	.00	.00	4555.50	320.00	4557.17	4557.17	4557.45	233.20	5.04	75.76	20.96
*	209.000	87.00	.00	.00	4560.60	120.00	4561.22	4561.22	4561.43	198.93	3.72	34.15	8.51

Whites Creek Ch. #1

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	99.000	966.93	4535.40	.00	.00	.00	302.18	.00
*	100.000	966.93	4536.27	.00	.87	.00	359.06	220.00
*	202.000	176.93	4536.43	.00	.16	.00	94.01	90.00
*	203.000	176.93	4538.74	.00	2.31	.00	71.62	137.00
*	204.000	189.26	4542.91	.00	4.17	.00	58.02	143.00
*	205.000	282.68	4546.32	.00	3.42	.00	46.72	141.00
*	206.000	316.26	4549.36	.00	3.04	.00	103.94	126.00
*	207.000	320.00	4555.01	.00	5.65	.00	186.77	171.00
*	208.000	320.00	4557.17	.00	2.16	.00	152.65	93.00
*	209.000	120.00	4561.22	.00	4.05	.00	89.97	87.00

SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 100.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 202.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 203.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 203.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 203.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 204.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 204.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 204.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 205.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 205.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 205.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 206.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 206.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 206.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 207.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 207.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 207.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 208.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 208.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 209.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 209.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 209.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

Wedge2.dat

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    17OCT95    TIME   10:23:55  *
*******************************************
```

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

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

1

17OCT95 10:23:55 PAGE 1

THIS RUN EXECUTED 17OCT95 10:23:55

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

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

SPLIT FLOW BEING PERFORMED

SF

```
JC     Split flow from chan #2
JP     0       0      40      -1       0

TW     Sect # 100 - 101
WS     4     100     101      -1     2.8
WC     0  4536.1      76    4537     150    4538     192  4538.9

TW     Sect # 101 - 102
WS     4     101     102      -1     2.8
WC     0  4538.9     100    4540     162    4541     205  4541.4

TW     Sect # 102 - 103
WS     4     102     103      -1     2.8
WC   205  4541.4     243    4542     314    4543     408    4545

TW     Sect # 103 - 104
WS     4     103     104      -1     2.8
WC   408    4545     500    4546     575    4547     595  4548.2
```

1

17OCT95 10:23:55 PAGE 2

```
T1          Wedge Parcel near Zolezzi              Filename:  Wedge2.dat
```

T2 By: Nimbus Engineers, Reno, NV Nimbus Job # 9311
T3 Whites Creek Ch. #2 Run 2
Existing Conditions

J1 ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FQ

0 2 0 0 0 0 0 0 4535.3 0

J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE

1 0 -1 15

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

150 38 43 13 14 15 26 1 53 54
4 25

QT 1 1415
NC 0.035 0.035 0.03 0.1 0.3
X1 99 7 1204 1220 0 0 0
GR 4536 1000 4535 1093 4534 1204 4534 1220 4534 1235
GR 4535 1330 4536 1400

X1 100 21 1120 1210 200 200 200
GR 4536.6 1000 4536 1020 4533.1 1027 4535 1030 4535.2 1035
GR 4535 1040 4534.9 1050 4535 1075 4535.2 1090 4535 1120
GR 4534 1170 4533.9 1179 4534 1182 4535 1201 4535.2 1210
GR 4535.2 1255 4535.5 1286 4535 1340 4535 1350 4536 1360
GR 4536.1 1370

200 cfs splits from channel #2 and combines with channel #1B @ Zolezzi Ln

QT 1 1240
X1 101 13.00 1070 1103 175 175 175
GR 4539 1000 4538 1070 4537 1078 4536.7 1090 4537.0 1098
GR 4538 1103 4538.6 1140 4538 1208 4537.9 1225 4537.9 1258
GR 4537.8 1353 4538 1360 4538.9 1384

X1 102 11.00 1000 1120 200 200 200
GR 4542.1 1000 4542 1013 4541 1060 4540.3 1080 4541 1090
GR 4542 1120 4541.5 1180 4541.3 1275 4541.5 1375 4541.4 1410
GR 4541.6 1440

X1 103 13.00 1000 1080 160 160 160
GR 4546 1000 4545 1035 4544 1043 4543.8 1050 4544 1062
GR 4545 1070 4545.7 1080 4545 1090 4544.5 1240 4544.3 1410
GR 4544.6 1480 4544.8 1526 4545 1554

1
17OCT95 10:23:55 PAGE 3

X1 104 16.00 1042 1120 150 150 150
GR 4550 1000 4549 1015 4548 1042 4547 1055 4546.4 1087
GR 4547 1095 4548 1110 4548.1 1120 4548 1130 4547 1208
GR 4546.9 1220 4547 1235 4546.8 1275 4547 1298 4548 1377
GR 4548.2 1445

X1 105 17.00 1042 1112 150 150 150
GR 4553 1000 4552 1021 4551 1042 4550.7 1060 4550.6 1068
GR 4550.6 1093 4551 1102 4550 1105 4551 1107 4551.2 1112
GR 4551 1113 4550 1127 4550 1138 4549.4 1180 4550 1245
GR 4551 1353 4551.5 1370

X1 106 16.00 1000 1063 200 200 200
GR 4555 1000 4554 1020 4553.7 1038 4554 1055 4554.5 1063

GR	4554	1072	4553	1075	4552.9	1077	4553	1079	4553.2	1217
GR	4554	1298	4554	1305	4553	1306	4553	1309	4554	1310
GR	4555	1315								
X1	108	91.00	1049	1100	170	170	170			
GR	4559.0	1000	4559.00	1003	4558.87	1010	4558.81	1016	4558.81	1017
GR	4558.8	1023	4558.74	1025	4558.67	1029	4558.62	1034	4558.47	1039
GR	4558.2	1045	4558.17	1046	4558.00	1049	4557.35	1053	4557.00	1055
GR	4557.0	1070	4557.15	1073	4557.27	1076	4557.29	1078	4557.39	1081
GR	4557.5	1084	4557.54	1087	4557.61	1091	4557.62	1093	4557.63	1099
GR	4557.7	1100	4557.65	1107	4557.66	1110	4557.66	1115	4557.67	1118
GR	4557.7	1166	4557.74	1169	4557.74	1171	4557.75	1174	4557.74	1176
GR	4557.8	1184	4557.75	1192	4557.74	1194	4557.74	1196	4557.76	1199
GR	4557.8	1200	4557.74	1201	4557.75	1204	4557.74	1205	4557.75	1208
GR	4557.7	1210	4557.74	1213	4557.72	1215	4557.72	1218	4557.69	1220
GR	4557.7	1222	4557.61	1228	4557.56	1230	4557.42	1234	4557.25	1239
GR	4557.2	1240	4557.00	1246	4556.97	1247	4556.84	1251	4556.84	1252
GR	4556.7	1275	4556.70	1277	4557.00	1290	4557.00	1291	4557.12	1295
GR	4557.1	1295	4557.15	1296	4557.37	1304	4557.66	1320	4557.66	1322
GR	4557.7	1325	4557.68	1327	4557.70	1330	4557.72	1333	4557.73	1335
GR	4557.7	1337	4557.73	1339	4557.74	1341	4557.74	1344	4557.73	1346
GR	4557.8	1357	4557.78	1358	4557.81	1363	4557.81	1364	4557.85	1369
GR	4558.0	1376	4558.0	1381	4558.00	1384	4558.08	1386	4558.22	1388
GR	4559	1399								
X1	109	76.00	1000	1057	120	120	120			
GR	4562	941	4561.00	1000	4560.56	1006	4560.00	1011	4559.87	1012
GR	4559.3	1016	4559.00	1018	4558.77	1019	4558.00	1022	4558.00	1029
GR	4558.0	1032	4558.20	1034	4559.00	1043	4559.13	1044	4560.0	1053
GR	4560.1	1056	4560.09	1057	4560.09	1057	4560.41	1077	4560.42	1081
GR	4560.4	1083	4560.44	1084	4560.45	1088	4560.46	1091	4560.47	1095
GR	4560.8	1123	4561.00	1126	4561.00	1128	4561.00	1134	4561.00	1135
GR	4561.0	1137	4561.00	1139	4561.00	1145	4561.00	1145	4561.00	1146
GR	4561.0	1149	4561.00	1152	4561.00	1153	4560.91	1158	4560.87	1159
GR	4561.5	1174	4560.33	1179	4560.30	1180	4560.00	1188	4559.95	1189
GR	4560.0	1189	4559.66	1196	4559.64	1198	4559.61	1199	4559.50	1202
GR	4559.4	1204	4559.37	1206	4559.37	1210	4559.27	1219	4559.28	1221
GR	4559.3	1222	4559.30	1223	4559.31	1224	4559.33	1226	4559.28	1229
GR	4559.4	1231	4559.42	1233	4559.47	1236	4559.54	1241	4559.64	1246

1

GR	4559.7	1249	4559.80	1255	4559.83	1257	4560.00	1263	4560.00	1265
GR	4560.6	1277	4561.00	1285	4561.21	1291	4561.12	1293	4561.42	1300
GR	4561.4	1301								
X1	110	16.00	1067	1110	130	130	130			
GR	4565	1000	4564	1048	4563	1067	4562	1070	4561.5	1072
GR	4562	1078	4563	1093	4563.4	1110	4563.1	1167	4563.2	1190
GR	4563	1210	4563	1220	4562.3	1262	4563	1308	4564	1335
GR	4564.3	1356								
X1	111	20.00	1105	1137	160	160	160			
GR	4570.8	1000	4570	1070	4569	1095	4568	1105	4567	1110
GR	4566	1115	4567	1126	4568	1137	4568	1152	4568.4	1180
GR	4568	1220	4567	1252	4566.6	1266	4567	1270	4567.4	1273
GR	4567	1310	4567	1355	4568	1415	4569	1445	4570	1540
X1	112	20.00	1066	1105	200	200	200			
GR	4574	1000	4573	1049	4572	1066	4571	1075	4570.8	1082
GR	4571	1092	4572	1105	4572.2	1110	4572	1115	4571	1118
GR	4570.6	1120	4571	1123	4571.1	1149	4572	1178	4572.9	1222
GR	4572	1268	4571.2	1358	4572	1438	4573	1503	4573.2	1530
QT	1	1440								

```
X1      113      21.00      1215      1303       150       150       150
GR     4575.5     1000      4575      1066      4574      1183     4573.9     1200      4574      1212
GR     4574.3     1215      4574      1218     4573.7     1244      4574      1266     4574.5     1303
GR       4574     1339     4573.4     1385      4574      1420      4575      1445     4575.1     1455
GR       4575     1465     4574.3     1544      4574      1575     4573.8     1605      4574      1632
GR     4574.9     1713

X1      113.5     19.00      1056      1120       150       150       150
GR       4579     1000      4578      1025      4577      1056      4576      1083     4575.8     1105
GR       4576     1109      4577      1120     4577.3     1150     4577.6     1182      4577      1229
GR     4576.9     1245      4577      1263      4578      1330      4578      1335      4577      1400
GR     4576.9     1440      4577      1482      4578      1564     4578.5     1640

X1        114     16.00      1080      1188       260       260       260
GR       4583     1000      4582      1040      4581      1068      4580      1080      4579      1110
GR     4579.8     1157      4580      1188      4581      1280     4580.5     1288      4581      1298
GR       4581     1316      4580      1400     4579.7     1446      4580      1460      4581      1520
GR     4581.4     1552

X1        115     21.00      1103      1175       230       230       230
GR     4588.5     1000      4588      1004      4586      1010      4587      1020      4586      1040
GR       4585     1060      4584      1103      4583      1125     4582.7     1140      4583      1157
GR       4584     1175      4585      1200      4586      1207      4586      1214      4585      1216
GR       4586     1222      4585      1225     4584.4     1240      4585      1270      4585      1345
GR     4585.6     1470
1
   17OCT95      10:23:55                                                                    PAGE     5


X1        116     16.00      1025      1108       150       150       150
GR     4591.2     1000      4591      1005      4589      1010      4591      1015      4590      1020
GR       4589     1025      4588      1045      4588      1058     4587.8     1073      4588      1083
GR       4589     1108      4588      1120      4589      1162     4589.6     1210     4589.3     1235
GR       4590     1256

X1        117       24      1180      1225       150       165       130
GR       4595     1000      4593      1108     4592.7     1128      4593      1137     4593.5     1142
GR       4593     1147      4592      1150      4593      1153      4594      1155     4594.2     1164
GR       4594     1180      4593      1188      4592      1191     4591.8     1209      4592      1218
GR       4593     1222      4594      1225     4594.1     1228      4593      1236      4592      1238
GR     4591.8     1240      4594      1244     4594.8     1254      4595      1304
1
   17OCT95      10:23:55                                                                    PAGE     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
0

CCHV=     .100 CEHV=     .300
*SECNO 99.000
    99.000      1.30   4535.30       .00   4535.30   4535.64       .34       .00       .00   4534.00
     943.2     373.5     139.0     430.7      93.0      20.8      98.6        .0        .0   4534.00
       .00      4.02      6.68      4.37      .035      .030      .035      .000   4534.00   1065.12
   .012828        0.        0.        0.         0         0         0       .00    285.87   1350.99


FLOW DISTRIBUTION FOR SECNO=     99.00          CWSEL=   4535.30

 STA=    1065.    1093.    1204.    1220.    1235.    1330.    1351.
```

```
 PER Q=      .6    39.0    14.7    11.8    33.4     .5
  AREA=     4.2    88.8    20.8    19.5    76.0    3.1
   VEL=     1.4     4.1     6.7     5.7     4.1    1.4
 DEPTH=      .1      .8     1.3     1.3      .8     .1

*SECNO 100.000
3280 CROSS SECTION    100.00 EXTENDED       .15 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.91

  100.000     3.15  4536.25  4535.62      .00  4536.33      .08      .67      .03  4535.00
    943.2    248.0    446.7    248.5    128.4    158.8    151.4      1.5      1.5  4535.20
      .02     1.93     2.81     1.64     .035     .030     .035     .000  4533.10  1011.62
  .001512     200.     200.     200.       19       20        0      .00   358.38  1370.00


FLOW DISTRIBUTION FOR SECNO=    100.00          CWSEL=   4536.25

STA=    1012.    1030.    1050.    1075.    1090.    1120.    1210.    1255.    1286.    1340.    1360.    1370.
 PER Q=     4.6      4.9      6.8      3.3      6.6     47.4      8.6      4.6      9.5      3.6       .1
  AREA=    19.6     24.5     32.5     17.3     34.5    158.8     47.3     27.9     54.1     20.0      2.0
   VEL=     2.2      1.9      2.0      1.8      1.8      2.8      1.7      1.5      1.7      1.7       .6
 DEPTH=     1.1      1.2      1.3      1.2      1.2      1.8      1.1       .9      1.0      1.0       .2

*SECNO 101.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL

  17OCT95      10:23:55                                                                    PAGE    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


3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  101.000     1.94  4538.64  4538.64      .00  4538.94      .30      .49      .06  4538.00
    796.8     26.5    307.6    462.8     14.4     50.7    158.0      2.8      2.9  4538.00
      .04     1.84     6.07     2.93     .035     .030     .035     .000  4536.70  1025.09
  .008537     175.     175.     175.       20       14        0      .00   352.02  1377.11


FLOW DISTRIBUTION FOR SECNO=    101.00          CWSEL=   4538.64

STA=    1025.    1070.    1103.    1140.    1208.    1225.    1258.    1353.    1360.    1377.
 PER Q=     3.3     38.6      3.0      5.6      4.5      9.9     31.7      2.1      1.3
  AREA=    14.4     50.7     12.6     23.2     11.8     24.5     75.2      5.2      5.5
   VEL=     1.8      6.1      1.9      1.9      3.1      3.2      3.4      3.2      1.8
 DEPTH=      .3      1.5       .3       .3       .7       .7       .8       .7       .3

*SECNO 102.000

3265 DIVIDED FLOW

3280 CROSS SECTION    102.00 EXTENDED       .35 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  102.000     1.65  4541.95  4541.95      .00  4542.20      .25     2.24      .00  4542.10
    858.5       .0    358.7    499.8       .0     74.1    151.4      3.9      4.7  4542.00
      .05      .00     4.84     3.30     .000     .030     .035     .000  4540.30  1015.20
  .014922     200.     200.     200.        4        9        0      .00   417.77  1440.00
```

FLOW DISTRIBUTION FOR SECNO= 102.00 CWSEL= 4541.95

STA=	1015.	1120.	1180.	1275.	1375.	1410.	1440.
PER Q=	41.8	2.8	21.4	22.5	6.7	4.8	
AREA=	74.1	12.3	52.6	55.3	17.6	13.6	
VEL=	4.8	1.9	3.5	3.5	3.3	3.0	
DEPTH=	.7	.2	.6	.6	.5	.5	

*SECNO 103.000

1

17OCT95 10:23:55 PAGE 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

3265 DIVIDED FLOW

3280 CROSS SECTION 103.00 EXTENDED .11 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

103.000	1.31	4545.11	4545.11	.00	4545.35	.24	2.36	.00	4546.00
1060.4	.0	173.5	886.9	.0	33.2	247.5	4.8	6.4	4545.70
.06	.00	5.22	3.58	.000	.030	.035	.000	4543.80	1031.02
.014614	160.	160.	160.	5	14	0	.00	506.23	1554.00

FLOW DISTRIBUTION FOR SECNO= 103.00 CWSEL= 4545.11

STA=	1031.	1080.	1240.	1410.	1480.	1526.	1554.
PER Q=	16.4	13.5	46.9	17.1	5.1	1.0	
AREA=	33.2	54.7	121.4	46.5	19.0	6.0	
VEL=	5.2	2.6	4.1	3.9	2.9	1.8	
DEPTH=	.8	.3	.7	.7	.4	.2	

*SECNO 104.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

104.000	1.67	4548.07	4548.07	.00	4548.42	.35	2.06	.03	4548.00
1240.0	.0	386.8	853.2	.1	71.0	194.5	5.7	7.9	4548.10
.07	.05	5.45	4.39	.035	.030	.035	.000	4546.40	1040.11
.013032	150.	150.	150.	3	12	0	.00	354.55	1400.72

FLOW DISTRIBUTION FOR SECNO= 104.00 CWSEL= 4548.07

STA=	1040.	1042.	1120.	1130.	1208.	1220.	1235.	1275.	1298.	1377.	1401.
PER Q=	.0	31.2	.0	11.9	5.7	7.1	20.3	11.7	12.1	.0	
AREA=	.1	71.0	.2	44.4	13.4	16.8	46.8	26.9	45.0	.8	
VEL=	.0	5.4	.5	3.3	5.2	5.2	5.4	5.4	3.3	.5	
DEPTH=	.0	.9	.0	.6	1.1	1.1	1.2	1.2	.6	.0	

1

17OCT95 10:23:55 PAGE 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 105.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   105.000      1.65   4551.05   4551.05       .00   4551.46       .41      2.02       .02   4551.00
    1240.0        .0      67.2    1172.8        .0      23.3      223.8       6.6       9.0   4551.20
       .08        .05      2.89      5.24       .035      .030      .035      .000   4549.40   1040.89
   .013883      150.      150.      150.          4         5         0       .00    309.48   1354.79


FLOW DISTRIBUTION FOR SECNO=    105.00          CWSEL=   4551.05

STA=    1041.    1042.    1112.    1127.    1138.    1180.    1245.    1353.    1355.
  PER Q=       .0       5.4       2.1       4.8      28.0      43.4      16.2       .0
   AREA=       .0      23.3       7.7      11.6      56.8      87.9      59.7       .0
    VEL=       .1       2.9       3.4       5.2       6.1       6.1       3.4       .1
  DEPTH=       .0        .4        .5       1.1       1.4       1.4        .6       .0

*SECNO 106.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   106.000      1.35   4554.25   4554.25       .00   4554.67       .42      2.92       .00   4555.00
    1240.0        .0      45.1    1194.9        .0      15.0      226.0       7.7      10.4   4554.50
       .09        .00      3.00      5.29       .000      .030      .035      .000   4552.90   1015.04
   .015354      200.      200.      200.          3        15         0       .00    287.63   1311.24


FLOW DISTRIBUTION FOR SECNO=    106.00          CWSEL=   4554.25

STA=    1015.    1063.    1072.    1075.    1077.    1079.    1217.    1298.    1305.    1306.    1309.    1310.    1311.
  PER Q=       3.6       .1        .8       1.3       1.3      73.7      16.7       .3       .2       1.8       .2       .0
   AREA=      15.0       .6       2.2       2.6       2.6     158.4      52.5      1.7       .7       3.7       .7       .2
    VEL=       3.0      1.3       4.2       6.3       6.3       5.8       3.9       2.1      3.4       6.1      3.4      1.3
  DEPTH=       .3        .1        .7       1.3       1.3       1.1        .6        .2       .7       1.2       .7       .1


   17OCT95      10:23:55                                                                                    PAGE   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


*SECNO 108.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   108.000      1.54   4558.24   4558.24       .00   4558.63       .39      2.61       .00   4558.00
    1240.0        .7     272.7     966.6        .5      47.0      203.9       8.7      11.6   4557.70
       .10       1.32      5.80      4.74       .035      .030      .035      .000   4556.70   1044.07
   .015306      170.      170.      170.          2        11         0       .00    344.24   1388.31


FLOW DISTRIBUTION FOR SECNO=    108.00          CWSEL=   4558.24
```

STA=	1044.	1049.	1100.	1118.	1166.	1192.	1215.	1234.	1246.	1251.	1275.	1290.	1296.
PER Q=	.1	22.0	3.0	7.7	3.3	3.1	3.6	5.4	3.4	19.3	11.3	3.3	
AREA=	.5	47.0	10.4	26.7	12.6	11.5	11.6	12.4	6.6	35.3	21.2	7.1	
VEL=	1.4	5.8	3.6	3.6	3.2	3.3	3.8	5.4	6.3	6.8	6.6	5.9	
DEPTH=	.1	.9	.6	.6	.5	.5	.6	1.0	1.3	1.5	1.4	1.2	

STA=	1296.	1304.	1320.	1341.	1369.	1388.
PER Q=	3.3	4.0	3.2	3.3	.8	
AREA=	7.9	11.6	11.4	13.0	4.7	
VEL=	5.2	4.2	3.5	3.1	2.2	
DEPTH=	1.0	.7	.5	.5	.2	

*SECNO 109.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

109.000	2.85	4560.85	4560.85	.00	4561.37	.52	1.44	.04	4561.00
1240.0	.0	640.1	599.9	.0	92.9	138.5	9.4	12.4	4560.09
.10	.00	6.89	4.33	.000	.030	.035	.000	4558.00	1002.04
.009681	120.	120.	120.	20	17	0	.00	226.93	1282.00

FLOW DISTRIBUTION FOR SECNO= 109.00 CWSEL= 4560.85

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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=	1002.	1057.	1081.	1188.	1198.	1204.	1210.	1219.	1224.	1229.	1236.	1246.	1255.
PER Q=	51.6	3.2	3.5	3.6	3.2	3.9	6.2	3.5	3.5	4.4	5.2	3.7	
AREA=	92.9	13.7	18.4	10.4	7.9	8.9	13.8	7.8	7.7	10.1	13.0	10.1	
VEL=	6.9	2.9	2.3	4.3	5.0	5.4	5.5	5.6	5.6	5.3	5.0	4.5	
DEPTH=	1.7	.6	.2	1.0	1.3	1.5	1.5	1.6	1.5	1.4	1.3	1.1	

STA=	1255.	1265.	1282.
PER Q=	3.0	1.5	
AREA=	9.4	7.2	
VEL=	4.0	2.6	
DEPTH=	.9	.4	

*SECNO 110.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

110.000	2.37	4563.87	4563.87	.00	4564.27	.40	1.42	.01	4563.00
1240.0	19.4	333.7	886.9	7.2	52.9	193.1	10.1	13.1	4563.40
.11	2.71	6.31	4.59	.035	.030	.035	.000	4561.50	1050.51
.012406	130.	130.	130.	20	10	0	.00	280.91	1331.43

FLOW DISTRIBUTION FOR SECNO= 110.00 CWSEL= 4563.87

STA=	1051.	1067.	1110.	1167.	1190.	1210.	1220.	1262.	1308.	1331.
PER Q=	1.6	26.9	9.7	5.0	4.9	3.0	22.2	24.4	2.2	
AREA=	7.2	52.9	35.2	16.5	15.4	8.7	51.1	56.0	10.2	
VEL=	2.7	6.3	3.4	3.8	4.0	4.3	5.4	5.4	2.7	
DEPTH=	.4	1.2	.6	.7	.8	.9	1.2	1.2	.4	

*SECNO 111.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

111.000	2.24	4568.24	4568.24	.00	4568.67	.43	2.07	.01	4568.00
1240.0	.3	261.7	977.9	.3	39.6	200.3	11.0	14.2	4568.00
.12	1.19	6.61	4.88	.035	.030	.035	.000	4566.00	1102.62
.013533	160.	160.	160.	20	11	0	.00	292.05	1422.15

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

FLOW DISTRIBUTION FOR SECNO= 111.00 CWSEL= 4568.24

STA=	1103.	1105.	1137.	1252.	1266.	1273.	1310.	1355.	1415.	1422.
PER Q=	.0	21.1	8.7	10.2	4.2	15.7	25.6	14.4	.1	
AREA=	.3	39.6	32.0	20.1	8.9	38.4	55.7	44.3	.9	
VEL=	1.2	6.6	3.4	6.3	5.8	5.1	5.7	4.0	1.2	
DEPTH=	.1	1.2	.3	1.4	1.3	1.0	1.2	.7	.1	

*SECNO 112.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

112.000	1.78	4572.38	4572.38	.00	4572.75	.37	2.71	.01	4572.00
1240.0	2.0	280.3	957.7	1.2	44.5	216.4	12.1	15.7	4572.00
.13	1.63	6.30	4.42	.035	.030	.035	.000	4570.60	1059.54
.013595	200.	200.	200.	6	16	0	.00	351.14	1462.69

FLOW DISTRIBUTION FOR SECNO= 112.00 CWSEL= 4572.38

STA=	1060.	1066.	1105.	1120.	1149.	1178.	1358.	1438.	1463.
PER Q=	.2	22.6	3.1	19.2	8.5	24.7	21.1	.6	
AREA=	1.2	44.5	8.6	39.3	24.1	77.4	62.4	4.7	
VEL=	1.6	6.3	4.5	6.1	4.4	4.0	4.2	1.6	
DEPTH=	.2	1.1	.6	1.4	.8	.4	.8	.2	

*SECNO 113.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

113.000	1.33	4574.73	4574.73	.00	4575.04	.32	2.27	.01	4574.30
1440.0	199.1	311.9	929.1	55.5	61.7	207.1	13.1	17.2	4574.50
.14	3.58	5.05	4.49	.035	.030	.035	.000	4573.40	1097.59
.016692	150.	150.	150.	4	19	0	.00	542.90	1697.71

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

FLOW DISTRIBUTION FOR SECNO= 113.00 CWSEL= 4574.73

STA=	1098.	1183.	1200.	1212.	1215.	1303.	1339.	1385.	1420.	1575.	1605.	1632.	1698.
PER Q=	6.1	4.3	3.0	.5	21.7	4.0	18.4	14.0	7.5	8.4	7.5	4.7	
AREA=	31.2	13.3	9.4	1.7	61.7	17.3	47.4	36.1	35.1	24.9	22.4	24.0	
VEL=	2.8	4.6	4.6	3.8	5.1	3.4	5.6	5.6	3.1	4.8	4.8	2.8	
DEPTH=	.4	.8	.8	.6	.7	.5	1.0	1.0	.2	.8	.8	.4	

*SECNO 113.500

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

113.500	2.10	4577.90	4577.90	.00	4578.23	.34	1.67	.01	4577.00
1440.0	27.6	644.9	767.5	12.4	104.9	260.1	14.4	19.0	4577.00
.15	2.22	6.15	2.95	.035	.030	.035	.000	4575.80	1028.24
.007978	150.	150.	150.	7	14	0	.00	508.40	1555.43

FLOW DISTRIBUTION FOR SECNO= 113.50 CWSEL= 4577.90

STA=	1028.	1056.	1120.	1150.	1182.	1229.	1245.	1263.	1323.	1400.	1440.	1482.	1555.
PER Q=	1.9	44.8	4.8	2.2	5.2	3.8	4.3	4.1	4.0	9.6	10.1	5.1	
AREA=	12.4	104.9	22.4	14.3	28.0	15.1	17.0	26.9	26.1	37.8	39.7	32.9	
VEL=	2.2	6.1	3.1	2.2	2.7	3.7	3.7	2.2	2.2	3.7	3.7	2.2	
DEPTH=	.4	1.6	.7	.4	.6	.9	.9	.4	.3	.9	.9	.4	

*SECNO 114.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

114.000	1.93	4580.93	4580.93	.00	4581.33	.41	2.30	.02	4580.00
1440.0	12.9	881.2	545.9	5.1	146.3	168.9	16.4	21.8	4580.00
.17	2.52	6.02	3.23	.035	.030	.035	.000	4579.00	1068.89
.009869	260.	260.	260.	4	11	0	.00	412.92	1515.55

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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= 114.00 CWSEL= 4580.93

STA=	1069.	1080.	1188.	1273.	1288.	1297.	1400.	1446.	1460.	1516.
PER Q=	.9	61.2	6.9	.2	.2	6.3	15.2	4.6	4.5	
AREA=	5.1	146.3	39.4	1.5	1.8	36.0	49.5	15.1	25.7	
VEL=	2.5	6.0	2.5	1.5	1.5	2.5	4.4	4.4	2.5	
DEPTH=	.5	1.4	.5	.1	.2	.3	1.1	1.1	.5	

*SECNO 115.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

115.000	2.79	4585.49	4585.49	.00	4585.96	.46	1.63	.02	4584.00
1440.0	134.6	1029.3	276.1	45.1	164.3	124.9	18.2	23.9	4584.00
.18	2.98	6.27	2.21	.035	.030	.035	.000	4582.70	1050.15
.005333	230.	230.	230.	20	11	0	.00	381.35	1447.62

FLOW DISTRIBUTION FOR SECNO= 115.00 CWSEL= 4585.49

STA=	1050.	1060.	1103.	1175.	1200.	1203.	1216.	1219.	1225.	1240.	1270.	1345.	1448.
PER Q=	.2	9.1	71.5	5.3	.1	.0	.1	.0	2.2	4.4	5.0	2.1	
AREA=	2.4	42.7	164.3	24.8	.8	.2	.7	.4	11.9	23.8	37.0	25.3	
VEL=	1.2	3.1	6.3	3.1	1.2	1.1	1.2	1.2	2.7	2.7	1.9	1.2	
DEPTH=	.2	1.0	2.3	1.0	.2	.0	.2	.1	.8	.8	.5	.2	

*SECNO 116.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

116.000	2.07	4589.87	4589.87	.00	4590.44	.57	1.07	.03	4589.00
1440.0	9.0	928.8	502.2	3.8	135.3	116.8	19.2	24.9	4589.00
.18	2.37	6.87	4.30	.035	.030	.035	.000	4587.80	1007.82
.010028	150.	150.	150.	20	19	0	.00	235.83	1252.12

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

FLOW DISTRIBUTION FOR SECNO= 116.00 CWSEL= 4589.87

STA=	1008.	1010.	1012.	1025.	1108.	1120.	1162.	1210.	1235.	1252.
PER Q=	.2	.2	.3	64.5	6.0	21.0	5.6	1.7	.6	
AREA=	.9	.9	1.9	135.3	16.4	57.6	27.4	10.5	4.9	
VEL=	2.3	2.3	2.4	6.9	5.2	5.2	2.9	2.4	1.8	
DEPTH=	.4	.4	.1	1.6	1.4	1.4	.6	.4	.3	

*SECNO 117.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

117.000	2.66	4594.46	4594.46	.00	4595.06	.60	1.35	.01	4594.00
1440.0	602.2	712.6	125.2	139.3	93.5	25.2	20.0	25.7	4594.00
.19	4.32	7.62	4.98	.035	.030	.035	.000	4591.80	1029.06
.009068	150.	130.	165.	20	11	0	.00	220.72	1249.78

FLOW DISTRIBUTION FOR SECNO= 117.00 CWSEL= 4594.46

STA=	1029.	1108.	1128.	1137.	1147.	1153.	1180.	1225.	1238.	1244.	1250.
PER Q=	13.1	12.4	5.6	3.9	5.0	1.8	49.5	3.7	4.8	.1	

AREA=	57.7	32.2	14.5	12.1	11.8	11.0	93.5	12.5	11.4	1.3
VEL=	3.3	5.6	5.6	4.6	6.1	2.3	7.6	4.3	6.1	1.5
DEPTH=	.7	1.6	1.6	1.2	2.0	.4	2.1	1.0	1.9	.2

TW Sect # 100 - 101

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
28.63	28.70	.24	28.63	28.70	.24	9	4536.248	4538.642	100.000	101.000

TW Sect # 101 - 102

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
61.70	61.62	.13	90.33	90.32	.02	9	4538.642	4541.953	101.000	102.000

TW Sect # 102 - 103

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
201.84	200.92	.46	292.18	291.24	.32	9	4541.953	4545.114	102.000	103.000

TW Sect # 103 - 104

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
179.61	179.54	.04	471.79	470.77	.22	9	4545.114	4548.070	103.000	104.000

1

THIS RUN EXECUTED 17OCT95 10:24:29

****
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

Whites Creek Ch. #2

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
	99.000	943.21	373.50	138.96	430.74	6.68	4535.30	1065.12	1350.99	285.87	212.38
*	100.000	943.21	248.01	446.68	248.53	2.81	4536.25	1011.62	1370.00	358.38	438.65
*	101.000	796.85	26.48	307.59	462.77	6.07	4538.64	1025.09	1377.11	352.02	223.07
*	102.000	858.55	.00	358.70	499.84	4.84	4541.95	1015.20	1440.00	417.77	225.47
*	103.000	1060.39	.00	173.46	886.93	5.22	4545.11	1031.02	1554.00	506.23	280.71

*	104.000	1240.00	.00	386.76	853.24	5.45	4548.07	1040.11	1400.72	354.55	265.53
*	105.000	1240.00	.00	67.22	1172.78	2.89	4551.05	1040.89	1354.79	309.48	247.10
*	106.000	1240.00	.00	45.14	1194.86	3.00	4554.25	1015.04	1311.24	287.63	241.06
*	108.000	1240.00	.72	272.66	966.61	5.80	4558.24	1044.07	1388.31	344.24	251.45
*	109.000	1240.00	.00	640.15	599.85	6.89	4560.85	1002.04	1282.00	226.93	231.41
*	110.000	1240.00	19.36	333.75	886.89	6.31	4563.87	1050.51	1331.43	280.91	253.13
*	111.000	1240.00	.34	261.72	977.94	6.61	4568.24	1102.62	1422.15	292.05	240.23
*	112.000	1240.00	2.00	280.34	957.65	6.30	4572.38	1059.54	1462.69	351.14	262.19
*	113.000	1440.00	199.09	311.86	929.06	5.05	4574.73	1097.59	1697.71	542.90	324.36
*	113.500	1440.00	27.58	644.88	767.54	6.15	4577.90	1028.24	1555.43	508.40	377.45
*	114.000	1440.00	12.95	881.15	545.90	6.02	4580.93	1068.89	1515.55	412.92	320.37
*	115.000	1440.00	134.63	1029.27	276.10	6.27	4585.49	1050.15	1447.62	381.35	334.29

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
*	116.000	1440.00	8.97	928.81	502.22	6.87	4589.87	1007.82	1252.12	235.83	255.85
*	117.000	1440.00	602.18	712.59	125.23	7.62	4594.46	1029.06	1249.78	220.72	257.96

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	99.000	.00	.00	.00	4534.00	943.21	4535.30	.00	4535.64	128.28	6.68	212.38	83.28
*	100.000	200.00	.00	.00	4533.10	943.21	4536.25	4535.62	4536.33	15.12	2.81	438.65	242.54
*	101.000	175.00	.00	.00	4536.70	796.85	4538.64	4538.64	4538.94	85.37	6.07	223.07	86.24
*	102.000	200.00	.00	.00	4540.30	858.55	4541.95	4541.95	4542.20	149.22	4.84	225.47	70.28
*	103.000	160.00	.00	.00	4543.80	1060.39	4545.11	4545.11	4545.35	146.14	5.22	280.71	87.72
*	104.000	150.00	.00	.00	4546.40	1240.00	4548.07	4548.07	4548.42	130.32	5.45	265.53	108.62
*	105.000	150.00	.00	.00	4549.40	1240.00	4551.05	4551.05	4551.46	138.83	2.89	247.10	105.24
*	106.000	200.00	.00	.00	4552.90	1240.00	4554.25	4554.25	4554.67	153.54	3.00	241.06	100.07
*	108.000	170.00	.00	.00	4556.70	1240.00	4558.24	4558.24	4558.63	153.06	5.80	251.45	100.23
*	109.000	120.00	.00	.00	4558.00	1240.00	4560.85	4560.85	4561.37	96.81	6.89	231.41	126.02
*	110.000	130.00	.00	.00	4561.50	1240.00	4563.87	4563.87	4564.27	124.06	6.31	253.13	111.33

111.000	160.00	.00	.00	4566.00	1240.00	4568.24	4568.24	4568.67	135.33	6.61	240.23	106.59
112.000	200.00	.00	.00	4570.60	1240.00	4572.38	4572.38	4572.75	135.95	6.30	262.19	106.35
113.000	150.00	.00	.00	4573.40	1440.00	4574.73	4574.73	4575.04	166.92	5.05	324.36	111.46
113.500	150.00	.00	.00	4575.80	1440.00	4577.90	4577.90	4578.23	79.78	6.15	377.45	161.22
114.000	260.00	.00	.00	4579.00	1440.00	4580.93	4580.93	4581.33	98.69	6.02	320.37	144.96
115.000	230.00	.00	.00	4582.70	1440.00	4585.49	4585.49	4585.96	53.33	6.27	334.29	197.19
116.000	150.00	.00	.00	4587.80	1440.00	4589.87	4589.87	4590.44	100.28	6.87	255.85	143.80
117.000	130.00	.00	.00	4591.80	1440.00	4594.46	4594.46	4595.06	90.68	7.62	257.96	151.22

1

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
99.000	943.21	4535.30	.00	.00	.00	285.87	.00
100.000	943.21	4536.25	.00	.95	.00	358.38	200.00
101.000	796.85	4538.64	.00	2.39	.00	352.02	175.00
102.000	858.55	4541.95	.00	3.31	.00	417.77	200.00
103.000	1060.39	4545.11	.00	3.16	.00	506.23	160.00
104.000	1240.00	4548.07	.00	2.96	.00	354.55	150.00
105.000	1240.00	4551.05	.00	2.98	.00	309.48	150.00
106.000	1240.00	4554.25	.00	3.20	.00	287.63	200.00
108.000	1240.00	4558.24	.00	3.99	.00	344.24	170.00
109.000	1240.00	4560.85	.00	2.61	.00	226.93	120.00
110.000	1240.00	4563.87	.00	3.02	.00	280.91	130.00
111.000	1240.00	4568.24	.00	4.37	.00	292.05	160.00
112.000	1240.00	4572.38	.00	4.14	.00	351.14	200.00
113.000	1440.00	4574.73	.00	2.35	.00	542.90	150.00
113.500	1440.00	4577.90	.00	3.17	.00	508.40	150.00
114.000	1440.00	4580.93	.00	3.03	.00	412.92	260.00
115.000	1440.00	4585.49	.00	4.57	.00	381.35	230.00
116.000	1440.00	4589.87	.00	4.38	.00	235.83	150.00
117.000	1440.00	4594.46	.00	4.59	.00	220.72	130.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=    100.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    101.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    101.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    101.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    102.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    102.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    103.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    103.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    104.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    104.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    105.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    105.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    106.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    106.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    108.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    108.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    109.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    109.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    109.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    110.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    110.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    110.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    111.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    111.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    111.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    112.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    112.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    113.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    113.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    113.500  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    113.500  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    114.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    114.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    115.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    115.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    115.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
```



```
CAUTION SECNO=    116.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
```

```
 CAUTION SECNO=    116.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    116.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

  CAUTION SECNO=    117.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=    117.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    117.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
```

Wedge 2s.dat

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    17OCT95    TIME   10:31:18    *
**********************************************
```

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

1

17OCT95 10:31:18 PAGE 1

THIS RUN EXECUTED 17OCT95 10:31:18

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

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

```
T1          Wedge Parcel near Zolezzi              File Name: Wedge2s.dat
T2     By:  Nimbus Engineers, Reno, NV             Nimbus Job # 9311
T3          Whites Creek Ch. #2 - Split Flow       Date: 7/1/1993
      Starting WSEL @ sect #208 = 4557.23 - refer to Wedge1.dat

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
       0        2         0         0         0         0         0         0   4557.23         0

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

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     150        38        43        13        14        15        26         1        53        54
       4        25

NC    0.035     0.035     0.035      0.1       0.3
QT        1       350
X1      208     16.00      1027      1041       100       100       100
GR   4558.6      1000      4558      1027      4557      1032      4556      1033    4555.5      1034
GR     4556      1035      4557      1038      4558      1041    4558.1      1045      4558      1047
GR   4557.5      1127      4557      1154    4556.3      1214      4557      1286      4558      1309
GR     4559      1316

QT        1       200
X1      210      8.00      1078      1126       250       250       250
GR   4561.9      1000      4561      1018      4560      1036    4559.2      1078    4559.2      1126
GR     4560      1171      4561      1185      4562      1202
```

```
X1      211      12.00      1077      1157       250       250       250
GR     4566       1000      4565      1016      4564      1034      4563      1059    4562.6      1077
GR   4562.2       1148    4562.5      1157      4562      1165      4563      1176      4564      1186
GR     4565       1213      4566      1213

X1      212      16.00      1127      1142       250       250       250
GR     4569       1000      4568      1016      4567      1042      4566      1074      4565      1121
GR   4564.9       1123      4565      1125    4565.4      1127      4565      1131    4564.5      1133
GR     4565       1136      4566      1142      4567      1162      4568      1173      4569      1183
GR     4570       1193
1
   17OCT95      10:31:18                                                                    PAGE    2


X1      213      14.00      1120      1145       200       200       200
GR     4572       1000      4571      1018      4570      1047      4569      1089      4568      1120
GR     4567       1139    4566.8      1141      4567      1142      4568      1145      4569      1157
GR     4570       1172      4571      1187      4572      1201      4573      1216

X1      214      10.00      1075      1166       200       200       200
GR     4573       1000      4572      1017      4571      1075      4570      1153    4569.5      1157
GR     4570       1160      4571      1166      4572      1187      4573      1201      4574      1215

X1      215       7.00      1114      1186       160       160       160
GR     4574       1000      4573      1059      4572      1114    4571.4      1183      4572      1186
GR     4573       1207      4574      1234
1
   17OCT95      10:31:18                                                                    PAGE    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


*PROF 1
0

CCHV=     .100 CEHV=     .300
*SECNO 208.000

3265 DIVIDED FLOW

   208.000      1.73   4557.23   4557.22   4557.23   4557.50       .27       .00       .00   4558.00
     350.0        .0      28.7     321.3        .0       6.1      78.6        .0        .0   4558.00
       .00       .00      4.71      4.09      .000      .035      .035      .000   4555.50   1030.85
   .019834      100.      100.      100.         0         4         0       .00    157.55   1291.29


*SECNO 210.000
   210.000       .90   4560.10       .00       .00   4560.19       .09      2.68       .02   4559.20
     200.0      38.9     119.4      41.7      20.8      42.9      22.3        .5        .8   4559.20
       .03      1.87      2.78      1.87      .035      .035      .035      .000   4559.20   1034.30
   .004989      250.      250.      250.         6         0         0       .00    138.02   1172.32


*SECNO 211.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   211.000       .90   4562.90   4562.90       .00   4563.14       .24      2.27       .04   4562.60
     200.0       3.4     156.7      39.9       2.0      40.0       9.6        .9       1.6   4562.50
       .05      1.73      3.91      4.17      .035      .035      .035      .000   4562.00   1063.73
   .021398      250.      250.      250.         5         5         0       .00    111.12   1174.85
```

*SECNO 212.000

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

212.000	1.71	4566.21	.00	.00	4566.40	.20	3.26	.00	4565.40
200.0	136.8	62.9	.4	41.0	15.6	.4	1.2	2.1	4566.00
.07	3.34	4.04	.88	.035	.035	.035	.000	4564.50	1067.38
.008785	250.	250.	250.	6	0	0	.00	78.77	1146.14

*SECNO 213.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
213.000	1.90	4568.70	4568.70	.00	4569.12	.42	2.06	.07	4568.00
200.0	17.9	175.1	6.9	7.7	31.9	3.0	1.4	2.4	4568.00
.08	2.34	5.49	2.33	.035	.035	.035	.000	4566.80	1098.19
.012232	200.	200.	200.	3	8	0	.00	55.26	1153.44
*SECNO 214.000									
214.000	1.62	4571.12	.00	.00	4571.28	.16	2.13	.03	4571.00
200.0	.3	199.6	.1	.5	62.5	.2	1.7	2.8	4571.00
.09	.66	3.19	.66	.035	.035	.035	.000	4569.50	1067.52
.009366	200.	200.	200.	2	0	0	.00	101.18	1168.71
*SECNO 215.000									
215.000	1.10	4572.50	.00	.00	4572.65	.15	1.37	.00	4572.00
200.0	10.1	186.0	3.9	6.8	57.4	2.6	1.9	3.2	4572.00
.11	1.49	3.24	1.49	.035	.035	.035	.000	4571.40	1086.63
.007875	160.	160.	160.	4	0	0	.00	109.81	1196.45

THIS RUN EXECUTED 17OCT95 10:31:19

****
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

Whites Creek Ch. #2

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
	208.000	350.00	.00	28.69	321.31	4.71	4557.23	1030.85	1291.29	157.55	84.70
	210.000	200.00	38.90	119.43	41.67	2.78	4560.10	1034.30	1172.32	138.02	86.05
*	211.000	200.00	3.39	156.75	39.86	3.91	4562.90	1063.73	1174.85	111.12	51.56
*	212.000	200.00	136.77	62.85	.38	4.04	4566.21	1067.38	1146.14	78.77	56.94
*	213.000	200.00	17.95	175.11	6.93	5.49	4568.70	1098.19	1153.44	55.26	42.53
	214.000	200.00	.32	199.57	.12	3.19	4571.12	1067.52	1168.71	101.18	63.14
	215.000	200.00	10.14	185.98	3.87	3.24	4572.50	1086.63	1196.45	109.81	66.84

1

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	208.000	.00	.00	.00	4555.50	350.00	4557.23	4557.22	4557.50	198.34	4.71	84.70	24.85
	210.000	250.00	.00	.00	4559.20	200.00	4560.10	.00	4560.19	49.89	2.78	86.05	28.32
*	211.000	250.00	.00	.00	4562.00	200.00	4562.90	4562.90	4563.14	213.98	3.91	51.56	13.67
*	212.000	250.00	.00	.00	4564.50	200.00	4566.21	.00	4566.40	87.85	4.04	56.94	21.34
*	213.000	200.00	.00	.00	4566.80	200.00	4568.70	4568.70	4569.12	122.32	5.49	42.53	18.08
	214.000	200.00	.00	.00	4569.50	200.00	4571.12	.00	4571.28	93.66	3.19	63.14	20.67
	215.000	160.00	.00	.00	4571.40	200.00	4572.50	.00	4572.65	78.75	3.24	66.84	22.54

1

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	208.000	350.00	4557.23	.00	.00	.00	157.55	.00
	210.000	200.00	4560.10	.00	2.87	.00	138.02	250.00
*	211.000	200.00	4562.90	.00	2.80	.00	111.12	250.00
*	212.000	200.00	4566.21	.00	3.31	.00	78.77	250.00
*	213.000	200.00	4568.70	.00	2.50	.00	55.26	200.00
	214.000	200.00	4571.12	.00	2.42	.00	101.18	200.00
	215.000	200.00	4572.50	.00	1.38	.00	109.81	160.00

SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO= 211.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 211.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

WARNING SECNO= 212.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 213.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 213.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

R311wdge.dat

```
1**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    18OCT95    TIME   09:47:24    *
**********************************************
```

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

1

18OCT95 09:47:24 PAGE 1

THIS RUN EXECUTED 18OCT95 09:47:24

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

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

SPLIT FLOW BEING PERFORMED

```
SF    Split Flow

JC    Weir flow over Zolezzi ln.
JP     0      .5      40      -1       0

TW     SECT # 203 - 204
WS     2     203     204      -1       3
WC     0  4539.8     143  4542.5

TW     SECT # 204 - 205
WS     2     204     205      -1       3
WC   143  4542.5     284    4546

TW     SECT # 205 - 206
WS     2     205     206      -1       3
WC   284    4546     410  4549.3

TW     SECT # 206 - 207
WS     2     206     207      -1       3
WC   410  4549.3     581    4555

TW     SECT # 207 - 208
WS     2     207     208      -1       3
WC   581    4555     701    4560
```

1

```
T1          Wedge Parcel near Zolezzi              File Name:  R311wdge.dat
T2     By:  Nimbus Engineers, Reno, NV             Nimbus Job # 9311
T3          Whites Creek Ch. #1                    Date: Jul 1995 by ACP & RMH

   This HEC-2 model is to delineate the 100-year floodplain boundary for
   the south side of Zolezzi Ln. The floodplain boundary for the north side of
   Zollezi Ln. should not be used (?).   PROPOSED CONDITION

J1 ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
        0         2         0         0       .01         0         0         0      4540         0

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

      150        38        43        13        14        15        26         1        53        54
        4        25
         channel #1 combines with channel #2 upstream from Virginia Street

QT        1       895
NC    0.035     0.035     0.035       0.1       0.3
X1       99         7      1204      1235         0         0         0
GR     4536      1000      4535      1093      4534      1204      4534      1220      4534      1235
GR     4535      1330      4536      1400

X1      100        21      1120      1201       215       150       220
GR   4536.6      1000      4536      1020    4533.1      1027      4535      1030    4535.2      1035
GR     4535      1040    4534.9      1050      4535      1075    4535.2      1090      4535      1120
GR     4534      1170    4533.9      1179      4534      1182      4535      1201    4535.2      1210
GR   4535.2      1255    4535.5      1286      4535      1340      4535      1350      4536      1360
GR   4536.2      1370
         120 cfs from ch #1 flows easterly down Zolezzi Lane

QT        1       132
X1      202        31      1029      1034        90        90        90
GR   4537.5      1000   4537.00      1017   4537.00      1025   4536.53      1026   4536.00      1028
GR   4535.4      1028   4535.00      1029   4534.43      1030   4534.00      1030   4534.00      1031
GR   4534.0      1032   4534.84      1034   4535.00      1034   4535.33      1054   4535.47      1064
GR   4535.6      1075   4536.00      1101   4536.00      1102   4536.00      1103   4536.25      1111
GR   4536.3      1113   4536.34      1116   4536.42      1120   4536.58      1126   4536.70      1133
GR   4536.8      1136   4536.87      1147   4536.97      1147   4537.00      1149   4537.00      1149
GR     4538      1200
         CROSS SECTION 1 OF SPECIAL CULVERT OPTION - DOWNSTREAM OF CULVERT
1
```



```
X1    202.5        12      1024      1038        87        87        87
GR     4539      1000    4538.4      1020      4538      1024      4537      1026      4536      1028
GR     4535      1030    4534.5      1033      4535      1036      4536      1038    4536.1      1059
GR     4537      1109      4538      1184

NC     .035      .035      .013        .3        .5
         CROSS SECTION 2 OF SPECIAL CULVERT OPTION - AT DOWNSTREAM FACE OF CULVERT
X1      203     42.00      1023      1035        50        50        50
X3       10                                                            4538      4538
GR   4539.8      1000   4539.26      1018   4538.20      1020   4537.13      1022      4535      1026
GR     4535      1033      4536      1035      4537      1037      4538      1039      4539      1041
```

```
GR  4538.3      1044    4538.00      1049    4538.00      1056    4537.90      1062    4537.98      1069
GR  4538.0      1070    4538.12      1076    4538.15      1077    4538.15      1078    4538.33      1085
GR  4538.4      1087    4538.51      1092    4538.56      1095    4538.65      1098    4538.71      1102
GR  4538.8      1106    4538.84      1108    4538.91      1114    4538.99      1121    4539.06      1127
GR  4539.1      1133    4539.17      1135    4539.32      1141    4539.37      1143    4539.48      1148
GR  4539.5      1152    4539.63      1156     4539.7      1159    4539.81      1165    4539.84      1167
GR  4540.0      1174    4539.98      1175
      SC CARD DEFINES A 7' x 3' RCB

SC  1.013        .2        2.7         0           3           7          72        10.1    4535.38      4535
NC   .035       .035       .035
      CROSS SECTION 3 OF SPECIAL CULVERT OPTION - AT UPSTREAM FACE OF CULVERT
X1  203.5          7       1025      1062          72          72          72
X2                             2  4538.38     4539.38
X3     10                                                              4538.38    4538.38
GR  4541.2      1000    4540.83      1022    4538.10      1025    4535.38      1028    4535.38      1035
GR   4540      1062       4542      1134
      CROSS SECTION 4 OF SPECIAL CULVERT OPTION - UPSTREAM OF CULVERT

X1  203.7          9       1025      1045          12          12          12
GR  4541.5      1000    4541.09      1020        4540        1025        4538      1027        4536      1030
GR    4538      1040       4540      1045        4542        1110        4544      1210

X1    204      32.00       1028      1034          59          59          59
GR  4542.7      1000    4542.39      1012    4542.29      1016    4542.12      1020    4542.00      1023
GR  4541.7      1024    4541.00      1028        4540      1029        4540      1030    4540.00      1032
GR  4540.7      1033    4541.00      1034    4541.51      1035    4542.00      1037    4542.23      1038
GR  4542.4      1040    4542.76      1043    4542.77      1045    4542.85      1046    4542.91      1047
GR  4542.9      1063    4543.00      1069    4543.05      1070    4543.07      1071    4543.32      1078
GR  4543.4      1081    4543.57      1086    4543.71      1091    4543.78      1093    4543.97      1099
GR  4544.0      1100    4544.02      1101

X1    205      21.00       1024      1036         141         141         141
GR  4546.0      1000    4545.98      1002    4545.97      1003    4545.83      1008    4545.00      1024
GR  4544.0      1026    4543.20      1027    4543.00      1028    4543.00      1031    4544.00      1033
GR  4544.9      1036    4545.13      1037    4546.00      1040    4546.53      1051    4547.00      1060
GR  4547.1      1063    4548.00      1085    4548.47      1097    4548.64      1102    4549.00      1111
GR  4549.5      1113

   18OCT95     09:47:24                                                                          PAGE    4

ET                7.1                                                 1000      1058
X1    206      45.00       1019      1042         126         123         126
GR  4549.3      1000    4549.29      1008    4549.16      1013    4549.00      1019    4548.94      1020
GR  4548.0      1029    4547.00      1031    4547.00      1035    4547.96      1037    4548.00      1038
GR  4548.2      1039    4549.00      1042    4549.21      1046    4549.24      1047    4549.36      1050
GR  4549.4      1053    4549.46      1056    4549.50      1058    4549.50      1061    4549.56      1064
GR  4549.6      1067    4549.44      1071    4549.35      1074    4549.30      1076    4549.18      1080
GR  4549.1      1081    4549.03      1086    4549.02      1087    4548.94      1092    4548.92      1093
GR  4548.9      1094    4548.78      1101    4548.66      1103    4548.55      1108    4548.19      1114
GR  4548.1      1116    4548.00      1118    4548.00      1121    4548.00      1123    4548.47      1124
GR  4549.0      1126    4549.25      1127    4550.00      1129    4550.65      1136    4551.00      1140

ET                7.1                                                 1000      1070
X1    207      68.00       1019      1040         171         143         171
GR  4555.0      1000    4555.00      1002    4555.01      1019    4554.82      1020    4554.73      1021
GR  4554.5      1024    4554.27      1028    4554.00      1030    4553.34      1031    4553.00      1034
GR  4553.0      1035    4553.38      1036    4554.00      1038    4554.79
```

```
    1039     4555.00      1040
GR  4555.0      1070     4555.03      1074     4555.04      1078     4555.04      1091     4555.02      1097
GR  4555.0      1104     4554.97      1110     4554.92      1116     4554.92      1117     4554.87      1122
GR  4554.8      1123     4554.82      1128     4554.79      1129     4554.74      1135     4554.71      1136
GR  4554.7      1139     4554.59      1143     4554.53      1146     4554.47      1150     4554.38      1154
GR  4554.3      1156     4554.31      1160     4554.31      1161     4554.27      1163     4554.27      1164
GR  4554.3      1165     4554.24      1167     4554.30      1175     4554.29      1177     4554.27      1179
GR  4554.3      1180     4554.26      1183     4554.25      1184     4554.00      1200     4554.00      1209
GR  4554.3      1212     4554.83      1216     4555.00      1218     4555.32      1226     4555.66      1234
GR  4555.8      1238     4555.84      1239     4556.00      1243     4556.10      1246     4556.13      1247
GR  4556.3      1253     4556.40      1255     4556.71      1262     4556.80      1265     4556.85      1266
GR  4556.9      1270     4557.00      1272     4557.09      1274

ET              7.1                                        1000     1065
X1      208    16.00      1027      1041       93        92       93
GR  4558.6      1000     4558       1027     4557       1032     4556       1033     4555.5       1034
GR    4556      1035     4557       1038     4558       1041     4558.1     1045     4558         1047
GR  4557.5      1127     4557       1154     4556.3     1214     4557       1286     4558         1309
GR    4559      1316

ET              7.1                                        1000     1065
X1      209    19.00      1041      1103       87        87       87
GR    4562      1000     4561.1     1026     4561.4     1033     4561.2     1038     4561         1041
GR  4560.8      1046     4560.6     1057     4560.7     1087     4561       1103     4561.7       1128
GR  4560.9      1137     4561       1142     4562.1     1150     4561.8     1159     4562         1167
GR  4561.7      1175     4562       1180     4563       1217     4564.5     1243

  18OCT95      09:47:24                                                                    PAGE     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

 *PROF 1

CCHV=     .100 CEHV=     .300
 *SECNO 99.000
    99.000      1.35   4535.35       .00   4540.00   4535.60       .26       .00       .00   4534.00
     884.4     361.3     214.5     308.5      99.4      41.7      84.5        .0        .0   4534.00
       .00      3.64      5.14      3.65      .035      .035      .035      .000   4534.00   1060.90
   .009888        0.        0.        0.         0         0         7       .00    293.27   1354.17


*SECNO 100.000
3280 CROSS SECTION    100.00 EXTENDED       .01 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.42

   100.000      3.11   4536.21   4535.58       .00   4536.28       .07       .66       .02   4535.00
     884.4     248.1     373.4     262.9     124.0     145.1     154.3       1.4       1.4   4535.00
       .03      2.00      2.57      1.70      .035      .035      .035      .000   4533.10   1012.99
   .001687      215.      220.      150.        18        20         0       .00    357.01   1370.00


 *SECNO 202.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .15

   202.000      2.39   4536.39       .00       .00   4536.43       .05       .15       .00   4535.00
     121.4       1.7      24.7      95.0       1.5      10.4      62.3       1.9       1.9   4535.00
       .04      1.15      2.37      1.52      .035      .035      .035      .000   4534.00   1026.54
   .001475       90.       90.       90.         3         0         0       .00     91.85   1118.39
```

*SECNO 202.500
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

202.500	2.10	4536.60	4536.60	.00	4536.88	.27	.26	.07	4538.00
121.4	.0	78.4	43.0	.0	15.9	18.5	2.1	2.0	4536.00
.05	.00	4.94	2.32	.000	.035	.035	.000	4534.50	1026.80
.009213	87.	87.	87.	20	9	0	.00	60.04	1086.84

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

CCHV= .300 CEHV= .500
*SECNO 203.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 4538.00 ELREA= 4538.00

203.000	1.77	4536.77	4536.77	.00	4537.49	.72	.21	.22	4537.13
121.4	.0	121.4	.0	.0	17.8	.0	2.1	2.1	4536.00
.05	.00	6.81	.00	.000	.013	.000	.000	4535.00	1022.68
.002333	50.	50.	50.	3	11	0	.00	12.32	1035.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	1	.013	.20	2.70	.00	3.00	7.00	72.00	10	1	4535.38	4535.00

CHART 10 - BOX CULVERT; 90-DEGREE HEADWALL; CHAMFERED OR BEVELED INLET EDGES
SCALE 1 - INLET EDGES CHAMFERED 3/4-INCH

*SECNO 203.500

SPECIAL CULVERT INLET CONTROL
EGIC = 4538.831 EGOC = 4538.749 PCWSE= 4536.765 ELTRD= 4539.380

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.73

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
4538.83	4538.75	1.35	0.	121.	1.907	21.0	4539.38	0.

203.500	3.39	4538.77	.00	.00	4538.83	.06	1.35	.00	4538.10
121.4	.1	121.2	.0	.3	63.6	.0	2.2	2.1	4540.00
.06	.47	1.91	.00	.035	.035	.000	.000	4535.38	1024.26
.000781	72.	72.	72.	2	0	0	.00	30.59	1054.84

*SECNO 203.700

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 = .25

203.700	2.57	4538.57	.00	.00	4539.08	.52	.02	.23	4540.00
121.4	.0	121.4	.0	.0	21.1	.0	2.2	2.1	4540.00
.06	.00	5.76	.00	.000	.035	.000	.000	4536.00	1026.42
.012941	12.	12.	12.	3	0	0	.00	15.01	1041.44

*SECNO 204.000

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

204.000	2.51	4542.51	4542.51	.00	4542.96	.45	.61	.02	4541.00
121.4	27.6	82.4	11.3	8.8	13.3	3.6	2.2	2.1	4541.00
.06	3.16	6.18	3.16	.035	.035	.035	.000	4540.00	1007.48
.008417	59.	59.	59.	20	5	0	.00	33.41	1040.89

*SECNO 205.000

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

205.000	2.31	4545.31	4545.31	.00	4545.94	.63	1.50	.09	4545.00
121.4	1.3	119.4	.6	.9	18.6	.3	2.3	2.2	4544.90
.07	1.44	6.41	1.84	.035	.035	.035	.000	4543.00	1018.09
.013972	141.	141.	141.	20	8	0	.00	19.52	1037.61

*SECNO 206.000

3185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1000.0 1058.0 TYPE= 1 TARGET= 58.000

206.000	1.97	4548.97	4548.97	4548.97	4549.48	.50	2.09	.04	4549.00
121.4	.0	121.4	.0	.0	21.3	.0	2.3	2.3	4549.00
.07	.00	5.69	.00	.000	.035	.000	.000	4547.00	1019.47
.019954	126.	126.	123.	5	11	0	.00	22.42	1041.89

*SECNO 207.000

3185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

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

3470 ENCROACHMENT STATIONS= 1000.0 1070.0 TYPE= 1 TARGET= 70.000

207.000	2.22	4555.22	4555.22	4555.22	4555.52	.30	2.34	.06	4555.01
130.1	6.5	113.0	10.6	4.2	24.3	6.7	2.4	2.4	4555.00
.09	1.56	4.65	1.58	.035	.035	.035	.000	4553.00	1000.00
.010304	171.	171.	143.	8	9	0	.00	70.00	1070.00

*SECNO 208.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1000.0 1065.0 TYPE= 1 TARGET= 65.000

208.000	2.89	4558.39	4558.39	4558.39	4558.73	.34	.95	.02	4558.00
132.0	5.0	102.9	24.1	3.5	20.0	10.1	2.5	2.6	4558.00
.09	1.44	5.15	2.38	.035	.035	.035	.000	4555.50	1009.36
.010099	93.	93.	92.	20	11	0	.00	55.64	1065.00

*SECNO 209.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1000.0 1065.0 TYPE= 1 TARGET= 65.000

209.000	1.04	4561.64	4561.64	4561.64	4561.94	.30	1.04	.01	4561.00
132.0	26.5	105.5	.0	10.4	22.4	.0	2.6	2.7	100000.00
.10	2.55	4.72	.00	.035	.035	.000	.000	4560.60	1010.27
.014342	87.	87.	87.	20	22	0	.00	54.73	1065.00

TW SECT # 203 - 204

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	41	4536.765	4542.507	203.000	204.000

TW SECT # 204 - 205

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	9.34	.00	.00	7.67	41	4542.507	4545.307	204.000	205.000

TW SECT # 205 - 206

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	7.67	41	4545.307	4548.972	205.000	206.000

TW SECT # 206 - 207

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
8.77	8.82	.59	8.77	8.83	.60	41	4548.972	4555.224	206.000	207.000

TW SECT # 207 - 208

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1.87	1.87	.20	10.64	10.70	.53	41	4555.224	4558.392	207.000	208.000

1

THIS RUN EXECUTED 18OCT95 09:48:15

****
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

Whites Creek Ch. #1

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
	99.000	884.36	361.32	214.55	308.49	5.14	4535.35	1060.90	1354.17	293.27	225.53
*	100.000	884.36	248.11	373.36	262.89	2.57	4536.21	1012.99	1370.00	357.01	423.48
*	202.000	121.36	1.69	24.66	95.01	2.37	4536.39	1026.54	1118.39	91.85	74.20
*	202.500	121.36	.00	78.38	42.98	4.94	4536.60	1026.80	1086.84	60.04	34.42
*	203.000	121.36	.00	121.36	.00	6.81	4536.77	1022.68	1035.00	12.32	17.81
*	203.500	121.36	.12	121.24	.00	1.91	4538.77	1024.26	1054.84	30.59	63.81
*	203.700	121.36	.00	121.36	.00	5.76	4538.57	1026.42	1041.44	15.01	21.06
*	204.000	121.36	27.64	82.42	11.30	6.18	4542.51	1007.48	1040.89	33.41	25.68
*	205.000	121.36	1.30	119.42	.64	6.41	4545.31	1018.09	1037.61	19.52	19.88
*	206.000	121.36	.00	121.36	.00	5.69	4548.97	1019.47	1041.89	22.42	21.32
*	207.000	130.13	6.50	112.99	10.64	4.65	4555.22	1000.00	1070.00	70.00	35.22
*	208.000	132.00	4.98	102.95	24.07	5.15	4558.39	1009.36	1065.00	55.64	33.57
*	209.000	132.00	26.52	105.48	.00	4.72	4561.64	1010.27	1065.00	54.73	32.76

Whites Creek Ch. #1

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	99.000	.00	.00	.00	4534.00	884.36	4535.35	.00	4535.60	98.88	5.14	225.53	88.94
*	100.000	220.00	.00	.00	4533.10	884.36	4536.21	4535.58	4536.28	16.87	2.57	423.48	215.29
*	202.000	90.00	.00	.00	4534.00	121.36	4536.39	.00	4536.43	14.75	2.37	74.20	31.59

* 202.500	87.00	.00	.00	4534.50	121.36	4536.60	4536.60	4536.88	92.13	4.94	34.42	12.64
* 203.000	50.00	.00	.00	4535.00	121.36	4536.77	4536.77	4537.49	23.33	6.81	17.81	25.13
* 203.500	72.00	4539.38	4538.38	4535.38	121.36	4538.77	.00	4538.83	7.81	1.91	63.81	43.43
* 203.700	12.00	.00	.00	4536.00	121.36	4538.57	.00	4539.08	129.41	5.76	21.06	10.67
* 204.000	59.00	.00	.00	4540.00	121.36	4542.51	4542.51	4542.96	84.17	6.18	25.68	13.23
* 205.000	141.00	.00	.00	4543.00	121.36	4545.31	4545.31	4545.94	139.72	6.41	19.88	10.27
* 206.000	126.00	.00	.00	4547.00	121.36	4548.97	4548.97	4549.48	199.54	5.69	21.32	8.59
* 207.000	171.00	.00	.00	4553.00	130.13	4555.22	4555.22	4555.52	103.04	4.65	35.22	12.82
* 208.000	93.00	.00	.00	4555.50	132.00	4558.39	4558.39	4558.73	100.99	5.15	33.57	13.13
* 209.000	87.00	.00	.00	4560.60	132.00	4561.64	4561.64	4561.94	143.42	4.72	32.76	11.02

1

Whites Creek Ch. #1

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	99.000	884.36	4535.35	.00	.00	-4.65	293.27	.00
*	100.000	884.36	4536.21	.00	.86	.00	357.01	220.00
*	202.000	121.36	4536.39	.00	.18	.00	91.85	90.00
*	202.500	121.36	4536.60	.00	.21	.00	60.04	87.00
*	203.000	121.36	4536.77	.00	.16	.00	12.32	50.00
*	203.500	121.36	4538.77	.00	2.01	.00	30.59	72.00
*	203.700	121.36	4538.57	.00	-.21	.00	15.01	12.00
*	204.000	121.36	4542.51	.00	3.94	.00	33.41	59.00
*	205.000	121.36	4545.31	.00	2.80	.00	19.52	141.00
*	206.000	121.36	4548.97	.00	3.67	.00	22.42	126.00
*	207.000	130.13	4555.22	.00	6.25	.00	70.00	171.00
*	208.000	132.00	4558.39	.00	3.17	.00	55.64	93.00
*	209.000	132.00	4561.64	.00	3.25	.00	54.73	87.00

1

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=    100.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    202.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    202.500  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    202.500  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    202.500  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    203.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=    203.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    203.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    203.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    204.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    204.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    204.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    205.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=    205.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    205.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    206.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=    206.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    207.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    207.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    208.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    208.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    208.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    209.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    209.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=    209.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
```

Wedge6.dat

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    19OCT95     TIME   10:23:04   *
**********************************************
```

```
**********************************************
*  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 19OCT95 10:23:04

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

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

SPLIT FLOW BEING PERFORMED

SF

```
JC     Split flow from chan #2
JP     0       0       40       -1       0

TW     Sect # 100 - 101
WS     4      100      101       -1      2.8
WC     0   4536.1       76     4537      150     4538      192   4538.9

TW     Sect # 101 - 102
WS     4      101      102       -1      2.8
WC     0   4538.9      100     4540      162     4541      205   4541.4

TW     Sect # 102 - 103
WS     4      102      103       -1      2.8
WC   205   4541.4      243     4542      314     4543      408    4545

TW     Sect # 103 - 104
WS     4      103      104       -1      2.8
WC   408    4545      500     4546      575     4547      595   4548.1
```



```
T1          Wedge Parcel near Zolezzi              File Name:  Wedge6.dat
```

```
T2    By:  Nimbus Engineers, Reno, NV, ACP          Nimbus Job # 9311
T3         Whites Creek Ch. #2                      Date:  May 9, 1994
           1410 cfs all remains on south side of Flanders Road  (elevated)
           Proposed Conditions - Interim Design

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0        2         0         0         0         0       0.1         0     4535.4         0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

       1        0        -1                                                                    15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

      150        38        43        13        14        15        26         1        53        54
        4        25
           120 cfs from ch #1 flowing east on Zolezzi combines with 1440 cfs in ch 2

QT        1      1530
NC    0.035     0.035     0.035       0.1       0.3
X1       99         7      1204      1235         0         0         0
GR     4536      1000      4535      1093      4534      1204      4534      1220      4534      1235
GR     4535      1330      4536      1400

X1      100        21      1120      1210       215       150       220
GR   4536.6      1000      4536      1020    4533.1      1027      4535      1030    4535.2      1035
GR     4535      1040    4534.9      1050      4535      1075    4535.2      1090      4535      1120
GR     4534      1170    4533.9      1179      4534      1182      4535      1201    4535.2      1210
GR   4535.2      1255    4535.5      1286      4535      1340      4535      1350      4536      1360
GR   4536.1      1370
           Channel #2

QT        1      1410
X1      101     13.00      1070      1103       180       180       180
GR     4539      1000      4538      1070      4537      1078    4536.7      1090    4537.0      1098
GR     4538      1103    4538.6      1140      4538      1208    4537.9      1225    4537.9      1258
GR   4537.8      1353      4538      1360    4538.9      1384

X1      102     11.00      1000      1120       200       195       200
GR   4542.1      1000      4542      1013      4541      1060    4540.3      1080      4541      1090
GR     4542      1120    4541.5      1180    4541.3      1275    4541.5      1375    4541.4      1410
GR   4541.6      1440

X1      103     13.00      1035      1080       185       165       162
GR     4546      1000      4545      1035      4544      1043    4543.8      1050      4544      1062
GR     4545      1070    4545.7      1080      4545      1090    4544.5      1240    4544.3      1410
GR   4544.6      1480    4544.8      1526      4545      1554

    19OCT95      10:23:04                                                                PAGE     3


X1      104     17.00      1042      1120       165       140       165
GR     4550      1000      4549      1015      4548      1042      4547      1055    4546.4      1087
GR     4547      1095      4548      1110    4548.1      1120      4548      1130      4547      1208
GR   4546.9      1220      4547      1235    4546.8      1275      4547      1298      4548      1377
GR     4548      1410    4548.2      1445

X1      105     17.00      1042      1112       145       115       160
GR     4553      1000      4552      1021      4551      1042    4550.7      1060    4550.6      1068
GR   4550.6      1093      4551      1102      4550      1105      4551      1107    4551.2      1112
GR     4551      1113      4550      1127      4550      1138    4549.4      1180      4550      1245
GR     4551      1353    4551.5      1370
```

X1	106	16.00	1000	1063	180	180	230			
GR	4555	1000	4554	1020	4553.7	1038	4554	1055	4554.5	1063
GR	4554	1072	4553	1075	4552.9	1077	4553	1079	4553.2	1217
GR	4554	1298	4554	1305	4553	1306	4553	1309	4554	1310
GR	4555	1315								
X1	108	91.00	1049	1100	180	230	190			
GR	4559.0	1000	4559.00	1003	4558.87	1010	4558.81	1016	4558.81	1017
GR	4558.8	1023	4558.74	1025	4558.67	1029	4558.62	1034	4558.47	1039
GR	4558.2	1045	4558.17	1046	4558.00	1049	4557.35	1053	4557.00	1055
GR	4557.0	1070	4557.15	1073	4557.27	1076	4557.29	1078	4557.39	1081
GR	4557.5	1084	4557.54	1087	4557.61	1091	4557.62	1093	4557.63	1099
GR	4557.7	1100	4557.65	1107	4557.66	1110	4557.66	1115	4557.67	1118
GR	4557.7	1166	4557.74	1169	4557.74	1171	4557.75	1174	4557.74	1176
GR	4557.8	1184	4557.75	1192	4557.74	1194	4557.74	1196	4557.76	1199
GR	4557.8	1200	4557.74	1201	4557.75	1204	4557.74	1205	4557.75	1208
GR	4557.7	1210	4557.74	1213	4557.72	1215	4557.72	1218	4557.69	1220
GR	4557.7	1222	4557.61	1228	4557.56	1230	4557.42	1234	4557.25	1239
GR	4557.2	1240	4557.00	1246	4556.97	1247	4556.84	1251	4556.84	1252
GR	4556.7	1275	4556.70	1277	4557.00	1290	4557.00	1291	4557.12	1295
GR	4557.1	1295	4557.15	1296	4557.37	1304	4557.66	1320	4557.66	1322
GR	4557.7	1325	4557.68	1327	4557.70	1330	4557.72	1333	4557.73	1335
GR	4557.7	1337	4557.73	1339	4557.74	1341	4557.74	1344	4557.73	1346
GR	4557.8	1357	4557.78	1358	4557.81	1363	4557.81	1364	4557.85	1369
GR	4558.0	1376	4558.0	1381	4558.00	1384	4558.08	1386	4558.22	1388
GR	4559	1399								
ET		7.1					941	1301		
X1	109	76.00	1000	1057	100	125	115			
GR	4562	941	4561.00	1000	4560.56	1006	4560.00	1011	4559.87	1012
GR	4559.3	1016	4559.00	1018	4558.77	1019	4558.00	1022	4558.00	1029
GR	4558.0	1032	4558.20	1034	4559.00	1043	4559.13	1044	4560.0	1053
GR	4560.1	1056	4560.09	1057	4560.09	1057	4560.41	1077	4560.42	1081
GR	4560.4	1083	4560.44	1084	4560.45	1088	4560.46	1091	4560.47	1095
GR	4560.8	1123	4561.00	1126	4561.00	1128	4561.00	1134	4561.00	1135
GR	4561.0	1137	4561.00	1139	4561.00	1145	4561.00	1145	4561.00	1146
GR	4561.0	1149	4561.00	1152	4561.00	1153	4560.91	1158	4560.87	1159
GR	4561.5	1174	4560.33	1179	4560.30	1180	4560.00	1188	4559.95	1189
GR	4560.0	1189	4559.66	1196	4559.64	1198	4559.61	1199	4559.50	1202
GR	4559.4	1204	4559.37	1206	4559.37	1210	4559.27	1219	4559.28	1221
GR	4559.3	1222	4559.30	1223	4559.31	1224	4559.33	1226	4559.28	1229

GR	4559.4	1231	4559.42	1233	4559.47	1236	4559.54	1241	4559.64	1246
GR	4559.7	1249	4559.80	1255	4559.83	1257	4560.00	1263	4560.00	1265
GR	4560.6	1277	4561.00	1285	4561.21	1291	4561.12	1293	4561.42	1300
GR	4561.4	1301								
X1	110	16.00	1067	1110	140	140	140			
GR	4565	1000	4564	1048	4563	1067	4562	1070	4561.5	1072
GR	4562	1078	4563	1093	4563.4	1110	4563.1	1167	4563.2	1190
GR	4563	1210	4563	1220	4562.3	1262	4563	1308	4564	1335
GR	4564.3	1356								
X1	111	20.00	1105	1137	175	205	175			
GR	4570.8	1000	4570	1070	4569	1095	4568	1105	4567	1110
GR	4566	1115	4567	1126	4568	1137	4568	1152	4568.4	1180
GR	4568	1220	4567	1252	4566.6	1266	4567	1270	4567.4	1273
GR	4567	1310	4567	1355	4568	1415	4569	1445	4570	1540
X1	112	20.00	1066	1105	175	195	175			
GR	4574	1000	4573	1049	4572	1066	4571	1075	4570.8	1082
GR	4571	1092	4572	1105	4572.2	1110	4572	1115	4571	1118
GR	4570.6	1120	4571	1123	4571.1	1149	4572	1178	4572.9	1222

```
GR     4572       1268      4571.2      1358       4572       1438       4573       1503      4573.2      1530

ET                 7.1                                                    1310       1830
X1      113      17.00        1360       1452        205        150        175
GR   4575.5       1000        4575       1060     4574.4       1164       4575       1210        4576      1250
GR   4576.4       1290      4576.4       1310       4576       1340       4575       1360      4574.5      1415
GR     4575       1452        4574       1575       4573       1600       4574       1630      4574.4      1715
GR     4575       1750        4576       1830

ET                 7.1                                                    1250       1640
X1    113.5      19.00        1240       1330        200        170        235
X4        1     4577.3        1300
GR     4579       1000        4578       1025       4577       1056       4576       1083      4575.8      1105
GR     4576       1109        4577       1120     4577.3       1150       4578       1182      4578.4      1195
GR   4578.4       1240        4578       1265       4578       1330       4578       1335        4577      1400
GR   4576.9       1440        4577       1482       4578       1564     4578.5       1640

ET                 7.1                                                    1215       1618
X1      114      22.00        1215       1288        200        170        185
X4        2       4581        1280       4581       1295
GR     4583       1000        4579       1108       4580       1127       4581       1138        4582      1160
GR   4582.3       1183        4582       1215       4581       1245     4580.5       1254      4581.7      1288
GR     4581       1316        4580       1400     4579.7       1446       4580       1460        4581      1520
GR   4581.4       1552      4581.8       1618       4581       1670     4580.5       1753        4581      1780
GR   4581.4       1870        4582       1908

ET                 7.1                                                    1150       1540
X1      115      14.00        1230       1207        230        185        230
GR   4588.5       1000        4588       1004       4586       1010       4587       1020      4587.7      1125
GR   4587.4       1150        4587       1165       4586       1190       4585       1230      4584.4      1250
GR     4585       1270        4586       1450       4587       1540       4588       1595

     19OCT95      10:23:04                                                                                PAGE     5


X1      116      17.00        1025       1108        230        220        230
GR   4591.2       1000        4591       1005       4589       1010       4591       1015        4590      1020
GR     4589       1025        4588       1045       4588       1058     4587.8       1073        4588      1083
GR     4589       1108        4588       1120       4589       1162     4589.6       1210      4589.3      1235
GR     4590       1256        4591       1266

X1      117      24.00        1180       1225        150        165        130
GR     4595       1000        4593       1108     4592.7       1128       4593       1137      4593.5      1142
GR     4593       1147        4592       1150       4593       1153       4594       1155      4594.2      1164
GR     4594       1180        4593       1188       4592       1191     4591.8       1209        4592      1218
GR     4593       1222        4594       1225     4594.1       1228       4593       1236        4592      1238
GR   4591.8       1240        4594       1244     4594.8       1254       4595       1304

     19OCT95      10:23:04                                                                                PAGE     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 99.000
    99.000      1.40   4535.40       .00   4535.40   4535.68       .28       .00       .00   4534.00
     995.5     411.2     233.5     350.8     107.3      43.4      91.1        .0        .0   4534.00
       .00      3.83      5.38      3.85       .035      .035      .035      .000   4534.00   1055.81
```

```
   .010253        0.        0.        0.         0         0         0      .00    302.18   1357.99


FLOW DISTRIBUTION FOR SECNO=     99.00          CWSEL=   4535.40

STA=    1056.     1093.     1204.     1235.     1330.     1358.
  PER Q=      1.1      40.2      23.5      34.4        .8
   AREA=      7.4      99.9      43.4      85.5       5.6
    VEL=      1.5       4.0       5.4       4.0       1.5
  DEPTH=       .2        .9       1.4        .9        .2

*SECNO 100.000
3280 CROSS SECTION    100.00 EXTENDED       .20 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.45

   100.000      3.20   4536.30   4535.62       .00   4536.38       .08       .68       .02   4535.00
     995.5     281.4     426.9     287.2     133.9     163.3     159.3       1.5       1.4   4535.20
       .02      2.10      2.61      1.80      .035      .035      .035      .000   4533.10   1009.96
   .001713       215.      220.      150.        18        20         0      .00    360.04   1370.00


FLOW DISTRIBUTION FOR SECNO=    100.00          CWSEL=   4536.30

STA=    1010.     1027.     1035.     1050.     1075.     1090.     1120.     1210.     1255.     1286.     1340.     1360.     1370.
  PER Q=      3.1       3.0       4.1       7.3       3.6       7.2      42.9       9.3       5.0      10.4       4.0        .2
   AREA=     13.8      12.8      19.5      33.8      18.0      36.0     163.3      49.5      29.5      56.8      21.0       2.5
    VEL=      2.2       2.4       2.1       2.1       2.0       2.0       2.6       1.9       1.7       1.8       1.9        .7
  DEPTH=       .8       1.6       1.3       1.4       1.2       1.2       1.8       1.1       1.0       1.1       1.1        .3

*SECNO 101.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL

   19OCT95       10:23:04                                                                                                PAGE     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


3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   101.000      1.96   4538.67   4538.67       .00   4538.98       .31       .62       .07   4538.00
     914.6      33.7     312.6     568.3      15.5      51.4     164.4       3.0       2.9   4538.00
       .04      2.18      6.08      3.46      .035      .035      .035      .000   4536.70   1023.45
   .011411       180.      180.      180.        20        14         0      .00    354.29   1377.74


FLOW DISTRIBUTION FOR SECNO=    101.00          CWSEL=   4538.67

STA=    1023.     1070.     1103.     1140.     1208.     1225.     1258.     1353.     1360.     1378.
  PER Q=      3.7      34.2       3.4       6.3       4.8      10.5      33.5       2.2       1.4
   AREA=     15.5      51.4      13.5      24.8      12.2      25.2      77.4       5.4       5.9
    VEL=      2.2       6.1       2.3       2.3       3.6       3.8       4.0       3.8       2.2
  DEPTH=       .3       1.6        .4        .4        .7        .8        .8        .8        .3

*SECNO 102.000

3265 DIVIDED FLOW

3280 CROSS SECTION    102.00 EXTENDED       .39 FEET

7185 MINIMUM SPECIFIC ENERGY
```

3720 CRITICAL DEPTH ASSUMED

102.000	1.69	4541.99	4541.99	.00	4542.26	.27	2.84	.00	4542.10
986.3	.0	364.7	621.6	.0	77.8	162.7	4.0	4.7	4542.00
.05	.00	4.69	3.82	.000	.035	.035	.000	4540.30	1013.53
.018453	200.	200.	195.	4	9	0	.00	424.79	1440.00

FLOW DISTRIBUTION FOR SECNO= 102.00 CWSEL= 4541.99

STA=	1014.	1120.	1180.	1275.	1375.	1410.	1440.
PER Q=	37.0	3.3	23.0	24.2	7.3	5.3	
AREA=	77.8	14.3	55.9	58.9	18.9	14.7	
VEL=	4.7	2.3	4.1	4.1	3.8	3.5	
DEPTH=	.7	.2	.6	.6	.5	.5	

*SECNO 103.000

19OCT95 10:23:04 PAGE 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

3265 DIVIDED FLOW

3280 CROSS SECTION 103.00 EXTENDED .15 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

103.000	1.35	4545.15	4545.15	.00	4545.41	.26	2.83	.00	4545.00
1207.5	.4	175.4	1031.7	.4	34.2	263.4	5.1	6.4	4545.70
.06	.95	5.12	3.92	.035	.035	.035	.000	4543.80	1029.82
.016297	185.	162.	165.	4	14	0	.00	508.40	1554.00

FLOW DISTRIBUTION FOR SECNO= 103.00 CWSEL= 4545.15

STA=	1030.	1035.	1080.	1090.	1240.	1410.	1480.	1526.	1554.
PER Q=	.0	14.5	.0	14.5	47.0	17.3	5.4	1.2	
AREA=	.4	34.2	.2	59.7	127.2	48.9	20.6	6.9	
VEL=	1.0	5.1	1.0	2.9	4.5	4.3	3.2	2.1	
DEPTH=	.1	.9	.0	.4	.7	.7	.4	.2	

*SECNO 104.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

104.000	1.72	4548.12	4548.12	.00	4548.50	.38	2.30	.03	4548.00
1410.0	.2	383.4	1026.4	.2	74.8	211.3	6.0	7.9	4548.10
.07	.80	5.13	4.86	.035	.035	.035	.000	4546.40	1038.80
.015469	165.	165.	140.	4	11	0	.00	391.95	1430.74

FLOW DISTRIBUTION FOR SECNO= 104.00 CWSEL= 4548.12

STA=	1039.	1042.	1120.	1130.	1208.	1220.	1235.	1275.	1298.	1377.	1410.	1431.
PER Q=	.0	27.2	.0	13.1	5.8	7.3	20.8	12.0	13.3	.4	.1	
AREA=	.2	74.8	.7	48.3	14.0	17.5	48.8	28.0	48.9	3.9	1.2	
VEL=	.8	5.1	.9	3.8	5.9	5.9	6.0	6.0	3.8	1.3	.8	
DEPTH=	.1	1.0	.1	.6	1.2	1.2	1.2	1.2	.6	.1	.1	

*SECNO 105.000
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

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

105.000	1.74	4551.14	4551.14	.00	4551.58	.43	1.77	.02	4551.00
1410.0	.2	81.8	1328.0	.2	29.3	245.8	6.8	8.9	4551.20
.07	.85	2.79	5.40	.035	.035	.035	.000	4549.40	1039.00
.013477	145.	160.	115.	5	5	0	.00	317.16	1357.86

FLOW DISTRIBUTION FOR SECNO= 105.00 CWSEL= 4551.14

STA=	1039.	1042.	1112.	1127.	1138.	1180.	1245.	1353.	1358.
PER Q=	.0	5.8	2.3	4.8	27.1	41.9	18.1	.0	
AREA=	.2	29.3	9.1	12.6	60.6	93.8	69.5	.3	
VEL=	.8	2.8	3.6	5.4	6.3	6.3	3.7	.8	
DEPTH=	.1	.4	.6	1.1	1.4	1.4	.6	.1	

*SECNO 106.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

106.000	1.42	4554.32	4554.32	.00	4554.79	.47	2.63	.01	4555.00
1410.0	.0	52.6	1357.4	.0	18.5	244.5	8.0	10.2	4554.50
.08	.00	2.85	5.55	.000	.035	.035	.000	4552.90	1013.53
.015515	180.	230.	180.	3	15	0	.00	292.10	1311.62

FLOW DISTRIBUTION FOR SECNO= 106.00 CWSEL= 4554.32

STA=	1014.	1063.	1072.	1075.	1077.	1079.	1217.	1298.	1305.	1306.	1309.	1310.	1312.
PER Q=	3.7	.1	.8	1.3	1.3	72.5	17.7	.4	.2	1.8	.2	.0	
AREA=	18.5	.9	2.5	2.7	2.7	168.9	58.6	2.3	.8	4.0	.8	.3	
VEL=	2.8	1.6	4.5	6.5	6.5	6.1	4.3	2.5	3.7	6.4	3.7	1.6	
DEPTH=	.4	.1	.8	1.4	1.4	1.2	.7	.3	.8	1.3	.8	.2	

*SECNO 108.000
7185 MINIMUM SPECIFIC ENERGY
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

3720 CRITICAL DEPTH ASSUMED

108.000	1.62	4558.32	4558.32	.00	4558.72	.40	3.53	.01	4558.00
1410.0	1.7	270.8	1137.5	1.0	50.8	225.5	9.3	11.9	4557.70
.10	1.74	5.33	5.05	.035	.035	.035	.000	4556.70	1042.41
.015848	180.	190.	230.	4	8	0	.00	346.96	1389.36

FLOW DISTRIBUTION FOR SECNO= 108.00 CWSEL= 4558.32

STA=	1042.	1049.	1100.	1118.	1166.	1192.	1213.	1230.	1240.	1246.	1251.	1275.	1290.
PER Q=	.1	19.2	3.3	8.5	3.7	3.2	3.1	3.4	3.2	3.3	18.8	11.0	
AREA=	1.0	50.8	11.7	30.3	14.5	12.1	10.9	9.3	7.3	7.0	37.1	22.3	
VEL=	1.7	5.3	4.0	3.9	3.6	3.7	4.0	5.1	6.1	6.7	7.1	7.0	
DEPTH=	.1	1.0	.7	.6	.6	.6	.6	.9	1.2	1.4	1.5	1.5	

STA=	1290.	1296.	1304.	1320.	1339.	1363.	1389.
PER Q=	3.3	3.3	4.2	3.2	3.4	1.8	
AREA=	7.5	8.5	12.8	11.8	13.3	9.2	
VEL=	6.2	5.5	4.6	3.9	3.6	2.8	
DEPTH=	1.3	1.1	.8	.6	.6	.3	

*SECNO 109.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 941.0 1301.0 TYPE= 1 TARGET= 360.000

109.000	2.93	4560.93	4560.93	4560.93	4561.46	.52	1.66	.04	4561.00
1410.0	.0	650.4	759.6	.0	97.6	153.1	10.1	12.7	4560.09
.10	.00	6.67	4.96	.000	.035	.035	.000	4558.00	1000.91
.011885	100.	115.	125.	10	17	0	.00	235.17	1283.67

FLOW DISTRIBUTION FOR SECNO= 109.00 CWSEL= 4560.93

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

STA=	1001.	1057.	1077.	1123.	1196.	1202.	1210.	1219.	1223.	1229.	1236.	1246.	1255.
PER Q=	46.1	3.5	3.1	5.0	3.2	5.4	6.6	3.0	4.4	4.7	5.7	4.1	
AREA=	97.6	13.7	17.3	16.6	8.0	12.3	14.5	6.6	9.7	10.7	13.9	10.9	
VEL=	6.7	3.6	2.5	4.3	5.6	6.2	6.4	6.5	6.4	6.1	5.8	5.3	
DEPTH=	1.7	.7	.4	.2	1.3	1.5	1.6	1.6	1.6	1.5	1.4	1.2	

STA=	1255.	1265.	1284.
PER Q=	3.4	1.9	
AREA=	10.2	8.7	
VEL=	4.7	3.2	
DEPTH=	1.0	.5	

*SECNO 110.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

110.000	2.44	4563.94	4563.94	4563.94	4564.36	.43	1.80	.01	4563.00
1410.0	25.1	331.3	1053.6	8.3	55.8	208.0	10.9	13.5	4563.40
.11	3.02	5.94	5.06	.035	.035	.035	.000	4561.50	1049.23
.013933	140.	140.	140.	7	10	0	.00	284.01	1333.25

FLOW DISTRIBUTION FOR SECNO= 110.00 CWSEL= 4563.94

STA=	1049.	1067.	1110.	1167.	1190.	1210.	1220.	1262.	1308.	1333.
PER Q=	1.8	23.5	10.8	5.5	5.3	3.2	22.7	24.8	2.5	

AREA=	8.3	55.8	39.0	18.1	16.7	9.4	54.0	59.1	11.8
VEL=	3.0	5.9	3.9	4.3	4.4	4.8	5.9	5.9	3.0
DEPTH=	.5	1.3	.7	.8	.8	.9	1.3	1.3	.5

*SECNO 111.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

111.000	2.33	4568.33	4568.33	4568.33	4568.77	.44	2.76	.00	4568.00
1410.0	.8	255.6	1153.6	.5	42.5	224.5	12.2	14.9	4568.00
.12	1.50	6.01	5.14	.035	.035	.035	.000	4566.00	1101.71
.013876	175.	175.	205.	13	12	0	.00	311.13	1424.87

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= 111.00 CWSEL= 4568.33

STA=	1102.	1105.	1137.	1252.	1266.	1273.	1310.	1355.	1415.	1425.
PER Q=	.1	18.1	10.1	10.1	4.2	16.1	25.6	15.6	.2	
AREA=	.5	42.5	40.7	21.4	9.5	41.8	59.8	49.7	1.6	
VEL=	1.5	6.0	3.5	6.6	6.2	5.4	6.0	4.4	1.5	
DEPTH=	.2	1.3	.4	1.5	1.4	1.1	1.3	.8	.2	

*SECNO 112.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

112.000	1.83	4572.43	4572.43	4572.43	4572.83	.41	2.82	.00	4572.00
1410.0	3.0	276.7	1130.3	1.6	46.4	231.1	13.4	16.4	4572.00
.13	1.90	5.97	4.89	.035	.035	.035	.000	4570.60	1058.74
.015744	175.	175.	195.	5	19	0	.00	359.76	1465.77

FLOW DISTRIBUTION FOR SECNO= 112.00 CWSEL= 4572.43

STA=	1059.	1066.	1105.	1120.	1149.	1178.	1358.	1438.	1466.
PER Q=	.2	19.6	3.2	19.3	8.8	26.0	22.0	.8	
AREA=	1.6	46.4	9.3	40.7	25.4	83.6	66.2	5.9	
VEL=	1.9	6.0	4.9	6.7	4.9	4.4	4.7	1.9	
DEPTH=	.2	1.2	.6	1.4	.9	.5	.8	.2	

*SECNO 113.000

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1310.0 1830.0 TYPE= 1 TARGET= 520.000

113.000	2.12	4575.12	4575.12	4575.12	4575.51	.39	2.30	.00	4575.00
1410.0	.1	88.8	1321.1	.1	34.0	258.7	14.4	17.7	4575.00
.14	.78	2.61	5.11	.035	.035	.035	.000	4573.00	1357.61
.014273	205.	175.	150.	4	11	0	.00	401.96	1759.57

FLOW DISTRIBUTION FOR SECNO= 113.00 CWSEL= 4575.12

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

STA=	1358.	1360.	1452.	1575.	1600.	1630.	1715.	1750.	1760.
PER Q=	.0	6.3	19.9	20.1	24.1	26.6	3.0	.0	
AREA=	.1	34.0	76.2	40.5	48.6	78.2	14.7	.6	
VEL=	.8	2.6	3.7	7.0	7.0	4.8	2.8	.8	
DEPTH=	.1	.4	.6	1.6	1.6	.9	.4	.1	

*SECNO 113.500
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1250.0 1640.0 TYPE= 1 TARGET= 390.000

113.500	2.49	4578.29	4578.29	4578.29	4578.71	.42	2.63	.01	100000.00
1410.0	.0	158.3	1251.7	.0	44.2	234.1	15.5	19.4	4578.00
.15	.00	3.58	5.35	.000	.035	.035	.000	4575.80	1250.00
.015660	200.	235.	170.	4	11	0	.00	358.23	1608.23

FLOW DISTRIBUTION FOR SECNO= 113.50 CWSEL= 4578.29

STA=	1250.	1330.	1335.	1400.	1440.	1482.	1564.	1608.
PER Q=	11.2	.2	16.6	24.6	25.8	20.9	.7	
AREA=	44.2	1.5	51.4	53.6	56.3	64.9	6.4	
VEL=	3.6	2.3	4.5	6.5	6.5	4.5	1.5	
DEPTH=	.6	.3	.8	1.3	1.3	.8	.1	

*SECNO 114.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 1215.0 1618.0 TYPE= 1 TARGET= 403.000

114.000	2.43	4581.43	4581.43	4581.43	4581.86	.43	2.50	.00	4582.00
1410.0	.0	89.9	1320.1	.0	27.8	247.1	16.6	20.7	4581.70
.16	.00	3.23	5.34	.000	.035	.035	.000	4579.00	1231.99
.013677	200.	185.	170.	3	8	0	.00	319.86	1557.56

FLOW DISTRIBUTION FOR SECNO= 114.00 CWSEL= 4581.43

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

STA=	1232.	1288.	1295.	1316.	1400.	1446.	1460.	1520.	1552.	1558.
PER Q=	6.4	.1	1.8	26.4	34.8	10.6	18.8	1.0	.0	
AREA=	27.8	.9	9.1	78.4	72.8	22.2	56.0	7.5	.1	
VEL=	3.2	1.8	2.8	4.7	6.7	6.7	4.7	1.9	.0	

```
 DEPTH=       .5       .1       .4       .9      1.6      1.6       .9       .2       .0

*SECNO 115.000
1707 STCHL OF   1230.00 GREATER THAN STCHR    1207.00
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     1150.0    1540.0  TYPE=      1  TARGET=      390.000
   115.000      1.95   4586.35   4586.35   4586.35   4586.81       .46      2.76       .01 100000.00
    1410.0        .0       2.6    1407.4        .0       1.5     258.3      17.8      22.1   4586.00
       .17       .00      1.68      5.45      .000      .035      .035      .000   4584.40   1181.27
   .016098       230.      230.       185.         5        15         0       .00    300.15   1481.42


FLOW DISTRIBUTION FOR SECNO=    115.00          CWSEL=   4586.35

STA=    1181.    1190.    1230.    1250.    1270.    1450.    1481.
  PER Q=       .2     11.6     17.6     17.6     52.4       .7
   AREA=      1.5     34.0     33.0     33.0    152.8      5.5
    VEL=      1.7      4.8      7.5      7.5      4.8      1.7
  DEPTH=       .2       .8      1.6      1.6       .8       .2

*SECNO 116.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   116.000      2.03   4589.83   4589.83   4589.83   4590.38       .55      3.20       .03   4589.00
    1410.0       9.0     867.5     533.5       3.5     132.1     111.4      19.1      23.4   4589.00
       .18      2.60      6.56      4.79      .035      .035      .035      .000   4587.80   1007.92
   .012870       230.      230.       220.         2         8         0       .00    234.32   1250.99


FLOW DISTRIBUTION FOR SECNO=    116.00          CWSEL=   4589.83

1
  19OCT95      10:23:04                                                                    PAGE   15

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


STA=    1008.    1010.    1012.    1025.    1108.    1120.    1162.    1210.    1235.    1251.
  PER Q=       .2       .2       .3     61.5      6.6     23.2      5.7      1.7       .6
   AREA=       .9       .9      1.7    132.1     16.0     56.0     25.6      9.6      4.3
    VEL=      2.6      2.6      2.7      6.6      5.8      5.8      3.2      2.5      2.0
  DEPTH=       .4       .4       .1      1.6      1.3      1.3       .5       .4       .3

*SECNO 117.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   117.000      2.60   4594.40   4594.40   4594.40   4594.98       .58      1.74       .01   4594.00
    1410.0     622.4     656.4     131.2     129.9      90.7      23.6      19.9      24.2   4594.00
       .18      4.79      7.24      5.55      .035      .035      .035      .000   4591.80   1032.46
   .011606       150.      130.       165.        20        11         0       .00    216.53   1248.99


FLOW DISTRIBUTION FOR SECNO=    117.00          CWSEL=   4594.40

STA=    1032.    1108.    1128.    1137.    1147.    1153.    1180.    1225.    1238.    1244.    1249.
  PER Q=      13.5     13.5      6.1      4.1      5.5      1.6     46.6      3.9      5.3       .1
```

AREA=	52.8	31.0	13.9	11.5	11.4	9.3	90.7	11.6	11.0	1.0
VEL=	3.6	6.1	6.1	5.0	6.8	2.4	7.2	4.7	6.8	1.6
DEPTH=	.7	1.5	1.5	1.1	1.9	.3	2.0	.9	1.8	.2

TW Sect # 100 - 101

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
39.13	39.69	1.42	39.13	39.69	1.42	9	4536.297	4538.665	100.000	101.000

TW Sect # 101 - 102

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
71.71	72.03	.45	110.84	111.72	.79	9	4538.665	4541.989	101.000	102.000

TW Sect # 102 - 103

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
221.22	222.05	.37	332.06	333.77	.51	9	4541.989	4545.148	102.000	103.000

TW Sect # 103 - 104

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
202.46	203.81	.66	534.52	537.58	.57	9	4545.148	4548.119	103.000	104.000

1

THIS RUN EXECUTED 19OCT95 10:23:35

****
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

Whites Creek Ch. #2

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
	99.000	995.48	411.20	233.48	350.80	5.38	4535.40	1055.81	1357.99	302.18	241.81
*	100.000	995.48	281.43	426.85	287.20	2.61	4536.30	1009.96	1370.00	360.04	456.54
*	101.000	914.61	33.69	312.62	568.30	6.08	4538.67	1023.45	1377.74	354.29	231.35
*	102.000	986.32	.00	364.69	621.63	4.69	4541.99	1013.53	1440.00	424.79	240.49
*	103.000	1207.54	.37	175.42	1031.75	5.12	4545.15	1029.82	1554.00	508.40	298.05

*	104.000	1410.00	.15	383.41	1026.44	5.13	4548.12	1038.80	1430.74	391.95	286.24
*	105.000	1410.00	.18	81.83	1327.99	2.79	4551.14	1039.00	1357.86	317.16	275.40
*	106.000	1410.00	.00	52.61	1357.38	2.85	4554.32	1013.53	1311.62	292.10	263.00
*	108.000	1410.00	1.71	270.79	1137.50	5.33	4558.32	1042.41	1389.36	346.96	277.27
*	109.000	1410.00	.00	650.40	759.60	6.67	4560.93	1000.91	1283.67	235.17	250.65
*	110.000	1410.00	25.05	331.34	1053.61	5.94	4563.94	1049.23	1333.25	284.01	272.16
*	111.000	1410.00	.81	255.60	1153.59	6.01	4568.33	1101.71	1424.87	311.13	267.62
*	112.000	1410.00	2.95	276.72	1130.32	5.97	4572.43	1058.74	1465.77	359.76	279.03
*	113.000	1410.00	.11	88.83	1321.05	2.61	4575.12	1357.61	1759.57	401.96	292.88
*	113.500	1410.00	.00	158.26	1251.74	3.58	4578.29	1250.00	1608.23	358.23	278.38
*	114.000	1410.00	.00	89.87	1320.12	3.23	4581.43	1231.99	1557.56	319.86	274.88
*	115.000	1410.00	.00	2.56	1407.44	1.68	4586.35	1181.27	1481.42	300.15	259.78

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
*	116.000	1410.00	9.03	867.48	533.49	6.56	4589.83	1007.92	1250.99	234.32	247.02
*	117.000	1410.00	622.39	656.43	131.18	7.24	4594.40	1032.46	1248.99	216.53	244.19

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	99.000	.00	.00	.00	4534.00	995.48	4535.40	.00	4535.68	102.53	5.38	241.81	98.31
*	100.000	220.00	.00	.00	4533.10	995.48	4536.30	4535.62	4536.38	17.13	2.61	456.54	240.51
*	101.000	180.00	.00	.00	4536.70	914.61	4538.67	4538.67	4538.98	114.11	6.08	231.35	85.62
*	102.000	200.00	.00	.00	4540.30	986.32	4541.99	4541.99	4542.26	184.53	4.69	240.49	72.61
*	103.000	162.00	.00	.00	4543.80	1207.54	4545.15	4545.15	4545.41	162.97	5.12	298.05	94.59
*	104.000	165.00	.00	.00	4546.40	1410.00	4548.12	4548.12	4548.50	154.69	5.13	286.24	113.37
*	105.000	160.00	.00	.00	4549.40	1410.00	4551.14	4551.14	4551.58	134.77	2.79	275.40	121.46
*	106.000	230.00	.00	.00	4552.90	1410.00	4554.32	4554.32	4554.79	155.15	2.85	263.00	113.20
*	108.000	190.00	.00	.00	4556.70	1410.00	4558.32	4558.32	4558.72	158.48	5.33	277.27	112.00
*	109.000	115.00	.00	.00	4558.00	1410.00	4560.93	4560.93	4561.46	118.85	6.67	250.65	129.34
*	110.000	140.00	.00	.00	4561.50	1410.00	4563.94	4563.94	4564.36	139.33	5.94	272.16	119.45

* 111.000	175.00	.00	.00	4566.00	1410.00	4568.33	4568.33	4568.77	138.76	6.01	267.62	119.70
* 112.000	175.00	.00	.00	4570.60	1410.00	4572.43	4572.43	4572.83	157.44	5.97	279.03	112.37
* 113.000	175.00	.00	.00	4573.00	1410.00	4575.12	4575.12	4575.51	142.73	2.61	292.88	118.02
* 113.500	235.00	.00	.00	4575.80	1410.00	4578.29	4578.29	4578.71	156.60	3.58	278.38	112.68
* 114.000	185.00	.00	.00	4579.00	1410.00	4581.43	4581.43	4581.86	136.77	3.23	274.88	120.57
* 115.000	230.00	.00	.00	4584.40	1410.00	4586.35	4586.35	4586.81	160.98	1.68	259.78	111.13
* 116.000	230.00	.00	.00	4587.80	1410.00	4589.83	4589.83	4590.38	128.70	6.56	247.02	124.29
* 117.000	130.00	.00	.00	4591.80	1410.00	4594.40	4594.40	4594.98	116.06	7.24	244.19	130.88

Whites Creek Ch. #2

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	99.000	995.48	4535.40	.00	.00	.00	302.18	.00
*	100.000	995.48	4536.30	.00	.90	.00	360.04	220.00
*	101.000	914.61	4538.67	.00	2.37	.00	354.29	180.00
*	102.000	986.32	4541.99	.00	3.32	.00	424.79	200.00
*	103.000	1207.54	4545.15	.00	3.16	.00	508.40	162.00
*	104.000	1410.00	4548.12	.00	2.97	.00	391.95	165.00
*	105.000	1410.00	4551.14	.00	3.02	.00	317.16	160.00
*	106.000	1410.00	4554.32	.00	3.18	.00	292.10	230.00
*	108.000	1410.00	4558.32	.00	3.99	.00	346.96	190.00
*	109.000	1410.00	4560.93	.00	2.62	.00	235.17	115.00
*	110.000	1410.00	4563.94	.00	3.00	.00	284.01	140.00
*	111.000	1410.00	4568.33	.00	4.39	.00	311.13	175.00
*	112.000	1410.00	4572.43	.00	4.10	.00	359.76	175.00
*	113.000	1410.00	4575.12	.00	2.69	.00	401.96	175.00
*	113.500	1410.00	4578.29	.00	3.17	.00	358.23	235.00
*	114.000	1410.00	4581.43	.00	3.14	.00	319.86	185.00
*	115.000	1410.00	4586.35	.00	4.92	.00	300.15	230.00
*	116.000	1410.00	4589.83	.00	3.48	.00	234.32	230.00
*	117.000	1410.00	4594.40	.00	4.57	.00	216.53	130.00

SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 100.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 101.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 101.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 101.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 102.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 102.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 103.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 103.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 104.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 104.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 105.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 105.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 106.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 106.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 108.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 108.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 109.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 109.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 110.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 110.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 111.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 111.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 112.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 112.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 113.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 113.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 113.500 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 113.500 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 114.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 114.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 115.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 115.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 116.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 116.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 117.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 117.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY

311CHNL1.dat

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    21NOV95    TIME    12:42:21   *
**********************************************
```

```
**************************************
*  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 21NOV95 12:42:21

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

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

SPLIT FLOW BEING PERFORMED

SF

```
JC     Split flow from chan #2
JP     0       0       40      -1       0

TW     Sect # 100 - 101
WS     4      100      101      -1     2.8
WC     0  4536.1       76    4537     150    4538     192  4538.9

TW     Sect # 101 - 102
WS     4      101      102      -1     2.8
WC     0  4538.9      100    4540     162    4541     205  4541.4

TW     Sect # 102 - 103
WS     4      102      103      -1     2.8
WC   205  4541.4      243    4542     314    4543     408    4545

TW     Sect # 103 - 1095
WS     3      103     1095      -1     2.8
```

```
WC   408    4545     504    4546     521    4550

   21NOV95      12:42:21                                                    PAGE    2


 T1          Proposed Channel Design                 File Name:  311chnl1.dat
 T2          Nimbus Engineers, Reno, NV              Nimbus Job # 9311
 T3          Wedge Meadows Subdivision Unit 1        Date: Oct 1995 by: ACP

             Proposed channel is riprap lined at 2% slope,
             10' bottom width and 3:1 side slopes.

             Peak flow below detention basin is 1133 cfs, see HEC-1 and HEC-2
             File: 311weir1.dat.  HEC-1 routing decreases peak flow to 1178 cfs
             just upstream of the split flow sheeting off to the east.  The
             maximum split flow in the existing condition was 450 cfs.  HEC-1
             shows the proposed condition split at 413 cfs.

 J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0         2         0         0        .01         0         0         0      4548         0

 J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

       1         0        -1

 J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     150         38        43         13         14         15         26          1         53         54
       4         25         5

 QT        2       1251       3000
 NC    0.035      0.035      0.035        0.1        0.3
       Existing cross section
 X1       99          7       1204       1235          0          0          0
 GR     4536       1000       4535       1093       4534       1204       4534       1220       4534       1235
 GR     4535       1330       4536       1400
       Existing cross section

 X1      100         21       1120       1210        215        150        220
 GR   4536.3       1000       4536       1020     4533.1       1027       4535       1030     4535.2       1035
 GR     4535       1040     4534.9       1050       4535       1075     4535.2       1090       4535       1120
 GR     4534       1170     4533.9       1179       4534       1182       4535       1201     4535.2       1210
 GR   4535.2       1255     4535.5       1286       4535       1340       4535       1350       4536       1360
 GR   4536.1       1370

 QT        2       1121       3000
       Existing cross section extended to Wedge Parkway
 X1      101         18       1070       1103        180        180        180
 GR     4539        780       4538        823     4537.5        880     4537.6        902       4538        935
 GR     4539       1000       4538       1070       4537       1078     4536.7       1090       4537       1098
 GR     4538       1103     4538.6       1140       4538       1208     4537.9       1225     4537.9       1258
 GR   4537.8       1353       4538       1360     4538.9       1384
       Existing cross section extended to Wedge Parkway
1
   21NOV95      12:42:21                                                    PAGE    3
```

```
X1     102      16     1000     1120      200      195      200
GR    4544     800     4542      829   4541.3      926     4542      990     4542      990
GR  4542.1    1000     4542     1013     4541     1060   4540.3     1080     4541     1090
GR    4542    1120   4541.5     1180   4541.3     1275   4541.5     1375   4541.4     1410
GR  4541.6    1440
      Existing cross section extended to Wedge Parkway

X1     103      18     1035     1080      185      165      162
GR  4551.8     934     4551      984     4550      988     4550      988     4546     1000
GR    4546    1000     4545     1035     4544     1043   4543.8     1050     4544     1062
GR    4545    1070   4545.7     1080     4545     1090   4544.5     1240   4544.3     1410
GR  4544.6    1480   4544.8     1526   4544.8     1554

X1    1095      22     1055     1110      125      120      120
GR  4556.2    1000     4555     1050     4554     1055     4548     1073     4547     1076
GR    4547    1086     4548     1089     4549     1110     4549     1167     4548     1222
GR    4546    1253   4545.5     1261   4545.5     1277     4546     1292     4547     1317
GR    4546    1417   4545.9     1436     4546     1450   4546.4     1551   4546.4     1640
GR    4548    1655     4552     1672

QT       2    1135     3000
X1    1200      19     1050     1118      108      100      105
GR  4558.4    1000     4558     1050     4548     1080     4548     1090     4550     1096
GR    4551    1103   4551.5     1118   4551.5     1168     4551     1196     4550     1227
GR    4548    1275   4547.6     1288     4548     1298     4549     1323     4548     1378
GR  4547.5    1450   4547.5     1490     4548     1502     4554     1527
      Begin riprap
     CROSS SECTION 1 OF SPECIAL CULVERT MODEL - DOWNSTREAM OF CULVERT

X1    1331       8     1050     1126      136      130      131
GR  4560.2    1000     4560     1050     4550     1080     4549     1083     4549     1093
GR    4550    1096     4560     1126     4562     1135

NC    .035    .035     .012       .3       .5
     CROSS SECTION 2 OF SPECIAL CULVERT METHOD - AT DOWNSTREAM FACE OF CULVERT
X1    1391       6     1065     1097       40       80       60
X3      10                                                    4560     4560
GR  4560.8    1000     4560     1050     4550     1065     4550     1097     4560     1111
GR    4562    1117
     SC CARD DEFINES A TRIPLE 10' X 5' RCB

SC   3.012     0.5      3.0        0        5       10      225     10.1   4556.5     4550
     CROSS SECTION 3 OF SPECIAL CULVERT MODEL - AT UPSTREAM FACE OF CULVERT
X1    1616       4     1000   1030.1      200      250      225
X2                      2   4561.5     4563
X3      10                                                    4566     4566
BT      -6     857     4564              900     4563              938     4563
BT             967     4564             1082     4566             1217     4568
GR  4561.5    1000   4556.5   1000.1   4556.5     1030   4561.5   1030.1

  21NOV95    12:42:21                                                              PAGE    4


NC    .035    .035     .035
     CROSS SECTION 4 OF SPECIAL CULVERT MODEL - UPSTREAM OF CULVERT
X1    1662       6     1000   1067.1       85       20       46
GR  4570     1000   4556.8     1037   4556.8     1055     4560     1063     4561     1067
GR  4566   1067.1
```

```
NC                                    .1      .3
X1   1700      6     1000    1070     48      32      38
GR   4572   1000     4560    1031   4557.1  1038    4557.1  1048    4560    1052
GR   4566   1070

X1   1704      6     1000    1070      4       4       4
GR   4572   1000     4560    1031   4558.1  1038    4558.1  1048    4560    1052
GR   4566   1070

X1   1785      4     1000    1070     81      81      81
GR   4574   1000     4559    1042   4559    1052    4566    1070

X1   1789      4     1000    1070      4       4       4
GR   4574   1000     4560    1042   4560    1052    4566    1070

X1   1989      4     1000    1058    196     204     200
GR   4572   1000     4562    1030   4562    1040    4568    1058

X1   2189      4     1000    1052    200     200     200
GR   4572   1000     4564    1024   4564    1034    4570    1052

X1   2333      6     1010    1070    124     168     144
GR   4572   1000     4572    1010   4570    1015    4566    1027    4566    1040
GR   4576   1070

X1   2337      6     1010    1070      4       4       4
GR   4572   1000     4572    1010   4570    1015    4567    1027    4567    1040
GR   4577   1070

QT      2   1390     3000
X1   2433      8     1000    1077    112      84      96
GR   4578   1000     4576    1007   4574    1015    4572    1021    4570    1033
GR   4568   1039     4568    1042   4576    1077

X1   2437      0        0            4       4       4            1

X1   2533      4     1000    1067     96      96      96
GR   4580   1000     4570    1030   4570    1043    4578    1067

QT      2   1410     3000
X1   2537      0        0       0    4       4       4            1
1
     21NOV95    12:42:21                                                PAGE    5


X1   2633      0        0       0     96      96      96           1

X1   2637      0        0       0      4       4       4           1

X1   2733      0        0       0     96      96      96           1

X1   2737      0        0       0      4       4       4           1

X1   2833      0        0       0     96      96      96           1

X1   2837      0        0       0      4       4       4           1

X1   2933      4     1000    1061    108      86      96
```

```
GR     4586      1000      4578      1024      4578      1038      4586      1061
X1     2937         0         0         0         4         4         4                 1
X1     3033         0         0         0       100        94        96                 1
X1     3037         0         0         0         4         4         4                 1
X1     3135         9      1000      1195       196        99        98
GR     4592      1000      4590      1005      4588      1013      4584      1033      4582      1159
GR     4582      1169      4584      1176      4590      1195      4588      1217
```



```
    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       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 99.000
    99.000      1.38   4535.38       .00   4548.00   4535.65       .27       .00       .00   4534.00
     951.5     391.8     225.4     334.3     104.9      42.9      89.1        .0        .0   4534.00
       .00      3.74      5.26      3.75      .035      .035      .035      .000   4534.00   1057.35
   .009946        0.        0.        0.         0         0         9       .00    299.48   1356.83


*SECNO 100.000
 3280 CROSS SECTION    100.00 EXTENDED      .17 FEET


 3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.42

   100.000      3.16   4536.26   4535.60       .00   4536.34       .08       .67       .02   4535.00
     951.5     268.9     412.2     270.4     131.2     160.1     153.7       1.5       1.4   4535.20
       .02      2.05      2.57      1.76      .035      .035      .035      .000   4533.10   1002.25
   .001705      215.      220.      150.        18        20         0       .00    367.75   1370.00


*SECNO 101.000

 3265 DIVIDED FLOW

 3685 20 TRIALS ATTEMPTED WSEL,CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED
   101.000      1.71   4538.41   4538.41       .00   4538.66       .25       .62       .05   4538.00
     834.5     309.2     242.6     282.7      91.5      43.0      98.2       2.9       3.1   4538.00
       .04      3.38      5.64      2.88      .035      .035      .035      .000   4536.70    805.41
   .012494      180.      180.      180.        20        11         0       .00    452.34   1370.91


*SECNO 102.000

 3265 DIVIDED FLOW
```

3280 CROSS SECTION 102.00 EXTENDED .31 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

21NOV95 12:42:21 PAGE 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
102.000	1.62	4541.92	4541.92	.00	4542.12	.20	2.83	.01	4542.10
871.1	108.0	301.0	462.1	43.5	70.2	139.5	4.0	5.4	4542.00
.05	2.48	4.29	3.31	.035	.035	.035	.000	4540.30	840.77
.016464	200.	200.	195.	5	10	0	.00	551.73	1440.00

*SECNO 103.000

3265 DIVIDED FLOW

3280 CROSS SECTION 103.00 EXTENDED .29 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

103.000	1.29	4545.09	4545.09	.00	4545.33	.25	2.76	.01	4545.00
1054.0	.1	162.1	891.7	.1	32.0	238.3	5.0	7.4	4545.70
.06	.69	5.06	3.74	.035	.035	.035	.000	4543.80	1031.92
.016847	185.	162.	165.	4	14	0	.00	504.59	1554.00

*SECNO 1095.000

3265 DIVIDED FLOW

1095.000	1.43	4546.93	.00	.00	4547.21	.28	1.86	.01	4554.00
1121.0	.0	.0	1121.0	.0	.0	266.0	5.8	8.7	4549.00
.07	.00	.00	4.21	.000	.000	.035	.000	4545.50	1238.56
.014444	125.	120.	120.	4	0	0	.00	397.88	1644.98

*SECNO 1200.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1200.000	1.33	4548.83	4548.83	.00	4549.26	.44	1.52	.05	4558.00
1135.0	.0	42.7	1092.3	.0	10.3	204.3	6.3	9.4	4551.50
.08	.00	4.13	5.35	.000	.035	.035	.000	4547.50	1077.52
.015920	108.	105.	100.	2	11	0	.00	251.49	1505.45

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

*SECNO 1331.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1331.000	4.74	4553.74	4553.74	.00	4555.26	1.52	1.90	.33	4560.00
1135.0	.0	1135.0	.0	.0	114.7	.0	6.8	9.9	4560.00
.08	.00	9.90	.00	.000	.035	.000	.000	4549.00	1068.79
.013322	136.	131.	130.	20	23	0	.00	38.42	1107.21

CCHV= .300 CEHV= .500
*SECNO 1391.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.13

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 4560.00 ELREA= 4560.00

1391.000	4.60	4554.60	.00	.00	4555.52	.92	.09	.18	4550.00
1135.0	.0	1135.0	.0	.0	147.3	.0	7.0	9.9	4550.00
.08	.00	7.71	.00	.000	.012	.000	.000	4550.00	1065.00
.000506	40.	60.	80.	2	0	0	.00	32.00	1097.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.012	.50	3.00	.00	5.00	10.00	225.00	10	1	4556.50	4550.00

CHART 10 - BOX CULVERT; 90-DEGREE HEADWALL; CHAMFERED OR BEVELED INLET EDGES
SCALE 1 - INLET EDGES CHAMFERED 3/4-INCH

*SECNO 1616.000

SPECIAL CULVERT OUTLET CONTROL
EGIC = 4562.306 EGOC = 4562.583 PCWSE= 4554.600 ELTRD= 4563.000

3280 CROSS SECTION 1616.00 EXTENDED .29 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

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
4562.31	4562.58	7.06	0.	1135.	7.151	150.0	4563.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 4566.00 ELREA= 4566.00

1616.000	5.29	4561.79	.00	.00	4562.58	.79	7.06	.00	4561.50
1135.0	.0	1135.0	.0	.0	158.7	.0	7.8	10.1	4561.50
.09	.00	7.15	.00	.000	.012	.000	.000	4556.50	1000.00
.000534	200.	225.	250.	3	0	0	.00	30.10	1030.10

*SECNO 1662.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .32

1662.000	5.07	4561.87	.00	.00	4562.65	.77	.06	.01	4570.00
1135.0	.0	1135.0	.0	.0	161.0	.0	7.9	10.1	4566.00
.09	.00	7.05	.00	.000	.035	.000	.000	4556.80	1022.76
.005299	85.	46.	20.	2	0	0	.00	44.26	1067.02

CCHV= .100 CEHV= .300
*SECNO 1700.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1700.000	5.27	4562.37	4562.37	.00	4564.01	1.64	.30	.26	4572.00
1135.0	.0	1135.0	.0	.0	110.4	.0	8.1	10.1	4566.00
.10	.00	10.28	.00	.000	.035	.000	.000	4557.10	1024.88
.013435	48.	38.	32.	20	8	0	.00	34.24	1059.11

*SECNO 1704.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

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

1704.000	4.79	4562.89	4562.89	.00	4564.44	1.55	.05	.01	4572.00
1135.0	.0	1135.0	.0	.0	113.5	.0	8.1	10.1	4566.00
.10	.00	10.00	.00	.000	.035	.000	.000	4558.10	1023.53
.013281	4.	4.	4.	20	11	0	.00	37.14	1060.67

*SECNO 1785.000

1785.000	5.02	4564.02	.00	.00	4565.46	1.44	1.01	.01	4574.00
1135.0	.0	1135.0	.0	.0	117.8	.0	8.3	10.2	4566.00
.10	.00	9.63	.00	.000	.035	.000	.000	4559.00	1027.95
.011696	81.	81.	81.	3	0	0	.00	36.95	1064.90

*SECNO 1789.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1789.000	4.74	4564.74	4564.74	.00	4566.26	1.52	.05	.02	4574.00
1135.0	.0	1135.0	.0	.0	114.7	.0	8.3	10.2	4566.00
.10	.00	9.89	.00	.000	.035	.000	.000	4560.00	1027.79
.013310	4.	4.	4.	20	11	0	.00	38.43	1066.21

*SECNO 1989.000

1989.000	5.30	4567.30	.00	.00	4568.36	1.06	2.06	.05	4572.00
1135.0	.0	1135.0	.0	.0	137.3	.0	8.9	10.4	4568.00
.10	.00	8.27	.00	.000	.035	.000	.000	4562.00	1014.10
.008196	196.	200.	204.	3	0	0	.00	41.80	1055.90

*SECNO 2189.000

2189.000	5.00	4569.00	.00	.00	4570.28	1.28	1.85	.07	4572.00
1135.0	.0	1135.0	.0	.0	125.1	.0	9.5	10.6	4570.00
.11	.00	9.07	.00	.000	.035	.000	.000	4564.00	1008.99
.010533	200.	200.	200.	2	0	0	.00	40.01	1049.01

*SECNO 2333.000

2333.000	4.54	4570.54	.00	.00	4571.91	1.37	1.60	.03	4572.00
1135.0	.0	1135.0	.0	.0	120.8	.0	9.9	10.7	4576.00
.12	.00	9.40	.00	.000	.035	.000	.000	4566.00	1013.65
.011773	124.	144.	168.	3	0	0	.00	39.97	1053.62

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 2337.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2337.000	4.24	4571.24	4571.24	.00	4572.70	1.46	.05	.03	4572.00
1135.0	.0	1135.0	.0	.0	116.9	.0	9.9	10.7	4577.00
.12	.00	9.71	.00	.000	.035	.000	.000	4567.00	1011.90
.013394	4.	4.	4.	20	11	0	.00	40.83	1052.72

*SECNO 2433.000

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2433.000	5.49	4573.49	4573.49	.00	4574.97	1.47	1.28	.00	4578.00
1390.0	.0	1390.0	.0	.0	142.8	.0	10.2	10.8	4576.00
.12	.00	9.74	.00	.000	.035	.000	.000	4568.00	1016.52
.013280	112.	96.	84.	20	11	0	.00	49.52	1066.04

*SECNO 2437.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2437.000	5.50	4574.50	4574.50	.00	4575.97	1.47	.05	.00	4579.00
1390.0	.0	1390.0	.0	.0	142.9	.0	10.2	10.8	4577.00
.12	.00	9.73	.00	.000	.035	.000	.000	4569.00	1016.51
.013249	4.	4.	4.	20	5	0	.00	49.54	1066.05

*SECNO 2533.000

3301 HV CHANGED MORE THAN HVINS

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

2533.000	5.93	4575.93	.00	.00	4576.83	.90	.81	.06	4580.00
1390.0	.0	1390.0	.0	.0	182.5	.0	10.5	10.9	4578.00
.12	.00	7.62	.00	.000	.035	.000	.000	4570.00	1012.22
.005801	96.	96.	96.	3	0	0	.00	48.57	1060.78

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 2537.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2537.000	4.93	4575.93	4575.93	.00	4577.57	1.64	.03	.22	4581.00
1410.0	.0	1410.0	.0	.0	137.1	.0	10.6	10.9	4579.00
.12	.00	10.29	.00	.000	.035	.000	.000	4571.00	1015.21
.012974	4.	4.	4.	20	15	0	.00	42.59	1057.79

*SECNO 2633.000

2633.000	5.39	4577.39	.00	.00	4578.64	1.26	1.03	.04	4582.00
1410.0	.0	1410.0	.0	.0	156.7	.0	10.9	11.0	4580.00
.12	.00	9.00	.00	.000	.035	.000	.000	4572.00	1013.86
.009021	96.	96.	96.	3	0	0	.00	45.27	1059.14

*SECNO 2637.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2637.000	4.94	4577.94	4577.94	.00	4579.57	1.64	.04	.11	4583.00
1410.0	.0	1410.0	.0	.0	137.3	.0	10.9	11.0	4581.00
.12	.00	10.27	.00	.000	.035	.000	.000	4573.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

*SECNO 2733.000

2733.000	5.38	4579.38	.00	.00	4580.64	1.26	1.03	.04	4584.00
1410.0	.0	1410.0	.0	.0	156.6	.0	11.2	11.1	4582.00
.13	.00	9.01	.00	.000	.035	.000	.000	4574.00	1013.87
.009042	96.	96.	96.	3	0	0	.00	45.25	1059.13

*SECNO 2737.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2737.000	4.94	4579.94	4579.94	.00	4581.57	1.64	.04	.11	4585.00
1410.0	.0	1410.0	.0	.0	137.3	.0	11.2	11.1	4583.00
.13	.00	10.27	.00	.000	.035	.000	.000	4575.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

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 2833.000

2833.000	5.38	4581.38	.00	.00	4582.64	1.26	1.03	.04	4586.00
1410.0	.0	1410.0	.0	.0	156.6	.0	11.6	11.2	4584.00
.13	.00	9.01	.00	.000	.035	.000	.000	4576.00	1013.87
.009042	96.	96.	96.	3	0	0	.00	45.25	1059.13

*SECNO 2837.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2837.000	4.94	4581.94	4581.94	.00	4583.57	1.64	.04	.11	4587.00
1410.0	.0	1410.0	.0	.0	137.3	.0	11.6	11.2	4585.00
.13	.00	10.27	.00	.000	.035	.000	.000	4577.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

*SECNO 2933.000

2933.000	5.42	4583.42	.00	.00	4584.60	1.18	.98	.05	4586.00
1410.0	.0	1410.0	.0	.0	161.9	.0	11.9	11.3	4586.00
.13	.00	8.71	.00	.000	.035	.000	.000	4578.00	1007.76

.008225	108.	96.	86.	3	0	0	.00	45.81	1053.57

*SECNO 2937.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2937.000	4.86	4583.86	4583.86	.00	4585.49	1.64	.04	.14	4587.00
1410.0	.0	1410.0	.0	.0	137.3	.0	11.9	11.3	4587.00
.13	.00	10.27	.00	.000	.035	.000	.000	4579.00	1009.43
.012888	4.	4.	4.	20	11	0	.00	42.53	1051.96

*SECNO 3033.000

3033.000	5.30	4585.30	.00	.00	4586.56	1.26	1.03	.04	4588.00
1410.0	.0	1410.0	.0	.0	156.3	.0	12.2	11.4	4588.00
.14	.00	9.02	.00	.000	.035	.000	.000	4580.00	1008.13
.009054	100.	96.	94.	3	0	0	.00	45.08	1053.21

*SECNO 3037.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL

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

3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3037.000	4.86	4585.86	4585.86	.00	4587.49	1.64	.04	.11	4589.00
1410.0	.0	1410.0	.0	.0	137.3	.0	12.3	11.5	4589.00
.14	.00	10.27	.00	.000	.035	.000	.000	4581.00	1009.43
.012893	4.	4.	4.	20	11	0	.00	42.53	1051.96

*SECNO 3135.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.55

3135.000	5.68	4587.68	.00	.00	4587.74	.06	.09	.16	4592.00
1410.0	.0	1410.0	.0	.0	734.2	.0	13.2	11.7	4590.00
.15	.00	1.92	.00	.000	.035	.000	.000	4582.00	1014.61
.000301	196.	98.	99.	2	0	0	.00	173.04	1187.65

1

TW Sect # 100 - 101

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
12.99	12.80	1.50	12.99	12.80	1.50	8	4536.262	4538.409	100.000	101.000

TW Sect # 101 - 102

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
36.55	36.37	.49	49.54	49.17	.76	8	4538.409	4541.915	101.000	102.000

TW Sect # 102 - 103

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
182.88	182.47	.22	232.42	231.64	.34	8	4541.915	4545.088	102.000	103.000

TW Sect # 103 - 1095

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
67.05	66.97	.11	299.47	298.61	.29	8	4545.088	4546.931	103.000	1095.000

T1 NIMBUS JOB #9311
T2 FLOW FOR THIS RUN = 3000CFS
T3 WEDGE MEADOWS SUBDIVISION

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	3	0	0	.01	0	0	0	4549	

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

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

*PROF 2

CCHV= .100 CEHV= .300

*SECNO 99.000

99.000	1.84	4535.84	.00	4549.00	4536.23	.39	.00	.00	4534.00
1917.5	842.7	361.7	713.1	182.2	57.1	152.5	.0	.0	4534.00
.00	4.63	6.33	4.68	.035	.035	.035	.000	4534.00	1014.58
.009837	0.	0.	0.	0	0	8	.00	374.45	1389.03

*SECNO 100.000

3280 CROSS SECTION 100.00 EXTENDED .75 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.22

100.000	3.76	4536.86	4536.00	.00	4536.99	.14	.74	.03	4535.00
1917.5	561.3	719.2	637.1	201.8	213.1	247.9	2.3	1.6	4535.20
.02	2.78	3.37	2.57	.035	.035	.035	.000	4533.10	1000.00
.002003	215.	220.	150.	14	17	0	.00	370.00	1370.00

*SECNO 101.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

101.000	2.12	4538.82	4538.82	.00	4539.22	.40	.80	.08	4538.00
2128.6	823.2	405.8	899.5	182.5	56.6	207.4	4.6	3.6	4538.00
.03	4.51	7.17	4.34	.035	.035	.035	.000	4536.70	787.73
.014013	180.	180.	180.	20	14	0	.00	569.89	1381.88

*SECNO 102.000
3280 CROSS SECTION 102.00 EXTENDED .70 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

102.000	2.00	4542.30	4542.30	.00	4542.66	.36	3.02	.00	4542.10
2311.5	434.9	604.8	1271.7	107.5	114.2	261.7	6.7	6.2	4542.00
.04	4.04	5.30	4.86	.035	.035	.035	.000	4540.30	824.67
.016658	200.	200.	195.	4	10	0	.00	615.33	1440.00

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 103.000

3265 DIVIDED FLOW

3280 CROSS SECTION 103.00 EXTENDED .73 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

103.000	1.73	4545.53	4545.53	.00	4546.02	.49	2.87	.04	4545.00
2775.7	11.2	306.6	2457.9	4.8	49.3	443.4	8.6	8.5	4545.70
.05	2.32	6.22	5.54	.035	.035	.035	.000	4543.80	1016.59
.017717	185.	162.	165.	4	15	0	.00	532.43	1554.00

*SECNO 1095.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1095.000	1.97	4547.47	4547.47	.00	4548.05	.57	1.99	.03	4554.00
3000.0	.0	16.0	2984.0	.0	5.4	489.8	10.0	9.8	4549.00
.05	.00	2.96	6.09	.000	.035	.035	.000	4545.50	1074.58
.015653	125.	120.	120.	4	8	0	.00	432.76	1650.07

*SECNO 1200.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1200.000	2.11	4549.61	4549.61	.00	4550.36	.76	1.50	.06	4558.00
3000.0	.0	135.7	2864.3	.0	23.8	406.9	11.0	10.6	4551.50
.06	.00	5.69	7.04	.000	.035	.035	.000	4547.50	1075.18
.014404	108.	105.	100.	2	8	0	.00	291.92	1508.70

*SECNO 1331.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

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

3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1331.000	7.57	4556.57	4556.57	.00	4558.85	2.28	1.69	.46	4560.00
3000.0	.0	3000.0	.0	.0	247.5	.0	12.0	11.1	4560.00
.06	.00	12.12	.00	.000	.035	.000	.000	4549.00	1060.29
.011735	136.	131.	130.	20	23	0	.00	55.41	1115.71

CCHV= .300 CEHV= .500
*SECNO 1391.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 4560.00 ELREA= 4560.00

1391.000	6.47	4556.47	4556.47	.00	4559.73	3.26	.16	.49	4550.00
3000.0	.0	3000.0	.0	.0	207.1	.0	12.4	11.2	4550.00
.06	.00	14.48	.00	.000	.012	.000	.000	4550.00	1065.00
.001134	40.	60.	80.	4	11	0	.00	32.00	1097.00

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.012	.50	3.00	.00	5.00	10.00	225.00	10	1	4556.50	4550.00

CHART 10 - BOX CULVERT; 90-DEGREE HEADWALL; CHAMFERED OR BEVELED INLET EDGES
SCALE 1 - INLET EDGES CHAMFERED 3/4-INCH

5130, EGIC= 4575.38..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 4568.76 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
*SECNO 1616.000

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 4565.51
3280 CROSS SECTION 1616.00 EXTENDED 2.00 FEET

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
4575.38	4568.76	5.78	1238.	1754.	14.282	150.0	4563.00	197.

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 4566.00 ELREA= 4566.00

1616.000	7.00	4563.50	.00	.00	4566.66	3.17	.00	.00	4561.50
3000.0	.0	3000.0	.0	.0	210.1	.0	13.4	11.4	4561.50
.07	.00	14.28	.00	.000	.012	.000	.000	4556.50	1000.00
.001550	200.	225.	250.	20	0	0	.00	30.10	1030.10

*SECNO 1662.000
3280 CROSS SECTION 1662.00 EXTENDED .57 FEET

3301 HV CHANGED MORE THAN HVINS

1662.000	9.77	4566.57	.00	.00	4567.44	.88	.09	.69	4570.00
3000.0	.0	3000.0	.0	.0	399.6	.0	13.8	11.4	4566.00
.07	.00	7.51	.00	.000	.035	.000	.000	4556.80	1009.61
.002798	85.	46.	20.	5	0	0	.00	57.49	1067.10

CCHV= .100 CEHV= .300
*SECNO 1700.000
3280 CROSS SECTION 1700.00 EXTENDED .06 FEET

3301 HV CHANGED MORE THAN HVINS

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

1700.000	8.96	4566.06	.00	.00	4567.91	1.85	.17	.29	4572.00
3000.0	.0	3000.0	.0	.0	274.8	.0	14.1	11.5	4566.00
.07	.00	10.92	.00	.000	.035	.000	.000	4557.10	1015.34
.008377	48.	38.	32.	3	0	0	.00	54.66	1070.00

*SECNO 1704.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1704.000	7.69	4565.79	4565.79	.00	4568.13	2.33	.04	.14	4572.00
3000.0	.0	3000.0	.0	.0	244.7	.0	14.1	11.5	4566.00
.07	.00	12.26	.00	.000	.035	.000	.000	4558.10	1016.04
.011681	4.	4.	4.	3	15	0	.00	53.34	1069.37

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 1785.000
3280 CROSS SECTION 1785.00 EXTENDED .79 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1785.000	7.79	4566.79	4566.79	.00	4569.21	2.42	.94	.03	4574.00
3000.0	.0	3000.0	.0	.0	240.2	.0	14.5	11.6	4566.00
.07	.00	12.49	.00	.000	.035	.000	.000	4559.00	1020.18
.011623	81.	81.	81.	2	5	0	.00	49.82	1070.00

*SECNO 1789.000
3280 CROSS SECTION 1789.00 EXTENDED 1.53 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1789.000	7.53	4567.53	4567.53	.00	4569.92	2.39	.05	.00	4574.00
3000.0	.0	3000.0	.0	.0	241.7	.0	14.5	11.6	4566.00
.07	.00	12.41	.00	.000	.035	.000	.000	4560.00	1019.42
.011673	4.	4.	4.	20	8	0	.00	50.58	1070.00

*SECNO 1989.000
3280 CROSS SECTION 1989.00 EXTENDED 2.02 FEET

1989.000	8.02	4570.02	.00	.00	4571.98	1.96	2.02	.04	4572.00
3000.0	.0	3000.0	.0	.0	266.8	.0	15.7	11.8	4568.00
.08	.00	11.24	.00	.000	.035	.000	.000	4562.00	1005.95
.008820	196.	200.	204.	3	0	0	.00	52.05	1058.00

*SECNO 2189.000
3280 CROSS SECTION 2189.00 EXTENDED 1.77 FEET

2189.000	7.76	4571.76	.00	.00	4573.93	2.17	1.89	.06	4572.00
3000.0	.0	3000.0	.0	.0	254.0	.0	16.9	12.0	4570.00
.08	.00	11.81	.00	.000	.035	.000	.000	4564.00	1000.70
.010139	200.	200.	200.	2	0	0	.00	51.30	1052.00

*SECNO 2333.000
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

3280 CROSS SECTION 2333.00 EXTENDED 1.24 FEET

2333.000	7.24	4573.24	4573.23	.00	4575.41	2.17	1.47	.00	4572.00
3000.0	57.3	2942.7	.0	12.4	246.9	.0	17.8	12.2	4576.00
.08	4.62	11.92	.00	.035	.035	.000	.000	4566.00	1000.00
.010367	124.	144.	168.	6	11	0	.00	61.72	1061.72

*SECNO 2337.000
3280 CROSS SECTION 2337.00 EXTENDED 1.90 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2337.000	6.90	4573.90	4573.90	.00	4576.08	2.18	.04	.00	4572.00
3000.0	113.0	2887.0	.0	19.0	240.3	.0	17.8	12.2	4577.00
.08	5.95	12.01	.00	.035	.035	.000	.000	4567.00	1000.00
.010548	4.	4.	4.	20	11	0	.00	60.70	1060.70

*SECNO 2433.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2433.000	7.59	4575.59	4575.59	.00	4577.60	2.01	1.08	.02	4578.00
3000.0	.0	3000.0	.0	.0	263.8	.0	18.4	12.4	4576.00
.09	.00	11.37	.00	.000	.035	.000	.000	4568.00	1008.65
.011859	112.	96.	84.	20	8	0	.00	66.54	1075.19

*SECNO 2437.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2437.000	7.58	4576.58	4576.58	.00	4578.60	2.01	.05	.00	4579.00
3000.0	.0	3000.0	.0	.0	263.5	.0	18.4	12.4	4577.00
.09	.00	11.38	.00	.000	.035	.000	.000	4569.00	1008.67
.011898	4.	4.	4.	20	5	0	.00	66.50	1075.17

*SECNO 2533.000

2533.000	7.86	4577.86	.00	.00	4579.55	1.69	.92	.03	4580.00
3000.0	.0	3000.0	.0	.0	287.4	.0	19.0	12.5	4578.00
.09	.00	10.44	.00	.000	.035	.000	.000	4570.00	1006.43
.007940	96.	96.	96.	3	0	0	.00	60.14	1066.57

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 2537.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2537.000	7.19	4578.19	4578.19	.00	4580.45	2.26	.04	.17	4581.00
3000.0	.0	3000.0	.0	.0	248.7	.0	19.0	12.5	4579.00
.09	.00	12.06	.00	.000	.035	.000	.000	4571.00	1008.42
.011722	4.	4.	4.	20	11	0	.00	56.15	1064.58

*SECNO 2633.000

2633.000	7.59	4579.59	.00	.00	4581.49	1.90	1.00	.04	4582.00
3000.0	.0	3000.0	.0	.0	271.3	.0	19.6	12.6	4580.00
.09	.00	11.06	.00	.000	.035	.000	.000	4572.00	1007.24
.009274	96.	96.	96.	4	0	0	.00	58.52	1065.76

*SECNO 2637.000

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2637.000	7.23	4580.23	4580.23	.00	4582.45	2.22	.04	.10	4583.00
3000.0	.0	3000.0	.0	.0	250.8	.0	19.6	12.6	4581.00
.09	.00	11.96	.00	.000	.035	.000	.000	4573.00	1008.31
.011460	4.	4.	4.	20	8	0	.00	56.37	1064.69

*SECNO 2733.000

2733.000	7.54	4581.54	.00	.00	4583.48	1.94	1.00	.03	4584.00
3000.0	.0	3000.0	.0	.0	268.2	.0	20.2	12.8	4582.00
.09	.00	11.18	.00	.000	.035	.000	.000	4574.00	1007.40
.009558	96.	96.	96.	3	0	0	.00	58.21	1065.60

*SECNO 2737.000

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2737.000	7.23	4582.23	4582.23	.00	4584.45	2.22	.04	.08	4585.00
3000.0	.0	3000.0	.0	.0	250.8	.0	20.2	12.8	4583.00
.09	.00	11.96	.00	.000	.035	.000	.000	4575.00	1008.31
.011460	4.	4.	4.	20	8	0	.00	56.37	1064.69

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 2833.000

2833.000	7.54	4583.54	.00	.00	4585.48	1.94	1.00	.03	4586.00
3000.0	.0	3000.0	.0	.0	268.2	.0	20.8	12.9	4584.00
.10	.00	11.18	.00	.000	.035	.000	.000	4576.00	1007.40
.009558	96.	96.	96.	3	0	0	.00	58.21	1065.60

*SECNO 2837.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2837.000	7.23	4584.23	4584.23	.00	4586.45	2.22	.04	.08	4587.00
3000.0	.0	3000.0	.0	.0	250.8	.0	20.8	12.9	4585.00
.10	.00	11.96	.00	.000	.035	.000	.000	4577.00	1008.31
.011460	4.	4.	4.	20	8	0	.00	56.37	1064.69

*SECNO 2933.000

2933.000	7.63	4585.63	.00	.00	4587.45	1.82	.95	.04	4586.00
3000.0	.0	3000.0	.0	.0	277.2	.0	21.4	13.0	4586.00
.10	.00	10.82	.00	.000	.035	.000	.000	4578.00	1001.14
.008684	108.	96.	86.	3	0	0	.00	58.77	1059.91

*SECNO 2937.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2937.000	7.12	4586.12	4586.12	.00	4588.38	2.26	.04	.13	4587.00
3000.0	.0	3000.0	.0	.0	248.5	.0	21.4	13.0	4587.00
.10	.00	12.07	.00	.000	.035	.000	.000	4579.00	1002.64
.011663	4.	4.	4.	20	11	0	.00	55.82	1058.47

*SECNO 3033.000

3033.000	7.48	4587.48	.00	.00	4589.42	1.94	1.00	.03	4588.00
3000.0	.0	3000.0	.0	.0	268.7	.0	22.0	13.2	4588.00
.10	.00	11.16	.00	.000	.035	.000	.000	4580.00	1001.58
.009444	100.	96.	94.	3	0	0	.00	57.91	1059.49

*SECNO 3037.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL

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

3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3037.000	7.15	4588.15	4588.15	.00	4590.38	2.23	.04	.09	4589.00
3000.0	.0	3000.0	.0	.0	250.2	.0	22.0	13.2	4589.00
.10	.00	11.99	.00	.000	.035	.000	.000	4581.00	1002.55
.011451	4.	4.	4.	20	8	0	.00	56.00	1058.55

*SECNO 3135.000
3280 CROSS SECTION 3135.00 EXTENDED 2.58 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.79

3135.000	8.59	4590.59	.00	.00	4590.67	.08	.07	.21	4592.00
3000.0	.0	2970.6	29.4	.0	1267.4	34.8	23.8	13.5	4590.00
.11	.00	2.34	.84	.000	.035	.035	.000	4582.00	1003.54
.000249	196.	98.	99.	2	0	0	.00	213.46	1217.00

1

TW Sect # 100 - 101

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
211.07	210.18	.42	211.07	210.18	.42	7	4536.859	4538.820	100.000	101.000

TW Sect # 101 - 102

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
182.90	181.70	.66	393.97	391.88	.53	7	4538.820	4542.298	101.000	102.000

TW Sect # 102 - 103

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
464.26	463.08	.25	858.23	854.96	.38	7	4542.298	4545.526	102.000	103.000

TW Sect # 103 - 1095

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
224.26	223.76	.22	1082.49	1078.73	.35	7	4545.526	4547.474	103.000	1095.000

THIS RUN EXECUTED 21NOV95 12:42:54

****
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

Wedge Meadows Subdiv

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA	10*KS
	99.000	951.53	391.79	225.42	334.32	5.26	4535.38	1057.35	1356.83	299.48	236.82	99.46
	99.000	1917.51	842.66	361.75	713.11	6.33	4535.84	1014.58	1389.03	374.45	391.81	98.37
*	100.000	951.53	268.93	412.15	270.45	2.57	4536.26	1002.25	1370.00	367.75	445.08	17.05
*	100.000	1917.51	561.27	719.19	637.05	3.37	4536.86	1000.00	1370.00	370.00	662.75	20.03
*	101.000	834.53	309.21	242.62	282.69	5.64	4538.41	805.41	1370.91	452.34	232.67	124.94
*	101.000	2128.58	823.20	405.84	899.54	7.17	4538.82	787.73	1381.88	569.89	446.49	140.13
*	102.000	871.08	108.02	300.96	462.09	4.29	4541.92	840.77	1440.00	551.73	253.22	164.64
*	102.000	2311.48	434.94	604.83	1271.70	5.30	4542.30	824.67	1440.00	615.33	483.42	166.58
*	103.000	1053.95	.09	162.15	891.71	5.06	4545.09	1031.92	1554.00	504.59	270.43	168.47
*	103.000	2775.74	11.22	306.65	2457.87	6.22	4545.53	1016.59	1554.00	532.43	497.53	177.17
	1095.000	1121.00	.00	.00	1121.00	.00	4546.93	1238.56	1644.98	397.88	266.00	144.44
*	1095.000	3000.00	.00	16.05	2983.95	2.96	4547.47	1074.58	1650.07	432.76	495.27	156.53
*	1200.000	1135.00	.00	42.72	1092.28	4.13	4548.83	1077.52	1505.45	251.49	214.64	159.20
*	1200.000	3000.00	.00	135.68	2864.32	5.69	4549.61	1075.18	1508.70	291.92	430.70	144.04
*	1331.000	1135.00	.00	1135.00	.00	9.90	4553.74	1068.79	1107.21	38.42	114.68	133.22
*	1331.000	3000.00	.00	3000.00	.00	12.12	4556.57	1060.29	1115.71	55.41	247.52	117.35
*	1391.000	1135.00	.00	1135.00	.00	7.71	4554.60	1065.00	1097.00	32.00	147.25	5.06
*	1391.000	3000.00	.00	3000.00	.00	14.48	4556.47	1065.00	1097.00	32.00	207.14	11.34
	1616.000	1135.00	.00	1135.00	.00	7.15	4561.79	1000.00	1030.10	30.10	158.72	5.34
*	1616.000	3000.00	.00	3000.00	.00	14.28	4563.50	1000.00	1030.10	30.10	210.05	15.50
*	1662.000	1135.00	.00	1135.00	.00	7.05	4561.87	1022.76	1067.02	44.26	161.00	52.99
	1662.000	3000.00	.00	3000.00	.00	7.51	4566.57	1009.61	1067.10	57.49	399.61	27.98

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA	10*KS
*	1700.000	1135.00	.00	1135.00	.00	10.28	4562.37	1024.88	1059.11	34.24	110.42	134.35
*	1700.000	3000.00	.00	3000.00	.00	10.92	4566.06	1015.34	1070.00	54.66	274.75	83.77
*	1704.000	1135.00	.00	1135.00	.00	10.00	4562.89	1023.53	1060.67	37.14	113.48	132.81
*	1704.000	3000.00	.00	3000.00	.00	12.26	4565.79	1016.04	1069.37	53.34	244.71	116.81
	1785.000	1135.00	.00	1135.00	.00	9.63	4564.02	1027.95	1064.90	36.95	117.81	116.96
*	1785.000	3000.00	.00	3000.00	.00	12.49	4566.79	1020.18	1070.00	49.82	240.15	116.23
*	1789.000	1135.00	.00	1135.00	.00	9.89	4564.74	1027.79	1066.21	38.43	114.72	133.10
*	1789.000	3000.00	.00	3000.00	.00	12.41	4567.53	1019.42	1070.00	50.58	241.68	116.73
	1989.000	1135.00	.00	1135.00	.00	8.27	4567.30	1014.10	1055.90	41.80	137.28	81.96
	1989.000	3000.00	.00	3000.00	.00	11.24	4570.02	1005.95	1058.00	52.05	266.79	88.20
	2189.000	1135.00	.00	1135.00	.00	9.07	4569.00	1008.99	1049.01	40.01	125.10	105.33
	2189.000	3000.00	.00	3000.00	.00	11.81	4571.76	1000.70	1052.00	51.30	253.97	101.39
	2333.000	1135.00	.00	1135.00	.00	9.40	4570.54	1013.65	1053.62	39.97	120.78	117.73
	2333.000	3000.00	57.32	2942.68	.00	11.92	4573.24	1000.00	1061.72	61.72	259.30	103.67
*	2337.000	1135.00	.00	1135.00	.00	9.71	4571.24	1011.90	1052.72	40.83	116.94	133.94
*	2337.000	3000.00	113.04	2886.96	.00	12.01	4573.90	1000.00	1060.70	60.70	259.32	105.48
*	2433.000	1390.00	.00	1390.00	.00	9.74	4573.49	1016.52	1066.04	49.52	142.78	132.80
*	2433.000	3000.00	.00	3000.00	.00	11.37	4575.59	1008.65	1075.19	66.54	263.83	118.59
*	2437.000	1390.00	.00	1390.00	.00	9.73	4574.50	1016.51	1066.05	49.54	142.90	132.49
*	2437.000	3000.00	.00	3000.00	.00	11.38	4576.58	1008.67	1075.17	66.50	263.51	118.98
*	2533.000	1390.00	.00	1390.00	.00	7.62	4575.93	1012.22	1060.78	48.57	182.50	58.01
	2533.000	3000.00	.00	3000.00	.00	10.44	4577.86	1006.43	1066.57	60.14	287.36	79.40
*	2537.000	1410.00	.00	1410.00	.00	10.29	4575.93	1015.21	1057.79	42.59	137.07	129.74
*	2537.000	3000.00	.00	3000.00	.00	12.06	4578.19	1008.42	1064.58	56.15	248.66	117.22
	2633.000	1410.00	.00	1410.00	.00	9.00	4577.39	1013.86	1059.14	45.27	156.70	90.21
	2633.000	3000.00	.00	3000.00	.00	11.06	4579.59	1007.24	1065.76	58.52	271.26	92.74
*	2637.000	1410.00	.00	1410.00	.00	10.27	4577.94	1015.19	1057.81	42.62	137.28	129.21
*	2637.000	3000.00	.00	3000.00	.00	11.96	4580.23	1008.31	1064.69	56.37	250.75	114.60
	2733.000	1410.00	.00	1410.00	.00	9.01	4579.38	1013.87	1059.13	45.25	156.57	90.42
	2733.000	3000.00	.00	3000.00	.00	11.18	4581.54	1007.40	1065.60	58.21	268.24	95.58
*	2737.000	1410.00	.00	1410.00	.00	10.27	4579.94	1015.19	1057.81	42.62	137.28	129.21
*	2737.000	3000.00	.00	3000.00	.00	11.96	4582.23	1008.31	1064.69	56.37	250.75	114.60
	2833.000	1410.00	.00	1410.00	.00	9.01	4581.38	1013.87	1059.13	45.25	156.57	90.42
	2833.000	3000.00	.00	3000.00	.00	11.18	4583.54	1007.40	1065.60	58.21	268.24	95.58

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA	10*KS

*	2837.000	1410.00	.00	1410.00	.00	10.27	4581.94	1015.19	1057.81	42.62	137.28	129.21
*	2837.000	3000.00	.00	3000.00	.00	11.96	4584.23	1008.31	1064.69	56.37	250.75	114.60
	2933.000	1410.00	.00	1410.00	.00	8.71	4583.42	1007.76	1053.57	45.81	161.90	82.25
	2933.000	3000.00	.00	3000.00	.00	10.82	4585.63	1001.14	1059.91	58.77	277.22	86.84
*	2937.000	1410.00	.00	1410.00	.00	10.27	4583.86	1009.43	1051.96	42.53	137.29	128.88
*	2937.000	3000.00	.00	3000.00	.00	12.07	4586.12	1002.64	1058.47	55.82	248.52	116.63
	3033.000	1410.00	.00	1410.00	.00	9.02	4585.30	1008.13	1053.21	45.08	156.29	90.54
	3033.000	3000.00	.00	3000.00	.00	11.16	4587.48	1001.58	1059.49	57.91	268.73	94.44
*	3037.000	1410.00	.00	1410.00	.00	10.27	4585.86	1009.43	1051.96	42.53	137.27	128.93
*	3037.000	3000.00	.00	3000.00	.00	11.99	4588.15	1002.55	1058.55	56.00	250.21	114.51
*	3135.000	1410.00	.00	1410.00	.00	1.92	4587.68	1014.61	1187.65	173.04	734.23	3.01
*	3135.000	3000.00	.00	2970.64	29.36	2.34	4590.59	1003.54	1217.00	213.46	1302.23	2.49

1

Wedge Meadows Subdiv

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	99.000	.00	.00	.00	4534.00	951.53	4535.38	.00	4535.65	99.46	5.26	236.82	95.41
	99.000	.00	.00	.00	4534.00	1917.51	4535.84	.00	4536.23	98.37	6.33	391.81	193.33
*	100.000	220.00	.00	.00	4533.10	951.53	4536.26	4535.60	4536.34	17.05	2.57	445.08	230.45
*	100.000	220.00	.00	.00	4533.10	1917.51	4536.86	4536.00	4536.99	20.03	3.37	662.75	428.44
*	101.000	180.00	.00	.00	4536.70	834.53	4538.41	4538.41	4538.66	124.94	5.64	232.67	74.66
*	101.000	180.00	.00	.00	4536.70	2128.58	4538.82	4538.82	4539.22	140.13	7.17	446.49	179.81
*	102.000	200.00	.00	.00	4540.30	871.08	4541.92	4541.92	4542.12	164.64	4.29	253.22	67.89
*	102.000	200.00	.00	.00	4540.30	2311.48	4542.30	4542.30	4542.66	166.58	5.30	483.42	179.09
*	103.000	162.00	.00	.00	4543.80	1053.95	4545.09	4545.09	4545.33	168.47	5.06	270.43	81.20
*	103.000	162.00	.00	.00	4543.80	2775.74	4545.53	4545.53	4546.02	177.17	6.22	497.53	208.54
	1095.000	120.00	.00	.00	4545.50	1121.00	4546.93	.00	4547.21	144.44	.00	266.00	93.28
*	1095.000	120.00	.00	.00	4545.50	3000.00	4547.47	4547.47	4548.05	156.53	2.96	495.27	239.79
*	1200.000	105.00	.00	.00	4547.50	1135.00	4548.83	4548.83	4549.26	159.20	4.13	214.64	89.95
*	1200.000	105.00	.00	.00	4547.50	3000.00	4549.61	4549.61	4550.36	144.04	5.69	430.70	249.97
*	1331.000	131.00	.00	.00	4549.00	1135.00	4553.74	4553.74	4555.26	133.22	9.90	114.68	98.34
*	1331.000	131.00	.00	.00	4549.00	3000.00	4556.57	4556.57	4558.85	117.35	12.12	247.52	276.94
*	1391.000	60.00	.00	.00	4550.00	1135.00	4554.60	.00	4555.52	5.06	7.71	147.25	504.49
*	1391.000	60.00	.00	.00	4550.00	3000.00	4556.47	4556.47	4559.73	11.34	14.48	207.14	890.99
	1616.000	225.00	4563.00	4561.50	4556.50	1135.00	4561.79	.00	4562.58	5.34	7.15	158.72	491.06
*	1616.000	225.00	4563.00	4561.50	4556.50	3000.00	4563.50	.00	4566.66	15.50	14.28	210.05	762.00
*	1662.000	46.00	.00	.00	4556.80	1135.00	4561.87	.00	4562.65	52.99	7.05	161.00	155.91

1662.000	46.00	.00	.00	4556.80	3000.00	4566.57	.00	4567.44	27.98	7.51	399.61	567.16
* 1700.000	38.00	.00	.00	4557.10	1135.00	4562.37	4562.37	4564.01	134.35	10.28	110.42	97.92
* 1700.000	38.00	.00	.00	4557.10	3000.00	4566.06	.00	4567.91	83.77	10.92	274.75	327.77
* 1704.000	4.00	.00	.00	4558.10	1135.00	4562.89	4562.89	4564.44	132.81	10.00	113.48	98.49
* 1704.000	4.00	.00	.00	4558.10	3000.00	4565.79	4565.79	4568.13	116.81	12.26	244.71	277.58
1785.000	81.00	.00	.00	4559.00	1135.00	4564.02	.00	4565.46	116.96	9.63	117.81	104.95
* 1785.000	81.00	.00	.00	4559.00	3000.00	4566.79	4566.79	4569.21	116.23	12.49	240.15	278.27
* 1789.000	4.00	.00	.00	4560.00	1135.00	4564.74	4564.74	4566.26	133.10	9.89	114.72	98.38
* 1789.000	4.00	.00	.00	4560.00	3000.00	4567.53	4567.53	4569.92	116.73	12.41	241.68	277.67
1989.000	200.00	.00	.00	4562.00	1135.00	4567.30	.00	4568.36	81.96	8.27	137.28	125.37
1989.000	200.00	.00	.00	4562.00	3000.00	4570.02	.00	4571.98	88.20	11.24	266.79	319.45

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
2189.000	200.00	.00	.00	4564.00	1135.00	4569.00	.00	4570.28	105.33	9.07	125.10	110.59
2189.000	200.00	.00	.00	4564.00	3000.00	4571.76	.00	4573.93	101.39	11.81	253.97	297.93
2333.000	144.00	.00	.00	4566.00	1135.00	4570.54	.00	4571.91	117.73	9.40	120.78	104.61
2333.000	144.00	.00	.00	4566.00	3000.00	4573.24	4573.23	4575.41	103.67	11.92	259.30	294.64
* 2337.000	4.00	.00	.00	4567.00	1135.00	4571.24	4571.24	4572.70	133.94	9.71	116.94	98.07
* 2337.000	4.00	.00	.00	4567.00	3000.00	4573.90	4573.90	4576.08	105.48	12.01	259.32	292.10
* 2433.000	96.00	.00	.00	4568.00	1390.00	4573.49	4573.49	4574.97	132.80	9.74	142.78	120.62
* 2433.000	96.00	.00	.00	4568.00	3000.00	4575.59	4575.59	4577.60	118.59	11.37	263.83	275.48
* 2437.000	4.00	.00	.00	4569.00	1390.00	4574.50	4574.50	4575.97	132.49	9.73	142.90	120.76
* 2437.000	4.00	.00	.00	4569.00	3000.00	4576.58	4576.58	4578.60	118.98	11.38	263.51	275.03
* 2533.000	96.00	.00	.00	4570.00	1390.00	4575.93	.00	4576.83	58.01	7.62	182.50	182.49
2533.000	96.00	.00	.00	4570.00	3000.00	4577.86	.00	4579.55	79.40	10.44	287.36	336.67
* 2537.000	4.00	.00	.00	4571.00	1410.00	4575.93	4575.93	4577.57	129.74	10.29	137.07	123.79
* 2537.000	4.00	.00	.00	4571.00	3000.00	4578.19	4578.19	4580.45	117.22	12.06	248.66	277.10
2633.000	96.00	.00	.00	4572.00	1410.00	4577.39	.00	4578.64	90.21	9.00	156.70	148.45
2633.000	96.00	.00	.00	4572.00	3000.00	4579.59	.00	4581.49	92.74	11.06	271.26	311.52
* 2637.000	4.00	.00	.00	4573.00	1410.00	4577.94	4577.94	4579.57	129.21	10.27	137.28	124.04
* 2637.000	4.00	.00	.00	4573.00	3000.00	4580.23	4580.23	4582.45	114.60	11.96	250.75	280.24
2733.000	96.00	.00	.00	4574.00	1410.00	4579.38	.00	4580.64	90.42	9.01	156.57	148.28
2733.000	96.00	.00	.00	4574.00	3000.00	4581.54	.00	4583.48	95.58	11.18	268.24	306.86
* 2737.000	4.00	.00	.00	4575.00	1410.00	4579.94	4579.94	4581.57	129.21	10.27	137.28	124.04
* 2737.000	4.00	.00	.00	4575.00	3000.00	4582.23	4582.23	4584.45	114.60	11.96	250.75	280.24
2833.000	96.00	.00	.00	4576.00	1410.00	4581.38	.00	4582.64	90.42	9.01	156.57	148.28
2833.000	96.00	.00	.00	4576.00	3000.00	4583.54	.00	4585.48	95.58	11.18	268.24	306.86
* 2837.000	4.00	.00	.00	4577.00	1410.00	4581.94	4581.94	4583.57	129.21	10.27	137.28	124.04

*	2837.000	4.00	.00	.00	4577.00	3000.00	4584.23	4584.23	4586.45	114.60	11.96	250.75	280.24
	2933.000	96.00	.00	.00	4578.00	1410.00	4583.42	.00	4584.60	82.25	8.71	161.90	155.47
	2933.000	96.00	.00	.00	4578.00	3000.00	4585.63	.00	4587.45	86.84	10.82	277.22	321.93
*	2937.000	4.00	.00	.00	4579.00	1410.00	4583.86	4583.86	4585.49	128.88	10.27	137.29	124.20
*	2937.000	4.00	.00	.00	4579.00	3000.00	4586.12	4586.12	4588.38	116.63	12.07	248.52	277.79
	3033.000	96.00	.00	.00	4580.00	1410.00	4585.30	.00	4586.56	90.54	9.02	156.29	148.18
	3033.000	96.00	.00	.00	4580.00	3000.00	4587.48	.00	4589.42	94.44	11.16	268.73	308.71
*	3037.000	4.00	.00	.00	4581.00	1410.00	4585.86	4585.86	4587.49	128.93	10.27	137.27	124.18
*	3037.000	4.00	.00	.00	4581.00	3000.00	4588.15	4588.15	4590.38	114.51	11.99	250.21	280.35

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	3135.000	98.00	.00	.00	4582.00	1410.00	4587.68	.00	4587.74	3.01	1.92	734.23	813.24
*	3135.000	98.00	.00	.00	4582.00	3000.00	4590.59	.00	4590.67	2.49	2.34	1302.23	1902.85

Wedge Meadows Subdiv

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	99.000	951.53	4535.38	.00	.00	-12.62	299.48	.00
	99.000	1917.51	4535.84	.46	.00	-13.16	374.45	.00
*	100.000	951.53	4536.26	.00	.88	.00	367.75	220.00
*	100.000	1917.51	4536.86	.60	1.02	.00	370.00	220.00
*	101.000	834.53	4538.41	.00	2.15	.00	452.34	180.00
*	101.000	2128.58	4538.82	.41	1.96	.00	569.89	180.00
*	102.000	871.08	4541.92	.00	3.51	.00	551.73	200.00
*	102.000	2311.48	4542.30	.38	3.48	.00	615.33	200.00
*	103.000	1053.95	4545.09	.00	3.17	.00	504.59	162.00
*	103.000	2775.74	4545.53	.44	3.23	.00	532.43	162.00
	1095.000	1121.00	4546.93	.00	1.84	.00	397.88	120.00
*	1095.000	3000.00	4547.47	.54	1.95	.00	432.76	120.00
*	1200.000	1135.00	4548.83	.00	1.90	.00	251.49	105.00
*	1200.000	3000.00	4549.61	.78	2.13	.00	291.92	105.00
*	1331.000	1135.00	4553.74	.00	4.91	.00	38.42	131.00
*	1331.000	3000.00	4556.57	2.83	6.96	.00	55.41	131.00
*	1391.000	1135.00	4554.60	.00	.86	.00	32.00	60.00
*	1391.000	3000.00	4556.47	1.87	-.10	.00	32.00	60.00

	1616.000	1135.00	4561.79	.00	7.19	.00	30.10	225.00
*	1616.000	3000.00	4563.50	1.71	7.02	.00	30.10	225.00
*	1662.000	1135.00	4561.87	.00	.09	.00	44.26	46.00
	1662.000	3000.00	4566.57	4.69	3.07	.00	57.49	46.00
*	1700.000	1135.00	4562.37	.00	.50	.00	34.24	38.00
*	1700.000	3000.00	4566.06	3.69	-.51	.00	54.66	38.00
*	1704.000	1135.00	4562.89	.00	.52	.00	37.14	4.00
*	1704.000	3000.00	4565.79	2.90	-.27	.00	53.34	4.00
	1785.000	1135.00	4564.02	.00	1.13	.00	36.95	81.00
*	1785.000	3000.00	4566.79	2.77	1.00	.00	49.82	81.00
*	1789.000	1135.00	4564.74	.00	.72	.00	38.43	4.00
*	1789.000	3000.00	4567.53	2.79	.73	.00	50.58	4.00
	1989.000	1135.00	4567.30	.00	2.56	.00	41.80	200.00
	1989.000	3000.00	4570.02	2.72	2.49	.00	52.05	200.00

1

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	2189.000	1135.00	4569.00	.00	1.70	.00	40.01	200.00
	2189.000	3000.00	4571.76	2.76	1.75	.00	51.30	200.00
	2333.000	1135.00	4570.54	.00	1.54	.00	39.97	144.00
	2333.000	3000.00	4573.24	2.70	1.47	.00	61.72	144.00
*	2337.000	1135.00	4571.24	.00	.70	.00	40.83	4.00
*	2337.000	3000.00	4573.90	2.66	.66	.00	60.70	4.00
*	2433.000	1390.00	4573.49	.00	2.25	.00	49.52	96.00
*	2433.000	3000.00	4575.59	2.09	1.69	.00	66.54	96.00
*	2437.000	1390.00	4574.50	.00	1.00	.00	49.54	4.00
*	2437.000	3000.00	4576.58	2.09	1.00	.00	66.50	4.00
*	2533.000	1390.00	4575.93	.00	1.43	.00	48.57	96.00
	2533.000	3000.00	4577.86	1.93	1.28	.00	60.14	96.00
*	2537.000	1410.00	4575.93	.00	.00	.00	42.59	4.00
*	2537.000	3000.00	4578.19	2.26	.33	.00	56.15	4.00
	2633.000	1410.00	4577.39	.00	1.45	.00	45.27	96.00
	2633.000	3000.00	4579.59	2.20	1.39	.00	58.52	96.00
*	2637.000	1410.00	4577.94	.00	.55	.00	42.62	4.00
*	2637.000	3000.00	4580.23	2.29	.64	.00	56.37	4.00
	2733.000	1410.00	4579.38	.00	1.45	.00	45.25	96.00
	2733.000	3000.00	4581.54	2.16	1.31	.00	58.21	96.00
*	2737.000	1410.00	4579.94	.00	.55	.00	42.62	4.00
*	2737.000	3000.00	4582.23	2.29	.69	.00	56.37	4.00

	2833.000	1410.00	4581.38	.00	1.45	.00	45.25	96.00
	2833.000	3000.00	4583.54	2.16	1.31	.00	58.21	96.00
*	2837.000	1410.00	4581.94	.00	.55	.00	42.62	4.00
*	2837.000	3000.00	4584.23	2.29	.69	.00	56.37	4.00
	2933.000	1410.00	4583.42	.00	1.48	.00	45.81	96.00
	2933.000	3000.00	4585.63	2.21	1.40	.00	58.77	96.00
*	2937.000	1410.00	4583.86	.00	.44	.00	42.53	4.00
*	2937.000	3000.00	4586.12	2.26	.49	.00	55.82	4.00
	3033.000	1410.00	4585.30	.00	1.44	.00	45.08	96.00
	3033.000	3000.00	4587.48	2.19	1.37	.00	57.91	96.00
*	3037.000	1410.00	4585.86	.00	.56	.00	42.53	4.00
*	3037.000	3000.00	4588.15	2.29	.67	.00	56.00	4.00

1

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	3135.000	1410.00	4587.68	.00	1.83	.00	173.04	98.00
*	3135.000	3000.00	4590.59	2.90	2.44	.00	213.46	98.00

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=    100.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    100.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    101.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    101.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    101.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    101.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    101.000  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    101.000  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=    102.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    102.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    102.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    102.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    103.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    103.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    103.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    103.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=   1095.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1095.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

CAUTION SECNO= 1200.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1200.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1200.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1200.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1331.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1331.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1331.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 1331.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1331.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1331.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO= 1391.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO= 1391.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1391.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1616.000 PROFILE= 2 WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO= 1616.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO= 1662.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 1700.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1700.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1700.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO= 1700.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 1704.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1704.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1704.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 1704.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1704.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1785.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1785.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1789.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1789.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1789.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 1789.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1789.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1789.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2337.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2337.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2337.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2337.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2337.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2337.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2433.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2433.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2433.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2433.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2433.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2433.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2437.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2437.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2437.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2437.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2437.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2437.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO= 2533.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 2537.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2537.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2537.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2537.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2537.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2537.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2637.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2637.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2637.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2637.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2637.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2637.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2737.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2737.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2737.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
1

CAUTION SECNO= 2737.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2737.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2737.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2837.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2837.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2837.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2837.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2837.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2837.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2937.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2937.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2937.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 2937.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2937.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 2937.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3037.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3037.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3037.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 3037.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3037.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3037.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO= 3135.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 3135.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

311weir1.dat

```
**********************************************
*  HEC-2 WATER SURFACE PROFILES              *
*                                            *
*  Version   4.6.2;  May 1991                *
*                                            *
*  RUN DATE    16OCT95    TIME   09:01:12    *
**********************************************
```

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

1

THIS RUN EXECUTED 16OCT95 09:01:12

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

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

SPLIT FLOW BEING PERFORMED

SF

```
JC     WEIR FLOW INTO DETENTION BASIN
JP     0       0      40      -1       0

TW     Section #2337-2433
WS     5    2337    2433      -1     2.8
WC     0    4572       3    4571      76    4571      80    4572     110    4578
```



```
T1          Wedge Meadows Subdivision          File Name: 311weir1.dat
T2          By:  Nimbus Engineers, Reno, Nv    Nimbus Job # 9311
T3          Proposed Channel Design            Date: Oct 1995 by ACP & RMH
```

Proposed channel is riprap lined, 10' bottom width and 3:1 side slopes with a one foot drop structure every 100 feet in the upstream section

Flow at southwest corner from HEC-1 is 1410 cfs which reduces to 1390 cfs upstream of the detention basin. Weir to detention basin has to take off a minimun of 198 cfs, leaving a maximun of 1192 cfs in channel downstream of basin. Hec-1 shows this flow being reduced by routing to 1178 cfs upsteam of the split flow to the east. A maximun of 413 cfs can be split off.

J1 ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FQ

0 2 0 0 0 0 0 0 4563.46 0

J2 NPROF IPLOT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE

-1 0 -1

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

150 38 43 13 14 15 26 1 53 54
4 25 5

QT 1 1390
NC .035 .035 .035 .1 .3
X1 1700 6 1000 1070 48 32 38
GR 4572 1000 4560 1031 4558.6 1038 4558.6 1048 4560 1052
GR 4566 1070

X1 1789 4 1000 1070 89 89 89
GR 4574 1000 4560 1042 4560 1052 4566 1070

X1 1989 4 1000 1058 196 204 200
GR 4572 1000 4562 1030 4562 1040 4568 1058

X1 2189 4 1000 1052 200 200 200
GR 4572 1000 4564 1024 4564 1034 4570 1052

NC .035 .035 .035
X1 2333 6 1010 1070 124 168 144
GR 4572 1000 4572 1010 4570 1015 4566 1027 4566 1040
GR 4576 1070

X1 2337 6 1010 1070 4 4 4
GR 4572 1000 4572 1010 4570 1015 4567 1027 4567 1040
GR 4577 1070

X1 2433 8 1000 1077 112 84 96
GR 4578 1000 4576 1007 4574 1015 4572 1021 4570 1033
GR 4568 1039 4568 1042 4576 1077

X1 2437 0 0 4 4 4 1

X1 2533 4 1000 1067 96 96 96
GR 4580 1000 4570 1030 4570 1043 4578 1067

QT 1 1410
X1 2537 0 0 0 4 4 4 1

X1 2633 0 0 0 96 96 96 1

X1 2637 0 0 0 4 4 4 1

X1 2733 0 0 0 96 96 96 1

X1 2737 0 0 0 4 4 4 1

X1 2833 0 0 0 96 96 96 1

X1 2837 0 0 0 4 4 4 1

```
X1    2933        4      1000      1061       108        86        96
GR    4586     1000      4578      1024      4578      1038      4586      1061

X1    2937        0         0         0         4         4         4                 1

X1    3033        0         0         0       100        94        96                 1

X1    3037        0         0         0         4         4         4                 1

X1    3135        9      1000      1195       196        99        98
GR    4592     1000      4590      1005      4588      1013      4584      1033      4582      1159
GR    4582     1169      4584      1176      4590      1195      4588      1217
```


SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 1700.000
  1700.000     4.86  4563.46      .00  4563.46  4564.68     1.22      .00      .00  4572.00
    1133.5       .0   1133.5       .0       .0    127.8       .0       .0       .0  4566.00
       .00      .00     8.87      .00      .000     .035      .000      .000  4558.60  1022.06
   .009871      48.       38.      32.         0        0         0      .00    40.32  1062.38


*SECNO 1789.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  1789.000     4.75  4564.75  4564.75      .00  4566.25     1.50     1.01      .08  4574.00
    1133.5       .0   1133.5       .0       .0    115.1       .0       .2       .1  4566.00
       .00      .00     9.84      .00      .000     .035      .000      .000  4560.00  1027.75
   .013141      89.       89.      89.        20        8         0      .00    38.49  1066.25


*SECNO 1989.000
  1989.000     5.29  4567.29      .00      .00  4568.35     1.07     2.06      .04  4572.00
    1133.5       .0   1133.5       .0       .0    136.7       .0       .8       .3  4568.00
       .01      .00     8.29      .00      .000     .035      .000      .000  4562.00  1014.14
   .008267      196.      200.     204.        3        0         0      .00    41.72  1055.86


*SECNO 2189.000
  2189.000     5.00  4569.00      .00      .00  4570.27     1.28     1.86      .06  4572.00
    1133.5       .0   1133.5       .0       .0    125.1       .0      1.4       .5  4570.00
       .02      .00     9.06      .00      .000     .035      .000      .000  4564.00  1009.00
   .010514      200.      200.     200.        2        0         0      .00    40.01  1049.00


*SECNO 2333.000
  2333.000     4.53  4570.53      .00      .00  4571.90     1.37     1.60      .03  4572.00
    1133.5       .0   1133.5       .0       .0    120.6       .0      1.8       .6  4576.00
       .02      .00     9.40      .00      .000     .035      .000      .000  4566.00  1013.66
   .011778      124.      144.     168.        3        0         0      .00    39.95  1053.61
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	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 2337.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2337.000	4.24	4571.24	4571.24	.00	4572.70	1.46	.05	.03	4572.00
1133.5	.0	1133.5	.0	.0	116.9	.0	1.8	.6	4577.00
.02	.00	9.69	.00	.000	.035	.000	.000	4567.00	1011.90
.013365	4.	4.	4.	20	11	0	.00	40.82	1052.72

*SECNO 2433.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2433.000	5.49	4573.49	4573.49	.00	4574.97	1.47	1.28	.00	4578.00
1390.0	.0	1390.0	.0	.0	142.8	.0	2.1	.7	4576.00
.02	.00	9.74	.00	.000	.035	.000	.000	4568.00	1016.52
.013280	112.	96.	84.	20	11	0	.00	49.52	1066.04

*SECNO 2437.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2437.000	5.50	4574.50	4574.50	.00	4575.97	1.47	.05	.00	4579.00
1390.0	.0	1390.0	.0	.0	142.9	.0	2.1	.7	4577.00
.02	.00	9.73	.00	.000	.035	.000	.000	4569.00	1016.51
.013249	4.	4.	4.	20	5	0	.00	49.54	1066.05

*SECNO 2533.000

3301 HV CHANGED MORE THAN HVINS

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

2533.000	5.93	4575.93	.00	.00	4576.83	.90	.81	.06	4580.00
1390.0	.0	1390.0	.0	.0	182.5	.0	2.5	.8	4578.00
.03	.00	7.62	.00	.000	.035	.000	.000	4570.00	1012.22
.005801	96.	96.	96.	3	0	0	.00	48.57	1060.78

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

*SECNO 2537.000

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2537.000	4.93	4575.93	4575.93	.00	4577.57	1.64	.03	.22	4581.00
1410.0	.0	1410.0	.0	.0	137.1	.0	2.5	.8	4579.00
.03	.00	10.29	.00	.000	.035	.000	.000	4571.00	1015.21
.012974	4.	4.	4.	20	15	0	.00	42.59	1057.79

*SECNO 2633.000

2633.000	5.39	4577.39	.00	.00	4578.64	1.26	1.03	.04	4582.00
1410.0	.0	1410.0	.0	.0	156.7	.0	2.8	.9	4580.00
.03	.00	9.00	.00	.000	.035	.000	.000	4572.00	1013.86
.009021	96.	96.	96.	3	0	0	.00	45.27	1059.14

*SECNO 2637.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2637.000	4.94	4577.94	4577.94	.00	4579.57	1.64	.04	.11	4583.00
1410.0	.0	1410.0	.0	.0	137.3	.0	2.9	.9	4581.00
.03	.00	10.27	.00	.000	.035	.000	.000	4573.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

*SECNO 2733.000

2733.000	5.38	4579.38	.00	.00	4580.64	1.26	1.03	.04	4584.00
1410.0	.0	1410.0	.0	.0	156.6	.0	3.2	1.0	4582.00
.03	.00	9.01	.00	.000	.035	.000	.000	4574.00	1013.87
.009042	96.	96.	96.	3	0	0	.00	45.25	1059.13

*SECNO 2737.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2737.000	4.94	4579.94	4579.94	.00	4581.57	1.64	.04	.11	4585.00
1410.0	.0	1410.0	.0	.0	137.3	.0	3.2	1.0	4583.00
.03	.00	10.27	.00	.000	.035	.000	.000	4575.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

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 2833.000

2833.000	5.38	4581.38	.00	.00	4582.64	1.26	1.03	.04	4586.00
1410.0	.0	1410.0	.0	.0	156.6	.0	3.5	1.1	4584.00
.04	.00	9.01	.00	.000	.035	.000	.000	4576.00	1013.87
.009042	96.	96.	96.	3	0	0	.00	45.25	1059.13

*SECNO 2837.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2837.000	4.94	4581.94	4581.94	.00	4583.57	1.64	.04	.11	4587.00
1410.0	.0	1410.0	.0	.0	137.3	.0	3.5	1.1	4585.00

.04	.00	10.27	.00	.000	.035	.000	.000	4577.00	1015.19
.012921	4.	4.	4.	20	11	0	.00	42.62	1057.81

*SECNO 2933.000

2933.000	5.42	4583.42	.00	.00	4584.60	1.18	.98	.05	4586.00
1410.0	.0	1410.0	.0	.0	161.9	.0	3.9	1.2	4586.00
.04	.00	8.71	.00	.000	.035	.000	.000	4578.00	1007.76
.008225	108.	96.	86.	3	0	0	.00	45.81	1053.57

*SECNO 2937.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2937.000	4.86	4583.86	4583.86	.00	4585.49	1.64	.04	.14	4587.00
1410.0	.0	1410.0	.0	.0	137.3	.0	3.9	1.2	4587.00
.04	.00	10.27	.00	.000	.035	.000	.000	4579.00	1009.43
.012888	4.	4.	4.	20	11	0	.00	42.53	1051.96

*SECNO 3033.000

3033.000	5.30	4585.30	.00	.00	4586.56	1.26	1.03	.04	4588.00
1410.0	.0	1410.0	.0	.0	156.3	.0	4.2	1.3	4588.00
.04	.00	9.02	.00	.000	.035	.000	.000	4580.00	1008.13
.009054	100.	96.	94.	3	0	0	.00	45.08	1053.21

*SECNO 3037.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL

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

3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3037.000	4.86	4585.86	4585.86	.00	4587.49	1.64	.04	.11	4589.00
1410.0	.0	1410.0	.0	.0	137.3	.0	4.2	1.3	4589.00
.04	.00	10.27	.00	.000	.035	.000	.000	4581.00	1009.43
.012893	4.	4.	4.	20	11	0	.00	42.53	1051.96

*SECNO 3135.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.55

3135.000	5.68	4587.68	.00	.00	4587.74	.06	.09	.16	4592.00
1410.0	.0	1410.0	.0	.0	734.2	.0	5.2	1.6	4590.00
.06	.00	1.92	.00	.000	.035	.000	.000	4582.00	1014.61
.000301	196.	98.	99.	2	0	0	.00	173.04	1187.65

1

TW Section #2337-2433

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
256.49	256.46	.01	256.49	256.46	.01	5	4571.241	4573.495	2337.000	2433.000

THIS RUN EXECUTED 16OCT95 09:01:17

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

Proposed Channel Des

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA	10*KS
	1700.000	1133.51	.00	1133.51	.00	8.87	4563.46	1022.06	1062.38	40.32	127.78	98.71
	1789.000	1133.51	.00	1133.51	.00	9.84	4564.75	1027.75	1066.25	38.49	115.15	131.41
	1989.000	1133.51	.00	1133.51	.00	8.29	4567.29	1014.14	1055.86	41.72	136.71	82.67
	2189.000	1133.51	.00	1133.51	.00	9.06	4569.00	1009.00	1049.00	40.01	125.06	105.14
	2333.000	1133.51	.00	1133.51	.00	9.40	4570.53	1013.66	1053.61	39.95	120.65	117.78
*	2337.000	1133.51	.00	1133.51	.00	9.69	4571.24	1011.90	1052.72	40.82	116.92	133.65
	2433.000	1390.00	.00	1390.00	.00	9.74	4573.49	1016.52	1066.04	49.52	142.78	132.80
*	2437.000	1390.00	.00	1390.00	.00	9.73	4574.50	1016.51	1066.05	49.54	142.90	132.49
	2533.000	1390.00	.00	1390.00	.00	7.62	4575.93	1012.22	1060.78	48.57	182.50	58.01
*	2537.000	1410.00	.00	1410.00	.00	10.29	4575.93	1015.21	1057.79	42.59	137.07	129.74
	2633.000	1410.00	.00	1410.00	.00	9.00	4577.39	1013.86	1059.14	45.27	156.70	90.21
*	2637.000	1410.00	.00	1410.00	.00	10.27	4577.94	1015.19	1057.81	42.62	137.28	129.21
	2733.000	1410.00	.00	1410.00	.00	9.01	4579.38	1013.87	1059.13	45.25	156.57	90.42
*	2737.000	1410.00	.00	1410.00	.00	10.27	4579.94	1015.19	1057.81	42.62	137.28	129.21
	2833.000	1410.00	.00	1410.00	.00	9.01	4581.38	1013.87	1059.13	45.25	156.57	90.42
*	2837.000	1410.00	.00	1410.00	.00	10.27	4581.94	1015.19	1057.81	42.62	137.28	129.21
	2933.000	1410.00	.00	1410.00	.00	8.71	4583.42	1007.76	1053.57	45.81	161.90	82.25

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA..	10*KS
*	2937.000	1410.00	.00	1410.00	.00	10.27	4583.86	1009.43	1051.96	42.53	137.29	128.88
	3033.000	1410.00	.00	1410.00	.00	9.02	4585.30	1008.13	1053.21	45.08	156.29	90.54
*	3037.000	1410.00	.00	1410.00	.00	10.27	4585.86	1009.43	1051.96	42.53	137.27	128.93
*	3135.000	1410.00	.00	1410.00	.00	1.92	4587.68	1014.61	1187.65	173.04	734.23	3.01

Proposed Channel Des

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	1700.000	.00	.00	.00	4558.60	1133.51	4563.46	.00	4564.68	98.71	8.87	127.78	114.09
*	1789.000	89.00	.00	.00	4560.00	1133.51	4564.75	4564.75	4566.25	131.41	9.84	115.15	98.88
	1989.000	200.00	.00	.00	4562.00	1133.51	4567.29	.00	4568.35	82.67	8.29	136.71	124.67
	2189.000	200.00	.00	.00	4564.00	1133.51	4569.00	.00	4570.27	105.14	9.06	125.06	110.54
	2333.000	144.00	.00	.00	4566.00	1133.51	4570.53	.00	4571.90	117.78	9.40	120.65	104.44
*	2337.000	4.00	.00	.00	4567.00	1133.51	4571.24	4571.24	4572.70	133.65	9.69	116.92	98.05
*	2433.000	96.00	.00	.00	4568.00	1390.00	4573.49	4573.49	4574.97	132.80	9.74	142.78	120.62
*	2437.000	4.00	.00	.00	4569.00	1390.00	4574.50	4574.50	4575.97	132.49	9.73	142.90	120.76
*	2533.000	96.00	.00	.00	4570.00	1390.00	4575.93	.00	4576.83	58.01	7.62	182.50	182.49
*	2537.000	4.00	.00	.00	4571.00	1410.00	4575.93	4575.93	4577.57	129.74	10.29	137.07	123.79
	2633.000	96.00	.00	.00	4572.00	1410.00	4577.39	.00	4578.64	90.21	9.00	156.70	148.45
*	2637.000	4.00	.00	.00	4573.00	1410.00	4577.94	4577.94	4579.57	129.21	10.27	137.28	124.04
	2733.000	96.00	.00	.00	4574.00	1410.00	4579.38	.00	4580.64	90.42	9.01	156.57	148.28
*	2737.000	4.00	.00	.00	4575.00	1410.00	4579.94	4579.94	4581.57	129.21	10.27	137.28	124.04
	2833.000	96.00	.00	.00	4576.00	1410.00	4581.38	.00	4582.64	90.42	9.01	156.57	148.28
*	2837.000	4.00	.00	.00	4577.00	1410.00	4581.94	4581.94	4583.57	129.21	10.27	137.28	124.04
	2933.000	96.00	.00	.00	4578.00	1410.00	4583.42	.00	4584.60	82.25	8.71	161.90	155.47
*	2937.000	4.00	.00	.00	4579.00	1410.00	4583.86	4583.86	4585.49	128.88	10.27	137.29	124.20
	3033.000	96.00	.00	.00	4580.00	1410.00	4585.30	.00	4586.56	90.54	9.02	156.29	148.18
*	3037.000	4.00	.00	.00	4581.00	1410.00	4585.86	4585.86	4587.49	128.93	10.27	137.27	124.18
*	3135.000	98.00	.00	.00	4582.00	1410.00	4587.68	.00	4587.74	3.01	1.92	734.23	813.24

Proposed Channel Des

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	1700.000	1133.51	4563.46	.00	.00	.00	40.32	.00
*	1789.000	1133.51	4564.75	.00	1.29	.00	38.49	89.00
	1989.000	1133.51	4567.29	.00	2.54	.00	41.72	200.00
	2189.000	1133.51	4569.00	.00	1.71	.00	40.01	200.00
	2333.000	1133.51	4570.53	.00	1.54	.00	39.95	144.00
*	2337.000	1133.51	4571.24	.00	.71	.00	40.82	4.00
*	2433.000	1390.00	4573.49	.00	2.25	.00	49.52	96.00
*	2437.000	1390.00	4574.50	.00	1.00	.00	49.54	4.00
*	2533.000	1390.00	4575.93	.00	1.43	.00	48.57	96.00
*	2537.000	1410.00	4575.93	.00	.00	.00	42.59	4.00
	2633.000	1410.00	4577.39	.00	1.45	.00	45.27	96.00
*	2637.000	1410.00	4577.94	.00	.55	.00	42.62	4.00
	2733.000	1410.00	4579.38	.00	1.45	.00	45.25	96.00
*	2737.000	1410.00	4579.94	.00	.55	.00	42.62	4.00
	2833.000	1410.00	4581.38	.00	1.45	.00	45.25	96.00
*	2837.000	1410.00	4581.94	.00	.55	.00	42.62	4.00
	2933.000	1410.00	4583.42	.00	1.48	.00	45.81	96.00
*	2937.000	1410.00	4583.86	.00	.44	.00	42.53	4.00
	3033.000	1410.00	4585.30	.00	1.44	.00	45.08	96.00
*	3037.000	1410.00	4585.86	.00	.56	.00	42.53	4.00
*	3135.000	1410.00	4587.68	.00	1.83	.00	173.04	98.00

SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO= 1789.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1789.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1789.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2337.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 2337.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY

```
CAUTION SECNO=   2337.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2433.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2433.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   2433.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2437.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2437.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   2437.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 WARNING SECNO=   2533.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=   2537.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   2537.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=   2537.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2637.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2637.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO=   2637.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2737.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2737.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   2737.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2837.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2837.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   2837.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   2937.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
 CAUTION SECNO=   2937.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   2937.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 CAUTION SECNO=   3037.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   3037.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   3037.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

 WARNING SECNO=   3135.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

```
*******************************************
*  HEC-2 WATER SURFACE PROFILES           *
*                                         *
*  Version   4.6.2;  May 1991             *
*                                         *
*  RUN DATE    21NOV95    TIME   13:11:14  *
*******************************************
```


```
****************************************
*  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 21NOV95   13:11:14

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

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

SPLIT FLOW BEING PERFORMED

```
SF

JC     SPLIT FLOW OVER ZOLEZZI LN
JP     0       0       40      -1

TW      SECTION 3 & 4
WS     2       3       4       -1       3
WC     0  4583.3      100     4586

TW      SECTION 4 & 5
WS     2       4       5       -1       3
WC     0    4586      100     4588

TW      SECTION 5 & 6
WS     2       5       6       -1       3
WC   100    4588      196   4590.4

TW      SECTION 6 & 7
WS     2       6       7       -1       3
```

```
WC   196  4590.4     301  4593.6

TW      SECTION 7 & 8
WS     2       7       8      -1       3
WC   301  4593.6     416  4597.1
```



```
T1      Wedge parcel - split flow along Zolezzi ln. to north
T2      Filename:  311ZOLEZ.dat
T3      Zolezzi Ln

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0        2         0         0      .017         0         0         0      4600         0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      -1         0        -1

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     150        38        43        13        14        15        26         1        53        54
       4        25

QT       1      2800
NC     .04       .04       .03        .1        .3
X1       3         4      1000      1045         0         0         0
GR  4583.4      1000    4582.2      1015      4584      1045    4584.2      1125

X1       4         6      1000      1025       100       100       100
GR    4586      1000    4584.7      1017      4586      1025      4587      1048      4588      1089
GR  4588.9      1130

X1       5         5      1000      1022       100       100       100
GR    4588      1000      4587      1015      4588      1022      4590      1080    4591.4      1114

X1       6         6      1000      1073        96        96        96
GR  4590.4      1000      4590      1020    4589.9      1038      4590      1055      4590      1073
GR    4592      1121

QT       1       680
X1       7         5      1000      1034       105       105       105
GR  4593.6      1000    4593.4      1017      4594      1034    4594.5      1103    4594.6      1122

X1       8         6      1000      1030       115       115       115
GR  4597.1      1000    4597.0      1010    4597.2      1021      4597      1030      4598      1068
GR    4598      1111
```



```
    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       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 3.000

3280 CROSS SECTION 3.00 EXTENDED .12 FEET

3720 CRITICAL DEPTH ASSUMED

3.000	1.32	4583.52	4583.52	4600.00	4583.87	.35	.00	.00	4583.40
119.6	.0	119.6	.0	.0	25.2	.0	.0	.0	4584.00
.00	.00	4.76	.00	.000	.030	.000	.000	4582.20	1000.00
.015497	0.	0.	0.	0	23	0	.00	36.93	1036.93

*SECNO 4.000

3280 CROSS SECTION 4.00 EXTENDED .74 FEET

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

4.000	2.04	4586.74	4586.74	.00	4587.30	.57	1.20	.06	4586.00
226.8	.0	214.5	12.2	.0	34.7	6.2	.1	.1	4586.00
.00	.00	6.19	1.96	.000	.030	.040	.000	4584.70	1000.00
.010588	100.	100.	100.	2	14	0	.00	41.94	1041.94

*SECNO 5.000

3280 CROSS SECTION 5.00 EXTENDED 2.32 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

5.000	3.32	4590.32	4590.32	.00	4591.07	.75	.84	.05	4588.00
818.4	.0	510.7	307.7	.0	62.1	78.1	.3	.2	4588.00
.01	.00	8.22	3.94	.000	.030	.040	.000	4587.00	1000.00
.007927	100.	100.	100.	20	14	0	.00	87.89	1087.89

*SECNO 6.000

3280 CROSS SECTION 6.00 EXTENDED 1.96 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

6.000	2.46	4592.36	4592.36	.00	4593.33	.97	.87	.07	4590.40
1727.7	.0	1434.9	292.9	.0	170.4	65.5	.7	.5	4590.00
.01	.00	8.42	4.47	.000	.030	.040	.000	4589.90	1000.00
.009674	96.	96.	96.	20	19	0	.00	121.00	1121.00

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

*SECNO 7.000

3280 CROSS SECTION 7.00 EXTENDED .94 FEET

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.000	1.14	4594.54	4594.54	.00	4594.79	.25	1.01	.07	4593.60
169.6	.0	139.2	30.3	.0	31.9	20.1	1.0	.7	4594.00
.02	.00	4.36	1.51	.000	.030	.040	.000	4593.40	1000.00
.008744	105.	105.	105.	20	14	0	.00	110.41	1110.41

*SECNO 8.000
3280 CROSS SECTION 8.00 EXTENDED 1.64 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

8.000	1.74	4598.74	4598.74	.00	4599.29	.55	1.25	.09	4597.10
680.0	.0	358.6	321.4	.0	49.8	79.2	1.3	1.0	4597.00
.03	.00	7.20	4.06	.000	.030	.040	.000	4597.00	1000.00
.011562	115.	115.	115.	3	14	0	.00	111.00	1111.00

1

TW SECTION 3 & 4

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
107.13	102.27	4.64	107.13	102.27	4.64	12	4583.516	4586.736	3.000	4.000

TW SECTION 4 & 5

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
591.65	587.36	.73	698.77	689.63	1.32	12	4586.736	4590.325	4.000	5.000

TW SECTION 5 & 6

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
909.32	905.50	.42	1608.09	1595.14	.81	12	4590.325	4592.365	5.000	6.000

TW SECTION 6 & 7

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
561.82	559.76	.37	2169.92	2154.90	.69	12	4592.365	4594.539	6.000	7.000

TW SECTION 7 & 8

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
510.43	510.55	.02	2680.35	2665.44	.56	12	4594.539	4598.743	7.000	8.000

1

THIS RUN EXECUTED 21NOV95 13:11:21

****
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

Zolezzi Ln

SUMMARY PRINTOUT

	SECNO	Q	QLOB	QCH	QROB	VCH	CWSEL	SSTA	ENDST	TOPWID	AREA
*	3.000	119.65	.00	119.65	.00	4.76	4583.52	1000.00	1036.93	36.93	25.15
*	4.000	226.78	.00	214.54	12.24	6.19	4586.74	1000.00	1041.94	41.94	40.89
*	5.000	818.42	.00	510.74	307.68	8.22	4590.32	1000.00	1087.89	87.89	140.26
*	6.000	1727.74	.00	1434.89	292.86	8.42	4592.36	1000.00	1121.00	121.00	235.89
*	7.000	169.57	.00	139.24	30.33	4.36	4594.54	1000.00	1110.41	110.41	52.02
*	8.000	680.00	.00	358.58	321.41	7.20	4598.74	1000.00	1111.00	111.00	128.93

1

Zolezzi Ln

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	3.000	.00	.00	.00	4582.20	119.65	4583.52	4583.52	4583.87	154.97	4.76	25.15	9.61
*	4.000	100.00	.00	.00	4584.70	226.78	4586.74	4586.74	4587.30	105.88	6.19	40.89	22.04
*	5.000	100.00	.00	.00	4587.00	818.42	4590.32	4590.32	4591.07	79.27	8.22	140.26	91.92
*	6.000	96.00	.00	.00	4589.90	1727.74	4592.36	4592.36	4593.33	96.74	8.42	235.89	175.66
*	7.000	105.00	.00	.00	4593.40	169.57	4594.54	4594.54	4594.79	87.44	4.36	52.02	18.13
*	8.000	115.00	.00	.00	4597.00	680.00	4598.74	4598.74	4599.29	115.62	7.20	128.93	63.24

1

Zolezzi Ln

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	3.000	119.65	4583.52	.00	.00	-16.48	36.93	.00
*	4.000	226.78	4586.74	.00	3.22	.00	41.94	100.00
*	5.000	818.42	4590.32	.00	3.59	.00	87.89	100.00
*	6.000	1727.74	4592.36	.00	2.04	.00	121.00	96.00
*	7.000	169.57	4594.54	.00	2.17	.00	110.41	105.00
*	8.000	680.00	4598.74	.00	4.20	.00	111.00	115.00

SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO= 3.000 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 4.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 4.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 5.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 5.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 5.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 6.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 6.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 6.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 7.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 7.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 7.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 8.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 8.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

FED RD REG NO.	STATE	PROJECT NO.	E.A. NO.	COUNTY	SHEET NO.
9	NEVADA	M-681 (1)	71416	WASHOE	RW1

PARCEL NUMBER PREFIX: F-681-WA-

SEE SHEET 6 FOR PROPERTY SCHEDULE

SPRING VALLEY ESTATES

UNIT 2

UNIT 1

BLK. A

BEGIN ACQUISITION "X" 34+47.11 P.O.T.

WEST 1/16 SECTION LINE

T.18N., R.20E. M.D.M.

1 702 500 N

3 000 981

016.430
P.O.B. 30.00' LT. "A" 39+79.42 P.O.T.
TIE: N.88°26'35"E.-1323.99' FROM THE SW CORNER OF SEC. 17, T.18N., R.20E., M.D.M.
E S.89°15'17"E.-95.58'
F N.0°44'43"E.-15.00'
G N.88°00'29"E.-104.70'
H S.34°11'28"W.-53.85'
I N.89°08'32"W.-169.81'
J N.0°51'16"W.-24.60'

016.457
P.O.B. 50.00' LT. "A" 41+79.58 P.O.T.
TIE: N.87°59'40"E.-1524.84' FROM THE SW CORNER OF SEC. 17, T.18N., R.20E., M.D.M.
K S.0°44'43"W.-10.00'
L S.86°54'49"E.-422.21'
M S.85°06'34"E.-151.24'
N S.20°27'42"E.-53.88'
O N.88°50'32"W.-647.52'
P N.34°11'28"E.-100.37'

016.430 McDONALD

016.457 ECCLES

016.457TE

016.580TE SEE SHEET 4

016.580 TELLMAN SEE SHEET 4

016.589 TRAUTMAN SEE SHEET 4

016.519 THE ROMAN CATHOLIC BISHOP OF RENO

016.329 MARLIA

CREEK CREST DRIVE

CLEARWATER DRIVE

LOT 30 LOT 31 LOT 1

BOULDER CREEK ROAD

TO THOMAS CREEK ROAD

TO SO. VIRGINIA ST.

F.A.S.-681 ZOLEZZI LANE

LAST CHANCE DITCH

WHITES CREEK

NORTH FORK

SECTION 17

SECTION 20

RECORD OF SURVEY NO. 1428

016.329
P.O.B. 28.87' RT. "X" 34+47.13 P.O.T.
TIE: S.88°50'32"E.-790.65' FROM THE NW CORNER OF SEC. 20, T.18N., R.20E., M.D.M.
A S.88°50'32"E.-230.00'
B S.0°49'36"W.-8.12'
C N.89°09'13"W.-230.00'
D N.0°51'00"E.-9.37'

016.457TE
P.O.B. 50.00' LT. "A" 41+79.58 P.O.T.
TIE: N.87°59'40"E.-1524.84' FROM THE SW CORNER OF SEC. 17, T.18N., R.20E., M.D.M.
Q N.34°11'28"E.-11.69'
R S.86°54'49"E.-416.89'
RI S.85°06'34"E.-142.08'
S S.20°27'42"E.-22.13'
M N.85°06'34"W.-151.24'
L N.86°54'49"W.-422.21'
K N.0°44'43"E.-10.00'

016.519
P.O.B. 29.45' RT. "A" 44+53.67 P.O.T.
TIE: S.88°43'15"E.-1795.65' FROM THE NW CORNER OF SEC. 20, T.18N., R.20E., M.D.M.
T N.1°09'28"E.-3.80'
U S.88°50'32"E.-290.00'
V Δ=63°23'55" R=30.00' L=33.20'
W N.86°32'05"W.-317.08'

VALLEY SPRINGS TRACT

VALLEY SPRINGS ROAD

WASHOE COUNTY

WHITES CREEK ESTATES UNIT 1

STATE OF NEVADA
DEP'T OF TRANSPORTATION R/W DIVISION

DATE: FEBRUARY, 1989

R/W PLANS

APPROVED _____
SUPERVISOR, R/W ENGINEERING

FHWA APPROVAL DATE _____

SCALE: 1" = 100'

Nimbus Engineers
3710 Grant Dr., Suite A • Reno, NV 89509
Mail: P.O. Box 10220 • Reno, NV 89510
(702) 689-8630 FAX (702) 689-8614

JOB 9311
SHEET NO. ____ OF ____
CALCULATED BY ACP DATE 10/19/95
CHECKED BY ____ DATE ____
SCALE ____

RIPRAP CALCULATION

AVERAGE SLOPE = $\frac{4582 - 4556.5}{2920 - 1400} = .0168$

VELOCITY = 10 FPS

$S_s = 2.60$

$d_{50} = \left[\frac{(V)5.17}{S_s - 1(3)}\right]^2 (12) = 12"$