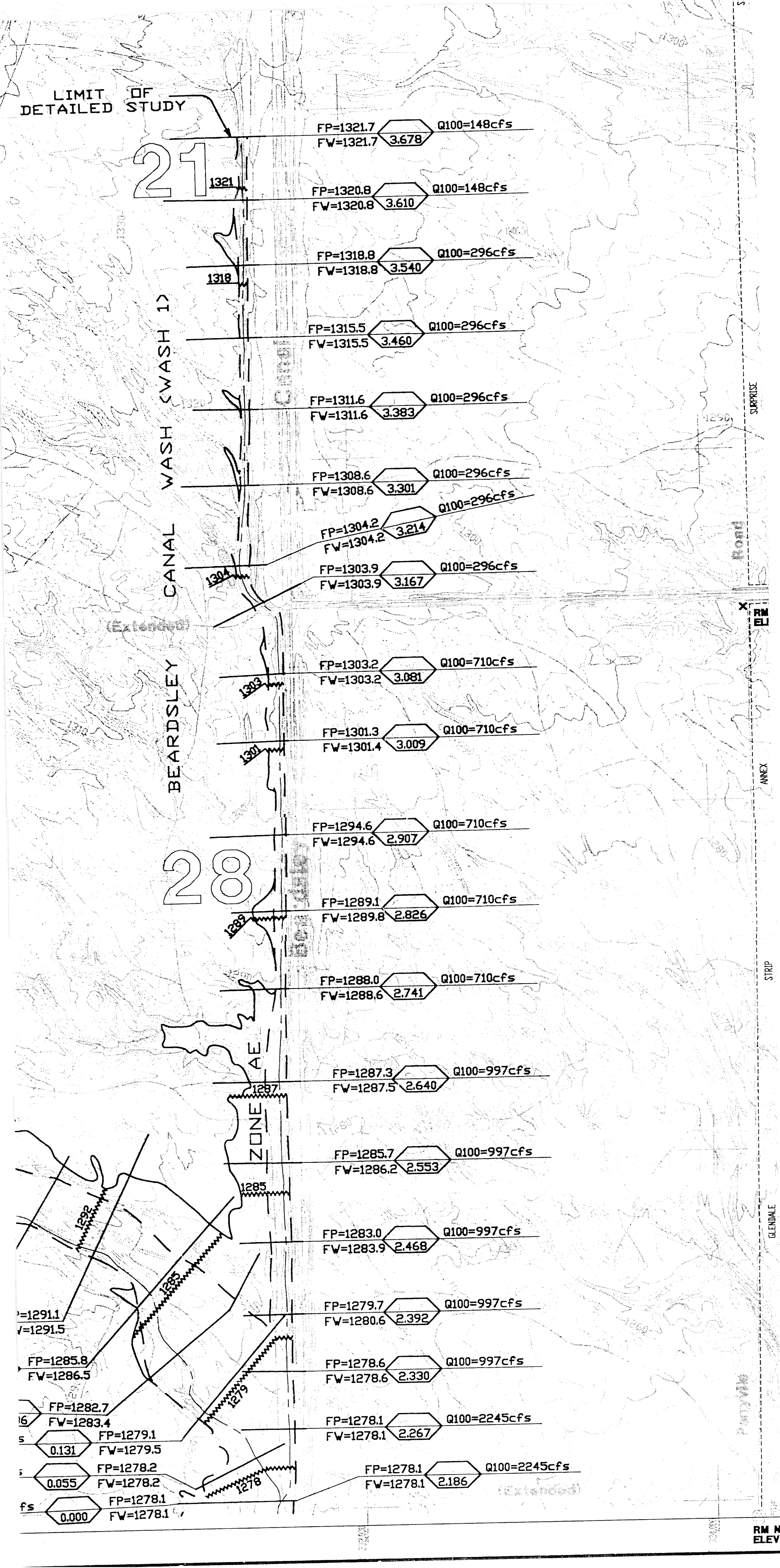
McMicken Channel and Beardsley Canal Wash

Volume 2 of 2

1997


LIMIT OF DETAILED STUDY
21
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Q100=296cfs
BEARDSLEY CANAL WASH (WASH 1)
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3.383
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3.301
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Q100=296cfs
(Extended)
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NONE
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FW=1286.2
2.553
Q100=997cfs
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1292
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2.468
Q100=997cfs
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0.055
FP=1278.2
FW=1278.2
1278
FP=1278.1
FW=1278.1
2.186
Q100=2245cfs
0.000
FP=1278.1
FW=1278.1
(Extended)
SURPRISE
STRIP
GLENDALE
ANNEX
RM N
ELEV

RM No. 506
ELEV.= 1299.40
CHOLLA WASH
ZONE AE
(WASH 1)
FP=1278.1
FW=1278.1
2.167
Q100=2245cfs
1278
490 CFS
1274
Avenue
FP=1274.7
FW=1274.7
2.159
Q100=1755cfs
FP=1269.1
FW=1269.4
2.072
Q100=1755cfs
1267
FP=1265.6
FW=1265.6
1.996
Q100=2048cfs
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1.920
Q100=2048cfs
1260
FP=1259.4
FW=1259.4
1.844
Q100=2048cfs
1255
FP=1253.6
FW=1253.9
1.768
Q100=2048cfs
33
1251
FP=1250.8
FW=1250.8
1.692
Q100=2048cfs
1251
FP=1250.7
FW=1250.7
1.616
Q100=2048cfs
1249
FP=1249.1
FW=1248.9
1.556
Q100=3816cfs
FP=1245.5
FW=1245.7
1.466
Q100=5141cfs
1245
Q100=1486cfs
Q100=1457cfs
FP=1282.1
FW=1282.7
1281
0.560
FP=1275.9
FW=1275.9
1269
0.466
FP=1270.4
FW=1270.4
1258
FP=1265.1
FW=1265.1
0.373
Q100=3816cfs
FP=1259.3
FW=1259.4
0.278
Q100=3816cfs
1252
FP=1254.9
FW=1255.0
0.189
Q100=3816cfs
FP=1251.5
FW=1251.7
0.095
Q100=3816cfs
FP=1249.1
FW=1248.9
0.000
Q100=3816cfs
1240
FP=1240.7
FW=1240.8
1.388
Q100=5141cfs
FP=1238.5
FW=1238.5
1.313
Q100=5141cfs
1238
FP=1229.3
FW=1229.3
3.727
FP=1226.6
FW=1226.6
3.681
FP=1226.6
FW=1226.6
Q100=4645cfs
FP=1238.3
FW=1238.3
1.237
Q100=4150cfs
FP=1238.2
FW=1238.2
1.159
1238
1227
1226
Q100=3655cfs
FP=1234.6
FW=1234.6
1.148
1234
1222
Q100=3655cfs
FP=1229.0
FW=1229.0
1.074
1228
1217
Q100=3890cfs
FP=1225.7
FW=1225.7
0.998
LIMIT OF DETAILED STUDY
Q100=3890cfs
FP=1221.5
FW=1221.5
0.920
Q100=3890cfs
FP=1220.2
FW=1220.9
0.846
1221
ZONE AE
(WASH 1)
1220
1206
Q100=4125cfs
FP=1220.0
FW=1219.9
0.770
Q100=4125cfs
FP=1217.2
FW=1217.2
0.696
Q100=4125cfs
FP=1215.1
FW=1215.1
0.620
1216
Q100=4125cfs
FP=1213.9
FW=1213.9
0.543
1214
Q100=4414cfs
FP=1211.4
FW=1211.4
0.465
Q100=4414cfs
FP=1208.1
FW=1208.1
0.390
1210
BEARDSLEY CANAL WASH
PERRYVILLE ROAD WASH
4
Q100=1743cfs
0.551
Q100=1743cfs
0.484
Q100=1743cfs
0.452
FP=1214.3
FW=1214.3
Q100=4414cfs
FP=1203.2
FW=1203.2
0.307
1202
Q100=4414cfs
FP=1200.0
FW=1200.3
0.231
Q100=1743cfs
FP=1213.4
FW=1213.4
0.437
0.156
ZONE A
FP=1208.9
FW=1208.9
Q100=1743cfs
0.423
1321
RM No. 511
ELEV.= 1213.89
(Extended)

MC MICKEN CHANNEL

The following models have been developed and are available on "G:\RWC\PROJECTS\MCM-CH".

HEC-1 MODEL:

WT3 - This is the model developed for subbasins 1 - 17, as a part of the White Tanks ADMS.

WT3- - The same as model WT3 except that the diversions are removed at Olive and Northern Avenues.

WT3-B1&2 - This model uses model WT3 and removes subbasins 1 and 2. Its purpose is to develop flows for the present drainage if the short channel were to be constructed to divert part of the flows from the White Tanks to McMicken Dam.

WT3-1&2 - The same as model WT3-B1&2 except that the diversions are removed at Olive and Northern Avenues.

WT3-B1-9 - This model uses model WT3 and removes subbasins 1, 2 and 4-9. Its purpose is to develop flows for the present drainage if the long channel were to be constructed to divert part of the flows from the White Tanks to McMicken Dam.

WT-3-1-9 - The same as model WT3-B1-9 except that the diversions are removed at Olive and Northern Avenues.

MCMKRSI - This is input data developed for the partial subbasins for use in model WT3-MCH.

WT3-MCH - This is a modification of a section of the model WT3 from the White Tanks ADMS. It covers the portion of the basin that would drain into the proposed long channel, and organizes the subbasins in a manner that would allow it to be collected by the channel in a downstream direction.

WT3-MCHA - This is a modification of model WT3-MCH to give flow values from subbasins 1 and 2 only. This would be used if only the flows between the dam and the hill about 2,000 feet south west were to be diverted to McMicken dam.

WTMCHSPF- This is a modification of model WT3-MCH to develop SPF flow rates.

WTMCHASP- This is a modification of model WT3MCHA to develop SPF flow rates for the short channel.

HEC-2 MODELS:

CHANNELS:

RUN01 - This is the GR data developed from the GIS data as the beginning input to the HEC-2 model.

MCMCH1 - This model is a first cut at designing the channel based on the GR data developed from the GIS data. The chimp routine was used to develop the long channel.

MCMCH - This is the final model developed for the long channel based on information gathered in developing model MCMCH1. Some of the items modified were the center of the channel and a revision of the discharges for some cross sections. For the cross sections where the discharge was modified, it required the modification of the channel width.

MCMCH-PL- This model uses model MCMCH and eliminates part of the GR data outside of the excavated channel. This was done so that plots could be generated at a reasonable scale.

MCMCHAPL- This model is model MCMCH-PL with the starting channel bottom raised 1.0 foot. Thus, it could be determined how much less material would need to be excavated.

MCMCHBPL- This model is the same as MCMCHAPL with the starting bottom elevation raised 2.0 feet.

MCMCHDEM-This model uses model MCMCH-PL and rearranges the output.

MCMCHSPF - This model uses model MCMCH and changes the flow rates from the 100-year values to the SPF values.

MCMCHA - This model was developed to be used for a short channel, that only goes to the hill about 2,000 feet southwest of the dam.

MCMCHASP - This model uses model MCMCHA and changes the flow rates from the 100-year values to the SPF values for the short channel.

HEC-2 MODELS(CONT.):

BEARDSLEY CANAL WASH:

1.2HI - This is the original model used for flood plain delineation of Beardsley Canal Wash.

WTCH1 - This is a duplicate of model 1.2HI with floodway analysis removed and output format modified.

WTCH1-N - This model uses model WTCH1 and modifies the Q's based on no overflow at Olive and Northern Avenues, and modifies the culverts at these two sites to be able to carry the flows.

WTCH1SC - This is a modification of model WTCH1 based on the flows with the short channel in place, but no modification of the culverts at Olive and Northern Avenues.

WTCH1SCN - This model uses model WTCH1SC and modifies the Q's based on no overflow at Olive and Northern Avenues, and modifies the culvert at Northern Avenue, to be able to carry the flows.

WTCH1LC - This is a modification of model WTCH1 based on the flows with the Long channel in place, but no modification of the culverts at Olive and Northern Avenues.

WTCH1LCN - This model uses model WTCH1LC and modifies the Q's based on no overflow at Olive and Northern Avenues, and modifies the culvert at Northern Avenue, to be able to carry the flows.

R.W. Cruff, P.E.
April 29, 1997

FILE - WTCH1.DAT

```
C
C      93
C    .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C    .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C    .000
C    .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C    .000   Q = 4125 + (.7)413  =4414 CFS
C    .000
C    .465
C    .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C    .465   Q = 4125 CFS
C    .465
C    .846
C    .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C    .846   Q = (4125 + 3655)/2 = 3890 CFS
C    .846
C   1.074
C   1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C   1.074   Q = 3655 CFS                                   SION AT NORTHERN AVE.)
C   1.074
C   1.148
C   1.148   NORTHERN AVENUE
C   1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1486 CFS BREAKS OUT EAST OVER
C   1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C   1.148
C   1.159
C   1.159   Q @ X1 = 1.159 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO  HE EAST
C   1.159   Q = 5141 - 991 = 4150 CFS                                   THE EAST
C   1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.159
C   1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C   1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C   1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C   1.159
C   1.237
C   1.237   Q AT X1 = 1.237 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO
C   1.237   Q = 5141 - 495 = 4645 CFS                                THE EAST
C   1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.237
C   1.313
C   1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C   1.313   Q = 5141 CFS                                        AT NORTHERN AVE.)
C   1.313
C   1.556
C   1.556   Q AT X1 = 1.556
C   1.556   Q = 3816 CFS
C   1.556
C   1.616
C   1.616   Q @ X1 = 1.556 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C   1.616   Q = (1173/4 + 1755) = 2048 CFS
C   1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C   1.616
C   1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C   1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C   1.616
C   2.072
C   2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C   2.072   Q = 1755 CFS                                  AT OLIVE AVENUE)
C   2.072
C   2.159
C   2.159   OLIVE AVENUE
C   2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C   2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C   2.159
C   2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C   2.159   OLIVE AVENUE.
C   2.159
C   2.167
C   2.167   Q @ X1 = 2.107 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C   2.167   Q = 2245 CFS                                  AT OLIVE AVE.)
C   2.167
C   2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C   2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
C   2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
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C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1.DAT WHICH IS THE SAME AS 1.H2I DEVELOPED BY WLB
*           WITHOUT THE FLOODWAY ANALYSIS AND MODIFIED OUTPUT TABLE
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1.DAT - R.W. CRUFF - 4-25-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1      0       2       0       0   .0055       0       0       0    1195       0
J2      1       0       0       0       0       0       0       0       0       0
J3     38      43       1       8      26
J3     38      53       4      54      13      14      15
NC    .03     .04    .028      .1      .3
QT      2    4414    4414
ET                    9.1                                          9947.3410139.22
X1 0.000       20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350  1200.4   10365
ET                    9.1                                          9948.3310160.30
X1 0.070       13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                    9.1                                          9907.8310260.83
X1 0.156       17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH      4     .04    9970     .03   10115     .03   10260     .04   10285
ET                    9.1                                          9954.33   10115
X1 0.231       18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH      6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                    9.1                                          9881.25   10065
X1 0.307       23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC    .03     .04     .03      .1      .3
ET                    9.1                                          9931.3310041.47
X1 0.390       11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT      2    4125    4125
ET                    9.1                                          9922.8310040.76
X1 0.465       15    9930   10030     410     390     395
GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
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GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                           9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                            9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                           9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                           9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    3890    3890
ET                   9.1                                           9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                           9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                           9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    3655    3655
ET                   9.1                                           9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                              988010069.42
X1 1.148      18    9989   10011     395     405     390
X3    10                                                     1234.5  1234.5
GR1234.5    9880  1234.5    9920    1232    9940    1230    9970    1228    9980
GR  1227    9989  1224.7    9990    1224    9992  1224.7    9994    1227    9995
GR  1227   10005  1224.7   10006    1224   10008  1224.7   10010    1227   10011
GR  1228   10020    1236   10080  1236.5   10230
QT     2    4150    4150
SB     1     1.5     2.5       0      16      .1     113     .41  1224.4    1224
ET                  9.11                                              988610247.26
X1 1.159      21    9989   10011      60      60      60
X2                     1  1230.4  1234.5
X3    10                                                     1234.5  1234.5
BT    21    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9968  1234.6  1234.6    9989  1234.7  1227.4    9990
BT1234.7  1229.7    9992 1234.72  1230.4    9994 1234.73  1229.7    9995 1234.75
BT1227.4   10005  1234.8  1227.4   10006 1234.81  1229.7   10008 1234.82  1230.4
BT 10010 1234.83  1229.7   10011 1234.85  1227.4   10034    1238    1238   10080
BT  1238    1238   10115    1238    1238   10145    1238    1238   10200    1237
BT  1237   10280    1239    1239
GR1234.5    9886  1234.5    9909 1233.75    9916  1229.7    9927  1228.7    9968
GR1227.4    9989  1225.1    9990  1224.4    9992  1225.1    9994  1227.4    9995
GR1227.4   10005  1225.1   10006  1224.4   10008  1225.1   10010  1227.4   10011
GR  1238   10034    1238   10080    1238   10115    1238   10145    1237   10200
GR  1239   10280
NC   .03     .05    .035      .3      .5
QT     2    4645    4645
ET                   9.1                                              995010298.35
X1 1.237      18    9975   10030     390     390     410
GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
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GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    5141    5141
ET                   9.1                                          9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                           9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                           9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    3816    3816
ET                   9.1                                          9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    2048    2048
ET                   9.1                                            995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                          9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940    .035    9960     .03   10045     .04   10220    .035
NH 10325
ET                   9.1                                           9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                          9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                          9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                             9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2    1755    1755
ET                   9.1                                           9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                            991010542.73
X1 2.159      16    9991 10008.2     440     460     460
X3    10                                                   1275.6  1275.6
GR1275.7    9910    1274    9970  1271.2    9991  1269.2  9991.5  1267.7    9993
GR1267.2    9995  1267.6 10004.6  1268.1 10006.4  1269.4 10007.6  1271.2 10008.2
GR  1272   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
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GR  1280   10910
QT     2    2245    2245
SB  1.25     1.5     2.5       0      10      .1     104     .56  1268.2  1267.8
ET                  9.11                                            991010542.73
X1 2.167      24    9991 10008.2      40      40      40
X2                     1  1275.6  1275.9
X3    10                                                 1275.9  1275.9
BT    24    9910    1277    1277    9940 1276.63 1276.63    9968  1276.5  1276.5
BT  9991  1276.4  1271.6  9991.5  1276.4  1273.6    9993  1276.4  1275.1    9995
BT1276.4  1275.6    9997  1276.4  1275.1  9998.5  1276.4  1273.6    9999  1276.4
BT1271.6   10001  1276.4  1271.6 10001.3  1276.4  1273.4 10002.8  1276.4  1274.7
BT10004.  1276.4  1275.2 10006.4  1276.4  1274.7 10007.6  1276.4  1273.4 10008.2
BT1276.4  1271.6   10055  1276.2  1276.2   10085  1276.1  1276.1   10100  1275.9
BT1275.9   10300  1276.1  1276.1   10500  1277.3  1277.3   10530   1278    1278
BT 10720  1279.5  1279.5
GR  1277    9910  1274.7    9940  1274.0    9968  1271.6    9991  1269.6  9991.5
GR1268.1    9993  1267.6    9995  1268.1    9997  1269.6  9998.5  1271.6    9999
GR1271.6   10001  1269.8 10001.3  1268.5 10002.8  1268.0 10004.6  1268.5 10006.4
GR1269.8 10007.6  1271.6 10008.2  1272.3   10055  1273.2   10085  1274.3   10100
GR1275.3   10300    1277   10500    1278   10530  1279.5   10720
ET                  9.1                                             991010518.19
X1 2.186      18    9955   10075     100     100     100
GR  1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR  1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR  1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC   .04     .07    .035      .1      .3
ET                  9.1                                             997010352.22
X1 2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR  1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR  1280   10430
QT     2     997     997
ET                  9.1                                          9977.12   10100
X1 2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR  1274   10010    1276   10040    1278   10160    1280   10335
NH     5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                  9.1                                          9986.62   10090
X1 2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR  1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR  1278   10110  1278.7   10155    1280   10225    1282   10300
NH     3     .04    9970    .035   10055     .05   10300
ET                  9.1                                          9983.68   10085
X1 2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR  1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH     3     .04    9960    .035   10030     .07   10325
ET                  9.1                                          9976.58   10085
X1 2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR  1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC  .035     .07    .035      .1      .3
ET                  9.1                                          9969.89   10080
X1 2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR  1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR  1286   10150    1288   10175    1290   10220    1292   10255
QT     2     710     710
ET                  9.1                                          9985.09   10035
X1 2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR  1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR  1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR  1294   10285  1294.4   10340
ET                  9.1                                          9983.29   10055
X1 2.826      10    9965   10055     450     450     450
GR  1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR  1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                  9.1                                          9980.5610044.07
X1 2.907       8    9985   10030     430     430     430
GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
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GR  1294   10030    1296   10080  1297.7   10110
NH     2    .035   10025     .07   10125
ET                   9.1                                        9980.7910066.54
X1 3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR  1302   10090  1302.5   10125
NC   .04     .07    .035      .1      .3
ET                   9.1                                        9974.8010050.31
X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                        9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                        9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                        9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                        9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                        9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                        9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                        9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                        9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
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FILE = WTCH1.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1.DAT WHICH IS THE SAME AS 1.H2I DEVELOPED BY WLB
WITHOUT THE FLOODWAY ANALYSIS AND MODIFIED OUTPUT TABLE

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	DEPTH	VCH
	.000	4414.00	1192.84	3.44	8.47
	.070	4414.00	1195.17	3.17	8.73
	.156	4414.00	1198.29	4.39	6.67
	.231	4414.00	1200.04	4.74	7.08
	.307	4414.00	1202.27	4.57	8.85
	.390	4414.00	1208.15	6.35	11.09
	.465	4125.00	1211.43	6.43	9.90
	.543	4125.00	1213.93	7.23	7.49
	.620	4125.00	1215.09	7.29	6.11
	.696	4125.00	1217.17	7.17	12.06
	.770	4125.00	1219.98	8.68	5.40
	.846	3890.00	1220.24	6.64	6.83
	.920	3890.00	1221.50	5.90	10.54
	.998	3890.00	1225.72	7.42	12.48
	1.074	3655.00	1229.03	8.03	10.41
Northern	1.148	3655.00	1234.59	10.59	6.62
overflow	1.159	4150.00	1238.18	13.78	3.92
	1.237	4645.00	1238.34	10.54	4.53
	1.313	5141.00	1238.51	7.71	7.32
	1.388	5141.00	1240.74	6.24	11.78
	1.466	5141.00	1245.55	8.05	10.95
	1.556	3816.00	1249.07	8.07	8.72
	1.616	2048.00	1250.67	6.67	2.81

SECNO	Q	CWSEL	DEPTH	VCH
1.692	2048.00	1250.78	3.08	6.65
1.768	2048.00	1253.62	2.92	4.73
1.844	2048.00	1259.44	7.04	10.83
1.920	2048.00	1262.78	7.58	7.66
1.996	2048.00	1265.60	5.20	10.22
2.072	1755.00	1269.12	5.62	4.85
2.159	1755.00	1274.66	7.46	14.92
2.167	2245.00	1278.10	10.50	1.50
2.186	2245.00	1278.10	8.60	1.54
2.267	2245.00	1278.06	6.96	4.49
2.330	997.00	1278.58	5.28	3.46
2.392	997.00	1279.67	4.27	6.79
2.468	997.00	1283.04	3.34	3.85
2.553	997.00	1285.71	3.61	7.11
2.640	997.00	1287.34	4.44	2.53
2.741	710.00	1287.96	4.06	4.86
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.58	3.28	7.69
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

Olive

FILE = WTCH1.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1.DAT WHICH IS THE SAME AS 1.H2I DEVELOPED BY WLB
WITHOUT THE FLOODWAY ANALYSIS AND MODIFIED OUTPUT TABLE

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY

SUMMARY PRINTOUT

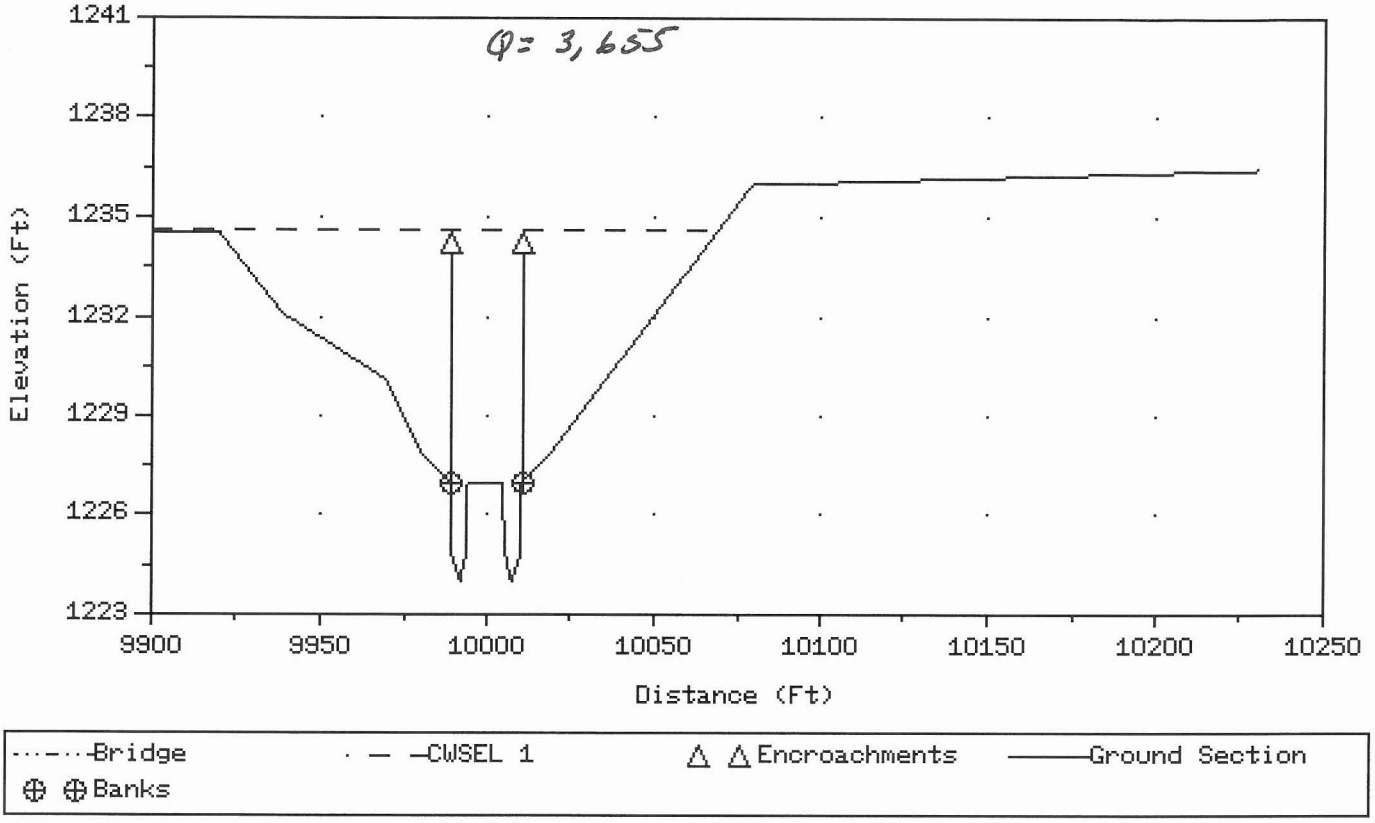
SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9947.34	191.88	10139.22	11.02	4286.37	116.61
.070	9948.33	211.97	10160.30	20.53	4386.56	6.91
.156	9907.83	352.99	10260.83	.28	4248.45	165.27
.231	9954.39	280.61	10262.55	.00	2894.95	1519.05
.307	9881.26	225.46	10318.36	.00	3736.93	677.06
.390	9931.33	110.14	10041.47	.22	4413.72	.07
.465	9922.83	117.93	10040.76	15.70	4091.51	17.79
.543	9940.37	232.59	10172.96	23.12	2959.03	1142.85
.620	9954.50	379.46	10333.96	65.56	2808.09	1251.35
.696	9954.16	91.67	10045.84	151.73	3859.48	113.79
.770	9950.13	449.10	10399.23	106.88	2376.61	1641.51
.846	9943.22	205.70	10148.92	99.28	3269.57	521.15
.920	9966.26	126.18	10092.44	9.82	3833.82	46.36
.998	9969.28	74.31	10043.59	18.35	3850.69	20.97
1.074	9957.19	75.41	10032.60	9.02	3643.82	2.16
1.148	9880.00	189.42	10069.42	1282.75	1275.36	1096.89
1.159	9886.00	361.26	10247.26	2742.17	1031.08	376.75
1.237	9950.00	348.35	10298.35	82.62	2130.43	2431.96
1.313	9963.26	209.66	10172.92	3.42	4004.59	1132.99
1.388	9982.23	195.71	10177.94	3.07	1714.72	3423.22
1.466	9980.75	169.07	10149.83	.00	2752.49	2388.51
1.556	9964.30	138.48	10102.78	11.89	3597.72	206.39
1.616	9950.00	199.96	10149.96	43.45	1343.29	661.26

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9974.68	161.21	10135.88	9.66	766.47	1271.86
1.768	9962.88	273.29	10236.16	.00	666.71	1381.29
1.844	9980.94	74.94	10055.88	.00	1989.89	58.11
1.920	9973.04	76.54	10049.58	.94	2039.17	7.89
1.996	9974.00	62.99	10036.99	.00	2048.00	.00
2.072	9972.17	246.41	10218.58	.00	981.55	773.45
2.159	9991.00	17.20	10008.20	.00	1755.00	.00
2.167	9910.00	632.85	10542.85	332.45	233.38	1679.17
2.186	9910.00	608.19	10518.19	132.70	1411.16	701.15
2.267	9970.00	382.22	10352.22	.00	1005.06	1239.94
2.330	9977.12	233.30	10210.42	.00	804.95	192.05
2.392	9986.63	159.31	10207.46	.00	536.53	460.47
2.468	9983.59	273.66	10260.37	.00	373.96	623.03
2.553	9976.47	118.87	10095.33	.00	902.04	94.96
2.640	9969.91	196.89	10166.81	.00	515.07	481.93
2.741	9985.09	153.09	10159.82	.00	481.87	228.13
2.826	9983.29	173.76	10157.05	.00	589.64	120.36
2.907	9980.41	64.13	10044.54	2.81	702.72	4.47
3.009	9980.80	85.74	10066.54	28.54	639.62	41.84
3.081	9974.79	75.52	10050.31	6.56	697.80	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

No channels – overflow @ Olive & Northern

WASH "1" - BEARDSLEY CAN

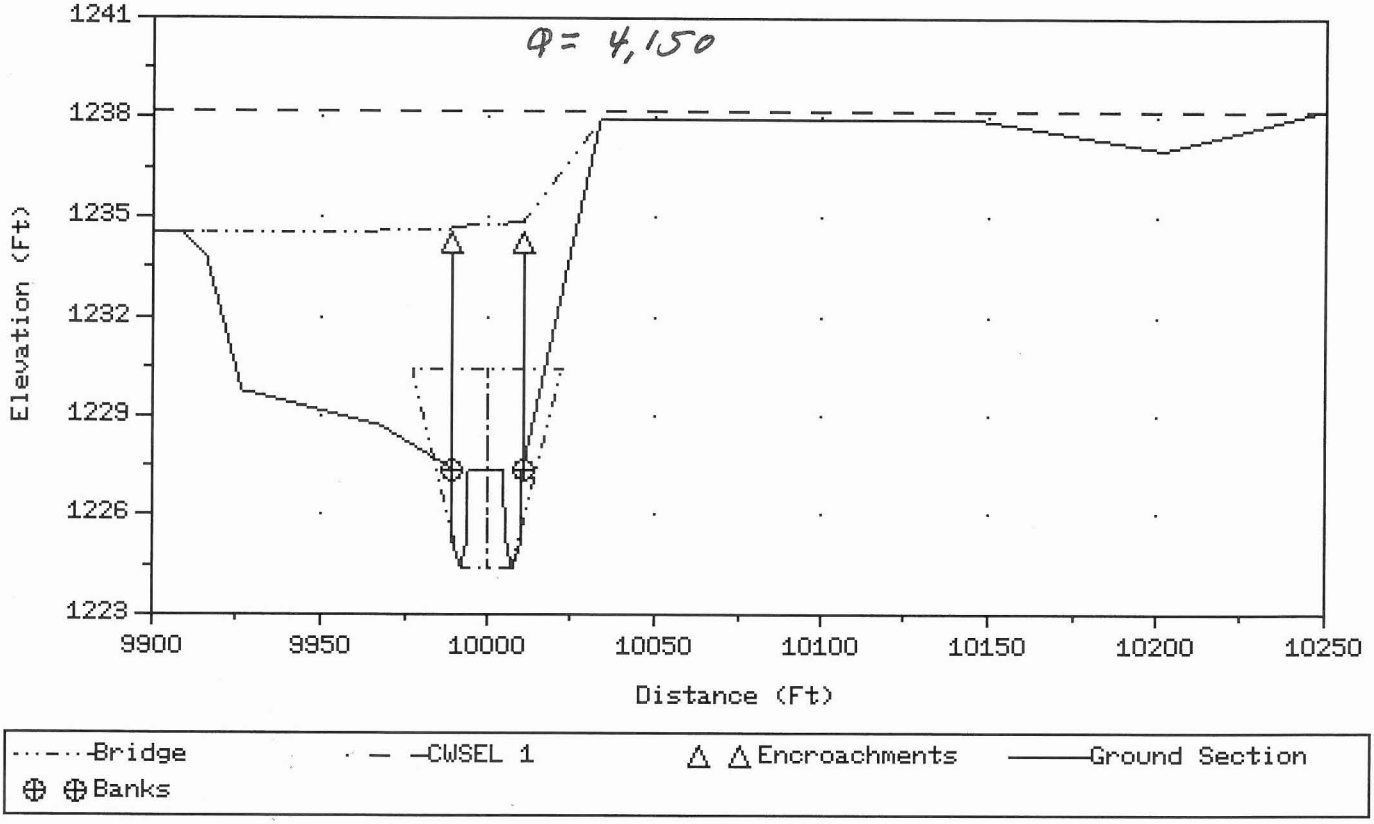
Cross-Section 1.148



Northern Ave.

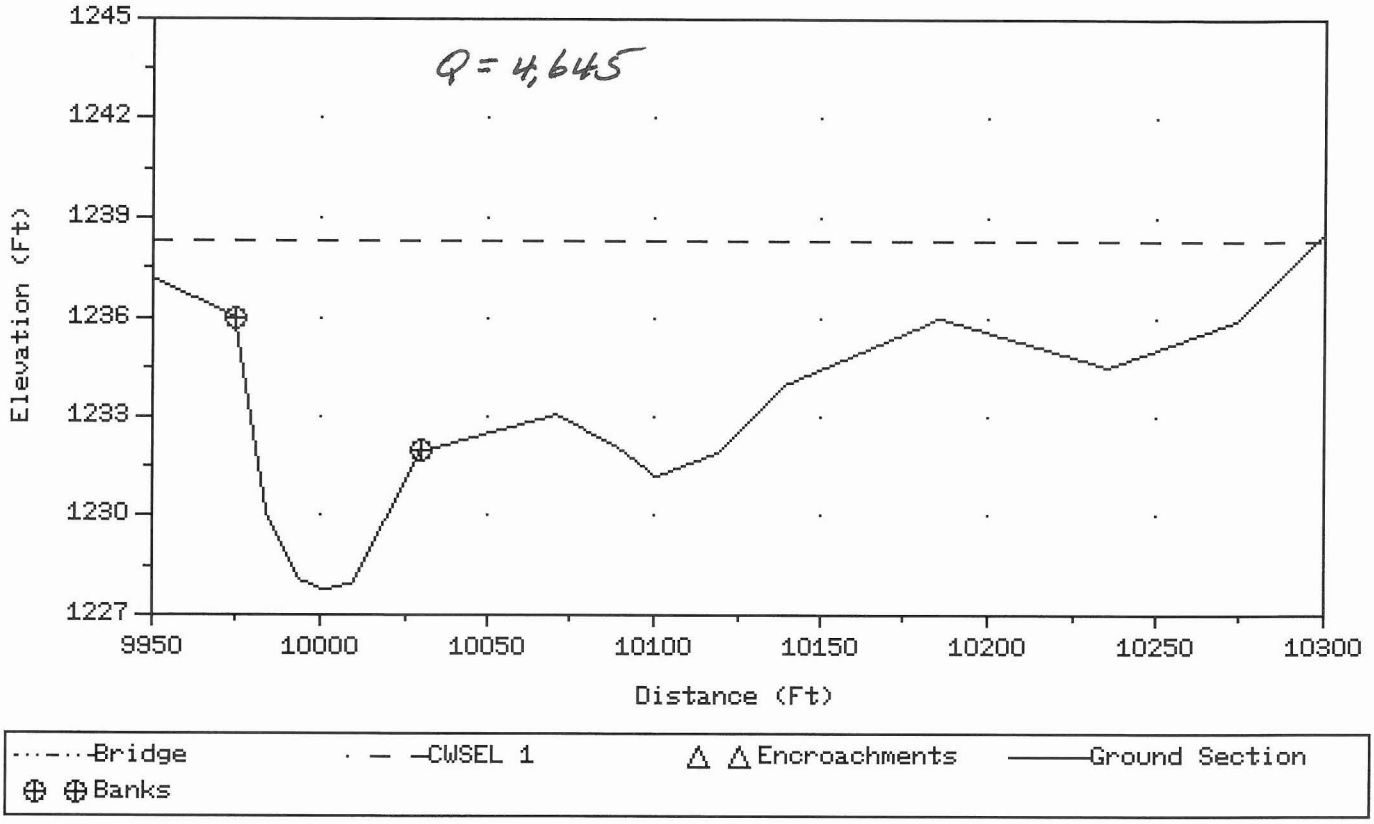
WASH "1" - BEARDSLEY CAN

Cross-Section 1.159



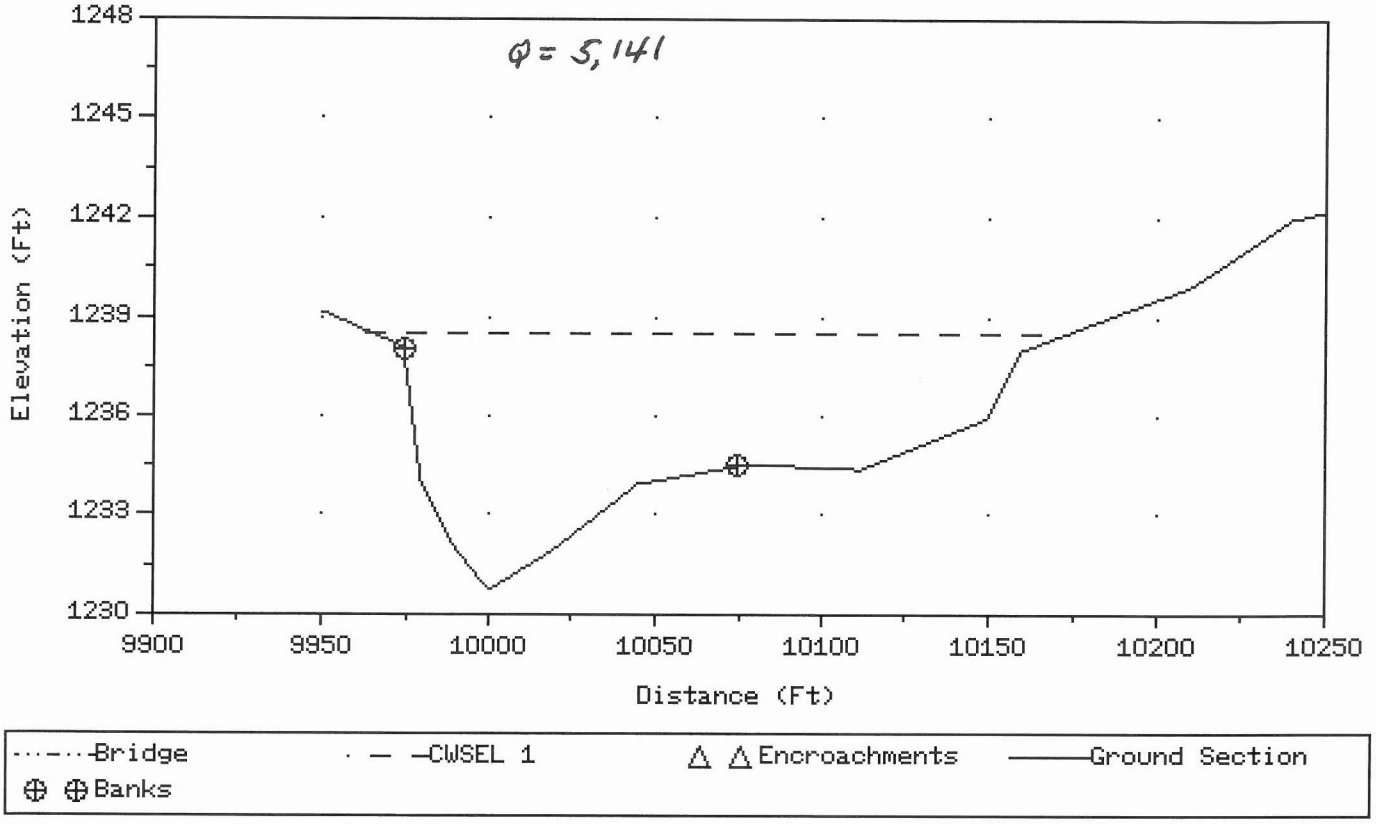
WASH "1" - BEARDSLEY CAN

Cross-Section 1.237



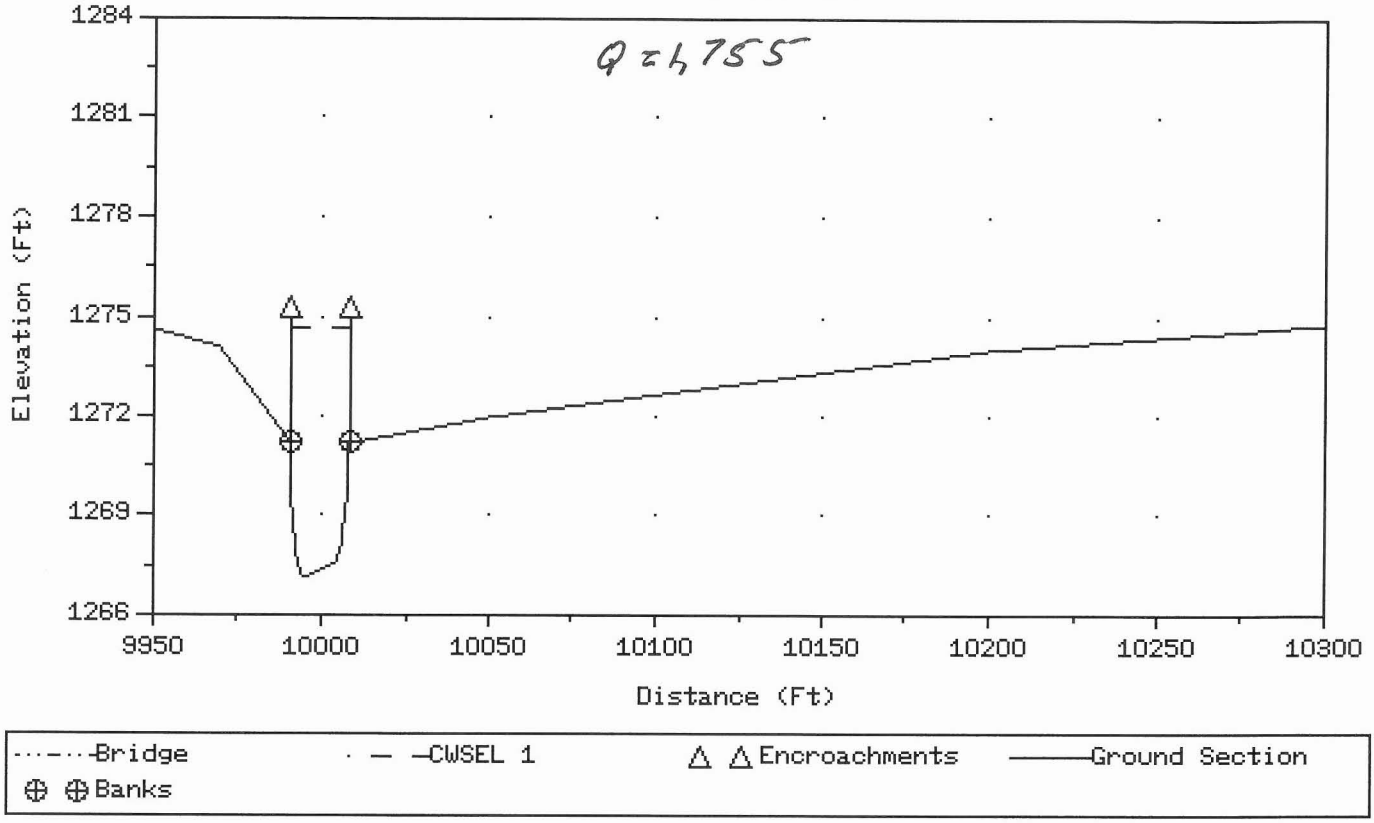
WASH "1" - BEARDSLEY CAN

Cross-Section 1.313



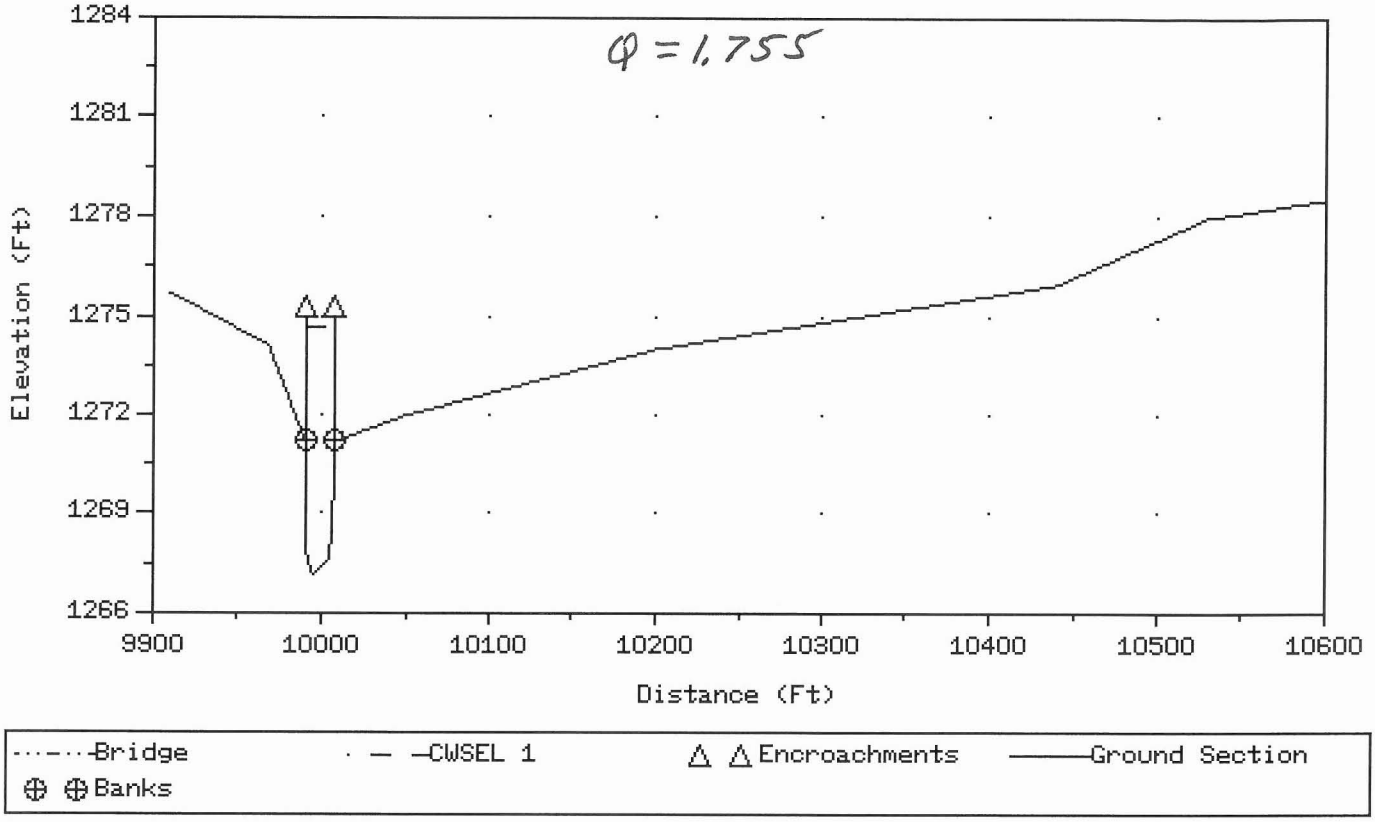
WASH "1" - BEARDSLEY CAN

Cross-Section 2.159



WASH "1" - BEARDSLEY CAN

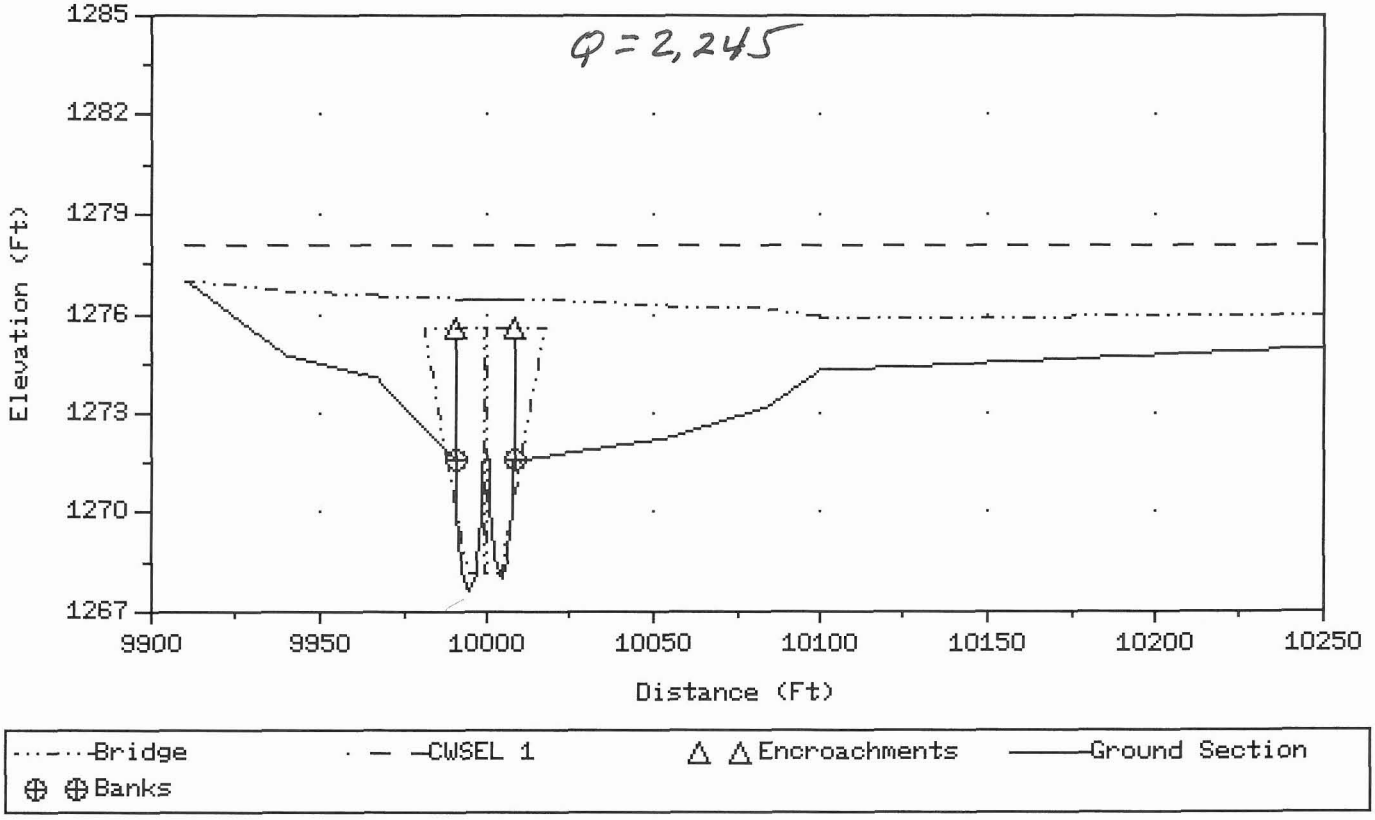
Cross-Section 2.159



Olive Avenue

WASH "1" - BEARDSLEY CAN

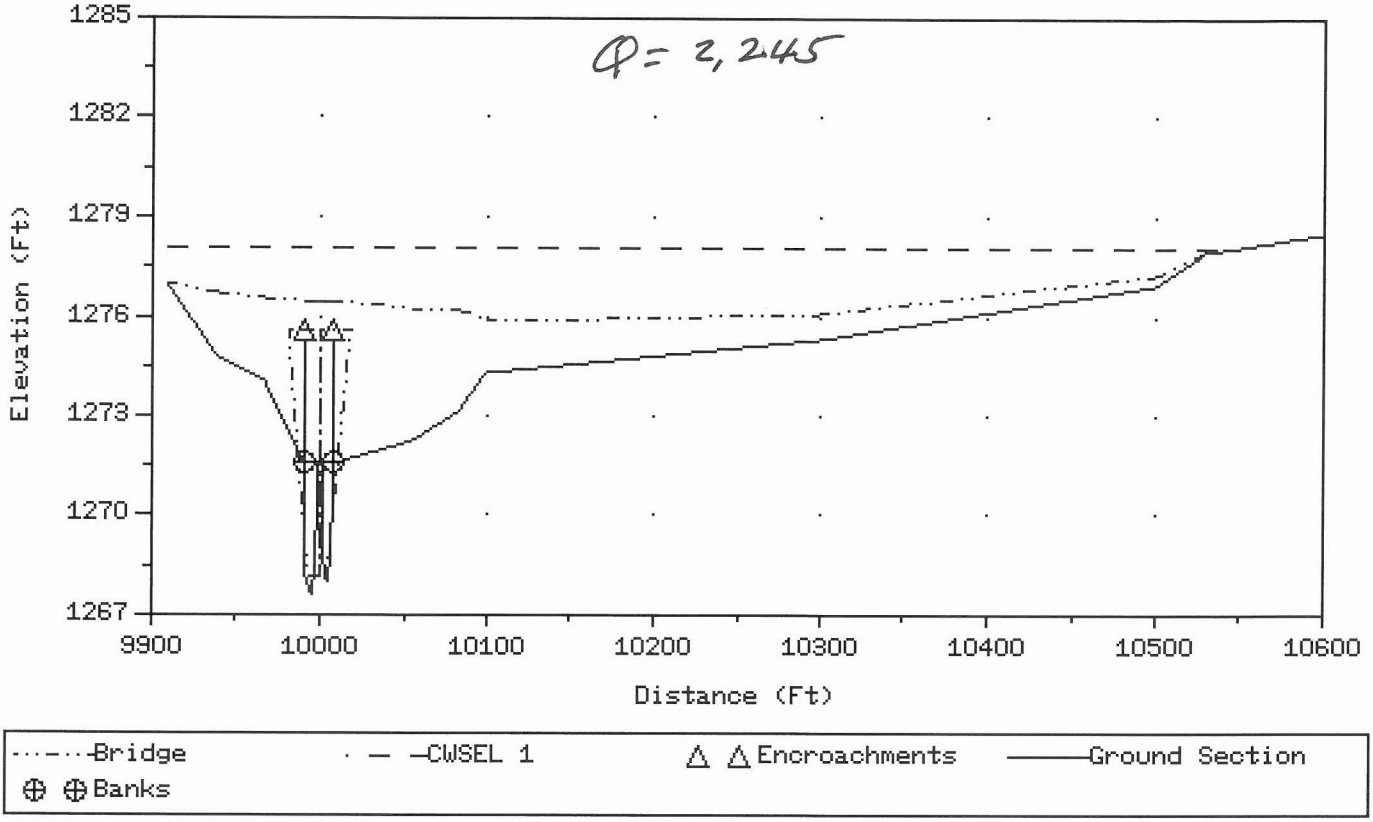
Cross-Section 2.167



Olive Avenue

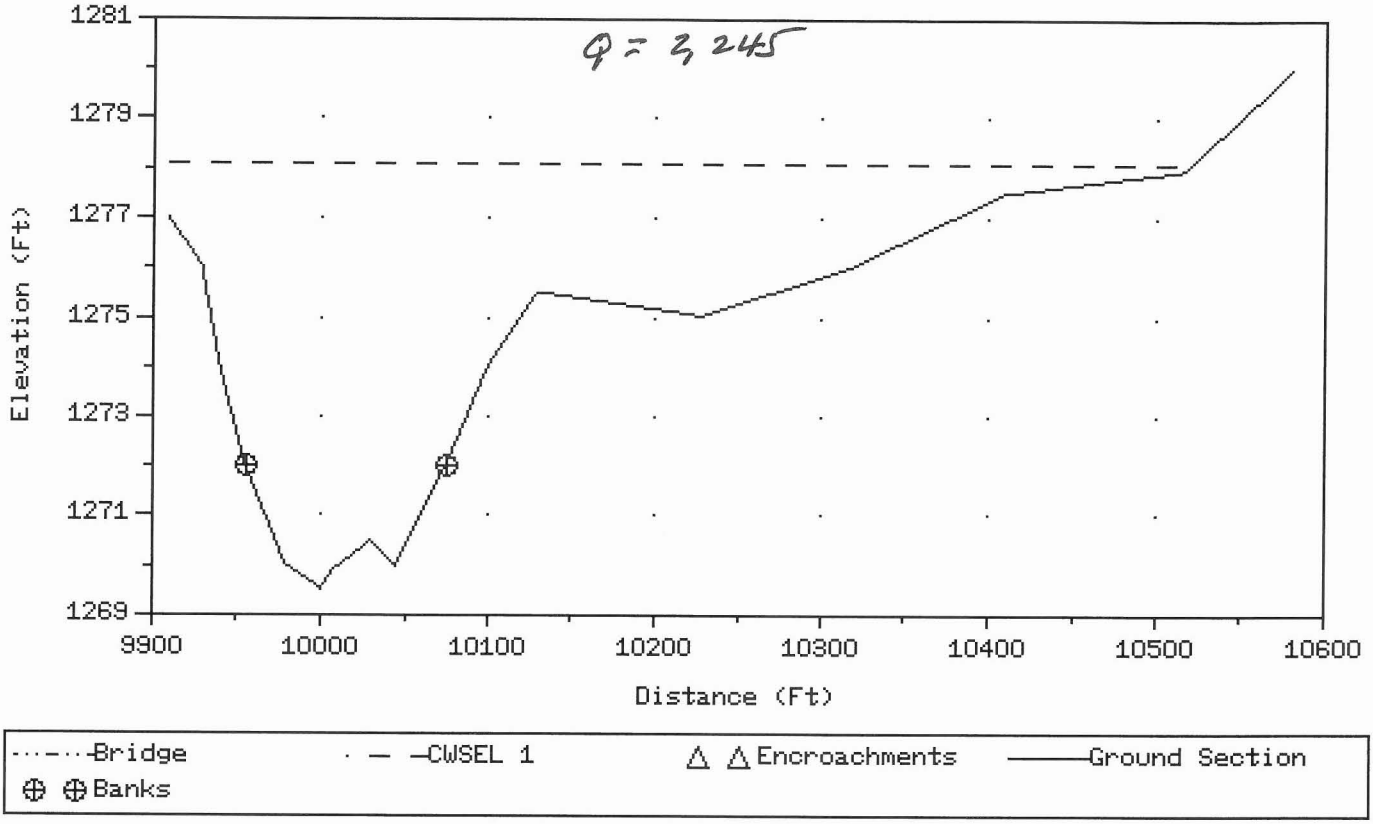
WASH "1" - BEARDSLEY CAN

Cross-Section 2.167



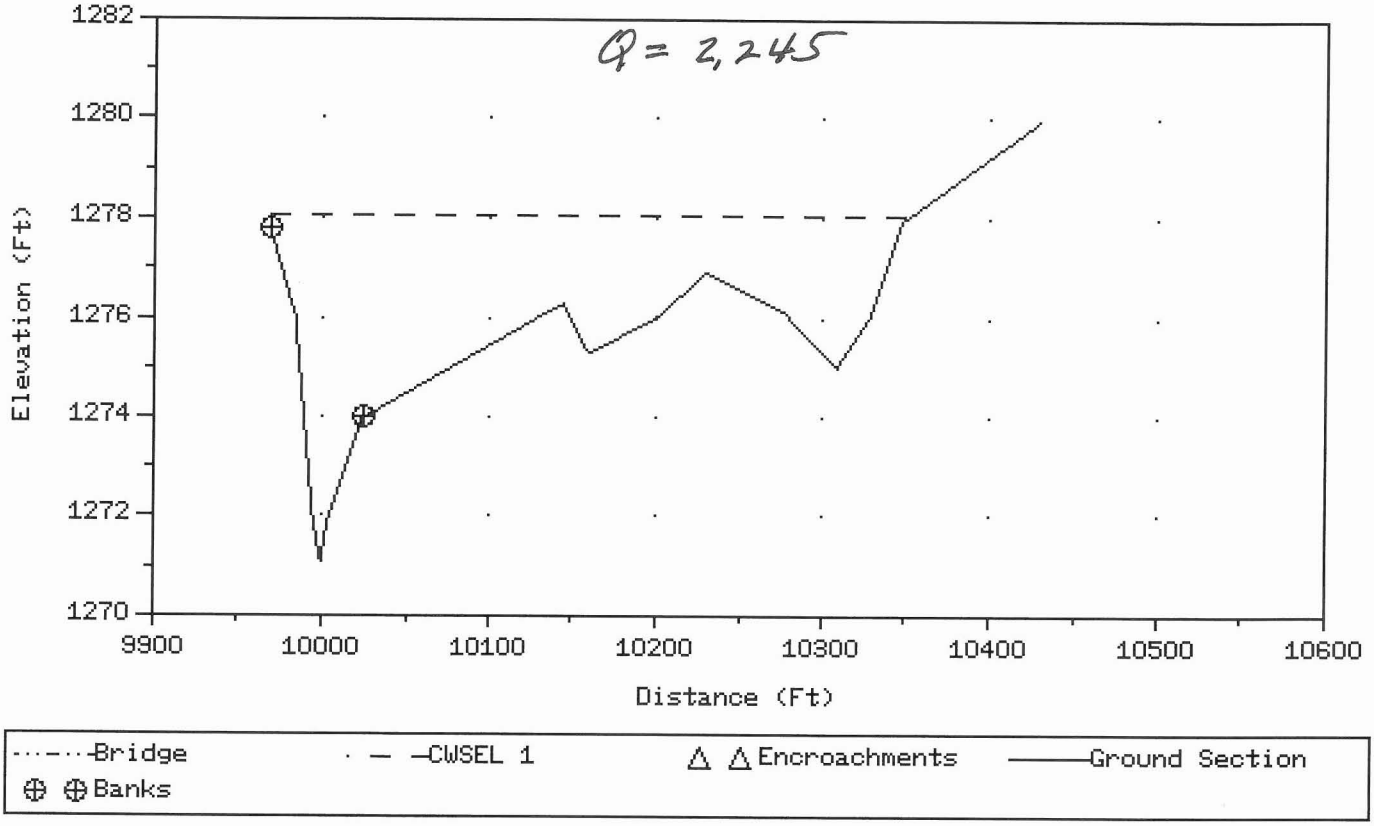
WASH "1" - BEARDSLEY CAN

Cross-Section 2.186



WASH "1" - BEARDSLEY CAN

Cross-Section 2.267



```
FILE = WTCH1-N.DAT

C
C     93
C   .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C   .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C   .000
C   .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C   .000   Q = 5888 + (.7)413  =6177 CFS
C   .000
C   .465
C   .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C   .465   Q = 5888 CFS
C   .465
C   .846
C   .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C   .846   Q = (5888 + 5504)/2 = 5696 CFS
C   .846
C  1.074
C  1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C  1.074   Q = 5504 CFS                                   SION AT NORTHERN AVE.)
C  1.074
C  1.148
C  1.148   NORTHERN AVENUE
C  1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1279 CFS BREAKS OUT EAST OVER
C  1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C  1.148
C  1.159
C  1.159   Q @ X1 = 1.159 EQUALS Q AT CP10
C  1.159   Q = 5504  CFS
C  1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C  1.159
C  1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C  1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C  1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C  1.159
C  1.237
C  1.237   Q AT X1 = 1.237 EQUALS Q AT CP10
C  1.237   Q = 5504 CFS
C  1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C  1.237
C  1.313
C  1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C  1.313   Q = 5504 CFS                                        AT NORTHERN AVE.)
C  1.313
C  1.556
C  1.556   Q AT X1 = 1.556
C  1.556   Q = 4214 CFS
C  1.556
C  1.616
C  1.616   Q @ X1 = 1.616 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C  1.616   Q = (1173/4 + 2245) = 2538 CFS
C  1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C  1.616
C  1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C  1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C  1.616
C  2.072
C  2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C  2.072   Q = 2245 CFS                                  AT OLIVE AVENUE)
C  2.072
C  2.159
C  2.159   OLIVE AVENUE
C  2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C  2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C  2.159
C  2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C  2.159   OLIVE AVENUE.
C  2.159
C  2.167
C  2.167   Q @ X1 = 2.167 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C  2.167   Q = 2245 CFS                                  AT OLIVE AVE.)
C  2.167
C  2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C  2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
C  2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
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C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1-N.DAT WHICH USES MODEL WTCH1-N & CHANGE Q'S TO BE
*           IN EFFECT IF THE CULVERTS AT OLIVE AVENUE  & AT
*           NORTHERN AVENUE WERE REBUILT TO CARRY THE FLOWS.
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1-N.DAT - R.W. CRUFF - 4-28-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1      0       2       0       0   .0055       0       0       0    1195       0
J2      1       0       0       0       0       0       0       0       0       0
J3     38      43       1       8      26
J3     38      53       4      54      13      14      15
NC    .03     .04    .028      .1      .3
QT      2    6177    6177
ET                    9.1                                          9947.3410139.22
X1 0.000       20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350  1200.4   10365
ET                    9.1                                          9948.3310160.30
X1 0.070       13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                    9.1                                          9907.8310260.83
X1 0.156       17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH      4     .04    9970     .03   10115     .03   10260     .04   10285
ET                    9.1                                          9954.33   10115
X1 0.231       18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH      6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                    9.1                                          9881.25   10065
X1 0.307       23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC    .03     .04     .03      .1      .3
ET                    9.1                                          9931.3310041.47
X1 0.390       11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT      2    5888    5888
ET                    9.1                                          9922.8310040.76
X1 0.465       15    9930   10030     410     390     395
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GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                            9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                             9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                            9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                            9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    5696    5696
ET                   9.1                                            9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                            9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                            9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    5504    5504
ET                   9.1                                            9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                               988010069.42
X1 1.148      18    9950   10011     395     405     390
X3    10                                                     1234.5  1234.5
GR1234.5    9880  1234.5    9927  1234.5    9930  1234.5    9950    1224    9950
GR  1224    9989    1224    9990    1224    9992    1224    9994    1224    9995
GR  1224   10005    1224   10006    1224   10008    1224   10010  1234.5   10011
GR1234.5   10020    1236   10080  1236.5   10230
QT     2    5504    5504
SB     1     1.5     2.5       0      60       2     522       0  1224.4    1224
ET                  9.11                                                 9886   10145
X1 1.159      16    9950   10010      60      60      60
X2                     1  1233.4  1234.5
X3    10                                                     1234.5  1234.5
BT    14    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9950  1234.5  1233.4    9990  1234.5  1233.4    9992
BT1234.5  1233.4     994  1234.5  1233.4   10010  1234.5  1233.4   10011  1234.5
BT1234.5   10034    1238    1238   10080    1238    1238   10115    1238    1238
BT 10145    1238    1238
GR1234.5    9886  1234.5    9909  1234.5    9916  1234.5    9927  1234.5    9950
GR1224.4    9950  1224.4    9990  1224.4    9992  1224.4    9994  1224.4   10010
GR1234.5   10010  1234.5   10011    1238   10034    1238   10080    1238   10115
GR  1238   10145

NC   .03     .05    .035      .3      .5
QT     2    5504    5504
ET                   9.1                                               995010298.35
X1 1.237      18    9975   10030     390     390     410
GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
```

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GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    5504    5504
ET                   9.1                                          9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                          9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                          9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    4214    5214
ET                   9.1                                          9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    2538    2538
ET                   9.1                                           995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                          9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940    .035    9960     .03   10045     .04   10220    .035
NH 10325
ET                   9.1                                          9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                          9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                           9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                            9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2    2245    2245
ET                   9.1                                          9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                            991010542.73
X1 2.159      16    9970   10010     440     460     460
X3    10                                                   1275.6  1275.6
GR1275.7    9910    1274    9970  1267.6    9970  1267.6    9990  1267.6    9993
GR1267.6    9995  1267.6 10004.6  1267.6 10006.4  1267.6   10010  1274.0   10010
GR  1274   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
GR  1280   10910
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QT      2    2245    2245
SB   1.25     1.5     2.5       0      40       1     234       0    1268  1267.6
ET                   9.11                                             991010542.73
X1  2.167      11    9970   10010      40      40      40
X2                     1    1274  1275.9
X3     10                                                   1275.9  1275.9
BT      9    9910    1277    1277    9940  1275.9  1275.9    9968  1275.9  1275.9
BT   9970  1275.9    1274   10010  1275.9    1274   10055  1276.2  1276.2   10085
BT1276.1  1276.1   10100  1275.9  1275.9   10300  1276.1  1276.1
GR   1277    9910  1275.9    9940  1275.9    9968  1275.9    9970    1268    9970
GR   1268   10010  1275.9   10010  1276.2   10055  1276.2   10085  1275.9   10100
GR1276.1   10300
ET                   9.1                                              991010518.19
X1  2.186      18    9955   10075     100     100     100
GR   1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR   1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR   1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC    .04     .07    .035      .1      .3
ET                   9.1                                              997010352.22
X1  2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR   1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR   1280   10430
QT      2     997     997
ET                   9.1                                          9977.12   10100
X1  2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR   1274   10010    1276   10040    1278   10160    1280   10335
NH      5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                   9.1                                          9986.62   10090
X1  2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR   1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR   1278   10110  1278.7   10155    1280   10225    1282   10300
NH      3     .04    9970    .035   10055     .05   10300
ET                   9.1                                          9983.68   10085
X1  2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR   1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH      3     .04    9960    .035   10030     .07   10325
ET                   9.1                                          9976.58   10085
X1  2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR   1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC   .035     .07    .035      .1      .3
ET                   9.1                                          9969.89   10080
X1  2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR   1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR   1286   10150    1288   10175    1290   10220    1292   10255
QT      2     710     710
ET                   9.1                                          9985.09   10035
X1  2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR   1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR   1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR   1294   10285  1294.4   10340
ET                   9.1                                          9983.29   10055
X1  2.826      10    9965   10055     450     450     450
GR   1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR   1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                   9.1                                          9980.5610044.07
X1  2.907       8    9985   10030     430     430     430
GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
GR   1294   10030    1296   10080  1297.7   10110
NH      2    .035   10025     .07   10125
ET                   9.1                                          9980.7910066.54
X1  3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR   1302   10090  1302.5   10125
NC    .04     .07    .035      .1      .3
ET                   9.1                                          9974.8010050.31
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X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                          9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                          9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                          9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                          9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                          9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                          9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                          9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                          9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
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FILE WTCH1-N.OUT

R.W. CRUFF, P.E.

APRIL 28, 1997

FILE = WTCH1-N.DAT WHICH USES MODEL WTCH1-N & CHANGE Q'S TO BE
IN EFFECT IF THE CULVERTS AT OLIVE AVENUE & AT
NORTHERN AVENUE WERE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1-N.DAT - R.W. CRUFF - 4-28-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	VCH
.000	6177.00	1193.52	4.12	9.63
.070	6177.00	1195.79	3.79	9.78
.156	6177.00	1198.91	5.01	7.32
.231	6177.00	1200.59	5.29	7.85
.307	6177.00	1202.87	5.17	9.61
.390	6177.00	1209.27	7.47	11.82
.465	5888.00	1212.20	7.20	11.79
.543	5888.00	1215.20	8.50	7.58
.620	5888.00	1216.16	8.36	6.18
.696	5888.00	1218.47	8.47	13.16
.770	5888.00	1221.49	10.19	4.92
.846	5696.00	1221.53	7.93	7.42
.920	5696.00	1222.59	6.99	11.50
.998	5696.00	1227.24	8.94	13.70
1.074	5504.00	1229.90	8.90	13.40
1.148	5504.00	1232.65	8.65	10.53
1.159	5504.00	1233.53	9.13	10.05
1.237	5504.00	1235.43	7.63	11.48
1.313	5504.00	1238.30	7.50	8.24
1.388	5504.00	1240.89	6.39	11.97
1.466	5504.00	1245.80	8.30	10.78
1.556	4214.00	1249.14	8.14	9.48
1.616	2538.00	1250.98	6.98	3.23

SECNO	Q	CWSEL	DEPTH	VCH
1.692	2538.00	1251.14	3.44	6.87
1.768	2538.00	1253.88	3.18	5.14
1.844	2538.00	1260.16	7.76	11.12
1.920	2538.00	1263.31	8.11	8.48
1.996	2538.00	1266.22	5.82	10.51
2.072	2245.00	1269.69	6.19	4.84
2.159	2245.00	1272.19	4.59	12.22
2.167	2245.00	1273.52	5.52	10.17
2.186	2245.00	1275.48	5.98	3.32
2.267	2245.00	1276.88	5.78	8.24
2.330	997.00	1278.59	5.29	3.45
2.392	997.00	1279.68	4.28	6.79
2.468	997.00	1283.04	3.34	3.85
2.553	997.00	1285.71	3.61	7.11
2.640	997.00	1287.34	4.44	2.53
2.741	710.00	1287.96	4.06	4.87
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.56	3.26	7.76
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

FILE WTCH1-N.OUT

R.W. CRUFF, P.E.

APRIL 28, 1997

FILE = WTCH1-N.DAT WHICH USES MODEL WTCH1-N & CHANGE Q'S TO BE
IN EFFECT IF THE CULVERTS AT OLIVE AVENUE & AT
NORTHERN AVENUE WERE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1-N.DAT - R.W. CRUFF - 4-28-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

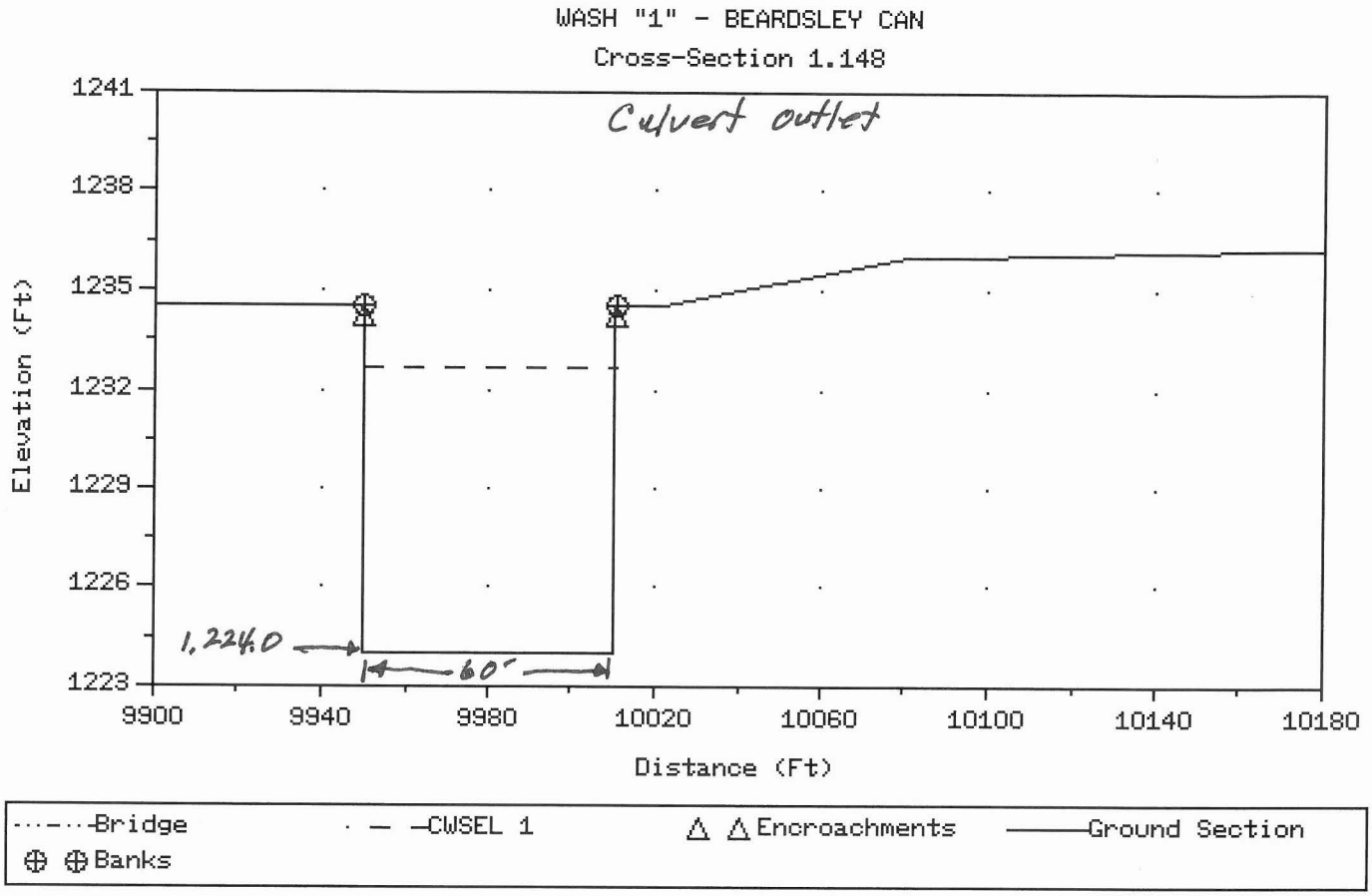
WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9937.14	205.48	10142.62	53.17	5918.88	204.94
.070	9942.15	236.28	10213.51	61.95	6093.94	21.11
.156	9903.21	380.74	10283.95	5.59	5740.21	431.20
.231	9946.19	338.81	10285.00	.00	3901.81	2275.19
.307	9861.80	259.89	10325.85	.00	5050.80	1126.20
.390	9910.00	142.67	10052.67	65.69	6093.08	18.23
.465	9918.53	133.84	10052.37	54.75	5770.87	62.37
.543	9934.01	282.89	10216.90	88.15	3766.14	2033.71
.620	9949.13	424.33	10373.46	129.17	3438.88	2319.95
.696	9947.63	108.31	10055.94	366.50	5245.71	275.79
.770	9930.00	470.00	10400.00	224.09	2651.44	3012.46
.846	9933.55	263.69	10197.24	222.84	4321.89	1151.27
.920	9962.03	147.97	10110.00	44.01	5445.29	206.70
.998	9964.19	87.72	10051.91	92.34	5482.78	120.88
1.074	9950.75	84.00	10034.75	52.33	5439.14	12.53
1.148	9950.00	60.82	10010.82	.00	5504.00	.00
1.159	9950.00	60.00	10010.00	.00	5504.00	.00
1.237	9975.94	252.38	10259.91	.00	3566.50	1937.50
1.313	9968.29	199.08	10167.38	.89	4326.97	1176.15
1.388	9981.66	198.90	10180.57	4.97	1814.44	3684.60
1.466	9980.34	175.13	10155.47	.00	2857.21	2646.79
1.556	9963.58	142.10	10105.68	15.26	3956.43	242.31
1.616	9950.00	211.59	10161.59	61.59	1638.39	838.02

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9969.90	168.71	10138.61	24.99	917.01	1596.00
1.768	9960.98	277.72	10238.70	.00	832.42	1705.58
1.844	9977.59	82.41	10060.00	.12	2361.26	176.62
1.920	9971.73	83.27	10055.00	3.81	2499.68	34.51
1.996	9972.96	70.37	10043.33	.00	2538.00	.00
2.072	9970.77	284.24	10255.00	.00	1112.00	1133.00
2.159	9970.00	40.00	10010.00	.00	2245.00	.00
2.167	9970.00	40.00	10010.00	.00	2245.00	.00
2.186	9932.59	331.80	10268.32	82.08	1999.40	163.53
2.267	9977.65	359.63	10338.83	.00	1342.83	902.17
2.330	9977.05	234.49	10211.55	.00	803.46	193.54
2.392	9986.63	159.38	10207.50	.00	536.34	460.65
2.468	9983.59	273.59	10260.33	.00	373.99	623.00
2.553	9976.46	118.90	10095.36	.00	901.99	95.01
2.640	9969.92	196.89	10166.81	.00	515.07	481.92
2.741	9985.09	153.08	10159.82	.00	481.89	228.11
2.826	9983.29	173.76	10157.05	.00	589.64	120.36
2.907	9980.55	63.54	10044.09	2.62	703.21	4.17
3.009	9980.79	85.78	10066.57	28.57	639.54	41.89
3.081	9974.80	75.50	10050.30	6.56	697.81	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

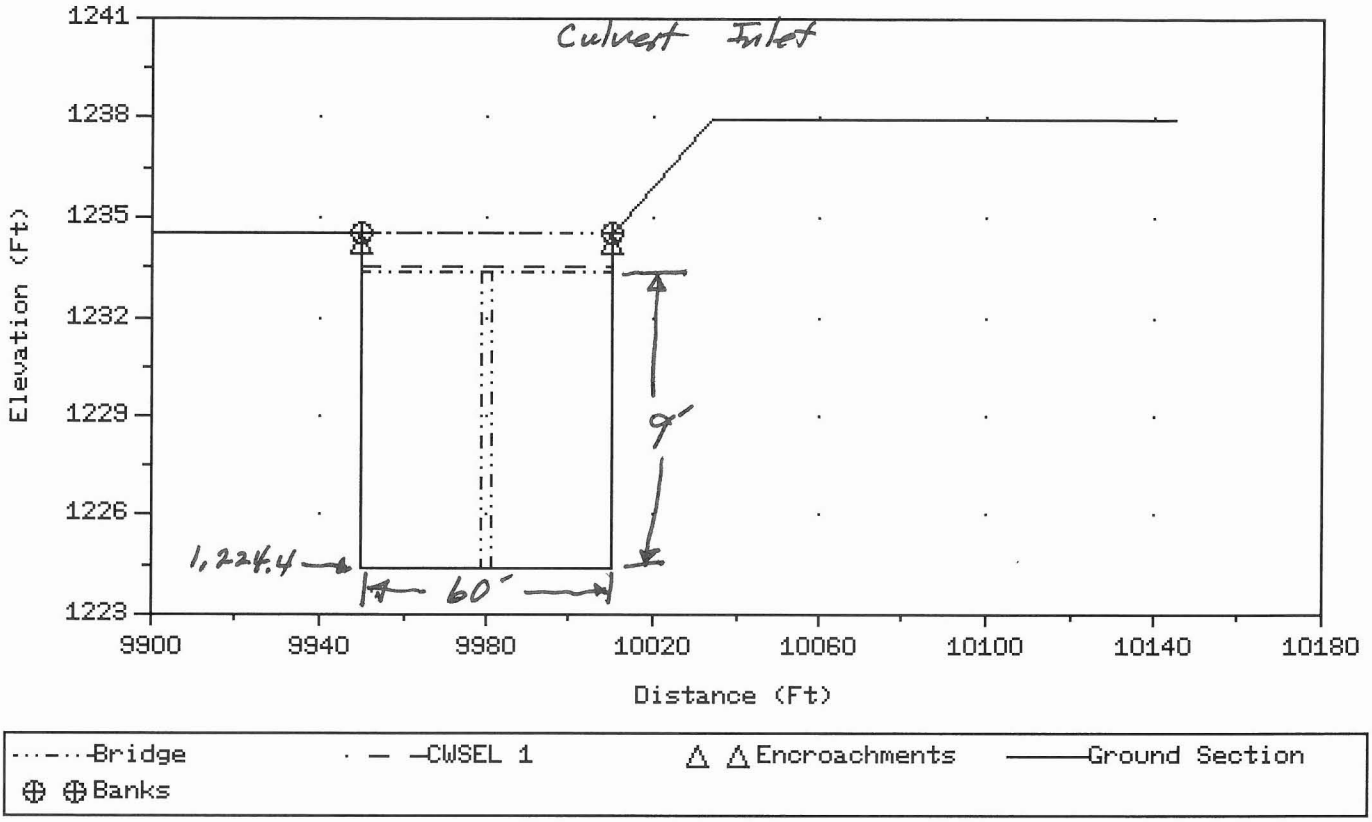
No Channels — New Culverts @ Olive & Northern



Northern Ave

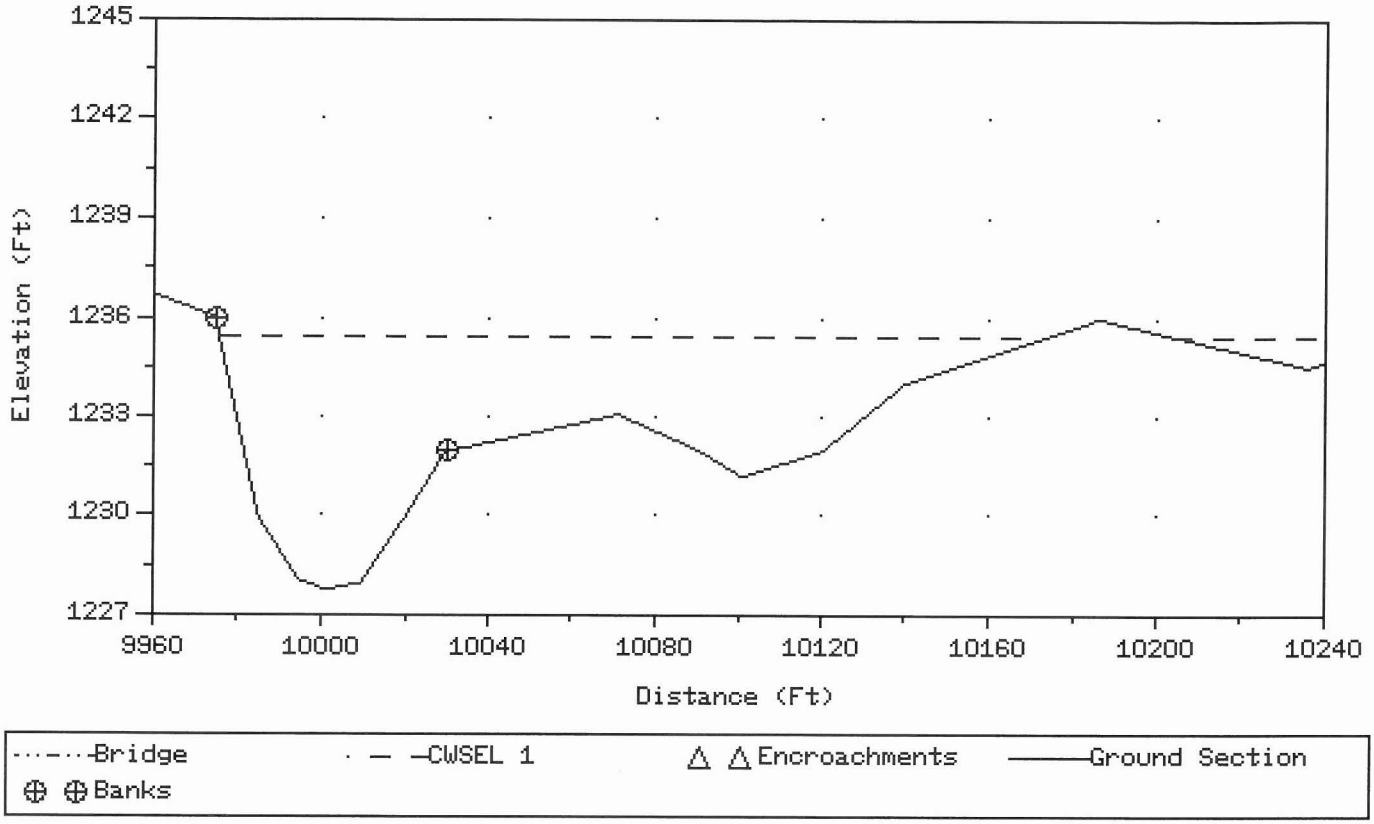
WASH "1" - BEARDSLEY CAN

Cross-Section 1.159



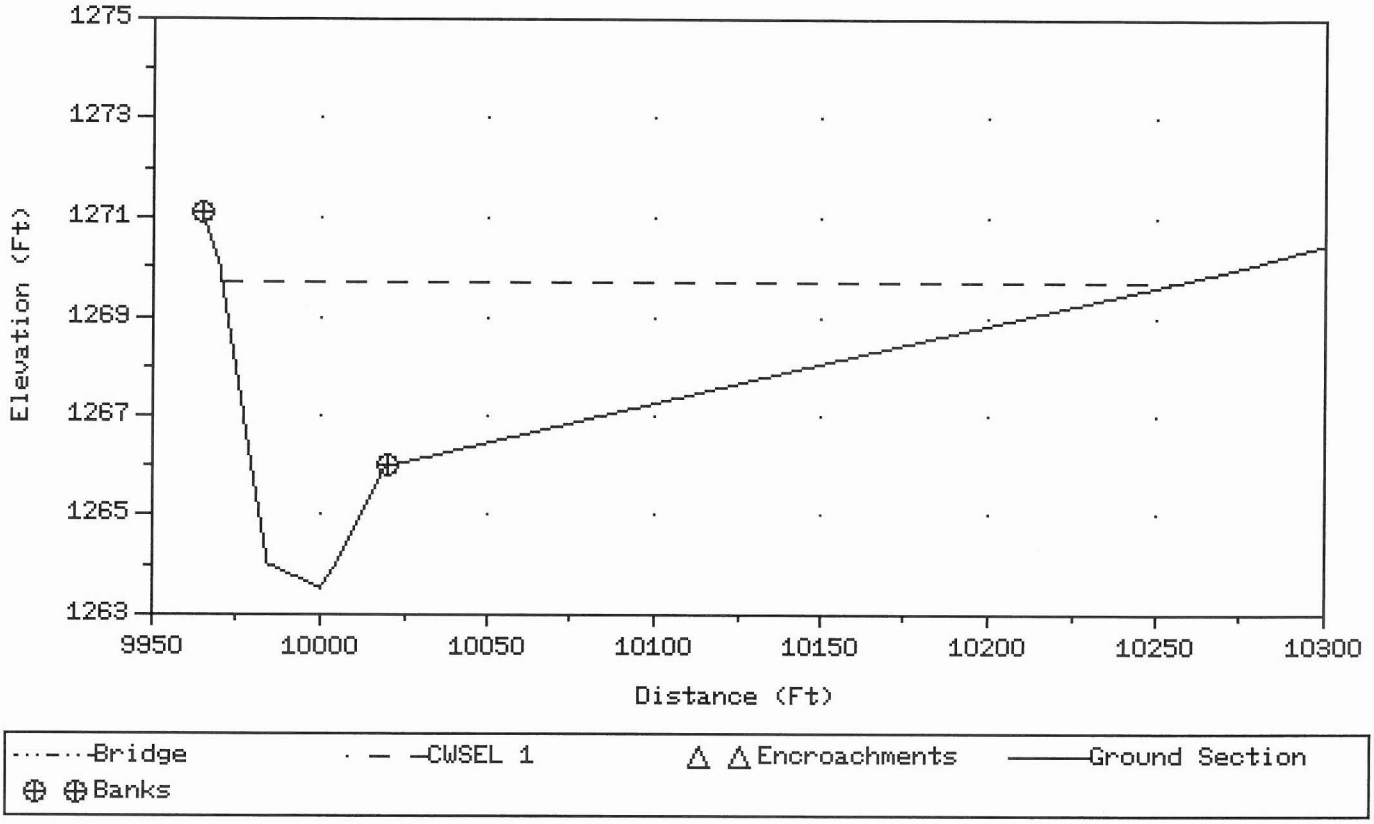
WASH "1" - BEARDSLEY CAN

Cross-Section 1.237



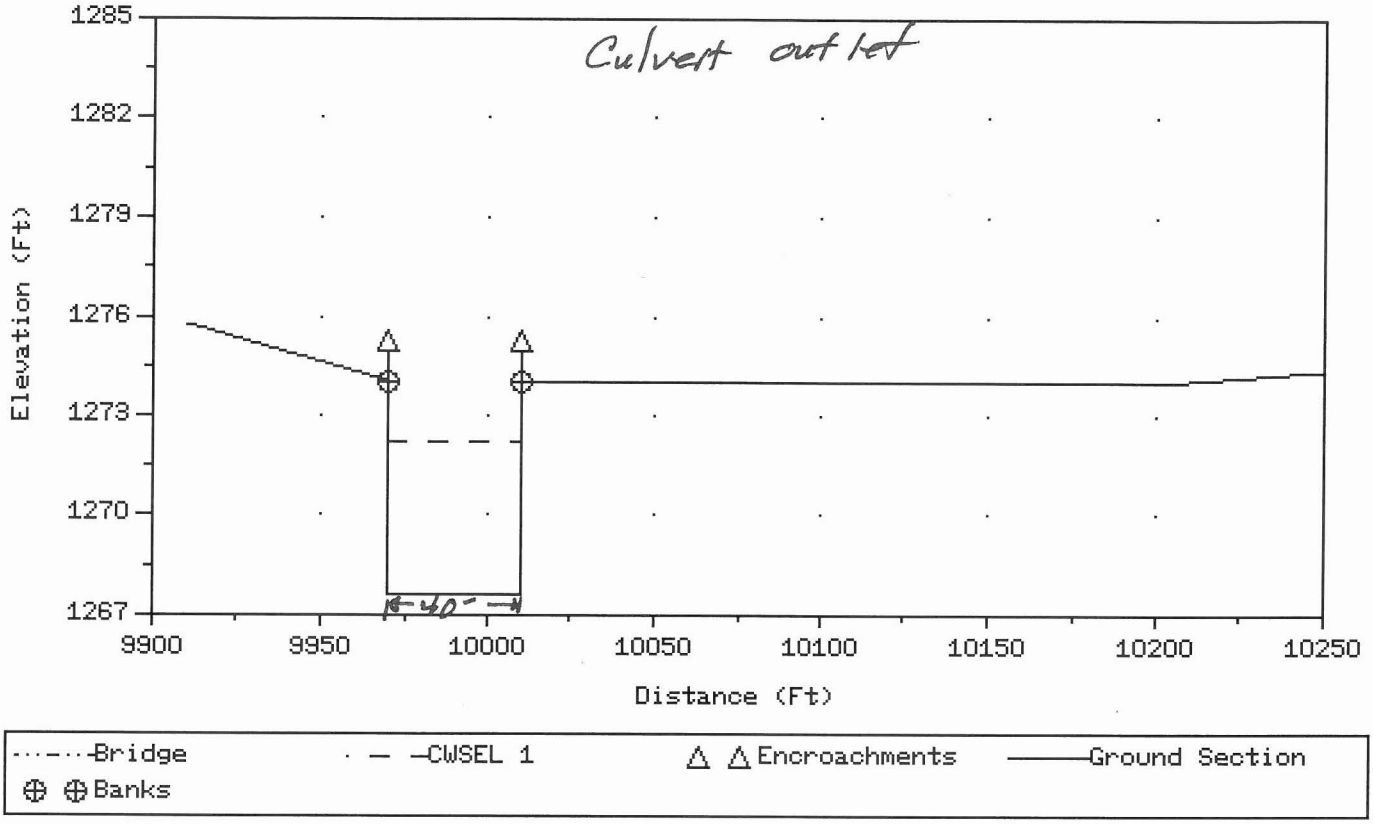
WASH "1" - BEARDSLEY CAN

Cross-Section 2.072



WASH "1" - BEARDSLEY CAN

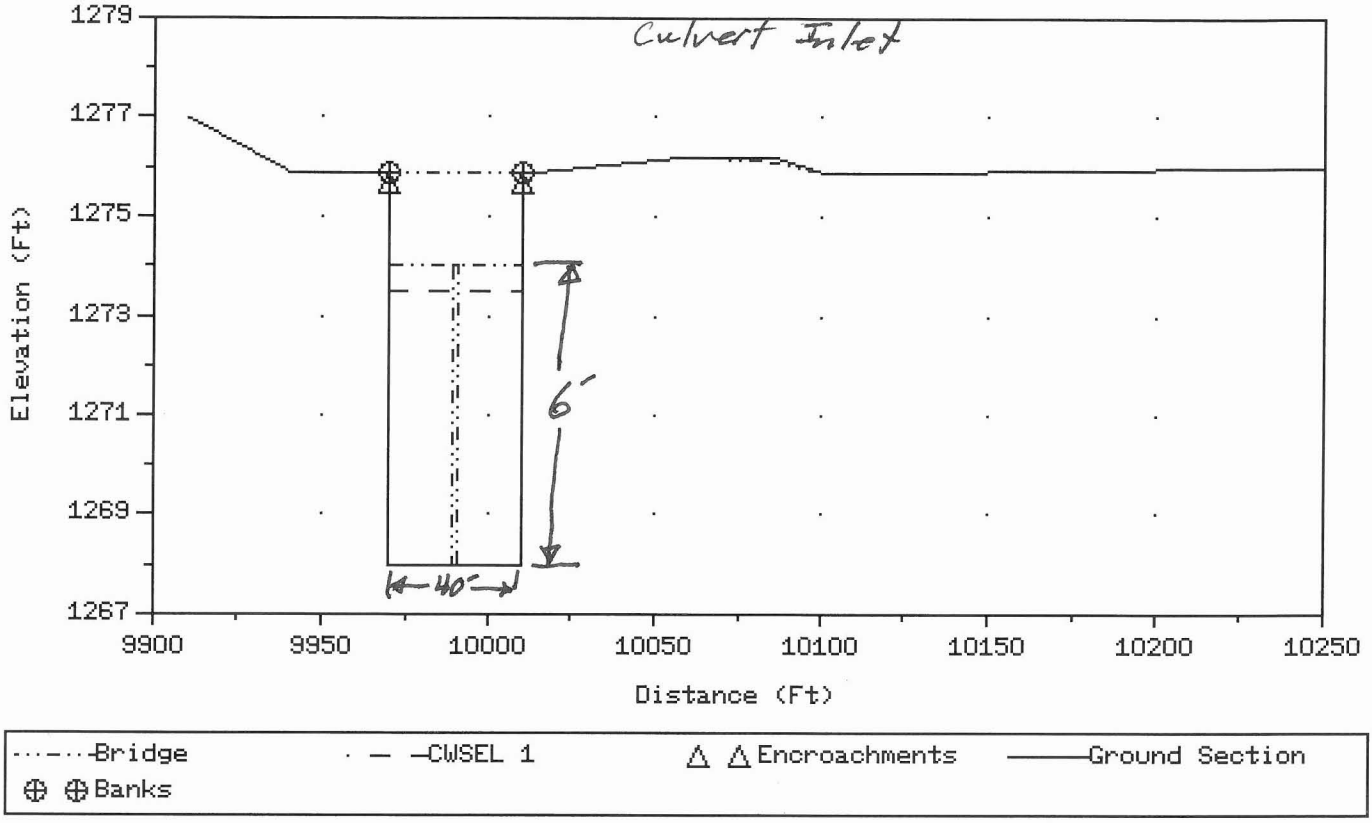
Cross-Section 2.159



Olive Avenue

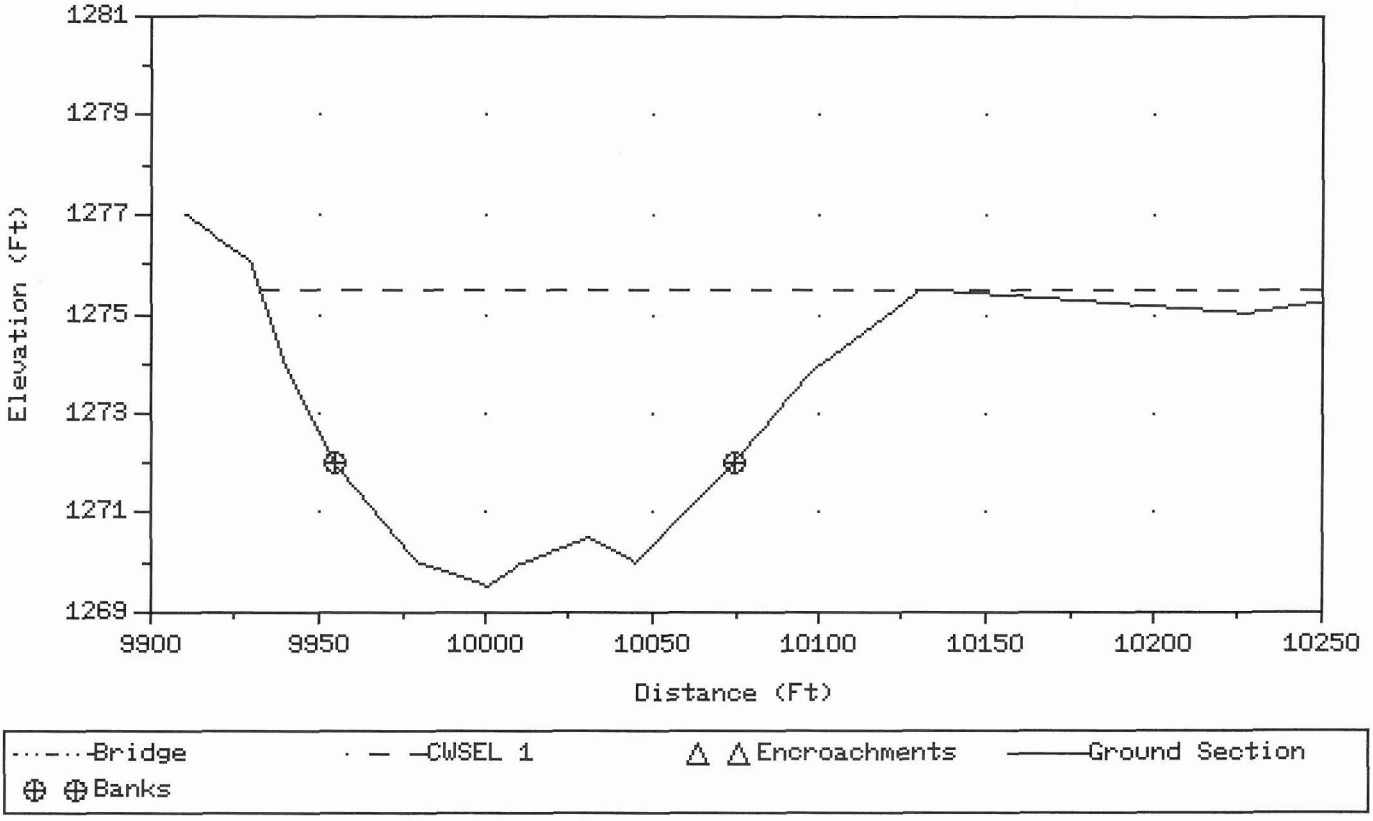
WASH "1" - BEARDSLEY CAN

Cross-Section 2.167



WASH "1" - BEARDSLEY CAN

Cross-Section 2.186



```
FILE = WTCH1LC.DAT

C
C      93
C    .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C    .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C    .000
C    .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C    .000   Q = 3702 + (.7)413  =2671 CFS
C    .000
C    .465
C    .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C    .465   Q = 2382 CFS
C    .465
C    .846
C    .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C    .846   Q = (2382 + 1530)/2 = 1956 CFS
C    .846
C   1.074
C   1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C   1.074   Q = 1530 CFS                                   SION AT NORTHERN AVE.)
C   1.074
C   1.148
C   1.148   NORTHERN AVENUE
C   1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1279 CFS BREAKS OUT EAST OVER
C   1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C   1.148
C   1.159
C   1.159   Q @ X1 = 1.159 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO  HE EAST
C   1.159   Q = 1862 - 221 = 1641 CFS                                    THE EAST
C   1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.159
C   1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C   1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C   1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C   1.159
C   1.237
C   1.237   Q AT X1 = 1.237 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO
C   1.237   Q = 1862 - 111 = 1751 CFS                              THE EAST
C   1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.237
C   1.313
C   1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C   1.313   Q = 1862 CFS                                        AT NORTHERN AVE.)
C   1.313
C   1.556
C   1.556   Q AT X1 = 1.556
C   1.556   Q = 1465 CFS
C   1.556
C   1.616
C   1.616   Q @ X1 = 1.616 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C   1.616   Q = (1173/4 + 997) = 1289 CFS
C   1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C   1.616
C   1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C   1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C   1.616
C   2.072
C   2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C   2.072   Q = 997 CFS                                  AT OLIVE AVENUE)
C   2.072
C   2.159
C   2.159   OLIVE AVENUE
C   2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C   2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C   2.159
C   2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C   2.159   OLIVE AVENUE.
C   2.159
C   2.167
C   2.167   Q @ X1 = 2.167 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C   2.167   Q = 997 CFS                                  AT OLIVE AVE.)
C   2.167
C   2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C   2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
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C  2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1LC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
*           IN EFFECT IF THE LONG CHANNEL WERE BUILT
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1LC.DAT - R.W. CRUFF - 4-25-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1     0       2       0       0   .0055       0       0       0    1195       0
J2     1       0       0       0       0       0       0       0       0       0
J3    38      43       1       8      26
J3    38      53       4      54      13      14      15
NC   .03     .04    .028      .1      .3
QT     2    2671    2671
ET                   9.1                                          9947.3410139.22
X1 0.000      20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350  1200.4   10365
ET                   9.1                                          9948.3310160.30
X1 0.070      13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                   9.1                                          9907.8310260.83
X1 0.156      17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH     4     .04    9970     .03   10115     .03   10260     .04   10285
ET                   9.1                                          9954.33   10115
X1 0.231      18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH     6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                   9.1                                          9881.25   10065
X1 0.307      23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC   .03     .04     .03      .1      .3
ET                   9.1                                          9931.3310041.47
X1 0.390      11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT     2    2382    2382
ET                   9.1                                          9922.8310040.76
X1 0.465      15    9930   10030     410     390     395
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GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                          9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                           9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                          9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                          9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    1956    1956
ET                   9.1                                          9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                           9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                          9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    3225    3225
ET                   9.1                                          9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                            988010069.42
X1 1.148      18    9989   10011     395     405     390
X3    10                                                        1234.5  1234.5
GR1234.5    9880  1234.5    9920    1232    9940    1230    9970    1228    9980
GR  1227    9989  1224.7    9990    1224    9992  1224.7    9994    1227    9995
GR  1227   10005  1224.7   10006    1224   10008  1224.7   10010    1227   10011
GR  1228   10020    1236   10080  1236.5   10230
QT     2    1641    1641
SB     1     1.5     2.5       0      16      .1     113     .41  1224.4    1224
ET                  9.11                                            988610247.26
X1 1.159      21    9989   10011      60      60      60
X2                     1  1230.4  1234.5
X3    10                                                        1234.5  1234.5
BT    21    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9968  1234.6  1234.6    9989  1234.7  1227.4    9990
BT1234.7  1229.7    9992 1234.72  1230.4    9994 1234.73  1229.7    9995 1234.75
BT1227.4   10005  1234.8  1227.4   10006 1234.81  1229.7   10008 1234.82  1230.4
BT 10010 1234.83  1229.7   10011 1234.85  1227.4   10034    1238    1238   10080
BT  1238    1238   10115    1238    1238   10145    1238    1238   10200    1237
BT  1237   10280    1239    1239
GR1234.5    9886  1234.5    9909 1233.75    9916  1229.7    9927  1228.7    9968
GR1227.4    9989  1225.1    9990  1224.4    9992  1225.1    9994  1227.4    9995
GR1227.4   10005  1225.1   10006  1224.4   10008  1225.1   10010  1227.4   10011
GR  1238   10034    1238   10080    1238   10115    1238   10145    1237   10200
GR  1239   10280
NC   .03     .05    .035      .3      .5
QT     2    1751    1751
ET                   9.1                                            995010298.35
X1 1.237      18    9975   10030     390     390     410
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GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    1862    1862
ET                   9.1                                        9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                        9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                        9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    1465    1465
ET                   9.1                                        9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    1289    1289
ET                   9.1                                          995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                        9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940     .035    9960     .03   10045     .04   10220     .035
NH 10325
ET                   9.1                                        9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                        9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                         9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                           9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2     997     997
ET                   9.1                                        9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                           991010542.73
X1 2.159      16    9991 10008.2     440     460     460
X3    10                                                   1275.6  1275.6
GR1275.7    9910    1274    9970  1271.2    9991  1269.2  9991.5  1267.7    9993
GR1267.2    9995  1267.6 10004.6  1268.1 10006.4  1269.4 10007.6  1271.2 10008.2
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GR  1272   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
GR  1280   10910
QT     2     997     997
SB  1.25     1.5     2.5       0      10      .1     104     .56  1268.2  1267.8
ET                  9.11                                          991010542.73
X1 2.167      24    9991 10008.2      40      40      40
X2                     1  1275.6  1275.9
X3    10                                                 1275.9  1275.9
BT    24    9910    1277    1277    9940 1276.63 1276.63    9968  1276.5  1276.5
BT  9991  1276.4  1271.6  9991.5  1276.4  1273.6    9993  1276.4  1275.1    9995
BT1276.4  1275.6    9997  1276.4  1275.1  9998.5  1276.4  1273.6    9999  1276.4
BT1271.6   10001  1276.4  1271.6 10001.3  1276.4  1273.4 10002.8  1276.4  1274.7
BT10004.  1276.4  1275.2 10006.4  1276.4  1274.7 10007.6  1276.4  1273.4 10008.2
BT1276.4  1271.6   10055  1276.2  1276.2   10085  1276.1  1276.1   10100  1275.9
BT1275.9   10300  1276.1  1276.1   10500  1277.3  1277.3   10530    1278    1278
BT 10720  1279.5  1279.5
GR  1277    9910  1274.7    9940  1274.0    9968  1271.6    9991  1269.6  9991.5
GR1268.1    9993  1267.6    9995  1268.1    9997  1269.6  9998.5  1271.6    9999
GR1271.6   10001  1269.8 10001.3  1268.5 10002.8  1268.0 10004.6  1268.5 10006.4
GR1269.8 10007.6  1271.6 10008.2  1272.3   10055  1273.2   10085  1274.3   10100
GR1275.3   10300    1277   10500    1278   10530  1279.5   10720
ET                  9.1                                           991010518.19
X1 2.186      18    9955   10075     100     100     100
GR  1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR  1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR  1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC   .04     .07    .035      .1      .3
ET                  9.1                                           997010352.22
X1 2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR  1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR  1280   10430
QT     2     997     997
ET                  9.1                                        9977.12   10100
X1 2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR  1274   10010    1276   10040    1278   10160    1280   10335
NH     5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                  9.1                                        9986.62   10090
X1 2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR  1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR  1278   10110  1278.7   10155    1280   10225    1282   10300
NH     3     .04    9970    .035   10055     .05   10300
ET                  9.1                                        9983.68   10085
X1 2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR  1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH     3     .04    9960    .035   10030     .07   10325
ET                  9.1                                        9976.58   10085
X1 2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR  1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC  .035     .07    .035      .1      .3
ET                  9.1                                        9969.89   10080
X1 2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR  1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR  1286   10150    1288   10175    1290   10220    1292   10255
QT     2     710     710
ET                  9.1                                        9985.09   10035
X1 2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR  1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR  1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR  1294   10285  1294.4   10340
ET                  9.1                                        9983.29   10055
X1 2.826      10    9965   10055     450     450     450
GR  1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR  1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                  9.1                                        9980.5610044.07
X1 2.907       8    9985   10030     430     430     430
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GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
GR  1294   10030    1296   10080  1297.7   10110
NH     2    .035   10025     .07   10125
ET                   9.1                                        9980.7910066.54
X1 3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR  1302   10090  1302.5   10125
NC   .04     .07    .035      .1      .3
ET                   9.1                                        9974.8010050.31
X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                        9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                        9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                        9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                        9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                        9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                        9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                        9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                        9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
```

FILE = WTCH1LC.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1LC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
IN EFFECT IF THE LONG CHANNEL WERE BUILT

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1LC.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	VCH
.000	2671.00	1192.04	2.64	6.96
.070	2671.00	1194.45	2.45	7.33
.156	2671.00	1197.50	3.60	5.86
.231	2671.00	1199.30	4.00	5.84
.307	2671.00	1201.38	3.68	8.12
.390	2671.00	1206.80	5.00	10.00
.465	2382.00	1210.33	5.33	7.84
.543	2382.00	1212.52	5.82	6.96
.620	2382.00	1213.89	6.09	5.73
.696	2382.00	1215.52	5.52	10.61
.770	2382.00	1218.19	6.89	6.25
.846	1956.00	1219.00	5.40	4.73
.920	1956.00	1220.11	4.51	8.69
.998	1956.00	1223.77	5.47	10.21
1.074	3225.00	1227.85	6.85	11.82
1.148	3225.00	1234.64	10.64	5.76
1.159	1641.00	1236.21	11.81	2.12
1.237	1751.00	1236.26	8.46	2.87
1.313	1862.00	1236.44	5.64	4.75
1.388	1862.00	1239.22	4.72	8.56
1.466	1862.00	1243.57	6.07	9.25
1.556	1465.00	1246.75	5.75	5.81
1.616	1289.00	1248.05	4.05	4.26

SECNO	Q	CWSEL	DEPTH	VCH
1.692	1289.00	1250.07	2.37	6.71
1.768	1289.00	1253.22	2.52	3.77
1.844	1289.00	1257.80	5.40	10.56
1.920	1289.00	1261.63	6.43	6.35
1.996	1289.00	1264.55	4.15	9.24
2.072	997.00	1268.09	4.59	4.73
2.159	997.00	1272.53	5.33	12.32
2.167	997.00	1276.29	8.69	1.48
2.186	997.00	1276.30	6.80	1.15
2.267	997.00	1276.00	4.90	6.42
2.330	997.00	1277.58	4.28	5.30
2.392	997.00	1279.61	4.21	7.18
2.468	997.00	1283.08	3.38	3.72
2.553	997.00	1285.66	3.56	7.27
2.640	997.00	1287.35	4.45	2.52
2.741	710.00	1287.96	4.06	4.86
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.56	3.26	7.76
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

FILE = WTCH1LC.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1LC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
IN EFFECT IF THE LONG CHANNEL WERE BUILT

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1LC.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

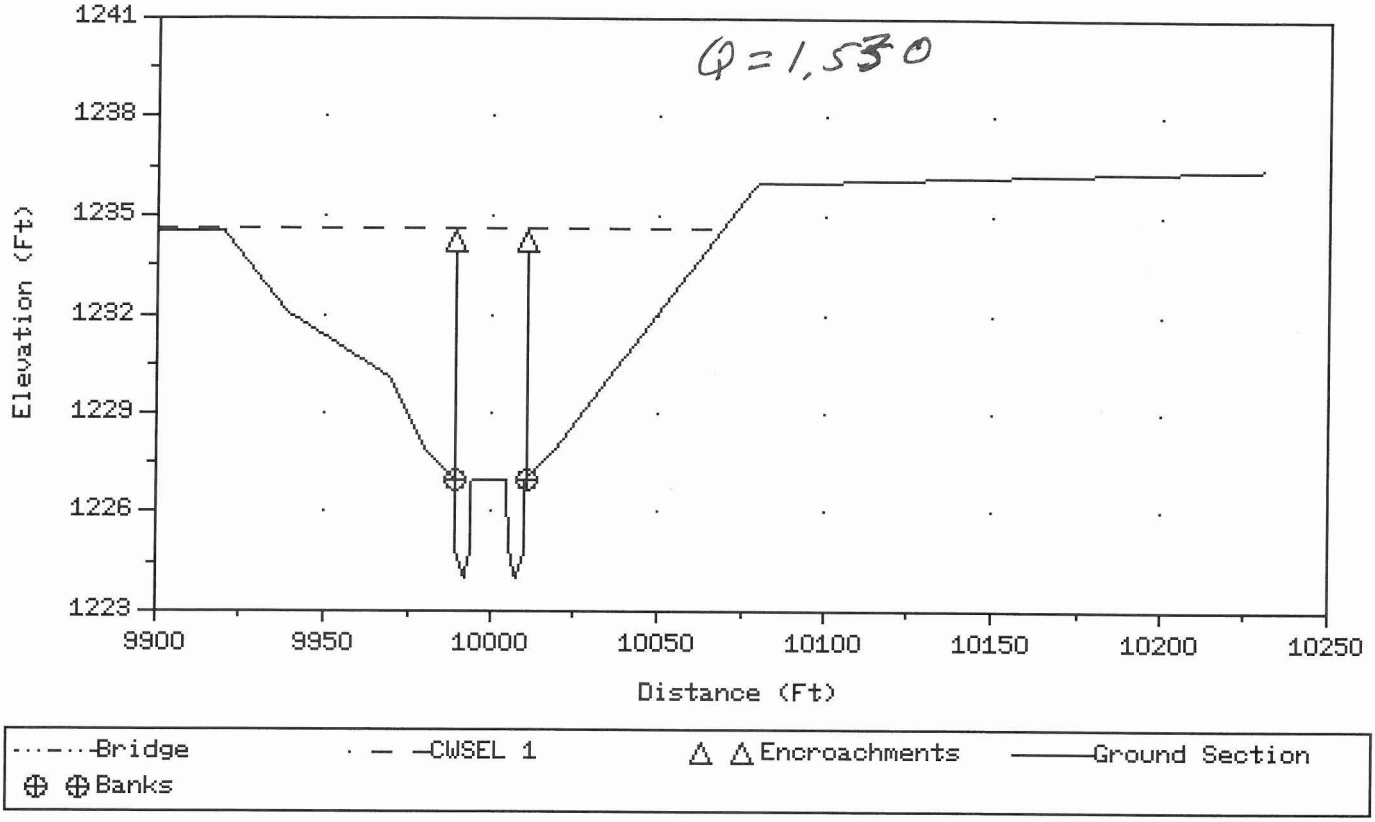
SUMMARY PRINTOUT

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9959.40	175.80	10135.20	.00	2627.18	43.82
.070	9955.44	201.63	10157.07	1.75	2668.67	.59
.156	9917.46	265.38	10225.13	.00	2658.47	12.53
.231	9960.20	229.92	10235.72	.00	1776.66	894.34
.307	9903.85	182.30	10310.38	.00	2380.17	290.83
.390	9947.01	86.99	10034.00	.00	2671.00	.00
.465	9928.32	104.21	10032.53	.32	2381.31	.36
.543	9947.39	186.94	10134.33	.82	1969.05	412.12
.620	9960.52	317.48	10278.00	19.85	2015.33	346.82
.696	9962.42	75.17	10037.58	21.13	2345.02	15.85
.770	9959.07	347.26	10345.58	28.36	2025.97	327.67
.846	9949.95	170.24	10120.19	28.18	1800.54	127.28
.920	9969.72	101.93	10071.65	.00	1955.99	.00
.998	9975.58	58.25	10033.83	.00	1956.00	.00
1.074	9965.50	64.00	10029.50	.00	3225.00	.00
1.148	9880.00	189.83	10069.83	1137.66	1118.01	969.33
1.159	9886.00	144.12	10030.12	1060.46	465.26	115.28
1.237	9969.11	308.49	10277.59	.19	1022.70	728.11
1.313	9976.95	175.23	10152.18	.00	1617.92	244.07
1.388	9986.96	162.34	10149.31	.00	730.73	1131.27
1.466	9984.04	102.45	10111.81	.00	1419.44	442.56
1.556	9978.13	72.47	10050.61	.00	1461.94	3.06
1.616	9964.56	145.81	10110.37	.00	974.73	314.26

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9984.13	146.37	10130.50	.00	532.24	756.76
1.768	9965.80	266.46	10232.26	.00	412.89	876.11
1.844	9983.67	35.83	10019.50	.00	1289.00	.00
1.920	9975.94	52.18	10028.12	.00	1289.00	.00
1.996	9975.74	53.41	10029.15	.00	1289.00	.00
2.072	9974.77	176.19	10150.96	.00	728.91	268.09
2.159	9991.00	17.20	10008.20	.00	997.00	.00
2.167	9919.10	498.78	10417.88	146.74	183.90	666.35
2.186	9924.04	409.84	10333.88	44.36	806.64	146.01
2.267	9985.00	245.30	10329.98	.00	799.00	198.00
2.330	9981.04	153.97	10135.01	.00	912.77	84.23
2.392	9986.93	154.60	10204.24	.00	549.82	447.18
2.468	9983.45	279.09	10263.62	.00	371.64	625.36
2.553	9976.67	116.62	10093.29	.00	905.74	91.26
2.640	9969.90	196.92	10166.83	.00	515.06	481.94
2.741	9985.09	153.10	10159.82	.00	481.86	228.14
2.826	9983.29	173.77	10157.06	.00	589.62	120.38
2.907	9980.55	63.53	10044.08	2.62	703.21	4.17
3.009	9980.79	85.78	10066.57	28.57	639.54	41.89
3.081	9974.80	75.50	10050.30	6.56	697.81	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

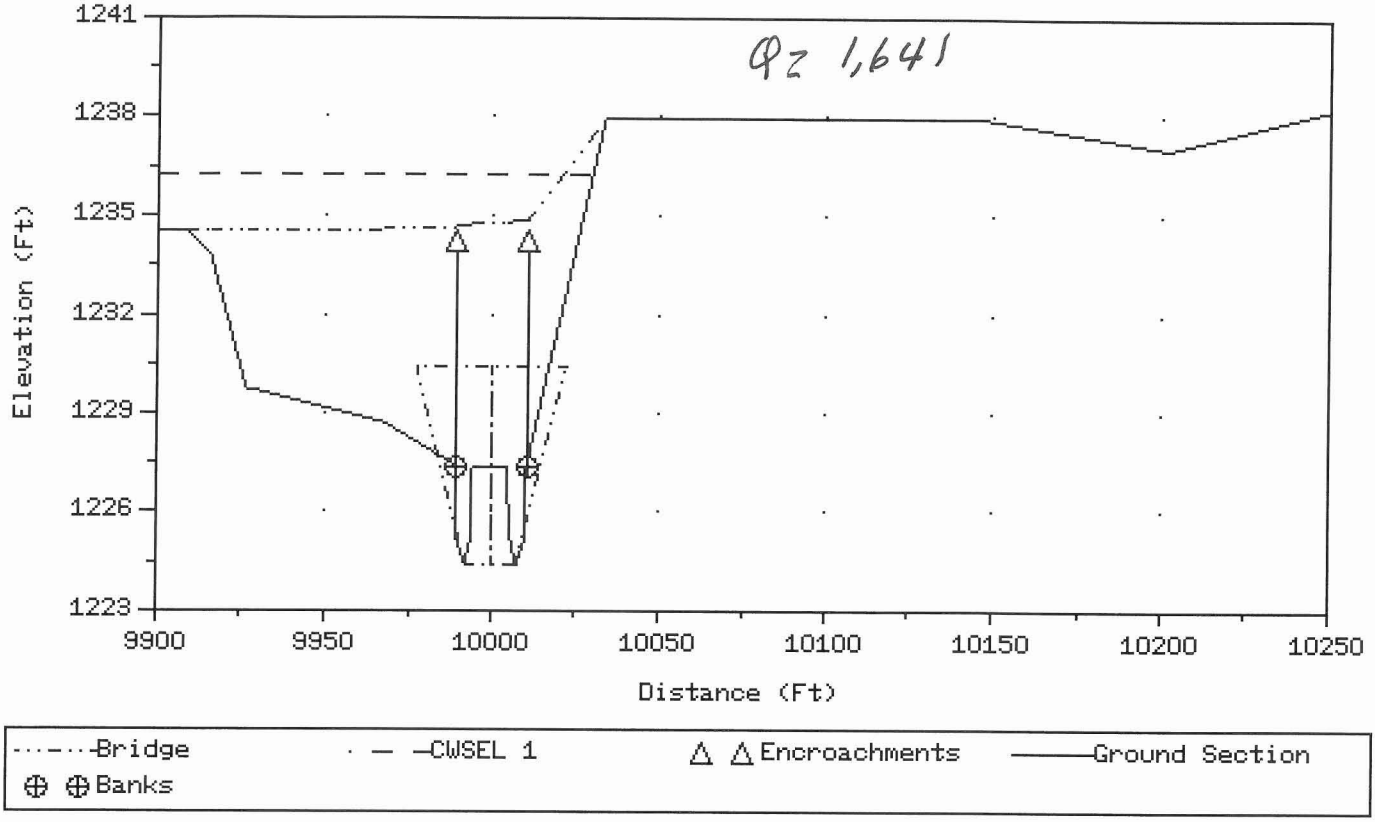
WASH "1" - BEARDSLEY CAN

Cross-Section 1.148



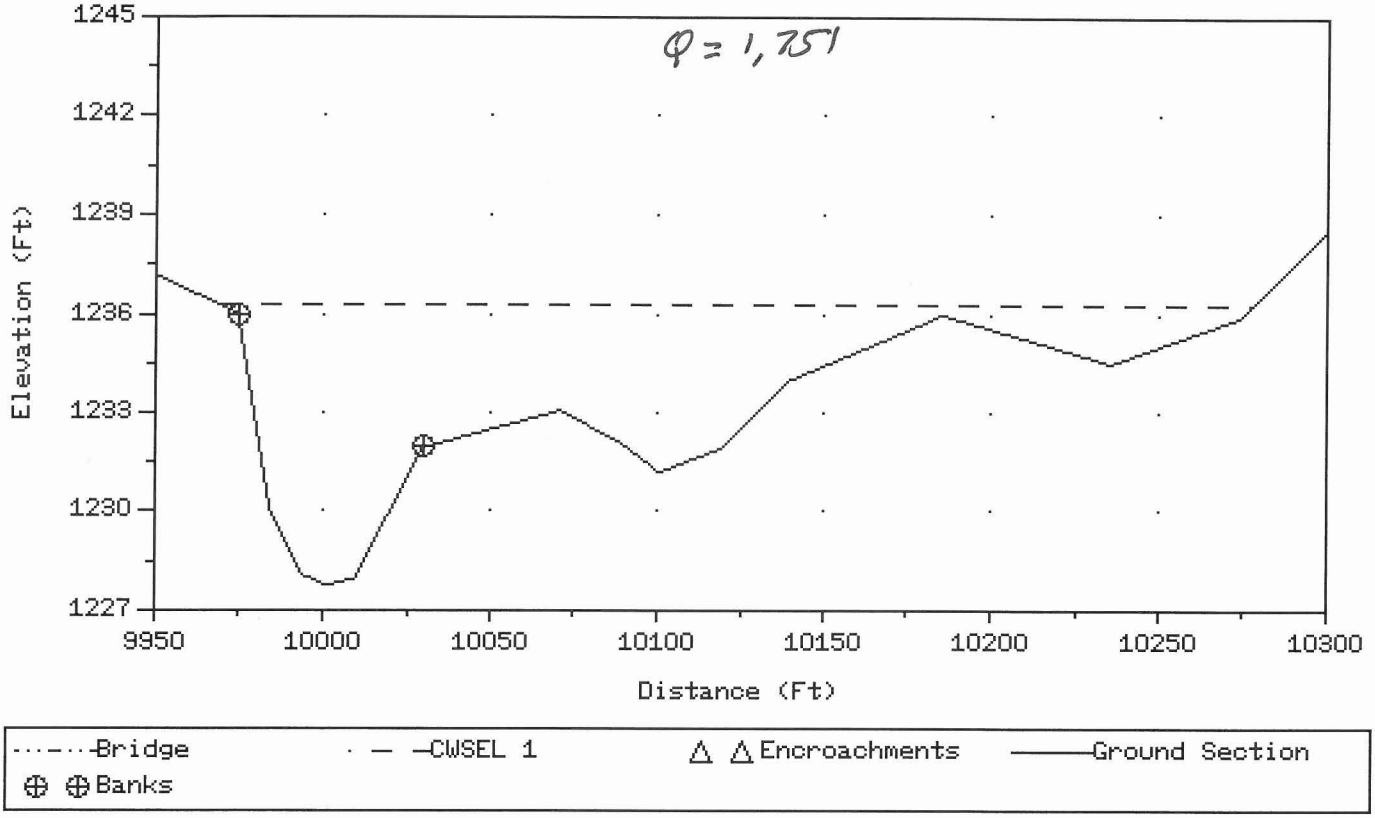
WASH "1" - BEARDSLEY CAN

Cross-Section 1.159



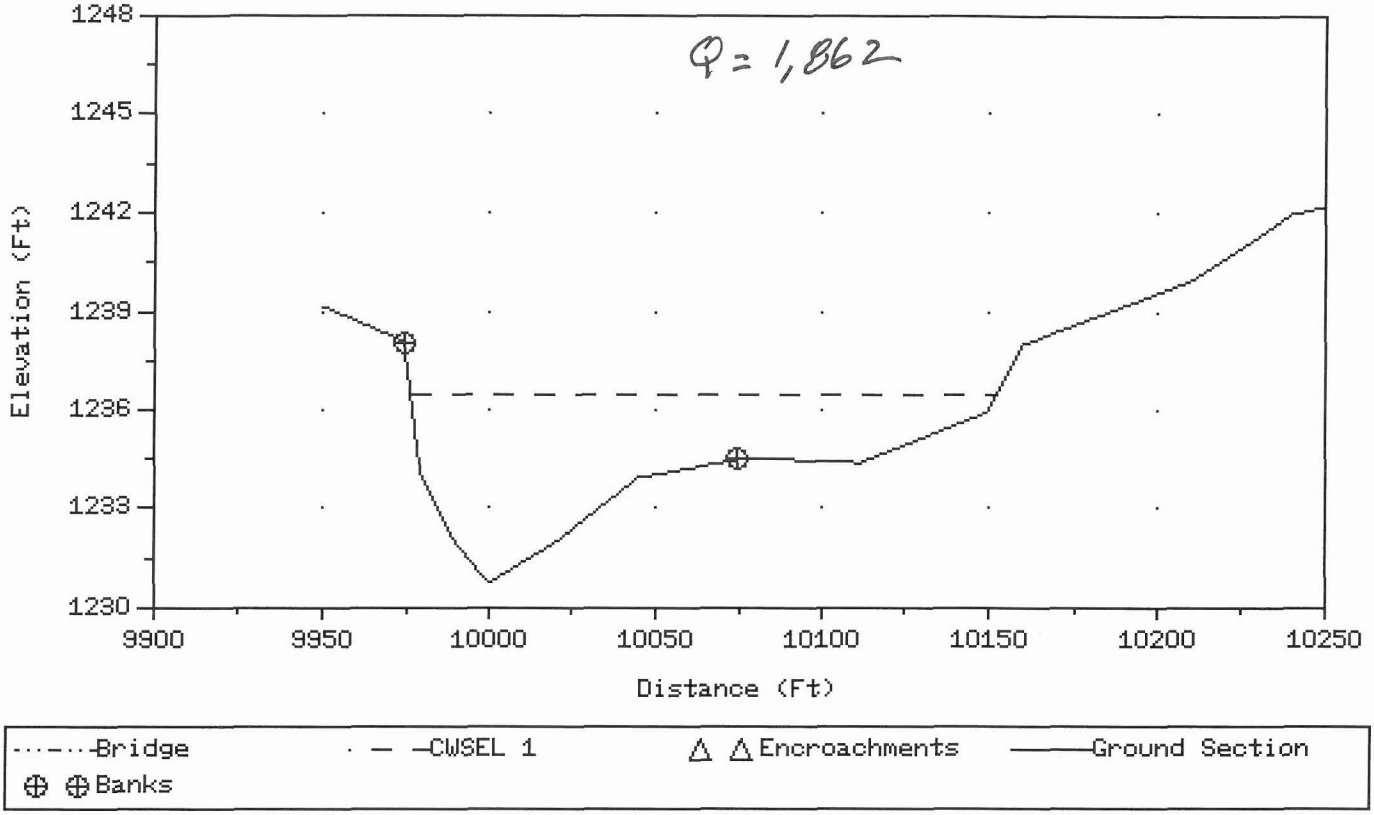
WASH "1" - BEARDSLEY CAN

Cross-Section 1.237



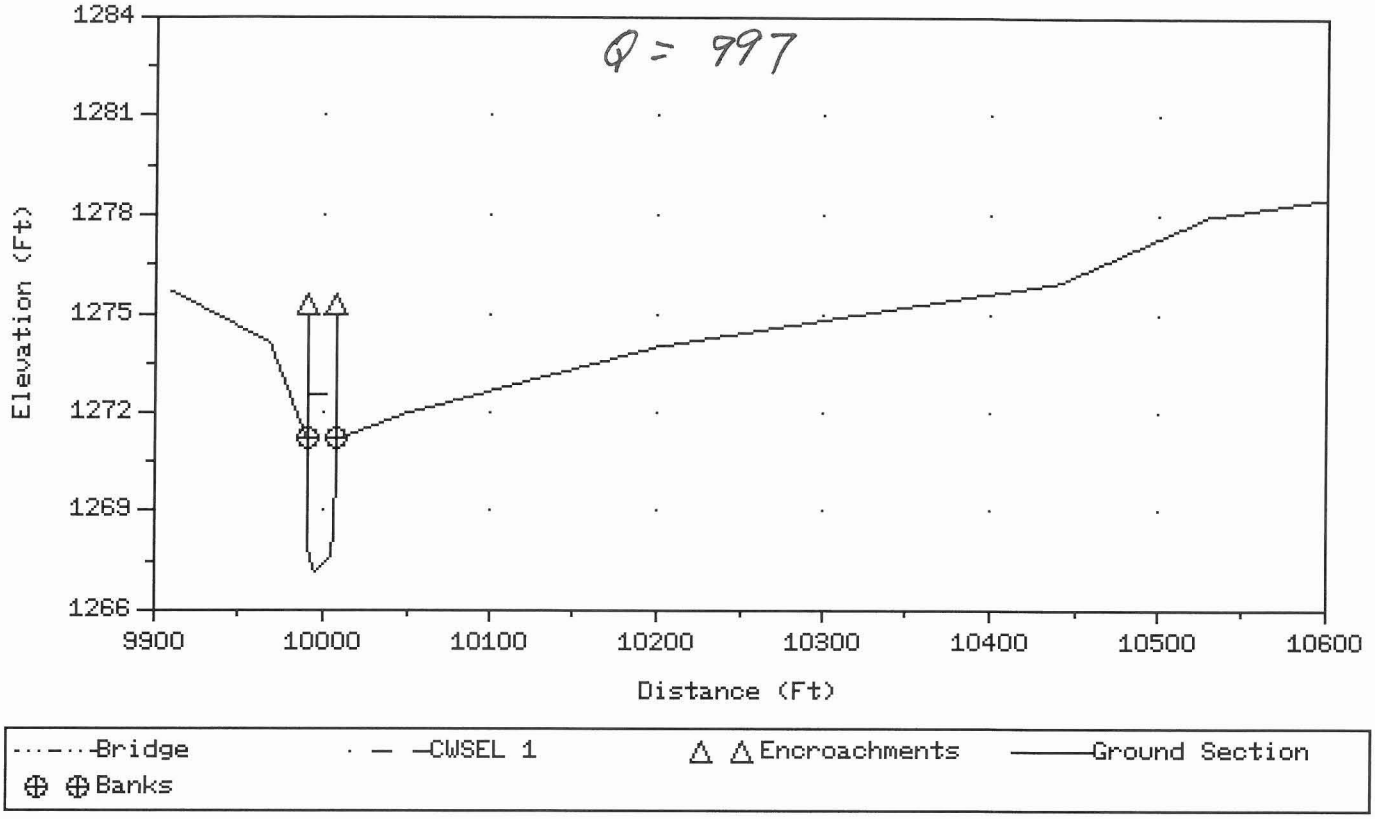
WASH "1" - BEARDSLEY CAN

Cross-Section 1.313



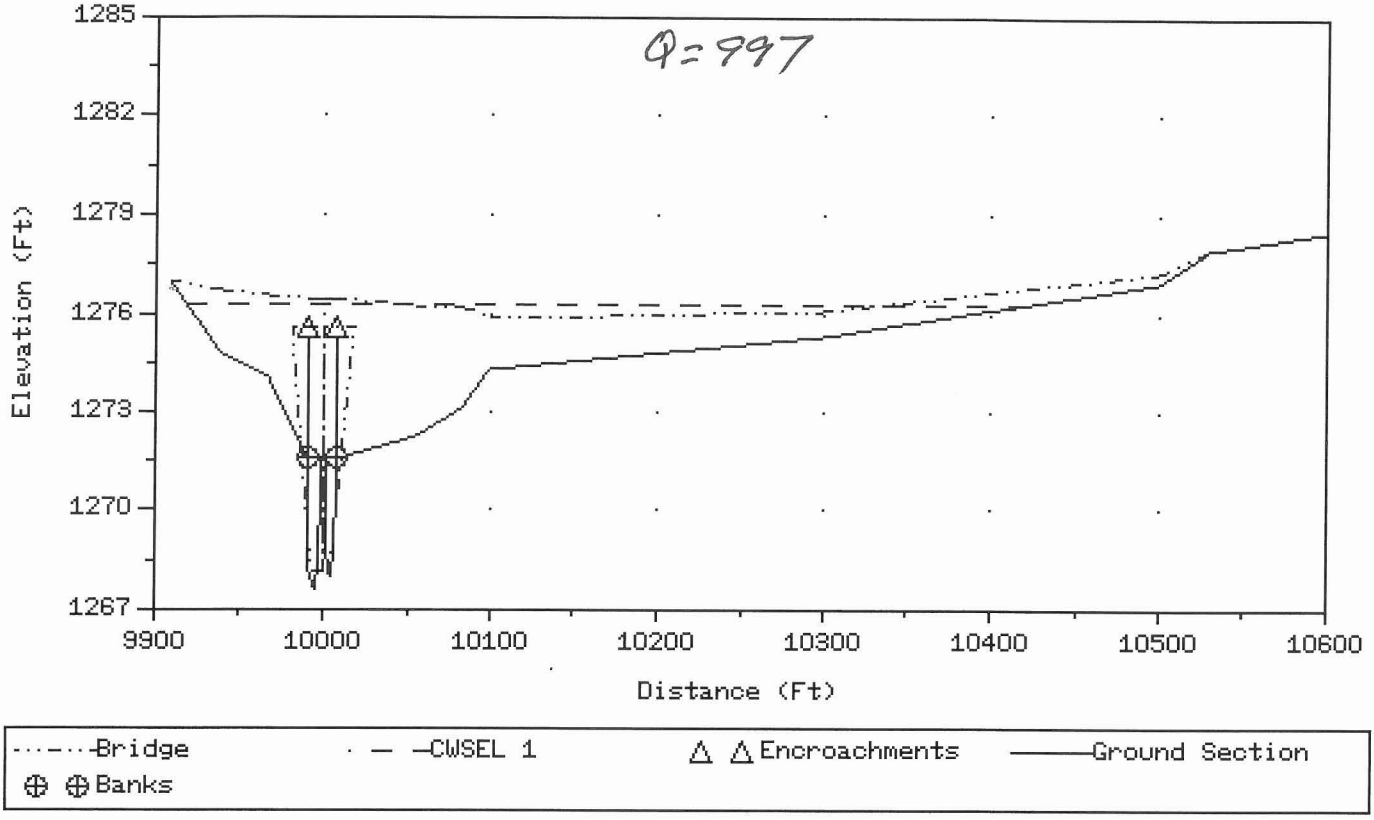
WASH "1" - BEARDSLEY CAN

Cross-Section 2.159



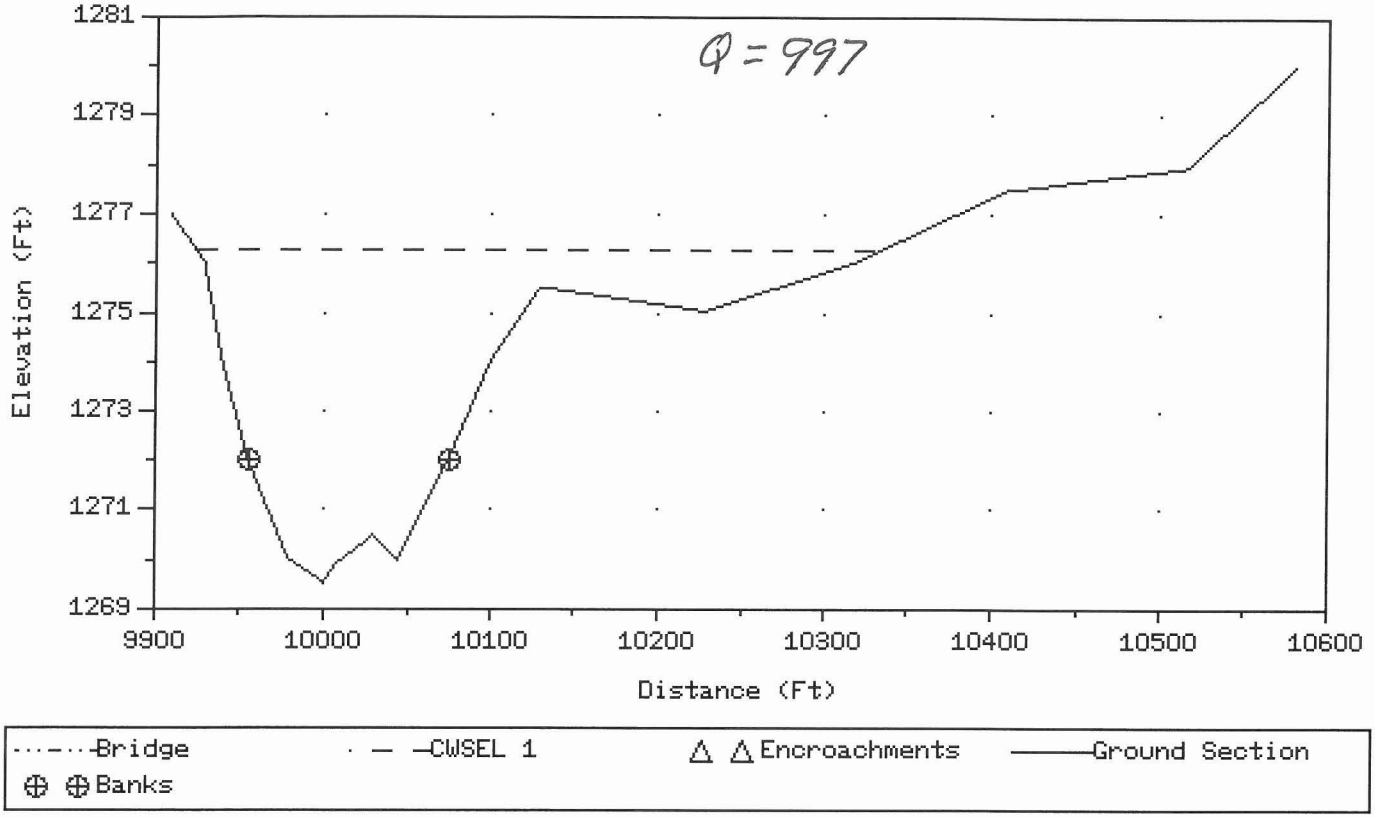
WASH "1" - BEARDSLEY CAN

Cross-Section 2.167



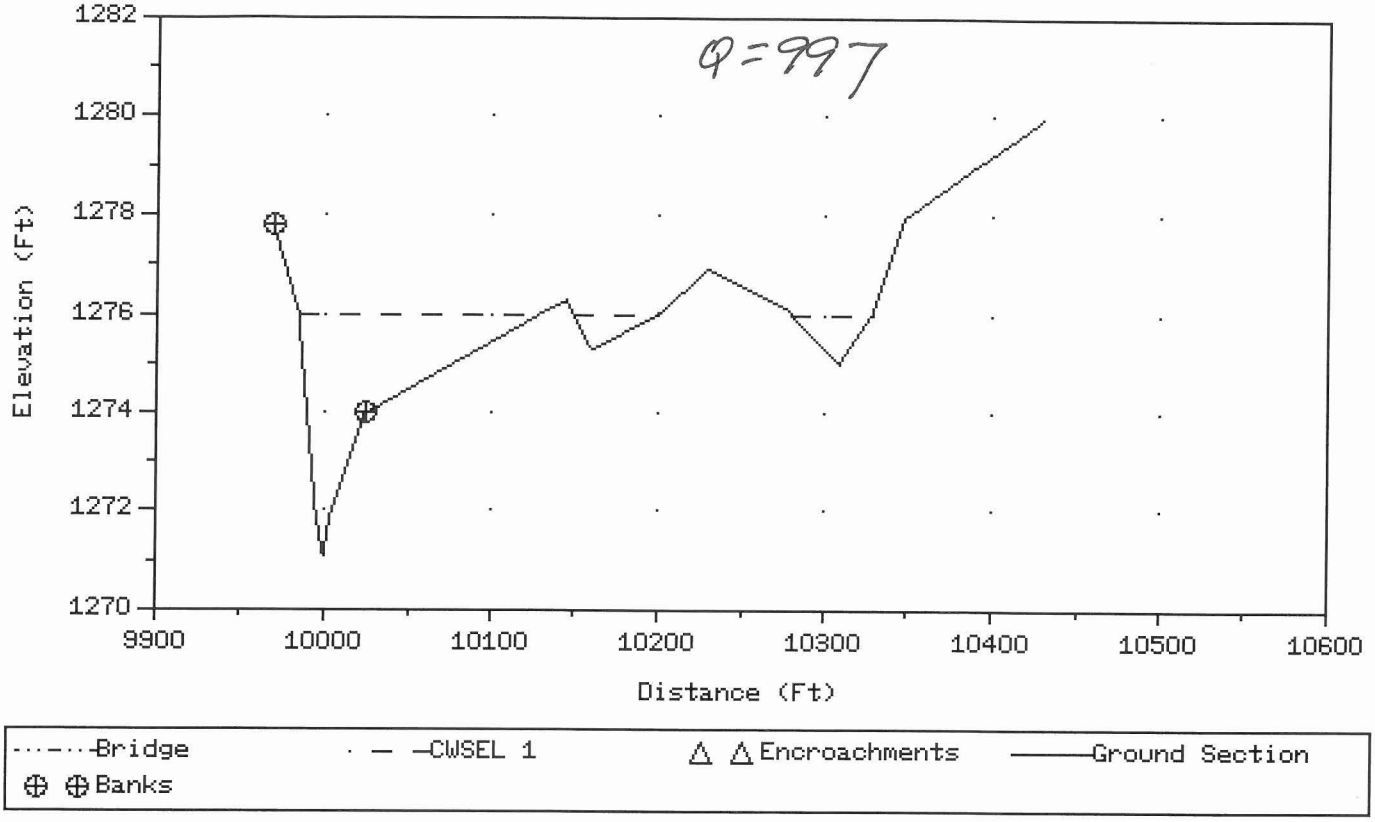
WASH "1" - BEARDSLEY CAN

Cross-Section 2.186



WASH "1" - BEARDSLEY CAN

Cross-Section 2.267



```
FILE = WTCH1LCN.OUT

C
C     93
C   .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C   .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C   .000
C   .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C   .000   Q = 2614 + (.7)413  =2913 CFS
C   .000
C   .465
C   .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C   .465   Q = 2614 CFS
C   .465
C   .846
C   .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C   .846   Q = (2614 + 1862)/2 = 2238 CFS
C   .846
C  1.074
C  1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C  1.074   Q = 1862 CFS                                   SION AT NORTHERN AVE.)
C  1.074
C  1.148
C  1.148   NORTHERN AVENUE
C  1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1279 CFS BREAKS OUT EAST OVER
C  1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C  1.148
C  1.159
C  1.159   Q @ X1 = 1.159 EQUALS Q AT CP10
C  1.159   Q = 1862  CFS
C  1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C  1.159
C  1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C  1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C  1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C  1.159
C  1.237
C  1.237   Q AT X1 = 1.237 EQUALS Q AT CP10
C  1.237   Q = 1862 CFS
C  1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C  1.237
C  1.313
C  1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C  1.313   Q = 1862 CFS                                          AT NORTHERN AVE.)
C  1.313
C  1.556
C  1.556   Q AT X1 = 1.556
C  1.556   Q = 1542 CFS
C  1.556
C  1.616
C  1.616   Q @ X1 = 1.616 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C  1.616   Q = (1173/4 + 997) = 1290 CFS
C  1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C  1.616
C  1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C  1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C  1.616
C  2.072
C  2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C  2.072   Q = 997 CFS                                  AT OLIVE AVENUE)
C  2.072
C  2.159
C  2.159   OLIVE AVENUE
C  2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C  2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C  2.159
C  2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C  2.159   OLIVE AVENUE.
C  2.159
C  2.167
C  2.167   Q @ X1 = 2.167 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C  2.167   Q = 997 CFS                                  AT OLIVE AVE.)
C  2.167
C  2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C  2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
C  2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
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C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1LCN.DAT WHICH USES MODEL WTCH1LC & CHANGE Q'S TO BE
*           IN EFFECT IF THE SHORT CHANNEL WERE BUILT  & CULVERT AT
*           NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1LCN.DAT - R.W. CRUFF - 4-28-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1     0       2       0       0   .0055       0       0       0    1195       0
J2     1       0       0       0       0       0       0       0       0       0
J3    38      43       1       8      26
J3    38      53       4      54      13      14      15
NC   .03     .04    .028      .1      .3
QT     2    2913    2913
ET                   9.1                                          9947.3410139.22
X1 0.000      20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350  1200.4   10365
ET                   9.1                                          9948.3310160.30
X1 0.070      13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                   9.1                                          9907.8310260.83
X1 0.156      17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH     4     .04    9970     .03   10115     .03   10260     .04   10285
ET                   9.1                                          9954.33   10115
X1 0.231      18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH     6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                   9.1                                          9881.25   10065
X1 0.307      23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC   .03     .04     .03      .1      .3
ET                   9.1                                          9931.3310041.47
X1 0.390      11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT     2    2614    2614
ET                   9.1                                          9922.8310040.76
X1 0.465      15    9930   10030     410     390     395
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GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                           9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                            9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                           9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                           9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    2238    2238
ET                   9.1                                           9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                           9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                           9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    1862    1862
ET                   9.1                                           9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                              988010069.42
X1 1.148      18    9990   10011     395     405     390
X3    10                                                        1234.5  1234.5
GR1234.5    9880  1234.5    9920  1234.5    9940  1234.5    9980  1234.5    9982
GR1234.5    9990    1224    9990    1224    9992    1224    9994    1224    9995
GR  1224   10005    1224   10006    1224   10008    1224   10010  1234.5   10011
GR1234.5   10020    1236   10080  1236.5   10230
QT     2    1862    1862
SB     1     1.5     2.5       0      20       0     120       0  1224.4    1224
ET                  9.11                                                9886   10145
X1 1.159      16    9990   10010      60      60      60
X2                     1  1230.4  1234.5
X3    10                                                        1234.5  1234.5
BT    14    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9980  1234.5  1234.5    9990  1234.5  1230.4    9992
BT1234.5  1230.4     994  1234.5  1230.4   10010  1234.5  1230.4   10011  1234.5
BT1234.5   10034    1238    1238   10080    1238    1238   10115    1238    1238
BT 10145    1238    1238
GR1234.5    9886  1234.5    9909  1234.5    9916  1234.5    9927  1234.5    9980
GR1234.5    9990  1224.4    9990  1224.4    9992  1224.4    9994  1224.4   10010
GR1234.5   10010  1234.5   10011    1238   10034    1238   10080    1238   10115
GR  1238   10145

NC   .03     .05    .035      .3      .5
QT     2    1862    1862
ET                   9.1                                              995010298.35
X1 1.237      18    9975   10030     390     390     410
GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
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GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    1862    1862
ET                   9.1                                          9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                          9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                          9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    1542    1542
ET                   9.1                                           9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    1290    1290
ET                   9.1                                             995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                          9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940    .035    9960     .03   10045     .04   10220    .035
NH 10325
ET                   9.1                                          9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                          9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                           9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                             9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2     997     997
ET                   9.1                                          9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                             991010542.73
X1 2.159      16    9991 10008.2     440     460     460
X3    10                                                   1275.6  1275.6
GR1275.7    9910    1274    9970  1271.2    9991  1269.2  9991.5  1267.7    9993
GR1267.2    9995  1267.6 10004.6  1268.1 10006.4  1269.4 10007.6  1271.2 10008.2
GR  1272   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
GR  1280   10910
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QT     2     997     997
SB  1.25     1.5     2.5       0      10      .1     104     .56  1268.2  1267.8
ET                  9.11                                             991010542.73
X1 2.167      24    9991 10008.2      40      40      40
X2                     1  1275.6  1275.9
X3    10                                                 1275.9  1275.9
BT    24    9910    1277    1277    9940 1276.63 1276.63    9968  1276.5  1276.5
BT  9991  1276.4  1271.6  9991.5  1276.4  1273.6    9993  1276.4  1275.1    9995
BT1276.4  1275.6    9997  1276.4  1275.1  9998.5  1276.4  1273.6    9999  1276.4
BT1271.6   10001  1276.4  1271.6 10001.3  1276.4  1273.4 10002.8  1276.4  1274.7
BT10004.  1276.4  1275.2 10006.4  1276.4  1274.7 10007.6  1276.4  1273.4 10008.2
BT1276.4  1271.6   10055  1276.2  1276.2   10085  1276.1  1276.1   10100  1275.9
BT1275.9   10300  1276.1  1276.1   10500  1277.3  1277.3   10530    1278    1278
BT 10720  1279.5  1279.5
GR  1277    9910  1274.7    9940  1274.0    9968  1271.6    9991  1269.6  9991.5
GR1268.1    9993  1267.6    9995  1268.1    9997  1269.6  9998.5  1271.6    9999
GR1271.6   10001  1269.8 10001.3  1268.5 10002.8  1268.0 10004.6  1268.5 10006.4
GR1269.8 10007.6  1271.6 10008.2  1272.3   10055  1273.2   10085  1274.3   10100
GR1275.3   10300    1277   10500    1278   10530  1279.5   10720
ET                  9.1                                              991010518.19
X1 2.186      18    9955   10075     100     100     100
GR  1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR  1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR  1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC   .04     .07    .035      .1      .3
ET                  9.1                                              997010352.22
X1 2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR  1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR  1280   10430
QT     2     997     997
ET                  9.1                                          9977.12   10100
X1 2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR  1274   10010    1276   10040    1278   10160    1280   10335
NH     5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                  9.1                                          9986.62   10090
X1 2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR  1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR  1278   10110  1278.7   10155    1280   10225    1282   10300
NH     3     .04    9970    .035   10055     .05   10300
ET                  9.1                                          9983.68   10085
X1 2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR  1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH     3     .04    9960    .035   10030     .07   10325
ET                  9.1                                          9976.58   10085
X1 2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR  1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC  .035     .07    .035      .1      .3
ET                  9.1                                          9969.89   10080
X1 2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR  1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR  1286   10150    1288   10175    1290   10220    1292   10255
QT     2     710     710
ET                  9.1                                          9985.09   10035
X1 2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR  1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR  1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR  1294   10285  1294.4   10340
ET                  9.1                                          9983.29   10055
X1 2.826      10    9965   10055     450     450     450
GR  1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR  1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                  9.1                                          9980.5610044.07
X1 2.907       8    9985   10030     430     430     430
GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
GR  1294   10030    1296   10080  1297.7   10110
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NH     2    .035   10025     .07   10125
ET                   9.1                                          9980.7910066.54
X1 3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR  1302   10090  1302.5   10125
NC   .04     .07    .035      .1      .3
ET                   9.1                                          9974.8010050.31
X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                          9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                          9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                          9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                          9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                          9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                          9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                          9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                          9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
```

FILE = WTCH1LCN.OUT

R.W. CRUFF, P.E.

APRIL 28, 1997

FILE = WTCH1LCN.DAT WHICH USES MODEL WTCH1LC & CHANGE Q'S TO BE
IN EFFECT IF THE SHORT CHANNEL WERE BUILT & CULVERT AT
NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1LCN.DAT - R.W. CRUFF - 4-28-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	VCH
.000	2913.00	1192.16	2.76	7.20
.070	2913.00	1194.56	2.56	7.56
.156	2913.00	1197.63	3.73	5.98
.231	2913.00	1199.43	4.13	5.97
.307	2913.00	1201.52	3.82	8.28
.390	2913.00	1207.02	5.22	10.16
.465	2614.00	1210.51	5.51	8.14
.543	2614.00	1212.72	6.02	7.06
.620	2614.00	1214.07	6.27	5.85
.696	2614.00	1215.78	5.78	10.81
.770	2614.00	1218.45	7.15	6.16
.846	2238.00	1219.16	5.56	5.18
.920	2238.00	1220.33	4.73	9.04
.998	2238.00	1224.05	5.75	10.74
1.074	1862.00	1227.53	6.53	7.38
1.148	1862.00	1230.38	6.38	14.38
1.159	1862.00	1233.52	9.12	10.20
1.237	1862.00	1235.94	8.14	3.35
1.313	1862.00	1236.22	5.42	5.13
1.388	1862.00	1239.19	4.69	8.71
1.466	1862.00	1243.57	6.07	9.25
1.556	1542.00	1246.78	5.78	6.06
1.616	1290.00	1248.13	4.13	4.10

SECNO	Q	CWSEL	DEPTH	VCH
1.692	1290.00	1250.08	2.38	6.63
1.768	1290.00	1253.21	2.51	3.79
1.844	1290.00	1257.80	5.40	10.56
1.920	1290.00	1261.64	6.44	6.36
1.996	1290.00	1264.55	4.15	9.25
2.072	997.00	1268.09	4.59	4.72
2.159	997.00	1272.53	5.33	12.32
2.167	997.00	1276.29	8.69	1.48
2.186	997.00	1276.30	6.80	1.15
2.267	997.00	1276.00	4.90	6.42
2.330	997.00	1277.58	4.28	5.30
2.392	997.00	1279.61	4.21	7.18
2.468	997.00	1283.08	3.38	3.72
2.553	997.00	1285.66	3.56	7.27
2.640	997.00	1287.35	4.45	2.52
2.741	710.00	1287.96	4.06	4.86
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.56	3.26	7.76
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

FILE = WTCH1LCN.OUT

R.W. CRUFF, P.E.

APRIL 28, 1997

FILE = WTCH1LCN.DAT WHICH USES MODEL WTCH1LC & CHANGE Q'S TO BE
IN EFFECT IF THE SHORT CHANNEL WERE BUILT & CULVERT AT
NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1LCN.DAT - R.W. CRUFF - 4-28-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
WASH "1" - BEARDSLEY CAN

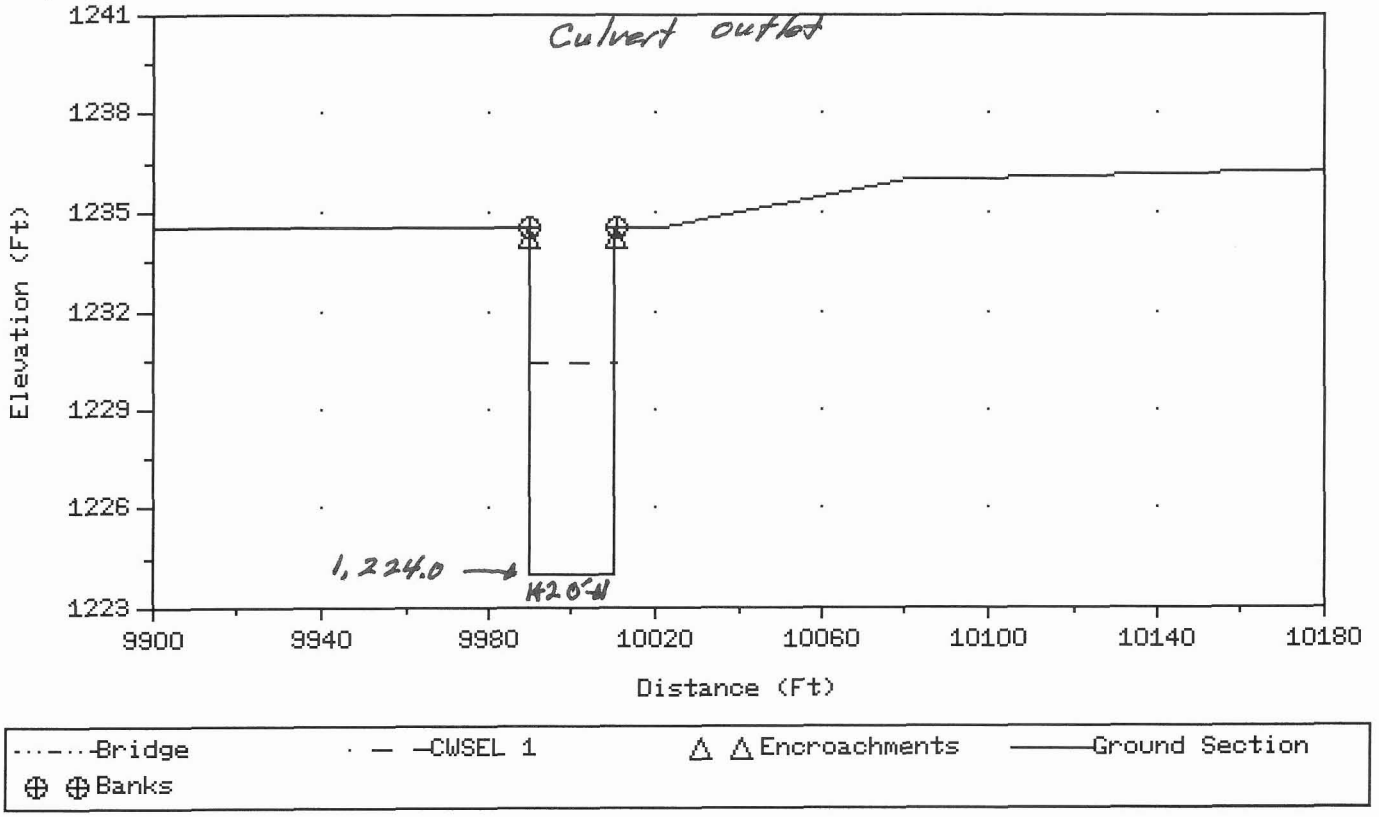
SUMMARY PRINTOUT

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9957.56	178.25	10135.81	.14	2860.07	52.79
.070	9954.38	203.17	10157.55	3.03	2908.95	1.02
.156	9915.48	285.23	10231.74	.00	2889.61	23.38
.231	9959.18	238.76	10240.49	.00	1926.88	986.12
.307	9900.83	188.34	10311.39	.00	2575.89	337.11
.390	9944.81	90.29	10035.10	.00	2913.00	.00
.465	9927.45	106.37	10033.82	.97	2611.94	1.10
.543	9946.38	193.52	10139.90	1.93	2112.01	500.06
.620	9959.66	333.05	10292.71	24.81	2146.70	442.49
.696	9961.11	77.79	10038.89	31.46	2558.95	23.59
.770	9957.76	391.23	10353.43	38.05	2102.64	473.31
.846	9949.17	174.13	10123.30	35.18	2037.50	165.32
.920	9969.17	105.83	10075.00	.20	2236.86	.94
.998	9974.84	60.40	10035.24	.00	2238.00	.00
1.074	9966.58	61.84	10028.42	.00	1862.00	.00
1.148	9990.00	20.61	10010.61	.00	1862.00	.00
1.159	9990.00	20.00	10010.00	.00	1862.00	.00
1.237	9975.10	294.82	10273.36	.00	1133.49	728.51
1.313	9977.21	173.93	10151.15	.00	1643.16	218.83
1.388	9987.04	161.67	10148.71	.00	733.88	1128.12
1.466	9984.04	102.44	10111.80	.00	1419.64	442.36
1.556	9978.06	72.77	10050.83	.00	1538.46	3.53
1.616	9963.81	147.19	10111.01	.00	969.65	320.34

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9983.92	146.70	10130.62	.00	531.08	758.91
1.768	9965.85	266.35	10232.20	.00	413.06	876.94
1.844	9983.66	35.84	10019.51	.00	1290.00	.00
1.920	9975.94	52.19	10028.13	.00	1290.00	.00
1.996	9975.74	53.41	10029.15	.00	1290.00	.00
2.072	9974.77	176.30	10151.07	.00	728.55	268.45
2.159	9991.00	17.20	10008.20	.00	997.00	.00
2.167	9919.10	498.78	10417.88	146.74	183.90	666.35
2.186	9924.04	409.85	10333.89	44.36	806.62	146.02
2.267	9985.00	245.35	10329.98	.00	798.95	198.05
2.330	9981.04	153.96	10135.00	.00	912.78	84.22
2.392	9986.93	154.60	10204.24	.00	549.82	447.18
2.468	9983.45	279.09	10263.62	.00	371.64	625.36
2.553	9976.67	116.62	10093.29	.00	905.74	91.26
2.640	9969.90	196.92	10166.83	.00	515.06	481.94
2.741	9985.09	153.10	10159.82	.00	481.86	228.14
2.826	9983.29	173.77	10157.06	.00	589.62	120.38
2.907	9980.55	63.53	10044.08	2.62	703.21	4.17
3.009	9980.79	85.78	10066.57	28.57	639.54	41.89
3.081	9974.80	75.50	10050.30	6.56	697.81	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

WASH "1" - BEARDSLEY CAN

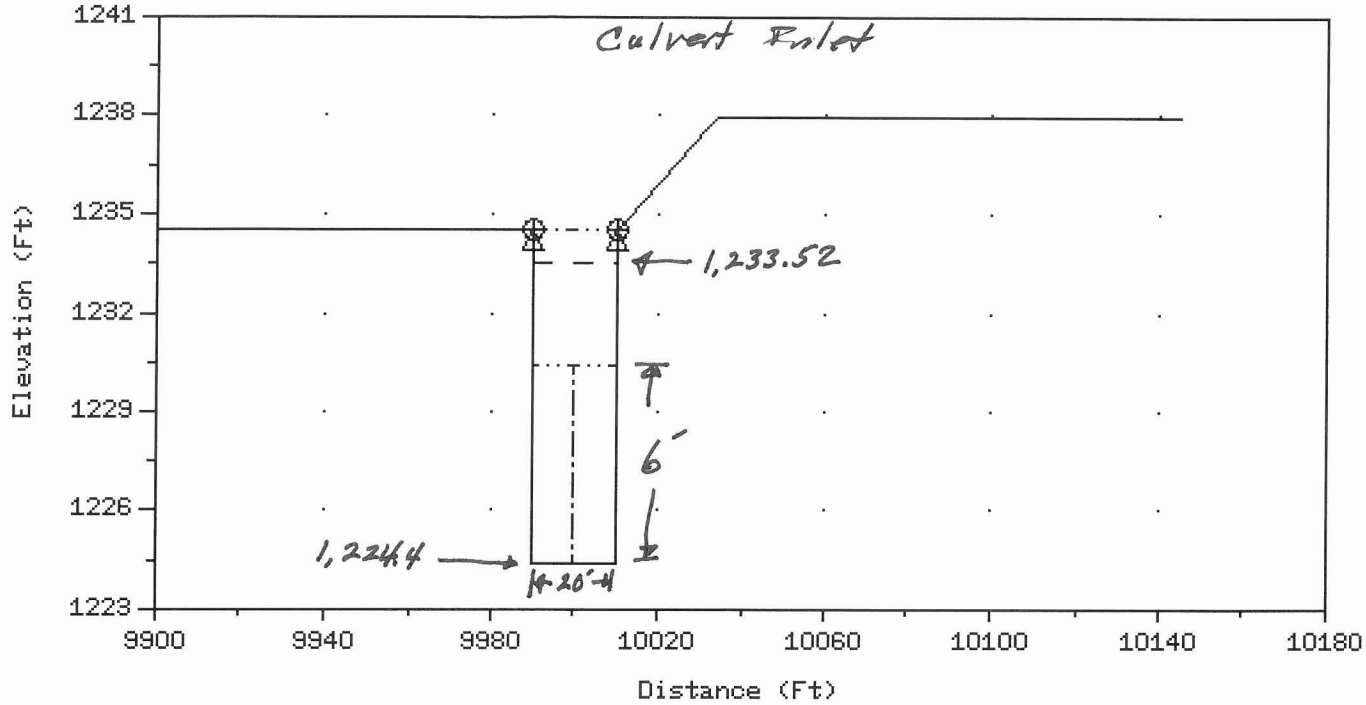
Cross-Section 1.148



Northern Alt

WASH "1" - BEARDSLEY CAN

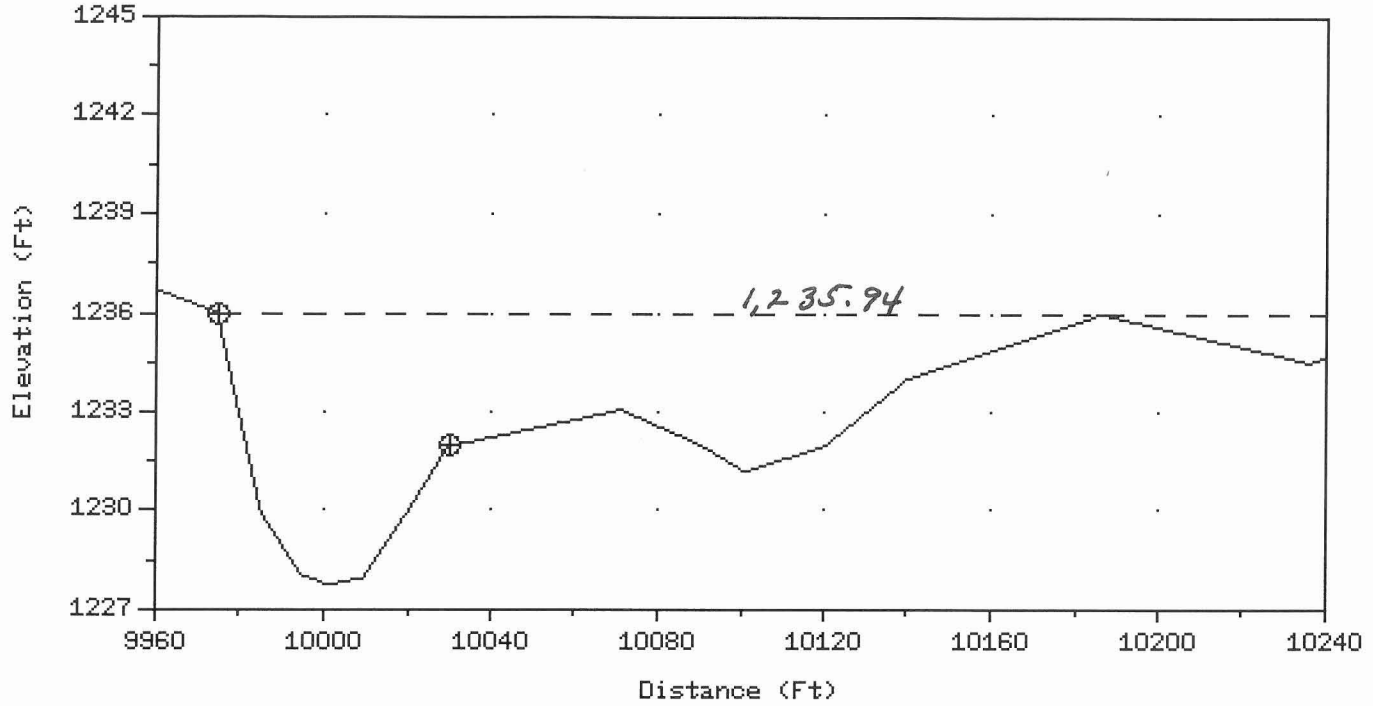
Cross-Section 1.159



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

WASH "1" - BEARDSLEY CAN

Cross-Section 1.237



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

```
FILE = WTCH1SC.DAT

C
C      93
C    .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C    .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C    .000
C    .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C    .000   Q = 3702 + (.7)413  =3991 CFS
C    .000
C    .465
C    .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C    .465   Q = 3702 CFS
C    .465
C    .846
C    .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C    .846   Q = (3702 + 3225)/2 = 3464 CFS
C    .846
C   1.074
C   1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C   1.074   Q = 3225 CFS                                   SION AT NORTHERN AVE.)
C   1.074
C   1.148
C   1.148   NORTHERN AVENUE
C   1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1279 CFS BREAKS OUT EAST OVER
C   1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C   1.148
C   1.159
C   1.159   Q @ X1 = 1.159 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO  HE EAST
C   1.159   Q = 4504 - 853 = 3651 CFS                                  THE EAST
C   1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.159
C   1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C   1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C   1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C   1.159
C   1.237
C   1.237   Q AT X1 = 1.237 EQUALS Q AT CP10 MINUS A PORTION OF BREAKOUT FLOW TO
C   1.237   Q = 4504 - 426 = 4078 CFS                                THE EAST
C   1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.237
C   1.313
C   1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C   1.313   Q = 4504 CFS                                      AT NORTHERN AVE.)
C   1.313
C   1.556
C   1.556   Q AT X1 = 1.556
C   1.556   Q = 3103 CFS
C   1.556
C   1.616
C   1.616   Q @ X1 = 1.616 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C   1.616   Q = (1173/4 + 996) = 1289 CFS
C   1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C   1.616
C   1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C   1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C   1.616
C   2.072
C   2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C   2.072   Q = 996 CFS                                  AT OLIVE AVENUE)
C   2.072
C   2.159
C   2.159   OLIVE AVENUE
C   2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C   2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C   2.159
C   2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C   2.159   OLIVE AVENUE.
C   2.159
C   2.167
C   2.167   Q @ X1 = 2.167 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C   2.167   Q = 997 CFS                                  AT OLIVE AVE.)
C   2.167
C   2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C   2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
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C  2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1SC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
*           IN EFFECT IF THE SHORT CHANNEL WERE BUILT
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1SC.DAT - R.W. CRUFF - 4-25-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1     0       2       0       0   .0055       0       0       0    1195       0
J2     1       0       0       0       0       0       0       0       0       0
J3    38      43       1       8      26
J3    38      53       4      54      13      14      15
NC   .03     .04    .028      .1      .3
QT     2    3991    3991
ET                   9.1                                          9947.3410139.22
X1 0.000      20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350  1200.4   10365
ET                   9.1                                          9948.3310160.30
X1 0.070      13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                   9.1                                          9907.8310260.83
X1 0.156      17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH     4     .04    9970     .03   10115     .03   10260     .04   10285
ET                   9.1                                          9954.33   10115
X1 0.231      18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH     6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                   9.1                                          9881.25   10065
X1 0.307      23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC   .03     .04     .03      .1      .3
ET                   9.1                                          9931.3310041.47
X1 0.390      11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT     2    3702    3702
ET                   9.1                                          9922.8310040.76
X1 0.465      15    9930   10030     410     390     395
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GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                          9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                           9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                          9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                          9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    3464    3464
ET                   9.1                                          9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                          9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                          9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    3225    3225
ET                   9.1                                          9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                             988010069.42
X1 1.148      18    9989   10011     395     405     390
X3    10                                                   1234.5  1234.5
GR1234.5    9880  1234.5    9920    1232    9940    1230    9970    1228    9980
GR  1227    9989  1224.7    9990    1224    9992  1224.7    9994    1227    9995
GR  1227   10005  1224.7   10006    1224   10008  1224.7   10010    1227   10011
GR  1228   10020    1236   10080  1236.5   10230
QT     2    3651    3651
SB     1     1.5     2.5       0      16      .1     113     .41  1224.4    1224
ET                  9.11                                             988610247.26
X1 1.159      21    9989   10011      60      60      60
X2                     1  1230.4  1234.5
X3    10                                                   1234.5  1234.5
BT    21    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9968  1234.6  1234.6    9989  1234.7  1227.4    9990
BT1234.7  1229.7    9992 1234.72  1230.4    9994 1234.73  1229.7    9995 1234.75
BT1227.4   10005  1234.8  1227.4   10006 1234.81  1229.7   10008 1234.82  1230.4
BT 10010 1234.83  1229.7   10011 1234.85  1227.4   10034    1238    1238   10080
BT  1238    1238   10115    1238    1238   10145    1238    1238   10200    1237
BT  1237   10280    1239    1239
GR1234.5    9886  1234.5    9909 1233.75    9916  1229.7    9927  1228.7    9968
GR1227.4    9989  1225.1    9990  1224.4    9992  1225.1    9994  1227.4    9995
GR1227.4   10005  1225.1   10006  1224.4   10008  1225.1   10010  1227.4   10011
GR  1238   10034    1238   10080    1238   10115    1238   10145    1237   10200
GR  1239   10280
NC   .03     .05    .035      .3      .5
QT     2    4078    4178
ET                   9.1                                             995010298.35
X1 1.237      18    9975   10030     390     390     410
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GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    4504    4504
ET                   9.1                                        9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                         9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                         9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    3103    3103
ET                   9.1                                        9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    1289    1289
ET                   9.1                                          995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                        9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940    .035    9960     .03   10045     .04   10220    .035
NH 10325
ET                   9.1                                         9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                        9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                         9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                           9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2     997     997
ET                   9.1                                         9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                          991010542.73
X1 2.159      16    9991 10008.2     440     460     460
X3    10                                                  1275.6  1275.6
GR1275.7    9910    1274    9970  1271.2    9991  1269.2  9991.5  1267.7    9993
GR1267.2    9995  1267.6 10004.6  1268.1 10006.4  1269.4 10007.6  1271.2 10008.2
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GR  1272   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
GR  1280   10910
QT     2     997     997
SB  1.25     1.5     2.5       0      10      .1     104     .56  1268.2  1267.8
ET                  9.11                                          991010542.73
X1 2.167      24    9991 10008.2      40      40      40
X2                     1  1275.6  1275.9
X3    10                                                 1275.9  1275.9
BT    24    9910    1277    1277    9940 1276.63 1276.63    9968  1276.5  1276.5
BT  9991  1276.4  1271.6  9991.5  1276.4  1273.6    9993  1276.4  1275.1    9995
BT1276.4  1275.6    9997  1276.4  1275.1  9998.5  1276.4  1273.6    9999  1276.4
BT1271.6   10001  1276.4  1271.6 10001.3  1276.4  1273.4 10002.8  1276.4  1274.7
BT10004.  1276.4  1275.2 10006.4  1276.4  1274.7 10007.6  1276.4  1273.4 10008.2
BT1276.4  1271.6   10055  1276.2  1276.2   10085  1276.1  1276.1   10100  1275.9
BT1275.9   10300  1276.1  1276.1   10500  1277.3  1277.3   10530    1278    1278
BT 10720  1279.5  1279.5
GR  1277    9910  1274.7    9940  1274.0    9968  1271.6    9991  1269.6  9991.5
GR1268.1    9993  1267.6    9995  1268.1    9997  1269.6  9998.5  1271.6    9999
GR1271.6   10001  1269.8 10001.3  1268.5 10002.8  1268.0 10004.6  1268.5 10006.4
GR1269.8 10007.6  1271.6 10008.2  1272.3   10055  1273.2   10085  1274.3   10100
GR1275.3   10300    1277   10500    1278   10530  1279.5   10720
ET                  9.1                                           991010518.19
X1 2.186      18    9955   10075     100     100     100
GR  1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR  1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR  1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC   .04     .07    .035      .1      .3
ET                  9.1                                           997010352.22
X1 2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR  1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR  1280   10430
QT     2     997     997
ET                  9.1                                          9977.12   10100
X1 2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR  1274   10010    1276   10040    1278   10160    1280   10335
NH     5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                  9.1                                          9986.62   10090
X1 2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR  1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR  1278   10110  1278.7   10155    1280   10225    1282   10300
NH     3     .04    9970    .035   10055     .05   10300
ET                  9.1                                          9983.68   10085
X1 2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR  1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH     3     .04    9960    .035   10030     .07   10325
ET                  9.1                                          9976.58   10085
X1 2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR  1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC  .035     .07    .035      .1      .3
ET                  9.1                                          9969.89   10080
X1 2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR  1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR  1286   10150    1288   10175    1290   10220    1292   10255
QT     2     710     710
ET                  9.1                                          9985.09   10035
X1 2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR  1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR  1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR  1294   10285  1294.4   10340
ET                  9.1                                          9983.29   10055
X1 2.826      10    9965   10055     450     450     450
GR  1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR  1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                  9.1                                          9980.5610044.07
X1 2.907       8    9985   10030     430     430     430
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GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
GR  1294   10030    1296   10080  1297.7   10110
NH     2    .035   10025     .07   10125
ET                   9.1                                          9980.7910066.54
X1 3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR  1302   10090  1302.5   10125
NC   .04     .07    .035      .1      .3
ET                   9.1                                          9974.8010050.31
X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                          9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                          9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                          9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                          9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                          9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                          9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                          9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                          9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
```

FILE = WTCH1SC.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1SC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
IN EFFECT IF THE SHORT CHANNEL WERE BUILT

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	VCH
.000	3991.00	1192.67	3.27	8.14
.070	3991.00	1195.01	3.01	8.45
.156	3991.00	1198.14	4.24	6.46
.231	3991.00	1199.93	4.63	6.60
.307	3991.00	1202.06	4.36	8.79
.390	3991.00	1207.88	6.08	10.78
.465	3702.00	1211.20	6.20	9.44
.543	3702.00	1213.61	6.91	7.40
.620	3702.00	1214.82	7.02	6.06
.696	3702.00	1216.83	6.83	11.69
.770	3702.00	1219.57	8.27	5.58
.846	3464.00	1219.92	6.32	6.57
.920	3464.00	1221.22	5.62	10.21
.998	3464.00	1225.31	7.01	12.13
1.074	3225.00	1228.72	7.72	9.78
1.148	3225.00	1234.56	10.56	5.87
1.159	3651.00	1237.91	13.51	3.61
1.237	4078.00	1238.04	10.24	4.25
1.313	4504.00	1238.22	7.42	6.88
1.388	4504.00	1240.47	5.97	11.38
1.466	4504.00	1245.32	7.82	10.39
1.556	3103.00	1248.67	7.67	7.76
1.616	1289.00	1250.02	6.02	2.11

SECNO	Q	CWSEL	DEPTH	VCH
1.692	1289.00	1250.07	2.37	6.72
1.768	1289.00	1253.22	2.52	3.77
1.844	1289.00	1257.80	5.40	10.56
1.920	1289.00	1261.63	6.43	6.35
1.996	1289.00	1264.55	4.15	9.24
2.072	997.00	1268.09	4.59	4.73
2.159	997.00	1272.53	5.33	12.32
2.167	997.00	1276.29	8.69	1.48
2.186	997.00	1276.30	6.80	1.15
2.267	997.00	1276.00	4.90	6.42
2.330	997.00	1277.58	4.28	5.30
2.392	997.00	1279.61	4.21	7.18
2.468	997.00	1283.08	3.38	3.72
2.553	997.00	1285.66	3.56	7.27
2.640	997.00	1287.35	4.45	2.52
2.741	710.00	1287.96	4.06	4.86
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.56	3.26	7.76
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

FILE = WTCH1SC.OUT

R.W. CRUFF, P.E.

APRIL 25, 1997

FILE = WTCH1SC.DAT WHICH USES MODEL WTCH1 & CHANGE Q'S TO
IN EFFECT IF THE SHORT CHANNEL WERE BUILT

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

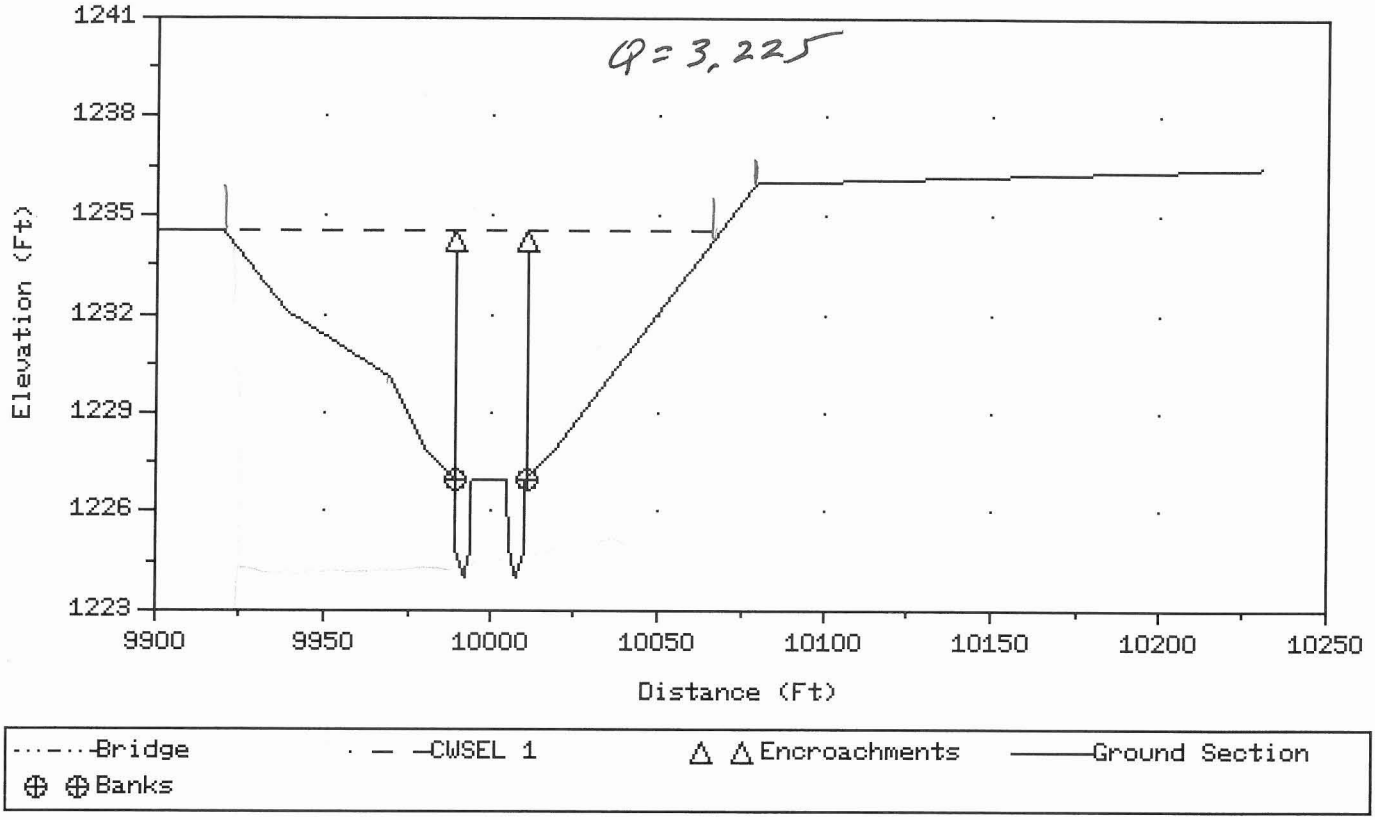
SUMMARY PRINTOUT

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9950.00	188.33	10138.33	5.87	3887.60	97.54
.070	9950.00	209.54	10159.54	13.77	3972.59	4.64
.156	9908.97	346.17	10255.15	.00	3875.06	115.93
.231	9955.56	270.18	10257.40	.00	2583.13	1407.87
.307	9887.91	213.70	10315.80	.00	3426.41	564.59
.390	9936.19	103.22	10039.41	.00	3991.00	.00
.465	9924.00	115.00	10039.00	9.66	3681.38	10.95
.543	9941.99	222.08	10164.07	14.65	2735.45	951.90
.620	9955.88	367.11	10322.98	52.72	2637.50	1011.78
.696	9955.85	88.31	10044.15	112.64	3504.88	84.48
.770	9952.16	434.86	10387.03	86.41	2311.45	1304.15
.846	9945.38	193.11	10138.49	77.37	2983.92	402.71
.920	9966.95	121.34	10088.29	5.81	3430.73	27.46
.998	9970.63	70.91	10041.55	9.14	3444.41	10.45
1.074	9959.59	72.22	10031.80	3.32	3220.88	.80
1.148	9880.00	189.23	10069.23	1129.34	1128.52	967.13
1.159	9886.00	234.31	10236.42	2421.68	927.06	302.27
1.237	9950.00	345.39	10295.39	59.07	1928.18	2090.75
1.313	9970.17	195.14	10165.31	.31	3552.95	950.74
1.388	9983.23	190.04	10173.27	.95	1535.42	2967.63
1.466	9981.13	163.56	10144.70	.00	2483.51	2020.49
1.556	9968.31	118.46	10086.77	3.18	2983.68	116.15
1.616	9950.00	175.40	10125.40	17.41	874.00	397.59

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9984.14	146.35	10130.49	.00	532.31	756.69
1.768	9965.80	266.47	10232.27	.00	412.90	876.10
1.844	9983.67	35.83	10019.50	.00	1289.00	.00
1.920	9975.94	52.18	10028.12	.00	1289.00	.00
1.996	9975.74	53.41	10029.15	.00	1289.00	.00
2.072	9974.77	176.19	10150.96	.00	728.91	268.09
2.159	9991.00	17.20	10008.20	.00	997.00	.00
2.167	9919.10	498.78	10417.88	146.74	183.90	666.35
2.186	9924.04	409.84	10333.88	44.36	806.64	146.01
2.267	9985.00	245.30	10329.98	.00	799.00	198.00
2.330	9981.04	153.97	10135.01	.00	912.77	84.23
2.392	9986.93	154.60	10204.24	.00	549.82	447.18
2.468	9983.45	279.09	10263.62	.00	371.64	625.36
2.553	9976.67	116.62	10093.29	.00	905.74	91.26
2.640	9969.90	196.92	10166.83	.00	515.06	481.94
2.741	9985.09	153.10	10159.82	.00	481.86	228.14
2.826	9983.29	173.77	10157.06	.00	589.62	120.38
2.907	9980.55	63.53	10044.08	2.62	703.21	4.17
3.009	9980.79	85.78	10066.57	28.57	639.54	41.89
3.081	9974.80	75.50	10050.30	6.56	697.81	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

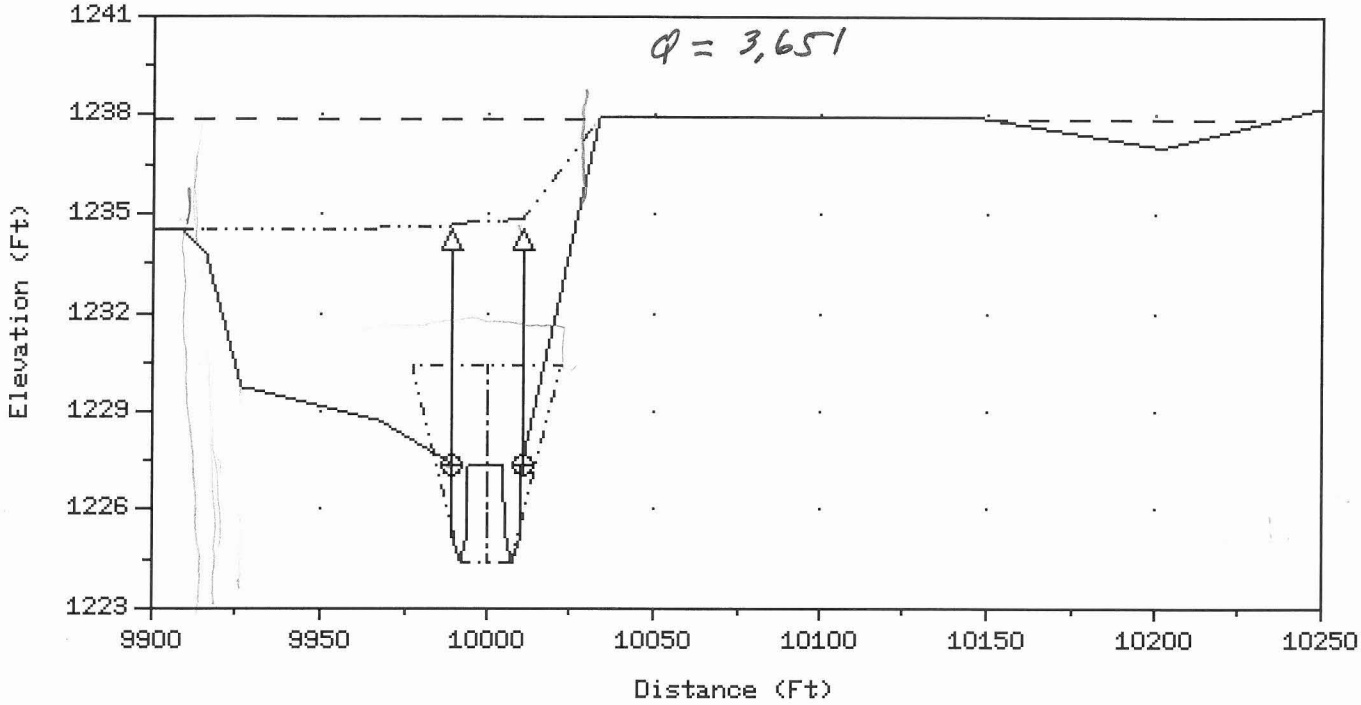
WASH "1" - BEARDSLEY CAN

Cross-Section 1.148



WASH "1" - BEARDSLEY CAN

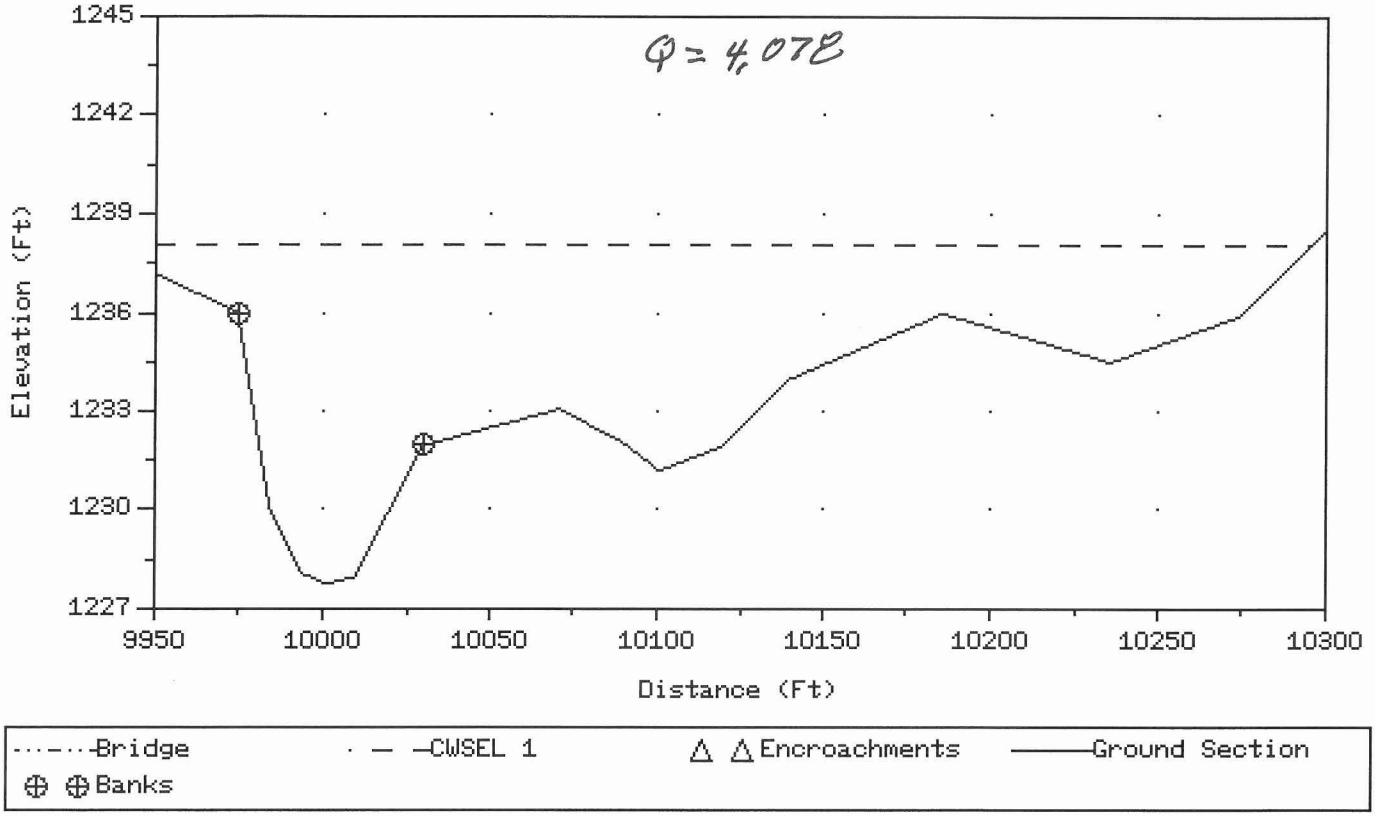
Cross-Section 1.159



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

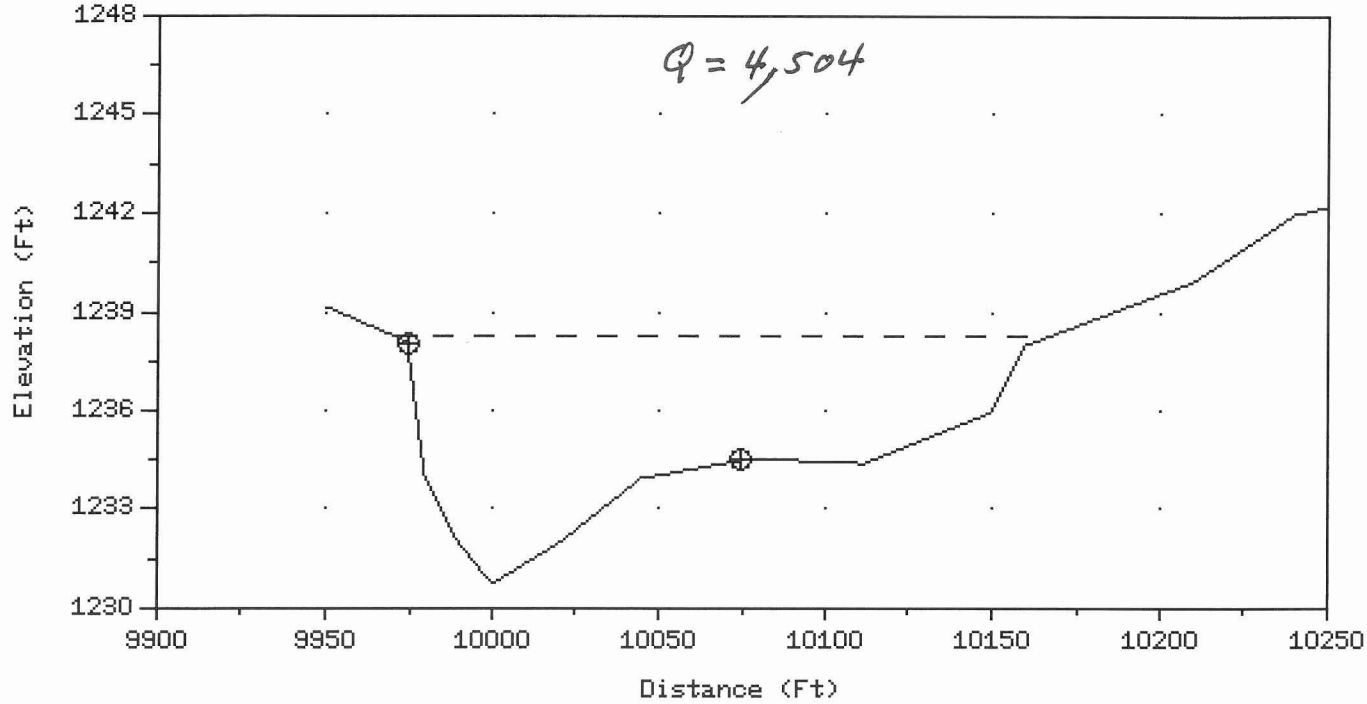
WASH "1" - BEARDSLEY CAN

Cross-Section 1.237



WASH "1" - BEARDSLEY CAN

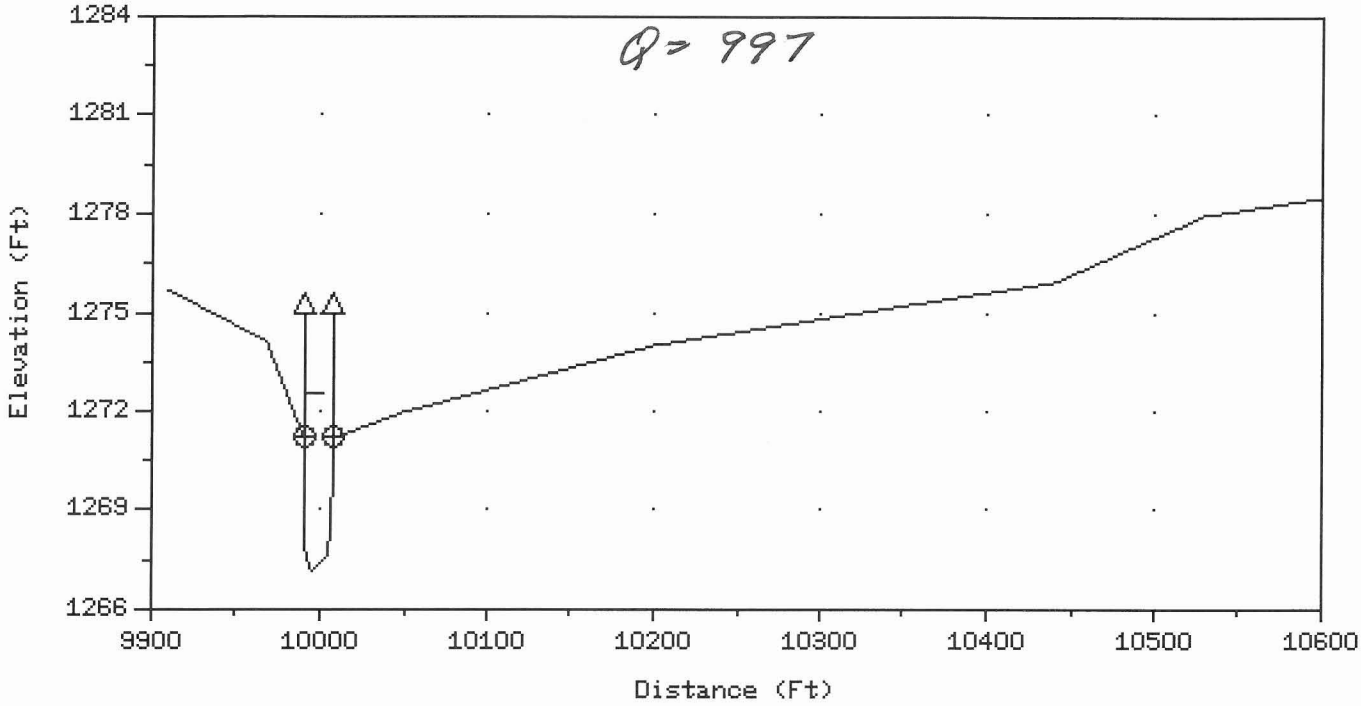
Cross-Section 1.313



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

WASH "1" - BEARDSLEY CAN

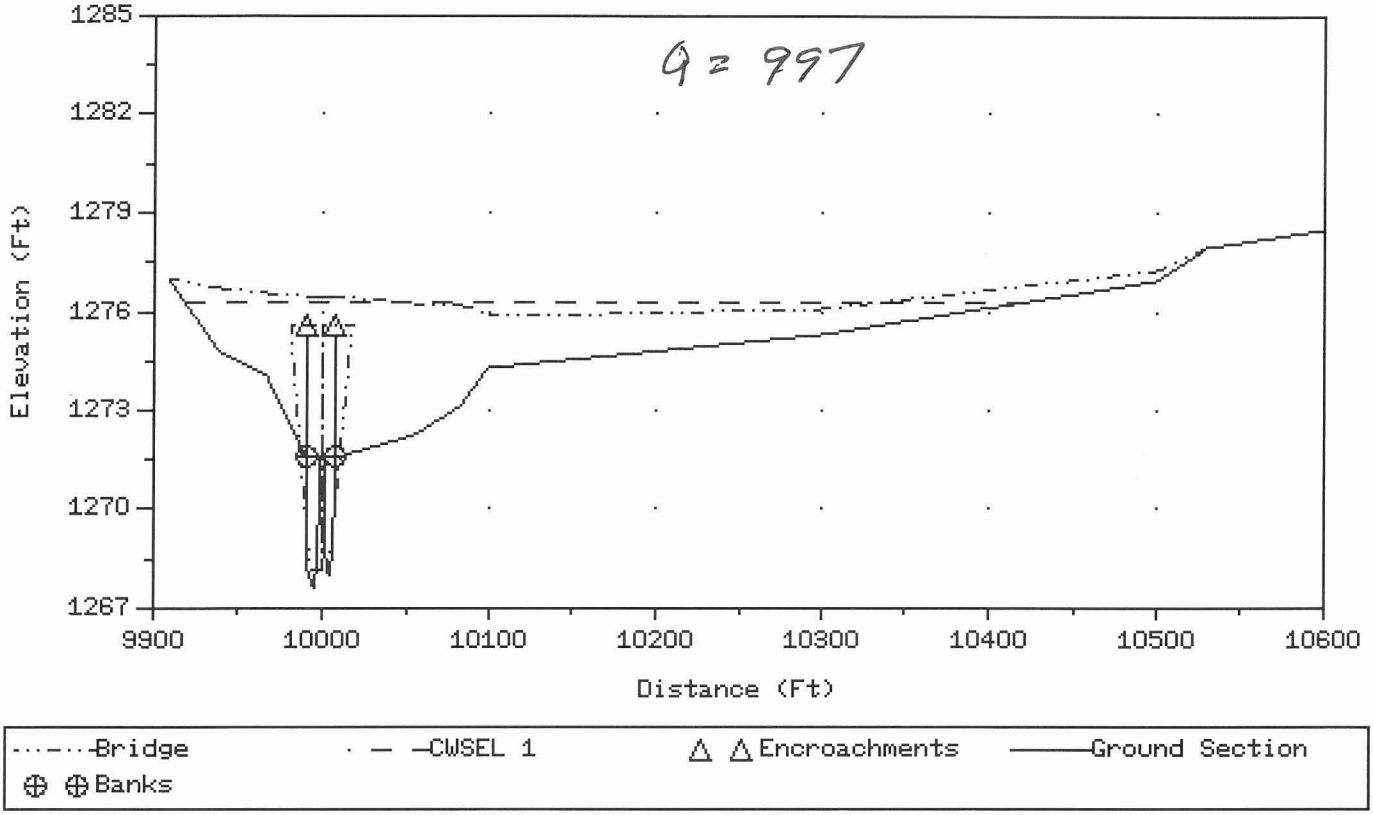
Cross-Section 2.159



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

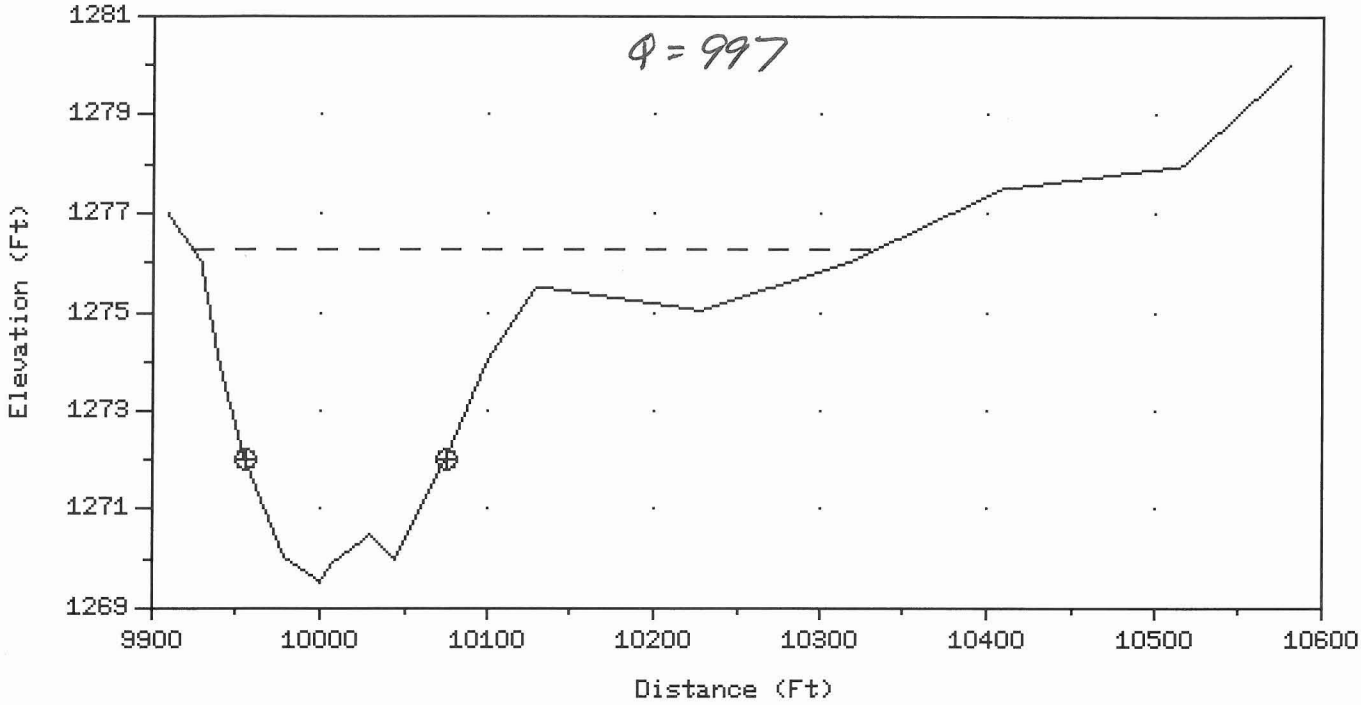
WASH "1" - BEARDSLEY CAN

Cross-Section 2.167



WASH "1" - BEARDSLEY CAN

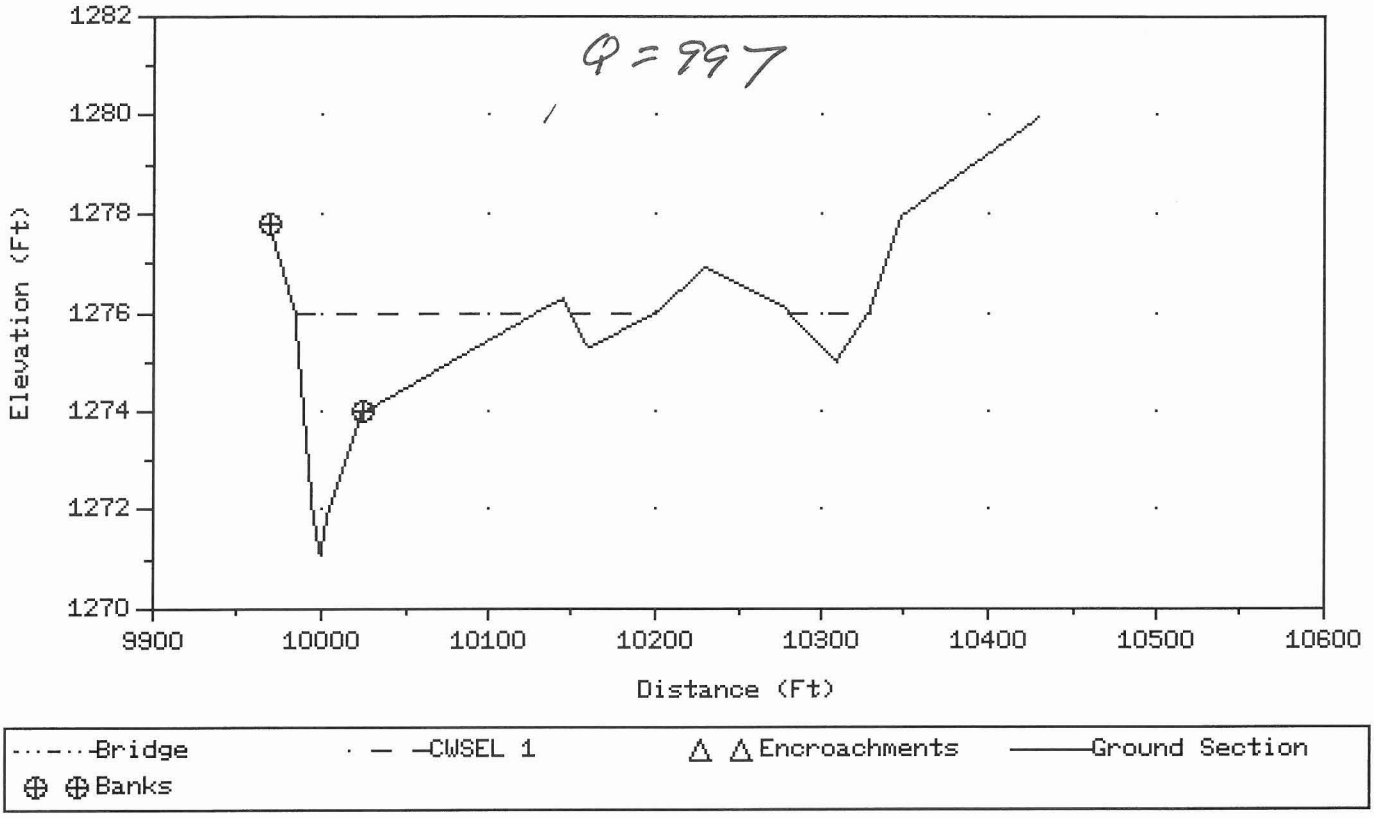
Cross-Section 2.186



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

WASH "1" - BEARDSLEY CAN

Cross-Section 2.267



```
FILE = WTCH1SCN.DAT

C
C      93
C    .000   BEGIN BACKWATER ANALYSIS AT NORMAL DEPTH.  TIE FLOODPLAIN INTO 100-YR
C    .000   PONDING WATER SURFACE BEHIND WHITE TANKS STRUCTURE #3
C    .000
C    .000   Q @ X1 = 0.000 TO X1 = 0.390 EQUALS Q AT CP12 + (.7) Q AT SUB-WT3
C    .000   Q = 4925 + (.7)413  =4621 CFS
C    .000
C    .465
C    .465   Q @ X1 = 0.465 TO X1 = 0.770 EQUALS Q AT CP12
C    .465   Q = 4925 CFS
C    .465
C    .846
C    .846   Q @ X1 = 0.846 TO X1 = 0.998 EQUALS (Q AT CP12 + Q AT CP10)/2
C    .846   Q = (4925 + 4505)/2 = 4715 CFS
C    .846
C   1.074
C   1.074   Q @ X1 = 1.074 TO X1 = 1.148 EQUALS Q AT CP10 (DOWNSTREAM OF DIVER-
C   1.074   Q = 4505 CFS                                   SION AT NORTHERN AVE.)
C   1.074
C   1.148
C   1.148   NORTHERN AVENUE
C   1.148   CROSS SECTION EXTENDED - APPROXIMATELY 1279 CFS BREAKS OUT EAST OVER
C   1.148   BEARDSLEY CANAL FOR NEXT THREE UPSTREAM CROSS SECTIONS.
C   1.148
C   1.159
C   1.159   Q @ X1 = 1.159 EQUALS Q AT CP10
C   1.159   Q = 4505  CFS
C   1.159   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.159
C   1.159   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS
C   1.159   WILL PRECLUDE ESTABLISHING A FLOODWAY FOR THE NEXT TWO UPSTREAM CROSS
C   1.159   SECTIONS.  NO LOSS OF VOLUME IS REQUIRED BECAUSE OF BREAKOUT.
C   1.159
C   1.237
C   1.237   Q AT X1 = 1.237 EQUALS Q AT CP10
C   1.237   Q = 4505 CFS
C   1.237   CROSS SECTION EXTENDED-FLOW WILL BREAKOUT TO THE EAST
C   1.237
C   1.313
C   1.313   Q AT X1 = 1.313 TO X1 = 1.466 EQUALS Q AT CP10 (UPSTREAM OF DIVERSION
C   1.313   Q = 4505 CFS                                        AT NORTHERN AVE.)
C   1.313
C   1.556
C   1.556   Q AT X1 = 1.556
C   1.556   Q = 3103 CFS
C   1.556
C   1.616
C   1.616   Q @ X1 = 1.616 TO X1 = 1.996 EQUALS (Q AT SUB 10/4 + Q AT CP3*)
C   1.616   Q = (1173/4 + 996) = 1289 CFS
C   1.616                              * = DOWNSTREAM OF DIVERSON AT OLIVE AVE.
C   1.616
C   1.616   CONFLUENCE WITH WASH "1A" - CHOLLA WASH
C   1.616   CROSS SECTION EXTENDED DUE TO OVERTOPPING OF BEARDSLEY CANAL DIKE
C   1.616
C   2.072
C   2.072   Q @ X1 = 2.072 TO X1 = 2.159 EQUALS Q AT CP3 (DOWNSTREAM OF DIVERSION
C   2.072   Q = 996 CFS                                  AT OLIVE AVENUE)
C   2.072
C   2.159
C   2.159   OLIVE AVENUE
C   2.159   NEXT THREE UPSTREAM CROSS SECTIONS EXTENDED - APPROXIMATELY 490 CFS
C   2.159   BREAKS OUT EAST OVER BEARDSLEY CANAL.
C   2.159
C   2.159   FLOODPLAIN LIMITS BASED UPON UPSTREAM FLOW COMING OVER THE TOP OF
C   2.159   OLIVE AVENUE.
C   2.159
C   2.167
C   2.167   Q @ X1 = 2.167 TO X1 = 2.267 EQUALS Q AT CP3 (UPSTREAM OF DIVERSION
C   2.167   Q = 997 CFS                                  AT OLIVE AVE.)
C   2.167
C   2.167   PONDING OCCURS IN THE RIGHT OVERBANK UPSTREAM OF CULVERTS.  THIS WILL
C   2.167   PRECLUDE ESTABLISHING A FLOODWAY FOR NEXT THREE UPSTEAM CROSS
C   2.167   SECTIONS.  NO VOLUME LOSS IS REQUIRED BECAUSE OF BREAKOUT.
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C  2.167
C  2.267
C  2.267   NEXT FOUR UPSTREAM CROSS SECTIONS ARE AT THE CONFLUENCE WITH
C  2.267   WASH "1B" - WATERFALL WASH
C  2.267
C  2.330
C  2.330   Q @ X1 = 2.330 TO X1 = 2.640 EQUALS Q AT I1CP3.
C  2.330   Q = 997 CFS
C  2.330
C  2.741
C  2.741   Q @ X1 = 2.741 TO X1 = 3.081 EQUALS Q AT SUB-3A + Q AT SUB-3/2
C  2.741   Q = 296 + 828/2 = 710 CFS
C  2.741
C  3.167
C  3.167   Q @ X1 = 3.167 TO X1 = 3.540 EQUALS Q AT SUB-3A
C  3.167   Q = 296 CFS
C  3.167
C  3.610
C  3.610   Q @ X1 = 3.610 TO X1 = 3.678 EQUALS Q AT SUB-3A/2
C  3.610   Q = 296/2 = 148 CFS
C  3.610
*           FILE = WTCH1SCN.DAT WHICH USES MODEL WTCH1SC & CHANGE Q'S TO BE
*           IN EFFECT IF THE SHORT CHANNEL WERE BUILT  & CULVERT AT
*           NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.
*
T1      WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2      100 - YEAR STORM EVENT - FILE = WTCH1SCN.DAT - R.W. CRUFF - 4-25-97
T3      WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
J1     0       2       0       0   .0055       0       0       0    1195       0
J2     1       0       0       0       0       0       0       0       0       0
J3    38      43       1       8      26
J3    38      53       4      54      13      14      15
NC   .03     .04    .028      .1      .3
QT     2    4621    4621
ET                   9.1                                          9947.3410139.22
X1 0.000      20    9960   10120   0.000   0.000   0.000
GR  1210    9875    1200    9895    1198    9905    1196    9915    1194    9930
GR  1192    9960    1190    9970  1189.4   10000  1189.5   10030  1189.6   10100
GR  1190   10120    1192   10135    1194   10145    1196   10155  1196.7   10190
GR1197.6   10270  1197.1   10295    1198   10320    1200   10350   1200.4   10365
ET                   9.1                                          9948.3310160.30
X1 0.070      13    9960   10155     360     370     370
GR  1210    9900    1200    9920    1198    9930    1196    9940    1194    9960
GR1192.4   10000    1192   10110    1194   10155  1196.2   10165  1195.7   10205
GR  1196   10235    1198   10440    1200   10670
ET                   9.1                                          9907.8310260.83
X1 0.156      17    9910   10150     460     450     455
GR  1210    9875    1200    9895    1198    9910    1196    9940    1194   10000
GR1193.9   10020    1194   10045    1196   10080    1198   10150    1197   10200
GR  1198   10250    1200   10325    1202   10455  1203.2   10490    1202   10540
GR  1204   10560    1206   10575
NH     4     .04    9970     .03   10115     .03   10260     .04   10285
ET                   9.1                                          9954.33   10115
X1 0.231      18    9925   10115     400     325     395
GR  1210    9910    1202    9925    1200    9955    1198    9970    1196   10000
GR1196.1   10025    1196   10045    1198   10075    1200   10105  1200.5   10115
GR  1200   10135    1198   10150    1196   10160  1195.3   10165    1196   10175
GR  1198   10190    1200   10260  1200.4   10285
NH     6     .03    9775     .03    9890    .025   10055     .04   10245     .03
NH 10340     .04   10655
ET                   9.1                                          9881.25   10065
X1 0.307      23    9785   10065     345     360     400
GR  1210    9775    1206    9785    1204    9825    1202    9890    1200    9935
GR  1198    9980  1197.7   10000    1198   10015    1200   10030    1202   10040
GR  1204   10055    1206   10065    1206   10165    1204   10245    1202   10255
GR  1200   10275  1199.4   10285    1200   10300    1202   10315    1204   10340
GR  1206   10480    1208   10615    1210   10655
NC   .03     .04     .03      .1      .3
ET                   9.1                                          9931.3310041.47
X1 0.390      11    9935   10040     420     480     440
GR  1209    9910    1208    9935    1206    9955    1204    9970    1202    9985
GR1201.8   10000    1202   10010    1204   10020    1206   10030    1208   10040
GR  1210   10060
QT     2    4925    4925
ET                   9.1                                          9922.8310040.76
X1 0.465      15    9930   10030     410     390     395
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GR1217.4    9880    1216    9895    1214    9905    1212    9920    1210    9930
GR  1208    9950    1206    9990    1205   10000    1206   10010    1208   10020
GR  1210   10030    1212   10045    1214   10120    1216   10240    1218   10360
ET                   9.1                                          9940.37   10100
X1 0.543      14    9950   10030     445     370     410
GR  1219    9910    1218    9920    1216    9930    1214    9940    1212    9950
GR  1210    9970    1208    9985  1206.7   10000    1208   10010    1210   10030
GR  1212   10120    1214   10175    1216   10245    1218   10320
ET                   9.1                                           9954.5   10100
X1 0.620      13    9970   10060     410     410     410
GR1220.7    9920    1220    9930    1212    9970    1210    9980    1208    9995
GR1207.8   10000    1208   10005    1210   10020    1212   10060    1214   10290
GR  1216   10370    1218   10410    1220   10475
ET                   9.1                                          9954.1710045.83
X1 0.696      19    9970   10030     400     400     400
GR1222.5    9920    1222    9930    1220    9940    1218    9950    1216    9960
GR  1214    9970    1212    9980    1210   10000    1212   10015    1214   10030
GR  1216   10040    1218   10050    1220   10075  1220.2   10110    1220   10130
GR  1219   10215    1220   10245  1218.6   10305    1220   10335
ET                   9.1                                          9950.1310071.28
X1 0.770      17    9970   10035     390     390     390
GR  1221    9930    1220    9950    1218    9960    1216    9970    1214    9975
GR  1212    9990  1211.3   10000    1212   10010    1214   10020    1216   10035
GR  1218   10170  1218.3   10190  1217.5   10225  1218.5   10260  1217.5   10310
GR  1218   10340    1220   10400
QT     2    4715    4715
ET                   9.1                                          9943.2210083.40
X1 0.846      14    9960   10040     400     400     400
GR1222.3    9920    1222    9930    1220    9945    1218    9955    1216    9960
GR  1214    9975  1213.6   10000    1214   10025    1216   10040    1218   10060
GR1218.3   10080    1218   10100    1220   10140    1222   10215
ET                   9.1                                           9966.26   10070
X1 0.920      12    9970   10070     395     395     395
GR1227.2    9935    1224    9955    1222    9965    1220    9970    1218    9980
GR  1216    9990  1215.6   10000    1216   10010    1218   10025    1220   10070
GR  1222   10100  1222.4   10110
ET                   9.1                                          9969.2810043.59
X1 0.998      10    9975   10035     410     410     410
GR1230.3    9940    1230    9955    1224    9975    1220    9985  1218.3   10000
GR  1220   10015    1222   10025    1224   10035    1226   10045  1227.8   10055
NC   .03     .04     .03      .3      .5
QT     2    4505    4505
ET                   9.1                                          9957.1910032.60
X1 1.074      10    9965   10030     400     400     400
GR1231.8    9930    1230    9950    1228    9965    1222    9985    1221   10000
GR  1222   10010    1228   10030    1230   10035    1232   10045  1233.5   10080
NC  .024    .024    .024      .3      .5
ET                  9.11                                        988010069.42
X1 1.148      18    9970   10011     395     405     390
X3    10                                                     1234.5  1234.5
GR1234.5    9880  1234.5    9920  1234.5    9940  1234.5    9970    1224    9970
GR  1224    9989    1224    9990    1224    9992    1224    9994    1224    9995
GR  1224   10005    1224   10006    1224   10008    1224   10010  1234.5   10011
GR1234.5   10020    1236   10080  1236.5   10230
QT     2    4505    4505
SB     1     1.5     2.5       0      40       1     312       0  1224.4    1224
ET                  9.11                                            9886   10145
X1 1.159      16    9970   10010      60      60      60
X2                     1  1232.4  1234.5
X3    10                                                     1234.5  1234.5
BT    14    9886  1234.5  1234.5    9909  1234.5  1234.5    9916  1234.5  1234.5
BT  9927  1234.5  1234.5    9970  1234.5  1232.4    9990  1234.5  1232.4    9992
BT1234.5  1232.4     994  1234.5  1232.4   10010  1234.5  1232.4   10011  1234.5
BT1234.5   10034    1238    1238   10080    1238    1238   10115    1238    1238
BT 10145    1238    1238
GR1234.5    9886  1234.5    9909  1234.5    9916  1234.5    9927  1234.5    9970
GR1224.4    9970  1224.4    9990  1224.4    9992  1224.4    9994  1224.4   10010
GR1234.5   10010  1234.5   10011    1238   10034    1238   10080    1238   10115
GR  1238   10145

NC   .03     .05    .035      .3      .5
QT     2    4505    4505
ET                   9.1                                            995010298.35
X1 1.237      18    9975   10030     390     390     410
GR1237.1    9950    1236    9975    1230    9985    1228    9995  1227.8   10000
GR  1228   10010    1230   10020    1232   10030  1233.1   10070    1232   10090
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GR1231.2   10100    1232   10120    1234   10140    1236   10185  1234.5   10235
GR  1236   10275    1238   10295    1240   10315
NC   .03     .05    .035      .1      .3
QT     2    4505    4505
ET                   9.1                                        9963.2610172.92
X1 1.313      16    9975   10075     405     405     405
GR1239.1    9950    1238    9975    1234    9980    1232    9990  1230.8   10000
GR  1232   10020    1234   10045  1234.5   10075  1234.4   10110    1236   10150
GR  1238   10160    1240   10210    1242   10240  1242.8   10280  1243.2   10325
GR  1244   10410
NH     5     .05    9960     .03    9985    .035   10065     .06   10100     .04
NH 10230
ET                   9.1                                        9982.22   10125
X1 1.388      18    9985   10025     395     395     395
GR1244.1    9960    1244    9970    1240    9985    1236    9995  1234.5   10000
GR  1236   10005    1238   10015  1238.3   10025    1238   10040  1238.5   10065
GR  1238   10075    1236   10085  1235.9   10095    1236   10100    1238   10125
GR  1240   10165    1242   10200  1242.7   10230
NC   .03     .03    .035      .1      .3
ET                   9.1                                        9980.75   10160
X1 1.466      18    9980   10035     410     410     410
GR1247.8    9960    1246    9980    1240    9990    1238    9995  1237.5   10000
GR  1238   10005    1240   10015    1244   10025  1244.3   10035    1244   10045
GR  1242   10065  1241.9   10085    1242   10100    1244   10115    1246   10160
GR  1247   10220    1248   10320  1249.6   10365
QT     2    3103    3103
ET                   9.1                                         9964.310102.78
X1 1.556      10    9975   10045     475     475     475
GR  1250    9955    1248    9975    1242    9990    1241   10000    1242   10015
GR  1244   10035    1246   10045    1248   10060    1250   10140    1251   10170
QT     2    1289    1289
ET                   9.1                                           995010149.96
X1 1.616      12    9965   10060     320     320     320
GR1249.7    9950    1248    9965    1246    9980    1244   10000    1246   10040
GR1247.1   10060    1246   10080  1245.6   10085    1246   10095    1248   10110
GR  1250   10125    1252   10200
ET                   9.1                                        9974.6810135.88
X1 1.692      11    9985   10035     400     400     400
GR1251.9    9960    1250    9985    1248    9995  1247.7   10000    1248   10010
GR1249.3   10035  1248.2   10100    1250   10130    1252   10145    1254   10170
GR1255.3   10190
NH     5     .04    9940    .035    9960     .03   10045     .04   10220    .035
NH 10325
ET                   9.1                                        9962.88   10140
X1 1.768      14    9960   10045     400     400     400
GR1254.6    9940    1254    9960    1252    9975  1250.7   10000    1252   10020
GR1252.9   10045  1250.8   10095  1252.1   10140  1251.2   10180    1252   10220
GR  1254   10240    1256   10265    1258   10295    1260   10325
NC   .04     .05    .035      .1      .3
ET                   9.1                                        9980.8210055.88
X1 1.844       7    9980   10020     400     400     400
GR  1261    9965    1260    9980    1254    9990  1252.4   10000    1254   10010
GR  1258   10020  1259.6   10060
ET                   9.1                                         9973.110048.95
X1 1.920      10    9975   10030     405     405     405
GR1265.2    9960    1264    9970    1262    9975    1260    9980    1256    9990
GR1255.2   10000    1256   10010    1260   10020    1262   10030    1263   10055
NC   .04     .05    .035      .1      .3
ET                   9.1                                           9974   10037
X1 1.996       8    9965   10055     400     400     400
GR1268.7    9965    1268    9970    1262    9980  1260.4   10000    1262   10015
GR  1264   10025    1266   10040    1267   10055
NC   .04     .04    .035      .3      .5
QT     2     997     997
ET                   9.1                                        9972.17   10040
X1 2.072       9    9965   10020     400     400     400
GR1271.1    9965    1270    9970    1264    9985  1263.5   10000    1264   10005
GR  1266   10020    1268   10145    1270   10275  1270.5   10300
NC  .024    .024    .024      .3      .5
ET                  9.11                                           991010542.73
X1 2.159      16    9991 10008.2     440     460     460
X3    10                                                   1275.6  1275.6
GR1275.7    9910    1274    9970  1271.2    9991  1269.2   9991.5  1267.7    9993
GR1267.2    9995  1267.6 10004.6  1268.1 10006.4  1269.4  10007.6  1271.2 10008.2
GR  1272   10050    1274   10200    1276   10440    1278   10530  1279.5   10720
GR  1280   10910
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QT      2     997     997
SB   1.25     1.5     2.5       0      10      .1     104     .56  1268.2  1267.8
ET                   9.11                                            991010542.73
X1 2.167      24    9991 10008.2      40      40      40
X2                     1  1275.6  1275.9
X3     10                                                 1275.9  1275.9
BT     24    9910    1277    1277    9940 1276.63 1276.63    9968  1276.5  1276.5
BT   9991  1276.4  1271.6  9991.5  1276.4  1273.6    9993  1276.4  1275.1    9995
BT1276.4  1275.6    9997  1276.4  1275.1  9998.5  1276.4  1273.6    9999  1276.4
BT1271.6   10001  1276.4  1271.6 10001.3  1276.4  1273.4 10002.8  1276.4  1274.7
BT10004.  1276.4  1275.2 10006.4  1276.4  1274.7 10007.6  1276.4  1273.4 10008.2
BT1276.4  1271.6   10055  1276.2  1276.2   10085  1276.1  1276.1   10100  1275.9
BT1275.9   10300  1276.1  1276.1   10500  1277.3  1277.3   10530    1278    1278
BT 10720  1279.5  1279.5
GR  1277    9910  1274.7    9940  1274.0    9968  1271.6    9991  1269.6  9991.5
GR1268.1    9993  1267.6    9995  1268.1    9997  1269.6  9998.5  1271.6    9999
GR1271.6   10001  1269.8 10001.3  1268.5 10002.8  1268.0 10004.6  1268.5 10006.4
GR1269.8 10007.6  1271.6 10008.2  1272.3   10055  1273.2   10085  1274.3   10100
GR1275.3   10300    1277   10500    1278   10530  1279.5   10720
ET                   9.1                                             991010518.19
X1 2.186      18    9955   10075     100     100     100
GR  1277    9910  1276.5    9920    1276    9930    1274    9940    1272    9955
GR  1270    9980  1269.5   10000    1270   10010  1270.5   10030    1270   10045
GR  1272   10075    1274   10100  1275.5   10130    1275   10225    1276   10315
GR1277.5   10410    1278   10515    1280   10580
NC   .04     .07    .035      .1      .3
ET                   9.1                                             997010352.22
X1 2.267      16    9970   10025     410     415     430
GR1277.8    9970    1276    9985    1272    9995  1271.1   10000    1272   10005
GR  1274   10025    1276   10130  1276.3   10145  1275.3   10160    1276   10200
GR1276.9   10230    1276   10280    1275   10310    1276   10330    1278   10350
GR  1280   10430
QT      2     997     997
ET                   9.1                                          9977.12   10100
X1 2.330       9    9965   10040     330     330     330
GR1280.3    9965    1280    9970    1278    9980    1274    9990  1273.3   10000
GR  1274   10010    1276   10040    1278   10160    1280   10335
NH      5     .04    9965    .035   10030     .05   10085    .035   10225     .05
NH 10300
ET                   9.1                                          9986.62   10090
X1 2.392      14    9965   10030     330     330     330
GR1282.7    9965    1282    9975    1280    9985    1278    9995  1275.4   10000
GR  1276   10005    1278   10015    1280   10030  1280.3   10060    1280   10085
GR  1278   10110  1278.7   10155    1280   10225    1282   10300
NH      3     .04    9970    .035   10055     .05   10300
ET                   9.1                                          9983.68   10085
X1 2.468      11    9970   10055     400     400     400
GR1285.8    9970    1284    9980    1280    9995  1279.7   10000    1280   10005
GR  1282   10020  1283.1   10055    1282   10080  1280.4   10100    1282   10170
GR1283.5   10300
NH      3     .04    9960    .035   10030     .07   10325
ET                   9.1                                          9976.58   10085
X1 2.553      10    9960   10030     450     450     450
GR1288.7    9960    1288    9965    1286    9975    1284    9985  1282.1   10000
GR  1284   10030    1285   10060    1286   10110    1288   10200    1289   10325
NC  .035     .07    .035      .1      .3
ET                   9.1                                          9969.89   10080
X1 2.640      14    9965   10040     460     460     460
GR1298.8    9950    1288    9965    1286    9980    1284    9990  1282.9   10000
GR  1284   10010  1284.3   10040    1284   10090  1283.5   10110    1284   10130
GR  1286   10150    1288   10175    1290   10220    1292   10255
QT      2     710     710
ET                   9.1                                          9985.09   10035
X1 2.741      17    9965   10035     530     530     530
GR1292.1    9965    1292    9970    1290    9980    1284    9995  1283.9   10000
GR  1284   10005    1286   10015    1288   10025  1288.4   10035    1288   10045
GR  1286   10125  1285.8   10145    1286   10150    1290   10170    1292   10215
GR  1294   10285  1294.4   10340
ET                   9.1                                          9983.29   10055
X1 2.826      10    9965   10055     450     450     450
GR  1291    9965    1290    9980    1286    9995  1285.7   10000    1286   10020
GR  1287   10055    1288   10115    1290   10190    1292   10205  1293.5   10250
ET                   9.1                                          9980.5610044.07
X1 2.907       8    9985   10030     430     430     430
GR1295.9    9970    1294    9985    1292    9995  1291.3   10000    1292   10010
GR  1294   10030    1296   10080  1297.7   10110
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NH     2    .035   10025     .07   10125
ET                   9.1                                        9980.7910066.54
X1 3.009       7    9995   10025     540     540     540
GR1301.8    9975    1300    9995  1296.6   10000    1298   10005    1300   10025
GR  1302   10090  1302.5   10125
NC   .04     .07    .035      .1      .3
ET                   9.1                                        9974.8010050.31
X1 3.081       9    9985   10035     380     380     380
GR1303.8    9970    1302    9985    1300    9990  1297.5   10000    1298   10005
GR  1300   10020    1302   10035    1304   10060  1304.2   10085
QT     2     296     296
ET                   9.1                                        9980.1810034.46
X1 3.167      13    9960   10035     450     370     450
GR1306.3    9860    1306    9905    1305    9930    1306    9960    1304    9980
GR  1300    9990  1299.8   10000    1300   10010    1302   10020    1304   10035
GR  1306   10130  1306.3   10210    1308   10280
ET                   9.1                                        9949.6610016.53
X1 3.214      17    9950   10015     230     280     250
GR1312.8    9920    1312    9930    1310    9940    1304    9950  1302.7   10000
GR  1304   10015    1306   10030    1308   10040    1310   10050    1312   10060
GR  1313   10070    1312   10080    1310   10085  1308.6   10115    1310   10145
GR  1312   10180    1314   10260
ET                   9.1                                        9986.8510040.75
X1 3.301      16    9990   10025     460     460     460
GR1314.5    9960    1314    9970    1310    9980    1308    9990  1306.1   10000
GR  1307   10020    1308   10025    1310   10075    1312   10100    1313   10140
GR  1312   10200  1312.4   10235    1312   10270  1310.3   10285    1312   10300
GR  1313   10320
ET                   9.1                                        9985.9510018.11
X1 3.383      11    9985   10020     430     430     430
GR1319.1    9970    1318    9975    1312    9985    1310    9990  1309.1   10000
GR  1310   10010    1312   10020    1314   10030    1316   10045    1318   10075
GR1319.1   10120
ET                   9.1                                        9988.7310013.82
X1 3.460      10    9975   10030     410     410     410
GR1320.4    9975    1320    9985    1314    9990  1312.6   10000    1314   10010
GR  1318   10020    1320   10030    1322   10090    1324   10245  1325.2   10290
ET                   9.1                                        9993.3510043.80
X1 3.540      10    9980   10050     420     420     420
GR1321.3    9980    1320    9990  1316.3   10000  1317.3   10015  1317.1   10030
GR  1318   10040    1320   10050    1322   10090    1324   10165    1326   10310
QT     2     148     148
ET                   9.1                                        9987.0910041.01
X1 3.610       8    9975   10010     370     370     370
GR  1324    9975    1320    9990  1318.3   10000    1320   10010    1322   10090
GR  1324   10155    1326   10370  1326.6   10420
ET                   9.1                                        9984.7610021.55
X1 3.678      13    9960   10030     360     360     360
GR  1330    9960    1320    9990  1318.8   10000    1320   10015    1324   10030
GR  1326   10050    1328   10120  1328.2   10160  1327.4   10185  1328.4   10225
GR1327.7   10270    1328   10320    1330   10400
EJ
*       WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
*       100 - YEAR STORM EVENT     FLOODWAY RUN       FILE:  1.H2I
*       WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV
*      0       3       0       0       0       0       0       0 1192.84       0
*     15       0      -1       0       0       0       0       0       0       0
ER
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FILE = WTCH1SCN.OUT

R.W. CRUFF, P.E.

APRIL 29, 1997

FILE = WTCH1SCN.DAT WHICH USES MODEL WTCH1SC & CHANGE Q'S TO BE
IN EFFECT IF THE SHORT CHANNEL WERE BUILT & CULVERT AT
NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1SCN.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

SUMMARY PRINTOUT

SECNO	Q	CWSEL	DEPTH	VCH
.000	4621.00	1192.94	3.54	8.58
.070	4621.00	1195.24	3.24	8.89
.156	4621.00	1198.37	4.47	6.75
.231	4621.00	1200.11	4.81	7.19
.307	4621.00	1202.35	4.65	8.94
.390	4621.00	1208.28	6.48	11.21
.465	4925.00	1211.58	6.58	11.38
.543	4925.00	1214.60	7.90	7.39
.620	4925.00	1215.61	7.81	6.12
.696	4925.00	1217.75	7.75	12.71
.770	4925.00	1220.70	9.40	5.11
.846	4715.00	1220.83	7.23	7.18
.920	4715.00	1222.07	6.47	10.89
.998	4715.00	1226.46	8.16	13.05
1.074	4505.00	1229.50	8.50	11.77
1.148	4505.00	1231.29	7.29	15.31
1.159	4505.00	1232.43	8.03	14.03
1.237	4505.00	1236.97	9.17	6.11
1.313	4505.00	1237.66	6.86	7.88
1.388	4505.00	1240.48	5.98	11.37
1.466	4505.00	1245.32	7.82	10.40
1.556	3103.00	1248.68	7.68	7.76
1.616	1289.00	1250.02	6.02	2.11

SECNO	Q	CWSEL	DEPTH	VCH
1.692	1289.00	1250.07	2.37	6.71
1.768	1289.00	1253.22	2.52	3.77
1.844	1289.00	1257.80	5.40	10.56
1.920	1289.00	1261.63	6.43	6.35
1.996	1289.00	1264.55	4.15	9.24
2.072	997.00	1268.09	4.59	4.73
2.159	997.00	1272.53	5.33	12.32
2.167	997.00	1276.29	8.69	1.48
2.186	997.00	1276.30	6.80	1.15
2.267	997.00	1276.00	4.90	6.42
2.330	997.00	1277.58	4.28	5.30
2.392	997.00	1279.61	4.21	7.18
2.468	997.00	1283.08	3.38	3.72
2.553	997.00	1285.66	3.56	7.27
2.640	997.00	1287.35	4.45	2.52
2.741	710.00	1287.96	4.06	4.86
2.826	710.00	1289.12	3.42	3.07
2.907	710.00	1294.56	3.26	7.76
3.009	710.00	1301.28	4.68	7.96
3.081	710.00	1303.22	5.72	3.88
3.167	296.00	1303.93	4.13	2.07
3.214	296.00	1304.20	1.50	5.33
3.301	296.00	1308.63	2.53	4.62
3.383	296.00	1311.62	2.52	5.77
3.460	296.00	1315.53	2.93	6.11
3.540	296.00	1318.76	2.46	3.97
3.610	148.00	1320.77	2.47	4.10
3.678	148.00	1321.74	2.94	2.15

FILE = WTCH1SCN.OUT

R.W. CRUFF, P.E.

APRIL 29, 1997

FILE = WTCH1SCN.DAT WHICH USES MODEL WTCH1SC & CHANGE Q'S TO BE
IN EFFECT IF THE SHORT CHANNEL WERE BUILT & CULVERT AT
NORTHERN AVENUE REBUILT TO CARRY THE FLOWS.

T1 WHITE TANKS / AGUA FRIA AREA DRAINAGE MASTER STUDY
T2 100 - YEAR STORM EVENT - FILE = WTCH1SCN.DAT - R.W. CRUFF - 4-25-97
T3 WASH "1" - BEARDSLEY CANAL - WHITE TANKS STRUCTURE #3 NORTH TO PEORIA AV

WASH "1" - BEARDSLEY CAN

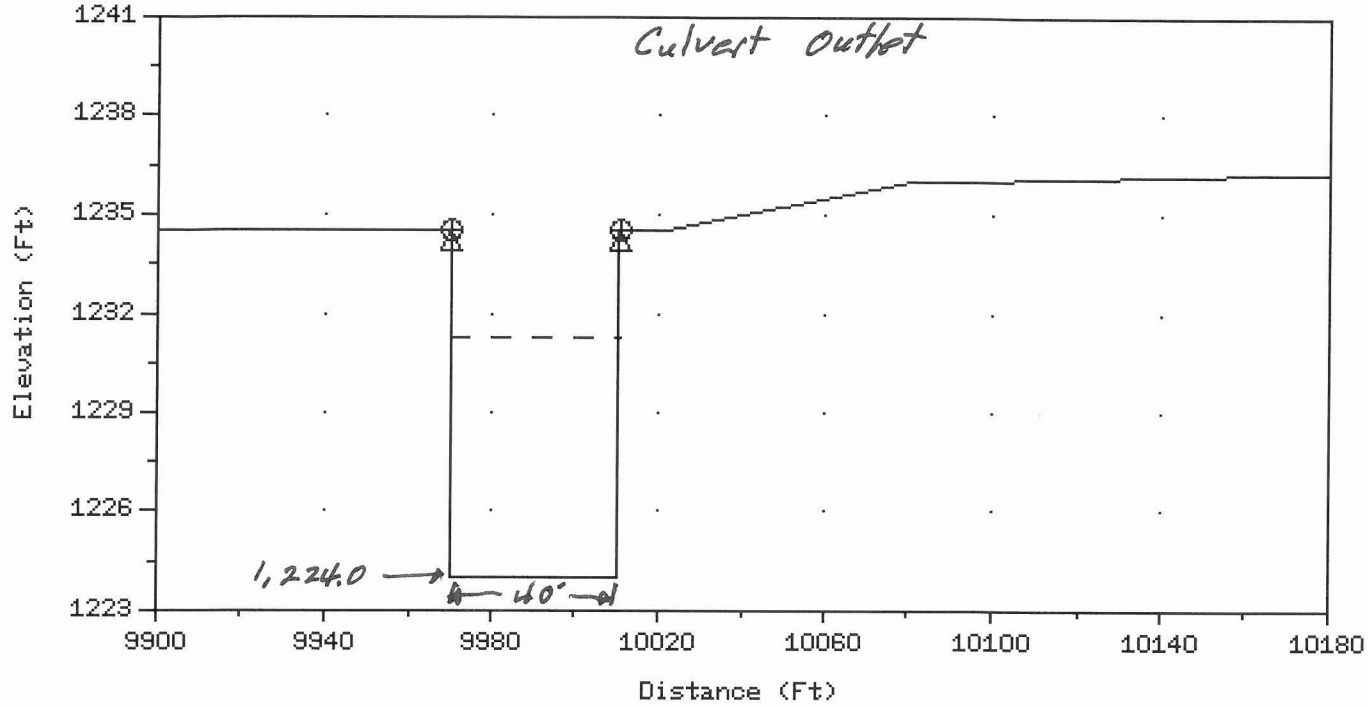
SUMMARY PRINTOUT

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
.000	9945.85	193.87	10139.72	14.72	4479.28	127.00
.070	9947.64	212.98	10160.62	23.98	4588.94	8.08
.156	9907.23	356.60	10263.83	.53	4427.11	193.36
.231	9953.37	289.96	10266.80	.00	3015.34	1605.66
.307	9878.59	230.18	10319.39	.00	3891.52	729.47
.390	9927.94	114.88	10042.82	1.22	4619.41	.37
.465	9922.08	119.79	10041.87	22.94	4876.06	26.00
.543	9937.01	258.95	10195.96	51.58	3317.88	1555.54
.620	9951.90	402.92	10354.81	93.16	3099.37	1732.47
.696	9951.24	97.52	10048.76	235.57	4512.75	176.68
.770	9936.00	464.00	10400.00	153.15	2493.03	2278.82
.846	9938.77	232.41	10171.17	149.85	3780.25	784.90
.920	9964.64	137.16	10101.80	22.39	4586.87	105.73
.998	9966.78	80.80	10047.58	45.94	4611.57	57.49
1.074	9953.74	80.02	10033.75	25.66	4473.20	6.14
1.148	9970.00	40.69	10010.69	.00	4505.00	.00
1.159	9970.00	40.00	10010.00	.00	4505.00	.00
1.237	9953.10	331.54	10284.64	12.75	2408.95	2083.30
1.313	9975.42	182.89	10158.31	.00	3641.36	863.64
1.388	9983.22	190.11	10173.33	.96	1535.35	2968.69
1.466	9981.13	163.55	10144.69	.00	2484.19	2020.81
1.556	9968.30	118.52	10086.82	3.19	2983.52	116.29
1.616	9950.00	175.43	10125.43	17.42	873.97	397.61

SECNO	SSTA	TOPWID	ENDST	QLOB	QCH	QROB
1.692	9984.13	146.36	10130.50	.00	532.25	756.75
1.768	9965.80	266.46	10232.26	.00	412.89	876.11
1.844	9983.67	35.83	10019.50	.00	1289.00	.00
1.920	9975.93	52.22	10028.15	.00	1289.00	.00
1.996	9975.75	53.40	10029.15	.00	1289.00	.00
2.072	9974.77	176.20	10150.97	.00	728.88	268.12
2.159	9991.00	17.20	10008.20	.00	997.00	.00
2.167	9919.10	498.78	10417.88	146.74	183.90	666.35
2.186	9924.04	409.84	10333.88	44.36	806.64	146.01
2.267	9985.00	245.30	10329.98	.00	799.00	198.00
2.330	9981.04	153.97	10135.01	.00	912.77	84.23
2.392	9986.93	154.60	10204.24	.00	549.82	447.18
2.468	9983.45	279.09	10263.62	.00	371.64	625.36
2.553	9976.67	116.62	10093.29	.00	905.74	91.26
2.640	9969.90	196.92	10166.83	.00	515.06	481.94
2.741	9985.09	153.10	10159.82	.00	481.86	228.14
2.826	9983.29	173.77	10157.06	.00	589.62	120.38
2.907	9980.55	63.53	10044.08	2.62	703.21	4.17
3.009	9980.79	85.78	10066.57	28.57	639.54	41.89
3.081	9974.80	75.50	10050.30	6.56	697.81	5.64
3.167	9980.18	54.28	10034.46	.00	296.00	.00
3.214	9949.66	66.86	10016.53	.00	295.90	.10
3.301	9986.85	53.90	10040.75	1.24	291.16	3.60
3.383	9985.95	32.16	10018.11	.00	296.00	.00
3.460	9988.73	25.09	10013.82	.00	296.00	.00
3.540	9993.35	50.44	10043.80	.00	296.00	.00
3.610	9987.09	53.92	10041.01	.00	137.76	10.24
3.678	9984.76	36.79	10021.55	.00	148.00	.00

WASH "1" - BEARDSLEY CAN

Cross-Section 1.148

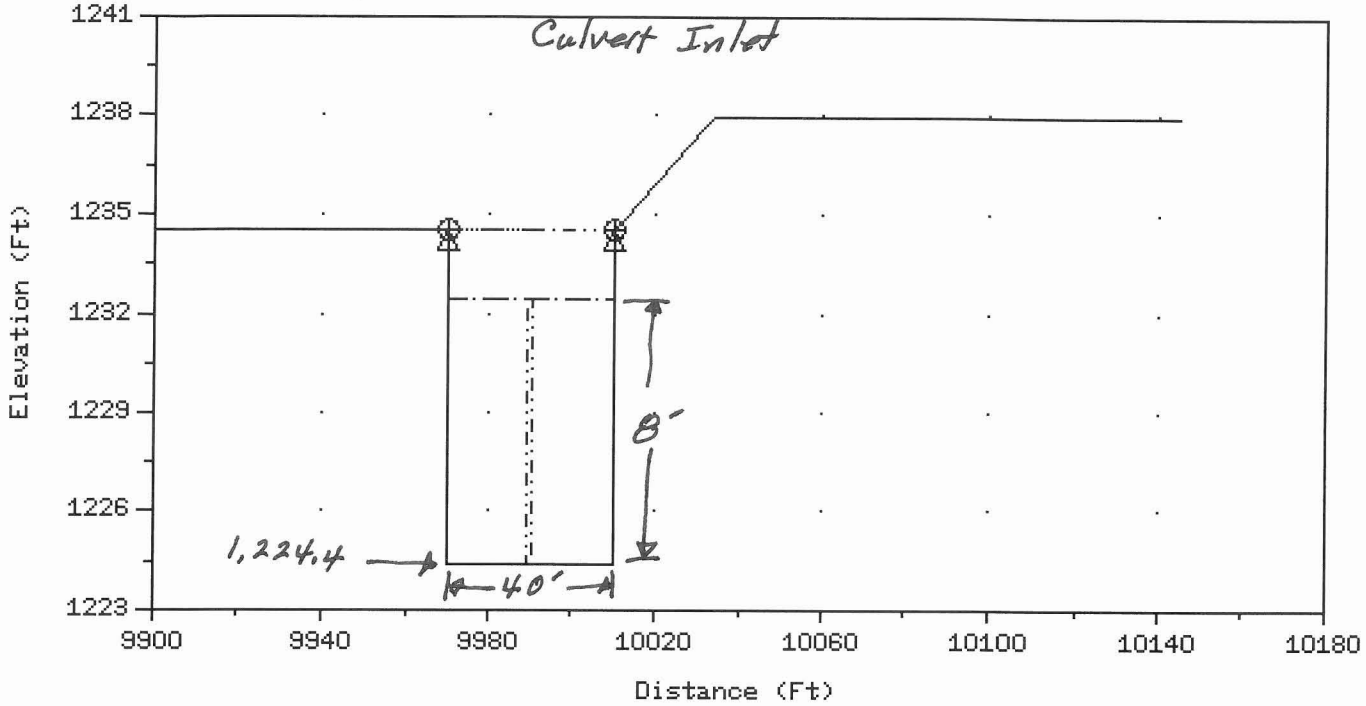


Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

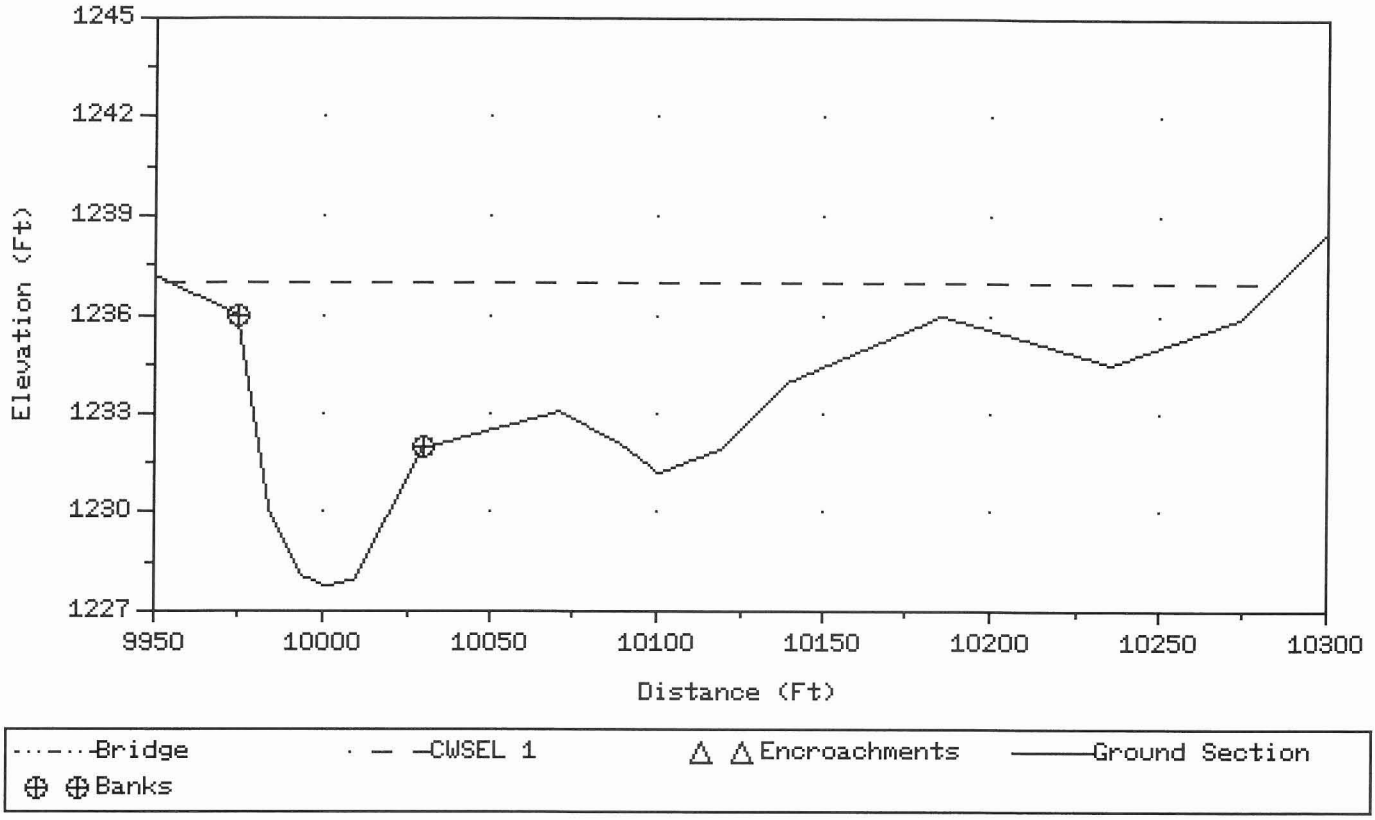
Northern Ave

WASH "1" - BEARDSLEY CAN

Cross-Section 1.159



Bridge | CWSEL 1 | Encroachments | Ground Section | Banks

WASH "1" - BEARDSLEY CAN

Cross-Section 1.237